Topology Analysis *†‡

(v2.3.0)

February 11, 2020

[‡]Besides, I would like to thank all of the people who have helped me in the development of the program. I am particularly grateful to Prof. Xingtao Huang for his comments on the principles and styles of the program, to Remco de Boer for his suggestions on the tex output and the use of GitHub, and to Xi Chen for his discussions on the core algorithms. I am especially indebted to Prof. Xiqing Hao, Longke Li, Xiaoping Qin, Ilya Komarov, Yubo Li, Guanda Gong, Suxian Li, Junhao Yin, Prof. Xiaolong Wang, and Yeqi Chen for their advice in extending and perfecting the program. Also, I thank Xi'an Xiong, Runqiu Ma, Wencheng Yan, Sen Jia, Lu Cao, Dong Liu, Hongpeng Wang, Jiawei Zhang, Hongrong Qi, Jiajun Liu, Maoqiang Jing, Yi Zhang, Wei Shan, and Yadi Wang for their efforts in helping me test the program.

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[†]This package is implemented referring to a program called Topo, which is first developed by Prof. Shuxian Du from Zhengzhou University and later extended and maintained by Prof. Gang Li from Institute of High Energy Physics, Chinese Academy of Sciences. The Topo program has been widely used by colleagues in BESIII collaboration. Several years ago, when I was a Ph.D. student working on the BESIII experiment, I learned the idea of topology analysis and a lot of programming techniques from the Topo program. So, I really appreciate the original works of Prof. Du and Prof. Li very much. To meet my own needs and to practice developing analysis tools with C++, ROOT, and LaTeX, I wrote the package from scratch. At that time, the package functioned well but was relatively simple. At the end of 2017, my co-supervisor, Prof. Chengping Shen reminded me that it could be a useful tool for the Belle II experiment as well. So, I revised and extended it, making it more well-rounded and suitable for the Belle II experiment. Here, I would like to thank Prof. Du and Prof. Li for their original works, and Prof. Shen for his suggestion, guidance, support, and encouragement.

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Table 1: Decay trees and their respective final states.

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 1 | $J/\psi \to \mu^+\mu^-$ | $\mu^+\mu^-$ | 6 | 5269 | 5269 |
| 2 | $J/\psi 	o e^+e^-$ | e^+e^- | 4 | 4513 | 9782 |
| 3 | $J/\psi ightarrow \pi^0 \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 0 | 2850 | 12632 |
| 4 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2 | 1895 | 14527 |
| 5 | $J/\psi \to \pi^0 \pi^+ \pi^- K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 20 | 1698 | 16225 |
| 6 | $J/\psi \to \rho^+ \rho^- \omega, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 19 | 1453 | 17678 |
| 7 | $J/\psi 	o e^+ e^- \gamma^f$ | $e^+e^-\gamma^f$ | 70 | 1222 | 18900 |
| 8 | $J/\psi ightarrow \pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 127 | 1161 | 20061 |
| 9 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 234 | 836 | 20897 |
| 10 | $J/\psi ightarrow \pi^0 \pi^0 \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 43 | 792 | 21689 |
| 11 | $J/\psi ightarrow \pi^+\pi^-\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 109 | 743 | 22432 |
| 12 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 41 | 719 | 23151 |
| 13 | $J/\psi 	o \pi^+\pi^-par{p}$ | $\pi^+\pi^-par{p}$ | 85 | 565 | 23716 |
| 14 | $J/\psi 	o \pi^0 ho^0, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-$ | 40 | 540 | 24256 |
| 15 | $J/\psi ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-$ | 59 | 502 | 24758 |
| 16 | $J/\psi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-$ | 46 | 501 | 25259 |
| 17 | $J/\psi \to \mu^+ \mu^- \gamma^f$ | $\mu^+\mu^-\gamma^f$ | 144 | 497 | 25756 |
| 18 | $J/\psi \to \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 211 | 404 | 26160 |
| 19 | $J/\psi \to \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 299 | 395 | 26555 |
| 20 | $J/\psi 	o \pi^+\pi^- n ar{n}$ | $\pi^+\pi^-nar{n}$ | 3 | 382 | 26937 |
| 21 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 198 | 380 | 27317 |
| 22 | $J/\psi \to \rho^0 a_2^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 143 | 354 | 27671 |
| 23 | $J/\psi 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-$ | 87 | 342 | 28013 |
| 24 | $J/\psi \rightarrow \rho^0 \rho^0 \omega, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 22 | 334 | 28347 |
| 25 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 385 | 315 | 28662 |
| 26 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 27 | 314 | 28976 |
| 27 | $J/\psi 	o \pi^0\pi^0\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 199 | 314 | 29290 |
| 28 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 294 | 280 | 29570 |
| 29 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 157 | 272 | 29842 |
| 30 | $J/\psi ightarrow ar{\Sigma}^+ \Sigma^-, ar{\Sigma}^+ ightarrow \pi^+ ar{n}, \Sigma^- ightarrow \pi^- n$ | $\pi^+\pi^-nar{n}$ | 442 | 272 | 30114 |
| 31 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 764 | 266 | 30380 |
| 32 | $J/\psi \rightarrow \rho^- \omega b_1^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 221 | 265 | 30645 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 33 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 61 | 262 | 30907 |
| 34 | $J/\psi ightarrow ho^+ ho^- \gamma, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 251 | 259 | 31166 |
| 35 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 215 | 256 | 31422 |
| 36 | $J/\psi 	o ho^- ar{K}^* K^{*+}, ho^- 	o \pi^0 \pi^-, ar{K}^* 	o \pi^+ K^-, K^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 121 | 249 | 31671 |
| 37 | $J/\psi 	o \pi^+ n ar p$ | $\pi^+ n ar{p}$ | 550 | 246 | 31917 |
| 38 | $J/\psi \rightarrow \rho^+ \omega b_1^-, \rho^+ \rightarrow \pi^0 \pi^+, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 135 | 238 | 32155 |
| 39 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13 | 237 | 32392 |
| 40 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 44 | 237 | 32629 |
| 41 | $J/\psi 	o \pi^0 \pi^+ \pi^- p ar p$ | $\pi^0\pi^+\pi^-par{p}$ | 361 | 219 | 32848 |
| 42 | $J/\psi 	o par p$ | $par{p}$ | 395 | 216 | 33064 |
| 43 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 679 | 214 | 33278 |
| 44 | $J/\psi ightarrow e^+e^-\gamma^f\gamma^f$ | $e^+e^-\gamma^f\gamma^f$ | 317 | 212 | 33490 |
| 45 | $J/\psi ightarrow \pi^+\pi^-K^+K^-\gamma^F$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 39 | 211 | 33701 |
| 46 | $J/\psi ightarrow \pi^0 b_1^0, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 282 | 210 | 33911 |
| 47 | $J/\psi 	o \pi^- ar{n} p$ | $\pi^- \bar{n} p$ | 120 | 209 | 34120 |
| 48 | $J/\psi 	o \pi^+\pi^-\eta\gamma^F, \eta 	o \gamma\gamma$ | $\pi^+\pi^-\gamma^F\gamma\gamma$ | 397 | 208 | 34328 |
| 49 | $J/\psi ightarrow \pi^0 \pi^0 K^+ K^-$ | $\pi^0\pi^0K^+K^-$ | 65 | 200 | 34528 |
| 50 | $J/\psi 	o nar{n}$ | $nar{n}$ | 443 | 196 | 34724 |
| 51 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 124 | 188 | 34912 |
| 52 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 338 | 183 | 35095 |
| 53 | $J/\psi \to \pi^0 \Delta^{++} \bar{\Delta}^{++}, \Delta^{++} \to \pi^+ p, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^0\pi^+\pi^-par{p}$ | 337 | 174 | 35269 |
| 54 | $J/\psi \to \pi^- \bar{p} \Delta^{++}, \Delta^{++} \to \pi^+ p$ | $\pi^+\pi^-par{p}$ | 298 | 165 | 35434 |
| 55 | $J/\psi \to \pi^+ p \bar{\Delta}^{++}, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^-par{p}$ | 241 | 158 | 35592 |
| 56 | $J/\psi ightarrow \pi^+\pi^-\eta\gamma^F, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 451 | 153 | 35745 |
| 57 | $J/\psi \to f_4(2050)\gamma, f_4(2050) \to \pi^+\pi^-$ | $\pi^+\pi^-\gamma$ | 974 | 151 | 35896 |
| 58 | $J/\psi 	o a_2^0 \pi^+ \pi^-, a_2^0 	o \pi^+ \rho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 645 | 149 | 36045 |
| 59 | $J/\psi 	o ar{\Xi}^+\Xi^-, ar{\Xi}^+ 	o \pi^+ar{\Lambda}, \Xi^- 	o \pi^-\Lambda, ar{\Lambda} 	o \pi^+ar{p}, \Lambda 	o \pi^-p$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 667 | 148 | 36193 |
| 60 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1503 | 147 | 36340 |
| 61 | $J/\psi 	o a_2^0 \pi^+ \pi^-, a_2^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 122 | 146 | 36486 |
| 62 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 137 | 146 | 36632 |
| 63 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 613 | 145 | 36777 |
| 64 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1076 | 143 | 36920 |
| 65 | $J/\psi 	o \pi^- \bar{\Delta}^- n, \bar{\Delta}^- 	o \pi^+ \bar{n}$ | $\pi^+\pi^-nar{n}$ | 10 | 143 | 37063 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 66 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 237 | 142 | 37205 |
| 67 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 563 | 142 | 37347 |
| 68 | $J/\psi 	o \pi^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 28 | 141 | 37488 |
| 69 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 175 | 139 | 37627 |
| 70 | $J/\psi \to \pi^+\pi^-a_1^0, a_1^0 \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 78 | 134 | 37761 |
| 71 | $J/\psi 	o \pi^+ b_1^-, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 136 | 133 | 37894 |
| 72 | $J/\psi ightarrow ho^0 ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 225 | 133 | 38027 |
| 73 | $J/\psi 	o \omega \omega \gamma, \omega 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 55 | 133 | 38160 |
| 74 | $J/\psi 	o \pi^0 \pi^+ a_2^-, a_2^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1088 | 130 | 38290 |
| 75 | $J/\psi 	o \pi^+ \Delta^- ar{n}, \Delta^- 	o \pi^- n$ | $\pi^+\pi^-nar{n}$ | 743 | 129 | 38419 |
| 76 | $J/\psi ightarrow \pi^- b_1^+, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 176 | 129 | 38548 |
| 77 | $J/\psi \to \pi^0 \pi^- a_1^+, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 15 | 128 | 38676 |
| 78 | $J/\psi ightarrow \pi^+\pi^-\eta\gamma^F, \eta ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 269 | 126 | 38802 |
| 79 | $J/\psi ightarrow ho^0 \omega b_1^0, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 424 | 125 | 38927 |
| 80 | $J/\psi 	o ho^- a_2^+, ho^- 	o \pi^0 \pi^-, a_2^+ 	o \pi^0 ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 366 | 125 | 39052 |
| 81 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 192 | 124 | 39176 |
| 82 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 62 | 123 | 39299 |
| 83 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 510 | 123 | 39422 |
| 84 | $J/\psi 	o \pi^0 ar{\Delta}^- \Delta^-, ar{\Delta}^- 	o \pi^+ ar{n}, \Delta^- 	o \pi^- n$ | $\pi^0\pi^+\pi^-nar{n}$ | 632 | 121 | 39543 |
| 85 | $J/\psi 	o \pi^0 K^+ K^{*-}, K^{*-} 	o \pi^- \bar{K}^0, \bar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 1169 | 121 | 39664 |
| 86 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 617 | 121 | 39785 |
| 87 | $J/\psi ightarrow ho^- ar K^0 K^+, ho^- ightarrow \pi^0 \pi^-, ar K^0 ightarrow K^0_L$ | $\pi^0 K_L^0 \pi^- K^+$ | 740 | 120 | 39905 |
| 88 | $J/\psi \to \pi^+\pi^-a^0_1, a^0_1 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1052 | 120 | 40025 |
| 89 | $J/\psi 	o ho^+ a_2^-, ho^+ 	o \pi^0 \pi^+, a_2^- 	o \pi^0 ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 150 | 119 | 40144 |
| 90 | $J/\psi 	o \eta' \gamma, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^-\gamma\gamma$ | 100 | 119 | 40263 |
| 91 | $J/\psi 	o \pi^0 \pi^+ a_1^-, a_1^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 261 | 116 | 40379 |
| 92 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 171 | 113 | 40492 |
| 93 | $J/\psi ightarrow ho^0 K^+ K^-, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-$ | 325 | 113 | 40605 |
| 94 | $J/\psi 	o \pi^0 K^- K^{*+}, K^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 58 | 113 | 40718 |
| 95 | $J/\psi ightarrow \eta(1405)\gamma, \eta(1405) ightarrow ho^0 ho^0, ho^0 ightarrow \pi^+\pi^-, ho^0 ightarrow \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 1340 | 113 | 40831 |
| 96 | $J/\psi \to \pi^0 \pi^+ a_1^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 558 | 113 | 40944 |
| 97 | $J/\psi \to \pi^- \bar{K}^* K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 203 | 112 | 41056 |
| 98 | $J/\psi ightarrow ho^0 \pi^+ \pi^- \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 516 | 110 | 41166 |
| 99 | $J/\psi 	o \pi^0 K^+ K^{*-}, K^{*-} 	o \pi^0 K^-$ | $\pi^0\pi^0K^+K^-$ | 663 | 110 | 41276 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 100 | $J/\psi 	o \pi^- ho^+ \eta, ho^+ 	o \pi^0 \pi^+, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 560 | 109 | 41385 |
| 101 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 689 | 109 | 41494 |
| 102 | $J/\psi 	o ho^- a_2^+, ho^- 	o \pi^0 \pi^-, a_2^+ 	o ho^0 \pi^+, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 71 | 109 | 41603 |
| 103 | $J/\psi 	o ho^+ a_2^-, ho^+ 	o \pi^0 \pi^+, a_2^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 577 | 109 | 41712 |
| 104 | $J/\psi \to \Delta^{++}\bar{\Delta}^{++}, \Delta^{++} \to \pi^+ p, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^-par{p}$ | 165 | 109 | 41821 |
| 105 | $J/\psi ightarrow \pi^+ \omega K_S^0 K^-, \omega ightarrow \pi^0 \pi^+ \pi^-, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 616 | 109 | 41930 |
| 106 | $J/\psi 	o K^+K^-\gamma^F$ | $K^+K^-\gamma^F$ | 213 | 108 | 42038 |
| 107 | $J/\psi ightarrow \pi^- ar K^0 K^+, ar K^0 ightarrow K^0_L$ | $K_L^0\pi^-K^+$ | 274 | 107 | 42145 |
| 108 | $J/\psi ightarrow \pi^+ K^0 K^-, K^0 ightarrow K^0_L$ | $K_L^0\pi^+K^-$ | 582 | 107 | 42252 |
| 109 | $J/\psi 	o \pi^0 n ar{n}$ | $\pi^0 n \bar{n}$ | 156 | 107 | 42359 |
| 110 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 608 | 106 | 42465 |
| 111 | $J/\psi 	o \Lambda ar{\Lambda} \gamma, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^-par p\gamma$ | 31 | 106 | 42571 |
| 112 | $J/\psi 	o \pi^0 p ar p$ | $\pi^0 p\bar{p}$ | 413 | 105 | 42676 |
| 113 | $J/\psi ightarrow \pi^- \omega K_S^0 K^+, \omega ightarrow \pi^0 \pi^+ \pi^-, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 86 | 104 | 42780 |
| 114 | $J/\psi 	o \pi^0 ar{K}^0 K^*, ar{K}^0 	o K_L^0, K^* 	o \pi^- K^+$ | $\pi^0 K_L^0 \pi^- K^+$ | 76 | 103 | 42883 |
| 115 | $J/\psi 	o \pi^0 K^0 \bar{K}^*, K^0 	o K_L^0, \bar{K}^* 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^-$ | 534 | 103 | 42986 |
| 116 | $J/\psi ightarrow ho^+ K^0 K^-, ho^+ ightarrow \pi^0 \pi^+, K^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 452 | 103 | 43089 |
| 117 | $J/\psi 	o \pi^0\pi^-a_1^+, a_1^+ 	o ho^0\pi^+, ho^0 	o \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 409 | 103 | 43192 |
| 118 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+\pi^-, a_2^0 ightarrow \pi^+\pi^-\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 113 | 102 | 43294 |
| 119 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^- ightarrow \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 172 | 101 | 43395 |
| 120 | $J/\psi ightarrow \omega \omega \omega, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 533 | 100 | 43495 |
| 121 | $J/\psi ightarrow \pi^+\pi^-a^0_0, a^0_0 ightarrow \pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 867 | 99 | 43594 |
| 122 | $J/\psi \rightarrow \pi^+ K^* K^-, K^* \rightarrow \pi^- K^+$ | $\pi^+\pi^-K^+K^-$ | 1102 | 98 | 43692 |
| 123 | $J/\psi ightarrow \pi^+ ho^- \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 681 | 96 | 43788 |
| 124 | $J/\psi 	o \omega p ar p, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 335 | 96 | 43884 |
| 125 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 483 | 95 | 43979 |
| 126 | $J/\psi \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+$ | 1195 | 95 | 44074 |
| 127 | $J/\psi 	o ho^+ K^0 K^-, ho^+ 	o \pi^0 \pi^+, K^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 730 | 94 | 44168 |
| 128 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\eta, \eta 	o \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 116 | 94 | 44262 |
| 129 | $J/\psi 	o \eta p ar p, \eta 	o \gamma \gamma$ | $par{p}\gamma\gamma$ | 140 | 92 | 44354 |
| 130 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 178 | 92 | 44446 |
| 131 | $J/\psi 	o \pi^- \omega a_0^+, \omega 	o \pi^0 \pi^+ \pi^-, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 331 | 92 | 44538 |
| 132 | $J/\psi \to \pi^0 \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 283 | 90 | 44628 |
| 133 | $J/\psi 	o \pi^0 ar{K}^0 K^*, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 339 | 90 | 44718 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 134 | $J/\psi \to \pi^- \rho^+ \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5 | 89 | 44807 |
| 135 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \rho^0 \rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 1591 | 88 | 44895 |
| 136 | $J/\psi \to \pi^0 K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-$ | 1450 | 86 | 44981 |
| 137 | $J/\psi \to K^+K^{*-}, K^{*-} \to \pi^0K^-$ | $\pi^0 K^+ K^-$ | 268 | 86 | 45067 |
| 138 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1174 | 86 | 45153 |
| 139 | $J/\psi \to \rho^- \bar{K}^* K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 189 | 85 | 45238 |
| 140 | $J/\psi \to \rho^+ K^* K^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1175 | 82 | 45320 |
| 141 | $J/\psi 	o \eta nar{n}, \eta 	o \gamma \gamma$ | $nar{n}\gamma\gamma$ | 52 | 82 | 45402 |
| 142 | $J/\psi ightarrow ar{K}^0 K^*, ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^- K^+$ | $K_L^0\pi^-K^+$ | 449 | 82 | 45484 |
| 143 | $J/\psi 	o \omega \bar K^0 K^*, \omega 	o \pi^0 \pi^+ \pi^-, \bar K^0 	o K_L^0, K^* 	o \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 535 | 81 | 45565 |
| 144 | $J/\psi ightarrow \pi^0 K^+ K^-$ | $\pi^0 K^+ K^-$ | 64 | 80 | 45645 |
| 145 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 492 | 80 | 45725 |
| 146 | $J/\psi 	o \pi^0 a_2^0 \omega, a_2^0 	o \pi^- ho^+, \omega 	o \pi^0 \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 38 | 80 | 45805 |
| 147 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1948 | 80 | 45885 |
| 148 | $J/\psi \to K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 1286 | 79 | 45964 |
| 149 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 478 | 78 | 46042 |
| 150 | $J/\psi 	o \pi^+\pi^-a^0_0, a^0_0 	o \pi^0\eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 698 | 78 | 46120 |
| 151 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 1777 | 77 | 46197 |
| 152 | $J/\psi 	o \Xi^0 \bar\Xi^0, \Xi^0 	o \pi^0 \Lambda, \bar\Xi^0 	o \pi^0 \bar\Lambda, \Lambda 	o \pi^- p, \bar\Lambda 	o \pi^+ \bar p$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 731 | 76 | 46273 |
| 153 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 185 | 75 | 46348 |
| 154 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 32 | 75 | 46423 |
| 155 | $J/\psi ightarrow \pi^+ ho^- \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 163 | 75 | 46498 |
| 156 | $J/\psi \to \bar{\Xi}^+\Xi^-, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^- \to \pi^-\Lambda, \bar{\Lambda} \to \pi^+\bar{p}, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 252 | 75 | 46573 |
| 157 | $J/\psi \to K^{-}K_{1}^{'+}, K_{1}^{'+} \to \pi^{+}K^{*}, K^{*} \to \pi^{-}K^{+}$ | $\pi^+\pi^-K^+K^-$ | 1389 | 75 | 46648 |
| 158 | $J/\psi 	o \Sigma^+ ar{\Sigma}^-, \Sigma^+ 	o \pi^0 p, ar{\Sigma}^- 	o \pi^- ar{n}$ | $\pi^0\pi^-\bar{n}p$ | 1081 | 74 | 46722 |
| 159 | $J/\psi \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 K^+ K^-$ | 1201 | 74 | 46796 |
| 160 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 528 | 73 | 46869 |
| 161 | $J/\psi \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^-$ | 529 | 73 | 46942 |
| 162 | $J/\psi 	o \pi^+\pi^-\omega, \omega 	o \pi^0\gamma$ | $\pi^0\pi^+\pi^-\gamma$ | 208 | 73 | 47015 |
| 163 | $J/\psi ightarrow \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 354 | 73 | 47088 |
| 164 | $J/\psi \to f_4(2050)\gamma, f_4(2050) \to \pi^0 \pi^0$ | $\pi^0\pi^0\gamma$ | 1 | 72 | 47160 |
| 165 | $J/\psi ightarrow \pi^+\pi^+\pi^-\pi^-\omega, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1364 | 72 | 47232 |
| 166 | $J/\psi \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-$ | 153 | 72 | 47304 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 167 | $J/\psi 	o ho^- ar{K}^0 K^+, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 280 | 72 | 47376 |
| 168 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 902 | 71 | 47447 |
| 169 | $J/\psi \to \pi^+ a_2^-, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 1473 | 71 | 47518 |
| 170 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+K^-$ | 1053 | 70 | 47588 |
| 171 | $J/\psi ightarrow \pi^+ ho^- \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1549 | 70 | 47658 |
| 172 | $J/\psi \to \Sigma^+ \bar{\Sigma}^-, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^+\pi^-nar{n}$ | 228 | 70 | 47728 |
| 173 | $J/\psi \to \bar{\Xi}^+\Xi^-, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^- \to \pi^-\Lambda, \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to \pi^-p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 1004 | 70 | 47798 |
| 174 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 301 | 70 | 47868 |
| 175 | $J/\psi 	o \Lambda \bar{\Lambda}, \Lambda 	o \pi^- p, \bar{\Lambda} 	o \pi^+ \bar{p}$ | $\pi^+\pi^-par{p}$ | 605 | 69 | 47937 |
| 176 | $J/\psi \to ho^0 ho^+ ho^-, ho^0 \to \pi^+ \pi^-, ho^+ \to \pi^0 \pi^+, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1335 | 69 | 48006 |
| 177 | $J/\psi 	o \pi^- a_2^+, a_2^+ 	o ho^0 \pi^+, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 561 | 69 | 48075 |
| 178 | $J/\psi 	o \pi^+ a_2^-, a_2^- 	o \pi^0 ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 425 | 69 | 48144 |
| 179 | $J/\psi 	o K^+ ar p \Lambda, \Lambda 	o \pi^- p$ | $\pi^- K^+ p ar p$ | 675 | 69 | 48213 |
| 180 | $J/\psi 	o \omega \bar{K}^0 K^*, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K^0_S, K^* 	o \pi^- K^+, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1271 | 69 | 48282 |
| 181 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\phi, \phi \to K^+K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 599 | 68 | 48350 |
| 182 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 262 | 68 | 48418 |
| 183 | $J/\psi \to \pi^0 \rho^0 \rho^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1285 | 68 | 48486 |
| 184 | $J/\psi \to \pi^0 \omega a_1^0, \omega \to \pi^0 \pi^+ \pi^-, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 297 | 68 | 48554 |
| 185 | $J/\psi 	o \eta p ar p, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0p\bar{p}$ | 1163 | 68 | 48622 |
| 186 | $J/\psi \to \pi^- a_2^+, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-$ | 106 | 67 | 48689 |
| 187 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-$ | 878 | 67 | 48756 |
| 188 | $J/\psi \to \pi^0 K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 349 | 67 | 48823 |
| 189 | $J/\psi \to \pi^0 K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 1181 | 67 | 48890 |
| 190 | $J/\psi \to \pi^0 \pi^0 h_1(1170), h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1535 | 66 | 48956 |
| 191 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 36 | 66 | 49022 |
| 192 | $J/\psi \to f_2(1270)\gamma, f_2(1270) \to \pi^+\pi^-$ | $\pi^+\pi^-\gamma$ | 949 | 66 | 49088 |
| 193 | $J/\psi \to \pi^0 a_2^0 \omega, a_2^0 \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1180 | 66 | 49154 |
| 194 | $J/\psi \to \eta n \bar{n}, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0n\bar{n}$ | 131 | 66 | 49220 |
| 195 | $J/\psi \to \pi^0 \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 481 | 65 | 49285 |
| 196 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 48 | 65 | 49350 |
| 197 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 330 | 64 | 49414 |
| 198 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 669 | 64 | 49478 |
| 199 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 1374 | 64 | 49542 |
| 200 | $J/\psi \to \eta n \bar{n}, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-nar{n}$ | 1277 | 63 | 49605 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 201 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 390 | 63 | 49668 |
| 202 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 179 | 63 | 49731 |
| 203 | $J/\psi \to \pi^0 \omega a_1^0, \omega \to \pi^0 \pi^+ \pi^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 474 | 63 | 49794 |
| 204 | $J/\psi ightarrow \pi^+\pi^-\eta K^+K^-, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1422 | 62 | 49856 |
| 205 | $J/\psi \to \bar{\Sigma}^+ \Sigma^- \gamma, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^- \to \pi^- n$ | $\pi^+\pi^-nar{n}\gamma$ | 691 | 62 | 49918 |
| 206 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+\pi^-, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 1792 | 62 | 49980 |
| 207 | $J/\psi \to \pi^0 \pi^0 h_1(1170), h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 523 | 62 | 50042 |
| 208 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1046 | 61 | 50103 |
| 209 | $J/\psi 	o \pi^+ \omega a_0^-, \omega 	o \pi^0 \pi^+ \pi^-, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 746 | 61 | 50164 |
| 210 | $J/\psi ightarrow \pi^+\pi^-\eta K^+K^-, \eta ightarrow \gamma \gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 668 | 61 | 50225 |
| 211 | $J/\psi 	o \Sigma^+ ar{\Sigma}^-, \Sigma^+ 	o \pi^+ n, ar{\Sigma}^- 	o \pi^0 ar{p}$ | $\pi^0\pi^+nar{p}$ | 1210 | 61 | 50286 |
| 212 | $J/\psi 	o \pi^+\pi^-a^0_0, a^0_0 	o \pi^0\eta, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1323 | 61 | 50347 |
| 213 | $J/\psi \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+$ | 536 | 60 | 50407 |
| 214 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^+K^-$ | $\pi^+\pi^-K^+K^-$ | 970 | 60 | 50467 |
| 215 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 480 | 60 | 50527 |
| 216 | $J/\psi 	o \pi^+ K_2^{*0} K^-, K_2^{*0} 	o \pi^- K^+$ | $\pi^+\pi^-K^+K^-$ | 11 | 60 | 50587 |
| 217 | $J/\psi 	o ho^0 K^{*+} K^{*-}, ho^0 	o \pi^+ \pi^-, K^{*+} 	o \pi^0 K^+, K^{*-} 	o \pi^- ar K^0, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 633 | 60 | 50647 |
| 218 | $J/\psi 	o \Lambda ar{\Sigma}^0, \Lambda 	o \pi^- p, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^-par p\gamma$ | 2318 | 60 | 50707 |
| 219 | $J/\psi ightarrow \pi^+ ho^- \eta^\prime, ho^- ightarrow \pi^0 \pi^-, \eta^\prime ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 687 | 59 | 50766 |
| 220 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 427 | 59 | 50825 |
| 221 | $J/\psi 	o ho^0 K^* \bar{K}^*, ho^0 	o \pi^+ \pi^-, K^* 	o \pi^0 K^0, \bar{K}^* 	o \pi^+ K^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 555 | 59 | 50884 |
| 222 | $J/\psi \rightarrow \pi^- \rho^+ \rho^+ \rho^-, \rho^+ \rightarrow \pi^0 \pi^+, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 155 | 58 | 50942 |
| 223 | $J/\psi ightarrow ho^0a_2^0, ho^0 ightarrow\pi^+\pi^-,a_2^0 ightarrow\pi^0\eta,\eta ightarrow\pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1783 | 57 | 50999 |
| 224 | $J/\psi \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^-$ | 728 | 57 | 51056 |
| 225 | $J/\psi ightarrow \pi^0 \omega a^0_0, \omega ightarrow \pi^0 \pi^+ \pi^-, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 513 | 56 | 51112 |
| 226 | $J/\psi 	o \eta \omega, \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 614 | 56 | 51168 |
| 227 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+$ | 1152 | 55 | 51223 |
| 228 | $J/\psi ightarrow ho^0 \pi^+ \pi^- \gamma^F, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 1980 | 55 | 51278 |
| 229 | $J/\psi ightarrow \Sigma^+ ar{\Sigma}^-, \Sigma^+ ightarrow \pi^0 p, ar{\Sigma}^- ightarrow \pi^0 ar{p}$ | $\pi^0\pi^0 par p$ | 795 | 55 | 51333 |
| 230 | $J/\psi \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^-\pi^-K^+$ | 23 | 54 | 51387 |
| 231 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 372 | 54 | 51441 |
| 232 | $J/\psi 	o \pi^- K_2^{*0} K^+, K_2^{*0} 	o \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 774 | 54 | 51495 |
| 233 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1650 | 54 | 51549 |
| 234 | $J/\psi 	o \Lambda \bar{\Lambda} \gamma, \Lambda 	o \pi^- p, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^-ar{n}p\gamma$ | 2194 | 54 | 51603 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 235 | $J/\psi \to K^- p \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+ K^- p \bar{p}$ | 1125 | 54 | 51657 |
| 236 | $J/\psi ightarrow \pi^+ \omega K_S^0 K^-, \omega ightarrow \pi^0 \pi^+ \pi^-, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 873 | 53 | 51710 |
| 237 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1536 | 53 | 51763 |
| 238 | $J/\psi \to \pi^- \eta b_1^+, \eta \to \gamma \gamma, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 570 | 53 | 51816 |
| 239 | $J/\psi ightarrow \pi^- ho^+ \eta^\prime, ho^+ ightarrow \pi^0 \pi^+, \eta^\prime ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 374 | 53 | 51869 |
| 240 | $J/\psi 	o \Lambda ar{\Lambda} \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+n\bar{p}\gamma$ | 526 | 52 | 51921 |
| 241 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1272 | 52 | 51973 |
| 242 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 307 | 52 | 52025 |
| 243 | $J/\psi 	o \Sigma^0 ar{\Sigma}^0, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^-par p\gamma\gamma$ | 316 | 51 | 52076 |
| 244 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \\ \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 988 | 51 | 52127 |
| 245 | $J/\psi \to \pi^0 \pi^0 h_1(1170), h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 621 | 51 | 52178 |
| 246 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\eta, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 754 | 51 | 52229 |
| 247 | $J/\psi ightarrow \pi^- ho^+ \eta, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 879 | 50 | 52279 |
| 248 | $J/\psi ightarrow ar{\Lambda}\Sigma^0, ar{\Lambda} ightarrow \pi^+ ar{p}, \Sigma^0 ightarrow \Lambda \gamma, \Lambda ightarrow \pi^- p$ | $\pi^+\pi^-p\bar{p}\gamma$ | 540 | 50 | 52329 |
| 249 | $J/\psi \to \bar{\Delta}^- \Delta^-, \bar{\Delta}^- \to \pi^+ \bar{n}, \Delta^- \to \pi^- n$ | $\pi^+\pi^-nar{n}$ | 21 | 50 | 52379 |
| 250 | $J/\psi ightarrow ho^0\pi^- ho^+\gamma^F, ho^0 ightarrow \pi^+\pi^-, ho^+ ightarrow \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 517 | 50 | 52429 |
| 251 | $J/\psi 	o \eta \gamma, \eta 	o \gamma \gamma$ | $\gamma\gamma\gamma$ | 93 | 49 | 52478 |
| 252 | $J/\psi \to \pi^+\pi^-\phi, \phi \to K^+K^-$ | $\pi^+\pi^-K^+K^-$ | 30 | 49 | 52527 |
| 253 | $J/\psi \to ho^+ ho^- b_1^0, ho^+ \to \pi^0 \pi^+, ho^- \to \pi^0 \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 641 | 49 | 52576 |
| 254 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1608 | 49 | 52625 |
| 255 | $J/\psi ightarrow \pi^0 \omega a^0_0, \omega ightarrow \pi^0 \pi^+ \pi^-, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 97 | 48 | 52673 |
| 256 | $J/\psi 	o \omega K^0 \bar{K}^*, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, \bar{K}^* 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 1007 | 48 | 52721 |
| 257 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+\Lambda, \bar{\Sigma}^{*-} \to \pi^-\bar{\Lambda}, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 240 | 48 | 52769 |
| 258 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2517 | 48 | 52817 |
| 259 | $J/\psi \to \pi^+ n \bar{\Delta}^+, \bar{\Delta}^+ \to \pi^0 \bar{p}$ | $\pi^0\pi^+n\bar{p}$ | 1573 | 47 | 52864 |
| 260 | $J/\psi \to \Xi^0 \bar{\Xi}^0, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^-ar{n}p$ | 486 | 47 | 52911 |
| 261 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 248 | 47 | 52958 |
| 262 | $J/\psi \to \pi^+ \eta b_1^-, \eta \to \gamma \gamma, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1795 | 46 | 53004 |
| 263 | $J/\psi \to \pi^+ \Delta^- \bar{\Delta}^0, \Delta^- \to \pi^- n, \bar{\Delta}^0 \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 894 | 46 | 53050 |
| 264 | $J/\psi \to \omega K^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 724 | 46 | 53096 |
| 265 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 224 | 46 | 53142 |
| 266 | $J/\psi \to \pi^+ \rho^+ \rho^- \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1121 | 46 | 53188 |
| 267 | $J/\psi \to \Sigma^- \bar{\Sigma}^{*+}, \Sigma^- \to \pi^- n, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-nar{p}$ | 699 | 46 | 53234 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 268 | $J/\psi \to \pi^0 \rho^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 3040 | 46 | 53280 |
| 269 | $J/\psi \rightarrow \rho^+\rho^-\omega, \rho^+ \rightarrow \pi^0\pi^+, \rho^- \rightarrow \pi^0\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, \pi^0 \rightarrow e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 1621 | 45 | 53325 |
| 270 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 126 | 45 | 53370 |
| 271 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 218 | 45 | 53415 |
| 272 | $J/\psi 	o \Lambda ar{\Lambda}, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^-ar{n}p$ | 186 | 45 | 53460 |
| 273 | $J/\psi 	o \pi^+ \Delta^+ \bar{\Delta}^{++}, \Delta^+ 	o \pi^0 p, \bar{\Delta}^{++} 	o \pi^- \bar{p}$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 1218 | 45 | 53505 |
| 274 | $J/\psi 	o ho^0 ho^+ b_1^-, ho^0 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2797 | 45 | 53550 |
| 275 | $J/\psi 	o \eta p ar p, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-par{p}$ | 342 | 45 | 53595 |
| 276 | $J/\psi \to \pi^0 \pi^+ \pi^- K^+ K^- \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 102 | 44 | 53639 |
| 277 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 290 | 44 | 53683 |
| 278 | $J/\psi 	o \pi^0 \Delta^+ ar{\Delta}^+, \Delta^+ 	o \pi^0 p, ar{\Delta}^+ 	o \pi^0 ar{p}$ | $\pi^0\pi^0\pi^0p\bar{p}$ | 979 | 44 | 53727 |
| 279 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 310 | 44 | 53771 |
| 280 | $J/\psi \to \rho^- K^+ \bar{K}_0^{*0}, \rho^- \to \pi^0 \pi^-, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 129 | 44 | 53815 |
| 281 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-$ | 1742 | 43 | 53858 |
| 282 | $J/\psi ightarrow \pi^+ \Delta^0 ar p, \Delta^0 ightarrow \pi^0 n$ | $\pi^0\pi^+n\bar{p}$ | 2050 | 43 | 53901 |
| 283 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 302 | 43 | 53944 |
| 284 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1523 | 43 | 53987 |
| 285 | $J/\psi \to \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 1188 | 43 | 54030 |
| 286 | $J/\psi 	o \eta \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 42 | 43 | 54073 |
| 287 | $J/\psi 	o K^0 K^- b_1^+, K^0 	o K_L^0, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^-$ | 521 | 43 | 54116 |
| 288 | $J/\psi ightarrow ho^0 \omega \gamma, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 857 | 42 | 54158 |
| 289 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 96 | 42 | 54200 |
| 290 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^+ \pi^- K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 1008 | 42 | 54242 |
| 291 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 655 | 42 | 54284 |
| 292 | $J/\psi \rightarrow \omega K^- K^{*+}, \omega \rightarrow \pi^0 \pi^+ \pi^-, K^{*+} \rightarrow \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1609 | 42 | 54326 |
| 293 | $J/\psi 	o \pi^- ho^+ \eta^\prime, ho^+ 	o \pi^0 \pi^+, \eta^\prime 	o \pi^+ \pi^- \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 430 | 42 | 54368 |
| 294 | $J/\psi ightarrow \pi^+ ho^- \omega \gamma^F, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 977 | 42 | 54410 |
| 295 | $J/\psi \to K^+K^-\phi, \phi \to K^+K^-$ | $K^{+}K^{+}K^{-}K^{-}$ | 2401 | 42 | 54452 |
| 296 | $J/\psi \to \bar{\Xi}^+\Xi^-, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^- \to \pi^-\Lambda, \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to \pi^0n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 320 | 42 | 54494 |
| 297 | $J/\psi \to \pi^+\pi^-\omega\gamma^F, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 1217 | 42 | 54536 |
| 298 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 394 | 42 | 54578 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 299 | $J/\psi \to \pi^0 \rho^+ \rho^- \gamma, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 1300 | 41 | 54619 |
| 300 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2325 | 41 | 54660 |
| 301 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1099 | 41 | 54701 |
| 302 | $J/\psi \to \pi^- \bar{n} \Delta^+, \Delta^+ \to \pi^0 p$ | $\pi^0\pi^-ar{n}p$ | 2045 | 41 | 54742 |
| 303 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 920 | 41 | 54783 |
| 304 | $J/\psi \to \pi^- \eta b_1^+, \eta \to \pi^0 \pi^0 \pi^0, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1384 | 41 | 54824 |
| 305 | $J/\psi ightarrow \pi^+\pi^-\eta K^+K^-, \eta ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 356 | 40 | 54864 |
| 306 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1668 | 40 | 54904 |
| 307 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 805 | 40 | 54944 |
| 308 | $J/\psi 	o ho^0 K^0 \bar{K}^0, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0, \bar{K}^0 	o K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 509 | 40 | 54984 |
| 309 | $J/\psi ightarrow \pi^- ar{\Delta}^0 p, ar{\Delta}^0 ightarrow \pi^0 ar{n}$ | $\pi^0\pi^-\bar{n}p$ | 334 | 40 | 55024 |
| 310 | $J/\psi ightarrow \pi^+ ho^- \eta^\prime, ho^- ightarrow \pi^0 \pi^-, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1017 | 40 | 55064 |
| 311 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1022 | 40 | 55104 |
| 312 | $J/\psi 	o ar K^0 K^* \gamma, ar K^0 	o K_L^0, K^* 	o \pi^- K^+$ | $K_L^0\pi^-K^+\gamma$ | 1032 | 40 | 55144 |
| 313 | $J/\psi ightarrow \pi^0 ho^0 \eta, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 275 | 40 | 55184 |
| 314 | $J/\psi 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 863 | 39 | 55223 |
| 315 | $J/\psi ightarrow \pi^- ho^+ \omega \gamma^F, ho^+ ightarrow \pi^0 \pi^+, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 1394 | 39 | 55262 |
| 316 | $J/\psi ightarrow \pi^0 \Delta^0 ar{\Delta}^0, \Delta^0 ightarrow \pi^0 n, ar{\Delta}^0 ightarrow \pi^0 ar{n}$ | $\pi^0\pi^0\pi^0n\bar{n}$ | 677 | 39 | 55301 |
| 317 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^+K^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 662 | 39 | 55340 |
| 318 | $J/\psi \to K^+ K^{*-} \gamma^F, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma^F$ | 855 | 39 | 55379 |
| 319 | $J/\psi \to \pi^+ \eta b_1^-, \eta \to \pi^0 \pi^0 \pi^0, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 60 | 39 | 55418 |
| 320 | $J/\psi ightarrow \eta' \gamma, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1595 | 39 | 55457 |
| 321 | $J/\psi ightarrow K^+K^-b_1^0, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 927 | 38 | 55495 |
| 322 | $J/\psi \to \pi^- \omega K_S^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1469 | 38 | 55533 |
| 323 | $J/\psi 	o \mu^+\mu^-\gamma^f\gamma^f$ | $\mu^+\mu^-\gamma^f\gamma^f$ | 2279 | 38 | 55571 |
| 324 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 326 | 38 | 55609 |
| 325 | $J/\psi 	o \Lambda ar{\Sigma}^0, \Lambda 	o \pi^- p, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^-ar{n}p\gamma$ | 345 | 38 | 55647 |
| 326 | $J/\psi 	o \Xi^0ar\Xi^0, \Xi^0 	o \pi^0\Lambda, ar\Xi^0 	o \pi^0ar\Lambda, \Lambda 	o \pi^0n, ar\Lambda 	o \pi^+ar p$ | $\pi^0\pi^0\pi^0\pi^+nar{p}$ | 1311 | 38 | 55685 |
| 327 | $J/\psi \to \pi^- \bar{\Delta}^+ \Delta^{++}, \bar{\Delta}^+ \to \pi^0 \bar{p}, \Delta^{++} \to \pi^+ p$ | $\pi^0\pi^+\pi^-par{p}$ | 1320 | 38 | 55723 |
| 328 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1139 | 38 | 55761 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 329 | $J/\psi \to \bar{K}^0 K^+ b_1^-, \bar{K}^0 \to K_L^0, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 72 | 38 | 55799 |
| 330 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1639 | 37 | 55836 |
| 331 | $J/\psi \to \rho^+ K^- K_0^0, \rho^+ \to \pi^0 \pi^+, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2435 | 37 | 55873 |
| 332 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+\bar{\Lambda}, \Sigma^{*-} \to \pi^-\Lambda, \bar{\Lambda} \to \pi^+\bar{p}, \Lambda \to \pi^-p$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 227 | 37 | 55910 |
| 333 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^0 \pi^0, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 300 | 37 | 55947 |
| 334 | $J/\psi \to K^- p \bar{\Sigma}^{*0}, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+K^-par{p}$ | 403 | 37 | 55984 |
| 335 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3309 | 37 | 56021 |
| 336 | $J/\psi ightarrow \pi^0 \pi^- ho^+, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-$ | 1392 | 36 | 56057 |
| 337 | $J/\psi \to \bar{K}^0 n \bar{\Lambda}, \bar{K}^0 \to K_L^0, \bar{\Lambda} \to \pi^+ \bar{p}$ | $K_L^0\pi^+nar{p}$ | 195 | 36 | 56093 |
| 338 | $J/\psi 	o \pi^- ho^+ \omega \omega, ho^+ 	o \pi^0 \pi^+, \omega 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 105 | 36 | 56129 |
| 339 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 466 | 36 | 56165 |
| 340 | $J/\psi \to \bar{\Lambda}\Sigma^0, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^0\pi^-ar{n}p\gamma$ | 1459 | 36 | 56201 |
| 341 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2500 | 35 | 56236 |
| 342 | $J/\psi 	o ar{\Lambda}\Sigma^0, ar{\Lambda} 	o \pi^+ar{p}, \Sigma^0 	o \Lambda\gamma, \Lambda 	o \pi^0n$ | $\pi^0\pi^+nar{p}\gamma$ | 1782 | 35 | 56271 |
| 343 | $J/\psi 	o \pi^0 ho^0 \eta, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 765 | 35 | 56306 |
| 344 | $J/\psi \to \pi^0 K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 1687 | 35 | 56341 |
| 345 | $J/\psi 	o ho^- ar{K}^0 K^+, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 2044 | 35 | 56376 |
| 346 | $J/\psi \to \Sigma^0 \bar{\Sigma}^0, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^-ar{n}p\gamma\gamma$ | 1521 | 34 | 56410 |
| 347 | $J/\psi \to K^0 \bar{n} \Lambda, K^0 \to K_L^0, \Lambda \to \pi^- p$ | $K_L^0\pi^-ar{n}p$ | 568 | 34 | 56444 |
| 348 | $J/\psi \to \omega\omega\omega, \omega \to \pi^0\gamma, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 2330 | 34 | 56478 |
| 349 | $J/\psi \to \pi^0 \pi^0 \phi, \phi \to K^+ K^-$ | $\pi^0\pi^0K^+K^-$ | 1720 | 34 | 56512 |
| 350 | $J/\psi	o par p\gamma^F$ | $par{p}\gamma^F$ | 1073 | 34 | 56546 |
| 351 | $J/\psi \to \pi^0 K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 1327 | 34 | 56580 |
| 352 | $J/\psi \to ho^0 ho^- b_1^+, ho^0 \to \pi^+ \pi^-, ho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1538 | 34 | 56614 |
| 353 | $J/\psi \to n\bar{n}f_0(1370), f_0(1370) \to \pi^+\pi^-$ | $\pi^+\pi^-n\bar{n}$ | 2145 | 34 | 56648 |
| 354 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1432 | 34 | 56682 |
| 355 | $J/\psi \to a_2^0 \pi^+ \pi^-, a_2^0 \to \pi^+ \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1442 | 34 | 56716 |
| 356 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^0 K^+ K^-$ | $\pi^0 K^+ K^- \gamma$ | 1166 | 33 | 56749 |
| 357 | $J/\psi 	o \pi^0 \pi^+ \pi^- \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 738 | 33 | 56782 |
| 358 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \gamma^f$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 1170 | 33 | 56815 |
| 359 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma$ | 2494 | 33 | 56848 |
| 360 | $J/\psi 	o \pi^+ \eta b_1^-, \eta 	o \pi^0 \pi^+ \pi^-, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 418 | 33 | 56881 |
| 361 | $J/\psi 	o ho^0 ho^0 \pi^- ho^+, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 167 | 33 | 56914 |
| 362 | $J/\psi 	o \pi^0 ar{K}^0 K^*, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 2790 | 33 | 56947 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 363 | $J/\psi 	o \pi^0\pi^0\omega, \omega 	o \pi^0\gamma$ | $\pi^0\pi^0\pi^0\gamma$ | 458 | 33 | 56980 |
| 364 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 2843 | 33 | 57013 |
| 365 | $J/\psi 	o ho^+ K^0 K^-, ho^+ 	o \pi^0 \pi^+, K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 704 | 33 | 57046 |
| 366 | $J/\psi \to K^0 K^- b_1^+, K^0 \to K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 760 | 33 | 57079 |
| 367 | $J/\psi 	o \eta \gamma, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\gamma$ | 3424 | 33 | 57112 |
| 368 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3563 | 33 | 57145 |
| 369 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 2380 | 32 | 57177 |
| 370 | $J/\psi 	o f_2(1270) \gamma, f_2(1270) 	o \pi^0 \pi^0$ | $\pi^0\pi^0\gamma$ | 1942 | 32 | 57209 |
| 371 | $J/\psi \to \phi f_0(1790), \phi \to K^+K^-, f_0(1790) \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-$ | 312 | 32 | 57241 |
| 372 | $J/\psi ightarrow \pi^- \eta b_1^+, \eta ightarrow \pi^0 \pi^+ \pi^-, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2441 | 32 | 57273 |
| 373 | $J/\psi \to K^- K^{*+} \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma^F$ | 392 | 32 | 57305 |
| 374 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+\pi^-, a_2^0 ightarrow \pi^0\eta, \eta ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1116 | 32 | 57337 |
| 375 | $J/\psi 	o f_0(1710)\gamma, f_0(1710) 	o \pi^0\pi^0$ | $\pi^0\pi^0\gamma$ | 956 | 32 | 57369 |
| 376 | $J/\psi 	o K^- p ar{\Lambda}, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0 K^- ar{n} p$ | 2622 | 32 | 57401 |
| 377 | $J/\psi \to \pi^+ \pi^+ \pi^- \pi^- \phi, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 469 | 32 | 57433 |
| 378 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 651 | 32 | 57465 |
| 379 | $J/\psi 	o \Lambda ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+n\bar{p}$ | 1185 | 32 | 57497 |
| 380 | $J/\psi \to K^-K^{*+}\gamma^F, K^{*+} \to \pi^0K^+$ | $\pi^0 K^+ K^- \gamma^F$ | 1012 | 32 | 57529 |
| 381 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 1477 | 32 | 57561 |
| 382 | $J/\psi 	o \Sigma^0 ar{\Sigma}^{*0}, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+\pi^-p\bar{p}\gamma$ | 3333 | 32 | 57593 |
| 383 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 976 | 32 | 57625 |
| 384 | $J/\psi ightarrow \pi^0 \omega a^0_0, \omega ightarrow \pi^0 \pi^+ \pi^-, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 429 | 32 | 57657 |
| 385 | $J/\psi \to \omega K^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4740 | 32 | 57689 |
| 386 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1095 | 31 | 57720 |
| 387 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1891 | 31 | 57751 |
| 388 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to K^+K^-$ | $K^+K^-\gamma$ | 769 | 31 | 57782 |
| 389 | $J/\psi 	o \Lambda ar{\Lambda} \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0n\bar{n}\gamma$ | 2323 | 31 | 57813 |
| 390 | $J/\psi \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-$ | 747 | 31 | 57844 |
| 391 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2819 | 31 | 57875 |
| 392 | $J/\psi ightarrow \pi^+ \Delta^0 ar p, \Delta^0 ightarrow \pi^- p$ | $\pi^+\pi^-p\bar{p}$ | 80 | 31 | 57906 |
| 393 | $J/\psi ightarrow ho^0\pi^+ ho^-\gamma^F, ho^0 ightarrow \pi^+\pi^-, ho^- ightarrow \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 581 | 31 | 57937 |
| 394 | $J/\psi \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+$ | 77 | 31 | 57968 |
| 395 | $J/\psi 	o \pi^- ho^+ \gamma^f, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-\gamma^f$ | 1026 | 31 | 57999 |
| 396 | $J/\psi 	o \pi^0 \eta b_1^0, \eta 	o \gamma \gamma, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3404 | 31 | 58030 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 397 | $J/\psi \to \pi^+ \eta' b_1^-, \eta' \to \rho^0 \gamma, b_1^- \to \pi^- \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 2070 | 31 | 58061 |
| 398 | $J/\psi ightarrow ho^0 ho^0 \omega, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 187 | 31 | 58092 |
| 399 | $J/\psi 	o \pi^0 K^0 ar{K}^0, K^0 	o K_L^0, ar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0$ | 4392 | 31 | 58123 |
| 400 | $J/\psi 	o ar{\Sigma}^0 \Sigma^{*0}, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Sigma^{*0} 	o \pi^0 \Lambda, ar{\Lambda} 	o \pi^+ ar{p}, \Lambda 	o \pi^- p$ | $\pi^0\pi^+\pi^-p\bar{p}\gamma$ | 2498 | 31 | 58154 |
| 401 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^-K^+, a_0^+ \to \pi^+\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 2027 | 30 | 58184 |
| 402 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7 | 30 | 58214 |
| 403 | $J/\psi \to \pi^- \eta K_S^0 K^+, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 419 | 30 | 58244 |
| 404 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma$ | 1472 | 30 | 58274 |
| 405 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1221 | 30 | 58304 |
| 406 | $J/\psi ightarrow \pi^+ ho^- \eta^\prime, ho^- ightarrow \pi^0 \pi^-, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 630 | 30 | 58334 |
| 407 | $J/\psi 	o ho^0 ho^0 \pi^+ ho^-, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 340 | 30 | 58364 |
| 408 | $J/\psi 	o K^+ ar p \Lambda, \Lambda 	o \pi^0 n$ | $\pi^0 K^+ n ar p$ | 1552 | 30 | 58394 |
| 409 | $J/\psi ightarrow \pi^0 \eta b_1^0, \eta ightarrow \pi^0 \pi^0 \pi^0, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 2842 | 30 | 58424 |
| 410 | $J/\psi \to \rho^0 f_2(1270), \rho^0 \to \pi^+\pi^-, f_2(1270) \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 173 | 29 | 58453 |
| 411 | $J/\psi ightarrow \pi^0 ho^0 \eta^\prime, ho^0 ightarrow \pi^+ \pi^-, \eta^\prime ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2813 | 29 | 58482 |
| 412 | $J/\psi \to \bar{\Sigma}^+ \Sigma^{*-}, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^{*-} \to \pi^- \Lambda, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-ar{n}p$ | 1982 | 29 | 58511 |
| 413 | $J/\psi \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^-$ | 255 | 29 | 58540 |
| 414 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0$ | 393 | 29 | 58569 |
| 415 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2980 | 29 | 58598 |
| 416 | $J/\psi 	o K^0 ar{K}^* \gamma, K^0 	o K_L^0, ar{K}^* 	o \pi^+ K^-$ | $K_L^0\pi^+K^-\gamma$ | 700 | 29 | 58627 |
| 417 | $J/\psi \to K^0 \bar{n} \Lambda, K^0 \to K_S^0, \Lambda \to \pi^- p, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-ar{n}p$ | 1393 | 29 | 58656 |
| 418 | $J/\psi 	o \pi^+\pi^-\omega\gamma^f, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 501 | 29 | 58685 |
| 419 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+\Lambda, \bar{\Sigma}^{*-} \to \pi^-\bar{\Lambda}, \Lambda \to \pi^-p, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 151 | 29 | 58714 |
| 420 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 414 | 29 | 58743 |
| 421 | $J/\psi \to \bar{K}^0 K^+ b_1^-, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 311 | 29 | 58772 |
| 422 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4163 | 29 | 58801 |
| 423 | $J/\psi 	o \pi^+\pi^-\eta\gamma^F, \eta 	o \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 1447 | 29 | 58830 |
| 424 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+\bar{\Lambda}, \Sigma^{*-} \to \pi^-\Lambda, \bar{\Lambda} \to \pi^+\bar{p}, \Lambda \to \pi^0 n$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}n\bar{p}$ | 1027 | 29 | 58859 |
| 425 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 1094 | 28 | 58887 |
| 426 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 160 | 28 | 58915 |
| 427 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3121 | 28 | 58943 |
| 428 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\omega\gamma^f, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 3288 | 28 | 58971 |
| 429 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o K^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 1786 | 28 | 58999 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 430 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 819 | 28 | 59027 |
| 431 | $J/\psi 	o \Sigma^0 ar{\Sigma}^0, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+nar p\gamma\gamma$ | 660 | 28 | 59055 |
| 432 | $J/\psi 	o \pi^0\pi^-ar{n}p$ | $\pi^0\pi^-ar{n}p$ | 2397 | 28 | 59083 |
| 433 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 884 | 28 | 59111 |
| 434 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1736 | 28 | 59139 |
| 435 | $J/\psi \to \pi^+ K^* K^-, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 1232 | 28 | 59167 |
| 436 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1196 | 28 | 59195 |
| 437 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^0 \pi^0, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2728 | 27 | 59222 |
| 438 | $J/\psi \to \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 2786 | 27 | 59249 |
| 439 | $J/\psi 	o \eta K^+K^-, \eta 	o \gamma \gamma$ | $K^+K^-\gamma\gamma$ | 2214 | 27 | 59276 |
| 440 | $J/\psi 	o \Xi^0 ar{\Xi}^0, \Xi^0 	o \pi^0 \Lambda, ar{\Xi}^0 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^0\pi^0n\bar{n}$ | 1652 | 27 | 59303 |
| 441 | $J/\psi ightarrow \pi^- ho^+ \eta^\prime, ho^+ ightarrow \pi^0 \pi^+, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 822 | 27 | 59330 |
| 442 | $J/\psi ightarrow \pi^0 \pi^+ a_2^-, a_2^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 1566 | 27 | 59357 |
| 443 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^- K^+$ | 219 | 27 | 59384 |
| 444 | $J/\psi ightarrow a_2^0 \pi^+ \pi^-, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 3765 | 27 | 59411 |
| 445 | $J/\psi \to K^+K^{*-}\gamma^F, K^{*-} \to \pi^0K^-$ | $\pi^0 K^+ K^- \gamma^F$ | 2125 | 27 | 59438 |
| 446 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^-$ | 1018 | 27 | 59465 |
| 447 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1128 | 27 | 59492 |
| 448 | $J/\psi ightarrow \pi^0 ho^0 \omega \gamma, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1999 | 26 | 59518 |
| 449 | $J/\psi ightarrow \pi^+\pi^-\omega b_1^0, \omega ightarrow \pi^0\pi^+\pi^-, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 245 | 26 | 59544 |
| 450 | $J/\psi 	o \pi^0 b_1^0 f_0(1370), b_1^0 	o \pi^0 \omega, f_0(1370) 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3263 | 26 | 59570 |
| 451 | $J/\psi \to \pi^+ \Delta^+ \bar{\Delta}^{++}, \Delta^+ \to \pi^+ n, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^+\pi^- nar{p}$ | 650 | 26 | 59596 |
| 452 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1721 | 26 | 59622 |
| 453 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 159 | 26 | 59648 |
| 454 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma$ | 922 | 26 | 59674 |
| 455 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^+K^-, a_0^- \to \pi^-\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 2112 | 26 | 59700 |
| 456 | $J/\psi \to ho^0 K^0 \bar{K}^*, ho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 1173 | 26 | 59726 |
| 457 | $J/\psi \to K^-K^{*+}\gamma^F, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma^F$ | 1978 | 26 | 59752 |
| 458 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 1162 | 26 | 59778 |
| 459 | $J/\psi \rightarrow \pi^- \eta' b_1^+, \eta' \rightarrow \rho^0 \gamma, b_1^+ \rightarrow \pi^+ \omega, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 4382 | 26 | 59804 |
| 460 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2196 | 26 | 59830 |
| 461 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1605 | 26 | 59856 |
| 462 | $J/\psi 	o \Delta^+ ar{\Delta}^+, \Delta^+ 	o \pi^0 p, ar{\Delta}^+ 	o \pi^0 ar{p}$ | $\pi^0\pi^0 par p$ | 5522 | 26 | 59882 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 463 | $J/\psi \to \pi^0 f_2(1270) b_1^0, f_2(1270) \to \pi^+\pi^-, b_1^0 \to \pi^0\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2301 | 25 | 59907 |
| 464 | $J/\psi ightarrow \pi^- ar{\Delta}^0 p, ar{\Delta}^0 ightarrow \pi^+ ar{p}$ | $\pi^+\pi^-p\bar{p}$ | 707 | 25 | 59932 |
| 465 | $J/\psi ightarrow \pi^+ \eta K^0_S K^-, \eta ightarrow \pi^0 \pi^0 \pi^0, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 665 | 25 | 59957 |
| 466 | $J/\psi \to \rho^- \bar{p}\Delta^{++}, \rho^- \to \pi^0 \pi^-, \Delta^{++} \to \pi^+ p$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 585 | 25 | 59982 |
| 467 | $J/\psi ightarrow f_{2}^{'}\gamma, f_{2}^{'} ightarrow K^{+}K^{-}$ | $K^+K^-\gamma$ | 1855 | 25 | 60007 |
| 468 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 2926 | 25 | 60032 |
| 469 | $J/\psi 	o \Sigma^0 ar{\Sigma}^0 \gamma, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^-p\bar{p}\gamma\gamma\gamma$ | 1874 | 25 | 60057 |
| 470 | $J/\psi 	o \Lambda ar{\Sigma}^0, \Lambda 	o \pi^0 n, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+n\bar{p}\gamma$ | 1149 | 25 | 60082 |
| 471 | $J/\psi ightarrow \pi^0 \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 2761 | 25 | 60107 |
| 472 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1612 | 25 | 60132 |
| 473 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+$ | 4790 | 25 | 60157 |
| 474 | $J/\psi 	o \eta' p ar p, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^-p\bar{p}\gamma$ | 532 | 25 | 60182 |
| 475 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 676 | 24 | 60206 |
| 476 | $J/\psi \to p\bar{p}f_0(1370), f_0(1370) \to \pi^+\pi^-$ | $\pi^+\pi^-p\bar{p}$ | 1421 | 24 | 60230 |
| 477 | $J/\psi \to \pi^0 \pi^+ \pi^- f_2(1270), f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1954 | 24 | 60254 |
| 478 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 368 | 24 | 60278 |
| 479 | $J/\psi ightarrow K^0 ar K^0 \gamma, K^0 ightarrow K^0_L, ar K^0 ightarrow K^0_L$ | $K_L^0 K_L^0 \gamma$ | 496 | 24 | 60302 |
| 480 | $J/\psi 	o \eta' p ar p, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \gamma \gamma$ | $\pi^+\pi^-p\bar p\gamma\gamma$ | 2879 | 24 | 60326 |
| 481 | $J/\psi ightarrow ho^- a_2^+, ho^- ightarrow \pi^0 \pi^-, a_2^+ ightarrow \pi^+ \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 82 | 24 | 60350 |
| 482 | $J/\psi 	o \pi^- ar{\Delta}^- \Delta^0, ar{\Delta}^- 	o \pi^+ ar{n}, \Delta^0 	o \pi^0 n$ | $\pi^0\pi^+\pi^-n\bar{n}$ | 2333 | 24 | 60374 |
| 483 | $J/\psi \rightarrow \rho^+ \omega b_1^-, \rho^+ \rightarrow \pi^0 \pi^+, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1051 | 24 | 60398 |
| 484 | $J/\psi \to \pi^- \bar{\Delta}^+ \Delta^{++}, \bar{\Delta}^+ \to \pi^- \bar{n}, \Delta^{++} \to \pi^+ p$ | $\pi^+\pi^-\pi^-\bar{n}p$ | 3114 | 24 | 60422 |
| 485 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2014 | 24 | 60446 |
| 486 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3164 | 24 | 60470 |
| 487 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 202 | 24 | 60494 |
| 488 | $J/\psi \to \pi^- \bar{\Delta}^0 \Delta^+, \bar{\Delta}^0 \to \pi^0 \bar{n}, \Delta^+ \to \pi^0 p$ | $\pi^0\pi^0\pi^-ar{n}p$ | 654 | 24 | 60518 |
| 489 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^-K^+, a_0^+ \to \pi^+\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1462 | 24 | 60542 |
| 490 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^-, \Lambda \to \pi^- p, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 961 | 24 | 60566 |
| 491 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $K_L^0 \pi^+ K^- \gamma$ | 1236 | 24 | 60590 |
| 492 | $J/\psi \to \pi^+ n \bar{\Delta}^+, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^+\pi^-nar{n}$ | 148 | 24 | 60614 |
| 493 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 887 | 24 | 60638 |
| 494 | $J/\psi \to \pi^+\pi^-\phi, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2570 | 24 | 60662 |
| 495 | $J/\psi \to \pi^0 \Delta^+ \bar{\Delta}^+, \Delta^+ \to \pi^0 p, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^0\pi^-\bar{n}p$ | 3789 | 24 | 60686 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 496 | $J/\psi \to K^{+} \bar{K}_{1}^{'-}, \bar{K}_{1}^{'-} \to \pi^{-} \bar{K}^{*}, \bar{K}^{*} \to \pi^{0} \bar{K}^{0}, \bar{K}^{0} \to K_{L}^{0}$ | $\pi^0 K_L^0 \pi^- K^+$ | 1273 | 24 | 60710 |
| 497 | $J/\psi \to \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 2189 | 24 | 60734 |
| 498 | $J/\psi \to \bar{\Xi}^+\Xi^{*-}, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^{*-} \to \pi^-\Xi^0, \bar{\Lambda} \to \pi^+\bar{p}, \Xi^0 \to \pi^0\Lambda, \Lambda \to \pi^-p$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 2757 | 24 | 60758 |
| 499 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 123 | 24 | 60782 |
| 500 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^- nar{p}$ | 1886 | 24 | 60806 |
| 501 | $J/\psi \to \Sigma^+ \bar{\Sigma}^- \gamma, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^+\pi^-nar{n}\gamma$ | 5288 | 24 | 60830 |
| 502 | $J/\psi ightarrow \pi^+ \Delta^0 ar{\Delta}^+, \Delta^0 ightarrow \pi^0 n, ar{\Delta}^+ ightarrow \pi^0 ar{p}$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 1156 | 24 | 60854 |
| 503 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 138 | 23 | 60877 |
| 504 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^0K^+K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 265 | 23 | 60900 |
| 505 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma$ | 3305 | 23 | 60923 |
| 506 | $J/\psi 	o \pi^0 K^+ K_1^-, K_1^- 	o ho^- ar K^0, ho^- 	o \pi^0 \pi^-, ar K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 1648 | 23 | 60946 |
| 507 | $J/\psi \to \rho^0 K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 569 | 23 | 60969 |
| 508 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 1794 | 23 | 60992 |
| 509 | $J/\psi \to \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 1165 | 23 | 61015 |
| 510 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 3454 | 23 | 61038 |
| 511 | $J/\psi 	o \pi^0 ar{K}^0 K_1^0, ar{K}^0 	o K_L^0, K_1^0 	o ho^- K^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 515 | 23 | 61061 |
| 512 | $J/\psi \to \pi^- \bar{n} \Delta^+, \Delta^+ \to \pi^+ n$ | $\pi^+\pi^-nar{n}$ | 3598 | 23 | 61084 |
| 513 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^- \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 1489 | 23 | 61107 |
| 514 | $J/\psi \to \rho^+ p \bar{\Delta}^{++}, \rho^+ \to \pi^0 \pi^+, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^0\pi^+\pi^-par{p}$ | 737 | 23 | 61130 |
| 515 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 3011 | 23 | 61153 |
| 516 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 4341 | 23 | 61176 |
| 517 | $J/\psi ightarrow \pi^+ \eta K_S^0 K^-, \eta ightarrow \gamma \gamma, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 666 | 23 | 61199 |
| 518 | $J/\psi ightarrow \pi^- ho^+ f_0(1370), ho^+ ightarrow \pi^0 \pi^+, f_0(1370) ightarrow \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3098 | 23 | 61222 |
| 519 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0$ | 1146 | 23 | 61245 |
| 520 | $J/\psi 	o \pi^0 \pi^+ a_2^-, a_2^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 574 | 23 | 61268 |
| 521 | $J/\psi ightarrow \pi^+ ho^- \eta^\prime, ho^- ightarrow \pi^0 \pi^-, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5160 | 23 | 61291 |
| 522 | $J/\psi 	o \omega ar{p} \Delta^+, \omega 	o \pi^0 \pi^+ \pi^-, \Delta^+ 	o \pi^0 p$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 636 | 23 | 61314 |
| 523 | $J/\psi \to K^{-}K_{1}^{'+}, K_{1}^{'+} \to \pi^{+}K^{*}, K^{*} \to \pi^{0}K^{0}, K^{0} \to K_{L}^{0}$ | $\pi^0 K_L^0 \pi^+ K^-$ | 3212 | 23 | 61337 |
| 524 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 1790 | 22 | 61359 |
| 525 | $J/\psi 	o \pi^- \eta K_S^0 K^+, \eta 	o \pi^0 \pi^0 \pi^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 238 | 22 | 61381 |
| 526 | $J/\psi 	o K^+ ar{K}_1^{'-}, ar{K}_1^{'-} 	o \pi^0 K^{*-}, K^{*-} 	o \pi^- ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 125 | 22 | 61403 |
| 527 | $J/\psi ightarrow \pi^- ho^+ \eta', ho^+ ightarrow \pi^0 \pi^+, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 495 | 22 | 61425 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 528 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma$ | 1820 | 22 | 61447 |
| 529 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 214 | 22 | 61469 |
| 530 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-$ | 2616 | 22 | 61491 |
| 531 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 652 | 22 | 61513 |
| 532 | $J/\psi \to \pi^- \bar{\Lambda} \Sigma^+, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^+ \to \pi^0 p$ | $\pi^0\pi^+\pi^-par{p}$ | 2720 | 22 | 61535 |
| 533 | $J/\psi 	o \eta \omega, \eta 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1239 | 22 | 61557 |
| 534 | $J/\psi ightarrow \pi^0 ho^0, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\gamma^f$ | 1153 | 22 | 61579 |
| 535 | $J/\psi \to K^* \bar{n} \Lambda, K^* \to \pi^- K^+, \Lambda \to \pi^- p$ | $\pi^-\pi^-K^+ar{n}p$ | 194 | 22 | 61601 |
| 536 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\pi^-\eta, \eta 	o \gamma\gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 1713 | 22 | 61623 |
| 537 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+\bar{\Lambda}, \Sigma^{*-} \to \pi^-\Lambda, \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to \pi^-p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 2293 | 22 | 61645 |
| 538 | $J/\psi 	o \pi^- ar{\Delta}{}^0 \Delta^+, ar{\Delta}{}^0 	o \pi^0 ar{n}, \Delta^+ 	o \pi^+ n$ | $\pi^0\pi^+\pi^-nar{n}$ | 388 | 22 | 61667 |
| 539 | $J/\psi 	o \pi^0 \Delta^0 \bar{\Delta}^0, \Delta^0 	o \pi^- p, \bar{\Delta}^0 	o \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^-ar{n}p$ | 1579 | 22 | 61689 |
| 540 | $J/\psi 	o ho^- ar{K}^* K^+, ho^- 	o \pi^0 \pi^-, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 1386 | 22 | 61711 |
| 541 | $J/\psi 	o \pi^0 \pi^+ n ar p$ | $\pi^0\pi^+n\bar{p}$ | 995 | 22 | 61733 |
| 542 | $J/\psi 	o ho^0 K^0 ar K^0, ho^0 	o \pi^+ \pi^-, K^0 	o K^0_S, ar K^0 	o K^0_L, K^0_S 	o \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 868 | 22 | 61755 |
| 543 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2849 | 22 | 61777 |
| 544 | $J/\psi 	o \pi^0\pi^-a_2^+, a_2^+ 	o \pi^+\eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 158 | 22 | 61799 |
| 545 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4570 | 22 | 61821 |
| 546 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2018 | 22 | 61843 |
| 547 | $J/\psi 	o ar K^0 n ar \Lambda, ar K^0 	o K_L^0, ar \Lambda 	o \pi^0 ar n$ | $\pi^0 K_L^0 n \bar{n}$ | 2022 | 22 | 61865 |
| 548 | $J/\psi \to \pi^- K^+ \bar{K}_1^0, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 295 | 22 | 61887 |
| 549 | $J/\psi 	o \pi^0 \Delta^+ \bar{\Delta}^+, \Delta^+ 	o \pi^+ n, \bar{\Delta}^+ 	o \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+nar{p}$ | 5171 | 22 | 61909 |
| 550 | $J/\psi ightarrow \omega ar{K}^0 K^*, \omega ightarrow \pi^0 \pi^+ \pi^-, ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^0 K^0, K^0 ightarrow K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 3031 | 22 | 61931 |
| 551 | $J/\psi 	o \eta K^+K^-, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^+K^-$ | 1611 | 22 | 61953 |
| 552 | $J/\psi \to K^+K^{*-}\gamma^F, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma^F$ | 6116 | 22 | 61975 |
| 553 | $J/\psi 	o \pi^0 K^0 ar K^0, K^0 	o K^0_S, ar K^0 	o K^0_L, K^0_S 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^-$ | 1642 | 21 | 61996 |
| 554 | $J/\psi \to \bar{\Sigma}^+ \Sigma^{*-}, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^{*-} \to \pi^- \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^-n\bar{n}$ | 792 | 21 | 62017 |
| 555 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^- \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1193 | 21 | 62038 |
| 556 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma$ | 1369 | 21 | 62059 |
| 557 | $J/\psi ightarrow \pi^0 \pi^- b_1^+, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2389 | 21 | 62080 |
| 558 | $J/\psi \to \pi^- \bar{K}^* K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 553 | 21 | 62101 |
| 559 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-$ | 499 | 21 | 62122 |
| 560 | $J/\psi 	o a_2^- ar{K}^0 K^+, a_2^- 	o ho^0 \pi^-, ar{K}^0 	o K_L^0, ho^0 	o \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 405 | 21 | 62143 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 561 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1715 | 21 | 62164 |
| 562 | $J/\psi 	o \pi^+\Lambda \bar{\Sigma}^-, \Lambda 	o \pi^- p, \bar{\Sigma}^- 	o \pi^- \bar{n}$ | $\pi^+\pi^-\pi^-ar{n}p$ | 1905 | 21 | 62185 |
| 563 | $J/\psi \to \pi^0 K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2182 | 21 | 62206 |
| 564 | $J/\psi \to \pi^+\pi^-\rho^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 576 | 21 | 62227 |
| 565 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 823 | 21 | 62248 |
| 566 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 889 | 21 | 62269 |
| 567 | $J/\psi \to \rho^- \bar{\Delta}^- n, \rho^- \to \pi^0 \pi^-, \bar{\Delta}^- \to \pi^+ \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 216 | 21 | 62290 |
| 568 | $J/\psi 	o ar K^* n ar \Lambda, ar K^* 	o \pi^+ K^-, ar \Lambda 	o \pi^+ ar p$ | $\pi^+\pi^+K^-nar{p}$ | 350 | 21 | 62311 |
| 569 | $J/\psi \to K^+K^-\phi, \phi \to K_L^0K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-K^+K^-$ | 2663 | 21 | 62332 |
| 570 | $J/\psi 	o K^{*-}K_2^{*+}, K^{*-} 	o \pi^- \bar{K}^0, K_2^{*+} 	o \pi^0 K^+, \bar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 4929 | 21 | 62353 |
| 571 | $J/\psi \to \pi^0 \pi^0 \pi^+ \pi^- \gamma^F, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma^F$ | 542 | 21 | 62374 |
| 572 | $J/\psi 	o \omega \omega \gamma, \omega 	o \pi^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1526 | 21 | 62395 |
| 573 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3237 | 21 | 62416 |
| 574 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 152 | 21 | 62437 |
| 575 | $J/\psi 	o \eta \gamma, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma$ | 1337 | 21 | 62458 |
| 576 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2264 | 20 | 62478 |
| 577 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2659 | 20 | 62498 |
| 578 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2660 | 20 | 62518 |
| 579 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \pi^+\pi^-$ | $\pi^+\pi^-\gamma$ | 1150 | 20 | 62538 |
| 580 | $J/\psi \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{-}K^{+}$ | 814 | 20 | 62558 |
| 581 | $J/\psi 	o K^+K^-$ | K^+K^- | 2300 | 20 | 62578 |
| 582 | $J/\psi 	o ar K^0 n ar \Lambda, ar K^0 	o K^0_S, ar \Lambda 	o \pi^+ ar p, K^0_S 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-nar{p}$ | 596 | 20 | 62598 |
| 583 | $J/\psi \to \pi^- \bar{\Lambda} \Sigma^+, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^+ \to \pi^+ n$ | $\pi^+\pi^+\pi^-nar{p}$ | 2012 | 20 | 62618 |
| 584 | $J/\psi ightarrow \pi^0 \eta b_1^0, \eta ightarrow \pi^0 \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1784 | 20 | 62638 |
| 585 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 1616 | 20 | 62658 |
| 586 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^0K^+, b_1^- \to \pi^-\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 692 | 20 | 62678 |
| 587 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 286 | 20 | 62698 |
| 588 | $J/\psi \to \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 1199 | 20 | 62718 |
| 589 | $J/\psi \to \pi^+ \rho^- \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-\gamma^f$ | 508 | 20 | 62738 |
| 590 | $J/\psi \to \rho^0 K^+ K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 3779 | 20 | 62758 |
| 591 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 328 | 20 | 62778 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 592 | $J/\psi 	o ho^- \omega b_1^+, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 4044 | 20 | 62798 |
| 593 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 1105 | 20 | 62818 |
| 594 | $J/\psi \to \bar{K}^*K^+b_1^-, \bar{K}^* \to \pi^+K^-, b_1^- \to \pi^-\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 63 | 20 | 62838 |
| 595 | $J/\psi \to \bar{\Sigma}^0 \Sigma^{*0}, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^-ar{n}p\gamma$ | 2924 | 20 | 62858 |
| 596 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1049 | 20 | 62878 |
| 597 | $J/\psi ightarrow \pi^0 \Delta^0 ar{\Delta}^0, \Delta^0 ightarrow \pi^0 n, ar{\Delta}^0 ightarrow \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 2445 | 20 | 62898 |
| 598 | $J/\psi \to \rho^0 K^+ K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 182 | 20 | 62918 |
| 599 | $J/\psi \to K^0 \bar{K}^0 \gamma, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\gamma$ | 4786 | 20 | 62938 |
| 600 | $J/\psi \to \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-$ | 1341 | 20 | 62958 |
| 601 | $J/\psi \to \pi^+ \rho^- \omega \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 924 | 20 | 62978 |
| 602 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 3067 | 20 | 62998 |
| 603 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 3068 | 20 | 63018 |
| 604 | $J/\psi ightarrow \pi^+ a_2^-, a_2^- ightarrow \pi^0 \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 723 | 20 | 63038 |
| 605 | $J/\psi \to \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 797 | 20 | 63058 |
| 606 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^+ K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 450 | 20 | 63078 |
| 607 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1313 | 19 | 63097 |
| 608 | $J/\psi \to K^{+}K^{-}f_{2}^{'}, f_{2}^{'} \to K^{+}K^{-}$ | $K^{+}K^{+}K^{-}K^{-}$ | 589 | 19 | 63116 |
| 609 | $J/\psi 	o \pi^- K_2^{*0} K^+, K_2^{*0} 	o \pi^0 ar K^0, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 1540 | 19 | 63135 |
| 610 | $J/\psi \rightarrow \rho^+ \omega b_1^-, \rho^+ \rightarrow \pi^0 \pi^+, \omega \rightarrow \pi^0 \gamma, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 954 | 19 | 63154 |
| 611 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 1178 | 19 | 63173 |
| 612 | $J/\psi \to \pi^0 \pi^+ \pi^- K^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 1994 | 19 | 63192 |
| 613 | $J/\psi ightarrow ho^0 \pi^+ ho^- \omega, ho^0 ightarrow \pi^+ \pi^-, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 741 | 19 | 63211 |
| 614 | $J/\psi 	o ar{K}^*K_2^{*0}, ar{K}^* 	o \pi^+K^-, K_2^{*0} 	o \pi^0K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 1572 | 19 | 63230 |
| 615 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+ \pi^- \gamma^f, a_2^0 ightarrow \pi^- ho^+, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 149 | 19 | 63249 |
| 616 | $J/\psi 	o \Lambda ar{\Sigma}^0, \Lambda 	o \pi^0 n, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0n\bar{n}\gamma$ | 2582 | 19 | 63268 |
| 617 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3003 | 19 | 63287 |
| 618 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0 K^+ K^- \gamma$ | 2016 | 19 | 63306 |
| 619 | $J/\psi ightarrow ho^+ a_2^-, ho^+ ightarrow \pi^0 \pi^+, a_2^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 3021 | 19 | 63325 |
| 620 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1339 | 19 | 63344 |
| 621 | $J/\psi 	o \Lambda ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0n\bar{n}$ | 4378 | 19 | 63363 |
| 622 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 1805 | 19 | 63382 |
| 623 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-$ | $\pi^+\pi^-K^+K^+K^-K^-$ | 217 | 19 | 63401 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 624 | $J/\psi \to K^{-}K_{1}^{'+}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{L}^{0}$ | $\pi^0 K_L^0 \pi^+ K^-$ | 4504 | 19 | 63420 |
| 625 | $J/\psi ightarrow \pi^+ \Lambda ar{\Sigma}^-, \Lambda ightarrow \pi^0 n, ar{\Sigma}^- ightarrow \pi^0 ar{p}$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 4545 | 19 | 63439 |
| 626 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^0 p, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^-par{p}$ | 355 | 19 | 63458 |
| 627 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 4618 | 19 | 63477 |
| 628 | $J/\psi ightarrow ho^- b_1^+ \gamma, ho^- ightarrow \pi^0 \pi^-, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4665 | 19 | 63496 |
| 629 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 1604 | 19 | 63515 |
| 630 | $J/\psi 	o \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2727 | 19 | 63534 |
| 631 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^* \to \pi^- K^+, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1293 | 19 | 63553 |
| 632 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1525 | 19 | 63572 |
| 633 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3185 | 19 | 63591 |
| 634 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to K^+K^-$ | $K^{+}K^{+}K^{-}K^{-}$ | 2759 | 19 | 63610 |
| 635 | $J/\psi \to a_2^- b_1^+, a_2^- \to \pi^0 \rho^-, b_1^+ \to \pi^+ \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 327 | 19 | 63629 |
| 636 | $J/\psi \to \bar{K}^0 K^* \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma$ | 2394 | 19 | 63648 |
| 637 | $J/\psi ightarrow ho^0\pi^- ho^+\omega, ho^0 ightarrow \pi^+\pi^-, ho^+ ightarrow \pi^0\pi^+, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1037 | 19 | 63667 |
| 638 | $J/\psi 	o \omega K^0 \bar{K}^*, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K^0_S, \bar{K}^* 	o \pi^+ K^-, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1770 | 18 | 63685 |
| 639 | $J/\psi \rightarrow \pi^0 K^+ K_1^-, K_1^- \rightarrow \omega K^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4364 | 18 | 63703 |
| 640 | $J/\psi 	o \Sigma^+ ar{\Sigma}^- \gamma, \Sigma^+ 	o \pi^0 p, ar{\Sigma}^- 	o \pi^0 ar{p}$ | $\pi^0\pi^0p\bar{p}\gamma$ | 2929 | 18 | 63721 |
| 641 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \rho^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 57 | 18 | 63739 |
| 642 | $J/\psi 	o ho^0 \omega \omega, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1981 | 18 | 63757 |
| 643 | $J/\psi \to \bar{\Sigma}^- \Sigma^{*+}, \bar{\Sigma}^- \to \pi^- \bar{n}, \Sigma^{*+} \to \pi^+ \Lambda, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-ar{n}p$ | 4485 | 18 | 63775 |
| 644 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1468 | 18 | 63793 |
| 645 | $J/\psi ightarrow \pi^0 b_1^0, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\gamma$ | 615 | 18 | 63811 |
| 646 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0 K_L^0\pi^+\pi^-$ | 755 | 18 | 63829 |
| 647 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 4579 | 18 | 63847 |
| 648 | $J/\psi ightarrow ho^- \omega b_1^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \gamma, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3412 | 18 | 63865 |
| 649 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma$ | 2137 | 18 | 63883 |
| 650 | $J/\psi ightarrow \pi^0 ho^0 ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 861 | 18 | 63901 |
| 651 | $J/\psi 	o \pi^- a_1^+, a_1^+ 	o ho^0 \pi^+, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 3544 | 18 | 63919 |
| 652 | $J/\psi \to \pi^- \bar{\Delta}^- \Delta^0, \bar{\Delta}^- \to \pi^+ \bar{n}, \Delta^0 \to \pi^- p$ | $\pi^+\pi^-\pi^-ar{n}p$ | 95 | 18 | 63937 |
| 653 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 2342 | 18 | 63955 |
| 654 | $J/\psi \to \pi^0 \bar{\Sigma}^+ \Sigma^-, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^- \to \pi^- n$ | $\pi^0\pi^+\pi^-nar{n}$ | 5138 | 18 | 63973 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 655 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^- K^+, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 993 | 18 | 63991 |
| 656 | $J/\psi ightarrow a_2^0 \pi^+ \pi^-, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 2017 | 18 | 64009 |
| 657 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \phi \to K^+ K^-$ | $K_{L}^{0}K_{L}^{0}K^{+}K^{-}$ | 1202 | 18 | 64027 |
| 658 | $J/\psi \to K^+K^-h_1(1170), h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 5440 | 18 | 64045 |
| 659 | $J/\psi 	o \pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 639 | 18 | 64063 |
| 660 | $J/\psi \rightarrow \phi f_2', \phi \rightarrow K^+K^-, f_2' \rightarrow K^+K^-$ | $K^{+}K^{+}K^{-}K^{-}$ | 1968 | 18 | 64081 |
| 661 | $J/\psi \to K^*K^-b_1^+, K^* \to \pi^-K^+, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2795 | 17 | 64098 |
| 662 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^-$ | 2110 | 17 | 64115 |
| 663 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2800 | 17 | 64132 |
| 664 | $J/\psi 	o ar{\Lambda}\Sigma^0, ar{\Lambda} 	o \pi^0ar{n}, \Sigma^0 	o \Lambda\gamma, \Lambda 	o \pi^0n$ | $\pi^0\pi^0n\bar{n}\gamma$ | 2539 | 17 | 64149 |
| 665 | $J/\psi \to \pi^0 f_2(1270) b_1^0, f_2(1270) \to \pi^0 \pi^0, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1707 | 17 | 64166 |
| 666 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 2824 | 17 | 64183 |
| 667 | $J/\psi 	o a_2^+ K^0 K^-, a_2^+ 	o ho^0 \pi^+, K^0 	o K_L^0, ho^0 	o \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 9 | 17 | 64200 |
| 668 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 803 | 17 | 64217 |
| 669 | $J/\psi 	o \Sigma^0 ar{\Sigma}^0, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0n\bar{n}\gamma\gamma$ | 1437 | 17 | 64234 |
| 670 | $J/\psi 	o K_S^0 ar{n} \Lambda, K_S^0 	o \pi^+ \pi^-, \Lambda 	o \pi^- p$ | $\pi^+\pi^-\pi^-\bar{n}p$ | 930 | 17 | 64251 |
| 671 | $J/\psi ightarrow K^0 ar{n} \Lambda, K^0 ightarrow K^0_S, \Lambda ightarrow \pi^0 n, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-nar{n}$ | 3301 | 17 | 64268 |
| 672 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \phi \to K^+ K^-$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 1515 | 17 | 64285 |
| 673 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 942 | 17 | 64302 |
| 674 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 236 | 17 | 64319 |
| 675 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 3393 | 17 | 64336 |
| 676 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+\bar{\Lambda}, \Sigma^{*-} \to \pi^-\Lambda, \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 4711 | 17 | 64353 |
| 677 | $J/\psi \to p\bar{p}f_0(1370), f_0(1370) \to \rho^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 2942 | 17 | 64370 |
| 678 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 1643 | 17 | 64387 |
| 679 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2990 | 17 | 64404 |
| 680 | $J/\psi ightarrow \pi^- a_2^+, a_2^+ ightarrow \pi^0 \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 384 | 17 | 64421 |
| 681 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4972 | 17 | 64438 |
| 682 | $J/\psi ightarrow \pi^0 ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 815 | 17 | 64455 |
| 683 | $J/\psi 	o \omega n ar{\Delta}^0, \omega 	o \pi^0 \pi^+ \pi^-, ar{\Delta}^0 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 88 | 17 | 64472 |
| 684 | $J/\psi ightarrow \pi^- ho^+ \eta^\prime, ho^+ ightarrow \pi^0 \pi^+, \eta^\prime ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1396 | 17 | 64489 |
| 685 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^-K^+, a_0^+ \to \pi^+\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3656 | 17 | 64506 |
| 686 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0 K_L^0\pi^+\pi^-$ | 965 | 17 | 64523 |
| 687 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1700 | 17 | 64540 |
| 688 | $J/\psi 	o ho^0 K^+ K_0^{*-}, ho^0 	o \pi^+ \pi^-, K_0^{*-} 	o \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 3782 | 17 | 64557 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 689 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 1299 | 16 | 64573 |
| 690 | $J/\psi 	o K^*K_2^{*0}, K^* 	o \pi^0 K^0, K_2^{*0} 	o \pi^+ K^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 2107 | 16 | 64589 |
| 691 | $J/\psi \to \Sigma^- \bar{\Sigma}^{*+}, \Sigma^- \to \pi^- n, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 845 | 16 | 64605 |
| 692 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 1953 | 16 | 64621 |
| 693 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2430 | 16 | 64637 |
| 694 | $J/\psi 	o \pi^0 \pi^0 \pi^- b_1^+, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1645 | 16 | 64653 |
| 695 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 3457 | 16 | 64669 |
| 696 | $J/\psi 	o \pi^+ \eta K_S^0 K^-, \eta 	o \pi^0 \pi^+ \pi^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2127 | 16 | 64685 |
| 697 | $J/\psi 	o ho^- a_2^+, ho^- 	o \pi^0 \pi^-, a_2^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1423 | 16 | 64701 |
| 698 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1427 | 16 | 64717 |
| 699 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 2166 | 16 | 64733 |
| 700 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 622 | 16 | 64749 |
| 701 | $J/\psi 	o \omega K^* ar{K}^*, \omega 	o \pi^0 \pi^+ \pi^-, K^* 	o \pi^- K^+, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 937 | 16 | 64765 |
| 702 | $J/\psi 	o ho^- K^+ ar{K}_0^{*0}, ho^- 	o \pi^0 \pi^-, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 1054 | 16 | 64781 |
| 703 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \gamma, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\gamma$ | 2556 | 16 | 64797 |
| 704 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^+ ho^-, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 3832 | 16 | 64813 |
| 705 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^+K^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3862 | 16 | 64829 |
| 706 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2985 | 16 | 64845 |
| 707 | $J/\psi 	o \pi^0 ho^0 \omega \omega, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2195 | 16 | 64861 |
| 708 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4241 | 16 | 64877 |
| 709 | $J/\psi 	o K^0 ar{n} \Lambda, K^0 	o K_L^0, \Lambda 	o \pi^0 n$ | $\pi^0 K^0_L n \bar{n}$ | 1989 | 16 | 64893 |
| 710 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 2210 | 16 | 64909 |
| 711 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^- K^+$ | 243 | 16 | 64925 |
| 712 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 739 | 16 | 64941 |
| 713 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 K^+ K^-$ | $\pi^0 K^+ K^- \gamma$ | 2003 | 16 | 64957 |
| 714 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 1803 | 16 | 64973 |
| 715 | $J/\psi 	o \pi^- b_1^+, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma$ | 2719 | 16 | 64989 |
| 716 | $J/\psi \to \pi^- \rho^+ \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 711 | 16 | 65005 |
| 717 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3105 | 16 | 65021 |
| 718 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2722 | 16 | 65037 |
| 719 | $J/\psi 	o a_2^- ar K^0 K^+, a_2^- 	o \pi^0 ho^-, ar K^0 	o K_L^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 1461 | 16 | 65053 |
| 720 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 3132 | 16 | 65069 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 721 | $J/\psi \to K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-$ | 3152 | 16 | 65085 |
| 722 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1840 | 16 | 65101 |
| 723 | $J/\psi \to \Sigma^{*0} \bar{\Sigma}^{*0}, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 3176 | 16 | 65117 |
| 724 | $J/\psi \to K^- p \bar{\Sigma}^{*0}, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0K^-\bar{n}p$ | 601 | 16 | 65133 |
| 725 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4807 | 16 | 65149 |
| 726 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4910 | 16 | 65165 |
| 727 | $J/\psi 	o \pi^+ K^{*-} K_0^0, K^{*-} 	o \pi^- \bar{K}^0, K_0^0 	o \pi^- K^+, \bar{K}^0 	o K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 2758 | 16 | 65181 |
| 728 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 4931 | 16 | 65197 |
| 729 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 3222 | 16 | 65213 |
| 730 | $J/\psi \to \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1130 | 16 | 65229 |
| 731 | $J/\psi \to K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 980 | 16 | 65245 |
| 732 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2772 | 16 | 65261 |
| 733 | $J/\psi \to \pi^+ K^* K^- \gamma^F, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 1887 | 16 | 65277 |
| 734 | $J/\psi \to \rho^0 K^- K_0^{*+}, \rho^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 1416 | 16 | 65293 |
| 735 | $J/\psi \to \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 1758 | 16 | 65309 |
| 736 | $J/\psi \to \rho^0 \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5740 | 16 | 65325 |
| 737 | $J/\psi 	o \eta' \gamma, \eta' 	o \gamma \gamma$ | $\gamma\gamma\gamma$ | 3323 | 16 | 65341 |
| 738 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 104 | 15 | 65356 |
| 739 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^- \bar{\Xi}^+, \Lambda \to \pi^- p, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 606 | 15 | 65371 |
| 740 | $J/\psi \to \pi^+ b_1^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma$ | 17 | 15 | 65386 |
| 741 | $J/\psi \to \pi^+ \pi^+ \pi^- \pi^- \phi, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 83 | 15 | 65401 |
| 742 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^+K^0K^-, K^0 \to K_L^0$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 810 | 15 | 65416 |
| 743 | $J/\psi 	o \pi^- \bar{K}^* K^+, \bar{K}^* 	o \pi^0 \bar{K}^0, \bar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 1056 | 15 | 65431 |
| 744 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-$ | 3473 | 15 | 65446 |
| 745 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 3505 | 15 | 65461 |
| 746 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o \pi^0 ho^-, a_0^0 	o \pi^0 \eta, ho^- 	o \pi^0 \pi^-, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1059 | 15 | 65476 |
| 747 | $J/\psi \to \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-$ | 2360 | 15 | 65491 |
| 748 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 2019 | 15 | 65506 |
| 749 | $J/\psi 	o a_2^0 b_1^0, a_2^0 	o \pi^- ho^+, b_1^0 	o \pi^0 \omega, ho^+ 	o \pi^0 \pi^+, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3608 | 15 | 65521 |
| 750 | $J/\psi ightarrow \pi^- \omega K_S^0 K^+, \omega ightarrow \pi^0 \gamma, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 2383 | 15 | 65536 |
| 751 | $J/\psi \to \rho^0 K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 3688 | 15 | 65551 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 752 | $J/\psi ightarrow ar{K}^0 n ar{\Lambda}, ar{K}^0 ightarrow K_S^0, ar{\Lambda} ightarrow \pi^0 ar{n}, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-n\bar{n}$ | 1064 | 15 | 65566 |
| 753 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 2024 | 15 | 65581 |
| 754 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1371 | 15 | 65596 |
| 755 | $J/\psi 	o \pi^- K_2^{*0} K^+, K_2^{*0} 	o \pi^0 ar K^0, ar K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 2897 | 15 | 65611 |
| 756 | $J/\psi 	o \Delta^0 ar{\Delta}^0, \Delta^0 	o \pi^0 n, ar{\Delta}^0 	o \pi^+ ar{p}$ | $\pi^0\pi^+nar{p}$ | 2031 | 15 | 65626 |
| 757 | $J/\psi ightarrow \pi^+ \Delta^0 ar{\Delta}^+, \Delta^0 ightarrow \pi^- p, ar{\Delta}^+ ightarrow \pi^0 ar{p}$ | $\pi^0\pi^+\pi^-par{p}$ | 2405 | 15 | 65641 |
| 758 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3913 | 15 | 65656 |
| 759 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1797 | 15 | 65671 |
| 760 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \omega\omega, \omega \to \pi^0\gamma, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4155 | 15 | 65686 |
| 761 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^- K^+$ | 813 | 15 | 65701 |
| 762 | $J/\psi 	o ho^0 ar{K}^0 K^*, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 1486 | 15 | 65716 |
| 763 | $J/\psi 	o ar{\Sigma}^0 \Sigma^{*0}, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Sigma^{*0} 	o \pi^0 \Lambda, ar{\Lambda} 	o \pi^0 ar{n}, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0\pi^0n\bar{n}\gamma$ | 4269 | 15 | 65731 |
| 764 | $J/\psi \to \pi^0 h_1(1170), h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 1819 | 15 | 65746 |
| 765 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2478 | 15 | 65761 |
| 766 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2490 | 15 | 65776 |
| 767 | $J/\psi 	o \pi^- \eta K_S^0 K^+, \eta 	o \gamma \gamma, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 2103 | 15 | 65791 |
| 768 | $J/\psi 	o ho^+ K^* K^-, ho^+ 	o \pi^0 \pi^+, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 557 | 15 | 65806 |
| 769 | $J/\psi \to \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4394 | 15 | 65821 |
| 770 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^0 K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1263 | 15 | 65836 |
| 771 | $J/\psi ightarrow ho^0 ho^0 \omega, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^- \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 205 | 15 | 65851 |
| 772 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 559 | 15 | 65866 |
| 773 | $J/\psi 	o ho^0 \pi^- \bar{K}^* K^+, ho^0 	o \pi^+ \pi^-, \bar{K}^* 	o \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 2540 | 15 | 65881 |
| 774 | $J/\psi 	o ar{K}^*K_2^{*0}, ar{K}^* 	o \pi^0 ar{K}^0, K_2^{*0} 	o \pi^- K^+, ar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 296 | 15 | 65896 |
| 775 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 750 | 15 | 65911 |
| 776 | $J/\psi \to ho^0 K^0 \bar{K}^0, ho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2573 | 15 | 65926 |
| 777 | $J/\psi \to \pi^0 \rho^0 \eta', \rho^0 \to \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 721 | 15 | 65941 |
| 778 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^- K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3122 | 15 | 65956 |
| 779 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1410 | 15 | 65971 |
| 780 | $J/\psi \to \pi^+ a_1^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 2167 | 15 | 65986 |
| 781 | $J/\psi 	o \Sigma^0 ar{\Sigma}^{*0}, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^-\bar{n}p\gamma$ | 4806 | 15 | 66001 |
| 782 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2641 | 15 | 66016 |
| 783 | $J/\psi ightarrow ho^+ b_1^- \gamma, ho^+ ightarrow \pi^0 \pi^+, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 4862 | 15 | 66031 |
| 784 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 117 | 15 | 66046 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 785 | $J/\psi \to \omega a_1^0, \omega \to \pi^0 \pi^+ \pi^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1703 | 15 | 66061 |
| 786 | $J/\psi 	o a_2^+ K^0 K^-, a_2^+ 	o \pi^0 ho^+, K^0 	o K_L^0, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 323 | 15 | 66076 |
| 787 | $J/\psi 	o \Delta^0 ar{\Delta}^0, \Delta^0 	o \pi^0 n, ar{\Delta}^0 	o \pi^0 ar{n}$ | $\pi^0\pi^0n\bar{n}$ | 4940 | 15 | 66091 |
| 788 | $J/\psi \to a_2^- b_1^+, a_2^- \to \rho^0 \pi^-, b_1^+ \to \pi^+ \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 726 | 15 | 66106 |
| 789 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1548 | 15 | 66121 |
| 790 | $J/\psi \to \bar{K}^0 K_0^0 \gamma, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+$ | $K_L^0\pi^-K^+\gamma$ | 658 | 15 | 66136 |
| 791 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 865 | 15 | 66151 |
| 792 | $J/\psi \to \pi^- K^0_S K^+ \phi, K^0_S \to \pi^+ \pi^-, \phi \to K^+ K^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 5233 | 15 | 66166 |
| 793 | $J/\psi 	o \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\gamma^f$ | 2242 | 15 | 66181 |
| 794 | $J/\psi \to \pi^0 ho^0 \eta', ho^0 \to \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5433 | 15 | 66196 |
| 795 | $J/\psi ightarrow \pi^- \eta K_S^0 K^+, \eta ightarrow \pi^0 \pi^0 \pi^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 545 | 15 | 66211 |
| 796 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 547 | 15 | 66226 |
| 797 | $J/\psi \to \pi^- K^+ \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 5533 | 15 | 66241 |
| 798 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5618 | 15 | 66256 |
| 799 | $J/\psi \to \pi^+ \rho^- \omega b_1^0, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5729 | 15 | 66271 |
| 800 | $J/\psi 	o nar{n}f_0(1370), f_0(1370) 	o \pi^0\pi^0$ | $\pi^0\pi^0n\bar{n}$ | 1439 | 15 | 66286 |
| 801 | $J/\psi \to \pi^+ \Delta^- \bar{\Delta}^0, \Delta^- \to \pi^- n, \bar{\Delta}^0 \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-nar{p}$ | 736 | 15 | 66301 |
| 802 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 6157 | 15 | 66316 |
| 803 | $J/\psi \to \pi^- ho^+ \omega b_1^0, ho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 1494 | 14 | 66330 |
| 804 | $J/\psi \to \rho^0 K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3987 | 14 | 66344 |
| 805 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^-$ | 2740 | 14 | 66358 |
| 806 | $J/\psi \to \Delta^0 \bar{\Delta}^0, \Delta^0 \to \pi^- p, \bar{\Delta}^0 \to \pi^0 \bar{n}$ | $\pi^0\pi^-ar{n}p$ | 4129 | 14 | 66372 |
| 807 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1069 | 14 | 66386 |
| 808 | $J/\psi \to \pi^+ a_2^-, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 344 | 14 | 66400 |
| 809 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0 K_L^0\pi^+\pi^-$ | 4207 | 14 | 66414 |
| 810 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 482 | 14 | 66428 |
| 811 | $J/\psi 	o \pi^0 K^0 ar{K}^0, K^0 	o K_L^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^-$ | 276 | 14 | 66442 |
| 812 | $J/\psi 	o \pi^0\pi^0\gamma$ | $\pi^0\pi^0\gamma$ | 4307 | 14 | 66456 |
| 813 | $J/\psi \to K^+K^{*-}a_0^0, K^{*-} \to \pi^-\bar{K}^0, a_0^0 \to \pi^0\eta, \bar{K}^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 1179 | 14 | 66470 |
| 814 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 181 | 14 | 66484 |
| 815 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2227 | 14 | 66498 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 816 | $J/\psi \to \pi^0 \pi^0 \pi^+ b_1^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3188 | 14 | 66512 |
| 817 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \pi^0\pi^0$ | $\pi^0\pi^0K^+K^-$ | 2792 | 14 | 66526 |
| 818 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^+K^{*-}, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1883 | 14 | 66540 |
| 819 | $J/\psi \to \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4404 | 14 | 66554 |
| 820 | $J/\psi 	o K_S^0 n ar{\Lambda}, K_S^0 	o \pi^+ \pi^-, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^+\pi^-nar{p}$ | 1529 | 14 | 66568 |
| 821 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 862 | 14 | 66582 |
| 822 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^+ K^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2507 | 14 | 66596 |
| 823 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2514 | 14 | 66610 |
| 824 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o K_L^0 K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 1754 | 14 | 66624 |
| 825 | $J/\psi \to \pi^+\pi^-K^*\bar{K}^*, K^* \to \pi^-K^+, \bar{K}^* \to \pi^+K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 1756 | 14 | 66638 |
| 826 | $J/\psi 	o \omega K^0 ar{K}^*, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 745 | 14 | 66652 |
| 827 | $J/\psi ightarrow \pi^+\pi^-b_1^0\gamma^F, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 2555 | 14 | 66666 |
| 828 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1624 | 14 | 66680 |
| 829 | $J/\psi \to \rho^0 \pi^+ K^* K^-, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 3394 | 14 | 66694 |
| 830 | $J/\psi ightarrow ho^0 \omega b_1^0, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2881 | 14 | 66708 |
| 831 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1635 | 14 | 66722 |
| 832 | $J/\psi \to x(1835)\gamma, x(1835) \to p\bar{p}$ | $par{p}\gamma$ | 2324 | 14 | 66736 |
| 833 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0$ | 1464 | 14 | 66750 |
| 834 | $J/\psi \to K^+K^-f_0(1370), f_0(1370) \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-$ | 4901 | 14 | 66764 |
| 835 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 610 | 14 | 66778 |
| 836 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 597 | 14 | 66792 |
| 837 | $J/\psi \to \pi^- \eta K_S^0 K^+, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3488 | 14 | 66806 |
| 838 | $J/\psi 	o \omega ar{n} \Delta^0, \omega 	o \pi^0 \pi^+ \pi^-, \Delta^0 	o \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 2971 | 14 | 66820 |
| 839 | $J/\psi \to \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2627 | 14 | 66834 |
| 840 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3558 | 14 | 66848 |
| 841 | $J/\psi \to \pi^+ K^- K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-$ | 5148 | 14 | 66862 |
| 842 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 5152 | 14 | 66876 |
| 843 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2628 | 14 | 66890 |
| 844 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 518 | 14 | 66904 |
| 845 | $J/\psi \to \pi^- a_1^+, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-$ | 3602 | 14 | 66918 |
| 846 | $J/\psi 	o \Sigma^0 ar{\Sigma}^{*0}, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^0n\bar{n}\gamma$ | 926 | 14 | 66932 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 847 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 693 | 14 | 66946 |
| 848 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 3678 | 14 | 66960 |
| 849 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, K_S^0 	o \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^-$ | 1060 | 14 | 66974 |
| 850 | $J/\psi 	o a_2^0 \pi^+ \pi^-, a_2^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2673 | 14 | 66988 |
| 851 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5591 | 14 | 67002 |
| 852 | $J/\psi \to \rho^0 f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 2387 | 14 | 67016 |
| 853 | $J/\psi 	o ho^- ar{K}^* K^+, ho^- 	o \pi^0 \pi^-, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3051 | 14 | 67030 |
| 854 | $J/\psi ightarrow \pi^+ a_2^-, a_2^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma$ | 5737 | 14 | 67044 |
| 855 | $J/\psi 	o nar{p}a_0^+, a_0^+ 	o \pi^+\eta, \eta 	o \gamma\gamma$ | $\pi^+ n \bar{p} \gamma \gamma$ | 844 | 14 | 67058 |
| 856 | $J/\psi \to \pi^+\pi^-\rho^-b_1^+, \rho^- \to \pi^0\pi^-, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1492 | 14 | 67072 |
| 857 | $J/\psi \to \pi^+\pi^-\rho^-a_1^+, \rho^- \to \pi^0\pi^-, a_1^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2000 | 14 | 67086 |
| 858 | $J/\psi \to ho^0 K^+ K^{*-}, ho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 6346 | 14 | 67100 |
| 859 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6928 | 14 | 67114 |
| 860 | $J/\psi ightarrow \pi^+\pi^-a^0_0, a^0_0 ightarrow \pi^0\eta, \eta ightarrow \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 2579 | 13 | 67127 |
| 861 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1058 | 13 | 67140 |
| 862 | $J/\psi \to \rho^0 \pi^+ \rho^- b_1^0, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2871 | 13 | 67153 |
| 863 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2584 | 13 | 67166 |
| 864 | $J/\psi \to ho^{0} a_{1}^{0}, ho^{0} \to \pi^{+} \pi^{-}, a_{1}^{0} \to \pi^{-} ho^{+}, ho^{+} \to \pi^{0} \pi^{+}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 627 | 13 | 67179 |
| 865 | $J/\psi \to \rho^+ K^* K^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 648 | 13 | 67192 |
| 866 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2625 | 13 | 67205 |
| 867 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 441 | 13 | 67218 |
| 868 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4459 | 13 | 67231 |
| 869 | $J/\psi 	o \pi^- ar{K}^* K^{*+}, ar{K}^* 	o \pi^0 ar{K}^0, K^{*+} 	o \pi^+ K^0, ar{K}^0 	o K_L^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4479 | 13 | 67244 |
| 870 | $J/\psi ightarrow \pi^0 ho^0 \eta, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 2143 | 13 | 67257 |
| 871 | $J/\psi \to \rho^+ \Delta^- \bar{n}, \rho^+ \to \pi^0 \pi^+, \Delta^- \to \pi^- n$ | $\pi^0\pi^+\pi^-nar{n}$ | 4498 | 13 | 67270 |
| 872 | $J/\psi 	o K^0 ar{K}^*, K^0 	o K_L^0, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0$ | 2933 | 13 | 67283 |
| 873 | $J/\psi ightarrow \pi^- \omega a_0^+, \omega ightarrow \pi^0 \gamma, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 1231 | 13 | 67296 |
| 874 | $J/\psi ightarrow K^0 ar K^0 \gamma, K^0 ightarrow K^0_L, ar K^0 ightarrow K^0_S, K^0_S ightarrow \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\gamma$ | 4558 | 13 | 67309 |
| 875 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \pi^- \eta', \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2944 | 13 | 67322 |
| 876 | $J/\psi \rightarrow \pi^0 \eta' b_1^0, \eta' \rightarrow \rho^0 \gamma, b_1^0 \rightarrow \pi^0 \omega, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1801 | 13 | 67335 |
| 877 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 4603 | 13 | 67348 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 878 | $J/\psi \to K^{-}K_{1}^{'+}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{0}K^{+}$ | $\pi^0\pi^0K^+K^-$ | 946 | 13 | 67361 |
| 879 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2181 | 13 | 67374 |
| 880 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^- ar K^0 K^+, ar K^0 	o K_L^0$ | $K_L^0\pi^-K^+\gamma$ | 3496 | 13 | 67387 |
| 881 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 2399 | 13 | 67400 |
| 882 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2687 | 13 | 67413 |
| 883 | $J/\psi \to K^+K^-h_1(1170), h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 254 | 13 | 67426 |
| 884 | $J/\psi \to \bar{\Xi}^+\Xi^{*-}, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^{*-} \to \pi^-\Xi^0, \bar{\Lambda} \to \pi^0\bar{n}, \Xi^0 \to \pi^0\Lambda, \Lambda \to \pi^-p$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 289 | 13 | 67439 |
| 885 | $J/\psi 	o ar{\Sigma}^- \Sigma^{*+}, ar{\Sigma}^- 	o \pi^0 ar{p}, \Sigma^{*+} 	o \pi^+ \Lambda, \Lambda 	o \pi^- p$ | $\pi^0\pi^+\pi^-par{p}$ | 3564 | 13 | 67452 |
| 886 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2013 | 13 | 67465 |
| 887 | $J/\psi 	o \pi^+\pi^-$ | $\pi^+\pi^-$ | 1431 | 13 | 67478 |
| 888 | $J/\psi \to K^- K_0^{*+} \gamma^F, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma^F$ | 1242 | 13 | 67491 |
| 889 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 3063 | 13 | 67504 |
| 890 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2205 | 13 | 67517 |
| 891 | $J/\psi \to K^{*-}p\bar{\Lambda}, K^{*-} \to \pi^0 K^-, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+K^-par{p}$ | 2455 | 13 | 67530 |
| 892 | $J/\psi \to K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 1519 | 13 | 67543 |
| 893 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1434 | 13 | 67556 |
| 894 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o \pi^0 ho^-, a_0^0 	o \pi^0 \eta, ho^- 	o \pi^0 \pi^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1880 | 13 | 67569 |
| 895 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2769 | 13 | 67582 |
| 896 | $J/\psi \to a_2^+ b_1^-, a_2^+ \to \rho^0 \pi^+, b_1^- \to \pi^- \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 554 | 13 | 67595 |
| 897 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 3852 | 13 | 67608 |
| 898 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 996 | 13 | 67621 |
| 899 | $J/\psi \to \pi^0 h_1(1170), h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 1186 | 13 | 67634 |
| 900 | $J/\psi 	o \omega \bar K^0 K^*, \omega 	o \pi^0 \gamma, \bar K^0 	o K_L^0, K^* 	o \pi^- K^+$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 3924 | 13 | 67647 |
| 901 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 3983 | 13 | 67660 |
| 902 | $J/\psi \to \eta K^- K^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 5453 | 13 | 67673 |
| 903 | $J/\psi \to \pi^0 \Delta^+ \bar{\Delta}^+, \Delta^+ \to \pi^+ n, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 1002 | 13 | 67686 |
| 904 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to \pi^+\pi^-$ | $\pi^+\pi^-\gamma$ | 4038 | 13 | 67699 |
| 905 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^0 p, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^-\bar{n}p$ | 453 | 13 | 67712 |
| 906 | $J/\psi \to \pi^- \rho^+ \eta^\prime, \rho^+ \to \pi^0 \pi^+, \eta^\prime \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1006 | 13 | 67725 |
| 907 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 798 | 13 | 67738 |
| 908 | $J/\psi 	o K^0 ar{K}^*, K^0 	o K^0_S, ar{K}^* 	o \pi^0 ar{K}^0, K^0_S 	o \pi^+ \pi^-, ar{K}^0 	o K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^-$ | 4162 | 13 | 67751 |
| 909 | $J/\psi 	o \Sigma^0 ar{\Sigma}^{*0}, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+n\bar{p}\gamma$ | 329 | 13 | 67764 |
| 910 | $J/\psi 	o \pi^0 ar{K}^0 K^*, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 4181 | 13 | 67777 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 911 | $J/\psi \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0$ | 659 | 13 | 67790 |
| 912 | $J/\psi \to a_0^+ b_1^-, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6289 | 13 | 67803 |
| 913 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 ho^+ ho^-, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 1117 | 13 | 67816 |
| 914 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6565 | 13 | 67829 |
| 915 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 1789 | 13 | 67842 |
| 916 | $J/\psi \to \phi f_0(2020), \phi \to K^+K^-, f_0(2020) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 7908 | 13 | 67855 |
| 917 | $J/\psi 	o \Lambda ar{\Sigma}^0 \gamma, \Lambda 	o \pi^- p, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^-par p\gamma\gamma$ | 9493 | 13 | 67868 |
| 918 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \rho^+K^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1487 | 12 | 67880 |
| 919 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 4099 | 12 | 67892 |
| 920 | $J/\psi \to \pi^0 h_1(1170), h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-$ | 1723 | 12 | 67904 |
| 921 | $J/\psi 	o \Sigma^+ ar{\Sigma}^- \gamma, \Sigma^+ 	o \pi^+ n, ar{\Sigma}^- 	o \pi^0 ar{p}$ | $\pi^0\pi^+ n\bar{p}\gamma$ | 4145 | 12 | 67916 |
| 922 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 112 | 12 | 67928 |
| 923 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2120 | 12 | 67940 |
| 924 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^+ \rho^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3146 | 12 | 67952 |
| 925 | $J/\psi ightarrow \pi^+ K^0_S K^- \phi, K^0_S ightarrow \pi^+ \pi^-, \phi ightarrow K^+ K^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-$ | 4165 | 12 | 67964 |
| 926 | $J/\psi 	o \Sigma^0 ar{\Sigma}^0 \gamma, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^-ar{n}p\gamma\gamma\gamma$ | 2122 | 12 | 67976 |
| 927 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\eta, \eta 	o \pi^+\pi^-\gamma^F$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 4182 | 12 | 67988 |
| 928 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1319 | 12 | 68000 |
| 929 | $J/\psi \to \bar{\Sigma}^0 \Sigma^{*0}, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+n\bar{p}\gamma$ | 4240 | 12 | 68012 |
| 930 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 766 | 12 | 68024 |
| 931 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 233 | 12 | 68036 |
| 932 | $J/\psi 	o \eta \phi, \eta 	o \gamma \gamma, \phi 	o K^+K^-$ | $K^+K^-\gamma\gamma$ | 4303 | 12 | 68048 |
| 933 | $J/\psi \to K^{*+} \bar{p} \Lambda, K^{*+} \to \pi^0 K^+, \Lambda \to \pi^- p$ | $\pi^0\pi^-K^+par{p}$ | 2762 | 12 | 68060 |
| 934 | $J/\psi \to f_2(1270)K^+K^-, f_2(1270) \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-$ | 3204 | 12 | 68072 |
| 935 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 1511 | 12 | 68084 |
| 936 | $J/\psi 	o ho^+ a_2^-, ho^+ 	o \pi^0 \pi^+, a_2^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1762 | 12 | 68096 |
| 937 | $J/\psi \to \pi^0 \pi^+ b_1^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3227 | 12 | 68108 |
| 938 | $J/\psi ightarrow \pi^0 \pi^+ K^0 K^-, K^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 4388 | 12 | 68120 |
| 939 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3228 | 12 | 68132 |
| 940 | $J/\psi 	o K^{*+} ar{p} \Lambda, K^{*+} 	o \pi^+ K^0, \Lambda 	o \pi^- p, K^0 	o K_L^0$ | $K_L^0\pi^+\pi^-par{p}$ | 2443 | 12 | 68144 |
| 941 | $J/\psi 	o par{p}f_0(1370), f_0(1370) 	o \pi^0\pi^0$ | $\pi^0\pi^0p\bar{p}$ | 288 | 12 | 68156 |
| 942 | $J/\psi 	o \omega K^* \bar{K}^*, \omega 	o \pi^0 \pi^+ \pi^-, K^* 	o \pi^0 K^0, \bar{K}^* 	o \pi^+ K^-, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 826 | 12 | 68168 |
| 943 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-, \phi \to K^+ K^-$ | $\pi^0\pi^0K^+K^+K^-K^-$ | 2793 | 12 | 68180 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 944 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^+ \rho^-, h_1(1170) \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2474 | 12 | 68192 |
| 945 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+\pi^-, a_2^0 ightarrow \pi^+\pi^-\omega, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2172 | 12 | 68204 |
| 946 | $J/\psi \to K^{-}K_{1}^{'+}, K_{1}^{'+} \to \pi^{+}K^{*}, K^{*} \to \pi^{0}K^{0}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 3310 | 12 | 68216 |
| 947 | $J/\psi 	o \pi^- \eta' b_1^+, \eta' 	o \pi^+ \pi^- \eta, b_1^+ 	o \pi^+ \omega, \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 1108 | 12 | 68228 |
| 948 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \phi \to K^0_L K^0_S, K^0_S \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 551 | 12 | 68240 |
| 949 | $J/\psi \to K^0 \bar{K}^0 \gamma, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 1629 | 12 | 68252 |
| 950 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o ho^0 \pi^-, a_0^0 	o \pi^0 \eta, ho^0 	o \pi^+ \pi^-, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 888 | 12 | 68264 |
| 951 | $J/\psi \to K^0K^-a_1^+, K^0 \to K_L^0, a_1^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 1787 | 12 | 68276 |
| 952 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 212 | 12 | 68288 |
| 953 | $J/\psi 	o \Sigma^{*0} ar{\Sigma}^{*0}, \Sigma^{*0} 	o \pi^0 \Lambda, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 2198 | 12 | 68300 |
| 954 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2534 | 12 | 68312 |
| 955 | $J/\psi \to f_4(2050)\gamma, f_4(2050) \to K^+K^-$ | $K^+K^-\gamma$ | 278 | 12 | 68324 |
| 956 | $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \rho^0 \pi^-, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 703 | 12 | 68336 |
| 957 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 12 | 12 | 68348 |
| 958 | $J/\psi 	o \pi^- a_2^+ a_0^0, a_2^+ 	o ho^0 \pi^+, a_0^0 	o \pi^0 \eta, ho^0 	o \pi^+ \pi^-, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 705 | 12 | 68360 |
| 959 | $J/\psi ightarrow ar{K}^0 K^+ a_0^-, ar{K}^0 ightarrow K_L^0, a_0^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $K_L^0\pi^-K^+\gamma\gamma$ | 1377 | 12 | 68372 |
| 960 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \gamma, a_0^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 3530 | 12 | 68384 |
| 961 | $J/\psi 	o ho^0 K^+ K_0^{*-}, ho^0 	o \pi^+ \pi^-, K_0^{*-} 	o \pi^- ar K^0, ar K^0 	o K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3540 | 12 | 68396 |
| 962 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 1800 | 12 | 68408 |
| 963 | $J/\psi \to \rho^0 \pi^+ \pi^- h_1(1170), \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3545 | 12 | 68420 |
| 964 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 923 | 12 | 68432 |
| 965 | $J/\psi ightarrow K^0 ar{n} \Lambda, K^0 ightarrow K^0_S, \Lambda ightarrow \pi^- p, K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-\bar{n}p$ | 2280 | 12 | 68444 |
| 966 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^-$ | 1658 | 12 | 68456 |
| 967 | $J/\psi \to \Sigma^+ \bar{\Sigma}^- \gamma, \Sigma^+ \to \pi^0 p, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^-\bar{n}p\gamma$ | 2608 | 12 | 68468 |
| 968 | $J/\psi ightarrow \pi^+ ho^- \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 2613 | 12 | 68480 |
| 969 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\omega, \omega 	o \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 3605 | 12 | 68492 |
| 970 | $J/\psi 	o par{\Delta}^+ \gamma^F, ar{\Delta}^+ 	o \pi^0 ar{p}$ | $\pi^0 p \bar{p} \gamma^F$ | 1187 | 12 | 68504 |
| 971 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^0K^-, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 759 | 12 | 68516 |
| 972 | $J/\psi 	o \eta \phi, \eta 	o \pi^0 \pi^+ \pi^-, \phi 	o K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 3658 | 12 | 68528 |
| 973 | $J/\psi \to \pi^+ a_1^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 1077 | 12 | 68540 |
| 974 | $J/\psi ightarrow \omega a_1^0, \omega ightarrow \pi^0 \pi^+ \pi^-, a_1^0 ightarrow \pi^- ho^+, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3008 | 12 | 68552 |
| 975 | $J/\psi \to ho^+ n \bar{p}, ho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+nar{p}$ | 3692 | 12 | 68564 |
| 976 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 3735 | 12 | 68576 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 977 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3753 | 12 | 68588 |
| 978 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0K^0, K_2^{*0} \to \pi^+K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 1567 | 12 | 68600 |
| 979 | $J/\psi 	o \pi^+ K_2^{*0} K^-, K_2^{*0} 	o \pi^- K^{*+}, K^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5565 | 12 | 68612 |
| 980 | $J/\psi \to \pi^+ \eta K_S^0 K^-, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 591 | 12 | 68624 |
| 981 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 3781 | 12 | 68636 |
| 982 | $J/\psi ightarrow \pi^+\pi^-K^+K^-$ | $\pi^+\pi^-K^+K^-$ | 5666 | 12 | 68648 |
| 983 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \gamma, a_0^- ightarrow \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 1864 | 12 | 68660 |
| 984 | $J/\psi ightarrow \pi^0 \pi^- \bar{K}^0 K^+, \bar{K}^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 1868 | 12 | 68672 |
| 985 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^+ K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 220 | 12 | 68684 |
| 986 | $J/\psi 	o \pi^+ \Delta^0 \bar{\Delta}^+, \Delta^0 	o \pi^0 n, \bar{\Delta}^+ 	o \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 5803 | 12 | 68696 |
| 987 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 5866 | 12 | 68708 |
| 988 | $J/\psi \to a_0^- b_1^+, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6021 | 12 | 68720 |
| 989 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^- ightarrow \pi^- \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 3061 | 12 | 68732 |
| 990 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1089 | 12 | 68744 |
| 991 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6180 | 12 | 68756 |
| 992 | $J/\psi 	o \pi^+ ho^- \eta', ho^- 	o \pi^0 \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3909 | 12 | 68768 |
| 993 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 2350 | 12 | 68780 |
| 994 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 2072 | 12 | 68792 |
| 995 | $J/\psi \to \rho^0 K^- K_0^{*+}, \rho^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2083 | 12 | 68804 |
| 996 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K^0_S, K^{*+} \to \pi^0 K^+, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7006 | 12 | 68816 |
| 997 | $J/\psi \to K^0 \bar{K}^0 \gamma, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\gamma$ | 7197 | 12 | 68828 |
| 998 | $J/\psi ightarrow ho^0 \pi^+ \pi^- \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7605 | 12 | 68840 |
| 999 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1091 | 12 | 68852 |
| 1000 | $J/\psi 	o ho^0 ar{K}^0 K_0^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_L^0, K_0^0 	o \pi^- K^+$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8471 | 12 | 68864 |
| 1001 | $J/\psi 	o \pi^0 ar{K}^0 K^*, ar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, K_S^0 	o \pi^0 \pi^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 3106 | 12 | 68876 |
| 1002 | $J/\psi 	o \pi^+ \eta K_S^0 K^-, \eta 	o \pi^0 \pi^+ \pi^-, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3260 | 11 | 68887 |
| 1003 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2481 | 11 | 68898 |
| 1004 | $J/\psi 	o \omega \bar{K}^0 K^*, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, K_S^0 	o \pi^+ \pi^-, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2485 | 11 | 68909 |
| 1005 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 932 | 11 | 68920 |
| 1006 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^0K^0, a_0^+ \to \pi^+\eta, K^0 \to K_L^0, \eta \to \gamma\gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 4234 | 11 | 68931 |
| 1007 | $J/\psi 	o ar{K}^0 K^* \gamma, ar{K}^0 	o K^0_S, K^* 	o \pi^- K^+, K^0_S 	o \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma$ | 4238 | 11 | 68942 |
| 1008 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 885 | 11 | 68953 |
| 1009 | $J/\psi ightarrow \pi^0 \pi^0 \phi, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2497 | 11 | 68964 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1010 | $J/\psi \to \eta K^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+$ | $\pi^0 K^+ K^- \gamma \gamma$ | 1219 | 11 | 68975 |
| 1011 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3317 | 11 | 68986 |
| 1012 | $J/\psi \to \pi^- \omega \bar{K}^* K^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1031 | 11 | 68997 |
| 1013 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3327 | 11 | 69008 |
| 1014 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\phi, \phi \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4357 | 11 | 69019 |
| 1015 | $J/\psi 	o \pi^+\pi^-\omega, \omega 	o \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 1654 | 11 | 69030 |
| 1016 | $J/\psi 	o \pi^+\pi^- p ar p \gamma^f$ | $\pi^+\pi^-par p\gamma^f$ | 3378 | 11 | 69041 |
| 1017 | $J/\psi 	o \pi^+\pi^- ho^+ b_1^-, ho^+ 	o \pi^0\pi^+, b_1^- 	o \pi^-\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3381 | 11 | 69052 |
| 1018 | $J/\psi 	o ho^0 ho^0 b_1^0, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4387 | 11 | 69063 |
| 1019 | $J/\psi 	o K^-K^{*+}a^0_0, K^{*+} 	o \pi^+K^0, a^0_0 	o \pi^0\eta, K^0 	o K^0_L, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 1222 | 11 | 69074 |
| 1020 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^0\bar{K}^0, K_2^{*0} \to \pi^-K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 1662 | 11 | 69085 |
| 1021 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 2529 | 11 | 69096 |
| 1022 | $J/\psi \to \phi \sigma_0, \phi \to K^+K^-, \sigma_0 \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-$ | 3405 | 11 | 69107 |
| 1023 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 1225 | 11 | 69118 |
| 1024 | $J/\psi ightarrow \pi^0\pi^0 ho^0, ho^0 ightarrow \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 4462 | 11 | 69129 |
| 1025 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4463 | 11 | 69140 |
| 1026 | $J/\psi 	o K_S^0 ar{n} \Lambda, K_S^0 	o \pi^+ \pi^-, \Lambda 	o \pi^0 n$ | $\pi^0\pi^+\pi^-nar{n}$ | 1683 | 11 | 69151 |
| 1027 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 3427 | 11 | 69162 |
| 1028 | $J/\psi ightarrow a_2^0 \omega, a_2^0 ightarrow \pi^+ ho^-, \omega ightarrow \pi^0 \pi^+ \pi^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2890 | 11 | 69173 |
| 1029 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 860 | 11 | 69184 |
| 1030 | $J/\psi 	o K_S^0 n \bar{\Lambda}, K_S^0 	o \pi^+ \pi^-, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 2216 | 11 | 69195 |
| 1031 | $J/\psi ightarrow \pi^0 ho^0 \pi^+ a_0^-, ho^0 ightarrow \pi^+ \pi^-, a_0^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2226 | 11 | 69206 |
| 1032 | $J/\psi ightarrow \eta K^+K^-, \eta ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4567 | 11 | 69217 |
| 1033 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \gamma \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 404 | 11 | 69228 |
| 1034 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1041 | 11 | 69239 |
| 1035 | $J/\psi \to \pi^- a_0^+ \gamma^F, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 2015 | 11 | 69250 |
| 1036 | $J/\psi \to \omega K^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1809 | 11 | 69261 |
| 1037 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^+ K^-, K^0_S \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4621 | 11 | 69272 |
| 1038 | $J/\psi \to a_2^0 K^+ K^-, a_2^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1814 | 11 | 69283 |
| 1039 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \gamma \gamma, K^{*-} \to \pi^0 K^-$ | $\pi^0 K^+ K^- \gamma \gamma$ | 4691 | 11 | 69294 |
| 1040 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2595 | 11 | 69305 |
| 1041 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 1592 | 11 | 69316 |
| 1042 | $J/\psi 	o \pi^+ ho^- \eta', ho^- 	o \pi^0 \pi^-, \eta' 	o \omega \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4749 | 11 | 69327 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 1043 | $J/\psi \to a_2^0 \omega, a_2^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1496 | 11 | 69338 |
| 1044 | $J/\psi \to K^+ {ar K}_1^{'-}, {ar K}_1^{'-} \to \pi^- {ar K}^*, {ar K}^* \to \pi^0 {ar K}^0, {ar K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 1825 | 11 | 69349 |
| 1045 | $J/\psi 	o ho^0 a_1^0, ho^0 	o \pi^+ \pi^-, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3583 | 11 | 69360 |
| 1046 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1839 | 11 | 69371 |
| 1047 | $J/\psi \to \bar{K}^* n \bar{\Lambda}, \bar{K}^* \to \pi^+ K^-, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+K^-nar{n}$ | 4823 | 11 | 69382 |
| 1048 | $J/\psi ightarrow ho^0 b_1^0 \gamma, ho^0 ightarrow \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4845 | 11 | 69393 |
| 1049 | $J/\psi \to K^+K^-a_1^0, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 18 | 11 | 69404 |
| 1050 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-$ | 4863 | 11 | 69415 |
| 1051 | $J/\psi \to \eta' \gamma, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 1853 | 11 | 69426 |
| 1052 | $J/\psi \to a_2^0 \pi^+ \pi^-, a_2^0 \to K^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 487 | 11 | 69437 |
| 1053 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 710 | 11 | 69448 |
| 1054 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 579 | 11 | 69459 |
| 1055 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^+K^-, K_2^{*0} \to \pi^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 367 | 11 | 69470 |
| 1056 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \rho^0 \pi^-, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 1445 | 11 | 69481 |
| 1057 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 4983 | 11 | 69492 |
| 1058 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^+K^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 5022 | 11 | 69503 |
| 1059 | $J/\psi \rightarrow \rho^- a_2^+ \eta, \rho^- \rightarrow \pi^0 \pi^-, a_2^+ \rightarrow \pi^0 \rho^+, \eta \rightarrow \gamma \gamma, \rho^+ \rightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2668 | 11 | 69514 |
| 1060 | $J/\psi ightarrow \eta \phi, \eta ightarrow \pi^0 \pi^0 \pi^0, \phi ightarrow K^+ K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 3723 | 11 | 69525 |
| 1061 | $J/\psi \to \pi^0 K^0 \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3729 | 11 | 69536 |
| 1062 | $J/\psi \to \rho^0 K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3731 | 11 | 69547 |
| 1063 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 2081 | 11 | 69558 |
| 1064 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3748 | 11 | 69569 |
| 1065 | $J/\psi \to \pi^+ K^* K^-, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 544 | 11 | 69580 |
| 1066 | $J/\psi \to \pi^+ \rho^+ \rho^- b_1^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5297 | 11 | 69591 |
| 1067 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5404 | 11 | 69602 |
| 1068 | $J/\psi 	o \eta' n ar{n}, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^-nar{n}\gamma$ | 2085 | 11 | 69613 |
| 1069 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 421 | 11 | 69624 |
| 1070 | $J/\psi \to \phi\phi\gamma, \phi \to K^+K^-, \phi \to K^+K^-$ | $K^+K^+K^-K^-\gamma$ | 1016 | 11 | 69635 |
| 1071 | $J/\psi \to K^- K^{*+} b_1^0, K^{*+} \to \pi^0 K^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3116 | 11 | 69646 |
| 1072 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 \pi^- ho^+, ho^0 ightarrow \pi^+ \pi^-, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1889 | 11 | 69657 |
| 1073 | $J/\psi \to ho^0 K^0 \bar{K}_0^{*0}, ho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 3808 | 11 | 69668 |
| 1074 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 1530 | 11 | 69679 |
| 1075 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 5601 | 11 | 69690 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 1076 | $J/\psi \to \bar{\Xi}^+\Xi^{*-}, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^{*-} \to \pi^0\Xi^-, \bar{\Lambda} \to \pi^+\bar{p}, \Xi^- \to \pi^-\Lambda, \Lambda \to \pi^-p$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 3123 | 11 | 69701 |
| 1077 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5629 | 11 | 69712 |
| 1078 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^0 K^-, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 5652 | 11 | 69723 |
| 1079 | $J/\psi \to \rho^0 \pi^+ \pi^- h_1(1170), \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2732 | 11 | 69734 |
| 1080 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3879 | 11 | 69745 |
| 1081 | $J/\psi 	o \omega p \bar{\Delta}^+, \omega 	o \pi^0 \pi^+ \pi^-, \bar{\Delta}^+ 	o \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 272 | 11 | 69756 |
| 1082 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2750 | 11 | 69767 |
| 1083 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1932 | 11 | 69778 |
| 1084 | $J/\psi \to ho^0 \pi^- \omega b_1^+, ho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 3967 | 11 | 69789 |
| 1085 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1636 | 11 | 69800 |
| 1086 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1944 | 11 | 69811 |
| 1087 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K^0_L \pi^+ K^-$ | 3997 | 11 | 69822 |
| 1088 | $J/\psi \to \pi^- \bar{K}^* K^+ \gamma^F, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 4002 | 11 | 69833 |
| 1089 | $J/\psi \to \pi^+ K^* K^-, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 1945 | 11 | 69844 |
| 1090 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \rho^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 883 | 11 | 69855 |
| 1091 | $J/\psi \to \pi^0 h_1(1170) a_1^0, h_1(1170) \to \pi^+ \rho^-, a_1^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6454 | 11 | 69866 |
| 1092 | $J/\psi \to \pi^- \rho^+ K^- K^{*+}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6502 | 11 | 69877 |
| 1093 | $J/\psi \to a_0^- b_1^+, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1950 | 11 | 69888 |
| 1094 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^{+}\bar{\Xi}^{0}, \Xi^{*-} \to \pi^{-}\Xi^{0}, \bar{\Xi}^{0} \to \pi^{0}\bar{\Lambda}, \Xi^{0} \to \pi^{0}\Lambda, \\ \bar{\Lambda} \to \pi^{+}\bar{p}, \Lambda \to \pi^{-}p$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 6586 | 11 | 69899 |
| 1095 | $J/\psi ightarrow ho^0 \omega \gamma, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 4101 | 11 | 69910 |
| 1096 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 2163 | 11 | 69921 |
| 1097 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \gamma \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+K^-\gamma\gamma$ | 7008 | 11 | 69932 |
| 1098 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 1207 | 11 | 69943 |
| 1099 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7367 | 11 | 69954 |
| 1100 | $J/\psi \to \pi^+ \rho^- K^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 4147 | 11 | 69965 |
| 1101 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^+ \rho^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7641 | 11 | 69976 |
| 1102 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 590 | 11 | 69987 |
| 1103 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3236 | 11 | 69998 |
| 1104 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8620 | 11 | 70009 |
| 1105 | $J/\psi \to K^+ {\bar K_1}'^-, {\bar K_1}'^- \to \pi^- {\bar K}^*, {\bar K}^* \to \pi^0 {\bar K}^0, {\bar K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 8621 | 11 | 70020 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 1106 | $J/\psi \to \omega p \bar{\Delta}^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 8671 | 11 | 70031 |
| 1107 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 9125 | 11 | 70042 |
| 1108 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 \pi^+ ho^-, ho^0 ightarrow \pi^+ \pi^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1785 | 11 | 70053 |
| 1109 | $J/\psi 	o \pi^+ ho^- f_2(1270), ho^- 	o \pi^0 \pi^-, f_2(1270) 	o \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1148 | 10 | 70063 |
| 1110 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3507 | 10 | 70073 |
| 1111 | $J/\psi \to K^0 \bar{K}_0^{*0} \gamma, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+K^-\gamma$ | 1072 | 10 | 70083 |
| 1112 | $J/\psi ightarrow \phi f_{2}^{'}, \phi ightarrow K^{+}K^{-}, f_{2}^{'} ightarrow K_{L}^{0}K_{L}^{0}$ | $K_{L}^{0}K_{L}^{0}K^{+}K^{-}$ | 2629 | 10 | 70093 |
| 1113 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1493 | 10 | 70103 |
| 1114 | $J/\psi 	o \pi^0 \pi^- \bar{K}^0 K^+, \bar{K}^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 2356 | 10 | 70113 |
| 1115 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 3038 | 10 | 70123 |
| 1116 | $J/\psi \rightarrow \eta(1405)\gamma, \eta(1405) \rightarrow \rho^0 \rho^0, \rho^0 \rightarrow \pi^+\pi^-, \rho^0 \rightarrow \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 1755 | 10 | 70133 |
| 1117 | $J/\psi \to K^- K^{*+} a_0^0, K^{*+} \to \pi^+ K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 3042 | 10 | 70143 |
| 1118 | $J/\psi ightarrow \pi^+ ho^- \eta', ho^- ightarrow \pi^0 \pi^-, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3580 | 10 | 70153 |
| 1119 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^{*-}, \Lambda \to \pi^- p, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 1407 | 10 | 70163 |
| 1120 | $J/\psi \to \rho^- K^+ \bar{K}_0^{*0}, \rho^- \to \pi^0 \pi^-, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1298 | 10 | 70173 |
| 1121 | $J/\psi 	o \pi^0 \pi^0 \pi^0 ho^0, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 2114 | 10 | 70183 |
| 1122 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^- \bar{\Xi}^+, \Lambda \to \pi^0 n, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \\ \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 895 | 10 | 70193 |
| 1123 | $J/\psi \to \pi^- \bar{\Lambda} \Sigma^+, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^+ \to \pi^+ n$ | $\pi^0\pi^+\pi^-nar{n}$ | 389 | 10 | 70203 |
| 1124 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K^0_S, K^{*+} \to \pi^0 K^+, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 3638 | 10 | 70213 |
| 1125 | $J/\psi \to \pi^0 h_1(1170) a_1^0, h_1(1170) \to \pi^+ \rho^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3070 | 10 | 70223 |
| 1126 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 4592 | 10 | 70233 |
| 1127 | $J/\psi \to \rho^0 \pi^+ \pi^- h_1(1170), \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 915 | 10 | 70243 |
| 1128 | $J/\psi \to f_2(1270)b_1^0, f_2(1270) \to \pi^+\pi^-, b_1^0 \to \pi^0\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 98 | 10 | 70253 |
| 1129 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3683 | 10 | 70263 |
| 1130 | $J/\psi \rightarrow \rho^+ \eta a_0^-, \rho^+ \rightarrow \pi^0 \pi^+, \eta \rightarrow \pi^0 \pi^0 \pi^0, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4664 | 10 | 70273 |
| 1131 | $J/\psi \to \eta \omega f_2(1270), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2400 | 10 | 70283 |
| 1132 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1424 | 10 | 70293 |
| 1133 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 4693 | 10 | 70303 |
| 1134 | $J/\psi \to \eta \phi, \eta \to \gamma \gamma, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\gamma\gamma$ | 3710 | 10 | 70313 |
| 1135 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 3711 | 10 | 70323 |
| 1136 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 3716 | 10 | 70333 |
| 1137 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3718 | 10 | 70343 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 1138 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1318 | 10 | 70353 |
| 1139 | $J/\psi ightarrow \pi^0 \Delta^0 ar{\Delta}^0, \Delta^0 ightarrow \pi^- p, ar{\Delta}^0 ightarrow \pi^+ ar{p}$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 455 | 10 | 70363 |
| 1140 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 1216 | 10 | 70373 |
| 1141 | $J/\psi \to \pi^- a_0^0 a_1^+, a_0^0 \to \pi^0 \eta, a_1^+ \to \pi^0 \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 133 | 10 | 70383 |
| 1142 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4840 | 10 | 70393 |
| 1143 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 3746 | 10 | 70403 |
| 1144 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4858 | 10 | 70413 |
| 1145 | $J/\psi \to \phi f_0(1790), \phi \to K_L^0 K_S^0, f_0(1790) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 465 | 10 | 70423 |
| 1146 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 411 | 10 | 70433 |
| 1147 | $J/\psi ightarrow K^0 ar K^0 \gamma, K^0 ightarrow K^0_S, ar K^0 ightarrow K^0_L, K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\gamma$ | 108 | 10 | 70443 |
| 1148 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3770 | 10 | 70453 |
| 1149 | $J/\psi 	o \eta p ar p, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^-par p\gamma^F$ | 271 | 10 | 70463 |
| 1150 | $J/\psi \to \pi^- \bar{\Lambda} \Sigma^{*+}, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^{*+} \to \pi^+ \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 2184 | 10 | 70473 |
| 1151 | $J/\psi 	o ar{\Lambda} \Sigma^0 \gamma, ar{\Lambda} 	o \pi^+ ar{p}, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^- p$ | $\pi^+\pi^-par p\gamma\gamma$ | 4934 | 10 | 70483 |
| 1152 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3179 | 10 | 70493 |
| 1153 | $J/\psi 	o K^- p \bar{\Sigma}^0, \bar{\Sigma}^0 	o \bar{\Lambda} \gamma, \bar{\Lambda} 	o \pi^+ \bar{p}$ | $\pi^+ K^- p \bar{p} \gamma$ | 4957 | 10 | 70503 |
| 1154 | $J/\psi \to \rho^- \eta a_0^+, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 4968 | 10 | 70513 |
| 1155 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 197 | 10 | 70523 |
| 1156 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2191 | 10 | 70533 |
| 1157 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 4985 | 10 | 70543 |
| 1158 | $J/\psi 	o \pi^0 ar{K}^* K_0^0, ar{K}^* 	o \pi^0 ar{K}^0, K_0^0 	o \pi^- K^+, ar{K}^0 	o K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 147 | 10 | 70553 |
| 1159 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 3834 | 10 | 70563 |
| 1160 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3842 | 10 | 70573 |
| 1161 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 3843 | 10 | 70583 |
| 1162 | $J/\psi 	o \Sigma^0 ar{\Sigma}^0 \gamma, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+n\bar{p}\gamma\gamma\gamma$ | 399 | 10 | 70593 |
| 1163 | $J/\psi \to \pi^0 K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 3217 | 10 | 70603 |
| 1164 | $J/\psi ightarrow K^{*-}par{\Lambda}, K^{*-} ightarrow \pi^-ar{K}^0, ar{\Lambda} ightarrow \pi^+ar{p}, ar{K}^0 ightarrow K_L^0$ | $K_L^0\pi^+\pi^-par{p}$ | 1663 | 10 | 70613 |
| 1165 | $J/\psi ightarrow \pi^0\pi^-a_1^+, a_1^+ ightarrow ho^0\pi^+, ho^0 ightarrow \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1551 | 10 | 70623 |
| 1166 | $J/\psi 	o \eta' \gamma, \eta' 	o \omega \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 1671 | 10 | 70633 |
| 1167 | $J/\psi ightarrow \pi^- a_2^+, a_2^+ ightarrow \pi^+ \eta, \eta ightarrow \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma$ | 5388 | 10 | 70643 |
| 1168 | $J/\psi \to \bar{K}^0 K^+ b_1^-, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 842 | 10 | 70653 |
| 1169 | $J/\psi \rightarrow \rho^+ \eta a_0^-, \rho^+ \rightarrow \pi^0 \pi^+, \eta \rightarrow \gamma \gamma, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3959 | 10 | 70663 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 1170 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}K^{-}$ | 2812 | 10 | 70673 |
| 1171 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1685 | 10 | 70683 |
| 1172 | $J/\psi \to K^0 K^- b_1^+, K^0 \to K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5457 | 10 | 70693 |
| 1173 | $J/\psi \to K^+ K_0^{*-} \gamma^F, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma^F$ | 5471 | 10 | 70703 |
| 1174 | $J/\psi ightarrow \pi^- \omega a_0^+, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5516 | 10 | 70713 |
| 1175 | $J/\psi \rightarrow \rho^+ \rho^- \omega, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 2818 | 10 | 70723 |
| 1176 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5532 | 10 | 70733 |
| 1177 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 3994 | 10 | 70743 |
| 1178 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K^0_L, K^* 	o \pi^0 K^0, K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L$ | 3281 | 10 | 70753 |
| 1179 | $J/\psi \to \rho^+ \rho^- \omega, \rho^+ \to \pi^0 \pi^+ \gamma^f, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3285 | 10 | 70763 |
| 1180 | $J/\psi \to \pi^+ \pi^+ \pi^- \pi^- \phi, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1370 | 10 | 70773 |
| 1181 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^+ \rho^-, h_1(1170) \to \pi^0 \rho^0, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1697 | 10 | 70783 |
| 1182 | $J/\psi 	o \eta' p \bar p, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 249 | 10 | 70793 |
| 1183 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5634 | 10 | 70803 |
| 1184 | $J/\psi 	o \pi^0 ho^0 \pi^+ a_0^-, ho^0 	o \pi^+ \pi^-, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 578 | 10 | 70813 |
| 1185 | $J/\psi \rightarrow \rho^0 \omega b_1^0, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^0 \rightarrow \pi^0 \omega, \omega \rightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 853 | 10 | 70823 |
| 1186 | $J/\psi \to \pi^- \bar{\Sigma}^{*+} \Lambda, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 2274 | 10 | 70833 |
| 1187 | $J/\psi \to \omega K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1709 | 10 | 70843 |
| 1188 | $J/\psi 	o K^* ar K^* \gamma, K^* 	o \pi^0 K^0, ar K^* 	o \pi^+ K^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 1712 | 10 | 70853 |
| 1189 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2036 | 10 | 70863 |
| 1190 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3362 | 10 | 70873 |
| 1191 | $J/\psi \to \eta(2225)\gamma, \eta(2225) \to \phi\phi, \phi \to K^+K^-, \phi \to K^+K^-$ | $K^+K^+K^-K^-\gamma$ | 5997 | 10 | 70883 |
| 1192 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1061 | 10 | 70893 |
| 1193 | $J/\psi \to \phi f_0(1370), \phi \to K^+K^-, f_0(1370) \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-$ | 6041 | 10 | 70903 |
| 1194 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4169 | 10 | 70913 |
| 1195 | $J/\psi \rightarrow a_0^+b_1^-, a_0^+ \rightarrow \pi^+\eta, b_1^- \rightarrow \pi^-\omega, \eta \rightarrow \gamma\gamma, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1063 | 10 | 70923 |
| 1196 | $J/\psi \to \bar{K}^0 K^+ a_1^-, \bar{K}^0 \to K_L^0, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 2306 | 10 | 70933 |
| 1197 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6183 | 10 | 70943 |
| 1198 | $J/\psi \to \omega \omega b_1^0, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6240 | 10 | 70953 |
| 1199 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^0 \eta, \omega ightarrow \pi^0 \pi^+ \pi^-, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4187 | 10 | 70963 |
| 1200 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+$ | 4191 | 10 | 70973 |
| 1201 | $J/\psi ightarrow \omega f_2(1270), \omega ightarrow \pi^0 \gamma, f_2(1270) ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma$ | 6365 | 10 | 70983 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 1202 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2048 | 10 | 70993 |
| 1203 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6494 | 10 | 71003 |
| 1204 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K^0_S, K^{*+} \to \pi^+ K^0, K^0_S \to \pi^0 \pi^0, K^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4222 | 10 | 71013 |
| 1205 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^+\rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 2602 | 10 | 71023 |
| 1206 | $J/\psi \to \rho^0 \pi^+ \omega b_1^-, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 1135 | 10 | 71033 |
| 1207 | $J/\psi 	o \pi^- ho^+ ho^- b_1^+, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6818 | 10 | 71043 |
| 1208 | $J/\psi \to K^-K^{*+}b_1^0, K^{*+} \to \pi^+K^0, b_1^0 \to \pi^0\omega, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 6834 | 10 | 71053 |
| 1209 | $J/\psi \to K^+ K_0^{*-} \gamma^F, K_0^{*-} \to \pi^0 K^-$ | $\pi^0 K^+ K^- \gamma^F$ | 2610 | 10 | 71063 |
| 1210 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2950 | 10 | 71073 |
| 1211 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^-\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 4262 | 10 | 71083 |
| 1212 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^- K^+$ | 7104 | 10 | 71093 |
| 1213 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o ho^0 \pi^-, a_0^0 	o \pi^0 \eta, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7161 | 10 | 71103 |
| 1214 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2967 | 10 | 71113 |
| 1215 | $J/\psi \to K^+K^+K^-K^-$ | $K^{+}K^{+}K^{-}K^{-}$ | 4285 | 10 | 71123 |
| 1216 | $J/\psi ightarrow ho^- ar{n} p, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^-ar{n}p$ | 7391 | 10 | 71133 |
| 1217 | $J/\psi \to \rho^0 \omega h_1(1170), \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 3434 | 10 | 71143 |
| 1218 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $K_L^0K_L^0\pi^+\pi^-\gamma\gamma$ | 712 | 10 | 71153 |
| 1219 | $J/\psi 	o \omega \eta', \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4319 | 10 | 71163 |
| 1220 | $J/\psi ightarrow ho^0 ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 8326 | 10 | 71173 |
| 1221 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 719 | 10 | 71183 |
| 1222 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 4345 | 10 | 71193 |
| 1223 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 2329 | 10 | 71203 |
| 1224 | $J/\psi \to \rho^0 K^- K_0^{*+}, \rho^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 3484 | 10 | 71213 |
| 1225 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 1730 | 10 | 71223 |
| 1226 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K^0_L \pi^+ \pi^- \pi^- K^+$ | 2992 | 10 | 71233 |
| 1227 | $J/\psi \to \pi^+ a_2^- a_1^0, a_2^- \to \rho^0 \pi^-, a_1^0 \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2096 | 9 | 71242 |
| 1228 | $J/\psi 	o ho^- ar{K}^0 K_0^{*+}, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_L^0, K_0^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 1346 | 9 | 71251 |
| 1229 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3128 | 9 | 71260 |
| 1230 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3131 | 9 | 71269 |
| 1231 | $J/\psi \to f_2(1270)K^+K^-, f_2(1270) \to \pi^0\pi^0$ | $\pi^0\pi^0K^+K^-$ | 4708 | 9 | 71278 |
| 1232 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}$ | 184 | 9 | 71287 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1233 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4716 | 9 | 71296 |
| 1234 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^- \bar{K}^0 K^+, \bar{K}^0 ightarrow K^0_S, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma$ | 1230 | 9 | 71305 |
| 1235 | $J/\psi \to \rho^+ a_2^- \eta, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 341 | 9 | 71314 |
| 1236 | $J/\psi ightarrow \pi^0 \eta' b_1^0, \eta' ightarrow \pi^+ \pi^- \eta, b_1^0 ightarrow \pi^0 \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 3777 | 9 | 71323 |
| 1237 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3155 | 9 | 71332 |
| 1238 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4794 | 9 | 71341 |
| 1239 | $J/\psi \to \pi^+ a_2^- a_1^0, a_2^- \to \pi^0 \rho^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 882 | 9 | 71350 |
| 1240 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2738 | 9 | 71359 |
| 1241 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 830 | 9 | 71368 |
| 1242 | $J/\psi \to \rho^0 \pi^- \rho^+ b_1^0, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 714 | 9 | 71377 |
| 1243 | $J/\psi \to \pi^0 K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2402 | 9 | 71386 |
| 1244 | $J/\psi \to \Sigma^{*0}\bar{\Sigma}^{*0}, \Sigma^{*0} \to \pi^0\Lambda, \bar{\Sigma}^{*0} \to \pi^0\bar{\Lambda}, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 3833 | 9 | 71395 |
| 1245 | $J/\psi \to \bar{\Xi}^+\Xi^{*-}, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^{*-} \to \pi^-\Xi^0, \bar{\Lambda} \to \pi^+\bar{p}, \Xi^0 \to \pi^0\Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 1383 | 9 | 71404 |
| 1246 | $J/\psi \to ho^0 K^0 \bar{K}_0^{*0}, ho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 1614 | 9 | 71413 |
| 1247 | $J/\psi 	o \omega a_0^0, \omega 	o \pi^0 \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1491 | 9 | 71422 |
| 1248 | $J/\psi 	o K^0 ar{K}^* a^0_0, K^0 	o K^0_L, ar{K}^* 	o \pi^+ K^-, a^0_0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 2438 | 9 | 71431 |
| 1249 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^0K^0, a_0^+ \to \pi^+\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 1122 | 9 | 71440 |
| 1250 | $J/\psi ightarrow \pi^+ ho^- \eta^\prime, ho^- ightarrow \pi^0 \pi^-, \eta^\prime ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1255 | 9 | 71449 |
| 1251 | $J/\psi ightarrow ho^+ a_2^- \eta, ho^+ ightarrow \pi^0 \pi^+, a_2^- ightarrow ho^0 \pi^-, \eta ightarrow \gamma \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2783 | 9 | 71458 |
| 1252 | $J/\psi \to \pi^- \eta K_S^0 K^+, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1776 | 9 | 71467 |
| 1253 | $J/\psi 	o ho^+ K^- K_0^0, ho^+ 	o \pi^0 \pi^+, K_0^0 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 4953 | 9 | 71476 |
| 1254 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \pi^- K^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 1261 | 9 | 71485 |
| 1255 | $J/\psi ightarrow \pi^0 \Sigma^+ ar{\Sigma}^-, \Sigma^+ ightarrow \pi^0 p, ar{\Sigma}^- ightarrow \pi^0 ar{p}$ | $\pi^0\pi^0\pi^0p\bar{p}$ | 3936 | 9 | 71494 |
| 1256 | $J/\psi \to \eta K^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma\gamma$ | 3938 | 9 | 71503 |
| 1257 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^0K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 4974 | 9 | 71512 |
| 1258 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4980 | 9 | 71521 |
| 1259 | $J/\psi \to \pi^+ a_0^- \gamma^F, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 2471 | 9 | 71530 |
| 1260 | $J/\psi \to a_2^0 \pi^+ \pi^- \gamma^f, a_2^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 2473 | 9 | 71539 |
| 1261 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^+\pi^-\bar{K}^*, \bar{K}^* \to \pi^+K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 4992 | 9 | 71548 |
| 1262 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 944 | 9 | 71557 |
| 1263 | $J/\psi 	o \pi^- \bar{\Delta}^0 \Delta^+, \bar{\Delta}^0 	o \pi^+ \bar{p}, \Delta^+ 	o \pi^0 p$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 5057 | 9 | 71566 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 1264 | $J/\psi \to \pi^+\pi^- h_1(1170)\gamma^F, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5065 | 9 | 71575 |
| 1265 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 5069 | 9 | 71584 |
| 1266 | $J/\psi \to \pi^+\pi^-\omega, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5135 | 9 | 71593 |
| 1267 | $J/\psi ightarrow ar{K}^0 K^* \gamma, ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^0 K^0, K^0 ightarrow K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 2171 | 9 | 71602 |
| 1268 | $J/\psi \to \pi^- a_0^0 a_1^+, a_0^0 \to \pi^0 \eta, a_1^+ \to \pi^0 \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2798 | 9 | 71611 |
| 1269 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 370 | 9 | 71620 |
| 1270 | $J/\psi ightarrow ho^0 a^0_0, ho^0 ightarrow \pi^+\pi^-, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 5154 | 9 | 71629 |
| 1271 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1956 | 9 | 71638 |
| 1272 | $J/\psi \to \pi^0 f_0(1370)\gamma, f_0(1370) \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\gamma$ | 742 | 9 | 71647 |
| 1273 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 720 | 9 | 71656 |
| 1274 | $J/\psi 	o f_2(1270) b_1^0, f_2(1270) 	o \pi^0 \pi^0, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5253 | 9 | 71665 |
| 1275 | $J/\psi \to K^- K_1^+, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 4045 | 9 | 71674 |
| 1276 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 4054 | 9 | 71683 |
| 1277 | $J/\psi 	o \pi^0 K^0 ar{K}_1^0, K^0 	o K_L^0, ar{K}_1^0 	o ho^0 ar{K}^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4055 | 9 | 71692 |
| 1278 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 1516 | 9 | 71701 |
| 1279 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^0K^+K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 697 | 9 | 71710 |
| 1280 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 4105 | 9 | 71719 |
| 1281 | $J/\psi \rightarrow \pi^- \eta' b_1^+, \eta' \rightarrow \pi^+ \pi^- \eta, b_1^+ \rightarrow \pi^+ \omega, \eta \rightarrow \pi^0 \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 1281 | 9 | 71728 |
| 1282 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma\gamma$ | 3341 | 9 | 71737 |
| 1283 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 2504 | 9 | 71746 |
| 1284 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 593 | 9 | 71755 |
| 1285 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^+K^-, K_2^{*0} \to \pi^+\pi^-K^*, K^* \to \pi^-K^+$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1192 | 9 | 71764 |
| 1286 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^+ \pi^- \eta', \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1147 | 9 | 71773 |
| 1287 | $J/\psi ightarrow \pi^+\pi^-\phi, \phi ightarrow K_L^0K_S^0, K_S^0 ightarrow \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 649 | 9 | 71782 |
| 1288 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 749 | 9 | 71791 |
| 1289 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\omega, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 2005 | 9 | 71800 |
| 1290 | $J/\psi 	o K^+K^-\eta', \eta' 	o ho^0\gamma, ho^0 	o \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 2904 | 9 | 71809 |
| 1291 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 5612 | 9 | 71818 |
| 1292 | $J/\psi 	o ar{K}^*K^+a_0^-, ar{K}^* 	o \pi^0ar{K}^0, a_0^- 	o \pi^-\eta, ar{K}^0 	o K_L^0, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 1197 | 9 | 71827 |
| 1293 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 906 | 9 | 71836 |
| 1294 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 435 | 9 | 71845 |
| 1295 | $J/\psi ightarrow \pi^0 ho^0 \eta^\prime, ho^0 ightarrow \pi^+ \pi^-, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2558 | 9 | 71854 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1296 | $J/\psi \to \rho^- b_1^+ h_1(1170), \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, h_1(1170) \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5653 | 9 | 71863 |
| 1297 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^+\pi^-, \phi \to K^+K^-$ | $\pi^+\pi^-K^+K^-$ | 1317 | 9 | 71872 |
| 1298 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 3459 | 9 | 71881 |
| 1299 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 3471 | 9 | 71890 |
| 1300 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2252 | 9 | 71899 |
| 1301 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-$ | 4246 | 9 | 71908 |
| 1302 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5804 | 9 | 71917 |
| 1303 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 279 | 9 | 71926 |
| 1304 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 5925 | 9 | 71935 |
| 1305 | $J/\psi ightarrow ar{K}^0 n ar{\Lambda}, ar{K}^0 ightarrow K_S^0, ar{\Lambda} ightarrow \pi^+ ar{p}, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+nar{p}$ | 5937 | 9 | 71944 |
| 1306 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 2960 | 9 | 71953 |
| 1307 | $J/\psi \to \rho^+ b_1^- h_1(1170), \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, h_1(1170) \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6002 | 9 | 71962 |
| 1308 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4274 | 9 | 71971 |
| 1309 | $J/\psi \to \pi^+ \rho^- K^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2581 | 9 | 71980 |
| 1310 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6064 | 9 | 71989 |
| 1311 | $J/\psi \to K^{+}K^{-}f_{2}^{'}, f_{2}^{'} \to K_{L}^{0}K_{L}^{0}$ | $K_{L}^{0}K_{L}^{0}K^{+}K^{-}$ | 6070 | 9 | 71998 |
| 1312 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma$ | 685 | 9 | 72007 |
| 1313 | $J/\psi \to \rho^- b_1^+ h_1(1170), \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1816 | 9 | 72016 |
| 1314 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2587 | 9 | 72025 |
| 1315 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1696 | 9 | 72034 |
| 1316 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6209 | 9 | 72043 |
| 1317 | $J/\psi 	o a_2^0 \pi^+ \pi^-, a_2^0 	o K_L^0 K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^-$ | 1157 | 9 | 72052 |
| 1318 | $J/\psi \to K^-K^{*+}a_0^0, K^{*+} \to \pi^+K^0, a_0^0 \to \pi^0\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 6285 | 9 | 72061 |
| 1319 | $J/\psi \to \pi^- a_0^0 a_1^+, a_0^0 \to \pi^0 \eta, a_1^+ \to \rho^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1211 | 9 | 72070 |
| 1320 | $J/\psi 	o \eta ar{K}^0 K^*, \eta 	o \gamma \gamma, ar{K}^0 	o K_L^0, K^* 	o \pi^- K^+$ | $K_L^0\pi^-K^+\gamma\gamma$ | 1830 | 9 | 72079 |
| 1321 | $J/\psi \to \pi^- \rho^+ \eta^\prime, \rho^+ \to \pi^0 \pi^+, \eta^\prime \to \pi^+ \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 4369 | 9 | 72088 |
| 1322 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 6374 | 9 | 72097 |
| 1323 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 1834 | 9 | 72106 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1324 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^+K^0, h_1(1170) \to \pi^+\rho^-, K^0 \to K_L^0, \rho^- \to \pi^0\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 6493 | 9 | 72115 |
| 1325 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1160 | 9 | 72124 |
| 1326 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3027 | 9 | 72133 |
| 1327 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma$ | 686 | 9 | 72142 |
| 1328 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0 K_L^0\pi^- K^+$ | 1842 | 9 | 72151 |
| 1329 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ n ar p$ | $\pi^+ n \bar{p} \gamma$ | 6640 | 9 | 72160 |
| 1330 | $J/\psi \rightarrow \rho^+ \eta a_0^-, \rho^+ \rightarrow \pi^0 \pi^+, \eta \rightarrow \gamma \gamma, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1848 | 9 | 72169 |
| 1331 | $J/\psi \to \pi^0 \pi^+ \pi^- f_0(1370), f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 587 | 9 | 72178 |
| 1332 | $J/\psi 	o \eta ar{K}^0 K^*, \eta 	o \pi^0 \pi^0 \pi^0, ar{K}^0 	o K_L^0, K^* 	o \pi^- K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 6847 | 9 | 72187 |
| 1333 | $J/\psi \to ho^0 K^* \bar{K}^*, ho^0 \to \pi^+ \pi^- \gamma^f, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 6917 | 9 | 72196 |
| 1334 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 2057 | 9 | 72205 |
| 1335 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 6958 | 9 | 72214 |
| 1336 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{\Sigma}^+ \Sigma^-, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^- \to \pi^- n$ | $\pi^+\pi^-nar{n}\gamma$ | 3609 | 9 | 72223 |
| 1337 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 2630 | 9 | 72232 |
| 1338 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^- \rho^+, K^{*+} \to \pi^0 K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3651 | 9 | 72241 |
| 1339 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7110 | 9 | 72250 |
| 1340 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^0 \eta, \omega ightarrow \pi^0 \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 989 | 9 | 72259 |
| 1341 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^0 \gamma, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma$ | 7191 | 9 | 72268 |
| 1342 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma$ | 2339 | 9 | 72277 |
| 1343 | $J/\psi \to ho^0 \bar{K}^* K_1^0, ho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^- K^+, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7322 | 9 | 72286 |
| 1344 | $J/\psi ightarrow ho^- ar{\Delta}^0 p, ho^- ightarrow \pi^0 \pi^-, ar{\Delta}^0 ightarrow \pi^0 ar{n}$ | $\pi^0\pi^0\pi^-\bar{n}p$ | 1858 | 9 | 72295 |
| 1345 | $J/\psi \to \Xi^-\bar{\Xi}^{*+}, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^{*+} \to \pi^+\bar{\Xi}^0, \Lambda \to \pi^-p, \bar{\Xi}^0 \to \pi^0\bar{\Lambda}, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 4544 | 9 | 72304 |
| 1346 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7421 | 9 | 72313 |
| 1347 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 7447 | 9 | 72322 |
| 1348 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2661 | 9 | 72331 |
| 1349 | $J/\psi 	o K^-K^{*+}a_1^0, K^{*+} 	o \pi^+K^0, a_1^0 	o \pi^+ ho^-, K^0 	o K_L^0, ho^- 	o \pi^0\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3084 | 9 | 72340 |
| 1350 | $J/\psi ightarrow \omega nar{\Delta}^0, \omega ightarrow \pi^0\pi^+\pi^-, ar{\Delta}^0 ightarrow \pi^+ar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 4563 | 9 | 72349 |
| 1351 | $J/\psi 	o \pi^+ K_2^{*0} K^-, K_2^{*0} 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 7988 | 9 | 72358 |
| 1352 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, \phi \to K^+ K^-, K^0_S \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-$ | 8078 | 9 | 72367 |
| 1353 | $J/\psi \to K^- K^{*+} a_0^0, K^{*+} \to \pi^0 K^+, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8136 | 9 | 72376 |
| 1354 | $J/\psi \to \pi^0 \omega \omega \gamma, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3090 | 9 | 72385 |
| 1355 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2078 | 9 | 72394 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 1356 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2667 | 9 | 72403 |
| 1357 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 992 | 9 | 72412 |
| 1358 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2670 | 9 | 72421 |
| 1359 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+K^-$ | 588 | 9 | 72430 |
| 1360 | $J/\psi \to K^-K^{*+}\gamma^F, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma^F$ | 9253 | 9 | 72439 |
| 1361 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to \pi^- \rho^+, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1871 | 9 | 72448 |
| 1362 | $J/\psi \to a_2^- \bar{K}^* K^+, a_2^- \to \pi^0 \rho^-, \bar{K}^* \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1582 | 8 | 72456 |
| 1363 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1584 | 8 | 72464 |
| 1364 | $J/\psi \to K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 1015 | 8 | 72472 |
| 1365 | $J/\psi 	o \pi^+ ho^- ar{K}^0 K^*, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K^0_L, K^* 	o \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 1406 | 8 | 72480 |
| 1366 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^{0} K_{L}^{0} \pi^{-} K^{+}$ | 1824 | 8 | 72488 |
| 1367 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 2502 | 8 | 72496 |
| 1368 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^+ \rho^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 968 | 8 | 72504 |
| 1369 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 1829 | 8 | 72512 |
| 1370 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1597 | 8 | 72520 |
| 1371 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2839 | 8 | 72528 |
| 1372 | $J/\psi 	o a_2^0 K^+ K^-, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2220 | 8 | 72536 |
| 1373 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K^+K^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 2520 | 8 | 72544 |
| 1374 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \rho^0\bar{K}^0, \rho^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $K^0_L\pi^+\pi^-\pi^-K^+$ | 1177 | 8 | 72552 |
| 1375 | $J/\psi \to \pi^- \bar{\Lambda} \Sigma^{*+}, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^{*+} \to \pi^+ \Lambda, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 4026 | 8 | 72560 |
| 1376 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2868 | 8 | 72568 |
| 1377 | $J/\psi 	o \pi^+ \Delta^0 \bar{\Delta}^+, \Delta^0 	o \pi^- p, \bar{\Delta}^+ 	o \pi^- \bar{n}$ | $\pi^+\pi^-\pi^-ar{n}p$ | 2531 | 8 | 72576 |
| 1378 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 1126 | 8 | 72584 |
| 1379 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-, K^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ K^+ K^- K^-$ | 5093 | 8 | 72592 |
| 1380 | $J/\psi \to n \bar{n} f_0(1370), f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 5094 | 8 | 72600 |
| 1381 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3337 | 8 | 72608 |
| 1382 | $J/\psi \to \pi^- a_7^+ a_0^0, a_7^+ \to \pi^0 \rho^+, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 871 | 8 | 72616 |
| 1383 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma$ | 3349 | 8 | 72624 |
| 1384 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 3358 | 8 | 72632 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 1385 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 1841 | 8 | 72640 |
| 1386 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 5159 | 8 | 72648 |
| 1387 | $J/\psi \to \pi^+\pi^-\eta\gamma^F\gamma^f, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 406 | 8 | 72656 |
| 1388 | $J/\psi \rightarrow \pi^+ \omega b_1^- \gamma^F, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 4137 | 8 | 72664 |
| 1389 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 2902 | 8 | 72672 |
| 1390 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^+ n ar p, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^+n\bar{p}\gamma$ | 2270 | 8 | 72680 |
| 1391 | $J/\psi 	o \eta\eta\gamma, \eta 	o \gamma\gamma, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 2909 | 8 | 72688 |
| 1392 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 2922 | 8 | 72696 |
| 1393 | $J/\psi 	o \pi^- ar{\Lambda} \Sigma^+, ar{\Lambda} 	o \pi^0 ar{n}, \Sigma^+ 	o \pi^0 p$ | $\pi^0\pi^0\pi^-ar{n}p$ | 5348 | 8 | 72704 |
| 1394 | $J/\psi \to K^+K^-\phi, \phi \to K_L^0K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0 \pi^0 K_L^0 K^+ K^-$ | 1728 | 8 | 72712 |
| 1395 | $J/\psi \to K^+K^{*-}a^0_0, K^{*-} \to \pi^0K^-, a^0_0 \to \pi^0\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 2278 | 8 | 72720 |
| 1396 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 396 | 8 | 72728 |
| 1397 | $J/\psi \to a_2^0 \pi^+ \pi^- \gamma^f, a_2^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5435 | 8 | 72736 |
| 1398 | $J/\psi 	o \eta' \gamma, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-\gamma\gamma\gamma^f$ | 2030 | 8 | 72744 |
| 1399 | $J/\psi ightarrow ho^0 ar{n} \Delta^0, ho^0 ightarrow \pi^+ \pi^-, \Delta^0 ightarrow \pi^0 n$ | $\pi^0\pi^+\pi^-nar{n}$ | 2936 | 8 | 72752 |
| 1400 | $J/\psi \to K^+ K^{*-} \gamma^F, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma^F$ | 3449 | 8 | 72760 |
| 1401 | $J/\psi \to K^+ K^{*-}\phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5467 | 8 | 72768 |
| 1402 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^- \gamma^f, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3450 | 8 | 72776 |
| 1403 | $J/\psi 	o \pi^0 ho^0 \pi^- a_0^+, ho^0 	o \pi^+ \pi^-, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1234 | 8 | 72784 |
| 1404 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma$ | 1425 | 8 | 72792 |
| 1405 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5529 | 8 | 72800 |
| 1406 | $J/\psi \to \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1860 | 8 | 72808 |
| 1407 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 1744 | 8 | 72816 |
| 1408 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^0\bar{\Sigma}^+, \Sigma^{*-} \to \pi^-\Lambda, \bar{\Sigma}^+ \to \pi^+\bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 2314 | 8 | 72824 |
| 1409 | $J/\psi \to \rho^+ K^* K^- \gamma^F, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 3479 | 8 | 72832 |
| 1410 | $J/\psi \to \pi^+ \eta' b_1^-, \eta' \to \pi^+ \pi^- \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 383 | 8 | 72840 |
| 1411 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 1429 | 8 | 72848 |
| 1412 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 4263 | 8 | 72856 |
| 1413 | $J/\psi \to \phi \sigma_0, \phi \to K_L^0 K_S^0, \sigma_0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3494 | 8 | 72864 |
| 1414 | $J/\psi ightarrow ho^+ \eta a_0^-, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \gamma \gamma, a_0^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 445 | 8 | 72872 |
| 1415 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_{L}^{0}K_{L}^{0}K^{+}K^{-}$ | 756 | 8 | 72880 |
| 1416 | $J/\psi \to \pi^+\pi^- h_1(1170)\gamma^F, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 4298 | 8 | 72888 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 1417 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5662 | 8 | 72896 |
| 1418 | $J/\psi ightarrow \pi^+ \eta K_S^0 K^-, \eta ightarrow \pi^0 \pi^0 \pi^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 5665 | 8 | 72904 |
| 1419 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^0\pi^0$ | $\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 2328 | 8 | 72912 |
| 1420 | $J/\psi ightarrow K^+K^-a^0_0, a^0_0 ightarrow \pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0 K^+ K^- \gamma \gamma$ | 5683 | 8 | 72920 |
| 1421 | $J/\psi \rightarrow \eta K^-K^{*+}, \eta \rightarrow \gamma \gamma, K^{*+} \rightarrow \pi^+K^0, K^0 \rightarrow K^0_S, K^0_S \rightarrow \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 5705 | 8 | 72928 |
| 1422 | $J/\psi \to \pi^- a_0^0 a_1^+, a_0^0 \to \pi^0 \eta, a_1^+ \to \rho^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 5721 | 8 | 72936 |
| 1423 | $J/\psi 	o K_S^0 ar{n} \Lambda, K_S^0 	o \pi^0 \pi^0, \Lambda 	o \pi^- p$ | $\pi^0\pi^0\pi^-ar{n}p$ | 5728 | 8 | 72944 |
| 1424 | $J/\psi \to \pi^+ a_2^-, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4305 | 8 | 72952 |
| 1425 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \bar{\Xi}^{*0} \to \pi^+\Xi^-, \bar{\Xi}^{*0} \to \pi^-\bar{\Xi}^+, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^+ \to \pi^+\bar{\Lambda},$ $\Lambda \to \pi^-p, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-p\bar{p}$ | 359 | 8 | 72960 |
| 1426 | $J/\psi 	o \eta n \bar{n}, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^-nar{n}\gamma^F$ | 931 | 8 | 72968 |
| 1427 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \omega \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5747 | 8 | 72976 |
| 1428 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5748 | 8 | 72984 |
| 1429 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 4320 | 8 | 72992 |
| 1430 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 4336 | 8 | 73000 |
| 1431 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1527 | 8 | 73008 |
| 1432 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 1352 | 8 | 73016 |
| 1433 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, $ $\rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 990 | 8 | 73024 |
| 1434 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 5959 | 8 | 73032 |
| 1435 | $J/\psi \to \pi^0 \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5963 | 8 | 73040 |
| 1436 | $J/\psi \to \pi^0 h_1(1170) a_1^0, h_1(1170) \to \pi^0 \rho^0, a_1^0 \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2087 | 8 | 73048 |
| 1437 | $J/\psi ightarrow \eta K^0 ar K^0, \eta ightarrow \pi^0 \pi^0 \pi^0, K^0 ightarrow K_L^0, ar K^0 ightarrow K_L^0$ | $\pi^0 \pi^0 \pi^0 K_L^0 K_L^0$ | 2089 | 8 | 73056 |
| 1438 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \rho^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 2645 | 8 | 73064 |
| 1439 | $J/\psi \to f_2(1270)h_1(1170), f_2(1270) \to \pi^+\pi^-, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 6029 | 8 | 73072 |
| 1440 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^0 \bar{\Xi}^0, \Lambda \to \pi^- p, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \\ \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 1365 | 8 | 73080 |
| 1441 | $J/\psi \to \pi^0 f_2(1270)\gamma, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\gamma$ | 6048 | 8 | 73088 |
| 1442 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 3046 | 8 | 73096 |
| 1443 | $J/\psi 	o \pi^0 ho^+ ho^- b_1^0, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 2370 | 8 | 73104 |
| 1444 | $J/\psi ightarrow ho^0 K^+ K^- \gamma^F, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 1908 | 8 | 73112 |
| 1445 | $J/\psi ightarrow \omega ar K^0 K^*, \omega ightarrow \pi^0 \gamma, ar K^0 ightarrow K^0_S, K^* ightarrow \pi^- K^+, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 1916 | 8 | 73120 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1446 | $J/\psi \to \pi^0 a_2^0 \omega, a_2^0 \to K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1926 | 8 | 73128 |
| 1447 | $J/\psi 	o \pi^- ar{\Delta}{}^0 \Delta^+, ar{\Delta}{}^0 	o \pi^+ ar{p}, \Delta^+ 	o \pi^+ n$ | $\pi^+\pi^+\pi^- nar{p}$ | 4431 | 8 | 73136 |
| 1448 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3620 | 8 | 73144 |
| 1449 | $J/\psi \to ho^- \bar{n} \Delta^+, ho^- \to \pi^0 \pi^-, \Delta^+ \to \pi^0 p$ | $\pi^0\pi^0\pi^-\bar{n}p$ | 3628 | 8 | 73152 |
| 1450 | $J/\psi ightarrow \pi^0 \pi^+ ho^- a^0_0, ho^- ightarrow \pi^0 \pi^-, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1928 | 8 | 73160 |
| 1451 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^+K^0, h_1(1170) \to \pi^-\rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 806 | 8 | 73168 |
| 1452 | $J/\psi \to \pi^+\pi^- h_1(1170)\gamma^F, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 886 | 8 | 73176 |
| 1453 | $J/\psi \to \bar{\Sigma}^- \Sigma^{*+}, \bar{\Sigma}^- \to \pi^- \bar{n}, \Sigma^{*+} \to \pi^+ \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^-nar{n}$ | 580 | 8 | 73184 |
| 1454 | $J/\psi \to \rho^- \bar{K}^* K^+ \gamma^F, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 2690 | 8 | 73192 |
| 1455 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow n ar{n}$ | $nar{n}\gamma$ | 6382 | 8 | 73200 |
| 1456 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6448 | 8 | 73208 |
| 1457 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 4509 | 8 | 73216 |
| 1458 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 812 | 8 | 73224 |
| 1459 | $J/\psi ightarrow ho^+ a_2^- \eta, ho^+ ightarrow \pi^0 \pi^+, a_2^- ightarrow \pi^0 ho^-, \eta ightarrow \gamma \gamma, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1947 | 8 | 73232 |
| 1460 | $J/\psi \to \pi^- a_0^0 a_1^+, a_0^0 \to \pi^0 \eta, a_1^+ \to \rho^0 \pi^+, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2134 | 8 | 73240 |
| 1461 | $J/\psi ightarrow ho^0 p ar p, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-p\bar{p}$ | 6543 | 8 | 73248 |
| 1462 | $J/\psi ightarrow \pi^0 ho^0 \eta^\prime, ho^0 ightarrow \pi^+ \pi^-, \eta^\prime ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3697 | 8 | 73256 |
| 1463 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3702 | 8 | 73264 |
| 1464 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1101 | 8 | 73272 |
| 1465 | $J/\psi \to f_4(2050)\gamma, f_4(2050) \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^-\gamma\gamma^f$ | 6679 | 8 | 73280 |
| 1466 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+ \gamma^f, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6800 | 8 | 73288 |
| 1467 | $J/\psi ightarrow \pi^+\pi^+\pi^-\pi^-\omega, \omega ightarrow \pi^0\pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 6801 | 8 | 73296 |
| 1468 | $J/\psi 	o \pi^- \eta' b_1^+, \eta' 	o \pi^+ \pi^- \eta, b_1^+ 	o \pi^+ \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 3118 | 8 | 73304 |
| 1469 | $J/\psi \to \eta' \phi, \eta' \to \rho^0 \gamma, \phi \to K^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 3120 | 8 | 73312 |
| 1470 | $J/\psi \to \pi^0 \pi^+ \pi^- f_0(1370), f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 2408 | 8 | 73320 |
| 1471 | $J/\psi \to \bar{\Lambda} \Sigma^{*0}, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^{*0} \to \pi^0 \Lambda, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-par{p}$ | 2731 | 8 | 73328 |
| 1472 | $J/\psi \to \Delta^+ \bar{\Delta}^+, \Delta^+ \to \pi^+ n, \bar{\Delta}^+ \to \pi^0 \bar{p}$ | $\pi^0\pi^+n\overline{p}$ | 2420 | 8 | 73336 |
| 1473 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^+K^-K^-\gamma$ | 4652 | 8 | 73344 |
| 1474 | $J/\psi \to \pi^- a_1^0 a_1^+, a_1^0 \to \pi^+ \rho^-, a_1^+ \to \pi^0 \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6965 | 8 | 73352 |
| 1475 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 6995 | 8 | 73360 |
| 1476 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 2421 | 8 | 73368 |
| 1477 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7007 | 8 | 73376 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 1478 | $J/\psi \to \pi^- f_2(1270)b_1^+, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 305 | 8 | 73384 |
| 1479 | $J/\psi 	o \pi^0 K^0 ar{K}^*, K^0 	o K^0_L, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 7040 | 8 | 73392 |
| 1480 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 514 | 8 | 73400 |
| 1481 | $J/\psi ightarrow ho^0 ho^0 \omega, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 145 | 8 | 73408 |
| 1482 | $J/\psi 	o \omega b_1^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 3148 | 8 | 73416 |
| 1483 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^+\Xi^-, \bar{\Xi}^{*0} \to \pi^-\bar{\Xi}^+, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^+ \to \pi^+\bar{\Lambda},$ $\Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-n\bar{p}$ | 3764 | 8 | 73424 |
| 1484 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^{+}\bar{\Xi}^{0}, \Xi^{*-} \to \pi^{-}\Xi^{0}, \bar{\Xi}^{0} \to \pi^{0}\bar{\Lambda}, \Xi^{0} \to \pi^{0}\Lambda, \\ \bar{\Lambda} \to \pi^{+}\bar{p}, \Lambda \to \pi^{0}n$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 1115 | 8 | 73432 |
| 1485 | $J/\psi \to f_2(1270)\gamma, f_2(1270) \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^-\gamma\gamma^f$ | 7243 | 8 | 73440 |
| 1486 | $J/\psi 	o \pi^+\pi^- f_2(1270), f_2(1270) 	o \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 4728 | 8 | 73448 |
| 1487 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^- K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 1570 | 8 | 73456 |
| 1488 | $J/\psi \to \pi^-\pi^-\rho^+a_1^+, \rho^+ \to \pi^0\pi^+, a_1^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 7390 | 8 | 73464 |
| 1489 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^+K^-, K_2^{*0} \to \pi^0K^*, K^* \to \pi^-K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1798 | 8 | 73472 |
| 1490 | $J/\psi \to a_2^+ b_1^-, a_2^+ \to \pi^0 \pi^+ \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4777 | 8 | 73480 |
| 1491 | $J/\psi \to ho^0 \bar{K}^0 K^*, ho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7439 | 8 | 73488 |
| 1492 | $J/\psi 	o \Delta^0 ar{\Delta}^0, \Delta^0 	o \pi^- p, ar{\Delta}^0 	o \pi^+ ar{p}$ | $\pi^+\pi^-par{p}$ | 2451 | 8 | 73496 |
| 1493 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^0\Xi^0, \bar{\Xi}^{*0} \to \pi^-\bar{\Xi}^+, \Xi^0 \to \pi^0\Lambda, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Lambda \to \pi^-p, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 1571 | 8 | 73504 |
| 1494 | $J/\psi 	o ar{\Lambda} \Sigma^0 \gamma, ar{\Lambda} 	o \pi^+ ar{p}, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^0 n$ | $\pi^0\pi^+nar p\gamma\gamma$ | 333 | 8 | 73512 |
| 1495 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7720 | 8 | 73520 |
| 1496 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 7728 | 8 | 73528 |
| 1497 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^-$ | 7738 | 8 | 73536 |
| 1498 | $J/\psi 	o K^0 ar{K}^* a^0_0, K^0 	o K^0_L, ar{K}^* 	o \pi^+ K^-, a^0_0 	o \pi^0 \eta, \eta 	o \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 3187 | 8 | 73544 |
| 1499 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 2782 | 8 | 73552 |
| 1500 | $J/\psi \to \omega p \bar{p}, \omega \to \pi^0 \gamma$ | $\pi^0 p ar p \gamma$ | 3193 | 8 | 73560 |
| 1501 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 3200 | 8 | 73568 |
| 1502 | $J/\psi 	o ho^+ \Delta^0 \bar{p}, ho^+ 	o \pi^0 \pi^+, \Delta^0 	o \pi^0 n$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 479 | 8 | 73576 |
| 1503 | $J/\psi ightarrow \eta' p ar p, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 8329 | 8 | 73584 |
| 1504 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8381 | 8 | 73592 |
| 1505 | $J/\psi \to \pi^- a_2^+, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 777 | 8 | 73600 |
| 1506 | $J/\psi \to f_2' \gamma, f_2' \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 8507 | 8 | 73608 |
| 1507 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 8532 | 8 | 73616 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 1508 | $J/\psi \to \pi^- a_1^0 a_1^+, a_1^0 \to \pi^- \rho^+, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 2185 | 8 | 73624 |
| 1509 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 1698 | 8 | 73632 |
| 1510 | $J/\psi ightarrow ar{K}^0 K^* a^0_0, ar{K}^0 ightarrow K^0_L, K^* ightarrow \pi^- K^+, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 4868 | 8 | 73640 |
| 1511 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8767 | 8 | 73648 |
| 1512 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^{*-}, \Lambda \to \pi^- p, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 8927 | 8 | 73656 |
| 1513 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 4888 | 8 | 73664 |
| 1514 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 9192 | 8 | 73672 |
| 1515 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 1998 | 8 | 73680 |
| 1516 | $J/\psi \to a_2^0 \pi^- a_1^+, a_2^0 \to \pi^+ \rho^-, a_1^+ \to \pi^0 \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3872 | 8 | 73688 |
| 1517 | $J/\psi 	o \pi^- a_2^+, a_2^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9786 | 8 | 73696 |
| 1518 | $J/\psi \to f_2(1270)\gamma, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 10044 | 8 | 73704 |
| 1519 | $J/\psi ightarrow a_2^0 \omega, a_2^0 ightarrow \pi^0 \eta, \omega ightarrow \pi^0 \pi^+ \pi^-, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2781 | 7 | 73711 |
| 1520 | $J/\psi 	o \pi^0 K^0 \bar{K}^0, K^0 	o K_L^0, \bar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0$ | 3926 | 7 | 73718 |
| 1521 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3933 | 7 | 73725 |
| 1522 | $J/\psi \to \rho^+ \rho^- \omega, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 2153 | 7 | 73732 |
| 1523 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \rho^0 \pi^+, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 1628 | 7 | 73739 |
| 1524 | $J/\psi \to \bar{K}^0 K^* b_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3943 | 7 | 73746 |
| 1525 | $J/\psi 	o \pi^- K_2^{*0} K^+, K_2^{*0} 	o \pi^0 ar K^0, ar K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 5033 | 7 | 73753 |
| 1526 | $J/\psi 	o \pi^+ ho^- K^0 ar{K}^*, ho^- 	o \pi^0 \pi^-, K^0 	o K_L^0, ar{K}^* 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 852 | 7 | 73760 |
| 1527 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3963 | 7 | 73767 |
| 1528 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o K_S^0 K_S^0, K_S^0 	o \pi^+ \pi^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3248 | 7 | 73774 |
| 1529 | $J/\psi 	o \pi^0 \pi^+ K^0 K^-, K^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 5082 | 7 | 73781 |
| 1530 | $J/\psi 	o \pi^- ho^+ ho^+ b_1^-, ho^+ 	o \pi^0 \pi^+, ho^+ 	o \pi^0 \pi^+, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5086 | 7 | 73788 |
| 1531 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 3259 | 7 | 73795 |
| 1532 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K^+K^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2453 | 7 | 73802 |
| 1533 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 1632 | 7 | 73809 |
| 1534 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 2170 | 7 | 73816 |
| 1535 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 1505 | 7 | 73823 |
| 1536 | $J/\psi \to \rho^+ K^* \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4010 | 7 | 73830 |
| 1537 | $J/\psi \to K^+K^{*-}a_1^0, K^{*-} \to \pi^-\bar{K}^0, a_1^0 \to \pi^+\rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1036 | 7 | 73837 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1538 | $J/\psi \to \eta_c \gamma, \eta_c \to \Sigma^+ \bar{\Sigma}^-, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^+\pi^-nar{n}\gamma$ | 2177 | 7 | 73844 |
| 1539 | $J/\psi ightarrow \pi^0 \pi^+ a_2^-, a_2^- ightarrow \pi^- \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 4040 | 7 | 73851 |
| 1540 | $J/\psi 	o ho^0 ar{K}^0 K^*, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5161 | 7 | 73858 |
| 1541 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^-$ | 5163 | 7 | 73865 |
| 1542 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 1514 | 7 | 73872 |
| 1543 | $J/\psi \to a_2^- b_1^+, a_2^- \to \pi^0 \pi^- \omega, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2801 | 7 | 73879 |
| 1544 | $J/\psi \to a_2^+ K^* K^-, a_2^+ \to \pi^0 \rho^+, K^* \to \pi^- K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5234 | 7 | 73886 |
| 1545 | $J/\psi 	o K^* ar{n} \Lambda, K^* 	o \pi^- K^+, \Lambda 	o \pi^0 n$ | $\pi^0\pi^-K^+nar{n}$ | 2804 | 7 | 73893 |
| 1546 | $J/\psi 	o K^{*-}par{\Lambda}, K^{*-} 	o \pi^0 K^-, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0K^-ar{n}p$ | 2482 | 7 | 73900 |
| 1547 | $J/\psi \to \pi^0 \Sigma^+ \bar{\Sigma}^-, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 4062 | 7 | 73907 |
| 1548 | $J/\psi 	o \eta(1405)\gamma, \eta(1405) 	o \pi^+\pi^-\eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 5313 | 7 | 73914 |
| 1549 | $J/\psi \to \pi^0 h_1(1170) a_1^0, h_1(1170) \to \pi^- \rho^+, a_1^0 \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5324 | 7 | 73921 |
| 1550 | $J/\psi ightarrow ar{n}\Delta^0\gamma, \Delta^0 ightarrow \pi^0 n$ | $\pi^0 n \bar{n} \gamma$ | 4063 | 7 | 73928 |
| 1551 | $J/\psi ightarrow ho^0 \eta a_0^0, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \gamma \gamma, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 1977 | 7 | 73935 |
| 1552 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5391 | 7 | 73942 |
| 1553 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2814 | 7 | 73949 |
| 1554 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \omega p \bar p, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-par p\gamma$ | 284 | 7 | 73956 |
| 1555 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 4106 | 7 | 73963 |
| 1556 | $J/\psi ightarrow \pi^- \eta b_1^+, \eta ightarrow \pi^+ \pi^- \gamma^F, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5436 | 7 | 73970 |
| 1557 | $J/\psi 	o ho^- ar{K}^0 K_0^{*+}, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_L^0, K_0^{*+} 	o \pi^0 K^+$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 3335 | 7 | 73977 |
| 1558 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1979 | 7 | 73984 |
| 1559 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^+\rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 407 | 7 | 73991 |
| 1560 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 975 | 7 | 73998 |
| 1561 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^- \gamma^f, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 503 | 7 | 74005 |
| 1562 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+ \gamma^f, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 5485 | 7 | 74012 |
| 1563 | $J/\psi \to K^- K_0^{*+} \gamma^F, K_0^{*+} \to \pi^0 K^+$ | $\pi^0 K^+ K^- \gamma^F$ | 5488 | 7 | 74019 |
| 1564 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-$ | 5509 | 7 | 74026 |
| 1565 | $J/\psi 	o K^+ K^- a^0_0, a^0_0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 717 | 7 | 74033 |
| 1566 | $J/\psi \to \pi^0 K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 1287 | 7 | 74040 |
| 1567 | $J/\psi 	o ho^-ar{K}^*K^+, ho^- 	o \pi^0\pi^-, ar{K}^* 	o \pi^0ar{K}^0, ar{K}^0 	o K^0_S, K^0_S 	o \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 352 | 7 | 74047 |
| 1568 | $J/\psi 	o \pi^+ \eta' b_1^-, \eta' 	o \pi^0 \pi^0 \eta, b_1^- 	o \pi^- \omega, \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 3387 | 7 | 74054 |
| 1569 | $J/\psi \to K^+K^-\phi, \phi \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2869 | 7 | 74061 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1570 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^+K^0, \phi \to K^+K^-, K^0 \to K_L^0$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 5562 | 7 | 74068 |
| 1571 | $J/\psi \to K^-K^{*+}a_1^0, K^{*+} \to \pi^0K^+, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1296 | 7 | 74075 |
| 1572 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4185 | 7 | 74082 |
| 1573 | $J/\psi \to \omega h_1(1170)\gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 26 | 7 | 74089 |
| 1574 | $J/\psi 	o \pi^0 \pi^+ a_2^-, a_2^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4188 | 7 | 74096 |
| 1575 | $J/\psi ightarrow \pi^0 ho^0 \pi^- a_0^+, ho^0 ightarrow \pi^+ \pi^-, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 293 | 7 | 74103 |
| 1576 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 2526 | 7 | 74110 |
| 1577 | $J/\psi 	o ho^0 K^0 ar{K}^0, ho^0 	o \pi^+ \pi^-, K^0 	o K^0_S, ar{K}^0 	o K^0_L, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0 K_L^0\pi^+\pi^-$ | 4215 | 7 | 74117 |
| 1578 | $J/\psi 	o \pi^- K^{*+} ar{K}_0^{*0}, K^{*+} 	o \pi^0 K^+, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0 K_L^0\pi^- K^+$ | 2528 | 7 | 74124 |
| 1579 | $J/\psi \to \bar{K}^0 K^+ a_1^-, \bar{K}^0 \to K_L^0, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0 K_L^0\pi^- K^+$ | 2900 | 7 | 74131 |
| 1580 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 2901 | 7 | 74138 |
| 1581 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 319 | 7 | 74145 |
| 1582 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 1310 | 7 | 74152 |
| 1583 | $J/\psi 	o ar{K}^*K_2^{*0}, ar{K}^* 	o \pi^0ar{K}^0, K_2^{*0} 	o \pi^0K^0, ar{K}^0 	o K_L^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0$ | 5670 | 7 | 74159 |
| 1584 | $J/\psi \to \bar{K}^*K^+a_1^-, \bar{K}^* \to \pi^+K^-, a_1^- \to \rho^0\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 2907 | 7 | 74166 |
| 1585 | $J/\psi \rightarrow \pi^+ \eta' b_1^-, \eta' \rightarrow \pi^+ \pi^- \eta, b_1^- \rightarrow \pi^- \omega, \eta \rightarrow \gamma \gamma, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 2532 | 7 | 74173 |
| 1586 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 1674 | 7 | 74180 |
| 1587 | $J/\psi \to \pi^- a_0^+ \gamma^F, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 2537 | 7 | 74187 |
| 1588 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 3472 | 7 | 74194 |
| 1589 | $J/\psi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^+\pi^-$ | $K_L^0\pi^+\pi^-$ | 415 | 7 | 74201 |
| 1590 | $J/\psi 	o \pi^+ a_1^0 a_1^-, a_1^0 	o \pi^+ ho^-, a_1^- 	o ho^0 \pi^-, ho^- 	o \pi^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 752 | 7 | 74208 |
| 1591 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 929 | 7 | 74215 |
| 1592 | $J/\psi 	o \pi^0 \eta' b_1^0, \eta' 	o \pi^+ \pi^- \eta, b_1^0 	o \pi^0 \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1688 | 7 | 74222 |
| 1593 | $J/\psi ightarrow \pi^- \omega b_1^+ \gamma^F, \omega ightarrow \pi^0 \pi^+ \pi^-, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5764 | 7 | 74229 |
| 1594 | $J/\psi 	o \pi^+ ho^- ho^- b_1^+, ho^- 	o \pi^0 \pi^-, ho^- 	o \pi^0 \pi^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5781 | 7 | 74236 |
| 1595 | $J/\psi ightarrow \eta \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \gamma$ | $\pi^0\gamma\gamma\gamma$ | 1203 | 7 | 74243 |
| 1596 | $J/\psi 	o \pi^+ a_0^0 a_1^-, a_0^0 	o \pi^0 \eta, a_1^- 	o \pi^0 ho^-, \eta 	o \gamma \gamma, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4316 | 7 | 74250 |
| 1597 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5814 | 7 | 74257 |
| 1598 | $J/\psi \to \pi^0 f_2(1270)\gamma, f_2(1270) \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\gamma$ | 586 | 7 | 74264 |
| 1599 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 5872 | 7 | 74271 |
| 1600 | $J/\psi \to \pi^- \rho^+ K^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 727 | 7 | 74278 |
| 1601 | $J/\psi \rightarrow \rho^0\pi^-b_1^+\gamma^F, \rho^0 \rightarrow \pi^+\pi^-, b_1^+ \rightarrow \pi^+\omega, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 1555 | 7 | 74285 |
| 1602 | $J/\psi 	o \pi^0 ho^0 ho^0 ho^0, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 371 | 7 | 74292 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 1603 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2283 | 7 | 74299 |
| 1604 | $J/\psi \to \pi^- a_2^+, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1003 | 7 | 74306 |
| 1605 | $J/\psi 	o ho^+ \eta a_0^-, ho^+ 	o \pi^0 \pi^+, \eta 	o \pi^0 \pi^0 \pi^0, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 1070 | 7 | 74313 |
| 1606 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \gamma, a_0^- ightarrow \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6015 | 7 | 74320 |
| 1607 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 816 | 7 | 74327 |
| 1608 | $J/\psi \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6027 | 7 | 74334 |
| 1609 | $J/\psi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F$ | 4370 | 7 | 74341 |
| 1610 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-$ | 2600 | 7 | 74348 |
| 1611 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 941 | 7 | 74355 |
| 1612 | $J/\psi 	o ho^- \eta a_0^+, ho^- 	o \pi^0 \pi^-, \eta 	o \pi^0 \pi^0 \pi^0, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6051 | 7 | 74362 |
| 1613 | $J/\psi ightarrow \pi^+ \omega K_S^0 K^-, \omega ightarrow \pi^0 \gamma, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 6055 | 7 | 74369 |
| 1614 | $J/\psi ightarrow ho^+ \Delta^0 ar p, ho^+ ightarrow \pi^0 \pi^+, \Delta^0 ightarrow \pi^- p$ | $\pi^0\pi^+\pi^-par{p}$ | 2604 | 7 | 74376 |
| 1615 | $J/\psi 	o \pi^+ K^- K_1^{'0}, K_1^{'0} 	o \pi^0 K^*, K^* 	o \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6068 | 7 | 74383 |
| 1616 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \gamma$ | 3010 | 7 | 74390 |
| 1617 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^0 \eta, \omega ightarrow \pi^0 \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3588 | 7 | 74397 |
| 1618 | $J/\psi \to \bar{\Xi}^0 \Xi^{*0}, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Xi^{*0} \to \pi^+ \Xi^-, \bar{\Lambda} \to \pi^+ \bar{p}, \Xi^- \to \pi^- \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 3592 | 7 | 74404 |
| 1619 | $J/\psi ightarrow ho^0 a_0^0, ho^0 ightarrow \pi^+\pi^-, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2606 | 7 | 74411 |
| 1620 | $J/\psi 	o ar{p}\Delta^+ \gamma^F, \Delta^+ 	o \pi^+ n$ | $\pi^+ n ar p \gamma^F$ | 3013 | 7 | 74418 |
| 1621 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4443 | 7 | 74425 |
| 1622 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6210 | 7 | 74432 |
| 1623 | $J/\psi \to K^+ ar{K}_1^{'-}, ar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- ar{K}^0, ar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 4445 | 7 | 74439 |
| 1624 | $J/\psi 	o a_2^0 \pi^+ a_1^-, a_2^0 	o \pi^+ ho^-, a_1^- 	o ho^0 \pi^-, ho^- 	o \pi^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6263 | 7 | 74446 |
| 1625 | $J/\psi \to \pi^- a_1^+ a_1^0, a_2^+ \to \rho^0 \pi^+, a_1^0 \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 729 | 7 | 74453 |
| 1626 | $J/\psi \to \phi\phi\gamma, \phi \to K_L^0 K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-K^+K^-\gamma$ | 943 | 7 | 74460 |
| 1627 | $J/\psi \to \bar{K}^*K_1^0, \bar{K}^* \to \pi^+K^-, K_1^0 \to \rho^-K^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6339 | 7 | 74467 |
| 1628 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 1865 | 7 | 74474 |
| 1629 | $J/\psi ightarrow f_2^{'} \gamma, f_2^{'} ightarrow K_L^0 K_L^0$ | $K_L^0K_L^0\gamma$ | 6352 | 7 | 74481 |
| 1630 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 3617 | 7 | 74488 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1631 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 1010 | 7 | 74495 |
| 1632 | $J/\psi \to \pi^0 h_1(1170) a_1^0, h_1(1170) \to \pi^- \rho^+, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3622 | 7 | 74502 |
| 1633 | $J/\psi \to ho^0 ho^- \bar{K}^* K^+, ho^0 \to \pi^+ \pi^-, ho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2068 | 7 | 74509 |
| 1634 | $J/\psi \to \phi f_{2}^{'}, \phi \to K_{L}^{0} K_{S}^{0}, f_{2}^{'} \to K^{+} K^{-}, K_{S}^{0} \to \pi^{+} \pi^{-}$ | $K_L^0 \pi^+ \pi^- K^+ K^-$ | 1869 | 7 | 74516 |
| 1635 | $J/\psi \to \pi^0 a_2^0 \pi^+ \rho^-, a_2^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4526 | 7 | 74523 |
| 1636 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^0\bar{K}^0, a_0^- \to \pi^-\eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 4542 | 7 | 74530 |
| 1637 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1583 | 7 | 74537 |
| 1638 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6534 | 7 | 74544 |
| 1639 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2074 | 7 | 74551 |
| 1640 | $J/\psi \to \rho^0 f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-$ | 4554 | 7 | 74558 |
| 1641 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 1463 | 7 | 74565 |
| 1642 | $J/\psi 	o ho^0 a_0^0, ho^0 	o \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1347 | 7 | 74572 |
| 1643 | $J/\psi ightarrow \pi^0 ho^+ b_1^- \gamma, ho^+ ightarrow \pi^0 \pi^+, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3680 | 7 | 74579 |
| 1644 | $J/\psi \to \pi^0 \pi^0 \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6708 | 7 | 74586 |
| 1645 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6729 | 7 | 74593 |
| 1646 | $J/\psi \to K^+K^-h_1(1170), h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6754 | 7 | 74600 |
| 1647 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \omega K^+, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0K^+K^-\gamma$ | 6782 | 7 | 74607 |
| 1648 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 2633 | 7 | 74614 |
| 1649 | $J/\psi \to K^+ K^{*-} a_0^0, K^{*-} \to \pi^- \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 673 | 7 | 74621 |
| 1650 | $J/\psi \to \rho^+ K^- K_0^0, \rho^+ \to \pi^0 \pi^+, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6815 | 7 | 74628 |
| 1651 | $J/\psi \to K^+K^{*-}a^0_0, K^{*-} \to \pi^-\bar{K}^0, a^0_0 \to \pi^0\eta, \bar{K}^0 \to K^0_L, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 4582 | 7 | 74635 |
| 1652 | $J/\psi ightarrow \pi^0 \pi^+ a_2^-, a_2^- ightarrow \pi^0 \pi^- \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6825 | 7 | 74642 |
| 1653 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4586 | 7 | 74649 |
| 1654 | $J/\psi 	o \pi^+\pi^-\eta\gamma^F\gamma^f, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 2346 | 7 | 74656 |
| 1655 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 2646 | 7 | 74663 |
| 1656 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma$ | 2658 | 7 | 74670 |
| 1657 | $J/\psi 	o a_2^0 \pi^+ ho^-, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2084 | 7 | 74677 |
| 1658 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^+ b_1^-, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1885 | 7 | 74684 |
| 1659 | $J/\psi 	o ho^- a_2^+, ho^- 	o \pi^0 \pi^-, a_2^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6982 | 7 | 74691 |
| 1660 | $J/\psi \to \pi^+ \rho^- K^- K^{*+}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 1362 | 7 | 74698 |
| 1661 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 357 | 7 | 74705 |
| 1662 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4685 | 7 | 74712 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 1663 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4690 | 7 | 74719 |
| 1664 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \rho^0 \pi^+, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 2375 | 7 | 74726 |
| 1665 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2092 | 7 | 74733 |
| 1666 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-$ | 4701 | 7 | 74740 |
| 1667 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^-$ | 7152 | 7 | 74747 |
| 1668 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 2381 | 7 | 74754 |
| 1669 | $J/\psi \to K^+K^-a_1^0, a_1^0 \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 7167 | 7 | 74761 |
| 1670 | $J/\psi \to a_2^- \bar{K}^* K^+, a_2^- \to \rho^0 \pi^-, \bar{K}^* \to \pi^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 7171 | 7 | 74768 |
| 1671 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2094 | 7 | 74775 |
| 1672 | $J/\psi \to \pi^+ \omega K^* K^-, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2678 | 7 | 74782 |
| 1673 | $J/\psi \rightarrow \pi^0 \rho^0 \pi^- \rho^+ \omega, \rho^0 \rightarrow \pi^+ \pi^-, \rho^+ \rightarrow \pi^0 \pi^+, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2384 | 7 | 74789 |
| 1674 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 1751 | 7 | 74796 |
| 1675 | $J/\psi \to \pi^+ \pi^+ \pi^- \pi^- \gamma^F \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 1090 | 7 | 74803 |
| 1676 | $J/\psi \to \pi^- \rho^+ K^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 4753 | 7 | 74810 |
| 1677 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^- \gamma^f, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 2104 | 7 | 74817 |
| 1678 | $J/\psi \to \omega h_1(1170)\gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1897 | 7 | 74824 |
| 1679 | $J/\psi \to \pi^0 \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 110 | 7 | 74831 |
| 1680 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 493 | 7 | 74838 |
| 1681 | $J/\psi 	o \pi^0 ho^0, ho^0 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^-\gamma^F$ | 7454 | 7 | 74845 |
| 1682 | $J/\psi \to \bar{K}^* K_0^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 7514 | 7 | 74852 |
| 1683 | $J/\psi 	o \Lambda \bar{\Sigma}^0 \gamma, \Lambda 	o \pi^- p, \bar{\Sigma}^0 	o \bar{\Lambda} \gamma, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^-ar{n}p\gamma\gamma$ | 4798 | 7 | 74859 |
| 1684 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 1915 | 7 | 74866 |
| 1685 | $J/\psi \to K^- K_1^+, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-$ | 7661 | 7 | 74873 |
| 1686 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 2116 | 7 | 74880 |
| 1687 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 470 | 7 | 74887 |
| 1688 | $J/\psi \to \eta K^- K^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 4826 | 7 | 74894 |
| 1689 | $J/\psi \to ho^0 \pi^- \bar{K}^* K^+, ho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7759 | 7 | 74901 |
| 1690 | $J/\psi \rightarrow \rho^- a_2^+ \eta, \rho^- \rightarrow \pi^0 \pi^-, a_2^+ \rightarrow \rho^0 \pi^+, \eta \rightarrow \gamma \gamma, \rho^0 \rightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7765 | 7 | 74908 |
| 1691 | $J/\psi ightarrow ho^- \eta a_0^+, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \gamma \gamma, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1372 | 7 | 74915 |
| 1692 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^0K^+, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3821 | 7 | 74922 |
| 1693 | $J/\psi \to \bar{\Xi}^0 \Xi^{*0}, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Xi^{*0} \to \pi^+ \Xi^-, \bar{\Lambda} \to \pi^+ \bar{p}, \Xi^- \to \pi^- \Lambda, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 8034 | 7 | 74929 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 1694 | $J/\psi \to \omega\omega\omega, \omega \to \pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 8058 | 7 | 74936 |
| 1695 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8061 | 7 | 74943 |
| 1696 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3181 | 7 | 74950 |
| 1697 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8080 | 7 | 74957 |
| 1698 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 2409 | 7 | 74964 |
| 1699 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8175 | 7 | 74971 |
| 1700 | $J/\psi \to K^0 \bar{K}_0^{*0} \gamma, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma$ | 8208 | 7 | 74978 |
| 1701 | $J/\psi 	o ho^- a_2^+ \eta, ho^- 	o \pi^0 \pi^-, a_2^+ 	o ho^0 \pi^+, \eta 	o \pi^0 \pi^0 \pi^0, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8262 | 7 | 74985 |
| 1702 | $J/\psi \to \pi^0 f_2(1270) b_1^0, f_2(1270) \to \pi^+\pi^-, b_1^0 \to \pi^0\omega, \omega \to \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 771 | 7 | 74992 |
| 1703 | $J/\psi \to \pi^- \rho^+ a_1^0, \rho^+ \to \pi^0 \pi^+, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 964 | 7 | 74999 |
| 1704 | $J/\psi 	o \pi^0 K^* \bar{K}_0^{*0}, K^* 	o \pi^0 K^0, \bar{K}_0^{*0} 	o \pi^+ K^-, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4886 | 7 | 75006 |
| 1705 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8446 | 7 | 75013 |
| 1706 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 2429 | 7 | 75020 |
| 1707 | $J/\psi \to K^*K^-a_1^+, K^* \to \pi^-K^+, a_1^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8492 | 7 | 75027 |
| 1708 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-$ | 4889 | 7 | 75034 |
| 1709 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3845 | 7 | 75041 |
| 1710 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_L^0, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 4902 | 7 | 75048 |
| 1711 | $J/\psi 	o \pi^+ \Lambda \bar{\Sigma}^-, \Lambda 	o \pi^0 n, \bar{\Sigma}^- 	o \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 1258 | 7 | 75055 |
| 1712 | $J/\psi \to f_2(1270)h_1(1170), f_2(1270) \to \pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3858 | 7 | 75062 |
| 1713 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 8753 | 7 | 75069 |
| 1714 | $J/\psi ightarrow ho^0 n ar{\Delta}^0, ho^0 ightarrow \pi^+ \pi^-, ar{\Delta}^0 ightarrow \pi^0 ar{n}$ | $\pi^0\pi^+\pi^-n\bar{n}$ | 1619 | 7 | 75076 |
| 1715 | $J/\psi ightarrow \pi^- a_2^+ a_0^0, a_2^+ ightarrow \pi^+ \eta, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8869 | 7 | 75083 |
| 1716 | $J/\psi \to \Xi^-\bar{\Xi}^{*+}, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^{*+} \to \pi^0\bar{\Xi}^+, \Lambda \to \pi^-p, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 3211 | 7 | 75090 |
| 1717 | $J/\psi 	o \pi^- a_0^0 a_1^+, a_0^0 	o \pi^0 \eta, a_1^+ 	o \pi^0 ho^+, \eta 	o \pi^0 \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4935 | 7 | 75097 |
| 1718 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \Sigma^+ ar{\Sigma}^-, \Sigma^+ 	o \pi^0 p, ar{\Sigma}^- 	o \pi^0 ar{p}$ | $\pi^0\pi^0p\bar{p}\gamma$ | 2764 | 7 | 75104 |
| 1719 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^+ K^0 K^-, K^0 ightarrow K^0_S, K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma$ | 3888 | 7 | 75111 |
| 1720 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 9288 | 7 | 75118 |
| 1721 | $J/\psi \to \pi^- K^{*+} \bar{K}^{*0}_0, K^{*+} \to \pi^+ K^0, \bar{K}^{*0}_0 \to \pi^+ K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9456 | 7 | 75125 |
| 1722 | $J/\psi \to \bar{\Sigma}^+ \Sigma^- \gamma^f, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^- \to \pi^- n$ | $\pi^+\pi^-nar{n}\gamma^f$ | 3901 | 7 | 75132 |
| 1723 | $J/\psi \to K^0 \bar{K}^* a^0_0, K^0 \to K^0_L, \bar{K}^* \to \pi^+ K^-, a^0_0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9538 | 7 | 75139 |
| 1724 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^-K^+, a_0^+ \to \pi^+\eta, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 9587 | 7 | 75146 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 1725 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9619 | 7 | 75153 |
| 1726 | $J/\psi \to \pi^- K^+ \bar{K}_1^{'0}, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 472 | 7 | 75160 |
| 1727 | $J/\psi \to b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9973 | 7 | 75167 |
| 1728 | $J/\psi \to \pi^+ a_0^- \gamma^F, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-\gamma^F\gamma\gamma$ | 967 | 7 | 75174 |
| 1729 | $J/\psi ightarrow \pi^0 \pi^0 \phi, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 10193 | 7 | 75181 |
| 1730 | $J/\psi \to \bar{K}^0 K^+ a_1^-, \bar{K}^0 \to K_S^0, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 10566 | 7 | 75188 |
| 1731 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11012 | 7 | 75195 |
| 1732 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\bar{K}^*, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 11863 | 7 | 75202 |
| 1733 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^+K^-, K_2^{*0} \to \pi^0K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 1497 | 6 | 75208 |
| 1734 | $J/\psi \to K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2977 | 6 | 75214 |
| 1735 | $J/\psi \to \rho^+ b_1^- h_1(1170), \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5447 | 6 | 75220 |
| 1736 | $J/\psi ightarrow K^0 ar K^0, K^0 ightarrow K^0_L, ar K^0 ightarrow K^0_L$ | $K_L^0K_L^0$ | 2312 | 6 | 75226 |
| 1737 | $J/\psi \to \pi^0 ho^- \omega b_1^+, ho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3537 | 6 | 75232 |
| 1738 | $J/\psi \to K^+K_1^-, K_1^- \to \rho^-\bar{K}^0, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 1646 | 6 | 75238 |
| 1739 | $J/\psi 	o nar\Delta^0 \gamma, ar\Delta^0 	o \pi^0 ar n$ | $\pi^0 n \bar{n} \gamma$ | 2033 | 6 | 75244 |
| 1740 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 5474 | 6 | 75250 |
| 1741 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 753 | 6 | 75256 |
| 1742 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5487 | 6 | 75262 |
| 1743 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1504 | 6 | 75268 |
| 1744 | $J/\psi \to \rho^+ b_1^0 b_1^-, \rho^+ \to \pi^0 \pi^+, b_1^0 \to \pi^0 \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5491 | 6 | 75274 |
| 1745 | $J/\psi \to \pi^- \bar{K}^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^-$ | 4289 | 6 | 75280 |
| 1746 | $J/\psi \to \pi^0 \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}}$ | 5515 | 6 | 75286 |
| 1747 | $J/\psi \to K^+K^{*-}a_1^0, K^{*-} \to \pi^-\bar{K}^0, a_1^0 \to \pi^-\rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4291 | 6 | 75292 |
| 1748 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^0K^+, f_0(1370) \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2611 | 6 | 75298 |
| 1749 | $J/\psi ightarrow \omega a_0^0, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 984 | 6 | 75304 |
| 1750 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4304 | 6 | 75310 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 1751 | $J/\psi \to K^0 \bar{K}^0 \gamma, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 3569 | 6 | 75316 |
| 1752 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_L^0, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 3571 | 6 | 75322 |
| 1753 | $J/\psi \to \pi^- K^+ \bar{K}^0_1, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 820 | 6 | 75328 |
| 1754 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^0K^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 539 | 6 | 75334 |
| 1755 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3585 | 6 | 75340 |
| 1756 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5607 | 6 | 75346 |
| 1757 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 4325 | 6 | 75352 |
| 1758 | $J/\psi ightarrow f_0(1710)\gamma, f_0(1710) ightarrow \eta\eta, \eta ightarrow \gamma\gamma, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 5614 | 6 | 75358 |
| 1759 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \rho^0 \gamma, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 2056 | 6 | 75364 |
| 1760 | $J/\psi \to K^0 K^- a_1^+, K^0 \to K_L^0, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 3023 | 6 | 75370 |
| 1761 | $J/\psi 	o ar{K}^0 K_1^0, ar{K}^0 	o K_S^0, K_1^0 	o ho^- K^+, K_S^0 	o \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 3597 | 6 | 75376 |
| 1762 | $J/\psi \rightarrow \rho^- \eta a_0^+, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \pi^0 \pi^0 \pi^0, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5637 | 6 | 75382 |
| 1763 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4353 | 6 | 75388 |
| 1764 | $J/\psi 	o ho^+ a_2^- \eta, ho^+ 	o \pi^0 \pi^+, a_2^- 	o ho^0 \pi^-, \eta 	o \pi^0 \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 905 | 6 | 75394 |
| 1765 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^- ar{K}^* K^+, ar{K}^* 	o \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 643 | 6 | 75400 |
| 1766 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 3034 | 6 | 75406 |
| 1767 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 p ar p$ | $\pi^0 p \bar{p} \gamma$ | 3606 | 6 | 75412 |
| 1768 | $J/\psi \to \pi^+\pi^-a_1^0\gamma^f, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1164 | 6 | 75418 |
| 1769 | $J/\psi 	o \pi^- a_0^+ \gamma^F, a_0^+ 	o \pi^+ \eta, \eta 	o \gamma \gamma$ | $\pi^+\pi^-\gamma^F\gamma\gamma$ | 1847 | 6 | 75424 |
| 1770 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^+\pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 5685 | 6 | 75430 |
| 1771 | $J/\psi 	o \pi^+ \omega a_0^-, \omega 	o \pi^0 \pi^+ \pi^-, a_0^- 	o K^0 K^-, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4383 | 6 | 75436 |
| 1772 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma$ | 1248 | 6 | 75442 |
| 1773 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\pi^0\bar{K}^*, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2355 | 6 | 75448 |
| 1774 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 232 | 6 | 75454 |
| 1775 | $J/\psi \to \bar{\Xi}^0 \Xi^{*0}, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Xi^{*0} \to \pi^+ \Xi^-, \bar{\Lambda} \to \pi^0 \bar{n}, \Xi^- \to \pi^- \Lambda, \Lambda \to \pi^- p$ | $\pi^0 \pi^0 \pi^+ \pi^- \pi^- \bar{n} p$ | 1256 | 6 | 75460 |
| 1776 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^0\bar{K}^0, a_0^- \to \pi^-\eta, \bar{K}^0 \to K_L^0, \eta \to \gamma\gamma$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 3631 | 6 | 75466 |
| 1777 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^0 \eta', \eta' ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5742 | 6 | 75472 |
| 1778 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \\ \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 541 | 6 | 75478 |
| 1779 | $J/\psi \to K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 4438 | 6 | 75484 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 1780 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \rho^0 \pi^+, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 3648 | 6 | 75490 |
| 1781 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 5779 | 6 | 75496 |
| 1782 | $J/\psi \to K^0 K^- a_1^+, K^0 \to K_S^0, a_1^+ \to \rho^0 \pi^+, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 3064 | 6 | 75502 |
| 1783 | $J/\psi 	o K^0 ar{K}^0_1 \gamma, K^0 	o K^0_L, ar{K}^0_1 	o ho^+ K^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 4448 | 6 | 75508 |
| 1784 | $J/\psi \to K^*K^-a_1^+, K^* \to \pi^-K^+, a_1^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4451 | 6 | 75514 |
| 1785 | $J/\psi 	o \pi^+\pi^-b_1^+b_1^-, b_1^+ 	o \pi^+\omega, b_1^- 	o \pi^-\omega, \omega 	o \pi^0\pi^+\pi^-, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 4454 | 6 | 75520 |
| 1786 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \rho^0 \pi^-, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2372 | 6 | 75526 |
| 1787 | $J/\psi \to \rho^0 b_1^+ b_1^-, \rho^0 \to \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 833 | 6 | 75532 |
| 1788 | $J/\psi 	o \pi^0 K^{*-} K_0^{*+}, K^{*-} 	o \pi^0 K^-, K_0^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 5875 | 6 | 75538 |
| 1789 | $J/\psi 	o \pi^0\pi^- ho^+ a_1^0, ho^+ 	o \pi^0\pi^+, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5883 | 6 | 75544 |
| 1790 | $J/\psi \to K^+K^-f_0(1370), f_0(1370) \to \rho^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5915 | 6 | 75550 |
| 1791 | $J/\psi \to \rho^- \omega b_1^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 1074 | 6 | 75556 |
| 1792 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 1000 | 6 | 75562 |
| 1793 | $J/\psi 	o \eta \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\gamma$ | 841 | 6 | 75568 |
| 1794 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 3095 | 6 | 75574 |
| 1795 | $J/\psi 	o \Sigma^0 ar{\Sigma}^0 \gamma, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0n\bar{n}\gamma\gamma\gamma$ | 5978 | 6 | 75580 |
| 1796 | $J/\psi 	o \pi^0 \Sigma^0 ar{\Sigma}^0, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+\pi^-par p\gamma\gamma$ | 5990 | 6 | 75586 |
| 1797 | $J/\psi \to \rho^0 \omega h_1(1170), \rho^0 \to \pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5994 | 6 | 75592 |
| 1798 | $J/\psi \to ho^0 a_2^0, ho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- ho^+, ho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4499 | 6 | 75598 |
| 1799 | $J/\psi ightarrow K^0 ar{n} \Lambda, K^0 ightarrow K^0_S, \Lambda ightarrow \pi^0 n, K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0n\bar{n}$ | 5999 | 6 | 75604 |
| 1800 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 571 | 6 | 75610 |
| 1801 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 3101 | 6 | 75616 |
| 1802 | $J/\psi 	o \omega ar K^0 K^*, \omega 	o \pi^0 \gamma, ar K^0 	o K^0_S, K^* 	o \pi^- K^+, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 4510 | 6 | 75622 |
| 1803 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^0K^+, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2386 | 6 | 75628 |
| 1804 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4537 | 6 | 75634 |
| 1805 | $J/\psi 	o ar{\Lambda} \Sigma^0 \gamma, ar{\Lambda} 	o \pi^0 ar{n}, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^- p$ | $\pi^0\pi^-ar{n}p\gamma\gamma$ | 3703 | 6 | 75640 |
| 1806 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1699 | 6 | 75646 |
| 1807 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2095 | 6 | 75652 |
| 1808 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3713 | 6 | 75658 |
| 1809 | $J/\psi 	o ar{K}^*K^+b_1^-, ar{K}^* 	o \pi^0ar{K}^0, b_1^- 	o \pi^-\omega, ar{K}^0 	o K_L^0, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 763 | 6 | 75664 |
| 1810 | $J/\psi \to \eta \omega f_0(1370), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\gamma\gamma$ | 2396 | 6 | 75670 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 1811 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 1278 | 6 | 75676 |
| 1812 | $J/\psi \to \pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 2398 | 6 | 75682 |
| 1813 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6133 | 6 | 75688 |
| 1814 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1704 | 6 | 75694 |
| 1815 | $J/\psi ightarrow \pi^0 \omega a^0_0, \omega ightarrow \pi^0 \gamma, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 2106 | 6 | 75700 |
| 1816 | $J/\psi \to a_2^+ b_1^-, a_2^+ \to \pi^0 \rho^+, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1005 | 6 | 75706 |
| 1817 | $J/\psi 	o K^+K^{*-}a^0_0, K^{*-} 	o \pi^0K^-, a^0_0 	o \pi^0\eta, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6185 | 6 | 75712 |
| 1818 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^+ \pi^- K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 111 | 6 | 75718 |
| 1819 | $J/\psi \to \pi^0 \rho^0 \rho^- b_1^+, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 848 | 6 | 75724 |
| 1820 | $J/\psi 	o ho^0 ar p \Delta^+, ho^0 	o \pi^+ \pi^-, \Delta^+ 	o \pi^0 p$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 6232 | 6 | 75730 |
| 1821 | $J/\psi 	o K^0 ar{K}^0 b_1^0, K^0 	o K_L^0, ar{K}^0 	o K_L^0, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 3759 | 6 | 75736 |
| 1822 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 575 | 6 | 75742 |
| 1823 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^- \bar{\Xi}^+, \Lambda \to \pi^- p, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 6264 | 6 | 75748 |
| 1824 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 4631 | 6 | 75754 |
| 1825 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^- \rho^+, a_1^- \to \rho^0 \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 1554 | 6 | 75760 |
| 1826 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 6311 | 6 | 75766 |
| 1827 | $J/\psi \to \pi^- K_S^0 K^+ \phi, K_S^0 \to \pi^0 \pi^0, \phi \to K^+ K^-$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 6338 | 6 | 75772 |
| 1828 | $J/\psi 	o ho^+ K^* K^-, ho^+ 	o \pi^0 \pi^+, K^* 	o \pi^0 K^0, K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 4653 | 6 | 75778 |
| 1829 | $J/\psi 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\gamma^f$ | 4656 | 6 | 75784 |
| 1830 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^{+}\bar{\Xi}^{0}, \Xi^{*-} \to \pi^{0}\Xi^{-}, \bar{\Xi}^{0} \to \pi^{0}\bar{\Lambda}, \Xi^{-} \to \pi^{-}\Lambda, \bar{\Lambda} \to \pi^{0}\bar{n}, \Lambda \to \pi^{-}p$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 6350 | 6 | 75790 |
| 1831 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0 \pi^0 K^0_L K^+ K^-$ | 2414 | 6 | 75796 |
| 1832 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^+ K^-, K^0_S \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 6354 | 6 | 75802 |
| 1833 | $J/\psi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0$ | 33 | 6 | 75808 |
| 1834 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 4678 | 6 | 75814 |
| 1835 | $J/\psi ightarrow \pi^0 \omega a_0^0, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 6380 | 6 | 75820 |
| 1836 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4680 | 6 | 75826 |
| 1837 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\pi^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 6388 | 6 | 75832 |
| 1838 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 6394 | 6 | 75838 |
| 1839 | $J/\psi \rightarrow nar{p}a_0^+, a_0^+ \rightarrow \pi^+\eta, \eta \rightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+nar{p}$ | 6440 | 6 | 75844 |
| 1840 | $J/\psi 	o \pi^0 K^+ K_2^{*-}, K_2^{*-} 	o ho^- K^0, ho^- 	o \pi^0 \pi^-, K^0 	o K_L^0$ | $\pi^0\pi^0K^0_L\pi^-K^+$ | 1558 | 6 | 75850 |
| 1841 | $J/\psi \to \pi^+ \eta b_1^-, \eta \to \pi^+ \pi^- \gamma^F, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 484 | 6 | 75856 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1842 | $J/\psi \to \rho^0 \bar{K}^0 K_0^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 6456 | 6 | 75862 |
| 1843 | $J/\psi \to K^+ K^{*-} a_1^0, K^{*-} \to \pi^- \bar{K}^0, a_1^0 \to \pi^- \rho^+, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6471 | 6 | 75868 |
| 1844 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 1724 | 6 | 75874 |
| 1845 | $J/\psi ightarrow ar{n}pa_0^-, a_0^- ightarrow \pi^-\eta, \eta ightarrow \gamma\gamma$ | $\pi^- ar{n} p \gamma \gamma$ | 2131 | 6 | 75880 |
| 1846 | $J/\psi ightarrow K^-K^{*+}a^0_0, K^{*+} ightarrow \pi^0K^+, a^0_0 ightarrow \pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 4694 | 6 | 75886 |
| 1847 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 6526 | 6 | 75892 |
| 1848 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6528 | 6 | 75898 |
| 1849 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3795 | 6 | 75904 |
| 1850 | $J/\psi \to \pi^0 \Sigma^+ \bar{\Sigma}^-, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+nar{p}$ | 2763 | 6 | 75910 |
| 1851 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 2436 | 6 | 75916 |
| 1852 | $J/\psi \to \eta \omega f_2(1270), \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6567 | 6 | 75922 |
| 1853 | $J/\psi \to \omega \bar{p}\Delta^+, \omega \to \pi^0 \pi^+ \pi^-, \Delta^+ \to \pi^+ n$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 2437 | 6 | 75928 |
| 1854 | $J/\psi \to p\bar{p}f_0(1370), f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 6599 | 6 | 75934 |
| 1855 | $J/\psi \to \pi^+ \eta' b_1^-, \eta' \to \pi^0 \pi^0 \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6629 | 6 | 75940 |
| 1856 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L K^0_L K^0_L \pi^+ \pi^-$ | 4720 | 6 | 75946 |
| 1857 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6658 | 6 | 75952 |
| 1858 | $J/\psi \to K^- n \bar{\Sigma}^+, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^+ K^- n \bar{n}$ | 454 | 6 | 75958 |
| 1859 | $J/\psi 	o \pi^0\pi^- ho^+ a_1^0, ho^+ 	o \pi^0\pi^+, a_1^0 	o \pi^- ho^+, ho^+ 	o \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6686 | 6 | 75964 |
| 1860 | $J/\psi \to \phi f_0(2020), \phi \to K_L^0 K_S^0, f_0(2020) \to \pi^+ \pi^+ \pi^- \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4730 | 6 | 75970 |
| 1861 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6711 | 6 | 75976 |
| 1862 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 6718 | 6 | 75982 |
| 1863 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0 K^+ K^+ K^- K^- \gamma$ | 772 | 6 | 75988 |
| 1864 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6738 | 6 | 75994 |
| 1865 | $J/\psi 	o \omega ar{n} \Delta^0, \omega 	o \pi^0 \pi^+ \pi^-, \Delta^0 	o \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 1190 | 6 | 76000 |
| 1866 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1308 | 6 | 76006 |
| 1867 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_L^0, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6787 | 6 | 76012 |
| 1868 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^+K^0, h_1(1170) \to \pi^-\rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0\pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4756 | 6 | 76018 |
| 1869 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 696 | 6 | 76024 |
| 1870 | $J/\psi \rightarrow \rho^0 \omega b_1^0, \rho^0 \rightarrow \pi^+ \pi^- \gamma^f, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^0 \rightarrow \pi^0 \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 2157 | 6 | 76030 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 1871 | $J/\psi \to \rho^0 \omega h_1(1170), \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 223 | 6 | 76036 |
| 1872 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 4791 | 6 | 76042 |
| 1873 | $J/\psi \to \pi^- a_1^0 a_1^+, a_1^0 \to \pi^- \rho^+, a_1^+ \to \rho^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 781 | 6 | 76048 |
| 1874 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^- \rho^+, K^{*+} \to \pi^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3869 | 6 | 76054 |
| 1875 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 6849 | 6 | 76060 |
| 1876 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^+ \pi^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 6857 | 6 | 76066 |
| 1877 | $J/\psi 	o K^*K^-a_0^+, K^* 	o \pi^0K^0, a_0^+ 	o \pi^+\eta, K^0 	o K_L^0, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 784 | 6 | 76072 |
| 1878 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to \omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 789 | 6 | 76078 |
| 1879 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \gamma, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 277 | 6 | 76084 |
| 1880 | $J/\psi 	o a_2^0 \pi^+ a_2^-, a_2^0 	o \pi^+ ho^-, a_2^- 	o ho^0 \pi^-, ho^- 	o \pi^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6959 | 6 | 76090 |
| 1881 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 1952 | 6 | 76096 |
| 1882 | $J/\psi 	o \pi^0\pi^- ho^+a_0^0, ho^+ 	o \pi^0\pi^+, a_0^0 	o \pi^0\eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3903 | 6 | 76102 |
| 1883 | $J/\psi 	o ar{\Sigma}^- \Sigma^{*+}, ar{\Sigma}^- 	o \pi^0 ar{p}, \Sigma^{*+} 	o \pi^+ \Lambda, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 6994 | 6 | 76108 |
| 1884 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^- \rho^+, h_1(1170) \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3251 | 6 | 76114 |
| 1885 | $J/\psi \to K^- K^{*+} \eta', K^{*+} \to \pi^+ K^0, \eta' \to \rho^0 \gamma, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 1452 | 6 | 76120 |
| 1886 | $J/\psi \to K^{*+} \bar{p}\Lambda, K^{*+} \to \pi^0 K^+, \Lambda \to \pi^0 n$ | $\pi^0\pi^0K^+n\bar{p}$ | 2802 | 6 | 76126 |
| 1887 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1764 | 6 | 76132 |
| 1888 | $J/\psi \to \pi^0 \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 7033 | 6 | 76138 |
| 1889 | $J/\psi \to \rho^0 h_1(1170)\gamma, \rho^0 \to \pi^+\pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7038 | 6 | 76144 |
| 1890 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3276 | 6 | 76150 |
| 1891 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-\gamma$ | 7057 | 6 | 76156 |
| 1892 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^+\bar{\Xi}^0, \Xi^{*-} \to \pi^0\Xi^-, \bar{\Xi}^0 \to \pi^0\bar{\Lambda}, \Xi^- \to \pi^-\Lambda, \\ \bar{\Lambda} \to \pi^+\bar{p}, \Lambda \to \pi^-p$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 4881 | 6 | 76162 |
| 1893 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1768 | 6 | 76168 |
| 1894 | $J/\psi \to h_1(1170)a_1^0, h_1(1170) \to \pi^-\rho^+, a_1^0 \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7136 | 6 | 76174 |
| 1895 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7143 | 6 | 76180 |
| 1896 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^- \rho^+, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3284 | 6 | 76186 |
| 1897 | $J/\psi \to \phi f_0(2020), \phi \to K^+K^-, f_0(2020) \to \pi^0\pi^0$ | $\pi^0\pi^0K^+K^-$ | 7155 | 6 | 76192 |
| 1898 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 2183 | 6 | 76198 |
| 1899 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 1454 | 6 | 76204 |
| 1900 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2815 | 6 | 76210 |
| 1901 | $J/\psi 	o a_2^- ar{K}^0 K^+, a_2^- 	o \pi^0 \pi^- \omega, ar{K}^0 	o K_L^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 3965 | 6 | 76216 |
| 1902 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4922 | 6 | 76222 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1903 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}$ | 7210 | 6 | 76228 |
| 1904 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 1969 | 6 | 76234 |
| 1905 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 7292 | 6 | 76240 |
| 1906 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^0K^-, b_1^0 \to \pi^0\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1773 | 6 | 76246 |
| 1907 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7336 | 6 | 76252 |
| 1908 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7361 | 6 | 76258 |
| 1909 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^+ \rho^-, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 1458 | 6 | 76264 |
| 1910 | $J/\psi ightarrow \pi^+ ho^- a_0^0, ho^- ightarrow \pi^0 \pi^-, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3311 | 6 | 76270 |
| 1911 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 4938 | 6 | 76276 |
| 1912 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 1603 | 6 | 76282 |
| 1913 | $J/\psi \to \pi^+ K^* K^- \gamma^f, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 4941 | 6 | 76288 |
| 1914 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 3998 | 6 | 76294 |
| 1915 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 4000 | 6 | 76300 |
| 1916 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 164 | 6 | 76306 |
| 1917 | $J/\psi \to \eta_c \gamma, \eta_c \to \Sigma^0 \bar{\Sigma}^0, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Lambda \to \pi^- p, \\ \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^-par p\gamma\gamma\gamma$ | 2509 | 6 | 76312 |
| 1918 | $J/\psi \to K^-K^{*+}a_1^0, K^{*+} \to \pi^+K^0, a_1^0 \to \pi^-\rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0\pi^+$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^-$ | 4011 | 6 | 76318 |
| 1919 | $J/\psi \to \pi^+\pi^-a_0^0, a_0^0 \to K^+K^-$ | $\pi^+\pi^-K^+K^-$ | 4012 | 6 | 76324 |
| 1920 | $J/\psi \to \pi^+ K^- K_1^{'0}, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1035 | 6 | 76330 |
| 1921 | $J/\psi \to a_2^- b_1^+, a_2^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2859 | 6 | 76336 |
| 1922 | $J/\psi \to \pi^+ \rho^- f_2(1270)\gamma^f, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 101 | 6 | 76342 |
| 1923 | $J/\psi \to \pi^0 a_2^- b_1^+, a_2^- \to \rho^0 \pi^-, b_1^+ \to \pi^+ \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2518 | 6 | 76348 |
| 1924 | $J/\psi \to \pi^- K_S^0 K^+ \phi, K_S^0 \to \pi^+ \pi^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5027 | 6 | 76354 |
| 1925 | $J/\psi 	o \pi^0 K^0 ar{K}^*, K^0 	o K^0_S, ar{K}^* 	o \pi^0 ar{K}^0, K^0_S 	o \pi^0 \pi^0, ar{K}^0 	o K^0_L$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 7816 | 6 | 76360 |
| 1926 | $J/\psi \rightarrow \pi^- \eta' b_1^+, \eta' \rightarrow \pi^0 \pi^0 \eta, b_1^+ \rightarrow \pi^+ \omega, \eta \rightarrow \pi^0 \pi^0 \pi^0, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 7819 | 6 | 76366 |
| 1927 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^-$ | 5030 | 6 | 76372 |
| 1928 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2199 | 6 | 76378 |
| 1929 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 7992 | 6 | 76384 |
| 1930 | $J/\psi ightarrow ho^0 \eta, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma$ | 4053 | 6 | 76390 |
| 1931 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2522 | 6 | 76396 |
| 1932 | $J/\psi \to \phi f_0(980), \phi \to K^+K^-, f_0(980) \to \pi^0\pi^0$ | $\pi^0\pi^0K^+K^-$ | 3359 | 6 | 76402 |
| 1933 | $J/\psi 	o a_2^0 \pi^+ a_2^-, a_2^0 	o \pi^+ ho^-, a_2^- 	o \pi^0 ho^-, ho^- 	o \pi^0 \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5077 | 6 | 76408 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 1934 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 5079 | 6 | 76414 |
| 1935 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1330 | 6 | 76420 |
| 1936 | $J/\psi \to \pi^+\pi^-\omega, \omega \to \pi^0\pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8150 | 6 | 76426 |
| 1937 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2884 | 6 | 76432 |
| 1938 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^-, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma$ | 8199 | 6 | 76438 |
| 1939 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 2886 | 6 | 76444 |
| 1940 | $J/\psi \to \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8219 | 6 | 76450 |
| 1941 | $J/\psi \to \omega h_1(1170)\gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8231 | 6 | 76456 |
| 1942 | $J/\psi \to \pi^0 \Lambda \bar{\Sigma}^{*0}, \Lambda \to \pi^- p, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 1334 | 6 | 76462 |
| 1943 | $J/\psi 	o \pi^- ar{K}^* K^+, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 5097 | 6 | 76468 |
| 1944 | $J/\psi \to \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 5130 | 6 | 76474 |
| 1945 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2894 | 6 | 76480 |
| 1946 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 8432 | 6 | 76486 |
| 1947 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 1997 | 6 | 76492 |
| 1948 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^-K^+$ | 191 | 6 | 76498 |
| 1949 | $J/\psi ightarrow K^+K^-\phi, \phi ightarrow \pi^- ho^+, ho^+ ightarrow \pi^0\pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 14 | 6 | 76504 |
| 1950 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 8494 | 6 | 76510 |
| 1951 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+K^-$ | 1615 | 6 | 76516 |
| 1952 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 266 | 6 | 76522 |
| 1953 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 8575 | 6 | 76528 |
| 1954 | $J/\psi 	o a_2^0 \pi^- a_1^+, a_2^0 	o \pi^- ho^+, a_1^+ 	o ho^0 \pi^+, ho^+ 	o \pi^0 \pi^+, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1215 | 6 | 76534 |
| 1955 | $J/\psi \to K^*K^-b_1^+, K^* \to \pi^0K^0, b_1^+ \to \pi^+\omega, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 365 | 6 | 76540 |
| 1956 | $J/\psi \to a_2^0 \pi^+ b_1^-, a_2^0 \to \pi^- \rho^+, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2920 | 6 | 76546 |
| 1957 | $J/\psi \to n\bar{n} f_0(1370), f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 8682 | 6 | 76552 |
| 1958 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 8698 | 6 | 76558 |
| 1959 | $J/\psi 	o \eta \Lambda \bar{\Lambda}, \eta 	o \pi^0 \pi^+ \pi^-, \Lambda 	o \pi^0 n, \bar{\Lambda} 	o \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-nar{p}$ | 8737 | 6 | 76564 |
| 1960 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8749 | 6 | 76570 |
| 1961 | $J/\psi \to \pi^+ \rho^- K^- K^{*+}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1483 | 6 | 76576 |
| 1962 | $J/\psi 	o \pi^+ a_0^0 a_1^-, a_0^0 	o \pi^0 \eta, a_1^- 	o \pi^0 ho^-, \eta 	o \pi^0 \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 5222 | 6 | 76582 |
| 1963 | $J/\psi \to \rho^- \omega b_1^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 8789 | 6 | 76588 |
| 1964 | $J/\psi \to K^+ K^{*-} a^0_0, K^{*-} \to \pi^- \bar{K}^0, a^0_0 \to \pi^0 \eta, \bar{K}^0 \to K^0_L, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 8840 | 6 | 76594 |
| 1965 | $J/\psi \rightarrow ho^0 ho^0 \gamma, ho^0 \rightarrow \pi^+ \pi^-, ho^0 \rightarrow \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 3451 | 6 | 76600 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1966 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8902 | 6 | 76606 |
| 1967 | $J/\psi 	o K^0 ar{K}^0, K^0 	o K^0_S, ar{K}^0 	o K^0_S, K^0_S 	o \pi^+\pi^-, K^0_S 	o \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 8920 | 6 | 76612 |
| 1968 | $J/\psi 	o ho^- K^+ ar{K}^0_1, ho^- 	o \pi^0 \pi^-, ar{K}^0_1 	o ho^+ K^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4180 | 6 | 76618 |
| 1969 | $J/\psi ightarrow \pi^0 \pi^- a_2^+, a_2^+ ightarrow \pi^0 \pi^+ \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 9047 | 6 | 76624 |
| 1970 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9122 | 6 | 76630 |
| 1971 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5239 | 6 | 76636 |
| 1972 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 9182 | 6 | 76642 |
| 1973 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 1345 | 6 | 76648 |
| 1974 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^- ho^+, \omega ightarrow \pi^0 \gamma, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 9242 | 6 | 76654 |
| 1975 | $J/\psi 	o \pi^0 a_0^0 h_1(1170), a_0^0 	o \pi^0 \eta, h_1(1170) 	o \pi^0 ho^0, \eta 	o \pi^0 \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5275 | 6 | 76660 |
| 1976 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9271 | 6 | 76666 |
| 1977 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^-$ | 631 | 6 | 76672 |
| 1978 | $J/\psi \to \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9379 | 6 | 76678 |
| 1979 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 5294 | 6 | 76684 |
| 1980 | $J/\psi \to h_1(1170)a_1^0, h_1(1170) \to \pi^0 \rho^0, a_1^0 \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2276 | 6 | 76690 |
| 1981 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \omega, \pi^0 ightarrow e^+ e^- \gamma^F, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 229 | 6 | 76696 |
| 1982 | $J/\psi 	o K^0 ar{K}^*, K^0 	o K_L^0, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0$ | 230 | 6 | 76702 |
| 1983 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5330 | 6 | 76708 |
| 1984 | $J/\psi 	o \eta' p \bar p, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^0 par p\gamma\gamma$ | 9628 | 6 | 76714 |
| 1985 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^0 \rho^+, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9633 | 6 | 76720 |
| 1986 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 2938 | 6 | 76726 |
| 1987 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 9874 | 6 | 76732 |
| 1988 | $J/\psi \to \rho^0 \rho^+ K^0 K^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1353 | 6 | 76738 |
| 1989 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 231 | 6 | 76744 |
| 1990 | $J/\psi \to \pi^0 ho^0 ho^+ b_1^-, ho^0 \to \pi^+ \pi^-, ho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5402 | 6 | 76750 |
| 1991 | $J/\psi \to \pi^- K^+ \bar{K}_1^{'0}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 10339 | 6 | 76756 |
| 1992 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10356 | 6 | 76762 |
| 1993 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10372 | 6 | 76768 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 1994 | $J/\psi \to \pi^+\pi^-\rho^+a_1^-, \rho^+ \to \pi^0\pi^+, a_1^- \to \rho^0\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10537 | 6 | 76774 |
| 1995 | $J/\psi \to \pi^- K^{*+} \bar{K}^0_1, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \rho^+ K^-, K^0 \to K^0_L, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 565 | 6 | 76780 |
| 1996 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 10793 | 6 | 76786 |
| 1997 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 10918 | 6 | 76792 |
| 1998 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^+K^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 718 | 6 | 76798 |
| 1999 | $J/\psi \to K^* \bar{K}^* b_1^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11133 | 6 | 76804 |
| 2000 | $J/\psi \to \rho^+ \rho^- K^+ K^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11227 | 6 | 76810 |
| 2001 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11386 | 6 | 76816 |
| 2002 | $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \rho^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1644 | 6 | 76822 |
| 2003 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 12231 | 6 | 76828 |
| 2004 | $J/\psi \to K^+K^-f_0(1370), f_0(1370) \to \pi^0\pi^0$ | $\pi^0\pi^0K^+K^-$ | 12578 | 6 | 76834 |
| 2005 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^+ \pi^- K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5688 | 5 | 76839 |
| 2006 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 5699 | 5 | 76844 |
| 2007 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 5704 | 5 | 76849 |
| 2008 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 670 | 5 | 76854 |
| 2009 | $J/\psi \to \pi^+\pi^-\eta\gamma^F, \eta \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma^F$ | 2289 | 5 | 76859 |
| 2010 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1811 | 5 | 76864 |
| 2011 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 1301 | 5 | 76869 |
| 2012 | $J/\psi \to \pi^0 a_0^+ b_1^-, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1305 | 5 | 76874 |
| 2013 | $J/\psi ightarrow ho^0 n ar{n}, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-nar{n}$ | 2304 | 5 | 76879 |
| 2014 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 3595 | 5 | 76884 |
| 2015 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 1818 | 5 | 76889 |
| 2016 | $J/\psi \to \pi^- \rho^+ h_1(1170) \gamma^F, \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 4395 | 5 | 76894 |
| 2017 | $J/\psi 	o \pi^0 a_2^0 \omega, a_2^0 	o \pi^- ho^+, \omega 	o \pi^0 \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+, \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 4399 | 5 | 76899 |
| 2018 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^0\rho^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5773 | 5 | 76904 |
| 2019 | $J/\psi ightarrow \pi^0 \eta \gamma, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 5778 | 5 | 76909 |
| 2020 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1528 | 5 | 76914 |
| 2021 | $J/\psi 	o \pi^0 ho^0 \pi^- a_0^+, ho^0 	o \pi^+ \pi^-, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4413 | 5 | 76919 |
| 2022 | $J/\psi 	o \pi^0\pi^0nar{n}$ | $\pi^0\pi^0n\bar{n}$ | 998 | 5 | 76924 |
| 2023 | $J/\psi \to \phi f_0(1790), \phi \to \pi^+ \rho^-, f_0(1790) \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4436 | 5 | 76929 |
| 2024 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^0K^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 706 | 5 | 76934 |
| 2025 | $J/\psi \to \phi f_0(1370), \phi \to K^+K^-, f_0(1370) \to \pi^0\pi^0$ | $\pi^0\pi^0K^+K^-$ | 5853 | 5 | 76939 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 2026 | $J/\psi \to K^- K^{*+} \phi, K^{*+} \to \pi^0 K^+, \phi \to K^+ K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 5856 | 5 | 76944 |
| 2027 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 346 | 5 | 76949 |
| 2028 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^+K^0K^-, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 1827 | 5 | 76954 |
| 2029 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 824 | 5 | 76959 |
| 2030 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3025 | 5 | 76964 |
| 2031 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5895 | 5 | 76969 |
| 2032 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 \rho^- b_1^+, \rho^- 	o \pi^0 \pi^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2327 | 5 | 76974 |
| 2033 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 773 | 5 | 76979 |
| 2034 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to K_L^0 K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 5933 | 5 | 76984 |
| 2035 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5934 | 5 | 76989 |
| 2036 | $J/\psi \to \eta \omega f_2(1270), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 348 | 5 | 76994 |
| 2037 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 5956 | 5 | 76999 |
| 2038 | $J/\psi \to \phi f_0(1790), \phi \to \pi^- \rho^+, f_0(1790) \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5958 | 5 | 77004 |
| 2039 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1838 | 5 | 77009 |
| 2040 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5960 | 5 | 77014 |
| 2041 | $J/\psi \to \pi^- \bar{K}^* K^+ \gamma^F, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^F$ | 4475 | 5 | 77019 |
| 2042 | $J/\psi \to \pi^- K^0_S K^+ \phi, K^0_S \to \pi^0 \pi^0, \phi \to K^0_L K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 5968 | 5 | 77024 |
| 2043 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^{+}\Sigma^{0}, \bar{\Sigma}^{*-} \to \pi^{-}\bar{\Lambda}, \Sigma^{0} \to \Lambda\gamma, \bar{\Lambda} \to \pi^{0}\bar{n}, \Lambda \to \pi^{-}p$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 5969 | 5 | 77029 |
| 2044 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \pi^0 \rho^-, a_0^0 \to \pi^0 \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 94 | 5 | 77034 |
| 2045 | $J/\psi \to \phi\phi\phi, \phi \to K_L^0K_S^0, \phi \to K^+K^-, \phi \to K^+K^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^- K^+ K^+ K^- K^-$ | 2336 | 5 | 77039 |
| 2046 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 4491 | 5 | 77044 |
| 2047 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 303 | 5 | 77049 |
| 2048 | $J/\psi ightarrow a_2^0 \pi^+ \pi^-, a_2^0 ightarrow \pi^- ho^+ \gamma^f, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1321 | 5 | 77054 |
| 2049 | $J/\psi 	o a_2^0 b_1^0, a_2^0 	o \pi^+ ho^-, b_1^0 	o \pi^0 \omega, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3056 | 5 | 77059 |
| 2050 | $J/\psi ightarrow ar{K}^0 n ar{\Lambda}, ar{K}^0 ightarrow K_S^0, ar{\Lambda} ightarrow \pi^0 ar{n}, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0n\bar{n}$ | 3662 | 5 | 77064 |
| 2051 | $J/\psi 	o \pi^0\pi^0\eta\omega, \eta 	o \gamma\gamma, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3677 | 5 | 77069 |
| 2052 | $J/\psi \to ho^0 ho^0 \pi^+ \pi^-, ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6023 | 5 | 77074 |
| 2053 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^-$ | 6026 | 5 | 77079 |
| 2054 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^+ \pi^- \omega, K^{*+} \to \pi^+ K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 1694 | 5 | 77084 |
| 2055 | $J/\psi \to \rho^0 \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1435 | 5 | 77089 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 2056 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6035 | 5 | 77094 |
| 2057 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 130 | 5 | 77099 |
| 2058 | $J/\psi 	o \Lambda ar{\Sigma}^{*0}, \Lambda 	o \pi^- p, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^-ar{n}p$ | 2075 | 5 | 77104 |
| 2059 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \pi^+\pi^-\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 958 | 5 | 77109 |
| 2060 | $J/\psi \to f_2(1270)h_1(1170), f_2(1270) \to \pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3694 | 5 | 77114 |
| 2061 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6063 | 5 | 77119 |
| 2062 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 2362 | 5 | 77124 |
| 2063 | $J/\psi ightarrow \pi^- ho^+, ho^+ ightarrow \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^+\pi^-\gamma^f$ | 139 | 5 | 77129 |
| 2064 | $J/\psi ightarrow \eta \phi, \eta ightarrow \pi^0 \pi^0 \pi^0, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 400 | 5 | 77134 |
| 2065 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6083 | 5 | 77139 |
| 2066 | $J/\psi \rightarrow \rho^0 \eta a_1^0, \rho^0 \rightarrow \pi^+ \pi^-, \eta \rightarrow \gamma \gamma, a_1^0 \rightarrow \pi^- \rho^+, \rho^+ \rightarrow \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4568 | 5 | 77144 |
| 2067 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6127 | 5 | 77149 |
| 2068 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6128 | 5 | 77154 |
| 2069 | $J/\psi \to K^-K^{*+}b_1^0, K^{*+} \to \pi^+K^0, b_1^0 \to \pi^0\omega, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6129 | 5 | 77159 |
| 2070 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 6131 | 5 | 77164 |
| 2071 | $J/\psi 	o \pi^0 a_2^0 \pi^- ho^+, a_2^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1083 | 5 | 77169 |
| 2072 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 2378 | 5 | 77174 |
| 2073 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to \pi^0 \pi^0$ | $\pi^0\pi^0\gamma$ | 6158 | 5 | 77179 |
| 2074 | $J/\psi 	o K^- p \bar{\Sigma}^0, \bar{\Sigma}^0 	o \bar{\Lambda} \gamma, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0 K^- ar{n} p \gamma$ | 1569 | 5 | 77184 |
| 2075 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K^0_S, K^* \to \pi^- K^+, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4584 | 5 | 77189 |
| 2076 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3104 | 5 | 77194 |
| 2077 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 6187 | 5 | 77199 |
| 2078 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2677 | 5 | 77204 |
| 2079 | $J/\psi 	o \Lambda \bar{\Sigma}^0 \gamma, \Lambda 	o \pi^0 n, \bar{\Sigma}^0 	o \bar{\Lambda} \gamma, \bar{\Lambda} 	o \pi^+ \bar{p}$ | $\pi^0\pi^+n\bar{p}\gamma\gamma$ | 4599 | 5 | 77209 |
| 2080 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 6225 | 5 | 77214 |
| 2081 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4602 | 5 | 77219 |
| 2082 | $J/\psi \to \pi^- K^+ \bar{K}_1^0, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 285 | 5 | 77224 |
| 2083 | $J/\psi \to K^+ K^{*-} \phi, K^{*-} \to \pi^0 K^-, \phi \to K^+ K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 4612 | 5 | 77229 |
| 2084 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \pi^0 \rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 3109 | 5 | 77234 |
| 2085 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^+ \pi^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 1866 | 5 | 77239 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2086 | $J/\psi \to \rho^0 a_2^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3733 | 5 | 77244 |
| 2087 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 850 | 5 | 77249 |
| 2088 | $J/\psi \to K^0 \bar{K}^* f_2', K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_2' \to K^+ K^-$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 6333 | 5 | 77254 |
| 2089 | $J/\psi \to K^- K^{*+} \eta', K^{*+} \to \pi^0 K^+, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 3742 | 5 | 77259 |
| 2090 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to K^0\bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-\gamma$ | 2707 | 5 | 77264 |
| 2091 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+ \gamma^f, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 2717 | 5 | 77269 |
| 2092 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \rho^0K^-, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 3750 | 5 | 77274 |
| 2093 | $J/\psi \to \eta K^- K^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4670 | 5 | 77279 |
| 2094 | $J/\psi 	o \pi^- \eta b_1^+, \eta 	o \pi^0 \pi^0 \pi^0, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 2093 | 5 | 77284 |
| 2095 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 1711 | 5 | 77289 |
| 2096 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4684 | 5 | 77294 |
| 2097 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 3762 | 5 | 77299 |
| 2098 | $J/\psi \to \rho^0 a_2^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^- \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4688 | 5 | 77304 |
| 2099 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 146 | 5 | 77309 |
| 2100 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^- ar{K}^0 K^+, ho^- ightarrow \pi^0 \pi^-, ar{K}^0 ightarrow K_L^0$ | $\pi^0 K^0_L \pi^- K^+ \gamma$ | 2723 | 5 | 77314 |
| 2101 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2391 | 5 | 77319 |
| 2102 | $J/\psi 	o a_2^0 \bar{K}^0 K^*, a_2^0 	o \pi^+ ho^-, \bar{K}^0 	o K_L^0, K^* 	o \pi^- K^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6442 | 5 | 77324 |
| 2103 | $J/\psi \to \pi^+ \eta b_1^-, \eta \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 3775 | 5 | 77329 |
| 2104 | $J/\psi \to p\bar{\Delta}^+\gamma^F, \bar{\Delta}^+ \to \pi^-\bar{n}$ | $\pi^-ar{n}p\gamma^F$ | 1455 | 5 | 77334 |
| 2105 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^+\Xi^-, \bar{\Xi}^{*0} \to \pi^-\bar{\Xi}^+, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^+ \to \pi^+\bar{\Lambda},$ $\Lambda \to \pi^-p, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\bar{n}p$ | 1574 | 5 | 77339 |
| 2106 | $J/\psi \to \pi^0 \pi^+ \pi^- \omega \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1575 | 5 | 77344 |
| 2107 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 2733 | 5 | 77349 |
| 2108 | $J/\psi 	o \pi^+\pi^-\phi, \phi 	o \pi^-\rho^+, \rho^+ 	o \pi^0\pi^+$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3785 | 5 | 77354 |
| 2109 | $J/\psi \to b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4726 | 5 | 77359 |
| 2110 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K^0_S, K^* 	o \pi^0 K^0, K^0_S 	o \pi^0 \pi^0, K^0 	o K^0_L$ | $\pi^0\pi^0\pi^0K_L^0$ | 3154 | 5 | 77364 |
| 2111 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 242 | 5 | 77369 |
| 2112 | $J/\psi 	o K^+K^{*-}a_1^0, K^{*-} 	o \pi^0K^-, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3801 | 5 | 77374 |
| 2113 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6539 | 5 | 77379 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 2114 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4745 | 5 | 77384 |
| 2115 | $J/\psi 	o \eta\eta\omega, \eta 	o \gamma\gamma, \eta 	o \pi^0\pi^0\pi^0, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6557 | 5 | 77389 |
| 2116 | $J/\psi 	o \pi^+ ho^- a_1^0, ho^- 	o \pi^0 \pi^-, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3804 | 5 | 77394 |
| 2117 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1238 | 5 | 77399 |
| 2118 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 971 | 5 | 77404 |
| 2119 | $J/\psi \to \pi^0 \pi^+ \pi^- \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4766 | 5 | 77409 |
| 2120 | $J/\psi ightarrow \pi^0 \eta' b_1^0, \eta' ightarrow \pi^+ \pi^- \eta, b_1^0 ightarrow \pi^0 \omega, \eta ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6606 | 5 | 77414 |
| 2121 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 6611 | 5 | 77419 |
| 2122 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 6621 | 5 | 77424 |
| 2123 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4770 | 5 | 77429 |
| 2124 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{n} p$ | $\pi^-ar{n}p\gamma$ | 3823 | 5 | 77434 |
| 2125 | $J/\psi ightarrow ho^0\pi^-a_0^+, ho^0 ightarrow \pi^+\pi^-, a_0^+ ightarrow \pi^+\eta, \eta ightarrow \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2753 | 5 | 77439 |
| 2126 | $J/\psi \to \rho^* \pi^- a_0^-, \rho^* \to \pi^+ \pi^-, a_0^- \to \pi^+ \eta, \eta \to \gamma \gamma$ $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta,$ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6667 | 5 | 77444 |
| 2127 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 910 | 5 | 77449 |
| 2128 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1729 | 5 | 77454 |
| 2129 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 3836 | 5 | 77459 |
| 2130 | $J/\psi \to K^+ K_1^-, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-$ | 3839 | 5 | 77464 |
| 2131 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 1096 | 5 | 77469 |
| 2132 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{n} p, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^-ar{n}p\gamma$ | 6726 | 5 | 77474 |
| 2133 | $J/\psi \rightarrow ho^0 ho^0 \omega, ho^0 \rightarrow \pi^+ \pi^-, ho^0 \rightarrow \pi^+ \pi^- \gamma^F, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 1902 | 5 | 77479 |
| 2134 | $J/\psi \to \pi^0 \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 99 | 5 | 77484 |
| 2135 | $J/\psi \to \bar{K}^0 K_0^0 \gamma, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma$ | 3848 | 5 | 77489 |
| 2136 | $J/\psi 	o \pi^+ \eta b_1^-, \eta 	o \gamma \gamma, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 6774 | 5 | 77494 |
| 2137 | $J/\psi 	o nar{\Delta}^0\gamma, ar{\Delta}^0 	o \pi^+ar{p}$ | $\pi^+ n \bar{p} \gamma$ | 4830 | 5 | 77499 |
| 2138 | $J/\psi \to \pi^-\pi^-\rho^+b_1^+, \rho^+ \to \pi^0\pi^+, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3851 | 5 | 77504 |
| 2139 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 6796 | 5 | 77509 |
| 2140 | $J/\psi 	o \pi^- \eta' b_1^+, \eta' 	o \pi^0 \pi^0 \eta, b_1^+ 	o \pi^+ \omega, \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 2413 | 5 | 77514 |
| 2141 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ h_1(1170), \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 4853 | 5 | 77519 |
| 2142 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 1740 | 5 | 77524 |
| 2143 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2418 | 5 | 77529 |
| 2144 | $J/\psi \to \bar{K}^* K^{*+} b_1^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3864 | 5 | 77534 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 2145 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 6826 | 5 | 77539 |
| 2146 | $J/\psi \to \pi^+ K^- K_1^{'0}, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 1741 | 5 | 77544 |
| 2147 | $J/\psi \rightarrow \rho^- \eta a_0^+, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \gamma \gamma, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2780 | 5 | 77549 |
| 2148 | $J/\psi \to K^+ K^{*-} b_1^0, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 3219 | 5 | 77554 |
| 2149 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 6856 | 5 | 77559 |
| 2150 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 1593 | 5 | 77564 |
| 2151 | $J/\psi \to \eta \eta \omega, \eta \to \gamma \gamma, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 6898 | 5 | 77569 |
| 2152 | $J/\psi \to K^{0} \bar{K}^{0} f_{2}^{'}, K^{0} \to K_{L}^{0}, \bar{K}^{0} \to K_{L}^{0}, f_{2}^{'} \to K^{+} K^{-}$ | $K_{L}^{0}K_{L}^{0}K^{+}K^{-}$ | 1354 | 5 | 77574 |
| 2153 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 1749 | 5 | 77579 |
| 2154 | $J/\psi ightarrow ho^0 p ar{\Delta}^+, ho^0 ightarrow \pi^+ \pi^-, ar{\Delta}^+ ightarrow \pi^0 ar{p}$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 3231 | 5 | 77584 |
| 2155 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4903 | 5 | 77589 |
| 2156 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 4904 | 5 | 77594 |
| 2157 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3233 | 5 | 77599 |
| 2158 | $J/\psi \to \bar{K}^0 K^* \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1359 | 5 | 77604 |
| 2159 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4923 | 5 | 77609 |
| 2160 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1941 | 5 | 77614 |
| 2161 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \rho^0 \pi^+, a_1^0 \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1753 | 5 | 77619 |
| 2162 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^0\bar{K}^0, a_0^- \to \pi^-\eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1470 | 5 | 77624 |
| 2163 | $I/y \to \pi^+ f_2(1270) h^- f_2(1270) \to \pi^+ \pi^- h^- \to \pi^- \psi \psi \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7013 | 5 | 77629 |
| 2164 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^+K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 7017 | 5 | 77634 |
| 2165 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^+ K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3252 | 5 | 77639 |
| 2166 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1361 | 5 | 77644 |
| 2167 | $J/\psi \to K^- K_1^+, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 439 | 5 | 77649 |
| 2168 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 1606 | 5 | 77654 |
| 2169 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \rho^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7070 | 5 | 77659 |
| 2170 | $J/\psi \to K^{*-}p\bar{\Lambda}, K^{*-} \to \pi^-\bar{K}^0, \bar{\Lambda} \to \pi^+\bar{p}, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 7071 | 5 | 77664 |
| 2171 | $J/\psi 	o b_1^0 a_1^0, b_1^0 	o \pi^0 \omega, a_1^0 	o \pi^+ ho^-, \omega 	o \pi^0 \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3267 | 5 | 77669 |
| 2172 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 1761 | 5 | 77674 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2173 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 7127 | 5 | 77679 |
| 2174 | $J/\psi \to \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7130 | 5 | 77684 |
| 2175 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7133 | 5 | 77689 |
| 2176 | $J/\psi \to \pi^- K^+ \bar{K}_1^{'0}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 3974 | 5 | 77694 |
| 2177 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to \pi^0\pi^0$ | $\pi^0\pi^0K^+K^-$ | 1476 | 5 | 77699 |
| 2178 | $J/\psi \to \pi^0 \omega a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1257 | 5 | 77704 |
| 2179 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 360 | 5 | 77709 |
| 2180 | $J/\psi 	o \pi^0 K^0 ar K^0, K^0 	o K^0_S, ar K^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7158 | 5 | 77714 |
| 2181 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 p ar p, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-par p\gamma$ | 507 | 5 | 77719 |
| 2182 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \rho^0 \rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 3293 | 5 | 77724 |
| 2183 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1959 | 5 | 77729 |
| 2184 | $J/\psi \to \rho^0 K^* \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7187 | 5 | 77734 |
| 2185 | $J/\psi 	o ar\Xi^0 \Xi^{*0}, ar\Xi^0 	o \pi^0 ar\Lambda, \Xi^{*0} 	o \pi^0 \Xi^0, ar\Lambda 	o \pi^+ ar p, \Xi^0 	o \pi^0 \Lambda, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 5017 | 5 | 77739 |
| 2186 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 5020 | 5 | 77744 |
| 2187 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2477 | 5 | 77749 |
| 2188 | $J/\psi \to \rho^- \bar{\Sigma}^+ \Lambda, \bar{\rho}^- \to \pi^0 \pi^-, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 7224 | 5 | 77754 |
| 2189 | $J/\psi 	o ar{\Lambda} \Sigma^{*0}, ar{\Lambda} 	o \pi^0 ar{n}, \Sigma^{*0} 	o \pi^0 \Lambda, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0\pi^0n\bar{n}$ | 4004 | 5 | 77759 |
| 2190 | $J/\psi \to a_0^0 b_1^0, a_0^0 \to \pi^0 \eta, b_1^0 \to \pi^0 \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7264 | 5 | 77764 |
| 2191 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 4006 | 5 | 77769 |
| 2192 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_L^0, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-\pi^-$ | 1960 | 5 | 77774 |
| 2193 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5042 | 5 | 77779 |
| 2194 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^0 \pi^0, \phi \to K^+ K^-$ | $\pi^0\pi^0K^+K^-$ | 5045 | 5 | 77784 |
| 2195 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 7363 | 5 | 77789 |
| 2196 | $J/\psi \to \pi^- \bar{\Sigma}^{*+} \Lambda, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 5047 | 5 | 77794 |
| 2197 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\phi\gamma^f, \phi \to K^+K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 2816 | 5 | 77799 |
| 2198 | $J/\psi \to a_2^0 \pi^- a_1^+, a_2^0 \to \pi^- ho^+, a_1^+ \to \pi^0 ho^+, ho^+ \to \pi^0 \pi^+, ho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 206 | 5 | 77804 |
| 2199 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7414 | 5 | 77809 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2200 | $J/\psi \to K^{+}K^{-}f_{2}', f_{2}' \to K_{S}^{0}K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 1774 | 5 | 77814 |
| 2201 | $J/\psi 	o ho^0 \pi^- a_0^+, ho^0 	o \pi^+ \pi^-, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4028 | 5 | 77819 |
| 2202 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 1267 | 5 | 77824 |
| 2203 | $J/\psi 	o a_2^0 \pi^+ ho^-, a_2^0 	o \pi^- ho^+, ho^- 	o \pi^0 \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7453 | 5 | 77829 |
| 2204 | $J/\psi \to \eta h_1(1170), \eta \to \gamma \gamma, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 2833 | 5 | 77834 |
| 2205 | $J/\psi \to \pi^- \rho^+ K^- K^{*+}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2834 | 5 | 77839 |
| 2206 | $J/\psi \to f_2(1270)\gamma, f_2(1270) \to K^+K^-$ | $K^+K^-\gamma$ | 7541 | 5 | 77844 |
| 2207 | $J/\psi ightarrow ho^0 \eta, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7582 | 5 | 77849 |
| 2208 | $J/\psi \to \pi^0 \rho^0 a_1^0, \rho^0 \to \pi^+ \pi^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2835 | 5 | 77854 |
| 2209 | $J/\psi \to \bar{\Xi}^0 \Xi^{*0}, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Xi^{*0} \to \pi^0 \Xi^0, \bar{\Lambda} \to \pi^0 \bar{n}, \Xi^0 \to \pi^0 \Lambda, \\ \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 7624 | 5 | 77859 |
| 2210 | $J/\psi 	o \pi^+ ho^- a_1^0, ho^- 	o \pi^0 \pi^-, a_1^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7629 | 5 | 77864 |
| 2211 | $J/\psi \rightarrow \rho^0 \rho^0 \omega, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 1039 | 5 | 77869 |
| 2212 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 983 | 5 | 77874 |
| 2213 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7692 | 5 | 77879 |
| 2214 | $J/\psi \rightarrow \eta_c \gamma, \eta_c \rightarrow \pi^+ K^0 K^-, K^0 \rightarrow K^0_S, K^0_S \rightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma$ | 5123 | 5 | 77884 |
| 2215 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 475 | 5 | 77889 |
| 2216 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0K^-, K_2^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 5131 | 5 | 77894 |
| 2217 | $J/\psi ightarrow \pi^0 ho^0 \omega \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 5134 | 5 | 77899 |
| 2218 | $J/\psi 	o ar{K}^0 K_0^0, ar{K}^0 	o K_L^0, K_0^0 	o \pi^- K^+$ | $K_L^0\pi^-K^+$ | 4059 | 5 | 77904 |
| 2219 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7766 | 5 | 77909 |
| 2220 | $J/\psi \to n\bar{n}f_0(1370), f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 7767 | 5 | 77914 |
| 2221 | $J/\psi \to \pi^0 \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7792 | 5 | 77919 |
| 2222 | $J/\psi \to \pi^0 \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4061 | 5 | 77924 |
| 2223 | $J/\psi \to \pi^+ a_2^-, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+K^-$ | 2847 | 5 | 77929 |
| 2224 | $J/\psi \to \eta_c \gamma, \eta_c \to \Sigma^+ \bar{\Sigma}^-, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^+nar p\gamma$ | 7844 | 5 | 77934 |
| 2225 | $J/\psi \to h_1(1170)a_1^0, h_1(1170) \to \pi^-\rho^+, a_1^0 \to \pi^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7874 | 5 | 77939 |
| 2226 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7900 | 5 | 77944 |
| 2227 | $J/\psi 	o \pi^0 \pi^- a_2^+, a_2^+ 	o ho^0 \pi^+ \gamma^f, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 2848 | 5 | 77949 |
| 2228 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K^+K^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 7959 | 5 | 77954 |
| 2229 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7969 | 5 | 77959 |
| 2230 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^+ K^-, K^0_S \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 7976 | 5 | 77964 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 2231 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4068 | 5 | 77969 |
| 2232 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^+\Xi^-, \bar{\Xi}^{*0} \to \pi^0\bar{\Xi}^0, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^0 \to \pi^0\bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 5156 | 5 | 77974 |
| 2233 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7998 | 5 | 77979 |
| 2234 | $J/\psi \to \bar{\Xi}^0 \Xi^{*0}, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Xi^{*0} \to \pi^0 \Xi^0, \bar{\Lambda} \to \pi^0 \bar{n}, \Xi^0 \to \pi^0 \Lambda, \\ \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^0\pi^0n\bar{n}$ | 8015 | 5 | 77984 |
| 2235 | $J/\psi \to K^-K^{*+}a_1^0, K^{*+} \to \pi^+K^0, a_1^0 \to \pi^+\rho^-, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1380 | 5 | 77989 |
| 2236 | $J/\psi \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 8037 | 5 | 77994 |
| 2237 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \gamma\gamma$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 8053 | 5 | 77999 |
| 2238 | $J/\psi \to \rho^+ \Lambda \bar{\Sigma}^-, \rho^+ \to \pi^0 \pi^+, \Lambda \to \pi^- p, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 3373 | 5 | 78004 |
| 2239 | $J/\psi \to ho^0 \pi^+ K^0 K^{*-}, ho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4104 | 5 | 78009 |
| 2240 | $J/\psi \to \eta K^0 \bar{K}^0, \eta \to \gamma \gamma, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2854 | 5 | 78014 |
| 2241 | $J/\psi 	o K^0_S n ar{\Lambda}, K^0_S 	o \pi^0 \pi^0, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 1627 | 5 | 78019 |
| 2242 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8091 | 5 | 78024 |
| 2243 | $J/\psi \to \pi^- K^+ \bar{K}_1^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 8118 | 5 | 78029 |
| 2244 | $J/\psi ightarrow \pi^0\pi^- ho^+a^0_0, ho^+ ightarrow \pi^0\pi^+, a^0_0 ightarrow \pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 8119 | 5 | 78034 |
| 2245 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^0 \pi^0, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 8121 | 5 | 78039 |
| 2246 | $J/\psi 	o ho^0 K^0 ar{K}^*, ho^0 	o \pi^+ \pi^-, K^0 	o K^0_S, ar{K}^* 	o \pi^+ K^-, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5179 | 5 | 78044 |
| 2247 | $J/\psi ightarrow \pi^0 ho^0 b_1^0 \gamma, ho^0 ightarrow \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2862 | 5 | 78049 |
| 2248 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5230 | 5 | 78054 |
| 2249 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma\gamma$ | 5232 | 5 | 78059 |
| 2250 | $J/\psi \to K^- K^{*+} \phi, K^{*+} \to \pi^0 K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 8206 | 5 | 78064 |
| 2251 | $J/\psi \to \rho^+ K^* \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 2501 | 5 | 78069 |
| 2252 | $J/\psi ightarrow \pi^+ ho^- b_1^0 \gamma^F, ho^- ightarrow \pi^0 \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 4139 | 5 | 78074 |
| 2253 | $J/\psi \to \rho^0 \pi^+ \rho^- \omega, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1988 | 5 | 78079 |
| 2254 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \rho^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 3396 | 5 | 78084 |
| 2255 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8263 | 5 | 78089 |
| 2256 | $J/\psi ightarrow ho^+ \omega K^0 K^-, ho^+ ightarrow \pi^0 \pi^+, \omega ightarrow \pi^0 \pi^+ \pi^-, K^0 ightarrow K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 363 | 5 | 78094 |
| 2257 | $J/\psi 	o ho^- \eta a_0^+, ho^- 	o \pi^0 \pi^-, \eta 	o \pi^0 \pi^+ \pi^-, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1993 | 5 | 78099 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2258 | $J/\psi \to \bar{K}^*K^+a_1^-, \bar{K}^* \to \pi^0\bar{K}^0, a_1^- \to \rho^0\pi^-, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8345 | 5 | 78104 |
| 2259 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 8346 | 5 | 78109 |
| 2260 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^+$ | $K_L^0\pi^-K^+$ | 8365 | 5 | 78114 |
| 2261 | $J/\psi 	o ho^0 \pi^+ \pi^- b_1^0, ho^0 	o \pi^+ \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8373 | 5 | 78119 |
| 2262 | $J/\psi ightarrow \pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | 3411 | 5 | 78124 |
| 2263 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1189 | 5 | 78129 |
| 2264 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to \pi^+ \rho^-, a_2^+ \to \pi^0 \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5309 | 5 | 78134 |
| 2265 | $J/\psi ightarrow \pi^0\pi^0b_1^0, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1995 | 5 | 78139 |
| 2266 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5322 | 5 | 78144 |
| 2267 | $J/\psi \to \pi^- K^+ \bar{K}_1^{'0}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 4174 | 5 | 78149 |
| 2268 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 8503 | 5 | 78154 |
| 2269 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma^F$ | 3425 | 5 | 78159 |
| 2270 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^-$ | 5334 | 5 | 78164 |
| 2271 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 292 | 5 | 78169 |
| 2272 | $J/\psi ightarrow \pi^+\pi^-\omega b_1^0, \omega ightarrow \pi^0\gamma, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8603 | 5 | 78174 |
| 2273 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^- \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 5385 | 5 | 78179 |
| 2274 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 2221 | 5 | 78184 |
| 2275 | $J/\psi \to K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 3439 | 5 | 78189 |
| 2276 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^- \rho^+, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8677 | 5 | 78194 |
| 2277 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3440 | 5 | 78199 |
| 2278 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 8688 | 5 | 78204 |
| 2279 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3445 | 5 | 78209 |
| 2280 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 5422 | 5 | 78214 |
| 2281 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 447 | 5 | 78219 |
| 2282 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^+ \rho^-, h_1(1170) \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8750 | 5 | 78224 |
| 2283 | $J/\psi \to \pi^-\pi^-\rho^+a_1^+, \rho^+ \to \pi^0\pi^+, a_1^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4192 | 5 | 78229 |
| 2284 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8760 | 5 | 78234 |
| 2285 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 817 | 5 | 78239 |
| 2286 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^0\bar{K}^0, K_2^{*0} \to \pi^-K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 8780 | 5 | 78244 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 2287 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 2898 | 5 | 78249 |
| 2288 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4219 | 5 | 78254 |
| 2289 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 8845 | 5 | 78259 |
| 2290 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 2236 | 5 | 78264 |
| 2291 | $J/\psi \to \eta(2225)\gamma, \eta(2225) \to \phi\phi, \phi \to K_L^0 K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K^+K^-\gamma$ | 3455 | 5 | 78269 |
| 2292 | $J/\psi \to K^+K^-\gamma^F\gamma^f$ | $K^+K^-\gamma^F\gamma^f$ | 8907 | 5 | 78274 |
| 2293 | $J/\psi \to \pi^-\omega\omega b_1^+, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 640 | 5 | 78279 |
| 2294 | $J/\psi 	o ho^- ar{n} \Delta^+, ho^- 	o \pi^0 \pi^-, \Delta^+ 	o \pi^+ n$ | $\pi^0\pi^+\pi^-nar{n}$ | 8924 | 5 | 78284 |
| 2295 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^+K^0, \phi \to K_L^0K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2248 | 5 | 78289 |
| 2296 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\gamma\gamma$ | 8959 | 5 | 78294 |
| 2297 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 3465 | 5 | 78299 |
| 2298 | $J/\psi 	o K^0 ar{K}^*, K^0 	o K^0_S, ar{K}^* 	o \pi^0 ar{K}^0, K^0_S 	o \pi^0 \pi^0, ar{K}^0 	o K^0_L$ | $\pi^0\pi^0\pi^0K_L^0$ | 9091 | 5 | 78304 |
| 2299 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2251 | 5 | 78309 |
| 2300 | $J/\psi \to K^-K^{*+}a_1^0, K^{*+} \to \pi^0K^+, a_1^0 \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1640 | 5 | 78314 |
| 2301 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2262 | 5 | 78319 |
| 2302 | $J/\psi \to \bar{K}^0 K^* \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 4266 | 5 | 78324 |
| 2303 | $J/\psi 	o \pi^0 a_2^0 \gamma, a_2^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 5494 | 5 | 78329 |
| 2304 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5496 | 5 | 78334 |
| 2305 | $J/\psi \to \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 2913 | 5 | 78339 |
| 2306 | $J/\psi \to K^-K^{*+}a_0^0, K^{*+} \to \pi^+K^0, a_0^0 \to \pi^0\eta, K^0 \to K_S^0, \eta \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2914 | 5 | 78344 |
| 2307 | $J/\psi \to K^0 ar{K}^* a_0^0, K^0 \to K_L^0, ar{K}^* \to \pi^0 ar{K}^0, a_0^0 \to \pi^0 \eta, ar{K}^0 \to K_L^0, \ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 9345 | 5 | 78349 |
| 2308 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0 K_L^0\pi^+\pi^-$ | 9347 | 5 | 78354 |
| 2309 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \rho^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 4275 | 5 | 78359 |
| 2310 | $J/\psi \to ho^0 a_2^0, ho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \pi^- \omega, \omega \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 9398 | 5 | 78364 |
| 2311 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 9404 | 5 | 78369 |
| 2312 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9428 | 5 | 78374 |
| 2313 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 4283 | 5 | 78379 |
| 2314 | $J/\psi 	o \pi^+ K^- K_1^0, K_1^0 	o ho^0 K^0, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 994 | 5 | 78384 |
| 2315 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^- \bar{\Xi}^+, \Lambda \to \pi^0 n, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 3490 | 5 | 78389 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 2316 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 2268 | 5 | 78394 |
| 2317 | $J/\psi \to \pi^0 \omega a_1^0, \omega \to \pi^0 \gamma, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 5555 | 5 | 78399 |
| 2318 | $J/\psi \to \eta' n \bar{n}, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-nar{n}\gamma\gamma$ | 2008 | 5 | 78404 |
| 2319 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 2272 | 5 | 78409 |
| 2320 | $J/\psi \to f_2(1270)K^-K^{*+}, f_2(1270) \to \pi^+\pi^-, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 9698 | 5 | 78414 |
| 2321 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9770 | 5 | 78419 |
| 2322 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 9775 | 5 | 78424 |
| 2323 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 3506 | 5 | 78429 |
| 2324 | $J/\psi 	o \pi^- \bar{K}^* K^+ \gamma^f, \bar{K}^* 	o \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 934 | 5 | 78434 |
| 2325 | $J/\psi \to K^* \bar{K}^* b_1^0, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9929 | 5 | 78439 |
| 2326 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 9964 | 5 | 78444 |
| 2327 | $J/\psi \to K^-K^{*+}f_2', K^{*+} \to \pi^0K^+, f_2' \to K^+K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 3522 | 5 | 78449 |
| 2328 | $J/\psi 	o \pi^- \bar{\Lambda} \Sigma^{*+}, \bar{\Lambda} 	o \pi^0 \bar{n}, \Sigma^{*+} 	o \pi^+ \Lambda, \Lambda 	o \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 10003 | 5 | 78454 |
| 2329 | $J/\psi \to \pi^0 a_2^- b_1^+, a_2^- \to \pi^0 \rho^-, b_1^+ \to \pi^+ \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 10035 | 5 | 78459 |
| 2330 | $J/\psi ightarrow ar{\Lambda} \Sigma^0 \gamma, ar{\Lambda} ightarrow \pi^0 ar{n}, \Sigma^0 ightarrow \Lambda \gamma, \Lambda ightarrow \pi^0 n$ | $\pi^0\pi^0n\bar{n}\gamma\gamma$ | 4312 | 5 | 78464 |
| 2331 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1401 | 5 | 78469 |
| 2332 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \phi \to K^+K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 10317 | 5 | 78474 |
| 2333 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10335 | 5 | 78479 |
| 2334 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 2563 | 5 | 78484 |
| 2335 | $J/\psi \to \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2566 | 5 | 78489 |
| 2336 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5631 | 5 | 78494 |
| 2337 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 10531 | 5 | 78499 |
| 2338 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 2277 | 5 | 78504 |
| 2339 | $J/\psi \to \pi^0 \pi^+ \rho^- a_0^0, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 10563 | 5 | 78509 |
| 2340 | $J/\psi 	o ar{K}^0 K^* b_1^0, ar{K}^0 	o K_L^0, K^* 	o \pi^- K^+, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 4335 | 5 | 78514 |
| 2341 | $J/\psi \to \rho^{+}\omega b_{1}^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, b_{1}^{-} \to \pi^{-}\omega, \pi^{0} \to e^{+}e^{-}\gamma^{F}, \omega \to \pi^{0}\pi^{+}\pi^{-}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 10762 | 5 | 78519 |
| 2342 | $J/\psi ightarrow \pi^+ \eta b_1^-, \eta ightarrow \pi^0 \pi^0 \pi^0, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 1403 | 5 | 78524 |
| 2343 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 10838 | 5 | 78529 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 2344 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 4337 | 5 | 78534 |
| 2345 | $J/\psi 	o \pi^- \eta b_1^+, \eta 	o \gamma \gamma, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 3546 | 5 | 78539 |
| 2346 | $J/\psi ightarrow ho^+ ho^- \gamma, ho^+ ightarrow \pi^0 \pi^+ \gamma^f, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma^f$ | 2946 | 5 | 78544 |
| 2347 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2576 | 5 | 78549 |
| 2348 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11361 | 5 | 78554 |
| 2349 | $J/\psi \to \omega K^- K^{*+}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 1136 | 5 | 78559 |
| 2350 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^+\Xi^-, \bar{\Xi}^{*0} \to \pi^-\bar{\Xi}^+, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 11562 | 5 | 78564 |
| 2351 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^0K^-, K_0^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 11591 | 5 | 78569 |
| 2352 | $J/\psi ightarrow \pi^0 ho^- b_1^+ \gamma, ho^- ightarrow \pi^0 \pi^-, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5681 | 5 | 78574 |
| 2353 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, \ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12010 | 5 | 78579 |
| 2354 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 3565 | 5 | 78584 |
| 2355 | $J/\psi \rightarrow ho^+ \omega b^1, ho^+ \rightarrow \pi^0 \pi^+, \omega \rightarrow \pi^0 \pi^+ \pi^-, b^1 \rightarrow \pi^- \omega \gamma^f, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 12248 | 5 | 78589 |
| 2356 | $J/\psi 	o ho^0 ar{K}^0 K_0^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_L^0, K_0^0 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 12559 | 5 | 78594 |
| 2357 | $J/\psi \to ho^0 ho^0 ho^0, ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 1138 | 5 | 78599 |
| 2358 | $J/\psi \to \rho^+ K^* \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 12881 | 5 | 78604 |
| 2359 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 12994 | 5 | 78609 |
| 2360 | $J/\psi \to K^{-}K_{1}^{'+}, K_{1}^{'+} \to \pi^{+}\pi^{-}K^{+}$ | $\pi^+\pi^-K^+K^-$ | 2037 | 4 | 78613 |
| 2361 | $J/\psi \to f_2(1270)K^-K^{*+}, f_2(1270) \to \pi^+\pi^-, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 2043 | 4 | 78617 |
| 2362 | $J/\psi ightarrow ho^0 \eta, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 89 | 4 | 78621 |
| 2363 | $J/\psi \to \bar{\Sigma}^0 \Sigma^{*0}, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \Sigma^{*0} \to \pi^+ \Sigma^-, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^- \to \pi^- n$ | $\pi^+\pi^+\pi^-nar p\gamma$ | 5667 | 4 | 78625 |
| 2364 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 916 | 4 | 78629 |
| 2365 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1302 | 4 | 78633 |
| 2366 | $J/\psi \to \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1303 | 4 | 78637 |
| 2367 | $J/\psi 	o \pi^0 ho^0 ho^+ ho^-, ho^0 	o \pi^+ \pi^- \gamma^f, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3413 | 4 | 78641 |
| 2368 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 2055 | 4 | 78645 |
| 2369 | $J/\psi \to ho^0 \pi^- \bar{K}^0 K^{*+}, ho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2392 | 4 | 78649 |
| 2370 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5703 | 4 | 78653 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 2371 | $J/\psi 	o K^0 ar{K}^0 b_1^0, K^0 	o K_S^0, ar{K}^0 	o K_S^0, b_1^0 	o \pi^0 \omega, K_S^0 	o \pi^+ \pi^-, \ K_S^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 661 | 4 | 78657 |
| 2372 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 921 | 4 | 78661 |
| 2373 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5713 | 4 | 78665 |
| 2374 | $J/\psi \to \bar{\Xi}^{+}\Xi^{*-}, \bar{\Xi}^{+} \to \pi^{+}\bar{\Lambda}, \Xi^{*-} \to \pi^{-}\Xi^{0}, \bar{\Lambda} \to \pi^{0}\bar{n}, \Xi^{0} \to \pi^{0}\Lambda, \Lambda \to \pi^{0}n$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 4288 | 4 | 78669 |
| 2375 | $J/\psi \to b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1813 | 4 | 78673 |
| 2376 | $J/\psi \to p\bar{p}f_0(1370), f_0(1370) \to \pi^0\pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 4290 | 4 | 78677 |
| 2377 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \bar{K}^0 K^+, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1626 | 4 | 78681 |
| 2378 | $J/\psi 	o ho^0 ho^0 \pi^- b_1^+, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 5739 | 4 | 78685 |
| 2379 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4297 | 4 | 78689 |
| 2380 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^- \rho^+, a_1^- \to \pi^0 \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 2803 | 4 | 78693 |
| 2381 | $J/\psi \to K^+ \phi K_0^{*-}, \phi \to K^+ K^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 5744 | 4 | 78697 |
| 2382 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 4300 | 4 | 78701 |
| 2383 | $J/\psi 	o \pi^0 ho^0 ho^0 \pi^- ho^+, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 607 | 4 | 78705 |
| 2384 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 5758 | 4 | 78709 |
| 2385 | $J/\psi ightarrow ho^0 ho^0 \omega, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 839 | 4 | 78713 |
| 2386 | $J/\psi 	o \pi^- a_2^+ a_0^0, a_2^+ 	o \pi^0 \pi^+ \omega, a_0^0 	o \pi^0 \eta, \omega 	o \pi^0 \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 761 | 4 | 78717 |
| 2387 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5774 | 4 | 78721 |
| 2388 | $J/\psi ightarrow \pi^0 \pi^+ a_1^-, a_1^- ightarrow ho^0 \pi^-, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5776 | 4 | 78725 |
| 2389 | $J/\psi \to \pi^0 \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 1314 | 4 | 78729 |
| 2390 | $J/\psi \to \eta \omega f_2(1270), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1633 | 4 | 78733 |
| 2391 | $J/\psi 	o ar K^0 p ar \Sigma^{*-}, ar K^0 	o K^0_S, ar \Sigma^{*-} 	o \pi^- ar \Lambda, K^0_S 	o \pi^+ \pi^-, ar \Lambda 	o \pi^+ ar p$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 4315 | 4 | 78737 |
| 2392 | $J/\psi \to \rho^{+}a_{2}^{-}, \rho^{+} \to \pi^{0}\pi^{+}, a_{2}^{-} \to \pi^{-}\eta, \eta \to \pi^{+}\pi^{-}\gamma^{F}$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 5790 | 4 | 78741 |
| 2393 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^- b_1^+, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2407 | 4 | 78745 |
| 2394 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^+\pi^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 1315 | 4 | 78749 |
| 2395 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5809 | 4 | 78753 |
| 2396 | $J/\psi \to \bar{K}^*K^{*+}a_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^0K^+, a_1^- \to \pi^0\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3460 | 4 | 78757 |
| 2397 | $J/\psi ightarrow \phi \sigma_0, \phi ightarrow K_L^0 K_S^0, \sigma_0 ightarrow \pi^+ \pi^-, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4324 | 4 | 78761 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 2398 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 200 | 4 | 78765 |
| 2399 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \rho^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5865 | 4 | 78769 |
| 2400 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 2412 | 4 | 78773 |
| 2401 | $J/\psi \to \rho^+ f_2(1270) a_0^-, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2825 | 4 | 78777 |
| 2402 | $J/\psi 	o f_0(1710)\gamma, f_0(1710) 	o \omega\omega, \omega 	o \pi^0\gamma, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2826 | 4 | 78781 |
| 2403 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \gamma\gamma$ | $\gamma\gamma\gamma\gamma\gamma$ | 5881 | 4 | 78785 |
| 2404 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o \pi^- \eta, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2827 | 4 | 78789 |
| 2405 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0K^0, K^{*-} \to \pi^0K^-, b_1^+ \to \pi^+\omega, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 1191 | 4 | 78793 |
| 2406 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 5900 | 4 | 78797 |
| 2407 | $J/\psi \to \rho^0 K^{*+} \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 5901 | 4 | 78801 |
| 2408 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^- \gamma^f, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5906 | 4 | 78805 |
| 2409 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5907 | 4 | 78809 |
| 2410 | $J/\psi \to \pi^0 ho^0 \omega b_1^0, ho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5913 | 4 | 78813 |
| 2411 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 3485 | 4 | 78817 |
| 2412 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 5916 | 4 | 78821 |
| 2413 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5918 | 4 | 78825 |
| 2414 | $J/\psi ightarrow \eta' par p, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0p\bar{p}$ | 4355 | 4 | 78829 |
| 2415 | $J/\psi \to \pi^0 \pi^+ \rho^- a_1^0, \rho^- \to \pi^0 \pi^-, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2086 | 4 | 78833 |
| 2416 | $J/\psi \to \pi^+ \pi^+ \rho^- a_1, \rho^- \to \pi^+ \pi^-, a_1 \to \pi^- \rho^+, \rho^+ \to \pi^+ \pi^+$ $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0,$ $\bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 2415 | 4 | 78837 |
| 2417 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3493 | 4 | 78841 |
| 2418 | $J/\psi ightarrow \pi^0 ho^0 \eta^\prime, ho^0 ightarrow \pi^+ \pi^-, \eta^\prime ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5955 | 4 | 78845 |
| 2419 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \rho^0 \bar{K}^0, K^0 \to K^0_L, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2416 | 4 | 78849 |
| 2420 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^0 K^-$ | $\pi^0 K^+ K^-$ | 716 | 4 | 78853 |
| 2421 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 4380 | 4 | 78857 |
| 2422 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 3503 | 4 | 78861 |
| 2423 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 1833 | 4 | 78865 |
| 2424 | $J/\psi \to \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 2091 | 4 | 78869 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2425 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2424 | 4 | 78873 |
| 2426 | $J/\psi 	o ho^- \eta a_0^+, ho^- 	o \pi^0 \pi^-, \eta 	o \pi^0 \pi^0 \pi^0, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 5970 | 4 | 78877 |
| 2427 | $J/\psi ightarrow \eta \eta \omega, \eta ightarrow \pi^0 \pi^0 \pi^0, \eta ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2425 | 4 | 78881 |
| 2428 | $J/\psi ightarrow \pi^0 \omega b_1^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3523 | 4 | 78885 |
| 2429 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^0 \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 2853 | 4 | 78889 |
| 2430 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \pi^+\pi^-\eta', \eta' \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 2428 | 4 | 78893 |
| 2431 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4403 | 4 | 78897 |
| 2432 | $J/\psi \to \phi f_0(1370), \phi \to K^+K^-, f_0(1370) \to \rho^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 928 | 4 | 78901 |
| 2433 | $J/\psi ightarrow \pi^- a_0^0 b_1^+, a_0^0 ightarrow \pi^0 \eta, b_1^+ ightarrow \pi^+ \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6009 | 4 | 78905 |
| 2434 | $J/\psi ightarrow \eta a_0^0 b_1^0, \eta ightarrow \gamma \gamma, a_0^0 ightarrow \pi^0 \eta, b_1^0 ightarrow \pi^0 \omega, \eta ightarrow \pi^0 \pi^0 \pi^0, \ \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1475 | 4 | 78909 |
| 2435 | $J/\psi \to \omega\omega\gamma, \omega \to \pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4416 | 4 | 78913 |
| 2436 | $J/\psi \to \bar{K}^0 K^+ a_1^-, \bar{K}^0 \to K_S^0, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4421 | 4 | 78917 |
| 2437 | $J/\psi \to \rho^0 f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2865 | 4 | 78921 |
| 2438 | $J/\psi \to K^{*-}p\bar{\Lambda}, K^{*-} \to \pi^-\bar{K}^0, \bar{\Lambda} \to \pi^0\bar{n}, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 4434 | 4 | 78925 |
| 2439 | $J/\psi \to \pi^+\pi^-\rho^-a_1^+, \rho^- \to \pi^0\pi^-, a_1^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2434 | 4 | 78929 |
| 2440 | $J/\psi \rightarrow \rho^- \eta a_0^+, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \pi^0 \pi^+ \pi^-, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6031 | 4 | 78933 |
| 2441 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3550 | 4 | 78937 |
| 2442 | $J/\psi \to \eta a_0^+ b_1^-, \eta \to \gamma \gamma, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 4440 | 4 | 78941 |
| 2443 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^F, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 4441 | 4 | 78945 |
| 2444 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 3554 | 4 | 78949 |
| 2445 | $J/\psi \to \pi^- \rho^+ f_2(1270) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 6052 | 4 | 78953 |
| 2446 | $J/\psi \to \pi^- \rho^+ \rho^- a_1^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3556 | 4 | 78957 |
| 2447 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^+K^0, \phi \to K^+K^-, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 1194 | 4 | 78961 |
| 2448 | $J/\psi 	o \eta \gamma, \eta 	o \pi^+\pi^-\gamma^F$ | $\pi^+\pi^-\gamma^F\gamma$ | 291 | 4 | 78965 |
| 2449 | $J/\psi 	o \pi^+ n \bar p \gamma^f$ | $\pi^+ n ar p \gamma^f$ | 6066 | 4 | 78969 |
| 2450 | $J/\psi 	o ho^0 ho^+ K^0 K^-, ho^0 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 1482 | 4 | 78973 |
| 2451 | $J/\psi ightarrow \pi^0 \eta b_1^0, \eta ightarrow \pi^+ \pi^- \gamma^F, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 4455 | 4 | 78977 |
| 2452 | $J/\psi \to ho^0 a_2^0, ho^0 \to \pi^+ \pi^- \gamma^F, a_2^0 \to \pi^+ ho^-, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 6079 | 4 | 78981 |
| 2453 | $J/\psi \to \pi^- \rho^+ \omega h_1(1170), \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 1324 | 4 | 78985 |
| 2454 | $J/\psi ightarrow \pi^0 \omega a_1^0, \omega ightarrow \pi^0 \gamma, a_1^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6094 | 4 | 78989 |
| 2455 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 6096 | 4 | 78993 |
| 2456 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6099 | 4 | 78997 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2457 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4461 | 4 | 79001 |
| 2458 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6123 | 4 | 79005 |
| 2459 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^+K^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1326 | 4 | 79009 |
| 2460 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \gamma \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^- \gamma \gamma$ | 527 | 4 | 79013 |
| 2461 | $J/\psi \to \pi^- b_1^+ a_1^0, b_1^+ \to \pi^+ \omega, a_1^0 \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4466 | 4 | 79017 |
| 2462 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 6130 | 4 | 79021 |
| 2463 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o \pi^0 \pi^- \omega, a_0^0 	o \pi^0 \eta, \omega 	o \pi^0 \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 2444 | 4 | 79025 |
| 2464 | $J/\psi \to K^0 \bar{K}^0 f_2', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_2' \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K^0_L\pi^+\pi^-K^+K^-$ | 6132 | 4 | 79029 |
| 2465 | $J/\psi 	o \pi^+\pi^-\eta K^+K^-, \eta 	o \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 4477 | 4 | 79033 |
| 2466 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^+\Xi^-, \bar{\Xi}^{*0} \to \pi^0\bar{\Xi}^0, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^0 \to \pi^0\bar{\Lambda},$ $\Lambda \to \pi^-\nu, \bar{\Lambda} \to \pi^+\bar{\nu}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 3581 | 4 | 79037 |
| 2467 | $J/\psi 	o ho^0 a_0^0 \eta, ho^0 	o \pi^+ \pi^-, a_0^0 	o \pi^+ ho^-, \eta 	o \pi^0 \pi^0 \pi^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 375 | 4 | 79041 |
| 2468 | $J/\psi \to \pi^- K^+ \bar{K}^0_1, \bar{K}^0_1 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4488 | 4 | 79045 |
| 2469 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 2446 | 4 | 79049 |
| 2470 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^F, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 2449 | 4 | 79053 |
| 2471 | $J/\psi \to ho^0 \pi^+ a_0^-, ho^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2450 | 4 | 79057 |
| 2472 | $J/\psi 	o \eta \Lambda ar{\Lambda}, \eta 	o \gamma \gamma, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^-par p\gamma\gamma$ | 377 | 4 | 79061 |
| 2473 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 4508 | 4 | 79065 |
| 2474 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^+ \pi^- \gamma^F, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 1857 | 4 | 79069 |
| 2475 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6231 | 4 | 79073 |
| 2476 | $J/\psi \to ho^0 a_2^0, ho^0 \to \pi^+\pi^-, a_2^0 \to \pi^+\rho^-, ho^- \to \pi^0\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 1660 | 4 | 79077 |
| 2477 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 3601 | 4 | 79081 |
| 2478 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 6249 | 4 | 79085 |
| 2479 | $J/\psi 	o ar{p}\Delta^+\gamma^F, \Delta^+ 	o \pi^0 p$ | $\pi^0 p \bar{p} \gamma^F$ | 6250 | 4 | 79089 |
| 2480 | $J/\psi \to \pi^0 \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6258 | 4 | 79093 |
| 2481 | $J/\psi \to \rho^+ \omega K^* K^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2462 | 4 | 79097 |
| 2482 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^+\pi^-, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2908 | 4 | 79101 |
| 2483 | $J/\psi \to K^{+} \bar{K}_{1}^{'-}, \bar{K}_{1}^{'-} \to \pi^{+} \pi^{-} K^{-}$ | $\pi^+\pi^-K^+K^-$ | 6276 | 4 | 79105 |
| 2484 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^+K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1200 | 4 | 79109 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 2485 | $J/\psi \to \phi f_2', \phi \to \pi^+ \rho^-, f_2' \to K^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 573 | 4 | 79113 |
| 2486 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 6305 | 4 | 79117 |
| 2487 | $J/\psi \to K^* \bar{n}\Lambda, K^* \to \pi^0 K^0, \Lambda \to \pi^- p, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- ar{n} p$ | 6309 | 4 | 79121 |
| 2488 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 4546 | 4 | 79125 |
| 2489 | $J/\psi ightarrow ho^+ ho^- \omega \gamma^f, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6317 | 4 | 79129 |
| 2490 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^+ \pi^- \omega, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 4551 | 4 | 79133 |
| 2491 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^+ \pi^-, \phi \to K_L^0 K_S^0, f_0(980) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 1667 | 4 | 79137 |
| 2492 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 4555 | 4 | 79141 |
| 2493 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 3612 | 4 | 79145 |
| 2494 | $J/\psi \to \pi^- \rho^+ b_1^0 \gamma^F, \rho^+ \to \pi^0 \pi^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 4559 | 4 | 79149 |
| 2495 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 2476 | 4 | 79153 |
| 2496 | $J/\psi ightarrow ho^0 \eta, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 379 | 4 | 79157 |
| 2497 | $J/\psi 	o ho^0 K^+ K_2^{*-}, ho^0 	o \pi^+ \pi^-, K_2^{*-} 	o \pi^- ar{K}^0, ar{K}^0 	o K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 6360 | 4 | 79161 |
| 2498 | $J/\psi \to \rho^+ K^* \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6361 | 4 | 79165 |
| 2499 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^- \rho^+, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 226 | 4 | 79169 |
| 2500 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2129 | 4 | 79173 |
| 2501 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4571 | 4 | 79177 |
| 2502 | $J/\psi \to \pi^+ p \bar{\Delta}^{++} \gamma^f, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^-par p\gamma^f$ | 256 | 4 | 79181 |
| 2503 | $J/\psi 	o \eta\eta\phi, \eta 	o \gamma\gamma, \eta 	o \pi^0\pi^0\pi^0, \phi 	o K^+K^-$ | $\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 3635 | 4 | 79185 |
| 2504 | $J/\psi 	o a_2^0 \pi^+ a_2^-, a_2^0 	o \pi^+ \pi^- \omega, a_2^- 	o \pi^0 ho^-, \omega 	o \pi^0 \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1679 | 4 | 79189 |
| 2505 | $J/\psi \to \rho^0 a_0^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6395 | 4 | 79193 |
| 2506 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^+K^-K^-$ | 6402 | 4 | 79197 |
| 2507 | $J/\psi \to a_2^+ b_1^-, a_2^+ \to \pi^0 \rho^+, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6426 | 4 | 79201 |
| 2508 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2486 | 4 | 79205 |
| 2509 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^* \to \pi^- K^+, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 1501 | 4 | 79209 |
| 2510 | $J/\psi ightarrow ho^-ar{\Delta}^0 p, ho^- ightarrow \pi^0 \pi^-, ar{\Delta}^0 ightarrow \pi^+ ar{p}$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 6447 | 4 | 79213 |
| 2511 | $J/\psi \to \rho^0 K^+ K_0^{*-}, \rho^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2491 | 4 | 79217 |
| 2512 | $J/\psi 	o \eta\eta\gamma, \eta 	o \gamma\gamma, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 2492 | 4 | 79221 |
| 2513 | $J/\psi \to \pi^0\pi^-\rho^+\rho^-b_1^+, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1502 | 4 | 79225 |
| 2514 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1881 | 4 | 79229 |
| 2515 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0 K^0_L K^0_L \pi^+\pi^-$ | 6484 | 4 | 79233 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 2516 | $J/\psi \to \phi f_0(1710), \phi \to \pi^+ \rho^-, f_0(1710) \to \omega \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2958 | 4 | 79237 |
| 2517 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 2148 | 4 | 79241 |
| 2518 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to \pi^+\pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^+K^-, K^0_S \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 6500 | 4 | 79245 |
| 2519 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^0K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 4626 | 4 | 79249 |
| 2520 | $J/\psi \to \phi f_0(2020), \phi \to K^+K^-, f_0(2020) \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-$ | 6507 | 4 | 79253 |
| 2521 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6525 | 4 | 79257 |
| 2522 | $J/\psi ightarrow ho^- \omega b_1^+, ho^- ightarrow \pi^0 \pi^- \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 2149 | 4 | 79261 |
| 2523 | $J/\psi ightarrow \eta K^0 ar K^0, \eta ightarrow \pi^0 \pi^+ \pi^-, K^0 ightarrow K^0_L, ar K^0 ightarrow K^0_L$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4636 | 4 | 79265 |
| 2524 | $J/\psi \to \pi^0 K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3684 | 4 | 79269 |
| 2525 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3685 | 4 | 79273 |
| 2526 | $J/\psi \to \pi^+ \rho^- h_1(1170) \gamma^F, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 1208 | 4 | 79277 |
| 2527 | $J/\psi ightarrow \pi^- ho^+ \eta^\prime, ho^+ ightarrow \pi^0 \pi^+, \eta^\prime ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 6551 | 4 | 79281 |
| 2528 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4658 | 4 | 79285 |
| 2529 | $J/\psi \to \bar{K}^0 K^* \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 6560 | 4 | 79289 |
| 2530 | $J/\psi \to \pi^- K^+ \bar{K}^0_1, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 778 | 4 | 79293 |
| 2531 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 24 | 4 | 79297 |
| 2532 | $J/\psi \to \pi^- K^+ \bar{K}_1^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4666 | 4 | 79301 |
| 2533 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6593 | 4 | 79305 |
| 2534 | $J/\psi ightarrow \pi^0 a^0_0 \gamma, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 6597 | 4 | 79309 |
| 2535 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1695 | 4 | 79313 |
| 2536 | $J/\psi \to \pi^- \rho^+ \omega \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4677 | 4 | 79317 |
| 2537 | $J/\psi 	o ar{K}^*K^+a_0^-, ar{K}^* 	o \pi^0ar{K}^0, a_0^- 	o \pi^-\eta, ar{K}^0 	o K_S^0, \eta 	o \pi^0\pi^0\pi^0, K_S^0 	o \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 1508 | 4 | 79321 |
| 2538 | $J/\psi 	o \pi^+\pi^- n \bar{n} \gamma^f$ | $\pi^+\pi^-nar{n}\gamma^f$ | 2512 | 4 | 79325 |
| 2539 | $J/\psi \to \rho^0 \pi^+ K^* K^-, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3708 | 4 | 79329 |
| 2540 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \omega \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6638 | 4 | 79333 |
| 2541 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2513 | 4 | 79337 |
| 2542 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3005 | 4 | 79341 |
| 2543 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3712 | 4 | 79345 |
| 2544 | $J/\psi ightarrow K^0K^-a_0^+, K^0 ightarrow K_L^0, a_0^+ ightarrow \pi^+\eta, \eta ightarrow \gamma\gamma$ | $K_L^0\pi^+K^-\gamma\gamma$ | 6669 | 4 | 79349 |
| 2545 | $J/\psi ightarrow \pi^+ a_2^-, a_2^- ightarrow ho^0 \pi^- \gamma^f, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1890 | 4 | 79353 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2546 | $J/\psi \to \rho^+ \rho^- \gamma, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma^f$ | 6681 | 4 | 79357 |
| 2547 | $J/\psi \to K^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+$ | 6684 | 4 | 79361 |
| 2548 | $J/\psi \to ho^0 a_2^0, ho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- ho^+, ho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 3009 | 4 | 79365 |
| 2549 | $J/\psi ightarrow a_2^0 \pi^+ \pi^-, a_2^0 ightarrow \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6691 | 4 | 79369 |
| 2550 | $J/\psi \to \pi^+\pi^-b_1^0h_1(1170), b_1^0 \to \pi^0\omega, h_1(1170) \to \pi^+\rho^-, \omega \to \pi^0\pi^+\pi^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1123 | 4 | 79373 |
| 2551 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^{*-}, \Lambda \to \pi^0 n, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 4699 | 4 | 79377 |
| 2552 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 4700 | 4 | 79381 |
| 2553 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6719 | 4 | 79385 |
| 2554 | $J/\psi \to \pi^+\pi^+\rho^-a_1^-, \rho^- \to \pi^0\pi^-, a_1^- \to \pi^0\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1513 | 4 | 79389 |
| 2555 | $J/\psi \to \pi^0 \pi^0 \rho^0 a_2^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4702 | 4 | 79393 |
| 2556 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \gamma \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 3726 | 4 | 79397 |
| 2557 | $J/\psi ightarrow ho^0 ho^0 \pi^- ho^+, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^- \gamma^f, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 4709 | 4 | 79401 |
| 2558 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 6758 | 4 | 79405 |
| 2559 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \rho^0 \gamma, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 2175 | 4 | 79409 |
| 2560 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4715 | 4 | 79413 |
| 2561 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^0K^+, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2176 | 4 | 79417 |
| 2562 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+K^-$ | 6788 | 4 | 79421 |
| 2563 | $J/\psi 	o K^+K_1^-, K_1^- 	o ho^-ar{K}^0, ho^- 	o \pi^0\pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 1124 | 4 | 79425 |
| 2564 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 1904 | 4 | 79429 |
| 2565 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 494 | 4 | 79433 |
| 2566 | $J/\psi \to a_2^0 \pi^- \rho^+, a_2^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1701 | 4 | 79437 |
| 2567 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \rho^-\bar{K}^0, K^0 \to K_L^0, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 4732 | 4 | 79441 |
| 2568 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-$ | 6824 | 4 | 79445 |
| 2569 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, b_1^0 \to \pi^0\omega, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 1913 | 4 | 79449 |
| 2570 | $J/\psi \to K^+ \bar{\Delta}^{++} \Sigma^+, \bar{\Delta}^{++} \to \pi^- \bar{p}, \Sigma^+ \to \pi^0 p$ | $\pi^0\pi^-K^+par{p}$ | 864 | 4 | 79453 |
| 2571 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^0\Xi^0, \bar{\Xi}^{*0} \to \pi^-\bar{\Xi}^+, \Xi^0 \to \pi^0\Lambda, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Lambda \to \pi^-p, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}\bar{n}p$ | 2188 | 4 | 79457 |
| 2572 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6846 | 4 | 79461 |
| 2573 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4752 | 4 | 79465 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 2574 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3756 | 4 | 79469 |
| 2575 | $J/\psi 	o a_2^0 \pi^+ a_1^-, a_2^0 	o \pi^0 \eta, a_1^- 	o ho^0 \pi^-, \eta 	o \pi^0 \pi^0, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6853 | 4 | 79473 |
| 2576 | $J/\psi \rightarrow ho^+ K^0 K^- \gamma^F, ho^+ \rightarrow \pi^0 \pi^+, K^0 \rightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^F$ | 951 | 4 | 79477 |
| 2577 | $J/\psi 	o K^-K^{*+}a_0^0, K^{*+} 	o \pi^+K^0, a_0^0 	o \pi^0\eta, K^0 	o K_L^0, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 3761 | 4 | 79481 |
| 2578 | $J/\psi 	o ho^0 \pi^+ a_2^- \omega, ho^0 	o \pi^+ \pi^-, a_2^- 	o \pi^0 ho^-, \omega 	o \pi^0 \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6883 | 4 | 79485 |
| 2579 | $J/\psi \to K^- K_0^{*+} \gamma^F, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma^F$ | 1922 | 4 | 79489 |
| 2580 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2553 | 4 | 79493 |
| 2581 | $J/\psi \to \phi f_0(1370), \phi \to K_L^0 K_S^0, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 6922 | 4 | 79497 |
| 2582 | $J/\psi ightarrow \pi^- \eta K_S^0 K^+, \eta ightarrow \pi^+ \pi^- \gamma^F, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 4784 | 4 | 79501 |
| 2583 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \phi \to K_L^0K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 6943 | 4 | 79505 |
| 2584 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 953 | 4 | 79509 |
| 2585 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 4787 | 4 | 79513 |
| 2586 | $J/\psi 	o \pi^+ K^- K^0_0, K^0_0 	o \pi^0 K^0, K^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 1708 | 4 | 79517 |
| 2587 | $J/\psi \to \eta K^- K^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3772 | 4 | 79521 |
| 2588 | $J/\psi ightarrow \phi f_2^\prime, \phi ightarrow K_L^0 K_S^0, f_2^\prime ightarrow K^+ K^-, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K^+K^-$ | 2557 | 4 | 79525 |
| 2589 | $J/\psi \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F$ | 1133 | 4 | 79529 |
| 2590 | $J/\psi 	o a_2^0 \pi^+ \pi^-, a_2^0 	o \pi^+ ho^- \gamma^f, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6997 | 4 | 79533 |
| 2591 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4804 | 4 | 79537 |
| 2592 | $J/\psi \to \eta \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 2562 | 4 | 79541 |
| 2593 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^0\bar{\Xi}^+, \Xi^{*-} \to \pi^-\Xi^0, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^0 \to \pi^0\Lambda, \\ \bar{\Lambda} \to \pi^+\bar{p}, \Lambda \to \pi^-p$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 1940 | 4 | 79545 |
| 2594 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4813 | 4 | 79549 |
| 2595 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 3069 | 4 | 79553 |
| 2596 | $J/\psi \to \bar{K}^*K^+a_1^-, \bar{K}^* \to \pi^+K^-, a_1^- \to \pi^0\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4825 | 4 | 79557 |
| 2597 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^-\rho^+, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 1224 | 4 | 79561 |
| 2598 | $J/\psi \to ho^0 K^- K^{*+} \gamma^F, ho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 7039 | 4 | 79565 |
| 2599 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 1368 | 4 | 79569 |
| 2600 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^f, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^f$ | 2209 | 4 | 79573 |
| 2601 | $J/\psi \to K^0 \bar{K}_0^{*0} \gamma, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma$ | 7064 | 4 | 79577 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 2602 | $J/\psi \to \eta K^- K^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3800 | 4 | 79581 |
| 2603 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 4847 | 4 | 79585 |
| 2604 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4850 | 4 | 79589 |
| 2605 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4851 | 4 | 79593 |
| 2606 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- h_1(1170), \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7115 | 4 | 79597 |
| 2607 | $J/\psi \to \rho^+ \Sigma^0 \bar{\Sigma}^-, \rho^+ \to \pi^0 \pi^+, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^- \to \pi^0 \bar{p}, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-par p\gamma$ | 2574 | 4 | 79601 |
| 2608 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 4855 | 4 | 79605 |
| 2609 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7131 | 4 | 79609 |
| 2610 | $J/\psi \to \pi^0 a_2^0 \pi^- \rho^+, a_2^0 \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3802 | 4 | 79613 |
| 2611 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7135 | 4 | 79617 |
| 2612 | $J/\psi 	o ar K^* n ar \Lambda, ar K^* 	o \pi^0 ar K^0, ar \Lambda 	o \pi^+ ar p, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ n ar p$ | 3096 | 4 | 79621 |
| 2613 | $J/\psi 	o \omega \Lambda ar{\Lambda}, \omega 	o \pi^0 \pi^+ \pi^-, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-nar{n}$ | 3807 | 4 | 79625 |
| 2614 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \pi^+\pi^-\eta', \eta' \to \rho^0\gamma, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7146 | 4 | 79629 |
| 2615 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^- K^+$ | 2575 | 4 | 79633 |
| 2616 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4873 | 4 | 79637 |
| 2617 | $J/\psi \to K^+ K_1^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 3812 | 4 | 79641 |
| 2618 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 3820 | 4 | 79645 |
| 2619 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 313 | 4 | 79649 |
| 2620 | $J/\psi \to \pi^0 ho^0 ho^0 \omega, ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3822 | 4 | 79653 |
| 2621 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 7184 | 4 | 79657 |
| 2622 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4891 | 4 | 79661 |
| 2623 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 2212 | 4 | 79665 |
| 2624 | $J/\psi 	o \pi^0 \gamma$ | $\pi^0\gamma$ | 7196 | 4 | 79669 |
| 2625 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1229 | 4 | 79673 |
| 2626 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_0(1370) \to \rho^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7198 | 4 | 79677 |
| 2627 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^* K^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 315 | 4 | 79681 |
| 2628 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^0 \rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 7211 | 4 | 79685 |
| 2629 | $J/\psi \to \pi^+ \pi^+ \rho^- \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 682 | 4 | 79689 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 2630 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^0 \bar{K}^{*0}_0, \bar{K}^{*0}_0 \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 7235 | 4 | 79693 |
| 2631 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 456 | 4 | 79697 |
| 2632 | $J/\psi 	o \pi^0 ho^- a_0^+, ho^- 	o \pi^0 \pi^-, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7251 | 4 | 79701 |
| 2633 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \eta f_2(1270), \eta \to \pi^0 \pi^0 \pi^0, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 7261 | 4 | 79705 |
| 2634 | $J/\psi \to \Xi^-\bar{\Xi}^{*+}, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^{*+} \to \pi^0\bar{\Xi}^+, \Lambda \to \pi^-p, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 7262 | 4 | 79709 |
| 2635 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2592 | 4 | 79713 |
| 2636 | $J/\psi ightarrow ho^- a_2^+ \gamma^f, ho^- ightarrow \pi^0 \pi^-, a_2^+ ightarrow ho^0 \pi^+, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7289 | 4 | 79717 |
| 2637 | $J/\psi \to \pi^+ K^* K^{*-} \gamma^F, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 2594 | 4 | 79721 |
| 2638 | $J/\psi \to \pi^+\pi^-a^0_1, a^0_1 \to \pi^+\rho^-\gamma^f, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7298 | 4 | 79725 |
| 2639 | $J/\psi ightarrow \pi^+ ho^- \omega \omega, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7311 | 4 | 79729 |
| 2640 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1141 | 4 | 79733 |
| 2641 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1144 | 4 | 79737 |
| 2642 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7338 | 4 | 79741 |
| 2643 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1381 | 4 | 79745 |
| 2644 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 3849 | 4 | 79749 |
| 2645 | $J/\psi ightarrow \pi^+ \eta' b_1^-, \eta' ightarrow \pi^0 \pi^0 \eta, b_1^- ightarrow \pi^- \omega, \eta ightarrow \pi^0 \pi^0 \pi^0, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1043 | 4 | 79753 |
| 2646 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 7369 | 4 | 79757 |
| 2647 | $J/\psi 	o \pi^+ K^- K_1^0, K_1^0 	o \omega K^0, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7374 | 4 | 79761 |
| 2648 | $J/\psi 	o \pi^0 a_2^0 \omega, a_2^0 	o K_L^0 K_L^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 7387 | 4 | 79765 |
| 2649 | $J/\psi \to f_2(1270)K^-K^{*+}, f_2(1270) \to \pi^0\pi^0, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7388 | 4 | 79769 |
| 2650 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 4939 | 4 | 79773 |
| 2651 | $J/\psi \to \pi^0 K^0 \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 2246 | 4 | 79777 |
| 2652 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 2607 | 4 | 79781 |
| 2653 | $J/\psi ightarrow \pi^+\pi^-\omega b_1^0, \omega ightarrow \pi^0\pi^+\pi^-, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 7420 | 4 | 79785 |
| 2654 | $J/\psi \to \rho^0 b_1^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, h_1(1170) \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4949 | 4 | 79789 |
| 2655 | $J/\psi \to \pi^+ a_2^- a_1^0, a_2^- \to \pi^- \eta, a_1^0 \to \pi^- \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4950 | 4 | 79793 |
| 2656 | $J/\psi \to \pi^+ \rho^- \eta \gamma^f, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 4951 | 4 | 79797 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2657 | $J/\psi \to \pi^+ \rho^- \eta', \rho^- \to \pi^0 \pi^-, \eta' \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1958 | 4 | 79801 |
| 2658 | $J/\psi \to \pi^+\pi^-K^*\bar{K}^*, K^* \to \pi^-K^+, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 4954 | 4 | 79805 |
| 2659 | $J/\psi ightarrow \pi^+ ho^+ ho^- ho^-, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, ho^- ightarrow \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7457 | 4 | 79809 |
| 2660 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7495 | 4 | 79813 |
| 2661 | $J/\psi 	o \pi^+ f_2(1270) b_1^-, f_2(1270) 	o \pi^0 \pi^0 \pi^+ \pi^-, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7503 | 4 | 79817 |
| 2662 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{f}$ | 4956 | 4 | 79821 |
| 2663 | $J/\psi \to K^+K^-\phi\gamma^F, \phi \to K^+K^-$ | $K^+K^+K^-K^-\gamma^F$ | 7540 | 4 | 79825 |
| 2664 | $J/\psi 	o \pi^0 \pi^+ K^0 K^-, K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 3138 | 4 | 79829 |
| 2665 | $J/\psi \to K^+ \bar{\Delta}^{++} \Sigma^+, \bar{\Delta}^{++} \to \pi^- \bar{p}, \Sigma^+ \to \pi^+ n$ | $\pi^+\pi^-K^+nar{p}$ | 7556 | 4 | 79833 |
| 2666 | $J/\psi ightarrow \eta f_0(1710)\gamma, \eta ightarrow \gamma\gamma, f_0(1710) ightarrow \pi^0\pi^0$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 7565 | 4 | 79837 |
| 2667 | $J/\psi \to K^{*-}K_1^{'+}\gamma, K^{*-} \to \pi^0K^-, K_1^{'+} \to \pi^+K^*, K^* \to \pi^-K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 4964 | 4 | 79841 |
| 2668 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 ho^0 \omega, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7591 | 4 | 79845 |
| 2669 | $J/\psi \to \rho^- b_1^+ h_1(1170), \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7602 | 4 | 79849 |
| 2670 | $J/\psi \to K^* \bar{K}_1^{'0} \gamma, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 4965 | 4 | 79853 |
| 2671 | $J/\psi \to \pi^- \bar{n} p a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 7617 | 4 | 79857 |
| 2672 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^0\bar{\Xi}^+, \Xi^{*-} \to \pi^-\Xi^0, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^0 \to \pi^0\Lambda, \\ \bar{\Lambda} \to \pi^+\bar{p}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-nar{p}$ | 1733 | 4 | 79861 |
| 2673 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \rho^0 \pi^- \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4971 | 4 | 79865 |
| 2674 | $J/\psi \to f_0(1370)h_1(1170), f_0(1370) \to \pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7635 | 4 | 79869 |
| 2675 | $J/\psi \to \pi^0 f_2(1270) b_1^0, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3871 | 4 | 79873 |
| 2676 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^0K^+, \eta' \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7657 | 4 | 79877 |
| 2677 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^0\pi^0, \phi \to K_L^0K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 1045 | 4 | 79881 |
| 2678 | $J/\psi 	o ho^0 \eta a_0^0, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7672 | 4 | 79885 |
| 2679 | $J/\psi 	o \pi^+ \eta' b_1^-, \eta' 	o \pi^+ \pi^- \eta, b_1^- 	o \pi^- \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2256 | 4 | 79889 |
| 2680 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^0 K^0 \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 7718 | 4 | 79893 |
| 2681 | $J/\psi \to \pi^0 \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7719 | 4 | 79897 |
| 2682 | $J/\psi \to \pi^0 K^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 3883 | 4 | 79901 |
| 2683 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3887 | 4 | 79905 |
| 2684 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K^0_L \pi^+ \pi^- K^+ K^-$ | 1739 | 4 | 79909 |
| 2685 | $J/\psi \to \pi^+ K^* \bar{K}_1^{'-}, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 4993 | 4 | 79913 |
| 2686 | $J/\psi \to \rho^0 K^{*+} \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 4994 | 4 | 79917 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2687 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \gamma \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 4998 | 4 | 79921 |
| 2688 | $J/\psi \to f_2' h_1(1380), f_2' \to K_L^0 K_L^0, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 5000 | 4 | 79925 |
| 2689 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 7782 | 4 | 79929 |
| 2690 | $J/\psi \to \pi^+ a_2^- f_2(1270), a_2^- \to \pi^0 \rho^-, f_2(1270) \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 635 | 4 | 79933 |
| 2691 | $J/\psi 	o K^- K_2^{*+}, K_2^{*+} 	o \pi^0 K^+$ | $\pi^0 K^+ K^-$ | 7802 | 4 | 79937 |
| 2692 | $J/\psi \to K^+ K_0^{*-} \gamma^F, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma^F$ | 7805 | 4 | 79941 |
| 2693 | $J/\psi \to \pi^0 \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1973 | 4 | 79945 |
| 2694 | $J/\psi \to \rho^0 \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 3171 | 4 | 79949 |
| 2695 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^0 \pi^0, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 7840 | 4 | 79953 |
| 2696 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5026 | 4 | 79957 |
| 2697 | $J/\psi \to K^{*-}p\bar{\Lambda}, K^{*-} \to \pi^-\bar{K}^0, \bar{\Lambda} \to \pi^0\bar{n}, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- ar{n} p$ | 7845 | 4 | 79961 |
| 2698 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 3911 | 4 | 79965 |
| 2699 | $J/\psi \to \pi^0 \rho^0 \pi^+ \pi^- \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7875 | 4 | 79969 |
| 2700 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0K^0, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-\pi^-$ | 7884 | 4 | 79973 |
| 2701 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^- \rho^+, a_2^- \to \pi^0 \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7886 | 4 | 79977 |
| 2702 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \rho^- K^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7889 | 4 | 79981 |
| 2703 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 7896 | 4 | 79985 |
| 2704 | $J/\psi 	o ho^0 h_1(1170) \gamma, ho^0 	o \pi^+\pi^-, h_1(1170) 	o \pi^+ ho^-, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1974 | 4 | 79989 |
| 2705 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \pi^0 \rho^+, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7905 | 4 | 79993 |
| 2706 | $J/\psi \to \phi f_0(2020), \phi \to K_L^0 K_S^0, f_0(2020) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0 K_L^0\pi^+\pi^-$ | 1244 | 4 | 79997 |
| 2707 | $J/\psi ightarrow \pi^+ ho^- \eta', ho^- ightarrow \pi^0 \pi^-, \eta' ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 7910 | 4 | 80001 |
| 2708 | $J/\psi 	o \pi^- ho^+ a_0^0, ho^+ 	o \pi^0 \pi^+, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7954 | 4 | 80005 |
| 2709 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+\pi^-, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^+\pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5036 | 4 | 80009 |
| 2710 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7960 | 4 | 80013 |
| 2711 | $J/\psi \to \pi^+ \rho^- K^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1391 | 4 | 80017 |
| 2712 | $J/\psi 	o K^+ b_1^- ar{K}_0^{*0}, b_1^- 	o \pi^- \omega, ar{K}_0^{*0} 	o \pi^+ K^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7972 | 4 | 80021 |
| 2713 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 3184 | 4 | 80025 |
| 2714 | $J/\psi \to \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 16 | 4 | 80029 |
| 2715 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^+$ | $K_L^0\pi^-K^+\gamma$ | 1250 | 4 | 80033 |
| 2716 | $J/\psi \to \bar{\Xi}^0 \Xi^{*0}, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Xi^{*0} \to \pi^0 \Xi^0, \bar{\Lambda} \to \pi^+ \bar{p}, \Xi^0 \to \pi^0 \Lambda, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 5059 | 4 | 80037 |
| 2717 | $J/\psi 	o \pi^0\pi^0 par p$ | $\pi^0\pi^0p\bar{p}$ | 8001 | 4 | 80041 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2718 | $J/\psi \to \pi^+ K^- K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 5061 | 4 | 80045 |
| 2719 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1564 | 4 | 80049 |
| 2720 | $J/\psi \to \bar{K}^* K_2^{*0} \gamma, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma$ | 3951 | 4 | 80053 |
| 2721 | $J/\psi \to a_2^0 \pi^+ \pi^-, a_2^0 \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3952 | 4 | 80057 |
| 2722 | $J/\psi \to \pi^- a_0^0 b_1^+, a_0^0 \to \pi^0 \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5078 | 4 | 80061 |
| 2723 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^- a_2^+, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 459 | 4 | 80065 |
| 2724 | $J/\psi \to \pi^+\pi^-\rho^+a_1^-, \rho^+ \to \pi^0\pi^+, a_1^- \to \pi^0\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3960 | 4 | 80069 |
| 2725 | $J/\psi ightarrow \pi^+ ho^- \eta', ho^- ightarrow \pi^0 \pi^-, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 504 | 4 | 80073 |
| 2726 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 8083 | 4 | 80077 |
| 2727 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^0K^+K^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 5087 | 4 | 80081 |
| 2728 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 8111 | 4 | 80085 |
| 2729 | $J/\psi \to K^{*-}K_1^{'+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 2647 | 4 | 80089 |
| 2730 | $J/\psi \to \pi^0 \omega a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 807 | 4 | 80093 |
| 2731 | $J/\psi ightarrow par{p}a^0_0, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0 p ar p \gamma \gamma$ | 3972 | 4 | 80097 |
| 2732 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 5101 | 4 | 80101 |
| 2733 | $J/\psi ightarrow \pi^+ K_S^0 K^- \phi, K_S^0 ightarrow \pi^0 \pi^0, \phi ightarrow K^+ K^-$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 8139 | 4 | 80105 |
| 2734 | $J/\psi \to \pi^+ \rho^- K^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8148 | 4 | 80109 |
| 2735 | $J/\psi \to \rho^0 b_1^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3973 | 4 | 80113 |
| 2736 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8156 | 4 | 80117 |
| 2737 | $J/\psi \to \pi^0 \pi^0 \omega, \omega \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 2287 | 4 | 80121 |
| 2738 | $J/\psi \to \pi^0 K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^-K^+$ | 8185 | 4 | 80125 |
| 2739 | $J/\psi ightarrow ho^0 \omega b_1^0, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8188 | 4 | 80129 |
| 2740 | $J/\psi \to \pi^+ \omega K_S^0 K^-, \omega \to \pi^0 \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 8193 | 4 | 80133 |
| 2741 | $J/\psi \to \pi^+\pi^-\omega h_1(1170), \omega \to \pi^0\pi^+\pi^-, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3213 | 4 | 80137 |
| 2742 | $J/\psi \to K^0 \bar{K}_0^{*0} \gamma, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 5132 | 4 | 80141 |
| 2743 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1992 | 4 | 80145 |
| 2744 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 8217 | 4 | 80149 |
| 2745 | $J/\psi \to \rho^+ \eta a_0^-, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3988 | 4 | 80153 |
| 2746 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L K^0_L K^0_L \pi^+ \pi^-$ | 3989 | 4 | 80157 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 2747 | $J/\psi \to \pi^+ K^0 K^{*-} \gamma^F, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 391 | 4 | 80161 |
| 2748 | $J/\psi \to \pi^0 ho^0 ho^+ ho^-, ho^0 \to \pi^+ \pi^-, ho^+ \to \pi^0 \pi^+, ho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 2295 | 4 | 80165 |
| 2749 | $J/\psi \to K^0 \bar{K}_1^{'0}, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^-$ | 8277 | 4 | 80169 |
| 2750 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8282 | 4 | 80173 |
| 2751 | $J/\psi \to \rho^0 a_2^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- \rho^+ \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8303 | 4 | 80177 |
| 2752 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^0K^0, a_0^+ \to \pi^+\eta, K^0 \to K_L^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8304 | 4 | 80181 |
| 2753 | $J/\psi \to \Lambda \bar{\Sigma}^{*0}, \Lambda \to \pi^- p, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^-par{p}$ | 8309 | 4 | 80185 |
| 2754 | $J/\psi 	o \pi^+ K^* K^- b_1^0, K^* 	o \pi^- K^+, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3223 | 4 | 80189 |
| 2755 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 2298 | 4 | 80193 |
| 2756 | $J/\psi \to K^+ {ar K_1^{'-}}, {ar K_1^{'-}} \to ho^- {ar K}^0, ho^- \to \pi^0 \pi^-, {ar K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 132 | 4 | 80197 |
| 2757 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^+K^0K^-, K^0 \to K_L^0$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 3229 | 4 | 80201 |
| 2758 | $J/\psi \to K^{*+} \bar{K}_1^{'-} \gamma, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^-K^+\gamma$ | 8350 | 4 | 80205 |
| 2759 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^+ \pi^- \gamma^f, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1159 | 4 | 80209 |
| 2760 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3232 | 4 | 80213 |
| 2761 | $J/\psi \to \omega \Lambda \bar{\Lambda}, \omega \to \pi^0 \pi^+ \pi^-, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 2672 | 4 | 80217 |
| 2762 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8384 | 4 | 80221 |
| 2763 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \eta', \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 8419 | 4 | 80225 |
| 2764 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8420 | 4 | 80229 |
| 2765 | $J/\psi \to \bar{\Xi}^+\Xi^{*-}, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^{*-} \to \pi^0\Xi^-, \bar{\Lambda} \to \pi^+\bar{p}, \Xi^- \to \pi^-\Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 5175 | 4 | 80233 |
| 2766 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 8443 | 4 | 80237 |
| 2767 | $J/\psi \to \eta' \phi, \eta' \to \pi^+ \pi^- \eta, \phi \to K^+ K^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3234 | 4 | 80241 |
| 2768 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \gamma, f_2(1270) \to \pi^0 \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 8451 | 4 | 80245 |
| 2769 | $J/\psi 	o \pi^0 \Lambda ar{\Sigma}^{*0}, \Lambda 	o \pi^- p, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 8456 | 4 | 80249 |
| 2770 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5210 | 4 | 80253 |
| 2771 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8483 | 4 | 80257 |
| 2772 | $J/\psi \to ho^0 ho^0 h_1(1170), ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^- \gamma^f, h_1(1170) \to \pi^+ ho^-, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 5214 | 4 | 80261 |
| 2773 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4014 | 4 | 80265 |
| 2774 | $J/\psi \rightarrow \pi^0 \eta' b_1^0, \eta' \rightarrow \pi^0 \pi^0 \eta, b_1^0 \rightarrow \pi^0 \omega, \eta \rightarrow \gamma \gamma, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 8495 | 4 | 80269 |
| 2775 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5229 | 4 | 80273 |
| 2776 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+K^+K^-$ | 4015 | 4 | 80277 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2777 | $J/\psi \to \pi^0\pi^-\rho^+a^0_0, \rho^+ \to \pi^0\pi^+, a^0_0 \to \pi^0\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8526 | 4 | 80281 |
| 2778 | $J/\psi \to \omega K^+ K_0^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8530 | 4 | 80285 |
| 2779 | $J/\psi \to \pi^- \bar{K}^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^- K^+$ | 4022 | 4 | 80289 |
| 2780 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8536 | 4 | 80293 |
| 2781 | $J/\psi \to \pi^+\pi^-\phi\gamma^f, \phi \to K^+K^-$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 8541 | 4 | 80297 |
| 2782 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \eta\eta, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 8556 | 4 | 80301 |
| 2783 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \gamma \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 8558 | 4 | 80305 |
| 2784 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 1057 | 4 | 80309 |
| 2785 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, $ $\eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 2675 | 4 | 80313 |
| 2786 | $J/\psi \to \Sigma^0 \bar{\Sigma}^{*0}, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^{*0} \to \pi^- \bar{\Sigma}^+, \Lambda \to \pi^- p, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^+\pi^-\pi^-ar{n}p\gamma$ | 8612 | 4 | 80317 |
| 2787 | $J/\psi \to \rho^0 f_0(1370) a_1^0, \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^+\pi^-, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8615 | 4 | 80321 |
| 2788 | $J/\psi \to \phi f_0(2020), \phi \to K_L^0 K_S^0, f_0(2020) \to \pi^0 \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5236 | 4 | 80325 |
| 2789 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 4033 | 4 | 80329 |
| 2790 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0K^-, K_2^{*+} \to \pi^+\pi^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 8631 | 4 | 80333 |
| 2791 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 8648 | 4 | 80337 |
| 2792 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^- \gamma^f, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8669 | 4 | 80341 |
| 2793 | $J/\psi \to n\bar{n} f_0(1370), f_0(1370) \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^-nar{n}\gamma^f$ | 5242 | 4 | 80345 |
| 2794 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5244 | 4 | 80349 |
| 2795 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \gamma, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5248 | 4 | 80353 |
| 2796 | $J/\psi 	o \eta \omega, \eta 	o \pi^+ \pi^- \gamma^F, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5249 | 4 | 80357 |
| 2797 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^+\pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 68 | 4 | 80361 |
| 2798 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8725 | 4 | 80365 |
| 2799 | $J/\psi \to \pi^+ a_2^- a_1^0, a_2^- \to \pi^0 \rho^-, a_1^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8726 | 4 | 80369 |
| 2800 | $J/\psi 	o \eta par p, \eta 	o \pi^0\pi^0\pi^0, \pi^0 	o e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^0 par p\gamma^F$ | 8733 | 4 | 80373 |
| 2801 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^-$ | 5263 | 4 | 80377 |
| 2802 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 2308 | 4 | 80381 |
| 2803 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 5277 | 4 | 80385 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 2804 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_L^0, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4042 | 4 | 80389 |
| 2805 | $J/\psi \to \pi^0 \rho^0 a_2^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2684 | 4 | 80393 |
| 2806 | $J/\psi ightarrow \omega K^0 ar K^0, \omega ightarrow \pi^0 \pi^+ \pi^-, K^0 ightarrow K_L^0, ar K^0 ightarrow K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 8761 | 4 | 80397 |
| 2807 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 3258 | 4 | 80401 |
| 2808 | $J/\psi \to \Delta^+ \bar{\Delta}^+, \Delta^+ \to \pi^0 p, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^-ar{n}p$ | 8768 | 4 | 80405 |
| 2809 | $J/\psi \to \phi f_0(980), \phi \to K^+K^-, f_0(980) \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-$ | 8775 | 4 | 80409 |
| 2810 | $J/\psi \to \Delta^{++} \bar{\Delta}^{++} \gamma^f, \Delta^{++} \to \pi^+ p, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^-par p\gamma^f$ | 5306 | 4 | 80413 |
| 2811 | $J/\psi 	o \pi^+ K_2^{*0} K^-, K_2^{*0} 	o ho^0 K^0, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 4046 | 4 | 80417 |
| 2812 | $J/\psi \to \rho^- \bar{K}^* K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 8810 | 4 | 80421 |
| 2813 | $J/\psi 	o \pi^0 ho^+ a_2^-, ho^+ 	o \pi^0 \pi^+, a_2^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8816 | 4 | 80425 |
| 2814 | $J/\psi 	o \eta_2(1870)\gamma, \eta_2(1870) 	o \pi^0 a_2^0, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 8821 | 4 | 80429 |
| 2815 | $J/\psi \to \pi^0 a_2^+ b_1^-, a_2^+ \to \pi^0 \rho^+, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8823 | 4 | 80433 |
| 2816 | $J/\psi 	o \pi^0 ar{\Lambda} \Sigma^{*0}, ar{\Lambda} 	o \pi^0 ar{n}, \Sigma^{*0} 	o \pi^0 \Lambda, \Lambda 	o \pi^- p$ | $\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 141 | 4 | 80437 |
| 2817 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 1578 | 4 | 80441 |
| 2818 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^{*-}, \Lambda \to \pi^0 n, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 2706 | 4 | 80445 |
| 2819 | $J/\psi 	o \pi^0\pi^0\pi^0b_1^0, b_1^0 	o \pi^0\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 8879 | 4 | 80449 |
| 2820 | $J/\psi \to \pi^+ K_S^0 K^- \phi, K_S^0 \to \pi^+ \pi^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8892 | 4 | 80453 |
| 2821 | $J/\psi \to \pi^0 f_2(1270) b_1^0, f_2(1270) \to \pi^+ \pi^- \gamma^f, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5327 | 4 | 80457 |
| 2822 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K^0_S \to \pi^0 \pi^0, \ \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 2315 | 4 | 80461 |
| 2823 | $J/\psi \to \pi^+\pi^-\omega\gamma^F\gamma^f, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 2316 | 4 | 80465 |
| 2824 | $J/\psi ightarrow \omega K^0 ar{K}^*, \omega ightarrow \pi^0 \gamma, K^0 ightarrow K_L^0, ar{K}^* ightarrow \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 5337 | 4 | 80469 |
| 2825 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8926 | 4 | 80473 |
| 2826 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 5339 | 4 | 80477 |
| 2827 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 8943 | 4 | 80481 |
| 2828 | $J/\psi \to \eta a_0^- b_1^+, \eta \to \gamma \gamma, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 5343 | 4 | 80485 |
| 2829 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^{+}\bar{\Xi}^{0}, \Xi^{*-} \to \pi^{-}\Xi^{0}, \bar{\Xi}^{0} \to \pi^{0}\bar{\Lambda}, \Xi^{0} \to \pi^{0}\Lambda, \\ \bar{\Lambda} \to \pi^{0}\bar{n}, \Lambda \to \pi^{-}p$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 8978 | 4 | 80489 |
| 2830 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-$ | 8983 | 4 | 80493 |
| 2831 | $J/\psi \to \rho^0 \pi^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 8987 | 4 | 80497 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2832 | $J/\psi \to \pi^0 \pi^+ \pi^- \omega, \omega \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 9004 | 4 | 80501 |
| 2833 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 9020 | 4 | 80505 |
| 2834 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 9023 | 4 | 80509 |
| 2835 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1771 | 4 | 80513 |
| 2836 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9057 | 4 | 80517 |
| 2837 | $J/\psi 	o \pi^- K^+ ar{K}^0_1, ar{K}^0_1 	o ho^0 ar{K}^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K^0_L$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 5356 | 4 | 80521 |
| 2838 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 9121 | 4 | 80525 |
| 2839 | $J/\psi \to K^+K^{*-}\phi, K^{*-} \to \pi^-\bar{K}^0, \phi \to K^+K^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 5361 | 4 | 80529 |
| 2840 | $J/\psi \to \pi^0 \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5369 | 4 | 80533 |
| 2841 | $J/\psi \to \pi^- \eta' b_1^+, \eta' \to \gamma \gamma, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9136 | 4 | 80537 |
| 2842 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^0 K^-, K^0 \to K_L^0, \\ \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9137 | 4 | 80541 |
| 2843 | $J/\psi \to \pi^0 \pi^0 h_1(1170), \pi^0 \to e^+ e^- \gamma^F, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 9139 | 4 | 80545 |
| 2844 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 5380 | 4 | 80549 |
| 2845 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^+ ho^-, \omega ightarrow \pi^0 \gamma, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 3282 | 4 | 80553 |
| 2846 | $J/\psi 	o \pi^0 n ar{\Delta}^0, ar{\Delta}^0 	o \pi^0 ar{n}$ | $\pi^0\pi^0n\bar{n}$ | 210 | 4 | 80557 |
| 2847 | $J/\psi ightarrow \omega \omega \omega, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4077 | 4 | 80561 |
| 2848 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4082 | 4 | 80565 |
| 2849 | $J/\psi 	o \Lambda ar{\Sigma}^{*0}, \Lambda 	o \pi^0 n, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 9275 | 4 | 80569 |
| 2850 | $J/\psi \to \pi^+ b_1^- a_1^0, b_1^- \to \pi^- \omega, a_1^0 \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9283 | 4 | 80573 |
| 2851 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4098 | 4 | 80577 |
| 2852 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 5406 | 4 | 80581 |
| 2853 | $J/\psi \to \pi^+\pi^-\eta\gamma^F, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{F}$ | 5415 | 4 | 80585 |
| 2854 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5421 | 4 | 80589 |
| 2855 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 270 | 4 | 80593 |
| 2856 | $J/\psi ightarrow \pi^+ a_2^-, a_2^- ightarrow \pi^0 \pi^- \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 2010 | 4 | 80597 |
| 2857 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^- \gamma^f, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 9407 | 4 | 80601 |
| 2858 | $J/\psi \to \omega K^- K^{*+}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-\gamma$ | 9412 | 4 | 80605 |
| 2859 | $J/\psi \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-K^-\gamma^f$ | 2725 | 4 | 80609 |
| 2860 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^0 K^+$ | $\pi^0 K^+ K^- \gamma^F$ | 3298 | 4 | 80613 |
| 2861 | $J/\psi \to \pi^0 \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 9465 | 4 | 80617 |
| 2862 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9490 | 4 | 80621 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 2863 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^-, \eta' \to \rho^0 \gamma, a_0^+ \to \pi^+ \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\gamma$ | 892 | 4 | 80625 |
| 2864 | $J/\psi ightarrow nar{n}a_0^0, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 9501 | 4 | 80629 |
| 2865 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 9507 | 4 | 80633 |
| 2866 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9516 | 4 | 80637 |
| 2867 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 4116 | 4 | 80641 |
| 2868 | $J/\psi ightarrow ho^0\pi^+b_1^-\gamma^F, ho^0 ightarrow \pi^+\pi^-, b_1^- ightarrow \pi^-\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 9562 | 4 | 80645 |
| 2869 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^0K^-$ | $\pi^0 K^+ K^+ K^- K^- \gamma$ | 9568 | 4 | 80649 |
| 2870 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5449 | 4 | 80653 |
| 2871 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9609 | 4 | 80657 |
| 2872 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \rho^-K^0, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 142 | 4 | 80661 |
| 2873 | $J/\psi ightarrow \phi f_2^{'}, \phi ightarrow K_L^0 K_S^0, f_2^{'} ightarrow K_L^0 K_L^0, K_S^0 ightarrow \pi^+ \pi^-$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 5456 | 4 | 80665 |
| 2874 | $J/\psi 	o \pi^0 ho^0 \pi^+ a_0^-, ho^0 	o \pi^+ \pi^-, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4133 | 4 | 80669 |
| 2875 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1282 | 4 | 80673 |
| 2876 | $J/\psi 	o \pi^- a_2^+, a_2^+ 	o \bar K^0 K^+, \bar K^0 	o K_L^0$ | $K_L^0\pi^-K^+$ | 9716 | 4 | 80677 |
| 2877 | $J/\psi 	o \phi f_2^{'}, \phi 	o K^+K^-, f_2^{'} 	o K_S^0K_S^0, K_S^0 	o \pi^0\pi^0, K_S^0 	o \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9744 | 4 | 80681 |
| 2878 | $J/\psi ightarrow \eta b_1^0, \eta ightarrow \pi^0 \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9765 | 4 | 80685 |
| 2879 | $J/\psi \to \pi^0 \Sigma^+ \bar{\Sigma}^-, \Sigma^+ \to \pi^0 p, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^0\pi^-ar{n}p$ | 5469 | 4 | 80689 |
| 2880 | $J/\psi 	o a_2^- ar{K}^0 K^+, a_2^- 	o \pi^0 ho^-, ar{K}^0 	o K_S^0, ho^- 	o \pi^0 \pi^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9771 | 4 | 80693 |
| 2881 | $J/\psi \to K^+ \phi K_1^-, \phi \to K^+ K^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^+K^-K^-$ | 1284 | 4 | 80697 |
| 2882 | $J/\psi 	o K^+K^-b_1^0, b_1^0 	o \pi^0\omega, \omega 	o \pi^0\pi^+\pi^-\gamma^f$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 4142 | 4 | 80701 |
| 2883 | $J/\psi 	o K^+K^-\phi, \phi 	o \pi^0 ho^0, ho^0 	o \pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 9811 | 4 | 80705 |
| 2884 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 9849 | 4 | 80709 |
| 2885 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1430 | 4 | 80713 |
| 2886 | $J/\psi 	o ho^0 n \bar{\Delta}^0, ho^0 	o \pi^+ \pi^-, \bar{\Delta}^0 	o \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-nar{p}$ | 9914 | 4 | 80717 |
| 2887 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 476 | 4 | 80721 |
| 2888 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^+ K^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9953 | 4 | 80725 |
| 2889 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^- \gamma^f, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 9961 | 4 | 80729 |
| 2890 | $J/\psi \to \pi^+ a_2^- a_1^0, a_2^- \to \rho^0 \pi^-, a_1^0 \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4153 | 4 | 80733 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2891 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3319 | 4 | 80737 |
| 2892 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^0\pi^0, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 51 | 4 | 80741 |
| 2893 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \pi^+\pi^-\eta, K^0 \to K^0_S, \eta \to \pi^0\pi^+\pi^-, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 10012 | 4 | 80745 |
| 2894 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 \pi^+ b_1^-, ho^0 ightarrow \pi^+ \pi^-, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 1071 | 4 | 80749 |
| 2895 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+K^-\gamma$ | 3329 | 4 | 80753 |
| 2896 | $J/\psi \to K^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-$ | 10045 | 4 | 80757 |
| 2897 | $J/\psi 	o \pi^0 \pi^+ ho^- a_1^0, ho^- 	o \pi^0 \pi^-, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10111 | 4 | 80761 |
| 2898 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10131 | 4 | 80765 |
| 2899 | $J/\psi \to K^+ K^{*-} a_1^0, K^{*-} \to \pi^- \bar{K}^0, a_1^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10132 | 4 | 80769 |
| 2900 | $J/\psi \to \Delta^+ \bar{\Delta}^+, \Delta^+ \to \pi^+ n, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^+\pi^-nar{n}$ | 10142 | 4 | 80773 |
| 2901 | $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \rho^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10145 | 4 | 80777 |
| 2902 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+K^-\gamma$ | 4167 | 4 | 80781 |
| 2903 | $J/\psi ightarrow \eta \phi, \eta ightarrow \pi^0 \pi^0 \pi^0, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 10211 | 4 | 80785 |
| 2904 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10218 | 4 | 80789 |
| 2905 | $J/\psi 	o \eta K^0 ar K^0, \eta 	o \gamma \gamma, K^0 	o K^0_L, ar K^0 	o K^0_L$ | $K_L^0 K_L^0 \gamma \gamma$ | 2020 | 4 | 80793 |
| 2906 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^+\pi^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10319 | 4 | 80797 |
| 2907 | $J/\psi \to f_2(1270)K^-K^{*+}, f_2(1270) \to \pi^+\pi^-, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 5520 | 4 | 80801 |
| 2908 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^-\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2756 | 4 | 80805 |
| 2909 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \omega K^+, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 10348 | 4 | 80809 |
| 2910 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2021 | 4 | 80813 |
| 2911 | $J/\psi 	o \pi^0 K^0 ar{K}_0^{*0}, K^0 	o K_L^0, ar{K}_0^{*0} 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^-$ | 1288 | 4 | 80817 |
| 2912 | $J/\psi 	o \pi^+ \omega n ar p, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 10388 | 4 | 80821 |
| 2913 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \phi \to K_L^0K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 10398 | 4 | 80825 |
| 2914 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^0\bar{\Xi}^+, \Xi^{*-} \to \pi^0\Xi^-, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^- \to \pi^-\Lambda, \\ \bar{\Lambda} \to \pi^+\bar{p}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 10470 | 4 | 80829 |
| 2915 | $J/\psi 	o \pi^- ar{\Sigma}^{*+} \Lambda, ar{\Sigma}^{*+} 	o \pi^+ ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 10523 | 4 | 80833 |
| 2916 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 3343 | 4 | 80837 |
| 2917 | $J/\psi ightarrow a_0^0 b_1^0, a_0^0 ightarrow \pi^0 \eta, b_1^0 ightarrow \pi^0 \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 347 | 4 | 80841 |
| 2918 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, b_1^0 \to \pi^0\omega, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2358 | 4 | 80845 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 2919 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2026 | 4 | 80849 |
| 2920 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma$ | 10622 | 4 | 80853 |
| 2921 | $J/\psi 	o a_2^0 \pi^- a_1^+, a_2^0 	o \pi^+ ho^-, a_1^+ 	o ho^0 \pi^+, ho^- 	o \pi^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10623 | 4 | 80857 |
| 2922 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0 K_L^0\pi^+ K^-$ | 10628 | 4 | 80861 |
| 2923 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10657 | 4 | 80865 |
| 2924 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 10745 | 4 | 80869 |
| 2925 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 5573 | 4 | 80873 |
| 2926 | $J/\psi 	o \pi^0\pi^- ho^+ a_0^0, ho^+ 	o \pi^0\pi^+, a_0^0 	o \pi^0\eta, \eta 	o \pi^+\pi^-\gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5580 | 4 | 80877 |
| 2927 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^0 p, \bar{\Sigma}^{*-} \to \pi^- \bar{\Sigma}^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^-par p\gamma$ | 10797 | 4 | 80881 |
| 2928 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0 K^0_L K^0_L \pi^+\pi^-$ | 10799 | 4 | 80885 |
| 2929 | $J/\psi \to \phi f_0(1710), \phi \to \pi^0 \rho^0, f_0(1710) \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3361 | 4 | 80889 |
| 2930 | $J/\psi 	o \eta' n ar{n}, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 5598 | 4 | 80893 |
| 2931 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^+ \pi^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 10961 | 4 | 80897 |
| 2932 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10962 | 4 | 80901 |
| 2933 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10967 | 4 | 80905 |
| 2934 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^f, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 603 | 4 | 80909 |
| 2935 | $J/\psi \to \rho^+ K^- K_1^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11073 | 4 | 80913 |
| 2936 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^-$ | 4194 | 4 | 80917 |
| 2937 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 11221 | 4 | 80921 |
| 2938 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1297 | 4 | 80925 |
| 2939 | $J/\psi \to \phi f_0(1790), \phi \to \pi^0 \rho^0, f_0(1790) \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11305 | 4 | 80929 |
| 2940 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, \phi \to K^+ K^-, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11326 | 4 | 80933 |
| 2941 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^+, K_2^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 4214 | 4 | 80937 |
| 2942 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+K^-\gamma$ | 11374 | 4 | 80941 |
| 2943 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 5615 | 4 | 80945 |
| 2944 | $J/\psi 	o \pi^0 K^* K_2^{*0}, K^* 	o \pi^- K^+, K_2^{*0} 	o \pi^0 ar K^0, ar K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 11441 | 4 | 80949 |
| 2945 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_L^0, $ $\rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11467 | 4 | 80953 |
| 2946 | $J/\psi ightarrow \pi^0 \Lambda ar{\Lambda}, \Lambda ightarrow \pi^0 n, ar{\Lambda} ightarrow \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 11496 | 4 | 80957 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 2947 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11553 | 4 | 80961 |
| 2948 | $J/\psi \to \pi^0 K^* \bar{K}^* \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11561 | 4 | 80965 |
| 2949 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^0\bar{K}^0, a_0^- \to \pi^-\eta, \bar{K}^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 5617 | 4 | 80969 |
| 2950 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^{+}\Lambda, \bar{\Sigma}^{*-} \to \pi^{-}\bar{\Sigma}^{0}, \Lambda \to \pi^{-}p, \bar{\Sigma}^{0} \to \bar{\Lambda}\gamma, \\ \bar{\Lambda} \to \pi^{+}\bar{p}$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma$ | 11569 | 4 | 80973 |
| 2951 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^+K^0, h_1(1170) \to \pi^0\rho^0, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11579 | 4 | 80977 |
| 2952 | $J/\psi 	o \pi^0 K^+ K_1^-, K_1^- 	o ho^- ar{K}^0, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 3375 | 4 | 80981 |
| 2953 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 11603 | 4 | 80985 |
| 2954 | $J/\psi 	o ho^0 K^0 ar{K}^0, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0 K_L^0\pi^+\pi^-$ | 11668 | 4 | 80989 |
| 2955 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0$ | 11677 | 4 | 80993 |
| 2956 | $J/\psi \to \pi^0 \rho^+ K^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 5625 | 4 | 80997 |
| 2957 | $J/\psi \rightarrow \rho^0 \eta', \rho^0 \rightarrow \pi^+ \pi^-, \eta' \rightarrow \rho^0 \gamma, \rho^0 \rightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 908 | 4 | 81001 |
| 2958 | $J/\psi 	o \pi^+ ho^- ho^- a_2^+, ho^- 	o \pi^0 \pi^-, ho^- 	o \pi^0 \pi^-, a_2^+ 	o ho^0 \pi^+, ho^0 	o \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 12085 | 4 | 81005 |
| 2959 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12131 | 4 | 81009 |
| 2960 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \gamma \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 12172 | 4 | 81013 |
| 2961 | $J/\psi \to K^+ K_1^-, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4221 | 4 | 81017 |
| 2962 | $J/\psi 	o ho^+ \eta a_0^-, ho^+ 	o \pi^0 \pi^+, \eta 	o \pi^0 \pi^+ \pi^-, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 519 | 4 | 81021 |
| 2963 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \omega b_1^+, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 12277 | 4 | 81025 |
| 2964 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12320 | 4 | 81029 |
| 2965 | $J/\psi 	o \omega K^+ K^{*-}, \omega 	o \pi^0 \gamma, K^{*-} 	o \pi^- \bar K^0, \bar K^0 	o K_L^0$ | $\pi^0 K^0_L \pi^- K^+ \gamma$ | 12361 | 4 | 81033 |
| 2966 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}$ | 12517 | 4 | 81037 |
| 2967 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 12537 | 4 | 81041 |
| 2968 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^0 \Sigma^+, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Sigma^+ \to \pi^+ n, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 4230 | 4 | 81045 |
| 2969 | $J/\psi \to K^+K^{*-}a_0^0, K^{*-} \to \pi^-\bar{K}^0, a_0^0 \to \pi^0\eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12574 | 4 | 81049 |
| 2970 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2034 | 4 | 81053 |
| 2971 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12591 | 4 | 81057 |
| 2972 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12669 | 4 | 81061 |
| 2973 | $J/\psi \to K^* \bar{K}_1^{'0} \gamma, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 12675 | 4 | 81065 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 2974 | $J/\psi \to \rho^0 \pi^- \rho^+ h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12746 | 4 | 81069 |
| 2975 | $J/\psi \to \omega b_1^+ b_1^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 12766 | 4 | 81073 |
| 2976 | $J/\psi \to \pi^0 \omega a_0^0, \omega \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 12829 | 4 | 81077 |
| 2977 | $J/\psi ightarrow \pi^+ ho^- \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^0 \pi^0 \pi^0, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 1448 | 4 | 81081 |
| 2978 | $J/\psi \to K^{*+} \bar{p}\Lambda, K^{*+} \to \pi^+ K^0, \Lambda \to \pi^- p, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 5660 | 4 | 81085 |
| 2979 | $J/\psi 	o \pi^+\pi^-\eta\gamma^F\gamma^f, \eta 	o \gamma\gamma$ | $\pi^+\pi^-\gamma^F\gamma\gamma\gamma^f$ | 13044 | 4 | 81089 |
| 2980 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \rho^-K^0, K^0 \to K_L^0, \rho^- \to \pi^0\pi^-, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 13068 | 4 | 81093 |
| 2981 | $J/\psi \to \pi^+ K^0 K^- \gamma^f, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma^f$ | 13069 | 4 | 81097 |
| 2982 | $J/\psi 	o \pi^+ ho^- ar{K}^0 K^*, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13323 | 4 | 81101 |
| 2983 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 13436 | 4 | 81105 |
| 2984 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 13472 | 4 | 81109 |
| 2985 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 13504 | 4 | 81113 |
| 2986 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13518 | 4 | 81117 |
| 2987 | $J/\psi ightarrow ho^-ar{\Sigma}^+\Lambda, ho^- ightarrow \pi^0\pi^-, ar{\Sigma}^+ ightarrow \pi^+ar{n}, \Lambda ightarrow \pi^-p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 13570 | 4 | 81121 |
| 2988 | $J/\psi 	o \pi^0\pi^0\omega, \omega 	o \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 14490 | 4 | 81125 |
| 2989 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^- K^+$ | 14574 | 4 | 81129 |
| 2990 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 15178 | 4 | 81133 |
| 2991 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6114 | 3 | 81136 |
| 2992 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 1457 | 3 | 81139 |
| 2993 | $J/\psi 	o ho^- a_2^+, ho^- 	o \pi^0 \pi^- \gamma^f, a_2^+ 	o ho^0 \pi^+, ho^0 	o \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 1631 | 3 | 81142 |
| 2994 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 2870 | 3 | 81145 |
| 2995 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 4505 | 3 | 81148 |
| 2996 | $J/\psi 	o a_2^- ar{K}^* K^+, a_2^- 	o \pi^0 ho^-, ar{K}^* 	o \pi^0 ar{K}^0, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 1843 | 3 | 81151 |
| 2997 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\bar{K}^*, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 2872 | 3 | 81154 |
| 2998 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^- \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 2877 | 3 | 81157 |
| 2999 | $J/\psi \to \pi^0\pi^0\rho^-a_2^+, \rho^- \to \pi^0\pi^-, a_2^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4513 | 3 | 81160 |
| 3000 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L$ | 4522 | 3 | 81163 |
| 3001 | $J/\psi \to \phi f_0(1370), \phi \to K_L^0 K_S^0, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6145 | 3 | 81166 |
| 3002 | $J/\psi \to \pi^- a_1^+ \gamma^f, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 6146 | 3 | 81169 |
| 3003 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^0 \eta, \omega ightarrow \pi^0 \gamma, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 6148 | 3 | 81172 |
| 3004 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 440 | 3 | 81175 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 3005 | $J/\psi \to \rho^0 K^0 \bar{K}_0^{*0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4531 | 3 | 81178 |
| 3006 | $J/\psi 	o \pi^0 ar{K}^0 K_2^{*0}, ar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0$ | 6159 | 3 | 81181 |
| 3007 | $J/\psi ightarrow \pi^+\pi^- f_0(1370), f_0(1370) ightarrow \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-$ | 6171 | 3 | 81184 |
| 3008 | $J/\psi \to K^- \Delta^{++} \bar{\Sigma}^-, \Delta^{++} \to \pi^+ p, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^+K^-p\bar{p}$ | 6179 | 3 | 81187 |
| 3009 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4532 | 3 | 81190 |
| 3010 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^F, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^F$ | 3587 | 3 | 81193 |
| 3011 | $J/\psi 	o \pi^+ \omega K_S^0 K^-, \omega 	o \pi^+ \pi^-, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1309 | 3 | 81196 |
| 3012 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 978 | 3 | 81199 |
| 3013 | $J/\psi \to \pi^+ K^* K^{*-} \gamma^F, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 6201 | 3 | 81202 |
| 3014 | $J/\psi \to \pi^0 K^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^- K^+$ | 6208 | 3 | 81205 |
| 3015 | $J/\psi ightarrow a_2^0 \pi^+ \pi^-, a_2^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^- \gamma^f$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 1854 | 3 | 81208 |
| 3016 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3596 | 3 | 81211 |
| 3017 | $J/\psi \to \pi^+ a_1^0 a_1^-, a_1^0 \to \pi^- \rho^+, a_1^- \to \rho^0 \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4548 | 3 | 81214 |
| 3018 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^- \rho^+, K^{*-} \to \pi^0 K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 732 | 3 | 81217 |
| 3019 | $J/\psi \to K^* \bar{K}^0_1, K^* \to \pi^0 K^0, \bar{K}^0_1 \to \rho^+ K^-, K^0 \to K^0_S, \rho^+ \to \pi^0 \pi^+, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 733 | 3 | 81220 |
| 3020 | $J/\psi ightarrow ho^0 a_2^0 \eta, ho^0 ightarrow \pi^+ \pi^-, a_2^0 ightarrow \pi^- ho^+, \eta ightarrow \gamma \gamma, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 646 | 3 | 81223 |
| 3021 | $J/\psi 	o ar{K}^*K_2^{*0}, ar{K}^* 	o \pi^+K^-, K_2^{*0} 	o \pi^0K^0, K^0 	o K_S^0, K_S^0 	o \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 6246 | 3 | 81226 |
| 3022 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1467 | 3 | 81229 |
| 3023 | $J/\psi \to \rho^0 K^+ K_0^{*-}, \rho^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 2899 | 3 | 81232 |
| 3024 | $J/\psi 	o \pi^0\pi^0 ho^0 a_0^0, ho^0 	o \pi^+\pi^-, a_0^0 	o \pi^0\eta, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 688 | 3 | 81235 |
| 3025 | $J/\psi \to K^{-}K_{1}^{'+}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 6259 | 3 | 81238 |
| 3026 | $J/\psi \rightarrow \rho^+ \rho^- \gamma \gamma^f, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma^f$ | 987 | 3 | 81241 |
| 3027 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^0K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 161 | 3 | 81244 |
| 3028 | $J/\psi 	o \pi^0 a_2^0 \pi^+ \pi^-, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6265 | 3 | 81247 |
| 3029 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6272 | 3 | 81250 |
| 3030 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^0 K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 4569 | 3 | 81253 |
| 3031 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K^+K^-, K^0 \to K^0_S, \\ \bar{K}^0 \to K^0_L, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 2150 | 3 | 81256 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3032 | $J/\psi \to \rho^0 \pi^+ \rho^- \omega, \rho^0 \to \pi^+ \pi^- \gamma^f, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 3613 | 3 | 81259 |
| 3033 | $J/\psi ightarrow ho^0 \eta a_0^0, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \gamma \gamma, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1471 | 3 | 81262 |
| 3034 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma$ | 4581 | 3 | 81265 |
| 3035 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma$ | 1647 | 3 | 81268 |
| 3036 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6313 | 3 | 81271 |
| 3037 | $J/\psi \to ho^0 a_2^0, ho^0 \to \pi^+ \pi^- \gamma^f, a_2^0 \to K^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 4583 | 3 | 81274 |
| 3038 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6325 | 3 | 81277 |
| 3039 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2484 | 3 | 81280 |
| 3040 | $J/\psi \to K^* \bar{K}_1^{'0} \gamma, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 6337 | 3 | 81283 |
| 3041 | $J/\psi 	o a_2^0 b_1^0, a_2^0 	o \pi^+ \pi^- \omega, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3624 | 3 | 81286 |
| 3042 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 4588 | 3 | 81289 |
| 3043 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 6343 | 3 | 81292 |
| 3044 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \rho^+ K^-, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 3625 | 3 | 81295 |
| 3045 | $J/\psi 	o \eta K^+K^-, \eta 	o \pi^+\pi^-\gamma^F$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 6347 | 3 | 81298 |
| 3046 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to \pi^0\pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 6348 | 3 | 81301 |
| 3047 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 2910 | 3 | 81304 |
| 3048 | $J/\psi \to K^+ \phi K_1^-, \phi \to K^+ K^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 4600 | 3 | 81307 |
| 3049 | $J/\psi 	o \pi^0 \eta b_1^0, \eta 	o \gamma \gamma, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 2158 | 3 | 81310 |
| 3050 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma$ | 2160 | 3 | 81313 |
| 3051 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 4609 | 3 | 81316 |
| 3052 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 2917 | 3 | 81319 |
| 3053 | $J/\psi ightarrow par{p}a_0^0, a_0^0 ightarrow \pi^0\eta, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0p\bar{p}$ | 4616 | 3 | 81322 |
| 3054 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^0 \bar{\Xi}^0, \Lambda \to \pi^- p, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \\ \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 6376 | 3 | 81325 |
| 3055 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4617 | 3 | 81328 |
| 3056 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K^+K^-$ | 3639 | 3 | 81331 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3057 | $J/\psi \to \phi f_0(2020), \phi \to \pi^+ \rho^-, f_0(2020) \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4620 | 3 | 81334 |
| 3058 | $J/\psi \to \rho^0 \pi^+ \rho^- b_1^0, \rho^0 \to \pi^+ \pi^- \gamma^f, \rho^- \to \pi^0 \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 6392 | 3 | 81337 |
| 3059 | $J/\psi 	o \pi^0 p ar{\Delta}^+, ar{\Delta}^+ 	o \pi^0 ar{p}$ | $\pi^0\pi^0p\bar{p}$ | 3642 | 3 | 81340 |
| 3060 | $J/\psi \to \pi^0 \pi^+ \pi^- f_0(1370), f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1086 | 3 | 81343 |
| 3061 | $J/\psi \to K^0 \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+K^-$ | 6401 | 3 | 81346 |
| 3062 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \pi^- K^+$ | $\pi^0\pi^-\pi^-K^+K^+$ | 609 | 3 | 81349 |
| 3063 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to K^+K^-$ | $K^{+}K^{+}K^{-}K^{-}$ | 6406 | 3 | 81352 |
| 3064 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 6423 | 3 | 81355 |
| 3065 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6425 | 3 | 81358 |
| 3066 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1651 | 3 | 81361 |
| 3067 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^0 \eta', \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 4640 | 3 | 81364 |
| 3068 | $J/\psi \to \omega\omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-\gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 3657 | 3 | 81367 |
| 3069 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2168 | 3 | 81370 |
| 3070 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 332 | 3 | 81373 |
| 3071 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^-$ | 3665 | 3 | 81376 |
| 3072 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3667 | 3 | 81379 |
| 3073 | $J/\psi \to \rho^0 \omega b_1^0, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 6463 | 3 | 81382 |
| 3074 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3672 | 3 | 81385 |
| 3075 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 6473 | 3 | 81388 |
| 3076 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^- \phi, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K^+K^-\gamma$ | 6483 | 3 | 81391 |
| 3077 | $J/\psi 	o \omega \eta', \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2931 | 3 | 81394 |
| 3078 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \gamma \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 6487 | 3 | 81397 |
| 3079 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6489 | 3 | 81400 |
| 3080 | $J/\psi \rightarrow \rho^0 \rho^0 \eta \omega, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^-, \eta \rightarrow \pi^0 \pi^0 \pi^0, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6490 | 3 | 81403 |
| 3081 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 1653 | 3 | 81406 |
| 3082 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta', \eta' \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 2499 | 3 | 81409 |
| 3083 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 273 | 3 | 81412 |
| 3084 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1198 | 3 | 81415 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 3085 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6506 | 3 | 81418 |
| 3086 | $J/\psi 	o \pi^+ b_1^0 a_0^-, b_1^0 	o \pi^0 \omega, a_0^- 	o \pi^- \eta, \omega 	o \pi^0 \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 695 | 3 | 81421 |
| 3087 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 6515 | 3 | 81424 |
| 3088 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3686 | 3 | 81427 |
| 3089 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 2503 | 3 | 81430 |
| 3090 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \rho^+K^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 3691 | 3 | 81433 |
| 3091 | $J/\psi ightarrow \pi^+\pi^+\pi^- ho^-\gamma^F, ho^- ightarrow \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 6531 | 3 | 81436 |
| 3092 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^- \rho^+, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2948 | 3 | 81439 |
| 3093 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 584 | 3 | 81442 |
| 3094 | $J/\psi ightarrow \pi^0 ho^0 \omega \gamma, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2953 | 3 | 81445 |
| 3095 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^+\pi^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2957 | 3 | 81448 |
| 3096 | $J/\psi \rightarrow \eta(1405)\gamma, \eta(1405) \rightarrow \rho^0 \rho^0, \rho^0 \rightarrow \pi^+\pi^-, \rho^0 \rightarrow \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 6552 | 3 | 81451 |
| 3097 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \omega K^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 903 | 3 | 81454 |
| 3098 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $e^+e^-K_L^0\pi^-K^+\gamma^F$ | 3705 | 3 | 81457 |
| 3099 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 3707 | 3 | 81460 |
| 3100 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L$ | 4705 | 3 | 81463 |
| 3101 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 6574 | 3 | 81466 |
| 3102 | $J/\psi \to \phi f_0(2020), \phi \to K_L^0 K_S^0, f_0(2020) \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6580 | 3 | 81469 |
| 3103 | $J/\psi \to \rho^0 f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^0\pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4706 | 3 | 81472 |
| 3104 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \rho^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6591 | 3 | 81475 |
| 3105 | $J/\psi \to \pi^+ \rho^+ \rho^- a_2^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1666 | 3 | 81478 |
| 3106 | $J/\psi 	o \pi^0 a_2^0 \pi^+ b_1^-, a_2^0 	o \pi^+ \pi^- \omega, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 6596 | 3 | 81481 |
| 3107 | $J/\psi \to \pi^+ \omega K_S^0 K^-, \omega \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 2962 | 3 | 81484 |
| 3108 | $J/\psi 	o \pi^0 ar{K}^0 K_2^{*0}, ar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 103 | 3 | 81487 |
| 3109 | $J/\psi \to \pi^+\pi^-K^*K^-b_1^+, K^* \to \pi^-K^+, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 6601 | 3 | 81490 |
| 3110 | $J/\psi \to \eta(2225)\gamma, \eta(2225) \to \phi\phi, \phi \to K_L^0 K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-\gamma$ | 1900 | 3 | 81493 |
| 3111 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2975 | 3 | 81496 |
| 3112 | $J/\psi 	o \pi^0 ho^+ K^0 K^-, ho^+ 	o \pi^0 \pi^+, K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 6613 | 3 | 81499 |
| 3113 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 3715 | 3 | 81502 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3114 | $J/\psi \to \bar{K}^0 K^* \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6623 | 3 | 81505 |
| 3115 | $J/\psi \to \pi^0 \omega a_0^0, \omega \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6624 | 3 | 81508 |
| 3116 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0K^+, K_1^- \to \rho^0K^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 1901 | 3 | 81511 |
| 3117 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \rho^0 \gamma, a_0^- \to \pi^- \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 6634 | 3 | 81514 |
| 3118 | $J/\psi \to \pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 2978 | 3 | 81517 |
| 3119 | $J/\psi \to \pi^0\pi^+a^0_0b^1, a^0_0 \to \pi^0\eta, b^1 \to \pi^-\omega, \eta \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3720 | 3 | 81520 |
| 3120 | $J/\psi ightarrow \pi^+ ho^- \eta^\prime, ho^- ightarrow \pi^0 \pi^-, \eta^\prime ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 6644 | 3 | 81523 |
| 3121 | $J/\psi 	o ho^0 \Lambda ar{\Sigma}^0, ho^0 	o \pi^+ \pi^-, \Lambda 	o \pi^- p, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 6651 | 3 | 81526 |
| 3122 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 2187 | 3 | 81529 |
| 3123 | $J/\psi 	o \pi^0 b_1^0, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 6664 | 3 | 81532 |
| 3124 | $J/\psi \to \phi\phi\gamma, \phi \to \pi^0\rho^0, \phi \to K^+K^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 4739 | 3 | 81535 |
| 3125 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 1488 | 3 | 81538 |
| 3126 | $J/\psi \to \eta K^- K_0^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 2988 | 3 | 81541 |
| 3127 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4747 | 3 | 81544 |
| 3128 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6683 | 3 | 81547 |
| 3129 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 1670 | 3 | 81550 |
| 3130 | $J/\psi \to \rho^0 h_1(1170)\gamma, \rho^0 \to \pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2991 | 3 | 81553 |
| 3131 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_1^- \to \rho^0 \pi^-, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6687 | 3 | 81556 |
| 3132 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to K^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_{L}^{0}K_{L}^{0}K^{+}K^{-}$ | 2190 | 3 | 81559 |
| 3133 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6702 | 3 | 81562 |
| 3134 | $J/\psi 	o K_S^0 ar{n} \Lambda, K_S^0 	o \pi^0 \pi^0, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0\pi^0n\bar{n}$ | 3736 | 3 | 81565 |
| 3135 | $J/\psi \to K^0 \bar{K}_1^{'0}, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4764 | 3 | 81568 |
| 3136 | $J/\psi \to \phi f_0(1710), \phi \to \pi^- \rho^+, f_0(1710) \to K^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6712 | 3 | 81571 |
| 3137 | $J/\psi ightarrow ar{K}^0 K^* \eta', ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^- K^+, \eta' ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 6713 | 3 | 81574 |
| 3138 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6717 | 3 | 81577 |
| 3139 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3737 | 3 | 81580 |
| 3140 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^0K^+, \eta' \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 2993 | 3 | 81583 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3141 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2994 | 3 | 81586 |
| 3142 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 2996 | 3 | 81589 |
| 3143 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3000 | 3 | 81592 |
| 3144 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 6753 | 3 | 81595 |
| 3145 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \rho^0 \bar{K}^0, K^0 \to K^0_S, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3752 | 3 | 81598 |
| 3146 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3001 | 3 | 81601 |
| 3147 | $J/\psi 	o p \bar{p} a_1^0, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-par{p}$ | 6760 | 3 | 81604 |
| 3148 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- K^- K^-$ | 6766 | 3 | 81607 |
| 3149 | $J/\psi \to \pi^0 \pi^0 K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 2523 | 3 | 81610 |
| 3150 | $J/\psi \to \pi^0 \pi^+ \rho^+ \rho^- b_1^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6775 | 3 | 81613 |
| 3151 | $J/\psi \to \pi^- a_1^0 a_1^+, a_1^0 \to \pi^+ \rho^-, a_1^+ \to \rho^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2524 | 3 | 81616 |
| 3152 | $J/\psi ightarrow \eta f_{2}^{'}\gamma, \eta ightarrow \gamma\gamma, f_{2}^{'} ightarrow K_{L}^{0}K_{L}^{0}$ | $K_L^0 K_L^0 \gamma \gamma \gamma$ | 6786 | 3 | 81619 |
| 3153 | $J/\psi \to \pi^0 \pi^0 \phi, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1097 | 3 | 81622 |
| 3154 | $J/\psi 	o \pi^0\pi^+\pi^-\eta, \eta 	o \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 4800 | 3 | 81625 |
| 3155 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1672 | 3 | 81628 |
| 3156 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6797 | 3 | 81631 |
| 3157 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 1490 | 3 | 81634 |
| 3158 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{\Xi}^+ \Xi^-, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^- \to \pi^- \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 2530 | 3 | 81637 |
| 3159 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^+K^0K^-, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 6804 | 3 | 81640 |
| 3160 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^{+}\bar{\Lambda}, \Sigma^{*-} \to \pi^{0}\Sigma^{-}, \bar{\Lambda} \to \pi^{+}\bar{p}, \Sigma^{-} \to \pi^{-}n$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 6805 | 3 | 81643 |
| 3161 | $J/\psi \to K^-K^{*+}f_2^{'}, K^{*+} \to \pi^0K^+, f_2^{'} \to K_L^0K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 6806 | 3 | 81646 |
| 3162 | $J/\psi \to \bar{K}^0 K^+ a_1^-, \bar{K}^0 \to K_S^0, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4808 | 3 | 81649 |
| 3163 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 K^0 ar K^0, K^0 ightarrow K^0_L, ar K^0 ightarrow K^0_S, K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 4809 | 3 | 81652 |
| 3164 | $J/\psi \to f_2(1270)b_1^0, f_2(1270) \to \pi^+\pi^-, b_1^0 \to \pi^0\omega, \omega \to \pi^0\gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 6819 | 3 | 81655 |
| 3165 | $J/\psi \to \omega \Lambda \bar{\Sigma}^0, \omega \to \pi^0 \pi^+ \pi^-, \Lambda \to \pi^- p, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma$ | 4810 | 3 | 81658 |
| 3166 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 4811 | 3 | 81661 |
| 3167 | $J/\psi \to \rho^+ K^- K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3766 | 3 | 81664 |
| 3168 | $J/\psi \to \pi^+\pi^-\phi, \phi \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4819 | 3 | 81667 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 3169 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6839 | 3 | 81670 |
| 3170 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^0K^0, a_0^+ \to \pi^+\eta, K^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 6844 | 3 | 81673 |
| 3171 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1206 | 3 | 81676 |
| 3172 | $J/\psi \to \pi^- K^+ \bar{K}_1^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 3015 | 3 | 81679 |
| 3173 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_L^0, \\ \eta \to \gamma \gamma$ | $\pi^0\pi^0K_L^0K_L^0\gamma\gamma$ | 3774 | 3 | 81682 |
| 3174 | $J/\psi 	o K^+K^-\eta', \eta' 	o \pi^+\pi^-\eta, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4827 | 3 | 81685 |
| 3175 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to \pi^+ \pi^- \omega, a_2^+ \to \rho^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6854 | 3 | 81688 |
| 3176 | $J/\psi \to \rho^+ b_1^- h_1(1170), \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4828 | 3 | 81691 |
| 3177 | $J/\psi ightarrow \pi^0\pi^0\pi^+b_1^-, b_1^- ightarrow \pi^-\omega, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 351 | 3 | 81694 |
| 3178 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 6875 | 3 | 81697 |
| 3179 | $J/\psi 	o \pi^- K_2^{*0} K^+, K_2^{*0} 	o \pi^0 \pi^0 \bar{K}^*, \bar{K}^* 	o \pi^0 \bar{K}^0, \bar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 6878 | 3 | 81700 |
| 3180 | $J/\psi \to K^+K^{*-}\eta', K^{*-} \to \pi^-\bar{K}^0, \eta' \to \pi^+\pi^-\eta, \bar{K}^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma$ | 4832 | 3 | 81703 |
| 3181 | $J/\psi 	o \eta \omega \eta', \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 6888 | 3 | 81706 |
| 3182 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^0 \pi^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6892 | 3 | 81709 |
| 3183 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 6893 | 3 | 81712 |
| 3184 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4839 | 3 | 81715 |
| 3185 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2533 | 3 | 81718 |
| 3186 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 818 | 3 | 81721 |
| 3187 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 4846 | 3 | 81724 |
| 3188 | $J/\psi 	o \pi^0 K^0 \bar{K}^*, K^0 	o K_S^0, \bar{K}^* 	o \pi^0 \bar{K}^0, K_S^0 	o \pi^0 \pi^0, \bar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6937 | 3 | 81727 |
| 3189 | $J/\psi 	o \pi^0\pi^0K^+K^-, \pi^0 	o e^+e^-\gamma^F$ | $e^+e^-\pi^0K^+K^-\gamma^F$ | 2536 | 3 | 81730 |
| 3190 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6948 | 3 | 81733 |
| 3191 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6956 | 3 | 81736 |
| 3192 | $J/\psi \to \rho^0 a_2^0 \eta, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6957 | 3 | 81739 |
| 3193 | $J/\psi \to \rho^- \omega \bar{K}^* K^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3028 | 3 | 81742 |
| 3194 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 3784 | 3 | 81745 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 3195 | $J/\psi \to K^+K^{*-}\eta', K^{*-} \to \pi^0K^-, \eta' \to \rho^0\gamma, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 3029 | 3 | 81748 |
| 3196 | $J/\psi \to \pi^0 \pi^- a_0^+ \gamma^F, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 2204 | 3 | 81751 |
| 3197 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_1^0 \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6983 | 3 | 81754 |
| 3198 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 6992 | 3 | 81757 |
| 3199 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3794 | 3 | 81760 |
| 3200 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2538 | 3 | 81763 |
| 3201 | $J/\psi ightarrow \eta' n ar{n}, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0nar{n}\gamma\gamma$ | 3798 | 3 | 81766 |
| 3202 | $J/\psi 	o \pi^0\pi^0\eta\gamma, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 4864 | 3 | 81769 |
| 3203 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^F, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 657 | 3 | 81772 |
| 3204 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^0K^+, K^{*-} \to \pi^0K^-, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 748 | 3 | 81775 |
| 3205 | $J/\psi \to \pi^0 \pi^+ a_1^- \gamma^f, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4876 | 3 | 81778 |
| 3206 | $J/\psi 	o \pi^0 ar{K}^* K_2^{*0}, ar{K}^* 	o \pi^0 ar{K}^0, K_2^{*0} 	o \pi^- K^+, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 2548 | 3 | 81781 |
| 3207 | $J/\psi \to \eta \omega f_0(1370), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 7021 | 3 | 81784 |
| 3208 | $J/\psi \to \pi^+ \rho^- \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 7030 | 3 | 81787 |
| 3209 | $J/\psi \to \pi^- \bar{\Sigma}^0 \Sigma^{*+}, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 7032 | 3 | 81790 |
| 3210 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^- \rho^+, h_1(1170) \to \pi^0 \rho^0, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1931 | 3 | 81793 |
| 3211 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 3048 | 3 | 81796 |
| 3212 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1690 | 3 | 81799 |
| 3213 | $J/\psi \to \pi^0 \pi^+ \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 3811 | 3 | 81802 |
| 3214 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 7049 | 3 | 81805 |
| 3215 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^+ \rho^-, h_1(1170) \to \pi^0 \rho^0, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 7051 | 3 | 81808 |
| 3216 | $J/\psi ightarrow ho^- ar{\Lambda} \Sigma^+, ho^- ightarrow \pi^0 \pi^-, ar{\Lambda} ightarrow \pi^+ ar{p}, \Sigma^+ ightarrow \pi^0 p$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 7055 | 3 | 81811 |
| 3217 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7056 | 3 | 81814 |
| 3218 | $J/\psi \to \eta K^+ K_1^-, \eta \to \gamma \gamma, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 3054 | 3 | 81817 |
| 3219 | $J/\psi ightarrow \pi^- ho^+ \eta \gamma^f, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 3813 | 3 | 81820 |
| 3220 | $J/\psi \to \omega \bar{K}^0 K_0^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3814 | 3 | 81823 |
| 3221 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^- K_2^{*+}, K_2^{*+} \to \pi^0 K^+$ | $\pi^0\pi^-\pi^-K^+K^+$ | 3817 | 3 | 81826 |
| 3222 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, h_1(1170) \to \pi^+\rho^-, K^0 \to K_L^0, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 7072 | 3 | 81829 |
| 3223 | $J/\psi \to \pi^+ \rho^- \omega h_1(1170), \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7075 | 3 | 81832 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3224 | $J/\psi 	o \eta f_0(1710)\gamma, \eta 	o \gamma\gamma, f_0(1710) 	o \pi^+\pi^-$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 7078 | 3 | 81835 |
| 3225 | $J/\psi ightarrow \pi^- \eta b_1^+, \eta ightarrow \gamma \gamma, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7085 | 3 | 81838 |
| 3226 | $J/\psi 	o \pi^- ho^+ a_1^0, ho^+ 	o \pi^0 \pi^+, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7101 | 3 | 81841 |
| 3227 | $J/\psi \to \pi^- b_1^0 a_0^+, b_1^0 \to \pi^0 \omega, a_0^+ \to \pi^+ \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1213 | 3 | 81844 |
| 3228 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7105 | 3 | 81847 |
| 3229 | $J/\psi 	o \pi^+ ho^- \gamma^f \gamma^f, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-\gamma^f\gamma^f$ | 7108 | 3 | 81850 |
| 3230 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 4913 | 3 | 81853 |
| 3231 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7113 | 3 | 81856 |
| 3232 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 4914 | 3 | 81859 |
| 3233 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7122 | 3 | 81862 |
| 3234 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 3059 | 3 | 81865 |
| 3235 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1106 | 3 | 81868 |
| 3236 | $J/\psi \to f_2(1270) n \bar{n}, f_2(1270) \to \pi^+ \pi^-$ | $\pi^+\pi^-nar{n}$ | 29 | 3 | 81871 |
| 3237 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3831 | 3 | 81874 |
| 3238 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^+K^-\gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 4932 | 3 | 81877 |
| 3239 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^+ \rho^-, K^{*-} \to \pi^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4933 | 3 | 81880 |
| 3240 | $J/\psi \to \phi f_1(1420), \phi \to \pi^+ \rho^-, f_1(1420) \to \pi^+ K^0 K^-, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2560 | 3 | 81883 |
| 3241 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^+K^*, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 1943 | 3 | 81886 |
| 3242 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0\pi^-\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7147 | 3 | 81889 |
| 3243 | $J/\psi ightarrow ho^+ K^0 K^- \gamma^f, ho^+ ightarrow \pi^0 \pi^+, K^0 ightarrow K^0_S, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 2222 | 3 | 81892 |
| 3244 | $J/\psi \to \rho^+ \omega K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3835 | 3 | 81895 |
| 3245 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 701 | 3 | 81898 |
| 3246 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7159 | 3 | 81901 |
| 3247 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 751 | 3 | 81904 |
| 3248 | $J/\psi 	o \eta K^* ar{K}^*, \eta 	o \pi^0 \pi^0 \pi^0, K^* 	o \pi^- K^+, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 4948 | 3 | 81907 |
| 3249 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 7169 | 3 | 81910 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3250 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 3840 | 3 | 81913 |
| 3251 | $J/\psi \to \rho^0 K^0 \bar{K}_0^{*0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7177 | 3 | 81916 |
| 3252 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 3079 | 3 | 81919 |
| 3253 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^+K^-, K_2^{*0} \to \pi^0K^*, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 2232 | 3 | 81922 |
| 3254 | $J/\psi 	o a_2^0 \pi^- b_1^+, a_2^0 	o \pi^+ ho^-, b_1^+ 	o \pi^+ \omega, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3086 | 3 | 81925 |
| 3255 | $J/\psi \to \eta' \phi, \eta' \to \pi^+ \pi^- \eta, \phi \to K^+ K^-, \eta \to \gamma \gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 7192 | 3 | 81928 |
| 3256 | $J/\psi \to K^- K^{*+} \eta', K^{*+} \to \pi^+ K^0, \eta' \to \omega \gamma, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 7195 | 3 | 81931 |
| 3257 | $J/\psi 	o K^+K^{*-}\eta', K^{*-} 	o \pi^-ar{K}^0, \eta' 	o ho^0\gamma, ar{K}^0 	o K^0_S, ho^0 	o \pi^+\pi^-, K^0_S 	o \pi^0\pi^0$ | $\pi^0 \pi^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 3846 | 3 | 81934 |
| 3258 | $J/\psi 	o \pi^0 ar{K}^0 K_1^0, ar{K}^0 	o K_L^0, K_1^0 	o ho^0 K^0, ho^0 	o \pi^+ \pi^-, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 3847 | 3 | 81937 |
| 3259 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to \pi^0\rho^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 1355 | 3 | 81940 |
| 3260 | $J/\psi \to \eta h_1(1170), \eta \to \gamma \gamma, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 7199 | 3 | 81943 |
| 3261 | $J/\psi 	o \pi^+\pi^-\omega\gamma^F, \omega 	o \pi^0\gamma$ | $\pi^0\pi^+\pi^-\gamma^F\gamma$ | 7208 | 3 | 81946 |
| 3262 | $J/\psi 	o \pi^+ \eta b_1^- \gamma^f, \eta 	o \gamma \gamma, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 2238 | 3 | 81949 |
| 3263 | $J/\psi \to \omega f_2(1270), \omega \to \pi^+\pi^-, f_2(1270) \to \pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 2240 | 3 | 81952 |
| 3264 | $J/\psi \to \pi^+ K_0^0 K_1^-, K_0^0 \to \pi^- K^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7213 | 3 | 81955 |
| 3265 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 7221 | 3 | 81958 |
| 3266 | $J/\psi \to \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 619 | 3 | 81961 |
| 3267 | $J/\psi ightarrow \eta \eta' \phi, \eta ightarrow \gamma \gamma, \eta' ightarrow ho^0 \gamma, \phi ightarrow K^+ K^-, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma\gamma$ | 4970 | 3 | 81964 |
| 3268 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7241 | 3 | 81967 |
| 3269 | $J/\psi ightarrow ho^0 ho^+ ho^-, ho^0 ightarrow \pi^+ \pi^- \gamma^f, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3099 | 3 | 81970 |
| 3270 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3860 | 3 | 81973 |
| 3271 | $J/\psi \to \pi^0 \rho^0 h_1(1170)\gamma, \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7258 | 3 | 81976 |
| 3272 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^+\pi^-\eta', \eta' ightarrow \pi^0\pi^0\eta, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 4973 | 3 | 81979 |
| 3273 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1119 | 3 | 81982 |
| 3274 | $J/\psi \to \pi^0 \pi^0 K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 828 | 3 | 81985 |
| 3275 | $J/\psi ightarrow \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\eta, \eta ightarrow \pi^+\pi^-\gamma^F$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 7280 | 3 | 81988 |
| 3276 | $J/\psi 	o \pi^0 K^- K_2^{*+}, K_2^{*+} 	o ho^+ K^0, ho^+ 	o \pi^0 \pi^+, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 7284 | 3 | 81991 |
| 3277 | $J/\psi 	o \pi^- \bar{p} \Delta^{++} \gamma^f, \Delta^{++} 	o \pi^+ p$ | $\pi^+\pi^-par p\gamma^f$ | 7287 | 3 | 81994 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3278 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4981 | 3 | 81997 |
| 3279 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^-\rho^+, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4982 | 3 | 82000 |
| 3280 | $J/\psi \to \bar{\Sigma}^0 \Sigma^{*0}, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \Sigma^{*0} \to \pi^- \Sigma^+, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^+ \to \pi^+ n$ | $\pi^+\pi^+\pi^-nar p\gamma$ | 2249 | 3 | 82003 |
| 3281 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 7302 | 3 | 82006 |
| 3282 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 7307 | 3 | 82009 |
| 3283 | $J/\psi \to \pi^- \omega \omega a_1^+, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 7308 | 3 | 82012 |
| 3284 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 829 | 3 | 82015 |
| 3285 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 7314 | 3 | 82018 |
| 3286 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 7318 | 3 | 82021 |
| 3287 | $J/\psi 	o \eta \omega \eta', \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3107 | 3 | 82024 |
| 3288 | $J/\psi 	o \pi^0 \pi^+ \pi^- \eta', \eta' 	o \pi^+ \pi^- \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7333 | 3 | 82027 |
| 3289 | $J/\psi \to \rho^+ n \bar{\Delta}^+, \rho^+ \to \pi^0 \pi^+, \bar{\Delta}^+ \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 1705 | 3 | 82030 |
| 3290 | $J/\psi \to h_1(1170)a_1^0, h_1(1170) \to \pi^+ \rho^-, a_1^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3113 | 3 | 82033 |
| 3291 | $J/\psi \to \pi^0 \pi^0 K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 7339 | 3 | 82036 |
| 3292 | $J/\psi \to \pi^- b_1^+ \gamma^f, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7348 | 3 | 82039 |
| 3293 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 7356 | 3 | 82042 |
| 3294 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 3886 | 3 | 82045 |
| 3295 | $J/\psi \to \pi^- \bar{K}^* K^+, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 2593 | 3 | 82048 |
| 3296 | $J/\psi ightarrow \pi^0 ar K^0 K^* \gamma, ar K^0 ightarrow K^0_L, K^* ightarrow \pi^- K^+$ | $\pi^0 K^0_L \pi^- K^+ \gamma$ | 5011 | 3 | 82051 |
| 3297 | $J/\psi \to \omega K^+ \bar{K}_1^{'-}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5014 | 3 | 82054 |
| 3298 | $J/\psi ightarrow \eta' \phi, \eta' ightarrow ho^0 \gamma, \phi ightarrow K_L^0 K_S^0, ho^0 ightarrow \pi^+ \pi^-, K_S^0 ightarrow \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5016 | 3 | 82057 |
| 3299 | $J/\psi \to K^-K^{*+}a_1^0, K^{*+} \to \pi^+K^0, a_1^0 \to \pi^-\rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7386 | 3 | 82060 |
| 3300 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^- \gamma$ | 1011 | 3 | 82063 |
| 3301 | $J/\psi \to \pi^+ \rho^- K^- K^{*+}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 3889 | 3 | 82066 |
| 3302 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ h_1(1170), \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 3890 | 3 | 82069 |
| 3303 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^+ \rho^-, K^{*+} \to \pi^0 K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5025 | 3 | 82072 |
| 3304 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 7408 | 3 | 82075 |
| 3305 | $J/\psi \rightarrow \rho^0 \rho^+ b_1^-, \rho^0 \rightarrow \pi^+ \pi^-, \rho^+ \rightarrow \pi^0 \pi^+, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 3895 | 3 | 82078 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 3306 | $J/\psi \to \pi^+ \rho^- n\bar{n}, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-n\bar{n}$ | 3900 | 3 | 82081 |
| 3307 | $J/\psi 	o \pi^0\pi^0 ho^- a_0^+, ho^- 	o \pi^0\pi^-, a_0^+ 	o \pi^+\eta, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2257 | 3 | 82084 |
| 3308 | $J/\psi ightarrow \eta b_1^0, \eta ightarrow \gamma \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2260 | 3 | 82087 |
| 3309 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7441 | 3 | 82090 |
| 3310 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7443 | 3 | 82093 |
| 3311 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^+K^0, h_1(1170) \to \pi^+\rho^-, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7444 | 3 | 82096 |
| 3312 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 925 | 3 | 82099 |
| 3313 | $J/\psi 	o ho^- K_2^{*0} K^+, ho^- 	o \pi^0 \pi^-, K_2^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 5038 | 3 | 82102 |
| 3314 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5039 | 3 | 82105 |
| 3315 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 5041 | 3 | 82108 |
| 3316 | $J/\psi ightarrow \pi^- ho^+ \eta, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \pi^0 \pi^0, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 7463 | 3 | 82111 |
| 3317 | $J/\psi ightarrow ar{K}^0 K^* \eta', ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^- K^+, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \gamma \gamma$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 7464 | 3 | 82114 |
| 3318 | $J/\psi \to \pi^0 \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 7465 | 3 | 82117 |
| 3319 | $J/\psi \to \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 7467 | 3 | 82120 |
| 3320 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 7470 | 3 | 82123 |
| 3321 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \eta\eta, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 1013 | 3 | 82126 |
| 3322 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 620 | 3 | 82129 |
| 3323 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3918 | 3 | 82132 |
| 3324 | $J/\psi \to \phi \phi \phi, \phi \to K_L^0 K_S^0, \phi \to K_L^0 K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-K^+K^-$ | 7523 | 3 | 82135 |
| 3325 | $J/\psi ightarrow ho^0 \Sigma^+ ar{\Sigma}^-, ho^0 ightarrow \pi^+ \pi^-, \Sigma^+ ightarrow \pi^0 p, ar{\Sigma}^- ightarrow \pi^- ar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 7532 | 3 | 82138 |
| 3326 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 7536 | 3 | 82141 |
| 3327 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3919 | 3 | 82144 |
| 3328 | $J/\psi \to \pi^0 K^{*+} K^{*-} \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 1522 | 3 | 82147 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3329 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 7550 | 3 | 82150 |
| 3330 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 488 | 3 | 82153 |
| 3331 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+\pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7561 | 3 | 82156 |
| 3332 | $J/\psi \to \rho^0 \rho^0 \pi^+ b_1^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7562 | 3 | 82159 |
| 3333 | $J/\psi \to \omega \bar{K}^0 K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1714 | 3 | 82162 |
| 3334 | $J/\psi \to K^0 \bar{K}^0 a_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 7566 | 3 | 82165 |
| 3335 | $J/\psi \to \rho^0 K^- K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 7574 | 3 | 82168 |
| 3336 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^+K^0, f_0(1370) \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 7581 | 3 | 82171 |
| 3337 | $J/\psi \to \phi f_2', \phi \to K^+K^-, f_2' \to K_S^0 K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 5067 | 3 | 82174 |
| 3338 | $J/\psi 	o K^0 ar{K}^0, K^0 	o K_L^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-$ | 5068 | 3 | 82177 |
| 3339 | $J/\psi 	o \pi^0 ar{K}^0 K_1^0, ar{K}^0 	o K_L^0, K_1^0 	o ho^0 K^0, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 3136 | 3 | 82180 |
| 3340 | $J/\psi \to \pi^- \omega \bar{K}^0 K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 5071 | 3 | 82183 |
| 3341 | $J/\psi \to \pi^+ K^0 K^{*-} \gamma^F, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7609 | 3 | 82186 |
| 3342 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5073 | 3 | 82189 |
| 3343 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7620 | 3 | 82192 |
| 3344 | $J/\psi \to \omega K^+ K_0^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3137 | 3 | 82195 |
| 3345 | $J/\psi \to \pi^+\pi^- f_2(1270), f_2(1270) \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-$ | 3939 | 3 | 82198 |
| 3346 | $J/\psi \to \pi^- \rho^+ K^- K^{*+}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3942 | 3 | 82201 |
| 3347 | $J/\psi \to \bar{K}^*K^+a_1^-, \bar{K}^* \to \pi^0\bar{K}^0, a_1^- \to \rho^0\pi^-, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2275 | 3 | 82204 |
| 3348 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 7649 | 3 | 82207 |
| 3349 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 3944 | 3 | 82210 |
| 3350 | $J/\psi \to \bar{K}^0 K^* f_2', \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_2' \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3140 | 3 | 82213 |
| 3351 | $J/\psi 	o K^{*+} ar{p} \Lambda, K^{*+} 	o \pi^+ K^0, \Lambda 	o \pi^0 n, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ n \bar{p}$ | 5088 | 3 | 82216 |
| 3352 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 7686 | 3 | 82219 |
| 3353 | $J/\psi \to ho^0 K^0 \bar{K}^*, ho^0 \to \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7689 | 3 | 82222 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 3354 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 834 | 3 | 82225 |
| 3355 | $J/\psi \to \rho^- K^+ \bar{K}_0^{*0}, \rho^- \to \pi^0 \pi^-, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 7696 | 3 | 82228 |
| 3356 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 7712 | 3 | 82231 |
| 3357 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, K^0 \to K$ | $K_L^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7717 | 3 | 82234 |
| 3358 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 490 | 3 | 82237 |
| 3359 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 3149 | 3 | 82240 |
| 3360 | $J/\psi 	o \pi^0 \pi^+ a_0^- \gamma^F, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 2621 | 3 | 82243 |
| 3361 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7721 | 3 | 82246 |
| 3362 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7725 | 3 | 82249 |
| 3363 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 5106 | 3 | 82252 |
| 3364 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K^+K^-, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7730 | 3 | 82255 |
| 3365 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 7731 | 3 | 82258 |
| 3366 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7734 | 3 | 82261 |
| 3367 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 1134 | 3 | 82264 |
| 3368 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5125 | 3 | 82267 |
| 3369 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7761 | 3 | 82270 |
| 3370 | $J/\psi 	o ho^- K^+ ar{K}^0_1, ho^- 	o \pi^0 \pi^-, ar{K}^0_1 	o ho^0 ar{K}^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 1722 | 3 | 82273 |
| 3371 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 3970 | 3 | 82276 |
| 3372 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-$ | 1020 | 3 | 82279 |
| 3373 | $J/\psi 	o \pi^0\pi^-b_1^+a_1^0, b_1^+ 	o \pi^+\omega, a_1^0 	o \pi^+ ho^-, \omega 	o \pi^0\pi^+\pi^-, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7772 | 3 | 82282 |
| 3374 | $J/\psi \to \pi^0 \rho^0 \omega h_1(1170), \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2281 | 3 | 82285 |
| 3375 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^0\bar{\Sigma}^+, \Sigma^{*-} \to \pi^-\Lambda, \bar{\Sigma}^+ \to \pi^+\bar{n}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 3174 | 3 | 82288 |
| 3376 | $J/\psi \to \pi^0 \bar{K}^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 5136 | 3 | 82291 |
| 3377 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\pi^+K^{*-}, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3977 | 3 | 82294 |
| 3378 | $J/\psi ightarrow ar{K}^0 K^+ b_1^-, ar{K}^0 ightarrow K_L^0, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 7811 | 3 | 82297 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3379 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7814 | 3 | 82300 |
| 3380 | $J/\psi \rightarrow \rho^0 \rho^+ \rho^- \eta, \rho^0 \rightarrow \pi^+ \pi^-, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5147 | 3 | 82303 |
| 3381 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 840 | 3 | 82306 |
| 3382 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 7826 | 3 | 82309 |
| 3383 | $J/\psi \to \pi^+\pi^-\eta K^+K^-, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 7832 | 3 | 82312 |
| 3384 | $J/\psi ightarrow \pi^0 a_0^0 \gamma, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 5150 | 3 | 82315 |
| 3385 | $J/\psi ightarrow \pi^+ ho^- \eta \gamma^f, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7841 | 3 | 82318 |
| 3386 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \rho^0\gamma, K^0 \to K^0_S, \rho^0 \to \pi^+\pi^-, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 1382 | 3 | 82321 |
| 3387 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma$ | 1983 | 3 | 82324 |
| 3388 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 7847 | 3 | 82327 |
| 3389 | $J/\psi \to \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7859 | 3 | 82330 |
| 3390 | $J/\psi \to \pi^- \bar{K}^* K^+ \gamma^F, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 2636 | 3 | 82333 |
| 3391 | $J/\psi 	o \omega ar{K}^* K_1^0, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^* 	o \pi^+ K^-, K_1^0 	o ho^- K^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3990 | 3 | 82336 |
| 3392 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^+K^0, h_1(1170) \to \pi^-\rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7880 | 3 | 82339 |
| 3393 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3991 | 3 | 82342 |
| 3394 | $J/\psi 	o a_2^0 K^- K^{*+}, a_2^0 	o \pi^+ \pi^- \omega, K^{*+} 	o \pi^0 K^+, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7885 | 3 | 82345 |
| 3395 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^0\Xi^0, \bar{\Xi}^{*0} \to \pi^0\bar{\Xi}^0, \Xi^0 \to \pi^0\Lambda, \bar{\Xi}^0 \to \pi^0\bar{\Lambda}, \Lambda \to \pi^-p, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 2637 | 3 | 82348 |
| 3396 | $J/\psi 	o \eta K^0 ar K^*, \eta 	o \gamma \gamma, K^0 	o K^0_L, ar K^* 	o \pi^0 ar K^0, ar K^0 	o K^0_L$ | $\pi^0 K_L^0 K_L^0 \gamma \gamma$ | 1986 | 3 | 82351 |
| 3397 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5167 | 3 | 82354 |
| 3398 | $J/\psi 	o \eta K^0 ar{K}^*, \eta 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 2643 | 3 | 82357 |
| 3399 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^0K^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 1533 | 3 | 82360 |
| 3400 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1243 | 3 | 82363 |
| 3401 | $J/\psi \to \Sigma^- \bar{\Sigma}^{*+}, \Sigma^- \to \pi^- n, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Sigma}^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 5183 | 3 | 82366 |
| 3402 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 7920 | 3 | 82369 |
| 3403 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 7936 | 3 | 82372 |
| 3404 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7937 | 3 | 82375 |
| 3405 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^0 \bar{\Sigma}^-, \Lambda \to \pi^- p, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 5187 | 3 | 82378 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3406 | $J/\psi \to \pi^+ K^0 K^{*-} \gamma^F, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5190 | 3 | 82381 |
| 3407 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^- \gamma^f, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 5194 | 3 | 82384 |
| 3408 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5199 | 3 | 82387 |
| 3409 | $J/\psi 	o ar{K}^0 K_0^0 \gamma, ar{K}^0 	o K_L^0, K_0^0 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 1732 | 3 | 82390 |
| 3410 | $J/\psi 	o ar{K}^0 K_0^0 \gamma, ar{K}^0 	o K_S^0, K_0^0 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma$ | 3206 | 3 | 82393 |
| 3411 | $J/\psi 	o a_2^0 \pi^+ \pi^-, a_2^0 	o \pi^+ \rho^-, \rho^- 	o \pi^0 \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 7986 | 3 | 82396 |
| 3412 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\eta\gamma^f, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 7987 | 3 | 82399 |
| 3413 | $J/\psi \to \rho^+ \rho^- K^- K^{*+}, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 3208 | 3 | 82402 |
| 3414 | $J/\psi \to K^0 \bar{K}^0 \gamma, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 7990 | 3 | 82405 |
| 3415 | $J/\psi \to \pi^- \rho^+ f_2(1270)\gamma^f, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5228 | 3 | 82408 |
| 3416 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 2651 | 3 | 82411 |
| 3417 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^- b_1^+, \rho^0 \to \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 2654 | 3 | 82414 |
| 3418 | $J/\psi \rightarrow \pi^+ b_1^0 a_0^-, b_1^0 \rightarrow \pi^0 \omega, a_0^- \rightarrow \pi^- \eta, \omega \rightarrow \pi^0 \pi^+ \pi^-, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8002 | 3 | 82417 |
| 3419 | $J/\psi \to \pi^+ \rho^- K^* \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8010 | 3 | 82420 |
| 3420 | $J/\psi \to \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 8011 | 3 | 82423 |
| 3421 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^0 \rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8013 | 3 | 82426 |
| 3422 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 8014 | 3 | 82429 |
| 3423 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 623 | 3 | 82432 |
| 3424 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^0 \pi^0, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 8019 | 3 | 82435 |
| 3425 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8020 | 3 | 82438 |
| 3426 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 8024 | 3 | 82441 |
| 3427 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^*\bar{K}^*, K^* \to \pi^-K^+, \bar{K}^* \to \pi^+K^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 8033 | 3 | 82444 |
| 3428 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 3215 | 3 | 82447 |
| 3429 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^- \gamma^f, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma^f$ | 4020 | 3 | 82450 |
| 3430 | $J/\psi \to \bar{K}^0 K_1^{'0} \gamma, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 8044 | 3 | 82453 |
| 3431 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^+K^-$ | $K^+K^-\gamma$ | 8045 | 3 | 82456 |
| 3432 | $J/\psi 	o ho^+ \Sigma^- ar{\Sigma}^0, ho^+ 	o \pi^0 \pi^+, \Sigma^- 	o \pi^- n, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 2302 | 3 | 82459 |
| 3433 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 5237 | 3 | 82462 |
| 3434 | $J/\psi ightarrow ho^+ \Sigma^- ar{\Lambda}, ho^+ ightarrow \pi^0 \pi^+, \Sigma^- ightarrow \pi^- n, ar{\Lambda} ightarrow \pi^+ ar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 5238 | 3 | 82465 |
| 3435 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \rho^0 \pi^+, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 8069 | 3 | 82468 |
| 3436 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^+ \pi^- \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 8074 | 3 | 82471 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3437 | $J/\psi \to \rho^0 K^* \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4023 | 3 | 82474 |
| 3438 | $J/\psi 	o \eta f_0(1710)\gamma, \eta 	o \pi^0\pi^0\pi^0, f_0(1710) 	o \omega\omega, \omega 	o \pi^0\pi^+\pi^-, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 5241 | 3 | 82477 |
| 3439 | $J/\psi ightarrow \omega K^-K^{*+}, \omega ightarrow \pi^0 \gamma, K^{*+} ightarrow \pi^+K^0, K^0 ightarrow K^0_L$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 3218 | 3 | 82480 |
| 3440 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^+ K^- \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 1734 | 3 | 82483 |
| 3441 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8092 | 3 | 82486 |
| 3442 | $J/\psi \to \pi^- a_2^+ f_2(1270), a_2^+ \to \rho^0 \pi^+, f_2(1270) \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 8100 | 3 | 82489 |
| 3443 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ho^- ar K^0 K^+, ho^- 	o \pi^0 \pi^-, ar K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 8102 | 3 | 82492 |
| 3444 | $J/\psi \to \pi^0 a_2^0 \omega, a_2^0 \to K_S^0 K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1537 | 3 | 82495 |
| 3445 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 8117 | 3 | 82498 |
| 3446 | $J/\psi \to ho^0 ho^- \bar{K}^0 K^+, ho^0 \to \pi^+ \pi^-, ho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 4035 | 3 | 82501 |
| 3447 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 1996 | 3 | 82504 |
| 3448 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^0 \pi^0, \ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5254 | 3 | 82507 |
| 3449 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+\bar{\Lambda}, \Sigma^{*-} \to \pi^0\Sigma^-, \bar{\Lambda} \to \pi^0\bar{n}, \Sigma^- \to \pi^-n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 8123 | 3 | 82510 |
| 3450 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_S^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 2665 | 3 | 82513 |
| 3451 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^-\pi^-K^+K^+$ | 2309 | 3 | 82516 |
| 3452 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2311 | 3 | 82519 |
| 3453 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \rho^0 K^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 5280 | 3 | 82522 |
| 3454 | $J/\psi ightarrow \pi^+ \eta' b_1^-, \eta' ightarrow \gamma \gamma, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1385 | 3 | 82525 |
| 3455 | $J/\psi \to \bar{\Xi}^+\Xi^-, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^- \to \pi^-\Lambda, \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to \pi^0n, \\ \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-n\bar{n}\gamma^F$ | 8165 | 3 | 82528 |
| 3456 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \pi^+\pi^-\eta', \eta' \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 8166 | 3 | 82531 |
| 3457 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma$ | 8174 | 3 | 82534 |
| 3458 | $J/\psi 	o ho^+ a_2^-, ho^+ 	o \pi^0 \pi^+, a_2^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5291 | 3 | 82537 |
| 3459 | $J/\psi \to \phi f_0(980), \phi \to K_L^0 K_S^0, f_0(980) \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 757 | 3 | 82540 |
| 3460 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 1388 | 3 | 82543 |
| 3461 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \rho^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5301 | 3 | 82546 |
| 3462 | $J/\psi \to K^*K^-a_1^+, K^* \to \pi^0K^0, a_1^+ \to \pi^0\rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 5304 | 3 | 82549 |
| 3463 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8201 | 3 | 82552 |
| 3464 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 625 | 3 | 82555 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 3465 | $J/\psi \to \pi^0 \pi^- a_2^+ \gamma^f, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5307 | 3 | 82558 |
| 3466 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, K^0 \to K_S^0, \omega \to \pi^0\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 8213 | 3 | 82561 |
| 3467 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 8214 | 3 | 82564 |
| 3468 | $J/\psi \to \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 936 | 3 | 82567 |
| 3469 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 5312 | 3 | 82570 |
| 3470 | $J/\psi ightarrow \pi^0 ar{n} p a_0^-, a_0^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^-ar{n}p\gamma\gamma$ | 626 | 3 | 82573 |
| 3471 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8235 | 3 | 82576 |
| 3472 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 8237 | 3 | 82579 |
| 3473 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\gamma\gamma$ | 8251 | 3 | 82582 |
| 3474 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8257 | 3 | 82585 |
| 3475 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \pi^+\pi^-\eta', \eta' \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 8259 | 3 | 82588 |
| 3476 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5321 | 3 | 82591 |
| 3477 | $J/\psi \to \eta h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3242 | 3 | 82594 |
| 3478 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 8268 | 3 | 82597 |
| 3479 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \pi^+\pi^-\eta, K^0 \to K_L^0, \eta \to \gamma\gamma$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 471 | 3 | 82600 |
| 3480 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \omega \omega, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma$ | 3250 | 3 | 82603 |
| 3481 | $J/\psi \to K^+K_1^-, K_1^- \to \rho^-\bar{K}^0, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 8286 | 3 | 82606 |
| 3482 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8294 | 3 | 82609 |
| 3483 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8296 | 3 | 82612 |
| 3484 | $J/\psi \to K^- K_0^{*+} \gamma^F, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma^F$ | 8299 | 3 | 82615 |
| 3485 | $J/\psi \to \pi^+ \pi^- \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 4065 | 3 | 82618 |
| 3486 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4066 | 3 | 82621 |
| 3487 | $J/\psi 	o ar{K}^0 K^* \gamma, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 2686 | 3 | 82624 |
| 3488 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8310 | 3 | 82627 |
| 3489 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 8311 | 3 | 82630 |
| 3490 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^{*+}K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 8315 | 3 | 82633 |
| 3491 | $J/\psi \to \pi^{+}a_{0}^{0}a_{1}^{-}, a_{0}^{0} \to \pi^{0}\eta, a_{1}^{-} \to \pi^{0}\rho^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \rho^{-} \to \pi^{0}\pi^{-}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 8319 | 3 | 82636 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3492 | $J/\psi \to \eta a_0^+ b_1^-, \eta \to \gamma \gamma, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8321 | 3 | 82639 |
| 3493 | $J/\psi \to \pi^0 \pi^+ \pi^- \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8322 | 3 | 82642 |
| 3494 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 ho^0 b_1^0, ho^0 ightarrow \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 713 | 3 | 82645 |
| 3495 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^+K^-, a_0^- \to \pi^-\eta, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 4079 | 3 | 82648 |
| 3496 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2689 | 3 | 82651 |
| 3497 | $J/\psi ightarrow \pi^+\pi^-\eta a^0_0, \eta ightarrow \gamma\gamma, a^0_0 ightarrow \pi^0\eta, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5350 | 3 | 82654 |
| 3498 | $J/\psi \to \pi^- K^{*+} \bar{K}^0_1, K^{*+} \to \pi^0 K^+, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5353 | 3 | 82657 |
| 3499 | $J/\psi ightarrow \pi^+\pi^-\omega par p, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 8354 | 3 | 82660 |
| 3500 | $J/\psi 	o ar{K}^* K_0^0, ar{K}^* 	o \pi^+ K^-, K_0^0 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 8357 | 3 | 82663 |
| 3501 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to K_L^0 K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 8358 | 3 | 82666 |
| 3502 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, \\ \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 1556 | 3 | 82669 |
| 3503 | $J/\psi 	o \eta ar{\Delta}^- \Delta^-, \eta 	o \gamma \gamma, ar{\Delta}^- 	o \pi^+ ar{n}, \Delta^- 	o \pi^- n$ | $\pi^+\pi^-nar{n}\gamma\gamma$ | 2694 | 3 | 82672 |
| 3504 | $J/\psi \to p\bar{p}f_0(1370), f_0(1370) \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^- par p \gamma^f$ | 8374 | 3 | 82675 |
| 3505 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^+ \pi^- \eta', \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8380 | 3 | 82678 |
| 3506 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5365 | 3 | 82681 |
| 3507 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0K^+K^-$ | 1395 | 3 | 82684 |
| 3508 | $J/\psi 	o \pi^0 a_1^0 \gamma, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 8386 | 3 | 82687 |
| 3509 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 8395 | 3 | 82690 |
| 3510 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 8407 | 3 | 82693 |
| 3511 | $J/\psi \to \omega f_0(980), \omega \to \pi^0 \pi^+ \pi^-, f_0(980) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 8409 | 3 | 82696 |
| 3512 | $J/\psi \to \phi\phi\phi, \phi \to K_L^0K_S^0, \phi \to K^+K^-, \phi \to K^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K^0_LK^+K^+K^-K^-$ | 5375 | 3 | 82699 |
| 3513 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 3266 | 3 | 82702 |
| 3514 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \Xi^0 \bar{\Xi}^0, \Xi^0 	o \pi^0 \Lambda, \bar{\Xi}^0 	o \pi^0 \bar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}\gamma$ | 8431 | 3 | 82705 |
| 3515 | $J/\psi 	o ho^+ a_2^- \eta, ho^+ 	o \pi^0 \pi^+, a_2^- 	o \pi^0 ho^-, \eta 	o \pi^0 \pi^0 \pi^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1559 | 3 | 82708 |
| 3516 | $J/\psi \to K^+ K^{*-} b_1^0, K^{*-} \to \pi^0 K^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3273 | 3 | 82711 |
| 3517 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4107 | 3 | 82714 |
| 3518 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5393 | 3 | 82717 |
| 3519 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 5400 | 3 | 82720 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 3520 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 8470 | 3 | 82723 |
| 3521 | $J/\psi \rightarrow \rho^0 \eta a_0^0, \rho^0 \rightarrow \pi^+\pi^-, \eta \rightarrow \pi^0\pi^+\pi^-, a_0^0 \rightarrow \pi^0\eta, \eta \rightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5401 | 3 | 82726 |
| 3522 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3275 | 3 | 82729 |
| 3523 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8484 | 3 | 82732 |
| 3524 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_0(1710) \to \omega \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 8486 | 3 | 82735 |
| 3525 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4123 | 3 | 82738 |
| 3526 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^0 \pi^0, \ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2716 | 3 | 82741 |
| 3527 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \rho^+ K^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3280 | 3 | 82744 |
| 3528 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^+ \pi^- \gamma^f, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 8499 | 3 | 82747 |
| 3529 | $J/\psi ightarrow \eta' n ar{n}, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0n\bar{n}$ | 5417 | 3 | 82750 |
| 3530 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 8505 | 3 | 82753 |
| 3531 | $J/\psi 	o \pi^0 ho^0 a_0^0, ho^0 	o \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4135 | 3 | 82756 |
| 3532 | $J/\psi \to \phi f_0(1790), \phi \to K_L^0 K_S^0, f_0(1790) \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 1561 | 3 | 82759 |
| 3533 | $J/\psi \to \pi^0 \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 5425 | 3 | 82762 |
| 3534 | $J/\psi \to \pi^0 \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 5428 | 3 | 82765 |
| 3535 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1760 | 3 | 82768 |
| 3536 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4141 | 3 | 82771 |
| 3537 | $J/\psi 	o \pi^-ar{\Sigma}^0\Sigma^{*+}, ar{\Sigma}^0 	o ar{\Lambda}\gamma, \Sigma^{*+} 	o \pi^+\Lambda, ar{\Lambda} 	o \pi^+ar{p}, \Lambda 	o \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-nar{p}\gamma$ | 8544 | 3 | 82774 |
| 3538 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \pi^0 \rho^+, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1562 | 3 | 82777 |
| 3539 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-$ | 4143 | 3 | 82780 |
| 3540 | $J/\psi 	o ho^+ \omega b_1^-, ho^+ 	o \pi^0 \pi^+, \omega 	o \pi^0 \pi^+ \pi^-, b_1^- 	o \pi^- \omega, \omega 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8560 | 3 | 82783 |
| 3541 | $J/\psi \to \pi^0 \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 8571 | 3 | 82786 |
| 3542 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8574 | 3 | 82789 |
| 3543 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5445 | 3 | 82792 |
| 3544 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 8599 | 3 | 82795 |
| 3545 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^- \phi, \phi \to K^+ K^-$ | $K^+K^+K^-K^-\gamma$ | 244 | 3 | 82798 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3546 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1397 | 3 | 82801 |
| 3547 | $J/\psi 	o ho^0 \pi^+ \pi^- \pi^- b_1^+, ho^0 	o \pi^+ \pi^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 1766 | 3 | 82804 |
| 3548 | $J/\psi 	o K^*ar{K}_0^{*0}, K^* 	o \pi^0 K^0, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, K^0 	o K_L^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K^0_LK^0_L$ | 3295 | 3 | 82807 |
| 3549 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 4161 | 3 | 82810 |
| 3550 | $J/\psi \to \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 8627 | 3 | 82813 |
| 3551 | $J/\psi \to K^+K^{*-}f_2^{'}, K^{*-} \to \pi^-\bar{K}^0, f_2^{'} \to K^+K^-, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 2347 | 3 | 82816 |
| 3552 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to \omega\omega, \omega \to \pi^0\gamma, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 8642 | 3 | 82819 |
| 3553 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8647 | 3 | 82822 |
| 3554 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \omega b_1^-, \omega 	o \pi^0 \pi^+ \pi^-, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 1398 | 3 | 82825 |
| 3555 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^- \rho^+, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8656 | 3 | 82828 |
| 3556 | $J/\psi \to \pi^+ \rho^- h_1(1170) \gamma^F, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 8658 | 3 | 82831 |
| 3557 | $J/\psi 	o \pi^+ K^0_S K^- \phi, K^0_S 	o \pi^0 \pi^0, \phi 	o K^0_L K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 5470 | 3 | 82834 |
| 3558 | $J/\psi 	o \pi^0 ar{\Lambda} \Sigma^{*0}, ar{\Lambda} 	o \pi^+ ar{p}, \Sigma^{*0} 	o \pi^0 \Lambda, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^+nar{p}$ | 2354 | 3 | 82837 |
| 3559 | $J/\psi 	o \pi^+ K^0 K_1^-, K^0 	o K_L^0, K_1^- 	o \pi^- ar{K}_0^{*0}, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 8676 | 3 | 82840 |
| 3560 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0K^+, K_1^- \to \omega K^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 1400 | 3 | 82843 |
| 3561 | $J/\psi 	o \Lambda ar{\Sigma}^{*0}, \Lambda 	o \pi^0 n, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^0n\bar{n}$ | 8681 | 3 | 82846 |
| 3562 | $J/\psi \to a_2^- \bar{K}^* K^+, a_2^- \to \pi^0 \pi^- \omega, \bar{K}^* \to \pi^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1040 | 3 | 82849 |
| 3563 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4170 | 3 | 82852 |
| 3564 | $J/\psi 	o \Sigma^0 ar{\Sigma}^{*0}, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^{*0} 	o \pi^+ ar{\Sigma}^-, \Lambda 	o \pi^- p, ar{\Sigma}^- 	o \pi^0 ar{p}$ | $\pi^0\pi^+\pi^-par p\gamma$ | 8691 | 3 | 82855 |
| 3565 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^+ \rho^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2737 | 3 | 82858 |
| 3566 | $J/\psi 	o \pi^0\pi^0a_1^0\gamma, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 8701 | 3 | 82861 |
| 3567 | $J/\psi ightarrow ho^0 K^+ K^-, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 8708 | 3 | 82864 |
| 3568 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 8718 | 3 | 82867 |
| 3569 | $J/\psi 	o \omega \bar{K}^0 K_0^0, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_S^0, K_0^0 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8724 | 3 | 82870 |
| 3570 | $J/\psi \to \pi^0 \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5489 | 3 | 82873 |
| 3571 | $J/\psi \to \pi^0 \pi^0 K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4175 | 3 | 82876 |
| 3572 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 3314 | 3 | 82879 |
| 3573 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3316 | 3 | 82882 |
| 3574 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8739 | 3 | 82885 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 3575 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma$ | 8748 | 3 | 82888 |
| 3576 | $J/\psi \to \rho^+ a_2^- \eta, \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5508 | 3 | 82891 |
| 3577 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \rho^+ K^0, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1266 | 3 | 82894 |
| 3578 | $J/\psi \to \Xi^-\bar{\Xi}^{*+}, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^{*+} \to \pi^+\bar{\Xi}^0, \Lambda \to \pi^0 n, \bar{\Xi}^0 \to \pi^0\bar{\Lambda}, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 5512 | 3 | 82897 |
| 3579 | $J/\psi 	o \pi^0 ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o \pi^+ \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8756 | 3 | 82900 |
| 3580 | $J/\psi 	o \pi^0 ho^0 f_2(1270), ho^0 	o \pi^+ \pi^-, f_2(1270) 	o K_L^0 K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 5513 | 3 | 82903 |
| 3581 | $J/\psi ightarrow \pi^+\pi^+\pi^-\pi^-\phi, \phi ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5514 | 3 | 82906 |
| 3582 | $J/\psi 	o \pi^0 K^0 K_2^{*0}, K^0 	o K_L^0, K_2^{*0} 	o \pi^+ \pi^- ar{K}^*, ar{K}^* 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4183 | 3 | 82909 |
| 3583 | $J/\psi \rightarrow \rho^+ \omega b_1^-, \rho^+ \rightarrow \pi^0 \pi^+, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 4184 | 3 | 82912 |
| 3584 | $J/\psi \to K^+K^{*-}f_2', K^{*-} \to \pi^0K^-, f_2' \to K^+K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 8774 | 3 | 82915 |
| 3585 | $J/\psi \to K^{+} \bar{K}_{1}^{'-} \gamma^{F}, \bar{K}_{1}^{'-} \to \pi^{-} \bar{K}^{*}, \bar{K}^{*} \to \pi^{+} K^{-}$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 5518 | 3 | 82918 |
| 3586 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 K^0 ar{K}^0, K^0 	o K_S^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8778 | 3 | 82921 |
| 3587 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2739 | 3 | 82924 |
| 3588 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 8784 | 3 | 82927 |
| 3589 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 4186 | 3 | 82930 |
| 3590 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \rho^0 K^+, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 8809 | 3 | 82933 |
| 3591 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \rho^- K^+, K_2^{*0} \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1405 | 3 | 82936 |
| 3592 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8812 | 3 | 82939 |
| 3593 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 8815 | 3 | 82942 |
| 3594 | $J/\psi ightarrow \pi^+ \eta K_S^0 K^-, \eta ightarrow \pi^+ \pi^- \gamma^F, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 3326 | 3 | 82945 |
| 3595 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, K_S^0 	o \pi^0 \pi^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0$ | 2742 | 3 | 82948 |
| 3596 | $J/\psi \to \rho^+ K^* \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8822 | 3 | 82951 |
| 3597 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5535 | 3 | 82954 |
| 3598 | $J/\psi 	o K^0 ar{K}^0, K^0 	o K^0_L, ar{K}^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L$ | 8831 | 3 | 82957 |
| 3599 | $J/\psi 	o \omega K^* ar{K}^*, \omega 	o \pi^0 \gamma, K^* 	o \pi^- K^+, ar{K}^* 	o \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 5538 | 3 | 82960 |
| 3600 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 3328 | 3 | 82963 |
| 3601 | $J/\psi 	o \pi^0 ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 8864 | 3 | 82966 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3602 | $J/\psi \to \pi^+ b_1^- \gamma^f, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 2747 | 3 | 82969 |
| 3603 | $J/\psi ightarrow ho^0\pi^-ar{\Delta}^0 p, ho^0 ightarrow \pi^+\pi^-, ar{\Delta}^0 ightarrow \pi^0ar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 5564 | 3 | 82972 |
| 3604 | $J/\psi 	o ho^0 f_2(1270) a_0^0, ho^0 	o \pi^+\pi^-, f_2(1270) 	o \pi^+\pi^-, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 8881 | 3 | 82975 |
| 3605 | $J/\psi ightarrow \pi^- a_2^+ \eta, a_2^+ ightarrow \pi^0 ho^+, \eta ightarrow \gamma \gamma, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4195 | 3 | 82978 |
| 3606 | $J/\psi \to K^-K^{*+}\gamma^f, K^{*+} \to \pi^0K^+$ | $\pi^0 K^+ K^- \gamma^f$ | 8894 | 3 | 82981 |
| 3607 | $J/\psi \rightarrow \phi f_0(1710), \phi \rightarrow K^+K^-, f_0(1710) \rightarrow \eta \eta, \eta \rightarrow \gamma \gamma, \eta \rightarrow \gamma \gamma$ | $K^+K^-\gamma\gamma\gamma\gamma$ | 8896 | 3 | 82984 |
| 3608 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5570 | 3 | 82987 |
| 3609 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4201 | 3 | 82990 |
| 3610 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 8912 | 3 | 82993 |
| 3611 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to \pi^+\pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 8916 | 3 | 82996 |
| 3612 | $J/\psi \to \rho^0 \pi^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 8917 | 3 | 82999 |
| 3613 | $J/\psi \to \pi^+ K_S^0 K^- \phi, K_S^0 \to \pi^+ \pi^-, \phi \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4203 | 3 | 83002 |
| 3614 | $J/\psi ightarrow f_1(1285)\gamma, f_1(1285) ightarrow \pi^0\pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 8922 | 3 | 83005 |
| 3615 | $J/\psi 	o f_2(1270) n ar{n}, f_2(1270) 	o \pi^0 \pi^0$ | $\pi^0\pi^0n\bar{n}$ | 2748 | 3 | 83008 |
| 3616 | $J/\psi 	o \phi\phi\gamma, \phi 	o K_L^0 K_S^0, \phi 	o K^+ K^-, K_S^0 	o \pi^0\pi^0$ | $\pi^0\pi^0K_L^0K^+K^-\gamma$ | 5596 | 3 | 83011 |
| 3617 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2749 | 3 | 83014 |
| 3618 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 8929 | 3 | 83017 |
| 3619 | $J/\psi \to \pi^0 \pi^0 \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 8937 | 3 | 83020 |
| 3620 | $J/\psi \to K^+K^{*-}\phi, K^{*-} \to \pi^0K^-, \phi \to K_L^0K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 8938 | 3 | 83023 |
| 3621 | $J/\psi \to \pi^- \bar{K}^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 2028 | 3 | 83026 |
| 3622 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 8958 | 3 | 83029 |
| 3623 | $J/\psi \to \phi f_1(1420), \phi \to \pi^- \rho^+, f_1(1420) \to \pi^0 K^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5604 | 3 | 83032 |
| 3624 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8962 | 3 | 83035 |
| 3625 | $J/\psi 	o a_2^0 \pi^- ho^+, a_2^0 	o \pi^+ ho^-, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 432 | 3 | 83038 |
| 3626 | $J/\psi 	o \omega \Lambda \bar{\Lambda}, \omega 	o \pi^0 \pi^+ \pi^-, \Lambda 	o \pi^0 n, \bar{\Lambda} 	o \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-nar{p}$ | 1268 | 3 | 83041 |
| 3627 | $J/\psi 	o \pi^0 \pi^+ \pi^- \rho^- b_1^+, \rho^- 	o \pi^0 \pi^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8985 | 3 | 83044 |
| 3628 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^+ K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 3345 | 3 | 83047 |
| 3629 | $J/\psi \to \rho^0 a_0^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 8990 | 3 | 83050 |
| 3630 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 4224 | 3 | 83053 |
| 3631 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 9006 | 3 | 83056 |
| 3632 | $J/\psi \to n\bar{n}a_0^0, a_0^0 \to \pi^0\eta, \eta \to \gamma\gamma$ | $\pi^0 n \bar{n} \gamma \gamma$ | 9014 | 3 | 83059 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3633 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^0 K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9016 | 3 | 83062 |
| 3634 | $J/\psi 	o \pi^+\pi^- K^0 ar K^0, K^0 	o K^0_L, ar K^0 	o K^0_L$ | $K_L^0K_L^0\pi^+\pi^-$ | 4226 | 3 | 83065 |
| 3635 | $J/\psi \to ho^0 a_2^0, ho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ ho^-, ho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 2373 | 3 | 83068 |
| 3636 | $J/\psi \to \Sigma^{*0}\bar{\Sigma}^{*0}, \Sigma^{*0} \to \pi^-\Sigma^+, \bar{\Sigma}^{*0} \to \pi^0\bar{\Lambda}, \Sigma^+ \to \pi^+n, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 5623 | 3 | 83071 |
| 3637 | $J/\psi \to \pi^0 \pi^0 \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9049 | 3 | 83074 |
| 3638 | $J/\psi \to \pi^- a_0^0 a_1^+, a_0^0 \to \pi^0 \eta, a_1^+ \to \rho^0 \pi^+, \eta \to \pi^+ \pi^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 9055 | 3 | 83077 |
| 3639 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 1408 | 3 | 83080 |
| 3640 | $J/\psi 	o \pi^0 ar{K}^0 K_0^0, ar{K}^0 	o K_L^0, K_0^0 	o \pi^- K^+$ | $\pi^0 K_L^0 \pi^- K^+$ | 9059 | 3 | 83083 |
| 3641 | $J/\psi 	o \pi^+ K^- K_1^0, K_1^0 	o \pi^- K_0^{*+}, K_0^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 9062 | 3 | 83086 |
| 3642 | $J/\psi \rightarrow \rho^+ \omega b_1^-, \rho^+ \rightarrow \pi^0 \pi^+, \omega \rightarrow \pi^+ \pi^-, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9072 | 3 | 83089 |
| 3643 | $J/\psi \to h_1(1380)f_1(1420), h_1(1380) \to K^-K^{*+}, f_1(1420) \to \pi^+K^0K^-, K^{*+} \to \pi^0K^+, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 9088 | 3 | 83092 |
| 3644 | $J/\psi 	o \pi^0 ho^+ a_0^-, ho^+ 	o \pi^0 \pi^+, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4236 | 3 | 83095 |
| 3645 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9096 | 3 | 83098 |
| 3646 | $J/\psi ightarrow \pi^0\pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 9098 | 3 | 83101 |
| 3647 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^0 \bar{\Sigma}^-, \Lambda \to \pi^- p, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 9114 | 3 | 83104 |
| 3648 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^+K^-K^-$ | 1576 | 3 | 83107 |
| 3649 | $J/\psi 	o \eta K^- K_1^+, \eta 	o \pi^0 \pi^0 \pi^0, K_1^+ 	o ho^+ K^0, ho^+ 	o \pi^0 \pi^+, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 5632 | 3 | 83110 |
| 3650 | $J/\psi \to \pi^- \rho^+ \rho^- a_1^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 5633 | 3 | 83113 |
| 3651 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-K^+K^-$ | 9127 | 3 | 83116 |
| 3652 | $J/\psi \to a_2^+ K^* K^-, a_2^+ \to \rho^0 \pi^+, K^* \to \pi^- K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 4239 | 3 | 83119 |
| 3653 | $J/\psi \to K^+ \phi K_0^{*-}, \phi \to K^+ K^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 5636 | 3 | 83122 |
| 3654 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2760 | 3 | 83125 |
| 3655 | $J/\psi 	o \pi^0 ar{n} \Delta^0, \Delta^0 	o \pi^0 n$ | $\pi^0\pi^0n\bar{n}$ | 9143 | 3 | 83128 |
| 3656 | $J/\psi 	o ar{K}^0 K^* a_1^0, ar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, a_1^0 	o \pi^+ ho^-, K_S^0 	o \pi^+ \pi^-, K^0 	o K_L^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9149 | 3 | 83131 |
| 3657 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 9151 | 3 | 83134 |
| 3658 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9166 | 3 | 83137 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3659 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 9177 | 3 | 83140 |
| 3660 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5643 | 3 | 83143 |
| 3661 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^+\pi^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9189 | 3 | 83146 |
| 3662 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5651 | 3 | 83149 |
| 3663 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9206 | 3 | 83152 |
| 3664 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 9218 | 3 | 83155 |
| 3665 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 572 | 3 | 83158 |
| 3666 | $J/\psi \to \phi f_0(1370), \phi \to K_L^0 K_S^0, f_0(1370) \to \rho^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9246 | 3 | 83161 |
| 3667 | $J/\psi \to \bar{K}^*K_2^0, \bar{K}^* \to \pi^+K^-, K_2^0 \to \pi^+K_2^{*-}, K_2^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 3363 | 3 | 83164 |
| 3668 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^0 K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5655 | 3 | 83167 |
| 3669 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0K_L^0$ | 5656 | 3 | 83170 |
| 3670 | $J/\psi 	o \Lambda ar{\Sigma}^0 \gamma, \Lambda 	o \pi^0 n, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0n\bar{n}\gamma\gamma$ | 9282 | 3 | 83173 |
| 3671 | $J/\psi \to \phi f_2', \phi \to K_L^0 K_S^0, f_2' \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 4256 | 3 | 83176 |
| 3672 | $J/\psi 	o K^0 ar{K}^* a_1^0, K^0 	o K_L^0, ar{K}^* 	o \pi^0 ar{K}^0, a_1^0 	o \pi^- ho^+, ar{K}^0 	o K_L^0, \ ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 3370 | 3 | 83179 |
| 3673 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 9295 | 3 | 83182 |
| 3674 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 9314 | 3 | 83185 |
| 3675 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9338 | 3 | 83188 |
| 3676 | $J/\psi 	o \eta' p \bar p, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 5663 | 3 | 83191 |
| 3677 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 671 | 3 | 83194 |
| 3678 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 9349 | 3 | 83197 |
| 3679 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9351 | 3 | 83200 |
| 3680 | $J/\psi ightarrow \pi^0 \Lambda ar{\Lambda}, \Lambda ightarrow \pi^0 n, ar{\Lambda} ightarrow \pi^0 ar{n}$ | $\pi^0\pi^0\pi^0n\bar{n}$ | 9360 | 3 | 83203 |
| 3681 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to K_L^0 K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 9372 | 3 | 83206 |
| 3682 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0K_L^0$ | 950 | 3 | 83209 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3683 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 9396 | 3 | 83212 |
| 3684 | $J/\psi 	o \pi^+\pi^-\eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1275 | 3 | 83215 |
| 3685 | $J/\psi \to \pi^+ K^* \bar{K}_1^{'-}, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5669 | 3 | 83218 |
| 3686 | $J/\psi 	o \pi^0 K^* ar{K}_0^{*0}, K^* 	o \pi^- K^+, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 9406 | 3 | 83221 |
| 3687 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 4270 | 3 | 83224 |
| 3688 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 5678 | 3 | 83227 |
| 3689 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9427 | 3 | 83230 |
| 3690 | $J/\psi 	o \Xi^0 \bar{\Xi}^0 \gamma, \Xi^0 	o \pi^0 \Lambda, \bar{\Xi}^0 	o \pi^0 \bar{\Lambda}, \Lambda 	o \pi^0 n, \bar{\Lambda} 	o \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}\gamma$ | 5680 | 3 | 83233 |
| 3691 | $J/\psi \to K^+ \bar{\Delta}^+ \Sigma^0, \bar{\Delta}^+ \to \pi^0 \bar{p}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^0 n$ | $\pi^0\pi^0K^+n\bar{p}\gamma$ | 9453 | 3 | 83236 |
| 3692 | $J/\psi \to \phi f_0(1710), \phi \to \pi^+ \rho^-, f_0(1710) \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4272 | 3 | 83239 |
| 3693 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 2766 | 3 | 83242 |
| 3694 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to K^+ K^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^+ \pi^- K^+ K^-$ | 9480 | 3 | 83245 |
| 3695 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- b_1^0, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2385 | 3 | 83248 |
| 3696 | $J/\psi \to K^+ K_1^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 3391 | 3 | 83251 |
| 3697 | $J/\psi ightarrow \pi^0\pi^0 ho^0a_0^0, ho^0 ightarrow \pi^+\pi^-, a_0^0 ightarrow \pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5698 | 3 | 83254 |
| 3698 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 9505 | 3 | 83257 |
| 3699 | $J/\psi \to \pi^+ K^0 K^{*-} \gamma^F, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 1788 | 3 | 83260 |
| 3700 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9511 | 3 | 83263 |
| 3701 | $J/\psi ightarrow \pi^+ ho^- \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 4287 | 3 | 83266 |
| 3702 | $J/\psi \to ho^0 \pi^- a_1^+ \gamma^F, ho^0 \to \pi^+ \pi^-, a_1^+ \to ho^0 \pi^+, ho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 9526 | 3 | 83269 |
| 3703 | $J/\psi ightarrow ar{K}^0 K^+ n ar{p}, ar{K}^0 ightarrow K_L^0$ | $K^0_L K^+ n \bar{p}$ | 9533 | 3 | 83272 |
| 3704 | $J/\psi \to \eta f_2' \gamma, \eta \to \gamma \gamma, f_2' \to K^+ K^-$ | $K^+K^-\gamma\gamma\gamma$ | 9534 | 3 | 83275 |
| 3705 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 2779 | 3 | 83278 |
| 3706 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^0 \rho^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 9541 | 3 | 83281 |
| 3707 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 858 | 3 | 83284 |
| 3708 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 3400 | 3 | 83287 |
| 3709 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+\pi^-, \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 9574 | 3 | 83290 |
| 3710 | $J/\psi \to K^{*-}p\bar{\Lambda}, K^{*-} \to \pi^-\bar{K}^0, \bar{\Lambda} \to \pi^0\bar{n}, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 2388 | 3 | 83293 |
| 3711 | $J/\psi 	o \omega K^0 K_2^{*0}, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, K_2^{*0} 	o ho^+ K^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4294 | 3 | 83296 |
| 3712 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1588 | 3 | 83299 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3713 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 9621 | 3 | 83302 |
| 3714 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_0(1370) \to \pi^+ \pi^-$ | $K_L^0K_L^0\pi^+\pi^-$ | 9622 | 3 | 83305 |
| 3715 | $J/\psi 	o \pi^0 K^+ K^- \gamma^F$ | $\pi^0 K^+ K^- \gamma^F$ | 2390 | 3 | 83308 |
| 3716 | $J/\psi ightarrow \eta K^+K_1^-, \eta ightarrow \gamma \gamma, K_1^- ightarrow ho^0 K^-, ho^0 ightarrow \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 2784 | 3 | 83311 |
| 3717 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9642 | 3 | 83314 |
| 3718 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 9653 | 3 | 83317 |
| 3719 | $J/\psi ightarrow ho^0 ho^- b_1^+, ho^0 ightarrow \pi^+ \pi^-, ho^- ightarrow \pi^0 \pi^-, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 9660 | 3 | 83320 |
| 3720 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 9663 | 3 | 83323 |
| 3721 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 9664 | 3 | 83326 |
| 3722 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4301 | 3 | 83329 |
| 3723 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma^F$ | 1589 | 3 | 83332 |
| 3724 | $J/\psi \to \pi^+ \omega K_S^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 9726 | 3 | 83335 |
| 3725 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 2789 | 3 | 83338 |
| 3726 | $J/\psi \to \phi f_1(1420), \phi \to \pi^+ \rho^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 9749 | 3 | 83341 |
| 3727 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 9762 | 3 | 83344 |
| 3728 | $J/\psi \to K_0^{*+} \bar{K}_1^{'-}, K_0^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5745 | 3 | 83347 |
| 3729 | $\begin{array}{l} \Lambda_S \to \pi^+ \pi \\ J/\psi \to \bar{\Sigma}^{*+} \Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Sigma}^0, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Lambda \to \pi^- p, \\ \bar{\Lambda} \to \pi^0 \bar{n} \end{array}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma$ | 9769 | 3 | 83350 |
| 3730 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^-\gamma\gamma^f$ | 5746 | 3 | 83353 |
| 3731 | $J/\psi ightarrow a_2^0\omega, a_2^0 ightarrow \pi^0\eta, \omega ightarrow \pi^0\pi^+\pi^-, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 1050 | 3 | 83356 |
| 3732 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 376 | 3 | 83359 |
| 3733 | $J/\psi \to \pi^+ a_2^-, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-$ | 9782 | 3 | 83362 |
| 3734 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+ \pi^- \gamma^f, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 5750 | 3 | 83365 |
| 3735 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 3429 | 3 | 83368 |
| 3736 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 9844 | 3 | 83371 |
| 3737 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 5760 | 3 | 83374 |
| 3738 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4314 | 3 | 83377 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 3739 | $J/\psi \to n\bar{p}a_0^+, a_0^+ \to \pi^+\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 9881 | 3 | 83380 |
| 3740 | $J/\psi \to \bar{K}^* K^{*+} b_1^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 3431 | 3 | 83383 |
| 3741 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_0(1710) \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 9917 | 3 | 83386 |
| 3742 | $J/\psi \to \pi^+ K^0 K^{*-} \gamma^F, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 2058 | 3 | 83389 |
| 3743 | $J/\psi \to \pi^0\pi^-a_2^+, a_2^+ \to \bar{K}^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 9939 | 3 | 83392 |
| 3744 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^- K^+ \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 9940 | 3 | 83395 |
| 3745 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-$ | 9951 | 3 | 83398 |
| 3746 | $J/\psi 	o \pi^0 \Lambda \bar{\Sigma}^{*0}, \Lambda 	o \pi^0 n, \bar{\Sigma}^{*0} 	o \pi^0 \bar{\Lambda}, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^0n\bar{n}$ | 3435 | 3 | 83401 |
| 3747 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 9955 | 3 | 83404 |
| 3748 | $J/\psi \to \rho^0 \pi^- \rho^+ h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3438 | 3 | 83407 |
| 3749 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2063 | 3 | 83410 |
| 3750 | $J/\psi 	o \pi^0\pi^-a_2^+\eta, a_2^+ 	o ho^0\pi^+, \eta 	o \gamma\gamma, ho^0 	o \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2796 | 3 | 83413 |
| 3751 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5782 | 3 | 83416 |
| 3752 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10010 | 3 | 83419 |
| 3753 | $J/\psi \to \pi^0\pi^-\pi^-\rho^+\rho^+, \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 10011 | 3 | 83422 |
| 3754 | $J/\psi \to \rho^0 \bar{\Sigma}^+ \Sigma^-, \rho^0 \to \pi^+ \pi^-, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^- \to \pi^- n$ | $\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 4326 | 3 | 83425 |
| 3755 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 5792 | 3 | 83428 |
| 3756 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 10036 | 3 | 83431 |
| 3757 | $J/\psi 	o \pi^+ a_1^0 a_1^-, a_1^0 	o \pi^- ho^+, a_1^- 	o \pi^0 ho^-, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 10041 | 3 | 83434 |
| 3758 | $J/\psi \to \eta_c \gamma, \eta_c \to \Sigma^0 \bar{\Sigma}^0, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Lambda \to \pi^- p, \ \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^-ar{n}p\gamma\gamma\gamma$ | 5794 | 3 | 83437 |
| 3759 | $J/\psi \to \pi^0 a_0^+ b_1^-, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 5798 | 3 | 83440 |
| 3760 | $J/\psi 	o ho^0 \pi^+ a_0^-, ho^0 	o \pi^+ \pi^-, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10072 | 3 | 83443 |
| 3761 | $J/\psi \to p\bar{p}f_0(1370), f_0(1370) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 10075 | 3 | 83446 |
| 3762 | $J/\psi \to \phi f_0(2020), \phi \to K_L^0 K_S^0, f_0(2020) \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5799 | 3 | 83449 |
| 3763 | $J/\psi ightarrow ho^- a_2^+ \eta, ho^- ightarrow \pi^0 \pi^-, a_2^+ ightarrow \pi^0 \pi^+ \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 10127 | 3 | 83452 |
| 3764 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4327 | 3 | 83455 |
| 3765 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow par{p}$ | $par{p}\gamma$ | 4329 | 3 | 83458 |
| 3766 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma$ | 10136 | 3 | 83461 |
| 3767 | $J/\psi 	o a_2^0 K^+ K^-, a_2^0 	o \pi^0 \eta, \eta 	o \gamma \gamma$ | $\pi^0 K^+ K^- \gamma \gamma$ | 10139 | 3 | 83464 |
| 3768 | $J/\psi \rightarrow ho^0\pi^+\rho^-\gamma^F, ho^0 \rightarrow \pi^+\pi^-, ho^- \rightarrow \pi^0\pi^-, \pi^0 \rightarrow e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 2064 | 3 | 83467 |
| 3769 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 548 | 3 | 83470 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3770 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10147 | 3 | 83473 |
| 3771 | $J/\psi \to \rho^0 \pi^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10168 | 3 | 83476 |
| 3772 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10173 | 3 | 83479 |
| 3773 | $J/\psi 	o \omega n ar{\Delta}^0, \omega 	o \pi^0 \gamma, ar{\Delta}^0 	o \pi^0 ar{n}$ | $\pi^0\pi^0n\bar{n}\gamma$ | 5815 | 3 | 83482 |
| 3774 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 5844 | 3 | 83485 |
| 3775 | $J/\psi 	o \pi^0 a_2^+ b_1^-, a_2^+ 	o ho^0 \pi^+, b_1^- 	o \pi^- \omega, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10213 | 3 | 83488 |
| 3776 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 2799 | 3 | 83491 |
| 3777 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 10260 | 3 | 83494 |
| 3778 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10305 | 3 | 83497 |
| 3779 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5854 | 3 | 83500 |
| 3780 | $J/\psi \to \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 436 | 3 | 83503 |
| 3781 | $J/\psi \to \pi^+ \rho^- \omega h_1(1170), \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10325 | 3 | 83506 |
| 3782 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+\bar{\Lambda}, \Sigma^{*-} \to \pi^-\Sigma^0, \bar{\Lambda} \to \pi^+\bar{p}, \Sigma^0 \to \Lambda\gamma, \Lambda \to \pi^-p$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma$ | 5864 | 3 | 83509 |
| 3783 | $J/\psi \to \pi^- a_2^+ \gamma^f, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 4344 | 3 | 83512 |
| 3784 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 638 | 3 | 83515 |
| 3785 | $J/\psi \to \pi^0 K^{*+} K_1^-, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4347 | 3 | 83518 |
| 3786 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1598 | 3 | 83521 |
| 3787 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^{*-} \to \pi^0 \bar{\Sigma}^-, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 5876 | 3 | 83524 |
| 3788 | $J/\psi \to K^- K_1^+, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 10393 | 3 | 83527 |
| 3789 | $J/\psi \to \pi^0 \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10396 | 3 | 83530 |
| 3790 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1601 | 3 | 83533 |
| 3791 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 10422 | 3 | 83536 |
| 3792 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 10427 | 3 | 83539 |
| 3793 | $J/\psi 	o \pi^+\pi^-a_1^0 \gamma^f, a_1^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10433 | 3 | 83542 |
| 3794 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10461 | 3 | 83545 |
| 3795 | $J/\psi \to K^+ K^{*-} \phi, K^{*-} \to \pi^0 K^-, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1602 | 3 | 83548 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3796 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^{+}\Sigma^{0}, \bar{\Sigma}^{*-} \to \pi^{-}\bar{\Lambda}, \Sigma^{0} \to \Lambda\gamma, \bar{\Lambda} \to \pi^{+}\bar{p}, \\ \Lambda \to \pi^{-}p$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma$ | 10473 | 3 | 83551 |
| 3797 | $J/\psi \to K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10501 | 3 | 83554 |
| 3798 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 5887 | 3 | 83557 |
| 3799 | $J/\psi \to a_0^+ b_1^-, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 775 | 3 | 83560 |
| 3800 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5896 | 3 | 83563 |
| 3801 | $J/\psi \to \rho^0 a_0^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10557 | 3 | 83566 |
| 3802 | $J/\psi 	o ho^0 ar{K}^0 K_0^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_S^0, K_0^0 	o \pi^- K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10561 | 3 | 83569 |
| 3803 | $J/\psi \to \rho^0 b_1^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5897 | 3 | 83572 |
| 3804 | $J/\psi \to \omega K^+ K^{*-} \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 4366 | 3 | 83575 |
| 3805 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10577 | 3 | 83578 |
| 3806 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^- \rho^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10579 | 3 | 83581 |
| 3807 | $J/\psi \to \pi^0 \rho^0 K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^-$ | 10580 | 3 | 83584 |
| 3808 | $J/\psi \to \rho^+ \rho^- K^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 10589 | 3 | 83587 |
| 3809 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\pi^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4367 | 3 | 83590 |
| 3810 | $J/\psi \to \rho^0 \pi^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5902 | 3 | 83593 |
| 3811 | $J/\psi \to f_2(1270)h_1(1170), f_2(1270) \to \pi^0\pi^0, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 678 | 3 | 83596 |
| 3812 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0 K^0_L\pi^-K^+$ | 10637 | 3 | 83599 |
| 3813 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 10646 | 3 | 83602 |
| 3814 | $J/\psi \to \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 725 | 3 | 83605 |
| 3815 | $J/\psi 	o \eta b_1^0, \eta 	o \pi^0 \pi^0 \pi^0, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 10668 | 3 | 83608 |
| 3816 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^+ \rho^-, K^{*-} \to \pi^0 K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10675 | 3 | 83611 |
| 3817 | $J/\psi \to \eta K^- K^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10684 | 3 | 83614 |
| 3818 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 10688 | 3 | 83617 |
| 3819 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10709 | 3 | 83620 |
| 3820 | $J/\psi \to f_2(1270)p\bar{p}, f_2(1270) \to \pi^+\pi^-$ | $\pi^+\pi^-par{p}$ | 10711 | 3 | 83623 |
| 3821 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10714 | 3 | 83626 |
| 3822 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 10734 | 3 | 83629 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 3823 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10741 | 3 | 83632 |
| 3824 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 5909 | 3 | 83635 |
| 3825 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 477 | 3 | 83638 |
| 3826 | $J/\psi \to \omega f_0(980), \omega \to \pi^0 \pi^+ \pi^-, f_0(980) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10765 | 3 | 83641 |
| 3827 | $J/\psi \to \rho^0 f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10774 | 3 | 83644 |
| 3828 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^0 K^-, \phi \to K^+ K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 10789 | 3 | 83647 |
| 3829 | $J/\psi \to \bar{K}^0 K^* b_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 869 | 3 | 83650 |
| 3830 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^+\pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3478 | 3 | 83653 |
| 3831 | $J/\psi 	o ho^0 K^0 ar{K}_0^{*0}, ho^0 	o \pi^+ \pi^-, K^0 	o K_S^0, ar{K}_0^{*0} 	o \pi^+ K^-, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10798 | 3 | 83656 |
| 3832 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 604 | 3 | 83659 |
| 3833 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^+\pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K^0_L\pi^+\pi^+\pi^-\pi^-$ | 10802 | 3 | 83662 |
| 3834 | $J/\psi 	o \pi^0 K^0 K_2^{*0}, K^0 	o K_L^0, K_2^{*0} 	o \pi^0 ar K^0, ar K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0$ | 10818 | 3 | 83665 |
| 3835 | $J/\psi 	o ar{n}\Delta^0\gamma, \Delta^0 	o \pi^- p$ | $\pi^- ar{n} p \gamma$ | 10835 | 3 | 83668 |
| 3836 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 3482 | 3 | 83671 |
| 3837 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^* K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 10859 | 3 | 83674 |
| 3838 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10860 | 3 | 83677 |
| 3839 | $J/\psi \to K_0^0 \bar{K}_0^{*0}, K_0^0 \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 10890 | 3 | 83680 |
| 3840 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 10891 | 3 | 83683 |
| 3841 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_L^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10907 | 3 | 83686 |
| 3842 | $J/\psi \to \pi^0 \pi^+ a_0^- \gamma^F, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 10917 | 3 | 83689 |
| 3843 | $J/\psi \to \pi^0 \pi^+ \pi^- \eta', \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1440 | 3 | 83692 |
| 3844 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10931 | 3 | 83695 |
| 3845 | $I/2/ \to \pi^0 K^+ \bar{K}'^- \bar{K}'^- \to \pi^0 K^{*-} K^{*-} \to \pi^- \bar{K}^0 \bar{K}^0 \to K^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10933 | 3 | 83698 |
| 3846 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 10937 | 3 | 83701 |
| 3847 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}$ | 10947 | 3 | 83704 |
| 3848 | $J/\psi \to \rho^{0} K^{*} \bar{K}^{*}, \rho^{0} \to \pi^{+} \pi^{-}, K^{*} \to \pi^{0} K^{0}, \bar{K}^{*} \to \pi^{0} \bar{K}^{0}, K^{0} \to K^{0}_{S}, K^{0} \to \pi^{+} \pi^{-}, K^{0}_{S} \to \pi^{0} \pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10957 | 3 | 83707 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 3849 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_1^0 \to \pi^+ \rho^-, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2820 | 3 | 83710 |
| 3850 | $J/\psi \to K^*K^-b_1^+, K^* \to \pi^0K^0, b_1^+ \to \pi^+\omega, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3486 | 3 | 83713 |
| 3851 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 5944 | 3 | 83716 |
| 3852 | $J/\psi \to \rho^+ K^- K_1^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10993 | 3 | 83719 |
| 3853 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0 \pi^0 K_L^0 K_L^0 \pi^- K^+$ | 11008 | 3 | 83722 |
| 3854 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 5946 | 3 | 83725 |
| 3855 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11042 | 3 | 83728 |
| 3856 | $J/\psi 	o nar{n}\gamma$ | $nar{n}\gamma$ | 11064 | 3 | 83731 |
| 3857 | $J/\psi 	o \pi^0 \bar{\Lambda} \Sigma^{*0}, \bar{\Lambda} 	o \pi^+ \bar{p}, \Sigma^{*0} 	o \pi^0 \Lambda, \Lambda 	o \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 11068 | 3 | 83734 |
| 3858 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5953 | 3 | 83737 |
| 3859 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 11079 | 3 | 83740 |
| 3860 | $J/\psi 	o \pi^0 ar{n} \Delta^0, \Delta^0 	o \pi^- p$ | $\pi^0\pi^-\bar{n}p$ | 11114 | 3 | 83743 |
| 3861 | $J/\psi \to \rho^0 \bar{p}\Delta^+, \rho^0 \to \pi^+\pi^-, \Delta^+ \to \pi^+ n$ | $\pi^+\pi^+\pi^-n\bar{p}$ | 1441 | 3 | 83746 |
| 3862 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11136 | 3 | 83749 |
| 3863 | $J/\psi ightarrow a_2^+ K^0 K^-, a_2^+ ightarrow \pi^+ \eta, K^0 ightarrow K_L^0, \eta ightarrow \gamma \gamma$ | $K_L^0\pi^+K^-\gamma\gamma$ | 11148 | 3 | 83752 |
| 3864 | $J/\psi 	o K^+ K^- a^0_0, a^0_0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 11177 | 3 | 83755 |
| 3865 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11210 | 3 | 83758 |
| 3866 | $J/\psi \to \phi f_0(1790), \phi \to K^+K^-, f_0(1790) \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 11214 | 3 | 83761 |
| 3867 | $J/\psi 	o a_2^0 \pi^+ b_1^-, a_2^0 	o \pi^+ ho^-, b_1^- 	o \pi^- \omega, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11220 | 3 | 83764 |
| 3868 | $J/\psi ightarrow K^0K^-b_1^+, K^0 ightarrow K_S^0, b_1^+ ightarrow \pi^+\omega, K_S^0 ightarrow \pi^+\pi^-, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 1822 | 3 | 83767 |
| 3869 | $J/\psi \to \pi^0 h_1(1170) a_1^0, h_1(1170) \to \pi^0 \rho^0, a_1^0 \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1613 | 3 | 83770 |
| 3870 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11237 | 3 | 83773 |
| 3871 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 11242 | 3 | 83776 |
| 3872 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^- \gamma^f, a_2^0 	o \pi^+ \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11295 | 3 | 83779 |
| 3873 | $J/\psi 	o K^* ar{n} \Lambda, K^* 	o \pi^0 K^0, \Lambda 	o \pi^0 n, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 438 | 3 | 83782 |
| 3874 | $J/\psi \to \eta K^- K^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4410 | 3 | 83785 |
| 3875 | $J/\psi \to \rho^- \bar{K}^0 K^{*+} \gamma, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 11345 | 3 | 83788 |
| 3876 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \rho^0 \gamma, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 11360 | 3 | 83791 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3877 | $J/\psi \to K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 2828 | 3 | 83794 |
| 3878 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11362 | 3 | 83797 |
| 3879 | $J/\psi \to \pi^0 \rho^+ n \bar{\Delta}^+, \rho^+ \to \pi^0 \pi^+, \bar{\Delta}^+ \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 11368 | 3 | 83800 |
| 3880 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 5964 | 3 | 83803 |
| 3881 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 683 | 3 | 83806 |
| 3882 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 11389 | 3 | 83809 |
| 3883 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^+\pi^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1067 | 3 | 83812 |
| 3884 | $J/\psi \to \pi^-\pi^-\rho^+\rho^+, \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2098 | 3 | 83815 |
| 3885 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \rho^-K^0, K^0 \to K_L^0, \rho^- \to \pi^0\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11484 | 3 | 83818 |
| 3886 | $J/\psi 	o \pi^0 ar{K}^0 K_2^{*0}, ar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^0 \pi^- K^{*+}, K^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 11494 | 3 | 83821 |
| 3887 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0\pi^-K^+K^+K^-\gamma$ | 5973 | 3 | 83824 |
| 3888 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 11523 | 3 | 83827 |
| 3889 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^0 \pi^0, b_1^+ \to \pi^+ \omega, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11540 | 3 | 83830 |
| 3890 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+\pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2100 | 3 | 83833 |
| 3891 | $J/\psi ightarrow ho^0 \pi^+ n ar p, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-nar{p}$ | 5983 | 3 | 83836 |
| 3892 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^- K^+ K^-$ | 5988 | 3 | 83839 |
| 3893 | $J/\psi ightarrow \eta f_2^{\prime} \gamma, \eta ightarrow \pi^0 \pi^0 \pi^0, f_2^{\prime} ightarrow K^+ K^-$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 3510 | 3 | 83842 |
| 3894 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 5991 | 3 | 83845 |
| 3895 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11581 | 3 | 83848 |
| 3896 | $J/\psi 	o ar K^0 \Delta^0 ar \Lambda, ar K^0 	o K_L^0, \Delta^0 	o \pi^0 n, ar \Lambda 	o \pi^+ ar p$ | $\pi^0 K_L^0 \pi^+ n \bar{p}$ | 3517 | 3 | 83851 |
| 3897 | $J/\psi \to \pi^0 \Sigma^- \bar{\Sigma}^{*+}, \Sigma^- \to \pi^- n, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 11593 | 3 | 83854 |
| 3898 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^-$ | 5996 | 3 | 83857 |
| 3899 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11608 | 3 | 83860 |
| 3900 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \rho^0 K^+, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 11613 | 3 | 83863 |
| 3901 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \phi \to K^+K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 11662 | 3 | 83866 |
| 3902 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 3520 | 3 | 83869 |
| 3903 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2432 | 3 | 83872 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 3904 | $J/\psi \to a_2^0 \pi^- a_1^+, a_2^0 \to \pi^+ \pi^- \omega, a_1^+ \to \pi^0 \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11679 | 3 | 83875 |
| 3905 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^+ \rho^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11680 | 3 | 83878 |
| 3906 | $J/\psi \to \pi^0 a_0^- b_1^+, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11704 | 3 | 83881 |
| 3907 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11736 | 3 | 83884 |
| 3908 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+$ | 11737 | 3 | 83887 |
| 3909 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^-$ | 11775 | 3 | 83890 |
| 3910 | $J/\psi \to K^0 \bar{K}^* b_1^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 11813 | 3 | 83893 |
| 3911 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^0 \eta', \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 11814 | 3 | 83896 |
| 3912 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11833 | 3 | 83899 |
| 3913 | $J/\psi \to K^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^-$ | 1068 | 3 | 83902 |
| 3914 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \gamma, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11897 | 3 | 83905 |
| 3915 | $J/\psi ightarrow \eta' n ar{n}, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-nar{n}$ | 11905 | 3 | 83908 |
| 3916 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^- \rho^+, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11910 | 3 | 83911 |
| 3917 | $J/\psi 	o \pi^0 \eta' \gamma, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 11911 | 3 | 83914 |
| 3918 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 11940 | 3 | 83917 |
| 3919 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11941 | 3 | 83920 |
| 3920 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^0 \eta', \eta' \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 11971 | 3 | 83923 |
| 3921 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11972 | 3 | 83926 |
| 3922 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 11976 | 3 | 83929 |
| 3923 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_L^0, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11983 | 3 | 83932 |
| 3924 | $J/\psi \to \rho^+ b_1^0 b_1^-, \rho^+ \to \pi^0 \pi^+, b_1^0 \to \pi^0 \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 12007 | 3 | 83935 |
| 3925 | $J/\psi \to \pi^0\pi^-a_2^+, \pi^0 \to e^+e^-\gamma^F, a_2^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 6006 | 3 | 83938 |
| 3926 | $J/\psi \to ho^0 ho^+ ho^-, ho^0 \to \pi^+ \pi^-, ho^+ \to \pi^0 \pi^+, ho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12032 | 3 | 83941 |
| 3927 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 12048 | 3 | 83944 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 3928 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 12075 | 3 | 83947 |
| 3929 | $J/\psi \to \Sigma^- \bar{\Sigma}^{*+}, \Sigma^- \to \pi^- n, \bar{\Sigma}^{*+} \to \pi^0 \bar{\Sigma}^+, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 2844 | 3 | 83950 |
| 3930 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, $ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12099 | 3 | 83953 |
| 3931 | $J/\psi \to \pi^- a_2^+ \gamma^f, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 12104 | 3 | 83956 |
| 3932 | $J/\psi ightarrow \pi^0 ho^0, \pi^0 ightarrow e^+ e^- \gamma^F, ho^0 ightarrow \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^-\gamma^F$ | 12109 | 3 | 83959 |
| 3933 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^+K^0K^-, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 12110 | 3 | 83962 |
| 3934 | $J/\psi \to \bar{K}^0 K^* \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 6010 | 3 | 83965 |
| 3935 | $J/\psi \to \rho^+ K^* K^{*-} \gamma^f, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 6014 | 3 | 83968 |
| 3936 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12213 | 3 | 83971 |
| 3937 | $J/\psi \to \pi^- \rho^+ \omega h_1(1170), \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 12214 | 3 | 83974 |
| 3938 | $J/\psi ightarrow \omega \bar{K}^0 K^*, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f, \bar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^- K^+$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 3535 | 3 | 83977 |
| 3939 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^+K^0, \phi \to K^+K^-, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 793 | 3 | 83980 |
| 3940 | $J/\psi ightarrow \pi^0 b_1^0, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 12250 | 3 | 83983 |
| 3941 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12252 | 3 | 83986 |
| 3942 | $J/\psi \rightarrow \omega K^* \bar{K}^*, \omega \rightarrow \pi^0 \pi^+ \pi^-, K^* \rightarrow \pi^0 K^0, \bar{K}^* \rightarrow \pi^0 \bar{K}^0, K^0 \rightarrow K_L^0, \bar{K}^0 \rightarrow K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 4452 | 3 | 83989 |
| 3943 | $J/\psi 	o \pi^0 \pi^+ p \bar{\Delta}^{++}, \bar{\Delta}^{++} 	o \pi^- \bar{p}$ | $\pi^0\pi^+\pi^-par{p}$ | 12315 | 3 | 83992 |
| 3944 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3538 | 3 | 83995 |
| 3945 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 1182 | 3 | 83998 |
| 3946 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to K^0 K^-, h_1(1170) \to \pi^- \rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12371 | 3 | 84001 |
| 3947 | $J/\psi 	o \omega K^0 ar{K}^*, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K^0_S, ar{K}^* 	o \pi^0 ar{K}^0, K^0_S 	o \pi^0 \pi^0, ar{K}^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 12394 | 3 | 84004 |
| 3948 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 12436 | 3 | 84007 |
| 3949 | $J/\psi 	o \pi^- K^+ ar{K}_0^{*0}, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 12465 | 3 | 84010 |
| 3950 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6028 | 3 | 84013 |
| 3951 | $J/\psi 	o \eta K^+K^{*-}, \eta 	o \gamma \gamma, K^{*-} 	o \pi^-ar{K}^0, ar{K}^0 	o K^0_S, K^0_S 	o \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 12523 | 3 | 84016 |
| 3952 | $J/\psi 	o \pi^0 \eta b_1^0, \eta 	o \pi^+ \pi^- \gamma^F, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 12525 | 3 | 84019 |
| 3953 | $J/\psi ightarrow a_2^0 \omega, a_2^0 ightarrow \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 4458 | 3 | 84022 |
| 3954 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 12543 | 3 | 84025 |
| 3955 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 128 | 3 | 84028 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3956 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+}\to \pi^+K^0, K^{*-}\to \pi^-\bar{K}^0, \phi\to K^+K^-, K^0\to K_L^0, \\ \bar{K}^0\to K_S^0, K_S^0\to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 2850 | 3 | 84031 |
| 3957 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^0 \bar{K}^{*0}_0, K^0 \to K^0_S, \bar{K}^{*0}_0 \to \pi^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6040 | 3 | 84034 |
| 3958 | $J/\psi \rightarrow \rho^0 \rho^+ b_1^-, \rho^0 \rightarrow \pi^+ \pi^- \gamma^f, \rho^+ \rightarrow \pi^0 \pi^+, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 2851 | 3 | 84037 |
| 3959 | $J/\psi 	o \pi^+\pi^-\omega \gamma^f, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma^f$ | 12641 | 3 | 84040 |
| 3960 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 12643 | 3 | 84043 |
| 3961 | $J/\psi 	o \pi^+ K_2^{*0} K^-, K_2^{*0} 	o \pi^0 K^*, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 6044 | 3 | 84046 |
| 3962 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+ \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 3547 | 3 | 84049 |
| 3963 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12692 | 3 | 84052 |
| 3964 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12722 | 3 | 84055 |
| 3965 | $J/\psi \to K^- p \bar{\Sigma}^{*0}, \bar{\Sigma}^{*0} \to \pi^+ \bar{\Sigma}^-, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^+K^-par{p}$ | 6050 | 3 | 84058 |
| 3966 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4464 | 3 | 84061 |
| 3967 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 12792 | 3 | 84064 |
| 3968 | $J/\psi \to \pi^0 \rho^0 \eta', \rho^0 \to \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 12813 | 3 | 84067 |
| 3969 | $J/\psi \to \pi^0 \pi^+ \rho^- a_0^0, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2108 | 3 | 84070 |
| 3970 | $J/\psi \to \rho^0 \pi^+ \rho^- h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4471 | 3 | 84073 |
| 3971 | $J/\psi \to \rho \ \pi \ \rho \ h_1(1110), \rho \to \pi \ \pi \ , \rho \to \pi \ \pi \ , h_1(1110) \to \pi \ \rho \ , \rho \to \pi \ \pi $ $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0,$ $K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12895 | 3 | 84076 |
| 3972 | $J/\psi \rightarrow \pi^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 12906 | 3 | 84079 |
| 3973 | $J/\psi 	o \eta \omega \eta', \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 12909 | 3 | 84082 |
| 3974 | $J/\psi \to K^0K^-a_1^+, K^0 \to K_S^0, a_1^+ \to \pi^0\rho^+, K_S^0 \to \pi^0\pi^0, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 12912 | 3 | 84085 |
| 3975 | $J/\psi \to \rho^+ \rho^- \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 12913 | 3 | 84088 |
| 3976 | $J/\psi \to K^+ K^{*-} a_0^0, K^{*-} \to \pi^0 K^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 12922 | 3 | 84091 |
| 3977 | $J/\psi \to \rho^0 \pi^+ \pi^+ \pi^- \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 12938 | 3 | 84094 |
| 3978 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 12966 | 3 | 84097 |
| 3979 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 12967 | 3 | 84100 |
| 3980 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12976 | 3 | 84103 |
| 3981 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2440 | 3 | 84106 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 3982 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 13019 | 3 | 84109 |
| 3983 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4476 | 3 | 84112 |
| 3984 | $J/\psi \to \pi^- \bar{K}^* K^+ \phi, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-$ | $\pi^+\pi^-K^+K^+K^-K^-$ | 1306 | 3 | 84115 |
| 3985 | $J/\psi \to \bar{K}^{0}K^{*}f_{2}^{'}, \bar{K}^{0} \to K_{S}^{0}, K^{*} \to \pi^{-}K^{+}, f_{2}^{'} \to K^{+}K^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 4478 | 3 | 84118 |
| 3986 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 13089 | 3 | 84121 |
| 3987 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^0K^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0K^+K^+K^-K^-$ | 13094 | 3 | 84124 |
| 3988 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \gamma, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13125 | 3 | 84127 |
| 3989 | $J/\psi 	o \pi^0\pi^-a_2^+, a_2^+ 	o ho^0\pi^+, ho^0 	o \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 13170 | 3 | 84130 |
| 3990 | $J/\psi \to \pi^+\pi^+\pi^-\rho^-\omega, \rho^- \to \pi^0\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13186 | 3 | 84133 |
| 3991 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ b_1^0, \rho^+ \to \pi^0 \pi^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13320 | 3 | 84136 |
| 3992 | $J/\psi 	o \pi^0 K^- K_1^{'+}, K_1^{'+} 	o \pi^+ K^*, K^* 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 3557 | 3 | 84139 |
| 3993 | $J/\psi \to \bar{K}^0 K^* a^0_0, \bar{K}^0 \to K^0_L, K^* \to \pi^- K^+, a^0_0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^-K^+$ | 13353 | 3 | 84142 |
| 3994 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13387 | 3 | 84145 |
| 3995 | $J/\psi \to h_1(1170)a_1^0, h_1(1170) \to \pi^0 \rho^0, a_1^0 \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6078 | 3 | 84148 |
| 3996 | $J/\psi \to \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\eta, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 4482 | 3 | 84151 |
| 3997 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \rho^+\rho^-, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 2442 | 3 | 84154 |
| 3998 | $J/\psi \to \pi^0 \rho^0 \pi^+ \rho^- \omega, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6092 | 3 | 84157 |
| 3999 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \omega \bar{K}^0, \omega \to \pi^0\pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13519 | 3 | 84160 |
| 4000 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13542 | 3 | 84163 |
| 4001 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0 K^0_L\pi^+K^-$ | 2864 | 3 | 84166 |
| 4002 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 13629 | 3 | 84169 |
| 4003 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0 K^+ K^+ K^- K^-$ | 13647 | 3 | 84172 |
| 4004 | $J/\psi \rightarrow \eta' f_2^{'} \gamma, \eta' \rightarrow \pi^+ \pi^- \eta, f_2^{'} \rightarrow K^+ K^-, \eta \rightarrow \gamma \gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma\gamma$ | 13661 | 3 | 84175 |
| 4005 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 13673 | 3 | 84178 |
| 4006 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^+K^0, h_1(1170) \to \pi^+\rho^-, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13685 | 3 | 84181 |
| 4007 | $J/\psi \to K^0K^-b_1^+, K^0 \to K_L^0, b_1^+ \to \pi^+\omega, \omega \to \pi^0\gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 13688 | 3 | 84184 |
| 4008 | $J/\psi \to K^0 \bar{K}^* b_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13695 | 3 | 84187 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 4009 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 13700 | 3 | 84190 |
| 4010 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13796 | 3 | 84193 |
| 4011 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 13854 | 3 | 84196 |
| 4012 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 13889 | 3 | 84199 |
| 4013 | $J/\psi 	o \pi^0 \Lambda ar{\Lambda}, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+\pi^-par{p}$ | 13895 | 3 | 84202 |
| 4014 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^F$ | 13964 | 3 | 84205 |
| 4015 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^+ \pi^- K^+$ | $\pi^+\pi^-K^+K^-$ | 13968 | 3 | 84208 |
| 4016 | $J/\psi \to ho^0 ar{K}^0 K^*, ho^0 \to \pi^+ \pi^-, ar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14093 | 3 | 84211 |
| 4017 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14183 | 3 | 84214 |
| 4018 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14197 | 3 | 84217 |
| 4019 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 14199 | 3 | 84220 |
| 4020 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14209 | 3 | 84223 |
| 4021 | $J/\psi \to n\bar{n}a_1^0, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-nar{n}$ | 14210 | 3 | 84226 |
| 4022 | $J/\psi \to \pi^0 \rho^0 \pi^+ \rho^- b_1^0, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14238 | 3 | 84229 |
| 4023 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^- \rho^+, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14319 | 3 | 84232 |
| 4024 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14320 | 3 | 84235 |
| 4025 | $J/\psi 	o f_2(1270)b_1^0, f_2(1270) 	o \pi^0\pi^0\pi^+\pi^-, b_1^0 	o \pi^0\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14329 | 3 | 84238 |
| 4026 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14447 | 3 | 84241 |
| 4027 | $J/\psi \to \pi^+ a_0^- \gamma^F, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 14456 | 3 | 84244 |
| 4028 | $J/\psi \to K^- p \bar{\Sigma}^{*0}, \bar{\Sigma}^{*0} \to \pi^- \bar{\Sigma}^+, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^+\pi^-K^-ar{n}p$ | 1456 | 3 | 84247 |
| 4029 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14503 | 3 | 84250 |
| 4030 | $J/\psi 	o a_2^+ b_1^-, a_2^+ 	o \pi^+ \eta, b_1^- 	o \pi^- \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14547 | 3 | 84253 |
| 4031 | $J/\psi \to b_1^0 a_1^0, b_1^0 \to \pi^0 \omega, a_1^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4492 | 3 | 84256 |
| 4032 | $J/\psi 	o \eta \Lambda ar{\Lambda}, \eta 	o \pi^0 \pi^0 \pi^0, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}par{p}$ | 14686 | 3 | 84259 |
| 4033 | $J/\psi 	o a_2^- ar{K}^0 K^+, a_2^- 	o \pi^- \eta, ar{K}^0 	o K_L^0, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 14789 | 3 | 84262 |
| 4034 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+K^-\gamma\gamma$ | 14854 | 3 | 84265 |
| 4035 | $J/\psi \to \omega K^- K_0^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15001 | 3 | 84268 |
| 4036 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \pi^0 \rho^+, a_1^0 \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15017 | 3 | 84271 |
| 4037 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^0 \pi^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15077 | 3 | 84274 |
| 4038 | $J/\psi \to \eta \omega f_0(1370), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6109 | 3 | 84277 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 4039 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 15269 | 3 | 84280 |
| 4040 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 15277 | 3 | 84283 |
| 4041 | $J/\psi \rightarrow \pi^0\eta'b_1^0, \eta' \rightarrow \pi^0\pi^0\eta, b_1^0 \rightarrow \pi^0\omega, \eta \rightarrow \pi^0\pi^0\pi^0, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 15436 | 3 | 84286 |
| 4042 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15486 | 3 | 84289 |
| 4043 | $J/\psi \to K^{*-}K_{1}^{'+}\gamma, K^{*-} \to \pi^{0}K^{-}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{L}^{0}$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 15570 | 3 | 84292 |
| 4044 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15608 | 3 | 84295 |
| 4045 | $J/\psi \to ho^{0} K^{+} K^{-} b_{1}^{0}, ho^{0} \to \pi^{+} \pi^{-}, b_{1}^{0} \to \pi^{0} \omega, \omega \to \pi^{0} \pi^{+} \pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15679 | 3 | 84298 |
| 4046 | $J/\psi 	o \pi^0 a_2^0 \gamma, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 16220 | 3 | 84301 |
| 4047 | $J/\psi ightarrow \pi^0 \pi^+ ho^- \omega \omega, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16528 | 3 | 84304 |
| 4048 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 3534 | 2 | 84306 |
| 4049 | $J/\psi \to K^+K_1^-, K_1^- \to \pi^-\bar{K}^*, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 1292 | 2 | 84308 |
| 4050 | $J/\psi 	o K^* \bar{p} \Sigma^+, K^* 	o \pi^0 K^0, \Sigma^+ 	o \pi^0 p, K^0 	o K_L^0$ | $\pi^0\pi^0K^0_L par p$ | 3536 | 2 | 84310 |
| 4051 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6641 | 2 | 84312 |
| 4052 | $J/\psi 	o \pi^+\pi^-\Sigma^0ar{\Sigma}^0, \Sigma^0 	o \Lambda\gamma, ar{\Sigma}^0 	o ar{\Lambda}\gamma, \Lambda 	o \pi^0n, ar{\Lambda} 	o \pi^+ar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma\gamma$ | 4629 | 2 | 84314 |
| 4053 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 ho^0 \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6646 | 2 | 84316 |
| 4054 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 6648 | 2 | 84318 |
| 4055 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6649 | 2 | 84320 |
| 4056 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 387 | 2 | 84322 |
| 4057 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 6656 | 2 | 84324 |
| 4058 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \gamma, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0K^+K^-\gamma$ | 4634 | 2 | 84326 |
| 4059 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6660 | 2 | 84328 |
| 4060 | $J/\psi 	o a_2^0 \pi^- b_1^+, a_2^0 	o \pi^- ho^+, b_1^+ 	o \pi^+ \omega, ho^+ 	o \pi^0 \pi^+, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6663 | 2 | 84330 |
| 4061 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2791 | 2 | 84332 |
| 4062 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^+ \rho^-, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4638 | 2 | 84334 |
| 4063 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6668 | 2 | 84336 |
| 4064 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 4639 | 2 | 84338 |
| 4065 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 6673 | 2 | 84340 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 4066 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 3539 | 2 | 84342 |
| 4067 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 4641 | 2 | 84344 |
| 4068 | $J/\psi \to K_1^+ K_1^-, K_1^+ \to \pi^+ K_0^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_0^0 \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4644 | 2 | 84346 |
| 4069 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 4651 | 2 | 84348 |
| 4070 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 2326 | 2 | 84350 |
| 4071 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 3541 | 2 | 84352 |
| 4072 | $J/\psi \to K^0 \bar{K}_1^{'0} \gamma, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 4655 | 2 | 84354 |
| 4073 | $J/\psi \to \Sigma^{*0} \bar{\Sigma}^{*0}, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Sigma}^{*0} \to \pi^- \bar{\Sigma}^+, \Lambda \to \pi^0 n, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 6692 | 2 | 84356 |
| 4074 | $J/\psi ightarrow \pi^+\pi^-\phi, \phi ightarrow \eta\gamma, \eta ightarrow \gamma\gamma$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 6696 | 2 | 84358 |
| 4075 | $J/\psi \to \rho^0 K^0 \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^0 \pi^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1294 | 2 | 84360 |
| 4076 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^-K^{*+}, K^0 \to K_S^0, K^{*+} \to \pi^0K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 6704 | 2 | 84362 |
| 4077 | $J/\psi \to \rho^- \bar{K}^* K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 6705 | 2 | 84364 |
| 4078 | $J/\psi 	o \pi^+ K_2^{*0} K^- \gamma^f, K_2^{*0} 	o \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 2794 | 2 | 84366 |
| 4079 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 6710 | 2 | 84368 |
| 4080 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 4662 | 2 | 84370 |
| 4081 | $J/\psi ightarrow a_2^0\pi^+a_2^-, a_2^0 ightarrow \pi^0\eta, a_2^- ightarrow \pi^0 ho^-, \eta ightarrow \gamma\gamma, ho^- ightarrow \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1669 | 2 | 84372 |
| 4082 | $J/\psi 	o \omega \bar{K}^0 K^*, \omega 	o \pi^0 \gamma, \bar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, K_S^0 	o \pi^+ \pi^-, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1295 | 2 | 84374 |
| 4083 | $J/\psi 	o \pi^+ \Delta^- ar{n}, \Delta^- 	o \pi^- n \gamma^f$ | $\pi^+\pi^-nar{n}\gamma^f$ | 3548 | 2 | 84376 |
| 4084 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4669 | 2 | 84378 |
| 4085 | $J/\psi 	o ho^0 ar{K}^0 K_2^{*0}, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 264 | 2 | 84380 |
| 4086 | $J/\psi \to K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6723 | 2 | 84382 |
| 4087 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\gamma$ | 4671 | 2 | 84384 |
| 4088 | $J/\psi \rightarrow \rho^- \omega a_0^+ \gamma, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 6727 | 2 | 84386 |
| 4089 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to \pi^0\pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3552 | 2 | 84388 |
| 4090 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6733 | 2 | 84390 |
| 4091 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6736 | 2 | 84392 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 4092 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^+K^0, h_1(1170) \to \pi^0\rho^0, K^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6737 | 2 | 84394 |
| 4093 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2331 | 2 | 84396 |
| 4094 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6741 | 2 | 84398 |
| 4095 | $J/\psi \to \bar{K}^0 K^*, \bar{K}^0 \to K^0_S, K^* \to \pi^- K^+ \gamma^f, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma^f$ | 6742 | 2 | 84400 |
| 4096 | $J/\psi \to \rho^0 K^- K^{*+} \gamma^F, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 6743 | 2 | 84402 |
| 4097 | $J/\psi \to \pi^0 \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6744 | 2 | 84404 |
| 4098 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 6746 | 2 | 84406 |
| 4099 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^+ K_1^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 6751 | 2 | 84408 |
| 4100 | $J/\psi 	o \pi^0 K^* K^- b_1^+, K^* 	o \pi^- K^+, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6752 | 2 | 84410 |
| 4101 | $J/\psi \to \pi^+ \Delta^0 \bar{\Delta}^+, \Delta^0 \to \pi^0 n, \bar{\Delta}^+ \to \bar{p}\gamma$ | $\pi^0\pi^+nar{p}\gamma$ | 1025 | 2 | 84412 |
| 4102 | $J/\psi \to \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma$ | 1961 | 2 | 84414 |
| 4103 | $J/\psi \to \pi^- \bar{\Sigma}^{*0} \Sigma^+, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \Sigma^+ \to \pi^+ n, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 6757 | 2 | 84416 |
| 4104 | $J/\psi \to \phi f_0(1710), \phi \to \pi^0 \rho^0, f_0(1710) \to K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1967 | 2 | 84418 |
| 4105 | $J/\psi \to K^+ K^{*-} \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma^f$ | 433 | 2 | 84420 |
| 4106 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma$ | 6765 | 2 | 84422 |
| 4107 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 1675 | 2 | 84424 |
| 4108 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 1970 | 2 | 84426 |
| 4109 | $J/\psi \to \pi^0 a_0^+ b_1^-, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 3567 | 2 | 84428 |
| 4110 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^0\rho^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6777 | 2 | 84430 |
| 4111 | $J/\psi 	o ho^0 a_2^0 \eta, ho^0 	o \pi^+ \pi^-, a_2^0 	o \pi^- ho^+, \eta 	o \pi^0 \pi^0 \pi^0, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6779 | 2 | 84432 |
| 4112 | $J/\psi ightarrow \pi^0 \eta \gamma, \eta ightarrow \gamma \gamma$ | $\pi^0\gamma\gamma\gamma$ | 3568 | 2 | 84434 |
| 4113 | $J/\psi \to \pi^0 \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6784 | 2 | 84436 |
| 4114 | $J/\psi \to a_2^0 K^+ K^-, a_2^0 \to \pi^+ \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4698 | 2 | 84438 |
| 4115 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 2807 | 2 | 84440 |
| 4116 | $J/\psi 	o \pi^0 ho^0 f_2(1270), \pi^0 	o e^+ e^- \gamma^F, ho^0 	o \pi^+ \pi^-, f_2(1270) 	o \pi^0 \pi^0$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 2810 | 2 | 84442 |
| 4117 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^+ \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6794 | 2 | 84444 |
| 4118 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 6795 | 2 | 84446 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4119 | $J/\psi \to K^0 \bar{n} \Sigma^0, K^0 \to K^0_S, \Sigma^0 \to \Lambda \gamma, K^0_S \to \pi^+ \pi^-, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 3575 | 2 | 84448 |
| 4120 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 3578 | 2 | 84450 |
| 4121 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 4704 | 2 | 84452 |
| 4122 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 2348 | 2 | 84454 |
| 4123 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6803 | 2 | 84456 |
| 4124 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1972 | 2 | 84458 |
| 4125 | $J/\psi 	o \eta ar{K}^0 K_2^{*0}, \eta 	o \pi^0 \pi^0 \pi^0, ar{K}^0 	o K_S^0, K_2^{*0} 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2352 | 2 | 84460 |
| 4126 | $J/\psi \to \eta \omega f_0(1370), \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2353 | 2 | 84462 |
| 4127 | $J/\psi \to \pi^+ K^* K^- h_1(1170), K^* \to \pi^- K^+, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6814 | 2 | 84464 |
| 4128 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 3586 | 2 | 84466 |
| 4129 | $J/\psi \rightarrow \rho^+ \omega b_1^-, \rho^+ \rightarrow \pi^0 \pi^+, \omega \rightarrow \pi^0 \gamma, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1678 | 2 | 84468 |
| 4130 | $J/\psi \to \pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 73 | 2 | 84470 |
| 4131 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^+\pi^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 6821 | 2 | 84472 |
| 4132 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+ \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 4719 | 2 | 84474 |
| 4133 | $J/\psi \to ho^0 ar{K}^* K_1^0, ho^0 \to \pi^+ \pi^-, ar{K}^* \to \pi^+ K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 3590 | 2 | 84476 |
| 4134 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3591 | 2 | 84478 |
| 4135 | $J/\psi \to ho^0 \pi^- \bar{K}^* K^{*+}, ho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6827 | 2 | 84480 |
| 4136 | $J/\psi ightarrow \pi^0 ho^0 \eta^\prime, ho^0 ightarrow \pi^+ \pi^-, \eta^\prime ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1975 | 2 | 84482 |
| 4137 | $J/\psi \to \pi^0 \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6835 | 2 | 84484 |
| 4138 | $J/\psi \to K^- K^{*+} a_0^0, K^{*+} \to \pi^0 K^+, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 6838 | 2 | 84486 |
| 4139 | $J/\psi \to \phi f_1(1285), \phi \to K_L^0 K_S^0, f_1(1285) \to \rho^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3594 | 2 | 84488 |
| 4140 | $J/\psi \to \pi^- K^{*+} \bar{n}\Lambda, K^{*+} \to \pi^0 K^+, \Lambda \to \pi^- p$ | $\pi^0\pi^-\pi^-K^+ar{n}p$ | 6840 | 2 | 84490 |
| 4141 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6841 | 2 | 84492 |
| 4142 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 6842 | 2 | 84494 |
| 4143 | $J/\psi \to K^* \bar{K}_1^{'0} \gamma, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 1976 | 2 | 84496 |
| 4144 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 4733 | 2 | 84498 |
| 4145 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 2823 | 2 | 84500 |

| | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|------|--|--|--------|------|-------|
| 4146 | $J/\psi \to \rho^+ \rho^- K^- K^{*+}, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1680 | 2 | 84502 |
| 4147 | $J/\psi \to \omega K^0 \bar{K}^0_1, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^0 \bar{K}^0, K^0_S \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 6851 | 2 | 84504 |
| 4148 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4743 | 2 | 84506 |
| 4149 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2361 | 2 | 84508 |
| 4150 | $J/\psi \to \pi^+ \pi^- f_0(1370), f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4746 | 2 | 84510 |
| 4151 | $J/\psi \to \pi^+ n \bar{p} a^0_0, a^0_0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 1682 | 2 | 84512 |
| 4152 | $J/\psi ightarrow \pi^+ n ar{p} a_0^0, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+n\bar{p}\gamma\gamma$ | 6868 | 2 | 84514 |
| 4153 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^+ \eta, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6871 | 2 | 84516 |
| 4154 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6874 | 2 | 84518 |
| 4155 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4748 | 2 | 84520 |
| 4156 | $J/\psi \rightarrow \rho^0 \pi^+ \rho^- \gamma^F \gamma^f, \rho^0 \rightarrow \pi^+ \pi^-, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 6876 | 2 | 84522 |
| 4157 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 6877 | 2 | 84524 |
| 4158 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2366 | 2 | 84526 |
| 4159 | $J/\psi \rightarrow \rho^+ K^0 K^-, \rho^+ \rightarrow \pi^0 \pi^+ \gamma^f, K^0 \rightarrow K_L^0$ | $\pi^0 K^0_L \pi^+ K^- \gamma^f$ | 6879 | 2 | 84528 |
| 4160 | $J/\psi 	o \eta \eta \phi, \eta 	o \gamma \gamma, \eta 	o \pi^0 \pi^0 \pi^0, \phi 	o K_L^0 K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 6880 | 2 | 84530 |
| 4161 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6881 | 2 | 84532 |
| 4162 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0\pi^-\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4750 | 2 | 84534 |
| 4163 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6885 | 2 | 84536 |
| 4164 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4751 | 2 | 84538 |
| 4165 | $J/\psi \to \pi^0 K^+ K^{*-} \gamma^F, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma^F$ | 6889 | 2 | 84540 |
| 4166 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to \pi^- \rho^+, h_1(1380) \to K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 3604 | 2 | 84542 |
| 4167 | $J/\psi \to \eta \Lambda \bar{\Lambda}, \eta \to \gamma \gamma, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^-ar{n}p\gamma\gamma$ | 1029 | 2 | 84544 |
| 4168 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^- \phi, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma$ | 6894 | 2 | 84546 |
| 4169 | $J/\psi \rightarrow \rho^- a_2^+ \eta, \rho^- \rightarrow \pi^0 \pi^-, a_2^+ \rightarrow \pi^+ \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0, \eta \rightarrow \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 6896 | 2 | 84548 |
| 4170 | $J/\psi \to \pi^0 \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-K^-$ | 2829 | 2 | 84550 |
| 4171 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6900 | 2 | 84552 |
| 4172 | $J/\psi \to \pi^0 a_2^- b_1^+, a_2^- \to \bar{K}^0 K^-, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 6902 | 2 | 84554 |
| 4173 | $J/\psi \to \pi^0 \rho^+ K^* K^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6903 | 2 | 84556 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4174 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6904 | 2 | 84558 |
| 4175 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^0 \to K^0_S, K^{*-}_0 \to \pi^0 K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6905 | 2 | 84560 |
| 4176 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \rho^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6906 | 2 | 84562 |
| 4177 | $J/\psi \to \pi^0 K^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 6915 | 2 | 84564 |
| 4178 | $J/\psi \to \pi^+ K^0_S K^- \phi, K^0_S \to \pi^+ \pi^-, \phi \to K^0_L K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4757 | 2 | 84566 |
| 4179 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 6918 | 2 | 84568 |
| 4180 | $J/\psi \to \pi^- K^+ \bar{K}_1^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 6921 | 2 | 84570 |
| 4181 | $J/\psi \to \pi^+ K^- K^{*+} b_1^-, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3607 | 2 | 84572 |
| 4182 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6924 | 2 | 84574 |
| 4183 | $J/\psi 	o K^0 ar{K}^* \gamma, K^0 	o K^0_S, ar{K}^* 	o \pi^0 ar{K}^0, K^0_S 	o \pi^0 \pi^0, ar{K}^0 	o K^0_L$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 6925 | 2 | 84576 |
| 4184 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 4765 | 2 | 84578 |
| 4185 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6930 | 2 | 84580 |
| 4186 | $J/\psi 	o ho^0 \eta a_0^0, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 2831 | 2 | 84582 |
| 4187 | $J/\psi \to \pi^+ \omega K^* K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 6941 | 2 | 84584 |
| 4188 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 4769 | 2 | 84586 |
| 4189 | $J/\psi \to K^+ K^- \eta', \eta' \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 2832 | 2 | 84588 |
| 4190 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 4772 | 2 | 84590 |
| 4191 | $J/\psi \to \pi^0 \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 4775 | 2 | 84592 |
| 4192 | $J/\psi \to K^+K^-f_2^{'}, f_2^{'} \to K_S^0K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2371 | 2 | 84594 |
| 4193 | $J/\psi \to K^- n \bar{\Sigma}^{*+}, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+K^-nar{p}$ | 4781 | 2 | 84596 |
| 4194 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} \phi, K^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-\gamma$ | 6962 | 2 | 84598 |
| 4195 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^+ \rho^-, K^{*-} \to \pi^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6964 | 2 | 84600 |
| 4196 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 4783 | 2 | 84602 |
| 4197 | $J/\psi \to K^+ K^- K^{*+} K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 6969 | 2 | 84604 |
| 4198 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^{*+}, K_2^{*0} \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 6970 | 2 | 84606 |
| 4199 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^- \bar{\Delta}^0 p, \bar{\Delta}^0 	o \pi^+ \bar{p}$ | $\pi^+\pi^-par p\gamma$ | 6972 | 2 | 84608 |
| 4200 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6976 | 2 | 84610 |
| 4201 | $J/\psi \to \pi^0 \pi^+ \rho^+ \rho^- \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6978 | 2 | 84612 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 4202 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^0 \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 1030 | 2 | 84614 |
| 4203 | $J/\psi \to \rho^- f_2(1270) a_0^+, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4785 | 2 | 84616 |
| 4204 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6984 | 2 | 84618 |
| 4205 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6986 | 2 | 84620 |
| 4206 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6990 | 2 | 84622 |
| 4207 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 1474 | 2 | 84624 |
| 4208 | $J/\psi \to \pi^0\pi^-a_1^+, \pi^0 \to e^+e^-\gamma^F, a_1^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 6993 | 2 | 84626 |
| 4209 | $J/\psi \to \eta K^- K_2^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2837 | 2 | 84628 |
| 4210 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \pi^+\pi^-\eta, K^0 \to K_L^0, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4789 | 2 | 84630 |
| 4211 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3621 | 2 | 84632 |
| 4212 | $J/\psi \to K_0^{*-}K_1^{'+}, K_0^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 7002 | 2 | 84634 |
| 4213 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 7003 | 2 | 84636 |
| 4214 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 2374 | 2 | 84638 |
| 4215 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 2841 | 2 | 84640 |
| 4216 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4795 | 2 | 84642 |
| 4217 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7010 | 2 | 84644 |
| 4218 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ho^- \omega a_0^+, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, a_0^+ 	o \pi^+ \eta, \ \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 7011 | 2 | 84646 |
| 4219 | $J/\psi \to \eta h_1(1170), \eta \to \gamma \gamma, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 827 | 2 | 84648 |
| 4220 | $J/\psi \to \pi^0 a_2^0 \omega, \pi^0 \to e^+ e^- \gamma^F, a_2^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 7014 | 2 | 84650 |
| 4221 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \pi^+ \pi^- \gamma^F, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 4799 | 2 | 84652 |
| 4222 | $J/\psi \to K^+ \bar{n} \Sigma^{*-}, \Sigma^{*-} \to \pi^- \Sigma^0, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^-\pi^-K^+ar{n}p\gamma$ | 7018 | 2 | 84654 |
| 4223 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7020 | 2 | 84656 |
| 4224 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 74 | 2 | 84658 |
| 4225 | $J/\psi 	o \pi^0 ho^+ \omega b_1^-, ho^+ 	o \pi^0 \pi^+, \omega 	o \pi^0 \pi^+ \pi^-, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7022 | 2 | 84660 |
| 4226 | $J/\psi \to \pi^+ \omega K^{*-} K_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_L^0, \\ \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 7023 | 2 | 84662 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 4227 | $J/\psi \to \pi^+ \omega K^* K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 7028 | 2 | 84664 |
| 4228 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1984 | 2 | 84666 |
| 4229 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 7031 | 2 | 84668 |
| 4230 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_0(1710) \to K^+ K^-$ | $K_L^0 K_L^0 K^+ K^-$ | 4805 | 2 | 84670 |
| 4231 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3632 | 2 | 84672 |
| 4232 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3634 | 2 | 84674 |
| 4233 | $J/\psi \to a_0^+ b_1^-, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 321 | 2 | 84676 |
| 4234 | $J/\psi \to \pi^0 K^+ K^{*-}, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0K^+K^-\gamma^F$ | 1479 | 2 | 84678 |
| 4235 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 7042 | 2 | 84680 |
| 4236 | $J/\psi \to \eta f_0(1370) h_1(1170), \eta \to \gamma \gamma, f_0(1370) \to \rho^0 \rho^0, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 7048 | 2 | 84682 |
| 4237 | $J/\psi \to \omega b_1^+ b_1^-, \omega \to \pi^0 \gamma, b_1^+ \to \pi^+ \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 1480 | 2 | 84684 |
| 4238 | $J/\psi \rightarrow \pi^0\pi^+\omega\omega b_1^-, \omega \rightarrow \pi^0\pi^+\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, b_1^- \rightarrow \pi^-\omega, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 7050 | 2 | 84686 |
| 4239 | $J/\psi 	o a_2^0 \pi^- ho^+, a_2^0 	o \pi^0 \eta, ho^+ 	o \pi^0 \pi^+, \eta 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3640 | 2 | 84688 |
| 4240 | $J/\psi \to \rho^- \eta a_0^+, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 4812 | 2 | 84690 |
| 4241 | $J/\psi \to K^0 \bar{\Delta}^0 \Sigma^0, K^0 \to K_S^0, \bar{\Delta}^0 \to \pi^0 \bar{n}, \Sigma^0 \to \Lambda \gamma, K_S^0 \to \pi^+ \pi^-, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 322 | 2 | 84692 |
| 4242 | $J/\psi \to \eta(2225)\gamma, \eta(2225) \to \phi\phi, \phi \to \pi^0\rho^0, \phi \to K_L^0K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma$ | 4814 | 2 | 84694 |
| 4243 | $J/\psi \to ho^0 \eta a_1^0, ho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, a_1^0 \to \pi^+ ho^-, ho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4817 | 2 | 84696 |
| 4244 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 7065 | 2 | 84698 |
| 4245 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 n \bar{n}$ | $\pi^0 n \bar{n} \gamma$ | 7066 | 2 | 84700 |
| 4246 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4818 | 2 | 84702 |
| 4247 | $J/\psi \to \eta \phi, \eta \to \pi^+ \pi^- \gamma^F, \phi \to K^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 3647 | 2 | 84704 |
| 4248 | $J/\psi 	o \pi^0\pi^0\omega, \pi^0 	o e^+e^-\gamma^F, \omega 	o \pi^0\gamma$ | $e^+e^-\pi^0\pi^0\gamma^F\gamma$ | 4820 | 2 | 84706 |
| 4249 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^- \rho^+, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7073 | 2 | 84708 |
| 4250 | $J/\psi \to \pi^+\pi^-K^+K_1^-, K_1^- \to \pi^-\bar{K}^*, \bar{K}^* \to \pi^+K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1307 | 2 | 84710 |
| 4251 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^-K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 4824 | 2 | 84712 |
| 4252 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \rho^0 K^-, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7080 | 2 | 84714 |
| 4253 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1484 | 2 | 84716 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4254 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ K^- \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 7087 | 2 | 84718 |
| 4255 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7092 | 2 | 84720 |
| 4256 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7099 | 2 | 84722 |
| 4257 | $J/\psi \to \rho^0 \rho^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3652 | 2 | 84724 |
| 4258 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0K^0, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3653 | 2 | 84726 |
| 4259 | $J/\psi 	o \pi^0\pi^-b_1^+a_1^0, b_1^+ 	o \pi^+\omega, a_1^0 	o \pi^- ho^+, \omega 	o \pi^0\pi^+\pi^-, ho^+ 	o \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 831 | 2 | 84728 |
| 4260 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ho^+ ho^- \eta, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 7106 | 2 | 84730 |
| 4261 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-$ | 7107 | 2 | 84732 |
| 4262 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0,$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2858 | 2 | 84734 |
| 4263 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 4831 | 2 | 84736 |
| 4264 | $J/\psi 	o \eta \eta' \gamma, \eta 	o \gamma \gamma, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 7112 | 2 | 84738 |
| 4265 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^0 \bar{K}^*, K^0_S \to \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 1167 | 2 | 84740 |
| 4266 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^+ \pi^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 3659 | 2 | 84742 |
| 4267 | $J/\psi \to K^-K^{*+}a_0^0, K^{*+} \to \pi^+K^0, a_0^0 \to \pi^0\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 7119 | 2 | 84744 |
| 4268 | $J/\psi ightarrow \pi^0 n ar{n} a_0^0, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0n\bar{n}\gamma\gamma$ | 3660 | 2 | 84746 |
| 4269 | $J/\psi ightarrow ho^- \omega b_1^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \gamma, b_1^+ ightarrow \pi^+ \omega \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 2861 | 2 | 84748 |
| 4270 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7129 | 2 | 84750 |
| 4271 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \gamma \gamma, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 3664 | 2 | 84752 |
| 4272 | $J/\psi \to \rho^0 h_1(1170)\gamma, \rho^0 \to \pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 1702 | 2 | 84754 |
| 4273 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \omega a_1^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_1^+ \to \rho^0 \pi^+, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 4849 | 2 | 84756 |
| 4274 | $J/\psi \to f_2(1270)K^+K^-, f_2(1270) \to K^+K^-$ | $K^{+}K^{+}K^{-}K^{-}$ | 1038 | 2 | 84758 |
| 4275 | $J/\psi \to \pi^- a_2^+ \omega \gamma^F, a_2^+ \to \rho^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 75 | 2 | 84760 |
| 4276 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7137 | 2 | 84762 |
| 4277 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 7139 | 2 | 84764 |
| 4278 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 7141 | 2 | 84766 |
| 4279 | $J/\psi \to x(1835)\gamma, x(1835) \to \pi^+\pi^-\eta', \eta' \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 2866 | 2 | 84768 |
| 4280 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \omega K^0, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 4854 | 2 | 84770 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 4281 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2393 | 2 | 84772 |
| 4282 | $J/\psi \to \rho^0 \pi^- \rho^+ h_1(1170), \rho^0 \to \pi^+ \pi^- \gamma^f, \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 7149 | 2 | 84774 |
| 4283 | $J/\psi 	o \pi^0 \pi^+ \pi^- \omega, \omega 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 3679 | 2 | 84776 |
| 4284 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 1171 | 2 | 84778 |
| 4285 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3682 | 2 | 84780 |
| 4286 | $J/\psi \to \pi^- \bar{K}^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2395 | 2 | 84782 |
| 4287 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^-\pi^-K^+K^+K^-\gamma$ | 2001 | 2 | 84784 |
| 4288 | $J/\psi 	o \eta K^+K^-, \eta 	o \pi^0\pi^0\pi^0, \pi^0 	o e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^0\pi^0K^+K^-\gamma^F\gamma^f$ | 7162 | 2 | 84786 |
| 4289 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 7163 | 2 | 84788 |
| 4290 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 177 | 2 | 84790 |
| 4291 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-$ | 2874 | 2 | 84792 |
| 4292 | $J/\psi \to \pi^0 b_1^0, \pi^0 \to e^+ e^- \gamma^F, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 7170 | 2 | 84794 |
| 4293 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ p ar{\Delta}^{++}, ar{\Delta}^{++} 	o \pi^- ar{p}$ | $\pi^+\pi^-par p\gamma$ | 4879 | 2 | 84796 |
| 4294 | $J/\psi 	o ho^0 \pi^+ \omega a_1^-, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, a_1^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 4880 | 2 | 84798 |
| 4295 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to \pi^+\pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 7180 | 2 | 84800 |
| 4296 | $J/\psi 	o \eta\eta\omega, \eta 	o \gamma\gamma, \eta 	o \pi^0\pi^+\pi^-, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7183 | 2 | 84802 |
| 4297 | $J/\psi ightarrow \pi^0\pi^-a_2^+\eta, a_2^+ ightarrow \pi^0\pi^+\omega, \eta ightarrow \pi^0\pi^+\pi^-, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2876 | 2 | 84804 |
| 4298 | $J/\psi ightarrow \pi^0 \pi^+ \omega n ar p, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 3690 | 2 | 84806 |
| 4299 | $J/\psi ightarrow \omega \eta', \omega ightarrow \pi^0 \pi^+ \pi^-, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 933 | 2 | 84808 |
| 4300 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2878 | 2 | 84810 |
| 4301 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1285) \to \pi^+ a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 4890 | 2 | 84812 |
| 4302 | $J/\psi ightarrow \pi^+\pi^-\pi^- ho^+\omega, ho^+ ightarrow \pi^0\pi^+, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 1316 | 2 | 84814 |
| 4303 | $J/\psi 	o K_2^{*0} \bar{K}_1^0, K_2^{*0} 	o \pi^0 K^0, \bar{K}_1^0 	o \pi^0 \bar{K}^*, K^0 	o K_L^0, \bar{K}^* 	o \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 2880 | 2 | 84816 |
| 4304 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1042 | 2 | 84818 |
| 4305 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma$ | 2882 | 2 | 84820 |
| 4306 | $J/\psi \to \pi^0 K^{*+} K^{*-} \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 7203 | 2 | 84822 |
| 4307 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2883 | 2 | 84824 |
| 4308 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 4907 | 2 | 84826 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 4309 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2011 | 2 | 84828 |
| 4310 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7212 | 2 | 84830 |
| 4311 | $J/\psi \to \pi^+ a_2^- \omega \gamma^F, a_2^- \to \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 4911 | 2 | 84832 |
| 4312 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7214 | 2 | 84834 |
| 4313 | $J/\psi \to \rho^0 \pi^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 90 | 2 | 84836 |
| 4314 | $J/\psi \to K^{*-}K_2^{*+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3709 | 2 | 84838 |
| 4315 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 7227 | 2 | 84840 |
| 4316 | $J/\psi \to \phi \sigma_0, \phi \to \pi^- \rho^+, \sigma_0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7229 | 2 | 84842 |
| 4317 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7231 | 2 | 84844 |
| 4318 | $J/\psi \to \rho^+ \omega K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4915 | 2 | 84846 |
| 4319 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 4917 | 2 | 84848 |
| 4320 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^0K^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 4919 | 2 | 84850 |
| 4321 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^+ \pi^- a_0^0, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7244 | 2 | 84852 |
| 4322 | $J/\psi \to \eta \phi f_0(980), \eta \to \gamma \gamma, \phi \to K^+ K^-, f_0(980) \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 7247 | 2 | 84854 |
| 4323 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^-, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 7250 | 2 | 84856 |
| 4324 | $J/\psi \to \rho^0 K^- K^{*+} \gamma^F, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 2888 | 2 | 84858 |
| 4325 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 7252 | 2 | 84860 |
| 4326 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^0 \pi^+ \omega, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 7254 | 2 | 84862 |
| 4327 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7256 | 2 | 84864 |
| 4328 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2404 | 2 | 84866 |
| 4329 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \pi^0 \rho^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 7260 | 2 | 84868 |
| 4330 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4925 | 2 | 84870 |
| 4331 | $J/\psi ightarrow ho^0 \Sigma^+ ar{\Sigma}^-, ho^0 ightarrow \pi^+ \pi^-, \Sigma^+ ightarrow \pi^0 p, ar{\Sigma}^- ightarrow \pi^0 ar{p}$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 1044 | 2 | 84872 |
| 4332 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7263 | 2 | 84874 |
| 4333 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to K^+ K^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 4930 | 2 | 84876 |
| 4334 | $J/\psi 	o \eta\eta\phi, \eta 	o \gamma\gamma, \eta 	o \pi^0\pi^0\pi^0, \phi 	o \pi^0 ho^0, ho^0 	o \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 7266 | 2 | 84878 |
| 4335 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow K^+ K^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0K^+K^-\gamma$ | 7272 | 2 | 84880 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4336 | $J/\psi \to \rho^{+} a_{0}^{-} f_{0}(1370), \rho^{+} \to \pi^{0} \pi^{+}, a_{0}^{-} \to \pi^{-} \eta, f_{0}(1370) \to \rho^{+} \rho^{-}, \eta \to \gamma \gamma, \\ \rho^{+} \to \pi^{0} \pi^{+}, \rho^{-} \to \pi^{0} \pi^{-}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2406 | 2 | 84882 |
| 4337 | $J/\psi \to \pi^0 K^- K_1^+, \pi^0 \to e^+ e^- \gamma^F, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 7281 | 2 | 84884 |
| 4338 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 7283 | 2 | 84886 |
| 4339 | $J/\psi \to K^{+}a_{0}^{-}\bar{K}_{1}^{'0}, a_{0}^{-} \to \pi^{-}\eta, \bar{K}_{1}^{'0} \to \pi^{+}K^{*-}, \eta \to \pi^{0}\pi^{0}\pi^{0}, K^{*-} \to \pi^{-}\bar{K}^{0}, \bar{K}^{0} \to K_{L}^{0}$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1498 | 2 | 84888 |
| 4340 | $J/\psi \to \rho^- \omega \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1499 | 2 | 84890 |
| 4341 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1719 | 2 | 84892 |
| 4342 | $J/\psi \to K^{*-}K_{1}^{'+}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{+}K^{*}, \bar{K}^{0} \to K_{S}^{0}, K^{*} \to \pi^{-}K^{+}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2410 | 2 | 84894 |
| 4343 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 7293 | 2 | 84896 |
| 4344 | $J/\psi \rightarrow \pi^+ \omega a_0^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 7295 | 2 | 84898 |
| 4345 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 7296 | 2 | 84900 |
| 4346 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+K^-\gamma^F$ | 7297 | 2 | 84902 |
| 4347 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4937 | 2 | 84904 |
| 4348 | $J/\psi \to \phi f_0(2020), \phi \to \pi^0 \rho^0, f_0(2020) \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3721 | 2 | 84906 |
| 4349 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7304 | 2 | 84908 |
| 4350 | $J/\psi \to a_2^+ K^* K^{*-}, a_2^+ \to \pi^0 \rho^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2411 | 2 | 84910 |
| 4351 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0, \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 91 | 2 | 84912 |
| 4352 | $J/\psi \to \rho^0 \pi^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 592 | 2 | 84914 |
| 4353 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1047 | 2 | 84916 |
| 4354 | $J/\psi \to \pi^+\pi^-K^0\bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+K^-$ | $K^0_L\pi^+\pi^+\pi^-K^-$ | 7317 | 2 | 84918 |
| 4355 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \rho^0 K^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 35 | 2 | 84920 |
| 4356 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 446 | 2 | 84922 |
| 4357 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 7324 | 2 | 84924 |
| 4358 | $J/\psi \to \pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7325 | 2 | 84926 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4359 | $J/\psi 	o \pi^0\pi^0\eta\omega, \eta 	o \pi^0\pi^+\pi^-, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 2912 | 2 | 84928 |
| 4360 | $J/\psi \to \rho^- \bar{K}^0 K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K_L^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7334 | 2 | 84930 |
| 4361 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4952 | 2 | 84932 |
| 4362 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0\pi^-\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1506 | 2 | 84934 |
| 4363 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 1507 | 2 | 84936 |
| 4364 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \pi^0 \pi^- \omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7342 | 2 | 84938 |
| 4365 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \phi \to \pi^+\rho^-, K^0 \to K_L^0, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 7343 | 2 | 84940 |
| 4366 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \rho^+ \rho^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 7345 | 2 | 84942 |
| 4367 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^- \rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4955 | 2 | 84944 |
| 4368 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7351 | 2 | 84946 |
| 4369 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 3744 | 2 | 84948 |
| 4370 | $J/\psi \to \pi^0\pi^0\pi^+\pi^-\rho^+b_1^-, \rho^+ \to \pi^0\pi^+, b_1^- \to \pi^-\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2916 | 2 | 84950 |
| 4371 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4959 | 2 | 84952 |
| 4372 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 47 | 2 | 84954 |
| 4373 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^0 K^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7368 | 2 | 84956 |
| 4374 | $J/\psi \to \rho^+ K^- K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3749 | 2 | 84958 |
| 4375 | $J/\psi ightarrow \pi^0 \pi^+ ho^-, \pi^0 ightarrow e^+ e^- \gamma^F, ho^- ightarrow \pi^0 \pi^-$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 7373 | 2 | 84960 |
| 4376 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{\Xi}^+ \Xi^-, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^- \to \pi^- \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \\ \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma$ | 4966 | 2 | 84962 |
| 4377 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7375 | 2 | 84964 |
| 4378 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 7381 | 2 | 84966 |
| 4379 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^+\pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 2919 | 2 | 84968 |
| 4380 | $J/\psi \to \rho^- \bar{K}^0 K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2423 | 2 | 84970 |
| 4381 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \gamma \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 1510 | 2 | 84972 |
| 4382 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_1^- \to \omega K^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7389 | 2 | 84974 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 4383 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3755 | 2 | 84976 |
| 4384 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 2923 | 2 | 84978 |
| 4385 | $J/\psi ightarrow ho^0 \Lambda ar{\Lambda}, ho^0 ightarrow \pi^+ \pi^-, \Lambda ightarrow \pi^- p, ar{\Lambda} ightarrow \pi^0 ar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 7393 | 2 | 84980 |
| 4386 | $J/\psi \to K^*K^-b_1^+, K^* \to \pi^0K^0, b_1^+ \to \pi^+\omega, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7399 | 2 | 84982 |
| 4387 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 7406 | 2 | 84984 |
| 4388 | $J/\psi ightarrow ar{K}^0 K^* \eta', ar{K}^0 ightarrow K^0_L, K^* ightarrow \pi^- K^+, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma\gamma$ | 1329 | 2 | 84986 |
| 4389 | $J/\psi \rightarrow \pi^0 \rho^0 \eta', \pi^0 \rightarrow e^+ e^- \gamma^F, \rho^0 \rightarrow \pi^+ \pi^-, \eta' \rightarrow \rho^0 \gamma, \rho^0 \rightarrow \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 7411 | 2 | 84988 |
| 4390 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4979 | 2 | 84990 |
| 4391 | $J/\psi \to \bar{\Sigma}^0 \Sigma^{*0}, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Sigma^{*0} \to \pi^- \Sigma^+, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^+ \to \pi^0 p$ | $\pi^0\pi^+\pi^-par p\gamma$ | 2925 | 2 | 84992 |
| 4392 | $J/\psi \to \omega \omega K^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2427 | 2 | 84994 |
| 4393 | $J/\psi \to \omega \omega K K , \omega \to \kappa \kappa , \kappa \to \kappa \kappa , K \to \kappa K $ $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta,$ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7428 | 2 | 84996 |
| 4394 | $J/\psi \to \eta K^- K^{*+}, \eta \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 7430 | 2 | 84998 |
| 4395 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7438 | 2 | 85000 |
| 4396 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K_0^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 2927 | 2 | 85002 |
| 4397 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^F, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 653 | 2 | 85004 |
| 4398 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 7442 | 2 | 85006 |
| 4399 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-$ | 1331 | 2 | 85008 |
| 4400 | $J/\psi ightarrow ho^0 \eta a_1^0, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \gamma \gamma, a_1^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4987 | 2 | 85010 |
| 4401 | $J/\psi \to K^{*-}K_2^{*+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4991 | 2 | 85012 |
| 4402 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7449 | 2 | 85014 |
| 4403 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 7451 | 2 | 85016 |
| 4404 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3767 | 2 | 85018 |
| 4405 | $J/\psi \to \eta \omega f_0(1370), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2032 | 2 | 85020 |
| 4406 | $J/\psi 	o \pi^- ar{K}_1^0 K_0^{*+}, ar{K}_1^0 	o ho^+ K^-, K_0^{*+} 	o \pi^+ K^0, ho^+ 	o \pi^0 \pi^+, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 1738 | 2 | 85022 |
| 4407 | $J/\psi ightarrow \pi^0 \omega a_1^0, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f, a_1^0 ightarrow \pi^- ho^+, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 7460 | 2 | 85024 |
| 4408 | $J/\psi \to K^+K^-f_1(1285), f_1(1285) \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 4996 | 2 | 85026 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4409 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4997 | 2 | 85028 |
| 4410 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2937 | 2 | 85030 |
| 4411 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \gamma, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 1332 | 2 | 85032 |
| 4412 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3776 | 2 | 85034 |
| 4413 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7473 | 2 | 85036 |
| 4414 | $J/\psi ightarrow \omega \eta', \omega ightarrow \pi^0 \pi^+ \pi^-, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7474 | 2 | 85038 |
| 4415 | $J/\psi \to \pi^+ K^{*-} n\bar{\Lambda}, K^{*-} \to \pi^0 K^-, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+K^-nar{p}$ | 7479 | 2 | 85040 |
| 4416 | $J/\psi \to \eta \phi f_0(980), \eta \to \gamma \gamma, \phi \to K_L^0 K_S^0, f_0(980) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7481 | 2 | 85042 |
| 4417 | $J/\psi \to a_2^0 \pi^- a_1^+, a_2^0 \to \pi^0 \eta, a_1^+ \to \pi^0 \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 7485 | 2 | 85044 |
| 4418 | $J/\psi \to \pi^0 a_2^0 b_1^0, a_2^0 \to \pi^- \rho^+, b_1^0 \to \pi^0 \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5012 | 2 | 85046 |
| 4419 | $J/\psi \to a_2^- b_1^+, a_2^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7498 | 2 | 85048 |
| 4420 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^0 p, \bar{\Sigma}^{*-} \to \pi^0 \bar{\Sigma}^-, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^0p\bar{p}$ | 448 | 2 | 85050 |
| 4421 | $J/\psi \to \pi^+ \rho^- K^{*+} K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 7505 | 2 | 85052 |
| 4422 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7509 | 2 | 85054 |
| 4423 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o \pi^0 \pi^- \omega, a_0^0 	o \pi^0 \eta, \omega 	o \pi^0 \pi^+ \pi^-, \eta 	o \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 7511 | 2 | 85056 |
| 4424 | $J/\psi ightarrow ho^- a_2^+, ho^- ightarrow \pi^0 \pi^-, a_2^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7513 | 2 | 85058 |
| 4425 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^0\bar{K}^0, a_0^- \to \pi^-\eta, \bar{K}^0 \to K_L^0, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^F$ | 3778 | 2 | 85060 |
| 4426 | $J/\psi \to K^0 \bar{K}^0 a_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7515 | 2 | 85062 |
| 4427 | $J/\psi \to \pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 947 | 2 | 85064 |
| 4428 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 7524 | 2 | 85066 |
| 4429 | $J/\psi \to \pi^- f_2(1270)\bar{K}^0 K^+, f_2(1270) \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7526 | 2 | 85068 |
| 4430 | $J/\psi \to \bar{\Xi}^+\Xi^{*-}, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^{*-} \to \pi^0\Xi^-, \bar{\Lambda} \to \pi^0\bar{n}, \Xi^- \to \pi^-\Lambda, \Lambda \to \pi^-p$ | $\pi^0\pi^0\pi^+\pi^-\pi^- \bar{n}p$ | 7529 | 2 | 85070 |
| 4431 | $J/\psi \to \pi^0 K^* \bar{K}^* f_0(1370), K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 5018 | 2 | 85072 |
| 4432 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7533 | 2 | 85074 |
| 4433 | $J/\psi \to K^0 \bar K^0 \eta', K^0 \to K_L^0, \bar K^0 \to K_L^0, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 7535 | 2 | 85076 |
| 4434 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^0 \to K^0_S, K^{*-}_0 \to \pi^- \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 3780 | 2 | 85078 |
| 4435 | $J/\psi \to K^- K^{*+} \eta', K^{*+} \to \pi^+ K^0, \eta' \to \omega \gamma, K^0 \to K^0_L, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 7538 | 2 | 85080 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4436 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 2038 | 2 | 85082 |
| 4437 | $J/\psi \rightarrow \rho^+\rho^-a_0^0\gamma, \rho^+ \rightarrow \pi^0\pi^+, \rho^- \rightarrow \pi^0\pi^-, a_0^0 \rightarrow \pi^0\eta, \eta \rightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 5024 | 2 | 85084 |
| 4438 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7546 | 2 | 85086 |
| 4439 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7547 | 2 | 85088 |
| 4440 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2039 | 2 | 85090 |
| 4441 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, b_1^0 \to \pi^0\omega, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2439 | 2 | 85092 |
| 4442 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 7557 | 2 | 85094 |
| 4443 | $J/\psi \to \rho^0 \pi^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7559 | 2 | 85096 |
| 4444 | $J/\psi \to \omega n \bar{\Delta}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{\Delta}^0 \to \pi^0 \bar{n}, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-n\bar{n}\gamma^F$ | 2951 | 2 | 85098 |
| 4445 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5029 | 2 | 85100 |
| 4446 | $J/\psi \to \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1055 | 2 | 85102 |
| 4447 | $J/\psi \to \pi^0\pi^-a_2^+, a_2^+ \to \pi^+\eta, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 3792 | 2 | 85104 |
| 4448 | $J/\psi \to \rho^0 \pi^+ a_1^- \gamma^F, \rho^0 \to \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7568 | 2 | 85106 |
| 4449 | $J/\psi 	o \omega\omega\gamma, \omega 	o \pi^0\pi^+\pi^-, \omega 	o \pi^0\pi^+\pi^-, \pi^0 	o e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 7570 | 2 | 85108 |
| 4450 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^0 K^{*-}, K_1^{'+} \to \pi^+ K^*, K^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^- K^+, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7572 | 2 | 85110 |
| 4451 | $J/\psi \to \Sigma^{*0} \bar{\Sigma}^{*0}, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Sigma}^{*0} \to \pi^+ \bar{\Sigma}^-, \Lambda \to \pi^- p, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 5034 | 2 | 85112 |
| 4452 | $J/\psi 	o \pi^0 a_2^0 b_1^0, a_2^0 	o \pi^0 \eta, b_1^0 	o \pi^0 \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7575 | 2 | 85114 |
| 4453 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^0 K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 1743 | 2 | 85116 |
| 4454 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 851 | 2 | 85118 |
| 4455 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7586 | 2 | 85120 |
| 4456 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o K_S^0 K_S^0, K_S^0 	o \pi^0 \pi^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 2047 | 2 | 85122 |
| 4457 | $J/\psi \to \phi f_0(1710), \phi \to \pi^0 \rho^0, f_0(1710) \to K^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 7598 | 2 | 85124 |
| 4458 | $J/\psi \to \pi^- \rho^+ \eta, \rho^+ \to \pi^0 \pi^+, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 7599 | 2 | 85126 |
| 4459 | $J/\psi \to K^{*-}K_{1}^{'+}\gamma, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{+}K^{*}, \bar{K}^{0} \to K_{L}^{0}, K^{*} \to \pi^{-}K^{+}$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 600 | 2 | 85128 |
| 4460 | $J/\psi \to \pi^+ \pi^- a_0^0 \gamma^f, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7603 | 2 | 85130 |
| 4461 | $J/\psi \to \rho^{+} K^{*} \bar{K}_{1}^{'-}, \rho^{+} \to \pi^{0} \pi^{+}, K^{*} \to \pi^{0} K^{0}, \bar{K}_{1}^{'-} \to \pi^{0} K^{*-}, K^{0} \to K_{L}^{0}, K^{*-} \to \pi^{-} \bar{K}^{0}, \bar{K}^{0} \to K_{S}^{0}, K^{0}_{S} \to \pi^{+} \pi^{-}$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2963 | 2 | 85132 |
| 4462 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5043 | 2 | 85134 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 4463 | $J/\psi \to ho^0 \pi^- \bar{K}^0 K^{*+}, ho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 7613 | 2 | 85136 |
| 4464 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2964 | 2 | 85138 |
| 4465 | $J/\psi \to \pi^0 K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-\gamma$ | 2965 | 2 | 85140 |
| 4466 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7621 | 2 | 85142 |
| 4467 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 5052 | 2 | 85144 |
| 4468 | $J/\psi \to \pi^+\pi^-\rho^-\bar{K}^0K^{*+}, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7625 | 2 | 85146 |
| 4469 | $J/\psi \to \rho^+ K_2^{*0} K^{*-}, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^- K^{*+}, K^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 7627 | 2 | 85148 |
| 4470 | $J/\psi \to \pi^+\pi^- h_1(1170)\gamma^F, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 3805 | 2 | 85150 |
| 4471 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \rho^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7630 | 2 | 85152 |
| 4472 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 768 | 2 | 85154 |
| 4473 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 7636 | 2 | 85156 |
| 4474 | $J/\psi \to \pi^0 ho^0 \pi^- ho^+ b_1^0, ho^0 \to \pi^+ \pi^-, ho^+ \to \pi^0 \pi^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 7637 | 2 | 85158 |
| 4475 | $J/\psi \to f_2(1270)\gamma, f_2(1270) \to \pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\gamma^F\gamma$ | 5060 | 2 | 85160 |
| 4476 | $J/\psi \to \pi^0 a_2^0 \pi^+ b_1^-, \pi^0 \to e^+ e^- \gamma^F, a_2^0 \to \pi^- \rho^+, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 7645 | 2 | 85162 |
| 4477 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 2968 | 2 | 85164 |
| 4478 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^+ \pi^- K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 7651 | 2 | 85166 |
| 4479 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7652 | 2 | 85168 |
| 4480 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \omega \to \pi^0 \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 2051 | 2 | 85170 |
| 4481 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7658 | 2 | 85172 |
| 4482 | $J/\psi \to K^-K^{*+}\gamma^f, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma^f$ | 2972 | 2 | 85174 |
| 4483 | $J/\psi ightarrow \pi^0 b_1^0, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 7662 | 2 | 85176 |
| 4484 | $J/\psi \to K^{+}a_{0}^{0}K_{1}^{-}, a_{0}^{0} \to \pi^{0}\eta, K_{1}^{-} \to \pi^{0}K^{*-}, \eta \to \gamma\gamma, K^{*-} \to \pi^{-}\bar{K}^{0}, \\ \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 7664 | 2 | 85178 |
| 4485 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7670 | 2 | 85180 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 4486 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2973 | 2 | 85182 |
| 4487 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 7673 | 2 | 85184 |
| 4488 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \rho^0 \gamma, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 7676 | 2 | 85186 |
| 4489 | $J/\psi \to K^-K^{*+}f_2^{'}, K^{*+} \to \pi^+K^0, f_2^{'} \to K^+K^-, K^0 \to K_L^0$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 7683 | 2 | 85188 |
| 4490 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2448 | 2 | 85190 |
| 4491 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \pi^+ \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 5070 | 2 | 85192 |
| 4492 | $J/\psi \rightarrow a_0^- b_1^+, a_0^- \rightarrow \pi^- \eta, b_1^+ \rightarrow \pi^+ \omega, \eta \rightarrow \gamma \gamma, \omega \rightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 3815 | 2 | 85194 |
| 4493 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, b_1^+ \to \pi^+\omega, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7693 | 2 | 85196 |
| 4494 | $J/\psi \to \phi f_0(1710), \phi \to \pi^+ \rho^-, f_0(1710) \to K^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 3816 | 2 | 85198 |
| 4495 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\eta\gamma^f, \eta 	o \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 7697 | 2 | 85200 |
| 4496 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7702 | 2 | 85202 |
| 4497 | $J/\psi \to \rho^- \bar{\Sigma}^0 \Sigma^+, \rho^- \to \pi^0 \pi^-, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Sigma^+ \to \pi^+ n, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 7704 | 2 | 85204 |
| 4498 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7706 | 2 | 85206 |
| 4499 | $J/\psi \to \rho^0 p \bar{\Delta}^+, \rho^0 \to \pi^+ \pi^-, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^+\pi^-\pi^-ar{n}p$ | 7708 | 2 | 85208 |
| 4500 | $J/\psi \to \rho^- f_2(1270) a_0^+, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7709 | 2 | 85210 |
| 4501 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 2976 | 2 | 85212 |
| 4502 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^-$ | 2052 | 2 | 85214 |
| 4503 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 1343 | 2 | 85216 |
| 4504 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K_L^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 5081 | 2 | 85218 |
| 4505 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0\gamma$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 1344 | 2 | 85220 |
| 4506 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 5083 | 2 | 85222 |
| 4507 | $J/\psi 	o K^- \Sigma^0 \bar{\Xi}^+, \Sigma^0 	o \Lambda \gamma, \bar{\Xi}^+ 	o \pi^+ \bar{\Lambda}, \Lambda 	o \pi^- p, \bar{\Lambda} 	o \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-K^-par p\gamma$ | 2984 | 2 | 85224 |
| 4508 | $J/\psi ightarrow \pi^0 ho^0 \eta', ho^0 ightarrow \pi^+ \pi^-, \eta' ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 7727 | 2 | 85226 |
| 4509 | $J/\psi \to \pi^0\pi^+\omega a_0^-, \omega \to \pi^0\pi^+\pi^-, a_0^- \to \pi^-\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8 | 2 | 85228 |
| 4510 | $J/\psi \to \pi^- K_S^0 K^+ \phi, K_S^0 \to \pi^+ \pi^-, \phi \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2987 | 2 | 85230 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 4511 | $J/\psi ightarrow a_2^- ar{K}^0 K^+, a_2^- ightarrow \pi^0 \pi^- \omega, ar{K}^0 ightarrow K_L^0, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 5089 | 2 | 85232 |
| 4512 | $J/\psi \to \pi^- \omega \bar{K}^0 K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7732 | 2 | 85234 |
| 4513 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^{*-} \phi, K^{*-} \to \pi^0 K^-, \phi \to K^+ K^-$ | $\pi^0K^+K^+K^-K^-\gamma$ | 602 | 2 | 85236 |
| 4514 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2456 | 2 | 85238 |
| 4515 | $J/\psi 	o \pi^0 \pi^+ a_2^-, a_2^- 	o \pi^0 ho^-, \pi^0 	o e^+ e^- \gamma^F, ho^- 	o \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 7742 | 2 | 85240 |
| 4516 | $J/\psi \to \eta K^0 \bar{K}_1^0, \eta \to \gamma \gamma, K^0 \to K_L^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 7746 | 2 | 85242 |
| 4517 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7750 | 2 | 85244 |
| 4518 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{\Lambda} \Sigma^0, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^+\pi^-par p\gamma\gamma$ | 7755 | 2 | 85246 |
| 4519 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \bar{K}^*, K_1^0 \to \omega K^0, \bar{K}^* \to \pi^+ K^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7756 | 2 | 85248 |
| 4520 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5096 | 2 | 85250 |
| 4521 | $J/\psi \to \pi^- \rho^+ K^- K^{*+}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7760 | 2 | 85252 |
| 4522 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to K^+K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 2457 | 2 | 85254 |
| 4523 | $J/\psi 	o \pi^0 ar{K}^0 K_1^0, ar{K}^0 	o K_S^0, K_1^0 	o \pi^0 K^*, K_S^0 	o \pi^+ \pi^-, K^* 	o \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7763 | 2 | 85256 |
| 4524 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0K^+K^-$ | 5098 | 2 | 85258 |
| 4525 | $J/\psi \to \pi^- \omega \bar{K}^* K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 5100 | 2 | 85260 |
| 4526 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2061 | 2 | 85262 |
| 4527 | $J/\psi ightarrow ho^+\Lambdaar{\Sigma}^-, ho^+ ightarrow \pi^0\pi^+, \Lambda ightarrow \pi^0n, ar{\Sigma}^- ightarrow \pi^-ar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 7770 | 2 | 85264 |
| 4528 | $J/\psi 	o \pi^+ K^- K_1^0, K_1^0 	o \omega K^0, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2463 | 2 | 85266 |
| 4529 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7775 | 2 | 85268 |
| 4530 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^0K^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0K^+K^+K^-K^-$ | 7778 | 2 | 85270 |
| 4531 | $J/\psi 	o a_2^+ b_1^-, a_2^+ 	o ar K^0 K^+, b_1^- 	o \pi^- \omega, ar K^0 	o K_L^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5110 | 2 | 85272 |
| 4532 | $J/\psi \to \Xi^-\bar{\Xi}^{*+}, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^{*+} \to \pi^+\bar{\Xi}^0, \Lambda \to \pi^-p, \bar{\Xi}^0 \to \pi^0\bar{\Lambda}, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 7783 | 2 | 85274 |
| 4533 | $J/\psi \to K^*K_2^{*0}\gamma, K^* \to \pi^-K^+, K_2^{*0} \to \pi^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 7784 | 2 | 85276 |
| 4534 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 7785 | 2 | 85278 |
| 4535 | $J/\psi \to \rho^0 \omega K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 7787 | 2 | 85280 |
| 4536 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^+\pi^-K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5111 | 2 | 85282 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 4537 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 5115 | 2 | 85284 |
| 4538 | $J/\psi 	o \pi^- \bar{\Delta}^0 p, \bar{\Delta}^0 	o \pi^0 \bar{n}, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^-ar{n}p\gamma^F$ | 5116 | 2 | 85286 |
| 4539 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5117 | 2 | 85288 |
| 4540 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 7813 | 2 | 85290 |
| 4541 | $J/\psi \to ho^+ a_2^- \eta, ho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5120 | 2 | 85292 |
| 4542 | $J/\psi ightarrow ho^0 \Lambda ar{\Lambda}, ho^0 ightarrow \pi^+ \pi^-, \Lambda ightarrow \pi^0 n, ar{\Lambda} ightarrow \pi^+ ar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 2467 | 2 | 85294 |
| 4543 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^- a_2^+ \omega, a_2^+ 	o ho^0 \pi^+, \omega 	o \pi^0 \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\gamma$ | 2995 | 2 | 85296 |
| 4544 | $J/\psi 	o \pi^0\pi^-b_1^0a_0^+, b_1^0 	o \pi^0\omega, a_0^+ 	o \pi^+\eta, \omega 	o \pi^0\pi^+\pi^-, \eta 	o \gamma\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7820 | 2 | 85298 |
| 4545 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^+\pi^-K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7821 | 2 | 85300 |
| 4546 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^- a_2^+, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 7822 | 2 | 85302 |
| 4547 | $J/\psi \rightarrow \rho^+ \eta' a_0^-, \rho^+ \rightarrow \pi^0 \pi^+, \eta' \rightarrow \pi^+ \pi^- \eta, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \gamma \gamma, \\ \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1757 | 2 | 85304 |
| 4548 | $J/\psi \to ho^- \eta a_0^+, ho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 2999 | 2 | 85306 |
| 4549 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7835 | 2 | 85308 |
| 4550 | $J/\psi \to K^+ K_1^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-$ | 7838 | 2 | 85310 |
| 4551 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \rho^0 K^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 7839 | 2 | 85312 |
| 4552 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2472 | 2 | 85314 |
| 4553 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^- \rho^+, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 247 | 2 | 85316 |
| 4554 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ K^-$ | 2066 | 2 | 85318 |
| 4555 | $J/\psi \to \rho^0 \pi^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1348 | 2 | 85320 |
| 4556 | $J/\psi \to \pi^+ \rho^- \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 7846 | 2 | 85322 |
| 4557 | $J/\psi 	o \pi^0 K^+ \bar{p} \Lambda, \Lambda 	o \pi^- p$ | $\pi^0\pi^-K^+par{p}$ | 3007 | 2 | 85324 |
| 4558 | $J/\psi 	o ho^0 ar{K}^0 K_1^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_L^0, K_1^0 	o ho^- K^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7854 | 2 | 85326 |
| 4559 | $J/\psi \rightarrow \omega a_0^+ a_0^-, \omega \rightarrow \pi^0 \gamma, a_0^+ \rightarrow \pi^+ \eta, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \gamma \gamma, \\ \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 7855 | 2 | 85328 |
| 4560 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^0\Xi^0, \bar{\Xi}^{*0} \to \pi^-\bar{\Xi}^+, \Xi^0 \to \pi^0\Lambda, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 7856 | 2 | 85330 |
| 4561 | $J/\psi \to K^+ \bar{n} \Sigma^{*-}, \Sigma^{*-} \to \pi^- \Lambda, \Lambda \to \pi^- p$ | $\pi^-\pi^-K^+ar{n}p$ | 5141 | 2 | 85332 |
| 4562 | $J/\psi \to \pi^+ K^- K_1^{'0}, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7861 | 2 | 85334 |
| 4563 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7862 | 2 | 85336 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4564 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5144 | 2 | 85338 |
| 4565 | $J/\psi \to K^-K^{*+}f_2^{'}, K^{*+} \to \pi^+K^0, f_2^{'} \to K^+K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 500 | 2 | 85340 |
| 4566 | $J/\psi 	o \omega ar{K}^0 K_2^{*0}, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7878 | 2 | 85342 |
| 4567 | $J/\psi \to \omega K \ K_2 \ , \omega \to \pi \ \pi^+ \pi \ , K \to K_L, K_2 \to \pi \ K$ $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \rho^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-,$ $\bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3853 | 2 | 85344 |
| 4568 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^+ \pi^- \eta \gamma^f, \eta 	o \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma\gamma^f$ | 3855 | 2 | 85346 |
| 4569 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \bar{K}^0 K^+, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^- K^+ K^-$ | 3857 | 2 | 85348 |
| 4570 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 2071 | 2 | 85350 |
| 4571 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 3859 | 2 | 85352 |
| 4572 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^0 K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 7894 | 2 | 85354 |
| 4573 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2480 | 2 | 85356 |
| 4574 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 960 | 2 | 85358 |
| 4575 | $J/\psi \to K^{*+} \bar{K}_1^{'-} \gamma, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 7902 | 2 | 85360 |
| 4576 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^+ \pi^- K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 3863 | 2 | 85362 |
| 4577 | $J/\psi \to \bar{K}^0 K^* b_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, b_1^0 \to \pi^0 \omega, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7906 | 2 | 85364 |
| 4578 | $J/\psi \to f_2(1950)^{\gamma}, f_2(1950) \to \eta \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 7907 | 2 | 85366 |
| 4579 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \eta \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 5162 | 2 | 85368 |
| 4580 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2073 | 2 | 85370 |
| 4581 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^+\pi^-K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7915 | 2 | 85372 |
| 4582 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7916 | 2 | 85374 |
| 4583 | $J/\psi \to \pi^0\pi^-\rho^+\rho^+a_1^-, \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+, a_1^- \to \rho^0\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 7918 | 2 | 85376 |
| 4584 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 79 | 2 | 85378 |
| 4585 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^- \rho^+, K^{*+} \to \pi^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7923 | 2 | 85380 |
| 4586 | $J/\psi \rightarrow \rho^+ a_2^-, \rho^+ \rightarrow \pi^0 \pi^+, a_2^- \rightarrow \pi^0 \pi^- \omega, \omega \rightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 7930 | 2 | 85382 |
| 4587 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 3870 | 2 | 85384 |
| 4588 | $J/\psi \to \bar{K}^* K_1^0, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 5172 | 2 | 85386 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4589 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7946 | 2 | 85388 |
| 4590 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \omega K^+, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7953 | 2 | 85390 |
| 4591 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^0\pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5173 | 2 | 85392 |
| 4592 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to K^+ K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 7955 | 2 | 85394 |
| 4593 | $J/\psi \to K^0 \bar{K}^0 a_1^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7957 | 2 | 85396 |
| 4594 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7958 | 2 | 85398 |
| 4595 | $J/\psi \to \eta \omega f_0(1370), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3017 | 2 | 85400 |
| 4596 | $J/\psi \to K^{*+}K_2^{*-}\gamma, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 3019 | 2 | 85402 |
| 4597 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^+\pi^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3873 | 2 | 85404 |
| 4598 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 ho^- b_1^+, ho^- ightarrow \pi^0 \pi^-, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5184 | 2 | 85406 |
| 4599 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 3874 | 2 | 85408 |
| 4600 | $J/\psi 	o \eta K^* ar{K}_0^{*0}, \eta 	o \gamma \gamma, K^* 	o \pi^- K^+, ar{K}_0^{*0} 	o \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 7983 | 2 | 85410 |
| 4601 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_S^0, $ $\eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 7985 | 2 | 85412 |
| 4602 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5188 | 2 | 85414 |
| 4603 | $J/\psi 	o \eta p \bar p, \eta 	o e^+ e^- \gamma^F$ | $e^+e^-par{p}\gamma^F$ | 3875 | 2 | 85416 |
| 4604 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3877 | 2 | 85418 |
| 4605 | $J/\psi 	o ar{K}^0 \phi K_0^0, ar{K}^0 	o K_L^0, \phi 	o K^+ K^-, K_0^0 	o \pi^- K^+$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 7989 | 2 | 85420 |
| 4606 | $J/\psi 	o \pi^0 \pi^- a_1^+, a_1^+ 	o ho^0 \pi^+ \gamma^f, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3878 | 2 | 85422 |
| 4607 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^+ \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7991 | 2 | 85424 |
| 4608 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 5207 | 2 | 85426 |
| 4609 | $J/\psi 	o a_2^0 \pi^- a_2^+, a_2^0 	o \pi^+ ho^-, a_2^+ 	o ho^0 \pi^+, ho^- 	o \pi^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5208 | 2 | 85428 |
| 4610 | $J/\psi 	o \pi^+ K_2^{*0} K^-, K_2^{*0} 	o \omega K^0, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 962 | 2 | 85430 |
| 4611 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \rho^0 K^-, K^0 \to K_L^0, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 5211 | 2 | 85432 |
| 4612 | $J/\psi \to \pi^- \omega K_S^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 5213 | 2 | 85434 |
| 4613 | $J/\psi 	o \eta \phi, \eta 	o \pi^0 \pi^+ \pi^-, \phi 	o \pi^0 ho^0, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3880 | 2 | 85436 |
| 4614 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ K^-$ | 5218 | 2 | 85438 |
| 4615 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \rho^+ K^-, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 3881 | 2 | 85440 |
| 4616 | $J/\psi ightarrow ar{K}^0 \Delta^- ar{\Sigma}^+, ar{K}^0 ightarrow K_S^0, \Delta^- ightarrow \pi^- n, ar{\Sigma}^+ ightarrow \pi^+ ar{n}, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-nar{n}$ | 5223 | 2 | 85442 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 4617 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5224 | 2 | 85444 |
| 4618 | $J/\psi \to \pi^- \rho^+ \rho^+ \rho^- \eta, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}$ | 25 | 2 | 85446 |
| 4619 | $J/\psi 	o \pi^0 \pi^+ a_2^-, a_2^- 	o \pi^0 ho^-, ho^- 	o \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 8021 | 2 | 85448 |
| 4620 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 2488 | 2 | 85450 |
| 4621 | $J/\psi \to \bar{K}^* n \bar{\Lambda}, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{\Lambda} \to \pi^0 \bar{n}, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 8026 | 2 | 85452 |
| 4622 | $J/\psi \to K^0 \bar{K}_1^{'0}, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^-$ | 8027 | 2 | 85454 |
| 4623 | $J/\psi \to K^{0} \bar{K}^{0} f_{2}^{'}, K^{0} \to K_{S}^{0}, \bar{K}^{0} \to K_{L}^{0}, f_{2}^{'} \to K^{+} K^{-}, K_{S}^{0} \to \pi^{0} \pi^{0}$ | $\pi^0 \pi^0 K_L^0 K^+ K^-$ | 8030 | 2 | 85456 |
| 4624 | $J/\psi \to \rho^0 K^{*-} K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2080 | 2 | 85458 |
| 4625 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma$ | 5231 | 2 | 85460 |
| 4626 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 1543 | 2 | 85462 |
| 4627 | $J/\psi \to K^-K^{*+}a_0^0, K^{*+} \to \pi^+K^0, a_0^0 \to \pi^0\eta, K^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 8039 | 2 | 85464 |
| 4628 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 1546 | 2 | 85466 |
| 4629 | $J/\psi ightarrow \omega b_1^0 \gamma, \omega ightarrow \pi^0 \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3030 | 2 | 85468 |
| 4630 | $J/\psi \to \rho^+ \eta a_0^-, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8047 | 2 | 85470 |
| 4631 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^+ a_2^-, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8049 | 2 | 85472 |
| 4632 | $J/\psi 	o ho^- \bar{\Lambda} \Sigma^+, ho^- 	o \pi^0 \pi^-, \bar{\Lambda} 	o \pi^+ \bar{p}, \Sigma^+ 	o \pi^+ n$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 8051 | 2 | 85474 |
| 4633 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_1^0 \to \pi^- \rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8052 | 2 | 85476 |
| 4634 | $J/\psi \to \rho^0 \rho^+ K^* K^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3891 | 2 | 85478 |
| 4635 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{\Xi}^+ \Xi^-, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^- \to \pi^- \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 3892 | 2 | 85480 |
| 4636 | $J/\psi \to \omega b_1^+ b_1^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma,$ $\omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 8060 | 2 | 85482 |
| 4637 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- K_2^{*0} K^{*+}, K_2^{*0} \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 3894 | 2 | 85484 |
| 4638 | $J/\psi 	o \eta ar{K}^0 K^*, \eta 	o \pi^0 \pi^0 \pi^0, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 8062 | 2 | 85486 |
| 4639 | $J/\psi \to K^+ b_1^0 K_0^{*-}, b_1^0 \to \pi^0 \omega, K_0^{*-} \to \pi^0 K^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 2493 | 2 | 85488 |
| 4640 | $J/\psi ightarrow \omega \eta', \omega ightarrow \pi^0 \pi^+ \pi^-, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5240 | 2 | 85490 |
| 4641 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to K_L^0 K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 8076 | 2 | 85492 |
| 4642 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1360 | 2 | 85494 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 4643 | $J/\psi \to \pi^0 K^{*+} K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2496 | 2 | 85496 |
| 4644 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^+ \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 776 | 2 | 85498 |
| 4645 | $J/\psi \to K^-K^{*+}a_1^0, K^{*+} \to \pi^+K^0, a_1^0 \to \pi^-\rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8084 | 2 | 85500 |
| 4646 | $J/\psi 	o \omega K^0 ar K^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K^0_L, ar K^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 8085 | 2 | 85502 |
| 4647 | $J/\psi ightarrow K^0 ar K^0 a_0^0, K^0 ightarrow K_L^0, ar K^0 ightarrow K_S^0, a_0^0 ightarrow \pi^0 \eta, K_S^0 ightarrow \pi^+ \pi^-, \ \eta ightarrow \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 8089 | 2 | 85504 |
| 4648 | $J/\psi \to \pi^+ \rho^- \bar{K}^0 K^*, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5246 | 2 | 85506 |
| 4649 | $J/\psi \to \pi^+ K^0 K^- \gamma^F, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma^F$ | 5247 | 2 | 85508 |
| 4650 | $J/\psi \to \Lambda \bar{\Sigma}^{*0}, \Lambda \to \pi^- p, \bar{\Sigma}^{*0} \to \pi^- \bar{\Sigma}^+, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^+\pi^-\pi^-\bar{n}p$ | 8094 | 2 | 85510 |
| 4651 | $J/\psi \to K^{2}, K \to \pi p, \Sigma \to \pi \Sigma^{-}, \Sigma \to \pi n$ $J/\psi \to K^{0}a_{0}^{+}K_{1}^{-}, K^{0} \to K_{L}^{0}, a_{0}^{+} \to \pi^{+}\eta, K_{1}^{-} \to \omega K^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0},$ $\omega \to \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 3906 | 2 | 85512 |
| 4652 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 3907 | 2 | 85514 |
| 4653 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^+ \pi^- \gamma^F$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 8108 | 2 | 85516 |
| 4654 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5250 | 2 | 85518 |
| 4655 | $J/\psi \to \eta K^{*+} K^{*-}, \eta \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+ \gamma^F$ | 8114 | 2 | 85520 |
| 4656 | $J/\psi \to \phi f_0(2020), \phi \to K_L^0 K_S^0, f_0(2020) \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 3908 | 2 | 85522 |
| 4657 | $J/\psi \to \pi^0\pi^0\pi^-b_1^+, b_1^+ \to \pi^+\omega, \omega \to \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 3041 | 2 | 85524 |
| 4658 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5255 | 2 | 85526 |
| 4659 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^0 \bar{K}^{*0}_0, K^0_S \to \pi^+ \pi^-, \bar{K}^{*0}_0 \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5256 | 2 | 85528 |
| 4660 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 5257 | 2 | 85530 |
| 4661 | $J/\psi \rightarrow \eta' \phi, \eta' \rightarrow \pi^+ \pi^- \eta, \phi \rightarrow \pi^+ \rho^-, \eta \rightarrow \gamma \gamma, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8133 | 2 | 85532 |
| 4662 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 5258 | 2 | 85534 |
| 4663 | $J/\psi \to K^+K^{*-}f_2^{'}, K^{*-} \to \pi^-\bar{K}^0, f_2^{'} \to K^+K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 8137 | 2 | 85536 |
| 4664 | $J/\psi ightarrow \pi^0 par{p}a^0_0, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0 par p\gamma\gamma$ | 5262 | 2 | 85538 |
| 4665 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8144 | 2 | 85540 |
| 4666 | $J/\psi 	o \pi^0 ho^0 \pi^+ a_0^-, ho^0 	o \pi^+ \pi^-, a_0^- 	o \pi^- \eta, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 8145 | 2 | 85542 |
| 4667 | $J/\psi \to K^+K^-f_1(1285), f_1(1285) \to \pi^-a_0^+, a_0^+ \to \bar{K}^0K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 1550 | 2 | 85544 |
| 4668 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^- \gamma^f, f_2(1270) \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 5265 | 2 | 85546 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 4669 | $J/\psi 	o f_2' \gamma, f_2' 	o \eta \eta, \eta 	o \gamma \gamma, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 8152 | 2 | 85548 |
| 4670 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^0 \pi^0, \phi \to K^+ K^-, f_0(980) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 8155 | 2 | 85550 |
| 4671 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 5270 | 2 | 85552 |
| 4672 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \eta' \to \rho^0\gamma, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 69 | 2 | 85554 |
| 4673 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \rho^0 \pi^+, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3916 | 2 | 85556 |
| 4674 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8168 | 2 | 85558 |
| 4675 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8173 | 2 | 85560 |
| 4676 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1778 | 2 | 85562 |
| 4677 | $J/\psi 	o ho^+ K_2^{*0} K^-, ho^+ 	o \pi^0 \pi^+, K_2^{*0} 	o \pi^0 \pi^0 K^*, K^* 	o \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5282 | 2 | 85564 |
| 4678 | $J/\psi ightarrow K^* ar{n} \Lambda, K^* ightarrow \pi^0 K^0, \Lambda ightarrow \pi^- p, K^0 ightarrow K^0_S, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 8183 | 2 | 85566 |
| 4679 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5283 | 2 | 85568 |
| 4680 | $J/\psi \to ho^0 K^+ K_2^{*-}, ho^0 \to \pi^+ \pi^-, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 5287 | 2 | 85570 |
| 4681 | $J/\psi 	o ar{\Sigma}^+ \Sigma^{*-}, ar{\Sigma}^+ 	o \pi^+ ar{n}, \Sigma^{*-} 	o \pi^- \Sigma^0, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^- p$ | $\pi^+\pi^-\pi^-ar{n}p\gamma$ | 2090 | 2 | 85572 |
| 4682 | $J/\psi \to \pi^- \bar{\Sigma}^{*+} \Sigma^0, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Sigma^0 \to \Lambda \gamma, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma$ | 1204 | 2 | 85574 |
| 4683 | $J/\psi 	o ho^0 ho^- ar{K}^0 K^+, ho^0 	o \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5293 | 2 | 85576 |
| 4684 | $J/\psi \to f_0(1370)h_1(1170), f_0(1370) \to \pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8203 | 2 | 85578 |
| 4685 | $J/\psi \to \bar{\Sigma}^- \Sigma^{*+}, \bar{\Sigma}^- \to \pi^- \bar{n}, \Sigma^{*+} \to \pi^0 \Sigma^+, \Sigma^+ \to \pi^0 p$ | $\pi^0\pi^0\pi^-\bar{n}p$ | 1205 | 2 | 85580 |
| 4686 | $J/\psi \to \pi^0 \bar{\Sigma}^{*+} \Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 5296 | 2 | 85582 |
| 4687 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8210 | 2 | 85584 |
| 4688 | $J/\psi 	o \eta\eta\phi, \eta 	o \gamma\gamma, \eta 	o \gamma\gamma, \phi 	o K^0_L K^0_S, K^0_S 	o \pi^+\pi^-$ | $K_L^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 3927 | 2 | 85586 |
| 4689 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_0(1710) \to \omega \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3928 | 2 | 85588 |
| 4690 | $J/\psi ightarrow ho^0 a_2^0 \eta, ho^0 ightarrow \pi^+ \pi^-, a_2^0 ightarrow \pi^+ \pi^- \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 664 | 2 | 85590 |
| 4691 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^- \rho^+, h_1(1170) \to \pi^0 \rho^0, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8218 | 2 | 85592 |
| 4692 | $J/\psi \to \omega K^- K_1^{'+}, \omega \to \pi^0 \pi^+ \pi^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3060 | 2 | 85594 |
| 4693 | $J/\psi 	o \pi^0 ho^- \eta ar{K}^* K^+, ho^- 	o \pi^0 \pi^-, \eta 	o \pi^0 \pi^+ \pi^-, ar{K}^* 	o \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2505 | 2 | 85596 |
| 4694 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8232 | 2 | 85598 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 4695 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \omega \bar{K}^0, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 8233 | 2 | 85600 |
| 4696 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 8234 | 2 | 85602 |
| 4697 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 5308 | 2 | 85604 |
| 4698 | $J/\psi \to a_2^- b_1^+, a_2^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3062 | 2 | 85606 |
| 4699 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8240 | 2 | 85608 |
| 4700 | $J/\psi ightarrow \pi^- ho^+ \eta, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \pi^0 \pi^0, \pi^0 ightarrow e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 8245 | 2 | 85610 |
| 4701 | $J/\psi 	o ar{K}^0 K_0^0 \gamma, ar{K}^0 	o K_L^0, K_0^0 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 8248 | 2 | 85612 |
| 4702 | $J/\psi \to \Xi^-\bar{\Xi}^{*+}, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^{*+} \to \pi^+\bar{\Xi}^0, \Lambda \to \pi^0 n, \bar{\Xi}^0 \to \pi^0\bar{\Lambda}, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 5311 | 2 | 85614 |
| 4703 | $J/\psi \to f_2(1270)K^-K^{*+}, f_2(1270) \to \pi^+\pi^-, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8256 | 2 | 85616 |
| 4704 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \gamma \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 3940 | 2 | 85618 |
| 4705 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 969 | 2 | 85620 |
| 4706 | $J/\psi \to \pi^- f_2(1270) a_1^+, f_2(1270) \to \pi^0 \pi^0, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5315 | 2 | 85622 |
| 4707 | $J/\psi \to \eta \omega f_2(1270), \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5319 | 2 | 85624 |
| 4708 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1557 | 2 | 85626 |
| 4709 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8269 | 2 | 85628 |
| 4710 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8273 | 2 | 85630 |
| 4711 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^{*-}, \Lambda \to \pi^- p, \bar{\Sigma}^{*-} \to \pi^- \bar{\Sigma}^0, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma$ | 3066 | 2 | 85632 |
| 4712 | $J/\psi \to \rho^0 \pi^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8278 | 2 | 85634 |
| 4713 | $J/\psi \to \eta(2225)\gamma, \eta(2225) \to \phi\phi, \phi \to \pi^0 \rho^0, \phi \to K^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 8280 | 2 | 85636 |
| 4714 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 8281 | 2 | 85638 |
| 4715 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^+K^0, \phi \to \pi^-\rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3949 | 2 | 85640 |
| 4716 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_1^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 114 | 2 | 85642 |
| 4717 | $J/\psi \to \pi^- \rho^+ K^* \bar{K}^0_1, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8288 | 2 | 85644 |
| 4718 | $J/\psi \to \rho^0 f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \rho^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8289 | 2 | 85646 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 4719 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^+ K^0, \eta \to \pi^0 \pi^0 \pi^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8290 | 2 | 85648 |
| 4720 | $J/\psi ightarrow \pi^+ K^{*-} n \bar{\Lambda}, K^{*-} ightarrow \pi^- \bar{K}^0, \bar{\Lambda} ightarrow \pi^0 \bar{n}, \bar{K}^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- n ar n$ | 5329 | 2 | 85650 |
| 4721 | $J/\psi \to K^+K^{*-}a^0_0, K^{*-} \to \pi^-\bar{K}^0, a^0_0 \to \pi^0\eta, \bar{K}^0 \to K^0_S, \eta \to \pi^0\pi^0\pi^0, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 304 | 2 | 85652 |
| 4722 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \rho^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5331 | 2 | 85654 |
| 4723 | $J/\psi \to \phi f_0(980), \phi \to K_L^0 K_S^0, f_0(980) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8301 | 2 | 85656 |
| 4724 | $J/\psi 	o \eta\eta\gamma, \eta 	o \pi^0\pi^+\pi^-, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3956 | 2 | 85658 |
| 4725 | $J/\psi 	o \eta \omega, \eta 	o \gamma \gamma, \omega 	o \pi^+ \pi^-$ | $\pi^+\pi^-\gamma\gamma$ | 3957 | 2 | 85660 |
| 4726 | $J/\psi 	o \eta ar{K}^0 K_1^0, \eta 	o \pi^0 \pi^0 \pi^0, ar{K}^0 	o K_L^0, K_1^0 	o ho^0 K^0, ho^0 	o \pi^+ \pi^-, K_L^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 8306 | 2 | 85662 |
| 4727 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 8307 | 2 | 85664 |
| 4728 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^0 K^0_L \pi^+ K^- \gamma^f$ | 3958 | 2 | 85666 |
| 4729 | $J/\psi ightarrow ar{K}^* n ar{\Lambda}, ar{K}^* ightarrow \pi^0 ar{K}^0, ar{\Lambda} ightarrow \pi^+ ar{p}, ar{K}^0 ightarrow K_S^0, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 5340 | 2 | 85668 |
| 4730 | $J/\psi \to \pi^0 \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2099 | 2 | 85670 |
| 4731 | $J/\psi 	o \pi^0 \Delta^+ \bar{\Delta}^+, \pi^0 	o e^+ e^- \gamma^F, \Delta^+ 	o \pi^0 p, \bar{\Delta}^+ 	o \pi^0 ar{p}$ | $e^+e^-\pi^0\pi^0par{p}\gamma^F$ | 8312 | 2 | 85672 |
| 4732 | $J/\psi 	o ho^+ K^- K_1^0, ho^+ 	o \pi^0 \pi^+, K_1^0 	o \pi^- K^{*+}, K^{*+} 	o \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8314 | 2 | 85674 |
| 4733 | $J/\psi 	o \pi^0 \pi^+ \pi^+ \pi^- ho^- \omega, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 973 | 2 | 85676 |
| 4734 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^f$ | 8317 | 2 | 85678 |
| 4735 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-\gamma^F$ | 8318 | 2 | 85680 |
| 4736 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 3071 | 2 | 85682 |
| 4737 | $J/\psi 	o \eta ar{K}^0 K^*, \eta 	o \pi^+ \pi^- \gamma^F, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^F$ | 8320 | 2 | 85684 |
| 4738 | $J/\psi \to \eta a_0^- b_1^+, \eta \to \gamma \gamma, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5351 | 2 | 85686 |
| 4739 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0\pi^+\pi^-, K^{*-} \to \pi^0K^-, K_1^+ \to \omega K^+, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3074 | 2 | 85688 |
| 4740 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5354 | 2 | 85690 |
| 4741 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 3075 | 2 | 85692 |
| 4742 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8330 | 2 | 85694 |
| 4743 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8332 | 2 | 85696 |
| 4744 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^-\pi^-K^+K^+K^-\gamma$ | 8337 | 2 | 85698 |
| 4745 | $J/\psi \to \pi^0 a_0^- b_1^+, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8342 | 2 | 85700 |
| 4746 | $J/\psi \to \pi^+ \rho^- \bar{K}^0 K_1^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 5358 | 2 | 85702 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 4747 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3078 | 2 | 85704 |
| 4748 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8348 | 2 | 85706 |
| 4749 | $J/\psi 	o \eta_c \gamma, \eta_c 	o K^+ K^+ K^- K^-$ | $K^+K^+K^-K^-\gamma$ | 2102 | 2 | 85708 |
| 4750 | $J/\psi ightarrow \pi^0 n ar{\Delta}^0, ar{\Delta}^0 ightarrow \pi^+ ar{p}$ | $\pi^0\pi^+n\bar{p}$ | 8351 | 2 | 85710 |
| 4751 | $J/\psi 	o \eta \Lambda ar{\Lambda}, \eta 	o \pi^0 \pi^+ \pi^-, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 3080 | 2 | 85712 |
| 4752 | $J/\psi \to ho^0 K^{*-} K_1^+, ho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ \pi^- K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 8355 | 2 | 85714 |
| 4753 | $J/\psi 	o K^+K^{*-}f_2^{'}, K^{*-} 	o \pi^-ar{K}^0, f_2^{'} 	o K_L^0K_L^0, ar{K}^0 	o K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^- K^+$ | 5371 | 2 | 85716 |
| 4754 | $J/\psi \to \omega K^* \bar{K}_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 5374 | 2 | 85718 |
| 4755 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8361 | 2 | 85720 |
| 4756 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- h_1(1170), h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3081 | 2 | 85722 |
| 4757 | $J/\psi \to \pi^- b_1^+ h_1(1170) \gamma^F, b_1^+ \to \pi^+ \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5377 | 2 | 85724 |
| 4758 | $J/\psi \to a_2^+ b_1^-, a_2^+ \to \pi^0 \rho^+, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5379 | 2 | 85726 |
| 4759 | $J/\psi \to \pi^0 K^- K^{*+} \gamma^F, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-\gamma^F$ | 8375 | 2 | 85728 |
| 4760 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8379 | 2 | 85730 |
| 4761 | $J/\psi \to \pi^0 \omega K^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 3976 | 2 | 85732 |
| 4762 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5381 | 2 | 85734 |
| 4763 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^-$ | 8382 | 2 | 85736 |
| 4764 | $J/\psi 	o ar K^0 n ar \Sigma^{*0}, ar K^0 	o K_L^0, ar \Sigma^{*0} 	o \pi^0 ar \Lambda, ar \Lambda 	o \pi^+ ar p$ | $\pi^0 K_L^0 \pi^+ n ar p$ | 8383 | 2 | 85738 |
| 4765 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 K^+ K^+ K^- K^-$ | 3082 | 2 | 85740 |
| 4766 | $J/\psi \to \pi^0 \pi^- a_0^+ \gamma^F, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 3979 | 2 | 85742 |
| 4767 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \omega K^+, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 1373 | 2 | 85744 |
| 4768 | $J/\psi \to \pi^- \rho^+ h_1(1170) \gamma^F, \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 8399 | 2 | 85746 |
| 4769 | $J/\psi \to \pi^0 \bar{\Sigma}^+ \Sigma^{*-}, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^{*-} \to \pi^- \Lambda, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 3984 | 2 | 85748 |
| 4770 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \pi^- \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8408 | 2 | 85750 |
| 4771 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \rho^0 \rho^0, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 5397 | 2 | 85752 |
| 4772 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^+K^0, f_0(1370) \to \pi^+\pi^+\pi^-\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 8415 | 2 | 85754 |
| 4773 | $J/\psi ightarrow \pi^0 \omega a^0_0, \omega ightarrow \pi^0 \gamma, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 3986 | 2 | 85756 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 4774 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 1212 | 2 | 85758 |
| 4775 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8428 | 2 | 85760 |
| 4776 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 8429 | 2 | 85762 |
| 4777 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\gamma$ | 8430 | 2 | 85764 |
| 4778 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3087 | 2 | 85766 |
| 4779 | $J/\psi \to K^+K^{*-}\eta', K^{*-} \to \pi^0K^-, \eta' \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 3088 | 2 | 85768 |
| 4780 | $J/\psi \to \rho^0 \rho^0 \eta \omega, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 8437 | 2 | 85770 |
| 4781 | $J/\psi \to \bar{\Xi}^+\Xi^-, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^- \to \pi^-\Lambda, \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to \pi^-p,$ $\pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^-\pi^-\bar{n}p\gamma^F$ | 2105 | 2 | 85772 |
| 4782 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8444 | 2 | 85774 |
| 4783 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 5408 | 2 | 85776 |
| 4784 | $J/\psi \to ho^0 a_2^0, ho^0 \to \pi^+ \pi^- \gamma^F, a_2^0 \to K^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 8448 | 2 | 85778 |
| 4785 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^- ho^+ a_0^0, ho^+ ightarrow \pi^0 \pi^+, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 8449 | 2 | 85780 |
| 4786 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^+ \pi^- \gamma^F, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^F$ | 5412 | 2 | 85782 |
| 4787 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, $ $\eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 8453 | 2 | 85784 |
| 4788 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^-K^+$ | 5414 | 2 | 85786 |
| 4789 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^F$ | 8458 | 2 | 85788 |
| 4790 | $J/\psi \to \pi^0\pi^0a_0^0b_1^0, a_0^0 \to \pi^0\eta, b_1^0 \to \pi^0\omega, \eta \to \gamma\gamma, \omega \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 8465 | 2 | 85790 |
| 4791 | $J/\psi \to \omega K^+ K^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 8466 | 2 | 85792 |
| 4792 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^0 p, \bar{\Sigma}^{*-} \to \pi^- \bar{\Sigma}^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^-ar{n}p\gamma$ | 8467 | 2 | 85794 |
| 4793 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 8469 | 2 | 85796 |
| 4794 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^0 K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1376 | 2 | 85798 |
| 4795 | $J/\psi 	o ho^+ ho^- \eta \omega, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-, \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2525 | 2 | 85800 |
| 4796 | $J/\psi \to a_2^- b_1^+, a_2^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 8476 | 2 | 85802 |
| 4797 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8478 | 2 | 85804 |
| 4798 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 8481 | 2 | 85806 |
| 4799 | $J/\psi \to \pi^+\pi^-\omega\gamma^f\gamma^f, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 1078 | 2 | 85808 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4800 | $J/\psi \to K^+K^{*-}a_0^0, K^{*-} \to \pi^-\bar{K}^0, a_0^0 \to \pi^0\eta, \bar{K}^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 2527 | 2 | 85810 |
| 4801 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1568 | 2 | 85812 |
| 4802 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8491 | 2 | 85814 |
| 4803 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 4001 | 2 | 85816 |
| 4804 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5430 | 2 | 85818 |
| 4805 | $J/\psi ightarrow \eta \phi, \eta ightarrow \pi^0 \pi^+ \pi^-, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 5431 | 2 | 85820 |
| 4806 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \rho^- K^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8497 | 2 | 85822 |
| 4807 | $J/\psi \to \pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3102 | 2 | 85824 |
| 4808 | $J/\psi 	o \eta \omega \eta', \eta 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4003 | 2 | 85826 |
| 4809 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 2109 | 2 | 85828 |
| 4810 | $J/\psi ightarrow \eta a_0^0 b_1^0, \eta ightarrow \pi^0 \pi^0 \pi^0, a_0^0 ightarrow \pi^0 \eta, b_1^0 ightarrow \pi^0 \omega, \eta ightarrow \gamma \gamma, \ \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1379 | 2 | 85830 |
| 4811 | $J/\psi 	o \eta\eta\phi, \eta 	o \gamma\gamma, \eta 	o \pi^+\pi^-\gamma^F, \phi 	o K^0_L K^0_S, K^0_S 	o \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 8512 | 2 | 85832 |
| 4812 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8516 | 2 | 85834 |
| 4813 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^+ \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 5442 | 2 | 85836 |
| 4814 | $J/\psi 	o \pi^+ ho^- \eta', ho^- 	o \pi^0 \pi^-, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0, \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8527 | 2 | 85838 |
| 4815 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5443 | 2 | 85840 |
| 4816 | $J/\psi 	o \pi^0 K^* ar{K}^*, K^* 	o \pi^0 K^0, ar{K}^* 	o \pi^+ K^-, K^0 	o K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 5444 | 2 | 85842 |
| 4817 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^0K^+, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 8533 | 2 | 85844 |
| 4818 | $J/\psi \to \pi^0\pi^-a_2^+, \pi^0 \to e^+e^-\gamma^F, a_2^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 1799 | 2 | 85846 |
| 4819 | $J/\psi 	o K^0 ar{K}^0 f_2^{'}, K^0 	o K_L^0, ar{K}^0 	o K_L^0, f_2^{'} 	o K_L^0 K_L^0$ | $K_L^0K_L^0K_L^0K_L^0$ | 8540 | 2 | 85848 |
| 4820 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 5446 | 2 | 85850 |
| 4821 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8543 | 2 | 85852 |
| 4822 | $J/\psi 	o \pi^- b_1^0 a_0^+, b_1^0 	o \pi^0 \omega, a_0^+ 	o \pi^+ \eta, \omega 	o \pi^0 \pi^+ \pi^-, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2113 | 2 | 85854 |
| 4823 | $J/\psi ightarrow \pi^0\pi^- ho^+\omega\omega, ho^+ ightarrow \pi^0\pi^+, \omega ightarrow \pi^0\pi^+\pi^-, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1079 | 2 | 85856 |
| 4824 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \rho^- K^0, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3110 | 2 | 85858 |
| 4825 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 3112 | 2 | 85860 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 4826 | $J/\psi \to K^* \bar{K}^* b_1^0, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-K^-$ | 8564 | 2 | 85862 |
| 4827 | $J/\psi 	o \pi^0 \eta \omega, \eta 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8565 | 2 | 85864 |
| 4828 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8568 | 2 | 85866 |
| 4829 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \rho^0K^-, K^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 4019 | 2 | 85868 |
| 4830 | $J/\psi 	o \pi^- \omega a_0^+ \gamma^f, \omega 	o \pi^0 \gamma, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 8572 | 2 | 85870 |
| 4831 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^0 \pi^0, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5458 | 2 | 85872 |
| 4832 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0 K_L^0\pi^- K^+$ | 5461 | 2 | 85874 |
| 4833 | $J/\psi \to \rho^0 \bar{\Lambda} \Sigma^0, \rho^0 \to \pi^+ \pi^-, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 8577 | 2 | 85876 |
| 4834 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8578 | 2 | 85878 |
| 4835 | $J/\psi \rightarrow \phi\phi\phi, \phi \rightarrow \pi^-\rho^+, \phi \rightarrow K^+K^-, \phi \rightarrow K^+K^-, \rho^+ \rightarrow \pi^0\pi^+$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 8579 | 2 | 85880 |
| 4836 | $J/\psi \to \omega h_1(1170)\gamma, \omega \to \pi^0 \gamma, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 8593 | 2 | 85882 |
| 4837 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8596 | 2 | 85884 |
| 4838 | $J/\psi \to K^0 \bar{K}^0 f_2', K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_2' \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5465 | 2 | 85886 |
| 4839 | $J/\psi 	o ho^0 \pi^+ ho^- K^+ K^-, ho^0 	o \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 786 | 2 | 85888 |
| 4840 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 8607 | 2 | 85890 |
| 4841 | $J/\psi \rightarrow \pi^- \eta' b_1^+, \eta' \rightarrow \pi^0 \pi^0 \eta, b_1^+ \rightarrow \pi^+ \omega, \eta \rightarrow \pi^+ \pi^- \gamma^F, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 2535 | 2 | 85892 |
| 4842 | $J/\psi 	o \pi^- ar{K}^* p ar{\Lambda}, ar{K}^* 	o \pi^+ K^-, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^+\pi^-K^-par{p}$ | 2117 | 2 | 85894 |
| 4843 | $J/\psi 	o \pi^+ ho^- a^0_0, ho^- 	o \pi^0 \pi^-, a^0_0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8618 | 2 | 85896 |
| 4844 | $J/\psi \to \rho^0 K^{*-} K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3117 | 2 | 85898 |
| 4845 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \rho^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4027 | 2 | 85900 |
| 4846 | $J/\psi \to K^+K^{*-}a_0^0, K^{*-} \to \pi^0K^-, a_0^0 \to \pi^0\eta, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 8624 | 2 | 85902 |
| 4847 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^{+}\bar{\Xi}^{0}, \Xi^{*-} \to \pi^{0}\Xi^{-}, \bar{\Xi}^{0} \to \pi^{0}\bar{\Lambda}, \Xi^{-} \to \pi^{-}\Lambda, \\ \bar{\Lambda} \to \pi^{+}\bar{p}, \Lambda \to \pi^{0}n$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 5475 | 2 | 85904 |
| 4848 | $J/\psi \to \omega K^0 \bar{K}_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 5479 | 2 | 85906 |
| 4849 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8637 | 2 | 85908 |
| 4850 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8638 | 2 | 85910 |
| 4851 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 8639 | 2 | 85912 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4852 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}K^{-}$ | 8641 | 2 | 85914 |
| 4853 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 5482 | 2 | 85916 |
| 4854 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 1082 | 2 | 85918 |
| 4855 | $J/\psi \to \bar{K}^0 K_0^{*+} a_1^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4031 | 2 | 85920 |
| 4856 | $J/\psi 	o \eta\eta\phi, \eta 	o \gamma\gamma, \eta 	o \gamma\gamma, \phi 	o K_L^0K_S^0, K_S^0 	o \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\gamma\gamma\gamma\gamma$ | 8655 | 2 | 85922 |
| 4857 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4032 | 2 | 85924 |
| 4858 | $J/\psi \to \rho^0 K^0 \bar{K}_0^{*0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 3119 | 2 | 85926 |
| 4859 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2121 | 2 | 85928 |
| 4860 | $J/\psi \to K^-K^{*+}a_0^0, K^{*+} \to \pi^+K^0, a_0^0 \to K^+K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 1804 | 2 | 85930 |
| 4861 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^+ \pi^- \omega, K^{*-} \to \pi^0 K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5495 | 2 | 85932 |
| 4862 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 190 | 2 | 85934 |
| 4863 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 8678 | 2 | 85936 |
| 4864 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8679 | 2 | 85938 |
| 4865 | $J/\psi \to ho^0 a_2^0 \eta, ho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ ho^-, \eta \to \gamma \gamma, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5499 | 2 | 85940 |
| 4866 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5504 | 2 | 85942 |
| 4867 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 K^- b_1^+, K^0 \to K_L^0, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 8683 | 2 | 85944 |
| 4868 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 8684 | 2 | 85946 |
| 4869 | $J/\psi \to \rho^0 \pi^- a_0^0 a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8685 | 2 | 85948 |
| 4870 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0K_L^0\pi^-K^+\gamma$ | 5505 | 2 | 85950 |
| 4871 | $J/\psi ightarrow \eta K^- K_2^{*+}, \eta ightarrow \gamma \gamma, K_2^{*+} ightarrow \pi^+ K^0, K^0 ightarrow K_L^0$ | $K_L^0\pi^+K^-\gamma\gamma$ | 8690 | 2 | 85952 |
| 4872 | $J/\psi \to \pi^{+}b_{1}^{-}f_{1}(1285), b_{1}^{-} \to \pi^{-}\omega, f_{1}(1285) \to \pi^{0}a_{0}^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, a_{0}^{0} \to \pi^{0}\eta, $ $\eta \to \pi^{0}\pi^{0}\pi^{0}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 5507 | 2 | 85954 |
| 4873 | $J/\psi 	o \omega ar{n} \Delta^0, \omega 	o \pi^0 \gamma, \Delta^0 	o \pi^0 n$ | $\pi^0\pi^0n\bar{n}\gamma$ | 8692 | 2 | 85956 |
| 4874 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 8695 | 2 | 85958 |
| 4875 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 2542 | 2 | 85960 |
| 4876 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^0 \eta, K^{*-} \to \pi^- \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K_+^+$ | 3124 | 2 | 85962 |
| 4877 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8702 | 2 | 85964 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 4878 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 8705 | 2 | 85966 |
| 4879 | $J/\psi ightarrow \pi^+ \eta K^0_S K^-, \eta ightarrow \pi^+ \pi^- \gamma^F, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 3127 | 2 | 85968 |
| 4880 | $J/\psi \to \eta a_0^+ b_1^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8717 | 2 | 85970 |
| 4881 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 2547 | 2 | 85972 |
| 4882 | $J/\psi \to K^*K^{*-}a_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^0K^-, a_1^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1806 | 2 | 85974 |
| 4883 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^- a_0^+, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma$ | 2549 | 2 | 85976 |
| 4884 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2550 | 2 | 85978 |
| 4885 | $J/\psi \to \pi^- K^0 \bar{K}^* b_1^+, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8729 | 2 | 85980 |
| 4886 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8731 | 2 | 85982 |
| 4887 | $J/\psi 	o \phi f_2^{'}, \phi 	o K_L^0 K_S^0, f_2^{'} 	o K_S^0 K_S^0, K_S^0 	o \pi^+\pi^-, K_S^0 	o \pi^0\pi^0, K_S^0 	o \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4057 | 2 | 85984 |
| 4888 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8735 | 2 | 85986 |
| 4889 | $J/\psi \to \omega K^+ \bar{K}_1^{'-}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 8736 | 2 | 85988 |
| 4890 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 562 | 2 | 85990 |
| 4891 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0K^0, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, K^0 \to K_S^0, \ \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5521 | 2 | 85992 |
| 4892 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8747 | 2 | 85994 |
| 4893 | $J/\psi \rightarrow \omega a_0^+ a_0^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^+ \rightarrow \pi^+ \eta, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \gamma \gamma, $ $\eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1810 | 2 | 85996 |
| 4894 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5527 | 2 | 85998 |
| 4895 | $J/\psi \to K^{*-} K_2^{*+} \gamma, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^- K^+ \gamma$ | 875 | 2 | 86000 |
| 4896 | $J/\psi \to K^0 \phi \bar{K}_0^{*0}, K^0 \to K_L^0, \phi \to K^+ K^-, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+K^+K^-K^-$ | 2135 | 2 | 86002 |
| 4897 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \omega K^+, \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 876 | 2 | 86004 |
| 4898 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 2141 | 2 | 86006 |
| 4899 | $J/\psi 	o \pi^0 ar{\Lambda} \Sigma^0, ar{\Lambda} 	o \pi^+ ar{p}, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^- p$ | $\pi^0\pi^+\pi^-p\bar{p}\gamma$ | 2561 | 2 | 86008 |
| 4900 | $J/\psi 	o K^0 ar{K}^0_1, K^0 	o K^0_S, ar{K}^0_1 	o ho^+ K^-, K^0_S 	o \pi^0 \pi^0, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 5540 | 2 | 86010 |
| 4901 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 5546 | 2 | 86012 |
| 4902 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^- \rho^+ \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8769 | 2 | 86014 |
| 4903 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^- ho^+ \eta, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8773 | 2 | 86016 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 4904 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5547 | 2 | 86018 |
| 4905 | $J/\psi 	o K^0 ar{K}^0, K^0 	o K^0_S, ar{K}^0 	o K^0_L, K^0_S 	o \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-$ | 5549 | 2 | 86020 |
| 4906 | $J/\psi \to K^0 \bar{K}^* \phi \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-$ | $K_L^0\pi^+K^+K^-K^-\gamma$ | 8776 | 2 | 86022 |
| 4907 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8777 | 2 | 86024 |
| 4908 | $K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ $J/\psi \to K^{*+}K_{2}^{*-}, K^{*+} \to \pi^{+}K^{0}, K_{2}^{*-} \to \pi^{+}\pi^{-}K^{*-}, K^{0} \to K_{S}^{0}, K^{*-} \to \pi^{0}K^{-},$ $K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5550 | 2 | 86026 |
| 4909 | $J/\psi 	o ho^0 K^0 ar{K}^* \gamma, ho^0 	o \pi^+ \pi^-, K^0 	o K^0_S, ar{K}^* 	o \pi^+ K^-, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 4071 | 2 | 86028 |
| 4910 | $J/\psi \to \pi^0 f_2(1270) b_1^0, f_2(1270) \to \pi^+\pi^-, b_1^0 \to \pi^0\omega, \omega \to \pi^0\pi^+\pi^-\gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 8781 | 2 | 86030 |
| 4911 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8782 | 2 | 86032 |
| 4912 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 5556 | 2 | 86034 |
| 4913 | $J/\psi \to \pi^- K^+ \bar{K}^0_1, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 8788 | 2 | 86036 |
| 4914 | $J/\psi \to \pi^- \bar{K}^* K^+ b_1^0, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 5558 | 2 | 86038 |
| 4915 | $J/\psi \to K^+ K_0^{*-} \gamma^F, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma^F$ | 8793 | 2 | 86040 |
| 4916 | $J/\psi ightarrow \pi^+\pi^-b_1^0\gamma^F, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 8800 | 2 | 86042 |
| 4917 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \eta \to \pi^+ \pi^- \gamma^F$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^F$ | 5561 | 2 | 86044 |
| 4918 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 4074 | 2 | 86046 |
| 4919 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1577 | 2 | 86048 |
| 4920 | $J/\psi 	o par p \gamma^f$ | $par{p}\gamma^f$ | 45 | 2 | 86050 |
| 4921 | $J/\psi \to \phi f_1(1420), \phi \to \pi^- \rho^+, f_1(1420) \to \pi^- \bar{K}^0 K^+, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5569 | 2 | 86052 |
| 4922 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 8818 | 2 | 86054 |
| 4923 | $J/\psi \to \eta \eta \gamma, \eta \to \gamma \gamma, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^-\gamma^F\gamma\gamma\gamma$ | 8820 | 2 | 86056 |
| 4924 | $J/\psi \to K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4080 | 2 | 86058 |
| 4925 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $K_L^0K_L^0\pi^+\pi^-$ | 4081 | 2 | 86060 |
| 4926 | $J/\psi \to \pi^0\pi^0\rho^0a_1^0, \rho^0 \to \pi^+\pi^-, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5574 | 2 | 86062 |
| 4927 | $J/\psi \to \pi^{0}\pi^{0}\rho^{0}a_{1}^{\gamma}, \rho^{0} \to \pi^{+}\pi^{-}, a_{1}^{\gamma} \to \pi^{+}\rho^{-}, \rho^{-} \to \pi^{0}\pi$ $J/\psi \to \pi^{-}b_{1}^{+}f_{0}(1370), b_{1}^{+} \to \pi^{+}\omega, f_{0}(1370) \to \rho^{0}\rho^{0}, \omega \to \pi^{0}\gamma, \rho^{0} \to \pi^{+}\pi^{-},$ $\rho^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 8827 | 2 | 86064 |
| 4928 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \eta' \to \rho^0\gamma, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 8829 | 2 | 86066 |
| 4929 | $J/\psi 	o K_2^{*0} ar{K}_0^{*0}, K_2^{*0} 	o \pi^- K^+, ar{K}_0^{*0} 	o \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 8830 | 2 | 86068 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 4930 | $J/\psi \to \bar{K}^*K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^{0}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma$ | 5578 | 2 | 86070 |
| 4931 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8836 | 2 | 86072 |
| 4932 | $J/\psi \to \pi^+ K_2^{*-} K_0^0, K_2^{*-} \to \pi^0 K^-, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 8839 | 2 | 86074 |
| 4933 | $J/\psi \to \bar{\Xi}^0 \Xi^{*0}, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Xi^{*0} \to \pi^+ \Xi^-, \bar{\Lambda} \to \pi^0 \bar{n}, \Xi^- \to \pi^- \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 3160 | 2 | 86076 |
| 4934 | $J/\psi \to a_2^0 K^{*+} K^{*-}, a_2^0 \to \pi^- \rho^+, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 4086 | 2 | 86078 |
| 4935 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8848 | 2 | 86080 |
| 4936 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \eta \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8851 | 2 | 86082 |
| 4937 | $J/\psi 	o \pi^0\pi^0\pi^0\gamma$ | $\pi^0\pi^0\pi^0\gamma$ | 8859 | 2 | 86084 |
| 4938 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^-K^{*+}, f_1(1420) \to \pi^+K^0K^-, K^{*+} \to \pi^0K^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 8862 | 2 | 86086 |
| 4939 | $J/\psi \to \bar{\Sigma}^+ \Sigma^{*-}, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^{*-} \to \pi^0 \Sigma^-, \Sigma^- \to \pi^- n$ | $\pi^0\pi^+\pi^-nar{n}$ | 5593 | 2 | 86088 |
| 4940 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 8865 | 2 | 86090 |
| 4941 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4089 | 2 | 86092 |
| 4942 | $J/\psi \to a_2^0 \pi^- a_1^+, a_2^0 \to \pi^0 \eta, a_1^+ \to \pi^0 \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 8876 | 2 | 86094 |
| 4943 | $J/\psi \to K^-K^{*+} f_0(1370), K^{*+} \to \pi^0 K^+, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4091 | 2 | 86096 |
| 4944 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 \pi^- ho^+, a_2^0 \to \pi^- ho^+, ho^+ \to \pi^0 \pi^+, ho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 4092 | 2 | 86098 |
| 4945 | $J/\psi 	o \Sigma^{*0}ar{\Sigma}^{*0}, \Sigma^{*0} 	o \pi^0\Lambda, ar{\Sigma}^{*0} 	o \pi^0ar{\Lambda}, \Lambda 	o \pi^0n, ar{\Lambda} 	o \pi^0ar{n}$ | $\pi^0\pi^0\pi^0\pi^0nar{n}$ | 8882 | 2 | 86100 |
| 4946 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8888 | 2 | 86102 |
| 4947 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, \ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 5602 | 2 | 86104 |
| 4948 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \eta' \to \pi^+\pi^-\eta, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4095 | 2 | 86106 |
| 4949 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to K^+ K^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 8895 | 2 | 86108 |
| 4950 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5606 | 2 | 86110 |
| 4951 | $J/\psi \to \rho^0 K^- K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K_2^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 8898 | 2 | 86112 |
| 4952 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4096 | 2 | 86114 |
| 4953 | $J/\psi 	o \pi^+\pi^+\pi^-\Sigma^0ar{\Sigma}^-, \Sigma^0 	o \Lambda\gamma, ar{\Sigma}^- 	o \pi^0ar{p}, \Lambda 	o \pi^-p$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 8904 | 2 | 86116 |
| 4954 | $J/\psi 	o K^{*+} ar{p} \Lambda, K^{*+} 	o \pi^+ K^0, \Lambda 	o \pi^- p, K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 2564 | 2 | 86118 |
| 4955 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8910 | 2 | 86120 |
| 4956 | $J/\psi 	o ar{K}^0 \phi K_0^0, ar{K}^0 	o K_S^0, \phi 	o K^+ K^-, K_0^0 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+K^+K^-$ | 8911 | 2 | 86122 |
| 4957 | $J/\psi \to f_0(1370)h_1(1170), f_0(1370) \to \pi^+\pi^-, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3169 | 2 | 86124 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 4958 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 8914 | 2 | 86126 |
| 4959 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 4100 | 2 | 86128 |
| 4960 | $J/\psi \to \pi^0 K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2146 | 2 | 86130 |
| 4961 | $J/\psi \to \eta_c \gamma, \eta_c \to \Lambda \bar{\Sigma}^0, \Lambda \to \pi^- p, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^-p\bar p\gamma\gamma$ | 3172 | 2 | 86132 |
| 4962 | $J/\psi \to K^0 \bar{K}_1^0 \gamma, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 5620 | 2 | 86134 |
| 4963 | $J/\psi 	o \eta \omega a_1^0, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5621 | 2 | 86136 |
| 4964 | $J/\psi 	o K^* ar{K}_0^{*0}, K^* 	o \pi^- K^+, ar{K}_0^{*0} 	o \pi^+ K^- \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 2568 | 2 | 86138 |
| 4965 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1817 | 2 | 86140 |
| 4966 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ b_1^0 b_1^-, b_1^0 \to \pi^0 \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 8928 | 2 | 86142 |
| 4967 | $J/\psi 	o \pi^0 a_2^0 \pi^+ ho^-, a_2^0 	o \pi^+ \pi^- \omega, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 794 | 2 | 86144 |
| 4968 | $J/\psi 	o \eta' n ar{n}, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 8930 | 2 | 86146 |
| 4969 | $J/\psi 	o a_0^- b_1^+, a_0^- 	o \pi^- \eta, b_1^+ 	o \pi^+ \omega, \eta 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4108 | 2 | 86148 |
| 4970 | $J/\psi ightarrow \pi^0 \omega K^+ K^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1226 | 2 | 86150 |
| 4971 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 3183 | 2 | 86152 |
| 4972 | $J/\psi ightarrow \eta \phi, \eta ightarrow \pi^0 \pi^0 \pi^0, \phi ightarrow \pi^0 ho^0, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 8955 | 2 | 86154 |
| 4973 | $J/\psi \to K^0 \bar{K}^0 a_0^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4124 | 2 | 86156 |
| 4974 | $J/\psi ightarrow \pi^+ ho^- \omega \omega, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5635 | 2 | 86158 |
| 4975 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4127 | 2 | 86160 |
| 4976 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, $ $\rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 8966 | 2 | 86162 |
| 4977 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 2151 | 2 | 86164 |
| 4978 | $J/\psi \to \pi^+ a_0^0 b_1^-, a_0^0 \to \pi^0 \eta, b_1^- \to \pi^- \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 5639 | 2 | 86166 |
| 4979 | $J/\psi \to ho^0 K^+ K^{*-}, ho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5640 | 2 | 86168 |
| 4980 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1228 | 2 | 86170 |
| 4981 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o K^+ K^- \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 8988 | 2 | 86172 |
| 4982 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 8989 | 2 | 86174 |
| 4983 | $J/\psi 	o \eta\eta\phi, \eta 	o \pi^0\pi^+\pi^-, \eta 	o \pi^0\pi^+\pi^-, \phi 	o K^+K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5645 | 2 | 86176 |
| 4984 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \rho^0 \pi^+, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8991 | 2 | 86178 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 4985 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}$ | 8992 | 2 | 86180 |
| 4986 | $J/\psi \to \pi^+ \omega K^0 K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8993 | 2 | 86182 |
| 4987 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8997 | 2 | 86184 |
| 4988 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 8999 | 2 | 86186 |
| 4989 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9000 | 2 | 86188 |
| 4990 | $J/\psi 	o a_0^0 b_1^0, a_0^0 	o \pi^0 \eta, b_1^0 	o \pi^0 \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4134 | 2 | 86190 |
| 4991 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0K^0, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9005 | 2 | 86192 |
| 4992 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 3186 | 2 | 86194 |
| 4993 | $J/\psi 	o ho^- \omega ar{K}^0 K^+, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9009 | 2 | 86196 |
| 4994 | $J/\psi \to K^0K^-a_0^+, K^0 \to K_S^0, a_0^+ \to \pi^+\eta, K_S^0 \to \pi^0\pi^0, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 2577 | 2 | 86198 |
| 4995 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \gamma, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 9015 | 2 | 86200 |
| 4996 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-$ | 1821 | 2 | 86202 |
| 4997 | $J/\psi ightarrow \eta K^+K^-, \eta ightarrow \pi^0\pi^0\pi^0, \pi^0 ightarrow e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^0K^+K^-\gamma^F$ | 9018 | 2 | 86204 |
| 4998 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \eta', \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3190 | 2 | 86206 |
| 4999 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5657 | 2 | 86208 |
| 5000 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^0 \eta, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9024 | 2 | 86210 |
| 5001 | $J/\psi 	o \omega ar p \Delta^+, \omega 	o \pi^0 \gamma, \Delta^+ 	o \pi^0 p$ | $\pi^0\pi^0 par p\gamma$ | 9026 | 2 | 86212 |
| 5002 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 9028 | 2 | 86214 |
| 5003 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9031 | 2 | 86216 |
| 5004 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+ \pi^-, a_2^0 ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma$ | 9035 | 2 | 86218 |
| 5005 | $J/\psi 	o \omega K^0 ar{K}^*, \omega 	o \pi^0 \gamma, K^0 	o K^0_S, ar{K}^* 	o \pi^+ K^-, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 9039 | 2 | 86220 |
| 5006 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 9041 | 2 | 86222 |
| 5007 | $J/\psi ightarrow \phi \sigma_0, \phi ightarrow \pi^0 ho^0, \sigma_0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1093 | 2 | 86224 |
| 5008 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 9048 | 2 | 86226 |
| 5009 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \gamma \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 3194 | 2 | 86228 |
| 5010 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 9050 | 2 | 86230 |
| 5011 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^0 \bar{K}^*, K^0_S \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3198 | 2 | 86232 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 5012 | $J/\psi \to \pi^+ K^* K^{*-} \gamma^F, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 4146 | 2 | 86234 |
| 5013 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 9058 | 2 | 86236 |
| 5014 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \pi^+ K^0, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 1586 | 2 | 86238 |
| 5015 | $J/\psi \to \pi^0 \rho^0 \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9060 | 2 | 86240 |
| 5016 | $J/\psi ightarrow \eta \omega f_2(1270), \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-, f_2(1270) ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 9061 | 2 | 86242 |
| 5017 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \rho^0 \rho^0, \eta \to \gamma \gamma, $ $\rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 3202 | 2 | 86244 |
| 5018 | $J/\psi \to \pi^0 \pi^+ \pi^- b_1^+ a_1^-, b_1^+ \to \pi^+ \omega, a_1^- \to \rho^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 9066 | 2 | 86246 |
| 5019 | $J/\psi \to \pi^0 \pi^+ K^0 K^{*-}, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9068 | 2 | 86248 |
| 5020 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 9069 | 2 | 86250 |
| 5021 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+} \gamma^f, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 2583 | 2 | 86252 |
| 5022 | $J/\psi \to \rho^- \omega b_1^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9075 | 2 | 86254 |
| 5023 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 9077 | 2 | 86256 |
| 5024 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 9083 | 2 | 86258 |
| 5025 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 9085 | 2 | 86260 |
| 5026 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 4158 | 2 | 86262 |
| 5027 | $J/\psi \rightarrow \pi^- \omega a_0^+, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^+ \rightarrow \pi^+ \eta, \pi^0 \rightarrow e^+ e^- \gamma^F, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 3205 | 2 | 86264 |
| 5028 | $J/\psi 	o \pi^0 ho^0 ho^0 \pi^+ ho^-, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^- \gamma^f, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 9095 | 2 | 86266 |
| 5029 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, \phi \to K^+K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5679 | 2 | 86268 |
| 5030 | $J/\psi \to \pi^+ a_1^0 a_1^-, a_1^0 \to \pi^+ \rho^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 981 | 2 | 86270 |
| 5031 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 9100 | 2 | 86272 |
| 5032 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 1826 | 2 | 86274 |
| 5033 | $J/\psi \to \pi^0 \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4164 | 2 | 86276 |
| 5034 | $J/\psi \to f_4(2050)\gamma, f_4(2050) \to K_L^0 K_L^0$ | $K_L^0 K_L^0 \gamma$ | 2590 | 2 | 86278 |
| 5035 | $J/\psi ightarrow \eta_2(1870) \gamma, \eta_2(1870) ightarrow \eta f_2(1270), \eta ightarrow \pi^0 \pi^0 \pi^0, f_2(1270) ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 9123 | 2 | 86280 |
| 5036 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_1^- \to \pi^0 \rho^-, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 9124 | 2 | 86282 |
| 5037 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 881 | 2 | 86284 |
| 5038 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5690 | 2 | 86286 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 5039 | $J/\psi \to \pi^+ \eta a_1^-, \eta \to \gamma \gamma, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 9128 | 2 | 86288 |
| 5040 | $J/\psi 	o \eta' p ar p, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma^F$ | 9129 | 2 | 86290 |
| 5041 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to \pi^-\rho^+, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 9131 | 2 | 86292 |
| 5042 | $J/\psi \to \eta \omega f_0(1370), \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9132 | 2 | 86294 |
| 5043 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9133 | 2 | 86296 |
| 5044 | $J/\psi \to K^0 \bar{K}^0_1 \gamma, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 5693 | 2 | 86298 |
| 5045 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^0 \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}$ | 5694 | 2 | 86300 |
| 5046 | $J/\psi \to K^{*+} \bar{K}_{1}^{'-} \gamma, K^{*+} \to \pi^{+} K^{0}, \bar{K}_{1}^{'-} \to \pi^{0} K^{*-}, K^{0} \to K_{S}^{0}, K^{*-} \to \pi^{-} \bar{K}^{0}, K^{0} \to K_{S}^{0} \to K_{L}^{0}$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 5697 | 2 | 86302 |
| 5047 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9141 | 2 | 86304 |
| 5048 | $J/\psi \to x(1835)\gamma, x(1835) \to \pi^+\pi^-\eta', \eta' \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 564 | 2 | 86306 |
| 5049 | $J/\psi 	o \eta \eta' \phi, \eta 	o \pi^0 \pi^+ \pi^-, \eta' 	o ho^0 \gamma, \phi 	o \pi^+ ho^-, ho^0 	o \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 9145 | 2 | 86308 |
| 5050 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 9148 | 2 | 86310 |
| 5051 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 985 | 2 | 86312 |
| 5052 | $J/\psi \to \pi^+ \eta b_1^-, \eta \to \pi^0 \pi^0 \pi^0, b_1^- \to \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 5700 | 2 | 86314 |
| 5053 | $J/\psi \to \pi^- a_2^+ \gamma^f, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9158 | 2 | 86316 |
| 5054 | $J/\psi \rightarrow \eta' \gamma, \eta' \rightarrow \pi^0 \pi^0 \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^0\pi^0\gamma^F\gamma$ | 9160 | 2 | 86318 |
| 5055 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to \pi^0 \rho^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 9161 | 2 | 86320 |
| 5056 | $J/\psi \to \rho^0 K^+ K^- \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 9163 | 2 | 86322 |
| 5057 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 4173 | 2 | 86324 |
| 5058 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 9167 | 2 | 86326 |
| 5059 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \eta', \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 9169 | 2 | 86328 |
| 5060 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 K^+ K^- \gamma \gamma$ | 9172 | 2 | 86330 |
| 5061 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 512 | 2 | 86332 |
| 5062 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9179 | 2 | 86334 |
| 5063 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2597 | 2 | 86336 |
| 5064 | $J/\psi 	o \pi^0 K^0 ar{K}^0_1, K^0 	o K^0_S, ar{K}^0_1 	o \pi^+ K^{*-}, K^0_S 	o \pi^0 \pi^0, K^{*-} 	o \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 4176 | 2 | 86338 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 5065 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 5718 | 2 | 86340 |
| 5066 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \rho^0 K^-, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9193 | 2 | 86342 |
| 5067 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 9205 | 2 | 86344 |
| 5068 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4179 | 2 | 86346 |
| 5069 | $J/\psi \to \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9207 | 2 | 86348 |
| 5070 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 5723 | 2 | 86350 |
| 5071 | $J/\psi \rightarrow \rho^- \eta a_0^+, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \gamma \gamma, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 9220 | 2 | 86352 |
| 5072 | $J/\psi \to K^* \bar{K}_0^{*0} \gamma, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 9231 | 2 | 86354 |
| 5073 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 9234 | 2 | 86356 |
| 5074 | $J/\psi 	o \pi^0\pi^0\pi^+\rho^-\gamma^f, \rho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 5726 | 2 | 86358 |
| 5075 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \rho^+ K^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 9244 | 2 | 86360 |
| 5076 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 5727 | 2 | 86362 |
| 5077 | $J/\psi \to K^+K^-\eta', \eta' \to \pi^+\pi^-\eta, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 1594 | 2 | 86364 |
| 5078 | $J/\psi \to f_2' h_1(1380), f_2' \to K_L^0 K_L^0, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9261 | 2 | 86366 |
| 5079 | $J/\psi \to \pi^0 \pi^+ a_2^- \gamma^f, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 9269 | 2 | 86368 |
| 5080 | $J/\psi 	o \pi^0 \pi^+ b_1^0 a_0^-, b_1^0 	o \pi^0 \omega, a_0^- 	o \pi^- \eta, \omega 	o \pi^0 \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3220 | 2 | 86370 |
| 5081 | $J/\psi \to \pi^0 \rho^- \bar{K}^0 K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9273 | 2 | 86372 |
| 5082 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 5731 | 2 | 86374 |
| 5083 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \omega K^-, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 9276 | 2 | 86376 |
| 5084 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9278 | 2 | 86378 |
| 5085 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 5736 | 2 | 86380 |
| 5086 | $J/\psi 	o K^+ K_2^{*-}, K_2^{*-} 	o \pi^+ \pi^- K^{*-}, K^{*-} 	o \pi^- ar{K}^0, ar{K}^0 	o K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 2601 | 2 | 86382 |
| 5087 | $J/\psi \to \rho^0 \pi^+ \rho^- h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1835 | 2 | 86384 |
| 5088 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9292 | 2 | 86386 |
| 5089 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \rho^- K^+, K_0^{*-} \to \pi^0 K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3225 | 2 | 86388 |
| 5090 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^0\rho^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 9296 | 2 | 86390 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5091 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9303 | 2 | 86392 |
| 5092 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^0\bar{K}^0, K_2^{*0} \to \pi^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 9304 | 2 | 86394 |
| 5093 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2603 | 2 | 86396 |
| 5094 | $J/\psi \to \rho^0 K^- K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 9315 | 2 | 86398 |
| 5095 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9317 | 2 | 86400 |
| 5096 | $J/\psi \rightarrow \rho^+ \omega b_1^-, \rho^+ \rightarrow \pi^0 \pi^+ \gamma^f, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 9322 | 2 | 86402 |
| 5097 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 9323 | 2 | 86404 |
| 5098 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9325 | 2 | 86406 |
| 5099 | $J/\psi \to K^{*+}K_2^{*-}\gamma, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma$ | 9332 | 2 | 86408 |
| 5100 | $J/\psi 	o ho^0 ar{K}^0 K_2^{*0}, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_S^0, K_2^{*0} 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 9334 | 2 | 86410 |
| 5101 | $J/\psi \to \pi^+ \omega K_S^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 9335 | 2 | 86412 |
| 5102 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1399 | 2 | 86414 |
| 5103 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, $ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 1237 | 2 | 86416 |
| 5104 | $J/\psi \to ho^0 \bar{K}^0 K^* \gamma, ho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 9346 | 2 | 86418 |
| 5105 | $J/\psi \to \eta_c \gamma, \eta_c \to K^{*+}K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2178 | 2 | 86420 |
| 5106 | $J/\psi \to \rho^0 K^+ K^{*-} \gamma^F, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 4189 | 2 | 86422 |
| 5107 | $J/\psi \to \pi^0 K^{*+} K^{*-} \gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 373 | 2 | 86424 |
| 5108 | $J/\psi 	o K^+ K_2^{*-} \gamma^F, K_2^{*-} 	o \pi^- ar{K}^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma^F$ | 9359 | 2 | 86426 |
| 5109 | $J/\psi \to \eta \omega \eta', \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1600 | 2 | 86428 |
| 5110 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 9370 | 2 | 86430 |
| 5111 | $J/\psi \rightarrow \rho^+ \rho^- \omega, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow e^+ e^- \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 800 | 2 | 86432 |
| 5112 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^* K^+, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 9374 | 2 | 86434 |
| 5113 | $J/\psi 	o \pi^- a_2^+ a_0^0, a_2^+ 	o \bar K^0 K^+, a_0^0 	o \pi^0 \eta, \bar K^0 	o K_L^0, \eta 	o \gamma \gamma$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 5759 | 2 | 86436 |
| 5114 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 9389 | 2 | 86438 |
| 5115 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9393 | 2 | 86440 |
| 5116 | $J/\psi \to \eta\eta\phi, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-, \phi \to K^+K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9394 | 2 | 86442 |
| 5117 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 1240 | 2 | 86444 |
| 5118 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 5762 | 2 | 86446 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 5119 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 9400 | 2 | 86448 |
| 5120 | $J/\psi \to K^* \bar{K}^0_2, K^* \to \pi^- K^+, \bar{K}^0_2 \to \pi^- K^{*+}_2, K^{*+}_2 \to \pi^+ K^0, K^0 \to K^0_L$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 4196 | 2 | 86450 |
| 5121 | $J/\psi 	o K^0 ar{K}^* \gamma, K^0 	o K^0_L, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 4197 | 2 | 86452 |
| 5122 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_0(1710) \to \pi^+ \pi^-$ | $K_L^0K_L^0\pi^+\pi^-$ | 4199 | 2 | 86454 |
| 5123 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \omega \bar{K}^0, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 9409 | 2 | 86456 |
| 5124 | $J/\psi \to \rho^0 K^0 \bar{K}_0^{*0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5775 | 2 | 86458 |
| 5125 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9413 | 2 | 86460 |
| 5126 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^0 \eta, K^{*-} \to \pi^- \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 9414 | 2 | 86462 |
| 5127 | $J/\psi \to \pi^- \bar{K}^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 9423 | 2 | 86464 |
| 5128 | $J/\psi 	o \pi^- ar{K}^0 K_2^{*+}, ar{K}^0 	o K_S^0, K_2^{*+} 	o \pi^0 K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 9424 | 2 | 86466 |
| 5129 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4200 | 2 | 86468 |
| 5130 | $J/\psi 	o \eta \omega \eta', \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 2615 | 2 | 86470 |
| 5131 | $J/\psi ightarrow \pi^- ar{K}^0 K^+ \gamma^f, ar{K}^0 ightarrow K^0_S, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma^f$ | 9432 | 2 | 86472 |
| 5132 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9436 | 2 | 86474 |
| 5133 | $J/\psi \to K^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0 K^+ K^-$ | 9438 | 2 | 86476 |
| 5134 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 \pi^+ a_2^-, ho^0 ightarrow \pi^+ \pi^-, a_2^- ightarrow \pi^0 ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9441 | 2 | 86478 |
| 5135 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9443 | 2 | 86480 |
| 5136 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 9446 | 2 | 86482 |
| 5137 | $J/\psi \to \rho^0 a_2^+ a_0^-, \rho^0 \to \pi^+ \pi^-, a_2^+ \to \rho^0 \pi^+, a_0^- \to \pi^- \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 9447 | 2 | 86484 |
| 5138 | $J/\psi \to ho^0 ho^+ ho^- \eta, ho^0 \to \pi^+ \pi^-, ho^+ \to \pi^0 \pi^+, ho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 9448 | 2 | 86486 |
| 5139 | $J/\psi \rightarrow \rho^0 \eta' a_0^0, \rho^0 \rightarrow \pi^+ \pi^-, \eta' \rightarrow \pi^+ \pi^- \eta, a_0^0 \rightarrow \pi^0 \eta, \eta \rightarrow \gamma \gamma, \\ \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9449 | 2 | 86488 |
| 5140 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4202 | 2 | 86490 |
| 5141 | $J/\psi \to \pi^+ \rho^+ \rho^- a_1^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9454 | 2 | 86492 |
| 5142 | $J/\psi \to \pi^0 \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 9455 | 2 | 86494 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 5143 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 1241 | 2 | 86496 |
| 5144 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^0K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 9458 | 2 | 86498 |
| 5145 | $J/\psi 	o \pi^- \omega K_S^0 K^+, \omega 	o \pi^0 \gamma, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 9462 | 2 | 86500 |
| 5146 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^0\bar{K}^0, K_2^{*0} \to \pi^-K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 9464 | 2 | 86502 |
| 5147 | $J/\psi \rightarrow \pi^+ \omega a_1^- \gamma^F, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_1^- \rightarrow \pi^0 \rho^-, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 4205 | 2 | 86504 |
| 5148 | $J/\psi ightarrow \pi^0 \pi^0 K^+ K^- \gamma^f$ | $\pi^0\pi^0K^+K^-\gamma^f$ | 9466 | 2 | 86506 |
| 5149 | $J/\psi \to x(1835)\gamma, x(1835) \to \pi^+\pi^-\eta', \eta' \to \rho^0\gamma, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9467 | 2 | 86508 |
| 5150 | $J/\psi \to K^0 \phi \bar{K}^0_1, K^0 \to K^0_S, \phi \to K^+ K^-, \bar{K}^0_1 \to \rho^+ K^-, K^0_S \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 9471 | 2 | 86510 |
| 5151 | $J/\psi \to K^- f_0(1370) K_1^+, f_0(1370) \to \pi^+ \pi^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 9474 | 2 | 86512 |
| 5152 | $J/\psi 	o ho^0 ar{n} \Delta^0, ho^0 	o \pi^+ \pi^- \gamma^f, \Delta^0 	o \pi^- p$ | $\pi^+\pi^-\pi^-ar{n}p\gamma^f$ | 9478 | 2 | 86514 |
| 5153 | $J/\psi 	o \eta \phi, \eta 	o \gamma \gamma, \phi 	o K_L^0 K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\gamma\gamma$ | 3243 | 2 | 86516 |
| 5154 | $J/\psi ightarrow ar{K}^0 p ar{\Sigma}^-, ar{K}^0 ightarrow K_L^0, ar{\Sigma}^- ightarrow \pi^0 ar{p}$ | $\pi^0 K^0_L p ar p$ | 9483 | 2 | 86518 |
| 5155 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \pi^- \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 9485 | 2 | 86520 |
| 5156 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 9486 | 2 | 86522 |
| 5157 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \rho^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4208 | 2 | 86524 |
| 5158 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 5793 | 2 | 86526 |
| 5159 | $J/\psi 	o \eta K^*K_2^{*0}, \eta 	o \gamma \gamma, K^* 	o \pi^0 K^0, K_2^{*0} 	o \pi^+ K^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 9499 | 2 | 86528 |
| 5160 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^+\pi^-\bar{K}^*, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3246 | 2 | 86530 |
| 5161 | $J/\psi ightarrow ho^0 \pi^+ \pi^- \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 9502 | 2 | 86532 |
| 5162 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^0 K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 9503 | 2 | 86534 |
| 5163 | $J/\psi \to \rho^0 f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5796 | 2 | 86536 |
| 5164 | $J/\psi 	o \pi^0 \Lambda ar{\Lambda}, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^-\bar{n}p$ | 2620 | 2 | 86538 |
| 5165 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4217 | 2 | 86540 |
| 5166 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5801 | 2 | 86542 |
| 5167 | $J/\psi \to \pi^0 p \bar{\Delta}^+, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^-\bar{n}p$ | 9520 | 2 | 86544 |
| 5168 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_L^0, \phi \to \pi^- \rho^+, K_1^0 \to \pi^- K_0^{*+}, \rho^+ \to \pi^0 \pi^+, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 9523 | 2 | 86546 |
| 5169 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^+\rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9524 | 2 | 86548 |
| 5170 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma^f$ | 674 | 2 | 86550 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 5171 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to \pi^- \rho^+, h_1(1380) \to K^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma$ | 9529 | 2 | 86552 |
| 5172 | $J/\psi \to \rho^- \bar{K}^0 K^{*+} \gamma, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 9530 | 2 | 86554 |
| 5173 | $J/\psi \to \pi^- \omega \bar{K}^* K^+, \omega \to \pi^0 \gamma, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 991 | 2 | 86556 |
| 5174 | $J/\psi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F$ | 2623 | 2 | 86558 |
| 5175 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 4223 | 2 | 86560 |
| 5176 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3253 | 2 | 86562 |
| 5177 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 9550 | 2 | 86564 |
| 5178 | $J/\psi \to \bar{K}^* n \bar{\Sigma}^0, \bar{K}^* \to \pi^+ K^-, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+K^-nar p\gamma$ | 9559 | 2 | 86566 |
| 5179 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5817 | 2 | 86568 |
| 5180 | $J/\psi 	o \omega K^0 \bar{K}^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, \bar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 5819 | 2 | 86570 |
| 5181 | $J/\psi \to \pi^0 f_0(1370)\gamma, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5840 | 2 | 86572 |
| 5182 | $J/\psi \to \pi^0 \pi^+ \pi^- f_2(1270), f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3256 | 2 | 86574 |
| 5183 | $J/\psi \to \omega K^{*+}K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9591 | 2 | 86576 |
| 5184 | $J/\psi \to \pi^- a_2^+ f_2(1270), a_2^+ \to \pi^0 \rho^+, f_2(1270) \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9592 | 2 | 86578 |
| 5185 | $J/\psi \to K^{-}K_{1}^{'+}, K_{1}^{'+} \to \pi^{+}K^{*}, K^{*} \to \pi^{-}K^{+}\gamma^{f}$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 9593 | 2 | 86580 |
| 5186 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9601 | 2 | 86582 |
| 5187 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \rho^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9602 | 2 | 86584 |
| 5188 | $J/\psi \to \bar{K}^*K_2^0, \bar{K}^* \to \pi^+K^-, K_2^0 \to \pi^0K_2^{*0}, K_2^{*0} \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 9604 | 2 | 86586 |
| 5189 | $J/\psi \to ho^0 ar{K}^0 K^*, ho^0 \to \pi^+ \pi^-, ar{K}^0 \to K^0_S, K^* \to \pi^0 K^0, K^0_S \to \pi^0 \pi^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9608 | 2 | 86588 |
| 5190 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \omega K^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5846 | 2 | 86590 |
| 5191 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^0K^-, \phi \to K_L^0K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 9616 | 2 | 86592 |
| 5192 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \pi^- \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5851 | 2 | 86594 |
| 5193 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^0 \pi^+ \omega, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9620 | 2 | 86596 |
| 5194 | $J/\psi \to ho^+ K^0 K^- \gamma^f, ho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^f$ | 3257 | 2 | 86598 |
| 5195 | $J/\psi \to ho^- K^+ \bar{K}_0^{*0}, ho^- \to \pi^0 \pi^-, \bar{K}_0^{*0} \to \pi^+ K^- \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 4231 | 2 | 86600 |
| 5196 | $J/\psi \to \pi^0\pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0\pi^+, a_2^- \to \pi^0\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9623 | 2 | 86602 |
| 5197 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^+ \pi^- \omega, K^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 9624 | 2 | 86604 |
| 5198 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 1409 | 2 | 86606 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 5199 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9629 | 2 | 86608 |
| 5200 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5858 | 2 | 86610 |
| 5201 | $J/\psi 	o \pi^- K_2^{*0} K^+, K_2^{*0} 	o \omega \bar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 464 | 2 | 86612 |
| 5202 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \rho^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 4237 | 2 | 86614 |
| 5203 | $J/\psi \to \pi^+ \omega K^0 K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 1411 | 2 | 86616 |
| 5204 | $J/\psi \to \pi^0\omega\omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5867 | 2 | 86618 |
| 5205 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\gamma^{F}$ | 5869 | 2 | 86620 |
| 5206 | $J/\psi ightarrow \eta f_{2}^{\prime} \gamma, \eta ightarrow \pi^{0} \pi^{+} \pi^{-}, f_{2}^{\prime} ightarrow K_{L}^{0} K_{L}^{0}$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 9665 | 2 | 86622 |
| 5207 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 9678 | 2 | 86624 |
| 5208 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9687 | 2 | 86626 |
| 5209 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9688 | 2 | 86628 |
| 5210 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^0K^+, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 5871 | 2 | 86630 |
| 5211 | $J/\psi 	o a_2^0 \pi^+ a_2^-, a_2^0 	o \pi^0 \eta, a_2^- 	o ho^0 \pi^-, \eta 	o \gamma \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9706 | 2 | 86632 |
| 5212 | $J/\psi \to \rho^0 K^+ K^- f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9713 | 2 | 86634 |
| 5213 | $J/\psi 	o ho^- K_2^{*0} K^+, ho^- 	o \pi^0 \pi^-, K_2^{*0} 	o \pi^0 \pi^0 ar{K}^*, ar{K}^* 	o \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 309 | 2 | 86636 |
| 5214 | $J/\psi 	o ho^0 K^0 ar{K}^0, ho^0 	o \pi^+ \pi^-, K^0 	o K^0_S, ar{K}^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9718 | 2 | 86638 |
| 5215 | $J/\psi 	o \pi^0 ar{K}^0 K_2^{*0}, ar{K}^0 	o K_L^0, K_2^{*0} 	o ho^- K^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 9722 | 2 | 86640 |
| 5216 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_1^- \to \rho^0 K^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9724 | 2 | 86642 |
| 5217 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 9725 | 2 | 86644 |
| 5218 | $J/\psi 	o \pi^+ \omega K^0 K^{*-}, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, K^{*-} 	o \pi^- ar K^0, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3265 | 2 | 86646 |
| 5219 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9727 | 2 | 86648 |
| 5220 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^+ \pi^- K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 9729 | 2 | 86650 |
| 5221 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9733 | 2 | 86652 |
| 5222 | $J/\psi 	o K_2^{*0} \bar{K}_0^{*0}, K_2^{*0} 	o \pi^0 K^0, \bar{K}_0^{*0} 	o \pi^+ K^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 9737 | 2 | 86654 |
| 5223 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+$ | 1417 | 2 | 86656 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 5224 | $J/\psi \to K^+ K^{*-} \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ \gamma^f$ | 9745 | 2 | 86658 |
| 5225 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5880 | 2 | 86660 |
| 5226 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \omega K^+, \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9754 | 2 | 86662 |
| 5227 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to K^+ K^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-$ | 9756 | 2 | 86664 |
| 5228 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^-\pi^-K^+K^+$ | 9760 | 2 | 86666 |
| 5229 | $J/\psi ightarrow \pi^0 \eta' b_1^0, \eta' ightarrow \omega \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 2632 | 2 | 86668 |
| 5230 | $J/\psi 	o \pi^+ \Delta^- \bar{n} \gamma^f, \Delta^- 	o \pi^- n$ | $\pi^+\pi^-nar{n}\gamma^f$ | 5882 | 2 | 86670 |
| 5231 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+K^+K^-$ | 4247 | 2 | 86672 |
| 5232 | $J/\psi ightarrow \pi^+\pi^+ ho^- nar p, ho^- ightarrow \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 5884 | 2 | 86674 |
| 5233 | $J/\psi \to \pi^0 \rho^+ b_1^0 b_1^-, \rho^+ \to \pi^0 \pi^+, b_1^0 \to \pi^0 \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4249 | 2 | 86676 |
| 5234 | $J/\psi 	o K^0 ar K^0, K^0 	o K^0_S, ar K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 5889 | 2 | 86678 |
| 5235 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma^F$ | 9777 | 2 | 86680 |
| 5236 | $J/\psi \to \pi^- \rho^+ f_0(1370) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5893 | 2 | 86682 |
| 5237 | $J/\psi \rightarrow \pi^0\pi^+\rho^-\omega b_1^0, \rho^- \rightarrow \pi^0\pi^-, \omega \rightarrow \pi^0\gamma, b_1^0 \rightarrow \pi^0\omega, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9784 | 2 | 86684 |
| 5238 | $J/\psi 	o \pi^0 ho^+ ho^- b_1^0, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 9785 | 2 | 86686 |
| 5239 | $J/\psi \to \omega K^0 \bar{K}^0_1, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4250 | 2 | 86688 |
| 5240 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9790 | 2 | 86690 |
| 5241 | $J/\psi \to \rho^0 \bar{K}^* K_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K_L^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 9801 | 2 | 86692 |
| 5242 | $J/\psi \to h_1(1170)f_1(1285), h_1(1170) \to \pi^+\rho^-, f_1(1285) \to \rho^0\pi^+\pi^-, \rho^- \to \pi^0\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 9802 | 2 | 86694 |
| 5243 | $J/\psi \to \eta K^0 \bar{K}^0, \eta \to \gamma \gamma, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\gamma\gamma$ | 9805 | 2 | 86696 |
| 5244 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 9806 | 2 | 86698 |
| 5245 | $J/\psi ightarrow \eta' p ar p, \eta' ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-par p\gamma\gamma^f$ | 9809 | 2 | 86700 |
| 5246 | $J/\psi 	o \omega a_0^0 a_0^0, \omega 	o \pi^0 \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0, \ \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3271 | 2 | 86702 |
| 5247 | $J/\psi \to \omega K^* \bar{K}_0^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9822 | 2 | 86704 |
| 5248 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9828 | 2 | 86706 |
| 5249 | $J/\psi 	o ho^0 \bar{K}^0 K^* \gamma, ho^0 	o \pi^+ \pi^-, \bar{K}^0 	o K_L^0, K^* 	o \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 9840 | 2 | 86708 |
| 5250 | $J/\psi \to \eta \eta h_1(1170), \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9843 | 2 | 86710 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 5251 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4257 | 2 | 86712 |
| 5252 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 9848 | 2 | 86714 |
| 5253 | $J/\psi \to \pi^- \bar{K}^0 K^+ \gamma^f, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma^f$ | 1862 | 2 | 86716 |
| 5254 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^0 K_0^*, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9850 | 2 | 86718 |
| 5255 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^+ \pi^-, \phi \to K^+ K^-, f_0(980) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9853 | 2 | 86720 |
| 5256 | $J/\psi \rightarrow \rho^- \omega b_1^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^+ \pi^-, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9857 | 2 | 86722 |
| 5257 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 9858 | 2 | 86724 |
| 5258 | $J/\psi 	o ar{K}^0 K_2^{*0} \gamma, ar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^+ \pi^- K^*, K^* 	o \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 9864 | 2 | 86726 |
| 5259 | $J/\psi \to \pi^+\pi^-K^0\bar{K}^*, K^0 \to K^0_S, \bar{K}^* \to \pi^+K^-, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9865 | 2 | 86728 |
| 5260 | $J/\psi \to K^+K^{*-}\phi, K^{*-}\to \pi^-\bar{K}^0, \phi\to \pi^0\rho^0, \bar{K}^0\to K^0_S, \rho^0\to \pi^+\pi^-, K^0_S\to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9869 | 2 | 86730 |
| 5261 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 9870 | 2 | 86732 |
| 5262 | $J/\psi \to \pi^- b_1^+, b_1^+ \to \pi^+ \omega \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9872 | 2 | 86734 |
| 5263 | $J/\psi ightarrow \pi^0 a_0^0 \gamma, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 2635 | 2 | 86736 |
| 5264 | $J/\psi \to K^*\bar{K}^*b_1^0, K^* \to \pi^0K^0, \bar{K}^* \to \pi^+K^-, b_1^0 \to \pi^0\omega, K^0 \to K_L^0, \\ \omega \to \pi^0\gamma$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-\gamma$ | 9879 | 2 | 86738 |
| 5265 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \rho^+ K^0, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2197 | 2 | 86740 |
| 5266 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^0 \eta, K^{*+} \to \pi^+ K^0, \eta \to \gamma \gamma, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 9885 | 2 | 86742 |
| 5267 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 9886 | 2 | 86744 |
| 5268 | $J/\psi \to \pi^- K_2^{*+} \bar{K}_0^{*0}, K_2^{*+} \to \pi^+ K^*, \bar{K}_0^{*0} \to \pi^+ K^-, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 9888 | 2 | 86746 |
| 5269 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to \pi^- \rho^+, a_2^+ \to \rho^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9893 | 2 | 86748 |
| 5270 | $J/\psi ightarrow \pi^- ho^+ \eta^\prime \gamma^f, ho^+ ightarrow \pi^0 \pi^+, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 9901 | 2 | 86750 |
| 5271 | $J/\psi 	o \pi^0 K^+ ar{K}_1^{'-}, ar{K}_1^{'-} 	o \pi^+ \pi^- K^-$ | $\pi^0 \pi^+ \pi^- K^+ K^-$ | 9905 | 2 | 86752 |
| 5272 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9908 | 2 | 86754 |
| 5273 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^F$ | 5903 | 2 | 86756 |
| 5274 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1419 | 2 | 86758 |
| 5275 | $J/\psi \to \pi^- ho^+ \eta', ho^+ \to \pi^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9918 | 2 | 86760 |
| 5276 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \Lambda ar{\Lambda}, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^-ar{n}p\gamma$ | 2639 | 2 | 86762 |
| 5277 | $J/\psi \to \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 5908 | 2 | 86764 |
| 5278 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to \bar{K}^0K^*, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 1420 | 2 | 86766 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 5279 | $J/\psi ightarrow ho^0\pi^+nar\Delta^+, ho^0 ightarrow \pi^+\pi^-, ar\Delta^+ ightarrow \pi^0ar p$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 9943 | 2 | 86768 |
| 5280 | $J/\psi \to \rho^0 \pi^+ \pi^- \omega \gamma^f, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 9949 | 2 | 86770 |
| 5281 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+\pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5911 | 2 | 86772 |
| 5282 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^- \rho^+, h_1(1170) \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5912 | 2 | 86774 |
| 5283 | $J/\psi \to \pi^+ \rho^- \omega h_1(1170), \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4273 | 2 | 86776 |
| 5284 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5914 | 2 | 86778 |
| 5285 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 9962 | 2 | 86780 |
| 5286 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 9963 | 2 | 86782 |
| 5287 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 1249 | 2 | 86784 |
| 5288 | $J/\psi \to K^* \bar{K}_1^0, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 9969 | 2 | 86786 |
| 5289 | $J/\psi \to \rho^0 K^+ K_1^-, \rho^0 \to \pi^+ \pi^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9971 | 2 | 86788 |
| 5290 | $J/\psi \to K^- \Delta^+ \bar{\Lambda}, \Delta^+ \to \pi^0 p, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+K^-par{p}$ | 9972 | 2 | 86790 |
| 5291 | $J/\psi 	o \pi^- K_S^0 K^+ \phi, K_S^0 	o \pi^+ \pi^-, \phi 	o K_L^0 K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1867 | 2 | 86792 |
| 5292 | $J/\psi \to ho^0 \pi^+ \pi^- ho^- a_0^+, ho^0 \to \pi^+ \pi^-, ho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 9984 | 2 | 86794 |
| 5293 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^+ K^{*-}, \bar{K}^0 \to K_S^0, K_S^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9985 | 2 | 86796 |
| 5294 | $J/\psi \to \bar{K}^* K_1^0, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 9986 | 2 | 86798 |
| 5295 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9990 | 2 | 86800 |
| 5296 | $J/\psi 	o ar{K}^0 K_1^0, ar{K}^0 	o K_S^0, K_1^0 	o \omega K^0, K_S^0 	o \pi^+\pi^-, \omega 	o \pi^0\pi^+\pi^-, K_S^0 	o K_S^0, K_S^0 	o \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9995 | 2 | 86802 |
| 5297 | $J/\psi \to \omega b_1^0 h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, h_1(1170) \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9996 | 2 | 86804 |
| 5298 | $J/\psi \to K^+ K_2^{*-} \gamma^F, K_2^{*-} \to \pi^0 K^-$ | $\pi^0 K^+ K^- \gamma^F$ | 9999 | 2 | 86806 |
| 5299 | $J/\psi \to \eta' h_1(1170), \eta' \to \rho^0 \gamma, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 10002 | 2 | 86808 |
| 5300 | $J/\psi 	o ho^- a_2^+ \eta', ho^- 	o \pi^0 \pi^-, a_2^+ 	o ho^0 \pi^+, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 4277 | 2 | 86810 |
| 5301 | $J/\psi 	o \pi^- K^+ ar{K}^0_1, ar{K}^0_1 	o \pi^0 ar{K}^{*0}_0, ar{K}^{*0}_0 	o \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 10008 | 2 | 86812 |
| 5302 | $J/\psi \to \pi^- \bar{\Sigma}^0 \Sigma^+, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Sigma^+ \to \pi^0 p, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^-p\bar{p}\gamma$ | 5923 | 2 | 86814 |
| 5303 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 5924 | 2 | 86816 |
| 5304 | $J/\psi 	o K_2^{*0} K_2^{*0}, K_2^{*0} 	o \pi^- K^+, K_2^{*0} 	o \pi^+ K^{*-}, K^{*-} 	o \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4282 | 2 | 86818 |
| 5305 | $J/\psi 	o \pi^0 \Sigma^0 \bar{\Sigma}^0, \Sigma^0 	o \Lambda \gamma, \bar{\Sigma}^0 	o \bar{\Lambda} \gamma, \Lambda 	o \pi^- p, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^-ar{n}p\gamma\gamma$ | 10029 | 2 | 86820 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5306 | $J/\psi \to \pi^0 \pi^- K^0 \bar{K}^* b_1^+, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 10034 | 2 | 86822 |
| 5307 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^0 \pi^0, $ $\rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5930 | 2 | 86824 |
| 5308 | $J/\psi 	o \eta \Lambda ar{\Lambda}, \eta 	o \pi^0 \pi^+ \pi^-, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 417 | 2 | 86826 |
| 5309 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma^F$ | 10039 | 2 | 86828 |
| 5310 | $J/\psi \to \pi^0 \pi^+ \omega a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10040 | 2 | 86830 |
| 5311 | $J/\psi \to \pi^0 \Lambda \bar{\Sigma}^{*0}, \Lambda \to \pi^0 n, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 1618 | 2 | 86832 |
| 5312 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1251 | 2 | 86834 |
| 5313 | $J/\psi 	o \pi^0 K^0 K_2^{*0}, K^0 	o K_L^0, K_2^{*0} 	o \pi^0 \pi^+ K^{*-}, K^{*-} 	o \pi^- ar K^0, ar K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 5939 | 2 | 86836 |
| 5314 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \rho^-\bar{K}^0, K^0 \to K_L^0, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 10047 | 2 | 86838 |
| 5315 | $J/\psi 	o ho^- ar{K}^0 K_1^{'+}, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_L^0, K_1^{'+} 	o \pi^+ K^*, K^* 	o \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10049 | 2 | 86840 |
| 5316 | $J/\psi \to \pi^- \rho^+ K^{*-} K_1^+, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^- \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 10050 | 2 | 86842 |
| 5317 | $J/\psi \to \eta' f_0(1710)\gamma, \eta' \to \pi^+\pi^-\eta, f_0(1710) \to K^+K^-, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 10054 | 2 | 86844 |
| 5318 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10055 | 2 | 86846 |
| 5319 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 10061 | 2 | 86848 |
| 5320 | $J/\psi \to \eta \eta \phi, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-, \phi \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 10065 | 2 | 86850 |
| 5321 | $J/\psi \to K^- \phi K_0^{*+}, \phi \to K^+ K^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0 K^+ K^+ K^- K^-$ | 10068 | 2 | 86852 |
| 5322 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10070 | 2 | 86854 |
| 5323 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 5940 | 2 | 86856 |
| 5324 | $J/\psi \to \pi^- \omega K_S^0 K^+, \omega \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 3296 | 2 | 86858 |
| 5325 | $J/\psi \rightarrow ho^0 a_0^0, ho^0 \rightarrow \pi^+ \pi^- \gamma^f, a_0^0 \rightarrow \pi^0 \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 10080 | 2 | 86860 |
| 5326 | $J/\psi ightarrow ho^- b_1^+ \gamma, ho^- ightarrow \pi^0 \pi^-, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 10083 | 2 | 86862 |
| 5327 | $J/\psi 	o \eta K^- K_1^+, \eta 	o \pi^0 \pi^0 \pi^0, K_1^+ 	o ho^+ K^0, ho^+ 	o \pi^0 \pi^+, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10086 | 2 | 86864 |
| 5328 | $J/\psi \to \omega \omega K^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10088 | 2 | 86866 |
| 5329 | $J/\psi \to \pi^+ K^* K^- \gamma^F, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 10094 | 2 | 86868 |
| 5330 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \rho^0 \pi^+, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 10101 | 2 | 86870 |
| 5331 | $J/\psi \to \pi^+\pi^-b_1^0b_1^0, b_1^0 \to \pi^0\omega, b_1^0 \to \pi^0\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10103 | 2 | 86872 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5332 | $J/\psi \to K^0 \bar{K}_1^0 \gamma, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \ \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1872 | 2 | 86874 |
| 5333 | $J/\psi 	o K^+ K_2^{*-} a_0^0, K_2^{*-} 	o \pi^- ar K^0, a_0^0 	o \pi^0 \eta, ar K^0 	o K_L^0, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 10112 | 2 | 86876 |
| 5334 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^+ \pi^-, a_0^- ightarrow \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10116 | 2 | 86878 |
| 5335 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K^0_L K^0_L \pi^+ \pi^-$ | 10119 | 2 | 86880 |
| 5336 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \eta' \to \pi^0\pi^0\eta, K^0 \to K_L^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 10123 | 2 | 86882 |
| 5337 | $J/\psi 	o \pi^0 ar{\Sigma}^- \Sigma^{*+}, ar{\Sigma}^- 	o \pi^0 ar{p}, \Sigma^{*+} 	o \pi^+ \Lambda, \Lambda 	o \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 10124 | 2 | 86884 |
| 5338 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^-$ | 10125 | 2 | 86886 |
| 5339 | $J/\psi ightarrow \pi^0\pi^0a_0^0\gamma, a_0^0 ightarrow \pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 3299 | 2 | 86888 |
| 5340 | $J/\psi 	o \eta\eta\phi, \eta 	o \gamma\gamma, \eta 	o \pi^0\pi^0\pi^0, \phi 	o K_L^0K_S^0, K_S^0 	o \pi^+\pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 1253 | 2 | 86890 |
| 5341 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4293 | 2 | 86892 |
| 5342 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 1879 | 2 | 86894 |
| 5343 | $J/\psi \to \pi^0 K^* \bar{K}_1^{'0}, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10137 | 2 | 86896 |
| 5344 | $J/\psi ightarrow ar{K}^* n ar{\Lambda}, ar{K}^* ightarrow \pi^0 ar{K}^0, ar{\Lambda} ightarrow \pi^0 ar{n}, ar{K}^0 ightarrow K_S^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0n\bar{n}$ | 4296 | 2 | 86898 |
| 5345 | $J/\psi ightarrow a_2^0 p ar p, a_2^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 10141 | 2 | 86900 |
| 5346 | $J/\psi ightarrow \pi^0 \eta b_1^0, \eta ightarrow \gamma \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 3307 | 2 | 86902 |
| 5347 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_L^0, \ \omega \to \pi^0 \gamma$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 1623 | 2 | 86904 |
| 5348 | $J/\psi 	o K^0 ar{K}^0_1, K^0 	o K^0_S, ar{K}^0_1 	o \pi^+ K^{*-}, K^0_S 	o \pi^0 \pi^0, K^{*-} 	o \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 808 | 2 | 86906 |
| 5349 | $J/\psi \rightarrow \pi^- b_1^0 a_2^+ b_1^0 \rightarrow \pi^0 \psi a_2^+ \rightarrow \pi^+ \eta \psi \rightarrow \pi^0 \pi^+ \pi^- \eta \rightarrow \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 10149 | 2 | 86908 |
| 5350 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^+ \pi^- \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10150 | 2 | 86910 |
| 5351 | $J/\psi \to f_2^{'}h_1(1380), f_2^{'} \to K_L^0 K_L^0, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^+ K^-$ | 10151 | 2 | 86912 |
| 5352 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10154 | 2 | 86914 |
| 5353 | $J/\psi 	o K^+ K_1^- \gamma^F, K_1^- 	o ho^- ar{K}^0, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 10164 | 2 | 86916 |
| 5354 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 2662 | 2 | 86918 |
| 5355 | $J/\psi \to K^+K^{*-}, K^{*-} \to \pi^0K^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-K^+K^-\gamma^F$ | 893 | 2 | 86920 |
| 5356 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 10175 | 2 | 86922 |
| 5357 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}$ | 10176 | 2 | 86924 |
| 5358 | $J/\psi \to K^+ K^{*-} f_2', K^{*-} \to \pi^- \bar{K}^0, f_2' \to K_S^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 10179 | 2 | 86926 |
| 5359 | $J/\psi \to K^0 \bar{K}_1^0, K^0 \to K_L^0, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 10183 | 2 | 86928 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5360 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10188 | 2 | 86930 |
| 5361 | $J/\psi \to f_2(1270)p\bar{p}, f_2(1270) \to \pi^0\pi^0$ | $\pi^0\pi^0 par p$ | 10189 | 2 | 86932 |
| 5362 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 3315 | 2 | 86934 |
| 5363 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^0\Sigma^+, \bar{\Sigma}^{*-} \to \pi^-\bar{\Lambda}, \Sigma^+ \to \pi^+ n, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 10200 | 2 | 86936 |
| 5364 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10202 | 2 | 86938 |
| 5365 | $J/\psi \to \omega b_1^0 h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5972 | 2 | 86940 |
| 5366 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1884 | 2 | 86942 |
| 5367 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 4306 | 2 | 86944 |
| 5368 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 \pi^0 \eta, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 10234 | 2 | 86946 |
| 5369 | $J/\psi \to \pi^0 \rho^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 10235 | 2 | 86948 |
| 5370 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 10237 | 2 | 86950 |
| 5371 | $J/\psi 	o \pi^- ar{K}^* K^{*+} \gamma^F, ar{K}^* 	o \pi^+ K^-, K^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $K^0_L\pi^+\pi^+\pi^-K^-\gamma^F$ | 10256 | 2 | 86952 |
| 5372 | $J/\psi ightarrow \omega ar{K}^0 K^*, \omega ightarrow \pi^+ \pi^-, ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 5979 | 2 | 86954 |
| 5373 | $J/\psi \to K^-K^{*+}f_1(1285), K^{*+} \to \pi^0K^+, f_1(1285) \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 10267 | 2 | 86956 |
| 5374 | $J/\psi \to \pi^0 \pi^+ \pi^- \omega \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10277 | 2 | 86958 |
| 5375 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 10278 | 2 | 86960 |
| 5376 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 10279 | 2 | 86962 |
| 5377 | $J/\psi ightarrow K^+K^{*-}\eta', K^{*-} ightarrow \pi^-ar{K}^0, \eta' ightarrow \omega \gamma, ar{K}^0 ightarrow K_L^0, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 10285 | 2 | 86964 |
| 5378 | $J/\psi 	o a_2^- \bar K^0 K^+, a_2^- 	o \pi^0 ho^-, \bar K^0 	o K_L^0, ho^- 	o \pi^0 \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0K_L^0\pi^-K^+\gamma^F$ | 10290 | 2 | 86966 |
| 5379 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^F, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^F$ | 10294 | 2 | 86968 |
| 5380 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10297 | 2 | 86970 |
| 5381 | $J/\psi ightarrow \pi^+\pi^-ar{n}\Delta^0, \Delta^0 ightarrow \pi^0 n$ | $\pi^0\pi^+\pi^-n\bar{n}$ | 2666 | 2 | 86972 |
| 5382 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 10308 | 2 | 86974 |
| 5383 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \pi^+ \eta, a_1^0 \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10310 | 2 | 86976 |
| 5384 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^F$ | 10311 | 2 | 86978 |
| 5385 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^+\pi^-\omega, h_1(1170) \to \pi^+\rho^-, \omega \to \pi^0\pi^+\pi^-, \rho^- \to \pi^0\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10313 | 2 | 86980 |
| 5386 | $J/\psi \to \pi^0 \pi^- \rho^+ \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4310 | 2 | 86982 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 5387 | $J/\psi \to \eta \omega f_0(1370), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 10318 | 2 | 86984 |
| 5388 | $J/\psi \rightarrow \pi^0 \rho^- \omega b_1^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^+ \pi^-, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4311 | 2 | 86986 |
| 5389 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 2228 | 2 | 86988 |
| 5390 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \pi^- K_0^{*+}, \eta \to \gamma \gamma, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 10331 | 2 | 86990 |
| 5391 | $J/\psi \to \rho^- \eta a_0^+, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 5993 | 2 | 86992 |
| 5392 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 10338 | 2 | 86994 |
| 5393 | $J/\psi 	o K^+K^-\eta', \eta' 	o \omega\gamma, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 3321 | 2 | 86996 |
| 5394 | $J/\psi ightarrow ho^0 a_2^0 f_0(1370), ho^0 ightarrow \pi^+ \pi^-, a_2^0 ightarrow \pi^+ ho^-, f_0(1370) ightarrow \pi^+ \pi^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10341 | 2 | 86998 |
| 5395 | $J/\psi ightarrow \pi^+ \eta' b_1^-, \eta' ightarrow \pi^+ \pi^- \eta, b_1^- ightarrow \pi^- \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 10342 | 2 | 87000 |
| 5396 | $J/\psi 	o \eta \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 2231 | 2 | 87002 |
| 5397 | $J/\psi 	o \omega p ar p, \omega 	o \pi^0 \pi^+ \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-par{p}\gamma^F$ | 10351 | 2 | 87004 |
| 5398 | $J/\psi \to \pi^+\pi^-a^0_0, a^0_0 \to \pi^0\eta, \pi^0 \to e^+e^-\gamma^F, \eta \to \pi^0\pi^+\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10353 | 2 | 87006 |
| 5399 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3325 | 2 | 87008 |
| 5400 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10358 | 2 | 87010 |
| 5401 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10362 | 2 | 87012 |
| 5402 | $J/\psi 	o \Xi^0 \bar{\Xi}^{*0}, \Xi^0 	o \pi^0 \Lambda, \bar{\Xi}^{*0} 	o \pi^0 \bar{\Xi}^0, \Lambda 	o \pi^0 n, \bar{\Xi}^0 	o \pi^0 \bar{\Lambda}, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 10363 | 2 | 87014 |
| 5403 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 10365 | 2 | 87016 |
| 5404 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4318 | 2 | 87018 |
| 5405 | $J/\psi \to \pi^- K_2^{*+} \bar{K}_0^{*0}, K_2^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10377 | 2 | 87020 |
| 5406 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10378 | 2 | 87022 |
| 5407 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10380 | 2 | 87024 |
| 5408 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 10382 | 2 | 87026 |
| 5409 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- b_1^0 b_1^+, b_1^0 \to \pi^0 \omega, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 2669 | 2 | 87028 |
| 5410 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 10392 | 2 | 87030 |
| 5411 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 997 | 2 | 87032 |
| 5412 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 6007 | 2 | 87034 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 5413 | $J/\psi \to \eta K^- K_1^+, \eta \to \gamma \gamma, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 4321 | 2 | 87036 |
| 5414 | $J/\psi \to \pi^0 K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 10399 | 2 | 87038 |
| 5415 | $J/\psi ightarrow \pi^- \omega a_0^+, \omega ightarrow \pi^0 \gamma, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10400 | 2 | 87040 |
| 5416 | $J/\psi \to a_2^0 K^+ K^-, a_2^0 \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10416 | 2 | 87042 |
| 5417 | $J/\psi ightarrow \eta' \phi, \eta' ightarrow \pi^0 \pi^0 \eta, \phi ightarrow K^+ K^-, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 4323 | 2 | 87044 |
| 5418 | $J/\psi ightarrow \pi^0 \Delta^0 ar{\Delta}^0, \Delta^0 ightarrow \pi^0 n, ar{\Delta}^0 ightarrow \pi^0 ar{n}, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0nar{n}\gamma^F$ | 809 | 2 | 87046 |
| 5419 | $J/\psi 	o K^0 ar{K}^0 f_2^{'}, K^0 	o K_L^0, ar{K}^0 	o K_S^0, f_2^{'} 	o K_L^0 K_L^0, K_S^0 	o \pi^+ \pi^-$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 10430 | 2 | 87048 |
| 5420 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 53 | 2 | 87050 |
| 5421 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 10436 | 2 | 87052 |
| 5422 | $J/\psi \to \pi^- \rho^+ \eta', \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10452 | 2 | 87054 |
| 5423 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 10456 | 2 | 87056 |
| 5424 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 10457 | 2 | 87058 |
| 5425 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 10459 | 2 | 87060 |
| 5426 | $J/\psi \to K^- K^{*+} a_0^0, K^{*+} \to \pi^0 K^+, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 3331 | 2 | 87062 |
| 5427 | $J/\psi \to \pi^- \bar{K}^* K^+ \phi, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 10466 | 2 | 87064 |
| 5428 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 2239 | 2 | 87066 |
| 5429 | $J/\psi 	o \pi^0 \pi^+ ho^-, ho^- 	o \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 1888 | 2 | 87068 |
| 5430 | $J/\psi \to ho^- \bar{K}^0 K_1^+, ho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^+ \to ho^0 K^+, ho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10474 | 2 | 87070 |
| 5431 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 10479 | 2 | 87072 |
| 5432 | $J/\psi \to \eta a_0^- b_1^+, \eta \to \pi^0 \pi^0 \pi^0, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10480 | 2 | 87074 |
| 5433 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10488 | 2 | 87076 |
| 5434 | $J/\psi \to \rho^0 K^{*+} \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4331 | 2 | 87078 |
| 5435 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 10502 | 2 | 87080 |
| 5436 | $J/\psi \to \pi^0 \omega \omega h_1(1170), \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\gamma$ | 10508 | 2 | 87082 |
| 5437 | $J/\psi \to \eta h_1(1380), \eta \to \pi^+\pi^-\gamma^F, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^F$ | 10518 | 2 | 87084 |
| 5438 | $J/\psi \to \omega a_0^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 1630 | 2 | 87086 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5439 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \rho^+ \rho^-, \eta \to \gamma \gamma, $ $\rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10530 | 2 | 87088 |
| 5440 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2679 | 2 | 87090 |
| 5441 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 10533 | 2 | 87092 |
| 5442 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 6030 | 2 | 87094 |
| 5443 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10540 | 2 | 87096 |
| 5444 | $J/\psi \to a_2^+ n \bar{p}, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 10543 | 2 | 87098 |
| 5445 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^0 \Sigma^+, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Sigma^+ \to \pi^0 p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^-ar{n}p$ | 10546 | 2 | 87100 |
| 5446 | $J/\psi \to \pi^+ K^* K^-, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 10554 | 2 | 87102 |
| 5447 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10555 | 2 | 87104 |
| 5448 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \rho^0K^-, K^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 2680 | 2 | 87106 |
| 5449 | $J/\psi 	o ho^0 \eta a_1^0, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0, a_1^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4338 | 2 | 87108 |
| 5450 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6037 | 2 | 87110 |
| 5451 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \pi^- \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 1262 | 2 | 87112 |
| 5452 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, f_0(1370) \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 10569 | 2 | 87114 |
| 5453 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10574 | 2 | 87116 |
| 5454 | $J/\psi ightarrow ar{K}^0 \Delta^- ar{\Sigma}^+, ar{K}^0 ightarrow K_L^0, \Delta^- ightarrow \pi^- n, ar{\Sigma}^+ ightarrow \pi^+ ar{n}$ | $K_L^0\pi^+\pi^-nar{n}$ | 10575 | 2 | 87118 |
| 5455 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4342 | 2 | 87120 |
| 5456 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 10578 | 2 | 87122 |
| 5457 | $J/\psi 	o ho^- a_2^+ \eta', ho^- 	o \pi^0 \pi^-, a_2^+ 	o \pi^0 ho^+, \eta' 	o \pi^+ \pi^- \eta, ho^+ 	o \pi^0 \pi^+, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4343 | 2 | 87124 |
| 5458 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \rho^0 K^+, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3347 | 2 | 87126 |
| 5459 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \rho^+ K^-, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 10586 | 2 | 87128 |
| 5460 | $J/\psi 	o \omega K^* ar{K}^*, \omega 	o \pi^0 \pi^+ \pi^-, K^* 	o \pi^- K^+ \gamma^f, ar{K}^* 	o \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 3348 | 2 | 87130 |
| 5461 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, $ $\eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10590 | 2 | 87132 |
| 5462 | $J/\psi \to K^- \phi K_1^+, \phi \to K^+ K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{-}K^{+}K^{+}K^{-}K^{-}$ | 10593 | 2 | 87134 |
| 5463 | $J/\psi ightarrow \eta K^0 K_2^{*0}, \eta ightarrow \gamma \gamma, K^0 ightarrow K_L^0, K_2^{*0} ightarrow \pi^+ K^-$ | $K_L^0\pi^+K^-\gamma\gamma$ | 10594 | 2 | 87136 |
| 5464 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 10601 | 2 | 87138 |
| 5465 | $J/\psi \to \pi^+\pi^-\eta K^+K^-\gamma^f, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 10615 | 2 | 87140 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 5466 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 10616 | 2 | 87142 |
| 5467 | $J/\psi ightarrow \pi^- a_2^+ a_0^0, a_2^+ ightarrow \pi^+ \eta, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 10621 | 2 | 87144 |
| 5468 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4346 | 2 | 87146 |
| 5469 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 1433 | 2 | 87148 |
| 5470 | $J/\psi \to \pi^+ \omega a_1^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 10626 | 2 | 87150 |
| 5471 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_L^0, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 6054 | 2 | 87152 |
| 5472 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 10630 | 2 | 87154 |
| 5473 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4351 | 2 | 87156 |
| 5474 | $J/\psi \to \pi^+ K^- K_1^{'0}, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10639 | 2 | 87158 |
| 5475 | $J/\psi \to \pi^- K^+ \bar{K}_1^{'0}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10641 | 2 | 87160 |
| 5476 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6056 | 2 | 87162 |
| 5477 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^- \gamma^f, K_2^{*0} \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 6060 | 2 | 87164 |
| 5478 | $J/\psi 	o \pi^0 K^0 ar{K}^*, K^0 	o K^0_S, ar{K}^* 	o \pi^+ K^- \gamma^f, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 10658 | 2 | 87166 |
| 5479 | $J/\psi 	o a_2^0 \pi^+ a_2^-, a_2^0 	o \pi^- ho^+, a_2^- 	o ho^0 \pi^-, ho^+ 	o \pi^0 \pi^+, ho^0 	o \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10667 | 2 | 87168 |
| 5480 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, \bar{K}^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K_S^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 3351 | 2 | 87170 |
| 5481 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+\pi^-K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10672 | 2 | 87172 |
| 5482 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 4354 | 2 | 87174 |
| 5483 | $J/\psi ightarrow \omega a_0^0, \omega ightarrow \pi^0 \gamma, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 1892 | 2 | 87176 |
| 5484 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \pi^+\pi^-\eta', \eta' \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 1893 | 2 | 87178 |
| 5485 | $J/\psi \to \pi^+\pi^-\omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10692 | 2 | 87180 |
| 5486 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, b_1^0 \to \pi^0\omega, K^0 \to K_L^0, \ \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 10695 | 2 | 87182 |
| 5487 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^0 \eta', \eta' ightarrow \gamma \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 10698 | 2 | 87184 |
| 5488 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4360 | 2 | 87186 |
| 5489 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+$ | 6071 | 2 | 87188 |
| 5490 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10712 | 2 | 87190 |
| 5491 | $J/\psi \to K^+ \phi K_1^-, \phi \to K^+ K^-, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^+K^-K^-$ | 6073 | 2 | 87192 |
| 5492 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^+K^0, f_0(1370) \to \pi^0\pi^0, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10715 | 2 | 87194 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5493 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 1894 | 2 | 87196 |
| 5494 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4365 | 2 | 87198 |
| 5495 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10742 | 2 | 87200 |
| 5496 | $J/\psi \to a_2^0 \pi^- \rho^+, a_2^0 \to \pi^+ \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1896 | 2 | 87202 |
| 5497 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 10746 | 2 | 87204 |
| 5498 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $K_{L}^{0}K_{L}^{0}K^{+}K^{-}$ | 6084 | 2 | 87206 |
| 5499 | $J/\psi \to \pi^0 \pi^- a_1^+, a_1^+ \to \pi^0 \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 10764 | 2 | 87208 |
| 5500 | $J/\psi \to \eta K^0 \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6087 | 2 | 87210 |
| 5501 | $J/\psi \to \pi^0 \pi^+ a_2^- \gamma^f, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10766 | 2 | 87212 |
| 5502 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 10767 | 2 | 87214 |
| 5503 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^0K^+, f_0(1370) \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^+K^-$ | 6090 | 2 | 87216 |
| 5504 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10776 | 2 | 87218 |
| 5505 | $J/\psi \to \omega K^0 \bar{K}^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10777 | 2 | 87220 |
| 5506 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^{*-} \to \pi^0 \bar{\Sigma}^-, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+nar{p}$ | 10787 | 2 | 87222 |
| 5507 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 10788 | 2 | 87224 |
| 5508 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 2696 | 2 | 87226 |
| 5509 | $J/\psi \to \pi^+\pi^-a^0_0, a^0_0 \to \pi^0\eta, \eta \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10790 | 2 | 87228 |
| 5510 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 10792 | 2 | 87230 |
| 5511 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 3364 | 2 | 87232 |
| 5512 | $J/\psi \to \pi^- \rho^+ f_1(1285) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 10795 | 2 | 87234 |
| 5513 | $J/\psi 	o \omega \bar{K}^0 K^*, \omega 	o \pi^0 \gamma, \bar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, K_S^0 	o \pi^0 \pi^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 3365 | 2 | 87236 |
| 5514 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^- \rho^+, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 6097 | 2 | 87238 |
| 5515 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6098 | 2 | 87240 |
| 5516 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10800 | 2 | 87242 |
| 5517 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 3368 | 2 | 87244 |
| 5518 | $J/\psi \to \pi^+ \omega K^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10804 | 2 | 87246 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5519 | $J/\psi \to \rho^+ K^0 K^-, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 10805 | 2 | 87248 |
| 5520 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10806 | 2 | 87250 |
| 5521 | $J/\psi ightarrow par{p}a_0^0, a_0^0 ightarrow \pi^0\eta, \eta ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 10810 | 2 | 87252 |
| 5522 | $J/\psi \to ho^0 \pi^+ K^* K^-, ho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10812 | 2 | 87254 |
| 5523 | $J/\psi 	o \omega K^0 \bar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K^0_L, \bar{K}^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10813 | 2 | 87256 |
| 5524 | $J/\psi 	o a_2^0 \pi^+ a_1^-, a_2^0 	o \pi^0 \eta, a_1^- 	o \pi^0 ho^-, \eta 	o \gamma \gamma, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6104 | 2 | 87258 |
| 5525 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10820 | 2 | 87260 |
| 5526 | $J/\psi \to \pi^- K^+ K^{*-} b_1^+, K^{*-} \to \pi^0 K^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10822 | 2 | 87262 |
| 5527 | $J/\psi \to \bar{K}^0 K^+ a_1^-, \bar{K}^0 \to K_S^0, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 10824 | 2 | 87264 |
| 5528 | $J/\psi \to \rho^- \bar{K}^0 K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10829 | 2 | 87266 |
| 5529 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \rho^+ K^0, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 10832 | 2 | 87268 |
| 5530 | $J/\psi \to \rho^0 h_1(1170) h_1(1170), \rho^0 \to \pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6106 | 2 | 87270 |
| 5531 | $J/\psi 	o \eta K^0 ar K^0, \eta 	o \gamma \gamma, K^0 	o K_L^0, ar K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\gamma\gamma$ | 6108 | 2 | 87272 |
| 5532 | $J/\psi \to \eta(2225)\gamma, \eta(2225) \to \phi\phi, \phi \to \pi^{+}\rho^{-}, \phi \to K^{+}K^{-}, \rho^{-} \to \pi^{0}\pi^{-}$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 10841 | 2 | 87274 |
| 5533 | $J/\psi \to \rho^0 \pi^+ \pi^- K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10843 | 2 | 87276 |
| 5534 | $J/\psi \to \pi^- \rho^- \bar{\Delta}^- p, \rho^- \to \pi^0 \pi^-, \bar{\Delta}^- \to \pi^+ \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 10849 | 2 | 87278 |
| 5535 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 10853 | 2 | 87280 |
| 5536 | $J/\psi \to a_0^- b_1^+, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 2697 | 2 | 87282 |
| 5537 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to \pi^0 \rho^0, h_1(1380) \to \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 6111 | 2 | 87284 |
| 5538 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 10866 | 2 | 87286 |
| 5539 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10867 | 2 | 87288 |
| 5540 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6112 | 2 | 87290 |
| 5541 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3371 | 2 | 87292 |
| 5542 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^- \gamma$ | 10894 | 2 | 87294 |
| 5543 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10898 | 2 | 87296 |
| 5544 | $J/\psi \to \eta f_0(1370) h_1(1170), \eta \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10901 | 2 | 87298 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 5545 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^+ \pi^-, b_1^+ \to \pi^+ \omega \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 2699 | 2 | 87300 |
| 5546 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 10915 | 2 | 87302 |
| 5547 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6122 | 2 | 87304 |
| 5548 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^+ \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 2702 | 2 | 87306 |
| 5549 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^+ \rho^-, K^{*-} \to \pi^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10922 | 2 | 87308 |
| 5550 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10926 | 2 | 87310 |
| 5551 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^0 \pi^+ \omega, K^0 \to K^0_S, \omega \to \pi^0 \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6124 | 2 | 87312 |
| 5552 | $J/\psi \to \rho^+ a_2^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, f_0(1370) \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2704 | 2 | 87314 |
| 5553 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 3380 | 2 | 87316 |
| 5554 | $J/\psi \to \pi^0 f_2(1270) h_1(1170), f_2(1270) \to \pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10941 | 2 | 87318 |
| 5555 | $J/\psi \to K^0 \bar{K}^0 a_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 10942 | 2 | 87320 |
| 5556 | $J/\psi 	o \pi^- ar{\Lambda} \Sigma^{*+}, ar{\Lambda} 	o \pi^0 ar{n}, \Sigma^{*+} 	o \pi^+ \Lambda, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 10943 | 2 | 87322 |
| 5557 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^- \pi^- K^+ K^+$ | 1001 | 2 | 87324 |
| 5558 | $J/\psi 	o \pi^- n \bar{n} a_0^+, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 10950 | 2 | 87326 |
| 5559 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 10951 | 2 | 87328 |
| 5560 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 10952 | 2 | 87330 |
| 5561 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10953 | 2 | 87332 |
| 5562 | $J/\psi \to \pi^0 K^- K^{*+} \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^F$ | 3382 | 2 | 87334 |
| 5563 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^0 \pi^+ \omega, a_0^0 \to \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3385 | 2 | 87336 |
| 5564 | $J/\psi ightarrow a_0^+b_1^-, a_0^+ ightarrow \pi^+\eta, b_1^- ightarrow \pi^-\omega, \eta ightarrow \gamma\gamma, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 3386 | 2 | 87338 |
| 5565 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 1634 | 2 | 87340 |
| 5566 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^-K^+, a_0^+ \to \bar{K}^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 10970 | 2 | 87342 |
| 5567 | $J/\psi 	o \pi^0 ar{K}^0 K_1^0, ar{K}^0 	o K_S^0, K_1^0 	o \pi^0 K^*, K_S^0 	o \pi^0 \pi^0, K^* 	o \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 10974 | 2 | 87344 |
| 5568 | $J/\psi \to \phi\phi\phi, \phi \to K_L^0 K_S^0, \phi \to \pi^- \rho^+, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 10979 | 2 | 87346 |
| 5569 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^-, \eta' \to \pi^0 \pi^0 \eta, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 10985 | 2 | 87348 |
| 5570 | $J/\psi 	o ar{K}^0 K^* a^0_0, ar{K}^0 	o K^0_L, K^* 	o \pi^- K^+, a^0_0 	o \pi^0 \eta, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 10987 | 2 | 87350 |
| 5571 | $J/\psi \to \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 6137 | 2 | 87352 |
| 5572 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 10998 | 2 | 87354 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 5573 | $J/\psi \to a_2^0 \pi^+ \pi^-, a_2^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 6144 | 2 | 87356 |
| 5574 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \bar{K}^0 K^+, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 11011 | 2 | 87358 |
| 5575 | $J/\psi 	o \pi^0 \pi^- \omega \bar{K}^0 K^{*+}, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_S^0, K^{*+} 	o \pi^+ K^0, K_S^0 	o \pi^0 \pi^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4406 | 2 | 87360 |
| 5576 | $J/\psi 	o ho^- ar{K}^0 K^+, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0, \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 11013 | 2 | 87362 |
| 5577 | $J/\psi \to \rho^+ \Sigma^- \bar{\Sigma}^0, \rho^+ \to \pi^0 \pi^+, \Sigma^- \to \pi^- n, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 11020 | 2 | 87364 |
| 5578 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^+K^{*-}, f_1(1420) \to \pi^-\bar{K}^0K^+, K^{*-} \to \pi^0K^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 11021 | 2 | 87366 |
| 5579 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 11031 | 2 | 87368 |
| 5580 | $J/\psi 	o \eta_c \gamma, \eta_c 	o K^*K^-b_1^+, K^* 	o \pi^-K^+, b_1^+ 	o \pi^+\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 11032 | 2 | 87370 |
| 5581 | $J/\psi \to K^{*-}n\bar{\Sigma}^+, K^{*-} \to \pi^0 K^-, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^0\pi^+K^-nar{n}$ | 11038 | 2 | 87372 |
| 5582 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11041 | 2 | 87374 |
| 5583 | $J/\psi \to \pi^0 \rho^+ p \bar{\Delta}^{++}, \rho^+ \to \pi^0 \pi^+, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 3389 | 2 | 87376 |
| 5584 | $J/\psi \to \rho^0 K^* \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11045 | 2 | 87378 |
| 5585 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 11047 | 2 | 87380 |
| 5586 | $J/\psi \to \rho^+ K^0 K^- \gamma^F, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 11051 | 2 | 87382 |
| 5587 | $J/\psi \to \pi^0 \rho^+ K^* K^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11055 | 2 | 87384 |
| 5588 | $J/\psi 	o a_2^+ K^0 K^-, a_2^+ 	o \pi^+ \eta, K^0 	o K_S^0, \eta 	o \pi^0 \pi^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11059 | 2 | 87386 |
| 5589 | $J/\psi ightarrow \pi^0 \eta b_1^0, \eta ightarrow \pi^0 \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 11063 | 2 | 87388 |
| 5590 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 6147 | 2 | 87390 |
| 5591 | $J/\psi 	o K^0 ar{n} \Lambda \gamma, K^0 	o K^0_S, \Lambda 	o \pi^- p, K^0_S 	o \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-ar{n}p\gamma$ | 4412 | 2 | 87392 |
| 5592 | $J/\psi \to K^{*+} \bar{K}_{1}^{'-} \gamma, K^{*+} \to \pi^{0} K^{+}, \bar{K}_{1}^{'-} \to \pi^{-} \bar{K}^{*}, \bar{K}^{*} \to \pi^{+} K^{-}$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11070 | 2 | 87394 |
| 5593 | $J/\psi 	o ho^0 \pi^- ar{K}^0 K^{*+}, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_S^0, K^{*+} 	o \pi^+ K^0, K_S^0 	o \pi^0 \pi^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6150 | 2 | 87396 |
| 5594 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^0 a_2^0, a_2^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 11075 | 2 | 87398 |
| 5595 | $J/\psi 	o \pi^0\pi^0 ho^+ a_0^-, ho^+ 	o \pi^0\pi^+, a_0^- 	o \pi^-\eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 11076 | 2 | 87400 |
| 5596 | $J/\psi 	o ho^- ar{K}^0 K^+, ho^- 	o \pi^0 \pi^- \gamma^f, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 6155 | 2 | 87402 |
| 5597 | $J/\psi \to \rho^0 \pi^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 11112 | 2 | 87404 |
| 5598 | $J/\psi ightarrow \pi^0 \omega a^0_0, \omega ightarrow \pi^0 \gamma, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 11113 | 2 | 87406 |
| 5599 | $J/\psi \to \pi^+ K_2^{*-} K_0^0, K_2^{*-} \to \pi^- \bar{K}^*, K_0^0 \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3390 | 2 | 87408 |
| 5600 | $J/\psi \to \phi f_0(2020), \phi \to \pi^0 \rho^0, f_0(2020) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11116 | 2 | 87410 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 5601 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0\gamma^f, K_2^{*+} \to \pi^0K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^f$ | 11117 | 2 | 87412 |
| 5602 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^+ ho^-, \omega ightarrow \pi^+ \pi^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11124 | 2 | 87414 |
| 5603 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 11127 | 2 | 87416 |
| 5604 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4415 | 2 | 87418 |
| 5605 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^0\bar{\Xi}^+, \Xi^{*-} \to \pi^0\Xi^-, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^- \to \pi^-\Lambda, \\ \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to \pi^-p$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 257 | 2 | 87420 |
| 5606 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^0\pi^0, \phi \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11141 | 2 | 87422 |
| 5607 | $J/\psi \to \pi^- \rho^+ K^* \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11143 | 2 | 87424 |
| 5608 | $J/\psi ightarrow ho^0 p ar p \gamma^F, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-par p\gamma^F$ | 6163 | 2 | 87426 |
| 5609 | $J/\psi \to \pi^0 K^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 11152 | 2 | 87428 |
| 5610 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 11162 | 2 | 87430 |
| 5611 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 11163 | 2 | 87432 |
| 5612 | $J/\psi \to \pi^- K^0_S K^+ \phi, K^0_S \to \pi^+ \pi^-, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11167 | 2 | 87434 |
| 5613 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 11168 | 2 | 87436 |
| 5614 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 11169 | 2 | 87438 |
| 5615 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 11170 | 2 | 87440 |
| 5616 | $J/\psi \to \bar{K}^0 K^* a^0_0, \bar{K}^0 \to K^0_L, K^* \to \pi^- K^+, a^0_0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11175 | 2 | 87442 |
| 5617 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 11176 | 2 | 87444 |
| 5618 | $J/\psi \to \pi^0 f_2(1270)\gamma, f_2(1270) \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^-\gamma\gamma^f$ | 6168 | 2 | 87446 |
| 5619 | $J/\psi \to \rho^- K_2^{*0} K^{*+}, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11178 | 2 | 87448 |
| 5620 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \eta K^-, K^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 11184 | 2 | 87450 |
| 5621 | $J/\psi ightarrow ho^0 \eta', ho^0 ightarrow \pi^+ \pi^-, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11188 | 2 | 87452 |
| 5622 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11191 | 2 | 87454 |
| 5623 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 11208 | 2 | 87456 |
| 5624 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 4418 | 2 | 87458 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5625 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11211 | 2 | 87460 |
| 5626 | $J/\psi \to \pi^- \rho^+ \eta^\prime, \rho^+ \to \pi^0 \pi^+, \eta^\prime \to \omega \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11212 | 2 | 87462 |
| 5627 | $J/\psi \rightarrow \pi^0 \rho^0 \omega b_1^0, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \gamma, b_1^0 \rightarrow \pi^0 \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6175 | 2 | 87464 |
| 5628 | $J/\psi \to \pi^0 \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11217 | 2 | 87466 |
| 5629 | $J/\psi 	o \eta K^0 ar{K}^0, \eta 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6177 | 2 | 87468 |
| 5630 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4419 | 2 | 87470 |
| 5631 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11222 | 2 | 87472 |
| 5632 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_2^{*0} \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 680 | 2 | 87474 |
| 5633 | $J/\psi 	o \pi^- \bar{n} p \gamma^F$ | $\pi^- ar{n} p \gamma^F$ | 11229 | 2 | 87476 |
| 5634 | $J/\psi \to K^* \bar{n} \Lambda, K^* \to \pi^0 K^0, \Lambda \to \pi^0 n, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L nar{n}$ | 11231 | 2 | 87478 |
| 5635 | $J/\psi \to \pi^+\pi^-\bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 4423 | 2 | 87480 |
| 5636 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_L^0, \eta \to \pi^+ \pi^- \gamma^F$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 4427 | 2 | 87482 |
| 5637 | $J/\psi \to \pi^+ \rho^- \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma$ | 11245 | 2 | 87484 |
| 5638 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 11247 | 2 | 87486 |
| 5639 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11257 | 2 | 87488 |
| 5640 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, f_0(1370) \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11260 | 2 | 87490 |
| 5641 | $J/\psi 	o a_2^- ar{K}^0 K^+, a_2^- 	o ho^0 \pi^-, ar{K}^0 	o K_S^0, ho^0 	o \pi^+ \pi^-, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11269 | 2 | 87492 |
| 5642 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 11277 | 2 | 87494 |
| 5643 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11278 | 2 | 87496 |
| 5644 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \rho^- K^+, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11283 | 2 | 87498 |
| 5645 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^{+}\Lambda, \bar{\Sigma}^{*-} \to \pi^{-}\bar{\Sigma}^{0}, \Lambda \to \pi^{-}p, \bar{\Sigma}^{0} \to \bar{\Lambda}\gamma, \\ \bar{\Lambda} \to \pi^{0}\bar{n}$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 11290 | 2 | 87500 |
| 5646 | $J/\psi 	o a_2^0 \pi^+ a_1^-, a_2^0 	o \pi^0 \eta, a_1^- 	o \pi^0 ho^-, \eta 	o \pi^0 \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4430 | 2 | 87502 |
| 5647 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6189 | 2 | 87504 |
| 5648 | $J/\psi 	o \phi\phi\gamma, \phi 	o K_L^0K_S^0, \phi 	o \pi^+ ho^-, K_S^0 	o \pi^+\pi^-, ho^- 	o \pi^0\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 11319 | 2 | 87506 |
| 5649 | $J/\psi 	o \eta_c \gamma, \eta_c 	o K^- p \bar{\Lambda}, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0 K^- ar{n} p \gamma$ | 11320 | 2 | 87508 |
| 5650 | $J/\psi ightarrow ho^0 \omega \gamma, ho^0 ightarrow \pi^+ \pi^- \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 6193 | 2 | 87510 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 5651 | $J/\psi \to \omega K^0 \bar{K}_0^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11331 | 2 | 87512 |
| 5652 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- f_2(1270), f_2(1270) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 11340 | 2 | 87514 |
| 5653 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2265 | 2 | 87516 |
| 5654 | $J/\psi ightarrow ar{K}^0 p ar{\Sigma}^-, ar{K}^0 ightarrow K^0_S, ar{\Sigma}^- ightarrow \pi^0 ar{p}, K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0p\bar{p}$ | 11357 | 2 | 87518 |
| 5655 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 6204 | 2 | 87520 |
| 5656 | $J/\psi \to f_2(1270) K^0 \bar{K}^0, f_2(1270) \to \pi^+\pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6206 | 2 | 87522 |
| 5657 | $J/\psi \to ho^0 K^0 \bar{K}^0 \gamma, ho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4433 | 2 | 87524 |
| 5658 | $J/\psi 	o a_2^0 \pi^- a_1^+, a_2^0 	o \pi^+ \pi^- \omega, a_1^+ 	o ho^0 \pi^+, \omega 	o \pi^0 \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11366 | 2 | 87526 |
| 5659 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 3395 | 2 | 87528 |
| 5660 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11372 | 2 | 87530 |
| 5661 | $J/\psi \to \omega \bar{K}^0 K_0^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1637 | 2 | 87532 |
| 5662 | $J/\psi \to \rho^0 \eta' a_1^0, \rho^0 \to \pi^+ \pi^-, \eta' \to \rho^0 \gamma, a_1^0 \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 11385 | 2 | 87534 |
| 5663 | $J/\psi ightarrow a_2^0 \pi^+ \pi^- \gamma^f, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6212 | 2 | 87536 |
| 5664 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to K^0 K^-, h_1(1170) \to \pi^- \rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11388 | 2 | 87538 |
| 5665 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 6217 | 2 | 87540 |
| 5666 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^{+}\bar{\Lambda}, \Sigma^{*-} \to \pi^{-}\Sigma^{0}, \bar{\Lambda} \to \pi^{0}\bar{n}, \Sigma^{0} \to \Lambda\gamma, \\ \Lambda \to \pi^{-}p$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 11393 | 2 | 87542 |
| 5667 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \rho^0 \gamma, \phi \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11395 | 2 | 87544 |
| 5668 | $J/\psi \to \phi\phi\gamma, \phi \to \pi^-\rho^+, \phi \to K^+K^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11397 | 2 | 87546 |
| 5669 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, $ $\rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11399 | 2 | 87548 |
| 5670 | $J/\psi 	o b_1^0 a_1^0, b_1^0 	o \pi^0 \omega, a_1^0 	o \pi^+ ho^-, \omega 	o \pi^0 \gamma, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 11402 | 2 | 87550 |
| 5671 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^F$ | 11412 | 2 | 87552 |
| 5672 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 11420 | 2 | 87554 |
| 5673 | $J/\psi \to \pi^- b_1^- J_0(1370), b_1^- \to \pi^+ \omega, J_0(1370) \to \pi^- \pi^-, \omega \to \pi^- \gamma$ $J/\psi \to \pi^- \bar{K}_1^0 K_0^{*+}, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0,$ $\bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11427 | 2 | 87556 |
| 5674 | $J/\psi \rightarrow \rho^- a_2^+ \gamma^f, \rho^- \rightarrow \pi^0 \pi^-, a_2^+ \rightarrow \pi^+ \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 11431 | 2 | 87558 |
| 5675 | $J/\psi 	o \pi^- K^+ ar{K}^0_1, ar{K}^0_1 	o \pi^0 ar{K}^*, ar{K}^* 	o \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6220 | 2 | 87560 |
| 5676 | $J/\psi \to K_0^{*+} \bar{K}_1^{'-}, K_0^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 11445 | 2 | 87562 |
| 5677 | $J/\psi \to K^*K^-b_1^+, K^* \to \pi^-K^+, b_1^+ \to \pi^+\omega, \omega \to \pi^0\gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11449 | 2 | 87564 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 5678 | $J/\psi \to \pi^{0}\rho^{0}\pi^{+}\pi^{-}\eta h_{1}(1170), \rho^{0} \to \pi^{+}\pi^{-}, \eta \to \gamma\gamma, h_{1}(1170) \to \pi^{0}\rho^{0}, \rho^{0} \to \pi^{+}\pi^{-}$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 11463 | 2 | 87566 |
| 5679 | $J/\psi 	o \pi^+\pi^- K^0 ar K^0, K^0 	o K^0_L, ar K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0 K_L^0\pi^+\pi^-$ | 6224 | 2 | 87568 |
| 5680 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^0 K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 11473 | 2 | 87570 |
| 5681 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_0(1710) \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 11477 | 2 | 87572 |
| 5682 | $J/\psi \to \rho^- \omega \bar{K}^0 K^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11480 | 2 | 87574 |
| 5683 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 11482 | 2 | 87576 |
| 5684 | $J/\psi \to f_{2}'h_{1}(1380), f_{2}' \to K_{L}^{0}K_{L}^{0}, h_{1}(1380) \to K^{0}\bar{K}^{*}, K^{0} \to K_{L}^{0}, \bar{K}^{*} \to \pi^{+}K^{-}$ | $K_L^0K_L^0K_L^0\pi^+K^-$ | 3397 | 2 | 87578 |
| 5685 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 11488 | 2 | 87580 |
| 5686 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma$ | 11489 | 2 | 87582 |
| 5687 | $J/\psi 	o \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} 	o \pi^- K^+, K_2^{*-} 	o \pi^- ar{K}^0, ar{K}^0 	o K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 11493 | 2 | 87584 |
| 5688 | $J/\psi ightarrow a_2^0 \pi^- ho^+, a_2^0 ightarrow \pi^0 \eta, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6230 | 2 | 87586 |
| 5689 | $J/\psi \to \pi^0 \rho^0 h_1(1170) \gamma, \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2721 | 2 | 87588 |
| 5690 | $J/\psi ightarrow \pi^+\pi^-a^0_1, a^0_1 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11502 | 2 | 87590 |
| 5691 | $J/\psi \to K^0 \bar{K}_0^{*0} \gamma, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 11510 | 2 | 87592 |
| 5692 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11522 | 2 | 87594 |
| 5693 | $J/\psi 	o ar{K}^0 K_1^0, ar{K}^0 	o K_L^0, K_1^0 	o \pi^- K^{*+}, K^{*+} 	o \pi^0 K^+$ | $\pi^0 K^0_L \pi^- K^+$ | 3401 | 2 | 87596 |
| 5694 | $J/\psi 	o \pi^0 \omega a^0_0, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f, a^0_0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11536 | 2 | 87598 |
| 5695 | $J/\psi \to \pi^0 \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 11538 | 2 | 87600 |
| 5696 | $J/\psi \to K^0 \bar{K}_1^0 a_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6235 | 2 | 87602 |
| 5697 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11541 | 2 | 87604 |
| 5698 | $J/\psi ightarrow \pi^+\pi^-ar{p}\Delta^+, \Delta^+ ightarrow \pi^0 p$ | $\pi^0\pi^+\pi^-par{p}$ | 11543 | 2 | 87606 |
| 5699 | $J/\psi 	o \eta b_1^0, \eta 	o \gamma \gamma, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 6238 | 2 | 87608 |
| 5700 | $J/\psi 	o K^0 K_2^{*0} \eta', K^0 	o K_L^0, K_2^{*0} 	o \pi^+ K^-, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 11557 | 2 | 87610 |
| 5701 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^-K^+K^-$ | 4442 | 2 | 87612 |
| 5702 | $J/\psi \to \pi^0 K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 6242 | 2 | 87614 |
| 5703 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6244 | 2 | 87616 |
| 5704 | $J/\psi \to \pi^0 K^{*-} K_1^{'+}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 11570 | 2 | 87618 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5705 | $J/\psi \to \eta a_0^+ b_1^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 11576 | 2 | 87620 |
| 5706 | $J/\psi \to \pi^0 \rho^0 \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6245 | 2 | 87622 |
| 5707 | $J/\psi ightarrow \pi^0 ho^0 a_0^0, ho^0 ightarrow \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 343 | 2 | 87624 |
| 5708 | $J/\psi \to \pi^0 \pi^+ \pi^+ \rho^- \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 11583 | 2 | 87626 |
| 5709 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^+ ho^- \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11584 | 2 | 87628 |
| 5710 | $J/\psi \to K^+ K_1^-, K_1^- \to \pi^+ \pi^- K^-$ | $\pi^+\pi^-K^+K^-$ | 11585 | 2 | 87630 |
| 5711 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, f_0(1370) \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11586 | 2 | 87632 |
| 5712 | $J/\psi ightarrow ho^0 \eta^\prime, ho^0 ightarrow \pi^+ \pi^-, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 11590 | 2 | 87634 |
| 5713 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4444 | 2 | 87636 |
| 5714 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma$ | 2271 | 2 | 87638 |
| 5715 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6254 | 2 | 87640 |
| 5716 | $J/\psi ightarrow ar{n}pa_0^-, a_0^- ightarrow \pi^-\eta, \eta ightarrow \pi^+\pi^-\gamma^F$ | $\pi^+\pi^-\pi^-ar{n}p\gamma^F$ | 6256 | 2 | 87642 |
| 5717 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^0 \pi^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 6257 | 2 | 87644 |
| 5718 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11614 | 2 | 87646 |
| 5719 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11616 | 2 | 87648 |
| 5720 | $J/\psi ightarrow \eta K^- K_2^{*+}, \eta ightarrow \gamma \gamma, K_2^{*+} ightarrow \pi^0 K^+$ | $\pi^0 K^+ K^- \gamma \gamma$ | 11624 | 2 | 87650 |
| 5721 | $J/\psi \to \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11634 | 2 | 87652 |
| 5722 | $J/\psi 	o \pi^0 ar{\Delta}^- \Delta^-, \pi^0 	o e^+ e^- \gamma^F, ar{\Delta}^- 	o \pi^+ ar{n}, \Delta^- 	o \pi^- n$ | $e^+e^-\pi^+\pi^-nar{n}\gamma^F$ | 11650 | 2 | 87654 |
| 5723 | $J/\psi 	o \pi^- \eta' b_1^+, \eta' 	o ho^0 \gamma, b_1^+ 	o \pi^+ \omega, ho^0 	o \pi^+ \pi^- \gamma^f, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 11661 | 2 | 87656 |
| 5724 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{-}$ | 4447 | 2 | 87658 |
| 5725 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 11667 | 2 | 87660 |
| 5726 | $J/\psi ightarrow \omega a_0^0, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1906 | 2 | 87662 |
| 5727 | $J/\psi 	o \pi^0 ho^0 \omega b_1^0, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11671 | 2 | 87664 |
| 5728 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 11673 | 2 | 87666 |
| 5729 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 11676 | 2 | 87668 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 5730 | $J/\psi \rightarrow \pi^+ K^* K^- \gamma^F, K^* \rightarrow \pi^0 K^0, K^0 \rightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^F$ | 2726 | 2 | 87670 |
| 5731 | $J/\psi \to \omega K^+ \bar{K}_1^{'-}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1269 | 2 | 87672 |
| 5732 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 3415 | 2 | 87674 |
| 5733 | $J/\psi \rightarrow \pi^- \rho^+ \eta', \rho^+ \rightarrow \pi^0 \pi^+, \eta' \rightarrow \pi^0 \pi^0 \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11684 | 2 | 87676 |
| 5734 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11685 | 2 | 87678 |
| 5735 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^0\pi^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 11697 | 2 | 87680 |
| 5736 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^F$ | 3419 | 2 | 87682 |
| 5737 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11706 | 2 | 87684 |
| 5738 | $J/\psi \to \phi f_0(1370), \phi \to K^+K^-, f_0(1370) \to K^+K^-$ | $K^{+}K^{+}K^{-}K^{-}$ | 11714 | 2 | 87686 |
| 5739 | $J/\psi \to \pi^+\pi^-b_1^+b_1^-, b_1^+ \to \pi^+\omega, b_1^- \to \pi^-\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-\gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 6275 | 2 | 87688 |
| 5740 | $J/\psi \to \pi^- \bar{\Sigma}^+ \Sigma^0, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-ar{n}p\gamma$ | 3420 | 2 | 87690 |
| 5741 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11742 | 2 | 87692 |
| 5742 | $J/\psi \to \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to e^+ e^- \pi^0, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 11748 | 2 | 87694 |
| 5743 | $J/\psi \to \rho^- \bar{n} p \gamma^F, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^-\bar{n}p\gamma^F$ | 11752 | 2 | 87696 |
| 5744 | $J/\psi \to \pi^+ \omega K^* K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11754 | 2 | 87698 |
| 5745 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11773 | 2 | 87700 |
| 5746 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Sigma}^0, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 6283 | 2 | 87702 |
| 5747 | $J/\psi \to \phi f_1(1420), \phi \to \pi^+ \rho^-, f_1(1420) \to \pi^0 K^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11778 | 2 | 87704 |
| 5748 | $J/\psi ightarrow ho^- \omega b_1^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11795 | 2 | 87706 |
| 5749 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11796 | 2 | 87708 |
| 5750 | $J/\psi \rightarrow \rho^0 K^+ K^-, \rho^0 \rightarrow \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 11802 | 2 | 87710 |
| 5751 | $J/\psi 	o \eta n \bar{n}, \eta 	o e^+ e^- \gamma^F$ | $e^+e^-nar{n}\gamma^F$ | 11803 | 2 | 87712 |
| 5752 | $J/\psi \to \bar{K}^0 K_0^0 \gamma, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 3422 | 2 | 87714 |
| 5753 | $J/\psi \to K^{*+}K_2^{*-}\gamma, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6286 | 2 | 87716 |
| 5754 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 11815 | 2 | 87718 |
| 5755 | $J/\psi \to \omega K^{-}K_{1}^{'+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11823 | 2 | 87720 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5756 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \rho^- K^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11829 | 2 | 87722 |
| 5757 | $J/\psi \to \eta K^+ \bar{K}_1^{'-}, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 6288 | 2 | 87724 |
| 5758 | $J/\psi \to \rho^0 f_2(1270) a_1^0, \rho^0 \to \pi^+\pi^-, f_2(1270) \to \pi^+\pi^-, a_1^0 \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11835 | 2 | 87726 |
| 5759 | $J/\psi \to \pi^0 \pi^+ a_1^-, a_1^- \to \pi^0 \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 11839 | 2 | 87728 |
| 5760 | $J/\psi 	o ho^+ a_2^-, ho^+ 	o \pi^0 \pi^+ \gamma^f, a_2^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11843 | 2 | 87730 |
| 5761 | $J/\psi 	o \pi^0 \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\gamma$ | 11852 | 2 | 87732 |
| 5762 | $J/\psi 	o \eta K^0 ar{K}_0^{*0}, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K_S^0, ar{K}_0^{*0} 	o \pi^+ K^-, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 11854 | 2 | 87734 |
| 5763 | $J/\psi 	o \pi^+\pi^-\Sigma^+ar{\Sigma}^-, \Sigma^+ 	o \pi^0 p, ar{\Sigma}^- 	o \pi^0 ar{p}$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 11861 | 2 | 87736 |
| 5764 | $J/\psi 	o \pi^- a_2^+, a_2^+ 	o ar K^0 K^+, ar K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+$ | 1910 | 2 | 87738 |
| 5765 | $J/\psi \to ho^- a_2^+ \eta, ho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11870 | 2 | 87740 |
| 5766 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to K^+K^{*-}, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11872 | 2 | 87742 |
| 5767 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 6292 | 2 | 87744 |
| 5768 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 K^- K^{*+}, ho^0 ightarrow \pi^+ \pi^-, K^{*+} ightarrow \pi^+ K^0, K^0 ightarrow K^0_L$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 11900 | 2 | 87746 |
| 5769 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11903 | 2 | 87748 |
| 5770 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^0 \bar{K}^0, K^0_S \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6293 | 2 | 87750 |
| 5771 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6295 | 2 | 87752 |
| 5772 | $J/\psi 	o \pi^- ar{K}^0 K_0^{*+}, ar{K}^0 	o K_S^0, K_0^{*+} 	o \pi^0 K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 6297 | 2 | 87754 |
| 5773 | $J/\psi 	o \pi^+ n ar p \gamma^F$ | $\pi^+ n ar p \gamma^F$ | 11922 | 2 | 87756 |
| 5774 | $J/\psi \to \pi^- K^+ \bar{K}^0_1, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 11924 | 2 | 87758 |
| 5775 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 11936 | 2 | 87760 |
| 5776 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 11938 | 2 | 87762 |
| 5777 | $J/\psi ightarrow \eta K^+K_1^-, \eta ightarrow \pi^0\pi^+\pi^-, K_1^- ightarrow \omega K^-, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6303 | 2 | 87764 |
| 5778 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 2730 | 2 | 87766 |
| 5779 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K_L^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1912 | 2 | 87768 |
| 5780 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^+ K^-$ | 6310 | 2 | 87770 |
| 5781 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 11975 | 2 | 87772 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 5782 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^+K^-, K_2^{*0} \to \pi^0\pi^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 422 | 2 | 87774 |
| 5783 | $J/\psi 	o \eta \omega \eta', \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 11978 | 2 | 87776 |
| 5784 | $J/\psi \to \pi^- \bar{K}_1^0 K_0^{*+}, \bar{K}_1^0 \to \rho^+ K^-, K_0^{*+} \to \pi^0 K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6312 | 2 | 87778 |
| 5785 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11990 | 2 | 87780 |
| 5786 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11994 | 2 | 87782 |
| 5787 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11995 | 2 | 87784 |
| 5788 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 12001 | 2 | 87786 |
| 5789 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, K^0 \to K_S^0, \omega \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 1914 | 2 | 87788 |
| 5790 | $J/\psi \to K^+ K^{*-} \gamma^f, K^{*-} \to \pi^0 K^-$ | $\pi^0 K^+ K^- \gamma^f$ | 12009 | 2 | 87790 |
| 5791 | $J/\psi 	o \eta ar{K}^* K_2^{*0}, \eta 	o \gamma \gamma, ar{K}^* 	o \pi^+ K^-, K_2^{*0} 	o \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 6314 | 2 | 87792 |
| 5792 | $J/\psi \to K^- b_1^+ K_0^0, b_1^+ \to \pi^+ \omega, K_0^0 \to \pi^- K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12014 | 2 | 87794 |
| 5793 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^0 \eta, K^{*+} \to \pi^+ K^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12016 | 2 | 87796 |
| 5794 | $J/\psi \to \pi^- a_2^+, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 12018 | 2 | 87798 |
| 5795 | $J/\psi \to K^- \Delta^{++} \bar{\Sigma}^-, \Delta^{++} \to \pi^+ p, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^+\pi^-K^-ar{n}p$ | 12022 | 2 | 87800 |
| 5796 | $J/\psi \to \pi^- \rho^+ f_1(1285) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 12026 | 2 | 87802 |
| 5797 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6316 | 2 | 87804 |
| 5798 | $J/\psi \to \pi^0 a_2^0 \pi^- a_1^+, a_2^0 \to \pi^- \rho^+, a_1^+ \to \rho^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12035 | 2 | 87806 |
| 5799 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^+ a_2^- \omega, a_2^- ightarrow \pi^0 ho^-, \omega ightarrow \pi^0 \pi^+ \pi^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4467 | 2 | 87808 |
| 5800 | $J/\psi \to K^+K^-\eta', \eta' \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12050 | 2 | 87810 |
| 5801 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 12055 | 2 | 87812 |
| 5802 | $J/\psi \to \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 12057 | 2 | 87814 |
| 5803 | $J/\psi \to K^+K^{*-}\gamma^f, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma^f$ | 12059 | 2 | 87816 |
| 5804 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \gamma \gamma, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma$ | 12061 | 2 | 87818 |
| 5805 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12070 | 2 | 87820 |
| 5806 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^+, K_2^{*0} \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6320 | 2 | 87822 |
| 5807 | $J/\psi 	o \pi^0 ho^+ ho^- \omega, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 12081 | 2 | 87824 |
| 5808 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6321 | 2 | 87826 |
| 5809 | $J/\psi \to \eta f_0(1370) h_1(1170), \eta \to \gamma \gamma, f_0(1370) \to \pi^0 \pi^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 12086 | 2 | 87828 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 5810 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 12088 | 2 | 87830 |
| 5811 | $J/\psi \to \bar{K}^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+$ | 12098 | 2 | 87832 |
| 5812 | $J/\psi \to \omega K^- K^{*+}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 4469 | 2 | 87834 |
| 5813 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12103 | 2 | 87836 |
| 5814 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 6326 | 2 | 87838 |
| 5815 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12105 | 2 | 87840 |
| 5816 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^-K^+$ | 2736 | 2 | 87842 |
| 5817 | $J/\psi \to ho^0 K^0 \bar{K}^*, ho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 6335 | 2 | 87844 |
| 5818 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+ \gamma^f, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 12119 | 2 | 87846 |
| 5819 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 12128 | 2 | 87848 |
| 5820 | $J/\psi \to \rho^+ K^0 K^{*-} \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 4473 | 2 | 87850 |
| 5821 | $J/\psi \to K^-K^{*+}f_0(1710), K^{*+} \to \pi^+K^0, f_0(1710) \to K^+K^-, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 12137 | 2 | 87852 |
| 5822 | $J/\psi \to \pi^0 \omega K^{*+} K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12140 | 2 | 87854 |
| 5823 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 12142 | 2 | 87856 |
| 5824 | $J/\psi 	o \pi^0 a_2^0 \pi^+ ho^-, a_2^0 	o \pi^- ho^+, ho^- 	o \pi^0 \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12143 | 2 | 87858 |
| 5825 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^+K^*, K^* \to \pi^-K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 12151 | 2 | 87860 |
| 5826 | $J/\psi 	o \eta K^- K_1^+, \eta 	o \pi^0 \pi^0 \pi^0, K_1^+ 	o ho^+ K^0, ho^+ 	o \pi^0 \pi^+, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 12159 | 2 | 87862 |
| 5827 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \phi \to K_L^0K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+K^-$ | 907 | 2 | 87864 |
| 5828 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12179 | 2 | 87866 |
| 5829 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_1^- \to \pi^0 \rho^-, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12183 | 2 | 87868 |
| 5830 | $J/\psi \to \pi^+\omega \omega b_1^-, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, b_1^- \to \pi^-\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 12187 | 2 | 87870 |
| 5831 | $J/\psi \to K^-\phi K_1^+, \phi \to K^+K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 12193 | 2 | 87872 |
| 5832 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12204 | 2 | 87874 |
| 5833 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma$ | 260 | 2 | 87876 |
| 5834 | $J/\psi \to \pi^+\pi^- f_2(1270), f_2(1270) \to \pi^0\pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1918 | 2 | 87878 |
| 5835 | $J/\psi \to \rho^+ \rho^- \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12219 | 2 | 87880 |
| 5836 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^- \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 12228 | 2 | 87882 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5837 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^0\rho^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6345 | 2 | 87884 |
| 5838 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12233 | 2 | 87886 |
| 5839 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \omega \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12236 | 2 | 87888 |
| 5840 | $J/\psi \to \rho^0 a_2^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^-, f_0(1370) \to \rho^+ \rho^-, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12237 | 2 | 87890 |
| 5841 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^- \phi, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-\gamma$ | 2282 | 2 | 87892 |
| 5842 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^- K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3443 | 2 | 87894 |
| 5843 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^0 \bar{K}^*, K^0 \to K^0_L, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4480 | 2 | 87896 |
| 5844 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 12256 | 2 | 87898 |
| 5845 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 12271 | 2 | 87900 |
| 5846 | $J/\psi \to \eta K^- K_0^{*+}, \eta \to \gamma \gamma, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma\gamma$ | 12273 | 2 | 87902 |
| 5847 | $J/\psi 	o \pi^0 ar{K}^* K_2^{*0}, ar{K}^* 	o \pi^+ K^-, K_2^{*0} 	o ho^0 K^0, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}$ | 6349 | 2 | 87904 |
| 5848 | $J/\psi 	o ho^0 \pi^+ a_1^- \gamma^F, ho^0 	o \pi^+ \pi^-, a_1^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 12279 | 2 | 87906 |
| 5849 | $J/\psi \to \pi^+ K^* \bar{p}\Lambda, K^* \to \pi^- K^+, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^-K^+nar{p}$ | 12285 | 2 | 87908 |
| 5850 | $J/\psi \to K^- K_1^+, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 12288 | 2 | 87910 |
| 5851 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 ho^+ b_1^-, ho^+ ightarrow \pi^0 \pi^+, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12297 | 2 | 87912 |
| 5852 | $J/\psi \rightarrow \pi^0\pi^-\omega\omega b_1^+, \omega \rightarrow \pi^0\pi^+\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, b_1^+ \rightarrow \pi^+\omega, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 12298 | 2 | 87914 |
| 5853 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to K^-K^{*+}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12300 | 2 | 87916 |
| 5854 | $J/\psi 	o \omega K^0 ar{K}_1^0, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, ar{K}_1^0 	o ho^0 ar{K}^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12303 | 2 | 87918 |
| 5855 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2741 | 2 | 87920 |
| 5856 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3447 | 2 | 87922 |
| 5857 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12321 | 2 | 87924 |
| 5858 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12325 | 2 | 87926 |
| 5859 | $J/\psi \to \pi^0 ar{K}^0 K_2^{*0}, ar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12335 | 2 | 87928 |
| 5860 | $J/\psi \to \rho^0 \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12338 | 2 | 87930 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 5861 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12344 | 2 | 87932 |
| 5862 | $J/\psi 	o K^+ar{\Sigma}^-\Xi^0, ar{\Sigma}^- 	o \pi^0ar{p}, \Xi^0 	o \pi^0\Lambda, \Lambda 	o \pi^-p$ | $\pi^0\pi^0\pi^-K^+par{p}$ | 12347 | 2 | 87934 |
| 5863 | $J/\psi \to \rho^- a_2^+ a_0^0, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12348 | 2 | 87936 |
| 5864 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^-K^+$ | 12350 | 2 | 87938 |
| 5865 | $J/\psi \to \pi^0 \pi^+ K^- K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 12356 | 2 | 87940 |
| 5866 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 12358 | 2 | 87942 |
| 5867 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12360 | 2 | 87944 |
| 5868 | $J/\psi ightarrow ho^- \omega ar K^0 K^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-, ar K^0 ightarrow K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1920 | 2 | 87946 |
| 5869 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12369 | 2 | 87948 |
| 5870 | $J/\psi \to ho^0 ho^- \bar{K}^* K^+, ho^0 \to \pi^+ \pi^-, ho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12370 | 2 | 87950 |
| 5871 | $J/\psi \to K^+ \phi K_1^-, \phi \to K^+ K^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 2743 | 2 | 87952 |
| 5872 | $J/\psi \to \pi^0 \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12373 | 2 | 87954 |
| 5873 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \pi^+ \pi^- K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12380 | 2 | 87956 |
| 5874 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^0K^+K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 12383 | 2 | 87958 |
| 5875 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2744 | 2 | 87960 |
| 5876 | $J/\psi \to \bar{K}^0 K_1^{'0} \gamma, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 12415 | 2 | 87962 |
| 5877 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 12418 | 2 | 87964 |
| 5878 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 12423 | 2 | 87966 |
| 5879 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12425 | 2 | 87968 |
| 5880 | $J/\psi 	o ho^0 \eta a_0^0, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12428 | 2 | 87970 |
| 5881 | $J/\psi ightarrow ho^+ ho^- b_1^0, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6363 | 2 | 87972 |
| 5882 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12440 | 2 | 87974 |
| 5883 | $J/\psi 	o ho^- ar{K}^0 K^+, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_L^0, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-K_L^0\pi^-K^+\gamma^F$ | 12441 | 2 | 87976 |
| 5884 | $J/\psi ightarrow ho^0 ar{\Lambda} \Sigma^0, ho^0 ightarrow \pi^+ \pi^-, ar{\Lambda} ightarrow \pi^0 ar{n}, \Sigma^0 ightarrow \Lambda \gamma, \Lambda ightarrow \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma$ | 12444 | 2 | 87978 |
| 5885 | $J/\psi \to ho^0 K^0 \bar{K}^*, ho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 12453 | 2 | 87980 |
| 5886 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^+ \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 12456 | 2 | 87982 |
| 5887 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 1274 | 2 | 87984 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5888 | $J/\psi \to \pi^- \eta K_S^0 K^+, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 12469 | 2 | 87986 |
| 5889 | $J/\psi \to K^+K_1^-, K_1^- \to \pi^0K_0^{*-}, K_0^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 12487 | 2 | 87988 |
| 5890 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 12497 | 2 | 87990 |
| 5891 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12498 | 2 | 87992 |
| 5892 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 12502 | 2 | 87994 |
| 5893 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12507 | 2 | 87996 |
| 5894 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^0K^-, K_0^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 2288 | 2 | 87998 |
| 5895 | $J/\psi \to K^0 \phi \bar{K}_1^0, K^0 \to K_L^0, \phi \to K^+ K^-, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 6375 | 2 | 88000 |
| 5896 | $J/\psi \to \bar{K}^0 K^* h_1(1170) \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 12524 | 2 | 88002 |
| 5897 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4501 | 2 | 88004 |
| 5898 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^+ \pi^- \omega, a_1^- \to \pi^0 \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12530 | 2 | 88006 |
| 5899 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \rho^+ K^0, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 3456 | 2 | 88008 |
| 5900 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 1925 | 2 | 88010 |
| 5901 | $J/\psi ightarrow \pi^0 \eta \gamma, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\gamma$ | 12553 | 2 | 88012 |
| 5902 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 K^*, K_2^{*0} \to \pi^+ K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12558 | 2 | 88014 |
| 5903 | $J/\psi 	o \pi^0 \omega \eta', \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6385 | 2 | 88016 |
| 5904 | $J/\psi \to \pi^+\pi^-K^*\bar{K}^*, K^* \to \pi^-K^+, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12561 | 2 | 88018 |
| 5905 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 12564 | 2 | 88020 |
| 5906 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12568 | 2 | 88022 |
| 5907 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_S^0, \\ \eta \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^F$ | 629 | 2 | 88024 |
| 5908 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^- \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12576 | 2 | 88026 |
| 5909 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_2^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2751 | 2 | 88028 |
| 5910 | $J/\psi 	o \pi^0\pi^0\pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 12589 | 2 | 88030 |
| 5911 | $J/\psi \to \pi^+\pi^-ar{\Sigma}^+\Sigma^-, ar{\Sigma}^+ \to \pi^+ar{n}, \Sigma^- \to \pi^- n$ | $\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 3461 | 2 | 88032 |
| 5912 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 12592 | 2 | 88034 |
| 5913 | $J/\psi \to a_2^+ K^* K^{*-}, a_2^+ \to \rho^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12596 | 2 | 88036 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 5914 | $J/\psi \to \rho^0 f_2(1270), \rho^0 \to \pi^+\pi^-, f_2(1270) \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12598 | 2 | 88038 |
| 5915 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12608 | 2 | 88040 |
| 5916 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 12609 | 2 | 88042 |
| 5917 | $J/\psi \to K^0 K^- a_1^+, K^0 \to K_S^0, a_1^+ \to \rho^0 \pi^+, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12617 | 2 | 88044 |
| 5918 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 12618 | 2 | 88046 |
| 5919 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^+ \pi^- K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12621 | 2 | 88048 |
| 5920 | $J/\psi \to \rho^+ \rho^- K^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12624 | 2 | 88050 |
| 5921 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3463 | 2 | 88052 |
| 5922 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^-, \eta' \to \rho^0 \gamma, a_0^+ \to \pi^+ \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 6397 | 2 | 88054 |
| 5923 | $J/\psi \to \pi^0 \pi^0 h_1(1170), h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 12646 | 2 | 88056 |
| 5924 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, b_1^0 \to \pi^0\omega, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12649 | 2 | 88058 |
| 5925 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \rho^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 12652 | 2 | 88060 |
| 5926 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \omega\omega, h_1(1380) \to K^0\bar{K}^*, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12654 | 2 | 88062 |
| 5927 | $J/\psi 	o \pi^0 ho^0 \eta, ho^0 	o \pi^+ \pi^- \gamma^f, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 12667 | 2 | 88064 |
| 5928 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 4515 | 2 | 88066 |
| 5929 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 12671 | 2 | 88068 |
| 5930 | $J/\psi 	o K^+ K^- \gamma^f$ | $K^+K^-\gamma^f$ | 12672 | 2 | 88070 |
| 5931 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_L^0, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 4521 | 2 | 88072 |
| 5932 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12686 | 2 | 88074 |
| 5933 | $J/\psi \to \Sigma^{*0} \bar{\Sigma}^{*0}, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Sigma}^{*0} \to \pi^- \bar{\Sigma}^+, \Lambda \to \pi^- p, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 12689 | 2 | 88076 |
| 5934 | $J/\psi \to \pi^+ K^- K_1^{'0}, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3464 | 2 | 88078 |
| 5935 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^0 K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 12700 | 2 | 88080 |
| 5936 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^0 \rho^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0 K_L^0 K_L^0\pi^+\pi^-$ | 12704 | 2 | 88082 |
| 5937 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12707 | 2 | 88084 |
| 5938 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to \pi^0\pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 12708 | 2 | 88086 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 5939 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12720 | 2 | 88088 |
| 5940 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi h_1(1380), \phi \to K^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 12721 | 2 | 88090 |
| 5941 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 6409 | 2 | 88092 |
| 5942 | $J/\psi ightarrow ho^- ar K^0 K^+ \gamma^F, ho^- ightarrow \pi^0 \pi^-, ar K^0 ightarrow K^0_L$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^F$ | 12725 | 2 | 88094 |
| 5943 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 12728 | 2 | 88096 |
| 5944 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6416 | 2 | 88098 |
| 5945 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to \pi^+ \pi^- \omega, a_2^+ \to \pi^0 \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12748 | 2 | 88100 |
| 5946 | $J/\psi \to \pi^0 \pi^+ \pi^- K^+ K^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | 4524 | 2 | 88102 |
| 5947 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12778 | 2 | 88104 |
| 5948 | $J/\psi \to \pi^0 \Delta^{++} \bar{\Delta}^{++}, \pi^0 \to e^+ e^- \gamma^F, \Delta^{++} \to \pi^+ p, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $e^+e^-\pi^+\pi^-p\bar{p}\gamma^F$ | 12785 | 2 | 88106 |
| 5949 | $J/\psi 	o \pi^0 K^{*+} K^{*-} \gamma, K^{*+} 	o \pi^+ K^0, K^{*-} 	o \pi^0 K^-, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 2752 | 2 | 88108 |
| 5950 | $J/\psi ightarrow \pi^- a_2^+ \eta, a_2^+ ightarrow ho^0 \pi^+, \eta ightarrow \gamma \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12793 | 2 | 88110 |
| 5951 | $J/\psi \to \pi^0 \pi^0 \pi^+ a_2^-, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12807 | 2 | 88112 |
| 5952 | $J/\psi \to K^+K^-h_1(1170)\gamma^F, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 4528 | 2 | 88114 |
| 5953 | $J/\psi \to \eta \phi f_0(980), \eta \to \gamma \gamma, \phi \to K^+ K^-, f_0(980) \to K^+ K^-$ | $K^+K^+K^-K^-\gamma\gamma$ | 12814 | 2 | 88116 |
| 5954 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 12815 | 2 | 88118 |
| 5955 | $J/\psi \to \pi^0 \pi^+ \pi^- \rho^+ b_1^-, \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12820 | 2 | 88120 |
| 5956 | $J/\psi 	o a_2^- ar{K}^0 K^+, a_2^- 	o \pi^0 \pi^- \omega, ar{K}^0 	o K_S^0, \omega 	o \pi^0 \gamma, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 12828 | 2 | 88122 |
| 5957 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^- K^+$ | 6427 | 2 | 88124 |
| 5958 | $J/\psi \to \pi^0 \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 12839 | 2 | 88126 |
| 5959 | $J/\psi ightarrow \pi^+ \omega \Delta^- ar{n}, \omega ightarrow \pi^0 \pi^+ \pi^-, \Delta^- ightarrow \pi^- n$ | $\pi^0\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 12841 | 2 | 88128 |
| 5960 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \pi^0 \rho^+, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12847 | 2 | 88130 |
| 5961 | $J/\psi \to \rho^- \bar{K}^0 K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 12852 | 2 | 88132 |
| 5962 | $J/\psi \to \rho^0 \rho^- b_1^+, \rho^0 \to \pi^+ \pi^- \gamma^F, \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 12854 | 2 | 88134 |
| 5963 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 12855 | 2 | 88136 |
| 5964 | $J/\psi 	o \eta K^0 ar{K}^*, \eta 	o \pi^0 \pi^+ \pi^-, K^0 	o K^0_S, ar{K}^* 	o \pi^+ K^-, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12874 | 2 | 88138 |
| 5965 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12875 | 2 | 88140 |
| 5966 | $J/\psi \to K_2^{(1210)}, \omega \to \pi^+ \pi^- \pi^-, J_2^{(1210)} \to K_S^- K_S^-, K_S^- \to \pi^- \pi^- K_S^-, K_S^- \to K_L^0, \bar{K}^0 \to K_S^0,$ $K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6432 | 2 | 88142 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 5967 | $J/\psi \to n\bar{n}f_0(1370), f_0(1370) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 6433 | 2 | 88144 |
| 5968 | $J/\psi \to \pi^+\pi^-\bar{K}^*K^0_1, \bar{K}^* \to \pi^0\bar{K}^0, K^0_1 \to \rho^-K^+, \bar{K}^0 \to K^0_L, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12897 | 2 | 88146 |
| 5969 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^0 \pi^+ b_1^-, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3467 | 2 | 88148 |
| 5970 | $J/\psi \to \phi f_0(2020), \phi \to \pi^0 \rho^0, f_0(2020) \to \pi^0 \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6441 | 2 | 88150 |
| 5971 | $J/\psi \to \pi^0 \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12910 | 2 | 88152 |
| 5972 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \pi^0 \rho^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1927 | 2 | 88154 |
| 5973 | $J/\psi 	o ho^0 \bar{n} \Delta^0, ho^0 	o \pi^+ \pi^-, \Delta^0 	o \pi^- p$ | $\pi^+\pi^-\pi^-\bar{n}p$ | 6446 | 2 | 88156 |
| 5974 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^- ho^+ \eta', ho^+ 	o \pi^0 \pi^+, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 12915 | 2 | 88158 |
| 5975 | $J/\psi \to K^+ \bar{p} \Sigma^{*0}, \Sigma^{*0} \to \pi^0 \Lambda, \Lambda \to \pi^- p$ | $\pi^0\pi^-K^+par{p}$ | 12917 | 2 | 88160 |
| 5976 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2296 | 2 | 88162 |
| 5977 | $J/\psi 	o ho^+ K^- K_0^0, ho^+ 	o \pi^0 \pi^+ \gamma^f, K_0^0 	o \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 12931 | 2 | 88164 |
| 5978 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12935 | 2 | 88166 |
| 5979 | $J/\psi \to K_2^{*0} K^- a_0^+, K_2^{*0} \to \pi^0 K^0, a_0^+ \to \pi^+ \eta, K^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 4539 | 2 | 88168 |
| 5980 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^0\bar{K}^0, a_0^- \to \pi^-\eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12942 | 2 | 88170 |
| 5981 | $J/\psi \to \eta' \phi, \eta' \to \pi^+ \pi^- \eta, \phi \to K_L^0 K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12946 | 2 | 88172 |
| 5982 | $J/\psi \to \pi^- \rho^+ K^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12960 | 2 | 88174 |
| 5983 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 12962 | 2 | 88176 |
| 5984 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 12963 | 2 | 88178 |
| 5985 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6453 | 2 | 88180 |
| 5986 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma$ | 4541 | 2 | 88182 |
| 5987 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-\gamma\gamma$ | 12974 | 2 | 88184 |
| 5988 | $J/\psi \to b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 1449 | 2 | 88186 |
| 5989 | $J/\psi ightarrow \pi^+\pi^-\phi, \phi ightarrow \pi^0 ho^0, ho^0 ightarrow \pi^+\pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 12979 | 2 | 88188 |
| 5990 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- h_1(1170), \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3474 | 2 | 88190 |
| 5991 | $J/\psi \to \phi f_0(1370), \phi \to K_L^0 K_S^0, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^-$ | 13003 | 2 | 88192 |
| 5992 | $J/\psi \to \pi^0 K^- K^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 13004 | 2 | 88194 |
| 5993 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 13006 | 2 | 88196 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 5994 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \gamma \gamma, K_2^{*-} \to \pi^0 K^-$ | $\pi^0 K^+ K^- \gamma \gamma$ | 13008 | 2 | 88198 |
| 5995 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 6464 | 2 | 88200 |
| 5996 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13022 | 2 | 88202 |
| 5997 | $J/\psi \to \Sigma^{*0} \bar{\Sigma}^{*0}, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \pi^0 \to e^+ e^- \gamma^F, \Lambda \to \pi^- p, \\ \bar{\Lambda} \to \pi^+ \bar{p}$ | $e^+e^-\pi^0\pi^+\pi^-p\bar{p}\gamma^F$ | 13030 | 2 | 88204 |
| 5998 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13031 | 2 | 88206 |
| 5999 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^{+}\bar{\Lambda}, \Sigma^{*-} \to \pi^{-}\Sigma^{0}, \bar{\Lambda} \to \pi^{+}\bar{p}, \Sigma^{0} \to \Lambda\gamma, \\ \Lambda \to \pi^{0}n$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 3476 | 2 | 88208 |
| 6000 | $J/\psi \to K^-K^{*+}a_1^0, K^{*+} \to \pi^+K^0, a_1^0 \to \pi^+\rho^-, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 13059 | 2 | 88210 |
| 6001 | $J/\psi 	o a_2^- ar{K}^0 K^+, a_2^- 	o ho^0 \pi^-, ar{K}^0 	o K_S^0, ho^0 	o \pi^+ \pi^- \gamma^f, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 13063 | 2 | 88212 |
| 6002 | $J/\psi 	o \eta' \phi, \eta' 	o \omega \gamma, \phi 	o K^+ K^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13064 | 2 | 88214 |
| 6003 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-\gamma$ | 13067 | 2 | 88216 |
| 6004 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 1009 | 2 | 88218 |
| 6005 | $J/\psi \to \eta h_1(1170), \eta \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4547 | 2 | 88220 |
| 6006 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^*, K_2^{*-} \to \pi^0 K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 13074 | 2 | 88222 |
| 6007 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \rho^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13081 | 2 | 88224 |
| 6008 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13088 | 2 | 88226 |
| 6009 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \bar{K}^0 K^+, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 911 | 2 | 88228 |
| 6010 | $J/\psi \to K_0^0 \bar{K}_1^{'0}, K_0^0 \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 13090 | 2 | 88230 |
| 6011 | $J/\psi \to K^* \bar{K}^0_2, K^* \to \pi^- K^+, \bar{K}^0_2 \to \pi^0 K^{*0}_2, K^{*0}_2 \to \pi^0 \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^-\pi^-K^+K^+$ | 6485 | 2 | 88232 |
| 6012 | $J/\psi \to \pi^0 \pi^0 h_1(1170), \pi^0 \to e^+ e^- \gamma^F, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 13108 | 2 | 88234 |
| 6013 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13118 | 2 | 88236 |
| 6014 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 13124 | 2 | 88238 |
| 6015 | $J/\psi \to K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1938 | 2 | 88240 |
| 6016 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^0 K_0^{*+}, K_S^0 \to \pi^0 \pi^0, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 13127 | 2 | 88242 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6017 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \\ \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13144 | 2 | 88244 |
| 6018 | $J/\psi \to f_2(1270)K^+K^-, f_2(1270) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 13154 | 2 | 88246 |
| 6019 | $J/\psi \to \phi f_1(1420), \phi \to \pi^- \rho^+, f_1(1420) \to \pi^- \bar{K}^0 K^+, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4552 | 2 | 88248 |
| 6020 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 13177 | 2 | 88250 |
| 6021 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^-$ | 1453 | 2 | 88252 |
| 6022 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^+\pi^-, \phi \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13187 | 2 | 88254 |
| 6023 | $J/\psi \to \pi^0 f_2(1270)\gamma, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 13197 | 2 | 88256 |
| 6024 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13200 | 2 | 88258 |
| 6025 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 13227 | 2 | 88260 |
| 6026 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, \ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 13259 | 2 | 88262 |
| 6027 | $J/\psi 	o \pi^0 K^0 K_2^{*0}, K^0 	o K_L^0, K_2^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13272 | 2 | 88264 |
| 6028 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13298 | 2 | 88266 |
| 6029 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^0 \pi^0, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13308 | 2 | 88268 |
| 6030 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^+K^0, f_0(1370) \to \pi^0\pi^0, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 13310 | 2 | 88270 |
| 6031 | $J/\psi 	o \pi^+ ho^- K^0 ar{K}^0, ho^- 	o \pi^0 \pi^-, K^0 	o K^0_S, ar{K}^0 	o K^0_L, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13312 | 2 | 88272 |
| 6032 | $J/\psi \to K^*K^{*-}a_0^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, a_0^+ \to \pi^+\eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6491 | 2 | 88274 |
| 6033 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13322 | 2 | 88276 |
| 6034 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6492 | 2 | 88278 |
| 6035 | $J/\psi ightarrow \pi^+\pi^+\pi^-\pi^-\eta \gamma^f, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 13333 | 2 | 88280 |
| 6036 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^- ightarrow \pi^- \eta \gamma^f, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 13343 | 2 | 88282 |
| 6037 | $J/\psi \to \pi^0\pi^-b_1^+, b_1^+ \to \pi^+\omega, \omega \to \pi^0\gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 13345 | 2 | 88284 |
| 6038 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 912 | 2 | 88286 |
| 6039 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13361 | 2 | 88288 |
| 6040 | $J/\psi \to K^0 \bar{K}^0 \gamma, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\gamma$ | 13364 | 2 | 88290 |
| 6041 | $J/\psi \to \pi^- \rho^+ \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13372 | 2 | 88292 |
| 6042 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^0K^+, \eta' \to \pi^0\pi^0\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 54 | 2 | 88294 |
| 6043 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ a_0^-, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 13397 | 2 | 88296 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6044 | $J/\psi 	o \pi^0 ar p \Delta^+, \Delta^+ 	o \pi^0 p$ | $\pi^0\pi^0 par p$ | 13414 | 2 | 88298 |
| 6045 | $J/\psi \to \pi^- \omega \bar{n} \Delta^+, \omega \to \pi^0 \pi^+ \pi^-, \Delta^+ \to \pi^+ n$ | $\pi^0\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 13416 | 2 | 88300 |
| 6046 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma$ | 13432 | 2 | 88302 |
| 6047 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^- K_2^{*+}, K_2^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 13433 | 2 | 88304 |
| 6048 | $J/\psi 	o \pi^- \eta \bar{K}^0 K^+, \eta 	o \pi^0 \pi^0 \pi^0, \bar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 6495 | 2 | 88306 |
| 6049 | $J/\psi \to \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13443 | 2 | 88308 |
| 6050 | $J/\psi \to \pi^0\pi^0a_0^-b_1^+, a_0^- \to \pi^-\eta, b_1^+ \to \pi^+\omega, \eta \to \gamma\gamma, \omega \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 13456 | 2 | 88310 |
| 6051 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \rho^-\bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma$ | 3487 | 2 | 88312 |
| 6052 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \eta f_2(1270), \eta \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13474 | 2 | 88314 |
| 6053 | $J/\psi \to ho^0 a_0^0, ho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13475 | 2 | 88316 |
| 6054 | $J/\psi \to K^+ ar{K}_1^{'-} \gamma^F, ar{K}_1^{'-} \to \pi^- ar{K}^*, ar{K}^* \to \pi^0 ar{K}^0, ar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 13492 | 2 | 88318 |
| 6055 | $J/\psi \to K^+K^-f_1(1285), f_1(1285) \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13498 | 2 | 88320 |
| 6056 | $J/\psi 	o \pi^-\pi^-ar{\Delta}^-p, ar{\Delta}^- 	o \pi^+ar{n}$ | $\pi^+\pi^-\pi^-ar{n}p$ | 13500 | 2 | 88322 |
| 6057 | $J/\psi \to \rho^+ f_2(1270) a_0^-, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4561 | 2 | 88324 |
| 6058 | $J/\psi \to \eta \omega f_0(1370), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6503 | 2 | 88326 |
| 6059 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 287 | 2 | 88328 |
| 6060 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^- \bar{K}^0 K^+ \gamma^f, \bar{K}^0 	o K_L^0$ | $K_L^0\pi^-K^+\gamma\gamma^f$ | 13521 | 2 | 88330 |
| 6061 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 13523 | 2 | 88332 |
| 6062 | $J/\psi \to \bar{\Lambda}\Sigma^0, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^0 \to \Lambda \gamma, \pi^0 \to e^+ e^- \gamma^F, \Lambda \to \pi^- p$ | $e^+e^-\pi^-ar{n}p\gamma^F\gamma$ | 3489 | 2 | 88334 |
| 6063 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^0 \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 13549 | 2 | 88336 |
| 6064 | $J/\psi \to h_1(1170)a_1^0, h_1(1170) \to \pi^+ \rho^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13551 | 2 | 88338 |
| 6065 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0K^+, K_1^- \to \pi^-\bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13554 | 2 | 88340 |
| 6066 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 13557 | 2 | 88342 |
| 6067 | $J/\psi \to \rho^- \bar{K}^0 K^+ \gamma^F, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 6511 | 2 | 88344 |
| 6068 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 13602 | 2 | 88346 |
| 6069 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13607 | 2 | 88348 |
| 6070 | $J/\psi \to \rho^0 \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13616 | 2 | 88350 |
| 6071 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 13618 | 2 | 88352 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6072 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ $K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13623 | 2 | 88354 |
| 6073 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^{+}\Xi^{-}, \bar{\Xi}^{*0} \to \pi^{0}\bar{\Xi}^{0}, \Xi^{-} \to \pi^{-}\Lambda, \bar{\Xi}^{0} \to \pi^{0}\bar{\Lambda}, \Lambda \to \pi^{0}n, \bar{\Lambda} \to \pi^{0}\bar{n}$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 13628 | 2 | 88356 |
| 6074 | $J/\psi \to \pi^0 \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6514 | 2 | 88358 |
| 6075 | $J/\psi \to K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to \pi^- \rho^+, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 13640 | 2 | 88360 |
| 6076 | $J/\psi 	o \pi^0 a_2^0 b_1^0, a_2^0 	o \pi^+ ho^-, b_1^0 	o \pi^0 \omega, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2765 | 2 | 88362 |
| 6077 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^0 \bar{K}^*, K^0_S \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 13655 | 2 | 88364 |
| 6078 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^0 \bar{K}^{*0}_0, K^0_S \to \pi^+\pi^-, \bar{K}^{*0}_0 \to \pi^+K^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 13660 | 2 | 88366 |
| 6079 | $J/\psi \to \pi^0 \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 6524 | 2 | 88368 |
| 6080 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13669 | 2 | 88370 |
| 6081 | $J/\psi ightarrow \eta K^0 ar{K}^0, \eta ightarrow \gamma \gamma, K^0 ightarrow K_S^0, ar{K}^0 ightarrow K_S^0, K_S^0 ightarrow \pi^0 \pi^0, \ K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3491 | 2 | 88372 |
| 6082 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 13681 | 2 | 88374 |
| 6083 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3492 | 2 | 88376 |
| 6084 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^- K^+ \gamma^F$ | 1655 | 2 | 88378 |
| 6085 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to K^+K^-, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 13691 | 2 | 88380 |
| 6086 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to K_L^0 K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 4572 | 2 | 88382 |
| 6087 | $J/\psi 	o \Delta^0ar{\Delta}^0, \Delta^0 	o \pi^0 n, ar{\Delta}^0 	o \pi^+ar{p}\gamma^f$ | $\pi^0\pi^+nar{p}\gamma^f$ | 4575 | 2 | 88384 |
| 6088 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13706 | 2 | 88386 |
| 6089 | $J/\psi \to \rho^+ K_2^{*0} K^{*-}, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 13710 | 2 | 88388 |
| 6090 | $J/\psi \to \pi^+\pi^-\omega h_1(1170), \omega \to \pi^0\pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13711 | 2 | 88390 |
| 6091 | $J/\psi \to \pi^+ \rho^- \bar{K}^0 K^*, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13712 | 2 | 88392 |
| 6092 | $J/\psi 	o \pi^0 K^* K_2^{*0}, K^* 	o \pi^0 K^0, K_2^{*0} 	o \pi^+ K^-, K^0 	o K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 13749 | 2 | 88394 |
| 6093 | $J/\psi \to \pi^+ f_2(1270) a_1^-, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 13761 | 2 | 88396 |
| 6094 | $J/\psi \to ho^0 \pi^- K^+ ar{K}_0^{*0}, ho^0 \to \pi^+ \pi^-, ar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 13762 | 2 | 88398 |
| 6095 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 13771 | 2 | 88400 |
| 6096 | $J/\psi \to \pi^+\pi^-a_2^+a_0^-, a_2^+ \to ho^0\pi^+, a_0^- \to \pi^-\eta, ho^0 \to \pi^+\pi^-, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13778 | 2 | 88402 |
| 6097 | $J/\psi \to \pi^- K^+ \bar{K}^0_1, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 6535 | 2 | 88404 |
| 6098 | $J/\psi ightarrow ho^+ \eta' a_0^-, ho^+ ightarrow \pi^0 \pi^+, \eta' ightarrow \gamma \gamma, a_0^- ightarrow \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13814 | 2 | 88406 |
| 6099 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \omega a_0^-, \omega 	o \pi^0 \pi^+ \pi^-, a_0^- 	o \pi^- \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 13820 | 2 | 88408 |
| 6100 | $J/\psi 	o \eta K^0 ar{K}^*, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K_L^0, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 13825 | 2 | 88410 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 6101 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^0 K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13828 | 2 | 88412 |
| 6102 | $J/\psi \to \pi^+\pi^-b_1^+a_1^-, b_1^+ \to \pi^+\omega, a_1^- \to \pi^0\rho^-, \omega \to \pi^0\pi^+\pi^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13847 | 2 | 88414 |
| 6103 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^-$ | 13850 | 2 | 88416 |
| 6104 | $J/\psi 	o ar{K}^0 K_0^0, ar{K}^0 	o K_L^0, K_0^0 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0$ | 2768 | 2 | 88418 |
| 6105 | $J/\psi ightarrow \pi^0 \pi^+ ho^- \eta^\prime, ho^- ightarrow \pi^0 \pi^-, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13862 | 2 | 88420 |
| 6106 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0 K_L^0\pi^- K^+$ | 13864 | 2 | 88422 |
| 6107 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 13865 | 2 | 88424 |
| 6108 | $J/\psi \to \pi^0 \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13868 | 2 | 88426 |
| 6109 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13871 | 2 | 88428 |
| 6110 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13876 | 2 | 88430 |
| 6111 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \pi^+\pi^-\eta', \eta' \to \omega\gamma, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13877 | 2 | 88432 |
| 6112 | $J/\psi \to \pi^+ K^* K^{*-} \gamma^F, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 13882 | 2 | 88434 |
| 6113 | $J/\psi \to \pi^+ \pi^+ \rho^- b_1^-, \rho^- \to \pi^0 \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6541 | 2 | 88436 |
| 6114 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 917 | 2 | 88438 |
| 6115 | $J/\psi \to \Lambda \bar{\Lambda} \gamma, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^0 \bar{n}, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0nar{n}\gamma^F\gamma$ | 13908 | 2 | 88440 |
| 6116 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 13910 | 2 | 88442 |
| 6117 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13919 | 2 | 88444 |
| 6118 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13920 | 2 | 88446 |
| 6119 | $J/\psi \to K^{*+} \bar{K}_1^{'-} \gamma, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 13926 | 2 | 88448 |
| 6120 | $J/\psi \to \pi^- a_0^+ h_1(1170) \gamma^f, a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 13932 | 2 | 88450 |
| 6121 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 13939 | 2 | 88452 |
| 6122 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^-K^+\gamma^F\gamma$ | 13945 | 2 | 88454 |
| 6123 | $J/\psi ightarrow \pi^- \eta b_1^+, \eta ightarrow \pi^0 \pi^+ \pi^-, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13952 | 2 | 88456 |
| 6124 | $J/\psi \to \pi^- \bar{K}^* K^+ h_1(1170), \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13957 | 2 | 88458 |
| 6125 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 3497 | 2 | 88460 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6126 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 3499 | 2 | 88462 |
| 6127 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 13972 | 2 | 88464 |
| 6128 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 13973 | 2 | 88466 |
| 6129 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^- \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 13980 | 2 | 88468 |
| 6130 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^+ \pi^-, \eta' \to \rho^0 \gamma, \phi \to K_L^0 K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma$ | 13985 | 2 | 88470 |
| 6131 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13986 | 2 | 88472 |
| 6132 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13990 | 2 | 88474 |
| 6133 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-\gamma^f, K^{*+} \to \pi^0K^+, b_1^- \to \pi^-\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 13993 | 2 | 88476 |
| 6134 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+\pi^-K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13996 | 2 | 88478 |
| 6135 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^- \bar{\Sigma}^0, \Lambda \to \pi^0 n, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}\gamma$ | 13999 | 2 | 88480 |
| 6136 | $J/\psi \to K^0 \bar{\Delta}^0 \Sigma^0, K^0 \to K_S^0, \bar{\Delta}^0 \to \pi^0 \bar{n}, \Sigma^0 \to \Lambda \gamma, K_S^0 \to \pi^+ \pi^-, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 14012 | 2 | 88482 |
| 6137 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14019 | 2 | 88484 |
| 6138 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, K^0 \to K_L^0, \omega \to \pi^0\gamma$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 14029 | 2 | 88486 |
| 6139 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \pi^0 \to e^+ e^- \gamma^F, \ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}K_{L}^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 14032 | 2 | 88488 |
| 6140 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 14045 | 2 | 88490 |
| 6141 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 14047 | 2 | 88492 |
| 6142 | $J/\psi 	o ho^+ K^- K_1^0, ho^+ 	o \pi^0 \pi^+, K_1^0 	o \pi^0 K_0^0, K_0^0 	o \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14057 | 2 | 88494 |
| 6143 | $J/\psi \to \rho^0 K^0 \bar{K}_0^{*0}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 14059 | 2 | 88496 |
| 6144 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+ \pi^- \gamma^f, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 14066 | 2 | 88498 |
| 6145 | $J/\psi \to \pi^- \bar{K}^* K^+ b_1^0, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14069 | 2 | 88500 |
| 6146 | $J/\psi \to \bar{K}^* K_0^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 14080 | 2 | 88502 |
| 6147 | $J/\psi \rightarrow \phi\phi\gamma, \phi \rightarrow K_L^0 K_S^0, \phi \rightarrow K_L^0 K_S^0, K_S^0 \rightarrow \pi^+\pi^-, K_S^0 \rightarrow \pi^+\pi^-$ | $K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14082 | 2 | 88504 |
| 6148 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14087 | 2 | 88506 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 6149 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \rho^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6554 | 2 | 88508 |
| 6150 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_1^{'+}, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 14095 | 2 | 88510 |
| 6151 | $J/\psi \to \omega f_0(1370) f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14099 | 2 | 88512 |
| 6152 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^- \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 14111 | 2 | 88514 |
| 6153 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^+K^{*-}, f_1(1420) \to \pi^0K^+K^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 14112 | 2 | 88516 |
| 6154 | $J/\psi \to \eta_c \gamma, \eta_c \to \Sigma^0 \bar{\Sigma}^0, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Lambda \to \pi^0 n, \\ \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+n\bar{p}\gamma\gamma\gamma$ | 14136 | 2 | 88518 |
| 6155 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 14139 | 2 | 88520 |
| 6156 | $J/\psi 	o ar{\Lambda} \Sigma^{*0}, ar{\Lambda} 	o \pi^+ ar{p}, \Sigma^{*0} 	o \pi^0 \Lambda, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 14151 | 2 | 88522 |
| 6157 | $J/\psi \to \pi^+\pi^-K^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 14161 | 2 | 88524 |
| 6158 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 14163 | 2 | 88526 |
| 6159 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14166 | 2 | 88528 |
| 6160 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14176 | 2 | 88530 |
| 6161 | $J/\psi \to \bar{K}^*K^+a_1^-, \bar{K}^* \to \pi^0\bar{K}^0, a_1^- \to \rho^0\pi^-, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3501 | 2 | 88532 |
| 6162 | $J/\psi 	o K^0 ar{K}^* f_2^{'}, K^0 	o K_L^0, ar{K}^* 	o \pi^+ K^-, f_2^{'} 	o K_L^0 K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^+ K^-$ | 2313 | 2 | 88534 |
| 6163 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \pi^0 \pi^0 \pi^0, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-\gamma$ | 2776 | 2 | 88536 |
| 6164 | $J/\psi \to \bar{K}^*K^{*+}a_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^+K^0, a_1^- \to \pi^0\rho^-, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 918 | 2 | 88538 |
| 6165 | $J/\psi 	o a_2^+ K^* K^-, a_2^+ 	o \pi^0 ho^+, K^* 	o \pi^0 K^0, ho^+ 	o \pi^0 \pi^+, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 4593 | 2 | 88540 |
| 6166 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \rho^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14225 | 2 | 88542 |
| 6167 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14235 | 2 | 88544 |
| 6168 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6577 | 2 | 88546 |
| 6169 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, b_1^0 \to \pi^0\omega, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14242 | 2 | 88548 |
| 6170 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \pi^+\pi^-\eta', \eta' \to \pi^0\pi^0\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 14280 | 2 | 88550 |
| 6171 | $J/\psi \to \pi^+ \omega K^0 K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 14284 | 2 | 88552 |
| 6172 | $J/\psi \to \pi^+ \rho^+ \rho^- a_1^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14301 | 2 | 88554 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6173 | $J/\psi \to \omega K^{*+}K_1^-, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+, K_1^- \to \pi^-\bar{K}^*, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14303 | 2 | 88556 |
| 6174 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 14310 | 2 | 88558 |
| 6175 | $J/\psi \to K^0 K^- a_1^+, K^0 \to K_S^0, a_1^+ \to \pi^0 \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 14316 | 2 | 88560 |
| 6176 | $J/\psi \to \phi \phi \phi, \phi \to K_L^0 K_S^0, \phi \to K_L^0 K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 4595 | 2 | 88562 |
| 6177 | $J/\psi \to n\bar{p}a_0^+, a_0^+ \to \bar{K}^0K^+, \bar{K}^0 \to K_L^0$ | $K^0_L K^+ n \bar{p}$ | 6585 | 2 | 88564 |
| 6178 | $J/\psi ightarrow \eta \eta \gamma, \eta ightarrow \gamma \gamma, \eta ightarrow \gamma \gamma$ | $\gamma\gamma\gamma\gamma\gamma$ | 4596 | 2 | 88566 |
| 6179 | $J/\psi \to \bar{\Delta}^- \Delta^- \gamma, \bar{\Delta}^- \to \pi^+ \bar{n}, \Delta^- \to \pi^- n$ | $\pi^+\pi^-nar{n}\gamma$ | 14354 | 2 | 88568 |
| 6180 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to K^+ K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 14364 | 2 | 88570 |
| 6181 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^+K^0, h_1(1170) \to \pi^0\rho^0, K^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14365 | 2 | 88572 |
| 6182 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^+ \pi^- \gamma^F$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 14377 | 2 | 88574 |
| 6183 | $J/\psi \to \pi^+ a_2^- \gamma^f, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14413 | 2 | 88576 |
| 6184 | $J/\psi ightarrow \pi^0\pi^0\pi^-b_1^+, b_1^+ ightarrow \pi^+\omega, \omega ightarrow \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14416 | 2 | 88578 |
| 6185 | $J/\psi \to \rho^0 \eta', \rho^0 \to \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14427 | 2 | 88580 |
| 6186 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14433 | 2 | 88582 |
| 6187 | $J/\psi 	o \pi^- ar{K}^0 K_1^+, ar{K}^0 	o K_L^0, K_1^+ 	o \pi^+ K_0^0, K_0^0 	o \pi^- K^+$ | $K^0_L\pi^+\pi^-\pi^-K^+$ | 4597 | 2 | 88584 |
| 6188 | $J/\psi \to \pi^+ \omega K^- K_1^0, \omega \to \pi^0 \pi^+ \pi^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 235 | 2 | 88586 |
| 6189 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14461 | 2 | 88588 |
| 6190 | $J/\psi \to K^-K^{*+}f_2', K^{*+} \to \pi^+K^0, f_2' \to K_S^0K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 14474 | 2 | 88590 |
| 6191 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14489 | 2 | 88592 |
| 6192 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_L^0, \\ \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1949 | 2 | 88594 |
| 6193 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0$ | $e^+e^-K^0_L\pi^-K^+\gamma^F\gamma$ | 14501 | 2 | 88596 |
| 6194 | $J/\psi 	o \omega\omega\gamma, \omega 	o \pi^0\pi^+\pi^-, \omega 	o \pi^0\pi^+\pi^-\gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 14502 | 2 | 88598 |
| 6195 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 3511 | 2 | 88600 |
| 6196 | $J/\psi \to n_0 \gamma$, $n_0 \to \pi^+ K^- K_1^{'0}$, $K_1^{'0} \to \pi^- K^{*+}$, $K^{*+} \to \pi^+ K^0$, $K^0 \to K_2^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 14524 | 2 | 88602 |
| 6197 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^+ K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 14530 | 2 | 88604 |
| 6198 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 14533 | 2 | 88606 |
| 6199 | $J/\psi 	o ar K^* n ar \Lambda, ar K^* 	o \pi^0 ar K^0, ar \Lambda 	o \pi^0 ar n, ar K^0 	o K_L^0$ | $\pi^0\pi^0K^0_Ln\bar{n}$ | 3512 | 2 | 88608 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6200 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14558 | 2 | 88610 |
| 6201 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^0 K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14559 | 2 | 88612 |
| 6202 | $J/\psi \to K^{*+} \bar{n} \Sigma^{-}, K^{*+} \to \pi^{+} K^{0}, \Sigma^{-} \to \pi^{-} n, K^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{+} \pi^{-}$ | $\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 14571 | 2 | 88614 |
| 6203 | $J/\psi \to \pi^+ K^0 \bar{K}^* b_1^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 6600 | 2 | 88616 |
| 6204 | $J/\psi ightarrow \eta f_2^{'}\gamma, \eta ightarrow \pi^0\pi^0\pi^0, f_2^{'} ightarrow K_L^0K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\gamma$ | 14575 | 2 | 88618 |
| 6205 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_1^0 \to \pi^+ \rho^-, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 14601 | 2 | 88620 |
| 6206 | $J/\psi \to K^- K^{*+} \eta', K^{*+} \to \pi^0 K^+, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 14610 | 2 | 88622 |
| 6207 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 14615 | 2 | 88624 |
| 6208 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 14618 | 2 | 88626 |
| 6209 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to K^- K^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14619 | 2 | 88628 |
| 6210 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14623 | 2 | 88630 |
| 6211 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14632 | 2 | 88632 |
| 6212 | $J/\psi 	o ho^0 ar{K}^0 K_0^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_S^0, K_0^0 	o \pi^0 K^0, K_S^0 	o \pi^0 \pi^0, K_L^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14652 | 2 | 88634 |
| 6213 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^+K^{*-}, f_1(1420) \to \pi^0K^+K^-, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0K^+K^+K^-K^-$ | 14678 | 2 | 88636 |
| 6214 | $J/\psi 	o \pi^- ho^+ ho^+ K^0 K^-, ho^+ 	o \pi^0 \pi^+, ho^+ 	o \pi^0 \pi^+, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4607 | 2 | 88638 |
| 6215 | $J/\psi \to K^+ K^{*-} \gamma^F, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-K^+K^-\gamma^F\gamma^F$ | 14690 | 2 | 88640 |
| 6216 | $J/\psi \to \pi^0 \pi^0 \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14692 | 2 | 88642 |
| 6217 | $J/\psi \to \pi^+ \pi^- \pi^- \bar{K}^* K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 14693 | 2 | 88644 |
| 6218 | $J/\psi \to \rho^0 \rho^0 \pi^+ \pi^- a^0_0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, a^0_0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14697 | 2 | 88646 |
| 6219 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14716 | 2 | 88648 |
| 6220 | $J/\psi \to \phi f_0(2020), \phi \to K^+K^-, f_0(2020) \to \pi^0\pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 14730 | 2 | 88650 |
| 6221 | $J/\psi \rightarrow \rho^+ \omega b_1^-, \rho^+ \rightarrow \pi^0 \pi^+, \omega \rightarrow \pi^0 \pi^+ \pi^- \gamma^f, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 14747 | 2 | 88652 |
| 6222 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^- \pi^- \pi^- K^+ K^+$ | 14752 | 2 | 88654 |
| 6223 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14755 | 2 | 88656 |
| 6224 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 14758 | 2 | 88658 |
| 6225 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, \phi \to K^0_L K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 14762 | 2 | 88660 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6226 | $J/\psi \to K^{*-}K_{1}^{'+}, K^{*-} \to \pi^{0}K^{-}, K_{1}^{'+} \to \pi^{+}K^{*}, K^{*} \to \pi^{-}K^{+}$ | $\pi^0\pi^+\pi^-K^+K^-$ | 14772 | 2 | 88662 |
| 6227 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14779 | 2 | 88664 |
| 6228 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 6604 | 2 | 88666 |
| 6229 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \omega K^+, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14795 | 2 | 88668 |
| 6230 | $J/\psi \to K_1^- K_1^{'+}, K_1^- \to \rho^- \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 14803 | 2 | 88670 |
| 6231 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 14819 | 2 | 88672 |
| 6232 | $J/\psi \rightarrow \rho^0 \rho^0 \omega, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 14824 | 2 | 88674 |
| 6233 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 14829 | 2 | 88676 |
| 6234 | $J/\psi \to \pi^0 \rho^+ n \bar{\Delta}^+, \rho^+ \to \pi^0 \pi^+, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 821 | 2 | 88678 |
| 6235 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^0K^0\bar{K}^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0, K^0 \to K_L^0, K^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^-K^+$ | 14858 | 2 | 88680 |
| 6236 | $J/\psi \to \rho^- K^+ \bar{K}_0^{*0}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 14863 | 2 | 88682 |
| 6237 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14868 | 2 | 88684 |
| 6238 | $J/\psi \to K^+K^{*-}a^0_0, K^{*-} \to \pi^-\bar{K}^0, a^0_0 \to \pi^0\eta, \bar{K}^0 \to K^0_S, \eta \to \pi^0\pi^+\pi^-, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14891 | 2 | 88686 |
| 6239 | $J/\psi \to \rho^+ n \bar{\Delta}^+, \rho^+ \to \pi^0 \pi^+, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 14893 | 2 | 88688 |
| 6240 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^0 \eta, a_2^- \to \rho^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14906 | 2 | 88690 |
| 6241 | $J/\psi 	o \eta \omega \eta', \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14942 | 2 | 88692 |
| 6242 | $J/\psi \to \pi^+ \eta b_1^-, \eta \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 14945 | 2 | 88694 |
| 6243 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+\Lambda, \bar{\Sigma}^{*-} \to \pi^0\bar{\Sigma}^-, \Lambda \to \pi^0 n, \bar{\Sigma}^- \to \pi^-\bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 14963 | 2 | 88696 |
| 6244 | $J/\psi \to \pi^- \bar{K}^* K^+ \phi, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 14967 | 2 | 88698 |
| 6245 | $J/\psi \to \phi f_0(1370), \phi \to K_L^0 K_S^0, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14972 | 2 | 88700 |
| 6246 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14978 | 2 | 88702 |
| 6247 | $J/\psi \to \pi^0 a_0^- b_1^+, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 6607 | 2 | 88704 |
| 6248 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 15007 | 2 | 88706 |
| 6249 | $J/\psi 	o \pi^0 ar{K}^* n ar{\Lambda}, ar{K}^* 	o \pi^+ K^-, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+\pi^+K^-n\bar{p}$ | 15009 | 2 | 88708 |
| 6250 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15011 | 2 | 88710 |
| 6251 | $J/\psi \to \pi^+\pi^-a_0^0\gamma^f, a_0^0 \to \pi^0\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 15016 | 2 | 88712 |
| 6252 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4610 | 2 | 88714 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6253 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15027 | 2 | 88716 |
| 6254 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \bar{K}^0 K^+, h_1(1170) \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15047 | 2 | 88718 |
| 6255 | $J/\psi \to \rho^0 K^+ K_1^-, \rho^0 \to \pi^+ \pi^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15056 | 2 | 88720 |
| 6256 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 15059 | 2 | 88722 |
| 6257 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_0(1710) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15071 | 2 | 88724 |
| 6258 | $J/\psi \to \eta b_1^0 a_1^0, \eta \to \gamma \gamma, b_1^0 \to \pi^0 \omega, a_1^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 2320 | 2 | 88726 |
| 6259 | $J/\psi 	o ho^0 \pi^+ K^- K_1^0, ho^0 	o \pi^+ \pi^-, K_1^0 	o \pi^0 K_0^0, K_0^0 	o \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15081 | 2 | 88728 |
| 6260 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \pi^+\pi^-\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 15105 | 2 | 88730 |
| 6261 | $J/\psi 	o ho^0 \pi^+ a_2^- \gamma^F, ho^0 	o \pi^+ \pi^-, a_2^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 15119 | 2 | 88732 |
| 6262 | $J/\psi 	o a_2^- ar{K}^* K^+, a_2^- 	o \pi^0 ho^-, ar{K}^* 	o \pi^0 ar{K}^0, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15124 | 2 | 88734 |
| 6263 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^0\pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15149 | 2 | 88736 |
| 6264 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \phi, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K^0 \to K_L^0$ | $K^0_L K^0_L \pi^+ \pi^- K^+ K^-$ | 15151 | 2 | 88738 |
| 6265 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-$ | 15160 | 2 | 88740 |
| 6266 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 15169 | 2 | 88742 |
| 6267 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 15172 | 2 | 88744 |
| 6268 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6614 | 2 | 88746 |
| 6269 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 15183 | 2 | 88748 |
| 6270 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 15211 | 2 | 88750 |
| 6271 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15218 | 2 | 88752 |
| 6272 | $J/\psi ightarrow \eta' \phi, \eta' ightarrow \pi^+ \pi^- \eta, \phi ightarrow K_L^0 K_S^0, \eta ightarrow \gamma \gamma, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma$ | 15242 | 2 | 88754 |
| 6273 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 15266 | 2 | 88756 |
| 6274 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6616 | 2 | 88758 |
| 6275 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0,$ | $K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 6620 | 2 | 88760 |
| 6276 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15290 | 2 | 88762 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6277 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-K^+K^-\gamma$ | 15301 | 2 | 88764 |
| 6278 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 15308 | 2 | 88766 |
| 6279 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \omega \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15321 | 2 | 88768 |
| 6280 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 15324 | 2 | 88770 |
| 6281 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ K^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 15334 | 2 | 88772 |
| 6282 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_1^0 \to \pi^- \rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 15357 | 2 | 88774 |
| 6283 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to K^0\bar{K}^*, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 15371 | 2 | 88776 |
| 6284 | $J/\psi 	o ho^+ K^- K^0_0, ho^+ 	o \pi^0 \pi^+, K^0_0 	o \pi^0 K^0, K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 15375 | 2 | 88778 |
| 6285 | $J/\psi 	o ar K^0 \Delta^0 ar \Lambda, ar K^0 	o K^0_S, \Delta^0 	o \pi^0 n, ar \Lambda 	o \pi^+ ar p, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 15380 | 2 | 88780 |
| 6286 | $J/\psi 	o \pi^- ar{\Sigma}^{*+} \Lambda, ar{\Sigma}^{*+} 	o \pi^+ ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 15430 | 2 | 88782 |
| 6287 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^-K^+, a_0^+ \to \bar{K}^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 15431 | 2 | 88784 |
| 6288 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to \pi^0\pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\gamma$ | 15433 | 2 | 88786 |
| 6289 | $J/\psi ightarrow ho^0 \omega \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4614 | 2 | 88788 |
| 6290 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15444 | 2 | 88790 |
| 6291 | $J/\psi \to \pi^0 \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 15451 | 2 | 88792 |
| 6292 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15457 | 2 | 88794 |
| 6293 | $J/\psi ightarrow \eta' \phi, \eta' ightarrow \pi^+ \pi^- \eta, \phi ightarrow K^+ K^-, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15475 | 2 | 88796 |
| 6294 | $J/\psi \to \omega K^- K_1^{'+}, \omega \to \pi^0 \pi^+ \pi^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2322 | 2 | 88798 |
| 6295 | $J/\psi \to K^+K^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 15512 | 2 | 88800 |
| 6296 | $J/\psi ightarrow \omega a_0^0, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15513 | 2 | 88802 |
| 6297 | $J/\psi \to \pi^0 K^- K^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma^{F}$ | 15528 | 2 | 88804 |
| 6298 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 15562 | 2 | 88806 |
| 6299 | $J/\psi 	o \omega f_0(1370), \omega 	o \pi^0 \gamma, f_0(1370) 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma$ | 2785 | 2 | 88808 |
| 6300 | $J/\psi 	o K^{0} ar{K}^{0} f_{2}^{'}, K^{0} 	o K_{S}^{0}, ar{K}^{0} 	o K_{S}^{0}, f_{2}^{'} 	o \eta \eta, K_{S}^{0} 	o \pi^{+} \pi^{-}, K_{S}^{0} 	o \pi^{+} \pi^{-}, \eta 	o \pi^{0} \pi^{0} \pi^{0}, \eta 	o \pi^{0} \pi^{+} \pi^{-}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15572 | 2 | 88810 |
| 6301 | $J/\psi \to ho^+ \omega K^0 K^{*-}, ho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15574 | 2 | 88812 |
| 6302 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 15579 | 2 | 88814 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 6303 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to \eta\eta, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 15587 | 2 | 88816 |
| 6304 | $J/\psi \to \pi^+ K^- K^0_1, K^0_1 \to \pi^0 K^0_0, K^0_0 \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6625 | 2 | 88818 |
| 6305 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 15614 | 2 | 88820 |
| 6306 | $J/\psi \to K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 15616 | 2 | 88822 |
| 6307 | $J/\psi \to \pi^0 K^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-$ | 15620 | 2 | 88824 |
| 6308 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15622 | 2 | 88826 |
| 6309 | $J/\psi 	o K^{*+} ar p \Lambda, K^{*+} 	o \pi^+ K^0, \Lambda 	o \pi^0 n, K^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 15625 | 2 | 88828 |
| 6310 | $J/\psi \to ho^0 \bar{\Lambda} \Sigma^0, ho^0 \to \pi^+ \pi^-, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 15647 | 2 | 88830 |
| 6311 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15660 | 2 | 88832 |
| 6312 | $J/\psi \to a_2^+b_1^-, a_2^+ \to \pi^+\eta, b_1^- \to \pi^-\omega, \eta \to \gamma\gamma, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 15677 | 2 | 88834 |
| 6313 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 1951 | 2 | 88836 |
| 6314 | $J/\psi 	o K^+K^-\eta', \eta' 	o \pi^0\pi^0\eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 15732 | 2 | 88838 |
| 6315 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 15782 | 2 | 88840 |
| 6316 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^+ \pi^-, \phi \to K^+ K^-, f_0(980) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 15847 | 2 | 88842 |
| 6317 | $J/\psi \to K^0 \bar{K}^* K^+ K^{*-}, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 15856 | 2 | 88844 |
| 6318 | $J/\psi \to ho^0 \pi^+ a_2^- \gamma^F, ho^0 \to \pi^+ \pi^-, a_2^- \to \pi^0 \rho^-, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15863 | 2 | 88846 |
| 6319 | $J/\psi 	o \pi^0 \pi^+ a^0_0 b^1, a^0_0 	o \pi^0 \eta, b^1 	o \pi^- \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15865 | 2 | 88848 |
| 6320 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15868 | 2 | 88850 |
| 6321 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15883 | 2 | 88852 |
| 6322 | $J/\psi \to \pi^- K^+ \bar{K}_1^{'0}, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15904 | 2 | 88854 |
| 6323 | $J/\psi \to K^+K^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 15909 | 2 | 88856 |
| 6324 | $J/\psi \to \pi^0 \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15918 | 2 | 88858 |
| 6325 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^0 K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 15939 | 2 | 88860 |
| 6326 | $J/\psi \to \eta_c \gamma, \eta_c \to K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 15953 | 2 | 88862 |
| 6327 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 15969 | 2 | 88864 |
| 6328 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \omega \bar{K}^0, \omega \to \pi^0\pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 15970 | 2 | 88866 |
| 6329 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 15973 | 2 | 88868 |
| 6330 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15981 | 2 | 88870 |
| 6331 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 15994 | 2 | 88872 |
| 6332 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K^0_L K^0_L K^0_L \pi^+ K^-$ | 16003 | 2 | 88874 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6333 | $J/\psi \to \omega \bar{K}^0 K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16011 | 2 | 88876 |
| 6334 | $J/\psi \to \eta_c \gamma, \eta_c \to \Delta^{++} \bar{\Delta}^{++}, \Delta^{++} \to \pi^+ p, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^-par p\gamma$ | 16021 | 2 | 88878 |
| 6335 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 16116 | 2 | 88880 |
| 6336 | $J/\psi ightarrow \pi^+ ho^- \omega \gamma^F, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 16120 | 2 | 88882 |
| 6337 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 16195 | 2 | 88884 |
| 6338 | $J/\psi ightarrow f_{2}^{'}\gamma, f_{2}^{'} ightarrow \eta\eta, \eta ightarrow \pi^{0}\pi^{+}\pi^{-}, \eta ightarrow \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16205 | 2 | 88886 |
| 6339 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K_0^0 \to K_0^0, K_0^S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16218 | 2 | 88888 |
| 6340 | $I/v \rightarrow n \sim n \rightarrow n\bar{n} f_0(1370) f_0(1370) \rightarrow \pi^+\pi^-$ | $\pi^+\pi^-par p\gamma$ | 6630 | 2 | 88890 |
| 6341 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \rho^+ K^-, \eta \to \gamma \gamma, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma$ | 16223 | 2 | 88892 |
| 6342 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^+\pi^-K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16227 | 2 | 88894 |
| 6343 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16237 | 2 | 88896 |
| 6344 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-\gamma^f, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16265 | 2 | 88898 |
| 6345 | $J/\psi \to \pi^0 \pi^+ \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16292 | 2 | 88900 |
| 6346 | $J/\psi \to \eta K^+ \bar{K}_1^{'-}, \eta \to \gamma \gamma, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 16312 | 2 | 88902 |
| 6347 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^+K_0^0, K_0^0 \to \pi^-K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 16341 | 2 | 88904 |
| 6348 | $J/\psi \to \pi^0\pi^-\rho^+\gamma^f, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 16353 | 2 | 88906 |
| 6349 | $J/\psi \to \eta \omega f_0(1370), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 16360 | 2 | 88908 |
| 6350 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^+K_0^0, K_0^0 \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 16391 | 2 | 88910 |
| 6351 | $J/\psi \to K^{*-}K_0^{*+}\gamma, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-\gamma$ | 16426 | 2 | 88912 |
| 6352 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16428 | 2 | 88914 |
| 6353 | $J/\psi \to \pi^- \rho^+ \eta \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16504 | 2 | 88916 |
| 6354 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^{+}\Sigma^{0}, \bar{\Sigma}^{*-} \to \pi^{-}\bar{\Lambda}, \Sigma^{0} \to \Lambda\gamma, \bar{\Lambda} \to \pi^{+}\bar{p}, \\ \Lambda \to \pi^{0}n$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}\gamma$ | 16509 | 2 | 88918 |
| 6355 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6633 | 2 | 88920 |
| 6356 | $J/\psi \to \rho^- f_2(1270) a_0^+, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 16550 | 2 | 88922 |
| 6357 | $J/\psi \to \phi\phi\gamma, \phi \to K_L^0 K_S^0, \phi \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 16580 | 2 | 88924 |
| 6358 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0 \gamma^f, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 16640 | 2 | 88926 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6359 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16655 | 2 | 88928 |
| 6360 | $J/\psi \to ho^0 \eta a_1^0, ho^0 \to \pi^+\pi^-, \eta \to \pi^0\pi^+\pi^-, a_1^0 \to \pi^-\rho^+, ho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16682 | 2 | 88930 |
| 6361 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 16707 | 2 | 88932 |
| 6362 | $J/\psi \to \pi^0 K^- K^{*+} \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma^F$ | 16714 | 2 | 88934 |
| 6363 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \pi^- \eta, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 16770 | 2 | 88936 |
| 6364 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 16968 | 2 | 88938 |
| 6365 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17090 | 2 | 88940 |
| 6366 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17204 | 2 | 88942 |
| 6367 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6366 | 1 | 88943 |
| 6368 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}_1^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6367 | 1 | 88944 |
| 6369 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6368 | 1 | 88945 |
| 6370 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow a_2^0 \pi^+ ho^-, a_2^0 ightarrow \pi^0 \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 6369 | 1 | 88946 |
| 6371 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+ \gamma^f, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma^f$ | 6370 | 1 | 88947 |
| 6372 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^+ \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6371 | 1 | 88948 |
| 6373 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 6372 | 1 | 88949 |
| 6374 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-$ | 6373 | 1 | 88950 |
| 6375 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \omega \bar{K}^0, K^0 \to K^0_S, \\ \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1563 | 1 | 88951 |
| 6376 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 3950 | 1 | 88952 |
| 6377 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 644 | 1 | 88953 |
| 6378 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \eta' \to \pi^+\pi^-\eta, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^-$ | 6377 | 1 | 88954 |
| 6379 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6378 | 1 | 88955 |
| 6380 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \pi^+ \pi^- K^{*+}, \phi \to K^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 6379 | 1 | 88956 |
| 6381 | $J/\psi \to \eta b_1^0 f_1(1285), \eta \to \gamma \gamma, b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 1565 | 1 | 88957 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6382 | $J/\psi \to a_2^- \eta b_1^+, a_2^- \to \pi^0 \rho^-, \eta \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6381 | 1 | 88958 |
| 6383 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+\pi^-, a_2^0 ightarrow \pi^0 \eta, \pi^0 ightarrow e^+e^-\gamma^F, \eta ightarrow \gamma \gamma$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma$ | 3953 | 1 | 88959 |
| 6384 | $J/\psi ightarrow \omega b_1^0 \gamma, \omega ightarrow \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6383 | 1 | 88960 |
| 6385 | $J/\psi \to \pi^- \omega \bar{K}^0 K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6384 | 1 | 88961 |
| 6386 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 3954 | 1 | 88962 |
| 6387 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^0K^-, K_1^{'+} \to \pi^0K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 6386 | 1 | 88963 |
| 6388 | $J/\psi \to \pi^- \bar{K}^* K^+ \phi, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6387 | 1 | 88964 |
| 6389 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-b_1^0, b_1^0 	o \pi^0\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3955 | 1 | 88965 |
| 6390 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^0K^0, a_0^+ \to \pi^+\eta, K^0 \to K_L^0, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^F$ | 6389 | 1 | 88966 |
| 6391 | $J/\psi 	o K^- p ar{\Sigma}^{*0}, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, \pi^0 	o e^+ e^- \gamma^F, ar{\Lambda} 	o \pi^0 ar{n}$ | $e^+e^-\pi^0K^-ar{n}p\gamma^F$ | 6390 | 1 | 88967 |
| 6392 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 6391 | 1 | 88968 |
| 6393 | $J/\psi ightarrow \pi^0 ho^0 \eta', ho^0 ightarrow \pi^+ \pi^- \gamma^F, \eta' ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 782 | 1 | 88969 |
| 6394 | $J/\psi 	o \pi^0\pi^0\pi^+\pi^-\Lambdaar{\Sigma}^0, \Lambda 	o \pi^-p, ar{\Sigma}^0 	o ar{\Lambda}\gamma, ar{\Lambda} 	o \pi^+ar{p}$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}par{p}\gamma$ | 6393 | 1 | 88970 |
| 6395 | $J/\psi \to \eta f_0(1370)\gamma, \eta \to \pi^0\pi^+\pi^-, f_0(1370) \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 2035 | 1 | 88971 |
| 6396 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^0 K^*, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 783 | 1 | 88972 |
| 6397 | $J/\psi \to \pi^0 \rho^0 \pi^+ K^- K_1^{'0}, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 6396 | 1 | 88973 |
| 6398 | $J/\psi \to K^0 \phi \bar{K}_1^0, K^0 \to K_S^0, \phi \to K^+ K^-, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^- \gamma^f, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 2754 | 1 | 88974 |
| 6399 | $J/\psi \to \pi^0 K^* \bar{K}_1^{'0} \gamma, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 6398 | 1 | 88975 |
| 6400 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma$ | 6399 | 1 | 88976 |
| 6401 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 6400 | 1 | 88977 |
| 6402 | $J/\psi \to \phi f_0(1710), \phi \to \pi^+ \rho^-, f_0(1710) \to K^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2755 | 1 | 88978 |
| 6403 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \pi^- \omega, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 3961 | 1 | 88979 |
| 6404 | $J/\psi \to \pi^+ K^0 K^{*-} \phi, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, K^0_S \to \pi^0 \pi^0, \\ \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6403 | 1 | 88980 |
| 6405 | $J/\psi \to f_2(1270)K^+K_1^-, f_2(1270) \to \pi^+\pi^-, K_1^- \to \pi^0K_0^{*-}, K_0^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6404 | 1 | 88981 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6406 | $J/\psi \to K_0^{*-}K_1^{'+}, K_0^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_S^0, \pi^0 \to e^+e^-\gamma^F, K_S^0 \to \pi^+\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 6405 | 1 | 88982 |
| 6407 | $J/\psi \to K^+ K_2^{*-} h_1(1170), K_2^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3962 | 1 | 88983 |
| 6408 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \rho^- \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 6407 | 1 | 88984 |
| 6409 | $J/\psi \to \rho^0 \omega f_0(1370) \gamma, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 6408 | 1 | 88985 |
| 6410 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 314 | 1 | 88986 |
| 6411 | $J/\psi 	o \eta K^+K^{*-}, \eta 	o \gamma \gamma, K^{*-} 	o K^- \gamma$ | $K^+K^-\gamma\gamma\gamma$ | 6410 | 1 | 88987 |
| 6412 | $J/\psi \to \pi^+\pi^+\pi^-K_2^{*0}K^{*-}, K_2^{*0} \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 6411 | 1 | 88988 |
| 6413 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ar K^0 n ar \Lambda, ar K^0 	o K^0_S, ar \Lambda 	o \pi^0 ar n, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 6412 | 1 | 88989 |
| 6414 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6413 | 1 | 88990 |
| 6415 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^0 \pi^- \omega, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 6414 | 1 | 88991 |
| 6416 | $J/\psi ightarrow \pi^0 \eta K^- K^{*+}, \eta ightarrow \gamma \gamma, K^{*+} ightarrow \pi^+ K^0, K^0 ightarrow K^0_L$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 6415 | 1 | 88992 |
| 6417 | $J/\psi 	o \eta \omega \eta', \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 3964 | 1 | 88993 |
| 6418 | $J/\psi ightarrow \pi^- \eta ar{K}^* K^+, \eta ightarrow \pi^0 \pi^+ \pi^-, ar{K}^* ightarrow \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6417 | 1 | 88994 |
| 6419 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6418 | 1 | 88995 |
| 6420 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^+ K^{*-}, K^0_S \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6419 | 1 | 88996 |
| 6421 | $J/\psi \to \pi^- \bar{K}^* K^{*+} a_1^0, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6420 | 1 | 88997 |
| 6422 | $J/\psi 	o ar{K}^0 K_1^0, ar{K}^0 	o K_S^0, K_1^0 	o \pi^0 K_0^0, K_S^0 	o \pi^0 \pi^0, K_0^0 	o \pi^0 K^0, K_L^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L$ | 6421 | 1 | 88998 |
| 6423 | $J/\psi \to K^- f_0(1370) K_1^+, f_0(1370) \to \pi^0 \pi^0, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 6422 | 1 | 88999 |
| 6424 | $J/\psi \rightarrow \pi^0 \rho^0 \rho^+ \rho^-, \rho^0 \rightarrow \pi^+ \pi^-, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^- \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1233 | 1 | 89000 |
| 6425 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6424 | 1 | 89001 |
| 6426 | $J/\psi \to \pi^0 K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \bar{K}^*, K_1^0 \to \pi^- K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3966 | 1 | 89002 |
| 6427 | $J/\psi \to \rho^+ a_2^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, f_0(1370) \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 785 | 1 | 89003 |
| 6428 | $J/\psi 	o K^+ b_1^0 K_0^{*-}, b_1^0 	o \pi^0 \omega, K_0^{*-} 	o \pi^- ar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 3968 | 1 | 89004 |
| 6429 | $J/\psi \to \pi^+\pi^-\rho^+K^0\bar{K}_1^{'-}, \rho^+ \to \pi^0\pi^+, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^-\bar{K}^*, K_S^0 \to \pi^+\pi^-, \bar{K}^* \to \pi^+K^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 6428 | 1 | 89005 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 6430 | $J/\psi \to \pi^0 \pi^+ K^0 K^{*-} h_1(1170), \pi^0 \to e^+ e^- \gamma^F, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 6429 | 1 | 89006 |
| 6431 | $J/\psi \to \bar{K}^0 b_1^- K_0^{*+}, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6430 | 1 | 89007 |
| 6432 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0\pi^0K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 6431 | 1 | 89008 |
| 6433 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^+\pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 3969 | 1 | 89009 |
| 6434 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 2040 | 1 | 89010 |
| 6435 | $J/\psi \to \pi^- \rho^+ K^{*+} K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 6434 | 1 | 89011 |
| 6436 | $J/\psi ightarrow \pi^0 \eta b_1^0, \eta ightarrow \pi^0 \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6435 | 1 | 89012 |
| 6437 | $J/\psi \to \pi^0 \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6436 | 1 | 89013 |
| 6438 | $J/\psi \to \pi^0 \rho^0 \rho^+ b_1^-, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 6437 | 1 | 89014 |
| 6439 | $J/\psi \to \pi^0 \pi^0 \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^+ \pi^-, \\ \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6438 | 1 | 89015 |
| 6440 | $J/\psi \to \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^- \gamma^f, f_2(1270) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6439 | 1 | 89016 |
| 6441 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^{'+}, \bar{K}_1^0 \to \rho^+ K^-, K_1^{'+} \to \pi^+ K^*, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3971 | 1 | 89017 |
| 6442 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 2041 | 1 | 89018 |
| 6443 | $J/\psi \to K_2^{*0} K^+ a_0^-, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, a_0^- \to \pi^- \eta, \bar{K}^* \to \pi^+ K^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 2042 | 1 | 89019 |
| 6444 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \omega K^{*+} K^{*-}, \omega ightarrow \pi^0 \gamma, K^{*+} ightarrow \pi^+ K^0, K^{*-} ightarrow \pi^- ar{K}^0, K^0 ightarrow K^0_L, ar{K}^0 ightarrow K^0_S, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 6443 | 1 | 89020 |
| 6445 | $J/\psi \to \eta \omega f_1(1285), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 6444 | 1 | 89021 |
| 6446 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0 K^+ K^-$ | $\pi^0 K^+ K^- \gamma$ | 6445 | 1 | 89022 |
| 6447 | $J/\psi \to K^0 \bar{K}^0 \bar{K}^0 K_1^{'0}, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_1^{'0} \to \rho^- K^+, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^- \pi^- K^+$ | 1235 | 1 | 89023 |
| 6448 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 3975 | 1 | 89024 |
| 6449 | $J/\psi \to K^-K^{*+}f_1(1285), K^{*+} \to \pi^0K^+, f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 107 | 1 | 89025 |
| 6450 | $J/\psi \to a_2^0 f_0(1370), a_2^0 \to \pi^+ \rho^-, f_0(1370) \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6449 | 1 | 89026 |
| 6451 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \eta a_1^0, \eta ightarrow \gamma \gamma, a_1^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 6450 | 1 | 89027 |
| 6452 | $J/\psi \to \pi^0 f_1(1285)\gamma, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 6451 | 1 | 89028 |
| 6453 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \rho^0 \pi^+ \pi^-, \omega \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6452 | 1 | 89029 |
| 6454 | $J/\psi \to \pi^0 \pi^- a_2^+ \gamma^f, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 982 | 1 | 89030 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 6455 | $J/\psi \to K^{*+} \bar{p} \Sigma^{0}, K^{*+} \to \pi^{+} K^{0}, \Sigma^{0} \to \Lambda \gamma, K^{0} \to K_{L}^{0}, \Lambda \to \pi^{-} p$ | $K_L^0\pi^+\pi^-par p\gamma$ | 3978 | 1 | 89031 |
| 6456 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^-K^+\gamma^f, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma^f$ | 6455 | 1 | 89032 |
| 6457 | $J/\psi \to ho^0 \omega \omega, ho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f\gamma^f$ | 2046 | 1 | 89033 |
| 6458 | $J/\psi 	o K^+K^-b_1^0, b_1^0 	o \pi^0\omega, \omega 	o \pi^0\gamma$ | $\pi^0\pi^0K^+K^-\gamma$ | 6457 | 1 | 89034 |
| 6459 | $J/\psi \to \pi^-\pi^-\rho^+\bar{K}^*K^+, \rho^+ \to \pi^0\pi^+, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6458 | 1 | 89035 |
| 6460 | $J/\psi \to \pi^+\pi^-\rho^+a_2^-\omega, \rho^+ \to \pi^0\pi^+, a_2^- \to \pi^0\rho^-, \omega \to \pi^0\pi^+\pi^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6459 | 1 | 89036 |
| 6461 | $J/\psi \to \pi^+ K^0 K^- f_0(1370), K^0 \to K_L^0, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 6460 | 1 | 89037 |
| 6462 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 6461 | 1 | 89038 |
| 6463 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^0 K^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 6462 | 1 | 89039 |
| 6464 | $J/\psi \to \pi^{0} a_{2}^{0} \eta K^{0} \bar{K}^{0}, a_{2}^{0} \to \pi^{0} \eta, \eta \to \pi^{0} \pi^{+} \pi^{-}, K^{0} \to K_{L}^{0}, \bar{K}^{0} \to K_{S}^{0}, \\ \eta \to \pi^{0} \pi^{+} \pi^{-}, K_{S}^{0} \to \pi^{+} \pi^{-}$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3980 | 1 | 89040 |
| 6465 | $J/\psi 	o ho^0 ho^0 \pi^+ a_2^-, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, a_2^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 3981 | 1 | 89041 |
| 6466 | $J/\psi \to \pi^- b_1^+, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 6465 | 1 | 89042 |
| 6467 | $J/\psi \to a_0^- b_1^+ f_0(1370), a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, f_0(1370) \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 6466 | 1 | 89043 |
| 6468 | $J/\psi ightarrow \pi^+ ho^- \eta^\prime, ho^- ightarrow \pi^0 \pi^-, \eta^\prime ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 6467 | 1 | 89044 |
| 6469 | $J/\psi \to K^0 \eta' \bar{K}_0^{*0}, K^0 \to K_L^0, \eta' \to \pi^0 \pi^0 \eta, \bar{K}_0^{*0} \to \pi^+ K^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma$ | 6468 | 1 | 89045 |
| 6470 | $J/\psi \to K^+ K_1^- a_1^0, K_1^- \to \pi^+ \pi^- K^-, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6469 | 1 | 89046 |
| 6471 | $J/\psi \to \rho^0 \pi^+ K^* K^{*-}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6470 | 1 | 89047 |
| 6472 | $J/\psi \to \bar{\Sigma}^0 \Sigma^{*0}, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \Sigma^{*0} \to \pi^- \Sigma^+, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^+ \to \pi^+ n$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 3982 | 1 | 89048 |
| 6473 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \gamma \gamma, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 6472 | 1 | 89049 |
| 6474 | $J/\psi \to \pi^0 \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 787 | 1 | 89050 |
| 6475 | $J/\psi \to \eta f_0(1710)\gamma, \eta \to \pi^0 \pi^0 \pi^0, f_0(1710) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6474 | 1 | 89051 |
| 6476 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to \pi^-\bar{K}^0, f_1(1285) \to \pi^0\pi^0\rho^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6475 | 1 | 89052 |
| 6477 | $J/\psi \to \Lambda \bar{\Lambda} \gamma, \Lambda \to e^- \bar{\nu}_e p, \bar{\Lambda} \to \pi^+ \bar{p}$ | $e^-ar{ u}_e\pi^+par{p}\gamma$ | 6476 | 1 | 89053 |
| 6478 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^0 \eta, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 6477 | 1 | 89054 |
| 6479 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \\ \pi^0 \to e^+ e^- \gamma^F \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 6478 | 1 | 89055 |
| 6480 | $J/\psi \to \pi^0 p\bar{p} f_0(1370), f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 6479 | 1 | 89056 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6481 | $J/\psi 	o \eta ar K^0 K^0_1, \eta 	o \gamma \gamma, ar K^0 	o K^0_L, K^0_1 	o \omega K^0, \omega 	o \pi^0 \pi^+ \pi^-, \ K^0 	o K^0_L$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 6480 | 1 | 89057 |
| 6482 | $J/\psi \to \pi^+\pi^-a^0_0, a^0_0 \to \pi^0\eta, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 6481 | 1 | 89058 |
| 6483 | $J/\psi \to \rho^0 K^* \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 6482 | 1 | 89059 |
| 6484 | $J/\psi \to \bar{K}^*K_2^0, \bar{K}^* \to \pi^0\bar{K}^0, K_2^0 \to \pi^0K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^-K^+\gamma^f$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 2767 | 1 | 89060 |
| 6485 | $J/\psi \to \bar{K}^* \phi K_0^0, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^- \rho^+, K_0^0 \to \pi^0 K^0, \rho^+ \to \pi^0 \pi^+, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 3985 | 1 | 89061 |
| 6486 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 788 | 1 | 89062 |
| 6487 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6486 | 1 | 89063 |
| 6488 | $J/\psi \to \eta K^{*+} \bar{K}_{1}^{'-}, \eta \to \pi^{0} \pi^{+} \pi^{-}, K^{*+} \to \pi^{0} K^{+}, \bar{K}_{1}^{'-} \to \pi^{0} K^{*-}, K^{*-} \to \pi^{0} K^{-}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2049 | 1 | 89064 |
| 6489 | $J/\psi \to f_1(1510)\gamma$, $f_1(1510) \to K^-K^{*+}$, $K^{*+} \to \pi^+K^0$, $K^0 \to K^0_S$, $K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma$ | 6488 | 1 | 89065 |
| 6490 | $J/\psi \to \pi^+ \rho^+ a_2^- b_1^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, b_1^- \to \pi^- \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2770 | 1 | 89066 |
| 6491 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \phi, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}$ | 2771 | 1 | 89067 |
| 6492 | $J/\psi \to K^+K^{*-}f_2^{'}, K^{*-} \to \pi^-\bar{K}^0, f_2^{'} \to K^+K^-\gamma^f, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+K^+K^-\gamma^f$ | 647 | 1 | 89068 |
| 6493 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^+\pi^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 2773 | 1 | 89069 |
| 6494 | $J/\psi \to \eta \eta h_1(1170), \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3992 | 1 | 89070 |
| 6495 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to \pi^+\rho^-, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 3993 | 1 | 89071 |
| 6496 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2774 | 1 | 89072 |
| 6497 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^+ \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 6496 | 1 | 89073 |
| 6498 | $J/\psi \to \pi^+ K_1^0 \bar{K}_1^{'-}, K_1^0 \to \rho^0 K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6497 | 1 | 89074 |
| 6499 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6498 | 1 | 89075 |
| 6500 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^- \rho^+, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6499 | 1 | 89076 |
| 6501 | $J/\psi \to \eta K^- K_1^{'+}, \eta \to \pi^0 \pi^0 \pi^0, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3995 | 1 | 89077 |
| 6502 | $J/\psi \to \pi^- K^0 \bar{K}^* a_1^+, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 6501 | 1 | 89078 |
| 6503 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3996 | 1 | 89079 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 6504 | $J/\psi \to \bar{K}^0 K^* \phi \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 2775 | 1 | 89080 |
| 6505 | $J/\psi \rightarrow \pi^+ \eta \omega a_0^-, \eta \rightarrow \pi^0 \pi^+ \pi^-, \omega \rightarrow \pi^0 \gamma, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6504 | 1 | 89081 |
| 6506 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0K_L^0\pi^-K^+$ | 6505 | 1 | 89082 |
| 6507 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \rho^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 986 | 1 | 89083 |
| 6508 | $J/\psi \to K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3999 | 1 | 89084 |
| 6509 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^+ \rho^-, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6508 | 1 | 89085 |
| 6510 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}_0^{*0} \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 6509 | 1 | 89086 |
| 6511 | $J/\psi \to \bar{K}^0 \eta' K_1^0, \bar{K}^0 \to K_L^0, \eta' \to \pi^+ \pi^- \eta, K_1^0 \to \pi^0 K_0^0, \eta \to \gamma \gamma, K_0^0 \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 6510 | 1 | 89087 |
| 6512 | $J/\psi \to \bar{\Xi}^+\Xi^-, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^- \to \pi^-\Lambda, \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to n\gamma$ | $\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 2777 | 1 | 89088 |
| 6513 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 \pi^- a_0^+, a_2^0 \to \pi^- \rho^+, a_0^+ \to \pi^+ \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6512 | 1 | 89089 |
| 6514 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6513 | 1 | 89090 |
| 6515 | $J/\psi \to \rho^0 \omega \gamma, \rho^0 \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 2778 | 1 | 89091 |
| 6516 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^+ \pi^- \omega, K^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 790 | 1 | 89092 |
| 6517 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 6516 | 1 | 89093 |
| 6518 | $J/\psi \to \pi^- K^+ \bar{K}_1^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6517 | 1 | 89094 |
| 6519 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^- K^+$ | 6518 | 1 | 89095 |
| 6520 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6519 | 1 | 89096 |
| 6521 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 6520 | 1 | 89097 |
| 6522 | $J/\psi \to \rho^- K_2^{*0} K^{*+}, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6521 | 1 | 89098 |
| 6523 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 6522 | 1 | 89099 |
| 6524 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^0 \pi^+ \omega, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 6523 | 1 | 89100 |
| 6525 | $J/\psi 	o \pi^- \eta ar{n} p, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-ar{n}p$ | 2053 | 1 | 89101 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6526 | $J/\psi \to \rho^+ K^0 K^{*-} \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 2054 | 1 | 89102 |
| 6527 | $J/\psi \rightarrow \pi^+ \eta \eta b_1^-, \eta \rightarrow \pi^0 \pi^+ \pi^-, \eta \rightarrow \pi^+ \pi^- \gamma^F, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 4005 | 1 | 89103 |
| 6528 | $J/\psi \to \pi^0 \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 6527 | 1 | 89104 |
| 6529 | $J/\psi \rightarrow \eta_c \gamma, \eta_c \rightarrow \pi^+ \pi^- \eta', \eta' \rightarrow \pi^0 \pi^0 \eta, \eta \rightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 791 | 1 | 89105 |
| 6530 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 6529 | 1 | 89106 |
| 6531 | $J/\psi \to \pi^0 \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^F, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 6530 | 1 | 89107 |
| 6532 | $J/\psi \to \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 4007 | 1 | 89108 |
| 6533 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to e^+ e^- \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 6532 | 1 | 89109 |
| 6534 | $J/\psi \to K_2^{*+}K_1^-, K_2^{*+} \to \pi^+K^*, K_1^- \to \omega K^-, K^* \to \pi^0 K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6533 | 1 | 89110 |
| 6535 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 4008 | 1 | 89111 |
| 6536 | $J/\psi \to \pi^0\pi^+a_2^-a_1^0, a_2^- \to \rho^0\pi^-, a_1^0 \to \pi^-\rho^+, \rho^0 \to \pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4009 | 1 | 89112 |
| 6537 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6536 | 1 | 89113 |
| 6538 | $J/\psi \to a_2^0 \pi^- a_1^+, a_2^0 \to K_S^0 K_S^0, a_1^+ \to \rho^0 \pi^+, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 6537 | 1 | 89114 |
| 6539 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^0 \rho^0, K^0_S \to \pi^+ \pi^-, \ \bar{K}^0 \to K^0_L, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6538 | 1 | 89115 |
| 6540 | $J/\psi ightarrow ho^- ar{K}^* K^+, ho^- ightarrow \pi^0 \pi^- \gamma^f, ar{K}^* ightarrow \pi^0 ar{K}^0, ar{K}^0 ightarrow K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 1580 | 1 | 89116 |
| 6541 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6540 | 1 | 89117 |
| 6542 | $J/\psi \to \pi^{-} \bar{K}_{1}^{0} K_{1}^{'+}, \bar{K}_{1}^{0} \to \rho^{+} K^{-}, K_{1}^{'+} \to \pi^{0} K^{*+}, \rho^{+} \to \pi^{0} \pi^{+}, K^{*+} \to \pi^{+} K^{0}, K^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{+} \pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1581 | 1 | 89118 |
| 6543 | $J/\psi \to K^0 \bar{K}^0 f_2', K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_2' \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6542 | 1 | 89119 |
| 6544 | $J/\psi \to K^0 a_0^0 \bar{K}_1^{'0}, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \\ \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma, \bar{K}^* \to \pi^+ K^-$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+K^-\gamma^F\gamma\gamma$ | 530 | 1 | 89120 |
| 6545 | $J/\psi \to \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, b_1^- \to \pi^- \omega, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 6544 | 1 | 89121 |
| 6546 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \pi^0 K_0^0, K_0^{*-} \to \pi^0 K^-, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6545 | 1 | 89122 |
| 6547 | $J/\psi 	o \pi^0 \pi^- K_2^{*0} K^+, K_2^{*0} 	o \omega \bar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6546 | 1 | 89123 |
| 6548 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6547 | 1 | 89124 |
| 6549 | $J/\psi ightarrow ho^- a_2^+, ho^- ightarrow \pi^0 \pi^- \gamma^f, a_2^+ ightarrow \pi^0 ho^+, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 6548 | 1 | 89125 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 6550 | $J/\psi \to \pi^- \bar{\Sigma}^0 \Sigma^{*+}, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \Sigma^{*+} \to \pi^+ \Sigma^0, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^0 \to \Lambda\gamma, \\ \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}\gamma\gamma$ | 6549 | 1 | 89126 |
| 6551 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6550 | 1 | 89127 |
| 6552 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^0 K^{*-}, K_1^+ \to \rho^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^- \gamma^F, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 4013 | 1 | 89128 |
| 6553 | $J/\psi \to \rho^0 \pi^+ \pi^- h_1(1170), \rho^0 \to \pi^+ \pi^- \gamma^f, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 2059 | 1 | 89129 |
| 6554 | $J/\psi \to \pi^+\pi^- f_0(1370)a_1^0, f_0(1370) \to \pi^0\pi^0\pi^+\pi^-, a_1^0 \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6553 | 1 | 89130 |
| 6555 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2787 | 1 | 89131 |
| 6556 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 6555 | 1 | 89132 |
| 6557 | $J/\psi \to K^- K^{*+} f_0(1710), K^{*+} \to \pi^+ K^0, f_0(1710) \to \eta \eta, K^0 \to K_L^0, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 6556 | 1 | 89133 |
| 6558 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 4016 | 1 | 89134 |
| 6559 | $J/\psi \to \pi^0 K^+ K^{*-} f_0(1370), K^{*-} \to \pi^- \bar{K}^0, f_0(1370) \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6558 | 1 | 89135 |
| 6560 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \omega\omega, \omega \to \pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6559 | 1 | 89136 |
| 6561 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4017 | 1 | 89137 |
| 6562 | $J/\psi \to K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 6561 | 1 | 89138 |
| 6563 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 6562 | 1 | 89139 |
| 6564 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6563 | 1 | 89140 |
| 6565 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\eta\gamma^f\gamma^f, \eta \to \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f\gamma^f$ | 6564 | 1 | 89141 |
| 6566 | $J/\psi \to \rho^0 \pi^- \rho^+ K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 4018 | 1 | 89142 |
| 6567 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 6566 | 1 | 89143 |
| 6568 | $J/\psi \to \pi^0 \pi^+ \rho^- K^* \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2788 | 1 | 89144 |
| 6569 | $J/\psi \to \pi^+\pi^-\omega\omega f_2(1270), \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, f_2(1270) \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6568 | 1 | 89145 |
| 6570 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \rho^0 \pi^+, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6569 | 1 | 89146 |
| 6571 | $J/\psi \to \pi^+\pi^-K^*\bar{K}_1^{'0}, K^* \to \pi^-K^+, \bar{K}_1^{'0} \to \pi^0\bar{K}^*, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6570 | 1 | 89147 |
| 6572 | $J/\psi \to \pi^+ \Xi^- \bar{\Xi}^0, \Xi^- \to \pi^- \Lambda, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 6571 | 1 | 89148 |
| 6573 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 6572 | 1 | 89149 |
| 6574 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 6573 | 1 | 89150 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 6575 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2060 | 1 | 89151 |
| 6576 | $J/\psi \to \rho^0 K^{*+} K_0^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 6575 | 1 | 89152 |
| 6577 | $J/\psi \to \rho \ K^{-1}K_{0} \ , \rho \to \pi^{+}\pi^{-}, K^{-1} \to \pi^{+}K^{-}, K_{0} \to \pi^{-}K^{-}, K \to K_{L}$ $J/\psi \to K_{2}^{*0}\bar{K}_{1}^{0}, K_{2}^{*0} \to \pi^{-}K^{*+}, \bar{K}_{1}^{0} \to \omega \bar{K}^{0}, K^{*+} \to \pi^{0}K^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-},$ $\bar{K}^{0} \to K_{L}^{0}$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6576 | 1 | 89153 |
| 6578 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 ar{p} \Delta^+, ho^0 ightarrow \pi^+ \pi^-, \Delta^+ ightarrow \pi^0 p$ | $\pi^0\pi^+\pi^-par p\gamma$ | 4021 | 1 | 89154 |
| 6579 | $J/\psi \to \pi^- f_2(1270) b_1^+ \gamma^f, f_2(1270) \to \pi^0 \pi^0, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6578 | 1 | 89155 |
| 6580 | $J/\psi \to \phi f_0(1710), \phi \to \pi^0 \rho^0, f_0(1710) \to \eta \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 6579 | 1 | 89156 |
| 6581 | $J/\psi \to \eta \bar{K}^* K_1^0, \eta \to \gamma \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 1245 | 1 | 89157 |
| 6582 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6581 | 1 | 89158 |
| 6583 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to \pi^+\rho^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, \rho^- \to \pi^0\pi^-, K^0_S \to \pi^+\pi^-, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6582 | 1 | 89159 |
| 6584 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6583 | 1 | 89160 |
| 6585 | $J/\psi \to K^* \bar{K}^* K^+ K^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{-}K^{+}K^{+}K^{-}K^{-}$ | 6584 | 1 | 89161 |
| 6586 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^- \eta, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \eta \to \gamma \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2062 | 1 | 89162 |
| 6587 | $J/\psi \to \bar{K}^0 K_0^{*+} a_1^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4024 | 1 | 89163 |
| 6588 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+\pi^-K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6587 | 1 | 89164 |
| 6589 | $J/\psi \to K^{0}\bar{K}^{0}f_{2}^{'}, K^{0} \to K_{S}^{0}, \bar{K}^{0} \to K_{S}^{0}, f_{2}^{'} \to K^{+}K^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6588 | 1 | 89165 |
| 6590 | $J/\psi ightarrow \pi^- \omega K_S^0 K^+, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 6589 | 1 | 89166 |
| 6591 | $J/\psi \to \omega K^+ K^{*-} \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 6590 | 1 | 89167 |
| 6592 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \pi^- \bar{K}_0^{*0}, \eta \to \pi^0 \pi^0 \pi^0, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 4025 | 1 | 89168 |
| 6593 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \rho^+ K^0, K_1^- \to \omega K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 6592 | 1 | 89169 |
| 6594 | $J/\psi 	o ho^0 ar{K}^* K_0^0, ho^0 	o \pi^+ \pi^-, ar{K}^* 	o \pi^+ K^-, K_0^0 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 1246 | 1 | 89170 |
| 6595 | $J/\psi \to \pi^- \bar{K}^0 \phi K_1^+, \bar{K}^0 \to K_L^0, \phi \to \pi^- \rho^+, K_1^+ \to \rho^0 K^+, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 6594 | 1 | 89171 |
| 6596 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \omega K^0, K_0^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \gamma, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6595 | 1 | 89172 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6597 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1585 | 1 | 89173 |
| 6598 | $J/\psi \to K_2^{*+} K_0^{*-}, K_2^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 2065 | 1 | 89174 |
| 6599 | $J/\psi \to \omega \bar{K}^* K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6598 | 1 | 89175 |
| 6600 | $J/\psi \to \pi^0 \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 4029 | 1 | 89176 |
| 6601 | $J/\psi \to \pi^0 \pi^+ \rho^- K^- K^{*+}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4030 | 1 | 89177 |
| 6602 | $J/\psi \to \bar{K}^0 K^* \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 1247 | 1 | 89178 |
| 6603 | $J/\psi ightarrow \eta \eta \omega, \eta ightarrow \pi^0 \pi^0 \pi^0, \eta ightarrow \pi^0 \pi^0 \pi^0, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 6602 | 1 | 89179 |
| 6604 | $J/\psi \to \pi^0 \pi^0 \pi^+ \pi^- f_2(1270), f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6603 | 1 | 89180 |
| 6605 | $J/\psi \to \pi^0 K^- b_1^+ K_1^0, b_1^+ \to \pi^+ \omega, K_1^0 \to \rho^- K^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2067 | 1 | 89181 |
| 6606 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 6605 | 1 | 89182 |
| 6607 | $J/\psi 	o \pi^0\pi^- ho^+, ho^+ 	o \pi^0\pi^+\gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 1587 | 1 | 89183 |
| 6608 | $J/\psi \to K^- K_2^{*+} h_1(1170), K_2^{*+} \to \pi^+ K^0, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4034 | 1 | 89184 |
| 6609 | $J/\psi \to \rho^- \bar{K}^0 K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K_S^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 6608 | 1 | 89185 |
| 6610 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6609 | 1 | 89186 |
| 6611 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 6610 | 1 | 89187 |
| 6612 | $J/\psi \to \pi^+\pi^-K^{*+}K_1^-, K^{*+} \to \pi^0K^+, K_1^- \to \pi^-\bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2069 | 1 | 89188 |
| 6613 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6612 | 1 | 89189 |
| 6614 | $J/\psi \to \pi^0 K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \rho^0 K^-, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4036 | 1 | 89190 |
| 6615 | $J/\psi \to \omega K^{*-}K_{1}^{'+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{+}K^{*}, \bar{K}^{0} \to K_{S}^{0}, K^{*} \to \pi^{-}K^{+}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4037 | 1 | 89191 |
| 6616 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6615 | 1 | 89192 |
| 6617 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 531 | 1 | 89193 |
| 6618 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 6617 | 1 | 89194 |
| 6619 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6618 | 1 | 89195 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6620 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6619 | 1 | 89196 |
| 6621 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4039 | 1 | 89197 |
| 6622 | $J/\psi 	o ho^- \bar{\Lambda} \Sigma^+, ho^- 	o \pi^0 \pi^-, \bar{\Lambda} 	o \pi^0 \bar{n}, \Sigma^+ 	o \pi^+ n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 437 | 1 | 89198 |
| 6623 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \gamma \gamma, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma\gamma$ | 6622 | 1 | 89199 |
| 6624 | $J/\psi \to \pi^- \omega K_S^0 K^+, \omega \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4041 | 1 | 89200 |
| 6625 | $J/\psi \to \pi^0 \pi^0 K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0 K_L^0\pi^- K^+$ | 1590 | 1 | 89201 |
| 6626 | $J/\psi \to \eta_c \gamma, \eta_c \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^- \gamma$ | 4043 | 1 | 89202 |
| 6627 | $J/\psi \to K^0 \bar{K}^* K^+ K^{*-}, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6626 | 1 | 89203 |
| 6628 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6627 | 1 | 89204 |
| 6629 | $J/\psi \to \bar{K}^0 K_1^{'0} \gamma, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6628 | 1 | 89205 |
| 6630 | $J/\psi \to \pi^- \bar{K}^* K^{*+} f_0(1370), \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, f_0(1370) \to \rho^0 \rho^0, K^0 \to K_L^0, $ $\rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 50 | 1 | 89206 |
| 6631 | $J/\psi ightarrow \pi^+ ho^- \omega \omega, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 796 | 1 | 89207 |
| 6632 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 6631 | 1 | 89208 |
| 6633 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_L^0, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6632 | 1 | 89209 |
| 6634 | $J/\psi \to K^+ \bar{n} \Sigma^-, \Sigma^- \to \pi^- n$ | $\pi^- K^+ n \bar{n}$ | 1252 | 1 | 89210 |
| 6635 | $J/\psi \to \phi f_1(1420), \phi \to \pi^- \rho^+, f_1(1420) \to \pi^+ K^0 K^- \gamma^f, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 4047 | 1 | 89211 |
| 6636 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^+ \pi^- \gamma^F, \phi \to K^+ K^-, f_0(980) \to K_L^0 K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^- \gamma^F$ | 6635 | 1 | 89212 |
| 6637 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \omega K^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 6636 | 1 | 89213 |
| 6638 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 6637 | 1 | 89214 |
| 6639 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to K^+ K^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 4048 | 1 | 89215 |
| 6640 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \rho^+ K^-, K_1^+ \to \pi^0 K^{*+}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 6639 | 1 | 89216 |
| 6641 | $J/\psi \to \pi^+ K_0^0 K_0^{*-}, K_0^0 \to \pi^- K^+, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4049 | 1 | 89217 |
| 6642 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 4050 | 1 | 89218 |
| 6643 | $J/\psi \to a_0^0 f_0(1370) h_1(1170), a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6642 | 1 | 89219 |
| 6644 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 K^+ K^-$ | 6643 | 1 | 89220 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6645 | $J/\psi \to \pi^0 \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4051 | 1 | 89221 |
| 6646 | $J/\psi \to K^+ K^{*-} f_0(1370), K^{*-} \to \pi^- \bar{K}^0, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6645 | 1 | 89222 |
| 6647 | $J/\psi \to \pi^- \bar{K}_1^{'0} K_1^{'+}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_1^{'+} \to \pi^+ K^*, K^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^0 K^0, \\ \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4052 | 1 | 89223 |
| 6648 | $J/\psi \to \rho^0 K^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6647 | 1 | 89224 |
| 6649 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to \pi^-\bar{K}^0, f_1(1285) \to \pi^+a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to \pi^-\eta, $ $\eta \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 2805 | 1 | 89225 |
| 6650 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 2806 | 1 | 89226 |
| 6651 | $J/\psi \to \pi^0 \omega f_0(1370) f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6650 | 1 | 89227 |
| 6652 | $J/\psi 	o \pi^0 \pi^+ \pi^- \eta \gamma^f, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 2076 | 1 | 89228 |
| 6653 | $J/\psi \to \pi^- \bar{\Xi}^+ \Xi^{*0}, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^{*0} \to \pi^0 \Xi^0, \bar{\Lambda} \to \pi^+ \bar{p}, \Xi^0 \to \pi^0 \Lambda, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 6652 | 1 | 89229 |
| 6654 | $J/\psi \to ho^0 K^+ K_1^-, ho^0 \to \pi^+ \pi^-, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6653 | 1 | 89230 |
| 6655 | $J/\psi \to a_2^0 \omega a_0^0, a_2^0 \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6654 | 1 | 89231 |
| 6656 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 6655 | 1 | 89232 |
| 6657 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 4056 | 1 | 89233 |
| 6658 | $J/\psi \rightarrow \rho^0 a_2^0 \eta, \rho^0 \rightarrow \pi^+ \pi^-, a_2^0 \rightarrow \pi^0 \eta, \eta \rightarrow \pi^+ \pi^- \gamma^F, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 6657 | 1 | 89234 |
| 6659 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0\gamma^f, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K^0_L, \bar{K}^0 \to K^0_L$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma^f$ | 2808 | 1 | 89235 |
| 6660 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6659 | 1 | 89236 |
| 6661 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4058 | 1 | 89237 |
| 6662 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \bar{K}^0 K^+, a_1^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6661 | 1 | 89238 |
| 6663 | $J/\psi 	o \pi^0 ho^0 \eta', ho^0 	o \pi^+ \pi^-, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 6662 | 1 | 89239 |
| 6664 | $J/\psi \to K^- K_2^{*+} \gamma^f, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 2809 | 1 | 89240 |
| 6665 | $J/\psi \to \eta \eta' \phi, \eta \to \gamma \gamma, \eta' \to \pi^+ \pi^- \eta, \phi \to K_L^0 K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4060 | 1 | 89241 |
| 6666 | $J/\psi \to K^+ \bar{p} \Sigma^0, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^- K^+ p \bar{p} \gamma$ | 6665 | 1 | 89242 |
| 6667 | $J/\psi \to \phi f_0(2020), \phi \to \pi^- \rho^+, f_0(2020) \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6666 | 1 | 89243 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 6668 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma^f$ | 2077 | 1 | 89244 |
| 6669 | $J/\psi \to \rho^0 \pi^+ a_0^0 a_0^-, \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 2811 | 1 | 89245 |
| 6670 | $J/\psi \to \rho^0 a_2^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^- \gamma^f, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 201 | 1 | 89246 |
| 6671 | $J/\psi \to \eta f_0(1370) h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, f_0(1370) \to \rho^0 \rho^0, h_1(1170) \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6670 | 1 | 89247 |
| 6672 | $J/\psi \to \pi^0 \pi^+ K^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6671 | 1 | 89248 |
| 6673 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \rho^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, $ $\rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6672 | 1 | 89249 |
| 6674 | $J/\psi ightarrow ho^0 n ar{n} \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-n\bar{n}\gamma$ | 4064 | 1 | 89250 |
| 6675 | $J/\psi \to \rho^0 \pi^- a_2^+ \omega, \rho^0 \to \pi^+ \pi^-, a_2^+ \to \pi^0 \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6674 | 1 | 89251 |
| 6676 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^0\pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6675 | 1 | 89252 |
| 6677 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 6676 | 1 | 89253 |
| 6678 | $J/\psi \to \pi^+ K^* K^{*-} \phi, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 6677 | 1 | 89254 |
| 6679 | $J/\psi \to K^0 b_1^+ K_1^-, K^0 \to K_L^0, b_1^+ \to \pi^+ \omega, K_1^- \to \rho^- \bar{K}^0, \omega \to \pi^0 \gamma, $ $\rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 6678 | 1 | 89255 |
| 6680 | $J/\psi \to \pi^+\pi^-h_1(1170)h_1(1170), h_1(1170) \to \pi^0\rho^0, h_1(1170) \to \pi^-\rho^+, \rho^0 \to \pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 2079 | 1 | 89256 |
| 6681 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6680 | 1 | 89257 |
| 6682 | $J/\psi \to \pi^+\pi^-K^0\bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0\pi^0, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1254 | 1 | 89258 |
| 6683 | $J/\psi \to \pi^- a_1^+ f_1(1285), a_1^+ \to \rho^0 \pi^+, f_1(1285) \to \pi^+ K^0 K^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 6682 | 1 | 89259 |
| 6684 | $J/\psi \to \pi^+ \pi^+ \pi^- a_2^- \omega, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 4067 | 1 | 89260 |
| 6685 | $J/\psi \to \pi^0\pi^0a_2^-b_1^+, a_2^- \to \pi^0\rho^-, b_1^+ \to \pi^+\omega, \rho^- \to \pi^0\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1596 | 1 | 89261 |
| 6686 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \gamma, f_0(1370) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 6685 | 1 | 89262 |
| 6687 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^0 \rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 4069 | 1 | 89263 |
| 6688 | $J/\psi \to \omega K^+ K_0^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4070 | 1 | 89264 |
| 6689 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 a_2^0 a_0^0, a_2^0 \to \pi^- \rho^+, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6688 | 1 | 89265 |
| 6690 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^0 \rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+ \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 6689 | 1 | 89266 |
| 6691 | $J/\psi \to K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+\pi^-K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6690 | 1 | 89267 |
| 6692 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0 \pi^+ \pi^- K^+ K^-$ | 2082 | 1 | 89268 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 6693 | $J/\psi \to \eta K^- K_2^{*+}, \eta \to \gamma \gamma, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0,$ $\pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+K^-\gamma^F\gamma\gamma$ | 4072 | 1 | 89269 |
| 6694 | $J/\psi 	o \pi^+ n \bar{n} a_0^-, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 6693 | 1 | 89270 |
| 6695 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \rho^0 K^-, K^0 \to K_S^0, $ $\rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6694 | 1 | 89271 |
| 6696 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to K^- K^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6695 | 1 | 89272 |
| 6697 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^0 \bar{K}^*, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4073 | 1 | 89273 |
| 6698 | $J/\psi \to \pi^- \omega \bar{K}^* K^{*+}, \omega \to \pi^0 \gamma, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 6697 | 1 | 89274 |
| 6699 | $J/\psi 	o \omega ar{K}^0 K_1^0, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K_S^0, K_1^0 	o ho^0 K^0, K_S^0 	o \pi^+ \pi^-, \ ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 6698 | 1 | 89275 |
| 6700 | $J/\psi \to \pi^+ f_0(1370) a_1^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6699 | 1 | 89276 |
| 6701 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6700 | 1 | 89277 |
| 6702 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \gamma \gamma, K_2^{*-} \to \pi^- \bar{K}^* \gamma^f, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma\gamma^f$ | 6701 | 1 | 89278 |
| 6703 | $J/\psi \to K^0 \bar{K}^* f_2', K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_2' \to K_L^0 K_L^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2817 | 1 | 89279 |
| 6704 | $J/\psi 	o \eta K^* \bar{K}^*, \eta 	o \pi^0 \pi^0 \pi^0, K^* 	o \pi^0 K^0, \bar{K}^* 	o \pi^+ K^-, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 6703 | 1 | 89280 |
| 6705 | $J/\psi \to \omega \eta' \eta', \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \rho^0 \gamma, \eta' \to \pi^+ \pi^- \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma$ | 4075 | 1 | 89281 |
| 6706 | $J/\psi \to \pi^0 \pi^+ \pi^- K^{*+} K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4076 | 1 | 89282 |
| 6707 | $J/\psi \to \pi^+ K^0 K^{*-} \gamma^F, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^F$ | 6706 | 1 | 89283 |
| 6708 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} a_0^0, K^{*+} \to \pi^0 K^+, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma$ | 6707 | 1 | 89284 |
| 6709 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^0 \rho^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 369 | 1 | 89285 |
| 6710 | $J/\psi 	o ho^0 ho^- a_2^+ \gamma, ho^0 	o \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-, a_2^+ 	o ho^0 \pi^+, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 6709 | 1 | 89286 |
| 6711 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^+ \eta b_1^-, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \pi^0 \pi^0, b_1^- ightarrow \pi^- \omega, \ \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4078 | 1 | 89287 |
| 6712 | $J/\psi \to \pi^0 p \bar{p} f_0(1370), f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0p\bar{p}$ | 799 | 1 | 89288 |
| 6713 | $J/\psi \to K_2^{*0} K^- a_0^+, K_2^{*0} \to \pi^0 K^0, a_0^+ \to \pi^+ \eta, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 1599 | 1 | 89289 |
| 6714 | $J/\psi ightarrow a_2^0 \pi^+ \pi^-, a_2^0 ightarrow \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \gamma, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 2821 | 1 | 89290 |
| 6715 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6714 | 1 | 89291 |
| 6716 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 6715 | 1 | 89292 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 6717 | $J/\psi \rightarrow a_2^0 \pi^+ \pi^- \gamma^f, a_2^0 \rightarrow \pi^0 \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 6716 | 1 | 89293 |
| 6718 | $J/\psi \to \rho^0 K^+ K_2^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 2822 | 1 | 89294 |
| 6719 | $J/\psi \to \rho^+ b_1^- h_1(1170), \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 4083 | 1 | 89295 |
| 6720 | $J/\psi \to \pi^+\pi^- f_2(1270) f_0(1370), f_2(1270) \to K^+K^-, f_0(1370) \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 4084 | 1 | 89296 |
| 6721 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 6720 | 1 | 89297 |
| 6722 | $J/\psi \to \pi^0 a_2^0 \omega, a_2^0 \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 6721 | 1 | 89298 |
| 6723 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^0K^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 6722 | 1 | 89299 |
| 6724 | $J/\psi \to \rho^+ K^0 \bar{K}^0 b_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4085 | 1 | 89300 |
| 6725 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6724 | 1 | 89301 |
| 6726 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_L^0, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6725 | 1 | 89302 |
| 6727 | $J/\psi \to a_2^0 \omega f_0(1370), a_2^0 \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 318 | 1 | 89303 |
| 6728 | $J/\psi \to \rho^+ a_2^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 4087 | 1 | 89304 |
| 6729 | $J/\psi ightarrow \pi^0\pi^-a_2^+\eta, a_2^+ ightarrow \pi^+\eta, \eta ightarrow \gamma\gamma, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 6728 | 1 | 89305 |
| 6730 | $J/\psi \to \eta \phi f_0(1710), \eta \to \gamma \gamma, \phi \to K^+K^-, f_0(1710) \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 4088 | 1 | 89306 |
| 6731 | $J/\psi \to K^* \bar{K}_1^{'0}, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 6730 | 1 | 89307 |
| 6732 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^0 K^+ K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6731 | 1 | 89308 |
| 6733 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $e^+e^-\pi^0\pi^0\pi^-K^+\gamma^F\gamma^f$ | 6732 | 1 | 89309 |
| 6734 | $J/\psi \to \pi^0 K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \rho^- K^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 801 | 1 | 89310 |
| 6735 | $J/\psi \to \rho^+ a_2^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, f_0(1370) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 6734 | 1 | 89311 |
| 6736 | $J/\psi 	o a_2^0 ar{K}^0 K^*, a_2^0 	o \pi^0 \eta, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, \eta 	o \pi^0 \pi^+ \pi^-, \ K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 6735 | 1 | 89312 |
| 6737 | $J/\psi \to K_0^0 \bar{K}_1^{'0}, K_0^0 \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4090 | 1 | 89313 |
| 6738 | $J/\psi 	o \pi^0 K^0 ar{K}^0, K^0 	o K^0_S, ar{K}^0 	o K^0_L, K^0_S 	o \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 2088 | 1 | 89314 |
| 6739 | $J/\psi \to \bar{K}^0 f_0(1370) K_1^0, \bar{K}^0 \to K_L^0, f_0(1370) \to \rho^0 \rho^0, K_1^0 \to \rho^- K^+, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 1259 | 1 | 89315 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 6740 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^- \gamma^f, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 6739 | 1 | 89316 |
| 6741 | $J/\psi 	o \pi^0 \pi^0 \omega f_2(1270), \omega 	o \pi^0 \gamma, f_2(1270) 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6740 | 1 | 89317 |
| 6742 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 4093 | 1 | 89318 |
| 6743 | $J/\psi \to \eta \eta' \phi, \eta \to \gamma \gamma, \eta' \to \pi^+ \pi^- \eta, \phi \to K_L^0 K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 4094 | 1 | 89319 |
| 6744 | $J/\psi \to \pi^+\pi^-\eta a_0^0 a_1^0, \eta \to \gamma\gamma, a_0^0 \to \pi^0\eta, a_1^0 \to \pi^-\rho^+, \eta \to \gamma\gamma, \\ \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 1260 | 1 | 89320 |
| 6745 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1380) \to K^- K^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 999 | 1 | 89321 |
| 6746 | $J/\psi \to \pi^+\pi^-b_1^0h_1(1170), b_1^0 \to \pi^0\omega, h_1(1170) \to \pi^-\rho^+, \omega \to \pi^0\gamma, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6745 | 1 | 89322 |
| 6747 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4097 | 1 | 89323 |
| 6748 | $J/\psi \to \eta \omega \eta', \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 6747 | 1 | 89324 |
| 6749 | $J/\psi \to \pi^- \rho^+ f_2(1270)\gamma^f, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 6748 | 1 | 89325 |
| 6750 | $J/\psi \to \pi^0 K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6749 | 1 | 89326 |
| 6751 | $J/\psi \to \pi^- \omega b_1^0 b_1^+, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6750 | 1 | 89327 |
| 6752 | $J/\psi \to K^+K^-f_0(1370), f_0(1370) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 802 | 1 | 89328 |
| 6753 | $J/\psi \to \pi^0 K^0 \bar{K}^* f_1(1285), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1285) \to \pi^+ a_0^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 2830 | 1 | 89329 |
| 6754 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Sigma^0, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 537 | 1 | 89330 |
| 6755 | $J/\psi \to \eta_c \gamma, \eta_c \to f_2(1270)K^+K^-, f_2(1270) \to \pi^+\pi^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 1607 | 1 | 89331 |
| 6756 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 6755 | 1 | 89332 |
| 6757 | $J/\psi \to \pi^0 \pi^+ \pi^- b_1^+ a_1^-, b_1^+ \to \pi^+ \omega, a_1^- \to \pi^0 \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6756 | 1 | 89333 |
| 6758 | $J/\psi ightarrow \pi^0 \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \gamma, a_0^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 4102 | 1 | 89334 |
| 6759 | $J/\psi 	o \pi^0\pi^0 ho^0\pi^+a_0^-, ho^0 	o \pi^+\pi^-, a_0^- 	o \pi^-\eta, \eta 	o \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4103 | 1 | 89335 |
| 6760 | $J/\psi \to K^+ \phi \bar{K}_1^{'-}, \phi \to \eta \gamma, \bar{K}_1^{'-} \to \pi^0 K^{*-}, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma$ | 6759 | 1 | 89336 |
| 6761 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 1264 | 1 | 89337 |
| 6762 | $J/\psi \rightarrow \pi^0 \rho^+ \eta a_0^-, \rho^+ \rightarrow \pi^0 \pi^+, \eta \rightarrow \gamma \gamma, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 6761 | 1 | 89338 |
| 6763 | $J/\psi \to \rho^0 \omega K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 6762 | 1 | 89339 |
| 6764 | $J/\psi \to \rho^+ a_2^- \gamma^f, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 6763 | 1 | 89340 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 6765 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{-}K^{+}K^{-}$ | 6764 | 1 | 89341 |
| 6766 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^+K^0, f_0(1370) \to \pi^+\pi^-, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1265 | 1 | 89342 |
| 6767 | $J/\psi \to \bar{K}^0 K_1^{'0} \gamma, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 2097 | 1 | 89343 |
| 6768 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+$ | 6767 | 1 | 89344 |
| 6769 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 6768 | 1 | 89345 |
| 6770 | $J/\psi \to K^+ K_1^- a_1^0, K_1^- \to \pi^- \bar{K}_0^{*0}, a_1^0 \to \pi^- \rho^+, \bar{K}_0^{*0} \to \pi^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6769 | 1 | 89346 |
| 6771 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^0, K_2^{*-} \to \rho^- K^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6770 | 1 | 89347 |
| 6772 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6771 | 1 | 89348 |
| 6773 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to \pi^0 \eta, a_2^+ \to \pi^+ \eta, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6772 | 1 | 89349 |
| 6774 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^0 \pi^0, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6773 | 1 | 89350 |
| 6775 | $J/\psi \to \pi^0 \omega a_0^0, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}$ | 2836 | 1 | 89351 |
| 6776 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 1610 | 1 | 89352 |
| 6777 | $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \rho^0 \pi^-, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 6776 | 1 | 89353 |
| 6778 | $J/\psi \to \pi^0 \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^-$ | 4109 | 1 | 89354 |
| 6779 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow a_2^0 \pi^+ ho^-, a_2^0 ightarrow \pi^0 \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6778 | 1 | 89355 |
| 6780 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_L^0, \bar{K}_1^{'-} \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4110 | 1 | 89356 |
| 6781 | $J/\psi \to a_2^- \bar{K}^* K^{*+}, a_2^- \to \pi^0 \rho^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6780 | 1 | 89357 |
| 6782 | $J/\psi \to K_2^{*0} K_0^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_0^0 \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6781 | 1 | 89358 |
| 6783 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4111 | 1 | 89359 |
| 6784 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \pi^+\pi^-\eta, K^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6783 | 1 | 89360 |
| 6785 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4112 | 1 | 89361 |
| 6786 | $J/\psi \to \eta_c \gamma, \eta_c \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^+\pi^-, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 6785 | 1 | 89362 |
| 6787 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+} \gamma^f, \bar{K}^0 \to K_L^0, K_2^{*+} \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 4113 | 1 | 89363 |
| 6788 | $J/\psi \to \eta \bar{K}^* K_1^{'0}, \eta \to \gamma \gamma, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 4114 | 1 | 89364 |
| 6789 | $J/\psi ightarrow \phi f_2', \phi ightarrow K_L^0 K_S^0, f_2' ightarrow \eta \eta, K_S^0 ightarrow \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^-, \ \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4115 | 1 | 89365 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 6790 | $J/\psi \to \pi^0 K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \rho^0 K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6789 | 1 | 89366 |
| 6791 | $J/\psi \to \pi^- \omega \bar{K}^0 K^+ \phi, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 6790 | 1 | 89367 |
| 6792 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \gamma, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 6791 | 1 | 89368 |
| 6793 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6792 | 1 | 89369 |
| 6794 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^0\Sigma^+, \bar{\Sigma}^{*-} \to \pi^-\bar{\Lambda}, \Sigma^+ \to \pi^0p, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 6793 | 1 | 89370 |
| 6795 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 2838 | 1 | 89371 |
| 6796 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^- \gamma^f, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4117 | 1 | 89372 |
| 6797 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4118 | 1 | 89373 |
| 6798 | $J/\psi \to \omega \bar{K}^0 K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 4119 | 1 | 89374 |
| 6799 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6798 | 1 | 89375 |
| 6800 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6799 | 1 | 89376 |
| 6801 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^0 K^{*-}, \phi \to K_L^0 K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 4120 | 1 | 89377 |
| 6802 | $J/\psi \to \pi^0 \pi^+ \pi^- \omega \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 4121 | 1 | 89378 |
| 6803 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 6802 | 1 | 89379 |
| 6804 | $J/\psi \to \pi^+\pi^- h_1(1170)h_1(1170), h_1(1170) \to \pi^+\rho^-, h_1(1170) \to \pi^-\rho^+, \rho^- \to \pi^0\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4122 | 1 | 89380 |
| 6805 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 804 | 1 | 89381 |
| 6806 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2840 | 1 | 89382 |
| 6807 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to K_S^0 K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4125 | 1 | 89383 |
| 6808 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 6807 | 1 | 89384 |
| 6809 | $J/\psi 	o \eta' p \bar p, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0, \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}p\bar{p}\gamma^{F}$ | 6808 | 1 | 89385 |
| 6810 | $J/\psi \to \pi^0 K^0 \bar{K}^0 \gamma, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6809 | 1 | 89386 |
| 6811 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0 K_L^0\pi^+ K^-$ | 6810 | 1 | 89387 |
| 6812 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, $ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6811 | 1 | 89388 |
| 6813 | $J/\psi \to \phi f_0(2020), \phi \to \pi^- \rho^+, f_0(2020) \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6812 | 1 | 89389 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 6814 | $J/\psi \to \pi^- \rho^+ a_0^0, \rho^+ \to \pi^0 \pi^+, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 6813 | 1 | 89390 |
| 6815 | $J/\psi \to \pi^+ \rho^- K^* \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4126 | 1 | 89391 |
| 6816 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 656 | 1 | 89392 |
| 6817 | $J/\psi \to h_1(1170)a_1^0, h_1(1170) \to \pi^- \rho^+, a_1^0 \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+ \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6816 | 1 | 89393 |
| 6818 | $J/\psi ightarrow \pi^0\pi^0\pi^+\pi^-\eta, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6817 | 1 | 89394 |
| 6819 | $J/\psi \to K^-K^{*+} f_1(1420), K^{*+} \to \pi^+K^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4128 | 1 | 89395 |
| 6820 | $J/\psi \to \pi^0\pi^-a_2^+, a_2^+ \to \pi^+\eta\gamma^f, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 2101 | 1 | 89396 |
| 6821 | $J/\psi \to \bar{K}^0 \eta' K_0^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 6820 | 1 | 89397 |
| 6822 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 4130 | 1 | 89398 |
| 6823 | $J/\psi \to K^- K^{*+} \gamma^F \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma^F\gamma^f$ | 6822 | 1 | 89399 |
| 6824 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to K^+K^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 6823 | 1 | 89400 |
| 6825 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 4131 | 1 | 89401 |
| 6826 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \rho^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4132 | 1 | 89402 |
| 6827 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 538 | 1 | 89403 |
| 6828 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ar{\Lambda} \Sigma^{*0}, ar{\Lambda} 	o \pi^0 ar{n}, \Sigma^{*0} 	o \pi^0 \Lambda, \Lambda 	o \pi^- p$ | $\pi^0\pi^0\pi^-\bar{n}p\gamma$ | 174 | 1 | 89404 |
| 6829 | $J/\psi \to \pi^0 \bar{\Sigma}^{*+} \Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Sigma^0, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^0 \to \Lambda \gamma, \\ \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 6828 | 1 | 89405 |
| 6830 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^- \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 6829 | 1 | 89406 |
| 6831 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6830 | 1 | 89407 |
| 6832 | $J/\psi 	o \eta_c \gamma, \eta_c 	o a_2^- ar{K}^0 K^+, a_2^- 	o \pi^0 ho^-, ar{K}^0 	o K_L^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 6831 | 1 | 89408 |
| 6833 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6832 | 1 | 89409 |
| 6834 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6833 | 1 | 89410 |
| 6835 | $J/\psi \rightarrow \pi^+ \rho^+ \rho^- \rho^- \gamma^f, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 2845 | 1 | 89411 |
| 6836 | $J/\psi \to \pi^0 \pi^+ \pi^- K^+ K^- h_1(1380), h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^+K^-$ | 4136 | 1 | 89412 |
| 6837 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^- \phi, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F\gamma\gamma^f$ | 6836 | 1 | 89413 |
| 6838 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0 \pi^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 6837 | 1 | 89414 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6839 | $J/\psi \to \bar{K}^0 K_2^{*0} \phi, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^*, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 2846 | 1 | 89415 |
| 6840 | $J/\psi \to K^- K_2^{*+} f_0(1370), K_2^{*+} \to \pi^0 K^+, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4138 | 1 | 89416 |
| 6841 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1270 | 1 | 89417 |
| 6842 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4140 | 1 | 89418 |
| 6843 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^0K^+, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 37 | 1 | 89419 |
| 6844 | $J/\psi 	o \Lambda ar{\Lambda} \gamma, \Lambda 	o \pi^- p, ar{\Lambda} 	o ar{n} \gamma$ | $\pi^- ar{n} p \gamma \gamma$ | 6843 | 1 | 89420 |
| 6845 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 1617 | 1 | 89421 |
| 6846 | $J/\psi \to \pi^0 a_2^0 \omega, a_2^0 \to \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 6845 | 1 | 89422 |
| 6847 | $J/\psi 	o \eta K^+ K_1^-, \eta 	o \pi^0 \pi^+ \pi^-, K_1^- 	o \pi^+ \pi^- K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 444 | 1 | 89423 |
| 6848 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4144 | 1 | 89424 |
| 6849 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^0 K^+, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6848 | 1 | 89425 |
| 6850 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 204 | 1 | 89426 |
| 6851 | $J/\psi 	o a_2^0 b_1^0, a_2^0 	o \pi^+ \pi^- \omega, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6850 | 1 | 89427 |
| 6852 | $J/\psi \to \pi^- \rho^+ b_1^+ a_1^-, \rho^+ \to \pi^0 \pi^+, b_1^+ \to \pi^+ \omega, a_1^- \to \pi^0 \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2852 | 1 | 89428 |
| 6853 | $J/\psi 	o \pi^0 b_1^0, b_1^0 	o \pi^0 \gamma$ | $\pi^0\pi^0\gamma$ | 6852 | 1 | 89429 |
| 6854 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^0 K^{*+}, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K^{*+} \to \pi^0 K^+$ | $e^+e^-\pi^0\pi^0K^+K^-\gamma^F\gamma^f$ | 1620 | 1 | 89430 |
| 6855 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4148 | 1 | 89431 |
| 6856 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \rho^- K^0, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 6855 | 1 | 89432 |
| 6857 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \omega K^+ K^{*-}, \omega 	o \pi^0 \gamma, K^{*-} 	o \pi^- \bar{K}^0, \bar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 4149 | 1 | 89433 |
| 6858 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow K^* ar{K}^*, K^* ightarrow \pi^0 K^0, ar{K}^* ightarrow \pi^+ K^-, K^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 4150 | 1 | 89434 |
| 6859 | $J/\psi \to f_2(1270)h_1(1170), f_2(1270) \to \pi^0\pi^0, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 6858 | 1 | 89435 |
| 6860 | $J/\psi \to \bar{K}^0 K^* K^+ K^{*-}, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+K^+K^-$ | 6859 | 1 | 89436 |
| 6861 | $J/\psi \to \pi^- \bar{K}_1^0 K_0^{*+}, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K_0^{*+} \to \pi^0 K^+, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6860 | 1 | 89437 |
| 6862 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^0 K^+, \eta \to \pi^0 \pi^0 \pi^0, \\ \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 6861 | 1 | 89438 |
| 6863 | $J/\psi 	o ho^0 \pi^+ a_0^-, ho^0 	o \pi^+ \pi^-, a_0^- 	o K^0 K^-, K^0 	o K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 6862 | 1 | 89439 |
| 6864 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_L^0, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6863 | 1 | 89440 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 6865 | $J/\psi \to \rho^0 K^{*+} \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 6864 | 1 | 89441 |
| 6866 | $J/\psi \to \pi^+\pi^+\pi^-K_1^0K_1^-, K_1^0 \to \pi^-K_0^{*+}, K_1^- \to \pi^-\bar{K}^*, K_0^{*+} \to \pi^+K^0, \bar{K}^* \to \pi^+K^-, K_0^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 6865 | 1 | 89442 |
| 6867 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6866 | 1 | 89443 |
| 6868 | $J/\psi \to \eta K^+ K^{*-}, \eta \to \pi^+ \pi^- \gamma^F, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 6867 | 1 | 89444 |
| 6869 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4151 | 1 | 89445 |
| 6870 | $J/\psi \to \pi^+ \bar{K}^0 K^* b_1^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 6869 | 1 | 89446 |
| 6871 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \gamma, \pi^0 ightarrow e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma^f$ | 6870 | 1 | 89447 |
| 6872 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \rho^+ K^0, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4152 | 1 | 89448 |
| 6873 | $J/\psi ightarrow ho^0 ho^+ ho^- a_0^0, ho^0 ightarrow \pi^+ \pi^-, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, a_0^0 ightarrow \pi^0 \eta, \ \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6872 | 1 | 89449 |
| 6874 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6873 | 1 | 89450 |
| 6875 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 811 | 1 | 89451 |
| 6876 | $J/\psi 	o \eta K^0 ar{K}^0, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K_L^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0, \\ \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\gamma^{F}$ | 4154 | 1 | 89452 |
| 6877 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to K^0\bar{K}^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2855 | 1 | 89453 |
| 6878 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 4156 | 1 | 89454 |
| 6879 | $J/\psi \to \pi^0 \pi^+ \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma$ | 4157 | 1 | 89455 |
| 6880 | $J/\psi \to K^* \bar{K}_0^{*0} \gamma, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 2856 | 1 | 89456 |
| 6881 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4159 | 1 | 89457 |
| 6882 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^+ \eta \gamma^f, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 4160 | 1 | 89458 |
| 6883 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6882 | 1 | 89459 |
| 6884 | $J/\psi \to K^0 f_0(1370) \bar{K}_1^0, K^0 \to K_S^0, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2857 | 1 | 89460 |
| 6885 | $J/\psi \to K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ \pi^- K^+, \bar{K}^0 \to K_L^0$ | $K^0_L\pi^+\pi^-\pi^-K^+$ | 6884 | 1 | 89461 |
| 6886 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \rho^- K^+, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 2111 | 1 | 89462 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6887 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 6886 | 1 | 89463 |
| 6888 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6887 | 1 | 89464 |
| 6889 | $J/\psi \to \pi^0 \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 1622 | 1 | 89465 |
| 6890 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0 \gamma^f, K_2^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^f$ | 2860 | 1 | 89466 |
| 6891 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6890 | 1 | 89467 |
| 6892 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6891 | 1 | 89468 |
| 6893 | $J/\psi 	o \Lambda ar{\Lambda}, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p} \gamma^F$ | $\pi^+\pi^- par p \gamma^F$ | 543 | 1 | 89469 |
| 6894 | $J/\psi \to \pi^0 \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4166 | 1 | 89470 |
| 6895 | $J/\psi \to \omega f_1(1420), \omega \to \pi^+\pi^-\gamma^F, f_1(1420) \to \pi^0 K^+K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 1276 | 1 | 89471 |
| 6896 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^-, \eta' \to \pi^+ \pi^- \eta, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6895 | 1 | 89472 |
| 6897 | $J/\psi \to K^-K^{*+}f_0(1710), K^{*+} \to \pi^+K^0, f_0(1710) \to \pi^+\pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 4168 | 1 | 89473 |
| 6898 | $J/\psi \to \Sigma^{*0} \bar{\Sigma}^{*0}, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^0 \bar{n}, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^0n\bar{n}\gamma^F$ | 6897 | 1 | 89474 |
| 6899 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+} \gamma^f, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 2863 | 1 | 89475 |
| 6900 | $J/\psi \to \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6899 | 1 | 89476 |
| 6901 | $J/\psi \to \eta \omega f_2(1270), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2115 | 1 | 89477 |
| 6902 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6901 | 1 | 89478 |
| 6903 | $J/\psi \to \phi f_0(1710), \phi \to \pi^+ \rho^-, f_0(1710) \to \eta \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4171 | 1 | 89479 |
| 6904 | $J/\psi \to \pi^+\pi^-\omega K^-K^{*+}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4172 | 1 | 89480 |
| 6905 | $J/\psi \to \eta h_1(1380), \eta \to \pi^+\pi^-\gamma^F, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 1625 | 1 | 89481 |
| 6906 | $J/\psi \to \rho^0 \pi^+ K^{*-} K_1^0, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_L^0, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 154 | 1 | 89482 |
| 6907 | $J/\psi \to \rho^0 \rho^+ K^0 K^- \gamma^f, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 2867 | 1 | 89483 |
| 6908 | $J/\psi 	o ar{K}^0 K^* b_1^0, ar{K}^0 	o K_L^0, K^* 	o \pi^- K^+, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 6907 | 1 | 89484 |
| 6909 | $J/\psi \to \pi^0 \pi^+ \pi^- f_0(1370), f_0(1370) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6908 | 1 | 89485 |
| 6910 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} h_1(1380), \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6909 | 1 | 89486 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6911 | $J/\psi \to \pi^+ \eta K^0 K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6910 | 1 | 89487 |
| 6912 | $J/\psi \to \eta K^{*-} K_2^{*+}, \eta \to \gamma \gamma, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 6911 | 1 | 89488 |
| 6913 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 6912 | 1 | 89489 |
| 6914 | $J/\psi \to \pi^- a_0^0 a_1^+, a_0^0 \to \pi^0 \eta, a_1^+ \to \pi^0 \rho^+, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 6913 | 1 | 89490 |
| 6915 | $J/\psi \to \pi^- \rho^+ K^+ K^- \phi, \rho^+ \to \pi^0 \pi^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 6914 | 1 | 89491 |
| 6916 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2118 | 1 | 89492 |
| 6917 | $J/\psi 	o \eta\eta\eta\gamma, \eta 	o \gamma\gamma, \eta 	o \gamma\gamma, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma\gamma\gamma$ | 6916 | 1 | 89493 |
| 6918 | $J/\psi \to \rho^+ \rho^- \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 4177 | 1 | 89494 |
| 6919 | $J/\psi \to K^{*+}\eta' K_1^-, K^{*+} \to \pi^+ K^0, \eta' \to \rho^0 \gamma, K_1^- \to \pi^+ \pi^- K^-, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$ | 4178 | 1 | 89495 |
| 6920 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^-K^{*+}, f_1(1420) \to \pi^0K^+K^-, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^+K^-K^-$ | 6919 | 1 | 89496 |
| 6921 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}K^{+}K^{-}\gamma^{F}$ | 6920 | 1 | 89497 |
| 6922 | $J/\psi ightarrow \pi^0 K^0 ar{K}^* \gamma, K^0 ightarrow K^0_L, ar{K}^* ightarrow \pi^0 ar{K}^0, ar{K}^0 ightarrow K^0_L$ | $\pi^0\pi^0K_L^0K_L^0\gamma$ | 2119 | 1 | 89498 |
| 6923 | $J/\psi \to \rho^- a_0^+ f_1(1285), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_1(1285) \to \pi^- \bar{K}^0 K^+, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 66 | 1 | 89499 |
| 6924 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 6923 | 1 | 89500 |
| 6925 | $J/\psi \to K^0 \bar{K}^* K^- K^{*+}, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1279 | 1 | 89501 |
| 6926 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1280 | 1 | 89502 |
| 6927 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 6926 | 1 | 89503 |
| 6928 | $J/\psi \to \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 6927 | 1 | 89504 |
| 6929 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \omega K^-, \eta \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 2873 | 1 | 89505 |
| 6930 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6929 | 1 | 89506 |
| 6931 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2123 | 1 | 89507 |
| 6932 | $J/\psi 	o \pi^0 ho^0 \pi^+ \pi^- b_1^0, ho^0 	o \pi^+ \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6931 | 1 | 89508 |
| 6933 | $J/\psi \to \eta \omega \eta', \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \gamma, \eta' \to \gamma \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^0\gamma^F\gamma\gamma\gamma$ | 6932 | 1 | 89509 |
| 6934 | $J/\psi ightarrow \pi^0 \omega n ar{\Delta}^0, \omega ightarrow \pi^0 \pi^+ \pi^-, ar{\Delta}^0 ightarrow \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 6933 | 1 | 89510 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 6935 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to K^0\bar{K}^*, \eta \to \gamma\gamma, \eta \to \pi^0\pi^0\pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 6934 | 1 | 89511 |
| 6936 | $J/\psi \to \pi^0 K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \bar{K}^*, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6935 | 1 | 89512 |
| 6937 | $J/\psi \to \pi^0 \pi^+ \pi^- f_2(1270), f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6936 | 1 | 89513 |
| 6938 | $J/\psi \to \pi^+ K^0 \bar{K}^0 a_0^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma$ | 2875 | 1 | 89514 |
| 6939 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 6938 | 1 | 89515 |
| 6940 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6939 | 1 | 89516 |
| 6941 | $J/\psi \to K^* \bar{K}^* f_0(1370), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \rho^+ \rho^-, K^0 \to K_L^0, $ $\rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 6940 | 1 | 89517 |
| 6942 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^+ K_2^{*-}, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+K^-K^-$ | 2124 | 1 | 89518 |
| 6943 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 6942 | 1 | 89519 |
| 6944 | $J/\psi ightarrow \pi^0\pi^0 ho^0\eta', ho^0 ightarrow \pi^+\pi^-, \eta' ightarrow \pi^+\pi^-\eta, \eta ightarrow \pi^+\pi^-\gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 546 | 1 | 89520 |
| 6945 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6944 | 1 | 89521 |
| 6946 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \pi^+ \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 6945 | 1 | 89522 |
| 6947 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 6946 | 1 | 89523 |
| 6948 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+K^-$ | 6947 | 1 | 89524 |
| 6949 | $J/\psi \rightarrow x(1835)\gamma, x(1835) \rightarrow \pi^+\pi^-\eta', \eta' \rightarrow \pi^+\pi^-\eta, \eta \rightarrow \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma$ | 2126 | 1 | 89525 |
| 6950 | $J/\psi \to \eta K^0 K_2^{*0}, \eta \to \gamma \gamma, K^0 \to K_S^0, K_2^{*0} \to \omega \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \\ \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 6949 | 1 | 89526 |
| 6951 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, K^0 \to K^0_S, K^0 \to K$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6950 | 1 | 89527 |
| 6952 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^0\Xi^0, \bar{\Xi}^{*0} \to \pi^-\bar{\Xi}^+, \Xi^0 \to \pi^0\Lambda, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-nar{n}$ | 6951 | 1 | 89528 |
| 6953 | $J/\psi \to K^-K^{*+}f_2^{'}, K^{*+} \to \pi^+K^0, f_2^{'} \to K^+K^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 6952 | 1 | 89529 |
| 6954 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 6953 | 1 | 89530 |
| 6955 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 K^{*-} b_1^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, \ \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 6954 | 1 | 89531 |
| 6956 | $J/\psi \to \rho^- K^+ K^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6955 | 1 | 89532 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 6957 | $J/\psi \to \pi^0 \pi^+ K_2^{*0} K_0^{*-}, K_2^{*0} \to \pi^- K^{*+}, K_0^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1014 | 1 | 89533 |
| 6958 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4190 | 1 | 89534 |
| 6959 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 2128 | 1 | 89535 |
| 6960 | $J/\psi 	o \pi^0 \eta p ar p, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 1283 | 1 | 89536 |
| 6961 | $J/\psi \rightarrow \rho^0 \eta a_0^0, \rho^0 \rightarrow \pi^+\pi^-, \eta \rightarrow \pi^0\pi^0\pi^0, a_0^0 \rightarrow \pi^0\eta, \eta \rightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6960 | 1 | 89537 |
| 6962 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 6961 | 1 | 89538 |
| 6963 | $J/\psi \to \pi^0 \pi^- \rho^+ \rho^+ \rho^- \eta, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 4193 | 1 | 89539 |
| 6964 | $J/\psi \to f_0(1370)h_1(1170), f_0(1370) \to \pi^0\pi^0, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6963 | 1 | 89540 |
| 6965 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2130 | 1 | 89541 |
| 6966 | $J/\psi \rightarrow a_2^+ K^0 K^-, a_2^+ \rightarrow \pi^+ \eta, K^0 \rightarrow K^0_S, \eta \rightarrow \gamma \gamma, K^0_S \rightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 324 | 1 | 89542 |
| 6967 | $J/\psi 	o a_2^0 K^0 ar{K}^0, a_2^0 	o \pi^0 \eta, K^0 	o K_L^0, ar{K}^0 	o K_L^0, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 6966 | 1 | 89543 |
| 6968 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0 \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 6967 | 1 | 89544 |
| 6969 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+ \gamma^f, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 6968 | 1 | 89545 |
| 6970 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \pi^0 \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 2132 | 1 | 89546 |
| 6971 | $J/\psi \to \pi^+ a_2^- a_0^0 \gamma^f, a_2^- \to \pi^0 \rho^-, a_0^0 \to \pi^0 \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 2885 | 1 | 89547 |
| 6972 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6971 | 1 | 89548 |
| 6973 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 4198 | 1 | 89549 |
| 6974 | $J/\psi 	o \pi^0 \pi^+ b_1^0 a_0^-, b_1^0 	o \pi^0 \omega, a_0^- 	o \pi^- \eta, \omega 	o \pi^+ \pi^-, \eta 	o \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 6973 | 1 | 89550 |
| 6975 | $J/\psi \to \pi^0 \pi^0 \pi^+ \pi^- \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 6974 | 1 | 89551 |
| 6976 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6975 | 1 | 89552 |
| 6977 | $J/\psi 	o \pi^0 a_2^+ K^0 K^-, a_2^+ 	o ho^0 \pi^+, K^0 	o K_L^0, ho^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2133 | 1 | 89553 |
| 6978 | $J/\psi \to \omega K^{*-}K_2^{*+}, \omega \to \pi^+\pi^-\gamma^F, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K_L^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 6977 | 1 | 89554 |
| 6979 | $J/\psi \to \pi^0 K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2887 | 1 | 89555 |
| 6980 | $J/\psi \to \pi^0 \pi^0 \rho^+ \rho^- b_1^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6979 | 1 | 89556 |
| 6981 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 6980 | 1 | 89557 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 6982 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 6981 | 1 | 89558 |
| 6983 | $J/\psi \to \pi^+\pi^-K^{*+}\bar{K}_1^{'-}, K^{*+} \to \pi^0K^+, \bar{K}_1^{'-} \to \pi^-\bar{K}^*, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 239 | 1 | 89559 |
| 6984 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \pi^- \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^+ \pi^- \gamma^F$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 2889 | 1 | 89560 |
| 6985 | $J/\psi ightarrow\phi f_{2}^{'}, \phi ightarrow\pi^{0} ho^{0}, f_{2}^{'} ightarrow K^{+}K^{-}, ho^{0} ightarrow\pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^-K^+K^-$ | 549 | 1 | 89561 |
| 6986 | $J/\psi \to \pi^+ K_2^{*-} K_0^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K_0^0 \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 6985 | 1 | 89562 |
| 6987 | $J/\psi \to \pi^-\pi^-\rho^+\eta a_1^+, \rho^+ \to \pi^0\pi^+, \eta \to \gamma\gamma, a_1^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 4204 | 1 | 89563 |
| 6988 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 6987 | 1 | 89564 |
| 6989 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^F$ | 6988 | 1 | 89565 |
| 6990 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^+K^0, f_0(1370) \to \pi^0\pi^0\pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 6989 | 1 | 89566 |
| 6991 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2891 | 1 | 89567 |
| 6992 | $J/\psi \to \rho^0 K^0 \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6991 | 1 | 89568 |
| 6993 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4206 | 1 | 89569 |
| 6994 | $J/\psi \to \pi^+\pi^-\eta\gamma^F, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^F\gamma^f$ | 2892 | 1 | 89570 |
| 6995 | $J/\psi \to K^{*+}K_2^{*-}\gamma, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^+\pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 2893 | 1 | 89571 |
| 6996 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 4209 | 1 | 89572 |
| 6997 | $J/\psi ightarrow \pi^0 \pi^+ a_2^-, a_2^- ightarrow \pi^0 \pi^- \omega \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6996 | 1 | 89573 |
| 6998 | $J/\psi \to K^0 \bar{\Sigma}^0 \Xi^0, K^0 \to K_L^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \Xi^0 \to \pi^0 \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^0K_L^0\pi^-\bar{n}p\gamma$ | 4210 | 1 | 89574 |
| 6999 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6998 | 1 | 89575 |
| 7000 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 6999 | 1 | 89576 |
| 7001 | $J/\psi 	o \pi^0 a_2^0 \pi^+ \pi^-, a_2^0 	o K_L^0 K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 7000 | 1 | 89577 |
| 7002 | $J/\psi ightarrow K^0 ar{K}^* b_1^0, K^0 ightarrow K_L^0, ar{K}^* ightarrow \pi^+ K^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 7001 | 1 | 89578 |
| 7003 | $J/\psi \to \pi^0 \rho^+ \Sigma^- \bar{\Sigma}^0, \rho^+ \to \pi^0 \pi^+, \Sigma^- \to \pi^- n, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 4211 | 1 | 89579 |
| 7004 | $J/\psi \to K^- \phi K_1^+, \phi \to K^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^+K^-K^-$ | 4212 | 1 | 89580 |
| 7005 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_1^+ \to \pi^0 \rho^+, K_S^0 \to \pi^0 \pi^0, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 7004 | 1 | 89581 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 7006 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, \bar{K}^0 \to K_S^0, K^0 \to K_S$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7005 | 1 | 89582 |
| 7007 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to \pi^0\pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 4213 | 1 | 89583 |
| 7008 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} f_0(1710), K^{*+} \to \pi^+ K^0, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0 \pi^0 K_L^0 K_L^0 \pi^+ K^- \gamma$ | 2136 | 1 | 89584 |
| 7009 | $J/\psi \to \pi^0\pi^-a_2^+a_0^0, a_2^+ \to \rho^0\pi^+, a_0^0 \to \pi^0\eta, \rho^0 \to \pi^+\pi^-, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2895 | 1 | 89585 |
| 7010 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 7009 | 1 | 89586 |
| 7011 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+, \\ \pi^0 \to e^+ e^- \gamma^F \gamma^f \gamma^f$ | $e^+e^-\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma^f\gamma^f$ | 4216 | 1 | 89587 |
| 7012 | $J/\psi \to \omega K^{*-}K_1^{'+}, \omega \to \pi^0\pi^+\pi^-, K^{*-} \to \pi^0K^-, K_1^{'+} \to \pi^+K^*, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 2896 | 1 | 89588 |
| 7013 | $J/\psi 	o ar{K^0} K_1^{'0}, ar{K^0} 	o K_L^0, K_1^{'0} 	o \pi^0 K^*, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K^0_LK^0_L$ | 7012 | 1 | 89589 |
| 7014 | $J/\psi \to ho^0 \eta' a_0^0, ho^0 \to \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma, \ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4218 | 1 | 89590 |
| 7015 | $J/\psi \to ho^+ K_2^{*0} K^{*-}, ho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^0 \pi^0 K^*, K^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^0 K^0, \ \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 378 | 1 | 89591 |
| 7016 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^+ K_2^{*-}, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7015 | 1 | 89592 |
| 7017 | $J/\psi \to \pi^0 \pi^0 \pi^- \omega \omega b_1^+, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 7016 | 1 | 89593 |
| 7018 | $J/\psi \to \pi^0 K^{*+} K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4220 | 1 | 89594 |
| 7019 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2138 | 1 | 89595 |
| 7020 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 7019 | 1 | 89596 |
| 7021 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2139 | 1 | 89597 |
| 7022 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}^0 h_1(1170), \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2140 | 1 | 89598 |
| 7023 | $J/\psi 	o K^0 ar{K}^* b_1^0, K^0 	o K_S^0, ar{K}^* 	o \pi^0 ar{K}^0, b_1^0 	o \pi^0 \omega, K_S^0 	o \pi^0 \pi^0, \ ar{K}^0 	o K_S^0, \omega 	o \pi^0 \pi^+ \pi^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1019 | 1 | 89599 |
| 7024 | $J/\psi \to \bar{K}^0 K_2^{*0} a_0^0, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0K_L^0K_L^0\gamma\gamma$ | 4225 | 1 | 89600 |
| 7025 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7024 | 1 | 89601 |
| 7026 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 7025 | 1 | 89602 |
| 7027 | $J/\psi \to K_0^{*+} \bar{K}_1^{'-}, K_0^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 7026 | 1 | 89603 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7028 | $J/\psi \to \pi^+\pi^-K_2^{*0}K_1^0, K_2^{*0} \to \pi^0\pi^0\bar{K}^*, K_1^0 \to \pi^-K_0^{*+}, \bar{K}^* \to \pi^+K^-, K_0^{*+} \to \pi^+K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7027 | 1 | 89604 |
| 7029 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+\pi^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2142 | 1 | 89605 |
| 7030 | $J/\psi \to \pi^+ \rho^+ \rho^- K^0 K^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7029 | 1 | 89606 |
| 7031 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_L^0, \omega \to \pi^0 \gamma, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 4227 | 1 | 89607 |
| 7032 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4228 | 1 | 89608 |
| 7033 | $J/\psi \to K^-K^{*+}f_1(1420), K^{*+} \to \pi^+K^0, f_1(1420) \to \pi^+K^0K^-, K^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+K^-K^-$ | 4229 | 1 | 89609 |
| 7034 | $J/\psi \to \bar{K}^0 K^* b_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2903 | 1 | 89610 |
| 7035 | $J/\psi \to \eta \omega f_2(1270), \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 7034 | 1 | 89611 |
| 7036 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 7035 | 1 | 89612 |
| 7037 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^+K^-, K_2^{*0} \to \pi^-K^{*+}\gamma^f, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 7036 | 1 | 89613 |
| 7038 | $J/\psi 	o K^0 ar K^* \eta', K^0 	o K^0_L, ar K^* 	o \pi^+ K^- \gamma^f, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma\gamma^f$ | 7037 | 1 | 89614 |
| 7039 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 ho^0 \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1638 | 1 | 89615 |
| 7040 | $J/\psi \to a_2^0 K^+ K^-, a_2^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 4232 | 1 | 89616 |
| 7041 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4233 | 1 | 89617 |
| 7042 | $J/\psi \to \eta \eta' \gamma, \eta \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 7041 | 1 | 89618 |
| 7043 | $J/\psi \to \omega p \bar{\Delta}^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{\Delta}^+ \to \pi^0 \bar{p}, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-par p\gamma^F$ | 2905 | 1 | 89619 |
| 7044 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^+ \pi^+ \pi^- \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 7043 | 1 | 89620 |
| 7045 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 7044 | 1 | 89621 |
| 7046 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 7045 | 1 | 89622 |
| 7047 | $J/\psi \to K_2^{*+}K_2^{*-}, K_2^{*+} \to \pi^0\pi^0K^{*+}, K_2^{*-} \to \pi^-\bar{K}^*, K^{*+} \to \pi^+K^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7046 | 1 | 89623 |
| 7048 | $J/\psi \to \pi^0 K^+ K_2^{*-} f_0(1370), K_2^{*-} \to \pi^0 K^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7047 | 1 | 89624 |
| 7049 | $J/\psi \to \pi^- \eta a_0^+ h_1(1170), \eta \to \pi^0 \pi^+ \pi^-, a_0^+ \to \bar{K}^0 K^+, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4235 | 1 | 89625 |
| 7050 | $J/\psi 	o \pi^+\pi^-K^0K_2^{*0}, K^0 	o K_S^0, K_2^{*0} 	o \pi^+K^{*-}, K_S^0 	o \pi^0\pi^0, K^{*-} 	o \pi^0K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2906 | 1 | 89626 |
| 7051 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-K_L^0\pi^+K^-\gamma^F\gamma^F$ | 2144 | 1 | 89627 |
| 7052 | $J/\psi \to K^+ K_2^{*-} \gamma^F, K_2^{*-} \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 1289 | 1 | 89628 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7053 | $J/\psi \to \pi^+\pi^- f_2(1270), f_2(1270) \to K^+K^-$ | $\pi^+\pi^-K^+K^-$ | 7052 | 1 | 89629 |
| 7054 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7053 | 1 | 89630 |
| 7055 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 7054 | 1 | 89631 |
| 7056 | $J/\psi \to \pi^+ a_2^-, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1290 | 1 | 89632 |
| 7057 | $J/\psi \to \pi^0\pi^-\bar{K}_0^{*0}K_0^{*+}, \bar{K}_0^{*0} \to \pi^0\bar{K}^0, K_0^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 2147 | 1 | 89633 |
| 7058 | $J/\psi \to \rho^+ \rho^- \gamma \gamma^f, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma\gamma^f$ | 2911 | 1 | 89634 |
| 7059 | $J/\psi \to \rho^0 \pi^+ \pi^- K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 7058 | 1 | 89635 |
| 7060 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to \pi^-\bar{K}^0, f_1(1285) \to \pi^0\pi^0\eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 7059 | 1 | 89636 |
| 7061 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 7060 | 1 | 89637 |
| 7062 | $J/\psi \to \rho^0 \omega b_1^0, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 7061 | 1 | 89638 |
| 7063 | $J/\psi ightarrow ho^+ a_2^- \eta, ho^+ ightarrow \pi^0 \pi^+, a_2^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 7062 | 1 | 89639 |
| 7064 | $J/\psi \to \eta \eta' h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \pi^0 \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 7063 | 1 | 89640 |
| 7065 | $J/\psi \to \pi^0 \rho^0 \omega b_1^0, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 4242 | 1 | 89641 |
| 7066 | $J/\psi ightarrow \eta' \phi, \eta' ightarrow \pi^0 \pi^0 \eta, \phi ightarrow K_L^0 K_S^0, \eta ightarrow \pi^0 \pi^0, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 4243 | 1 | 89642 |
| 7067 | $J/\psi \to a_0^0 f_0(1370) h_1(1170), a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, h_1(1170) \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 4244 | 1 | 89643 |
| 7068 | $J/\psi 	o \pi^0 K^- K_1^+, K_1^+ 	o ho^0 K^+, ho^0 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 7067 | 1 | 89644 |
| 7069 | $J/\psi \to \omega K^{*-}K_{1}^{'+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K^{*-} \to \pi^{0}K^{-}, K_{1}^{'+} \to \pi^{+}K^{*}, K^{*} \to \pi^{-}K^{+}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7068 | 1 | 89645 |
| 7070 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 7069 | 1 | 89646 |
| 7071 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^- a_0^+, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 4245 | 1 | 89647 |
| 7072 | $J/\psi \to \pi^0 \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1641 | 1 | 89648 |
| 7073 | $J/\psi \to \pi^- \eta a_0^+ \gamma^F, \eta \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 1291 | 1 | 89649 |
| 7074 | $J/\psi 	o \omega K^0 K_2^{*0}, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, K_2^{*0} 	o \pi^0 ar K^0, ar K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 4248 | 1 | 89650 |
| 7075 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7074 | 1 | 89651 |
| 7076 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^- \gamma^f \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 207 | 1 | 89652 |
| 7077 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^0K^-, f_0(1370) \to \pi^0\pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7076 | 1 | 89653 |
| 7078 | $J/\psi \to \pi^0 \rho^0 \eta', \rho^0 \to \pi^+ \pi^-, \eta' \to e^+ e^- \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 7077 | 1 | 89654 |
| 7079 | $J/\psi 	o a_2^0 \pi^- a_2^+, a_2^0 	o K_L^0 K_L^0, a_2^+ 	o \pi^0 ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 2915 | 1 | 89655 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 7080 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7079 | 1 | 89656 |
| 7081 | $J/\psi \to \eta K^* \bar{K}_0^{*0}, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4251 | 1 | 89657 |
| 7082 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, $ $\pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 7081 | 1 | 89658 |
| 7083 | $J/\psi ightarrow ho^+ \Lambda ar{\Sigma}^-, ho^+ ightarrow \pi^0 \pi^+, \Lambda ightarrow \pi^0 n, ar{\Sigma}^- ightarrow \pi^0 ar{p}$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 7082 | 1 | 89659 |
| 7084 | $J/\psi \to \bar{K}^0 b_1^- K_1^+, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_1^+ \to \pi^+ \pi^- K^+, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 7083 | 1 | 89660 |
| 7085 | $J/\psi \to \bar{K}^0 n \bar{\Sigma}^0, \bar{K}^0 \to K_L^0, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $K_L^0\pi^+nar p\gamma$ | 7084 | 1 | 89661 |
| 7086 | $J/\psi \to \pi^0 K^{*+} \bar{K}_1^{'-}, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4252 | 1 | 89662 |
| 7087 | $J/\psi 	o \phi p \bar{p}, \phi 	o K^+ K^-$ | $K^+K^-par{p}$ | 7086 | 1 | 89663 |
| 7088 | $J/\psi 	o K^0 ar p \Sigma^+, K^0 	o K^0_L, \Sigma^+ 	o \pi^0 p$ | $\pi^0 K^0_L p \bar{p}$ | 4253 | 1 | 89664 |
| 7089 | $J/\psi \to K^0 K^{*-}b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7088 | 1 | 89665 |
| 7090 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \rho^0 \pi^- \gamma^f, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 7089 | 1 | 89666 |
| 7091 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7090 | 1 | 89667 |
| 7092 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^+ \rho^- \gamma^f, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 7091 | 1 | 89668 |
| 7093 | $J/\psi \to K^0 K_2^{*0} \eta', K^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma\gamma$ | 4254 | 1 | 89669 |
| 7094 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 7093 | 1 | 89670 |
| 7095 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^+ \pi^+ \pi^- \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 7094 | 1 | 89671 |
| 7096 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-} \gamma^f, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 7095 | 1 | 89672 |
| 7097 | $J/\psi \to \pi^0\pi^0\pi^+\pi^-K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7096 | 1 | 89673 |
| 7098 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7097 | 1 | 89674 |
| 7099 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 7098 | 1 | 89675 |
| 7100 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \gamma \gamma, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 4255 | 1 | 89676 |
| 7101 | $J/\psi \to K^0 \bar{K}^0 a_0^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, a_0^0 \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-$ | 7100 | 1 | 89677 |
| 7102 | $J/\psi \to K_1^+ \bar{K}_1^{'-}, K_1^+ \to \rho^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1021 | 1 | 89678 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7103 | $J/\psi \to K^{*+}\bar{K}_{1}^{'-}, K^{*+} \to \pi^{+}K^{0}, \bar{K}_{1}^{'-} \to \pi^{0}K^{*-}, K^{0} \to K_{S}^{0}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7102 | 1 | 89679 |
| 7104 | $J/\psi 	o \pi^+\pi^-a_0^0f_0(1370), a_0^0 	o \pi^0\eta, f_0(1370) 	o \pi^+\pi^-, \eta 	o \gamma\gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7103 | 1 | 89680 |
| 7105 | $J/\psi \to \pi^+\pi^- f_1(1285), f_1(1285) \to \pi^+ a_0^-, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 2152 | 1 | 89681 |
| 7106 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4258 | 1 | 89682 |
| 7107 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \bar{K}^0 \gamma, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 4259 | 1 | 89683 |
| 7108 | $J/\psi \to K^+ \eta' K_0^{*-}, \eta' \to \pi^+ \pi^- \eta, K_0^{*-} \to \pi^0 K^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4260 | 1 | 89684 |
| 7109 | $J/\psi 	o ho^0 ho^0 K^+ K^{*-}, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, K^{*-} 	o \pi^- ar{K}^0, ar{K}^0 	o K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4261 | 1 | 89685 |
| 7110 | $J/\psi ightarrow \pi^- a_0^+ \gamma^F, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 7109 | 1 | 89686 |
| 7111 | $J/\psi 	o a_2^0 ar{K}^0 K^*, a_2^0 	o \pi^0 \eta, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 2918 | 1 | 89687 |
| 7112 | $J/\psi \to \pi^0 \rho^0 a_1^0, \rho^0 \to \pi^+ \pi^- \gamma^f, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7111 | 1 | 89688 |
| 7113 | $J/\psi 	o ar{K}^0 K_2^{*0}, ar{K}^0 	o K_S^0, K_2^{*0} 	o ho^- K^+, K_S^0 	o \pi^0 \pi^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 552 | 1 | 89689 |
| 7114 | $J/\psi \to \eta \omega f_0(1370), \eta \to \gamma \gamma, \omega \to \pi^0 \gamma, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 4264 | 1 | 89690 |
| 7115 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K_1^+ \to \rho^+ K^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7114 | 1 | 89691 |
| 7116 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 4265 | 1 | 89692 |
| 7117 | $J/\psi \to \phi f_0(1370), \phi \to \pi^+ \rho^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7116 | 1 | 89693 |
| 7118 | $J/\psi \to a_2^0 \rho^- \bar{K}^0 K^+, a_2^0 \to K_S^0 K_S^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 7117 | 1 | 89694 |
| 7119 | $J/\psi \to \pi^- a_1^+ f_1(1285), a_1^+ \to \rho^0 \pi^+, f_1(1285) \to \pi^+ \pi^- \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 7118 | 1 | 89695 |
| 7120 | $J/\psi \to \pi^+\pi^- \rho^+ a_1^-, \rho^+ \to \pi^0 \pi^+, a_1^- \to \pi^0 \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 2154 | 1 | 89696 |
| 7121 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^0 K^0, \bar{K}_2^0 \to \pi^+ K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7120 | 1 | 89697 |
| 7122 | $J/\psi \to \pi^0 h_1(1170), h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 7121 | 1 | 89698 |
| 7123 | $J/\psi 	o \eta' p \bar p, \eta' 	o \gamma \gamma$ | $par{p}\gamma\gamma$ | 4267 | 1 | 89699 |
| 7124 | $J/\psi \to \eta \bar{K}^* K_1^0, \eta \to \gamma \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 7123 | 1 | 89700 |
| 7125 | $J/\psi 	o \eta K^+ K_1^-, \eta 	o \pi^0 \pi^0 \pi^0, K_1^- 	o \pi^+ \pi^- K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7124 | 1 | 89701 |
| 7126 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 7125 | 1 | 89702 |
| 7127 | $J/\psi \to \pi^0 \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7126 | 1 | 89703 |
| 7128 | $J/\psi 	o \pi^0 \pi^+ ho^- \omega b_1^0, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 4268 | 1 | 89704 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7129 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 7128 | 1 | 89705 |
| 7130 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 2921 | 1 | 89706 |
| 7131 | $J/\psi \to \pi^- \bar{K}^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2155 | 1 | 89707 |
| 7132 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^0 K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4271 | 1 | 89708 |
| 7133 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 7132 | 1 | 89709 |
| 7134 | $J/\psi \to K^+ K_2^{*-} \eta', K_2^{*-} \to \rho^- K^0, \eta' \to \pi^+ \pi^- \eta, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2156 | 1 | 89710 |
| 7135 | $J/\psi \to \pi^+\pi^- f_0(1370) a_1^0, f_0(1370) \to \pi^+\pi^+\pi^-\pi^-, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7134 | 1 | 89711 |
| 7136 | $J/\psi \to \pi^- \eta \bar{K}^* K^+, \eta \to \gamma \gamma, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 1023 | 1 | 89712 |
| 7137 | $J/\psi \to \rho^0 \bar{K}^0 K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 1024 | 1 | 89713 |
| 7138 | $J/\psi \to K^-K^{*+}a^0_0, K^{*+} \to \pi^0K^+, a^0_0 \to K^0_LK^0_L$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 2159 | 1 | 89714 |
| 7139 | $J/\psi \to \pi^0 K^- f_0(1370) K_1^+, f_0(1370) \to \pi^0 \pi^0, K_1^+ \to \rho^+ K^0, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}\gamma^{F}$ | 7138 | 1 | 89715 |
| 7140 | $J/\psi \to \eta K^{*+} K_0^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 4276 | 1 | 89716 |
| 7141 | $J/\psi 	o \pi^- \omega \bar{K}^0 K_1^+, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_L^0, K_1^+ 	o ho^0 K^+, ho^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 7140 | 1 | 89717 |
| 7142 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, $ $\eta \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 672 | 1 | 89718 |
| 7143 | $J/\psi \to \rho^- a_0^0 a_0^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 7142 | 1 | 89719 |
| 7144 | $J/\psi \to \pi^0 \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4278 | 1 | 89720 |
| 7145 | $J/\psi \to \bar{K}^0 K_1^{'0} \gamma, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7144 | 1 | 89721 |
| 7146 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^+ \rho^-, h_1(1170) \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7145 | 1 | 89722 |
| 7147 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 4279 | 1 | 89723 |
| 7148 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0K^+K^-\gamma^F\gamma$ | 4280 | 1 | 89724 |
| 7149 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^0\bar{\Xi}^+, \Xi^{*-} \to \pi^-\Xi^0, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^0 \to \pi^0\Lambda, \\ \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to \pi^0n$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-nar{n}$ | 7148 | 1 | 89725 |
| 7150 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^0 \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 4281 | 1 | 89726 |
| 7151 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7150 | 1 | 89727 |
| 7152 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7151 | 1 | 89728 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7153 | $J/\psi \to \pi^0 \pi^0 a_2^0 \pi^+ \pi^-, a_2^0 \to K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2928 | 1 | 89729 |
| 7154 | $J/\psi \to K^- K^{*+} \eta' \gamma^F, K^{*+} \to \pi^0 K^+, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-\gamma^F$ | 7153 | 1 | 89730 |
| 7155 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \rho^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7154 | 1 | 89731 |
| 7156 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 2161 | 1 | 89732 |
| 7157 | $J/\psi \to \bar{K}^0 K^- K^{*+} K^0_1, \bar{K}^0 \to K^0_S, K^{*+} \to \pi^+ K^0, K^0_1 \to \rho^- K^+, K^0_S \to \pi^+ \pi^-, K^0 \to K^0_L, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 7156 | 1 | 89733 |
| 7158 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^+ \pi^- \gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 7157 | 1 | 89734 |
| 7159 | $J/\psi \to \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f$ | 4284 | 1 | 89735 |
| 7160 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^+ \pi^- \gamma^F, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^F$ | 2930 | 1 | 89736 |
| 7161 | $J/\psi \to K^{0}a_{0}^{+}\bar{K}_{1}^{'-}, K^{0} \to K_{S}^{0}, a_{0}^{+} \to \pi^{+}\eta, \bar{K}_{1}^{'-} \to \pi^{-}\bar{K}^{*}, K_{S}^{0} \to \pi^{+}\pi^{-}, \\ \eta \to \pi^{0}\pi^{0}\pi^{0}, \bar{K}^{*} \to \pi^{+}K^{-}$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^-$ | 7160 | 1 | 89737 |
| 7162 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta', \eta' \to \omega \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4286 | 1 | 89738 |
| 7163 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2162 | 1 | 89739 |
| 7164 | $J/\psi \to ho^- K_2^{*0} K^+, ho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2932 | 1 | 89740 |
| 7165 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^- K^+ \gamma^f, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma\gamma^f\gamma^f$ | 7164 | 1 | 89741 |
| 7166 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^0 K^0, \bar{K}_2^0 \to \pi^- K_2^{*+}, K^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K_2^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7165 | 1 | 89742 |
| 7167 | $J/\psi \to \pi^0 \rho^0 \pi^+ \rho^- \omega, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \omega \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7166 | 1 | 89743 |
| 7168 | $J/\psi \to \pi^0 \rho^0 \rho^0 b_1^0, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f, b_1^0 \to \pi^0 \omega, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 1649 | 1 | 89744 |
| 7169 | $J/\psi ightarrow \eta \phi f_{2}^{'}, \eta ightarrow \pi^{0} \pi^{+} \pi^{-}, \phi ightarrow K^{+} K^{-}, f_{2}^{'} ightarrow K^{+} K^{-}$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 7168 | 1 | 89745 |
| 7170 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 2934 | 1 | 89746 |
| 7171 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2935 | 1 | 89747 |
| 7172 | $J/\psi 	o K^+ K_2^{*-} \gamma^F, K_2^{*-} 	o \omega K^-, \omega 	o \pi^0 \gamma$ | $\pi^0 K^+ K^- \gamma^F \gamma$ | 4292 | 1 | 89748 |
| 7173 | $J/\psi 	o ho^0 \omega \bar{K}^0 K^*, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_L^0, K^* 	o \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 7172 | 1 | 89749 |
| 7174 | $J/\psi \to \rho^+ a_2^- \eta, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 7173 | 1 | 89750 |
| 7175 | $J/\psi \to \pi^0 \pi^0 a_0^0 b_1^0, a_0^0 \to \pi^0 \eta, b_1^0 \to \pi^0 \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7174 | 1 | 89751 |
| 7176 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^0K^-, b_1^0 \to \pi^0\omega, \omega \to \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-\gamma$ | 7175 | 1 | 89752 |
| 7177 | $J/\psi \to \pi^0 \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \rho^+ K^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}$ | 7176 | 1 | 89753 |
| 7178 | $J/\psi ightarrow \pi^0 a_2^0 \gamma, a_2^0 ightarrow K_L^0 K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 2164 | 1 | 89754 |
| 7179 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 7178 | 1 | 89755 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7180 | $J/\psi \to \rho^- \omega \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7179 | 1 | 89756 |
| 7181 | $J/\psi \to \omega a_0^0 f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2165 | 1 | 89757 |
| 7182 | $J/\psi \to \eta K^* K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, K^* \to K^0 \gamma, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma$ | 7181 | 1 | 89758 |
| 7183 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0\gamma^f, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 7182 | 1 | 89759 |
| 7184 | $J/\psi \to K^+ K^{*-} a_1^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, a_1^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^f$ | 4295 | 1 | 89760 |
| 7185 | $J/\psi \to K^0 \bar{p} \Sigma^{*+}, K^0 \to K_L^0, \Sigma^{*+} \to \pi^+ \Lambda, \Lambda \to \pi^- p$ | $K_L^0\pi^+\pi^-par{p}$ | 380 | 1 | 89761 |
| 7186 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \gamma, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 7185 | 1 | 89762 |
| 7187 | $J/\psi ightarrow \pi^- ar{K}^* p ar{\Lambda}, ar{K}^* ightarrow \pi^0 ar{K}^0, ar{\Lambda} ightarrow \pi^0 ar{n}, ar{K}^0 ightarrow K_L^0$ | $\pi^0\pi^0K_L^0\pi^-ar{n}p$ | 7186 | 1 | 89763 |
| 7188 | $J/\psi \to \rho^- \omega b_1^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 2939 | 1 | 89764 |
| 7189 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 7188 | 1 | 89765 |
| 7190 | $J/\psi \to \pi^0 \bar{\Sigma}^0 \Sigma^{*0}, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-par p\gamma$ | 7189 | 1 | 89766 |
| 7191 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^+ K^0, \eta \to \pi^0 \pi^+ \pi^-, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7190 | 1 | 89767 |
| 7192 | $J/\psi \to K^* \bar{K}_0^{*0} \gamma, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 2940 | 1 | 89768 |
| 7193 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to K^- K^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 4299 | 1 | 89769 |
| 7194 | $J/\psi ightarrow \pi^- ho^+ \eta^\prime, ho^+ ightarrow \pi^0 \pi^+, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 7193 | 1 | 89770 |
| 7195 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7194 | 1 | 89771 |
| 7196 | $J/\psi \to \pi^+ K^0 K^{*-} h_1(1170), K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 2941 | 1 | 89772 |
| 7197 | $J/\psi \to \pi^0 \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 381 | 1 | 89773 |
| 7198 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4302 | 1 | 89774 |
| 7199 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 2943 | 1 | 89775 |
| 7200 | $J/\psi 	o ar{K}^* K_1^0 \gamma, ar{K}^* 	o \pi^0 ar{K}^0, K_1^0 	o \omega K^0, ar{K}^0 	o K_S^0, \omega 	o \pi^0 \pi^+ \pi^-, \ K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1028 | 1 | 89776 |
| 7201 | $J/\psi \to \eta h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7200 | 1 | 89777 |
| 7202 | $J/\psi \to \pi^+\pi^-K^0\bar{K}^*h_1(1380), K^0 \to K^0_S, \bar{K}^* \to \pi^0\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, K^0_S \to \pi^+\pi^-, \\ \bar{K}^0 \to K^0_S, K^0 \to K^0_S, \bar{K}^* \to \pi^0\bar{K}^0, K^0_S \to \pi^0\pi^0, K^0_S \to \pi^0\pi^0, \\ \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 7201 | 1 | 89778 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7203 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7202 | 1 | 89779 |
| 7204 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2945 | 1 | 89780 |
| 7205 | $J/\psi \to \pi^0 \pi^+ \pi^- b_1^+ b_1^-, b_1^+ \to \pi^+ \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7204 | 1 | 89781 |
| 7206 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, \bar{K}^0 \to K_S^0,$ $\rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7205 | 1 | 89782 |
| 7207 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 7206 | 1 | 89783 |
| 7208 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7207 | 1 | 89784 |
| 7209 | $J/\psi \to \pi^+ K^{*-} K^0_1, K^{*-} \to \pi^- \bar{K}^0, K^0_1 \to \omega K^0, \bar{K}^0 \to K^0_S, \omega \to \pi^0 \pi^+ \pi^-, K^0_S \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 2169 | 1 | 89785 |
| 7210 | $J/\psi \to \pi^0 \pi^+ \pi^- f_0(1370), f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7209 | 1 | 89786 |
| 7211 | $J/\psi \to \bar{\Xi}^+\Xi^{*-}, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^{*-} \to \pi^-\Xi^0, \bar{\Lambda} \to \pi^0\bar{n}, \Xi^0 \to \pi^0\Lambda, \\ \Lambda \to \pi^0 n, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma^F$ | 2947 | 1 | 89787 |
| 7212 | $J/\psi \to K^0 \bar{n} \Sigma^{*0}, K^0 \to K^0_S, \Sigma^{*0} \to \pi^0 \Lambda, K^0_S \to \pi^0 \pi^0, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 4308 | 1 | 89788 |
| 7213 | $J/\psi \rightarrow a_2^0\pi^-b_1^+, a_2^0 \rightarrow \pi^0\eta, b_1^+ \rightarrow \pi^+\omega, \eta \rightarrow \gamma\gamma, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4309 | 1 | 89789 |
| 7214 | $J/\psi \to \pi^0 K^{*-} K_1^{'+}, K^{*-} \to \pi^0 K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 825 | 1 | 89790 |
| 7215 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 2949 | 1 | 89791 |
| 7216 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 7215 | 1 | 89792 |
| 7217 | $J/\psi \to K^{*-}K_2^{*+}\gamma, K^{*-} \to \pi^0K^-, K_2^{*+} \to \pi^0\pi^+K^*, K^* \to \pi^-K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 7216 | 1 | 89793 |
| 7218 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7217 | 1 | 89794 |
| 7219 | $J/\psi \to \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 7218 | 1 | 89795 |
| 7220 | $J/\psi \to \bar{K}^* K_1^{'0}, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7219 | 1 | 89796 |
| 7221 | $J/\psi ightarrow ho^+ a_2^- \eta, ho^+ ightarrow \pi^0 \pi^+, a_2^- ightarrow ho^0 \pi^-, \eta ightarrow \gamma \gamma, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 7220 | 1 | 89797 |
| 7222 | $J/\psi \to ho^0 \pi^+ a_0^-, ho^0 \to \pi^+ \pi^- \gamma^F, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 382 | 1 | 89798 |
| 7223 | $J/\psi \to a_2^+ \eta b_1^-, a_2^+ \to \pi^0 \rho^+, \eta \to \gamma \gamma, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7222 | 1 | 89799 |
| 7224 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 7223 | 1 | 89800 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 7225 | $J/\psi \to \pi^+ \rho^- K^* \bar{K}_0^{*0}, \rho^- \to \pi^0 \pi^-, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4313 | 1 | 89801 |
| 7226 | $J/\psi \to \bar{K}^* K^{*+} a_0^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, \eta \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7225 | 1 | 89802 |
| 7227 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0$ | 7226 | 1 | 89803 |
| 7228 | $J/\psi \to \pi^0\pi^-a_1^+, a_1^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 556 | 1 | 89804 |
| 7229 | $J/\psi ightarrow a_2^0 \omega, a_2^0 ightarrow \pi^+ ho^-, \omega ightarrow \pi^0 \gamma, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 7228 | 1 | 89805 |
| 7230 | $J/\psi \to \pi^+\pi^-\eta', \eta' \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2952 | 1 | 89806 |
| 7231 | $J/\psi \to \pi^- K^{*+} \bar{K}^0_1, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^0 \bar{K}^*, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, K^0_S \to \pi^0 \pi^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7230 | 1 | 89807 |
| 7232 | $J/\psi \rightarrow \rho^+ a_2^- \eta, \rho^+ \rightarrow \pi^0 \pi^+, a_2^- \rightarrow \pi^- \eta, \eta \rightarrow \gamma \gamma, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2173 | 1 | 89808 |
| 7233 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $e^+e^-\pi^0K_L^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 7232 | 1 | 89809 |
| 7234 | $J/\psi \to \pi^0 K^0 \bar{K}^* a_0^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_L^0, \\ \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\gamma\gamma$ | 7233 | 1 | 89810 |
| 7235 | $J/\psi \to K^0 K_2^{*-} a_0^+, K^0 \to K_S^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma \gamma$ | 7234 | 1 | 89811 |
| 7236 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 4317 | 1 | 89812 |
| 7237 | $J/\psi 	o \pi^0 \omega a^0_0, \omega 	o \pi^0 \pi^+ \pi^-, a^0_0 	o K^0_S K^0_S, K^0_S 	o \pi^+ \pi^-, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7236 | 1 | 89813 |
| 7238 | $J/\psi \to \rho^0 \omega b_1^0, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 7237 | 1 | 89814 |
| 7239 | $J/\psi 	o \Sigma^{*+} ar{\Sigma}^{*-}, \Sigma^{*+} 	o \pi^+ \Lambda, ar{\Sigma}^{*-} 	o \pi^- ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o ar{n} \gamma$ | $\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 7238 | 1 | 89815 |
| 7240 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7239 | 1 | 89816 |
| 7241 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K^{*-} \gamma^f \gamma^f, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma^f\gamma^f$ | 7240 | 1 | 89817 |
| 7242 | $J/\psi \to \pi^0\pi^0a_0^-b_1^+, a_0^- \to \pi^-\eta, b_1^+ \to \pi^+\omega, \eta \to \pi^0\pi^0\pi^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}$ | 2954 | 1 | 89818 |
| 7243 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 7242 | 1 | 89819 |
| 7244 | $J/\psi \to K^+ \phi \bar{K}_1^{'-}, \phi \to K_L^0 K_S^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2955 | 1 | 89820 |
| 7245 | $J/\psi \to \rho^0 K^* \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2956 | 1 | 89821 |
| 7246 | $J/\psi \to K^+ \bar{\Delta}^{++} \Sigma^{*+}, \bar{\Delta}^{++} \to \pi^- \bar{p}, \Sigma^{*+} \to \pi^+ \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^-K^+nar{p}$ | 7245 | 1 | 89822 |
| 7247 | $J/\psi ightarrow K^0 ar K^0 \eta', K^0 ightarrow K^0_L, ar K^0 ightarrow K^0_L, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 7246 | 1 | 89823 |
| 7248 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^F$ | 2174 | 1 | 89824 |
| 7249 | $J/\psi \to \pi^- K^{*+} K^{*-} a_0^+, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K^0 \to K_L^0, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 7248 | 1 | 89825 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7250 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to K^0\bar{K}^*, \eta \to \gamma\gamma, \eta \to \gamma\gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_L\gamma\gamma\gamma\gamma$ | 7249 | 1 | 89826 |
| 7251 | $J/\psi \to \pi^+ \omega K^0 K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4322 | 1 | 89827 |
| 7252 | $J/\psi ightarrow \pi^0 \pi^+ ho^- \eta', ho^- ightarrow \pi^0 \pi^-, \eta' ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1656 | 1 | 89828 |
| 7253 | $J/\psi \to \rho^0 a_2^0 K^+ K^-, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 2959 | 1 | 89829 |
| 7254 | $J/\psi \to \rho^0 \rho^0 \rho^+ K^0 K^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 7253 | 1 | 89830 |
| 7255 | $J/\psi \to \rho^0 K^- K^{*+}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F\gamma^f$ | 1657 | 1 | 89831 |
| 7256 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^0 K^{*+}, K_2^{*-} \to \pi^0 K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 7255 | 1 | 89832 |
| 7257 | $J/\psi \to \eta_c \gamma, \eta_c \to f_2' f_0(1710), f_2' \to K_S^0 K_S^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma\gamma$ | 2961 | 1 | 89833 |
| 7258 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7257 | 1 | 89834 |
| 7259 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 1304 | 1 | 89835 |
| 7260 | $J/\psi ightarrow \pi^0\pi^0\pi^+\pi^-a^0_0, a^0_0 ightarrow \pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 7259 | 1 | 89836 |
| 7261 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \rho^- K^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 4328 | 1 | 89837 |
| 7262 | $J/\psi \rightarrow \eta' a_0^0 \gamma, \eta' \rightarrow \pi^0 \pi^0 \eta, a_0^0 \rightarrow \pi^0 \eta, \eta \rightarrow \gamma \gamma, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 1659 | 1 | 89838 |
| 7263 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to K^+ K^-, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 4330 | 1 | 89839 |
| 7264 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^-\pi^-K^+K^+$ | 2179 | 1 | 89840 |
| 7265 | $J/\psi \to \eta K^+ K_1^-, \eta \to \pi^0 \pi^0 \pi^0, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 4332 | 1 | 89841 |
| 7266 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 7265 | 1 | 89842 |
| 7267 | $J/\psi \to \pi^0 K_2^{*0} \bar{K}_0^{*0}, K_2^{*0} \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4333 | 1 | 89843 |
| 7268 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \phi \to \eta \gamma, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 7267 | 1 | 89844 |
| 7269 | $J/\psi 	o \omega \bar{K}^0 K_1^{'0}, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_L^0, K_1^{'0} 	o \pi^0 K^*, K^* 	o \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 7268 | 1 | 89845 |
| 7270 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7269 | 1 | 89846 |
| 7271 | $J/\psi 	o \eta\eta\gamma, \eta 	o \pi^0\pi^0\pi^0, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 7270 | 1 | 89847 |
| 7272 | $J/\psi \to \eta K^0 \bar{K}_1^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^+ K^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7271 | 1 | 89848 |
| 7273 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 4334 | 1 | 89849 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7274 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^+ \pi^- \omega, K^{*+} \to \pi^+ K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 7273 | 1 | 89850 |
| 7275 | $J/\psi \to ho^0 \pi^+ a_2^- \gamma^F, ho^0 \to \pi^+ \pi^-, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7274 | 1 | 89851 |
| 7276 | $J/\psi ightarrow K^0 ar{K}^* \eta', K^0 ightarrow K^0_L, ar{K}^* ightarrow \pi^+ K^-, \eta' ightarrow \omega \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 7275 | 1 | 89852 |
| 7277 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 7276 | 1 | 89853 |
| 7278 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7277 | 1 | 89854 |
| 7279 | $J/\psi \to \omega K^+ \bar{K}_1^{'-}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7278 | 1 | 89855 |
| 7280 | $J/\psi ightarrow ho^- \eta a_0^+, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^0 \pi^0, a_0^+ ightarrow \pi^+ \eta, \pi^0 ightarrow e^+ e^- \gamma^F, \ \eta ightarrow \gamma \gamma$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 7279 | 1 | 89856 |
| 7281 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2180 | 1 | 89857 |
| 7282 | $J/\psi \to \pi^0 \bar{\Sigma}^{*+} \Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Sigma^{*-} \to \pi^0 \Sigma^-, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^- \to \pi^- n$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 2966 | 1 | 89858 |
| 7283 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 7282 | 1 | 89859 |
| 7284 | $J/\psi 	o \pi^- \omega \bar{K}^0 K^{*+}, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_L^0, K^{*+} 	o \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 281 | 1 | 89860 |
| 7285 | $J/\psi 	o K^0 ar{K}^0_1, K^0 	o K^0_L, ar{K}^0_1 	o ho^0 ar{K}^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K^0_L$ | $K_L^0K_L^0\pi^+\pi^-$ | 1661 | 1 | 89861 |
| 7286 | $J/\psi \to \pi^0 \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 7285 | 1 | 89862 |
| 7287 | $J/\psi \to \omega K^* \bar{K}_0^{*0}, \omega \to \pi^0 \gamma, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^-K^+\gamma$ | 7286 | 1 | 89863 |
| 7288 | $J/\psi \to \pi^+ \rho^- K^+ K_1^-, \rho^- \to \pi^0 \pi^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4339 | 1 | 89864 |
| 7289 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7288 | 1 | 89865 |
| 7290 | $J/\psi \to K_2^{*-} K_1^{'+}, K_2^{*-} \to \pi^- \bar{K}^0 \gamma^f, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 4340 | 1 | 89866 |
| 7291 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7290 | 1 | 89867 |
| 7292 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7291 | 1 | 89868 |
| 7293 | $J/\psi 	o ar{K}^* K_0^0 \gamma, ar{K}^* 	o \pi^+ K^-, K_0^0 	o \pi^- K^+ \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 2969 | 1 | 89869 |
| 7294 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 2970 | 1 | 89870 |
| 7295 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 7294 | 1 | 89871 |
| 7296 | $J/\psi 	o ar{K}^0 \phi K_1^0, ar{K}^0 	o K_S^0, \phi 	o K_L^0 K_S^0, K_1^0 	o ho^- K^+, K_S^0 	o \pi^0 \pi^0, K_S^0 	o \pi^0 \pi^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 1033 | 1 | 89872 |
| 7297 | $J/\psi ightarrow \pi^0\pi^-\omega a_0^+, \omega ightarrow \pi^0\pi^+\pi^-, a_0^+ ightarrow \pi^+\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1034 | 1 | 89873 |
| 7298 | $J/\psi \to \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 1664 | 1 | 89874 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7299 | $J/\psi \to \eta K^{*-}K_0^{*+}, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma^f$ | 2974 | 1 | 89875 |
| 7300 | $J/\psi \to \phi f_1(1285), \phi \to K_L^0 K_S^0, f_1(1285) \to \pi^- a_0^+, K_S^0 \to \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7299 | 1 | 89876 |
| 7301 | $J/\psi \to \pi^0 \rho^0 K^+ K^- f_0(1710), \rho^0 \to \pi^+ \pi^-, f_0(1710) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7300 | 1 | 89877 |
| 7302 | $J/\psi \to \rho^0 K^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7301 | 1 | 89878 |
| 7303 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^- \gamma^F, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 2186 | 1 | 89879 |
| 7304 | $J/\psi \to \pi^0 \rho^- a_2^+ a_1^0, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 7303 | 1 | 89880 |
| 7305 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4348 | 1 | 89881 |
| 7306 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 7305 | 1 | 89882 |
| 7307 | $J/\psi \to K^0 K_2^{*0} \phi, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, \phi \to K^+ K^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 7306 | 1 | 89883 |
| 7308 | $J/\psi \rightarrow \rho^- \eta' a_0^+, \rho^- \rightarrow \pi^0 \pi^-, \eta' \rightarrow \rho^0 \gamma, a_0^+ \rightarrow \pi^+ \eta, \rho^0 \rightarrow \pi^+ \pi^- \gamma^F, \\ \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 4349 | 1 | 89884 |
| 7309 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 4350 | 1 | 89885 |
| 7310 | $J/\psi \to \pi^0 a_2^- \bar{K}^0 K^+, a_2^- \to \pi^0 \rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 7309 | 1 | 89886 |
| 7311 | $J/\psi \to \eta(2225)\gamma, \eta(2225) \to \phi\phi, \phi \to \pi^-\rho^+, \phi \to a_0^0\gamma, \rho^+ \to \pi^0\pi^+, a_0^0 \to \pi^0\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 7310 | 1 | 89887 |
| 7312 | $J/\psi 	o \eta ar{K}^0 K_1^0, \eta 	o \pi^0 \pi^0 \pi^0, ar{K}^0 	o K_L^0, K_1^0 	o \omega K^0, \omega 	o \pi^0 \pi^+ \pi^-, K_S^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1665 | 1 | 89888 |
| 7313 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^* \gamma^f, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma^f$ | 7312 | 1 | 89889 |
| 7314 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^- \gamma^f, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 7313 | 1 | 89890 |
| 7315 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 4352 | 1 | 89891 |
| 7316 | $J/\psi \to K^+ a_0^0 K_1^-, a_0^0 \to \pi^0 \eta, K_1^- \to \pi^- \bar{K}_0^{*0}, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 7315 | 1 | 89892 |
| 7317 | $J/\psi \to K_0^{*+} \bar{K}_1^{'-}, K_0^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7316 | 1 | 89893 |
| 7318 | $J/\psi 	o ho^+ ho^- \eta \omega, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-, \eta 	o \pi^0 \pi^0, \omega 	o \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 81 | 1 | 89894 |
| 7319 | $J/\psi \to \omega \bar{K}^* K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 457 | 1 | 89895 |
| 7320 | $J/\psi 	o \pi^+\pi^-\omega, \omega 	o \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7319 | 1 | 89896 |
| 7321 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7320 | 1 | 89897 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7322 | $J/\psi \to \pi^0 K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 7321 | 1 | 89898 |
| 7323 | $J/\psi ightarrow \pi^0 p ar p, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-par{p}\gamma^F$ | 2979 | 1 | 89899 |
| 7324 | $J/\psi \to \rho^+ f_2(1270) a_0^-, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7323 | 1 | 89900 |
| 7325 | $J/\psi \to \pi^0 \bar{K}^* K^+ b_1^-, \bar{K}^* \to \pi^+ K^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 4356 | 1 | 89901 |
| 7326 | $J/\psi \to \rho^- \omega b_1^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \gamma, b_1^+ \to \pi^+ \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 209 | 1 | 89902 |
| 7327 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \rho^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7326 | 1 | 89903 |
| 7328 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^F, \bar{K}^0 \to K^0_S, K^{*+} \to \pi^+ K^0, K^0_S \to \pi^+ \pi^-, K^0 \to K^0_L$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7327 | 1 | 89904 |
| 7329 | $J/\psi \to \pi^0 K^+ K_2^{*-} \gamma^F, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma^F$ | 7328 | 1 | 89905 |
| 7330 | $J/\psi \to K^* \bar{K}_1^0, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 7329 | 1 | 89906 |
| 7331 | $J/\psi \to \rho^0 \pi^- \bar{K}^* K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 7330 | 1 | 89907 |
| 7332 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_0^{*+}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 7331 | 1 | 89908 |
| 7333 | $J/\psi \to \pi^- \omega \bar{K}^0 K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7332 | 1 | 89909 |
| 7334 | $J/\psi \to a_2^0 \rho^+ K^0 K^-, a_2^0 \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4358 | 1 | 89910 |
| 7335 | $J/\psi \to \pi^+ K_1^- K_1^{'0}, K_1^- \to \rho^0 K^-, K_1^{'0} \to \pi^- K^{*+}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma^{f}$ | 4359 | 1 | 89911 |
| 7336 | $J/\psi \to K^- K_1^+ f_1(1285), K_1^+ \to \pi^+ K_0^0, f_1(1285) \to \pi^- a_0^+, K_0^0 \to \pi^- K^+, a_0^+ \to \pi^+ \eta, $ $\eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma$ | 7335 | 1 | 89912 |
| 7337 | $J/\psi \to \eta a_0^+ b_1^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^+ \pi^- \gamma^F, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 2981 | 1 | 89913 |
| 7338 | $J/\psi \to K^0 \eta' \bar{K}_1^0, K^0 \to K_L^0, \eta' \to \pi^0 \pi^0 \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \eta \to \gamma \gamma, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 7337 | 1 | 89914 |
| 7339 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4361 | 1 | 89915 |
| 7340 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4362 | 1 | 89916 |
| 7341 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \gamma \gamma, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 7340 | 1 | 89917 |
| 7342 | $J/\psi ightarrow \omega \eta' f_0(1370), \omega ightarrow \pi^0 \gamma, \eta' ightarrow ho^0 \gamma, f_0(1370) ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7341 | 1 | 89918 |
| 7343 | $J/\psi \to \eta K^- K_1^{'+}, \eta \to \pi^0 \pi^0 \pi^0, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4363 | 1 | 89919 |
| 7344 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K_1^+ \to \pi^+ K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \\ \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2982 | 1 | 89920 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7345 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 7344 | 1 | 89921 |
| 7346 | $J/\psi 	o \pi^0 \Sigma^+ ar{\Sigma}^{*-}, \Sigma^+ 	o \pi^0 p, ar{\Sigma}^{*-} 	o \pi^- ar{\Lambda}, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 2983 | 1 | 89922 |
| 7347 | $J/\psi \to \omega p \bar{\Delta}^+, \omega \to \pi^+ \pi^- \gamma^F, \bar{\Delta}^+ \to \pi^0 \bar{p}$ | $\pi^0\pi^+\pi^-p\bar{p}\gamma^F$ | 7346 | 1 | 89923 |
| 7348 | $J/\psi \to \rho^+ a_0^- a_1^0, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 7347 | 1 | 89924 |
| 7349 | $J/\psi \to \pi^+ K_S^0 K^- \phi, K_S^0 \to \pi^+ \pi^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^f$ | 832 | 1 | 89925 |
| 7350 | $J/\psi \to \rho^0 \pi^+ \rho^- h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7349 | 1 | 89926 |
| 7351 | $J/\psi \to \pi^- \rho^+ K^{*+} K_1^-, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0 \gamma^f, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma^f$ | 7350 | 1 | 89927 |
| 7352 | $J/\psi \to f_2(1270) K^0 \bar{K}^*, f_2(1270) \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0$ | 2192 | 1 | 89928 |
| 7353 | $J/\psi 	o \pi^- ho^- a_2^+ ar K^0 K^+, ho^- 	o \pi^0 \pi^-, a_2^+ 	o \pi^+ \eta, ar K^0 	o K_L^0, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 7352 | 1 | 89929 |
| 7354 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \rho^- K^+, K_0^{*-} \to \pi^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7353 | 1 | 89930 |
| 7355 | $J/\psi \to \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 7354 | 1 | 89931 |
| 7356 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 a_1^+ a_1^-, a_1^+ \to \rho^0 \pi^+, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 7355 | 1 | 89932 |
| 7357 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 4368 | 1 | 89933 |
| 7358 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^+ \pi^- b_1^0, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7357 | 1 | 89934 |
| 7359 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7358 | 1 | 89935 |
| 7360 | $J/\psi \to \eta f_2' \gamma, \eta \to \pi^0 \pi^0 \pi^0, f_2' \to K_S^0 K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma$ | 7359 | 1 | 89936 |
| 7361 | $J/\psi \to \pi^0 K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7360 | 1 | 89937 |
| 7362 | $J/\psi \to \eta K^0 \bar{K}_1^0, \eta \to \gamma \gamma, K^0 \to K_L^0, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 2986 | 1 | 89938 |
| 7363 | $J/\psi \to K^{-}\phi K_{1}^{'+}, \phi \to \pi^{0}\rho^{0}, K_{1}^{'+} \to \pi^{0}K^{*+}, \rho^{0} \to \pi^{+}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7362 | 1 | 89939 |
| 7364 | $J/\psi \to \pi^+ \rho^- \bar{K}^* K_1^0, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2193 | 1 | 89940 |
| 7365 | $J/\psi ightarrow ho^+ a_2^-, ho^+ ightarrow \pi^0 \pi^+, a_2^- ightarrow \pi^- \eta, \eta ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 7364 | 1 | 89941 |
| 7366 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7365 | 1 | 89942 |
| 7367 | $J/\psi \to \pi^0 \pi^- a_2^+ \gamma^f, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 7366 | 1 | 89943 |
| 7368 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \phi \to \eta\gamma, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma\gamma$ | 4371 | 1 | 89944 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7369 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 4372 | 1 | 89945 |
| 7370 | $J/\psi \to \bar{K}^0 K_2^{*0} \phi, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, \phi \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4373 | 1 | 89946 |
| 7371 | $J/\psi \to \pi^0 \omega h_1(1170)\gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7370 | 1 | 89947 |
| 7372 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \rho^-\bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7371 | 1 | 89948 |
| 7373 | $J/\psi \to \pi^{+}a_{2}^{-}a_{0}^{0}, a_{2}^{-} \to \pi^{-}\eta, a_{0}^{0} \to \pi^{0}\eta, \eta \to \pi^{+}\pi^{-}\gamma^{F}, \eta \to \gamma\gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 7372 | 1 | 89949 |
| 7374 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \rho^0 \gamma, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 4374 | 1 | 89950 |
| 7375 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4375 | 1 | 89951 |
| 7376 | $J/\psi \to \pi^+\pi^-\rho^-\omega a_0^+, \rho^- \to \pi^0\pi^-, \omega \to \pi^0\pi^+\pi^-, a_0^+ \to \pi^+\eta, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 4376 | 1 | 89952 |
| 7377 | $J/\psi \to \eta \omega \eta', \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 7376 | 1 | 89953 |
| 7378 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7377 | 1 | 89954 |
| 7379 | $J/\psi \to \phi f_1(1420), \phi \to \eta \gamma, f_1(1420) \to \pi^- \bar{K}^0 K^+, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 7378 | 1 | 89955 |
| 7380 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to \pi^-\bar{K}^0, f_1(1285) \to \pi^0\pi^-\rho^+, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 7379 | 1 | 89956 |
| 7381 | $J/\psi \to \pi^0 \rho^0 \pi^+ \pi^- \rho^- a_2^+, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7380 | 1 | 89957 |
| 7382 | $J/\psi \to \bar{K}^0 \Delta^+ \bar{\Sigma}^-, \bar{K}^0 \to K_L^0, \Delta^+ \to \pi^0 p, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0 K_L^0 \pi^- ar{n} p$ | 4377 | 1 | 89958 |
| 7383 | $J/\psi \to \rho^{-}K^{*+}\bar{K}'_{1}^{0}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*+} \to \pi^{0}K^{+}, \bar{K}'_{1}^{0} \to \pi^{+}K^{*-}, K^{*-} \to \pi^{-}\bar{K}^{0}, \bar{K}^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7382 | 1 | 89959 |
| 7384 | $J/\psi \to \pi^{+}\rho^{+}\rho^{-}b_{1}^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, b_{1}^{-} \to \pi^{-}\omega, \omega \to \pi^{0}\pi^{+}\pi^{-}, \pi^{0} \to e^{+}e^{-}\gamma^{F}\gamma^{f}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 7383 | 1 | 89960 |
| 7385 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7384 | 1 | 89961 |
| 7386 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7385 | 1 | 89962 |
| 7387 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 1312 | 1 | 89963 |
| 7388 | $J/\psi \to K^+ K^{*-} \gamma^F \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma^F\gamma^f$ | 4379 | 1 | 89964 |
| 7389 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 2989 | 1 | 89965 |
| 7390 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^- K_1^{'+}, \eta \to \pi^0 \pi^0 \pi^0, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 4381 | 1 | 89966 |
| 7391 | $J/\psi ightarrow a_2^0 ho^- a_0^+, a_2^0 ightarrow \pi^0 \eta, ho^- ightarrow \pi^0 \pi^-, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \gamma \gamma, \ \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 386 | 1 | 89967 |
| 7392 | $J/\psi \to \pi^- f_2(1270)b_1^+, f_2(1270) \to K_S^0 K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 460 | 1 | 89968 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7393 | $J/\psi 	o \pi^0\pi^0\pi^-b_1^0a_0^+, b_1^0 	o \pi^0\omega, a_0^+ 	o \pi^+\eta, \omega 	o \pi^0\pi^+\pi^-, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 7392 | 1 | 89969 |
| 7394 | $J/\psi \to \pi^0 \rho^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 4384 | 1 | 89970 |
| 7395 | $J/\psi \to \pi^0 K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7394 | 1 | 89971 |
| 7396 | $J/\psi \to \pi^- \eta b_1^+ \gamma^f, \eta \to \gamma \gamma, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 7395 | 1 | 89972 |
| 7397 | $J/\psi \to \pi^0 \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7396 | 1 | 89973 |
| 7398 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \omega K^0, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 7397 | 1 | 89974 |
| 7399 | $J/\psi \to \rho^- K^+ \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 7398 | 1 | 89975 |
| 7400 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4385 | 1 | 89976 |
| 7401 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 7400 | 1 | 89977 |
| 7402 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 7401 | 1 | 89978 |
| 7403 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\gamma^{F}$ | 7402 | 1 | 89979 |
| 7404 | $J/\psi \to \eta K^0 \bar{K}^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7403 | 1 | 89980 |
| 7405 | $J/\psi \to \omega h_1(1170)h_1(1170), \omega \to \pi^0\pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, h_1(1170) \to \pi^-\rho^+, \rho^- \to \pi^0\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7404 | 1 | 89981 |
| 7406 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 7405 | 1 | 89982 |
| 7407 | $J/\psi 	o ar K^0 n ar \Lambda, ar K^0 	o K_L^0, ar \Lambda 	o \pi^+ ar p \gamma^f$ | $K^0_L\pi^+nar p\gamma^f$ | 4386 | 1 | 89983 |
| 7408 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma$ | 7407 | 1 | 89984 |
| 7409 | $J/\psi 	o ar{K}^0 a_0^0 K_1^0, ar{K}^0 	o K_L^0, a_0^0 	o \pi^0 \eta, K_1^0 	o \pi^0 K^*, \eta 	o \gamma \gamma, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\gamma\gamma$ | 1673 | 1 | 89985 |
| 7410 | $J/\psi \to \pi^0 K^+ K^{*-} f_0(1370), K^{*-} \to \pi^- \bar{K}^0, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 7409 | 1 | 89986 |
| 7411 | $J/\psi \to \pi^0\pi^+K_1^0K_1^-, K_1^0 \to \pi^0K_0^0, K_1^- \to \omega K^-, K_0^0 \to \pi^-K^+, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7410 | 1 | 89987 |
| 7412 | $J/\psi \to \omega K^0 \bar{K}^* \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 835 | 1 | 89988 |
| 7413 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-$ | 7412 | 1 | 89989 |
| 7414 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \omega K^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 7413 | 1 | 89990 |
| 7415 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_L^0, \\ \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4389 | 1 | 89991 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7416 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 7415 | 1 | 89992 |
| 7417 | $J/\psi \to \pi^0 K_0^{*-} K_1^{'+}, K_0^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7416 | 1 | 89993 |
| 7418 | $J/\psi \to \pi^0 \rho^0 \eta f_2(1270), \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7417 | 1 | 89994 |
| 7419 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \omega \bar{K}^0, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7418 | 1 | 89995 |
| 7420 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 7419 | 1 | 89996 |
| 7421 | $J/\psi ightarrow \pi^- ar{K}^* K^+ \eta', ar{K}^* ightarrow \pi^+ K^-, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma$ | 4390 | 1 | 89997 |
| 7422 | $J/\psi \to K^{-}_{2}K^{-}_{1}K^{-}_{2}K^{-}_{1}K^{-}_{1} \to K^{-}_{1}K^{-}_{1} \to K^{-}_{1}K^{-}_{1} \to K^{0}_{1}$ $J/\psi \to K_{2}^{*+}K_{2}^{*-}, K_{2}^{*+} \to \pi^{+}K^{0}, K_{2}^{*-} \to \pi^{+}\pi^{-}K^{*-}, K^{0} \to K_{L}^{0}, K^{*-} \to \pi^{-}\bar{K}^{0},$ $\bar{K}^{0} \to K_{L}^{0}$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4391 | 1 | 89998 |
| 7423 | $J/\psi \to \pi^0 \pi^0 K^0 \eta' \bar{K}_1^0, K^0 \to K_L^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7422 | 1 | 89999 |
| 7424 | $J/\psi \to K^* \bar{K}_1^{'0} \gamma, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 7423 | 1 | 90000 |
| 7425 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 7424 | 1 | 90001 |
| 7426 | $J/\psi 	o \pi^+\pi^-\eta\gamma^F\gamma^f, \eta 	o e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma^F\gamma^f$ | 7425 | 1 | 90002 |
| 7427 | $J/\psi \to K_2^{*0} K^- a_0^+, K_2^{*0} \to \pi^- K^{*+}, a_0^+ \to \pi^+ \eta, K^{*+} \to \pi^0 K^+, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 7426 | 1 | 90003 |
| 7428 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 7427 | 1 | 90004 |
| 7429 | $J/\psi \to \rho^0 \rho^0 \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 836 | 1 | 90005 |
| 7430 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 7429 | 1 | 90006 |
| 7431 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 4393 | 1 | 90007 |
| 7432 | $J/\psi \to \pi^0 \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7431 | 1 | 90008 |
| 7433 | $J/\psi \to K_2^{*0} K^- a_0^+, K_2^{*0} \to \pi^- K^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7432 | 1 | 90009 |
| 7434 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \rho^- K^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 7433 | 1 | 90010 |
| 7435 | $J/\psi \to \bar{\Sigma}^- \Sigma^{*+}, \bar{\Sigma}^- \to \pi^0 \bar{p}, \Sigma^{*+} \to \pi^+ \Sigma^0, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-par p\gamma$ | 7434 | 1 | 90011 |
| 7436 | $J/\psi \to \bar{K}^*K^+a_1^-, \bar{K}^* \to \pi^0\bar{K}^0, a_1^- \to \pi^0\rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7435 | 1 | 90012 |
| 7437 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 7436 | 1 | 90013 |
| 7438 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 \rho^+ \rho^-, a_2^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7437 | 1 | 90014 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7439 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^+ K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 2200 | 1 | 90015 |
| 7440 | $J/\psi \to \pi^0 K^{*+} K_1^- \gamma, K^{*+} \to \pi^0 K^+, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 2201 | 1 | 90016 |
| 7441 | $J/\psi ightarrow \eta ar{K}^0 K_1^0, \eta ightarrow \pi^0 \pi^0 \pi^0, ar{K}^0 ightarrow K_L^0, K_1^0 ightarrow \omega K^0, \omega ightarrow \pi^0 \gamma, K^0 ightarrow K_L^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\gamma$ | 7440 | 1 | 90017 |
| 7442 | $J/\psi 	o \pi^0 K^0 \bar{K}^0_1, K^0 	o K^0_S, \bar{K}^0_1 	o \pi^+ K^{*-}, K^0_S 	o \pi^+ \pi^-, K^{*-} 	o \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4396 | 1 | 90018 |
| 7443 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 4397 | 1 | 90019 |
| 7444 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to K^-K^{*+}, \eta \to \gamma\gamma, \eta \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 4398 | 1 | 90020 |
| 7445 | $J/\psi ightarrow a_2^0 \eta \omega, a_2^0 ightarrow \pi^+ ho^-, \eta ightarrow \pi^0 \pi^0 \pi^0, \omega ightarrow \pi^0 \gamma, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 2997 | 1 | 90021 |
| 7446 | $J/\psi \to f_2(1270)\bar{K}^0K_1^0, f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^-K^{*+}, K^{*+} \to \pi^+K^0, K_L^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7445 | 1 | 90022 |
| 7447 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \omega \omega, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 7446 | 1 | 90023 |
| 7448 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4400 | 1 | 90024 |
| 7449 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 7448 | 1 | 90025 |
| 7450 | $J/\psi \to \eta K^{*+} K_2^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4401 | 1 | 90026 |
| 7451 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7450 | 1 | 90027 |
| 7452 | $J/\psi \to \pi^+ K^* K_1^- \gamma^f, K^* \to \pi^0 K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 4402 | 1 | 90028 |
| 7453 | $J/\psi \to \pi^0 K^+ K^{*-} a_1^0, K^{*-} \to \pi^- \bar{K}^0, a_1^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7452 | 1 | 90029 |
| 7454 | $J/\psi \to \rho^0 \omega K^+ K^{*-}, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 2998 | 1 | 90030 |
| 7455 | $J/\psi \to \eta a_0^+ b_1^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2202 | 1 | 90031 |
| 7456 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^+ \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7455 | 1 | 90032 |
| 7457 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \rho^0 \bar{K}^0, K_1^{'0} \to \pi^+ \pi^- K^0, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 7456 | 1 | 90033 |
| 7458 | $J/\psi ightarrow \pi^- \eta K_S^0 K^+, \eta ightarrow \pi^0 \pi^0 \pi^0, K_S^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 4405 | 1 | 90034 |
| 7459 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7458 | 1 | 90035 |
| 7460 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- a_0^+ \gamma^f, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7459 | 1 | 90036 |
| 7461 | $J/\psi \rightarrow \pi^+ \rho^- \omega \gamma^F, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 2203 | 1 | 90037 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7462 | $J/\psi \to K^* \bar{K}^* f_0(1370), K^* \to \pi^- K^+ \gamma^f, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 7461 | 1 | 90038 |
| 7463 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \pi^0 \pi^+ \omega, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7462 | 1 | 90039 |
| 7464 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^0 K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4407 | 1 | 90040 |
| 7465 | $J/\psi 	o \omega K^0 \bar{K}^*, \omega 	o \pi^0 \gamma, K^0 	o K^0_S, \bar{K}^* 	o \pi^+ K^-, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 4408 | 1 | 90041 |
| 7466 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^{*+}, K_2^{*0} \to \rho^+ K^-, K^{*+} \to \pi^0 K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4409 | 1 | 90042 |
| 7467 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+}\to \pi^+K^0, K^{*-}\to \pi^0K^-, \phi\to \pi^0\rho^0, K^0\to K^0_S, \rho^0\to \pi^+\pi^-, K^0_S\to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7466 | 1 | 90043 |
| 7468 | $J/\psi 	o \pi^+\pi^-par{\Delta}^+, ar{\Delta}^+ 	o \pi^-ar{n}$ | $\pi^+\pi^-\pi^-ar{n}p$ | 1676 | 1 | 90044 |
| 7469 | $J/\psi 	o \pi^+ a_2^-, a_2^- 	o \pi^0 ho^-, \pi^0 	o e^+ e^- \gamma^F, ho^- 	o \pi^0 \pi^-$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 7468 | 1 | 90045 |
| 7470 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^- \rho^+, K^{*+} \to \pi^0 K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 7469 | 1 | 90046 |
| 7471 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 4411 | 1 | 90047 |
| 7472 | $J/\psi \to \pi^- \rho^+ \rho^- \bar{K}^* K^{*+}, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 7471 | 1 | 90048 |
| 7473 | $J/\psi \to \rho^- \bar{K}^0 K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 7472 | 1 | 90049 |
| 7474 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^+K^0K^-, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3002 | 1 | 90050 |
| 7475 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^0K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 1677 | 1 | 90051 |
| 7476 | $J/\psi \rightarrow \rho^- \bar{K}^0 K^+ a^0_0, \rho^- \rightarrow \pi^0 \pi^-, \bar{K}^0 \rightarrow K^0_L, a^0_0 \rightarrow \pi^0 \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma\gamma$ | 7475 | 1 | 90052 |
| 7477 | $J/\psi \to \pi^- \bar{K}^0 K_1^+ \gamma^F, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 7476 | 1 | 90053 |
| 7478 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^0 \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7477 | 1 | 90054 |
| 7479 | $J/\psi \to \pi^- \bar{K}^* K^{*+} a_1^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, a_1^0 \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7478 | 1 | 90055 |
| 7480 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^- \rho^+, f_1(1285) \to \pi^0 a_0^0, \rho^+ \to \pi^0 \pi^+, a_0^0 \to \pi^0 \eta, $ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4414 | 1 | 90056 |
| 7481 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7480 | 1 | 90057 |
| 7482 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^0K^+K^-$ | 3004 | 1 | 90058 |
| 7483 | $J/\psi \to \pi^0 \pi^0 \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7482 | 1 | 90059 |
| 7484 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7483 | 1 | 90060 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7485 | $J/\psi \to \eta p \bar{p}, \eta \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-p\bar{p}\gamma^F\gamma^f$ | 7484 | 1 | 90061 |
| 7486 | $J/\psi \to \pi^+ K_0^0 K_1^-, K_0^0 \to \pi^- K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2206 | 1 | 90062 |
| 7487 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \pi^- a_0^0, a_0^0 	o \pi^0 \eta, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 7486 | 1 | 90063 |
| 7488 | $J/\psi ightarrow \omega \omega b_1^0, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7487 | 1 | 90064 |
| 7489 | $J/\psi \to \pi^+ \omega K^* K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7488 | 1 | 90065 |
| 7490 | $J/\psi \to \pi^+ \omega K^0 K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7489 | 1 | 90066 |
| 7491 | $J/\psi 	o ar{K}^0 K^* a^0_0, ar{K}^0 	o K^0_S, K^* 	o \pi^0 K^0, a^0_0 	o \pi^0 \eta, K^0_S 	o \pi^+ \pi^- \gamma^F, \ K^0 	o K^0_L, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^F$ | 7490 | 1 | 90067 |
| 7492 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7491 | 1 | 90068 |
| 7493 | $J/\psi \to K^{*-}K_{1}^{'+}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{0}K^{*+}, \bar{K}^{0} \to K_{S}^{0}, K^{*+} \to \pi^{+}K^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}, K^{0} \to K_{L}^{0}$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7492 | 1 | 90069 |
| 7494 | $J/\psi \to K^+K^-h_1(1170)\gamma^f, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 7493 | 1 | 90070 |
| 7495 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^+K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 7494 | 1 | 90071 |
| 7496 | $J/\psi \to \pi^- \bar{\Xi}^{*+} \Xi^0, \bar{\Xi}^{*+} \to \pi^+ \bar{\Xi}^0, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Lambda \to \pi^- p, \\ \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 4417 | 1 | 90072 |
| 7497 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}_1^0 \to \rho^+ K^-, K^{*+} \to \pi^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7496 | 1 | 90073 |
| 7498 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0\bar{K}^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7497 | 1 | 90074 |
| 7499 | $J/\psi \to K_1^0 \bar{K}_1^{'0}, K_1^0 \to \pi^0 K_0^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_0^0 \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3006 | 1 | 90075 |
| 7500 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^+K_0^0, K_0^0 \to \pi^0K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 7499 | 1 | 90076 |
| 7501 | $J/\psi \to \rho^0 a_2^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \pi^- \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7500 | 1 | 90077 |
| 7502 | $J/\psi \to K^{-}K_{1}^{'+}\gamma^{F}, K_{1}^{'+} \to \pi^{+}K^{*}, K^{*} \to \pi^{-}K^{+}$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 7501 | 1 | 90078 |
| 7503 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^0 \eta, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 7502 | 1 | 90079 |
| 7504 | $J/\psi 	o \Sigma^+ ar{\Sigma}^-, \Sigma^+ 	o \pi^0 p, ar{\Sigma}^- 	o ar{p} \gamma$ | $\pi^0 p\bar{p}\gamma$ | 2207 | 1 | 90080 |
| 7505 | $J/\psi \to K^* \bar{p} \Sigma^+, K^* \to \pi^- K^+, \Sigma^+ \to \pi^+ n$ | $\pi^+\pi^-K^+nar{p}$ | 7504 | 1 | 90081 |
| 7506 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \omega a_1^-, \omega 	o \pi^0 \pi^+ \pi^-, a_1^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 4420 | 1 | 90082 |
| 7507 | $J/\psi \to \phi f_0(1710), \phi \to \eta \gamma, f_0(1710) \to K^+K^-, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 7506 | 1 | 90083 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7508 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^+\pi^-K^{*-}, K_1^{'+} \to \pi^+K^*, K^{*-} \to \pi^-\bar{K}^0, K^* \to \pi^-K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 7507 | 1 | 90084 |
| 7509 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^*\bar{K}^*, K^* \to \pi^- K^+ \gamma^f, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 7508 | 1 | 90085 |
| 7510 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^0 \pi^0, \phi \to K^+ K^-, f_0(980) \to K_L^0 K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0K^+K^-$ | 2208 | 1 | 90086 |
| 7511 | $J/\psi \to \pi^+\pi^-\rho^+a_1^-, \rho^+ \to \pi^0\pi^+\gamma^f, a_1^- \to \pi^0\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7510 | 1 | 90087 |
| 7512 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^{*+} K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-\gamma$ | 4422 | 1 | 90088 |
| 7513 | $J/\psi 	o \pi^0 ar{K}_0^{*0} K_1^0, ar{K}_0^{*0} 	o \pi^+ K^-, K_1^0 	o ho^- K^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7512 | 1 | 90089 |
| 7514 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^- K^+, K_0^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 837 | 1 | 90090 |
| 7515 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \eta\eta, \eta \to \pi^0\pi^+\pi^-, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4424 | 1 | 90091 |
| 7516 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4425 | 1 | 90092 |
| 7517 | $J/\psi \to \omega a_0^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_0^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \\ \eta \to \pi^+ \pi^- \gamma^F, \eta \to \pi^+ \pi^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}\gamma^{F}$ | 7516 | 1 | 90093 |
| 7518 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 7517 | 1 | 90094 |
| 7519 | $J/\psi \to h_1(1380)h_1(1380)\gamma, h_1(1380) \to \bar{K}^0K^*, h_1(1380) \to K^+K^{*-}, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\pi^-K^+K^+\gamma$ | 7518 | 1 | 90095 |
| 7520 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7519 | 1 | 90096 |
| 7521 | $J/\psi ightarrow ho^+ K^* K^-, ho^+ ightarrow \pi^0 \pi^+, K^* ightarrow \pi^- K^+ \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 7520 | 1 | 90097 |
| 7522 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \pi^- \omega, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 7521 | 1 | 90098 |
| 7523 | $J/\psi ightarrow \pi^0\pi^0\pi^-ar{K}^0K^+, ar{K}^0 ightarrow K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 7522 | 1 | 90099 |
| 7524 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^+\pi^-\gamma^f, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 4426 | 1 | 90100 |
| 7525 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma$ | 838 | 1 | 90101 |
| 7526 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7525 | 1 | 90102 |
| 7527 | $J/\psi \to f_2(1270)K^-K^{*+}, f_2(1270) \to \pi^0\pi^0, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 4428 | 1 | 90103 |
| 7528 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7527 | 1 | 90104 |
| 7529 | $J/\psi \to \rho^0 \pi^+ a_0^- f_0(1370), \rho^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 7528 | 1 | 90105 |
| 7530 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 4429 | 1 | 90106 |
| 7531 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7530 | 1 | 90107 |
| 7532 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 7531 | 1 | 90108 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7533 | $J/\psi \to ho^0 a_2^0, ho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 2211 | 1 | 90109 |
| 7534 | $J/\psi \to \eta \omega f_2(1270), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3012 | 1 | 90110 |
| 7535 | $J/\psi \to \pi^+ \pi^+ \rho^- \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, $ $\eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7534 | 1 | 90111 |
| 7536 | $J/\psi \to \pi^+ \pi^+ \eta K^0 K^- b_1^-, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 4432 | 1 | 90112 |
| 7537 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to K^0\bar{K}^*, \eta \to \gamma\gamma, \eta \to \gamma\gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma\gamma\gamma$ | 461 | 1 | 90113 |
| 7538 | $J/\psi 	o \pi^- K_2^{*0} K^+, K_2^{*0} 	o ho^0 \bar{K}^0, ho^0 	o \pi^+ \pi^-, \bar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 7537 | 1 | 90114 |
| 7539 | $J/\psi \rightarrow \pi^- \eta' b_1^+, \eta' \rightarrow \pi^+ \pi^- \eta, b_1^+ \rightarrow \pi^+ \omega, \eta \rightarrow \pi^+ \pi^- \gamma^F, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 3014 | 1 | 90115 |
| 7540 | $J/\psi \to \pi^+ K^{*-} K_0^0 \gamma^f, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 7539 | 1 | 90116 |
| 7541 | $J/\psi \to \pi^0 \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\gamma^F\gamma$ | 4435 | 1 | 90117 |
| 7542 | $J/\psi \to \rho^- \eta \bar{K}^0 K^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2213 | 1 | 90118 |
| 7543 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ K^- K_1^0, K_1^0 	o \pi^0 K_0^0, K_0^0 	o \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 7542 | 1 | 90119 |
| 7544 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7543 | 1 | 90120 |
| 7545 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 7544 | 1 | 90121 |
| 7546 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^- \rho^+ \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 7545 | 1 | 90122 |
| 7547 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to \bar{K}^0K^*, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 4437 | 1 | 90123 |
| 7548 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 3016 | 1 | 90124 |
| 7549 | $J/\psi \to \pi^0 K^0 \bar{K}^0 h_1(1170) \gamma, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-\gamma$ | 7548 | 1 | 90125 |
| 7550 | $J/\psi ightarrow ho^- a_2^+ \eta, ho^- ightarrow \pi^0 \pi^-, a_2^+ ightarrow \pi^0 \pi^+ \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 7549 | 1 | 90126 |
| 7551 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \rho^+ K^0 \gamma^f, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 4439 | 1 | 90127 |
| 7552 | $J/\psi 	o \pi^+\pi^-\eta' a^0_0, \eta' 	o ho^0\gamma, a^0_0 	o \pi^0\eta, ho^0 	o \pi^+\pi^-, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 7551 | 1 | 90128 |
| 7553 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 7552 | 1 | 90129 |
| 7554 | $J/\psi \to \pi^+ n \bar{p} h_1(1170), h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 7553 | 1 | 90130 |
| 7555 | $J/\psi \to ho^0 ho^0 \pi^+ \pi^- a_1^0, ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^-, a_1^0 \to \pi^- ho^+, ho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 7554 | 1 | 90131 |
| 7556 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 7555 | 1 | 90132 |
| 7557 | $J/\psi \to K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^- \bar{K}^* \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 1681 | 1 | 90133 |
| 7558 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 K^+ K^{*-}, a_2^0 \to K^+ K^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+K^+K^-\gamma$ | 3018 | 1 | 90134 |
| 7559 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 7558 | 1 | 90135 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 7560 | $J/\psi \to K^* K_2^{*0} \gamma, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma$ | 2215 | 1 | 90136 |
| 7561 | $J/\psi \to a_2^+ K^* K^{*-}, a_2^+ \to \pi^0 \rho^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7560 | 1 | 90137 |
| 7562 | $J/\psi ightarrow \eta f_2^\prime \gamma, \eta ightarrow \pi^0 \pi^0 \pi^0, f_2^\prime ightarrow K_L^0 K_L^0, \pi^0 ightarrow e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0K_L^0K_L^0\gamma^F\gamma\gamma^f$ | 3020 | 1 | 90138 |
| 7563 | $J/\psi \to K^0 \bar{K}^0 a_1^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 684 | 1 | 90139 |
| 7564 | $J/\psi \to \rho^- a_2^+ \eta', \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, \eta' \to \pi^+ \pi^- \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7563 | 1 | 90140 |
| 7565 | $J/\psi \to \pi^0 \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 7564 | 1 | 90141 |
| 7566 | $J/\psi \to \omega K^* \bar{K}^* \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 3022 | 1 | 90142 |
| 7567 | $J/\psi \to K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4446 | 1 | 90143 |
| 7568 | $J/\psi 	o \pi^0 ar{\Lambda} \Sigma^0, ar{\Lambda} 	o \pi^0 ar{n}, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0\pi^0n\bar{n}\gamma$ | 7567 | 1 | 90144 |
| 7569 | $J/\psi \to \pi^0 \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \rho^0 \pi^-, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2217 | 1 | 90145 |
| 7570 | $J/\psi \to K^{+}a_{0}^{-}\bar{K}_{1}^{0}, a_{0}^{-} \to \pi^{-}\eta, \bar{K}_{1}^{0} \to \rho^{0}\bar{K}^{0}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 7569 | 1 | 90146 |
| 7571 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \rho^+ K^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3024 | 1 | 90147 |
| 7572 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7571 | 1 | 90148 |
| 7573 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to K^+K^-, \phi \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4449 | 1 | 90149 |
| 7574 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $K_L^0\pi^+K^+K^-K^-\gamma$ | 7573 | 1 | 90150 |
| 7575 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 4450 | 1 | 90151 |
| 7576 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^+ K^-$ $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^*, K_2^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^0 K^0, \bar{K}^0 \to K_L^0,$ $K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 2218 | 1 | 90152 |
| 7577 | $J/\psi ightarrow \pi^+ \eta K^0 K^-, \eta ightarrow \gamma \gamma, K^0 ightarrow K_L^0$ | $K_L^0\pi^+K^-\gamma\gamma$ | 7576 | 1 | 90153 |
| 7578 | $J/\psi \to \eta' p \bar{p}, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-par p\gamma^F$ | 7577 | 1 | 90154 |
| 7579 | $J/\psi \to \pi^0 \rho^0 \pi^- \bar{K}^* K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-\pi^-$ | 7578 | 1 | 90155 |
| 7580 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^0 K_0^{*+}, \eta \to \gamma \gamma, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 7579 | 1 | 90156 |
| 7581 | $J/\psi \to \eta K^+ {ar K}_1^{'-}, \eta \to \pi^+ \pi^- \gamma^F, {ar K}_1^{'-} \to \pi^- {ar K}^*, {ar K}^* \to \pi^0 {ar K}^0, {ar K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 7580 | 1 | 90157 |
| 7582 | $J/\psi 	o \eta_c \gamma, \eta_c 	o a_2^0 \pi^+ ho^-, a_2^0 	o \pi^0 \eta, ho^- 	o \pi^0 \pi^-, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 3026 | 1 | 90158 |
| 7583 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, $ $\pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 4453 | 1 | 90159 |
| 7584 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 7583 | 1 | 90160 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 7585 | $J/\psi \to \eta K^- K_2^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7584 | 1 | 90161 |
| 7586 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7585 | 1 | 90162 |
| 7587 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+\gamma^f, K_2^{*0} \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 2219 | 1 | 90163 |
| 7588 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^f$ | 7587 | 1 | 90164 |
| 7589 | $J/\psi \to ho^0 \omega K^+ K^{*-}, ho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 7588 | 1 | 90165 |
| 7590 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 7589 | 1 | 90166 |
| 7591 | $J/\psi \to \pi^- K^+ b_1^+ \bar{K}_1^{'-}, b_1^+ \to \pi^+ \omega, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 7590 | 1 | 90167 |
| 7592 | $J/\psi \to \pi^0 \pi^+ \rho^- K^* \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 462 | 1 | 90168 |
| 7593 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 7592 | 1 | 90169 |
| 7594 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 7593 | 1 | 90170 |
| 7595 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \pi^0 K^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-K^-\gamma^F$ | 7594 | 1 | 90171 |
| 7596 | $J/\psi \to \pi^- \rho^+ a_0^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7595 | 1 | 90172 |
| 7597 | $J/\psi \to f_2(1270)h_1(1170), f_2(1270) \to \pi^+\pi^-\gamma^f, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7596 | 1 | 90173 |
| 7598 | $J/\psi 	o ho^0 \eta' a^0_0, ho^0 	o \pi^+ \pi^-, \eta' 	o \pi^+ \pi^- \eta, a^0_0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0, \ \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7597 | 1 | 90174 |
| 7599 | $J/\psi \to \omega K^- K^{*+}, \omega \to \pi^0 \gamma, K^{*+} \to K^+ \gamma$ | $\pi^0 K^+ K^- \gamma \gamma$ | 4456 | 1 | 90175 |
| 7600 | $J/\psi \to \phi f_0(1710), \phi \to \pi^+ \rho^-, f_0(1710) \to \eta \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma, \ \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 4457 | 1 | 90176 |
| 7601 | $J/\psi ightarrow \pi^0 \eta' \gamma, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 7600 | 1 | 90177 |
| 7602 | $J/\psi \to \pi^- \rho^+ f_0(1370) f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^0 \pi^0, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7601 | 1 | 90178 |
| 7603 | $J/\psi \to \pi^+\pi^+\rho^-\rho^-f_1(1285), \rho^- \to \pi^0\pi^-, \rho^- \to \pi^0\pi^-, f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 1684 | 1 | 90179 |
| 7604 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^0 K_0^*, K^0 \to K_L^0, K_0^- \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 1322 | 1 | 90180 |
| 7605 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7604 | 1 | 90181 |
| 7606 | $J/\psi 	o K_2^{*0} K^+ a_0^-, K_2^{*0} 	o \pi^+ K^-, a_0^- 	o K^0 K^-, K^0 	o K_L^0$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 4460 | 1 | 90182 |
| 7607 | $J/\psi \to \pi^+ K^* K_2^{*-} \gamma^F, K^* \to \pi^- K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 7606 | 1 | 90183 |
| 7608 | $J/\psi \to \omega f_0(980), \omega \to \pi^0 \pi^+ \pi^-, f_0(980) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 7607 | 1 | 90184 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 7609 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 7608 | 1 | 90185 |
| 7610 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^+\pi^-\gamma^f, \phi \to K^+K^-$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 2223 | 1 | 90186 |
| 7611 | $J/\psi \to f_2' h_1(1380), f_2' \to \eta \eta, h_1(1380) \to K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7610 | 1 | 90187 |
| 7612 | $J/\psi \to \omega h_1(1170)h_1(1170), \omega \to \pi^0 \pi^+ \pi^- \gamma^f, h_1(1170) \to \pi^- \rho^+, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 7611 | 1 | 90188 |
| 7613 | $J/\psi \to K_2^{*-} K_0^{*+}, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K_0^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 7612 | 1 | 90189 |
| 7614 | $J/\psi 	o \pi^- \omega \bar{K}^0 K^{*+}, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_L^0, K^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3032 | 1 | 90190 |
| 7615 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7614 | 1 | 90191 |
| 7616 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^- \gamma^f, a_2^+ \to \bar{K}^0 K^+, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma\gamma^f$ | 7615 | 1 | 90192 |
| 7617 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7616 | 1 | 90193 |
| 7618 | $J/\psi \to K^0 \bar{p} \Sigma^{*+}, K^0 \to K_S^0, \Sigma^{*+} \to \pi^+ \Sigma^0, K_S^0 \to \pi^+ \pi^-, \Sigma^0 \to \Lambda \gamma,$ $\Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma$ | 3033 | 1 | 90194 |
| 7619 | $J/\psi \to \pi^+ \omega K^0 \bar{K}_1^{'-}, \omega \to \pi^0 \gamma, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $e^+e^-\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma^f$ | 7618 | 1 | 90195 |
| 7620 | $J/\psi \to \pi^+\pi^-\bar{K}^*K_1^0, \bar{K}^* \to \pi^0\bar{K}^0, K_1^0 \to \pi^-K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+K^0, K_1^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 7619 | 1 | 90196 |
| 7621 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \omega K^0, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 2224 | 1 | 90197 |
| 7622 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \pi^0 K^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4465 | 1 | 90198 |
| 7623 | $J/\psi \to \rho^0 \rho^+ K^- K_1^0, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7622 | 1 | 90199 |
| 7624 | $J/\psi \to K^0 \phi \bar{K}_1^0, K^0 \to K_S^0, \phi \to K^+ K^-, \bar{K}_1^0 \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 7623 | 1 | 90200 |
| 7625 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3035 | 1 | 90201 |
| 7626 | $J/\psi \to a_2^+ K^* K^{*-}, a_2^+ \to \pi^0 \rho^+, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3036 | 1 | 90202 |
| 7627 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^+ \pi^- \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \\ \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 7626 | 1 | 90203 |
| 7628 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^+\pi^-, \phi \to K_L^0K_S^0, K_S^0 \to \pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 4468 | 1 | 90204 |
| 7629 | $J/\psi \to K^- K_2^{*+} h_1(1170), K_2^{*+} \to \omega K^+, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7628 | 1 | 90205 |
| 7630 | $J/\psi \to \pi^+ a_2^- f_2(1270), a_2^- \to \pi^0 \pi^- \omega, f_2(1270) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3037 | 1 | 90206 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 7631 | $J/\psi \to \pi^0 K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 4470 | 1 | 90207 |
| 7632 | $J/\psi \rightarrow \pi^- \eta b_1^+, \eta \rightarrow \pi^0 \pi^+ \pi^-, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 7631 | 1 | 90208 |
| 7633 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 7632 | 1 | 90209 |
| 7634 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^0 \rho^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7633 | 1 | 90210 |
| 7635 | $J/\psi \to K_2^{*0} \bar{K}_0^{*0}, K_2^{*0} \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7634 | 1 | 90211 |
| 7636 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 2225 | 1 | 90212 |
| 7637 | $J/\psi \to \pi^- \eta' b_1^+, \eta' \to \pi^+ \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 4472 | 1 | 90213 |
| 7638 | $J/\psi \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-\pi^-K^+\gamma^f$ | 3039 | 1 | 90214 |
| 7639 | $J/\psi 	o ho^0 \pi^- ho^+ b_1^0, ho^0 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+, b_1^0 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7638 | 1 | 90215 |
| 7640 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 7639 | 1 | 90216 |
| 7641 | $J/\psi \to \pi^0 K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^- \bar{K}^0, \phi \to \pi^0 \rho^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7640 | 1 | 90217 |
| 7642 | $J/\psi \to \pi^+ \eta \Delta^0 \bar{p}, \eta \to \gamma \gamma, \Delta^0 \to \pi^0 n$ | $\pi^0\pi^+nar{p}\gamma\gamma$ | 4474 | 1 | 90218 |
| 7643 | $J/\psi \to \pi^0 \pi^+ a_2^- f_0(1370), a_2^- \to \pi^0 \rho^-, f_0(1370) \to \rho^0 \rho^0, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7642 | 1 | 90219 |
| 7644 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7643 | 1 | 90220 |
| 7645 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \eta' \to \pi^+\pi^-\eta, K^0 \to K_L^0, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 7644 | 1 | 90221 |
| 7646 | $J/\psi \to \pi^0 K^0 \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0$ | 1686 | 1 | 90222 |
| 7647 | $J/\psi \to \rho^0 \eta K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \gamma^F$ | 7646 | 1 | 90223 |
| 7648 | $J/\psi \to K^0 b_1^+ K_0^{*-}, K^0 \to K_L^0, b_1^+ \to \pi^+ \omega, K_0^{*-} \to \pi^0 K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 7647 | 1 | 90224 |
| 7649 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7648 | 1 | 90225 |
| 7650 | $J/\psi \to ho^0 f_2(1270) a_0^0, ho^0 \to \pi^+\pi^-, f_2(1270) \to \pi^+\pi^-, a_0^0 \to \pi^0\eta, \eta \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 1048 | 1 | 90226 |
| 7651 | $J/\psi \rightarrow \pi^+ \rho^- \eta', \rho^- \rightarrow \pi^0 \pi^-, \eta' \rightarrow \pi^+ \pi^- \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 7650 | 1 | 90227 |
| 7652 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^+K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 463 | 1 | 90228 |
| 7653 | $J/\psi \to \pi^- \bar{K}^* K^+ h_1(1380), \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 3043 | 1 | 90229 |
| 7654 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7653 | 1 | 90230 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 7655 | $J/\psi \to \pi^- K^{*+} \bar{K}^0_1, K^{*+} \to \pi^0 K^+, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 7654 | 1 | 90231 |
| 7656 | $J/\psi \to \eta_c \gamma, \eta_c \to h_1(1380)h_1(1380), h_1(1380) \to \bar{K}^0 K^*, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0, K^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0K_L^0\pi^+\pi^-\gamma$ | 7655 | 1 | 90232 |
| 7657 | $J/\psi \to ho^0 K^0 K_2^{*0}, ho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 7656 | 1 | 90233 |
| 7658 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 3044 | 1 | 90234 |
| 7659 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 3045 | 1 | 90235 |
| 7660 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \eta b_1^-, \eta \to \pi^+ \pi^- \gamma^F, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma$ | 7659 | 1 | 90236 |
| 7661 | $J/\psi ightarrow \pi^0 \pi^- ar{\Delta}^0 p, ar{\Delta}^0 ightarrow \pi^0 ar{n}$ | $\pi^0\pi^0\pi^-\bar{n}p$ | 7660 | 1 | 90237 |
| 7662 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \pi^0 \rho^-, a_0^0 \to \pi^0 \eta, \rho^- \to \pi^0 \pi^- \gamma^f, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4481 | 1 | 90238 |
| 7663 | $J/\psi \to \pi^0 a_2^- b_1^+, a_2^- \to \bar{K}^0 K^-, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2229 | 1 | 90239 |
| 7664 | $J/\psi \to \bar{K}^0 K_2^{*+} a_0^-, \bar{K}^0 \to K_S^0, K_2^{*+} \to \rho^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7663 | 1 | 90240 |
| 7665 | $J/\psi \to \rho^0 \bar{K}^* K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4483 | 1 | 90241 |
| 7666 | $J/\psi \to \bar{K}^*K^{*+}a_0^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^0K^+, a_0^- \to \pi^-\eta, \bar{K}^0 \to K_L^0, \\ \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^-K^+$ | 7665 | 1 | 90242 |
| 7667 | $J/\psi 	o \pi^0 ho^0 ho^0 \pi^+ ho^-, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7666 | 1 | 90243 |
| 7668 | $J/\psi 	o \Delta^+ ar{\Delta}^+ \gamma, \Delta^+ 	o \pi^+ n, ar{\Delta}^+ 	o \pi^0 ar{p}$ | $\pi^0\pi^+nar p\gamma$ | 7667 | 1 | 90244 |
| 7669 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 7668 | 1 | 90245 |
| 7670 | $J/\psi \to \pi^- a_1^+, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7669 | 1 | 90246 |
| 7671 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 4484 | 1 | 90247 |
| 7672 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^*, K_1^- \to \rho^- \bar{K}^0, K^* \to \pi^- K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7671 | 1 | 90248 |
| 7673 | $J/\psi 	o \pi^0 ar{K}^0 K_2^{*0}, ar{K}^0 	o K_S^0, K_2^{*0} 	o \eta K^0, K_S^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^+ \pi^-, K_L^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3047 | 1 | 90249 |
| 7674 | $J/\psi \to \pi^+\pi^-\pi^-\omega a_1^+, \omega \to \pi^0\pi^+\pi^-, a_1^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4486 | 1 | 90250 |
| 7675 | $J/\psi \to \pi^0 K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^*, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 7674 | 1 | 90251 |
| 7676 | $J/\psi ightarrow K^0 ar{K}^0 a_0^0, K^0 ightarrow K_S^0, ar{K}^0 ightarrow K_L^0, a_0^0 ightarrow \pi^0 \eta, K_S^0 ightarrow \pi^0 \pi^0, \ \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 7675 | 1 | 90252 |
| 7677 | $J/\psi 	o a_2^0 \pi^- ar{K}^0 K^+, a_2^0 	o \pi^0 \eta, ar{K}^0 	o K_S^0, \eta 	o \pi^0 \pi^0 \pi^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 4487 | 1 | 90253 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7678 | $J/\psi \to \pi^{+} a_{0}^{-} h_{1}(1170), a_{0}^{-} \to \pi^{-} \eta, h_{1}(1170) \to \pi^{+} \rho^{-}, \eta \to \pi^{0} \pi^{0} \pi^{0}, \rho^{-} \to \pi^{0} \pi^{-}, \\ \pi^{0} \to e^{+} e^{-} \gamma^{F}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 7677 | 1 | 90254 |
| 7679 | $J/\psi \to \omega K^0 \bar{K}^* \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 7678 | 1 | 90255 |
| 7680 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0$ | $e^+e^-K_L^0\pi^+\pi^-\gamma^F\gamma$ | 7679 | 1 | 90256 |
| 7681 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^- \gamma^f$ | $K_L^0\pi^+K^-\gamma^f$ | 7680 | 1 | 90257 |
| 7682 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+ \gamma^f, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f\gamma^f$ | 7681 | 1 | 90258 |
| 7683 | $J/\psi \to \pi^+\pi^-K_2^{*0}K^{*-}, K_2^{*0} \to \omega K^0, K^{*-} \to \pi^-\bar{K}^0, \omega \to \pi^0\pi^+\pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7682 | 1 | 90259 |
| 7684 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 2230 | 1 | 90260 |
| 7685 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \omega \omega, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7684 | 1 | 90261 |
| 7686 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^- \gamma^F, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 7685 | 1 | 90262 |
| 7687 | $J/\psi \to \eta K^* K_2^{*0}, \eta \to \gamma \gamma, K^* \to \pi^- K^+, K_2^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 4489 | 1 | 90263 |
| 7688 | $J/\psi 	o K^+K^-\eta'\phi, \eta' 	o ho^0\gamma, \phi 	o K^+K^-, ho^0 	o \pi^+\pi^-$ | $\pi^+\pi^-K^+K^+K^-K^-\gamma$ | 7687 | 1 | 90264 |
| 7689 | $J/\psi \to \omega K^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 7688 | 1 | 90265 |
| 7690 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4490 | 1 | 90266 |
| 7691 | $J/\psi 	o \eta' \gamma, \eta' 	o e^+ e^- \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^-\gamma$ | 7690 | 1 | 90267 |
| 7692 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 7691 | 1 | 90268 |
| 7693 | $J/\psi 	o \eta ar{K}^* K_2^{*0}, \eta 	o \pi^0 \pi^0 \pi^0, ar{K}^* 	o \pi^+ K^-, K_2^{*0} 	o \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3049 | 1 | 90269 |
| 7694 | $J/\psi 	o ho^0 \pi^+ K^- K_1^0, ho^0 	o \pi^+ \pi^-, K_1^0 	o ho^- K^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3050 | 1 | 90270 |
| 7695 | $J/\psi \rightarrow \omega K^0 \bar{K}^*, \omega \rightarrow \pi^0 \pi^+ \pi^-, K^0 \rightarrow K_L^0, \bar{K}^* \rightarrow \pi^+ K^-, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f$ | $e^+e^-K_L^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma^f$ | 7694 | 1 | 90271 |
| 7696 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7695 | 1 | 90272 |
| 7697 | $J/\psi \to \pi^0 \rho^0 \rho^0 \pi^- \bar{K}^0 K^+, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+$ | 4493 | 1 | 90273 |
| 7698 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^0K^-, f_0(1710) \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^+K^-$ | 4494 | 1 | 90274 |
| 7699 | $J/\psi 	o ar{K}^* K_1^0, ar{K}^* 	o \pi^+ K^-, K_1^0 	o ho^0 K^0, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 7698 | 1 | 90275 |
| 7700 | $J/\psi 	o K^- b_1^+ K_1^0, b_1^+ 	o \pi^+ \omega, K_1^0 	o ho^- K^+, \omega 	o \pi^0 \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7699 | 1 | 90276 |
| 7701 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to \pi^0K^-, f_1(1285) \to \pi^0K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7700 | 1 | 90277 |
| 7702 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \omega\omega, h_1(1380) \to K^+K^{*-}, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7701 | 1 | 90278 |
| 7703 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4495 | 1 | 90279 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7704 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^+K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K_L^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7703 | 1 | 90280 |
| 7705 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 4496 | 1 | 90281 |
| 7706 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 7705 | 1 | 90282 |
| 7707 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+ \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f\gamma^f$ | 4497 | 1 | 90283 |
| 7708 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7707 | 1 | 90284 |
| 7709 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 1689 | 1 | 90285 |
| 7710 | $J/\psi \to \phi f_0(2020), \phi \to K^+K^-, f_0(2020) \to \eta \eta, \eta \to \pi^0 \pi^+\pi^-, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 3052 | 1 | 90286 |
| 7711 | $J/\psi \to \pi^0 a_2^0 \eta \omega, a_2^0 \to \pi^- \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \eta \gamma, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7710 | 1 | 90287 |
| 7712 | $J/\psi \to \bar{K}^0 K_0^0 \gamma, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^+e^-K_L^0\pi^+\pi^-\gamma^F\gamma$ | 7711 | 1 | 90288 |
| 7713 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1710) \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 4500 | 1 | 90289 |
| 7714 | $J/\psi \to \rho^0 \bar{K}^0 K^* f_0(1370), \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_0(1370) \to \rho^+ \rho^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7713 | 1 | 90290 |
| 7715 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7714 | 1 | 90291 |
| 7716 | $J/\psi 	o ho^+ ho^- b_1^0 \gamma^f, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7715 | 1 | 90292 |
| 7717 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^*, K_1^- \to \pi^- \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 7716 | 1 | 90293 |
| 7718 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^- \rho^+, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 3053 | 1 | 90294 |
| 7719 | $J/\psi ightarrow \omega K^0 ar{K}^*, \omega ightarrow \pi^+ \pi^-, K^0 ightarrow K_L^0, ar{K}^* ightarrow \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 4502 | 1 | 90295 |
| 7720 | $J/\psi \to \pi^0\pi^0\rho^0\omega\omega, \rho^0 \to \pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4503 | 1 | 90296 |
| 7721 | $J/\psi \to \pi^0 \pi^0 K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 1325 | 1 | 90297 |
| 7722 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1285) \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3055 | 1 | 90298 |
| 7723 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7722 | 1 | 90299 |
| 7724 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \gamma, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-\gamma$ | 7723 | 1 | 90300 |
| 7725 | $J/\psi \to \pi^+\pi^-\bar{K}_0^{*0}K_1^{'0}, \bar{K}_0^{*0} \to \pi^+K^-, K_1^{'0} \to \pi^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 7724 | 1 | 90301 |
| 7726 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to \bar{K}^0K^*, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ K^-$ | 4506 | 1 | 90302 |
| 7727 | $J/\psi \to K^-K^{*+}\phi, K^{*+}\to \pi^0K^+, \phi\to K_L^0K_S^0, K_S^0\to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 7726 | 1 | 90303 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 7728 | $J/\psi \to \pi^- \rho^+ \omega h_1(1170), \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \pi^0 \to e^+ e^- \gamma^F,$ $\rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 4507 | 1 | 90304 |
| 7729 | $J/\psi \to \eta \omega f_0(1370), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 2233 | 1 | 90305 |
| 7730 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}K_{L}^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 7729 | 1 | 90306 |
| 7731 | $J/\psi \to \rho^+ f_2(1270) K^0 K^-, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3057 | 1 | 90307 |
| 7732 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \pi^+ K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3058 | 1 | 90308 |
| 7733 | $J/\psi 	o \pi^+ ho^- \eta', ho^- 	o \pi^0 \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 4511 | 1 | 90309 |
| 7734 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_1^- \to \pi^- \bar{K}^*, K^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 7733 | 1 | 90310 |
| 7735 | $J/\psi \to \pi^+ K^0 K^- \gamma^F, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma^F$ | 4512 | 1 | 90311 |
| 7736 | $J/\psi 	o K^0 ar{K}^0 f_2^{'}, K^0 	o K_S^0, ar{K}^0 	o K_L^0, f_2^{'} 	o K^+ K^-, K_S^0 	o \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^- K^+ K^-$ | 7735 | 1 | 90312 |
| 7737 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 7736 | 1 | 90313 |
| 7738 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- p \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+ K^- p ar p \gamma$ | 7737 | 1 | 90314 |
| 7739 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^+\pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2234 | 1 | 90315 |
| 7740 | $J/\psi 	o \pi^0 \pi^+ ho^- \gamma^f, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 7739 | 1 | 90316 |
| 7741 | $J/\psi \to \phi f_0(1370), \phi \to \pi^- \rho^+, f_0(1370) \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7740 | 1 | 90317 |
| 7742 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^0 \rho^+, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 7741 | 1 | 90318 |
| 7743 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 4514 | 1 | 90319 |
| 7744 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7743 | 1 | 90320 |
| 7745 | $J/\psi \to K^+ a_0^- \bar{K}_0^{*0}, a_0^- \to K^0 K^-, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_L^0$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 7744 | 1 | 90321 |
| 7746 | $J/\psi \to h_1(1170)f_1(1285), h_1(1170) \to \pi^+ \rho^-, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 7745 | 1 | 90322 |
| 7747 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+\pi^-\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2235 | 1 | 90323 |
| 7748 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^{*+} K_1^-, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 7747 | 1 | 90324 |
| 7749 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 7748 | 1 | 90325 |
| 7750 | $J/\psi \to K^* \bar{K}^* f_0(1370), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \rho^+ \rho^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7749 | 1 | 90326 |
| 7751 | $J/\psi \to \bar{\Xi}^+ \Xi^-, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^- \to \pi^- \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^0 n,$ $\pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-n\bar{p}\gamma^F$ | 4516 | 1 | 90327 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7752 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0\gamma^f, \eta' \to \pi^+\pi^-\eta, K^0 \to K_S^0, \eta \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-\gamma^F$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 7751 | 1 | 90328 |
| 7753 | $J/\psi \to K^- K_2^{*+} a_0^0, K_2^{*+} \to \pi^+ K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7752 | 1 | 90329 |
| 7754 | $J/\psi \to \pi^0 K^0 K_2^{*0} a_0^0, K^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 7753 | 1 | 90330 |
| 7755 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^F, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 7754 | 1 | 90331 |
| 7756 | $J/\psi \to \rho^{+} K^{-} K^{-}, \rho^{-} \to \kappa^{-} K^{-} \gamma^{-}, K^{-} \to \kappa^{-} K^{-} K^{-} \to \kappa^{-} K^{-}$ $J/\psi \to \rho^{+} a_{2}^{-} a_{0}^{0}, \rho^{+} \to \pi^{0} \pi^{+}, a_{2}^{-} \to \pi^{0} \rho^{-}, a_{0}^{0} \to \pi^{0} \eta, \rho^{-} \to \pi^{0} \pi^{-},$ $\eta \to \pi^{0} \pi^{+} \pi^{-}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4517 | 1 | 90332 |
| 7757 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^* \gamma^f, K_2^{*-} \to \omega K^-, K^* \to \pi^0 K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 4518 | 1 | 90333 |
| 7758 | $J/\psi \to \omega\omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \omega \to e^+e^-\pi^0\gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 7757 | 1 | 90334 |
| 7759 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 7758 | 1 | 90335 |
| 7760 | $J/\psi \to \pi^0 \omega f_0(1370), \omega \to \pi^0 \gamma, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 4519 | 1 | 90336 |
| 7761 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \rho^+ K^0, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4520 | 1 | 90337 |
| 7762 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \rho^+ \rho^-, \bar{K}^0 \to K_S^0, $ $\rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 1691 | 1 | 90338 |
| 7763 | $J/\psi \rightarrow \rho^- \eta a_0^+, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \pi^+ \pi^- \gamma^F, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7762 | 1 | 90339 |
| 7764 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^+ \pi^- K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 2237 | 1 | 90340 |
| 7765 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to K^+ K^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 7764 | 1 | 90341 |
| 7766 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^- ho^+ \omega, ho^+ ightarrow \pi^0 \pi^+, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 4523 | 1 | 90342 |
| 7767 | $J/\psi \to \pi^0 \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1692 | 1 | 90343 |
| 7768 | $J/\psi \to K^{+}a_{0}^{-}\bar{K}_{1}^{0}, a_{0}^{-} \to \pi^{-}\eta, \bar{K}_{1}^{0} \to \rho^{0}\bar{K}^{0}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{L}^{0}$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 4525 | 1 | 90344 |
| 7769 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+ \gamma^f, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 7768 | 1 | 90345 |
| 7770 | $J/\psi \to \pi^0 h_1(1170) f_1(1285), h_1(1170) \to \pi^+ \rho^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7769 | 1 | 90346 |
| 7771 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ \rho^- f_0(1370), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 1693 | 1 | 90347 |
| 7772 | $J/\psi \to \pi^0\pi^-\rho^+\rho^+b_1^-, \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+, b_1^- \to \pi^-\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 7771 | 1 | 90348 |
| 7773 | $J/\psi \to \pi^+ f_0(1370) a_1^-, f_0(1370) \to \pi^0 \pi^0, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4527 | 1 | 90349 |
| 7774 | $J/\psi ightarrow \phi \phi \gamma, \phi ightarrow K_L^0 K_S^0, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^0 \pi^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0\gamma$ | 7773 | 1 | 90350 |
| 7775 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^+ K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 7774 | 1 | 90351 |
| 7776 | $J/\psi \to \pi^0 \pi^+ a_2^- f_0(1370), a_2^- \to \pi^0 \pi^- \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3065 | 1 | 90352 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 7777 | $J/\psi \to \pi^+\pi^-\bar{K}^0K^{*+}b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, K_S^0 \to \pi^+\pi^-, K_L^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^-$ | 7776 | 1 | 90353 |
| 7778 | $J/\psi \to \pi^0 \pi^0 \rho^- \omega b_1^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7777 | 1 | 90354 |
| 7779 | $J/\psi \to \Sigma^0 \bar{\Sigma}^{*0}, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \Lambda \to \pi^- p, \pi^0 \to e^+ e^- \gamma^F, \bar{\Lambda} \to \pi^+ \bar{p}$ | $e^+e^-\pi^+\pi^-p\bar{p}\gamma^F\gamma$ | 4529 | 1 | 90355 |
| 7780 | $J/\psi \to K^- K_2^{*+} a_1^0, K_2^{*+} \to \pi^0 K^{*+}, a_1^0 \to \pi^- \rho^+, K^{*+} \to \pi^0 K^+, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 7779 | 1 | 90356 |
| 7781 | $J/\psi 	o ar{K}^* K_0^0, ar{K}^* 	o \pi^0 ar{K}^0, K_0^0 	o \pi^0 K^0, ar{K}^0 	o K_L^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0$ | 7780 | 1 | 90357 |
| 7782 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7781 | 1 | 90358 |
| 7783 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 4530 | 1 | 90359 |
| 7784 | $J/\psi \to \omega K^+ K^{*-} \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 843 | 1 | 90360 |
| 7785 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2241 | 1 | 90361 |
| 7786 | $J/\psi \to \eta \bar{K}^* K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4533 | 1 | 90362 |
| 7787 | $J/\psi \to \eta K^- K_1^+, \eta \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7786 | 1 | 90363 |
| 7788 | $J/\psi \to K^0 \bar{K}^0 K^{*+} K^{*-}, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^0 \pi^0, K^0 \to K^0_L, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K^0_LK^0_LK^0_L\pi^+\pi^-$ | 4534 | 1 | 90364 |
| 7789 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7788 | 1 | 90365 |
| 7790 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^- \gamma^f, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 7789 | 1 | 90366 |
| 7791 | $J/\psi ightarrow \pi^+\pi^-\eta K^+K^-, \eta ightarrow \pi^0\pi^0\pi^0, \pi^0 ightarrow e^+e^-\gamma^F\gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}\gamma^{f}$ | 7790 | 1 | 90367 |
| 7792 | $J/\psi \to K^+ K_2^{*-} a_0^0, K_2^{*-} \to \pi^- \bar{K}^*, a_0^0 \to \pi^0 \eta, \bar{K}^* \to \pi^+ K^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 7791 | 1 | 90368 |
| 7793 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 4535 | 1 | 90369 |
| 7794 | $J/\psi \to \pi^- a_1^+, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 7793 | 1 | 90370 |
| 7795 | $J/\psi \to \pi^+ \rho^- \eta' \gamma^f, \rho^- \to \pi^0 \pi^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7794 | 1 | 90371 |
| 7796 | $J/\psi \to \pi^-\pi^-\rho^+\omega a_0^+, \rho^+ \to \pi^0\pi^+, \omega \to \pi^0\pi^+\pi^-, a_0^+ \to \pi^+\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7795 | 1 | 90372 |
| 7797 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^0 \eta, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7796 | 1 | 90373 |
| 7798 | $J/\psi \to \eta K^{*+} K_0^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 7797 | 1 | 90374 |
| 7799 | $J/\psi \to \rho^0 K^+ K^- \phi, \rho^0 \to \pi^+ \pi^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 7798 | 1 | 90375 |
| 7800 | $J/\psi \to \rho^- \eta \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7799 | 1 | 90376 |
| 7801 | $J/\psi \to \eta f_2(1270)b_1^0, \eta \to \gamma \gamma, f_2(1270) \to \pi^0 \pi^0, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 7800 | 1 | 90377 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 7802 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^+K^{*-}, \bar{K}^0 \to K_L^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^- \pi^- K^+ K^+$ | 7801 | 1 | 90378 |
| 7803 | $J/\psi \to \bar{K^0}K^{*+}a_1^-, \bar{K^0} \to K_L^0, K^{*+} \to \pi^0K^+, a_1^- \to \pi^0\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 4536 | 1 | 90379 |
| 7804 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 n ar{n}, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^-nar{n}\gamma$ | 7803 | 1 | 90380 |
| 7805 | $J/\psi \to K^{*-}K_1^{'+}\gamma, K^{*-} \to \pi^0K^-, K_1^{'+} \to \pi^0K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 7804 | 1 | 90381 |
| 7806 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 566 | 1 | 90382 |
| 7807 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- K^+ \bar{K}_1^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 7806 | 1 | 90383 |
| 7808 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^- \rho^+, K^{*+} \to \pi^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 7807 | 1 | 90384 |
| 7809 | $J/\psi \to \rho^- f_2(1270)\bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^+ \pi^- \pi^-$ | 7808 | 1 | 90385 |
| 7810 | $J/\psi ightarrow ho^0 \omega \omega, ho^0 ightarrow \pi^+ \pi^- \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 7809 | 1 | 90386 |
| 7811 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 7810 | 1 | 90387 |
| 7812 | $J/\psi \to \pi^0 K^- K^{*+} b_1^0, K^{*+} \to \pi^0 K^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-\gamma$ | 4538 | 1 | 90388 |
| 7813 | $J/\psi \to \omega f_0(1370) f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, f_0(1370) \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7812 | 1 | 90389 |
| 7814 | $J/\psi \to ho^0\pi^-K^+ar{K}_1^0, ho^0 \to \pi^+\pi^-, ar{K}_1^0 \to \pi^0ar{K}_0^{*0}, ar{K}_0^{*0} \to \pi^+K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2243 | 1 | 90390 |
| 7815 | $J/\psi \to \Sigma^- \bar{\Sigma}^{*+} \gamma^f, \Sigma^- \to \pi^- n, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^- nar p\gamma^f$ | 4540 | 1 | 90391 |
| 7816 | $J/\psi \to \rho^- a_2^+ \eta', \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \eta' \to \pi^+ \pi^- \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7815 | 1 | 90392 |
| 7817 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ ho^- b_1^0, ho^- 	o \pi^0 \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2244 | 1 | 90393 |
| 7818 | $J/\psi ightarrow K^0 ar{n} \Lambda, K^0 ightarrow K^0_S, \Lambda ightarrow \pi^- p, K^0_S ightarrow \pi^0 \pi^0, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^-ar{n}p\gamma^F$ | 7817 | 1 | 90394 |
| 7819 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7818 | 1 | 90395 |
| 7820 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, b_1^+ \to \pi^+ \omega, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2245 | 1 | 90396 |
| 7821 | $J/\psi \to \bar{K}^0 K_2^{*0} \phi, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 4543 | 1 | 90397 |
| 7822 | $J/\psi \to K^- b_1^+ K_0^0, b_1^+ \to \pi^+ \omega, K_0^0 \to \pi^- K^+, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 3072 | 1 | 90398 |
| 7823 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3073 | 1 | 90399 |
| 7824 | $J/\psi \to \pi^+\pi^-\rho^+\rho^-a_1^0, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, a_1^0 \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 7823 | 1 | 90400 |
| 7825 | $J/\psi \to \pi^0 \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7824 | 1 | 90401 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 7826 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \pi^- K_0^{*+}, \eta \to \pi^+ \pi^- \gamma^F, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^F$ | 7825 | 1 | 90402 |
| 7827 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 1328 | 1 | 90403 |
| 7828 | $J/\psi 	o \pi^0 K^+ ar{\Delta}^+ \Sigma^0, ar{\Delta}^+ 	o \pi^0 ar{p}, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0\pi^0K^+n\bar{p}\gamma$ | 7827 | 1 | 90404 |
| 7829 | $J/\psi \to K^+ \bar{n} \Sigma^{*-}, \Sigma^{*-} \to \pi^- \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^-K^+nar{n}$ | 7828 | 1 | 90405 |
| 7830 | $J/\psi 	o ho^+ \eta a_0^-, ho^+ 	o \pi^0 \pi^+, \eta 	o \pi^+ \pi^- \gamma^F, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 7829 | 1 | 90406 |
| 7831 | $J/\psi ightarrow ho^0 \pi^+ \pi^- \omega, ho^0 ightarrow \pi^+ \pi^- \gamma^f, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 7830 | 1 | 90407 |
| 7832 | $J/\psi \to \pi^-\pi^-b_1^+b_1^+, b_1^+ \to \pi^+\omega, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 7831 | 1 | 90408 |
| 7833 | $J/\psi \to \pi^{0} K_{2}^{*0} K_{1}^{'0}, K_{2}^{*0} \to \pi^{+} K^{*-}, K_{1}^{'0} \to \pi^{-} K^{*+}, K^{*-} \to \pi^{-} \bar{K}^{0}, K^{*+} \to \pi^{+} K^{0}, \bar{K}^{0} \to K_{S}^{0}, K^{0} \to K_{L}^{0}, K_{S}^{0} \to \pi^{+} \pi^{-}$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 2247 | 1 | 90409 |
| 7834 | $J/\psi \to \eta K^+ K_1^-, \eta \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7833 | 1 | 90410 |
| 7835 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 7834 | 1 | 90411 |
| 7836 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3076 | 1 | 90412 |
| 7837 | $J/\psi \to \pi^0 K^0 K^{*-} b_1^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7836 | 1 | 90413 |
| 7838 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma$ | 7837 | 1 | 90414 |
| 7839 | $J/\psi \to \pi^- \rho^+ \omega h_1(1170), \rho^+ \to \pi^0 \pi^+, \omega \to \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4549 | 1 | 90415 |
| 7840 | $J/\psi ightarrow ho^- \eta ar K^0 K^+, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^0 \pi^0, ar K^0 ightarrow K^0_L$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^-K^+$ | 4550 | 1 | 90416 |
| 7841 | $J/\psi \to \pi^- \omega \omega a_1^+, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, a_1^+ \to \pi^0 \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 3077 | 1 | 90417 |
| 7842 | $J/\psi ightarrow \omega a_0^+ a_0^-, \omega ightarrow \pi^0 \gamma, a_0^+ ightarrow \pi^+ \eta, a_0^- ightarrow \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0, \ \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 567 | 1 | 90418 |
| 7843 | $J/\psi \to \pi^- \rho^+ K^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 7842 | 1 | 90419 |
| 7844 | $J/\psi \to b_1^0 f_0(1370) a_1^0, b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, a_1^0 \to \pi^- \rho^+, \omega \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7843 | 1 | 90420 |
| 7845 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 4553 | 1 | 90421 |
| 7846 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 846 | 1 | 90422 |
| 7847 | $J/\psi \to \pi^0 \bar{K}^* K_1^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+ \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma^f$ | 2250 | 1 | 90423 |
| 7848 | $J/\psi 	o ar{K}^0 K_0^0, ar{K}^0 	o K_S^0, K_0^0 	o \pi^- K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+$ | 4556 | 1 | 90424 |
| 7849 | $J/\psi 	o \pi^+\pi^+ ho^-K^-K^0_1, ho^- 	o \pi^0\pi^-, K^0_1 	o ho^-K^+, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7848 | 1 | 90425 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7850 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^- \gamma^f, \Lambda \to \pi^0 n, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}\gamma^f$ | 7849 | 1 | 90426 |
| 7851 | $J/\psi 	o \eta K^- K_2^{*+}, \eta 	o \pi^0 \pi^+ \pi^-, K_2^{*+} 	o \pi^+ K^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7850 | 1 | 90427 |
| 7852 | $J/\psi \to \phi f_1(1420), \phi \to \pi^0 \rho^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 7851 | 1 | 90428 |
| 7853 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to K^+K^-, \phi \to K_L^0K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-K^+K^-$ | 7852 | 1 | 90429 |
| 7854 | $J/\psi ightarrow ho^0 \omega b_1^0, ho^0 ightarrow \pi^+ \pi^- \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 7853 | 1 | 90430 |
| 7855 | $J/\psi 	o \eta' p \bar p, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0 par p \gamma^F \gamma^f$ | 4557 | 1 | 90431 |
| 7856 | $J/\psi \to \pi^+ \omega a_0^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 847 | 1 | 90432 |
| 7857 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 67 | 1 | 90433 |
| 7858 | $J/\psi \to \pi^+ f_2(1270) a_1^-, f_2(1270) \to K^+ K^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 7857 | 1 | 90434 |
| 7859 | $J/\psi \to \rho^+ b_1^- h_1(1170), \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \gamma, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7858 | 1 | 90435 |
| 7860 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^+ K^0 K^-, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 4560 | 1 | 90436 |
| 7861 | $J/\psi \to \phi f_0(2020), \phi \to \pi^0 \rho^0, f_0(2020) \to \pi^+ \pi^- \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7860 | 1 | 90437 |
| 7862 | $J/\psi 	o \pi^+\pi^-\omega, \omega 	o \pi^+\pi^+\pi^-\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 3083 | 1 | 90438 |
| 7863 | $J/\psi 	o \pi^+ \eta K_2^{*0} K^-, \eta 	o \pi^0 \pi^+ \pi^-, K_2^{*0} 	o \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4562 | 1 | 90439 |
| 7864 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 7863 | 1 | 90440 |
| 7865 | $J/\psi \to K^0 a_0^+ \bar{K}_1^{'-}, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 7864 | 1 | 90441 |
| 7866 | $J/\psi \to \pi^0 \pi^- \rho^+ K^+ \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, \bar{K}_1^{'-} \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 7865 | 1 | 90442 |
| 7867 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7866 | 1 | 90443 |
| 7868 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 7867 | 1 | 90444 |
| 7869 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^+\pi^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 7868 | 1 | 90445 |
| 7870 | $J/\psi ightarrow \pi^0 a_2^0 \gamma, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 7869 | 1 | 90446 |
| 7871 | $J/\psi \to \rho^0 \pi^+ \pi^- h_1(1170), \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 7870 | 1 | 90447 |
| 7872 | $J/\psi \to K^0 \phi \bar{K}^0_1, K^0 \to K^0_S, \phi \to \pi^+ \rho^-, \bar{K}^0_1 \to \pi^+ K^{*-}, K^0_S \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7871 | 1 | 90448 |
| 7873 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 7872 | 1 | 90449 |
| 7874 | $J/\psi ightarrow \pi^0\pi^0\pi^+ ho^-, ho^- ightarrow \pi^0\pi^-, \pi^0 ightarrow e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 7873 | 1 | 90450 |
| 7875 | $J/\psi ightarrow \omega K^0 ar{K}^*, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f, K^0 ightarrow K_L^0, ar{K}^* ightarrow \pi^0 ar{K}^0, ar{K}^0 ightarrow K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 2253 | 1 | 90451 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7876 | $J/\psi \to K^0 K_2^{*-} a_0^+, K^0 \to K_L^0, K_2^{*-} \to \rho^0 K^-, a_0^+ \to \pi^+ \eta, \rho^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4564 | 1 | 90452 |
| 7877 | $J/\psi \to \pi^0 \pi^+ b_1^- a_1^0, b_1^- \to \pi^- \omega, a_1^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7876 | 1 | 90453 |
| 7878 | $J/\psi ightarrow par{p}b_1^0, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 7877 | 1 | 90454 |
| 7879 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \rho^0 \rho^0, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 4565 | 1 | 90455 |
| 7880 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^+\pi^-\omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0\pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7879 | 1 | 90456 |
| 7881 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4566 | 1 | 90457 |
| 7882 | $J/\psi \to \rho^0 f_0(1370) f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^0\pi^0, f_0(1370) \to \rho^0\rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7881 | 1 | 90458 |
| 7883 | $J/\psi \to \eta K^{*+}K^{*-}\gamma, \eta \to \gamma\gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma\gamma\gamma$ | 7882 | 1 | 90459 |
| 7884 | $J/\psi \to \pi^- \rho^+ K^* \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7883 | 1 | 90460 |
| 7885 | $J/\psi ightarrow \pi^0\pi^0\omega \eta', \omega ightarrow \pi^0\pi^+\pi^-, \eta' ightarrow \pi^0\pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 3085 | 1 | 90461 |
| 7886 | $J/\psi \to \pi^+ K_0^0 K_1^-, K_0^0 \to \pi^- K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2254 | 1 | 90462 |
| 7887 | $J/\psi \to \rho^0 \omega h_1(1170), \rho^0 \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^F$ | 2255 | 1 | 90463 |
| 7888 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-\gamma^F$ | 7887 | 1 | 90464 |
| 7889 | $J/\psi \to ho^0 f_2(1270), ho^0 \to \pi^+\pi^-, f_2(1270) \to K_L^0 K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 7888 | 1 | 90465 |
| 7890 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 1333 | 1 | 90466 |
| 7891 | $J/\psi \to \eta K^{*+} K_2^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7890 | 1 | 90467 |
| 7892 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma^f$ | 7891 | 1 | 90468 |
| 7893 | $J/\psi 	o \pi^0 ar{K}^0 K_2^{*0}, ar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^0 K^*, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0$ | 7892 | 1 | 90469 |
| 7894 | $J/\psi \to \pi^0 h_1(1170) f_1(1285), h_1(1170) \to \pi^0 \rho^0, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 7893 | 1 | 90470 |
| 7895 | $J/\psi \to \pi^0 \rho^+ K^0 K^- \phi, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3089 | 1 | 90471 |
| 7896 | $J/\psi \to \rho^0 K^{*+} K^{*-} \gamma^f, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 7895 | 1 | 90472 |
| 7897 | $J/\psi \to \pi^0 \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+ \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 849 | 1 | 90473 |
| 7898 | $J/\psi ightarrow \pi^0\pi^0 ho^0\pi^+\pi^-\omega, ho^0 ightarrow \pi^+\pi^-, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7897 | 1 | 90474 |
| 7899 | $J/\psi \to \bar{K}^0 a_0^- K_1^{'+}, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^{'+} \to \pi^+ \pi^- K^+, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 7898 | 1 | 90475 |
| 7900 | $J/\psi 	o \pi^+\pi^- ho^+ ho^-a_0^0, ho^+ 	o \pi^0\pi^+, ho^- 	o \pi^0\pi^-, a_0^0 	o \pi^0\eta, \eta 	o \gamma\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7899 | 1 | 90476 |
| 7901 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 4573 | 1 | 90477 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 7902 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma \gamma$ | 7901 | 1 | 90478 |
| 7903 | $J/\psi \to \rho^+ \rho^- \omega \eta', \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \\ \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 4574 | 1 | 90479 |
| 7904 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 7903 | 1 | 90480 |
| 7905 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \gamma, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 7904 | 1 | 90481 |
| 7906 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3091 | 1 | 90482 |
| 7907 | $J/\psi \to \rho^0 b_1^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, h_1(1170) \to \pi^0 \rho^0, \pi^0 \to e^+ e^- \gamma^F, \\ \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 4576 | 1 | 90483 |
| 7908 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \gamma, a_0^- ightarrow \pi^- \eta, \pi^0 ightarrow e^+ e^- \gamma^F, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma$ | 4577 | 1 | 90484 |
| 7909 | $J/\psi \to K^+ \phi K_1^-, \phi \to K^+ K^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 4578 | 1 | 90485 |
| 7910 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^+ K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 7909 | 1 | 90486 |
| 7911 | $J/\psi ightarrow \pi^0 K^+ K^- \phi, \phi ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3092 | 1 | 90487 |
| 7912 | $J/\psi \to K^+ a_0^0 K_1^-, a_0^0 \to \pi^0 \eta, K_1^- \to \rho^0 K^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 7911 | 1 | 90488 |
| 7913 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- K_2^{*0} K^{*+}, K_2^{*0} \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7912 | 1 | 90489 |
| 7914 | $J/\psi 	o \pi^- \eta \eta a_1^+, \eta 	o \gamma \gamma, \eta 	o \gamma \gamma, a_1^+ 	o ho^0 \pi^+, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 7913 | 1 | 90490 |
| 7915 | $J/\psi \to \omega K^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 7914 | 1 | 90491 |
| 7916 | $J/\psi \to \pi^0 \omega a_0^0, \omega \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4580 | 1 | 90492 |
| 7917 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3093 | 1 | 90493 |
| 7918 | $J/\psi 	o K^+K^-a_0^0\gamma^F, a_0^0 	o \pi^0\eta, \eta 	o \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma^F$ | 7917 | 1 | 90494 |
| 7919 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 3094 | 1 | 90495 |
| 7920 | $J/\psi \to \rho^0 \bar{K}^0 K^+ a_1^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 7919 | 1 | 90496 |
| 7921 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 2258 | 1 | 90497 |
| 7922 | $J/\psi \to \rho^+ a_2^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 7921 | 1 | 90498 |
| 7923 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 7922 | 1 | 90499 |
| 7924 | $J/\psi \to \pi^+\pi^- \rho^- \bar{K}^* K^+, \rho^- \to \pi^0\pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_c^0, K_c^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2259 | 1 | 90500 |
| 7925 | $J/\psi \to K^{-}a_{0}^{+}K_{1}^{'0}, a_{0}^{+} \to \pi^{+}\eta, K_{1}^{'0} \to \pi^{-}K^{*+}, \eta \to \gamma\gamma, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{L}^{0}$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 7924 | 1 | 90501 |
| 7926 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 7925 | 1 | 90502 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 7927 | $J/\psi \to \pi^0 K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma$ | 7926 | 1 | 90503 |
| 7928 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 \pi^- \rho^+, \omega \to \pi^0 \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 7927 | 1 | 90504 |
| 7929 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to K_S^0 K_S^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7928 | 1 | 90505 |
| 7930 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta' \gamma^f, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 7929 | 1 | 90506 |
| 7931 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4585 | 1 | 90507 |
| 7932 | $J/\psi \to \omega K^- K_0^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7931 | 1 | 90508 |
| 7933 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 7932 | 1 | 90509 |
| 7934 | $J/\psi \to K^+K^-f_1(1285), f_1(1285) \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 7933 | 1 | 90510 |
| 7935 | $J/\psi \to K^0 a_1^0 \bar{K}_1^{'0}, K^0 \to K_S^0, a_1^0 \to \pi^+ \rho^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, \\ \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 7934 | 1 | 90511 |
| 7936 | $J/\psi \to \pi^0 \bar{K}^0 K^* b_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, b_1^0 \to \pi^0 \omega, K^0 \to K_L^0, \ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^0\pi^+\pi^-$ | 7935 | 1 | 90512 |
| 7937 | $J/\psi \to b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 3097 | 1 | 90513 |
| 7938 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 4587 | 1 | 90514 |
| 7939 | $J/\psi \to \rho^{+} a_{0}^{-} a_{1}^{0}, \rho^{+} \to \pi^{0} \pi^{+}, a_{0}^{-} \to \pi^{-} \eta, a_{1}^{0} \to \pi^{-} \rho^{+}, \eta \to \pi^{0} \pi^{+} \pi^{-}, \rho^{+} \to \pi^{0} \pi^{+}$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7938 | 1 | 90515 |
| 7940 | $J/\psi \to \rho^0 \pi^+ a_2^- h_1(1170), \rho^0 \to \pi^+ \pi^-, a_2^- \to \pi^0 \pi^- \omega, h_1(1170) \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 7939 | 1 | 90516 |
| 7941 | $J/\psi 	o \pi^0 a^0_0 b^0_1, a^0_0 	o \pi^0 \eta, b^0_1 	o \pi^0 \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 7940 | 1 | 90517 |
| 7942 | $J/\psi \to K^{+}a_{0}^{-}\bar{K}_{1}^{0}, a_{0}^{-} \to \pi^{-}\eta, \bar{K}_{1}^{0} \to \omega\bar{K}^{0}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \omega \to \pi^{0}\gamma, \\ \bar{K}^{0} \to K_{S}^{0}, \pi^{0} \to e^{+}e^{-}\gamma^{F}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}\gamma$ | 7941 | 1 | 90518 |
| 7943 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^- \gamma^f, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 7942 | 1 | 90519 |
| 7944 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 7943 | 1 | 90520 |
| 7945 | $J/\psi 	o \eta \eta \omega, \eta 	o \gamma \gamma, \eta 	o \gamma \gamma, \omega 	o \pi^0 \gamma$ | $\pi^0\gamma\gamma\gamma\gamma\gamma$ | 7944 | 1 | 90521 |
| 7946 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 7945 | 1 | 90522 |
| 7947 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 690 | 1 | 90523 |
| 7948 | $J/\psi \to K^* \bar{p} \Sigma^+, K^* \to \pi^- K^+, \Sigma^+ \to \pi^0 p$ | $\pi^0\pi^-K^+par{p}$ | 7947 | 1 | 90524 |
| 7949 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_1(1285) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0K_L^0$ | 7948 | 1 | 90525 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 7950 | $J/\psi \to \pi^- \omega a_0^+ \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 7949 | 1 | 90526 |
| 7951 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 7950 | 1 | 90527 |
| 7952 | $J/\psi \to \pi^0 p\bar{p} f_0(1370), f_0(1370) \to K^+ K^-$ | $\pi^0 K^+ K^- p ar p$ | 7951 | 1 | 90528 |
| 7953 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 \pi^+ \pi^- \gamma^f \gamma^f$ | $\pi^0\pi^+\pi^-\gamma\gamma^f\gamma^f$ | 7952 | 1 | 90529 |
| 7954 | $J/\psi \to \pi^+ K^* K_0^{*-} \gamma^F, K^* \to \pi^- K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 4589 | 1 | 90530 |
| 7955 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4590 | 1 | 90531 |
| 7956 | $J/\psi 	o \eta \phi, \eta 	o \pi^0 \pi^0 \pi^0, \phi 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4591 | 1 | 90532 |
| 7957 | $J/\psi 	o \pi^0 K^0 ar{K}^0_1, K^0 	o K^0_L, ar{K}^0_1 	o \omega ar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 7956 | 1 | 90533 |
| 7958 | $J/\psi ightarrow \pi^0\pi^-\omega a_0^+, \omega ightarrow \pi^0\gamma, a_0^+ ightarrow \pi^+\eta, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 2261 | 1 | 90534 |
| 7959 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \omega \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3100 | 1 | 90535 |
| 7960 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 4594 | 1 | 90536 |
| 7961 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-\pi^-K^+K^+K^-\gamma^f$ | 1336 | 1 | 90537 |
| 7962 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 7961 | 1 | 90538 |
| 7963 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 7962 | 1 | 90539 |
| 7964 | $J/\psi \to \pi^+ \eta' b_1^- \gamma^f, \eta' \to \pi^0 \pi^0 \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 7963 | 1 | 90540 |
| 7965 | $J/\psi \to \pi^- K^* \bar{K}^* a_0^+, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma$ | 7964 | 1 | 90541 |
| 7966 | $J/\psi \to \eta_c \gamma, \eta_c \to K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 7965 | 1 | 90542 |
| 7967 | $J/\psi 	o \pi^0 \omega \omega \gamma, \omega 	o \pi^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 7966 | 1 | 90543 |
| 7968 | $J/\psi \to ho^+ K_2^{*0} K^-, ho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 7967 | 1 | 90544 |
| 7969 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \eta' \to \pi^+ \pi^- \eta, K^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7968 | 1 | 90545 |
| 7970 | $J/\psi \to K^{*+} a_0^- \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_L^0, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 2263 | 1 | 90546 |
| 7971 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_I^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7970 | 1 | 90547 |
| 7972 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_L^0, \\ \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 7971 | 1 | 90548 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 7973 | $J/\psi \to \eta' h_1(1170), \eta' \to \pi^0 \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3103 | 1 | 90549 |
| 7974 | $J/\psi \to \pi^+ K^* \bar{K}_1^{'-}, K^* \to \pi^0 K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 7973 | 1 | 90550 |
| 7975 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi f_0(1710), \phi \to K^+ K^-, f_0(1710) \to \omega \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 7974 | 1 | 90551 |
| 7976 | $J/\psi \to \pi^0 \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 7975 | 1 | 90552 |
| 7977 | $J/\psi \to \pi^- \eta a_1^+, \eta \to \gamma \gamma, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4598 | 1 | 90553 |
| 7978 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 7977 | 1 | 90554 |
| 7979 | $J/\psi \to \bar{K}^0 K_1^{'0} \gamma, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\gamma$ | 7978 | 1 | 90555 |
| 7980 | $J/\psi \to K^*K^{*-}a_0^+, K^* \to \pi^-K^+, K^{*-} \to \pi^0K^-, a_0^+ \to \pi^+\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 7979 | 1 | 90556 |
| 7981 | $J/\psi ightarrow \pi^- \eta' b_1^+, \eta' ightarrow ho^0 \gamma, b_1^+ ightarrow \pi^+ \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 7980 | 1 | 90557 |
| 7982 | $J/\psi \to \pi^0\pi^-K^-\Delta^{++}\bar{\Sigma}^0, \Delta^{++} \to \pi^+p, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0\pi^0\pi^+\pi^-K^-\bar{n}p\gamma$ | 7981 | 1 | 90558 |
| 7983 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 7982 | 1 | 90559 |
| 7984 | $J/\psi \to \rho^{+} K^{0} \bar{K}_{1}^{'-}, \rho^{+} \to \pi^{0} \pi^{+}, K^{0} \to K_{L}^{0}, \bar{K}_{1}^{'-} \to \pi^{-} \bar{K}^{*}, \bar{K}^{*} \to \pi^{0} \bar{K}^{0}, \bar{K}^{0} \to K_{L}^{0}$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 180 | 1 | 90560 |
| 7985 | $J/\psi ightarrow ho^0 ho^0 n \bar{n}, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 7984 | 1 | 90561 |
| 7986 | $J/\psi \to \eta \eta' h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \rho^0 \gamma, h_1(1170) \to \pi^- \rho^+, \pi^0 \to e^+ e^- \gamma^F, $ $\rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 1706 | 1 | 90562 |
| 7987 | $J/\psi \to \rho^+ a_2^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 4601 | 1 | 90563 |
| 7988 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2266 | 1 | 90564 |
| 7989 | $J/\psi \to K^-K^{*+}f_2', K^{*+} \to \pi^+K^0, f_2' \to K_S^0K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2267 | 1 | 90565 |
| 7990 | $J/\psi 	o ho^0 ar{K}^0 K^+ b_1^-, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_L^0, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 4604 | 1 | 90566 |
| 7991 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 4605 | 1 | 90567 |
| 7992 | $J/\psi \to K^- K^{*+} \phi \gamma^F, K^{*+} \to \pi^+ K^0, \phi \to K_L^0 K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+K^-\gamma^F$ | 4606 | 1 | 90568 |
| 7993 | $J/\psi 	o \pi^0 \pi^+ \pi^- \eta', \eta' 	o \omega \gamma, \omega 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3108 | 1 | 90569 |
| 7994 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^+K^0K^-\gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-\gamma^f$ | 7993 | 1 | 90570 |
| 7995 | $J/\psi 	o \eta \phi f_0(1710), \eta 	o \gamma \gamma, \phi 	o K_L^0 K_S^0, f_0(1710) 	o \pi^0 \pi^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 7994 | 1 | 90571 |
| 7996 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 7995 | 1 | 90572 |
| 7997 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to \eta\eta, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 7996 | 1 | 90573 |
| 7998 | $J/\psi ightarrow ho^0\pi^+\omega K^0K^-, ho^0 ightarrow \pi^+\pi^-, \omega ightarrow \pi^0\gamma, K^0 ightarrow K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 7997 | 1 | 90574 |
| 7999 | $J/\psi \to \Delta^+ \bar{\Delta}^+ \gamma^f, \Delta^+ \to \pi^0 p, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^-\bar{n}p\gamma^f$ | 4608 | 1 | 90575 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 8000 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma$ | 7999 | 1 | 90576 |
| 8001 | $J/\psi \to K^0 K^- b_1^+, K^0 \to K_S^0, b_1^+ \to \pi^+ \omega \gamma^f, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 8000 | 1 | 90577 |
| 8002 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 1338 | 1 | 90578 |
| 8003 | $J/\psi \to \pi^0 \bar{K}^0 \Delta^0 \bar{\Lambda}, \bar{K}^0 \to K_S^0, \Delta^0 \to \pi^- p, \bar{\Lambda} \to \pi^+ \bar{p}, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 2269 | 1 | 90579 |
| 8004 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8003 | 1 | 90580 |
| 8005 | $J/\psi 	o \eta f_0(1370) \gamma, \eta 	o \pi^0 \pi^0 \pi^0, f_0(1370) 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 8004 | 1 | 90581 |
| 8006 | $J/\psi \to K_2^{*0} K^+ a_0^-, K_2^{*0} \to \pi^+ K^{*-}, a_0^- \to \pi^- \eta, K^{*-} \to \pi^- \bar{K}^0, \eta \to \gamma \gamma, \\ \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 8005 | 1 | 90582 |
| 8007 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8006 | 1 | 90583 |
| 8008 | $J/\psi \to \rho^+ K^- K_1^0 \gamma^F, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 8007 | 1 | 90584 |
| 8009 | $J/\psi \to \omega f_0(980), \omega \to \pi^0 \pi^+ \pi^-, f_0(980) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8008 | 1 | 90585 |
| 8010 | $J/\psi \to \pi^0 \pi^+ \rho^- \omega b_1^0, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8009 | 1 | 90586 |
| 8011 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 4611 | 1 | 90587 |
| 8012 | $J/\psi \rightarrow \phi\phi\phi, \phi \rightarrow \pi^+\rho^-, \phi \rightarrow K^+K^-, \phi \rightarrow K^+K^-, \rho^- \rightarrow \pi^0\pi^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 3111 | 1 | 90588 |
| 8013 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8012 | 1 | 90589 |
| 8014 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4613 | 1 | 90590 |
| 8015 | $J/\psi \to \pi^- a_2^+ f_2(1270), a_2^+ \to \pi^+ \eta, f_2(1270) \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 92 | 1 | 90591 |
| 8016 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 4615 | 1 | 90592 |
| 8017 | $J/\psi \to \pi^0 K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 8016 | 1 | 90593 |
| 8018 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \bar{K}^0 K^+, a_1^0 \to \pi^- \rho^+, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8017 | 1 | 90594 |
| 8019 | $J/\psi \to \pi^0 \omega K^0 \bar{K}^*, \omega \to \pi^0 \gamma, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 8018 | 1 | 90595 |
| 8020 | $J/\psi \to \pi^+\pi^-\bar{K}^*K_1^0, \bar{K}^* \to \pi^+K^-, K_1^0 \to \pi^-K_0^{*+}, K_0^{*+} \to \pi^0K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 467 | 1 | 90596 |
| 8021 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0K_L^0\pi^+\pi^-$ | 1710 | 1 | 90597 |
| 8022 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 \eta \omega, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 3115 | 1 | 90598 |
| 8023 | $J/\psi \to \rho^+ a_2^- K^+ K^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8022 | 1 | 90599 |
| 8024 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \rho^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 8023 | 1 | 90600 |
| 8025 | $J/\psi 	o \pi^0 \pi^+ \pi^- a_1^0, a_1^0 	o \pi^+ ho^- \gamma^f, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4619 | 1 | 90601 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8026 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 8025 | 1 | 90602 |
| 8027 | $J/\psi \to \pi^- \rho^+ K^+ K^- \phi, \rho^+ \to \pi^0 \pi^+, \phi \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2273 | 1 | 90603 |
| 8028 | $J/\psi \to \pi^- \omega \bar{K}^0 K_1^{'+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 854 | 1 | 90604 |
| 8029 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0 K_L^0\pi^+\pi^-$ | 8028 | 1 | 90605 |
| 8030 | $J/\psi \rightarrow \pi^0 \rho^- \omega b_1^+, \rho^- \rightarrow \pi^0 \pi^- \gamma^f, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 8029 | 1 | 90606 |
| 8031 | $J/\psi ightarrow a_2^0 b_1^0, a_2^0 ightarrow \pi^- ho^+, b_1^0 ightarrow \pi^0 \omega, ho^+ ightarrow \pi^0 \pi^+, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 4622 | 1 | 90607 |
| 8032 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8031 | 1 | 90608 |
| 8033 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \rho^0 \pi^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 8032 | 1 | 90609 |
| 8034 | $J/\psi \to \pi^+\pi^-\rho^+K_2^{*0}K^-, \rho^+ \to \pi^0\pi^+, K_2^{*0} \to \pi^+\pi^-K^*, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4623 | 1 | 90610 |
| 8035 | $J/\psi \to \eta \eta' h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \\ \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L$ | 4624 | 1 | 90611 |
| 8036 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 8035 | 1 | 90612 |
| 8037 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^+ \pi^- \eta', \eta' ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8036 | 1 | 90613 |
| 8038 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4625 | 1 | 90614 |
| 8039 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 8038 | 1 | 90615 |
| 8040 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1342 | 1 | 90616 |
| 8041 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to K^+ K^-$ | $\pi^0 K^+ K^- \gamma$ | 8040 | 1 | 90617 |
| 8042 | $J/\psi \to \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8041 | 1 | 90618 |
| 8043 | $J/\psi ightarrow \eta \omega a_0^0, \eta ightarrow \pi^+\pi^-\gamma^F, \omega ightarrow \pi^0\pi^+\pi^-, a_0^0 ightarrow \pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 8042 | 1 | 90619 |
| 8044 | $J/\psi \to \pi^0 K^+ K^{*-}, K^{*-} \to \pi^0 K^- \gamma^f$ | $\pi^0\pi^0K^+K^-\gamma^f$ | 8043 | 1 | 90620 |
| 8045 | $J/\psi \to \rho^+ K^+ K^- a_1^-, \rho^+ \to \pi^0 \pi^+, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4627 | 1 | 90621 |
| 8046 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 4628 | 1 | 90622 |
| 8047 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8046 | 1 | 90623 |
| 8048 | $J/\psi \to ho^0 K^- K_2^{*+}, ho^0 \to \pi^+ \pi^-, K_2^{*+} \to ho^+ K^0, ho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 1062 | 1 | 90624 |
| 8049 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 8048 | 1 | 90625 |
| 8050 | $J/\psi \to \rho^0 a_1^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, a_1^0 \to \pi^+ \rho^-, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4630 | 1 | 90626 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8051 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8050 | 1 | 90627 |
| 8052 | $J/\psi \to \pi^0 \pi^0 f_0(1370) h_1(1170), f_0(1370) \to \pi^0 \pi^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 694 | 1 | 90628 |
| 8053 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 4632 | 1 | 90629 |
| 8054 | $J/\psi \to \rho^0 a_2^0 \eta, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^0 \eta, \eta \to \gamma \gamma, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 4633 | 1 | 90630 |
| 8055 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^0 \eta, K^{*+} \to \pi^0 K^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8054 | 1 | 90631 |
| 8056 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8055 | 1 | 90632 |
| 8057 | $J/\psi 	o a_2^+ K^0 K^-, a_2^+ 	o \pi^+ \eta, K^0 	o K_S^0, \eta 	o \pi^0 \pi^0 \pi^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 8056 | 1 | 90633 |
| 8058 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0\pi^+\pi^-, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^0K_0^{*+}, K_0^{*+} \to \pi^+K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8057 | 1 | 90634 |
| 8059 | $J/\psi ightarrow \pi^0 ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow e^+ e^- \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 856 | 1 | 90635 |
| 8060 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 K^+ K_2^{*-}, K_2^{*-} 	o \pi^- \bar{K}^0, \bar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 8059 | 1 | 90636 |
| 8061 | $J/\psi 	o \eta ar{K}^0 K^*, \eta 	o \pi^+ \pi^- \gamma^F, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 4635 | 1 | 90637 |
| 8062 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ho^- \eta b_1^+, ho^- 	o \pi^0 \pi^-, \eta 	o \gamma \gamma, b_1^+ 	o \pi^+ \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 1716 | 1 | 90638 |
| 8063 | $J/\psi \to \pi^0 K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \phi \to K^+ K^-$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 4637 | 1 | 90639 |
| 8064 | $J/\psi \to K^0 \phi \bar{K}_1^0, K^0 \to K_S^0, \phi \to \pi^0 \rho^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8063 | 1 | 90640 |
| 8065 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^+K^{*-}, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}$ | 8064 | 1 | 90641 |
| 8066 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8065 | 1 | 90642 |
| 8067 | $J/\psi \to \pi^0 K^{*+} K^{*-} \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 8066 | 1 | 90643 |
| 8068 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 8067 | 1 | 90644 |
| 8069 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to \pi^-\rho^+, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8068 | 1 | 90645 |
| 8070 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1285) \to \pi^+ a_0^-, K_S^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 1717 | 1 | 90646 |
| 8071 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^- \rho^+, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 8070 | 1 | 90647 |
| 8072 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 8071 | 1 | 90648 |
| 8073 | $J/\psi 	o \eta_2(1870)\gamma, \eta_2(1870) 	o \pi^0 a_0^0, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 8072 | 1 | 90649 |
| 8074 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \rho^0 K^+, K_2^{*-} \to \pi^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 8073 | 1 | 90650 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8075 | $J/\psi \to \bar{K}^* K_1^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1718 | 1 | 90651 |
| 8076 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, f_1(1285) \to \rho^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8075 | 1 | 90652 |
| 8077 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^0 \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3125 | 1 | 90653 |
| 8078 | $J/\psi \to \pi^0 \rho^0 K^- K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8077 | 1 | 90654 |
| 8079 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3126 | 1 | 90655 |
| 8080 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 8079 | 1 | 90656 |
| 8081 | $J/\psi \to \pi^0 \pi^- \rho^+ \omega h_1(1170), \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 4642 | 1 | 90657 |
| 8082 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 \pi^0 \eta, \omega \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 8081 | 1 | 90658 |
| 8083 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega \gamma^f, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 8082 | 1 | 90659 |
| 8084 | $J/\psi \to \pi^0 \pi^+ \pi^- \pi^- \pi^- \rho^+ a_2^+, \rho^+ \to \pi^0 \pi^+, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4643 | 1 | 90660 |
| 8085 | $J/\psi \to \pi^- \bar{\Xi}^{*+} \Xi^0, \bar{\Xi}^{*+} \to \pi^+ \bar{\Xi}^0, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 1065 | 1 | 90661 |
| 8086 | $J/\psi ightarrow \pi^0 \pi^- a_2^+ \eta \gamma^f, a_2^+ ightarrow ho^0 \pi^+, \eta ightarrow \gamma \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 4645 | 1 | 90662 |
| 8087 | $J/\psi 	o \pi^+ \eta a_0^- \gamma^F, \eta 	o \pi^0 \pi^0 \pi^0, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8086 | 1 | 90663 |
| 8088 | $J/\psi 	o \eta K^0 ar{K}^0_1, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K^0_L, ar{K}^0_1 	o \pi^+ K^{*-}_0, K^{*-}_0 	o \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 8087 | 1 | 90664 |
| 8089 | $J/\psi \to K^0 \bar{K}_1^{'0} \gamma, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 8088 | 1 | 90665 |
| 8090 | $J/\psi 	o \pi^+\pi^-\Sigma^0ar{\Sigma}^0, \Sigma^0 	o \Lambda\gamma, ar{\Sigma}^0 	o ar{\Lambda}\gamma, \Lambda 	o \pi^-p, ar{\Lambda} 	o \pi^0ar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma\gamma$ | 4646 | 1 | 90666 |
| 8091 | $J/\psi \to \bar{K}^0 a_0^- K_1^{'+}, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8090 | 1 | 90667 |
| 8092 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to K^0 K^-, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 4647 | 1 | 90668 |
| 8093 | $J/\psi \to \phi\phi\phi, \phi \to \pi^0\rho^0, \phi \to K_L^0K_S^0, \phi \to K_L^0K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 4648 | 1 | 90669 |
| 8094 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8093 | 1 | 90670 |
| 8095 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ \Delta^- \bar{n}, \rho^+ \to \pi^0 \pi^+, \Delta^- \to \pi^- n$ | $\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 4649 | 1 | 90671 |
| 8096 | $J/\psi \to \pi^0 \pi^+ K^- K^{*+} a_1^-, K^{*+} \to \pi^0 K^+, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8095 | 1 | 90672 |
| 8097 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^+ \rho^- \gamma^f, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 8096 | 1 | 90673 |
| 8098 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8097 | 1 | 90674 |
| 8099 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \eta' \to \gamma \gamma$ | $K_L^0 K_L^0 \gamma \gamma$ | 8098 | 1 | 90675 |
| 8100 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^0\pi^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 8099 | 1 | 90676 |
| 8101 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4650 | 1 | 90677 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 8102 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0,$ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8101 | 1 | 90678 |
| 8103 | $J/\psi \to \rho^0 f_2(1270), \rho^0 \to \pi^+\pi^-, f_2(1270) \to \pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 1066 | 1 | 90679 |
| 8104 | $J/\psi \to \pi^- \rho^+ \rho^- \bar{K}^0 K^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 8103 | 1 | 90680 |
| 8105 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^- K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 8104 | 1 | 90681 |
| 8106 | $J/\psi ightarrow a_2^0 \pi^+ \pi^- \gamma^f, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 8105 | 1 | 90682 |
| 8107 | $J/\psi 	o \eta ar{K}^0 K^*, \eta 	o \pi^0 \pi^0 \pi^0, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 8106 | 1 | 90683 |
| 8108 | $J/\psi \to \eta \omega f_0(1370), \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8107 | 1 | 90684 |
| 8109 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \rho^0\rho^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 3129 | 1 | 90685 |
| 8110 | $J/\psi \to \eta K^{*+} K_2^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 8109 | 1 | 90686 |
| 8111 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 8110 | 1 | 90687 |
| 8112 | $J/\psi \to \pi^0 \rho^+ \omega K^* K^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3130 | 1 | 90688 |
| 8113 | $J/\psi \to \rho^+ K^* K^{*-} \gamma^f, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 8112 | 1 | 90689 |
| 8114 | $J/\psi \to \pi^0 \pi^0 \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8113 | 1 | 90690 |
| 8115 | $J/\psi ightarrow \eta' \phi, \eta' ightarrow \omega \gamma, \phi ightarrow K_L^0 K_S^0, \omega ightarrow \pi^0 \pi^+ \pi^-, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 4654 | 1 | 90691 |
| 8116 | $J/\psi \rightarrow \pi^+ \rho^- \eta \eta', \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \pi^0 \pi^+ \pi^-, \eta' \rightarrow \gamma \gamma, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 8115 | 1 | 90692 |
| 8117 | $J/\psi \to \rho^+ K^0 K^- b_1^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 8116 | 1 | 90693 |
| 8118 | $J/\psi \to \pi^+\pi^-\bar{K}^*K_1^0, \bar{K}^* \to \pi^0\bar{K}^0, K_1^0 \to \pi^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 2284 | 1 | 90694 |
| 8119 | $J/\psi ightarrow \pi^0 \pi^+ K^0 ar{\Delta}^+ \Lambda, K^0 ightarrow K^0_S, ar{\Delta}^+ ightarrow \pi^0 ar{p}, \Lambda ightarrow \pi^- p, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 2285 | 1 | 90695 |
| 8120 | $J/\psi \to \eta f_0(1710)\gamma, \eta \to \pi^0 \pi^0 \pi^0, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 4657 | 1 | 90696 |
| 8121 | $J/\psi \rightarrow \pi^0 \rho^0 \pi^+ \pi^- \omega \eta', \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \eta' \rightarrow \pi^+ \pi^- \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-$ | 8120 | 1 | 90697 |
| 8122 | $J/\psi \to \rho^0 \pi^- \rho^+ \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 3133 | 1 | 90698 |
| 8123 | $J/\psi ightarrow \pi^0 ho^0 \pi^- ho^+ \omega, ho^0 ightarrow \pi^+ \pi^-, ho^+ ightarrow \pi^0 \pi^+, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8122 | 1 | 90699 |
| 8124 | $J/\psi \to \pi^0\pi^0a_2^-b_1^+, a_2^- \to \bar{K}^0K^-, b_1^+ \to \pi^+\omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4659 | 1 | 90700 |
| 8125 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^0 \eta, a_2^- \to \bar{K}^0 K^-, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8124 | 1 | 90701 |
| 8126 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8125 | 1 | 90702 |
| 8127 | $J/\psi \to \pi^0 ho^+ b_1^- \gamma, ho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \gamma$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 8126 | 1 | 90703 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8128 | $J/\psi \to \omega b_1^0 b_1^0, \omega \to \pi^0 \gamma, b_1^0 \to \pi^0 \omega, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 8127 | 1 | 90704 |
| 8129 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \eta' \to \rho^0\gamma, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 8128 | 1 | 90705 |
| 8130 | $J/\psi \rightarrow a_2^-b_1^+, a_2^- \rightarrow \pi^0\pi^-\omega, b_1^+ \rightarrow \pi^+\omega, \omega \rightarrow \pi^0\pi^+\pi^-, \omega \rightarrow \pi^0\gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 8129 | 1 | 90706 |
| 8131 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 8130 | 1 | 90707 |
| 8132 | $J/\psi \to \pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+ \gamma^f, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 8131 | 1 | 90708 |
| 8133 | $J/\psi \to \pi^+ \eta K^{*-} K_1^{'0}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8132 | 1 | 90709 |
| 8134 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 4660 | 1 | 90710 |
| 8135 | $J/\psi \to b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \rho^0 \rho^0, \omega \to \pi^0 \gamma, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8134 | 1 | 90711 |
| 8136 | $J/\psi ightarrow ho^0 \pi^+ \pi^- p ar p, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 8135 | 1 | 90712 |
| 8137 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^+\rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^f$ | 4661 | 1 | 90713 |
| 8138 | $J/\psi 	o \omega f_2(1270), \omega 	o \pi^0 \gamma, f_2(1270) 	o \pi^0 \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 3134 | 1 | 90714 |
| 8139 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8138 | 1 | 90715 |
| 8140 | $J/\psi \to K^-K^{*+} f_1(1420), K^{*+} \to \pi^+K^0, f_1(1420) \to \pi^-\bar{K}^0K^+, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 4663 | 1 | 90716 |
| 8141 | $J/\psi \to \phi\phi\gamma, \phi \to \pi^+\rho^-, \phi \to K^+K^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 8140 | 1 | 90717 |
| 8142 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 8141 | 1 | 90718 |
| 8143 | $J/\psi 	o a_2^0 \pi^+ ho^-, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-, ho^- 	o \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8142 | 1 | 90719 |
| 8144 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 8143 | 1 | 90720 |
| 8145 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3135 | 1 | 90721 |
| 8146 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 2286 | 1 | 90722 |
| 8147 | $J/\psi \to \pi^+\pi^-b_1^+a_1^-, b_1^+ \to \pi^+\omega, a_1^- \to \rho^0\pi^-, \omega \to \pi^0\pi^+\pi^-, \rho^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 8146 | 1 | 90723 |
| 8148 | $J/\psi \to \pi^0 K^{*-} K_1^+, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8147 | 1 | 90724 |
| 8149 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 468 | 1 | 90725 |
| 8150 | $J/\psi \to \rho^0 K^- K^{*+}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 8149 | 1 | 90726 |
| 8151 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 4667 | 1 | 90727 |
| 8152 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \omega\omega, h_1(1380) \to K^-K^{*+}, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8151 | 1 | 90728 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8153 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta \gamma^f, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma \gamma^f$ | 4668 | 1 | 90729 |
| 8154 | $J/\psi \to \bar{\Sigma}^- \Sigma^{*+}, \bar{\Sigma}^- \to \pi^0 \bar{p}, \Sigma^{*+} \to \pi^+ \Lambda, \pi^0 \to e^+ e^- \gamma^F, \Lambda \to \pi^- p$ | $e^+e^-\pi^+\pi^-p\bar{p}\gamma^F$ | 8153 | 1 | 90730 |
| 8155 | $J/\psi \to \phi\phi\phi, \phi \to K^+K^-, \phi \to K^+K^-, \phi \to K^+K^-$ | $K^{+}K^{+}K^{+}K^{-}K^{-}K^{-}$ | 8154 | 1 | 90731 |
| 8156 | $J/\psi \to K^0 ar K^0 f_1(1285), K^0 \to K_L^0, ar K^0 \to K_L^0, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 1349 | 1 | 90732 |
| 8157 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^+\pi^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3139 | 1 | 90733 |
| 8158 | $J/\psi 	o ho^0 \eta ar{K}^0 K^*, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 8157 | 1 | 90734 |
| 8159 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \rho^0 K^+, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 8158 | 1 | 90735 |
| 8160 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8159 | 1 | 90736 |
| 8161 | $J/\psi ightarrow \pi^+ ho^- \eta^\prime, ho^- ightarrow \pi^0 \pi^- \gamma^f, \eta^\prime ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma^f$ | 8160 | 1 | 90737 |
| 8162 | $J/\psi ightarrow a_2^0 \omega, a_2^0 ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma$ | 8161 | 1 | 90738 |
| 8163 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 8162 | 1 | 90739 |
| 8164 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 8163 | 1 | 90740 |
| 8165 | $J/\psi \to \pi^+ \eta \eta' a_1^-, \eta \to \gamma \gamma, \eta' \to \pi^0 \pi^0 \eta, a_1^- \to \rho^0 \pi^-, \eta \to \pi^+ \pi^- \gamma^F \gamma^f, \\ \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma\gamma^f$ | 8164 | 1 | 90741 |
| 8166 | $J/\psi \to \pi^- \rho^+ K^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 1350 | 1 | 90742 |
| 8167 | $J/\psi \rightarrow \rho^0 \omega b_1^0, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^0 \rightarrow \pi^0 \omega, \omega \rightarrow \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4672 | 1 | 90743 |
| 8168 | $J/\psi \to \rho^0 \eta f_1(1285), \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 8167 | 1 | 90744 |
| 8169 | $J/\psi 	o \eta K^* K_2^{*0}, \eta 	o \pi^0 \pi^0 \pi^0, K^* 	o \pi^- K^+, K_2^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 4673 | 1 | 90745 |
| 8170 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \rho^0 K^0, K_0^{*-} \to \pi^0 K^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8169 | 1 | 90746 |
| 8171 | $J/\psi 	o \pi^0 \eta K^- K_2^{*+}, \eta 	o \pi^0 \pi^0 \pi^0, K_2^{*+} 	o \pi^+ K^0 \gamma^f, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma^f$ | 8170 | 1 | 90747 |
| 8172 | $J/\psi \to K^- \phi K_1^+, \phi \to K^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 8171 | 1 | 90748 |
| 8173 | $J/\psi 	o \eta K^0 K_2^{*0}, \eta 	o \pi^0 \pi^+ \pi^-, K^0 	o K_S^0, K_2^{*0} 	o \pi^+ K^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8172 | 1 | 90749 |
| 8174 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 4674 | 1 | 90750 |
| 8175 | $J/\psi 	o ho^0 a_0^0 a_0^0, ho^0 	o \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0, \ \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4675 | 1 | 90751 |
| 8176 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^0K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\gamma$ | 4676 | 1 | 90752 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8177 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 \pi^0 K^*, K_2^{*0} \to \pi^0 \bar{K}^0, K^* \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 8176 | 1 | 90753 |
| 8178 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \gamma, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 8177 | 1 | 90754 |
| 8179 | $J/\psi \to \pi^0 \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8178 | 1 | 90755 |
| 8180 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8179 | 1 | 90756 |
| 8181 | $J/\psi \to \eta_c \gamma, \eta_c \to \Xi^0 \bar{\Xi}^0, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \pi^0 \to e^+ e^- \gamma^F, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^+ \bar{p}$ | $e^+e^-\pi^0\pi^+\pi^-p\bar{p}\gamma^F\gamma$ | 8180 | 1 | 90757 |
| 8182 | $J/\psi \to \bar{\Lambda}\Sigma^0, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^0 n, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0nar{n}\gamma^F\gamma\gamma^f$ | 8181 | 1 | 90758 |
| 8183 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, \\ \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 8182 | 1 | 90759 |
| 8184 | $J/\psi \to \eta K^- K^{*+} f_0(1370), \eta \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^0 K^+, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 3141 | 1 | 90760 |
| 8185 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 8184 | 1 | 90761 |
| 8186 | $J/\psi \to \pi^0 K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^- K^{*+}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3142 | 1 | 90762 |
| 8187 | $J/\psi \to \pi^0 \rho^0 \rho^0 \pi^- b_1^+, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 8186 | 1 | 90763 |
| 8188 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 8187 | 1 | 90764 |
| 8189 | $J/\psi \to K^0 \bar{K}^* a^0_0, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, a^0_0 \to \pi^0 \eta, K^0_S \to \pi^0 \pi^0, \ \bar{K}^0 \to K^0_S, \eta \to \pi^0 \pi^0, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0$ | 4679 | 1 | 90765 |
| 8190 | $J/\psi \to a_2^+ b_1^-, a_2^+ \to \pi^0 \rho^+, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8189 | 1 | 90766 |
| 8191 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^0 K^{*+}, K_2^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 8190 | 1 | 90767 |
| 8192 | $J/\psi 	o \pi^-\pi^- ho^+ \eta b_1^+, ho^+ 	o \pi^0\pi^+, \eta 	o \pi^0\pi^0\pi^0, b_1^+ 	o \pi^+\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8191 | 1 | 90768 |
| 8193 | $J/\psi \to \pi^0 \pi^+ \rho^- K^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8192 | 1 | 90769 |
| 8194 | $J/\psi \to \pi^{+}\rho^{-}f_{0}(1370)f_{0}(1370), \rho^{-} \to \pi^{0}\pi^{-}, f_{0}(1370) \to \rho^{+}\rho^{-}, f_{0}(1370) \to \rho^{+}\rho^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3143 | 1 | 90770 |
| 8195 | $J/\psi 	o ho^0\pi^-ar\Delta^- n, ho^0 	o \pi^+\pi^-\gamma^F, ar\Delta^- 	o \pi^+ar n$ | $\pi^+\pi^+\pi^-\pi^-nar{n}\gamma^F$ | 8194 | 1 | 90771 |
| 8196 | $J/\psi \to \rho^- \bar{K}^0 K^{*+} f_0(1370), \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, f_0(1370) \to \rho^+ \rho^-, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-\pi^-$ | 8195 | 1 | 90772 |
| 8197 | $J/\psi \to \pi^+\pi^-\bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^+K^-, K_2^{*0} \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 8196 | 1 | 90773 |
| 8198 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8197 | 1 | 90774 |
| 8199 | $J/\psi \to \pi^0 \pi^0 \pi^- a_2^+, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 8198 | 1 | 90775 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 8200 | $J/\psi \to \eta \phi f_1(1420), \eta \to \gamma \gamma, \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^- \gamma \gamma$ | 4681 | 1 | 90776 |
| 8201 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 8200 | 1 | 90777 |
| 8202 | $J/\psi ightarrow \pi^+ ho^- \eta' \gamma^f, ho^- ightarrow \pi^0 \pi^-, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 4682 | 1 | 90778 |
| 8203 | $J/\psi \to \pi^0 a_2^+ b_1^-, a_2^+ \to \rho^0 \pi^+ \gamma^f, b_1^- \to \pi^- \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 8202 | 1 | 90779 |
| 8204 | $J/\psi \to \pi^+ K_S^0 K^- \phi, K_S^0 \to \pi^0 \pi^0, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4683 | 1 | 90780 |
| 8205 | $J/\psi \to \pi^0\pi^0\pi^+\pi^-K^*K_2^{*0}, K^* \to \pi^0K^0, K_2^{*0} \to \pi^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 8204 | 1 | 90781 |
| 8206 | $J/\psi 	o \pi^+ p \bar{p} a_0^-, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 8205 | 1 | 90782 |
| 8207 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \eta \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 3144 | 1 | 90783 |
| 8208 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+ \gamma^f, f_1(1285) \to \pi^0 \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma\gamma^f$ | 8207 | 1 | 90784 |
| 8209 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 3145 | 1 | 90785 |
| 8210 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 8209 | 1 | 90786 |
| 8211 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_1^- \to \omega K^-, K^{*+} \to \pi^+ K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 4686 | 1 | 90787 |
| 8212 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^+ \pi^- K^*, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8211 | 1 | 90788 |
| 8213 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^*, K_1^- \to \rho^0 K^-, K^* \to \pi^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8212 | 1 | 90789 |
| 8214 | $J/\psi 	o \pi^- K_2^{*0} K^+, K_2^{*0} 	o \omega \bar{K}^0, \omega 	o \pi^0 \gamma, \bar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 4687 | 1 | 90790 |
| 8215 | $J/\psi \rightarrow \rho^0 \omega b_1^0, \rho^0 \rightarrow \pi^+ \pi^- \gamma^F, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^0 \rightarrow \pi^0 \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 2290 | 1 | 90791 |
| 8216 | $J/\psi \to K^- \eta' K_1^+, \eta' \to \rho^0 \gamma, K_1^+ \to \pi^0 K_0^{*+}, \rho^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 8215 | 1 | 90792 |
| 8217 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8216 | 1 | 90793 |
| 8218 | $J/\psi \to K^0 a_0^+ \bar{K}_1^{'-}, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \eta \to \gamma \gamma, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 4689 | 1 | 90794 |
| 8219 | $J/\psi \to \eta \gamma, \eta \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\gamma^F\gamma\gamma^f$ | 3147 | 1 | 90795 |
| 8220 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-\gamma$ | 2291 | 1 | 90796 |
| 8221 | $J/\psi \to \pi^+ \pi^+ \pi^- \omega K^* K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 8220 | 1 | 90797 |
| 8222 | $J/\psi \to \eta K^+ K^{*-}\phi, \eta \to \gamma \gamma, K^{*-} \to \pi^0 K^-, \phi \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 8221 | 1 | 90798 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8223 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8222 | 1 | 90799 |
| 8224 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8223 | 1 | 90800 |
| 8225 | $J/\psi \rightarrow \pi^+\pi^-\rho^+\rho^-\eta, \rho^+ \rightarrow \pi^0\pi^+, \rho^- \rightarrow \pi^0\pi^-, \eta \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8224 | 1 | 90801 |
| 8226 | $J/\psi \to K_2^{*0} K_0^0, K_2^{*0} \to \pi^+ K^-, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-$ | 8225 | 1 | 90802 |
| 8227 | $J/\psi \to \pi^0 \eta' h_1(1170), \eta' \to \pi^+ \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 8226 | 1 | 90803 |
| 8228 | $J/\psi \rightarrow \pi^+ \rho^- \rho^- b_1^+, \rho^- \rightarrow \pi^0 \pi^-, \rho^- \rightarrow \pi^0 \pi^-, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8227 | 1 | 90804 |
| 8229 | $J/\psi \to \pi^+ a_2^- \eta', a_2^- \to \rho^0 \pi^-, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 8228 | 1 | 90805 |
| 8230 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^0K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 8229 | 1 | 90806 |
| 8231 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 8230 | 1 | 90807 |
| 8232 | $J/\psi \to \phi f_0(980), \phi \to K_L^0 K_S^0, f_0(980) \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 4692 | 1 | 90808 |
| 8233 | $J/\psi 	o \eta \Lambda ar{\Lambda}, \eta 	o \gamma \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0nar{n}\gamma\gamma$ | 2292 | 1 | 90809 |
| 8234 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_L^0, \\ \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 3150 | 1 | 90810 |
| 8235 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1380) \to \bar{K}^0 K^*, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^- K^+$ | 4695 | 1 | 90811 |
| 8236 | $J/\psi \to \omega h_1(1170)h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4696 | 1 | 90812 |
| 8237 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f$ | 8236 | 1 | 90813 |
| 8238 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4697 | 1 | 90814 |
| 8239 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+ \gamma^f, K^{*-} \to \pi^0 K^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{f}$ | 8238 | 1 | 90815 |
| 8240 | $J/\psi \to K^{*+}K^{*-}f_0(1710), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to K^+K^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 8239 | 1 | 90816 |
| 8241 | $J/\psi \to K_0^{*-}K_1^{'+}, K_0^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+\gamma^f, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 3151 | 1 | 90817 |
| 8242 | $J/\psi 	o \pi^- a_2^+ \eta, a_2^+ 	o \pi^0 ho^+, \eta 	o \pi^0 \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8241 | 1 | 90818 |
| 8243 | $J/\psi 	o \pi^-ar{K}^0K^+a^0_0, ar{K}^0 	o K^0_L, a^0_0 	o \pi^0\eta, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 8242 | 1 | 90819 |
| 8244 | $J/\psi \to \pi^0 K^+ K_1^-, \pi^0 \to e^+ e^- \gamma^F, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $e^{+}e^{-}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 8243 | 1 | 90820 |
| 8245 | $J/\psi ightarrow ar{K}^*K_1^0\gamma, ar{K}^* ightarrow \pi^0ar{K}^0, K_1^0 ightarrow \omega K^0, ar{K}^0 ightarrow K_L^0, \omega ightarrow \pi^0\gamma, K^0 ightarrow K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\gamma\gamma$ | 8244 | 1 | 90821 |
| 8246 | $J/\psi \to \pi^{-}\rho^{+}K^{*-}K_{1}^{+}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{+} \to \omega K^{+}, \bar{K}^{0} \to K_{S}^{0}, \\ \omega \to \pi^{0}\pi^{+}\pi^{-}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1351 | 1 | 90822 |
| 8247 | $J/\psi \to \pi^+ \rho^- \bar{K}^0 K^+ a_1^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 8246 | 1 | 90823 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 8248 | $J/\psi \to \pi^0 K^* \bar{K}_1^{'0}, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8247 | 1 | 90824 |
| 8249 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 3153 | 1 | 90825 |
| 8250 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8249 | 1 | 90826 |
| 8251 | $J/\psi \to \bar{K}^0 K_2^{*0} \phi, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^0, \phi \to K^+ K^-, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 8250 | 1 | 90827 |
| 8252 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ K^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2294 | 1 | 90828 |
| 8253 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 8252 | 1 | 90829 |
| 8254 | $J/\psi \to \rho^0 K^* \bar{K}_0^{*0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 8253 | 1 | 90830 |
| 8255 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 8254 | 1 | 90831 |
| 8256 | $J/\psi \to \pi^{-}\omega a_{0}^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, a_{0}^{+} \to \pi^{+}\eta, \eta \to \pi^{0}\pi^{0}\pi^{0}, \pi^{0} \to e^{+}e^{-}\gamma^{F}\gamma^{f}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 8255 | 1 | 90832 |
| 8257 | $J/\psi \to K^-K^{*+}f_0(1710), K^{*+} \to \pi^+K^0, f_0(1710) \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 1725 | 1 | 90833 |
| 8258 | $J/\psi \to \pi^- \omega \bar{K}^0 K^{*+}, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 4703 | 1 | 90834 |
| 8259 | $J/\psi 	o \pi^0 ho^0 ho^- b_1^+, ho^0 	o \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 8258 | 1 | 90835 |
| 8260 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3156 | 1 | 90836 |
| 8261 | $J/\psi \to \eta K^{*+}K_1^-, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 8260 | 1 | 90837 |
| 8262 | $J/\psi \to K^- \phi K_1^+, \phi \to K_L^0 K_S^0, K_1^+ \to \omega K^+, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 8261 | 1 | 90838 |
| 8263 | $J/\psi \to \pi^+\pi^-a_2^-\eta a_0^+, a_2^- \to \rho^0\pi^-, \eta \to \pi^0\pi^+\pi^-, a_0^+ \to \pi^+\eta, \rho^0 \to \pi^+\pi^-, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 3157 | 1 | 90839 |
| 8264 | $J/\psi 	o \eta K^0 ar{K}_1^{'0}, \eta 	o \gamma \gamma, K^0 	o K_L^0, ar{K}_1^{'0} 	o \pi^0 ar{K}^*, ar{K}^* 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 3158 | 1 | 90840 |
| 8265 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \\ \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 8264 | 1 | 90841 |
| 8266 | $J/\psi \to ho^0 K^+ K^{*-}, ho^0 \to \pi^+ \pi^- \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 8265 | 1 | 90842 |
| 8267 | $J/\psi 	o K^- K_1^{'+}, K_1^{'+} 	o \pi^0 K^{*+}, K^{*+} 	o \pi^0 K^+ \gamma^f$ | $\pi^0\pi^0K^+K^-\gamma^f$ | 8266 | 1 | 90843 |
| 8268 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | 8267 | 1 | 90844 |
| 8269 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to \bar{K}^0K^*, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4707 | 1 | 90845 |
| 8270 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+ \gamma^f, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f\gamma^f$ | 3159 | 1 | 90846 |
| 8271 | $J/\psi \to \eta K^+ K_0^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 8270 | 1 | 90847 |
| 8272 | $J/\psi \to K^+ {ar K}_1^{'-}, {ar K}_1^{'-} \to \pi^- {ar K}^*, {ar K}^* \to \pi^0 {ar K}^0, {ar K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 8271 | 1 | 90848 |
| 8273 | $J/\psi \to \pi^0 \rho^0 \rho^+ \rho^- \eta', \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8272 | 1 | 90849 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8274 | $J/\psi \to \rho^0 \pi^+ a_0^- a_1^0, \rho^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, a_1^0 \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 1726 | 1 | 90850 |
| 8275 | $J/\psi 	o \Lambda ar{\Sigma}^0 \gamma, \Lambda 	o \pi^0 n, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^0 ar{n}, \pi^0 	o e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0nar{n}\gamma^F\gamma\gamma\gamma^f$ | 8274 | 1 | 90851 |
| 8276 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 8275 | 1 | 90852 |
| 8277 | $J/\psi \to \rho^0 f_0(1370) a_1^0, \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, a_1^0 \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 8276 | 1 | 90853 |
| 8278 | $J/\psi \to \pi^+ f_2(1270) K^0 K^-, f_2(1270) \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 4710 | 1 | 90854 |
| 8279 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 3161 | 1 | 90855 |
| 8280 | $J/\psi \to \eta K^0 \bar{K}_1^{'0}, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8279 | 1 | 90856 |
| 8281 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi f_0(1710), \phi \to \pi^- \rho^+, f_0(1710) \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 4712 | 1 | 90857 |
| 8282 | $J/\psi 	o \eta K^- K_2^{*+}, \eta 	o \pi^0 \pi^0 \pi^0, K_2^{*+} 	o \pi^0 \pi^+ K^*, K^* 	o \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4713 | 1 | 90858 |
| 8283 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \rho^+ \rho^- \gamma^f, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4714 | 1 | 90859 |
| 8284 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8283 | 1 | 90860 |
| 8285 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^- K^+ K^-$ | 8284 | 1 | 90861 |
| 8286 | $J/\psi 	o K^- \Delta^+ \bar{\Sigma}^0, \Delta^+ 	o \pi^+ n, \bar{\Sigma}^0 	o \bar{\Lambda} \gamma, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^+K^-nar{n}\gamma$ | 8285 | 1 | 90862 |
| 8287 | $J/\psi \to \rho^0 \bar{K}^0 K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3162 | 1 | 90863 |
| 8288 | $J/\psi \to \pi^+\pi^-\eta\gamma^F, \eta \to \mu^+\mu^-\gamma^F$ | $\mu^+\mu^-\pi^+\pi^-\gamma^F\gamma^F$ | 8287 | 1 | 90864 |
| 8289 | $J/\psi 	o \pi^+\pi^-K^0ar{K}^*, K^0 	o K_L^0, ar{K}^* 	o \pi^+K^-$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3163 | 1 | 90865 |
| 8290 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 4717 | 1 | 90866 |
| 8291 | $J/\psi 	o ar{K}_0^{*0} K_1^0, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, K_1^0 	o \omega K^0, ar{K}^0 	o K_S^0, \omega 	o \pi^0 \pi^+ \pi^-, \ K^0 	o K_L^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4718 | 1 | 90867 |
| 8292 | $J/\psi \to \pi^- \rho^+ \omega h_1(1170), \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8291 | 1 | 90868 |
| 8293 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^- b_1^0 a_0^+, b_1^0 	o \pi^0 \omega, a_0^+ 	o \pi^+ \eta, \omega 	o \pi^0 \pi^+ \pi^-, \ \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 8292 | 1 | 90869 |
| 8294 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 8293 | 1 | 90870 |
| 8295 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ \rho^- a_1^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_1^0 \to \pi^- \rho^+, $ $\pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 2297 | 1 | 90871 |
| 8296 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^-K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 8295 | 1 | 90872 |
| 8297 | $J/\psi \to \pi^+ K_2^{*0} K_0^{*-}, K_2^{*0} \to \pi^+ \pi^- K^*, K_0^{*-} \to \pi^0 K^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3165 | 1 | 90873 |
| 8298 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 8297 | 1 | 90874 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 8299 | $J/\psi \to \pi^- \omega a_0^+ \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 8298 | 1 | 90875 |
| 8300 | $J/\psi \to K^0 \bar{K}^* K^+ K_1^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^+ K^- K^-$ | 4721 | 1 | 90876 |
| 8301 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^+ n \gamma^f, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^- nar p\gamma^f$ | 8300 | 1 | 90877 |
| 8302 | $J/\psi \to K^+ b_1^- \bar{K}_0^{*0}, b_1^- \to \pi^- \omega, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \omega \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 4722 | 1 | 90878 |
| 8303 | $J/\psi \to \pi^0 \pi^- \bar{\Delta}^- n, \bar{\Delta}^- \to \pi^+ \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 8302 | 1 | 90879 |
| 8304 | $J/\psi \to \pi^+\pi^-a_0^0 f_0(1370), a_0^0 \to \pi^0\eta, f_0(1370) \to \pi^0\pi^0\pi^+\pi^-, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4723 | 1 | 90880 |
| 8305 | $J/\psi \to \pi^- \omega \bar{K}^* K_1^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 4724 | 1 | 90881 |
| 8306 | $J/\psi \to \rho^0 K^{*+} K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8305 | 1 | 90882 |
| 8307 | $J/\psi \to f_2(1270)K^{*+}K^{*-}, f_2(1270) \to \pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4725 | 1 | 90883 |
| 8308 | $J/\psi \to \pi^0 \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3166 | 1 | 90884 |
| 8309 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+} \gamma^F, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 8308 | 1 | 90885 |
| 8310 | $J/\psi \to \eta K^+ K_0^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^-K^+$ | 4727 | 1 | 90886 |
| 8311 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \gamma \gamma, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma\gamma$ | 3167 | 1 | 90887 |
| 8312 | $J/\psi 	o \pi^0 a_2^0 \eta \gamma, a_2^0 	o \pi^+ ho^-, \eta 	o \pi^0 \pi^0 \pi^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 4729 | 1 | 90888 |
| 8313 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \pi^0 K^+, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3168 | 1 | 90889 |
| 8314 | $J/\psi \to \pi^+\pi^-\pi^-\bar{K}^*K^{*+}, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^0K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 8313 | 1 | 90890 |
| 8315 | $J/\psi \to K^{*-}K_1^{'+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 4731 | 1 | 90891 |
| 8316 | $J/\psi \to K^+ b_1^0 K_0^{*-}, b_1^0 \to \pi^0 \omega, K_0^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 1727 | 1 | 90892 |
| 8317 | $J/\psi ightarrow ho^0 \omega b_1^0, ho^0 ightarrow \pi^+ \pi^- \gamma^f, \omega ightarrow \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 8316 | 1 | 90893 |
| 8318 | $J/\psi \to \eta K^{*+} K_1^-, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3170 | 1 | 90894 |
| 8319 | $J/\psi 	o \pi^0 \eta K^- K_1^+, \eta 	o \pi^0 \pi^0 \pi^0, K_1^+ 	o ho^0 K^+, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4734 | 1 | 90895 |
| 8320 | $J/\psi \to \eta\eta\phi, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-, \phi \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+\gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4735 | 1 | 90896 |
| 8321 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 4736 | 1 | 90897 |
| 8322 | $J/\psi \to \pi^0 K_1^+ \bar{K}_1^{'-}, K_1^+ \to \rho^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4737 | 1 | 90898 |
| 8323 | $J/\psi 	o \pi^0 \pi^+ a_0^0 b_1^-, a_0^0 	o \pi^0 \eta, b_1^- 	o \pi^- \omega, \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 4738 | 1 | 90899 |
| 8324 | $J/\psi ightarrow \pi^0 \eta \omega, \eta ightarrow \pi^0 \pi^0 \pi^0, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 8323 | 1 | 90900 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8325 | $J/\psi \to \rho^0 a_2^0 a_0^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- \rho^+, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 8324 | 1 | 90901 |
| 8326 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 8325 | 1 | 90902 |
| 8327 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 2299 | 1 | 90903 |
| 8328 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8327 | 1 | 90904 |
| 8329 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_0(1370) \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0$ | 8328 | 1 | 90905 |
| 8330 | $J/\psi \to \pi^0 \eta \omega f_2(1270), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 246 | 1 | 90906 |
| 8331 | $J/\psi \to \pi^0 \pi^0 K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^-K^+$ | 4741 | 1 | 90907 |
| 8332 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^+ \pi^-, \phi \to K_L^0 K_S^0, f_0(980) \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 8331 | 1 | 90908 |
| 8333 | $J/\psi \to a_0^- b_1^+, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 4742 | 1 | 90909 |
| 8334 | $J/\psi \to \pi^- \rho^+ K^{*+} K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8333 | 1 | 90910 |
| 8335 | $J/\psi \to \pi^- \eta K_2^{*0} K^+, \eta \to \pi^0 \pi^+ \pi^-, K_2^{*0} \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8334 | 1 | 90911 |
| 8336 | $J/\psi \to \rho^0 \omega b_1^0, \rho^0 \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}$ | 8335 | 1 | 90912 |
| 8337 | $J/\psi 	o \eta K^0 ar K^0, \eta 	o \gamma \gamma, K^0 	o K^0_S, ar K^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 8336 | 1 | 90913 |
| 8338 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 3173 | 1 | 90914 |
| 8339 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K_1^0 \to \pi^0 K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^- K^+, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8338 | 1 | 90915 |
| 8340 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8339 | 1 | 90916 |
| 8341 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 8340 | 1 | 90917 |
| 8342 | $J/\psi 	o \pi^+ \Sigma^- ar{\Sigma}^0, \Sigma^- 	o \pi^- n, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^+\pi^-nar{p}\gamma$ | 8341 | 1 | 90918 |
| 8343 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4744 | 1 | 90919 |
| 8344 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \omega K^+, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8343 | 1 | 90920 |
| 8345 | $J/\psi \to f_4(2050)\gamma, f_4(2050) \to \eta\eta, \eta \to \pi^0\pi^+\pi^-, \eta \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 8344 | 1 | 90921 |
| 8346 | $J/\psi \to K_2^{*+}K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^+ \pi^- K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 859 | 1 | 90922 |
| 8347 | $J/\psi 	o \pi^0 a_0^+ a_0^- \gamma, a_0^+ 	o \pi^+ \eta \gamma^f, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 3175 | 1 | 90923 |
| 8348 | $J/\psi \to \rho^0 \rho^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8347 | 1 | 90924 |
| 8349 | $K^{\circ} \to K_{L}^{\circ}$ $J/\psi \to \pi^{+}\pi^{-}\pi^{-}b_{1}^{0}a_{1}^{+}, b_{1}^{0} \to \pi^{0}\omega, a_{1}^{+} \to \rho^{0}\pi^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 56 | 1 | 90925 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8350 | $J/\psi \to \Xi^0 \bar{\Xi}^0, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \Lambda \to \pi^- p, \\ \bar{\Lambda} \to \pi^+ \bar{p}$ | $e^+e^-\pi^0\pi^+\pi^-p\bar{p}\gamma^F\gamma^f$ | 8349 | 1 | 90926 |
| 8351 | $J/\psi \to K^{+} \bar{K}_{1}^{'-}, \bar{K}_{1}^{'-} \to \pi^{-} \bar{K}^{*}, \bar{K}^{*} \to \pi^{+} K^{-} \gamma^{f}$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 3177 | 1 | 90927 |
| 8352 | $J/\psi \to \pi^0 \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3178 | 1 | 90928 |
| 8353 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^-K^{*+}, K^0 \to K_S^0, K^{*+} \to \pi^0K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^+K^-K^-$ | 8352 | 1 | 90929 |
| 8354 | $J/\psi 	o \eta K^- K_1^+, \eta 	o \pi^0 \pi^0 \pi^0, K_1^+ 	o \pi^+ K^*, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 8353 | 1 | 90930 |
| 8355 | $J/\psi \to \bar{K}^*K^+a_0^-\gamma^f, \bar{K}^* \to \pi^+K^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 2303 | 1 | 90931 |
| 8356 | $J/\psi 	o ar{K}^*K^{*+}b_1^-, ar{K}^* 	o \pi^0ar{K}^0, K^{*+} 	o \pi^+K^0, b_1^- 	o \pi^-\omega, ar{K}^0 	o K_S^0, K^0 	o K_S^0, \omega 	o \pi^0\gamma, K_S^0 	o \pi^+\pi^-, K_S^0 	o \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 3180 | 1 | 90932 |
| 8357 | $J/\psi 	o ho^- \eta a_0^+, ho^- 	o \pi^0 \pi^- \gamma^f, \eta 	o \gamma \gamma, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 8356 | 1 | 90933 |
| 8358 | $J/\psi 	o \pi^+\pi^+\pi^- ho^-b_1^0\gamma^f, ho^- 	o \pi^0\pi^-, b_1^0 	o \pi^0\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 1731 | 1 | 90934 |
| 8359 | $J/\psi \to \bar{K}^0 K_2^{*0} a_0^0, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 3182 | 1 | 90935 |
| 8360 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+\pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 8359 | 1 | 90936 |
| 8361 | $J/\psi \to K^* \bar{K}^* b_1^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 8360 | 1 | 90937 |
| 8362 | $J/\psi \to \phi f_1(1420), \phi \to \pi^0 \rho^0, f_1(1420) \to \pi^0 K^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4754 | 1 | 90938 |
| 8363 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8362 | 1 | 90939 |
| 8364 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^+ a_0^-, a_0^- ightarrow \pi^- \eta, \eta ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma$ | 8363 | 1 | 90940 |
| 8365 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 8364 | 1 | 90941 |
| 8366 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 4755 | 1 | 90942 |
| 8367 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 8366 | 1 | 90943 |
| 8368 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \\ \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 8367 | 1 | 90944 |
| 8369 | $J/\psi \to \rho^- a_2^+ \eta', \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \eta' \to \pi^+ \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8368 | 1 | 90945 |
| 8370 | $J/\psi 	o \pi^0 K^+ K^{*-} f_2^\prime, K^{*-} 	o \pi^- ar K^0, f_2^\prime 	o K^+ K^-, ar K^0 	o K_L^0$ | $\pi^0 K^0_L \pi^- K^+ K^+ K^-$ | 8369 | 1 | 90946 |
| 8371 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- a_0^0, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 8370 | 1 | 90947 |
| 8372 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^{+}\bar{\Sigma}^{0}, \Sigma^{*-} \to \pi^{-}\Lambda, \bar{\Sigma}^{0} \to \bar{\Lambda}\gamma, \Lambda \to \pi^{0}n, \\ \bar{\Lambda} \to \pi^{+}\bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 8371 | 1 | 90948 |
| 8373 | $J/\psi \rightarrow f_0(1710)\gamma, f_0(1710) \rightarrow \omega\omega, \omega \rightarrow \pi^+\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8372 | 1 | 90949 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 8374 | $J/\psi \to \pi^0 \pi^+ \pi^- K^{*+} K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 2305 | 1 | 90950 |
| 8375 | $J/\psi \to \pi^0 a_2^0 f_0(1370) \gamma, a_2^0 \to \pi^0 \eta, f_0(1370) \to \rho^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 183 | 1 | 90951 |
| 8376 | $J/\psi \to K^* \bar{K}^* f_0(1370), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}$ | 4758 | 1 | 90952 |
| 8377 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 8376 | 1 | 90953 |
| 8378 | $J/\psi \to \pi^+ \Xi^{*-} \bar{\Xi}^0, \Xi^{*-} \to \pi^- \Xi^0, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Xi^0 \to \pi^0 \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \\ \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 8377 | 1 | 90954 |
| 8379 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+ \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma^f$ | 8378 | 1 | 90955 |
| 8380 | $J/\psi ightarrow ho^+ \Sigma^0 ar{\Sigma}^-, ho^+ ightarrow \pi^0 \pi^+, \Sigma^0 ightarrow \Lambda \gamma, ar{\Sigma}^- ightarrow \pi^0 ar{p}, \Lambda ightarrow \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}\gamma$ | 4759 | 1 | 90956 |
| 8381 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^+K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 4760 | 1 | 90957 |
| 8382 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to K^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 4761 | 1 | 90958 |
| 8383 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 4762 | 1 | 90959 |
| 8384 | $J/\psi \to \pi^+\pi^-\eta K^+K^-\gamma^f, \eta \to \gamma\gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma\gamma^f$ | 4763 | 1 | 90960 |
| 8385 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 2307 | 1 | 90961 |
| 8386 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^*, K_2^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8385 | 1 | 90962 |
| 8387 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^-K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1356 | 1 | 90963 |
| 8388 | $J/\psi 	o \pi^0 \omega ar{K}^0 K^*, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K^0_S, K^* 	o \pi^- K^+, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8387 | 1 | 90964 |
| 8389 | $J/\psi 	o \pi^- \bar{\Delta}^0 \Delta^+ \gamma^F, \bar{\Delta}^0 	o \pi^0 \bar{n}, \Delta^+ 	o \pi^0 p$ | $\pi^0\pi^0\pi^-\bar{n}p\gamma^F$ | 8388 | 1 | 90965 |
| 8390 | $J/\psi \to a_2^0 \omega f_0(1370), a_2^0 \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 8389 | 1 | 90966 |
| 8391 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1420) \to \pi^0 K^+ K^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_LK^+_KK^-$ | 8390 | 1 | 90967 |
| 8392 | $J/\psi \to \bar{K}^0 K_2^{*+} a_1^-, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 8391 | 1 | 90968 |
| 8393 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 8392 | 1 | 90969 |
| 8394 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8393 | 1 | 90970 |
| 8395 | $J/\psi \to \pi^+ K^- K_2^{*+} a_0^-, K_2^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 8394 | 1 | 90971 |
| 8396 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^- \gamma^f, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 1357 | 1 | 90972 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 8397 | $J/\psi \to \phi f_0(2020), \phi \to \pi^0 \rho^0, f_0(2020) \to K^+ K^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 8396 | 1 | 90973 |
| 8398 | $J/\psi \to \pi^+ \rho^- K^{*-} K_1^+, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8397 | 1 | 90974 |
| 8399 | $\begin{array}{l} J/\psi \to K^+ a_0^0 K_1^-, a_0^0 \to \pi^0 \eta, K_1^- \to \rho^- \bar{K}^0, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_L^0 \end{array}$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma\gamma$ | 8398 | 1 | 90975 |
| 8400 | $J/\psi \to K^+K^{*-}\eta', K^{*-} \to \pi^-\bar{K}^0, \eta' \to \pi^0\pi^0\eta, \bar{K}^0 \to K_L^0, \eta \to \gamma\gamma$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma\gamma$ | 4767 | 1 | 90976 |
| 8401 | $J/\psi \rightarrow \pi^+ \omega a_0^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^- \rightarrow \pi^- \eta \gamma^f, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8400 | 1 | 90977 |
| 8402 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 8401 | 1 | 90978 |
| 8403 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^+ \pi^- K^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8402 | 1 | 90979 |
| 8404 | $J/\psi \to \pi^0 \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K_S^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8403 | 1 | 90980 |
| 8405 | $J/\psi \to \pi^0 \pi^+ \rho^- \rho^- a_1^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 8404 | 1 | 90981 |
| 8406 | $J/\psi \to K^- f_0(1370) K_1^+, f_0(1370) \to \pi^+ \pi^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8405 | 1 | 90982 |
| 8407 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \pi^+ K^{*-}, K_1^{'0} \to \pi^- K^{*+}, K^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8406 | 1 | 90983 |
| 8408 | $J/\psi ightarrow ar{K}^0 n ar{\Lambda}, ar{K}^0 ightarrow K_S^0, ar{\Lambda} ightarrow \pi^+ ar{p}, K_S^0 ightarrow \pi^0 \pi^0, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+nar p\gamma^F$ | 4768 | 1 | 90984 |
| 8409 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 2310 | 1 | 90985 |
| 8410 | $J/\psi \to K^-K^{*+}f_0(1710), K^{*+} \to \pi^+K^0, f_0(1710) \to \pi^+\pi^-, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3189 | 1 | 90986 |
| 8411 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 8410 | 1 | 90987 |
| 8412 | $J/\psi \rightarrow \pi^+ a_2^-, a_2^- \rightarrow \pi^0 \pi^- \omega, \pi^0 \rightarrow e^+ e^- \gamma^F, \omega \rightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 8411 | 1 | 90988 |
| 8413 | $J/\psi \to K^+ a_0^0 K_0^{*-}, a_0^0 \to \pi^0 \eta, K_0^{*-} \to \pi^- \bar{K}^0, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 8412 | 1 | 90989 |
| 8414 | $J/\psi \to \eta K^* \bar{K}_1^{'0}, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 8413 | 1 | 90990 |
| 8415 | $J/\psi \to \pi^0 \pi^0 \pi^- a_2^+, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 8414 | 1 | 90991 |
| 8416 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 K^0 K_2^{*0}, K^0 	o K_L^0, K_2^{*0} 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 4771 | 1 | 90992 |
| 8417 | $J/\psi \to \omega \eta' f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, f_0(1370) \to \rho^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 8416 | 1 | 90993 |
| 8418 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 8417 | 1 | 90994 |
| 8419 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 8418 | 1 | 90995 |
| 8420 | $J/\psi \to \pi^0 \eta \bar{K}^0 K^* \eta', \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma\gamma$ | 1735 | 1 | 90996 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 8421 | $J/\psi \to \omega K^0 \bar{K}^* \gamma, \omega \to \pi^0 \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 4773 | 1 | 90997 |
| 8422 | $J/\psi \to \rho^0 \pi^+ \pi^+ \pi^- \pi^- f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 8421 | 1 | 90998 |
| 8423 | $J/\psi \to \pi^0 \pi^+ K^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8422 | 1 | 90999 |
| 8424 | $J/\psi \to \pi^+ K^0 \bar{K}^0 a_0^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, a_0^- \to K^0 K^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8423 | 1 | 91000 |
| 8425 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0\gamma^f, \phi \to K_L^0K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 8424 | 1 | 91001 |
| 8426 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \omega K^0, K_0^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8425 | 1 | 91002 |
| 8427 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 8426 | 1 | 91003 |
| 8428 | $J/\psi \to \pi^0 \rho^0 \pi^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8427 | 1 | 91004 |
| 8429 | $J/\psi \to \pi^0\pi^0\pi^0K^0\bar{K}^*h_1(1170), K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4774 | 1 | 91005 |
| 8430 | $J/\psi 	o ho^+ K^0 K^-, ho^+ 	o \pi^0 \pi^+ \gamma^f, K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^f$ | 3191 | 1 | 91006 |
| 8431 | $J/\psi 	o \pi^0 a_2^- \bar{K}^0 K^+, a_2^- 	o \pi^0 ho^-, \bar{K}^0 	o K_L^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 4776 | 1 | 91007 |
| 8432 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ \omega a_0^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, $ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 3192 | 1 | 91008 |
| 8433 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \rho^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4778 | 1 | 91009 |
| 8434 | $K_S \to \pi^- \pi^-, K_L \to K_L$ $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^+ \gamma,$ $K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 8433 | 1 | 91010 |
| 8435 | $J/\psi \to \rho^+ \omega K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8434 | 1 | 91011 |
| 8436 | $J/\psi 	o ho^0 K^* \bar{K}^*, ho^0 	o \pi^+ \pi^- \gamma^F, K^* 	o \pi^- K^+, \bar{K}^* 	o \pi^0 \bar{K}^0, \bar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^F$ | 8435 | 1 | 91012 |
| 8437 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \rho^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8436 | 1 | 91013 |
| 8438 | $J/\psi \to \omega K^{-}K_{1}^{'+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K_{1}^{'+} \to \pi^{+}\pi^{-}K^{+}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4779 | 1 | 91014 |
| 8439 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8438 | 1 | 91015 |
| 8440 | $J/\psi \to \rho^0 f_2(1270) f_2(1270), \rho^0 \to \pi^+\pi^-, f_2(1270) \to \pi^+\pi^-, f_2(1270) \to \pi^+\pi^-\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 8439 | 1 | 91016 |
| 8441 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, h_1(1170) \to \pi^-\rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8440 | 1 | 91017 |
| 8442 | $J/\psi \to K^* f_0(1370) \bar{K}_1^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^+ \pi^-, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}_2^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 8441 | 1 | 91018 |
| 8443 | $J/\psi \to \pi^0\pi^-K^{*+}\bar{K}^0_1, K^{*+} \to \pi^+K^0, \bar{K}^0_1 \to \rho^+K^-, K^0 \to K^0_L, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8442 | 1 | 91019 |
| 8444 | $J/\psi \to K^0 \bar{K}^0 K^* \bar{K}^*, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 4780 | 1 | 91020 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 8445 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^0 \pi^0, $ $\rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma^f$ | 1358 | 1 | 91021 |
| 8446 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 8445 | 1 | 91022 |
| 8447 | $J/\psi ightarrow K^0 ar K^0 f_2^\prime, K^0 ightarrow K_L^0, ar K^0 ightarrow K_S^0, f_2^\prime ightarrow \eta \eta, K_S^0 ightarrow \pi^+ \pi^-, \ \eta ightarrow \gamma \gamma, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 4782 | 1 | 91023 |
| 8448 | $J/\psi \to \phi f_1(1420), \phi \to e^+e^-, f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{-}K^{+}$ | 8447 | 1 | 91024 |
| 8449 | $J/\psi \to \pi^0 \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1737 | 1 | 91025 |
| 8450 | $J/\psi \to \pi^0 K^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 3195 | 1 | 91026 |
| 8451 | $J/\psi \to \rho^+ K^0 K^{*-} \phi, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 8450 | 1 | 91027 |
| 8452 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^+K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}$ | 3196 | 1 | 91028 |
| 8453 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 8452 | 1 | 91029 |
| 8454 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to \pi^+\pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3197 | 1 | 91030 |
| 8455 | $J/\psi 	o K^0 ar{K}^0_1, K^0 	o K^0_S, ar{K}^0_1 	o \pi^+\pi^- ar{K}^0, K^0_S 	o \pi^+\pi^-, ar{K}^0 	o K^0_L$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8454 | 1 | 91031 |
| 8456 | $J/\psi \to \rho^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 8455 | 1 | 91032 |
| 8457 | $J/\psi \to \pi^+ K_1^0 \bar{K}_1^{'-}, K_1^0 \to \pi^0 K^*, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 336 | 1 | 91033 |
| 8458 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \pi^+ K^*, K^* \to K^0 \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma$ | 8457 | 1 | 91034 |
| 8459 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 4788 | 1 | 91035 |
| 8460 | $J/\psi \rightarrow \rho^0\pi^+\rho^-\eta\omega, \rho^0 \rightarrow \pi^+\pi^-, \rho^- \rightarrow \pi^0\pi^-, \eta \rightarrow \pi^0\pi^+\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 8459 | 1 | 91036 |
| 8461 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^+ K^{*-}, K^0_S \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 8460 | 1 | 91037 |
| 8462 | $J/\psi \to K^- K_0^{*+} h_1(1380), K_0^{*+} \to \pi^0 K^+, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+K^+K^-$ | 8461 | 1 | 91038 |
| 8463 | $J/\psi \to \rho^+ \rho^- a_0^0 \gamma, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 8462 | 1 | 91039 |
| 8464 | $J/\psi ightarrow \pi^- ho^+ \omega b_1^0, ho^+ ightarrow \pi^0 \pi^+, \omega ightarrow \pi^0 \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8463 | 1 | 91040 |
| 8465 | $J/\psi \to \pi^+\pi^- f_1(1285), f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8464 | 1 | 91041 |
| 8466 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0$ | 3199 | 1 | 91042 |
| 8467 | $J/\psi \to K^{*-}K_2^{*+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-\gamma^f$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 473 | 1 | 91043 |
| 8468 | $J/\psi \to \pi^+ \eta K^* \bar{K}_1^{'-}, \eta \to \pi^+ \pi^- \gamma^F, K^* \to \pi^0 K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^F$ | 3201 | 1 | 91044 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8469 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^- \gamma^f \gamma^f, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f\gamma^f$ | 8468 | 1 | 91045 |
| 8470 | $J/\psi \to \pi^0 \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 4792 | 1 | 91046 |
| 8471 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma\gamma$ | 4793 | 1 | 91047 |
| 8472 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_L^0, \phi \to \pi^+ \rho^-, K_1^0 \to \rho^0 K^0, \rho^- \to \pi^0 \pi^-, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 115 | 1 | 91048 |
| 8473 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \rho^0 \gamma, \phi \to K^+ K^-, \pi^0 \to e^+ e^- \gamma^F, \\ \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}\gamma$ | 8472 | 1 | 91049 |
| 8474 | $J/\psi \to \pi^0\pi^- \bar{K}_0^{*0} K_1^+, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8473 | 1 | 91050 |
| 8475 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_L^0, K_L^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8474 | 1 | 91051 |
| 8476 | $J/\psi \to \pi^+ \omega K^* K^-, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8475 | 1 | 91052 |
| 8477 | $J/\psi 	o \pi^0 \omega K^* ar{K}^0_1, \omega 	o \pi^0 \pi^+ \pi^-, K^* 	o \pi^- K^+, ar{K}^0_1 	o \pi^+ \pi^- ar{K}^0, ar{K}^0 	o K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3203 | 1 | 91053 |
| 8478 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, \ \bar{K}^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 8477 | 1 | 91054 |
| 8479 | $J/\psi \to \pi^0 \pi^- \rho^+ \omega b_1^0, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 4796 | 1 | 91055 |
| 8480 | $J/\psi \to \pi^- K^+ ar{K}^0_1, ar{K}^0_1 \to \omega ar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, ar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 8479 | 1 | 91056 |
| 8481 | $J/\psi \to \pi^+ a_1^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8480 | 1 | 91057 |
| 8482 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 4797 | 1 | 91058 |
| 8483 | $J/\psi \to K_2^{*+}K_2^{*-}, K_2^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-$ | 8482 | 1 | 91059 |
| 8484 | $J/\psi \to ho^0 ho^+ a_0^- \gamma, ho^0 \to \pi^+ \pi^-, ho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\gamma$ | 2317 | 1 | 91060 |
| 8485 | $J/\psi \to K^0 \phi \bar{K}_0^{*0}, K^0 \to K_S^0, \phi \to K_L^0 K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1075 | 1 | 91061 |
| 8486 | $J/\psi \to \pi^0 \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 8485 | 1 | 91062 |
| 8487 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 2319 | 1 | 91063 |
| 8488 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \omega \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 8487 | 1 | 91064 |
| 8489 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 8488 | 1 | 91065 |
| 8490 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0K^+, K_1^- \to \rho^-\bar{K}^0, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0 \pi^0 \pi^0 \pi^0 \pi^- K^+ \gamma$ | 8489 | 1 | 91066 |
| 8491 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 8490 | 1 | 91067 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8492 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^+ K_2^{*-}, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K_2^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4801 | 1 | 91068 |
| 8493 | $J/\psi \to \rho^0 a_2^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_2^- \to \rho^0 \pi^-, a_0^+ \to \pi^+ \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 4802 | 1 | 91069 |
| 8494 | $J/\psi \to \pi^0 K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 8493 | 1 | 91070 |
| 8495 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 4803 | 1 | 91071 |
| 8496 | $J/\psi \to \omega R R , \omega \to \pi , R \to \pi R , R \to \pi , $ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3207 | 1 | 91072 |
| 8497 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8496 | 1 | 91073 |
| 8498 | $J/\psi \to K_2^{*0} K^- a_0^+, K_2^{*0} \to \pi^- K^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1363 | 1 | 91074 |
| 8499 | $J/\psi ightarrow \pi^- a_2^+ \omega \gamma^F, a_2^+ ightarrow ho^0 \pi^+, \omega ightarrow \pi^0 \gamma, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma^f$ | 8498 | 1 | 91075 |
| 8500 | $J/\psi \to \pi^- a_0^0 a_1^+, a_0^0 \to \pi^0 \eta, a_1^+ \to \rho^0 \pi^+, \eta \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 3209 | 1 | 91076 |
| 8501 | $J/\psi \to \pi^0 \pi^0 \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8500 | 1 | 91077 |
| 8502 | $J/\psi \to \eta' \eta' \phi, \eta' \to \rho^0 \gamma, \eta' \to \pi^0 \pi^0 \eta, \phi \to K_L^0 K_S^0, \rho^0 \to \pi^+ \pi^-, \\ \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 8501 | 1 | 91078 |
| 8503 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \rho^0K^-, K^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8502 | 1 | 91079 |
| 8504 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to e^+ e^- \gamma^F, K_2^{*-} \to \pi^0 K^-$ | $e^+e^-\pi^0K^+K^-\gamma^F$ | 3210 | 1 | 91080 |
| 8505 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8504 | 1 | 91081 |
| 8506 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^- b_1^+, \rho^0 \to \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2321 | 1 | 91082 |
| 8507 | $J/\psi 	o \pi^0 ho^0 ho^0 \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8506 | 1 | 91083 |
| 8508 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0\gamma, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 702 | 1 | 91084 |
| 8509 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^F, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 8508 | 1 | 91085 |
| 8510 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^- \bar{K}^*, \phi \to K^+ K^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^- K^+ K^+ K^-$ | 8509 | 1 | 91086 |
| 8511 | $J/\psi \to \omega f_2(1270)\eta', \omega \to \pi^0\gamma, f_2(1270) \to \pi^0\pi^0, \eta' \to \rho^0\gamma, \rho^0 \to \pi^+\pi^-\gamma^F$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma\gamma$ | 8510 | 1 | 91087 |
| 8512 | $J/\psi \to \rho^- \bar{K}^* K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+ \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 8511 | 1 | 91088 |
| 8513 | $J/\psi \to \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 866 | 1 | 91089 |
| 8514 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, h_1(1170) \to \pi^-\rho^+, K^0 \to K_S^0, $ $\rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8513 | 1 | 91090 |
| 8515 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 8514 | 1 | 91091 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 8516 | $J/\psi \to \rho^0 K^* \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8515 | 1 | 91092 |
| 8517 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 3214 | 1 | 91093 |
| 8518 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8517 | 1 | 91094 |
| 8519 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8518 | 1 | 91095 |
| 8520 | $J/\psi \to \rho^0 \omega h_1(1170), \rho^0 \to \pi^+\pi^-, \omega \to \pi^0 \gamma, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8519 | 1 | 91096 |
| 8521 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^+\pi^-\omega, h_1(1170) \to \pi^-\rho^+, \omega \to \pi^0\pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8520 | 1 | 91097 |
| 8522 | $J/\psi \to \phi f_0(980), \phi \to \pi^+ \rho^-, f_0(980) \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 8521 | 1 | 91098 |
| 8523 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^+ \pi^- \pi^-$ | 8522 | 1 | 91099 |
| 8524 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 8523 | 1 | 91100 |
| 8525 | $J/\psi \to \rho^+ K^* \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 8524 | 1 | 91101 |
| 8526 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\omega, \omega \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 8525 | 1 | 91102 |
| 8527 | $J/\psi \to n\bar{n}f_0(1370), f_0(1370) \to \pi^+\pi^+\pi^-\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-nar{n}\gamma^f$ | 1745 | 1 | 91103 |
| 8528 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^- \gamma^f, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma^f$ | 3216 | 1 | 91104 |
| 8529 | $J/\psi \to K^0 K_2^{*0} \phi, K^0 \to K_S^0, K_2^{*0} \to \omega \bar{K}^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, \\ \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8528 | 1 | 91105 |
| 8530 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8529 | 1 | 91106 |
| 8531 | $J/\psi \to K^+ K^{*-} f_1(1285), K^{*-} \to \pi^- \bar{K}^0, f_1(1285) \to \pi^0 \pi^0 \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 1746 | 1 | 91107 |
| 8532 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, b_1^0 \to \pi^0\gamma, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 8531 | 1 | 91108 |
| 8533 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 4815 | 1 | 91109 |
| 8534 | $J/\psi \to \eta \eta \omega, \eta \to \gamma \gamma, \eta \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 4816 | 1 | 91110 |
| 8535 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, \eta \to e^+ e^- \gamma^F$ | $e^+e^-K_L^0\pi^+K^-\gamma^F$ | 8534 | 1 | 91111 |
| 8536 | $J/\psi \to a_2^+ K^* K^{*-}, a_2^+ \to \pi^0 \rho^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8535 | 1 | 91112 |
| 8537 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1747 | 1 | 91113 |
| 8538 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8537 | 1 | 91114 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 8539 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8538 | 1 | 91115 |
| 8540 | $J/\psi ightarrow K^-K^{*+}\eta'\gamma^f, K^{*+} ightarrow \pi^+K^0, \eta' ightarrow ho^0\gamma, K^0 ightarrow K^0_L, ho^0 ightarrow \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma^f$ | 8539 | 1 | 91116 |
| 8541 | $J/\psi \to \rho^+ b_1^0 b_1^-, \rho^+ \to \pi^0 \pi^+, b_1^0 \to \pi^0 \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1748 | 1 | 91117 |
| 8542 | $J/\psi \to \rho^+ \eta K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 1366 | 1 | 91118 |
| 8543 | $J/\psi \to K^-K^{*+}f_1(1420), K^{*+} \to \pi^+K^0, f_1(1420) \to \pi^+K^0K^-, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-}$ | 8542 | 1 | 91119 |
| 8544 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0K^0, K_L^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 3221 | 1 | 91120 |
| 8545 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4821 | 1 | 91121 |
| 8546 | $J/\psi \to \pi^0 \pi^0 \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8545 | 1 | 91122 |
| 8547 | $J/\psi \to \rho^0 K^0 \bar{K}^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to K_L^0 K_L^0$ | $\pi^0 K^0_L K^0_L K^0_L K^0_L \pi^+ \pi^-$ | 8546 | 1 | 91123 |
| 8548 | $J/\psi \to a_2^0 \rho^- a_0^+, a_2^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8547 | 1 | 91124 |
| 8549 | $J/\psi \to \pi^0 \rho^+ \rho^- \rho^- a_0^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta,$ $\pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 8548 | 1 | 91125 |
| 8550 | $J/\psi \to a_2^- b_1^+, a_2^- \to \bar{K}^0 K^-, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8549 | 1 | 91126 |
| 8551 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma$ | 8550 | 1 | 91127 |
| 8552 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 8551 | 1 | 91128 |
| 8553 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 8552 | 1 | 91129 |
| 8554 | $J/\psi \to \Xi^-\bar{\Xi}^{*+}, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^{*+} \to \pi^0\bar{\Xi}^+, \Lambda \to \pi^0 n, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \bar{\Lambda} \to \pi^+\bar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 8553 | 1 | 91130 |
| 8555 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+ \gamma^f, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 8554 | 1 | 91131 |
| 8556 | $J/\psi \to \pi^+\pi^- n\bar{\Delta}^0, \bar{\Delta}^0 \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-nar{p}$ | 8555 | 1 | 91132 |
| 8557 | $J/\psi \to \pi^+ \pi^- n\Delta^0, \Delta^0 \to \pi^+ \bar{p}$ $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4822 | 1 | 91133 |
| 8558 | $J/\psi \to \rho^0 \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K_S^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 8557 | 1 | 91134 |
| 8559 | $J/\psi 	o \pi^0\pi^-ar{n}p, \pi^0 	o e^+e^-\gamma^F$ | $e^+e^-\pi^-ar{n}p\gamma^F$ | 1750 | 1 | 91135 |
| 8560 | $J/\psi \to K^0 \bar{K}^* \phi \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-\gamma$ | 8559 | 1 | 91136 |
| 8561 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega p \bar{p}, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-p\bar{p}\gamma^F\gamma$ | 1367 | 1 | 91137 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 8562 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 8561 | 1 | 91138 |
| 8563 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8562 | 1 | 91139 |
| 8564 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+K^0, K_L^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8563 | 1 | 91140 |
| 8565 | $J/\psi \to \pi^- \rho^+ K^{*+} K_1^-, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3224 | 1 | 91141 |
| 8566 | $J/\psi \to K^{*+} K_0^{*-} \gamma^f, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 1752 | 1 | 91142 |
| 8567 | $J/\psi \to \rho^- f_2(1270) a_0^+, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 8566 | 1 | 91143 |
| 8568 | $J/\psi \to K^{*+}K_2^{*-}\gamma, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0\pi^-\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 8567 | 1 | 91144 |
| 8569 | $J/\psi \to K^+K^{*-}a_0^0, K^{*-} \to \pi^0K^-, a_0^0 \to \pi^0\eta, \pi^0 \to e^+e^-\gamma^F, \eta \to \gamma\gamma$ | $e^+e^-\pi^0K^+K^-\gamma^F\gamma\gamma$ | 3226 | 1 | 91145 |
| 8570 | $J/\psi 	o \pi^0 \pi^- a_1^+ \gamma^f, a_1^+ 	o ho^0 \pi^+, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8569 | 1 | 91146 |
| 8571 | $J/\psi \to \pi^0 \rho^+ \Delta^- \bar{n}, \rho^+ \to \pi^0 \pi^+, \Delta^- \to \pi^- n$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 8570 | 1 | 91147 |
| 8572 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^0 \rho^0, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 2332 | 1 | 91148 |
| 8573 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 4829 | 1 | 91149 |
| 8574 | $J/\psi \to \pi^0 \pi^+ \rho^- a_0^0, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 8573 | 1 | 91150 |
| 8575 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 250 | 1 | 91151 |
| 8576 | $J/\psi \to \pi^0 f_2(1270) h_1(1170), f_2(1270) \to \pi^0 \pi^0, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 2334 | 1 | 91152 |
| 8577 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_2^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 8576 | 1 | 91153 |
| 8578 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^+K^-, a_0^- \to K^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 3230 | 1 | 91154 |
| 8579 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^- \rho^+, f_1(1285) \to \pi^0 \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4833 | 1 | 91155 |
| 8580 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^F, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma^F$ | 4834 | 1 | 91156 |
| 8581 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to K^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 8580 | 1 | 91157 |
| 8582 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8581 | 1 | 91158 |
| 8583 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8582 | 1 | 91159 |
| 8584 | $J/\psi \to \bar{K}^*K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 8583 | 1 | 91160 |
| 8585 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \pi^+ \eta, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 8584 | 1 | 91161 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 8586 | $J/\psi \to K^{*+} \bar{K}_1'^- \gamma, K^{*+} \to \pi^+ K^0, \bar{K}_1'^- \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 8585 | 1 | 91162 |
| 8587 | $J/\psi \to \bar{K}^0 K^* b_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 8586 | 1 | 91163 |
| 8588 | $J/\psi \to K^- \phi K_1^+, \phi \to \pi^0 \rho^0, K_1^+ \to \omega K^+, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8587 | 1 | 91164 |
| 8589 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 8588 | 1 | 91165 |
| 8590 | $J/\psi \to \pi^0 f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^+\pi^-\gamma^f, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 8589 | 1 | 91166 |
| 8591 | $J/\psi \to \rho^0 \pi^+ \omega K^* K^-, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 8590 | 1 | 91167 |
| 8592 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8591 | 1 | 91168 |
| 8593 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, \\ \eta \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 8592 | 1 | 91169 |
| 8594 | $J/\psi \to \rho^{+} K^{*} K_{2}^{*-}, \rho^{+} \to \pi^{0} \pi^{+}, K^{*} \to \pi^{0} K^{0}, K_{2}^{*-} \to \omega K^{-}, K^{0} \to K_{L}^{0}, \omega \to \pi^{0} \pi^{+} \pi^{-}$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4835 | 1 | 91170 |
| 8595 | $J/\psi \to K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 8594 | 1 | 91171 |
| 8596 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8595 | 1 | 91172 |
| 8597 | $J/\psi \to K^0 \bar{K}^* f_2', K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_2' \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4836 | 1 | 91173 |
| 8598 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 8597 | 1 | 91174 |
| 8599 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^+ \pi^- K^0, \bar{K}^0 \to K_L^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8598 | 1 | 91175 |
| 8600 | $J/\psi \to \pi^0 \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 4837 | 1 | 91176 |
| 8601 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8600 | 1 | 91177 |
| 8602 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8601 | 1 | 91178 |
| 8603 | $J/\psi \to \eta \eta h_1(1380), \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 8602 | 1 | 91179 |
| 8604 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4838 | 1 | 91180 |
| 8605 | $J/\psi 	o K^0 ar{K}^0 a^0_0, K^0 	o K^0_L, ar{K}^0 	o K^0_L, a^0_0 	o \pi^0 \eta, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^F$ | 8604 | 1 | 91181 |
| 8606 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 8605 | 1 | 91182 |
| 8607 | $J/\psi \to \pi^0 \pi^- K^{*+} K^{*-} a_0^+, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K^0 \to K_L^0, \\ \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 8606 | 1 | 91183 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 8608 | $J/\psi \to \eta_c \gamma, \eta_c \to \Sigma^+ \bar{\Sigma}^-, \Sigma^+ \to \pi^0 p, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^-ar{n}p\gamma$ | 2335 | 1 | 91184 |
| 8609 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^+ K^{*-}, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 8608 | 1 | 91185 |
| 8610 | $J/\psi ightarrow \pi^0 \eta' b_1^0, \eta' ightarrow \pi^+ \pi^- \eta, b_1^0 ightarrow \pi^0 \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 8609 | 1 | 91186 |
| 8611 | $J/\psi \to \rho^0 K^- K_1^+, \rho^0 \to \pi^+ \pi^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 8610 | 1 | 91187 |
| 8612 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \gamma, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 8611 | 1 | 91188 |
| 8613 | $J/\psi \to \pi^0 \rho^0 \pi^+ K^- K_1^0, \rho^0 \to \pi^+ \pi^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 84 | 1 | 91189 |
| 8614 | $J/\psi 	o \eta \omega \eta', \eta 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \gamma, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8613 | 1 | 91190 |
| 8615 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 8614 | 1 | 91191 |
| 8616 | $J/\psi \to \pi^0 h_1(1170) f_1(1285), h_1(1170) \to \pi^+ \rho^-, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4841 | 1 | 91192 |
| 8617 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_L^0, \phi \to K^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 8616 | 1 | 91193 |
| 8618 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 8617 | 1 | 91194 |
| 8619 | $J/\psi \to \pi^0 \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^+ \pi^- \eta, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 4842 | 1 | 91195 |
| 8620 | $J/\psi \to \pi^+ K^* K^{*-} \gamma^F, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^F\gamma^F\gamma^f$ | 8619 | 1 | 91196 |
| 8621 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \eta', \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \eta' \to \pi^+ \pi^- \eta, K^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 4843 | 1 | 91197 |
| 8622 | $J/\psi \to \pi^- K_2^{*0} K_0^{*+}, K_2^{*0} \to \pi^+ K^{*-}, K_0^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 4844 | 1 | 91198 |
| 8623 | $J/\psi \to \eta_c \gamma, \eta_c \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Lambda \to \pi^- p, \\ \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma$ | 8622 | 1 | 91199 |
| 8624 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \gamma, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 8623 | 1 | 91200 |
| 8625 | $J/\psi \to \pi^0 K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^0 \pi^0 K^*, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^* \to \pi^0 K^0, \rho^0 \to \pi^+ \pi^-, \ \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 2337 | 1 | 91201 |
| 8626 | $J/\psi ightarrow \pi^+\pi^-\eta\gamma^F, \eta ightarrow \pi^0\gamma\gamma$ | $\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 8625 | 1 | 91202 |
| 8627 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 8626 | 1 | 91203 |
| 8628 | $J/\psi \to \pi^0\pi^-K^+K^{*-}b_1^+, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2338 | 1 | 91204 |
| 8629 | $J/\psi \to \pi^0 \rho^- b_1^+ \gamma, \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 8628 | 1 | 91205 |
| 8630 | $J/\psi \to a_2^0 K^0 \bar{K}_1^0, a_2^0 \to \pi^- \rho^+, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \rho^+ \to \pi^0 \pi^+, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 8629 | 1 | 91206 |
| 8631 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 8630 | 1 | 91207 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 8632 | $J/\psi \to \pi^- \rho^+ \gamma^f \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-\gamma^f\gamma^f$ | 3235 | 1 | 91208 |
| 8633 | $J/\psi \to \pi^0 h_1(1170), h_1(1170) \to \pi^- \rho^+ \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 8632 | 1 | 91209 |
| 8634 | $J/\psi \to \rho^+ \bar{K}^0 K^* a_0^-, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 8633 | 1 | 91210 |
| 8635 | $J/\psi ightarrow \pi^- \omega a_0^+, \omega ightarrow \pi^+ \pi^-, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8634 | 1 | 91211 |
| 8636 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \pi^0\pi^0\pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 8635 | 1 | 91212 |
| 8637 | $J/\psi ightarrow \pi^- \eta b_1^+, \eta ightarrow e^+ e^- \gamma^F, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8636 | 1 | 91213 |
| 8638 | $J/\psi \to K^{+}a_{0}^{-}\bar{K}_{1}^{'0}, a_{0}^{-} \to \pi^{-}\eta, \bar{K}_{1}^{'0} \to \pi^{0}\bar{K}^{*}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, \bar{K}^{0} \to K_{L}^{0}$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 4848 | 1 | 91214 |
| 8639 | $J/\psi \to \rho^0 \bar{K}^0 K_1^{'0}, \rho^0 \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K_S^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 1080 | 1 | 91215 |
| 8640 | $J/\psi \to K^+ a_0^0 K_1^-, a_0^0 \to \pi^0 \eta, K_1^- \to \rho^0 K^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 2340 | 1 | 91216 |
| 8641 | $J/\psi ightarrow \phi f_2^\prime, \phi ightarrow \eta \gamma, f_2^\prime ightarrow K_L^0 K_L^0, \eta ightarrow \gamma \gamma$ | $K_L^0 K_L^0 \gamma \gamma \gamma$ | 8640 | 1 | 91217 |
| 8642 | $J/\psi 	o ho^0 ar{K}^* K_1^0, ho^0 	o \pi^+ \pi^-, ar{K}^* 	o \pi^+ K^-, K_1^0 	o \pi^0 K^*, K^* 	o \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3238 | 1 | 91218 |
| 8643 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 4852 | 1 | 91219 |
| 8644 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 8643 | 1 | 91220 |
| 8645 | $J/\psi \to \bar{\Sigma}^- \Sigma^{*+}, \bar{\Sigma}^- \to \pi^0 \bar{p}, \Sigma^{*+} \to \pi^0 \Sigma^+, \Sigma^+ \to \pi^+ n$ | $\pi^0\pi^0\pi^+n\bar{p}$ | 8644 | 1 | 91221 |
| 8646 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^- K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8645 | 1 | 91222 |
| 8647 | $J/\psi \to K^{+}K^{*-}f_{2}^{'}, K^{*-} \to \pi^{-}\bar{K}^{0}, f_{2}^{'} \to K_{S}^{0}K_{S}^{0}, \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8646 | 1 | 91223 |
| 8648 | $J/\psi \to K^0 K_1^- a_1^+, K^0 \to K_S^0, K_1^- \to \rho^0 K^-, a_1^+ \to \rho^0 \pi^+, K_S^0 \to \pi^0 \pi^0, $ $\rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3239 | 1 | 91224 |
| 8649 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^0_L K^0_S, K^0_S \to \pi^+ \pi^-, \\ \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3240 | 1 | 91225 |
| 8650 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \pi^+ K^{*-}, K_1^{'0} \to \pi^- K^{*+}, K^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8649 | 1 | 91226 |
| 8651 | $J/\psi \to \pi^+\pi^-\eta f_1(1285), \eta \to \gamma\gamma, f_1(1285) \to \rho^0\gamma, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 8650 | 1 | 91227 |
| 8652 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^+, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8651 | 1 | 91228 |
| 8653 | $J/\psi \to \pi^+ \eta K^* K^{*-}, \eta \to \gamma \gamma, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 8652 | 1 | 91229 |
| 8654 | $J/\psi \to \pi^0 \pi^+ \pi^- \eta \gamma^f, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 8653 | 1 | 91230 |
| 8655 | $J/\psi 	o ar{K}^*K_2^0, ar{K}^* 	o \pi^0 ar{K}^0, K_2^0 	o \pi^0 K_2^{*0}, ar{K}^0 	o K_S^0, K_2^{*0} 	o \pi^0 K^*, K_S^0 	o \pi^+\pi^-, K^* 	o \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 8654 | 1 | 91231 |
| 8656 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^0 \pi^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 3241 | 1 | 91232 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 8657 | $J/\psi 	o \pi^0\pi^0\eta b_1^0, \eta 	o \gamma\gamma, b_1^0 	o \pi^0\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 4856 | 1 | 91233 |
| 8658 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 8657 | 1 | 91234 |
| 8659 | $J/\psi \to \omega K^+ \bar{K}_1^{'-}, \omega \to \pi^+ \pi^-, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 4857 | 1 | 91235 |
| 8660 | $J/\psi \to \rho^{+} a_{0}^{-} f_{0}(1370), \rho^{+} \to \pi^{0} \pi^{+}, a_{0}^{-} \to \pi^{-} \eta, f_{0}(1370) \to \rho^{+} \rho^{-}, \eta \to \pi^{0} \pi^{0} \pi^{0}, \rho^{+} \to \pi^{0} \pi^{+}, \rho^{-} \to \pi^{0} \pi^{-}, \pi^{0} \to e^{+} e^{-} \gamma^{F}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8659 | 1 | 91236 |
| 8661 | $J/\psi \to \omega K^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8660 | 1 | 91237 |
| 8662 | $J/\psi 	o b_1^0 a_1^0, b_1^0 	o \pi^0 \omega, a_1^0 	o \pi^- ho^+, \omega 	o \pi^0 \gamma, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 8661 | 1 | 91238 |
| 8663 | $J/\psi \to \pi^+ K^0 K^{*-} \phi, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8662 | 1 | 91239 |
| 8664 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \gamma, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 8663 | 1 | 91240 |
| 8665 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 8664 | 1 | 91241 |
| 8666 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1285) \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 8665 | 1 | 91242 |
| 8667 | $J/\psi \to \pi^0 K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-\gamma$ | 8666 | 1 | 91243 |
| 8668 | $J/\psi \to \pi^0 \eta \omega K^+ K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8667 | 1 | 91244 |
| 8669 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^+ \pi^-, \phi \to K^+ K^-, f_0(980) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8668 | 1 | 91245 |
| 8670 | $J/\psi \to \eta' h_1(1380), \eta' \to \gamma \gamma, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0\pi^-K^+\gamma\gamma$ | 2341 | 1 | 91246 |
| 8671 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^+ \pi^- \gamma^F, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 8670 | 1 | 91247 |
| 8672 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^0 K_0^{*+}, K_S^0 \to \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4859 | 1 | 91248 |
| 8673 | $J/\psi ightarrow \eta \phi, \eta ightarrow \pi^+ \pi^- \gamma^F, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 8672 | 1 | 91249 |
| 8674 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \pi^+\pi^-\eta', \eta' \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8673 | 1 | 91250 |
| 8675 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 8674 | 1 | 91251 |
| 8676 | $J/\psi 	o \eta' n ar{n}, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^-n\bar{n}\gamma^F\gamma$ | 8675 | 1 | 91252 |
| 8677 | $J/\psi \to \pi^+ K_1^- K_1^{'0}, K_1^- \to \rho^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 4860 | 1 | 91253 |
| 8678 | $J/\psi \to \pi^+ K^* K^{*-} \eta', K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \eta' \to \rho^0 \gamma, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma\gamma^f$ | 4861 | 1 | 91254 |
| 8679 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 162 | 1 | 91255 |
| 8680 | $J/\psi \to \pi^- K_2^{*+} \bar{K}_0^{*0}, K_2^{*+} \to \pi^+ K^*, \bar{K}_0^{*0} \to \pi^+ K^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3244 | 1 | 91256 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 8681 | $J/\psi \to \pi^+ \eta K^* K_1^-, \eta \to \gamma \gamma, K^* \to \pi^- K^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma$ | 8680 | 1 | 91257 |
| 8682 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^{+}\bar{\Xi}^{0}, \Xi^{*-} \to \pi^{0}\Xi^{-}, \bar{\Xi}^{0} \to \pi^{0}\bar{\Lambda}, \Xi^{-} \to \pi^{-}\Lambda, \\ \bar{\Lambda} \to \pi^{0}\bar{n}, \Lambda \to \pi^{0}n$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 3245 | 1 | 91258 |
| 8683 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_S^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4865 | 1 | 91259 |
| 8684 | $J/\psi 	o \pi^+ ho^- b_1^0, ho^- 	o \pi^0 \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4866 | 1 | 91260 |
| 8685 | $J/\psi \to \bar{K}^* K_1^{'0}, \bar{K}^* \to \pi^+ K^- \gamma^f, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 4867 | 1 | 91261 |
| 8686 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+K^+K^-\gamma$ | 2343 | 1 | 91262 |
| 8687 | $J/\psi \to a_2^+ K^* K^-, a_2^+ \to \pi^0 \pi^+ \omega, K^* \to \pi^- K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8686 | 1 | 91263 |
| 8688 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8687 | 1 | 91264 |
| 8689 | $J/\psi \to K^- \phi K_1^+, \phi \to K^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 4869 | 1 | 91265 |
| 8690 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^- \rho^+, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8689 | 1 | 91266 |
| 8691 | $J/\psi \to K^+ b_1^- \bar{K}_1^0, b_1^- \to \pi^- \omega, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 4870 | 1 | 91267 |
| 8692 | $J/\psi \to K^+K^{*-}\eta', K^{*-} \to \pi^-\bar{K}^0, \eta' \to \pi^+\pi^-\eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 4871 | 1 | 91268 |
| 8693 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to \pi^- \rho^+, a_2^+ \to \pi^+ \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4872 | 1 | 91269 |
| 8694 | $J/\psi \to K_0^0 \bar{K}_0^{*0}, K_0^0 \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8693 | 1 | 91270 |
| 8695 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, $ $\pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 8694 | 1 | 91271 |
| 8696 | $J/\psi 	o f_2(1270)b_1^0, f_2(1270) 	o \pi^0\pi^0, b_1^0 	o \pi^0\omega, \omega 	o \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^0\gamma$ | 3247 | 1 | 91272 |
| 8697 | $J/\psi \to \omega K^{*+}K_1^-, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+, K_1^- \to \pi^0K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 8696 | 1 | 91273 |
| 8698 | $J/\psi \to \pi^0 \pi^+ \eta b_1^-, \eta \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8697 | 1 | 91274 |
| 8699 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0 K^+ K^- \gamma$ | 4874 | 1 | 91275 |
| 8700 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8699 | 1 | 91276 |
| 8701 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 8700 | 1 | 91277 |
| 8702 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^+\pi^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 4875 | 1 | 91278 |
| 8703 | $J/\psi \to \pi^0 \pi^+ \pi^- \bar{K}^* K_1^{'0}, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 2344 | 1 | 91279 |
| 8704 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^- \gamma^f, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 8703 | 1 | 91280 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 8705 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^*, K_2^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8704 | 1 | 91281 |
| 8706 | $J/\psi 	o K^0 ar{K}^* a_0^0, K^0 	o K_L^0, ar{K}^* 	o \pi^0 ar{K}^0, a_0^0 	o \pi^0 \eta, ar{K}^0 	o K_L^0, \ \eta 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\gamma^{F}$ | 4877 | 1 | 91282 |
| 8707 | $J/\psi \to \pi^+ \rho^- a_0^+ a_0^-, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \\ \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 8706 | 1 | 91283 |
| 8708 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^0\pi^0, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 8707 | 1 | 91284 |
| 8709 | $J/\psi ightarrow ho^+ K^* K^- \gamma^f, ho^+ ightarrow \pi^0 \pi^+, K^* ightarrow \pi^0 K^0, K^0 ightarrow K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma^f$ | 4878 | 1 | 91285 |
| 8710 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^+ \pi^- K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8709 | 1 | 91286 |
| 8711 | $J/\psi \to \pi^0 \bar{K}^* K_1^0, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8710 | 1 | 91287 |
| 8712 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^-$ | 8711 | 1 | 91288 |
| 8713 | $J/\psi 	o ar{K}^0 K^* f_2^{'}, ar{K}^0 	o K_L^0, K^* 	o \pi^- K^+, f_2^{'} 	o K_L^0 K_L^0$ | $K^0_L K^0_L K^0_L \pi^- K^+$ | 8712 | 1 | 91289 |
| 8714 | $J/\psi ightarrow \pi^+ a_2^- \omega \gamma^F, a_2^- ightarrow ho^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 8713 | 1 | 91290 |
| 8715 | $J/\psi ightarrow \pi^- ho^+ \omega \gamma^F, ho^+ ightarrow \pi^0 \pi^+, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 8714 | 1 | 91291 |
| 8716 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^0 K^+, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8715 | 1 | 91292 |
| 8717 | $J/\psi \to \bar{K}^0 K_2^{*0} K^+ K^-, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^+$ | $K_L^0\pi^-K^+K^+K^-$ | 8716 | 1 | 91293 |
| 8718 | $J/\psi 	o a_2^0 \pi^+ K^0 K^-, a_2^0 	o \pi^- ho^+, K^0 	o K_S^0, ho^+ 	o \pi^0 \pi^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3249 | 1 | 91294 |
| 8719 | $J/\psi 	o \pi^0 a_2^0 \omega, a_2^0 	o K_S^0 K_S^0, \omega 	o \pi^0 \pi^+ \pi^-, K_S^0 	o \pi^0 \pi^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2345 | 1 | 91295 |
| 8720 | $J/\psi \to K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+\pi^- \bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8719 | 1 | 91296 |
| 8721 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8720 | 1 | 91297 |
| 8722 | $J/\psi \to \pi^0 K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 8721 | 1 | 91298 |
| 8723 | $J/\psi 	o \pi^0 ho^0 ar{n} \Delta^0, ho^0 	o \pi^+ \pi^-, \Delta^0 	o \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 8722 | 1 | 91299 |
| 8724 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \pi^0\pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8723 | 1 | 91300 |
| 8725 | $J/\psi \to \bar{K}^0 \phi K_1^{'0}, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 870 | 1 | 91301 |
| 8726 | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4882 | 1 | 91302 |
| 8727 | $J/\psi \to a_2^0 K^{*+} K^{*-}, a_2^0 \to \pi^+ \pi^- \omega, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 4883 | 1 | 91303 |
| 8728 | $J/\psi ightarrow \pi^- ho^+ \eta^\prime, ho^+ ightarrow \pi^0 \pi^+, \eta^\prime ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 8727 | 1 | 91304 |
| 8729 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_L^0, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 8728 | 1 | 91305 |
| 8730 | $J/\psi 	o \pi^- ho^+ \gamma^f, ho^+ 	o \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^+\pi^-\gamma^f\gamma^f$ | 4884 | 1 | 91306 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 8731 | $J/\psi \to \pi^+ K_2^{*0} K^- \gamma^f, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 8730 | 1 | 91307 |
| 8732 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_1^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 4885 | 1 | 91308 |
| 8733 | $J/\psi 	o \pi^+ n \bar{\Delta}^+, \bar{\Delta}^+ 	o \bar{p} \gamma$ | $\pi^+ n \bar{p} \gamma$ | 8732 | 1 | 91309 |
| 8734 | $J/\psi \to \pi^+ n \Delta^+, \Delta^+ \to \bar{p} \gamma$ $J/\psi \to K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-,$ $K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 398 | 1 | 91310 |
| 8735 | $J/\psi \to K^0 \bar{K}^* f_2', K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_2' \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8734 | 1 | 91311 |
| 8736 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- b_1^0, \rho^- \to \pi^0 \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 4887 | 1 | 91312 |
| 8737 | $J/\psi 	o \omega \bar K^0 K^*, \omega 	o \pi^+ \pi^+ \pi^- \pi^-, \bar K^0 	o K_L^0, K^* 	o \pi^- K^+$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1759 | 1 | 91313 |
| 8738 | $J/\psi \to \pi^0\pi^0K^+K^{*-}a^0_0, K^{*-} \to \pi^0K^-, a^0_0 \to \pi^0\eta, \pi^0 \to e^+e^-\gamma^F, \eta \to \pi^0\pi^0\pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K^{+}K^{-}\gamma^{F}$ | 3254 | 1 | 91314 |
| 8739 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_1^+ \to \rho^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K_0^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 8738 | 1 | 91315 |
| 8740 | $J/\psi \to K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3255 | 1 | 91316 |
| 8741 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 8740 | 1 | 91317 |
| 8742 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8741 | 1 | 91318 |
| 8743 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 8742 | 1 | 91319 |
| 8744 | $J/\psi \to \pi^0 \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8743 | 1 | 91320 |
| 8745 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+}\to \pi^+K^0, K^{*-}\to \pi^0K^-, \phi\to \pi^-\rho^+, K^0\to K^0_S, \rho^+\to \pi^0\pi^+, K^0_S\to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8744 | 1 | 91321 |
| 8746 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8745 | 1 | 91322 |
| 8747 | $J/\psi \to \eta \bar{K}^0 K^* f_0(1370), \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 8746 | 1 | 91323 |
| 8748 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 2349 | 1 | 91324 |
| 8749 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^- ar{\Delta}^- n, ar{\Delta}^- 	o \pi^+ ar{n}$ | $\pi^+\pi^-nar{n}\gamma$ | 4892 | 1 | 91325 |
| 8750 | $J/\psi \to \eta K^0 K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_L^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4893 | 1 | 91326 |
| 8751 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to K^- K^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 4894 | 1 | 91327 |
| 8752 | $J/\psi \to K^0 \phi \bar{K}_0^{*0}, K^0 \to K_S^0, \phi \to \pi^- \rho^+, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8751 | 1 | 91328 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 8753 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\gamma$ | 8752 | 1 | 91329 |
| 8754 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^+ K^-, K^0_S \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4895 | 1 | 91330 |
| 8755 | $J/\psi \to K^-K^{*+}f_1(1420), K^{*+} \to \pi^+K^0, f_1(1420) \to \pi^-\bar{K}^0K^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8754 | 1 | 91331 |
| 8756 | $J/\psi \to \eta K^- K_2^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8755 | 1 | 91332 |
| 8757 | $J/\psi 	o \omega b_1^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 4896 | 1 | 91333 |
| 8758 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 8757 | 1 | 91334 |
| 8759 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to K^0\bar{K}^*, \eta \to \pi^0\pi^0\pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-K^-$ | 8758 | 1 | 91335 |
| 8760 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \bar{K}^* K_1^0, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 8759 | 1 | 91336 |
| 8761 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^+ \pi^- \gamma^F, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 4897 | 1 | 91337 |
| 8762 | $J/\psi \to \eta' \eta' \phi, \eta' \to \pi^+ \pi^- \eta, \eta' \to \pi^+ \pi^- \eta, \phi \to K^+ K^-, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 4898 | 1 | 91338 |
| 8763 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \pi^+ K_0^0, \eta \to \pi^0 \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-K^-$ | 8762 | 1 | 91339 |
| 8764 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to K^0 \gamma, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 8763 | 1 | 91340 |
| 8765 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 \bar{n} \Lambda, K^0 \to K^0_S, \Lambda \to \pi^- p, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-ar{n}p\gamma$ | 8764 | 1 | 91341 |
| 8766 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 8765 | 1 | 91342 |
| 8767 | $J/\psi 	o \Delta^0 ar{\Delta}^0 \gamma, \Delta^0 	o \pi^- p, ar{\Delta}^0 	o \pi^+ ar{p}$ | $\pi^+\pi^-par p\gamma$ | 8766 | 1 | 91343 |
| 8768 | $J/\psi ightarrow \eta K^+K_1^-, \eta ightarrow \pi^0\pi^0\pi^0, K_1^- ightarrow \omega K^-, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-\gamma$ | 4899 | 1 | 91344 |
| 8769 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to \pi^0 \rho^0, h_1(1380) \to K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 4900 | 1 | 91345 |
| 8770 | $J/\psi \to \pi^0 \pi^- a_2^+ f_1(1285), a_2^+ \to \pi^0 \rho^+, f_1(1285) \to \rho^0 \gamma, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 1084 | 1 | 91346 |
| 8771 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8770 | 1 | 91347 |
| 8772 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 8771 | 1 | 91348 |
| 8773 | $J/\psi \to \pi^0 \rho^0 \rho^- b_1^+, \rho^0 \to \pi^+ \pi^- \gamma^f, \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 8772 | 1 | 91349 |
| 8774 | $J/\psi \to \pi^0 \Delta^0 \bar{\Delta}^0, \pi^0 \to e^+ e^- \gamma^F, \Delta^0 \to \pi^0 n, \bar{\Delta}^0 \to \pi^0 \bar{n}$ | $e^+e^-\pi^0\pi^0nar{n}\gamma^F$ | 2351 | 1 | 91350 |
| 8775 | $J/\psi \to \pi^- K_2^{*0} K^+ f_0(1370), K_2^{*0} \to \pi^0 \bar{K}^0, f_0(1370) \to \rho^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1375 | 1 | 91351 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 8776 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^+ \rho^- \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 1085 | 1 | 91352 |
| 8777 | $J/\psi \to \eta \phi f_0(980), \eta \to \gamma \gamma, \phi \to \pi^0 \rho^0, f_0(980) \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4905 | 1 | 91353 |
| 8778 | $J/\psi \to \rho^0 \pi^+ \pi^- \pi^- b_1^+, \rho^0 \to \pi^+ \pi^- \gamma^f, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 4906 | 1 | 91354 |
| 8779 | $J/\psi \to \bar{\Sigma}^- \Sigma^{*+} \gamma, \bar{\Sigma}^- \to \pi^- \bar{n}, \Sigma^{*+} \to \pi^+ \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 3261 | 1 | 91355 |
| 8780 | $J/\psi \to \pi^0\pi^-\rho^+\rho^-a_2^+, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, a_2^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8779 | 1 | 91356 |
| 8781 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ K^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 4908 | 1 | 91357 |
| 8782 | $J/\psi \to a_2^+ \omega a_0^-, a_2^+ \to \pi^+ \eta, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 4909 | 1 | 91358 |
| 8783 | $J/\psi \rightarrow \pi^0\pi^0a_0^+b_1^-, a_0^+ \rightarrow \pi^+\eta, b_1^- \rightarrow \pi^-\omega, \eta \rightarrow \gamma\gamma, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 3262 | 1 | 91359 |
| 8784 | $J/\psi \to h_1(1380)f_1(1420), h_1(1380) \to K^-K^{*+}, f_1(1420) \to \pi^0K^0\bar{K}^0, K^{*+} \to \pi^0K^+, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0\pi^0, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8783 | 1 | 91360 |
| 8785 | $J/\psi ightarrow \eta K^- K_1^+, \eta ightarrow \gamma \gamma, K_1^+ ightarrow \omega K^+, \omega ightarrow \pi^0 \gamma$ | $\pi^0 K^+ K^- \gamma \gamma \gamma$ | 1763 | 1 | 91361 |
| 8786 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta \bar{K}^0 K_1^{'0}, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 8785 | 1 | 91362 |
| 8787 | $J/\psi \to \bar{K}^0 K_2^{*0} f_0(1370), \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^+, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 8786 | 1 | 91363 |
| 8788 | $J/\psi \to \eta \omega f_1(1285), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 8787 | 1 | 91364 |
| 8789 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \pi^0\pi^0\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 4912 | 1 | 91365 |
| 8790 | $J/\psi \to \pi^- a_2^+, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 3264 | 1 | 91366 |
| 8791 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 8790 | 1 | 91367 |
| 8792 | $J/\psi \to K^0 \bar{K}_1^0 \gamma, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 8791 | 1 | 91368 |
| 8793 | $J/\psi 	o \pi^- ar{K}_1^0 K_0^{*+}, ar{K}_1^0 	o \pi^+ K_0^{*-}, K_0^{*+} 	o \pi^+ K^0, K_0^{*-} 	o \pi^0 K^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 8792 | 1 | 91369 |
| 8794 | $J/\psi ightarrow \omega K^+ K_1^-, \omega ightarrow \pi^0 \pi^+ \pi^-, K_1^- ightarrow \omega K^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 872 | 1 | 91370 |
| 8795 | $J/\psi 	o \pi^0 a_2^0 \omega, \pi^0 	o e^+ e^- \gamma^F, a_2^0 	o \pi^+ \rho^-, \omega 	o \pi^0 \pi^+ \pi^-, \rho^- 	o \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8794 | 1 | 91371 |
| 8796 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^F$ | 8795 | 1 | 91372 |
| 8797 | $J/\psi 	o \eta ar{K}^0 K_2^{*0}, \eta 	o \gamma \gamma, ar{K}^0 	o K_S^0, K_2^{*0} 	o \pi^- K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 8796 | 1 | 91373 |
| 8798 | $J/\psi \to K^{-}K_{1}^{'+}\gamma^{f}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{L}^{0}$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^f$ | 8797 | 1 | 91374 |
| 8799 | $J/\psi \to \omega K^* \bar{K}^0_1, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, K^* \to \pi^- K^+, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 8798 | 1 | 91375 |
| 8800 | $J/\psi \to \pi^- \omega \omega a_1^+, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 8799 | 1 | 91376 |
| 8801 | $J/\psi \to \pi^+ a_2^- K^+ K^-, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1765 | 1 | 91377 |
| 8802 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 8801 | 1 | 91378 |
| 8803 | $J/\psi \to \pi^0 \pi^+ a_2^-, \pi^0 \to e^+ e^- \gamma^F, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 8802 | 1 | 91379 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 8804 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8803 | 1 | 91380 |
| 8805 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^* \to \pi^+ K^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 8804 | 1 | 91381 |
| 8806 | $J/\psi \to \rho^- \eta a_0^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8805 | 1 | 91382 |
| 8807 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 8806 | 1 | 91383 |
| 8808 | $J/\psi \to \eta \eta' h_1(1380), \eta \to \gamma \gamma, \eta' \to \rho^0 \gamma, h_1(1380) \to K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^F, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma\gamma\gamma$ | 8807 | 1 | 91384 |
| 8809 | $J/\psi \to \pi^- K^- K^{*+} b_1^+, K^{*+} \to \pi^0 K^+, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 8808 | 1 | 91385 |
| 8810 | $J/\psi \to K^+K^-f_1(1285), f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4916 | 1 | 91386 |
| 8811 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2357 | 1 | 91387 |
| 8812 | $J/\psi \to \pi^+ a_1^- f_1(1285), a_1^- \to \rho^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, \rho^0 \to \pi^+ \pi^-, a_0^0 \to K_L^0 K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^+ \pi^- \pi^-$ | 8811 | 1 | 91388 |
| 8813 | $J/\psi \to K^0 \bar{K}^0 K^{*+} K^{*-}, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4918 | 1 | 91389 |
| 8814 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8813 | 1 | 91390 |
| 8815 | $J/\psi ightarrow a_2^0 \omega, a_2^0 ightarrow K^+ K^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0 K^+ K^- \gamma$ | 8814 | 1 | 91391 |
| 8816 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^+ K_2^{*-}, \bar{K}^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3268 | 1 | 91392 |
| 8817 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^- \bar{K}^*, \phi \to \pi^+ \rho^-, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 4920 | 1 | 91393 |
| 8818 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 8817 | 1 | 91394 |
| 8819 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0K_L^0\gamma^F\gamma$ | 4921 | 1 | 91395 |
| 8820 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma$ | 8819 | 1 | 91396 |
| 8821 | $J/\psi \to \pi^+ K_0^0 K_0^{*-}, K_0^0 \to \pi^0 K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 3269 | 1 | 91397 |
| 8822 | $J/\psi 	o \Xi^0 \bar{\Xi}^0 \gamma, \Xi^0 	o \pi^0 \Lambda, \bar{\Xi}^0 	o \pi^0 \bar{\Lambda}, \Lambda 	o n \gamma, \bar{\Lambda} 	o \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^+nar p\gamma\gamma$ | 3270 | 1 | 91398 |
| 8823 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 4924 | 1 | 91399 |
| 8824 | $J/\psi \to \eta' h_1(1170), \eta' \to \rho^0 \gamma, h_1(1170) \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1378 | 1 | 91400 |
| 8825 | $J/\psi \to \pi^- \rho^- a_0^+ a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8824 | 1 | 91401 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 8826 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_1^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8825 | 1 | 91402 |
| 8827 | $J/\psi \to \pi^0 a_2^0 \pi^+ \pi^- a_0^0, a_2^0 \to \pi^- \rho^+, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8826 | 1 | 91403 |
| 8828 | $J/\psi \to \pi^+ \eta K^0 K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4926 | 1 | 91404 |
| 8829 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma$ | 8828 | 1 | 91405 |
| 8830 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 4927 | 1 | 91406 |
| 8831 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 4928 | 1 | 91407 |
| 8832 | $J/\psi \to \rho^0 K^+ K_1^-, \rho^0 \to \pi^+ \pi^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3272 | 1 | 91408 |
| 8833 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ a_2^- \omega, a_2^- \to \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 8832 | 1 | 91409 |
| 8834 | $J/\psi \to \bar{K}^0 b_1^0 K_0^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8833 | 1 | 91410 |
| 8835 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \bar{K}^0 K^+, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8834 | 1 | 91411 |
| 8836 | $J/\psi \to \pi^+ \omega K^- K_1^0, \omega \to \pi^0 \pi^+ \pi^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8835 | 1 | 91412 |
| 8837 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2359 | 1 | 91413 |
| 8838 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^+ \eta', \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \rho^0 \gamma, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 8837 | 1 | 91414 |
| 8839 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_S^0, \\ \eta \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8838 | 1 | 91415 |
| 8840 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 3274 | 1 | 91416 |
| 8841 | $J/\psi \rightarrow \eta \phi f_{2}^{'}, \eta \rightarrow \gamma \gamma, \phi \rightarrow K^{+}K^{-}, f_{2}^{'} \rightarrow K^{+}K^{-}$ | $K^+K^+K^-K^-\gamma\gamma$ | 1767 | 1 | 91417 |
| 8842 | $J/\psi 	o \pi^0 b_1^0, b_1^0 	o \pi^0 \omega, \omega 	o \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8841 | 1 | 91418 |
| 8843 | $J/\psi \to \pi^+ K^0 K_2^{*-} \gamma^f, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^f$ | 8842 | 1 | 91419 |
| 8844 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \omega K^+, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8843 | 1 | 91420 |
| 8845 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^0 K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 8844 | 1 | 91421 |
| 8846 | $J/\psi \to K^* \bar{K}^* b_1^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1087 | 1 | 91422 |
| 8847 | $J/\psi \to K^0 \bar{K}^0 f_2^{'}, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_2^{'} \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8846 | 1 | 91423 |
| 8848 | $J/\psi \to \rho^0 \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8847 | 1 | 91424 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 8849 | $J/\psi \to \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^+ K^- \gamma^f, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 3277 | 1 | 91425 |
| 8850 | $J/\psi \to \pi^- \rho^+ \rho^+ a_1^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 8849 | 1 | 91426 |
| 8851 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+ \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 8850 | 1 | 91427 |
| 8852 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3278 | 1 | 91428 |
| 8853 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^+K^{*-}, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\pi^-K^+K^+$ | 8852 | 1 | 91429 |
| 8854 | $J/\psi \to \pi^0 K^{*-} K_1^+, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8853 | 1 | 91430 |
| 8855 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^0 \eta', \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 8854 | 1 | 91431 |
| 8856 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \gamma \gamma$ | 8855 | 1 | 91432 |
| 8857 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8856 | 1 | 91433 |
| 8858 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \gamma, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 8857 | 1 | 91434 |
| 8859 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Sigma^0, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-nar{n}\gamma$ | 8858 | 1 | 91435 |
| 8860 | $J/\psi ightarrow \pi^+ K^0 K^- p ar p, K^0 ightarrow K^0_S, K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-par{p}$ | 4936 | 1 | 91436 |
| 8861 | $J/\psi \to \pi^+\pi^-\eta K^*\bar{K}^*, \eta \to \gamma\gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 8860 | 1 | 91437 |
| 8862 | $J/\psi \to \rho^0 K^0 \bar{K}_0^{*0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 8861 | 1 | 91438 |
| 8863 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3279 | 1 | 91439 |
| 8864 | $J/\psi \to \pi^0 \pi^0 f_2(1270) \gamma, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 8863 | 1 | 91440 |
| 8865 | $J/\psi \to K^-K^{*+}f_1(1285), K^{*+} \to \pi^+K^0, f_1(1285) \to \pi^0 a_0^0, K^0 \to K_S^0, a_0^0 \to K^+K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^+K^-K^-$ | 1769 | 1 | 91441 |
| 8866 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 2363 | 1 | 91442 |
| 8867 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 8866 | 1 | 91443 |
| 8868 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8867 | 1 | 91444 |
| 8869 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+K^+K^-\gamma$ | 8868 | 1 | 91445 |
| 8870 | $J/\psi \rightarrow \pi^0 \rho^0 \rho^0 \gamma, \pi^0 \rightarrow e^+ e^- \gamma^F, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 2364 | 1 | 91446 |
| 8871 | $J/\psi 	o \pi^0 \pi^0 f_2(1270) \gamma, f_2(1270) 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\gamma$ | 8870 | 1 | 91447 |
| 8872 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 8871 | 1 | 91448 |
| 8873 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^+ K_1^-, \eta \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+\gamma$ | 8872 | 1 | 91449 |
| 8874 | $J/\psi \to \pi^{-} f_{2}(1270)b_{1}^{+}\gamma^{f}, f_{2}(1270) \to K_{S}^{0}K_{S}^{0}, b_{1}^{+} \to \pi^{+}\omega, K_{S}^{0} \to \pi^{0}\pi^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}, \\ \omega \to \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 8873 | 1 | 91450 |
| 8875 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \rho^- K^+, \eta \to \pi^+ \pi^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $\pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma^F$ | 8874 | 1 | 91451 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 8876 | $J/\psi \to \pi^0 K_0^{*-} K_1^{'+}, K_0^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8875 | 1 | 91452 |
| 8877 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to K^+ K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 3283 | 1 | 91453 |
| 8878 | $J/\psi 	o a_2^- b_1^+, a_2^- 	o ho^0 \pi^- \gamma^f, b_1^+ 	o \pi^+ \omega, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 8877 | 1 | 91454 |
| 8879 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^0 K^*, K_2^{*-} \to \rho^0 K^-, K^* \to \pi^- K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8878 | 1 | 91455 |
| 8880 | $J/\psi \to \pi^+ K_0^0 K_0^{*-}, K_0^0 \to \pi^- K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4942 | 1 | 91456 |
| 8881 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 \pi^+ \rho^-, a_2^0 \to \pi^+ \pi^- \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 8880 | 1 | 91457 |
| 8882 | $J/\psi \to K^+K^-\phi, \phi \to \eta\gamma, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 4943 | 1 | 91458 |
| 8883 | $J/\psi ightarrow \pi^0 \pi^0 \phi, \phi ightarrow \eta \gamma, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 4944 | 1 | 91459 |
| 8884 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 8883 | 1 | 91460 |
| 8885 | $J/\psi \to \eta_c \gamma, \eta_c \to K^{*+}K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 8884 | 1 | 91461 |
| 8886 | $J/\psi \to \pi^0 \pi^+ \pi^- \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8885 | 1 | 91462 |
| 8887 | $J/\psi \to K^- K_1^+ f_1(1285), K_1^+ \to \rho^+ K^0, f_1(1285) \to \pi^0 K^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+K^-$ | 8886 | 1 | 91463 |
| 8888 | $J/\psi \to \pi^0 \eta \bar{K}^0 K^+ b_1^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F\gamma\gamma\gamma^f$ | 8887 | 1 | 91464 |
| 8889 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^- \gamma^f, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 4945 | 1 | 91465 |
| 8890 | $J/\psi \to \rho^0 K^* \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \omega \bar{K}^0, K^0 \to K_L^0, \\ \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 8889 | 1 | 91466 |
| 8891 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1285) \to \rho^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8890 | 1 | 91467 |
| 8892 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^+ \pi^- K^*, K_2^{*0} \to \pi^0 \bar{K}^0, K^* \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 8891 | 1 | 91468 |
| 8893 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 4946 | 1 | 91469 |
| 8894 | $J/\psi \to \pi^0 \rho^0 \pi^+ K^* K^-, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8893 | 1 | 91470 |
| 8895 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 4947 | 1 | 91471 |
| 8896 | $J/\psi \to K^* \bar{K}^* h_1(1380), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 2365 | 1 | 91472 |
| 8897 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^+ \pi^- K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 583 | 1 | 91473 |
| 8898 | $J/\psi \to \pi^- \bar{K}^0 K^* b_1^+, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 8897 | 1 | 91474 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 8899 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 3286 | 1 | 91475 |
| 8900 | $J/\psi \to \rho^- K_2^{*0} K^{*+}, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K^{*+} \to \pi^0 K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8899 | 1 | 91476 |
| 8901 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \bar{K}^0 K^+, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 8900 | 1 | 91477 |
| 8902 | $J/\psi 	o \pi^0 K_1^0 \bar{K}_1^0, K_1^0 	o \pi^0 K_0^0, \bar{K}_1^0 	o \pi^+ \pi^- \bar{K}^0, K_0^0 	o \pi^- K^+, \bar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 8901 | 1 | 91478 |
| 8903 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3287 | 1 | 91479 |
| 8904 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \rho^+ K^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 8903 | 1 | 91480 |
| 8905 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \omega\omega, h_1(1380) \to \bar{K}^0K^*, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2367 | 1 | 91481 |
| 8906 | $J/\psi 	o \pi^0 ho^0 K^0 ar K^0, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 8905 | 1 | 91482 |
| 8907 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8906 | 1 | 91483 |
| 8908 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \rho^0 K^-, K^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 3289 | 1 | 91484 |
| 8909 | $J/\psi \to \pi^0 \pi^+ \rho^- \omega h_1(1170), \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 8908 | 1 | 91485 |
| 8910 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-$ | 8909 | 1 | 91486 |
| 8911 | $J/\psi \to \pi^+ K^- K_1^0 \gamma^f, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 3290 | 1 | 91487 |
| 8912 | $J/\psi \to \pi^- a_2^+ f_1(1285), a_2^+ \to \rho^0 \pi^+, f_1(1285) \to \pi^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, $ $\eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 3291 | 1 | 91488 |
| 8913 | $J/\psi 	o ho^- a_2^+ a_1^0, ho^- 	o \pi^0 \pi^-, a_2^+ 	o \pi^0 \pi^+ \omega, a_1^0 	o \pi^+ ho^-, \omega 	o \pi^0 \gamma, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3292 | 1 | 91489 |
| 8914 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8913 | 1 | 91490 |
| 8915 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \omega \gamma, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 2368 | 1 | 91491 |
| 8916 | $J/\psi \to \rho^+ K^- K_1^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 8915 | 1 | 91492 |
| 8917 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 4958 | 1 | 91493 |
| 8918 | $J/\psi \to K^{*-}a_0^0 K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, a_0^0 \to \pi^0 \eta, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3294 | 1 | 91494 |
| 8919 | $J/\psi \to K^- K^{*+} \eta', K^{*+} \to \pi^+ K^0, \eta' \to \pi^0 \pi^0 \eta, K^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 8918 | 1 | 91495 |
| 8920 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma$ | 8919 | 1 | 91496 |
| 8921 | $J/\psi \to \phi f_1(1285), \phi \to K_L^0 K_S^0, f_1(1285) \to \pi^0 \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 4960 | 1 | 91497 |
| 8922 | $J/\psi 	o \pi^+\pi^-\omega, \omega 	o \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8921 | 1 | 91498 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 8923 | $J/\psi \to \pi^{-} \bar{K}_{0}^{*0} K_{1}^{'+}, \bar{K}_{0}^{*0} \to \pi^{+} K^{-}, K_{1}^{'+} \to \pi^{0} K^{*+}, K^{*+} \to \pi^{+} K^{0} \gamma^{f}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0} \pi^{0}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{f}$ | 4961 | 1 | 91499 |
| 8924 | $J/\psi \to \pi^+ \rho^- f_2(1270) \gamma^f, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 8923 | 1 | 91500 |
| 8925 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^0K^+, \phi \to \eta\gamma, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma$ | 4962 | 1 | 91501 |
| 8926 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^0_1, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^0_S \to \pi^0 \pi^0, K^{*-}_0 \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8925 | 1 | 91502 |
| 8927 | $J/\psi \to \omega K^{*-} K_1^{'+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 4963 | 1 | 91503 |
| 8928 | $J/\psi \rightarrow \rho^0 \bar{K}^0 K^+ a_0^-, \rho^0 \rightarrow \pi^+ \pi^-, \bar{K}^0 \rightarrow K_S^0, a_0^- \rightarrow \pi^- \eta, K_S^0 \rightarrow \pi^+ \pi^-, \eta \rightarrow \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma$ | 2369 | 1 | 91504 |
| 8929 | $J/\psi \to \Sigma^0 \bar{\Sigma}^{*0}, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^{*0} \to \pi^+ \bar{\Sigma}^-, \Lambda \to \pi^0 n, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 874 | 1 | 91505 |
| 8930 | $J/\psi \to \pi^0 K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3297 | 1 | 91506 |
| 8931 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, \pi^0 \to e^+ e^- \gamma^F, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^0 K^-$ | $e^+e^-\pi^0\pi^0K^+K^-\gamma^F$ | 4967 | 1 | 91507 |
| 8932 | $J/\psi 	o ho^0 \eta a_1^0, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8931 | 1 | 91508 |
| 8933 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to K_L^0 K_L^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 8932 | 1 | 91509 |
| 8934 | $J/\psi \to f_0(1370)h_1(1170), f_0(1370) \to \gamma\gamma, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 8933 | 1 | 91510 |
| 8935 | $J/\psi \to \pi^0 f_2(1270) b_1^0, f_2(1270) \to K^+ K^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8934 | 1 | 91511 |
| 8936 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 8935 | 1 | 91512 |
| 8937 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to K_L^0K_L^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0K_L^0K_L^0$ | 8936 | 1 | 91513 |
| 8938 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 1772 | 1 | 91514 |
| 8939 | $J/\psi \to K^+ h_1(1170) K_1^-, h_1(1170) \to \pi^0 \rho^0, K_1^- \to \pi^- \bar{K}_0^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 4969 | 1 | 91515 |
| 8940 | $J/\psi 	o ho^0 K^0 K_2^{*0}, ho^0 	o \pi^+ \pi^-, K^0 	o K_S^0, K_2^{*0} 	o \pi^+ K^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 8939 | 1 | 91516 |
| 8941 | $J/\psi \to \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 8940 | 1 | 91517 |
| 8942 | $J/\psi \to \pi^0 \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K_1^- \to \rho^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 8941 | 1 | 91518 |
| 8943 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 8942 | 1 | 91519 |
| 8944 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \eta \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 708 | 1 | 91520 |
| 8945 | $J/\psi \to \pi^0 \rho^0 \pi^+ \pi^+ \pi^- a_1^-, \rho^0 \to \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8944 | 1 | 91521 |
| 8946 | $J/\psi \to \rho^{-}a_{0}^{0}a_{0}^{+}, \rho^{-} \to \pi^{0}\pi^{-}, a_{0}^{0} \to \pi^{0}\eta, a_{0}^{+} \to \pi^{+}\eta, \eta \to \pi^{+}\pi^{-}\gamma^{F}, \eta \to \pi^{0}\pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 8945 | 1 | 91522 |
| 8947 | $J/\psi \to \pi^0 K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^- K^+, \bar{K}_1^{'0} \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8946 | 1 | 91523 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 8948 | $J/\psi \to K^0 K_2^{*-} a_0^+, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 8947 | 1 | 91524 |
| 8949 | $J/\psi \to \pi^0 K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_LK^+_K^-$ | 8948 | 1 | 91525 |
| 8950 | $J/\psi \to \pi^0 \bar{K}^0 K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+ \gamma^f$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^f$ | 8949 | 1 | 91526 |
| 8951 | $J/\psi \to \pi^+ \eta K_2^{*0} K^-, \eta \to \gamma \gamma, K_2^{*0} \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 8950 | 1 | 91527 |
| 8952 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 8951 | 1 | 91528 |
| 8953 | $J/\psi \to \pi^0 \omega a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 8952 | 1 | 91529 |
| 8954 | $J/\psi \to \pi^0 \bar{K}^* K^+ a_0^-, \bar{K}^* \to \pi^+ K^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 8953 | 1 | 91530 |
| 8955 | $J/\psi \to ho^0 \pi^- \bar{K}^0 K^{*+}, ho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 8954 | 1 | 91531 |
| 8956 | $J/\psi \to \pi^0 \pi^+ K^+ K^{*-} b_1^-, K^{*-} \to \pi^0 K^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3300 | 1 | 91532 |
| 8957 | $J/\psi \to \rho^0 K^+ K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 8956 | 1 | 91533 |
| 8958 | $J/\psi \to \rho^+ K^* K^- f_0(1370), \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 8957 | 1 | 91534 |
| 8959 | $J/\psi \rightarrow \rho^- \omega b_1^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^+ \pi^-, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 709 | 1 | 91535 |
| 8960 | $J/\psi \to K^+K^{*-}a^0_0, K^{*-} \to \pi^-\bar{K}^0, a^0_0 \to \pi^0\eta, \bar{K}^0 \to K^0_S, \eta \to \pi^0\pi^+\pi^-, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3302 | 1 | 91536 |
| 8961 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^0 K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 8960 | 1 | 91537 |
| 8962 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^0 K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8961 | 1 | 91538 |
| 8963 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \eta' \to \omega \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 3303 | 1 | 91539 |
| 8964 | $J/\psi \to \pi^+ K^0 K^- f_0(1710), K^0 \to K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^f$ | 8963 | 1 | 91540 |
| 8965 | $J/\psi \to \pi^{-}\rho^{+}a_{0}^{0}a_{1}^{0}, \rho^{+} \to \pi^{0}\pi^{+}, a_{0}^{0} \to \pi^{0}\eta, a_{1}^{0} \to \pi^{-}\rho^{+}, \eta \to \gamma\gamma,$ $\rho^{+} \to \pi^{0}\pi^{+}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 8964 | 1 | 91541 |
| 8966 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, f_0(1370) \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 8965 | 1 | 91542 |
| 8967 | $J/\psi \to K^-K^{*+}f_1(1420), K^{*+} \to \pi^0K^+, f_1(1420) \to \pi^+K^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 4975 | 1 | 91543 |
| 8968 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 8967 | 1 | 91544 |
| 8969 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^*\bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 8968 | 1 | 91545 |
| 8970 | $J/\psi ightarrow K^0ar{K}^0b_1^0, K^0 ightarrow K_L^0, ar{K}^0 ightarrow K_L^0, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^0K_L^0K_L^0\gamma$ | 8969 | 1 | 91546 |
| 8971 | $J/\psi \to a_2^- \omega a_0^+, a_2^- \to \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 8970 | 1 | 91547 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 8972 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \rho^- K^0, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 8971 | 1 | 91548 |
| 8973 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0$ | 8972 | 1 | 91549 |
| 8974 | $J/\psi \rightarrow \pi^+ \eta' b_1^-, \eta' \rightarrow \pi^0 \pi^0 \eta, b_1^- \rightarrow \pi^- \omega, \eta \rightarrow \pi^0 \pi^0 \pi^0, \omega \rightarrow \pi^0 \pi^+ \pi^-, \\ \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 8973 | 1 | 91550 |
| 8975 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8974 | 1 | 91551 |
| 8976 | $J/\psi \to \rho^0 \pi^- \omega a_1^+, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 8975 | 1 | 91552 |
| 8977 | $J/\psi \to \rho^0 \pi^+ \pi^- \omega a^0_0, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a^0_0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 8976 | 1 | 91553 |
| 8978 | $J/\psi \to \omega a_0^0 a_1^0, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_0^0 \to \pi^0 \eta, a_1^0 \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 8977 | 1 | 91554 |
| 8979 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 4976 | 1 | 91555 |
| 8980 | $J/\psi \to \pi^- \rho^+ K^+ K_1^-, \rho^+ \to \pi^0 \pi^+, K_1^- \to \pi^+ \pi^- K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 8979 | 1 | 91556 |
| 8981 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 8980 | 1 | 91557 |
| 8982 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K^0_S \to \pi^0 \pi^0, \ \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 8981 | 1 | 91558 |
| 8983 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 8982 | 1 | 91559 |
| 8984 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \eta f_0(1370), \eta \to \pi^0 \pi^0 \pi^0, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 4977 | 1 | 91560 |
| 8985 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to K^+K^{*-}, \eta \to \gamma\gamma, \eta \to \pi^+\pi^-\gamma^F, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma\gamma$ | 8984 | 1 | 91561 |
| 8986 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 4978 | 1 | 91562 |
| 8987 | $J/\psi 	o \pi^0 \pi^+ b_1^-, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 8986 | 1 | 91563 |
| 8988 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 3304 | 1 | 91564 |
| 8989 | $J/\psi \to \bar{K}^0 K^+ b_1^-, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 1775 | 1 | 91565 |
| 8990 | $J/\psi \to \pi^0 \pi^+ K^- K^{*+} b_1^-, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3306 | 1 | 91566 |
| 8991 | $J/\psi \to ho^0 K^0 \bar{K}^* \gamma, ho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, ar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 \pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 1092 | 1 | 91567 |
| 8992 | $J/\psi \to \pi^0 K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 3308 | 1 | 91568 |
| 8993 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K_L^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 4984 | 1 | 91569 |
| 8994 | $J/\psi \to \pi^0 \pi^+ \eta b_1^-, \eta \to \gamma \gamma, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 2376 | 1 | 91570 |
| 8995 | $J/\psi 	o \Sigma^0 ar{\Sigma}^{*0}, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^{*0} 	o \pi^+ ar{\Sigma}^-, \Lambda 	o \pi^0 n, ar{\Sigma}^- 	o ar{p} \gamma$ | $\pi^0\pi^+nar p\gamma\gamma$ | 8994 | 1 | 91571 |
| 8996 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 8995 | 1 | 91572 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 8997 | $J/\psi \to \bar{K}^0 b_1^0 K_1^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, \\ \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\gamma$ | 8996 | 1 | 91573 |
| 8998 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 4986 | 1 | 91574 |
| 8999 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 8998 | 1 | 91575 |
| 9000 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^0\bar{K}^0, K_2^{*0} \to \pi^0\pi^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 2377 | 1 | 91576 |
| 9001 | $J/\psi \to \pi^- ho^+ K^* \bar{K}^*, ho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 4988 | 1 | 91577 |
| 9002 | $J/\psi \to \eta \phi f_0(1710), \eta \to \pi^0 \pi^0 \pi^0, \phi \to K_L^0 K_S^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9001 | 1 | 91578 |
| 9003 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9002 | 1 | 91579 |
| 9004 | $J/\psi \to K^0 \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-, K^0_S \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9003 | 1 | 91580 |
| 9005 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \pi^+ \pi^- K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 4989 | 1 | 91581 |
| 9006 | $J/\psi \to K^- \Delta^+ \bar{\Sigma^0}, \Delta^+ \to \pi^0 p, \bar{\Sigma^0} \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+K^-par p\gamma$ | 4990 | 1 | 91582 |
| 9007 | $J/\psi 	o a_2^0 ho^+ a_0^-, a_2^0 	o K^+ K^-, ho^+ 	o \pi^0 \pi^+, a_0^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 877 | 1 | 91583 |
| 9008 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9007 | 1 | 91584 |
| 9009 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+\gamma^f, K_2^{*0} \to \omega \bar{K}^0, \omega \to \pi^0\pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 9008 | 1 | 91585 |
| 9010 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 3312 | 1 | 91586 |
| 9011 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 9010 | 1 | 91587 |
| 9012 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^-K^+$ | 9011 | 1 | 91588 |
| 9013 | $J/\psi ightarrow \pi^- \omega ar{K}^0 K^+, \omega ightarrow \pi^0 \pi^+ \pi^-, ar{K}^0 ightarrow K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 9012 | 1 | 91589 |
| 9014 | $J/\psi \to K^* \bar{K}^0_1, K^* \to \pi^- K^+, \bar{K}^0_1 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 9013 | 1 | 91590 |
| 9015 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^- \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 3313 | 1 | 91591 |
| 9016 | $J/\psi \to \pi^0 \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2379 | 1 | 91592 |
| 9017 | $J/\psi \to \phi f_0(1710), \phi \to \pi^+ \rho^-, f_0(1710) \to \eta \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 4995 | 1 | 91593 |
| 9018 | $J/\psi \to \omega K^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 9017 | 1 | 91594 |
| 9019 | $J/\psi 	o \eta \omega K^+ K^-, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 253 | 1 | 91595 |
| 9020 | $J/\psi \to \pi^0 K^{*-} K_1^{'+}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 9019 | 1 | 91596 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 9021 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^-, \eta' \to \pi^0 \pi^0 \eta, a_0^+ \to \pi^+ \eta, \pi^0 \to e^+ e^- \gamma^F, \\ \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0$ | 1779 | 1 | 91597 |
| 9022 | $J/\psi \to \pi^0 \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 9021 | 1 | 91598 |
| 9023 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^+\pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9022 | 1 | 91599 |
| 9024 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2382 | 1 | 91600 |
| 9025 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^{*+} K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 4999 | 1 | 91601 |
| 9026 | $J/\psi \to \pi^- \rho^+ K^- K_1^+, \rho^+ \to \pi^0 \pi^+, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9025 | 1 | 91602 |
| 9027 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 3318 | 1 | 91603 |
| 9028 | $J/\psi \to \eta h_1(1170) f_1(1285), \eta \to \gamma \gamma, h_1(1170) \to \pi^+ \rho^-, f_1(1285) \to \pi^+ K^0 K^-, \rho^- \to \pi^0 \pi^-, K^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 9027 | 1 | 91604 |
| 9029 | $J/\psi \to \omega h_1(1170)\gamma, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 5001 | 1 | 91605 |
| 9030 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \pi^0 \rho^+, a_1^0 \to \pi^+ \rho^- \gamma^f, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9029 | 1 | 91606 |
| 9031 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^+K^0K^-, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9030 | 1 | 91607 |
| 9032 | $J/\psi ightarrow ho^0 \eta \omega \gamma, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 5002 | 1 | 91608 |
| 9033 | $J/\psi \to K^0 \bar{K}^0 K^+ \bar{K}_1^{'-}, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9032 | 1 | 91609 |
| 9034 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9033 | 1 | 91610 |
| 9035 | $J/\psi \to \pi^0 \pi^- \pi^- \rho^+ \bar{K}^* K^+, \rho^+ \to \pi^0 \pi^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9034 | 1 | 91611 |
| 9036 | $J/\psi \to \rho^0 \eta' a_0^0, \rho^0 \to \pi^+ \pi^-, \eta' \to \rho^0 \gamma, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 5003 | 1 | 91612 |
| 9037 | $J/\psi 	o \pi^+ \eta' b_1^-, \eta' 	o \omega \gamma, b_1^- 	o \pi^- \omega \gamma^f, \omega 	o \pi^+ \pi^- \gamma^F, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma^f$ | 9036 | 1 | 91613 |
| 9038 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K_1^+ \to \pi^+ K^*, K^{*-} \to \pi^0 K^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9037 | 1 | 91614 |
| 9039 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \phi \to K^+ K^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 9038 | 1 | 91615 |
| 9040 | $J/\psi \to \rho^- K^+ K^{*-} b_1^+, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 5004 | 1 | 91616 |
| 9041 | $J/\psi \to \pi^+ K^0 K^- \gamma^F, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma^F$ | 9040 | 1 | 91617 |
| 9042 | $J/\psi \to \pi^0 \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5005 | 1 | 91618 |
| 9043 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 9042 | 1 | 91619 |
| 9044 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^{+}\Lambda, \bar{\Sigma}^{*-} \to \pi^{-}\bar{\Sigma}^{0}, \Lambda \to \pi^{0}n, \bar{\Sigma}^{0} \to \bar{\Lambda}\gamma, \bar{\Lambda} \to \pi^{0}\bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 9043 | 1 | 91620 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 9045 | $J/\psi \to \pi^+\pi^-K^0\bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+K^{*-}, K^{*-} \to \pi^0K^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 9044 | 1 | 91621 |
| 9046 | $J/\psi 	o \eta K^0 \bar K^0, \eta 	o \gamma \gamma, K^0 	o K_L^0, \bar K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\gamma\gamma$ | 9045 | 1 | 91622 |
| 9047 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^-, K^* \to K^0 \gamma, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma\gamma$ | 9046 | 1 | 91623 |
| 9048 | $J/\psi \to \pi^+ \rho^- K^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 5006 | 1 | 91624 |
| 9049 | $J/\psi \to \omega K^* K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5007 | 1 | 91625 |
| 9050 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 5008 | 1 | 91626 |
| 9051 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f \gamma^f$ | $K_L^0K_L^0K_L^0\pi^+\pi^-\gamma^f\gamma^f$ | 5009 | 1 | 91627 |
| 9052 | $J/\psi \to \bar{K}^0 \eta' K_1^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, K_1^0 \to \omega K^0, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma \gamma$ | 9051 | 1 | 91628 |
| 9053 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 9052 | 1 | 91629 |
| 9054 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^0K^0\bar{K}^0, \bar{K}^0 \to K_L^0, K^0 \to $ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9053 | 1 | 91630 |
| 9055 | $J/\psi \to \omega \eta' f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \gamma \gamma, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9054 | 1 | 91631 |
| 9056 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^+\pi^+\pi^-\pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 5010 | 1 | 91632 |
| 9057 | $J/\psi \to \pi^+ K^0 \bar{K}^* b_1^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 9056 | 1 | 91633 |
| 9058 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^- \gamma^f, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 1780 | 1 | 91634 |
| 9059 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3320 | 1 | 91635 |
| 9060 | $J/\psi 	o \pi^- K^0 \bar{\Delta}^- \Lambda, K^0 	o K^0_S, \bar{\Delta}^- 	o \pi^+ \bar{n}, \Lambda 	o \pi^- p, K^0_S 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-\bar{n}p$ | 5013 | 1 | 91636 |
| 9061 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 1781 | 1 | 91637 |
| 9062 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^+ \rho^-, h_1(1170) \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^- \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5015 | 1 | 91638 |
| 9063 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3322 | 1 | 91639 |
| 9064 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9063 | 1 | 91640 |
| 9065 | $J/\psi \to \pi^+ K^- K_1^{'0} \gamma^F, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 9064 | 1 | 91641 |
| 9066 | $J/\psi \to \rho^0 \pi^+ \omega a_1^-, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9065 | 1 | 91642 |
| 9067 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \rho^- K^+, \bar{K}_1^0 \to \rho^+ K^-, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1387 | 1 | 91643 |
| 9068 | $J/\psi \to \eta_c \gamma, \eta_c \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}\gamma$ | 9067 | 1 | 91644 |
| 9069 | $J/\psi \to \pi^{-}K_{2}^{*0}K_{2}^{*+}, K_{2}^{*0} \to \pi^{0}\bar{K}^{*}, K_{2}^{*+} \to \pi^{+}K^{0}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, K^{0} \to K_{L}^{0},$ $\bar{K}^{0} \to K_{L}^{0}$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 3324 | 1 | 91645 |
| 9070 | $J/\psi 	o ho^- \eta ar{K}^0 K^+, ho^- 	o \pi^0 \pi^-, \eta 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5019 | 1 | 91646 |
| 9071 | $J/\psi \to \pi^- K_S^0 K^+ \phi, K_S^0 \to \pi^0 \pi^0, \phi \to K^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{-}K^{+}K^{+}K^{-}\gamma^{F}$ | 9070 | 1 | 91647 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 9072 | $J/\psi 	o \omega p \bar{\Delta}^+, \omega 	o \pi^0 \gamma, \bar{\Delta}^+ 	o \pi^0 \bar{p}$ | $\pi^0\pi^0 par p \gamma$ | 9071 | 1 | 91648 |
| 9073 | $J/\psi \to \pi^0 a_2^- \bar{K}^* K^+, a_2^- \to \rho^0 \pi^- \gamma^f, \bar{K}^* \to \pi^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma^f$ | 34 | 1 | 91649 |
| 9074 | $J/\psi \to \pi^{0} A_{2} K K^{+}, A_{2} \to \rho^{0} \pi^{-} \gamma^{0}, K^{-} \to \pi^{+} K^{-}, \rho^{-} \to \pi^{+} \pi$ $J/\psi \to \pi^{0} K_{2}^{*+} K_{1}^{-}, K_{2}^{*+} \to \pi^{0} \pi^{+} K^{*}, K_{1}^{-} \to \rho^{-} \bar{K}^{0}, K^{*} \to \pi^{-} K^{+}, \rho^{-} \to \pi^{0} \pi^{-},$ $\bar{K}^{0} \to K_{L}^{0}$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 9073 | 1 | 91650 |
| 9075 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0K^0_L\pi^+\pi^-\gamma^F\gamma^f$ | 9074 | 1 | 91651 |
| 9076 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5021 | 1 | 91652 |
| 9077 | $J/\psi \to \pi^- \bar{K}^0 h_1(1170) K_1^+, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^+ \rho^-, K_1^+ \to \rho^+ K^0, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9076 | 1 | 91653 |
| 9078 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \gamma, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 880 | 1 | 91654 |
| 9079 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi h_1(1380), \phi \to K^+K^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^0K^-$ | $\pi^0 K^+ K^+ K^- K^- \gamma$ | 9078 | 1 | 91655 |
| 9080 | $J/\psi 	o ho^0 K^0 \bar{K}^0 \gamma, ho^0 	o \pi^+ \pi^-, K^0 	o K^0_S, \bar{K}^0 	o K^0_L, K^0_S 	o \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9079 | 1 | 91656 |
| 9081 | $J/\psi \to \rho^- a_2^+ \eta', \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \eta' \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 9080 | 1 | 91657 |
| 9082 | $J/\psi \to K^+K^-\phi, \phi \to K_L^0K_S^0, K_S^0 \to \pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^0K_L^0K^+K^-\gamma^F\gamma^f$ | 9081 | 1 | 91658 |
| 9083 | $J/\psi \to \pi^+ a_0^- f_0(1370) \gamma^F, a_0^- \to \pi^- \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 9082 | 1 | 91659 |
| 9084 | $J/\psi \to \omega K^- K_0^{*+}, \omega \to \pi^0 \gamma, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 5023 | 1 | 91660 |
| 9085 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_1(1285) \to \pi^0 K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-K^+K^-$ | 9084 | 1 | 91661 |
| 9086 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^-, \eta' \to \pi^+ \pi^- \eta, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 1390 | 1 | 91662 |
| 9087 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9086 | 1 | 91663 |
| 9088 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0 \gamma^f, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9087 | 1 | 91664 |
| 9089 | $J/\psi \to \pi^0 \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 401 | 1 | 91665 |
| 9090 | $J/\psi 	o \phi f_2^{'}, \phi 	o K_L^0 K_S^0, f_2^{'} 	o K^+ K^- \gamma^f, K_S^0 	o \pi^+ \pi^-$ | $K^0_L\pi^+\pi^-K^+K^-\gamma^f$ | 9089 | 1 | 91666 |
| 9091 | $J/\psi \to \pi^-\pi^-\rho^+a_2^+\omega, \rho^+ \to \pi^0\pi^+, a_2^+ \to \pi^0\pi^+\omega, \omega \to \pi^0\gamma, \omega \to \pi^0\gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 9090 | 1 | 91667 |
| 9092 | $I_{(a)} \rightarrow \pm $ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 1098 | 1 | 91668 |
| 9093 | $J/\psi \to K_1^0 + \eta_1 + \eta_2 \to K_1^0 + \eta_1 + \eta_2 \to K_2^0 + \eta_$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 9092 | 1 | 91669 |
| 9094 | $J/\psi 	o \pi^0 \pi^0 \pi^0 \rho^- a_0^+, ho^- 	o \pi^0 \pi^-, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9093 | 1 | 91670 |
| 9095 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_1^+, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9094 | 1 | 91671 |
| 9096 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3330 | 1 | 91672 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 9097 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} h_1(1170), \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 5028 | 1 | 91673 |
| 9098 | $I_{(2)} \rightarrow \overline{K}^0 K^* h^0 \overline{K}^0 \rightarrow K^0 K^* \rightarrow \pi^- K^+ h^0 \rightarrow \pi^0 (1/2) \rightarrow \pi^0 (1/2)$ | $\pi^0\pi^0K^0_L\pi^-K^+\gamma$ | 9097 | 1 | 91674 |
| 9099 | $J/\psi \to K^{0}K_{0}^{+}, K^{0} \to K_{L}^{+}, K^{0} \to K^{0}S, K_{0}^{+-} \to \pi^{-}\bar{K}^{0}, a_{1}^{+} \to \pi^{0}\rho^{+}, K_{S}^{0} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{L}^{0}, \rho^{+} \to \pi^{0}\pi^{+}$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 402 | 1 | 91675 |
| 9100 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 9099 | 1 | 91676 |
| 9101 | $J/\psi \to \pi^0 K^{*+} K^{*-} h_1(1170), K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3332 | 1 | 91677 |
| 9102 | $J/\psi ightarrow \omega K^0 \bar{K}_0^{*0}, \omega ightarrow \pi^0 \gamma, K^0 ightarrow K_L^0, \bar{K}_0^{*0} ightarrow \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 9101 | 1 | 91678 |
| 9103 | $J/\psi 	o \eta p ar p \gamma^f, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0par p\gamma^f$ | 9102 | 1 | 91679 |
| 9104 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ b_1^- h_1(1170), b_1^- \to \pi^- \omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9103 | 1 | 91680 |
| 9105 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 9104 | 1 | 91681 |
| 9106 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^+ K^0 K^- \gamma^f, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma^f$ | 9105 | 1 | 91682 |
| 9107 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \eta \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9106 | 1 | 91683 |
| 9108 | $J/\psi \to a_2^- b_1^+, a_2^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9107 | 1 | 91684 |
| 9109 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9108 | 1 | 91685 |
| 9110 | $J/\psi \to \pi^+ K_1^- K_1^{'0}, K_1^- \to \pi^- \bar{K}_0^{*0}, K_1^{'0} \to \pi^- K^{*+}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 9109 | 1 | 91686 |
| 9111 | $J/\psi \to \phi f_0(1370), \phi \to \pi^0 \rho^0, f_0(1370) \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 9110 | 1 | 91687 |
| 9112 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma^F$ | 9111 | 1 | 91688 |
| 9113 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^f, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 9112 | 1 | 91689 |
| 9114 | $J/\psi \to K^0 \phi \bar{K}_1^0, K^0 \to K_L^0, \phi \to \pi^0 \rho^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^- \gamma^f, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 9113 | 1 | 91690 |
| 9115 | $J/\psi \to \eta K^{*-} K_1^+ \gamma, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 5031 | 1 | 91691 |
| 9116 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^0\rho^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 9115 | 1 | 91692 |
| 9117 | $J/\psi \to \pi^- \eta K_S^0 K^+ \gamma^f, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 9116 | 1 | 91693 |
| 9118 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- b_1^0 \gamma^F, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 9117 | 1 | 91694 |
| 9119 | $J/\psi \to \pi^0 \pi^+ b_1^0 a_0^-, b_1^0 \to \pi^0 \omega, a_0^- \to \pi^- \eta, \omega \to \pi^0 \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 9118 | 1 | 91695 |
| 9120 | $J/\psi \to K^+ K_1^- a_1^0, K_1^- \to \pi^- \bar{K}_0^{*0}, a_1^0 \to \pi^+ \rho^-, \bar{K}_0^{*0} \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9119 | 1 | 91696 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9121 | $J/\psi \to a_2^0 \pi^+ \rho^-, a_2^0 \to \pi^+ \pi^- \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9120 | 1 | 91697 |
| 9122 | $J/\psi \to \bar{K}^0 \phi K_0^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5032 | 1 | 91698 |
| 9123 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 1100 | 1 | 91699 |
| 9124 | $K^{+} \to \pi^{+} K^{+}, K^{+} \to K_{S}, K_{S} \to \pi^{+} \pi$ $J/\psi \to K_{2}^{*+} K_{2}^{*-}, K_{2}^{*+} \to \pi^{+} K^{0}, K_{2}^{*-} \to \pi^{-} \bar{K}^{*}, K^{0} \to K_{L}^{0}, \bar{K}^{*} \to \pi^{0} \bar{K}^{0},$ $\bar{K}^{0} \to K_{L}^{0}$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 3334 | 1 | 91700 |
| 9125 | $J/\psi \to \pi^- \omega \bar{K}^* K^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5035 | 1 | 91701 |
| 9126 | $J/\psi \rightarrow \rho^- \omega b_1^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^+ \pi^- \gamma^f, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 188 | 1 | 91702 |
| 9127 | $J/\psi \to \pi^+ a_2^- K^+ K^-, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 9126 | 1 | 91703 |
| 9128 | $J/\psi \to \bar{K}^0 K^* h_1(1170) \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 5037 | 1 | 91704 |
| 9129 | $J/\psi \to \pi^0 \rho^+ K^- K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 3336 | 1 | 91705 |
| 9130 | $J/\psi \to \omega \bar{K}^0 K_0^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1791 | 1 | 91706 |
| 9131 | $J/\psi \to a_2^+ \eta b_1^-, a_2^+ \to \pi^0 \pi^+ \omega, \eta \to \gamma \gamma, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 9130 | 1 | 91707 |
| 9132 | $J/\psi \to a_2^+ K^0 \bar{K}_1^{'-}, a_2^+ \to \pi^0 \rho^+, K^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 5040 | 1 | 91708 |
| 9133 | $J/\psi \to K^0 b_1^+ K_0^{*-}, K^0 \to K_S^0, b_1^+ \to \pi^+ \omega, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3338 | 1 | 91709 |
| 9134 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3339 | 1 | 91710 |
| 9135 | $J/\psi \rightarrow \rho^- a_2^+, \rho^- \rightarrow \pi^0 \pi^-, a_2^+ \rightarrow \pi^+ \eta, \pi^0 \rightarrow e^+ e^- \gamma^F, \eta \rightarrow \gamma \gamma$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma$ | 9134 | 1 | 91711 |
| 9136 | $J/\psi 	o a_2^- \bar{K}^0 K^{*+}, a_2^- 	o \pi^- \eta, \bar{K}^0 	o K_L^0, K^{*+} 	o \pi^+ K^0, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9135 | 1 | 91712 |
| 9137 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^0 \pi^0, \phi \to K^+ K^-, f_0(980) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3340 | 1 | 91713 |
| 9138 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_0^{*+}, \bar{K}_0^{*0} \to \pi^+ K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 5044 | 1 | 91714 |
| 9139 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, $ $\rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9138 | 1 | 91715 |
| 9140 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \rho^0 \pi^+, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 715 | 1 | 91716 |
| 9141 | $J/\psi \to \rho^0 \pi^+ K^0 K_1^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 9140 | 1 | 91717 |
| 9142 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5046 | 1 | 91718 |
| 9143 | $J/\psi \to \pi^0 K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \\ \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9142 | 1 | 91719 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9144 | $J/\psi \to h_1(1380)f_1(1420), h_1(1380) \to K^-K^{*+}, f_1(1420) \to \pi^+K^0K^-, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+K^-K^-$ | 3342 | 1 | 91720 |
| 9145 | $J/\psi \to K^0 \phi \bar{K}^0_1, K^0 \to K^0_S, \phi \to K^0_L K^0_S, \bar{K}^0_1 \to \rho^0 \bar{K}^0, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 9144 | 1 | 91721 |
| 9146 | $J/\psi 	o \pi^0 ho^0 \eta', ho^0 	o \pi^+ \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 5048 | 1 | 91722 |
| 9147 | $J/\psi \to \pi^- \rho^+ f_2(1270) f_0(1370), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9146 | 1 | 91723 |
| 9148 | $J/\psi \to \eta \eta h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9147 | 1 | 91724 |
| 9149 | $J/\psi \to \pi^+ K^- \phi K_1^0, \phi \to K_L^0 K_S^0, K_1^0 \to \pi^0 K_0^0, K_S^0 \to \pi^0 \pi^0, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+K^-$ | 5049 | 1 | 91725 |
| 9150 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5050 | 1 | 91726 |
| 9151 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 9150 | 1 | 91727 |
| 9152 | $J/\psi \to \pi^- \bar{K}^* K_1^+ \gamma^F, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 5051 | 1 | 91728 |
| 9153 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^- \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 9152 | 1 | 91729 |
| 9154 | $J/\psi \to \pi^+\pi^-K^{*+}K_1^-, K^{*+} \to \pi^0K^+, K_1^- \to \rho^0K^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9153 | 1 | 91730 |
| 9155 | $J/\psi \to \rho^+ K^* \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9154 | 1 | 91731 |
| 9156 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_1^0 \to \omega K^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 9155 | 1 | 91732 |
| 9157 | $J/\psi \to \pi^+\pi^- a_2^- \bar{K}^0 K^{*+}, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 9156 | 1 | 91733 |
| 9158 | $J/\psi \to \rho^- a_0^+ a_1^0, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, a_1^0 \to \pi^- \rho^+, \eta \to \gamma \gamma, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9157 | 1 | 91734 |
| 9159 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 1793 | 1 | 91735 |
| 9160 | $J/\psi \to \omega K^{*+} K_2^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 9159 | 1 | 91736 |
| 9161 | $J/\psi 	o \pi^0\pi^0a_2^0\pi^- ho^+, a_2^0 	o \pi^+ ho^-, ho^+ 	o \pi^0\pi^+, ho^- 	o \pi^0\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 5053 | 1 | 91737 |
| 9162 | $J/\psi \to \pi^0 \pi^0 \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 5054 | 1 | 91738 |
| 9163 | $J/\psi \to \pi^- K^+ \bar{p} \Sigma^{*+}, \Sigma^{*+} \to \pi^+ \Lambda, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-K^+p\bar{p}$ | 9162 | 1 | 91739 |
| 9164 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 5055 | 1 | 91740 |
| 9165 | $J/\psi 	o ar{K}^*K_2^{*0}, ar{K}^* 	o \pi^+K^-, K_2^{*0} 	o ho^0K^0, ho^0 	o \pi^+\pi^-, K^0 	o K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 9164 | 1 | 91741 |
| 9166 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^*, K_1^- \to \rho^0 K^-, K^* \to \pi^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9165 | 1 | 91742 |
| 9167 | $J/\psi ightarrow \pi^+\pi^- ho^-b_1^+, ho^- ightarrow \pi^0\pi^-, b_1^+ ightarrow \pi^+\omega, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5056 | 1 | 91743 |
| 9168 | $J/\psi \to ho^0 \omega f_0(1370) \gamma, ho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma$ | 3344 | 1 | 91744 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9169 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+ \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 9168 | 1 | 91745 |
| 9170 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5058 | 1 | 91746 |
| 9171 | $J/\psi \to \pi^0 \pi^+ K^0 K^- \gamma^F, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 9170 | 1 | 91747 |
| 9172 | $J/\psi ightarrow ho^0 b_1^0 \gamma, ho^0 ightarrow \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 9171 | 1 | 91748 |
| 9173 | $J/\psi \rightarrow \pi^0 a_2^+ b_1^-, a_2^+ \rightarrow \pi^+ \eta, b_1^- \rightarrow \pi^- \omega, \eta \rightarrow \gamma \gamma, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1103 | 1 | 91749 |
| 9174 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 9173 | 1 | 91750 |
| 9175 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o \pi^- \eta, a_0^0 	o K_S^0 K_S^0, \eta 	o \pi^0 \pi^0 \pi^0, K_S^0 	o \pi^0 \pi^0, K_$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9174 | 1 | 91751 |
| 9176 | $J/\psi \to ho^0 K^0 K_2^{*0}, ho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 9175 | 1 | 91752 |
| 9177 | $J/\psi ightarrow \pi^- \omega a_0^+, \omega ightarrow \pi^+ \pi^-, a_0^+ ightarrow ar{K}^0 K^+, ar{K}^0 ightarrow K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 9176 | 1 | 91753 |
| 9178 | $J/\psi \to ho^0 \pi^- a_2^+ \gamma^F, ho^0 \to \pi^+ \pi^-, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 3346 | 1 | 91754 |
| 9179 | $J/\psi 	o K^0 ar{K}^0_1, K^0 	o K^0_L, ar{K}^0_1 	o \pi^0 ar{K}^{*0}_0, ar{K}^{*0}_0 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^-$ | 9178 | 1 | 91755 |
| 9180 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^0\bar{K}^0, K_2^{*0} \to \pi^0\pi^-K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 1104 | 1 | 91756 |
| 9181 | $J/\psi \to K^{+}a_{0}^{0}K_{1}^{-}\gamma^{f}, a_{0}^{0} \to \pi^{0}\eta, K_{1}^{-} \to \omega K^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 9180 | 1 | 91757 |
| 9182 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 9181 | 1 | 91758 |
| 9183 | $J/\psi \to \omega K^* \bar{K}_1^{'0}, \omega \to \pi^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 5062 | 1 | 91759 |
| 9184 | $J/\psi \to \bar{K}^0 K^* f_2^{'}, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_2^{'} \to K_S^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9183 | 1 | 91760 |
| 9185 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^+ \pi^-, b_1^- \to \pi^- \omega \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 9184 | 1 | 91761 |
| 9186 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \pi^0 K_0^0, \eta \to \pi^0 \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9185 | 1 | 91762 |
| 9187 | $J/\psi 	o \Lambda ar{\Sigma}^0, \Lambda 	o \pi^0 n, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o ar{n} \gamma$ | $\pi^0 n ar{n} \gamma \gamma$ | 9186 | 1 | 91763 |
| 9188 | $J/\psi \to \pi^0\pi^-\rho^+\rho^-a_1^+, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, a_1^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9187 | 1 | 91764 |
| 9189 | $J/\psi \to K^+ K_2^{*-} a_0^0, K_2^{*-} \to \pi^- \bar{K}^*, a_0^0 \to \pi^0 \eta, \bar{K}^* \to \pi^0 \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 9188 | 1 | 91765 |
| 9190 | $J/\psi 	o \pi^+ K^{*-} K_1^0, K^{*-} 	o \pi^0 K^-, K_1^0 	o \omega K^0, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5063 | 1 | 91766 |
| 9191 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9190 | 1 | 91767 |
| 9192 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 9191 | 1 | 91768 |
| 9193 | $J/\psi \to \rho^0 a_0^0 f_0(1370), \rho^0 \to \pi^+\pi^-, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^0 \pi^0 \pi^+\pi^-, \eta \to \pi^0 \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5064 | 1 | 91769 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 9194 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 1796 | 1 | 91770 |
| 9195 | $J/\psi \to \eta \bar{K}^0 K_2^{*0}, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 9194 | 1 | 91771 |
| 9196 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-\gamma^F$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 9195 | 1 | 91772 |
| 9197 | $J/\psi \to \pi^0\pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0\pi^+ \gamma^f, a_2^- \to \rho^0\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 9196 | 1 | 91773 |
| 9198 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9197 | 1 | 91774 |
| 9199 | $J/\psi \to \pi^+ \rho^- K^{*+} K_1^-, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9198 | 1 | 91775 |
| 9200 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \eta a_0^+, \eta \to \gamma \gamma, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma\gamma\gamma$ | 9199 | 1 | 91776 |
| 9201 | $J/\psi \to \pi^+ K_0^0 K_1^-, K_0^0 \to \pi^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9200 | 1 | 91777 |
| 9202 | $J/\psi \to K^*K^+K^-\bar{K}^0_1, K^* \to \pi^-K^+, \bar{K}^0_1 \to \pi^+K^{*-}_0, K^{*-}_0 \to \pi^0K^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 9201 | 1 | 91778 |
| 9203 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9202 | 1 | 91779 |
| 9204 | $J/\psi \to \rho^0 K^- K^{*+} a_1^0, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9203 | 1 | 91780 |
| 9205 | $J/\psi \to \omega \eta' f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \gamma \gamma, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 9204 | 1 | 91781 |
| 9206 | $J/\psi \to ho^+ a_2^- \eta, ho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \pi^- \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5066 | 1 | 91782 |
| 9207 | $J/\psi \to \pi^+ \eta b_1^-, \eta \to \pi^0 \pi^0 \pi^0, b_1^- \to \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \gamma$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma$ | 118 | 1 | 91783 |
| 9208 | $J/\psi 	o \pi^- \bar{n} \Delta^+ \gamma^f, \Delta^+ 	o \pi^0 p$ | $\pi^0\pi^-ar{n}p\gamma^f$ | 3350 | 1 | 91784 |
| 9209 | $J/\psi \to \pi^- \rho^+ f_1(1285) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 9208 | 1 | 91785 |
| 9210 | $J/\psi \to K^+ \phi K_0^{*-}, \phi \to K_L^0 K_S^0, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 9209 | 1 | 91786 |
| 9211 | $J/\psi \to \omega K^- K_1^{'+}, \omega \to \pi^0 \pi^+ \pi^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9210 | 1 | 91787 |
| 9212 | $J/\psi ightarrow \eta \eta' \gamma, \eta ightarrow \gamma \gamma, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma\gamma\gamma$ | 9211 | 1 | 91788 |
| 9213 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^+ \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 9212 | 1 | 91789 |
| 9214 | $J/\psi 	o \pi^- \omega \bar{\Delta}^0 p, \omega 	o \pi^0 \pi^+ \pi^-, \bar{\Delta}^0 	o \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 9213 | 1 | 91790 |
| 9215 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_0(1710) \to \eta \eta, K^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9214 | 1 | 91791 |
| 9216 | $J/\psi \to \rho^0 \pi^+ \pi^- h_1(1170) \gamma^f, \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f\gamma^f$ | 9215 | 1 | 91792 |
| 9217 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9216 | 1 | 91793 |
| 9218 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9217 | 1 | 91794 |
| 9219 | $J/\psi \to \eta K^+ K_1^-, \eta \to \pi^0 \pi^0 \pi^0, K_1^- \to \pi^0 K_0^{*-}, \pi^0 \to e^+ e^- \gamma^F, K_0^{*-} \to \pi^0 K^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K^{+}K^{-}\gamma^{F}$ | 485 | 1 | 91795 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9220 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^0 \pi^0, $ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}$ | 9219 | 1 | 91796 |
| 9221 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 3352 | 1 | 91797 |
| 9222 | $J/\psi 	o K^0 ar K^0, K^0 	o K^0_S, ar K^0 	o K^0_L, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0$ | 9221 | 1 | 91798 |
| 9223 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_L^0, \phi \to K^+ K^-, K_1^0 \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0K^+K^-$ | 9222 | 1 | 91799 |
| 9224 | $J/\psi ightarrow a_2^0 \omega, a_2^0 ightarrow \pi^0 \eta, \omega ightarrow \pi^0 \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9223 | 1 | 91800 |
| 9225 | $J/\psi \to K^* \bar{K}^0_1, K^* \to \pi^0 K^0, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^0 \to K^0_L, K^{*-}_0 \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 9224 | 1 | 91801 |
| 9226 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K_1^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9225 | 1 | 91802 |
| 9227 | $J/\psi \rightarrow \rho^0 \pi^+ \Delta^+ \bar{\Delta}^{++}, \rho^0 \rightarrow \pi^+ \pi^-, \Delta^+ \rightarrow \pi^0 p, \bar{\Delta}^{++} \rightarrow \pi^- \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 9226 | 1 | 91803 |
| 9228 | $J/\psi \to \pi^+ \rho^- f_0(1370) \gamma^f, \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 9227 | 1 | 91804 |
| 9229 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9228 | 1 | 91805 |
| 9230 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^0\rho^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9229 | 1 | 91806 |
| 9231 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9230 | 1 | 91807 |
| 9232 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3353 | 1 | 91808 |
| 9233 | $J/\psi 	o K^+ ar p \Sigma^{*0}, \Sigma^{*0} 	o \pi^0 \Lambda, \Lambda 	o \pi^0 n, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0K^+n\bar{p}\gamma^F$ | 9232 | 1 | 91809 |
| 9234 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^0 K^{*+}, K_1^- \to \omega K^-, K^{*+} \to \pi^0 K^+, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9233 | 1 | 91810 |
| 9235 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 5072 | 1 | 91811 |
| 9236 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9235 | 1 | 91812 |
| 9237 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 9236 | 1 | 91813 |
| 9238 | $J/\psi \to \pi^0 \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9237 | 1 | 91814 |
| 9239 | $J/\psi \to \Lambda \bar{\Sigma}^{*0}, \Lambda \to \pi^- p, \bar{\Sigma}^{*0} \to \pi^+ \bar{\Sigma}^-, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^+\pi^-par{p}$ | 9238 | 1 | 91815 |
| 9240 | $J/\psi \to \Lambda \Sigma^{*0}, \Lambda \to \pi^{-}p, \Sigma^{*0} \to \pi^{+}\Sigma^{-}, \Sigma^{-} \to \pi^{0}\bar{p}$ $J/\psi \to K_{0}^{*-}K_{1}^{+}, K_{0}^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{+} \to \rho^{0}K^{+}, \bar{K}^{0} \to K_{S}^{0}, \rho^{0} \to \pi^{+}\pi^{-},$ $K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9239 | 1 | 91816 |
| 9241 | $J/\psi \to \pi^+ K^+ \bar{\Delta}^{++} \Sigma^0, \bar{\Delta}^{++} \to \pi^- \bar{p}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-K^+par p\gamma$ | 9240 | 1 | 91817 |
| 9242 | $J/\psi ightarrow ho^0\pi^+\pi^-K^+K^-, ho^0 ightarrow \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 9241 | 1 | 91818 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9243 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 3354 | 1 | 91819 |
| 9244 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9243 | 1 | 91820 |
| 9245 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \bar{K}^0 \gamma, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5074 | 1 | 91821 |
| 9246 | $J/\psi \to \pi^0\pi^0\pi^+b_1^-f_1(1285), b_1^- \to \pi^-\omega, f_1(1285) \to \pi^+\pi^-\eta, \omega \to \pi^0\pi^+\pi^-, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 9245 | 1 | 91822 |
| 9247 | $J/\psi \to \rho^0 K^+ \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5075 | 1 | 91823 |
| 9248 | $J/\psi \to \phi f_1(1420), \phi \to \pi^0 \rho^0, f_1(1420) \to \pi^+ K^0 K^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9247 | 1 | 91824 |
| 9249 | $J/\psi \to \pi^- \rho^+ n \bar{\Delta}^0, \rho^+ \to \pi^0 \pi^+, \bar{\Delta}^0 \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 9248 | 1 | 91825 |
| 9250 | $J/\psi \to ho^0 K^0 \bar{K}^0, ho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9249 | 1 | 91826 |
| 9251 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \pi^0 \rho^-, a_0^0 \to K^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9250 | 1 | 91827 |
| 9252 | $J/\psi \to \pi^0 \pi^0 \omega K^{*+} \bar{K}_1^{'-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9251 | 1 | 91828 |
| 9253 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 K^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 9252 | 1 | 91829 |
| 9254 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5076 | 1 | 91830 |
| 9255 | $J/\psi 	o \pi^0\pi^0\pi^+\pi^-a_1^0, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9254 | 1 | 91831 |
| 9256 | $J/\psi \to K^0 \bar{K}_1^{'0} \gamma, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma$ | 9255 | 1 | 91832 |
| 9257 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \eta \to \gamma \gamma, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 9256 | 1 | 91833 |
| 9258 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9257 | 1 | 91834 |
| 9259 | $J/\psi \to \eta' h_1(1380), \eta' \to \omega \gamma, h_1(1380) \to K^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 9258 | 1 | 91835 |
| 9260 | $J/\psi \to \pi^0 \pi^+ K^* K^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 9259 | 1 | 91836 |
| 9261 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^f, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 9260 | 1 | 91837 |
| 9262 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 3355 | 1 | 91838 |
| 9263 | $J/\psi \to \rho^+ K_1^- K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K_1^- \to \pi^- \bar{K}^*, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_I^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 9262 | 1 | 91839 |
| 9264 | $J/\psi 	o \eta ar{K}^0 K_1^0, \eta 	o \pi^0 \pi^0 \pi^0, ar{K}^0 	o K_S^0, K_1^0 	o ho^- K^+, K_S^0 	o \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9263 | 1 | 91840 |
| 9265 | $J/\psi \to \pi^- K^{*+} K^{*-} a_0^+, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K^0 \to K_S^0, \\ \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 9264 | 1 | 91841 |
| 9266 | $J/\psi \to \pi^- \rho^+ \rho^+ a_1^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9265 | 1 | 91842 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 9267 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \eta\eta, \eta \to \pi^0\pi^+\pi^-, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 9266 | 1 | 91843 |
| 9268 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 9267 | 1 | 91844 |
| 9269 | $J/\psi \to K^-K^{*+}f_1(1420), K^{*+} \to \pi^0K^+, f_1(1420) \to \pi^0K^+K^-$ | $\pi^0\pi^0K^+K^+K^-K^-$ | 9268 | 1 | 91845 |
| 9270 | $J/\psi \to \rho^0 K^{*+} \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^+ \pi^- \pi^-$ | 3356 | 1 | 91846 |
| 9271 | $J/\psi ightarrow \eta f_2^\prime \gamma, \eta ightarrow \pi^0 \pi^0 \pi^0, f_2^\prime ightarrow K^+ K^-, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0K^+K^-\gamma^F\gamma$ | 9270 | 1 | 91847 |
| 9272 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 3357 | 1 | 91848 |
| 9273 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9272 | 1 | 91849 |
| 9274 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5080 | 1 | 91850 |
| 9275 | $J/\psi \to \rho^0 \bar{K}^* K_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9274 | 1 | 91851 |
| 9276 | $J/\psi \to \pi^- \omega K_S^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}\gamma^{f}$ | 1107 | 1 | 91852 |
| 9277 | $J/\psi 	o \pi^0\pi^+\eta a_1^-, \eta 	o \gamma\gamma, a_1^- 	o \pi^0 ho^-, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2403 | 1 | 91853 |
| 9278 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 \Sigma^+ ar{\Sigma}^-, \Sigma^+ 	o \pi^+ n, ar{\Sigma}^- 	o \pi^0 ar{p}$ | $\pi^0\pi^0\pi^+nar p\gamma$ | 9277 | 1 | 91854 |
| 9279 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^0 \eta, a_1^- \to \rho^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 3360 | 1 | 91855 |
| 9280 | $J/\psi \to \rho^+ \omega K^* K^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9279 | 1 | 91856 |
| 9281 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 9280 | 1 | 91857 |
| 9282 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_1^- \to \rho^0 \pi^-, K^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9281 | 1 | 91858 |
| 9283 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \omega K^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0K^+K^-\gamma$ | 5084 | 1 | 91859 |
| 9284 | $J/\psi \to \pi^0 \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5085 | 1 | 91860 |
| 9285 | $J/\psi \to \pi^0 \rho^- f_2(1270) a_0^+, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9284 | 1 | 91861 |
| 9286 | $J/\psi \to \pi^+ K^* \bar{K}_1^{'-}, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9285 | 1 | 91862 |
| 9287 | $J/\psi \to \omega K^0 \bar{K}^* \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 9286 | 1 | 91863 |
| 9288 | $J/\psi \to \phi\phi\phi, \phi \to K_L^0 K_S^0, \phi \to K_L^0 K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 9287 | 1 | 91864 |
| 9289 | $J/\psi ightarrow ho^+ \eta K^0 K^-, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \pi^0 \pi^+ \pi^-, K^0 ightarrow K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 1402 | 1 | 91865 |
| 9290 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \rho^- K^+, K_0^{*-} \to \pi^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9289 | 1 | 91866 |
| 9291 | $J/\psi \to \pi^+ K^0 K_1^- \gamma^f, K^0 \to K_L^0, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma^f$ | 9290 | 1 | 91867 |
| 9292 | $J/\psi \to \omega \eta' f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, f_1(1285) \to \pi^+ a_0^-, \eta \to \gamma \gamma, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma\gamma$ | 9291 | 1 | 91868 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9293 | $J/\psi 	o \pi^0 \pi^0 \omega f_0(1370), \omega 	o \pi^0 \gamma, f_0(1370) 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 119 | 1 | 91869 |
| 9294 | $J/\psi 	o K_2^{*0} \bar{K}_0^{*0}, K_2^{*0} 	o \pi^+ \pi^- K^*, \bar{K}_0^{*0} 	o \pi^+ K^-, K^* 	o \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 9293 | 1 | 91870 |
| 9295 | $J/\psi \to \pi^0 \pi^+ a_2^- \gamma^f, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 9294 | 1 | 91871 |
| 9296 | $J/\psi \to f_0(1370)h_1(1170), f_0(1370) \to \pi^0\pi^0\pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1802 | 1 | 91872 |
| 9297 | $J/\psi \to \bar{K}^0 a_0^0 K_1^0, \bar{K}^0 \to K_S^0, a_0^0 \to \pi^0 \eta, K_1^0 \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \gamma \gamma, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 1404 | 1 | 91873 |
| 9298 | $J/\psi 	o \pi^- ho^+ K^- K_1^+, ho^+ 	o \pi^0 \pi^+, K_1^+ 	o \pi^+ K_0^0, K_0^0 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9297 | 1 | 91874 |
| 9299 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^0K^-$ | $\pi^0 K^+ K^- \gamma \gamma$ | 9298 | 1 | 91875 |
| 9300 | $J/\psi \to \pi^0\pi^0K^+K_2^{*-}, K_2^{*-} \to \pi^0K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9299 | 1 | 91876 |
| 9301 | $J/\psi \to \rho^0 a_2^0 \eta', \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- \rho^+, \eta' \to \pi^+ \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 9300 | 1 | 91877 |
| 9302 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \omega K^0, \omega \to \pi^0 \gamma, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma$ | 9301 | 1 | 91878 |
| 9303 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 9302 | 1 | 91879 |
| 9304 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^{'0}, K_0^0 \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5090 | 1 | 91880 |
| 9305 | $J/\psi \to \pi^0 K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^- K^+ K^-$ | 5091 | 1 | 91881 |
| 9306 | $J/\psi \to \pi^- \rho^+ \eta' \gamma^f, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 9305 | 1 | 91882 |
| 9307 | $J/\psi \to K^{*-}K_1^{'+}\gamma\gamma^f, K^{*-} \to \pi^0K^-, K_1^{'+} \to \pi^+K^*, K^* \to \pi^-K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 9306 | 1 | 91883 |
| 9308 | $J/\psi \to K^0 K^0 \bar{K}^* \bar{K}^*, K^0 \to K^0_S, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9307 | 1 | 91884 |
| 9309 | $J/\psi 	o \omega K^- K_2^{*+}, \omega 	o \pi^0 \pi^+ \pi^-, K_2^{*+} 	o \pi^+ K^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9308 | 1 | 91885 |
| 9310 | $J/\psi \to \pi^- \bar{K}^0_1 K^+_1, \bar{K}^0_1 \to \rho^+ K^-, K^+_1 \to \rho^0 K^+, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9309 | 1 | 91886 |
| 9311 | $J/\psi \to \pi^0 \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_1^- \to \rho^0 \pi^-, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9310 | 1 | 91887 |
| 9312 | $J/\psi \to \rho^- K^- K^{*+} a_0^+, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, a_0^+ \to \pi^+ \eta, K^0 \to K_S^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 9311 | 1 | 91888 |
| 9313 | $J/\psi 	o \eta' \eta' \phi, \eta' 	o \pi^0 \pi^0 \eta, \eta' 	o \pi^0 \pi^0 \eta, \phi 	o K_L^0 K_S^0, \eta 	o \gamma \gamma, \ \pi^0 	o e^+ e^- \gamma^F, \eta 	o \gamma \gamma, K_S^0 	o \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^F\gamma\gamma\gamma\gamma$ | 9312 | 1 | 91889 |
| 9314 | $J/\psi \to \pi^+ K^* K_1^- \gamma^F, K^* \to \pi^0 K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 9313 | 1 | 91890 |
| 9315 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 5092 | 1 | 91891 |
| 9316 | $J/\psi \to \pi^- \omega \bar{K}^* K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*+} \to \rho^0 K^+, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 1109 | 1 | 91892 |
| 9317 | $J/\psi \to \pi^0 K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^+, K_2^{*0} \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9316 | 1 | 91893 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9318 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^- \rho^+, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 3366 | 1 | 91894 |
| 9319 | $J/\psi \to \pi^- \rho^+ K^- K^{*+} \gamma^f, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 9318 | 1 | 91895 |
| 9320 | $J/\psi 	o \phi f_{2}^{'}, \phi 	o \pi^{0} \rho^{0}, f_{2}^{'} 	o K_{L}^{0} K_{L}^{0}, \rho^{0} 	o \pi^{+} \pi^{-}$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 9319 | 1 | 91896 |
| 9321 | $J/\psi \to \rho^0 K^{*+} K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 9320 | 1 | 91897 |
| 9322 | $J/\psi \to \pi^+\pi^-a_0^0a_1^0, a_0^0 \to \pi^0\eta, a_1^0 \to \pi^-\rho^+, \eta \to \pi^0\pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9321 | 1 | 91898 |
| 9323 | $J/\psi \to K^* K_2^{*0} \gamma, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 5095 | 1 | 91899 |
| 9324 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^+ \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 3367 | 1 | 91900 |
| 9325 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9324 | 1 | 91901 |
| 9326 | $J/\psi \to K^-K^{*+}f_0(1710), K^{*+} \to \pi^+K^0, f_0(1710) \to \eta\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, \eta \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 1110 | 1 | 91902 |
| 9327 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^+ K_2^{*-}, \bar{K}^0 \to K_S^0, K_2^{*-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9326 | 1 | 91903 |
| 9328 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^- \gamma^F, a_2^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 9327 | 1 | 91904 |
| 9329 | 1/s, $-0.00 h$ (1170) $0.00 h$ (1170) $0.00 h$ (1170) $0.00 h$ (1170) $0.00 h$ (1170) | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 9328 | 1 | 91905 |
| 9330 | $J/\psi \to \pi^{-} a_0 h_1(1170), a_0 \to \pi^{-} \eta, h_1(1170) \to \pi^{+} \rho^{-} \gamma^{*}, \eta \to \gamma \gamma, \rho^{-} \to \pi^{-} \pi^{-} $ $J/\psi \to \pi^{-} b_1^{+} f_1(1285), b_1^{+} \to \pi^{+} \omega, f_1(1285) \to \pi^{0} \pi^{0} \eta, \omega \to \pi^{0} \pi^{+} \pi^{-}, \pi^{0} \to e^{+} e^{-} \gamma^{F},$ $\eta \to \pi^{0} \pi^{0} \pi^{0}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9329 | 1 | 91906 |
| 9331 | $J/\psi 	o ho^0 \pi^+ \pi^- \gamma^F \gamma^f$, $ ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 9330 | 1 | 91907 |
| 9332 | $J/\psi \to \rho^+ a_2^- a_0^0, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, a_0^0 \to \pi^0 \eta, \rho^- \to \pi^0 \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 9331 | 1 | 91908 |
| 9333 | $J/\psi \to K^- \eta' K_0^{*+}, \eta' \to \rho^0 \gamma, K_0^{*+} \to \pi^+ K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 3369 | 1 | 91909 |
| 9334 | $J/\psi \to \eta \phi f_0(980), \eta \to \gamma \gamma, \phi \to K_L^0 K_S^0, f_0(980) \to K_L^0 K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 9333 | 1 | 91910 |
| 9335 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to \omega\omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5099 | 1 | 91911 |
| 9336 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma^F$ | 1111 | 1 | 91912 |
| 9337 | $J/\psi \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9336 | 1 | 91913 |
| 9338 | $J/\psi \to \pi^0 K^0 \bar{K}^* \phi, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^+K^-K^-$ | 9337 | 1 | 91914 |
| 9339 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o \pi^- ho^+, ho^+ 	o \pi^+ \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 1807 | 1 | 91915 |
| 9340 | $J/\psi 	o \pi^+\pi^-\omega\gamma^f\gamma^f, \omega 	o \pi^0\gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma^f\gamma^f$ | 9339 | 1 | 91916 |
| 9341 | $J/\psi ightarrow \pi^- b_1^+, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 9340 | 1 | 91917 |
| 9342 | $J/\psi \to \bar{K}^*K^{*+}a_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, a_1^- \to \pi^0\rho^-, K^0 \to K_S^0, \\ \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9341 | 1 | 91918 |
| 9343 | $J/\psi \to \pi^- a_2^+ K^+ K^{*-}, a_2^+ \to \pi^0 \rho^+, K^{*-} \to \pi^0 K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9342 | 1 | 91919 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 9344 | $J/\psi \to \eta \phi f_0(1710), \eta \to \gamma \gamma, \phi \to K^+K^-, f_0(1710) \to \eta \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 9343 | 1 | 91920 |
| 9345 | $J/\psi \to \bar{\Sigma}^+ \Sigma^-, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^- \to \pi^- n \gamma^f$ | $\pi^+\pi^-nar{n}\gamma^f$ | 9344 | 1 | 91921 |
| 9346 | $J/\psi \to K^{*+}K^{*-}f_0(1710), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to \eta\eta, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, \eta \to \gamma\gamma, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 5102 | 1 | 91922 |
| 9347 | $J/\psi \to K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to \pi^0 \rho^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5103 | 1 | 91923 |
| 9348 | $J/\psi \to \eta f_0(1710)\gamma, \eta \to \pi^0 \pi^0 \pi^0, f_0(1710) \to K^+ K^-$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 5104 | 1 | 91924 |
| 9349 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^F, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 9348 | 1 | 91925 |
| 9350 | $J/\psi \to \pi^0 \pi^+ \pi^- \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5105 | 1 | 91926 |
| 9351 | $J/\psi ightarrow \pi^0 \omega a_1^0, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f, a_1^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9350 | 1 | 91927 |
| 9352 | $J/\psi 	o ar K^* n ar \Lambda, ar K^* 	o \pi^0 ar K^0, ar \Lambda 	o \pi^+ ar p, ar K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 3372 | 1 | 91928 |
| 9353 | $J/\psi \to K^{*+}\phi K_1^-, K^{*+} \to \pi^0 K^+, \phi \to K^+ K^-, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 9352 | 1 | 91929 |
| 9354 | $J/\psi \to \rho^- \bar{K}^* K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_L^0, K_L^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 9353 | 1 | 91930 |
| 9355 | $J/\psi \to \pi^0 \omega \bar{K}^0 K_0^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9354 | 1 | 91931 |
| 9356 | $J/\psi 	o \pi^0 ar{K}^0 K_0^0, ar{K}^0 	o K_S^0, K_0^0 	o \pi^0 K^0, K_S^0 	o \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9355 | 1 | 91932 |
| 9357 | $J/\psi \to \pi^+\pi^-\pi^-a_0^+f_1(1285), a_0^+ \to \pi^+\eta, f_1(1285) \to \pi^+a_0^-, \eta \to \pi^+\pi^-\gamma^F, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 9356 | 1 | 91933 |
| 9358 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9357 | 1 | 91934 |
| 9359 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9358 | 1 | 91935 |
| 9360 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 5107 | 1 | 91936 |
| 9361 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 5108 | 1 | 91937 |
| 9362 | $J/\psi \to \eta K^{-}K_{1}^{'+}, \eta \to \gamma \gamma, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 9361 | 1 | 91938 |
| 9363 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 9362 | 1 | 91939 |
| 9364 | $J/\psi \to \pi^0 \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 9363 | 1 | 91940 |
| 9365 | $J/\psi ightarrow a_2^0 \pi^+ \pi^-, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 9364 | 1 | 91941 |
| 9366 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \rho^0 \gamma, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma^f$ | 9365 | 1 | 91942 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9367 | $J/\psi \to \omega \bar{K}^0 K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K_S^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9366 | 1 | 91943 |
| 9368 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 9367 | 1 | 91944 |
| 9369 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^-\rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9368 | 1 | 91945 |
| 9370 | $J/\psi \to K^0 \phi \bar{K}_0^{*0}, K^0 \to K_L^0, \phi \to \pi^+ \rho^-, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 9369 | 1 | 91946 |
| 9371 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5109 | 1 | 91947 |
| 9372 | $J/\psi \to \pi^0 K^- K^{*+} h_1(1380), K^{*+} \to \pi^0 K^+, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^+K^-K^-$ | 9371 | 1 | 91948 |
| 9373 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 1808 | 1 | 91949 |
| 9374 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 9373 | 1 | 91950 |
| 9375 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \pi^0\pi^0\pi^0, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 3374 | 1 | 91951 |
| 9376 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^- \gamma^f, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+K^-\gamma^F\gamma^f$ | 9375 | 1 | 91952 |
| 9377 | $J/\psi \to \pi^0 a_2^0 \omega, a_2^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9376 | 1 | 91953 |
| 9378 | $J/\psi \to \eta K^0 \bar{K}^0 h_1(1170), \eta \to \gamma \gamma, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 9377 | 1 | 91954 |
| 9379 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 9378 | 1 | 91955 |
| 9380 | $J/\psi \to \pi^{-}\bar{K}_{0}^{*0}K_{1}^{'+}\gamma^{F}, \bar{K}_{0}^{*0} \to \pi^{+}K^{-}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{0}K^{+}$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 5112 | 1 | 91956 |
| 9381 | $J/\psi \to \pi^+\pi^+\rho^-K^*K^{*-}, \rho^- \to \pi^0\pi^-, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 9380 | 1 | 91957 |
| 9382 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9381 | 1 | 91958 |
| 9383 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9382 | 1 | 91959 |
| 9384 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \omega, \pi^0 ightarrow e^+ e^- \gamma^F, \omega ightarrow \pi^0 \gamma$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma$ | 9383 | 1 | 91960 |
| 9385 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \pi^- \bar{K}_0^{*0}, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^F$ | 9384 | 1 | 91961 |
| 9386 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^0 \bar{K}^{*0}_0, \bar{K}^{*0}_0 \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K_L^0K_L^0$ | 9385 | 1 | 91962 |
| 9387 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \omega K^0, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 9386 | 1 | 91963 |
| 9388 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \eta \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 9387 | 1 | 91964 |
| 9389 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} h_1(1170), \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^+ \pi^- \pi^-$ | 9388 | 1 | 91965 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 9390 | $J/\psi ightarrow ho^0 \omega b_1^0, ho^0 ightarrow \pi^+ \pi^- \gamma^f, \omega ightarrow \pi^0 \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 5113 | 1 | 91966 |
| 9391 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 9390 | 1 | 91967 |
| 9392 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^-K^{*+}, f_1(1420) \to \pi^+K^0K^-\gamma^f, K^{*+} \to \pi^+K^0, K^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ K^- K^- \gamma^f$ | 9391 | 1 | 91968 |
| 9393 | $J/\psi ightarrow \eta \phi, \eta ightarrow \pi^0 \pi^+ \pi^-, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9392 | 1 | 91969 |
| 9394 | $J/\psi \to \bar{K}^0 K_1^{'0} \gamma, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 5114 | 1 | 91970 |
| 9395 | $J/\psi \to \pi^+ K^- a_0^- K_1^+, a_0^- \to \pi^- \eta, K_1^+ \to \rho^+ K^0, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 1112 | 1 | 91971 |
| 9396 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^0K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 9395 | 1 | 91972 |
| 9397 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^{+}\bar{\Sigma}^{0}, \Sigma^{*-} \to \pi^{-}\Sigma^{0}, \bar{\Sigma}^{0} \to \bar{\Lambda}\gamma, \Sigma^{0} \to \Lambda\gamma, \\ \bar{\Lambda} \to \pi^{+}\bar{p}, \Lambda \to \pi^{-}p$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma\gamma$ | 3376 | 1 | 91973 |
| 9398 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma$ | 9397 | 1 | 91974 |
| 9399 | $J/\psi \to K^- K_2^{*+} h_1(1170), K_2^{*+} \to \pi^+ K^0, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3377 | 1 | 91975 |
| 9400 | $J/\psi \to K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9399 | 1 | 91976 |
| 9401 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 5118 | 1 | 91977 |
| 9402 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9401 | 1 | 91978 |
| 9403 | $J/\psi \rightarrow \pi^- \omega a_0^+ \gamma^f, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 9402 | 1 | 91979 |
| 9404 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9403 | 1 | 91980 |
| 9405 | $J/\psi \to f_2(1270)K^-K_1^{'+}, f_2(1270) \to \pi^+\pi^-, K_1^{'+} \to \pi^+K^*, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5119 | 1 | 91981 |
| 9406 | $J/\psi \to \eta' a_1^0 \gamma, \eta' \to \pi^0 \pi^0 \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9405 | 1 | 91982 |
| 9407 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 1113 | 1 | 91983 |
| 9408 | $J/\psi \to \omega \bar{K}^0 K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^{'0} \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5121 | 1 | 91984 |
| 9409 | $J/\psi \to K^+ \bar{K}_1^{'-} \gamma^F, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^F$ | 9408 | 1 | 91985 |
| 9410 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5122 | 1 | 91986 |
| 9411 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \omega \bar{K}^0, K^0_S \to \pi^0 \pi^0, \omega \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9410 | 1 | 91987 |
| 9412 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^- \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 9411 | 1 | 91988 |
| 9413 | $J/\psi \to \pi^- a_2^+, a_2^+ \to \pi^0 \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 3379 | 1 | 91989 |
| 9414 | $J/\psi \to \pi^+\pi^-\eta a_1^0, \eta \to \pi^0\pi^0\pi^0, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5124 | 1 | 91990 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9415 | $J/\psi \to \pi^+ K^0 K_0^{*-} \gamma^f, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1114 | 1 | 91991 |
| 9416 | $J/\psi \to \pi^- a_1^+ f_1(1285), a_1^+ \to \rho^0 \pi^+, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9415 | 1 | 91992 |
| 9417 | $J/\psi \to \rho^+ \rho^- \eta \gamma, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 9416 | 1 | 91993 |
| 9418 | $J/\psi \to \rho^0 \eta a_0^0, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9417 | 1 | 91994 |
| 9419 | $J/\psi \to x(1835)\gamma, x(1835) \to \pi^+\pi^-\eta', \eta' \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9418 | 1 | 91995 |
| 9420 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \rho^+ K^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 9419 | 1 | 91996 |
| 9421 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^+\pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9420 | 1 | 91997 |
| 9422 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^+ \pi^- K^*, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9421 | 1 | 91998 |
| 9423 | $J/\psi \to \eta \omega f_1(1285), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \\ \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 9422 | 1 | 91999 |
| 9424 | $J/\psi \to K^+K^+K^-K_0^{*-}, K_0^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 5126 | 1 | 92000 |
| 9425 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^0 \rho^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5127 | 1 | 92001 |
| 9426 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9425 | 1 | 92002 |
| 9427 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9426 | 1 | 92003 |
| 9428 | $J/\psi ightarrow K^{+}K^{-}f_{2}^{'},f_{2}^{'} ightarrow \eta\eta,\eta ightarrow \gamma\gamma,\eta ightarrow \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 5128 | 1 | 92004 |
| 9429 | $J/\psi \to \pi^-\pi^-\rho^+\bar{n}p, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 5129 | 1 | 92005 |
| 9430 | $J/\psi \to K^0 K^- b_1^+, K^0 \to K_L^0, b_1^+ \to \pi^+ \omega \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 9429 | 1 | 92006 |
| 9431 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \pi^+ K^*, \phi \to K^+ K^-, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^+K^-K^-$ | 9430 | 1 | 92007 |
| 9432 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_2^{*-} \to \pi^- \bar{K}^*, K^{*+} \to \pi^+ K^0 \gamma^f, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 9431 | 1 | 92008 |
| 9433 | $J/\psi \to \pi^+ a_2^- f_2(1270), a_2^- \to \pi^- \eta, f_2(1270) \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1812 | 1 | 92009 |
| 9434 | $J/\psi \to \rho^0 \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9433 | 1 | 92010 |
| 9435 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K^0_S, \bar{K}^0 \to K^0_L, f_1(1420) \to \pi^0 K^+ K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 9434 | 1 | 92011 |
| 9436 | $J/\psi \to \omega f_0(1370)a_1^0, \omega \to \pi^0\pi^+\pi^-, f_0(1370) \to \rho^+\rho^-, a_1^0 \to \pi^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9435 | 1 | 92012 |
| 9437 | $J/\psi \to \pi^+\pi^-\rho^+K^*K^-, \rho^+ \to \pi^0\pi^+, K^* \to \pi^-K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2417 | 1 | 92013 |
| 9438 | $J/\psi \rightarrow \pi^0 \omega a_1^0, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_1^0 \rightarrow \pi^- \rho^+ \gamma^f, \rho^+ \rightarrow \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 9437 | 1 | 92014 |
| 9439 | $J/\psi \to \pi^0 \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3383 | 1 | 92015 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 9440 | $J/\psi \to h_1(1380)h_1(1380)\gamma, h_1(1380) \to \bar{K}^0K^*, h_1(1380) \to K^-K^{*+}, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+, K^{*+} \to \pi^0K^+$ | $\pi^{0}K_{L}^{0}\pi^{-}K^{+}K^{+}K^{-}\gamma$ | 9439 | 1 | 92016 |
| 9441 | $J/\psi \to \rho^+ a_0^0 a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^0 \to \pi^0 \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9440 | 1 | 92017 |
| 9442 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5133 | 1 | 92018 |
| 9443 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^+ a_2^-, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 9442 | 1 | 92019 |
| 9444 | $J/\psi \to \pi^- \rho^+ K^- K^{*+}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 3384 | 1 | 92020 |
| 9445 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^+ \pi^- \omega, a_2^- \to \rho^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 9444 | 1 | 92021 |
| 9446 | $J/\psi 	o \pi^0 \pi^- a_2^+, a_2^+ 	o ar K^0 K^+, ar K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 9445 | 1 | 92022 |
| 9447 | $J/\psi 	o \eta \Lambda ar{\Lambda}, \eta 	o \gamma \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+n\bar{p}\gamma\gamma$ | 258 | 1 | 92023 |
| 9448 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 2419 | 1 | 92024 |
| 9449 | $J/\psi 	o \eta K^+K^-\eta', \eta 	o \pi^0\pi^0\pi^0, \eta' 	o ho^0\gamma, ho^0 	o \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 5137 | 1 | 92025 |
| 9450 | $J/\psi 	o \pi^+ \Sigma^- ar{\Sigma}^{*0}, \Sigma^- 	o \pi^- n, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}nar{n}$ | 1412 | 1 | 92026 |
| 9451 | $J/\psi 	o \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 	o K_L^0, K_1^{'+} 	o ho^0 K^+, ho^0 	o \pi^+ \pi^-$ | $K^0_L\pi^+\pi^-\pi^-K^+$ | 9450 | 1 | 92027 |
| 9452 | $J/\psi ightarrow ho^+ a_2^- \eta, ho^+ ightarrow \pi^0 \pi^+, a_2^- ightarrow \pi^- \eta, \eta ightarrow \pi^+ \pi^- \gamma^F, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 9451 | 1 | 92028 |
| 9453 | $J/\psi 	o \pi^- ho^+ ho^- b_1^+, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9452 | 1 | 92029 |
| 9454 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^0\bar{\Xi}^+, \Xi^{*-} \to \pi^0\Xi^-, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \Xi^- \to \pi^-\Lambda, \\ \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to \pi^0n$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 5139 | 1 | 92030 |
| 9455 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 5140 | 1 | 92031 |
| 9456 | $J/\psi \to f_2(1270)K^-K_0^{*+}, f_2(1270) \to \pi^0\pi^0, K_0^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 3388 | 1 | 92032 |
| 9457 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^+ ho^-, a_1^- \to \pi^0 ho^-, ho^- \to \pi^0 \pi^- \gamma^f, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5142 | 1 | 92033 |
| 9458 | $J/\psi 	o \pi^+ K_S^0 K^- \phi, K_S^0 	o \pi^0 \pi^0, \phi 	o \pi^0 ho^0, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9457 | 1 | 92034 |
| 9459 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5143 | 1 | 92035 |
| 9460 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9459 | 1 | 92036 |
| 9461 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to K^+K^{*-}, \eta \to \gamma\gamma, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 9460 | 1 | 92037 |
| 9462 | $J/\psi \to \pi^- K_2^{*0} K^{*+} \gamma^F, K_2^{*0} \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 9461 | 1 | 92038 |
| 9463 | $J/\psi \to \rho^- K^+ \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1815 | 1 | 92039 |
| 9464 | $J/\psi \to \pi^- \bar{K}_1^{'0} K_1^{'+}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_1^{'+} \to \pi^0 K^{*+}, K^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9463 | 1 | 92040 |
| 9465 | $J/\psi \to \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 5145 | 1 | 92041 |
| 9466 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+} \gamma^f, K_2^{*0} \to \rho^+ K^-, K_2^{*+} \to \pi^0 K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 5146 | 1 | 92042 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 9467 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 K^0 \bar{K}^0, \omega \to \pi^0 \gamma, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 2422 | 1 | 92043 |
| 9468 | $J/\psi \to K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^-K^+$ | 1413 | 1 | 92044 |
| 9469 | $J/\psi \to a_2^+ b_1^- f_0(1370), a_2^+ \to \rho^0 \pi^+, b_1^- \to \pi^- \omega, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma$ | 9468 | 1 | 92045 |
| 9470 | $J/\psi \to \pi^0 \pi^+ \bar{K}^0 K^* K^* K^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ K^+ K^-$ | 9469 | 1 | 92046 |
| 9471 | $J/\psi \to \rho^0 a_2^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 9470 | 1 | 92047 |
| 9472 | $J/\psi \to K^{-}K_{1}^{'+}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}\gamma^{f}$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 5149 | 1 | 92048 |
| 9473 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 9472 | 1 | 92049 |
| 9474 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^0, K_0^0 \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 9473 | 1 | 92050 |
| 9475 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3392 | 1 | 92051 |
| 9476 | $J/\psi 	o \pi^0 \eta K^0 \bar{K}^0, \eta 	o \gamma \gamma, K^0 	o K_L^0, \bar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 9475 | 1 | 92052 |
| 9477 | $J/\psi \to \eta K^{*+} K_2^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \rho^0 K^-, K^0 \to K_S^0, $ $\rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 9476 | 1 | 92053 |
| 9478 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 9477 | 1 | 92054 |
| 9479 | $J/\psi \to \bar{K}^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 5151 | 1 | 92055 |
| 9480 | $J/\psi \to ho^0 \pi^+ \pi^- ho^- a_0^+, ho^0 \to \pi^+ \pi^-, ho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 9479 | 1 | 92056 |
| 9481 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 1414 | 1 | 92057 |
| 9482 | $J/\psi \to \pi^+\pi^-\rho^-b_1^+a_1^0, \rho^- \to \pi^0\pi^-, b_1^+ \to \pi^+\omega, a_1^0 \to \pi^-\rho^+, \omega \to \pi^0\pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 9481 | 1 | 92058 |
| 9483 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \omega \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9482 | 1 | 92059 |
| 9484 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi h_1(1380), \phi \to K^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+K^+K^-\gamma$ | 5153 | 1 | 92060 |
| 9485 | $J/\psi \to \pi^+\pi^-\rho^+a_2^-\omega, \rho^+ \to \pi^0\pi^+, a_2^- \to \rho^0\pi^-, \omega \to \pi^0\pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 9484 | 1 | 92061 |
| 9486 | $J/\psi \to \pi^+ K^* K_1^- \gamma^F, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 1415 | 1 | 92062 |
| 9487 | $J/\psi 	o \pi^0 ar{K}^0 K_1^{'0}, ar{K}^0 	o K_S^0, K_1^{'0} 	o \pi^0 K^*, K_S^0 	o \pi^+ \pi^-, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5155 | 1 | 92063 |
| 9488 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9487 | 1 | 92064 |
| 9489 | $J/\psi 	o a_2^- ar{K}^0 K^{*+} \gamma, a_2^- 	o \pi^0 \pi^- \omega, ar{K}^0 	o K_L^0, K^{*+} 	o \pi^+ K^0, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 9488 | 1 | 92065 |
| 9490 | $J/\psi \to \phi f_0(1710), \phi \to \pi^0 \rho^0, f_0(1710) \to \eta \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9489 | 1 | 92066 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9491 | $J/\psi \to \pi^- \omega \bar{K}^0 K_0^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 2426 | 1 | 92067 |
| 9492 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 9491 | 1 | 92068 |
| 9493 | $J/\psi \to \omega \omega b_1^0, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 9492 | 1 | 92069 |
| 9494 | $J/\psi \to \rho^- \omega \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5157 | 1 | 92070 |
| 9495 | $J/\psi 	o \pi^- \eta' ar n p, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^-ar{n}p\gamma\gamma$ | 9494 | 1 | 92071 |
| 9496 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 \bar{K}^* b_1^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, $ $\pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^+e^-e^-K_L^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma^F\gamma$ | 9495 | 1 | 92072 |
| 9497 | $J/\psi \to \omega K^0 \bar{K}_0^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9496 | 1 | 92073 |
| 9498 | $J/\psi \to \omega K^0 \bar{K}^0 \eta', \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta' \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma$ | 9497 | 1 | 92074 |
| 9499 | $J/\psi 	o ar{K}^0 K_2^{*0}, ar{K}^0 	o K_L^0, K_2^{*0} 	o ho^0 K^0, ho^0 	o \pi^+\pi^-, K^0 	o K_S^0, K_S^0 	o \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9498 | 1 | 92075 |
| 9500 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^+ K^{*-}, K^0_S \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0 K_L^0\pi^+\pi^-$ | 5158 | 1 | 92076 |
| 9501 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 9500 | 1 | 92077 |
| 9502 | $J/\psi \to \eta \eta \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-, \phi \to \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, $ $\rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 259 | 1 | 92078 |
| 9503 | $J/\psi 	o a_2^0 K^+ K^{*-}, a_2^0 	o \pi^0 \eta, K^{*-} 	o \pi^- ar K^0, \eta 	o \gamma \gamma, ar K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 890 | 1 | 92079 |
| 9504 | $J/\psi \to \eta \bar{K}^0 K_1^{'0}, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 3398 | 1 | 92080 |
| 9505 | $J/\psi \to K^* \bar{K}^* h_1(1380), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^- K^{*+}, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^0_LK^0_LK^0_+K^-$ | 9504 | 1 | 92081 |
| 9506 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^- \rho^+ \gamma^f, a_1^- \to \rho^0 \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 3399 | 1 | 92082 |
| 9507 | $J/\psi \rightarrow \rho^0 \pi^+ \pi^+ \pi^- \pi^- \omega \omega, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \gamma, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma$ | 9506 | 1 | 92083 |
| 9508 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 1418 | 1 | 92084 |
| 9509 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 9508 | 1 | 92085 |
| 9510 | $J/\psi \to \pi^+ \pi^+ \rho^- a_1^-, \rho^- \to \pi^0 \pi^-, a_1^- \to \pi^0 \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9509 | 1 | 92086 |
| 9511 | $J/\psi \rightarrow \omega\omega\omega, \omega \rightarrow \pi^0\pi^+\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, \pi^0 \rightarrow e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 9510 | 1 | 92087 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9512 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^+ K^-, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma^{F}$ | 5164 | 1 | 92088 |
| 9513 | $J/\psi \to \pi^0 \eta K^+ K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9512 | 1 | 92089 |
| 9514 | $J/\psi \to \bar{K}^0 K_2^{*+} a_0^-, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^*, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 9513 | 1 | 92090 |
| 9515 | $J/\psi \to \rho^0 a_2^0 \eta, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9514 | 1 | 92091 |
| 9516 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^+K^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-\gamma^f$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 9515 | 1 | 92092 |
| 9517 | $J/\psi 	o \pi^+\pi^-\eta\omega\gamma^F, \eta 	o \pi^0\pi^+\pi^-, \omega 	o \pi^0\pi^+\pi^-, \pi^0 	o e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}$ | 5165 | 1 | 92093 |
| 9518 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-\gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 9517 | 1 | 92094 |
| 9519 | $J/\psi ightarrow \pi^0 \eta a_0^0 \gamma, \eta ightarrow \gamma \gamma, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 9518 | 1 | 92095 |
| 9520 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 9519 | 1 | 92096 |
| 9521 | $J/\psi \to a_2^- \bar{K}^0 K_1^+, a_2^- \to \pi^0 \rho^-, \bar{K}^0 \to K_S^0, K_1^+ \to \rho^0 K^+, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5166 | 1 | 92097 |
| 9522 | $J/\psi 	o \pi^0 K^0 K_2^{*0}, K^0 	o K_L^0, K_2^{*0} 	o \omega \bar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 9521 | 1 | 92098 |
| 9523 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 9522 | 1 | 92099 |
| 9524 | $J/\psi \to \pi^- a_2^+ f_1(1285), a_2^+ \to \pi^+ \eta, f_1(1285) \to \pi^0 a_0^0, \eta \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1118 | 1 | 92100 |
| 9525 | $J/\psi \to \phi f_0(1710), \phi \to \pi^0 \rho^0, f_0(1710) \to K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5168 | 1 | 92101 |
| 9526 | $J/\psi \to \bar{K}^0 h_1(1170) K_0^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^- \rho^+, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9525 | 1 | 92102 |
| 9527 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_L^0, $ $\rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 5169 | 1 | 92103 |
| 9528 | $J/\psi 	o ar{K}^0 K_1^0 \gamma, ar{K}^0 	o K_S^0, K_1^0 	o \omega K^0, K_S^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_I^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 9527 | 1 | 92104 |
| 9529 | $J/\psi \to \rho^0 b_1^0 b_1^0, \rho^0 \to \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 9528 | 1 | 92105 |
| 9530 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^0_L \pi^- K^+$ | 5170 | 1 | 92106 |
| 9531 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3402 | 1 | 92107 |
| 9532 | $J/\psi \to \bar{K}^0 a_0^0 K_1^{'0}, \bar{K}^0 \to K_S^0, a_0^0 \to \pi^0 \eta, K_1^{'0} \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^+ \pi^- \gamma^F, K^* \to \pi^0 K^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}\gamma^{f}$ | 9531 | 1 | 92108 |
| 9533 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to K^0 \bar{K}^*, \eta \to \pi^0\pi^0\pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9532 | 1 | 92109 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 9534 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 3403 | 1 | 92110 |
| 9535 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^+ K_2^{*-}, \bar{K}^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 2431 | 1 | 92111 |
| 9536 | $J/\psi ightarrow \pi^0 \pi^0 \phi, \phi ightarrow \eta \gamma, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 9535 | 1 | 92112 |
| 9537 | $J/\psi ightarrow ho^+\Lambdaar{\Sigma}^-, ho^+ ightarrow \pi^0\pi^+, \Lambda ightarrow \pi^-p, ar{\Sigma}^- ightarrow \pi^0ar{p}$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 9536 | 1 | 92113 |
| 9538 | $J/\psi \to \bar{K}^0 \phi K_0^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 9537 | 1 | 92114 |
| 9539 | $J/\psi \to \rho^- K_2^{*0} K^{*+}, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \rho^+ K^- \gamma^f, K^{*+} \to \pi^+ K^0, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f\gamma^f$ | 5174 | 1 | 92115 |
| 9540 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^+ \gamma, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 9539 | 1 | 92116 |
| 9541 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 9540 | 1 | 92117 |
| 9542 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1823 | 1 | 92118 |
| 9543 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^+, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9542 | 1 | 92119 |
| 9544 | $J/\psi ightarrow ho^+ a_2^-, ho^+ ightarrow \pi^0 \pi^+ \gamma^f, a_2^- ightarrow \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 9543 | 1 | 92120 |
| 9545 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9544 | 1 | 92121 |
| 9546 | $J/\psi \to K^0 \bar{K}^0 a_0^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9545 | 1 | 92122 |
| 9547 | $J/\psi \to K^{*-}K_2^{*+}\gamma, K^{*-} \to \pi^0K^-, K_2^{*+} \to \rho^+K^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 9546 | 1 | 92123 |
| 9548 | $J/\psi \to \pi^0 \pi^+ \pi^- K_1^+ K_1^-, K_1^+ \to \pi^+ K_0^0, K_1^- \to \pi^- \bar{K}^*, K_0^0 \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 9547 | 1 | 92124 |
| 9549 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \gamma^F, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^F$ | 9548 | 1 | 92125 |
| 9550 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^- \bar{K}^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 9549 | 1 | 92126 |
| 9551 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 5176 | 1 | 92127 |
| 9552 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9551 | 1 | 92128 |
| 9553 | $J/\psi 	o \pi^+ \eta' b_1^-, \eta' 	o \pi^0 \pi^+ \pi^-, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9552 | 1 | 92129 |
| 9554 | $J/\psi \to \pi^0\pi^+a_0^0a_1^-, a_0^0 \to \pi^0\eta, a_1^- \to \rho^0\pi^-, \eta \to \pi^0\pi^0\pi^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9553 | 1 | 92130 |
| 9555 | $J/\psi \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^-\gamma^f$ | 9554 | 1 | 92131 |
| 9556 | $J/\psi \to \pi^0 \pi^0 \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 9555 | 1 | 92132 |
| 9557 | $J/\psi \to \pi^0 K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 9556 | 1 | 92133 |
| 9558 | $J/\psi 	o ar{K}^0 b_1^0 K_0^0, ar{K}^0 	o K_L^0, b_1^0 	o \pi^0 \omega, K_0^0 	o \pi^- K^+, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 9557 | 1 | 92134 |
| 9559 | $J/\psi ightarrow \pi^0 K^- K^{*+} \gamma^f, K^{*+} ightarrow \pi^0 K^+$ | $\pi^0\pi^0K^+K^-\gamma^f$ | 9558 | 1 | 92135 |
| 9560 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5177 | 1 | 92136 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9561 | $J/\psi \to \pi^0 \bar{K}^* K^{*+} b_1^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 9560 | 1 | 92137 |
| 9562 | $J/\psi \to \rho^0 K^* \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 9561 | 1 | 92138 |
| 9563 | $J/\psi \to \pi^0 \pi^0 h_1(1170), h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 5178 | 1 | 92139 |
| 9564 | $J/\psi \to ho^0 \bar{K}^0 K_1^0, ho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9563 | 1 | 92140 |
| 9565 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9564 | 1 | 92141 |
| 9566 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 9565 | 1 | 92142 |
| 9567 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1710) \to K^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 9566 | 1 | 92143 |
| 9568 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^- \rho^+, \eta \to e^+ e^- \gamma^F \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 9567 | 1 | 92144 |
| 9569 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 3406 | 1 | 92145 |
| 9570 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^+ K^-, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9569 | 1 | 92146 |
| 9571 | $J/\psi \to K^- K_1^+, K_1^+ \to \omega K^+, \omega \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-$ | 9570 | 1 | 92147 |
| 9572 | $J/\psi \to \pi^0 \rho^- a_0^0 a_0^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9571 | 1 | 92148 |
| 9573 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 9572 | 1 | 92149 |
| 9574 | $J/\psi \to \rho^- \bar{K}^0 K^+ a^0_0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K^0_S, a^0_0 \to \pi^0 \eta, K^0_S \to \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 9573 | 1 | 92150 |
| 9575 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5180 | 1 | 92151 |
| 9576 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9575 | 1 | 92152 |
| 9577 | $J/\psi 	o \pi^0 \omega a_0^0, \omega 	o \pi^0 \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, \pi^0 	o e^+ e^- \gamma^F, \eta 	o \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9576 | 1 | 92153 |
| 9578 | $J/\psi \to a_2^0 \pi^- \rho^+ f_0(1370), a_2^0 \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9577 | 1 | 92154 |
| 9579 | $J/\psi \to \pi^+\pi^+\pi^-\omega b_1^-, \omega \to \pi^0\pi^+\pi^-, b_1^- \to \pi^-\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 9578 | 1 | 92155 |
| 9580 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 9579 | 1 | 92156 |
| 9581 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $e^+e^-K_L^0\pi^+K^-\gamma^F$ | 9580 | 1 | 92157 |
| 9582 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 9581 | 1 | 92158 |
| 9583 | $J/\psi \to K^+ a_0^- \bar{K}_1^{'0}, a_0^- \to \pi^- \eta, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9582 | 1 | 92159 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9584 | $J/\psi \to \rho^0 K^{*+} \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \omega K^-, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 9583 | 1 | 92160 |
| 9585 | $J/\psi \to \pi^+ K^0 K^{*-} a^0_0, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, a^0_0 \to \pi^0 \eta, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9584 | 1 | 92161 |
| 9586 | $J/\psi \to K^0 \phi \bar{K}^0_1, K^0 \to K^0_S, \phi \to K^+ K^-, \bar{K}^0_1 \to \rho^0 \bar{K}^0, K^0_S \to \pi^0 \pi^0, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 9585 | 1 | 92162 |
| 9587 | $J/\psi \to \omega \bar{K}^0 K^* \gamma, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 9586 | 1 | 92163 |
| 9588 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 5181 | 1 | 92164 |
| 9589 | $J/\psi \to \rho^0 \pi^+ \pi^+ \pi^- K^0 K^-, \rho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma^{f}$ | 9588 | 1 | 92165 |
| 9590 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^- a_0^0 b_1^+, a_0^0 ightarrow \pi^0 \eta, b_1^+ ightarrow \pi^+ \omega, \eta ightarrow \pi^0 \pi^+ \pi^-, \ \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 9589 | 1 | 92166 |
| 9591 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9590 | 1 | 92167 |
| 9592 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5182 | 1 | 92168 |
| 9593 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \rho^- K^+, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 3407 | 1 | 92169 |
| 9594 | $J/\psi ightarrow ho^+ ho^- \eta \gamma, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 3408 | 1 | 92170 |
| 9595 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0 \gamma, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 9594 | 1 | 92171 |
| 9596 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 9595 | 1 | 92172 |
| 9597 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \omega f_0(1370), \omega \to \pi^0 \gamma, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9596 | 1 | 92173 |
| 9598 | $J/\psi \to \bar{K}^0 b_1^- K_1^+, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 9597 | 1 | 92174 |
| 9599 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ K^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9598 | 1 | 92175 |
| 9600 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^- \bar{\Xi}^+, \Lambda \to \pi^- p, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \\ \bar{\Lambda} \to \pi^+ \bar{p} \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma^f$ | 9599 | 1 | 92176 |
| 9601 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^+ \pi^- K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 9600 | 1 | 92177 |
| 9602 | $I/ab \rightarrow \overline{a} \Lambda^{+} c^{F} \Lambda^{+} \rightarrow mc$ | $par{p}\gamma^F\gamma$ | 5185 | 1 | 92178 |
| 9603 | $J/\psi \to F\Delta^{-1}, \Delta^{-1} \to F^{7}$ $J/\psi \to K_{2}^{*0}K^{-}a_{0}^{+}, K_{2}^{*0} \to \pi^{0}K^{0}, a_{0}^{+} \to \bar{K}^{0}K^{+}, K^{0} \to K_{S}^{0}, \bar{K}^{0} \to K_{L}^{0},$ $K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 5186 | 1 | 92179 |
| 9604 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}_0^{*0}, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9603 | 1 | 92180 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 9605 | $J/\psi \to \pi^+\pi^-K^*\bar{K}^*, K^* \to \pi^0K^0, \bar{K}^* \to \pi^+K^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3409 | 1 | 92181 |
| 9606 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9605 | 1 | 92182 |
| 9607 | $J/\psi ightarrow \pi^0 ho^0 \pi^+ \pi^- b_1^0, ho^0 ightarrow \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9606 | 1 | 92183 |
| 9608 | $J/\psi 	o \eta \eta' \phi, \eta 	o \gamma \gamma, \eta' 	o \pi^0 \pi^0 \eta, \phi 	o K_L^0 K_S^0, \eta 	o \pi^0 \pi^+ \pi^-, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma$ | 9607 | 1 | 92184 |
| 9609 | $J/\psi \to \pi^0 K_2^{*-} K_1^{'+}, K_2^{*-} \to \pi^0 K^-, K_1^{'+} \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3410 | 1 | 92185 |
| 9610 | $J/\psi \to \pi^0 a_1^0 \gamma, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma^f$ | 5189 | 1 | 92186 |
| 9611 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K_1^- \to \pi^- \bar{K}^*, K^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 9610 | 1 | 92187 |
| 9612 | $J/\psi \to K^{*+}K^{*-}\gamma\gamma^f, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 9611 | 1 | 92188 |
| 9613 | $J/\psi \to \pi^+ a_2^- \omega \gamma^F, a_2^- \to \pi^0 \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\gamma^F$ | 9612 | 1 | 92189 |
| 9614 | $J/\psi \to f_2' f_0(1710) \gamma, f_2' \to K_L^0 K_L^0, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0K_L^0\gamma$ | 9613 | 1 | 92190 |
| 9615 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9614 | 1 | 92191 |
| 9616 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega \gamma^f, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 9615 | 1 | 92192 |
| 9617 | $J/\psi \to \Lambda \bar{\Sigma}^0 \gamma, \Lambda \to \pi^0 n, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \bar{\Lambda} \to \pi^0 \bar{n}$ | $e^+e^-\pi^0nar{n}\gamma^F\gamma\gamma\gamma^f$ | 2433 | 1 | 92193 |
| 9618 | $J/\psi \to K^+ K_2^{*-} a_0^0, K_2^{*-} \to \pi^- \bar{K}^*, a_0^0 \to \pi^0 \eta, \bar{K}^* \to \pi^0 \bar{K}^0, \eta \to \pi^0 \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 9617 | 1 | 92194 |
| 9619 | $J/\psi \to \rho^0 a_1^+ a_1^-, \rho^0 \to \pi^+ \pi^-, a_1^+ \to \rho^0 \pi^+, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 9618 | 1 | 92195 |
| 9620 | $J/\psi \to \rho^0 \pi^- \rho^+ \omega, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+ \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 5191 | 1 | 92196 |
| 9621 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5192 | 1 | 92197 |
| 9622 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5193 | 1 | 92198 |
| 9623 | $J/\psi \to \omega K^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 891 | 1 | 92199 |
| 9624 | $J/\psi 	o \omega \bar{K}^0 K_2^{*0}, \omega 	o \pi^0 \gamma, \bar{K}^0 	o K_S^0, K_2^{*0} 	o ho^0 K^0, K_S^0 	o \pi^+ \pi^-, \kappa^0 	o K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 5195 | 1 | 92200 |
| 9625 | $J/\psi \to K_2^{++}K_1^{-}, K_2^{*+} \to \pi^0\pi^0K^{*+}, K_1^{-} \to \omega K^{-}, K^{*+} \to \pi^+K^0, \omega \to \pi^0\pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 5196 | 1 | 92201 |
| 9626 | $J/\psi \to \eta \omega K^* \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9625 | 1 | 92202 |
| 9627 | $J/\psi 	o \eta K^0 ar{K}_0^{*0}, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K_S^0, ar{K}_0^{*0} 	o \pi^+ K^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9626 | 1 | 92203 |
| 9628 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 K^+ K^{*-}, ho^0 ightarrow \pi^+ \pi^-, K^{*-} ightarrow \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 9627 | 1 | 92204 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9629 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5197 | 1 | 92205 |
| 9630 | $J/\psi 	o a_2^0 \eta \omega, a_2^0 	o \pi^+ ho^-, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 5198 | 1 | 92206 |
| 9631 | $J/\psi ightarrow a_2^0 b_1^0, a_2^0 ightarrow \pi^0 \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 9630 | 1 | 92207 |
| 9632 | $J/\psi \to K^0 K_2^{*-} b_1^+, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 9631 | 1 | 92208 |
| 9633 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 9632 | 1 | 92209 |
| 9634 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 1120 | 1 | 92210 |
| 9635 | $J/\psi \to \omega K^0 \bar{K}^* \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 9634 | 1 | 92211 |
| 9636 | $J/\psi \to n\bar{n}h_1(1170), h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-n\bar{n}$ | 9635 | 1 | 92212 |
| 9637 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^- K^+ \gamma^f, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 9636 | 1 | 92213 |
| 9638 | $J/\psi 	o \pi^0 \Lambda ar{\Sigma}^0, \Lambda 	o \pi^- p, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+\pi^-par p\gamma$ | 9637 | 1 | 92214 |
| 9639 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 9638 | 1 | 92215 |
| 9640 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 9639 | 1 | 92216 |
| 9641 | $J/\psi \to a_2^+ \eta b_1^-, a_2^+ \to \pi^0 \rho^+, \eta \to \pi^0 \pi^0 \pi^0, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9640 | 1 | 92217 |
| 9642 | $J/\psi \to K^+K_1^-, K_1^- \to \pi^-\bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 9641 | 1 | 92218 |
| 9643 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^0 K^{*-}, K_1^+ \to \rho^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5200 | 1 | 92219 |
| 9644 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 9643 | 1 | 92220 |
| 9645 | $J/\psi \to \pi^- \omega \omega \bar{K}^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9644 | 1 | 92221 |
| 9646 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^0K^0\bar{K}^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9645 | 1 | 92222 |
| 9647 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_1(1285) \to \pi^- a_0^+, K_S^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9646 | 1 | 92223 |
| 9648 | $J/\psi 	o \pi^+ K_0^0 K_1^-, K_0^0 	o \pi^- K^+, K_1^- 	o ho^- ar K^0, ho^- 	o \pi^0 \pi^-, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9647 | 1 | 92224 |
| 9649 | $J/\psi 	o \pi^0 K^0 ar{K}_1^{'0}, K^0 	o K_S^0, ar{K}_1^{'0} 	o \omega ar{K}^0, K_S^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, \ ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9648 | 1 | 92225 |
| 9650 | $J/\psi \to ho^0 \pi^+ \pi^- \eta K^- K^{*+}, ho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9649 | 1 | 92226 |
| 9651 | $J/\psi 	o ho^0 K^+ K^{*-}, ho^0 	o \pi^0 \gamma, K^{*-} 	o \pi^- ar{K}^0, ar{K}^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 9650 | 1 | 92227 |
| 9652 | $J/\psi 	o \pi^- ar{K}_0^{*0} K_1^+, ar{K}_0^{*0} 	o \pi^+ K^-, K_1^+ 	o \pi^+ K_0^0, K_0^0 	o \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 9651 | 1 | 92228 |
| 9653 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 9652 | 1 | 92229 |
| 9654 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^0 K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 5201 | _1 | 92230 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 9655 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \bar{K}^0 K^-, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}$ | 9654 | 1 | 92231 |
| 9656 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\bar{K}^*, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9655 | 1 | 92232 |
| 9657 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^- \eta, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \eta \to \pi^+ \pi^- \gamma^F, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 9656 | 1 | 92233 |
| 9658 | $J/\psi \to \pi^- \pi^- \bar{K}^0 K^{*+} b_1^+, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 9657 | 1 | 92234 |
| 9659 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0} a_0^0, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^+, a_0^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^+e^-\pi^0K^0_L\pi^-K^+\gamma^F\gamma\gamma$ | 9658 | 1 | 92235 |
| 9660 | $J/\psi \to K^+K^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 9659 | 1 | 92236 |
| 9661 | $J/\psi \to \pi^0 \omega h_1(1170)\gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5202 | 1 | 92237 |
| 9662 | $J/\psi \to \pi^+ K^* K_1^- \gamma^f, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 9661 | 1 | 92238 |
| 9663 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{f}$ | 9662 | 1 | 92239 |
| 9664 | $J/\psi \to \pi^+ \rho^+ a_0^- a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5203 | 1 | 92240 |
| 9665 | $J/\psi \to \pi^0 \pi^- \omega K^+ \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 5204 | 1 | 92241 |
| 9666 | $J/\psi \to K^+ ar{K}_1^{'-}, ar{K}_1^{'-} \to \pi^- ar{K}^* \gamma^f, ar{K}^* \to \pi^0 ar{K}^0, ar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^f$ | 5205 | 1 | 92242 |
| 9667 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}\gamma^{f}$ | 9666 | 1 | 92243 |
| 9668 | $J/\psi \to \pi^+ K^0 K^{*-} \eta', K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 9667 | 1 | 92244 |
| 9669 | $J/\psi ightarrow ho^0 ho^0 \pi^+ a_2^-, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^- \gamma^f, a_2^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma\gamma^f$ | 9668 | 1 | 92245 |
| 9670 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 9669 | 1 | 92246 |
| 9671 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_L^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-\pi^-K^+K^+$ | 9670 | 1 | 92247 |
| 9672 | $J/\psi \to \rho^0 a_0^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 9671 | 1 | 92248 |
| 9673 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 9672 | 1 | 92249 |
| 9674 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9673 | 1 | 92250 |
| 9675 | $J/\psi \to K^*K_2^{*0}\gamma, K^* \to \pi^0K^0, K_2^{*0} \to \pi^+K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 9674 | 1 | 92251 |
| 9676 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^F$ | 9675 | 1 | 92252 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 9677 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \bar{K}^0 \gamma, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9676 | 1 | 92253 |
| 9678 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 9677 | 1 | 92254 |
| 9679 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 5206 | 1 | 92255 |
| 9680 | $J/\psi \to \omega f_0(1370), \omega \to \pi^+\pi^-, f_0(1370) \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 9679 | 1 | 92256 |
| 9681 | $J/\psi 	o \Xi^0 ar{\Xi}^0 \gamma, \Xi^0 	o \pi^0 \Lambda, ar{\Xi}^0 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+\pi^-par p\gamma$ | 9680 | 1 | 92257 |
| 9682 | $J/\psi \to \omega K^- K^{*+} \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 9681 | 1 | 92258 |
| 9683 | $J/\psi \to \pi^0 \pi^- a_2^+ \eta \gamma^f, a_2^+ \to \rho^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9682 | 1 | 92259 |
| 9684 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 9683 | 1 | 92260 |
| 9685 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 9684 | 1 | 92261 |
| 9686 | $J/\psi \to \eta \bar{K}^0 K_2^{*0}, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 9685 | 1 | 92262 |
| 9687 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0K^0, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, \pi^0 \to e^+e^-\gamma^F, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9686 | 1 | 92263 |
| 9688 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3414 | 1 | 92264 |
| 9689 | $J/\psi 	o \eta f_2' \gamma, \eta 	o \pi^0 \pi^+ \pi^-, f_2' 	o K_S^0 K_S^0, K_S^0 	o \pi^+ \pi^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 594 | 1 | 92265 |
| 9690 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 9689 | 1 | 92266 |
| 9691 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9690 | 1 | 92267 |
| 9692 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^0\pi^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 9691 | 1 | 92268 |
| 9693 | $J/\psi \to \pi^0 \rho^0 \rho^0 \eta \omega, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 9692 | 1 | 92269 |
| 9694 | $J/\psi ightarrow \eta ar{K}^0 K_0^0, \eta ightarrow \gamma \gamma, ar{K}^0 ightarrow K_S^0, K_0^0 ightarrow \pi^0 K^0, K_S^0 ightarrow \pi^+ \pi^-, \ K^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 9693 | 1 | 92270 |
| 9695 | $J/\psi \to \pi^- \rho^+ \eta', \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9694 | 1 | 92271 |
| 9696 | $J/\psi \to \pi^0 \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9695 | 1 | 92272 |
| 9697 | $J/\psi ightarrow ho^0 ho^0 \pi^+ b_1^-, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 9696 | 1 | 92273 |
| 9698 | $J/\psi \to \pi^0 \pi^0 \eta K^+ K_2^{*-}, \eta \to \gamma \gamma, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^-K^+\gamma\gamma$ | 9697 | 1 | 92274 |
| 9699 | $J/\psi \to K^0 K^- a_1^+, K^0 \to K_L^0, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 5209 | 1 | 92275 |
| 9700 | $J/\psi \to \rho^0 K^{*-} K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \omega K^+, \bar{K}^0 \to K_L^0, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 9699 | 1 | 92276 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9701 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 9700 | 1 | 92277 |
| 9702 | $J/\psi \to \pi^+ a_2^- \eta, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 9701 | 1 | 92278 |
| 9703 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 9702 | 1 | 92279 |
| 9704 | $J/\psi \to K^- a_0^+ K_0^0, a_0^+ \to \pi^+ \eta, K_0^0 \to \pi^- K^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9703 | 1 | 92280 |
| 9705 | $J/\psi 	o \pi^+ \eta \eta' b_1^-, \eta 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^0 \pi^0 \eta, b_1^- 	o \pi^- \omega, \eta 	o \gamma \gamma, \ \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 9704 | 1 | 92281 |
| 9706 | $J/\psi \to a_2^- K^+ \bar{K}_0^{*0}, a_2^- \to \pi^0 \rho^-, \bar{K}_0^{*0} \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9705 | 1 | 92282 |
| 9707 | $J/\psi \to \rho^0 K^0 \bar{K}^0 b_1^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 3416 | 1 | 92283 |
| 9708 | $J/\psi \to \rho^- a_0^+ f_1(1285), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_1(1285) \to \pi^- a_0^+, \eta \to \gamma \gamma, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9707 | 1 | 92284 |
| 9709 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K^0 \to K^0_L$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 9708 | 1 | 92285 |
| 9710 | $J/\psi \to f_2(1270)\gamma, f_2(1270) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 9709 | 1 | 92286 |
| 9711 | $J/\psi \to \pi^+ \pi^+ \pi^- a_0^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9710 | 1 | 92287 |
| 9712 | $J/\psi ightarrow \pi^+ \eta b_1^-, \eta ightarrow \pi^0 \pi^+ \pi^-, b_1^- ightarrow \pi^- \omega \gamma^f, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 9711 | 1 | 92288 |
| 9713 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 9712 | 1 | 92289 |
| 9714 | $J/\psi \to \pi^-\omega\omega b_1^+, \omega \to \pi^0\gamma, \omega \to \pi^0\pi^+\pi^-, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 3417 | 1 | 92290 |
| 9715 | $J/\psi \to \omega K^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9714 | 1 | 92291 |
| 9716 | $J/\psi \to K^*K^-a_1^+\gamma^F, K^* \to \pi^-K^+, a_1^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 9715 | 1 | 92292 |
| 9717 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^+ K^{*-}, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5212 | 1 | 92293 |
| 9718 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 9717 | 1 | 92294 |
| 9719 | $J/\psi \to \pi^0\pi^-a_2^+a_0^0, a_2^+ \to \pi^0\rho^+, a_0^0 \to \pi^0\eta, \rho^+ \to \pi^0\pi^+, \eta \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3418 | 1 | 92295 |
| 9720 | $J/\psi \to \omega b_1^0 b_1^0, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9719 | 1 | 92296 |
| 9721 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^0K_0^{*+}, K_0^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 9720 | 1 | 92297 |
| 9722 | $J/\psi \to K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 9721 | 1 | 92298 |
| 9723 | $J/\psi ightarrow K^+K^{*-}b_1^0, K^{*-} ightarrow \pi^0K^-, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\pi^+\pi^-\gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 722 | 1 | 92299 |
| 9724 | $J/\psi \to \pi^+ \rho^+ \rho^- \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9723 | 1 | 92300 |
| 9725 | $J/\psi \to \pi^- \omega K^+ \bar{K}^0_1, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 5215 | 1 | 92301 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9726 | $J/\psi \to K_2^{*0} K_0^0, K_2^{*0} \to \pi^+ K^{*-}, K_0^0 \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5216 | 1 | 92302 |
| 9727 | $J/\psi ightarrow ar{K}^0 p ar{\Sigma}^-, ar{K}^0 ightarrow K_S^0, ar{\Sigma}^- ightarrow \pi^- ar{n}, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-\bar{n}p$ | 5217 | 1 | 92303 |
| 9728 | $J/\psi \to \pi^0 \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1828 | 1 | 92304 |
| 9729 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^0K^0, a_0^+ \to \pi^+\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 9728 | 1 | 92305 |
| 9730 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5219 | 1 | 92306 |
| 9731 | $J/\psi \to \pi^+\pi^-\rho^-\omega a_0^+, \rho^- \to \pi^0\pi^-, \omega \to \eta\gamma, a_0^+ \to \pi^+\eta, \eta \to \pi^0\pi^+\pi^-\gamma^f, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma^f$ | 9730 | 1 | 92307 |
| 9732 | $J/\psi \to \pi^0 \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 9731 | 1 | 92308 |
| 9733 | $J/\psi 	o \phi f_2^{'}, \phi 	o \pi^- ho^+, f_2^{'} 	o K_S^0 K_S^0, ho^+ 	o \pi^0 \pi^+, K_S^0 	o \pi^0 \pi^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 9732 | 1 | 92309 |
| 9734 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f \gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f\gamma^f$ | 5220 | 1 | 92310 |
| 9735 | $J/\psi \to \pi^+\pi^-\omega K^0 K_2^{*0}, \omega \to \pi^0\pi^+\pi^-\gamma^f, K^0 \to K_S^0, K_2^{*0} \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 9734 | 1 | 92311 |
| 9736 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \eta \to \gamma \gamma, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 9735 | 1 | 92312 |
| 9737 | $J/\psi \to \phi f_0(980), \phi \to K_L^0 K_S^0, f_0(980) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 9736 | 1 | 92313 |
| 9738 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5221 | 1 | 92314 |
| 9739 | $J/\psi \to \eta \eta' h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \pi^+ \pi^- \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9738 | 1 | 92315 |
| 9740 | $J/\psi 	o \eta \eta \omega, \eta 	o \gamma \gamma, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 9739 | 1 | 92316 |
| 9741 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to p\bar{p}$ | $par{p}\gamma$ | 9740 | 1 | 92317 |
| 9742 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, K_S^0 	o \pi^0 \pi^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 9741 | 1 | 92318 |
| 9743 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_0(1370) \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 9742 | 1 | 92319 |
| 9744 | $J/\psi \to \pi^0 \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 9743 | 1 | 92320 |
| 9745 | $J/\psi \to \eta \eta' \phi, \eta \to \gamma \gamma, \eta' \to \pi^+ \pi^- \eta, \phi \to \pi^0 \rho^0, \eta \to \pi^0 \pi^+ \pi^-, \\ \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 3421 | 1 | 92321 |
| 9746 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \rho^- K^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 595 | 1 | 92322 |
| 9747 | $J/\psi \to \pi^0 \pi^+ \rho^+ n \bar{\Delta}^{++}, \rho^+ \to \pi^0 \pi^+, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-nar{p}$ | 9746 | 1 | 92323 |
| 9748 | $J/\psi \to a_2^0 \pi^+ \omega a_0^-, a_2^0 \to \pi^+ \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 9747 | 1 | 92324 |
| 9749 | $J/\psi 	o \pi^0\pi^0a_2^0b_1^0, a_2^0 	o \pi^+ ho^-, b_1^0 	o \pi^0\omega, ho^- 	o \pi^0\pi^-, \omega 	o \pi^0\pi^+\pi^-\gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9748 | 1 | 92325 |
| 9750 | $J/\psi \to \rho^0 \bar{K}^0 K_1^{'0}, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_L^0, K_1^{'0} \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 3423 | 1 | 92326 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9751 | $J/\psi \to \Delta^+ \bar{\Delta}^+ \gamma, \Delta^+ \to \pi^+ n, \bar{\Delta}^+ \to \pi^- \bar{n} \gamma^f$ | $\pi^+\pi^-nar{n}\gamma\gamma^f$ | 9750 | 1 | 92327 |
| 9752 | $J/\psi ightarrow ho^+ a_2^- \eta, ho^+ ightarrow \pi^0 \pi^+, a_2^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 9751 | 1 | 92328 |
| 9753 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 9752 | 1 | 92329 |
| 9754 | $J/\psi \to \pi^0 K^+ K^+ K^{*-} K^{*-}, K^{*-} \to \pi^- \bar{K}^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+$ | 9753 | 1 | 92330 |
| 9755 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \Delta^0 \bar{p}, \Delta^0 	o \pi^- p$ | $\pi^+\pi^-par p\gamma$ | 5225 | 1 | 92331 |
| 9756 | $J/\psi ightarrow \pi^0\pi^0\pi^+\eta a_1^-, \eta ightarrow \gamma\gamma, a_1^- ightarrow \pi^0 ho^-, ho^- ightarrow \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 9755 | 1 | 92332 |
| 9757 | $J/\psi \to \pi^+\pi^- f_2(1270) f_0(1370), f_2(1270) \to \pi^+\pi^-, f_0(1370) \to K^+K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 5226 | 1 | 92333 |
| 9758 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9757 | 1 | 92334 |
| 9759 | $J/\psi \to K^* \bar{K}^* b_1^0, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^0 \to \pi^0 \omega, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 9758 | 1 | 92335 |
| 9760 | $J/\psi 	o \omega \bar{K}^0 K^*, \omega 	o \pi^0 \gamma, \bar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma$ | 9759 | 1 | 92336 |
| 9761 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, b_1^0 \to \pi^0\omega, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5227 | 1 | 92337 |
| 9762 | $J/\psi \to \pi^0 \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 9761 | 1 | 92338 |
| 9763 | $J/\psi 	o \pi^0\pi^- ho^+\eta^\prime, ho^+ 	o \pi^0\pi^+, \eta^\prime 	o \pi^0\pi^0\eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 489 | 1 | 92339 |
| 9764 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, $ $\rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9763 | 1 | 92340 |
| 9765 | $J/\psi 	o \pi^0 ho^- \omega b_1^+, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \gamma, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 9764 | 1 | 92341 |
| 9766 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \rho^0 \gamma, \phi \to K_L^0 K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1831 | 1 | 92342 |
| 9767 | $J/\psi \to \pi^0 \rho^+ K^0 K^{*-}, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma^{F}\gamma^{f}$ | 9766 | 1 | 92343 |
| 9768 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to K^+K^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 9767 | 1 | 92344 |
| 9769 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{\Sigma}^+ \Sigma^{*-}, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^{*-} \to \pi^- \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 9768 | 1 | 92345 |
| 9770 | $J/\psi ightarrow ho^+ \omega b_1^-, ho^+ ightarrow \pi^0 \pi^+, \omega ightarrow \pi^0 \gamma, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 3426 | 1 | 92346 |
| 9771 | $J/\psi 	o K^0 ar{K}^0 \eta' \gamma, K^0 	o K^0_L, ar{K}^0 	o K^0_L, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma$ | 1832 | 1 | 92347 |
| 9772 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1710) \to \eta \eta, K_S^0 \to \pi^0 \pi^0, $ $\eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3428 | 1 | 92348 |
| 9773 | $J/\psi 	o ar{K}^0 K^* a^0_0, ar{K}^0 	o K^0_S, K^* 	o \pi^0 K^0, a^0_0 	o \pi^0 \eta, K^0_S 	o \pi^+ \pi^-, K^0 	o K^0_L, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9772 | 1 | 92349 |
| 9774 | $J/\psi \to \bar{K}^0 K^* \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+ \gamma^f$ | $K_L^0\pi^-K^+\gamma\gamma^f$ | 9773 | 1 | 92350 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 9775 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, $ $\rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9774 | 1 | 92351 |
| 9776 | $J/\psi \to \pi^+\pi^-K^*K^-a_1^+, K^* \to \pi^0K^0, a_1^+ \to \rho^0\pi^+, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 1426 | 1 | 92352 |
| 9777 | $J/\psi \to \pi^+ K_2^{*-} K_0^0, K_2^{*-} \to \rho^0 K^-, K_0^0 \to \pi^- K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 9776 | 1 | 92353 |
| 9778 | $J/\psi \to \pi^0 h_1(1170) f_1(1285), h_1(1170) \to \pi^- \rho^+, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 3430 | 1 | 92354 |
| 9779 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \gamma \gamma, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 9778 | 1 | 92355 |
| 9780 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ho^0 \pi^- ho^+ \gamma^f, ho^0 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 9779 | 1 | 92356 |
| 9781 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 9780 | 1 | 92357 |
| 9782 | $J/\psi \to \pi^0 \omega K^{*+} K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9781 | 1 | 92358 |
| 9783 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5235 | 1 | 92359 |
| 9784 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 9783 | 1 | 92360 |
| 9785 | $J/\psi \to K^{*+}K^{*-}h_1(1380), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^+K^{*-}, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+$ | 896 | 1 | 92361 |
| 9786 | $J/\psi \to \rho^0 \pi^+ K^0 K_0^{*-}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3432 | 1 | 92362 |
| 9787 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^- \bar{K}^* K^+, a_2^- \to \rho^0 \pi^-, \bar{K}^* \to \pi^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 3433 | 1 | 92363 |
| 9788 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \pi^- \eta, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 9787 | 1 | 92364 |
| 9789 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 9788 | 1 | 92365 |
| 9790 | $J/\psi \to K^* \bar{K}^* h_1(1380), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-K^-$ | 9789 | 1 | 92366 |
| 9791 | $J/\psi ightarrow \pi^+\pi^-\omega ar{K}^0K^*, \omega ightarrow \pi^0\gamma, ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^0K^0, K^0 ightarrow K_L^0$ | $\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 1428 | 1 | 92367 |
| 9792 | $J/\psi \to \pi^0 \pi^+ a_1^-, \pi^0 \to e^+ e^- \gamma^F, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 9791 | 1 | 92368 |
| 9793 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 9792 | 1 | 92369 |
| 9794 | $J/\psi \to \pi^0 a_2^0 K^- K^{*+}, a_2^0 \to \pi^0 \eta, K^{*+} \to \pi^+ K^0, \eta \to \gamma \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 9793 | 1 | 92370 |
| 9795 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9794 | 1 | 92371 |
| 9796 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9795 | 1 | 92372 |
| 9797 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K^+K^-, K^0 \to K^0_S, \\ \bar{K}^0 \to K^0_S, K^0_S \to \pi^0\pi^0, K^0_S \to \pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 9796 | 1 | 92373 |
| 9798 | $J/\psi \to \pi^0 \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9797 | 1 | 92374 |
| 9799 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9798 | 1 | 92375 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9800 | $J/\psi \to \pi^+ a_2^- f_1(1285), a_2^- \to \pi^0 \rho^-, f_1(1285) \to \pi^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta,$ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 9799 | 1 | 92376 |
| 9801 | $J/\psi \to K^{*+}\phi \bar{K}_1^{'-}, K^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 \pi^+ \pi^+ \pi^- K^+ K^- K^-$ | 9800 | 1 | 92377 |
| 9802 | $J/\psi \to \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^+ \pi^- K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 1836 | 1 | 92378 |
| 9803 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^- K_1^{'+}, \eta \to \gamma \gamma, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma \gamma$ | 3436 | 1 | 92379 |
| 9804 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9803 | 1 | 92380 |
| 9805 | $J/\psi \to K^+K^-f_2^{'}, f_2^{'} \to \eta\eta, \eta \to \gamma\gamma, \eta \to \gamma\gamma$ | $K^+K^-\gamma\gamma\gamma\gamma$ | 9804 | 1 | 92381 |
| 9806 | $J/\psi 	o ho^0 K^0 ar{K}_0^{*0}, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 3437 | 1 | 92382 |
| 9807 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 5243 | 1 | 92383 |
| 9808 | $J/\psi \to K^{*+} K_0^{*-} \gamma, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma^f$ | 9807 | 1 | 92384 |
| 9809 | $J/\psi \to \pi^+ K_S^0 K^- \phi, K_S^0 \to \pi^+ \pi^- \gamma^f, \phi \to K^+ K^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-\gamma^f$ | 9808 | 1 | 92385 |
| 9810 | $J/\psi \to \pi^- K^+ \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 2447 | 1 | 92386 |
| 9811 | $J/\psi \to \rho^0 K^- K^{*+}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 9810 | 1 | 92387 |
| 9812 | $J/\psi \to \pi^0 K^{*+} K^{*-} h_1(1170), K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5245 | 1 | 92388 |
| 9813 | $J/\psi \to \rho^0 a_2^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 9812 | 1 | 92389 |
| 9814 | $J/\psi 	o \pi^0 K_2^{*0} K_1^0, K_2^{*0} 	o ho^+ K^-, K_1^0 	o ho^- K^+, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9813 | 1 | 92390 |
| 9815 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-K_L^0\pi^+\pi^-\gamma^F$ | 9814 | 1 | 92391 |
| 9816 | $J/\psi ightarrow \pi^0\pi^0\phi, \phi ightarrow \eta\gamma, \eta ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 9815 | 1 | 92392 |
| 9817 | $J/\psi \rightarrow \eta' b_1^0, \eta' \rightarrow \pi^+\pi^-\eta, b_1^0 \rightarrow \pi^0\omega, \eta \rightarrow \gamma\gamma, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 9816 | 1 | 92393 |
| 9818 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^0\pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L$ | 9817 | 1 | 92394 |
| 9819 | $J/\psi 	o \eta' \gamma, \eta' 	o \omega \gamma, \omega 	o \pi^0 \gamma$ | $\pi^0\gamma\gamma\gamma$ | 9818 | 1 | 92395 |
| 9820 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{-}K^{+}K^{+}K^{-}$ | 9819 | 1 | 92396 |
| 9821 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 9820 | 1 | 92397 |
| 9822 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ar{K}^* K^{*+} a_0^-, ar{K}^* 	o \pi^0 ar{K}^0, K^{*+} 	o \pi^+ K^0, a_0^- 	o \pi^- \eta, \ ar{K}^0 	o K_S^0, K^0 	o K_L^0, \eta 	o \gamma \gamma, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma\gamma$ | 9821 | 1 | 92398 |
| 9823 | $J/\psi \to \eta K^0 \bar{K}^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 1837 | 1 | 92399 |
| 9824 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0$ | 9823 | 1 | 92400 |
| 9825 | $J/\psi \to \pi^0 \rho^0 \omega \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 9824 | 1 | 92401 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9826 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9825 | 1 | 92402 |
| 9827 | $J/\psi \to \eta K^- K_1^+, \eta \to \gamma \gamma, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 9826 | 1 | 92403 |
| 9828 | $J/\psi \to K_0^{*+} \bar{K}_1'^-, K_0^{*+} \to \pi^0 K^+, \bar{K}_1'^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 9827 | 1 | 92404 |
| 9829 | $J/\psi \to K^{*+}K_2^{*-}\gamma, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^+\pi^-K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 897 | 1 | 92405 |
| 9830 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0 \gamma^f, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^f$ | 9829 | 1 | 92406 |
| 9831 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^+ \pi^- \omega, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 9830 | 1 | 92407 |
| 9832 | $J/\psi \rightarrow \pi^- \eta K^+ \bar{K}^0_1, \eta \rightarrow \gamma \gamma, \bar{K}^0_1 \rightarrow \rho^0 \bar{K}^0, \rho^0 \rightarrow \pi^+ \pi^-, \bar{K}^0 \rightarrow K^0_L$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 9831 | 1 | 92408 |
| 9833 | $J/\psi \to \pi^+ \eta p \bar{\Delta}^{++}, \eta \to \pi^0 \pi^0 \pi^0, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 9832 | 1 | 92409 |
| 9834 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} \phi, K^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K^0 \to K_L^0$ | $K_L^0\pi^+K^+K^-K^-\gamma$ | 9833 | 1 | 92410 |
| 9835 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma$ | 9834 | 1 | 92411 |
| 9836 | $J/\psi \to \Xi^0 \bar{\Xi}^0, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \pi^0 \to e^+ e^- \gamma^F, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^0 \bar{n}$ | $e^+e^-\pi^0\pi^0\pi^0n\bar{n}\gamma^F$ | 9835 | 1 | 92412 |
| 9837 | $J/\psi 	o \pi^0 \pi^+ \pi^- \omega \omega, \omega 	o \pi^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 9836 | 1 | 92413 |
| 9838 | $J/\psi 	o \pi^- \omega \bar{K}^* K^{*+}, \omega 	o \pi^0 \gamma, \bar{K}^* 	o \pi^+ K^-, K^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 9837 | 1 | 92414 |
| 9839 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 a_0^+ a_0^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 9838 | 1 | 92415 |
| 9840 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9839 | 1 | 92416 |
| 9841 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 3441 | 1 | 92417 |
| 9842 | $J/\psi ightarrow \pi^+ ho^- \eta \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \gamma \gamma, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 9841 | 1 | 92418 |
| 9843 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi h_1(1380), \phi \to K_L^0 K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma$ | 9842 | 1 | 92419 |
| 9844 | $J/\psi ightarrow \pi^0 K^0 ar K^0 \gamma, K^0 ightarrow K^0_L, ar K^0 ightarrow K^0_L$ | $\pi^0 K_L^0 K_L^0 \gamma$ | 3442 | 1 | 92420 |
| 9845 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 1127 | 1 | 92421 |
| 9846 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 9845 | 1 | 92422 |
| 9847 | $J/\psi 	o \pi^- \omega b_1^+ \gamma^F, \omega 	o \pi^0 \gamma, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 9846 | 1 | 92423 |
| 9848 | $J/\psi \to \omega f_2(1270)\eta', \omega \to \pi^0\pi^+\pi^-, f_2(1270) \to \pi^0\pi^0, \eta' \to \pi^0\pi^0\eta, \eta \to \gamma\gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 9847 | 1 | 92424 |
| 9849 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-} \gamma^f, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 5251 | 1 | 92425 |
| 9850 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5252 | 1 | 92426 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9851 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3444 | 1 | 92427 |
| 9852 | $J/\psi \to \pi^0 K^{*+} K^{*-} b_1^0, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9851 | 1 | 92428 |
| 9853 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 9852 | 1 | 92429 |
| 9854 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 898 | 1 | 92430 |
| 9855 | $J/\psi \to \pi^0 f_2(1270) K^0 \bar{K}^*, f_2(1270) \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9854 | 1 | 92431 |
| 9856 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9855 | 1 | 92432 |
| 9857 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L$ | 9856 | 1 | 92433 |
| 9858 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \bar{K}^0 \gamma, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 3446 | 1 | 92434 |
| 9859 | $J/\psi \to \pi^+ K^0 K^{*-} h_1(1380), K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 2452 | 1 | 92435 |
| 9860 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^0K^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 9859 | 1 | 92436 |
| 9861 | $J/\psi \to K^0 \bar{K}^0 b_1^0 \gamma, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 9860 | 1 | 92437 |
| 9862 | $J/\psi ightarrow ho^+ ho^- \gamma, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^- \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 9861 | 1 | 92438 |
| 9863 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^0K^+, K^{*-} \to \pi^0K^-, \eta' \to \rho^0\gamma, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 9862 | 1 | 92439 |
| 9864 | $J/\psi 	o \eta \omega f_0(1370), \eta 	o \gamma \gamma, \omega 	o \pi^0 \gamma, f_0(1370) 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 9863 | 1 | 92440 |
| 9865 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3448 | 1 | 92441 |
| 9866 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1129 | 1 | 92442 |
| 9867 | $J/\psi \to K^0 \bar{K}_1^0 \gamma, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 9866 | 1 | 92443 |
| 9868 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-\gamma^f$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9867 | 1 | 92444 |
| 9869 | $J/\psi \to \eta K^- K^{*+} \phi, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+, \phi \to K^+ K^-$ | $\pi^0 K^+ K^+ K^- K^- \gamma \gamma$ | 9868 | 1 | 92445 |
| 9870 | $J/\psi \to \pi^- \rho^+ K^{*+} K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 5259 | 1 | 92446 |
| 9871 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 5260 | 1 | 92447 |
| 9872 | $J/\psi \to \eta f_0(1710)\gamma, \eta \to \gamma\gamma, f_0(1710) \to \eta\eta, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 9871 | 1 | 92448 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9873 | $J/\psi 	o a_2^0 \pi^+ a_1^-, a_2^0 	o K_L^0 K_L^0, a_1^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5261 | 1 | 92449 |
| 9874 | $J/\psi \to K^0 \bar{K}^* a^0_0, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, a^0_0 \to \pi^0 \eta, K^0_S \to \pi^0 \pi^0, \\ \bar{K}^0 \to K^0_S, \eta \to \gamma \gamma, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma\gamma$ | 9873 | 1 | 92450 |
| 9875 | $J/\psi 	o \eta \eta' \gamma, \eta 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 2454 | 1 | 92451 |
| 9876 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9875 | 1 | 92452 |
| 9877 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, f_0(1370) \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9876 | 1 | 92453 |
| 9878 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma$ | 9877 | 1 | 92454 |
| 9879 | $J/\psi \to ho^0 \pi^+ K^* K^-, ho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9878 | 1 | 92455 |
| 9880 | $J/\psi \to \pi^+ K_2^{*0} K_0^{*-}, K_2^{*0} \to \pi^- K^{*+}, K_0^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 899 | 1 | 92456 |
| 9881 | $J/\psi \to \pi^0 \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9880 | 1 | 92457 |
| 9882 | $J/\psi 	o \pi^+\pi^-K^*ar{K}^*, K^* 	o \pi^0K^0, ar{K}^* 	o \pi^+K^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5264 | 1 | 92458 |
| 9883 | $J/\psi \to \eta K^0 \bar{K}^0 \gamma, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 9882 | 1 | 92459 |
| 9884 | $J/\psi ightarrow \eta \eta' \phi, \eta ightarrow \pi^0 \pi^0 \pi^0, \eta' ightarrow \pi^+ \pi^- \eta, \phi ightarrow K_L^0 K_S^0, \eta ightarrow \pi^0 \pi^0 \pi^0, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9883 | 1 | 92460 |
| 9885 | $J/\psi \to \pi^- K^+ \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 9884 | 1 | 92461 |
| 9886 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 3452 | 1 | 92462 |
| 9887 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^{*-} \phi, K^{*-} \to \pi^0 K^-, \phi \to \eta \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 5266 | 1 | 92463 |
| 9888 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 K^0 ar K^0, \pi^0 ightarrow e^+ e^- \gamma^F, K^0 ightarrow K^0_S, ar K^0 ightarrow K^0_L, \ K^0_S ightarrow \pi^0 \pi^0$ | $e^+e^-\pi^0\pi^0K_L^0\gamma^F\gamma$ | 9887 | 1 | 92464 |
| 9889 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^0 \rho^+, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5267 | 1 | 92465 |
| 9890 | $J/\psi ightarrow \pi^- a_2^+, a_2^+ ightarrow \pi^0 \pi^+ \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 9889 | 1 | 92466 |
| 9891 | $J/\psi \to K^0 \eta' \bar{K}_0^{*0}, K^0 \to K_S^0, \eta' \to \rho^0 \gamma, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 9890 | 1 | 92467 |
| 9892 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f\gamma^f$ | 9891 | 1 | 92468 |
| 9893 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9892 | 1 | 92469 |
| 9894 | $J/\psi \to \pi^+ \eta' b_1^- \gamma^f, \eta' \to \pi^0 \pi^0 \eta, b_1^- \to \pi^- \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma\gamma\gamma^f$ | 5268 | 1 | 92470 |
| 9895 | $J/\psi \to \omega K^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9894 | 1 | 92471 |
| 9896 | $J/\psi \to K^*K^-a_1^+, K^* \to \pi^-K^+\gamma^f, a_1^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 9895 | 1 | 92472 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 9897 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to K^0 K^-, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}$ | 9896 | 1 | 92473 |
| 9898 | $J/\psi 	o \eta \omega \omega \gamma, \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 9897 | 1 | 92474 |
| 9899 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 9898 | 1 | 92475 |
| 9900 | $J/\psi \to ho^0 f_2(1270) a_0^0, ho^0 \to \pi^+\pi^-, f_2(1270) \to \pi^+\pi^-, a_0^0 \to \pi^0\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9899 | 1 | 92476 |
| 9901 | $J/\psi \to \pi^+\pi^- f_2(1270)a_1^0, f_2(1270) \to \pi^+\pi^-, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9900 | 1 | 92477 |
| 9902 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 5269 | 1 | 92478 |
| 9903 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \eta \to \pi^+ \pi^- \gamma^F \gamma^f$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f$ | 9902 | 1 | 92479 |
| 9904 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 9903 | 1 | 92480 |
| 9905 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 9904 | 1 | 92481 |
| 9906 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_1(1285) \to \pi^0 a_0^0, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\gamma\gamma$ | 3453 | 1 | 92482 |
| 9907 | $J/\psi 	o K_2^{*0} K_2^{*0}, K_2^{*0} 	o \pi^0 K^*, K_2^{*0} 	o \pi^+ K^{*-}, K^* 	o \pi^0 K^0, K^{*-} 	o \pi^- ar{K}^0, K^0 	o K_L^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 9906 | 1 | 92483 |
| 9908 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 9907 | 1 | 92484 |
| 9909 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 5271 | 1 | 92485 |
| 9910 | $J/\psi \to \eta f_2(1270) h_1(1170), \eta \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9909 | 1 | 92486 |
| 9911 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 9910 | 1 | 92487 |
| 9912 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 9911 | 1 | 92488 |
| 9913 | $J/\psi \to \pi^0\pi^0 \rho^- a_0^+, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0\pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0\pi^+\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9912 | 1 | 92489 |
| 9914 | $J/\psi ightarrow ho^0 \Lambda \bar{\Lambda}, ho^0 ightarrow \pi^+ \pi^-, \Lambda ightarrow \pi^0 n, \bar{\Lambda} ightarrow \pi^0 ar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 9913 | 1 | 92490 |
| 9915 | $J/\psi 	o \pi^- K_2^{*0} K^+, K_2^{*0} 	o \pi^0 ar{K}^*, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 5272 | 1 | 92491 |
| 9916 | $J/\psi \to \pi^+ K_1^0 \bar{K}_1^{'-}, K_1^0 \to \rho^0 K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 9915 | 1 | 92492 |
| 9917 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0K^0_L\pi^-K^+$ | 9916 | 1 | 92493 |
| 9918 | $J/\psi \to \pi^- \eta b_1^+, \eta \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5273 | 1 | 92494 |
| 9919 | $J/\psi \to K^-K^{*+}f_1(1285), K^{*+} \to \pi^0K^+, f_1(1285) \to \pi^-a_0^+, a_0^+ \to \pi^+\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5274 | 1 | 92495 |
| 9920 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 9919 | 1 | 92496 |
| 9921 | $J/\psi \to f_2(1270)\gamma, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 9920 | 1 | 92497 |
| 9922 | $J/\psi 	o \pi^0 K^+ K_2^{*-}, K_2^{*-} 	o \pi^- ar{K}^*, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 9921 | 1 | 92498 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 9923 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 9922 | 1 | 92499 |
| 9924 | $J/\psi \to \pi^+ a_1^0 a_1^-, a_1^0 \to \pi^+ \rho^- \gamma^f, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 9923 | 1 | 92500 |
| 9925 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^F, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 9924 | 1 | 92501 |
| 9926 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \pi^0 \rho^- \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 9925 | 1 | 92502 |
| 9927 | $J/\psi \to K_2^{*0}K^+b_1^-, K_2^{*0} \to \pi^0\pi^0\bar{K}^*, b_1^- \to \pi^-\omega, \bar{K}^* \to \pi^0\bar{K}^0, \omega \to \pi^0\pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9926 | 1 | 92503 |
| 9928 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 9927 | 1 | 92504 |
| 9929 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9928 | 1 | 92505 |
| 9930 | $J/\psi \to K_2^{*+} K_0^{*-}, K_2^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1131 | 1 | 92506 |
| 9931 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^+K^-\gamma^f, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 9930 | 1 | 92507 |
| 9932 | $J/\psi \to \pi^0 \pi^0 \rho^0 f_2(1270), \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 9931 | 1 | 92508 |
| 9933 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^0 \pi^0, \ \eta \to \gamma \gamma, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 9932 | 1 | 92509 |
| 9934 | $J/\psi \to \pi^0 \pi^0 \phi, \pi^0 \to e^+ e^- \gamma^F, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $e^+e^-\pi^0K_L^0\pi^+\pi^-\gamma^F\gamma^f$ | 9933 | 1 | 92510 |
| 9935 | $J/\psi \to K^+K^{*-}a_1^0, K^{*-} \to \pi^-\bar{K}^0, a_1^0 \to \pi^-\rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F\gamma^f$ | 9934 | 1 | 92511 |
| 9936 | $J/\psi 	o ho^0 K^0 ar{K}^0_1, ho^0 	o \pi^+ \pi^-, K^0 	o K^0_L, ar{K}^0_1 	o ho^+ K^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 9935 | 1 | 92512 |
| 9937 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $e^+e^-K_L^0K_L^0\pi^+\pi^-\gamma^F$ | 9936 | 1 | 92513 |
| 9938 | $J/\psi \to \rho^- \bar{K}^* K^+ \phi, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 9937 | 1 | 92514 |
| 9939 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^0 K^{*-}, K_1^+ \to \pi^+ K^*, K^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 9938 | 1 | 92515 |
| 9940 | $J/\psi \to \pi^0 \bar{K}^* K^{*+} b_1^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, \bar{K}^0 \to K_S^0,$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5276 | 1 | 92516 |
| 9941 | $ \frac{J/\psi \to \rho^0 \eta' a_0^0, \rho^0 \to \pi^+ \pi^-, \eta' \to \rho^0 \gamma, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-,}{\eta \to \pi^0 \pi^0 \pi^0} $ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 1844 | 1 | 92517 |
| 9942 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 9941 | 1 | 92518 |
| 9943 | $J/\psi 	o K^- K_2^{*+} \gamma^f, K_2^{*+} 	o \pi^+ K^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma^f$ | 9942 | 1 | 92519 |
| 9944 | $J/\psi \to \pi^0 K^* \bar{K}^*, K^* \to \pi^- K^+ \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma^f$ | 5278 | 1 | 92520 |
| 9945 | $J/\psi 	o \pi^- \omega ar{n} p, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 9944 | 1 | 92521 |
| 9946 | $J/\psi \to \pi^- \bar{K}^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 9945 | 1 | 92522 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 9947 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 9946 | 1 | 92523 |
| 9948 | $J/\psi \to \pi^+ K^- K_0^0 \gamma^f, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^f$ | 9947 | 1 | 92524 |
| 9949 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 9948 | 1 | 92525 |
| 9950 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^+ \rho^- \gamma^f, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 5279 | 1 | 92526 |
| 9951 | $J/\psi \to \pi^0\pi^-a_0^+\gamma^F, a_0^+ \to \pi^+\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 9950 | 1 | 92527 |
| 9952 | $J/\psi \to K^0 \bar{K}^0 a_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2458 | 1 | 92528 |
| 9953 | $J/\psi \to K^+ \phi K_1^-, \phi \to K_L^0 K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 9952 | 1 | 92529 |
| 9954 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^0 K^{*+}, K_1^- \to \pi^- \bar{K}^*, K^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5281 | 1 | 92530 |
| 9955 | $J/\psi \to \pi^+ K_S^0 K^- \phi, K_S^0 \to \pi^0 \pi^0, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 9954 | 1 | 92531 |
| 9956 | $J/\psi \to \bar{K}^0 K^* f_2', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_2' \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma\gamma$ | 2459 | 1 | 92532 |
| 9957 | $J/\psi \to K_2^{*+}K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 9956 | 1 | 92533 |
| 9958 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-\gamma^F$ | 9957 | 1 | 92534 |
| 9959 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-$ | 9958 | 1 | 92535 |
| 9960 | $J/\psi \to \eta \eta' \phi, \eta \to \gamma \gamma, \eta' \to \omega \gamma, \phi \to K_L^0 K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma \gamma$ | 9959 | 1 | 92536 |
| 9961 | $J/\psi \to K^+ f_0(1370) K_1^-, f_0(1370) \to \pi^0 \pi^0, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9960 | 1 | 92537 |
| 9962 | $J/\psi \to \pi^0 \pi^- a_2^+ f_1(1285), a_2^+ \to \pi^0 \rho^+, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3458 | 1 | 92538 |
| 9963 | $J/\psi 	o \phi f_2^{'}, \phi 	o \eta \gamma, f_2^{'} 	o \eta \eta, \eta 	o \gamma \gamma, \eta 	o \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma\gamma$ | 5284 | 1 | 92539 |
| 9964 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 5285 | 1 | 92540 |
| 9965 | $J/\psi \to \pi^+ K^0 K^{*-} \phi, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 5286 | 1 | 92541 |
| 9966 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^+K^-, a_0^- \to K^0K^-, K^0 \to K_L^0$ | $K_L^0\pi^+K^+K^-K^-$ | 9965 | 1 | 92542 |
| 9967 | $J/\psi \to K^+ K_1^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0,$ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 9966 | 1 | 92543 |
| 9968 | $J/\psi \to \pi^0\pi^-a_2^+\gamma^f, a_2^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 9967 | 1 | 92544 |
| 9969 | $J/\psi \to \pi^0 K^0 \bar{K}^* f_1(1420), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1420) \to \pi^0 K^+ K^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9968 | 1 | 92545 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 9970 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^- K_2^{*+}, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2460 | 1 | 92546 |
| 9971 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9970 | 1 | 92547 |
| 9972 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^0\rho^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-\gamma^f$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 2461 | 1 | 92548 |
| 9973 | $J/\psi \to K^0 \bar{K}^0 K^{*-} K_1^+, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \\ \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 5289 | 1 | 92549 |
| 9974 | $J/\psi 	o \eta_c \gamma, \eta_c 	o K^- K^{*+} a_1^0, K^{*+} 	o \pi^0 K^+, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 5290 | 1 | 92550 |
| 9975 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to K^+ K^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9974 | 1 | 92551 |
| 9976 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1380) \to K^- K^{*+}, K^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^0_L \pi^+ K^-$ | 9975 | 1 | 92552 |
| 9977 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \eta' \to \rho^0 \gamma, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma^f$ | 9976 | 1 | 92553 |
| 9978 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \pi^+ K_0^0, \eta \to \pi^0 \pi^+ \pi^-, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 9977 | 1 | 92554 |
| 9979 | $J/\psi 	o a_2^0 b_1^0, a_2^0 	o \pi^+ ho^-, b_1^0 	o \pi^0 \gamma, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 9978 | 1 | 92555 |
| 9980 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \rho^- K^0, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 9979 | 1 | 92556 |
| 9981 | $J/\psi 	o ar{K}^*K_1^0, ar{K}^* 	o \pi^+K^-, K_1^0 	o \omega K^0, \omega 	o \pi^+\pi^-, K^0 	o K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 9980 | 1 | 92557 |
| 9982 | $J/\psi \to \omega f_2(1270)a_0^0, \omega \to \pi^0\pi^+\pi^-, f_2(1270) \to \pi^0\pi^0, a_0^0 \to K^+K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 9981 | 1 | 92558 |
| 9983 | $J/\psi \to K_2^{*+}K_1^-, K_2^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0 \pi^+ \pi^- K^+ K^-$ | 9982 | 1 | 92559 |
| 9984 | $J/\psi ightarrow a_2^+ n ar p, a_2^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 9983 | 1 | 92560 |
| 9985 | $J/\psi \to \pi^0 f_2(1270)\bar{K}^0 K^*, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 1845 | 1 | 92561 |
| 9986 | $J/\psi \to \pi^+\pi^-K_1^+K_1^-, K_1^+ \to \pi^+\pi^-K^+, K_1^- \to \pi^0K_0^{*-}, K_0^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 5292 | 1 | 92562 |
| 9987 | $J/\psi \to \pi^+ \rho^- K^+ K_1^-, \rho^- \to \pi^0 \pi^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 3462 | 1 | 92563 |
| 9988 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 9987 | 1 | 92564 |
| 9989 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^+ \pi^- \omega \gamma^f, a_1^- \to \rho^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 9988 | 1 | 92565 |
| 9990 | $J/\psi \rightarrow \phi f_2', \phi \rightarrow K^+K^-, f_2' \rightarrow \eta \eta, \eta \rightarrow \gamma \gamma, \eta \rightarrow \gamma \gamma$ | $K^+K^-\gamma\gamma\gamma\gamma$ | 9989 | 1 | 92566 |
| 9991 | $J/\psi \to K^0 \phi \bar{K}^0_1, K^0 \to K^0_S, \phi \to K^0_L K^0_S, \bar{K}^0_1 \to \omega \bar{K}^0, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^-$ | 1846 | 1 | 92567 |
| 9992 | $J/\psi \to ho^0 \eta K^0 ar{K}^*, ho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, ar{K}^* \to \pi^0 ar{K}^0, \ ar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 9991 | 1 | 92568 |
| 9993 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 9992 | 1 | 92569 |
| 9994 | $J/\psi \to \eta \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma$ | 9993 | 1 | 92570 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 9995 | $J/\psi ightarrow ar{K}^0 n ar{\Lambda} \gamma, ar{K}^0 ightarrow K_L^0, ar{\Lambda} ightarrow \pi^0 ar{n}$ | $\pi^0 K^0_L n ar{n} \gamma$ | 9994 | 1 | 92571 |
| 9996 | $J/\psi 	o \pi^0 \pi^0 \bar{K}^0 K^*, \bar{K}^0 	o K_L^0, K^* 	o \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 5295 | 1 | 92572 |
| 9997 | $J/\psi \to K^-K^{*+}, K^{*+} \to \pi^0K^+, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-K^+K^-\gamma^F$ | 2464 | 1 | 92573 |
| 9998 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 9997 | 1 | 92574 |
| 9999 | $J/\psi 	o a_2^- \bar{K}^* K^+, a_2^- 	o ho^0 \pi^-, \bar{K}^* 	o \pi^+ K^- \gamma^f, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 9998 | 1 | 92575 |
| 10000 | $J/\psi \to K^-K^{*+}a_0^0, K^{*+} \to \pi^+K^0, a_0^0 \to \pi^0\eta, K^0 \to K_L^0, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^F$ | 2465 | 1 | 92576 |
| 10001 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10000 | 1 | 92577 |
| 10002 | $J/\psi \to \pi^+ \omega K^0 K_0^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10001 | 1 | 92578 |
| 10003 | $J/\psi \to K^{*-}K_1^{'+}, K^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5298 | 1 | 92579 |
| 10004 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 5299 | 1 | 92580 |
| 10005 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \omega K^+, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 10004 | 1 | 92581 |
| 10006 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 10005 | 1 | 92582 |
| 10007 | $J/\psi 	o ho^+ a_2^- \eta, ho^+ 	o \pi^0 \pi^+, a_2^- 	o \bar{K}^0 K^-, \eta 	o \pi^0 \pi^0 \pi^0, \bar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 10006 | 1 | 92583 |
| 10008 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^+ \pi^-, \phi \to K_L^0 K_S^0, f_0(980) \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10007 | 1 | 92584 |
| 10009 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^+ K^0, \eta \to \pi^0 \pi^0 \pi^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 5300 | 1 | 92585 |
| 10010 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K^0_L$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 10009 | 1 | 92586 |
| 10011 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 3466 | 1 | 92587 |
| 10012 | $J/\psi \to \rho^0 \pi^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5302 | 1 | 92588 |
| 10013 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^+ \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0, \eta$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 5303 | 1 | 92589 |
| 10014 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, f_0(1370) \to \pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 10013 | 1 | 92590 |
| 10015 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10014 | 1 | 92591 |
| 10016 | $J/\psi \to K^* \bar{K}^* a_0^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 10015 | 1 | 92592 |
| 10017 | $J/\psi \to K^+ a_0^0 K_1^-, a_0^0 \to \pi^0 \eta, K_1^- \to \pi^0 K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 10016 | 1 | 92593 |
| 10018 | $J/\psi \to \phi f_0(980), \phi \to K^+ K^-, f_0(980) \to K_L^0 K_L^0$ | $K_{L}^{0}K_{L}^{0}K^{+}K^{-}$ | 10017 | 1 | 92594 |
| 10019 | $J/\psi \to \pi^+\pi^+\pi^-b_1^-h_1(1170), b_1^- \to \pi^-\omega, h_1(1170) \to \pi^0\rho^0, \omega \to \pi^0\pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 10018 | 1 | 92595 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 10020 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 10019 | 1 | 92596 |
| 10021 | $J/\psi \to \eta K^{*+} K_2^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 10020 | 1 | 92597 |
| 10022 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 10021 | 1 | 92598 |
| 10023 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^0 \pi^0, $ $\rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^-K^+K^+K^-$ | 10022 | 1 | 92599 |
| 10024 | $J/\psi 	o \pi^0 \omega K^+ K_2^{*-}, \omega 	o \pi^0 \gamma, K_2^{*-} 	o \pi^- ar{K}^*, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma$ | 10023 | 1 | 92600 |
| 10025 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to \mu^+ \mu^-$ | $\mu^{+}\mu^{-}K_{L}^{0}\pi^{+}K^{-}$ | 10024 | 1 | 92601 |
| 10026 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-\gamma$ | 10025 | 1 | 92602 |
| 10027 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10026 | 1 | 92603 |
| 10028 | $J/\psi \to \pi^0 K^0 \bar{K}^*, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^0K^0_L\pi^+\pi^-\gamma^F$ | 10027 | 1 | 92604 |
| 10029 | $J/\psi \to \eta K^{*+} K_2^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 10028 | 1 | 92605 |
| 10030 | $J/\psi \to \eta' f_1(1420)\gamma, \eta' \to \rho^0 \gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 2466 | 1 | 92606 |
| 10031 | $J/\psi \to \pi^- a_2^+ f_2(1270), a_2^+ \to \pi^0 \rho^+, f_2(1270) \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 10030 | 1 | 92607 |
| 10032 | $J/\psi \to \pi^+ \omega K^0 \bar{K}^0 b_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 10031 | 1 | 92608 |
| 10033 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10032 | 1 | 92609 |
| 10034 | $J/\psi \to \pi^0\pi^-\bar{K}^0K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+K_0^0, K_S^0 \to \pi^+\pi^-, K_0^0 \to \pi^-K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10033 | 1 | 92610 |
| 10035 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 5305 | 1 | 92611 |
| 10036 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \omega K^+, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 3468 | 1 | 92612 |
| 10037 | $J/\psi \to \eta \omega b_1^0 \gamma, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3469 | 1 | 92613 |
| 10038 | $J/\psi \to \bar{K}^0 K_1^+ a_1^-, \bar{K}^0 \to K_S^0, K_1^+ \to \rho^0 K^+, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 10037 | 1 | 92614 |
| 10039 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^0K^+, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0K^+K^+K^-K^-$ | 10038 | 1 | 92615 |
| 10040 | $J/\psi \to \pi^0 a_2^0 \pi^+ \pi^- f_0(1370), a_2^0 \to \pi^+ \rho^-, f_0(1370) \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3470 | 1 | 92616 |
| 10041 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^+ \pi^- K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 1132 | 1 | 92617 |
| 10042 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \rho^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5310 | 1 | 92618 |
| 10043 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \pi^+ \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10042 | 1 | 92619 |
| 10044 | $J/\psi \to \eta K^- K_1^+, \eta \to \pi^0 \pi^+ \pi^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 10043 | 1 | 92620 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 10045 | $J/\psi \to \bar{K}^0 p \bar{\Sigma}^{*-}, \bar{K}^0 \to K_S^0, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, K_S^0 \to \pi^+ \pi^-, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 2468 | 1 | 92621 |
| 10046 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_0(1710) \to K^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 2469 | 1 | 92622 |
| 10047 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10046 | 1 | 92623 |
| 10048 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \omega K^+, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2470 | 1 | 92624 |
| 10049 | $J/\psi \rightarrow \eta \omega \eta', \eta \rightarrow \pi^0 \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \eta' \rightarrow \pi^+ \pi^- \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 10048 | 1 | 92625 |
| 10050 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^+ K_2^{*-}, \bar{K}^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5314 | 1 | 92626 |
| 10051 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3475 | 1 | 92627 |
| 10052 | $J/\psi ightarrow \pi^- \eta b_1^+, \eta ightarrow \pi^0 \pi^0 \pi^0, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10051 | 1 | 92628 |
| 10053 | $J/\psi \to ho^+ \omega K^* K^-, ho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 10052 | 1 | 92629 |
| 10054 | $J/\psi \to \pi^0 b_1^0 a_1^0, \pi^0 \to e^+ e^- \gamma^F, b_1^0 \to \pi^0 \omega, a_1^0 \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10053 | 1 | 92630 |
| 10055 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 5316 | 1 | 92631 |
| 10056 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5317 | 1 | 92632 |
| 10057 | $J/\psi \to \pi^+\pi^-\pi^-\rho^+h_1(1170), \rho^+ \to \pi^0\pi^+, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10056 | 1 | 92633 |
| 10058 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \eta' \to \rho^0\gamma, K^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 10057 | 1 | 92634 |
| 10059 | $J/\psi \to \rho^0 K^- K_1^+, \rho^0 \to \pi^+ \pi^- \gamma^f, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 10058 | 1 | 92635 |
| 10060 | $J/\psi \to \pi^0 \pi^- \eta a_1^+, \eta \to \pi^0 \pi^+ \pi^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 10059 | 1 | 92636 |
| 10061 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 10060 | 1 | 92637 |
| 10062 | $J/\psi \to \pi^0 \pi^- \rho^+ a_1^0, \rho^+ \to \pi^0 \pi^+, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5318 | 1 | 92638 |
| 10063 | $J/\psi \to K^+ K_2^{*-} \gamma^F, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 10062 | 1 | 92639 |
| 10064 | $J/\psi \to \pi^+ \pi^+ \pi^- K^0 K^{*-} a_0^0, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10063 | 1 | 92640 |
| 10065 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 10064 | 1 | 92641 |
| 10066 | $J/\psi \to a_2^+ K^* K^{*-}, a_2^+ \to \rho^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 1436 | 1 | 92642 |
| 10067 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-K^-K^-$ | 10066 | 1 | 92643 |
| 10068 | $J/\psi \to K^+ \phi K_1^-, \phi \to \pi^+ \rho^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 10067 | 1 | 92644 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 10069 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 5320 | 1 | 92645 |
| 10070 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}^0_1 \to \pi^0 \bar{K}^{*0}_0, \bar{K}^{*0}_0 \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10069 | 1 | 92646 |
| 10071 | $J/\psi \to \pi^+ \pi^- a_0^0 \gamma^f, a_0^0 \to K_L^0 K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 3477 | 1 | 92647 |
| 10072 | $J/\psi \to ho^0 K^- K_2^{*+}, ho^0 \to \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 10071 | 1 | 92648 |
| 10073 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1849 | 1 | 92649 |
| 10074 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10073 | 1 | 92650 |
| 10075 | $J/\psi \to \pi^- \omega \bar{K}^* K^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 10074 | 1 | 92651 |
| 10076 | $J/\psi \rightarrow \pi^0\pi^-\pi^-\rho^+b_1^+, \rho^+ \rightarrow \pi^0\pi^+, b_1^+ \rightarrow \pi^+\omega, \omega \rightarrow \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5323 | 1 | 92652 |
| 10077 | $J/\psi \to \pi^0\pi^-b_1^+a_1^0, b_1^+ \to \pi^+\omega, a_1^0 \to \pi^+\rho^-, \omega \to \pi^0\gamma, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10076 | 1 | 92653 |
| 10078 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \gamma \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^-K^+\gamma^F\gamma\gamma$ | 10077 | 1 | 92654 |
| 10079 | $J/\psi \to K_2^{*0} \bar{K}_0^{*0}, K_2^{*0} \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 10078 | 1 | 92655 |
| 10080 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10079 | 1 | 92656 |
| 10081 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1850 | 1 | 92657 |
| 10082 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10081 | 1 | 92658 |
| 10083 | $J/\psi \to \rho^0 \pi^- \rho^+ h_1(1170), \rho^0 \to \pi^+ \pi^- \gamma^f, \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 10082 | 1 | 92659 |
| 10084 | $J/\psi \to \pi^0 f_1(1285)\gamma, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 5325 | 1 | 92660 |
| 10085 | $J/\psi 	o \Xi^0 ar{\Xi}^0, \Xi^0 	o \pi^0 \Lambda, ar{\Xi}^0 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^- p \gamma^f, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+\pi^-par p\gamma^f$ | 10084 | 1 | 92661 |
| 10086 | $J/\psi \to \pi^+ \eta K^* K^-, \eta \to \pi^+ \pi^- \gamma^F, K^* \to \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 10085 | 1 | 92662 |
| 10087 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 5326 | 1 | 92663 |
| 10088 | $J/\psi \to \eta' \phi, \eta' \to \pi^0 \pi^0 \eta, \phi \to K_L^0 K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 10087 | 1 | 92664 |
| 10089 | $J/\psi \to \omega \Lambda \bar{\Sigma}^0, \omega \to \pi^0 \pi^+ \pi^-, \Lambda \to \pi^- p, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma$ | 3480 | 1 | 92665 |
| 10090 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma^f$ | 10089 | 1 | 92666 |
| 10091 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 10090 | 1 | 92667 |
| 10092 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 10091 | 1 | 92668 |
| 10093 | $J/\psi ightarrow \pi^- \eta \bar{K}^0 K^+, \eta ightarrow \pi^0 \pi^+ \pi^-, \bar{K}^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10092 | 1 | 92669 |
| 10094 | $J/\psi 	o \eta f_2^{'} \gamma, \eta 	o \pi^0 \pi^0 \pi^0, f_2^{'} 	o K_S^0 K_S^0, K_S^0 	o \pi^0 \pi^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 10093 | 1 | 92670 |
| 10095 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 5328 | 1 | 92671 |
| 10096 | $J/\psi \to \pi^0 \pi^0 \pi^+ \pi^- \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10095 | 1 | 92672 |
| 10097 | $J/\psi \to K^+ \eta' K_0^{*-}, \eta' \to \pi^0 \pi^0 \eta, K_0^{*-} \to \pi^0 K^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 10096 | 1 | 92673 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 10098 | $J/\psi \to \pi^0 \omega K^{*+} K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10097 | 1 | 92674 |
| 10099 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Lambda \to \pi^- p, \bar{\Lambda} \to \bar{n} \gamma$ | $\pi^+\pi^-\pi^-ar{n}p\gamma$ | 10098 | 1 | 92675 |
| 10100 | $J/\psi \to \pi^+\pi^+\rho^+\rho^-\rho^-\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, \rho^- \to \pi^0\pi^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10099 | 1 | 92676 |
| 10101 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10100 | 1 | 92677 |
| 10102 | $J/\psi \to \pi^0 \pi^+ a_0^- \gamma^F, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 3481 | 1 | 92678 |
| 10103 | $J/\psi \to h_1(1380)f_1(1420), h_1(1380) \to \bar{K}^0 K^*, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 10102 | 1 | 92679 |
| 10104 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^f$ | 1851 | 1 | 92680 |
| 10105 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K^0_S, \bar{K}^0 \to K^0_L, f_0(1370) \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 10104 | 1 | 92681 |
| 10106 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 10105 | 1 | 92682 |
| 10107 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^0\bar{K}^0, a_0^- \to K^0K^-, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 10106 | 1 | 92683 |
| 10108 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \rho^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10107 | 1 | 92684 |
| 10109 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-$ | 10108 | 1 | 92685 |
| 10110 | $J/\psi \to K^* \bar{K}^0_2, K^* \to \pi^0 K^0, \bar{K}^0_2 \to \pi^0 K^{*0}_2, K^0 \to K^0_L, K^{*0}_2 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 10109 | 1 | 92686 |
| 10111 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10110 | 1 | 92687 |
| 10112 | $J/\psi \to \rho^0 K^- K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3483 | 1 | 92688 |
| 10113 | $J/\psi \to f_2(1270)\gamma, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 5332 | 1 | 92689 |
| 10114 | $J/\psi ightarrow ar{n}pa_0^-, a_0^- ightarrow \pi^-\eta, \eta ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 10113 | 1 | 92690 |
| 10115 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^+ \pi^- K^0, \bar{K}^0 \to K_S^0, K_1^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 10114 | 1 | 92691 |
| 10116 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \eta' \to \pi^0\pi^0\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 10115 | 1 | 92692 |
| 10117 | $J/\psi \to K^0 K_2^{*0} \phi, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, \phi \to K^+ K^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^+K^-K^-$ | 5333 | 1 | 92693 |
| 10118 | $J/\psi 	o \eta \omega \eta', \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10117 | 1 | 92694 |
| 10119 | $J/\psi 	o ho^0 a_2^0 \eta, ho^0 	o \pi^+ \pi^-, a_2^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10118 | 1 | 92695 |
| 10120 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2475 | 1 | 92696 |
| 10121 | $J/\psi ightarrow \eta \eta \phi, \eta ightarrow \gamma \gamma, \eta ightarrow \gamma \gamma, \phi ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 10120 | 1 | 92697 |
| 10122 | $J/\psi \rightarrow \pi^+\pi^-b_1^0b_1^0, b_1^0 \rightarrow \pi^0\omega, b_1^0 \rightarrow \pi^0\omega, \omega \rightarrow \pi^0\gamma, \omega \rightarrow \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10121 | 1 | 92698 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 10123 | $J/\psi \to \eta K^{*+} K_2^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 10122 | 1 | 92699 |
| 10124 | $J/\psi \to \pi^0 \pi^0 \pi^0 b_1^0, \pi^0 \to e^+ e^- \gamma^F, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 5335 | 1 | 92700 |
| 10125 | $J/\psi \to \pi^+ K^0 K^{*-} \gamma^F, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^0 \pi^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma^F$ | 5336 | 1 | 92701 |
| 10126 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 1852 | 1 | 92702 |
| 10127 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^+ K_2^{*-}, \bar{K}^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10126 | 1 | 92703 |
| 10128 | $J/\psi ightarrow \eta K^- K_1^+, \eta ightarrow \pi^0 \pi^0 \pi^0, K_1^+ ightarrow \omega K^+, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5338 | 1 | 92704 |
| 10129 | $J/\psi \to \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 10128 | 1 | 92705 |
| 10130 | $J/\psi \to K_1^+ K_1^- \gamma, K_1^+ \to \omega K^+, K_1^- \to \rho^- \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 10129 | 1 | 92706 |
| 10131 | $J/\psi \to \pi^- \bar{K}^* K^{*+} h_1(1170), \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, h_1(1170) \to \pi^- \rho^+, K^0 \to K_S^0,$ $\rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 10130 | 1 | 92707 |
| 10132 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to \pi^+\rho^-, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 900 | 1 | 92708 |
| 10133 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^* K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma$ | 1438 | 1 | 92709 |
| 10134 | $J/\psi \to \pi^+ \rho^- \bar{K}^0 K_1^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10133 | 1 | 92710 |
| 10135 | $J/\psi 	o \pi^+ K^- K_1^0 \gamma^f, K_1^0 	o \pi^+ \pi^- K^0, K^0 	o K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 10134 | 1 | 92711 |
| 10136 | $J/\psi \to K_1^0 \bar{K}_1^{'0}, K_1^0 \to \pi^- K_0^{*+}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_0^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10135 | 1 | 92712 |
| 10137 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 5341 | 1 | 92713 |
| 10138 | $J/\psi \to \rho^0 a_2^+ a_0^-, \rho^0 \to \pi^+ \pi^-, a_2^+ \to \rho^0 \pi^+, a_0^- \to K^0 K^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5342 | 1 | 92714 |
| 10139 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, $ $\rho^- \to \pi^0 \pi^- \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 10138 | 1 | 92715 |
| 10140 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 2479 | 1 | 92716 |
| 10141 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10140 | 1 | 92717 |
| 10142 | $J/\psi \to \pi^0 \pi^+ a_2^- f_0(1370), a_2^- \to \pi^- \eta, f_0(1370) \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5344 | 1 | 92718 |
| 10143 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^0K^+, b_1^- \to \pi^-\omega, \pi^0 \to e^+e^-\gamma^F\gamma^f, \omega \to \pi^0\pi^+\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}\gamma^{f}$ | 5345 | 1 | 92719 |
| 10144 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 10143 | 1 | 92720 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 10145 | $J/\psi \to \omega K^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10144 | 1 | 92721 |
| 10146 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^0\pi^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5346 | 1 | 92722 |
| 10147 | $J/\psi \to \pi^0 \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10146 | 1 | 92723 |
| 10148 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 5347 | 1 | 92724 |
| 10149 | $J/\psi \to K^- a_0^0 K_1^{'+}, a_0^0 \to \pi^0 \eta, K_1^{'+} \to \pi^+ K^*, \eta \to \pi^+ \pi^- \gamma^F, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 10148 | 1 | 92725 |
| 10150 | $J/\psi \to \pi^+\pi^-K^*\bar{K}_0^{*0}, K^* \to \pi^-K^+, \bar{K}_0^{*0} \to \pi^+K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 901 | 1 | 92726 |
| 10151 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 5349 | 1 | 92727 |
| 10152 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^0K^+, \eta' \to \rho^0\gamma, \rho^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 1856 | 1 | 92728 |
| 10153 | $J/\psi ightarrow \omega \eta', \omega ightarrow \pi^0 \gamma, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 10152 | 1 | 92729 |
| 10154 | $J/\psi \to K^0 \bar{p} \Sigma^{*+}, K^0 \to K_S^0, \Sigma^{*+} \to \pi^+ \Lambda, K_S^0 \to \pi^0 \pi^0, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 10153 | 1 | 92730 |
| 10155 | $J/\psi \to \rho^+ a_0^- f_1(1285), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_1(1285) \to \pi^+ a_0^-, \eta \to \gamma \gamma, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 408 | 1 | 92731 |
| 10156 | $J/\psi 	o \pi^0 \pi^+ K^* K^{*-}, K^* 	o \pi^0 K^0, K^{*-} 	o \pi^0 K^-, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 10155 | 1 | 92732 |
| 10157 | $J/\psi \to \pi^- \rho^+ \Delta^+ \bar{\Delta}^+, \rho^+ \to \pi^0 \pi^+, \Delta^+ \to \pi^+ n, \bar{\Delta}^+ \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 10156 | 1 | 92733 |
| 10158 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \bar{K}^0 K_0^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 10157 | 1 | 92734 |
| 10159 | $J/\psi 	o \pi^0 \eta K^+ K_1^-, \eta 	o \pi^0 \pi^0 \pi^0, K_1^- 	o ho^0 K^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10158 | 1 | 92735 |
| 10160 | $J/\psi \to ho^0 \pi^- \omega a_1^+, ho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma, a_1^+ \to ho^0 \pi^+, ho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10159 | 1 | 92736 |
| 10161 | $J/\psi \to \omega \bar{K}^0 K^* \gamma, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^* \to \pi^- K^+, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 10160 | 1 | 92737 |
| 10162 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to K^-\gamma, f_1(1285) \to \pi^0\pi^0\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0K^+K^-\gamma\gamma\gamma$ | 10161 | 1 | 92738 |
| 10163 | $J/\psi ightarrow \phi f_{2}^{'}, \phi ightarrow K^{+}K^{-}, f_{2}^{'} ightarrow \eta \eta, \eta ightarrow \pi^{0}\pi^{+}\pi^{-}, \eta ightarrow \pi^{+}\pi^{-}\gamma^{F}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 10162 | 1 | 92739 |
| 10164 | $J/\psi \to \omega K^0 \bar{K}^0_1, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 10163 | 1 | 92740 |
| 10165 | $J/\psi \to \rho^0 \eta f_1(1285), \rho^0 \to \pi^+\pi^-, \eta \to \gamma\gamma, f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 5352 | 1 | 92741 |
| 10166 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K_1^0 \to \omega K^0, K^{*-} \to K^- \gamma, \omega \to \pi^0 \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 10165 | 1 | 92742 |
| 10167 | $J/\psi \to \rho^0 \pi^- \bar{p} \Delta^{++}, \rho^0 \to \pi^+ \pi^-, \Delta^{++} \to \pi^+ p$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 10166 | 1 | 92743 |
| 10168 | $J/\psi \to K^+K^{*-}\phi, K^{*-}\to \pi^-\bar{K}^0, \phi\to K_L^0K_S^0, \bar{K}^0\to K_S^0, K_S^0\to \pi^0\pi^0, K_S^0\to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 10167 | 1 | 92744 |
| 10169 | $J/\psi ightarrow \pi^+ ho^- \eta \gamma^f, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 2483 | 1 | 92745 |
| 10170 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 10169 | 1 | 92746 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10171 | $J/\psi \to K^+ K_2^{*-} \gamma^F, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma^F$ | 10170 | 1 | 92747 |
| 10172 | $J/\psi \to K^0 K_2^{*0} \phi, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^0, \phi \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10171 | 1 | 92748 |
| 10173 | $J/\psi \to \pi^0 b_1^0 f_0(1370), \pi^0 \to e^+ e^- \gamma^F \gamma^f, b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 10172 | 1 | 92749 |
| 10174 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^-\pi^-K^+K^+$ | 598 | 1 | 92750 |
| 10175 | $J/\psi \to \pi^0 K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^- K^{*+}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 10174 | 1 | 92751 |
| 10176 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 5355 | 1 | 92752 |
| 10177 | $J/\psi ightarrow \pi^+\pi^-\eta^\prime, \eta^\prime ightarrow ho^0\gamma, ho^0 ightarrow \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 1859 | 1 | 92753 |
| 10178 | $J/\psi \to K^+K^{*-}a_1^0, K^{*-} \to \pi^-\bar{K}^0, a_1^0 \to \pi^+\rho^-\gamma^f, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 10177 | 1 | 92754 |
| 10179 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10178 | 1 | 92755 |
| 10180 | $J/\psi \to \rho^0 \pi^+ K^{*-} K_1^0, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 5357 | 1 | 92756 |
| 10181 | $J/\psi \to \pi^+ a_2^- f_2(1270), a_2^- \to \pi^0 \pi^- \omega, f_2(1270) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10180 | 1 | 92757 |
| 10182 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10181 | 1 | 92758 |
| 10183 | $J/\psi \to \pi^+ a_1^- f_1(1285), a_1^- \to \rho^0 \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10182 | 1 | 92759 |
| 10184 | $J/\psi \to K^+K^-\phi\gamma^F, \phi \to K_L^0K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0K^+K^-\gamma^F$ | 3495 | 1 | 92760 |
| 10185 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 10184 | 1 | 92761 |
| 10186 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10185 | 1 | 92762 |
| 10187 | $J/\psi \to \pi^+ \rho^- K^+ K_0^{*-}, \rho^- \to \pi^0 \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10186 | 1 | 92763 |
| 10188 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10187 | 1 | 92764 |
| 10189 | $J/\psi \to \bar{K}^0 K_1^0 a_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K^{*+}, a_1^0 \to \pi^- \rho^+, K^{*+} \to \pi^+ K^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 5359 | 1 | 92765 |
| 10190 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_1^+, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5360 | 1 | 92766 |
| 10191 | $J/\psi \to \rho^+ K_2^{*0} K^{*-}, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \rho^0 K^0, K^{*-} \to \pi^0 K^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 10190 | 1 | 92767 |
| 10192 | $J/\psi \to \pi^- \bar{\Sigma}^{*0} \Sigma^+, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \Sigma^+ \to \pi^0 p, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 10191 | 1 | 92768 |
| 10193 | $J/\psi \to a_2^- \bar{K}^* K^{*+}, a_2^- \to \rho^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10192 | 1 | 92769 |
| 10194 | $J/\psi \to K^+ K^- a_0^0, a_0^0 \to \pi^0 \eta, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0K^+K^-\gamma^F$ | 1137 | 1 | 92770 |
| 10195 | $J/\psi \to \rho^- \eta \bar{K}^* K^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 10194 | 1 | 92771 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 10196 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+\pi^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10195 | 1 | 92772 |
| 10197 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 10196 | 1 | 92773 |
| 10198 | $J/\psi ightarrow ho^- a_0^+, ho^- ightarrow \pi^0 \pi^-, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 10197 | 1 | 92774 |
| 10199 | $J/\psi 	o \pi^0 K_2^{*0} \bar{K}_1^0, K_2^{*0} 	o \pi^- K^+, \bar{K}_1^0 	o \pi^+ K^{*-}, K^{*-} 	o \pi^- \bar{K}^0, \bar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10198 | 1 | 92775 |
| 10200 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta', \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 10199 | 1 | 92776 |
| 10201 | $J/\psi \to \pi^- a_0^0 a_1^+, a_0^0 \to \pi^0 \eta, a_1^+ \to \rho^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 5362 | 1 | 92777 |
| 10202 | $J/\psi \to \pi^+\pi^- f_1(1285), f_1(1285) \to \pi^0\pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10201 | 1 | 92778 |
| 10203 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^- K^+ \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 5363 | 1 | 92779 |
| 10204 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^{*-}, \Lambda \to \pi^- p, \bar{\Sigma}^{*-} \to \pi^0 \bar{\Sigma}^-, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 10203 | 1 | 92780 |
| 10205 | $J/\psi \to \pi^- \bar{K}^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10204 | 1 | 92781 |
| 10206 | $J/\psi \to \pi^{+} \rho^{-} a_{0}^{+} a_{0}^{-}, \rho^{-} \to \pi^{0} \pi^{-} \gamma^{f}, a_{0}^{+} \to \pi^{+} \eta, a_{0}^{-} \to \pi^{-} \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^{0} \pi^{0} \pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 10205 | 1 | 92782 |
| 10207 | $J/\psi ightarrow \pi^0 ho^0 \eta^\prime, ho^0 ightarrow \pi^+ \pi^-, \eta^\prime ightarrow \omega \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10206 | 1 | 92783 |
| 10208 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0,$ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 10207 | 1 | 92784 |
| 10209 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 10208 | 1 | 92785 |
| 10210 | $J/\psi \to K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 10209 | 1 | 92786 |
| 10211 | $J/\psi \to \pi^0 \rho^0 \omega h_1(1170), \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10210 | 1 | 92787 |
| 10212 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5364 | 1 | 92788 |
| 10213 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-$ | 10212 | 1 | 92789 |
| 10214 | $J/\psi \to \bar{K}^* K_2^{*0} \gamma, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 2487 | 1 | 92790 |
| 10215 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10214 | 1 | 92791 |
| 10216 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta \gamma^f, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 10215 | 1 | 92792 |
| 10217 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10216 | 1 | 92793 |
| 10218 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, $ $\eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10217 | 1 | 92794 |
| 10219 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^+ K^0, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 5366 | 1 | 92795 |
| 10220 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to \pi^-\rho^+, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10219 | 1 | 92796 |
| 10221 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 10220 | 1 | 92797 |
| 10222 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^- K^+$ | 10221 | 1 | 92798 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10223 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+ \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 10222 | 1 | 92799 |
| 10224 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \\ \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}\gamma^{F}$ | 10223 | 1 | 92800 |
| 10225 | $J/\psi \to \bar{K}^* K_1^{'0}, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, \pi^0 \to e^+ e^- \gamma^F, K^* \to \pi^- K^+$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 10224 | 1 | 92801 |
| 10226 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \phi \to \pi^+ \rho^-, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 10225 | 1 | 92802 |
| 10227 | $J/\psi \to a_0^+ b_1^-, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 10226 | 1 | 92803 |
| 10228 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^{*+}, K_2^{*0} \to \pi^+ K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 10227 | 1 | 92804 |
| 10229 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to K^0 K^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10228 | 1 | 92805 |
| 10230 | $J/\psi \to \pi^0 K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \pi^0 \pi^0 \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 10229 | 1 | 92806 |
| 10231 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10230 | 1 | 92807 |
| 10232 | $J/\psi \to \rho^+ \rho^+ \rho^- a_0^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_0^- \to \pi^- \eta, \\ \pi^0 \to e^+ e^- \gamma^F \gamma^f, \eta \to \gamma \gamma$ | $e^+e^-\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma\gamma^f$ | 10231 | 1 | 92808 |
| 10233 | $J/\psi \to \phi f_0(2020), \phi \to \pi^+ \rho^-, f_0(2020) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10232 | 1 | 92809 |
| 10234 | $J/\psi \to \omega a_0^0 a_1^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 10233 | 1 | 92810 |
| 10235 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \pi^+ \eta, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, \ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 5367 | 1 | 92811 |
| 10236 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \pi^0 \rho^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 5368 | 1 | 92812 |
| 10237 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10236 | 1 | 92813 |
| 10238 | $J/\psi \to K^- \phi K_0^{*+}, \phi \to K_L^0 K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+K^-$ | 3498 | 1 | 92814 |
| 10239 | $J/\psi ightarrow \pi^0 ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 10238 | 1 | 92815 |
| 10240 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to K^- K^{*+}, \eta \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 10239 | 1 | 92816 |
| 10241 | $J/\psi \rightarrow \pi^0\pi^-a_2^+\eta', a_2^+ \rightarrow \pi^0\pi^+\omega, \eta' \rightarrow \rho^0\gamma, \omega \rightarrow \pi^0\pi^+\pi^-, \rho^0 \rightarrow \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10240 | 1 | 92817 |
| 10242 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, K^0_S \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 10241 | 1 | 92818 |
| 10243 | $J/\psi \to K^*\bar{K}_2^0, K^* \to \pi^-K^+, \bar{K}_2^0 \to \pi^+K_2^{*-}, K_2^{*-} \to \omega K^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10242 | 1 | 92819 |
| 10244 | $J/\psi \to \rho^+ a_0^- a_1^0, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10243 | 1 | 92820 |
| 10245 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 10244 | 1 | 92821 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10246 | $J/\psi \to \pi^0 \pi^- \rho^+ K^{*+} K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10245 | 1 | 92822 |
| 10247 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \Xi^0 \bar{\Xi}^0, \Xi^0 	o \pi^0 \Lambda, \bar{\Xi}^0 	o \pi^0 \bar{\Lambda}, \Lambda 	o \pi^0 n, \ \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^0n\bar{n}\gamma$ | 10246 | 1 | 92823 |
| 10248 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 10247 | 1 | 92824 |
| 10249 | $J/\psi 	o \pi^0 ho^+ K^0 K^-, ho^+ 	o \pi^0 \pi^+, K^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10248 | 1 | 92825 |
| 10250 | $J/\psi \to K^-K^{*+}f_2', K^{*+} \to \pi^+K^0, f_2' \to \eta\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 10249 | 1 | 92826 |
| 10251 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10250 | 1 | 92827 |
| 10252 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 10251 | 1 | 92828 |
| 10253 | $J/\psi \to K^{+}K^{-}f_{2}^{'}, f_{2}^{'} \to \pi^{+}\pi^{-}$ | $\pi^+\pi^-K^+K^-$ | 10252 | 1 | 92829 |
| 10254 | $J/\psi \rightarrow \pi^0\pi^+\pi^-\rho^+\eta b_1^-, \rho^+ \rightarrow \pi^0\pi^+, \eta \rightarrow \gamma\gamma, b_1^- \rightarrow \pi^-\omega, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 10253 | 1 | 92830 |
| 10255 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 10254 | 1 | 92831 |
| 10256 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 10255 | 1 | 92832 |
| 10257 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^0 \eta, K^{*+} \to \pi^+ K^0, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 5370 | 1 | 92833 |
| 10258 | $J/\psi \to \pi^+ \rho^- \eta f_0(1370), \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, f_0(1370) \to K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10257 | 1 | 92834 |
| 10259 | $J/\psi \to K^+ f_0(1370) K_1^-, f_0(1370) \to \pi^0 \pi^0, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 10258 | 1 | 92835 |
| 10260 | $J/\psi \to \phi f_{2}^{'}, \phi \to K^{+}K^{-}, f_{2}^{'} \to K_{S}^{0}K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}\gamma^{f}$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 10259 | 1 | 92836 |
| 10261 | $J/\psi \to \bar{K}^0 K_2^{*+} a_0^-, \bar{K}^0 \to K_S^0, K_2^{*+} \to \rho^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 1861 | 1 | 92837 |
| 10262 | $J/\psi \to K^0 \bar{K}^0 a_1^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10261 | 1 | 92838 |
| 10263 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10262 | 1 | 92839 |
| 10264 | $J/\psi \to K^0 \bar{K}_1^{'0} \gamma, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 10263 | 1 | 92840 |
| 10265 | $J/\psi \to a_2^0 \pi^+ \pi^-, a_2^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 10264 | 1 | 92841 |
| 10266 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10265 | 1 | 92842 |
| 10267 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^+K^0, f_0(1370) \to \rho^+\rho^-, K^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10266 | 1 | 92843 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 10268 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 5372 | 1 | 92844 |
| 10269 | $J/\psi \to a_2^0 K^- K_1^+, a_2^0 \to \pi^- \rho^+, K_1^+ \to \pi^0 K_0^{*+}, \rho^+ \to \pi^0 \pi^+, K_0^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10268 | 1 | 92845 |
| 10270 | $J/\psi \to \pi^0 \rho^0 \pi^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 10269 | 1 | 92846 |
| 10271 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^0 K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 10270 | 1 | 92847 |
| 10272 | $J/\psi 	o \pi^+ \eta n \bar{p}, \eta 	o \gamma \gamma$ | $\pi^+ n \bar{p} \gamma \gamma$ | 10271 | 1 | 92848 |
| 10273 | $J/\psi \to \pi^+ \eta n p, \eta \to \gamma \gamma$ $J/\psi \to \eta K^0 K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, K_2^{*0} \to \rho^+ K^-, K_S^0 \to \pi^+ \pi^-, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10272 | 1 | 92849 |
| 10274 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0 \gamma^f, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 10273 | 1 | 92850 |
| 10275 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to e^+ e^- \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 10274 | 1 | 92851 |
| 10276 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^0 \bar{K}^*, \bar{K}^0 \to K_L^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0K_L^0\pi^+\pi^-$ | 10275 | 1 | 92852 |
| 10277 | $J/\psi \to \pi^- \bar{K}^0 K^+ \phi, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10276 | 1 | 92853 |
| 10278 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^0 \eta, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 5373 | 1 | 92854 |
| 10279 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_1^0 \to \omega K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3500 | 1 | 92855 |
| 10280 | $J/\psi \to \pi^0 \pi^+ \pi^- K^- K^{*+} b_1^0, K^{*+} \to \pi^0 K^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2489 | 1 | 92856 |
| 10281 | $J/\psi \to ho^0 K^0 \bar{K}^* \gamma, ho^0 \to \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 10280 | 1 | 92857 |
| 10282 | $J/\psi \to K^- \eta' K_1^+, \eta' \to \pi^+ \pi^- \eta, K_1^+ \to \pi^+ K_0^0, \eta \to \gamma \gamma, K_0^0 \to \pi^0 K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F\gamma\gamma$ | 10281 | 1 | 92858 |
| 10283 | $J/\psi \to \pi^0\pi^-\eta \bar{K}^0 K_1^{'+}, \eta \to \pi^0\pi^0\pi^0, \bar{K}^0 \to K_L^0, K_1^{'+} \to \pi^+K^*, K^* \to \pi^-K^+$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 10282 | 1 | 92859 |
| 10284 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10283 | 1 | 92860 |
| 10285 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 10284 | 1 | 92861 |
| 10286 | $J/\psi \to K^+ K^{*-} \gamma^F, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma^F\gamma^f$ | 5376 | 1 | 92862 |
| 10287 | $J/\psi 	o \eta K^0 K_2^{*0}, \eta 	o \pi^+ \pi^- \gamma^F, K^0 	o K_S^0, K_2^{*0} 	o \pi^0 ar{K}^0, K_S^0 	o \pi^0 \pi^0, \ ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 10286 | 1 | 92863 |
| 10288 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^- p \bar{\Delta}^{++}, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 10287 | 1 | 92864 |
| 10289 | $J/\psi \to \pi^{-}\pi^{+}\pi^{+}\pi^{-}p\Delta^{++}, \Delta^{++} \to \pi^{-}p$ $J/\psi \to K_{2}^{*-}K_{1}^{+}, K_{2}^{*-} \to \pi^{0}\pi^{0}K^{*-}, K_{1}^{+} \to \pi^{+}K^{*}, K^{*-} \to \pi^{-}\bar{K}^{0}, K^{*} \to \pi^{-}K^{+},$ $\bar{K}^{0} \to K_{L}^{0}$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 10288 | 1 | 92865 |
| 10290 | $J/\psi 	o \pi^+ K^- K_1^0, K_1^0 	o ho^0 K^0, ho^0 	o \pi^+ \pi^- \gamma^F, K^0 	o K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 10289 | 1 | 92866 |
| 10291 | $J/\psi \to \pi^- \rho^+ \eta', \rho^+ \to \pi^0 \pi^+ \gamma^f, \eta' \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 3502 | 1 | 92867 |
| 10292 | $J/\psi \to \pi^0 \pi^0 \pi^- b_1^+, \pi^0 \to e^+ e^- \gamma^F, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10291 | 1 | 92868 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 10293 | $J/\psi \to \pi^0 \pi^+ \rho^+ \rho^- a_2^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10292 | 1 | 92869 |
| 10294 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 10293 | 1 | 92870 |
| 10295 | $J/\psi \to K^*K^-b_1^+, K^* \to \pi^-K^+, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-\gamma^f$ | $\pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma^f$ | 5378 | 1 | 92871 |
| 10296 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \rho^- K^+, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 10295 | 1 | 92872 |
| 10297 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to K^+ K^{*-}, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^-K^+\gamma\gamma$ | 10296 | 1 | 92873 |
| 10298 | $J/\psi 	o K^0 ar{K}_1^{'0}, K^0 	o K_S^0, ar{K}_1^{'0} 	o \pi^0 ar{K}^*, K_S^0 	o \pi^0 \pi^0, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 1443 | 1 | 92874 |
| 10299 | $J/\psi ightarrow \pi^0\pi^0\pi^- ho^+\eta, ho^+ ightarrow \pi^0\pi^+, \eta ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10298 | 1 | 92875 |
| 10300 | $J/\psi \to \bar{K}^0 f_0(1370) K_1^{'0}, \bar{K}^0 \to K_L^0, f_0(1370) \to \pi^+\pi^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10299 | 1 | 92876 |
| 10301 | $J/\psi \to \eta K^0 \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0$ | 10300 | 1 | 92877 |
| 10302 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^-K^{*+}, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0K^+, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10301 | 1 | 92878 |
| 10303 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K^0_S, K^{*+} \to \pi^+ K^0, K^0_S \to \pi^+ \pi^- \gamma^f, K^0 \to K^0_L$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10302 | 1 | 92879 |
| 10304 | $J/\psi \to \rho^+ K^- K_0^0, \rho^+ \to \pi^0 \pi^+, K_0^0 \to \pi^0 K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma^{F}$ | 10303 | 1 | 92880 |
| 10305 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 10304 | 1 | 92881 |
| 10306 | $J/\psi \to ho^0 K^- K_2^{*+}, ho^0 \to \pi^+ \pi^-, K_2^{*+} \to ho^0 K^+, ho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 3504 | 1 | 92882 |
| 10307 | $J/\psi 	o ho^0 \pi^+ \pi^- \pi^- a_2^+ \eta, ho^0 	o \pi^+ \pi^-, a_2^+ 	o ho^0 \pi^+, \eta 	o \gamma \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma\gamma$ | 10306 | 1 | 92883 |
| 10308 | $J/\psi \to K^- K^{*+} \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma^f$ | 10307 | 1 | 92884 |
| 10309 | $J/\psi \to \pi^0 a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^+ \rho^-, a_2^- \to \pi^- \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 1863 | 1 | 92885 |
| 10310 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 10309 | 1 | 92886 |
| 10311 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0K_L^0$ | 5382 | 1 | 92887 |
| 10312 | $J/\psi \to \eta \eta h_1(1380), \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma\gamma$ | 5383 | 1 | 92888 |
| 10313 | $J/\psi 	o K^- p ar{\Lambda}, ar{\Lambda} 	o \pi^0 ar{n}, \pi^0 	o e^+ e^- \gamma^F \gamma^f$ | $e^+e^-K^-ar{n}p\gamma^F\gamma^f$ | 10312 | 1 | 92889 |
| 10314 | $J/\psi \to \rho^- \bar{K}_1^0 K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}_1^0 \to \rho^+ K^-, K_1^+ \to \omega K^+, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5384 | 1 | 92890 |
| 10315 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10314 | 1 | 92891 |
| 10316 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 10315 | 1 | 92892 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 10317 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 10316 | 1 | 92893 |
| 10318 | $J/\psi \to K_0^0 \bar{K}_1^{'0}, K_0^0 \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1444 | 1 | 92894 |
| 10319 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_1^0 \to \rho^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}\gamma^{f}$ | 5386 | 1 | 92895 |
| 10320 | $J/\psi \to \pi^+\pi^-K^+K^{*-}a_1^0, K^{*-} \to \pi^-\bar{K}^0, a_1^0 \to \pi^+\rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 5387 | 1 | 92896 |
| 10321 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10320 | 1 | 92897 |
| 10322 | $J/\psi 	o \pi^0 ho^+ a_2^-, ho^+ 	o \pi^0 \pi^+, a_2^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10321 | 1 | 92898 |
| 10323 | $J/\psi \to \pi^+\pi^-\rho^+\rho^-\gamma^f, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10322 | 1 | 92899 |
| 10324 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 10323 | 1 | 92900 |
| 10325 | $J/\psi \to \eta a_0^0 h_1(1170), \eta \to \gamma \gamma, a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 10324 | 1 | 92901 |
| 10326 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 904 | 1 | 92902 |
| 10327 | $J/\psi 	o \pi^- ho^+ \bar{\Lambda} \Sigma^0, ho^+ 	o \pi^0 \pi^+, \bar{\Lambda} 	o \pi^+ \bar{p}, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^- p$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 10326 | 1 | 92903 |
| 10328 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10327 | 1 | 92904 |
| 10329 | $J/\psi \to \eta f_0(1370) h_1(1170), \eta \to \gamma \gamma, f_0(1370) \to \pi^0 \pi^0, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 10328 | 1 | 92905 |
| 10330 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), \pi^0 \to e^+ e^- \gamma^F, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}$ | 10329 | 1 | 92906 |
| 10331 | $J/\psi \to \pi^0 a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^+ \rho^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 10330 | 1 | 92907 |
| 10332 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-\gamma$ | 5389 | 1 | 92908 |
| 10333 | $J/\psi \to K^- K_0^0 a_1^+, K_0^0 \to \pi^0 K^0, a_1^+ \to \pi^0 \rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 10332 | 1 | 92909 |
| 10334 | $J/\psi \to K^* \bar{K}^* f_0(1370), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10333 | 1 | 92910 |
| 10335 | $J/\psi ightarrow \pi^0\pi^0 ho^0, \pi^0 ightarrow e^+e^-\gamma^F, ho^0 ightarrow \pi^+\pi^-$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 10334 | 1 | 92911 |
| 10336 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ ho^- a_1^0, ho^- 	o \pi^0 \pi^- \gamma^f, a_1^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 5390 | 1 | 92912 |
| 10337 | $J/\psi \to \eta h_1(1380), \eta \to \pi^+\pi^-\gamma^F, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 10336 | 1 | 92913 |
| 10338 | $J/\psi 	o \pi^0 K^0 \bar{K}^0_1, K^0 	o K^0_L, \bar{K}^0_1 	o \pi^+ \pi^- \bar{K}^0, \bar{K}^0 	o K^0_L$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 10337 | 1 | 92914 |
| 10339 | $J/\psi \rightarrow \pi^0 \rho^+ \rho^- \omega, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^- \gamma, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3508 | 1 | 92915 |
| 10340 | $J/\psi \to \pi^+ K^- K^{*+} b_1^-, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_S^0, \omega \to \pi^0 \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma$ | 5392 | 1 | 92916 |
| 10341 | $J/\psi \to \omega \bar{K}^* K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^- \gamma^f, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma^f$ | 10340 | 1 | 92917 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 10342 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 3509 | 1 | 92918 |
| 10343 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5394 | 1 | 92919 |
| 10344 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10343 | 1 | 92920 |
| 10345 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \bar{K}^0\gamma, a_0^- \to \pi^-\eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 10344 | 1 | 92921 |
| 10346 | $J/\psi \to K^*K^-b_1^+\gamma^F, K^* \to \pi^-K^+, b_1^+ \to \pi^+\omega, \omega \to \pi^0\gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma$ | 10345 | 1 | 92922 |
| 10347 | $J/\psi \to \pi^0 f_1(1285)\gamma, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\gamma^{F}\gamma$ | 10346 | 1 | 92923 |
| 10348 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 10347 | 1 | 92924 |
| 10349 | $J/\psi \to \pi^+ \rho^+ \rho^- b_1^-, \rho^+ \to \pi^0 \pi^+ \gamma^f, \rho^- \to \pi^0 \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 5395 | 1 | 92925 |
| 10350 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to \bar{K}^0K^*, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^- K^+$ | 10349 | 1 | 92926 |
| 10351 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10350 | 1 | 92927 |
| 10352 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^+ K^{*-}, \omega \to \pi^0 \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 5396 | 1 | 92928 |
| 10353 | $J/\psi \to \pi^0 \pi^0 h_1(1170), h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 10352 | 1 | 92929 |
| 10354 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \rho^0K^-, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 1446 | 1 | 92930 |
| 10355 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^+\pi^-\bar{K}^*, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10354 | 1 | 92931 |
| 10356 | $J/\psi \to \pi^0 \pi^- f_2(1270) b_1^+, f_2(1270) \to K^+ K^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10355 | 1 | 92932 |
| 10357 | $J/\psi \to \bar{K}^* K^{*+} b_1^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 5398 | 1 | 92933 |
| 10358 | $J/\psi \to \bar{K}^0 K_2^{*+} a_0^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, a_0^- \to \pi^- \eta, K^{*+} \to \pi^+ K^0, \\ \eta \to \gamma \gamma, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10357 | 1 | 92934 |
| 10359 | $J/\psi 	o \Sigma^- \bar{\Sigma}^{*+} \gamma^f, \Sigma^- 	o \pi^- n, \bar{\Sigma}^{*+} 	o \pi^+ \bar{\Lambda}, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}\gamma^f$ | 5399 | 1 | 92935 |
| 10360 | $J/\psi \to K^0 \bar{K}^0 a_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10359 | 1 | 92936 |
| 10361 | $J/\psi \to K^*\bar{K}^0_2, K^* \to \pi^-K^+, \bar{K}^0_2 \to \pi^0K^{*0}_2, K^{*0}_2 \to \pi^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0\pi^-\pi^-K^+K^+$ | 10360 | 1 | 92937 |
| 10362 | $J/\psi \to K_{2}^{*-}K_{1}^{'+}, K_{2}^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{+}K^{*}, \bar{K}^{0} \to K_{L}^{0}, K^{*} \to \pi^{0}K^{0}, K^{0} \to K_{S}^{0}, K^{0}_{S} \to \pi^{+}\pi^{-}$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10361 | 1 | 92938 |
| 10363 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2495 | 1 | 92939 |
| 10364 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \omega \bar{K}^0, K^0 \to K_S^0, \omega \to \pi^0 \gamma, \ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma$ | 491 | 1 | 92940 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 10365 | $J/\psi \to \pi^0 b_1^0, b_1^0 \to \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 10364 | 1 | 92941 |
| 10366 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 3513 | 1 | 92942 |
| 10367 | $J/\psi ightarrow \pi^0 K^0 ar K^0 b_1^0, K^0 ightarrow K_L^0, ar K^0 ightarrow K_L^0, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\gamma$ | 10366 | 1 | 92943 |
| 10368 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \omega K^0, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10367 | 1 | 92944 |
| 10369 | $J/\psi \to p\bar{p}f_0(1370), f_0(1370) \to \gamma\gamma$ | $par{p}\gamma\gamma$ | 10368 | 1 | 92945 |
| 10370 | $J/\psi \to \rho^0 \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10369 | 1 | 92946 |
| 10371 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^0 \eta, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 10370 | 1 | 92947 |
| 10372 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10371 | 1 | 92948 |
| 10373 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5403 | 1 | 92949 |
| 10374 | $J/\psi \to a_0^0 a_0^+ b_1^-, a_0^0 \to \pi^0 \eta, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \gamma \gamma, \ \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 10373 | 1 | 92950 |
| 10375 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+ \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10374 | 1 | 92951 |
| 10376 | $J/\psi \to \pi^+\pi^-K^0K^-a_1^+, K^0 \to K_S^0, a_1^+ \to \rho^0\pi^+, K_S^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 10375 | 1 | 92952 |
| 10377 | $J/\psi \to \rho^0 f_2(1270), \rho^0 \to \pi^+\pi^-, f_2(1270) \to K^+K^-$ | $\pi^+\pi^-K^+K^-$ | 10376 | 1 | 92953 |
| 10378 | $J/\psi \to \pi^- p\bar{p}a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-par{p}$ | 3514 | 1 | 92954 |
| 10379 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 5405 | 1 | 92955 |
| 10380 | $J/\psi \to \pi^- \rho^+ a_1^0, \rho^+ \to \pi^0 \pi^+, a_1^0 \to \pi^- \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10379 | 1 | 92956 |
| 10381 | $J/\psi \to \bar{K}^0 p \bar{\Sigma}^{*-}, \bar{K}^0 \to K_L^0, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $K_L^0\pi^+\pi^-p\bar{p}$ | 3515 | 1 | 92957 |
| 10382 | $J/\psi \to \bar{K}^0 f_0(1370) K_1^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \pi^+\pi^-, K_1^0 \to \rho^-K^+, K_S^0 \to \pi^0\pi^0, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10381 | 1 | 92958 |
| 10383 | $J/\psi \rightarrow \pi^+\pi^-\omega b_1^0, \omega \rightarrow \pi^0\pi^+\pi^-, b_1^0 \rightarrow \pi^0\omega, \pi^0 \rightarrow e^+e^-\gamma^F, \omega \rightarrow \pi^0\pi^+\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 5407 | 1 | 92959 |
| 10384 | $J/\psi \to \phi f_0(980), \phi \to K_L^0 K_S^0, f_0(980) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10383 | 1 | 92960 |
| 10385 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 10384 | 1 | 92961 |
| 10386 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 10385 | 1 | 92962 |
| 10387 | $J/\psi \to K_0^{*+} K_0^{*-}, K_0^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 10386 | 1 | 92963 |
| 10388 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 10387 | 1 | 92964 |
| 10389 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3516 | 1 | 92965 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 10390 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 10389 | 1 | 92966 |
| 10391 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^0 \eta, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 10390 | 1 | 92967 |
| 10392 | $J/\psi \to \pi^0 K^0 \bar{K}^0 a^0_0, K^0 \to K^0_L, \bar{K}^0 \to K^0_L, a^0_0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 10391 | 1 | 92968 |
| 10393 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 5409 | 1 | 92969 |
| 10394 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^- \gamma^f, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 5410 | 1 | 92970 |
| 10395 | $J/\psi \to \eta \bar{K}^0 K^* h_1(1170), \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10394 | 1 | 92971 |
| 10396 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^+ \pi^- K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10395 | 1 | 92972 |
| 10397 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5411 | 1 | 92973 |
| 10398 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 10397 | 1 | 92974 |
| 10399 | $J/\psi \to \pi^+ \Delta^- \bar{\Delta}^0, \Delta^- \to \pi^- n \gamma^f, \bar{\Delta}^0 \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-nar p\gamma^f$ | 1140 | 1 | 92975 |
| 10400 | $J/\psi \to K^+ K_1^-, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 5413 | 1 | 92976 |
| 10401 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \omega\omega, h_1(1380) \to K^+K^{*-}, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3518 | 1 | 92977 |
| 10402 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_1^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K_L^{*0} \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 10401 | 1 | 92978 |
| 10403 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10402 | 1 | 92979 |
| 10404 | $J/\psi \to \rho^- a_0^+ f_1(1285), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_1(1285) \to \pi^- \bar{K}^0 K^+, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma^F$ | 10403 | 1 | 92980 |
| 10405 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10404 | 1 | 92981 |
| 10406 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^+ \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 10405 | 1 | 92982 |
| 10407 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10406 | 1 | 92983 |
| 10408 | $J/\psi \to \pi^+ \omega K_S^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 10407 | 1 | 92984 |
| 10409 | $J/\psi ightarrow \pi^0\pi^0\pi^- ho^+, \pi^0 ightarrow e^+e^-\gamma^F\gamma^f, ho^+ ightarrow \pi^0\pi^+$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 10408 | 1 | 92985 |
| 10410 | $J/\psi ightarrow \eta K^+K_1^-, \eta ightarrow \gamma \gamma, K_1^- ightarrow \pi^-ar{K}^*, ar{K}^* ightarrow \pi^0ar{K}^0, ar{K}^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 10409 | 1 | 92986 |
| 10411 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \rho^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 10410 | 1 | 92987 |
| 10412 | $J/\psi ightarrow \pi^0 \pi^0 b_1^0, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\gamma$ | 10411 | 1 | 92988 |
| 10413 | $J/\psi \to ho^0 \omega \eta' \gamma, ho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma$ | 10412 | 1 | 92989 |
| 10414 | $J/\psi \to \eta K^0 \bar{K}^0, \eta \to e^+ e^- \gamma^F \gamma^f, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $e^+e^-K_L^0\pi^+\pi^-\gamma^F\gamma^f$ | 10413 | 1 | 92990 |
| 10415 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi h_1(1380), \phi \to K^+K^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^-\pi^-K^+K^+K^-\gamma$ | 10414 | 1 | 92991 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 10416 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \omega K^+, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 10415 | 1 | 92992 |
| 10417 | $J/\psi \to \pi^0 f_2(1270) K^+ K^{*-}, f_2(1270) \to K_S^0 K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 3519 | 1 | 92993 |
| 10418 | $J/\psi \to \pi^0 \rho^0 \pi^- \omega b_1^+, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 10417 | 1 | 92994 |
| 10419 | $J/\psi \to \rho^- a_0^+ f_1(1285), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_1(1285) \to \rho^0 \gamma, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10418 | 1 | 92995 |
| 10420 | $J/\psi ightarrow \pi^- \omega a_0^+, \omega ightarrow \pi^0 \gamma, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^0 \pi^0 \pi^0, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 10419 | 1 | 92996 |
| 10421 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \omega K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10420 | 1 | 92997 |
| 10422 | $J/\psi ightarrow \eta \eta \phi, \eta ightarrow \gamma \gamma, \eta ightarrow \pi^0 \pi^+ \pi^-, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 10421 | 1 | 92998 |
| 10423 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_1^+, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 5416 | 1 | 92999 |
| 10424 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \rho^+\rho^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10423 | 1 | 93000 |
| 10425 | $J/\psi 	o ho^0 a_2^0 \eta, ho^0 	o \pi^+ \pi^-, a_2^0 	o \pi^+ ho^-, \eta 	o \pi^+ \pi^- \gamma^F, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 10424 | 1 | 93001 |
| 10426 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^F$ | 10425 | 1 | 93002 |
| 10427 | $J/\psi \to \pi^0 \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10426 | 1 | 93003 |
| 10428 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 222 | 1 | 93004 |
| 10429 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 10428 | 1 | 93005 |
| 10430 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \rho^0 \bar{K}^0, K^0 \to K^0_S, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 10429 | 1 | 93006 |
| 10431 | $J/\psi \to \phi f_0(2020), \phi \to K_L^0 K_S^0, f_0(2020) \to \pi^+ \pi^+ \pi^- \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5418 | 1 | 93007 |
| 10432 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^{'+}, \bar{K}_1^0 \to \omega \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_L^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 10431 | 1 | 93008 |
| 10433 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^* K^+ a_0^-, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^- \to \pi^- \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma$ | 10432 | 1 | 93009 |
| 10434 | $J/\psi 	o \eta b_1^0, \eta 	o \gamma \gamma, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 5419 | 1 | 93010 |
| 10435 | $J/\psi \to \pi^-\pi^-\rho^+\rho^+a_1^0, \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+, a_1^0 \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10434 | 1 | 93011 |
| 10436 | $J/\psi ightarrow \pi^0 K^- K^{*+} \eta', K^{*+} ightarrow \pi^0 K^+, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 10435 | 1 | 93012 |
| 10437 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 5420 | 1 | 93013 |
| 10438 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10437 | 1 | 93014 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 10439 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 10438 | 1 | 93015 |
| 10440 | $J/\psi \to K^*K^-a_1^+, K^* \to \pi^0K^0, a_1^+ \to \rho^0\pi^+, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 10439 | 1 | 93016 |
| 10441 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^0 \pi^+ \omega, a_0^0 \to K_S^0 K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10440 | 1 | 93017 |
| 10442 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma^f$ | 10441 | 1 | 93018 |
| 10443 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 10442 | 1 | 93019 |
| 10444 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \pi^+ \pi^- \eta, \phi \to K_L^0 K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10443 | 1 | 93020 |
| 10445 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to K^+K^{*-}, \eta \to \gamma\gamma, \eta \to \gamma\gamma, K^{*-} \to \pi^0K^-$ | $\pi^0 K^+ K^- \gamma \gamma \gamma \gamma$ | 10444 | 1 | 93021 |
| 10446 | $J/\psi \to \pi^0 \Sigma^- \bar{\Sigma}^{*+}, \Sigma^- \to \pi^- n, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 10445 | 1 | 93022 |
| 10447 | $J/\psi \to \pi^0 \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10446 | 1 | 93023 |
| 10448 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- K_2^{*0} K^{*+}, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0 K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 10447 | 1 | 93024 |
| 10449 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 10448 | 1 | 93025 |
| 10450 | $J/\psi \to \pi^+\pi^-\Sigma^+\bar{\Sigma}^-, \Sigma^+ \to \pi^+n, \bar{\Sigma}^- \to \pi^-\bar{n}$ | $\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 10449 | 1 | 93026 |
| 10451 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 10450 | 1 | 93027 |
| 10452 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 10451 | 1 | 93028 |
| 10453 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 3521 | 1 | 93029 |
| 10454 | $J/\psi \to \pi^0 \pi^0 \eta h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 10453 | 1 | 93030 |
| 10455 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to K^0 K^-, \eta \to \gamma \gamma, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 10454 | 1 | 93031 |
| 10456 | $J/\psi \to a_2^- K^+ \bar{K}_1^0, a_2^- \to \pi^0 \rho^-, \bar{K}_1^0 \to \rho^+ K^-, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10455 | 1 | 93032 |
| 10457 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+ \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 1870 | 1 | 93033 |
| 10458 | $J/\psi 	o \pi^0\pi^0 ho^0a_2^0, ho^0 	o \pi^+\pi^-, a_2^0 	o K^+K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5423 | 1 | 93034 |
| 10459 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \phi, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+, \phi \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 10458 | 1 | 93035 |
| 10460 | $J/\psi \to K^0 \bar{K}^* f_2', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_2' \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-$ | 5424 | 1 | 93036 |
| 10461 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^0K^-, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10460 | 1 | 93037 |
| 10462 | $J/\psi 	o a_2^+ \omega a_0^-, a_2^+ 	o ho^0 \pi^+, \omega 	o \pi^0 \pi^+ \pi^-, a_0^- 	o \pi^- \eta, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1142 | 1 | 93038 |
| 10463 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 10462 | 1 | 93039 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 10464 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 10463 | 1 | 93040 |
| 10465 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10464 | 1 | 93041 |
| 10466 | $J/\psi \to K^0 \bar{K}^0 f_2^{'}, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_2^{'} \to K_L^0 K_L^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10465 | 1 | 93042 |
| 10467 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 5426 | 1 | 93043 |
| 10468 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 10467 | 1 | 93044 |
| 10469 | $J/\psi \to \pi^0 a_2^+ K^* K^{*-}, a_2^+ \to \rho^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 10468 | 1 | 93045 |
| 10470 | $J/\psi \to \pi^0 K^+ K^{*-} \gamma^F, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma^F$ | 10469 | 1 | 93046 |
| 10471 | $J/\psi \to \bar{K}^*K^+b_1^-, \bar{K}^* \to \pi^+K^-, b_1^- \to \pi^-\omega, \omega \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 5427 | 1 | 93047 |
| 10472 | $J/\psi \to K^- K_2^{*+} \eta', K_2^{*+} \to \pi^0 \pi^+ K^*, \eta' \to \pi^+ \pi^- \eta, K^* \to \pi^- K^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 10471 | 1 | 93048 |
| 10473 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma^f$ | 10472 | 1 | 93049 |
| 10474 | $J/\psi \to \pi^0 \eta' \gamma, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3524 | 1 | 93050 |
| 10475 | $J/\psi 	o a_2^0 K^0 \bar{K}^*, a_2^0 	o K^+ K^-, K^0 	o K_L^0, \bar{K}^* 	o \pi^+ K^-$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 5429 | 1 | 93051 |
| 10476 | $J/\psi 	o \omega n ar{n}, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-nar{n}$ | 10475 | 1 | 93052 |
| 10477 | $J/\psi \to \phi f_1(1420), \phi \to \pi^+ \rho^-, f_1(1420) \to \pi^- \bar{K}^0 K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 10476 | 1 | 93053 |
| 10478 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10477 | 1 | 93054 |
| 10479 | $J/\psi \to K^+ f_0(1370) K_1^-, f_0(1370) \to \pi^+ \pi^-, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10478 | 1 | 93055 |
| 10480 | $J/\psi \to \pi^0 \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3525 | 1 | 93056 |
| 10481 | $J/\psi 	o \pi^0 \pi^+ K_2^{*0} K^-, K_2^{*0} 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3526 | 1 | 93057 |
| 10482 | $J/\psi \to K^+ \eta' \bar{K}_1^{'-}, \eta' \to \pi^0 \pi^0 \eta, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10481 | 1 | 93058 |
| 10483 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \eta \eta, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 10482 | 1 | 93059 |
| 10484 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^0 \pi^0, \phi \to K_L^0 K_S^0, f_0(980) \to K_L^0 K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_LK^0_LK^0_L$ | 10483 | 1 | 93060 |
| 10485 | $J/\psi 	o K^0 ar{K}^* f_2^{'}, K^0 	o K_L^0, ar{K}^* 	o \pi^+ K^-, f_2^{'} 	o \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 10484 | 1 | 93061 |
| 10486 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^- \bar{K}^* \gamma^f, \bar{K}^* \to \pi^+ K^-$ | $\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{f}$ | 10485 | 1 | 93062 |
| 10487 | $J/\psi \to \pi^0 K_1^0 \bar{K}_1^{'0}, K_1^0 \to \pi^0 K_0^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_0^0 \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10486 | 1 | 93063 |
| 10488 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^0, K_0^0 \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 10487 | 1 | 93064 |
| 10489 | $J/\psi 	o ar{K}^0 K^* a_0^0, ar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, a_0^0 	o \pi^0 \eta, K_S^0 	o \pi^0 \pi^0, K^0 	o K_S^0, \eta 	o \pi^+ \pi^- \gamma^F, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 5432 | 1 | 93065 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10490 | $J/\psi \to a_0^0 b_1^0, a_0^0 \to K^+ K^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10489 | 1 | 93066 |
| 10491 | $J/\psi \to \omega f_2(1270) f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10490 | 1 | 93067 |
| 10492 | $J/\psi \to \pi^0 \eta K^0 \bar{K}^* a_0^0, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10491 | 1 | 93068 |
| 10493 | $J/\psi \rightarrow \pi^+ \rho^- \omega \omega, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 10492 | 1 | 93069 |
| 10494 | $J/\psi \to \pi^0 \pi^- a_1^+, \pi^0 \to e^+ e^- \gamma^F, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 10493 | 1 | 93070 |
| 10495 | $J/\psi \to a_2^0 K^+ K_1^-, a_2^0 \to \pi^+ \rho^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10494 | 1 | 93071 |
| 10496 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 10495 | 1 | 93072 |
| 10497 | $J/\psi \to \pi^0 f_2(1270)K^-K^{*+}, f_2(1270) \to \pi^+\pi^-, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10496 | 1 | 93073 |
| 10498 | $J/\psi \to \pi^0\pi^0 ho^0 ho^0\pi^+ ho^-, ho^0 \to \pi^+\pi^-, ho^0 \to \pi^+\pi^-, ho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10497 | 1 | 93074 |
| 10499 | $J/\psi \to \rho^- a_2^+ \eta', \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10498 | 1 | 93075 |
| 10500 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K_1^0 \to \rho^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10499 | 1 | 93076 |
| 10501 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 10500 | 1 | 93077 |
| 10502 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3527 | 1 | 93078 |
| 10503 | $J/\psi \to K_1^0 \bar{K}_1^0, K_1^0 \to \rho^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 5434 | 1 | 93079 |
| 10504 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, \bar{K}^0 \to K_S^0, $ $\rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10503 | 1 | 93080 |
| 10505 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^0 f_1(1285), f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 10504 | 1 | 93081 |
| 10506 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}_1^0 \to \rho^+ K^-, K^{*+} \to \pi^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 10505 | 1 | 93082 |
| 10507 | $J/\psi \to \pi^0 \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10506 | 1 | 93083 |
| 10508 | $J/\psi ightarrow K^0 ar{K}^0_1 \gamma, K^0 ightarrow K^0_S, ar{K}^0_1 ightarrow \omega ar{K}^0, K^0_S ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma, \ ar{K}^0 ightarrow K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 10507 | 1 | 93084 |
| 10509 | $J/\psi \to \bar{K}^0 K^+ a_0^- \gamma^F, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^-\pi^-K^+\gamma^F\gamma\gamma$ | 3528 | 1 | 93085 |
| 10510 | $J/\psi \to \pi^+ K^* K^- \gamma^F, K^* \to \pi^0 K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^+e^-K^0_L\pi^+K^-\gamma^F\gamma^F$ | 10509 | 1 | 93086 |
| 10511 | $J/\psi \to f_2(1270) h_1(1170), f_2(1270) \to \pi^0 \pi^0 \pi^0 \pi^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 10510 | 1 | 93087 |
| 10512 | $J/\psi \to \pi^0 \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 10511 | 1 | 93088 |
| 10513 | $J/\psi 	o \omega K^+K^-, \omega 	o \pi^0\pi^+\pi^-, \pi^0 	o e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 10512 | 1 | 93089 |
| 10514 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 10513 | 1 | 93090 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10515 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10514 | 1 | 93091 |
| 10516 | $J/\psi \to \pi^0 \pi^+ \pi^- \rho^- \eta a_1^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 10515 | 1 | 93092 |
| 10517 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 10516 | 1 | 93093 |
| 10518 | $J/\psi \to \pi^- \omega \bar{p} \Delta^{++}, \omega \to \pi^0 \pi^+ \pi^-, \Delta^{++} \to \pi^+ p$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par{p}$ | 10517 | 1 | 93094 |
| 10519 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \pi^+ K^{*-}, K_1^{'0} \to \pi^- K^{*+}, K^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^0 K^+, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3529 | 1 | 93095 |
| 10520 | $J/\psi \to K^0 \bar{K}^0 h_1(1380) \gamma, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 10519 | 1 | 93096 |
| 10521 | $J/\psi 	o a_2^0 \pi^- a_2^+, a_2^0 	o \pi^+ ho^-, a_2^+ 	o \pi^+ \eta, ho^- 	o \pi^0 \pi^-, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10520 | 1 | 93097 |
| 10522 | $J/\psi \rightarrow \rho^0\pi^-\rho^+b_1^0, \rho^0 \rightarrow \pi^+\pi^-, \rho^+ \rightarrow \pi^+\gamma, b_1^0 \rightarrow \pi^0\omega, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10521 | 1 | 93098 |
| 10523 | $J/\psi ightarrow \pi^+ ho^- \eta \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \gamma \gamma, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 10522 | 1 | 93099 |
| 10524 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^- \bar{K}^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 5437 | 1 | 93100 |
| 10525 | $J/\psi ightarrow a_2^0 \eta \gamma, a_2^0 ightarrow \pi^- ho^+, \eta ightarrow \pi^0 \pi^+ \pi^-, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10524 | 1 | 93101 |
| 10526 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 10525 | 1 | 93102 |
| 10527 | $J/\psi \to K^{*+}K^{*-}h_1(1380), K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K^0_S \to \pi^+ \pi^-, K^0 \to K_S^0, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10526 | 1 | 93103 |
| 10528 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^- \gamma^f, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10527 | 1 | 93104 |
| 10529 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K_0^{*-} \gamma^f, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 10528 | 1 | 93105 |
| 10530 | $J/\psi \to \phi f_1(1285), \phi \to K_L^0 K_S^0, f_1(1285) \to \pi^0 \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10529 | 1 | 93106 |
| 10531 | $J/\psi \to \rho^0 \bar{K}^0 K_0^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5438 | 1 | 93107 |
| 10532 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 5439 | 1 | 93108 |
| 10533 | $J/\psi \to \pi^0 \eta a_0^+ b_1^-, \eta \to \gamma \gamma, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^0 \pi^0, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10532 | 1 | 93109 |
| 10534 | $J/\psi \to \pi^0 \pi^0 \pi^0 K^+ K_1^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 1451 | 1 | 93110 |
| 10535 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to K^+K^-, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 10534 | 1 | 93111 |
| 10536 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \pi^0 \rho^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10535 | 1 | 93112 |
| 10537 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \rho^0 K^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10536 | 1 | 93113 |
| 10538 | $J/\psi \to \omega K^- K^{*+}, \omega \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 5441 | 1 | 93114 |
| 10539 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma^f$ | 10538 | 1 | 93115 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 10540 | $J/\psi \to K^+ \phi K_1^-, \phi \to K^+ K^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^- \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 10539 | 1 | 93116 |
| 10541 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 3531 | 1 | 93117 |
| 10542 | $J/\psi \to \rho^0 \rho^+ \rho^- a_0^0, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta,$ $\pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 10541 | 1 | 93118 |
| 10543 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 10542 | 1 | 93119 |
| 10544 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3532 | 1 | 93120 |
| 10545 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 10544 | 1 | 93121 |
| 10546 | $J/\psi \to K^{+}a_{0}^{0}K_{1}^{-}, a_{0}^{0} \to \pi^{0}\eta, K_{1}^{-} \to \rho^{-}\bar{K}^{0}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 10545 | 1 | 93122 |
| 10547 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+ \gamma^f, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 3533 | 1 | 93123 |
| 10548 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to K^- K^{*+}, \eta \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 10547 | 1 | 93124 |
| 10549 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10548 | 1 | 93125 |
| 10550 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^0 K^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^f$ | 10549 | 1 | 93126 |
| 10551 | $J/\psi 	o \pi^0 K^0 ar{K}^0 b_1^0, K^0 	o K_S^0, ar{K}^0 	o K_L^0, b_1^0 	o \pi^0 \omega, K_S^0 	o \pi^0 \pi^0, \ \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10550 | 1 | 93127 |
| 10552 | $J/\psi \to \rho^- a_2^+ a_0^0, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10551 | 1 | 93128 |
| 10553 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \rho^0 K^-, K_1^+ \to \pi^+ K^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10552 | 1 | 93129 |
| 10554 | $J/\psi \to \pi^-\pi^-\rho^+\rho^+a_1^0, \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10553 | 1 | 93130 |
| 10555 | $J/\psi \to \pi^- a_2^+, a_2^+ \to \pi^0 \pi^+ \omega \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1873 | 1 | 93131 |
| 10556 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, h_1(1170) \to \pi^+\rho^-, K^0 \to K_S^0, $ $\rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1143 | 1 | 93132 |
| 10557 | $J/\psi \to K^0 \bar{K}^0 f_2', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_2' \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10556 | 1 | 93133 |
| 10558 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 1875 | 1 | 93134 |
| 10559 | $J/\psi 	o \pi^0\pi^-\pi^- ho^+ar{n}p, ho^+	o \pi^0\pi^+, \pi^0	o e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma^F\gamma^f$ | 10558 | 1 | 93135 |
| 10560 | $J/\psi 	o a_2^0 ar{K}^0 K^*, a_2^0 	o \pi^+ ho^-, ar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, ho^- 	o \pi^0 \pi^-, K_S^0 	o \pi^0 \pi^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10559 | 1 | 93136 |
| 10561 | $J/\psi 	o \pi^- \eta \bar{\Delta}^- n, \eta 	o \gamma \gamma, \bar{\Delta}^- 	o \pi^+ \bar{n}$ | $\pi^+\pi^-nar{n}\gamma\gamma$ | 10560 | 1 | 93137 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10562 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to K_S^0 K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 5448 | 1 | 93138 |
| 10563 | $J/\psi ightarrow \pi^0 ho^0 ho^0 \omega, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10562 | 1 | 93139 |
| 10564 | $J/\psi \to \pi^+ K^- K_1^0 \gamma^F, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^F$ | 1876 | 1 | 93140 |
| 10565 | $J/\psi \rightarrow \pi^{+}\rho^{-}\eta\eta', \rho^{-} \rightarrow \pi^{0}\pi^{-}, \eta \rightarrow \gamma\gamma, \eta' \rightarrow \rho^{0}\gamma, \rho^{0} \rightarrow \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 10564 | 1 | 93141 |
| 10566 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^+ \rho^- \gamma^f, a_2^- \to \rho^0 \pi^-, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 10565 | 1 | 93142 |
| 10567 | $J/\psi \to \eta \eta h_1(1170), \eta \to \gamma \gamma, \eta \to \gamma \gamma, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 5450 | 1 | 93143 |
| 10568 | $J/\psi \to \eta K^{*+} K_0^{*-}, \eta \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 10567 | 1 | 93144 |
| 10569 | $J/\psi \to \pi^0 \rho^0 \rho^0 \omega, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 10568 | 1 | 93145 |
| 10570 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^+ a_1^-, \bar{K}^0 \to K_L^0, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 5451 | 1 | 93146 |
| 10571 | $J/\psi \to \rho^- a_0^0 a_0^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 10570 | 1 | 93147 |
| 10572 | $J/\psi \to \pi^0 \omega a_0^0 f_0(1370), \omega \to \pi^0 \gamma, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 10571 | 1 | 93148 |
| 10573 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^+ \pi^- \eta \gamma^f, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 10572 | 1 | 93149 |
| 10574 | $J/\psi \to K^- \eta' K_0^{*+}, \eta' \to \pi^0 \pi^0 \eta, K_0^{*+} \to \pi^+ K^0, \eta \to \gamma \gamma, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma$ | 10573 | 1 | 93150 |
| 10575 | $J/\psi 	o \pi^+ ho^- p \bar{\Delta}^+, ho^- 	o \pi^0 \pi^-, \bar{\Delta}^+ 	o \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 5452 | 1 | 93151 |
| 10576 | $J/\psi \to \pi^0 \pi^0 \pi^+ \rho^- \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2506 | 1 | 93152 |
| 10577 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^+ K^* \gamma^f, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | 10576 | 1 | 93153 |
| 10578 | $J/\psi \to K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5454 | 1 | 93154 |
| 10579 | $J/\psi ightarrow \pi^- ar K^0 K^+ \eta', ar K^0 ightarrow K^0_S, \eta' ightarrow ho^0 \gamma, K^0_S ightarrow \pi^0 \pi^0, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 5455 | 1 | 93155 |
| 10580 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 1877 | 1 | 93156 |
| 10581 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2508 | 1 | 93157 |
| 10582 | $J/\psi \to K_0^0 \bar{K}_1^{'0}, K_0^0 \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 10581 | 1 | 93158 |
| 10583 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10582 | 1 | 93159 |
| 10584 | $J/\psi \to \rho^- \omega \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 10583 | 1 | 93160 |
| 10585 | $J/\psi \to \eta \eta' h_1(1170), \eta \to \gamma \gamma, \eta' \to \pi^0 \pi^0 \eta, h_1(1170) \to \pi^+ \rho^- \gamma^f, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma\gamma^{f}$ | 10584 | 1 | 93161 |
| 10586 | $J/\psi \to \pi^0 \omega a_0^0 f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 10585 | 1 | 93162 |
| 10587 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^0\pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 1878 | 1 | 93163 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 10588 | $J/\psi 	o \pi^0 \pi^- \bar{K}^* K^+, \bar{K}^* 	o \pi^0 \bar{K}^0, \bar{K}^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 10587 | 1 | 93164 |
| 10589 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 \pi^- K^{*+}, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $e^+e^-\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma^f$ | 10588 | 1 | 93165 |
| 10590 | $J/\psi \to \pi^0 \rho^+ b_1^- h_1(1170), \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5459 | 1 | 93166 |
| 10591 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 5460 | 1 | 93167 |
| 10592 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10591 | 1 | 93168 |
| 10593 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^+ K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 10592 | 1 | 93169 |
| 10594 | $J/\psi \to \rho^- a_2^+ f_1(1285), \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, f_1(1285) \to \pi^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 3542 | 1 | 93170 |
| 10595 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} b_1^0, K^{*+} \to \pi^0 K^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 5462 | 1 | 93171 |
| 10596 | $J/\psi 	o \omega \bar K^0 K^*, \omega 	o \pi^0 \pi^+ \pi^-, \bar K^0 	o K_L^0, K^* 	o \pi^- K^+ \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 10595 | 1 | 93172 |
| 10597 | $J/\psi ightarrow \phi f_{2}^{'}, \phi ightarrow K^{+}K^{-}, f_{2}^{'} ightarrow \eta \eta, \eta ightarrow \gamma \gamma, \eta ightarrow \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 10596 | 1 | 93173 |
| 10598 | $J/\psi \to \eta \omega K^{*+}K^{*-}, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 10597 | 1 | 93174 |
| 10599 | $J/\psi \to K^-K^{*+}f_1(1420), K^{*+} \to \pi^+K^0, f_1(1420) \to \pi^-\bar{K}^0K^+, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{f}$ | 10598 | 1 | 93175 |
| 10600 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+ \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 10599 | 1 | 93176 |
| 10601 | $J/\psi \to \pi^- \bar{K}^0 K_1^+ \gamma^F, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 10600 | 1 | 93177 |
| 10602 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^+ a_0^- \gamma^f, K_S^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma\gamma^f$ | 5463 | 1 | 93178 |
| 10603 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \omega\omega, h_1(1380) \to \bar{K}^0K^*, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, K^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10602 | 1 | 93179 |
| 10604 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10603 | 1 | 93180 |
| 10605 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^+K^*, K^* \to \pi^0K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 10604 | 1 | 93181 |
| 10606 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 10605 | 1 | 93182 |
| 10607 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10606 | 1 | 93183 |
| 10608 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta f_0(1710), \eta \to \gamma \gamma, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\gamma\gamma\gamma$ | 10607 | 1 | 93184 |
| 10609 | $J/\psi \to \pi^- \rho^+ \rho^- a_2^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10608 | 1 | 93185 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10610 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10609 | 1 | 93186 |
| 10611 | $J/\psi \to K^{*+} \bar{K}_1^{'-} \gamma, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10610 | 1 | 93187 |
| 10612 | $J/\psi \to a_2^0 K^- K_1^+, a_2^0 \to \pi^+ \pi^- \omega, K_1^+ \to \rho^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 10611 | 1 | 93188 |
| 10613 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \gamma^f, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 10612 | 1 | 93189 |
| 10614 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_L^0, K^* \to K^0 \gamma, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 10613 | 1 | 93190 |
| 10615 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to K^+ K^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10614 | 1 | 93191 |
| 10616 | $J/\psi \to K^0 \bar{K}^0_1 \gamma, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-K_L^0\pi^+K^-\gamma^F\gamma$ | 5464 | 1 | 93192 |
| 10617 | $J/\psi \to \rho^+ K^- K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K_1^{'0} \to \pi^0 K^*, \pi^0 \to e^+ e^- \gamma^F, K^* \to \pi^- K^+$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 3543 | 1 | 93193 |
| 10618 | $J/\psi \to \pi^+ K_2^{*-} K_0^0, K_2^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 10617 | 1 | 93194 |
| 10619 | $J/\psi ightarrow \pi^0\pi^0\pi^0\omega, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^0\gamma$ | 10618 | 1 | 93195 |
| 10620 | $J/\psi \to \pi^- a_1^+ f_1(1285), a_1^+ \to \pi^0 \rho^+, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 10619 | 1 | 93196 |
| 10621 | $J/\psi 	o \omega \eta', \omega 	o \pi^+\pi^-\gamma^F, \eta' 	o \omega \gamma, \omega 	o \pi^0\gamma$ | $\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 10620 | 1 | 93197 |
| 10622 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 5466 | 1 | 93198 |
| 10623 | $J/\psi \to \rho^+ \rho^- \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 2510 | 1 | 93199 |
| 10624 | $J/\psi \to \bar{K}^0 \bar{K}^0 K^* K^*, \bar{K}^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^* \to \pi^- K^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^- K^+$ | 5468 | 1 | 93200 |
| 10625 | $J/\psi \to \pi^- f_2(1270) a_1^+, f_2(1270) \to \pi^+ \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10624 | 1 | 93201 |
| 10626 | $J/\psi ightarrow \pi^+\pi^-\eta K^+K^-, \eta ightarrow \pi^0\pi^+\pi^-, \pi^0 ightarrow e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 10625 | 1 | 93202 |
| 10627 | $J/\psi \to \pi^0 \rho^+ \omega K^0 K^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 2511 | 1 | 93203 |
| 10628 | $J/\psi \to K^0 \bar{K}_1^0 a_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10627 | 1 | 93204 |
| 10629 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 410 | 1 | 93205 |
| 10630 | $J/\psi \to K^+ K^{*-} \gamma^F \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma^F\gamma^f$ | 10629 | 1 | 93206 |
| 10631 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 1145 | 1 | 93207 |
| 10632 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 10631 | 1 | 93208 |
| 10633 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10632 | 1 | 93209 |
| 10634 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-\gamma$ | 10633 | 1 | 93210 |
| 10635 | $J/\psi \to \omega f_2(1270) f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 10634 | 1 | 93211 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 10636 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10635 | 1 | 93212 |
| 10637 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} b_1^0, K^{*+} \to \pi^+ K^0, b_1^0 \to \pi^0 \omega, K^0 \to K_S^0, \ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 10636 | 1 | 93213 |
| 10638 | $J/\psi \rightarrow \rho^0\pi^-\omega b_1^+, \rho^0 \rightarrow \pi^+\pi^-, \omega \rightarrow \pi^0\gamma, b_1^+ \rightarrow \pi^+\omega, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 5472 | 1 | 93214 |
| 10639 | $J/\psi \to a_2^0 \pi^- \rho^+, a_2^0 \to \pi^+ \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10638 | 1 | 93215 |
| 10640 | $J/\psi \to \bar{K}^0 a_0^- K_1^{'+}, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^{'+} \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5473 | 1 | 93216 |
| 10641 | $J/\psi \to \pi^0 \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10640 | 1 | 93217 |
| 10642 | $J/\psi \to \pi^+ K^* K^- \phi, K^* \to \pi^- K^+, \phi \to K^0_L K^0_S, K^0_S \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 166 | 1 | 93218 |
| 10643 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10642 | 1 | 93219 |
| 10644 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^+ K^{*-}, K_2^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10643 | 1 | 93220 |
| 10645 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0\bar{K}^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10644 | 1 | 93221 |
| 10646 | $J/\psi \to \Delta^{++}\bar{\Delta}^{++}, \Delta^{++} \to \pi^+ p, \bar{\Delta}^{++} \to \pi^- \bar{p}\gamma^f$ | $\pi^+\pi^-par p\gamma^f$ | 10645 | 1 | 93222 |
| 10647 | $J/\psi 	o \pi^0 ar K^0 n ar \Lambda, ar K^0 	o K_L^0, ar \Lambda 	o \pi^+ ar p$ | $\pi^0 K_L^0 \pi^+ n \bar{p}$ | 3549 | 1 | 93223 |
| 10648 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta \gamma^f, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10647 | 1 | 93224 |
| 10649 | $J/\psi \to \rho^0 b_1^+ b_1^-, \rho^0 \to \pi^+ \pi^- \gamma^F, b_1^+ \to \pi^+ \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma$ | 10648 | 1 | 93225 |
| 10650 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10649 | 1 | 93226 |
| 10651 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10650 | 1 | 93227 |
| 10652 | $J/\psi \to \pi^0 \rho^0 \bar{K}^0 K^+ a_0^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10651 | 1 | 93228 |
| 10653 | $J/\psi \to \pi^+ K^0_S K^- \phi, K^0_S \to \pi^0 \pi^0, \phi \to K^0_L K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 10652 | 1 | 93229 |
| 10654 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10653 | 1 | 93230 |
| 10655 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ \pi^- K^+, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 10654 | 1 | 93231 |
| 10656 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10655 | 1 | 93232 |
| 10657 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 10656 | 1 | 93233 |
| 10658 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 5476 | 1 | 93234 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 10659 | $J/\psi \to \eta a_0^- b_1^+, \eta \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to e^+ e^- \gamma^F, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 5477 | 1 | 93235 |
| 10660 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10659 | 1 | 93236 |
| 10661 | $J/\psi \to \rho^0 \rho^+ \omega a_0^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 10660 | 1 | 93237 |
| 10662 | $J/\psi 	o \pi^0\pi^-ar{\Delta}^0\Delta^+, ar{\Delta}^0 	o \pi^0ar{n}, \Delta^+ 	o \pi^0 p$ | $\pi^0\pi^0\pi^0\pi^-ar{n}p$ | 10661 | 1 | 93238 |
| 10663 | $J/\psi \to \rho^0 \pi^- \bar{K}^* K_1^+, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 10662 | 1 | 93239 |
| 10664 | $J/\psi \to ho^0 K^+ K_1^-, ho^0 \to \pi^+ \pi^-, K_1^- \to ho^0 K^-, ho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 10663 | 1 | 93240 |
| 10665 | $J/\psi \to \pi^- a_0^+ h_1(1170) \gamma^f, a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10664 | 1 | 93241 |
| 10666 | $J/\psi \to \rho^+ a_2^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^-, f_0(1370) \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10665 | 1 | 93242 |
| 10667 | $J/\psi \to \pi^0 \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10666 | 1 | 93243 |
| 10668 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5478 | 1 | 93244 |
| 10669 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 2515 | 1 | 93245 |
| 10670 | $J/\psi \to \pi^- \bar{K}^* K^+ \gamma^F \gamma^f, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | 10669 | 1 | 93246 |
| 10671 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 10670 | 1 | 93247 |
| 10672 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10671 | 1 | 93248 |
| 10673 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 5480 | 1 | 93249 |
| 10674 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 10673 | 1 | 93250 |
| 10675 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^f$ | 10674 | 1 | 93251 |
| 10676 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \pi^0 \rho^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 5481 | 1 | 93252 |
| 10677 | $J/\psi \rightarrow \pi^+ \eta b_1^0 a_0^-, \eta \rightarrow \gamma \gamma, b_1^0 \rightarrow \pi^0 \omega, a_0^- \rightarrow \pi^- \eta, \omega \rightarrow \pi^0 \pi^+ \pi^-, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10676 | 1 | 93253 |
| 10678 | $J/\psi \to \eta \omega f_1(1285), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma^{f}$ | 10677 | 1 | 93254 |
| 10679 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 10678 | 1 | 93255 |
| 10680 | $J/\psi \rightarrow a_2^-b_1^+, a_2^- \rightarrow \pi^-\eta, b_1^+ \rightarrow \pi^+\omega, \eta \rightarrow \pi^0\gamma\gamma, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10679 | 1 | 93256 |
| 10681 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10680 | 1 | 93257 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10682 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 10681 | 1 | 93258 |
| 10683 | $J/\psi \to \pi^0 \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10682 | 1 | 93259 |
| 10684 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \omega K^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 10683 | 1 | 93260 |
| 10685 | $J/\psi \to f_2' h_1(1380), f_2' \to \eta \eta, h_1(1380) \to K^- K^{*+}, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 3551 | 1 | 93261 |
| 10686 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10685 | 1 | 93262 |
| 10687 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 10686 | 1 | 93263 |
| 10688 | $J/\psi \to \pi^- K_2^{*+} \bar{K}_0^{*0}, K_2^{*+} \to \pi^0 K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10687 | 1 | 93264 |
| 10689 | $J/\psi \to \pi^0 K^* \bar{K}_1^0, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5483 | 1 | 93265 |
| 10690 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10689 | 1 | 93266 |
| 10691 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, K^0_S \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\gamma^{F}$ | 10690 | 1 | 93267 |
| 10692 | $J/\psi \to \eta K^0 \bar{K}^* \eta', \eta \to \gamma \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma\gamma\gamma$ | 10691 | 1 | 93268 |
| 10693 | $J/\psi \to \pi^- \bar{\Xi}^+ \Xi^0, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^0 \to \pi^0 \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^+\pi^-\pi^-p\bar{p}$ | 5484 | 1 | 93269 |
| 10694 | $J/\psi \to \bar{K}^0 K_2^{*+} a_0^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^*, a_0^- \to \pi^- \eta, K^* \to \pi^- K^+, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 10693 | 1 | 93270 |
| 10695 | $J/\psi \to \pi^+ a_2^- \omega K^+ K^-, a_2^- \to \rho^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 10694 | 1 | 93271 |
| 10696 | $J/\psi 	o \pi^0 \pi^+ \pi^- \eta', \eta' 	o \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 2516 | 1 | 93272 |
| 10697 | $J/\psi ightarrow \pi^0\pi^-\eta b_1^+, \eta ightarrow \pi^0\pi^0\pi^0, b_1^+ ightarrow \pi^+\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10696 | 1 | 93273 |
| 10698 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^+ \pi^- \gamma^F, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 10697 | 1 | 93274 |
| 10699 | $J/\psi \rightarrow \pi^+\pi^-\omega b_1^0, \omega \rightarrow \pi^0\pi^+\pi^-, b_1^0 \rightarrow \pi^0\omega, \omega \rightarrow \pi^0\pi^+\pi^-, \pi^0 \rightarrow e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 5486 | 1 | 93275 |
| 10700 | $J/\psi \to \bar{\Sigma}^{*+} \Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^{+} \bar{\Sigma}^{0}, \Sigma^{*-} \to \pi^{-} \Lambda, \bar{\Sigma}^{0} \to \bar{\Lambda} \gamma, \Lambda \to \pi^{0} n, \\ \bar{\Lambda} \to \pi^{0} \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 10699 | 1 | 93276 |
| 10701 | $J/\psi \to K^* K_2^{*0} \gamma, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 10700 | 1 | 93277 |
| 10702 | $J/\psi \to K^* \bar{K}_1^{'0}, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10701 | 1 | 93278 |
| 10703 | $J/\psi \to \rho^- K_2^{*0} K^{*+}, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^0 \bar{K}^*, K^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 10702 | 1 | 93279 |
| 10704 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^+\Xi^-, \bar{\Xi}^{*0} \to \pi^0\bar{\Xi}^0, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^0 \to \pi^0\bar{\Lambda}, \\ \Lambda \to \pi^-p, \pi^0 \to e^+e^-\gamma^F, \bar{\Lambda} \to \pi^+\bar{p}$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}p\bar{p}\gamma^{F}$ | 10703 | 1 | 93280 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10705 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10704 | 1 | 93281 |
| 10706 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 10705 | 1 | 93282 |
| 10707 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10706 | 1 | 93283 |
| 10708 | $J/\psi \to \eta K^+ \bar{K}_1^{'-}, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10707 | 1 | 93284 |
| 10709 | $J/\psi 	o \pi^+ \eta a_1^-, \eta 	o \pi^0 \pi^0 \pi^0, a_1^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10708 | 1 | 93285 |
| 10710 | $J/\psi \to \bar{K}^*K^{*+}a_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, a_1^- \to \rho^0\pi^-, K^0 \to K_S^0, \\ \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3553 | 1 | 93286 |
| 10711 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K_0^{*-} K_1^+, K_0^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 10710 | 1 | 93287 |
| 10712 | $J/\psi \to \pi^0 \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 1882 | 1 | 93288 |
| 10713 | $J/\psi \to ho^0 a_2^0 f_0(1370), ho^0 \to \pi^+\pi^-, a_2^0 \to \pi^-\rho^+, f_0(1370) \to \pi^+\pi^-, ho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 3555 | 1 | 93289 |
| 10714 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, \pi^0 \to e^+ e^- \gamma^F, K_2^{*+} \to \pi^0 K^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 10713 | 1 | 93290 |
| 10715 | $J/\psi \to K^{*+} \bar{p} \Lambda, K^{*+} \to \pi^+ K^0, \Lambda \to \pi^0 n, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 5490 | 1 | 93291 |
| 10716 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \rho^- \bar{K}^0, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 909 | 1 | 93292 |
| 10717 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 10716 | 1 | 93293 |
| 10718 | $J/\psi \to a_2^+ \omega a_0^-, a_2^+ \to \pi^0 \rho^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10717 | 1 | 93294 |
| 10719 | $J/\psi \to \rho^+ a_0^- f_1(1285), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_1(1285) \to \pi^- \bar{K}^0 K^+, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10718 | 1 | 93295 |
| 10720 | $J/\psi 	o \pi^+ K^0 ar{K}^* b_1^-, K^0 	o K_L^0, ar{K}^* 	o \pi^0 ar{K}^0, b_1^- 	o \pi^- \omega, ar{K}^0 	o K_S^0, \ \omega 	o \pi^0 \gamma, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 10719 | 1 | 93296 |
| 10721 | $J/\psi \to \pi^0 K_2^{*-} K_0^{*+}, K_2^{*-} \to \pi^0 K^{*-}, K_0^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K^{+}K^{-}\gamma^{F}$ | 10720 | 1 | 93297 |
| 10722 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} \phi, K^{*+} \to \pi^0 K^+, \phi \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 10721 | 1 | 93298 |
| 10723 | $J/\psi ightarrow \eta ar{K}^0 K^+ a_0^-, \eta ightarrow \gamma \gamma, ar{K}^0 ightarrow K_L^0, a_0^- ightarrow \pi^- \eta, \eta ightarrow \gamma \gamma$ | $K_L^0\pi^-K^+\gamma\gamma\gamma\gamma$ | 10722 | 1 | 93299 |
| 10724 | $J/\psi 	o \eta \eta' \phi, \eta 	o \gamma \gamma, \eta' 	o \pi^0 \pi^+ \pi^-, \phi 	o K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 10723 | 1 | 93300 |
| 10725 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10724 | 1 | 93301 |
| 10726 | $J/\psi 	o \pi^+ ho^- ho^- ar{K}^0 K^+, ho^- 	o \pi^0 \pi^-, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10725 | 1 | 93302 |
| 10727 | $J/\psi ightarrow \pi^0 ho^0 \eta', ho^0 ightarrow \pi^+ \pi^- \gamma^F, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 10726 | 1 | 93303 |
| 10728 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 10727 | 1 | 93304 |
| 10729 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \omega a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10728 | 1 | 93305 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10730 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \rho^- K^0, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10729 | 1 | 93306 |
| 10731 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \rho^+ a_0^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10730 | 1 | 93307 |
| 10732 | $J/\psi \to \pi^- \omega \bar{K}^0 K^{*+}, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 10731 | 1 | 93308 |
| 10733 | $J/\psi \to \pi^0 K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \bar{K}^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10732 | 1 | 93309 |
| 10734 | $J/\psi ightarrow \pi^0 ho^0 f_2(1270), ho^0 ightarrow \pi^0 \gamma, f_2(1270) ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 10733 | 1 | 93310 |
| 10735 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_1(1285) \to \pi^+ a_0^-, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5492 | 1 | 93311 |
| 10736 | $J/\psi \to \pi^0 \omega K^{*+} K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 10735 | 1 | 93312 |
| 10737 | $J/\psi \to \phi f_1(1285), \phi \to \pi^+ \rho^-, f_1(1285) \to \pi^+ a_0^-, \rho^- \to \pi^0 \pi^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 10736 | 1 | 93313 |
| 10738 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}$ | 10737 | 1 | 93314 |
| 10739 | $J/\psi \to K^- K^{*+} f_0(1710), K^{*+} \to \pi^0 K^+, f_0(1710) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 10738 | 1 | 93315 |
| 10740 | $J/\psi \to \omega K^+ \bar{K}_1^{'-}, \omega \to \pi^0 \gamma, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 10739 | 1 | 93316 |
| 10741 | $J/\psi 	o ar{K}^0 K_0^0, ar{K}^0 	o K_S^0, K_0^0 	o \pi^0 K^0, K_S^0 	o \pi^0 \pi^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0$ | 10740 | 1 | 93317 |
| 10742 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^+K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K_L^0 \to K_S^0, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 5493 | 1 | 93318 |
| 10743 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 2519 | 1 | 93319 |
| 10744 | $J/\psi \to K^0 \eta' \bar{K}_1^{'0}, K^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 10743 | 1 | 93320 |
| 10745 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $K_L^0K_L^0\pi^+\pi^-\gamma\gamma$ | 10744 | 1 | 93321 |
| 10746 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, \eta \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 412 | 1 | 93322 |
| 10747 | $J/\psi 	o \pi^0\pi^0\omega\eta', \omega 	o \pi^0\pi^+\pi^-, \eta' 	o \omega\gamma, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 3559 | 1 | 93323 |
| 10748 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 10747 | 1 | 93324 |
| 10749 | $J/\psi \to \omega f_1(1285), \omega \to \pi^+\pi^-, f_1(1285) \to \pi^0\pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10748 | 1 | 93325 |
| 10750 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 10749 | 1 | 93326 |
| 10751 | $J/\psi \to K^-K^{*+}f_0(1710), K^{*+} \to \pi^0K^+, f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma\gamma$ | 10750 | 1 | 93327 |
| 10752 | $J/\psi \to \omega a_0^0 f_1(1285), \omega \to \pi^0 \gamma, a_0^0 \to \pi^0 \eta, f_1(1285) \to \pi^0 K^+ K^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0K^+K^-\gamma\gamma\gamma$ | 10751 | 1 | 93328 |
| 10753 | $J/\psi \to \phi f_0(980), \phi \to K^+K^-, f_0(980) \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 10752 | 1 | 93329 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 10754 | $J/\psi \to \omega K^{*-}K_1^{'+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 10753 | 1 | 93330 |
| 10755 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-\gamma$ | 10754 | 1 | 93331 |
| 10756 | $J/\psi \to \pi^0 a_2^0 \pi^+ \pi^- f_2(1270), a_2^0 \to \pi^+ \rho^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10755 | 1 | 93332 |
| 10757 | $J/\psi \to \pi^-\pi^-\rho^+\bar{K}^*K^{*+}, \rho^+ \to \pi^0\pi^+, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 10756 | 1 | 93333 |
| 10758 | $J/\psi ightarrow \pi^0 ar K^0 \Delta^0 ar\Lambda, ar K^0 ightarrow K^0_S, \Delta^0 ightarrow \pi^0 n, ar\Lambda ightarrow \pi^+ ar p, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-nar{p}$ | 10757 | 1 | 93334 |
| 10759 | $J/\psi ightarrow \pi^0 ho^0 \eta', ho^0 ightarrow \pi^+ \pi^- \gamma^f, \eta' ightarrow \omega \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 10758 | 1 | 93335 |
| 10760 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10759 | 1 | 93336 |
| 10761 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 10760 | 1 | 93337 |
| 10762 | $J/\psi \to K_{1}^{'+}\bar{K}_{1}^{'-}, K_{1}^{'+} \to \pi^{+}K^{*}, \bar{K}_{1}^{'-} \to \rho^{0}K^{-}, K^{*} \to \pi^{0}K^{0}, \rho^{0} \to \pi^{+}\pi^{-}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10761 | 1 | 93338 |
| 10763 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5497 | 1 | 93339 |
| 10764 | $J/\psi \to \pi^0 \rho^0 K^+ K^{*-} \gamma^f, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 10763 | 1 | 93340 |
| 10765 | $J/\psi \to K^*K^{*-}a_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, a_1^+ \to \pi^0\rho^+, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5498 | 1 | 93341 |
| 10766 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi h_1(1380), \phi \to K_L^0 K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+K^-\gamma$ | 3560 | 1 | 93342 |
| 10767 | $J/\psi \to \eta K^0 \bar{K}_1^0, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 5500 | 1 | 93343 |
| 10768 | $J/\psi 	o \pi^0\pi^0a_2^0\omega, a_2^0 	o \pi^+ ho^-, \omega 	o \pi^0\pi^+\pi^-, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5501 | 1 | 93344 |
| 10769 | $J/\psi \to a_2^0 \pi^+ \pi^- \gamma^f, a_2^0 \to K^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 10768 | 1 | 93345 |
| 10770 | $J/\psi \to \rho^0 \eta f_1(1285), \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 10769 | 1 | 93346 |
| 10771 | $J/\psi \to \eta K^- K_2^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K_2^{*+} \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10770 | 1 | 93347 |
| 10772 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10771 | 1 | 93348 |
| 10773 | $J/\psi 	o \eta \eta' \phi, \eta 	o \gamma \gamma, \eta' 	o \pi^+ \pi^- \eta, \phi 	o K^+ K^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma\gamma$ | 10772 | 1 | 93349 |
| 10774 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0\gamma^f, K^0 \to K_L^0$ | $K_L^0\pi^+K^+K^-K^-\gamma\gamma^f$ | 10773 | 1 | 93350 |
| 10775 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^* K^+ a_1^-, \bar{K}^* \to \pi^+ K^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 5502 | 1 | 93351 |
| 10776 | $J/\psi \to \bar{K}^0 K^* f_2^{'}, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, f_2^{'} \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10775 | 1 | 93352 |
| 10777 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 5503 | 1 | 93353 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|----------------|---|---|---------------|--------|----------------|
| 10778 | $J/\psi \to \pi^0 \pi^+ K^- \phi K_1^0, \phi \to \pi^0 \rho^0, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 3561 | 1 | 93354 |
| 10779 | $J/\psi \to \omega \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10778 | 1 | 93355 |
| 10780 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^0\pi^0K^{*-}, K_1^{'+} \to \pi^0K^{*+}, K^{*-} \to \pi^0K^{-}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 10779 | 1 | 93356 |
| 10781 | $J/\psi \to \pi^- \bar{\Sigma}^{*0} \Sigma^{*+}, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 10780 | 1 | 93357 |
| 10782 | $J/\psi \to \pi^+ \rho^- \omega b_1^0, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 10781 | 1 | 93358 |
| 10783 10784 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F\gamma^f$ $J/\psi \to \pi^0\rho^0a_2^0, \rho^0 \to \pi^+\pi^-, a_2^0 \to K^+K^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma\gamma^{f} \ \pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}$ | 10782 10783 | 1 1 | 93359 93360 |
| 10785 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_L^0, \\ \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 10784 | 1 | 93361 |
| 10786 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 10785 | 1 | 93362 |
| 10787 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^0_1, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 10786 | 1 | 93363 |
| 10788 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \rho^0 b_1^0, \rho^0 \to \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F, \ \omega \to \pi^0 \gamma$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 3562 | 1 | 93364 |
| 10789 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5506 | 1 | 93365 |
| 10790 | $J/\psi \to f_2(1270)K^+K_1^-, f_2(1270) \to \pi^+\pi^-, K_1^- \to \rho^0K^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 2521 | 1 | 93366 |
| 10791 | $J/\psi \to \pi^+\pi^- f_0(1370), f_0(1370) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 134 | 1 | 93367 |
| 10792 | $J/\psi \to \phi f_0(2020), \phi \to \pi^- \rho^+, f_0(2020) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10791 | 1 | 93368 |
| 10793 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 497 | 1 | 93369 |
| 10794 | $J/\psi \to K^+ \eta' K_1^-, \eta' \to \pi^0 \pi^0 \eta, K_1^- \to \rho^- \bar{K}^0, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma\gamma$ | 5510 | 1 | 93370 |
| 10795 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \omega \bar{K}^0, K_2^{*+} \to \pi^+ K^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10794 | 1 | 93371 |
| 10796 | $J/\psi \to \pi^+ K^{*-} K_1^0 \gamma^F, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5511 | 1 | 93372 |
| 10797 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \eta\eta, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^0\pi^0\pi^0\pi^0\gamma^F\gamma$ | 10796 | 1 | 93373 |
| 10798 | $J/\psi \to \omega K^{*+} \bar{K}_{1}^{'-}, \omega \to \pi^{0} \pi^{+} \pi^{-}, K^{*+} \to \pi^{+} K^{0}, \bar{K}_{1}^{'-} \to \pi^{0} K^{*-}, K^{0} \to K_{L}^{0}, K^{*-} \to \pi^{-} \bar{K}^{0}, \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+} \pi^{-}$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3566 | 1 | 93374 |
| 10799 | $J/\psi \to \pi^0 K^- K^{*+} \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 1460 | 1 | 93375 |
| 10800 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^0K^-, f_1(1420) \to \pi^+K^0K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 1151 | 1 | 93376 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 10801 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 913 | 1 | 93377 |
| 10802 | $J/\psi 	o ar{\Lambda} \Sigma^{*0}, ar{\Lambda} 	o \pi^0 ar{n}, \Sigma^{*0} 	o \pi^+ \Sigma^-, \Sigma^- 	o \pi^- n$ | $\pi^0\pi^+\pi^-nar{n}$ | 10801 | 1 | 93378 |
| 10803 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3570 | 1 | 93379 |
| 10804 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^+ \pi^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 10803 | 1 | 93380 |
| 10805 | $J/\psi ightarrow ho^0 \pi^+ \pi^- \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5517 | 1 | 93381 |
| 10806 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-\gamma^F$ | 914 | 1 | 93382 |
| 10807 | $J/\psi \to \rho^- b_1^+ h_1(1170), \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \gamma, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5519 | 1 | 93383 |
| 10808 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_S^0, $ $\rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10807 | 1 | 93384 |
| 10809 | $J/\psi 	o \eta f_2' \gamma, \eta 	o \gamma \gamma, f_2' 	o K_S^0 K_S^0, K_S^0 	o \pi^+ \pi^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 10808 | 1 | 93385 |
| 10810 | $J/\psi \to \pi^0 K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^{*-}, K_1^0 \to \rho^- K^+, K^{*-} \to \pi^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 10809 | 1 | 93386 |
| 10811 | $J/\psi \to a_2^0 \rho^- a_2^+, a_2^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3572 | 1 | 93387 |
| 10812 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 10811 | 1 | 93388 |
| 10813 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta \gamma^f, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 3573 | 1 | 93389 |
| 10814 | $J/\psi \to \eta_c \gamma, \eta_c \to K^{*+}K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 3574 | 1 | 93390 |
| 10815 | $J/\psi 	o ho^- a_2^+ a_0^0, ho^- 	o \pi^0 \pi^-, a_2^+ 	o ho^0 \pi^+, a_0^0 	o \pi^0 \eta, ho^0 	o \pi^+ \pi^-, \ \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 10814 | 1 | 93391 |
| 10816 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 10815 | 1 | 93392 |
| 10817 | $J/\psi \to \eta \omega, \eta \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 10816 | 1 | 93393 |
| 10818 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 10817 | 1 | 93394 |
| 10819 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5523 | 1 | 93395 |
| 10820 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{\Sigma}^+ \Sigma^{*-}, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^{*-} \to \pi^- \Lambda, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-ar{n}p\gamma$ | 10819 | 1 | 93396 |
| 10821 | $J/\psi \to p\bar{p}f_0(1370), f_0(1370) \to K_S^0 K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 5524 | 1 | 93397 |
| 10822 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \pi^0 \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10821 | 1 | 93398 |
| 10823 | $J/\psi \to \pi^0 a_2^+ b_1^-, a_2^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5525 | 1 | 93399 |
| 10824 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 10823 | 1 | 93400 |
| 10825 | $J/\psi \to \pi^0 K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5526 | 1 | 93401 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 10826 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 10825 | 1 | 93402 |
| 10827 | $J/\psi \to \rho^0 \bar{K}^* K_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 10826 | 1 | 93403 |
| 10828 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10827 | 1 | 93404 |
| 10829 | $J/\psi \to \eta_c \gamma, \eta_c \to K^* K^- a_0^+, K^* \to \pi^0 K^0, a_0^+ \to \pi^+ \eta, K^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 10828 | 1 | 93405 |
| 10830 | $J/\psi \to K_2^{*+}K_1^-, K_2^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 1154 | 1 | 93406 |
| 10831 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 10830 | 1 | 93407 |
| 10832 | $I/y \to \pi^+\pi^- K^+ K^{*-} K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 10831 | 1 | 93408 |
| 10833 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5528 | 1 | 93409 |
| 10834 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^0\pi^0K^{*-}, K_1^+ \to \pi^+K^*, K^{*-} \to \pi^-\bar{K}^0, K^* \to \pi^0K^0, \\ \bar{K}^0 \to K_S^0, \pi^0 \to e^+e^-\gamma^F, K^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10833 | 1 | 93410 |
| 10835 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^0 \bar{K}^{*0}_0, K^0 \to K^0_L, \\ \bar{K}^{*0}_0 \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 10834 | 1 | 93411 |
| 10836 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^0 \pi^0 \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 3576 | 1 | 93412 |
| 10837 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^0 K^+, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 10836 | 1 | 93413 |
| 10838 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \bar{K}^0 \gamma, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 10837 | 1 | 93414 |
| 10839 | $J/\psi \to \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 5530 | 1 | 93415 |
| 10840 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 10839 | 1 | 93416 |
| 10841 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 10840 | 1 | 93417 |
| 10842 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+ \gamma$ | 5531 | 1 | 93418 |
| 10843 | $J/\psi \to \pi^0 K^+ K^- b_1^0, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10842 | 1 | 93419 |
| 10844 | $J/\psi \to \rho^- \bar{K}^* K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*+} \to \pi^0 \pi^+ K^*, \bar{K}^0 \to K_S^0, K_S^{*+} \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3577 | 1 | 93420 |
| 10845 | $J/\psi \to \pi^- \rho^+ K^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 10844 | 1 | 93421 |
| 10846 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0 \gamma^f, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10845 | 1 | 93422 |
| 10847 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 10846 | 1 | 93423 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 10848 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 10847 | 1 | 93424 |
| 10849 | $J/\psi \to \omega K^- K^{*+} \gamma^F, \omega \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 10848 | 1 | 93425 |
| 10850 | $J/\psi \to \rho^+ K^* \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1465 | 1 | 93426 |
| 10851 | $J/\psi \to \pi^- \rho^+ \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10850 | 1 | 93427 |
| 10852 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, $ $\rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 10851 | 1 | 93428 |
| 10853 | $J/\psi \to \eta K^- K^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 10852 | 1 | 93429 |
| 10854 | $J/\psi \to \bar{K}^*K^{*+}a_0^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^0K^+, a_0^- \to \pi^-\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 5534 | 1 | 93430 |
| 10855 | $J/\psi \to \bar{K}^* K_1^{'0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \omega K^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10854 | 1 | 93431 |
| 10856 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^+ \eta, K^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 10855 | 1 | 93432 |
| 10857 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^+ K^- \gamma^f, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 10856 | 1 | 93433 |
| 10858 | $J/\psi \to \rho^- \omega b_1^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 10857 | 1 | 93434 |
| 10859 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10858 | 1 | 93435 |
| 10860 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^0 \bar{K}^*, f_1(1420) \to \pi^- \bar{K}^0 K^+, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3579 | 1 | 93436 |
| 10861 | $J/\psi \to \pi^+ K_0^0 K_1^-, K_0^0 \to \pi^- K^+, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5536 | 1 | 93437 |
| 10862 | $J/\psi \to \pi^0 a_0^0 f_0(1370) \gamma, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 10861 | 1 | 93438 |
| 10863 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10862 | 1 | 93439 |
| 10864 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^{*+}K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^-\pi^-K^+\gamma^F\gamma$ | 10863 | 1 | 93440 |
| 10865 | $J/\psi \to \bar{K}^0 K^* \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 10864 | 1 | 93441 |
| 10866 | $J/\psi \to \rho^0 \bar{K}^* K_0^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 10865 | 1 | 93442 |
| 10867 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5537 | 1 | 93443 |
| 10868 | $J/\psi \to \pi^+ \rho^- f_0(1370) \gamma^f \gamma^f, \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 1466 | 1 | 93444 |
| 10869 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^+ \pi^- \omega, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-\pi^-$ | 10868 | 1 | 93445 |
| 10870 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1710) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 10869 | 1 | 93446 |
| 10871 | $J/\psi \to \pi^- a_2^+ f_1(1285), a_2^+ \to \pi^0 \rho^+, f_1(1285) \to \pi^0 a_0^0, \rho^+ \to \pi^0 \pi^+, a_0^0 \to \pi^0 \eta, $ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 10870 | 1 | 93447 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 10872 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 10871 | 1 | 93448 |
| 10873 | $J/\psi \rightarrow \pi^+ \eta' b_1^- \gamma^f, \eta' \rightarrow \rho^0 \gamma, b_1^- \rightarrow \pi^- \omega, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma^f$ | 10872 | 1 | 93449 |
| 10874 | $J/\psi \to \eta K^0 \bar{K}^* \gamma, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 10873 | 1 | 93450 |
| 10875 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to K^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0K^+K^-$ | 10874 | 1 | 93451 |
| 10876 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \gamma\gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\gamma\gamma\gamma$ | 10875 | 1 | 93452 |
| 10877 | $J/\psi \to \pi^+\pi^-\eta'\eta', \eta' \to \pi^0\pi^0\eta, \eta' \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^+\pi^-, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 10876 | 1 | 93453 |
| 10878 | $J/\psi \to \rho^- \eta \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10877 | 1 | 93454 |
| 10879 | $J/\psi 	o \phi f_2^{'}, \phi 	o \pi^- ho^+, f_2^{'} 	o K_L^0 K_L^0, ho^+ 	o \pi^0 \pi^+$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 10878 | 1 | 93455 |
| 10880 | $J/\psi \to K^*K^{*-}a_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, a_1^+ \to \pi^0\rho^+, \bar{K}^0 \to K_L^0, ho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 10879 | 1 | 93456 |
| 10881 | $J/\psi \to \pi^0 \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10880 | 1 | 93457 |
| 10882 | $J/\psi \to \pi^0 f_2(1270) b_1^0, f_2(1270) \to K_L^0 K_L^0, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 10881 | 1 | 93458 |
| 10883 | $J/\psi \to \pi^+ K^0 \bar{K}^* a_1^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10882 | 1 | 93459 |
| 10884 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- h_1(1170), h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10883 | 1 | 93460 |
| 10885 | $J/\psi \to \pi^- \bar{K}_1^0 K_0^{*+}, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 10884 | 1 | 93461 |
| 10886 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 10885 | 1 | 93462 |
| 10887 | $J/\psi \to \rho^- \eta a_0^+, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 10886 | 1 | 93463 |
| 10888 | $J/\psi \to \pi^+ \pi^+ \pi^- \rho^+ \rho^- a_0^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 10887 | 1 | 93464 |
| 10889 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 10888 | 1 | 93465 |
| 10890 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 10889 | 1 | 93466 |
| 10891 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to K^0 K^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5539 | 1 | 93467 |
| 10892 | $J/\psi \to \omega \omega b_1^0, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 1155 | 1 | 93468 |
| 10893 | $J/\psi \to \pi^- a_2^+, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 10892 | 1 | 93469 |
| 10894 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 10893 | 1 | 93470 |
| 10895 | $J/\psi \to K^0 \bar{K}^0_1 \gamma, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 5541 | 1 | 93471 |
| 10896 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 10895 | 1 | 93472 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 10897 | $J/\psi \to \pi^0 \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10896 | 1 | 93473 |
| 10898 | $J/\psi \to \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10897 | 1 | 93474 |
| 10899 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5542 | 1 | 93475 |
| 10900 | $J/\psi \to \rho^+ f_2(1270) K^0 K^-, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 10899 | 1 | 93476 |
| 10901 | $J/\psi \to K^+ \eta' K_1^-, \eta' \to \pi^+ \pi^- \eta, K_1^- \to \rho^- \bar{K}^0, \eta \to \pi^+ \pi^- \gamma^F, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^F$ | 10900 | 1 | 93477 |
| 10902 | $J/\psi ightarrow \overline{K^0} ar{n} \Lambda \gamma, K^0 ightarrow K^0_S, \Lambda ightarrow \pi^0 n, K^0_S ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 5543 | 1 | 93478 |
| 10903 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\omega, \omega \to e^+e^-\pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 10902 | 1 | 93479 |
| 10904 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-\gamma$ | 10903 | 1 | 93480 |
| 10905 | $J/\psi \to \pi^0 p\bar{p} f_0(1370), f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-par{p}$ | 10904 | 1 | 93481 |
| 10906 | $J/\psi \to a_2^0 \pi^+ \pi^+ \rho^- \rho^-, a_2^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10905 | 1 | 93482 |
| 10907 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 10906 | 1 | 93483 |
| 10908 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5544 | 1 | 93484 |
| 10909 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 10908 | 1 | 93485 |
| 10910 | $J/\psi \to \pi^+ \rho^- \eta' f_0(1370), \rho^- \to \pi^0 \pi^-, \eta' \to \pi^+ \pi^- \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 10909 | 1 | 93486 |
| 10911 | $J/\psi 	o K^- p ar{\Sigma}^{*0}, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, ar{\Lambda} 	o \pi^0 ar{n}, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0K^-ar{n}p\gamma^F$ | 10910 | 1 | 93487 |
| 10912 | $J/\psi \to \pi^0\pi^+\pi^-f_2(1270)a_0^0, f_2(1270) \to \pi^+\pi^-, a_0^0 \to \pi^0\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 10911 | 1 | 93488 |
| 10913 | $J/\psi \to \pi^0 \pi^- \rho^+ a_1^0, \rho^+ \to \pi^0 \pi^+, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10912 | 1 | 93489 |
| 10914 | $J/\psi \to K^-K^{*+}f_2^{'}, K^{*+} \to \pi^0K^+, f_2^{'} \to K_S^0K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 10913 | 1 | 93490 |
| 10915 | $J/\psi \to \pi^- \eta K_2^{*0} K^+, \eta \to \gamma \gamma, K_2^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 10914 | 1 | 93491 |
| 10916 | $J/\psi \to \eta K^0 K_2^{*0}, \eta \to \pi^+ \pi^- \gamma^F, K^0 \to K_S^0, K_2^{*0} \to \omega \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 5545 | 1 | 93492 |
| 10917 | $J/\psi \to K^0 K_1^- a_1^+, K^0 \to K_S^0, K_1^- \to \rho^- \bar{K}^0, a_1^+ \to \pi^0 \rho^+, K_S^0 \to \pi^+ \pi^-, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10916 | 1 | 93493 |
| 10918 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \pi^+ \eta, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3582 | 1 | 93494 |
| 10919 | $J/\psi \to \pi^+ \bar{K}^0 b_1^- K_1^0, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^-$ | 1895 | 1 | 93495 |
| 10920 | $J/\psi \to \pi^0\pi^-a_2^+f_0(1370), a_2^+ \to \pi^0\rho^+, f_0(1370) \to \pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10919 | 1 | 93496 |
| 10921 | $J/\psi \to K^{+}a_{0}^{0}K_{1}^{-}, a_{0}^{0} \to \pi^{0}\eta, K_{1}^{-} \to \pi^{0}K^{*-}, \eta \to \gamma\gamma, K^{*-} \to \pi^{-}\bar{K}^{0}, \bar{K}^{0} \to K_{L}^{0}$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma\gamma$ | 10920 | 1 | 93497 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 10922 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^+ \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10921 | 1 | 93498 |
| 10923 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 5548 | 1 | 93499 |
| 10924 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10923 | 1 | 93500 |
| 10925 | $J/\psi 	o \eta_2(1870) \gamma, \eta_2(1870) 	o \pi^0 a_2^0, a_2^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 10924 | 1 | 93501 |
| 10926 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 10925 | 1 | 93502 |
| 10927 | $J/\psi 	o \eta K^- K_1^+, \eta 	o \pi^0 \pi^0 \pi^0, K_1^+ 	o \pi^+ \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3584 | 1 | 93503 |
| 10928 | $J/\psi \to \pi^0 \pi^0 \pi^- a_2^+ f_2(1270), a_2^+ \to \pi^0 \rho^+, f_2(1270) \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10927 | 1 | 93504 |
| 10929 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10928 | 1 | 93505 |
| 10930 | $J/\psi ightarrow \pi^+ ho^- \eta', ho^- ightarrow \pi^0 \pi^-, \eta' ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^- \gamma^F \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma^f$ | 10929 | 1 | 93506 |
| 10931 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \rho^0 \gamma, a_0^- \to \pi^- \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 10930 | 1 | 93507 |
| 10932 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 734 | 1 | 93508 |
| 10933 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 10932 | 1 | 93509 |
| 10934 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 5551 | 1 | 93510 |
| 10935 | $J/\psi \to \eta K^0 K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\gamma^{F}$ | 10934 | 1 | 93511 |
| 10936 | $J/\psi \to \pi^0 \omega a_0^0 f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma\gamma$ | 10935 | 1 | 93512 |
| 10937 | $J/\psi \to \pi^0 f_2(1270) K^- K^{*+}, f_2(1270) \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 10936 | 1 | 93513 |
| 10938 | $J/\psi \to ho^0 a_1^0, ho^0 \to \pi^+\pi^-, a_1^0 \to \pi^+\rho^-, ho^- \to \pi^0\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5552 | 1 | 93514 |
| 10939 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 10938 | 1 | 93515 |
| 10940 | $J/\psi \to \omega K^{*-}K_{1}^{'+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{+}K^{*}, \bar{K}^{0} \to K_{S}^{0}, K^{*-} \to \pi^{0}K^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 10939 | 1 | 93516 |
| 10941 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^0 \pi^0, b_1^- \to \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10940 | 1 | 93517 |
| 10942 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \Lambda \bar{\Lambda}, \Lambda 	o \pi^- p, \bar{\Lambda} 	o \pi^+ \bar{p}$ | $\pi^+\pi^-p\bar{p}\gamma$ | 5553 | 1 | 93518 |
| 10943 | $J/\psi \to K^+ K_1^-, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 5554 | 1 | 93519 |
| 10944 | $J/\psi \to \bar{K}^0 \phi K_1^{'0}, \bar{K}^0 \to K_L^0, \phi \to \pi^- \rho^+, K_1^{'0} \to \pi^0 K^*, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 735 | 1 | 93520 |
| 10945 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^- \gamma^f, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10944 | 1 | 93521 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 10946 | $J/\psi \to \Xi^0 \bar{\Xi}^0, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Lambda \to \pi^- p, \pi^0 \to e^+ e^- \gamma^F, \bar{\Lambda} \to \pi^0 \bar{n}$ | $e^+e^-\pi^0\pi^0\pi^-\bar{n}p\gamma^F$ | 10945 | 1 | 93522 |
| 10947 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_1(1420) \to \pi^0 K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 10946 | 1 | 93523 |
| 10948 | $J/\psi \to \pi^0 \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 1898 | 1 | 93524 |
| 10949 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 10948 | 1 | 93525 |
| 10950 | $J/\psi \to \rho^{+}K^{*}\bar{K}_{1}^{'-}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*} \to \pi^{-}K^{+}, \bar{K}_{1}^{'-} \to \pi^{-}\bar{K}^{*}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, \\ \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10949 | 1 | 93526 |
| 10951 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^- \gamma^f, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 5557 | 1 | 93527 |
| 10952 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \rho^0 K^0, \eta \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 1899 | 1 | 93528 |
| 10953 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^+ K_1^-, \rho^0 \to \pi^+ \pi^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 5559 | 1 | 93529 |
| 10954 | $J/\psi \to K^+ K^{*-} b_1^0 \gamma^F, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 5560 | 1 | 93530 |
| 10955 | $J/\psi \to \rho^- K^+ \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 10954 | 1 | 93531 |
| 10956 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^0 K_0^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10955 | 1 | 93532 |
| 10957 | $J/\psi \to \rho^0 K^0 \bar{K}^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 10956 | 1 | 93533 |
| 10958 | $J/\psi \to \pi^0 \pi^- a_2^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 3589 | 1 | 93534 |
| 10959 | $J/\psi \to K^+ \phi K_1^-, \phi \to K^+ K^-, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 10958 | 1 | 93535 |
| 10960 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 10959 | 1 | 93536 |
| 10961 | $J/\psi \to \pi^0 K^* \bar{K}^*, \pi^0 \to e^+ e^- \gamma^F, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $e^+e^-\pi^0K_L^0\pi^+K^-\gamma^F$ | 10960 | 1 | 93537 |
| 10962 | $J/\psi \to \rho^0 a_2^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- \rho^+, f_0(1370) \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1158 | 1 | 93538 |
| 10963 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi \phi, \phi \to K_L^0 K_S^0, \phi \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 5563 | 1 | 93539 |
| 10964 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^f$ | 10963 | 1 | 93540 |
| 10965 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10964 | 1 | 93541 |
| 10966 | $J/\psi 	o a_2^0 ar{K}^0 K^*, a_2^0 	o \pi^0 \eta, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, \eta 	o \pi^0 \pi^0 \pi^0, \ K_S^0 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 10965 | 1 | 93542 |
| 10967 | $J/\psi \to K_2^{*-}K_0^{*+}, K_2^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^+K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10966 | 1 | 93543 |
| 10968 | $J/\psi \to \pi^- \bar{K}^0 K_1^+ \gamma^F, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 498 | 1 | 93544 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 10969 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+ \gamma^f, f_0(1370) \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 10968 | 1 | 93545 |
| 10970 | $J/\psi \to \pi^0 h_1(1170) a_1^0, h_1(1170) \to \pi^0 \rho^0, a_1^0 \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 10969 | 1 | 93546 |
| 10971 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^+K^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 263 | 1 | 93547 |
| 10972 | $J/\psi \to \rho^0 K^- K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 10971 | 1 | 93548 |
| 10973 | $J/\psi \to \bar{K}^0 K^* f_2^{'}, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, f_2^{'} \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 10972 | 1 | 93549 |
| 10974 | $J/\psi \to \pi^+ n\bar{p} f_0(1370), f_0(1370) \to K^+ K^-$ | $\pi^+ K^+ K^- n \bar{p}$ | 10973 | 1 | 93550 |
| 10975 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5566 | 1 | 93551 |
| 10976 | $J/\psi \to \rho^- \bar{K}^* K^+ \gamma^F, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma^F$ | 10975 | 1 | 93552 |
| 10977 | $J/\psi \to \pi^0 \pi^- a_2^+ \gamma^f, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 10976 | 1 | 93553 |
| 10978 | $J/\psi \to \pi^+\pi^+\rho^-a_1^-, \rho^- \to \pi^0\pi^-, a_1^- \to \rho^0\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 10977 | 1 | 93554 |
| 10979 | $J/\psi \to \eta a_0^+ b_1^-, \eta \to \pi^+ \pi^- \gamma^F, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma$ | 10978 | 1 | 93555 |
| 10980 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^{'0} \to \pi^- K^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^{*+} \to \pi^0 K^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 5567 | 1 | 93556 |
| 10981 | $J/\psi \to \eta' f_0(1710)\gamma, \eta' \to \pi^+\pi^-\eta, f_0(1710) \to K^0\bar{K}^0, \eta \to \gamma\gamma, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma\gamma$ | 10980 | 1 | 93557 |
| 10982 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^+ a_0^-, \rho^0 \to \pi^+ \pi^-, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 10981 | 1 | 93558 |
| 10983 | $J/\psi \to \eta \eta \omega, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\gamma^f$ | 10982 | 1 | 93559 |
| 10984 | $J/\psi \to \eta K^0 \bar{K}^0 K^- K^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-K^+K^-$ | 10983 | 1 | 93560 |
| 10985 | $J/\psi \to \rho^- K^{*+} \bar{K}_0^{*0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 10984 | 1 | 93561 |
| 10986 | $J/\psi \to \pi^-\pi^-a_2^+a_0^+, a_2^+ \to \pi^+\eta, a_0^+ \to \pi^+\eta, \eta \to \pi^0\pi^+\pi^-, \eta \to \gamma\gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 5568 | 1 | 93562 |
| 10987 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^- \gamma^f, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 10986 | 1 | 93563 |
| 10988 | $J/\psi \to \pi^0 a_2^- \bar{K}^0 K^+, a_2^- \to \pi^0 \rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3593 | 1 | 93564 |
| 10989 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^0K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 10988 | 1 | 93565 |
| 10990 | $J/\psi \to \bar{K}^0 K_2^{*0} \eta', \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 10989 | 1 | 93566 |
| 10991 | $J/\psi \to \omega \bar{K}^0 K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 10990 | 1 | 93567 |
| 10992 | $J/\psi \to \eta K^0 \bar{K}_1^0, \eta \to \gamma \gamma, K^0 \to K_S^0, \bar{K}_1^0 \to \omega \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \\ \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 10991 | 1 | 93568 |
| 10993 | $J/\psi \to \pi^0 \omega \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 10992 | 1 | 93569 |
| 10994 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^0\bar{K}^0, K_2^{*0} \to \pi^-K^+\gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^f$ | 1903 | 1 | 93570 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 10995 | $J/\psi \to \omega K^{*+}K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 10994 | 1 | 93571 |
| 10996 | $J/\psi \to \pi^- \bar{K}^* K^+ h_1(1380), \bar{K}^* \to \pi^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 10995 | 1 | 93572 |
| 10997 | $J/\psi \to K^+ K^{*-} a_0^0 \gamma^f, K^{*-} \to \pi^- \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 10996 | 1 | 93573 |
| 10998 | $J/\psi \to \pi^+ K^* K^{*-} \phi, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-, \phi \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 10997 | 1 | 93574 |
| 10999 | $J/\psi \to \eta \bar{K}^* K_1^0, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5571 | 1 | 93575 |
| 11000 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 10999 | 1 | 93576 |
| 11001 | $J/\psi \to K^+K^{*-}\eta', K^{*-} \to \pi^0K^-, \eta' \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11000 | 1 | 93577 |
| 11002 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}_0^{*0} \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11001 | 1 | 93578 |
| 11003 | $J/\psi \to \pi^0 K^{*+} \bar{K}_1^{'-}, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11002 | 1 | 93579 |
| 11004 | $J/\psi \to K^{*+} \bar{K}_1^{'-} \gamma, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 11003 | 1 | 93580 |
| 11005 | $J/\psi 	o ar{K}^0 K_1^0, ar{K}^0 	o K_L^0, K_1^0 	o \omega K^0, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 11004 | 1 | 93581 |
| 11006 | $J/\psi \to \omega K^0 K^- b_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11005 | 1 | 93582 |
| 11007 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \rho^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11006 | 1 | 93583 |
| 11008 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11007 | 1 | 93584 |
| 11009 | $J/\psi \to f_2(1270)\bar{K}^0K_1^0, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \omega K^0, K_S^0 \to \pi^0\pi^0, \\ \omega \to \pi^0\pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5572 | 1 | 93585 |
| 11010 | $J/\psi 	o \pi^0\pi^0\pi^+a_2^-, a_2^- 	o \pi^0 ho^-, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11009 | 1 | 93586 |
| 11011 | $J/\psi 	o \bar{\Xi}^+ \Xi^- \gamma^f, \bar{\Xi}^+ 	o \pi^+ \bar{\Lambda}, \Xi^- 	o \pi^- \Lambda, \bar{\Lambda} 	o \pi^0 \bar{n}, \Lambda 	o \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma^f$ | 11010 | 1 | 93587 |
| 11012 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 2541 | 1 | 93588 |
| 11013 | $J/\psi \to \pi^- \bar{K}^* K^+ h_1(1170), \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1161 | 1 | 93589 |
| 11014 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 5575 | 1 | 93590 |
| 11015 | $J/\psi \to \pi^+ a_2^- f_0(1370), a_2^- \to \pi^0 \pi^- \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11014 | 1 | 93591 |
| 11016 | $J/\psi \to \pi^0 \pi^0 f_2(1270) K^+ K^{*-}, f_2(1270) \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11015 | 1 | 93592 |
| 11017 | $J/\psi \to \pi^+ n\bar{p} f_0(1370), f_0(1370) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-n\bar{p}$ | 11016 | 1 | 93593 |
| 11018 | $J/\psi \to \eta \bar{K}^0 K^+ b_1^-, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 11017 | 1 | 93594 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 11019 | $J/\psi \to a_2^0 \pi^+ \rho^- a_0^0, a_2^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+ \gamma^f, \\ \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 11018 | 1 | 93595 |
| 11020 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^+ K^* K^-, K^* ightarrow \pi^0 K^0, K^0 ightarrow K^0_S, K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 11019 | 1 | 93596 |
| 11021 | $J/\psi \to \rho^- f_2(1270) a_0^+, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5576 | 1 | 93597 |
| 11022 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^+K^{*-}, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_S^0, \pi^0 \to e^+e^-\gamma^F, K_S^0 \to \pi^0\pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 5577 | 1 | 93598 |
| 11023 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^0 K^+, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 11022 | 1 | 93599 |
| 11024 | $J/\psi \to \eta K^0 K^- b_1^+, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-K^-$ | 11023 | 1 | 93600 |
| 11025 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^+K^0, f_0(1370) \to \pi^0\pi^0\pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11024 | 1 | 93601 |
| 11026 | $J/\psi \to \pi^0 \pi^- f_0(1370) a_1^+, f_0(1370) \to \rho^+ \rho^-, a_1^+ \to \rho^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11025 | 1 | 93602 |
| 11027 | $J/\psi \to \rho^0 \pi^- \bar{K}^* K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11026 | 1 | 93603 |
| 11028 | $J/\psi \to \rho^0 K^0 K^0 \bar{K}^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-K^-$ | 11027 | 1 | 93604 |
| 11029 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^+ \pi^- \omega, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 11028 | 1 | 93605 |
| 11030 | $J/\psi \to K^0 \bar{K}^0 K^- K^{*+}, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 11029 | 1 | 93606 |
| 11031 | $J/\psi \rightarrow \rho^0\pi^+\pi^+\rho^-\rho^-\omega, \rho^0 \rightarrow \pi^+\pi^-, \rho^- \rightarrow \pi^0\pi^-, \rho^- \rightarrow \pi^0\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11030 | 1 | 93607 |
| 11032 | $J/\psi \to K^0 K_2^{*-} b_1^+, K^0 \to K_S^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 2543 | 1 | 93608 |
| 11033 | $J/\psi \to \omega K^+ K^- b_1^0, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5579 | 1 | 93609 |
| 11034 | $J/\psi \to \pi^0 \pi^+ \pi^+ \rho^- b_1^-, \rho^- \to \pi^0 \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11033 | 1 | 93610 |
| 11035 | $J/\psi \to \bar{K}^0 K_2^{*0} \phi, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^0, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0 \pi^0 \pi^0 K_L^0 K^+ K^-$ | 11034 | 1 | 93611 |
| 11036 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 11035 | 1 | 93612 |
| 11037 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^- \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11036 | 1 | 93613 |
| 11038 | $J/\psi \to \Lambda \bar{\Lambda} \gamma, \Lambda \to \pi^- p \gamma^f, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^-ar{n}p\gamma\gamma^f$ | 11037 | 1 | 93614 |
| 11039 | $J/\psi ightarrow \pi^0 ho^- ar{n} \Delta^+, ho^- ightarrow \pi^0 \pi^-, \Delta^+ ightarrow \pi^0 p$ | $\pi^0\pi^0\pi^0\pi^-ar{n}p$ | 2544 | 1 | 93615 |
| 11040 | $J/\psi \to \omega K^{*-}K_{1}^{'+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K^{*-} \to \pi^{0}K^{-}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{0}K^{+}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11039 | 1 | 93616 |
| 11041 | $J/\psi \to K^+ \phi K_1^-, \phi \to K_L^0 K_S^0, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 11040 | 1 | 93617 |
| 11042 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^+ K^-, \eta \to \gamma \gamma$ | $K^+K^-\gamma\gamma\gamma$ | 5581 | 1 | 93618 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 11043 | $J/\psi \to \pi^0 \pi^+ a_2^- f_0(1370), a_2^- \to \pi^0 \rho^-, f_0(1370) \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5582 | 1 | 93619 |
| 11044 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^0 K^+ \gamma^f$ | $\pi^0\pi^0K^+K^-\gamma^f$ | 11043 | 1 | 93620 |
| 11045 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11044 | 1 | 93621 |
| 11046 | $J/\psi \to \pi^+\pi^-K^+K_2^{*-}, K_2^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 5583 | 1 | 93622 |
| 11047 | $J/\psi \to \pi^0 \pi^+ \pi^- \pi^- \rho^+ K^{*+} K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11046 | 1 | 93623 |
| 11048 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 5584 | 1 | 93624 |
| 11049 | $J/\psi ightarrow \pi^+\pi^-\phi \gamma^f, \phi ightarrow \pi^0 ho^0, ho^0 ightarrow \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11048 | 1 | 93625 |
| 11050 | $J/\psi ightarrow ho^0\pi^-ar{n}p, ho^0 ightarrow \pi^+\pi^-$ | $\pi^+\pi^-\pi^-ar{n}p$ | 11049 | 1 | 93626 |
| 11051 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_S^0, \\ \omega \to \pi^0 \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 11050 | 1 | 93627 |
| 11052 | $J/\psi \to K_1^- K_1^{'+}, K_1^- \to \rho^0 K^-, K_1^{'+} \to \pi^+ K^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 5585 | 1 | 93628 |
| 11053 | $J/\psi 	o ar{K}^0 \phi K_0^0, ar{K}^0 	o K_L^0, \phi 	o K^+ K^-, K_0^0 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 11052 | 1 | 93629 |
| 11054 | $J/\psi 	o \omega p \bar{\Delta}^+, \omega 	o \pi^+\pi^-, \bar{\Delta}^+ 	o \pi^0 \bar{p}$ | $\pi^0\pi^+\pi^-par{p}$ | 11053 | 1 | 93630 |
| 11055 | $J/\psi \rightarrow \pi^- \omega \bar{K}^0 K^+ \phi, \omega \rightarrow \pi^0 \pi^+ \pi^-, \bar{K}^0 \rightarrow K_L^0, \phi \rightarrow \pi^+ \rho^-, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11054 | 1 | 93631 |
| 11056 | $J/\psi \to \omega \bar{K}^0 K_0^0, \omega \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5586 | 1 | 93632 |
| 11057 | $J/\psi \to K^+ K_1^- \gamma^f, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 11056 | 1 | 93633 |
| 11058 | $J/\psi \to \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 11057 | 1 | 93634 |
| 11059 | $J/\psi ightarrow ho^0 ho^0 \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11058 | 1 | 93635 |
| 11060 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 5587 | 1 | 93636 |
| 11061 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11060 | 1 | 93637 |
| 11062 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- K^+ \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 11061 | 1 | 93638 |
| 11063 | $J/\psi \to \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^- K^+$ | 11062 | 1 | 93639 |
| 11064 | $J/\psi \to \pi^0 \bar{K}^0 K^* a^0_0, \bar{K}^0 \to K^0_L, K^* \to \pi^- K^+, a^0_0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 5588 | 1 | 93640 |
| 11065 | $J/\psi \to \pi^- \rho^+ f_0(1370) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5589 | 1 | 93641 |
| 11066 | $J/\psi \to K^0 h_1(1170) \bar{K}_1^0, K^0 \to K_S^0, h_1(1170) \to \pi^0 \rho^0, \bar{K}_1^0 \to \rho^+ K^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11065 | 1 | 93642 |
| 11067 | $J/\psi \to \pi^0 K^* \bar{K}^* \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma^f$ | 11066 | 1 | 93643 |
| 11068 | $J/\psi \to K^{*} + K^{*} $ | $\pi^0 \pi^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 11067 | 1 | 93644 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 11069 | $J/\psi \to K^{*+}K_0^{*-}\gamma, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 5590 | 1 | 93645 |
| 11070 | $J/\psi \to \bar{K}^* n \bar{\Sigma}^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{K}^0 \to K_S^0, \bar{\Lambda} \to \pi^+ \bar{p}, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}\gamma$ | 11069 | 1 | 93646 |
| 11071 | $J/\psi \to \eta K^- K_1^{'+}, \eta \to \gamma \gamma, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 3599 | 1 | 93647 |
| 11072 | $J/\psi \to \pi^0 K^+ K^- h_1(1170), h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11071 | 1 | 93648 |
| 11073 | $J/\psi 	o \pi^0 K^0 K_2^{*0}, K^0 	o K_S^0, K_2^{*0} 	o \pi^0 ar K^0, K_S^0 	o \pi^+ \pi^-, ar K^0 	o K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^-$ | 11072 | 1 | 93649 |
| 11074 | $J/\psi \to \pi^0 \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5592 | 1 | 93650 |
| 11075 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \pi^- K_0^{*+}, K_0^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11074 | 1 | 93651 |
| 11076 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3600 | 1 | 93652 |
| 11077 | $J/\psi \to \eta a_0^0 b_1^0, \eta \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, b_1^0 \to \pi^0 \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5594 | 1 | 93653 |
| 11078 | $J/\psi \to \pi^0 \rho^0 a_2^0 \eta, \rho^0 \to \pi^+ \pi^-, a_2^0 \to K_S^0 K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 11077 | 1 | 93654 |
| 11079 | $J/\psi \to \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11078 | 1 | 93655 |
| 11080 | $J/\psi \to \rho^- a_0^0 a_0^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5595 | 1 | 93656 |
| 11081 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_L^0, \phi \to K^+ K^-, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 11080 | 1 | 93657 |
| 11082 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11081 | 1 | 93658 |
| 11083 | $J/\psi \to \pi^0 K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \pi^+ \pi^- K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11082 | 1 | 93659 |
| 11084 | $J/\psi ightarrow ho^- ar{K}^* K^+, ho^- ightarrow \pi^0 \pi^-, ar{K}^* ightarrow \pi^+ K^- \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 11083 | 1 | 93660 |
| 11085 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11084 | 1 | 93661 |
| 11086 | $J/\psi 	o \pi^- b_1^0 a_0^+, b_1^0 	o \pi^0 \omega, a_0^+ 	o \pi^+ \eta, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 11085 | 1 | 93662 |
| 11087 | $J/\psi \to \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 11086 | 1 | 93663 |
| 11088 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 a_2^+ K^0 K^-, a_2^+ \to \pi^0 \rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 11087 | 1 | 93664 |
| 11089 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_1(1285) \to \pi^0 a_0^0, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 11088 | 1 | 93665 |
| 11090 | $J/\psi \to \pi^+\pi^-\omega f_0(1370)h_1(1170), \omega \to \pi^0\pi^+\pi^-, f_0(1370) \to \pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11089 | 1 | 93666 |
| 11091 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \gamma \gamma, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-, K^0_0 \to K^0_L$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11090 | 1 | 93667 |
| 11092 | $J/\psi \to K^{*+}\bar{K}_1^{'-}, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11091 | 1 | 93668 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|----------------|--|--|----------------|--------|---------------|
| 11093 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \rho^- a_0^+, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, a_0^+ \to \bar{K}^0 K^+, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 11092 | 1 | 93669 |
| 11094 | $J/\psi \to \rho^0 \eta' a_0^0, \rho^0 \to \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11093 | 1 | 93670 |
| 11095 11096 | $J/\psi \to \pi^{0}\eta b_{1}^{0}, \eta \to \pi^{0}\pi^{0}\pi^{0}, b_{1}^{0} \to \pi^{0}\omega, \pi^{0} \to e^{+}e^{-}\gamma^{F}\gamma^{f}, \omega \to \pi^{0}\pi^{+}\pi^{-}$ $J/\psi \to \pi^{0}\pi^{0}\pi^{+}\eta'a_{1}^{-}, \eta' \to \pi^{+}\pi^{-}\eta, a_{1}^{-} \to \pi^{0}\rho^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \rho^{-} \to \pi^{0}\pi^{-}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 11094 11095 | 1 1 | 93671 93672 |
| 11097 | $J/\psi \to a_2^- \omega a_0^+, a_2^- \to \pi^0 \rho^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 11096 | 1 | 93673 |
| 11098 | $J/\psi \to \rho^+ K^- K_1^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11097 | 1 | 93674 |
| 11099 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11098 | 1 | 93675 |
| 11100 | $J/\psi \to \rho^0 \bar{K}^0 K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11099 | 1 | 93676 |
| 11101 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- K_2^{*0} K^{*+}, K_2^{*0} \to \rho^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11100 | 1 | 93677 |
| 11102 | $J/\psi \to \pi^0 K^{*-} K_1^+, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11101 | 1 | 93678 |
| 11103 | $J/\psi \to \eta \omega \eta', \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 11102 | 1 | 93679 |
| 11104 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 \pi^+ a_0^-, a_2^0 \to \pi^- \rho^+, a_0^- \to K^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 11103 | 1 | 93680 |
| 11105 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, b_1^+ \to \pi^+\omega, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 11104 | 1 | 93681 |
| 11106 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 11105 | 1 | 93682 |
| 11107 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K_2^{*-}, K^* \to \pi^- K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 11106 | 1 | 93683 |
| 11108 | $J/\psi \to \pi^- \bar{K}^0 \bar{K}^0 K^* K^{*+}, \bar{K}^0 \to K_L^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-\pi^-$ | 11107 | 1 | 93684 |
| 11109 | $J/\psi \to K^+ \bar{p} \Sigma^{*0}, \Sigma^{*0} \to \pi^0 \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^0K^+nar{p}$ | 11108 | 1 | 93685 |
| 11110 | $J/\psi \to \pi^- f_0(1370) a_1^+, f_0(1370) \to K^+ K^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 11109 | 1 | 93686 |
| 11111 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta', \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 11110 | 1 | 93687 |
| 11112 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 K^- a_1^+, K^0 \to K_S^0, a_1^+ \to \pi^0 \rho^+, K_S^0 \to \pi^+ \pi^-, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 11111 | 1 | 93688 |
| 11113 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 2545 | 1 | 93689 |
| 11114 | $J/\psi \to \pi^+\pi^-\bar{K}^*K_1^{'0}, \bar{K}^* \to \pi^+K^-, K_1^{'0} \to \pi^0K^*, K^* \to \pi^-K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5597 | 1 | 93690 |
| 11115 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^- K^{*+}, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 2546 | 1 | 93691 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 11116 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \pi^- \eta, \eta \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 11115 | 1, | 93692 |
| 11117 | $J/\psi \to \rho^0 \eta a_0^0, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5599 | 1 | 93693 |
| 11118 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^{*-} a_0^0, K^{*-} \to \pi^- \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 5600 | 1 | 93694 |
| 11119 | $J/\psi \to \pi^+\pi^-K^{*+}\bar{K}_1^{'-}, K^{*+} \to \pi^0K^+, \bar{K}_1^{'-} \to \pi^0K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11118 | 1 | 93695 |
| 11120 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^- \gamma^f \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 11119 | 1 | 93696 |
| 11121 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^+K^{*-}, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 11120 | 1 | 93697 |
| 11122 | $J/\psi \to K^0 b_1^0 \bar{K}_1^{'0}, K^0 \to K_S^0, b_1^0 \to \pi^0 \omega, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11121 | 1 | 93698 |
| 11123 | $J/\psi \to \rho^0 K^- K_1^+, \rho^0 \to \pi^+ \pi^-, K_1^+ \to \pi^+ \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 11122 | 1 | 93699 |
| 11124 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^+ K^* K^-, a_2^+ \to \pi^0 \rho^+, K^* \to \pi^- K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11123 | 1 | 93700 |
| 11125 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 3603 | 1 | 93701 |
| 11126 | $J/\psi \to \rho^0 \pi^+ \omega a_0^- \gamma^F, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma$ | 11125 | 1 | 93702 |
| 11127 | $J/\psi \to a_2^0 \pi^+ \rho^- f_0(1370), a_2^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11126 | 1 | 93703 |
| 11128 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 919 | 1 | 93704 |
| 11129 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 11128 | 1 | 93705 |
| 11130 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 11129 | 1 | 93706 |
| 11131 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 11130 | 1 | 93707 |
| 11132 | $J/\psi \to \pi^+\pi^-K^{*+}K_1^-, K^{*+} \to \pi^+K^0, K_1^- \to \pi^0K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11131 | 1 | 93708 |
| 11133 | $J/\psi \to \bar{K}^0 \eta' K_1^{'0}, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 11132 | 1 | 93709 |
| 11134 | $J/\psi \to \pi^+ a_0^0 b_1^-, a_0^0 \to \pi^0 \eta, b_1^- \to \pi^- \omega, \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5603 | 1 | 93710 |
| 11135 | $J/\psi 	o \eta_c \gamma, \eta_c 	o K^* ar K^*, K^* 	o \pi^0 K^0, ar K^* 	o \pi^0 ar K^0, K^0 	o K_L^0, ar K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\gamma$ | 11134 | 1 | 93711 |
| 11136 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^F$ | 11135 | 1 | 93712 |
| 11137 | $J/\psi \to \pi^0 \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 193 | 1 | 93713 |
| 11138 | $J/\psi \to \pi^0 K^+ K^- K^{*+} K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 11137 | 1 | 93714 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 11139 | $J/\psi \to \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 11138 | 1 | 93715 |
| 11140 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0\gamma^f, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 11139 | 1 | 93716 |
| 11141 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 11140 | 1 | 93717 |
| 11142 | $J/\psi \to \eta K^+ \bar{K}_1^{'-}, \eta \to \gamma \gamma, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 5605 | 1 | 93718 |
| 11143 | $J/\psi \to \pi^0 K^{*+} K^{*-} h_1(1170), K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^- \rho^+, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11142 | 1 | 93719 |
| 11144 | $J/\psi \to a_0^0 \pi^+ K^* K^-, a_0^0 \to \pi^- \rho^+, K^* \to \pi^- K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1907 | 1 | 93720 |
| 11145 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^{*-}, K_1^0 \to \pi^- K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 11144 | 1 | 93721 |
| 11146 | $J/\psi \to f_2(1270)K^{*+}K^{*-}, f_2(1270) \to \pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11145 | 1 | 93722 |
| 11147 | $J/\psi \to \pi^0 \pi^- \omega \bar{K}^* K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11146 | 1 | 93723 |
| 11148 | $J/\psi \to \pi^- \bar{K}^* K^+ \gamma^F, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | 11147 | 1 | 93724 |
| 11149 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^+ \pi^- \omega, K^{*+} \to \pi^+ K^0, \omega \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 416 | 1 | 93725 |
| 11150 | $J/\psi 	o \pi^+ \Sigma^0 ar{\Sigma}^-, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^- 	o \pi^- ar{n}, \Lambda 	o \pi^0 n$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 11149 | 1 | 93726 |
| 11151 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \rho^+ \rho^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11150 | 1 | 93727 |
| 11152 | $J/\psi \to K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11151 | 1 | 93728 |
| 11153 | $J/\psi ightarrow ho^0 b_1^0 \gamma, ho^0 ightarrow \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5608 | 1 | 93729 |
| 11154 | $J/\psi \to \bar{K}^0 K_2^{*+} b_1^-, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^{*+}, b_1^- \to \pi^- \omega \gamma^f, K_S^0 \to \pi^+ \pi^-, K_S^{*+} \to \pi^0 K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 11153 | 1 | 93730 |
| 11155 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-} \gamma, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 11154 | 1 | 93731 |
| 11156 | $J/\psi \to \pi^0 f_0(1370)\gamma, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11155 | 1 | 93732 |
| 11157 | $J/\psi \to a_2^0 \eta \gamma, a_2^0 \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 11156 | 1 | 93733 |
| 11158 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 11157 | 1 | 93734 |
| 11159 | $J/\psi ightarrow f_0(1710)\gamma, f_0(1710) ightarrow \omega\omega, \omega ightarrow \pi^0\gamma, \omega ightarrow \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 11158 | 1 | 93735 |
| 11160 | $J/\psi \to \bar{K}^0 \eta' K_1^{'0}, \bar{K}^0 \to K_L^0, \eta' \to \pi^0 \pi^0 \eta, K_1^{'0} \to \pi^0 K^*, \eta \to \gamma \gamma, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma\gamma$ | 11159 | 1 | 93736 |
| 11161 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^{+}\Sigma^{0}, \bar{\Sigma}^{*-} \to \pi^{-}\bar{\Lambda}, \Sigma^{0} \to \Lambda\gamma, \bar{\Lambda} \to \pi^{0}\bar{n}, \Lambda \to \pi^{0}\bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 11160 | 1 | 93737 |
| 11162 | $J/\psi ightarrow \pi^0 \eta \eta \gamma, \eta ightarrow \gamma \gamma, \eta ightarrow \gamma \gamma$ | $\pi^0\gamma\gamma\gamma\gamma\gamma$ | 11161 | 1 | 93738 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|----------------|---|--|----------------|--------|----------------|
| 11163 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 5609 | 1 | 93739 |
| 11164 | $J/\psi \to \eta \bar{K}^* K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 5610 | 1 | 93740 |
| 11165 11166 | $J/\psi \to \pi^0 \pi^+ \pi^- K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^* \to \pi^+ K^-$ $J/\psi \to \pi^+ \pi^- \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^- \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F} \ \pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 11164 11165 | 1 1 | 93741 93742 |
| 11167 | $J/\psi \to K_0^{+-}K_1^{+}\gamma^f, K_0^{*-} \to \pi^0K^{-}, K_1^{+} \to \rho^+K^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{f}$ | 11166 | 1 | 93743 |
| 11168 | $J/\psi \to \pi^0 \pi^+ \pi^- f_0(1370), f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5611 | 1 | 93744 |
| 11169 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2551 | 1 | 93745 |
| 11170 | $J/\psi \to K^+ \eta' K_1^-, \eta' \to \pi^0 \pi^0 \eta, K_1^- \to \rho^0 K^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5613 | 1 | 93746 |
| 11171 | $J/\psi \to \pi^- \bar{K}_1^{'0} K_1^{'+}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_1^{'+} \to \pi^+ K^*, K^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^- K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 2552 | 1 | 93747 |
| 11172 | $J/\psi \to \pi^0 \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_1^0 \to \pi^0 \pi^0 \to \pi^0 \to \pi^0 \pi^0 \to \pi^0 \to$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11171 | 1 | 93748 |
| 11173 | $J/\psi \to K^+ \phi K_1^-, \phi \to K^+ K^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+K^+K^-$ | 11172 | 1 | 93749 |
| 11174 | $J/\psi \to \pi^+ K_1^{'0} \bar{K}_1^{'-}, K_1^{'0} \to \pi^0 K^*, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 11173 | 1 | 93750 |
| 11175 | $J/\psi \to \pi^- \omega K^{*+} \bar{K}_0^{*0}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 11174 | 1 | 93751 |
| 11176 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3610 | 1 | 93752 |
| 11177 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^+ \pi^- K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 5616 | 1 | 93753 |
| 11178 | $J/\psi \to K^- h_1(1170) K_1^+, h_1(1170) \to \pi^0 \rho^0, K_1^+ \to \omega K^+, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3611 | 1 | 93754 |
| 11179 | $J/\psi \to \bar{K}^0 K^+ a_1^- \gamma^F, \bar{K}^0 \to K_L^0, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^F$ | 1909 | 1 | 93755 |
| 11180 | $J/\psi \to \pi^- a_2^+ \omega \omega, a_2^+ \to \pi^+ \eta, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 11179 | 1 | 93756 |
| 11181 | $J/\psi \to \eta \eta' h_1(1380), \eta \to \gamma \gamma, \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 11180 | 1 | 93757 |
| 11182 | $J/\psi \to \pi^- \omega K^+ \bar{K}_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11181 | 1 | 93758 |
| 11183 | $J/\psi \rightarrow \pi^0\pi^0\phi, \phi \rightarrow \pi^+\rho^-, \rho^- \rightarrow \pi^0\pi^-, \pi^0 \rightarrow e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11182 | 1 | 93759 |
| 11184 | $J/\psi \to \rho^+ K_2^{*0} K^{*-}, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 11183 | 1 | 93760 |
| 11185 | $J/\psi \to \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^- K^+ \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 5619 | 1 | 93761 |
| 11186 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^0 \pi^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11185 | 1 | 93762 |
| 11187 | $J/\psi \to \rho^0 \bar{K}^* K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 11186 | 1 | 93763 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11188 | $J/\psi \to \pi^- \omega a_1^+ \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 11187 | 1 | 93764 |
| 11189 | $J/\psi ightarrow \pi^- \eta b_1^+, \eta ightarrow \gamma \gamma, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 2554 | 1 | 93765 |
| 11190 | $J/\psi \to \eta' h_1(1170), \eta' \to \pi^+\pi^-\eta, h_1(1170) \to \pi^-\rho^+, \eta \to \pi^+\pi^-\gamma^F, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 11189 | 1 | 93766 |
| 11191 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^{*-} f_0(1370), K^{*-} \to \pi^0 K^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11190 | 1 | 93767 |
| 11192 | $J/\psi \to f_2(1270)h_1(1170), f_2(1270) \to \pi^+\pi^-, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3614 | 1 | 93768 |
| 11193 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_L^0, $ $\rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0 K_L^0 K_L^0 \pi^+\pi^-$ | 11192 | 1 | 93769 |
| 11194 | $J/\psi \to \pi^0\pi^+\rho^-a^0_0, \rho^- \to \pi^0\pi^-, a^0_0 \to K^0_S K^0_S, K^0_S \to \pi^+\pi^-, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11193 | 1 | 93770 |
| 11195 | $J/\psi 	o K^+ ar{\Delta}^+ \Lambda, ar{\Delta}^+ 	o \pi^0 ar{p}, \Lambda 	o \pi^0 n$ | $\pi^0\pi^0K^+n\bar{p}$ | 11194 | 1 | 93771 |
| 11196 | $J/\psi \to K^- f_0(1370) K_1^+, f_0(1370) \to \rho^0 \rho^0, K_1^+ \to \pi^+ K^*, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 11195 | 1 | 93772 |
| 11197 | $J/\psi ightarrow f_{2}^{'}\gamma, f_{2}^{'} ightarrow \eta\eta, \eta ightarrow \gamma\gamma, \eta ightarrow \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 11196 | 1 | 93773 |
| 11198 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_1(1285) \to \pi^+ a_0^-, K_S^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^F$ | 11197 | 1 | 93774 |
| 11199 | $J/\psi \to \pi^0 \pi^- a_2^+, \pi^0 \to e^+ e^- \gamma^F, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $e^+e^-K_L^0\pi^-K^+\gamma^F$ | 11198 | 1 | 93775 |
| 11200 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11199 | 1 | 93776 |
| 11201 | $J/\psi \to K^0 \bar{K}_1^0 f_1(1285), K^0 \to K_L^0, \bar{K}_1^0 \to \rho^+ K^-, f_1(1285) \to \pi^0 \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, $ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 11200 | 1 | 93777 |
| 11202 | $J/\psi \to \pi^+ K^* K^- b_1^0, K^* \to \pi^- K^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11201 | 1 | 93778 |
| 11203 | $J/\psi \to \rho^- a_2^+ \eta', \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11202 | 1 | 93779 |
| 11204 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \bar{K}^0 \gamma, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 11203 | 1 | 93780 |
| 11205 | $J/\psi \to K^- K_2^{*+} a_0^0, K_2^{*+} \to \pi^+ K^*, a_0^0 \to \pi^0 \eta, K^* \to \pi^0 K^0, \eta \to \gamma \gamma, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma$ | 11204 | 1 | 93781 |
| 11206 | $J/\psi \to \bar{K}^* K_0^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma$ | 11205 | 1 | 93782 |
| 11207 | $J/\psi \to \pi^0 K_2^{*0} \bar{K}_1^0, \pi^0 \to e^+ e^- \gamma^F, K_2^{*0} \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 11206 | 1 | 93783 |
| 11208 | $J/\psi \to \omega \omega f_0(1370)\gamma, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma$ | 11207 | 1 | 93784 |
| 11209 | $J/\psi \to a_2^- b_1^+, a_2^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5622 | 1 | 93785 |
| 11210 | $J/\psi \to K^0 \bar{K}^0_1 \gamma, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^+ K^-, K^0_S \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 11209 | 1 | 93786 |
| 11211 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to \pi^-\bar{K}^0, f_1(1285) \to \rho^0\gamma, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 3615 | 1 | 93787 |
| 11212 | $J/\psi ightarrow \pi^0\pi^-\eta a_1^+, \eta ightarrow \gamma\gamma, a_1^+ ightarrow ho^0\pi^+, ho^0 ightarrow \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5624 | 1 | 93788 |
| 11213 | $J/\psi \to K^0 \bar{\Delta}^+ \Sigma^+, K^0 \to K_L^0, \bar{\Delta}^+ \to \pi^0 \bar{p}, \Sigma^+ \to \pi^0 p$ | $\pi^0\pi^0K^0_L par p$ | 3616 | 1 | 93789 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 11214 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11213 | 1 | 93790 |
| 11215 | $J/\psi \to K^-K^{*+}\phi\gamma^F, K^{*+} \to \pi^+K^0, \phi \to K^+K^-, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-\gamma^F$ | 5626 | 1 | 93791 |
| 11216 | $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \rho^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11215 | 1 | 93792 |
| 11217 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 11216 | 1 | 93793 |
| 11218 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 5627 | 1 | 93794 |
| 11219 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^*, \pi^0 \to e^+ e^- \gamma^F, K^* \to \pi^0 K^0, K_L^0 \to K_L^0$ | $e^+e^-\pi^0K_L^0K_L^0\gamma^F$ | 11218 | 1 | 93795 |
| 11220 | $J/\psi ightarrow \overline{ ho^0} ho^0 \eta \gamma, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11219 | 1 | 93796 |
| 11221 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5628 | 1 | 93797 |
| 11222 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, $ $\rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 502 | 1 | 93798 |
| 11223 | $J/\psi \to K^+ K^{*-} f_0(1710), K^{*-} \to \pi^0 K^-, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 5630 | 1 | 93799 |
| 11224 | $J/\psi \to \eta \omega K^+ K^-, \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 11223 | 1 | 93800 |
| 11225 | $J/\psi 	o a_2^- b_1^+, a_2^- 	o \pi^0 ho^-, b_1^+ 	o \pi^+ \omega, ho^- 	o \pi^0 \pi^-, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 11224 | 1 | 93801 |
| 11226 | $J/\psi \to \eta \eta' h_1(1170), \eta \to \gamma \gamma, \eta' \to \rho^0 \gamma, h_1(1170) \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 11225 | 1 | 93802 |
| 11227 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11226 | 1 | 93803 |
| 11228 | $J/\psi \to \pi^+ \rho^- \bar{K}^0 K_1^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 3618 | 1 | 93804 |
| 11229 | $J/\psi \to a_2^0 \pi^+ \eta b_1^-, a_2^0 \to \pi^0 \eta, \eta \to \gamma \gamma, b_1^- \to \pi^- \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma\gamma$ | 11228 | 1 | 93805 |
| 11230 | $J/\psi \to \eta \phi f_2^{'}, \eta \to \pi^0 \pi^0 \pi^0, \phi \to K^+ K^-, f_2^{'} \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3619 | 1 | 93806 |
| 11231 | $J/\psi \to \pi^+\pi^-K^*ar{K}_1^0, K^* \to \pi^0K^0, ar{K}_1^0 \to \pi^+\pi^-ar{K}^0, K^0 \to K_L^0, ar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11230 | 1 | 93807 |
| 11232 | $J/\psi \to K^* \bar{K}^* f_0(1370), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 1911 | 1 | 93808 |
| 11233 | $J/\psi 	o ho^+ n ar{p} \gamma^F, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+n\bar{p}\gamma^F$ | 11232 | 1 | 93809 |
| 11234 | $J/\psi \to \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}$ | 11233 | 1 | 93810 |
| 11235 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \rho^+K^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 11234 | 1 | 93811 |
| 11236 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^F$ | 11235 | 1 | 93812 |
| 11237 | $J/\psi \to \phi f_1(1420), \phi \to \pi^- \rho^+, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11236 | 1 | 93813 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11238 | $J/\psi \to \pi^+\pi^-a_0^0, a_0^0 \to \pi^0\eta, \pi^0 \to e^+e^-\gamma^F, \eta \to \pi^0\pi^0\pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 1478 | 1 | 93814 |
| 11239 | $J/\psi \rightarrow \rho^+ a_2^-, \rho^+ \rightarrow \pi^0 \pi^+, a_2^- \rightarrow \rho^0 \pi^- \gamma^f \gamma^f, \rho^0 \rightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 11238 | 1 | 93815 |
| 11240 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+K^-K^-$ | 11239 | 1 | 93816 |
| 11241 | $J/\psi \to \pi^0 K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11240 | 1 | 93817 |
| 11242 | $J/\psi \to \pi^0 \rho^0 \bar{K}^* K_1^{'0}, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K_L^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11241 | 1 | 93818 |
| 11243 | $J/\psi ightarrow \eta' b_1^0, \eta' ightarrow ho^0 \gamma, b_1^0 ightarrow \pi^0 \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 611 | 1 | 93819 |
| 11244 | $J/\psi \to a_2^0 K^+ K_0^{*-}, a_2^0 \to \pi^+ \pi^- \omega, K_0^{*-} \to \pi^0 K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11243 | 1 | 93820 |
| 11245 | $J/\psi \to K^- K_0^0 a_1^+, K_0^0 \to \pi^0 K^0, a_1^+ \to \pi^0 ho^+, K^0 \to K_L^0, ho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 11244 | 1 | 93821 |
| 11246 | $J/\psi \to \pi^0 \rho^0 \rho^+ b_1^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 3623 | 1 | 93822 |
| 11247 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \omega K^0, \omega \to \pi^0 \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 11246 | 1 | 93823 |
| 11248 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1710) \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 2559 | 1 | 93824 |
| 11249 | $J/\psi \to \pi^0 \pi^+ \pi^- \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 11248 | 1 | 93825 |
| 11250 | $J/\psi \to \rho^{+}a_{2}^{-}\eta, \rho^{+} \to \pi^{0}\pi^{+}, a_{2}^{-} \to \pi^{0}\rho^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \rho^{-} \to \pi^{0}\pi^{-}, \pi^{0} \to e^{+}e^{-}\gamma^{F}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11249 | 1 | 93826 |
| 11251 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^0K^{*-}, K_1^{'+} \to \pi^+K^*, K^{*-} \to \pi^0K^-, K^* \to \pi^-K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11250 | 1 | 93827 |
| 11252 | $J/\psi \to \eta' h_1(1380), \eta' \to \gamma \gamma, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 11251 | 1 | 93828 |
| 11253 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^0 \eta, K^{*-} \to \pi^0 K^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 11252 | 1 | 93829 |
| 11254 | $J/\psi ightarrow \omega a_0^0 f_0(1370), \omega ightarrow \pi^0 \gamma, a_0^0 ightarrow \pi^0 \eta, f_0(1370) ightarrow \gamma \gamma, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma\gamma\gamma$ | 11253 | 1 | 93830 |
| 11255 | $J/\psi \to \eta a_0^- b_1^+, \eta \to \pi^0 \pi^0 \pi^0, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma,$ $\omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11254 | 1 | 93831 |
| 11256 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 a_2^- a_1^+, a_2^- \to \rho^0 \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 11255 | 1 | 93832 |
| 11257 | $J/\psi \to \omega f_0(1370) f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11256 | 1 | 93833 |
| 11258 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f\gamma^f$ | 5638 | 1 | 93834 |
| 11259 | $J/\psi \to K^{*-}K_1^{'+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \omega K^+, \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 11258 | 1 | 93835 |
| 11260 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0\gamma^f, h_1(1170) \to \pi^-\rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 11259 | 1 | 93836 |
| 11261 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 612 | 1 | 93837 |
| 11262 | $J/\psi \rightarrow \pi^+\pi^-b_1^+b_1^-, b_1^+ \rightarrow \pi^+\omega, b_1^- \rightarrow \pi^-\omega, \omega \rightarrow \pi^0\pi^+\pi^-, \omega \rightarrow \pi^0\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 11261 | 1 | 93838 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11263 | $J/\psi \to \pi^- K^0 \bar{K}^* a_0^+, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 11262 | 1 | 93839 |
| 11264 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^- K^+, K_0^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 11263 | 1 | 93840 |
| 11265 | $J/\psi \to \pi^0 \rho^+ K^0 K^{*-} \phi, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-K^-$ | 11264 | 1 | 93841 |
| 11266 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 11265 | 1 | 93842 |
| 11267 | $J/\psi \to \pi^+ \rho^- K^- K_1^+, \rho^- \to \pi^0 \pi^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 11266 | 1 | 93843 |
| 11268 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \eta K^+, \bar{K}^0 \to K_L^0, \eta \to \pi^+\pi^-\gamma^F$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 11267 | 1 | 93844 |
| 11269 | $J/\psi \to \rho^- a_0^+ f_1(1285), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_1(1285) \to \pi^0 a_0^0, \eta \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11268 | 1 | 93845 |
| 11270 | $J/\psi \to \pi^0 \pi^+ a_2^-, \pi^0 \to e^+ e^- \gamma^F, a_2^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 3626 | 1 | 93846 |
| 11271 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11270 | 1 | 93847 |
| 11272 | $J/\psi \to \pi^0 K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 11271 | 1 | 93848 |
| 11273 | $J/\psi \to \rho^0 K^+ K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11272 | 1 | 93849 |
| 11274 | $J/\psi \to \omega f_2(1270), \omega \to \pi^+\pi^-, f_2(1270) \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-$ | 11273 | 1 | 93850 |
| 11275 | $J/\psi \to K^+ a_0^0 K_1^-, a_0^0 \to \pi^0 \eta, K_1^- \to \pi^- \bar{K}_0^{*0}, \eta \to \gamma \gamma, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 11274 | 1 | 93851 |
| 11276 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 11275 | 1 | 93852 |
| 11277 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \omega \gamma, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 11276 | 1 | 93853 |
| 11278 | $J/\psi \to \pi^0 \pi^+ \pi^- K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5641 | 1 | 93854 |
| 11279 | $J/\psi \to \pi^0 K^{*+} K^{*-} \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 5642 | 1 | 93855 |
| 11280 | $J/\psi \to \pi^+ \eta b_1^-, \eta \to \gamma \gamma, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 11279 | 1 | 93856 |
| 11281 | $J/\psi 	o \eta_2(1870) \gamma, \eta_2(1870) 	o \pi^0 a_0^0, a_0^0 	o \pi^0 \eta, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 11280 | 1 | 93857 |
| 11282 | $J/\psi \to \pi^- \rho^+ a^0_0, \rho^+ \to \pi^0 \pi^+, a^0_0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11281 | 1 | 93858 |
| 11283 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11282 | 1 | 93859 |
| 11284 | $J/\psi \to \phi f_1(1420), \phi \to \pi^0 \rho^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 3627 | 1 | 93860 |
| 11285 | $J/\psi 	o a_2^0 \pi^- b_1^+, a_2^0 	o K_L^0 K_L^0, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11284 | 1 | 93861 |
| 11286 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 11285 | 1 | 93862 |
| 11287 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 11286 | 1 | 93863 |
| 11288 | $J/\psi 	o \pi^- ar{\Sigma}^0 \Sigma^+ \gamma^F, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Sigma^+ 	o \pi^+ n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^+\pi^-n\bar{p}\gamma^F\gamma$ | 11287 | 1 | 93864 |
| 11289 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11288 | 1 | 93865 |
| 11290 | $J/\psi 	o \pi^- \bar{\Delta}^0 \Delta^+, \bar{\Delta}^0 	o \pi^+ \bar{p}, \Delta^+ 	o \pi^0 p, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-par p\gamma^F$ | 11289 | 1 | 93866 |
| 11291 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^+ \pi^- \gamma^F, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 5644 | 1 | 93867 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 11292 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 11291 | 1 | 93868 |
| 11293 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11292 | 1 | 93869 |
| 11294 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 11293 | 1 | 93870 |
| 11295 | $J/\psi \to \rho^0 a_2^0 \eta', \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^-, \eta' \to \pi^+ \pi^- \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 11294 | 1 | 93871 |
| 11296 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \omega K^0, K_S^0 \to \pi^+ \pi^-, \ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 1481 | 1 | 93872 |
| 11297 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \phi \to \eta \gamma, \eta \to \pi^+ \pi^- \gamma^F$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^F\gamma$ | 11296 | 1 | 93873 |
| 11298 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 11297 | 1 | 93874 |
| 11299 | $J/\psi \to K^+K^-f_1(1285), f_1(1285) \to \pi^+K^0K^-, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 11298 | 1 | 93875 |
| 11300 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0 \pi^- \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma$ | 11299 | 1 | 93876 |
| 11301 | $J/\psi 	o \pi^+ K^0 K_1^- \gamma^F, K^0 	o K_L^0, K_1^- 	o ho^- ar K^0, ho^- 	o \pi^0 \pi^-, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^F$ | 11300 | 1 | 93877 |
| 11302 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11301 | 1 | 93878 |
| 11303 | $J/\psi \to \pi^0 \pi^0 \rho^0 \pi^- \omega b_1^+, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 11302 | 1 | 93879 |
| 11304 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 11303 | 1 | 93880 |
| 11305 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 11304 | 1 | 93881 |
| 11306 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 5646 | 1 | 93882 |
| 11307 | $J/\psi 	o \pi^0 a_2^0 \pi^+ a_1^-, a_2^0 	o \pi^- ho^+, a_1^- 	o \pi^0 ho^-, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 11306 | 1 | 93883 |
| 11308 | $J/\psi \to \rho^- \eta a_0^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^+ \to \pi^+ \eta \gamma^f, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 11307 | 1 | 93884 |
| 11309 | $J/\psi \to \omega K^{*+} \bar{K}_{1}^{'-}, \omega \to \pi^{0} \pi^{+} \pi^{-}, K^{*+} \to \pi^{+} K^{0}, \bar{K}_{1}^{'-} \to \pi^{0} K^{*-}, K^{0} \to K_{S}^{0}, K^{*-} \to \pi^{-} \bar{K}^{0}, K^{0}_{S} \to \pi^{+} \pi^{-}, \bar{K}^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{0} \pi^{0}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 11308 | 1 | 93885 |
| 11310 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11309 | 1 | 93886 |
| 11311 | $J/\psi ightarrow ho^-ar{\Delta}^0\Delta^+, ho^- ightarrow \pi^0\pi^-, ar{\Delta}^0 ightarrow \pi^0ar{n}, \Delta^+ ightarrow \pi^+n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 11310 | 1 | 93887 |
| 11312 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 11311 | 1 | 93888 |
| 11313 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to K^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0 K^+ K^+ K^- K^-$ | 11312 | 1 | 93889 |
| 11314 | $J/\psi \to \pi^0 a_2^+ b_1^-, a_2^+ \to \pi^0 \rho^+, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, $ $\pi^0 \to e^+ e^- \gamma^F \gamma^f \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}\gamma^{f}$ | 11313 | 1 | 93890 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 11315 | $J/\psi \to K^- K_1^0 a_1^+, K_1^0 \to \pi^- K_0^{*+}, a_1^+ \to \rho^0 \pi^+, K_0^{*+} \to \pi^+ K^0, \rho^0 \to \pi^+ \pi^-, K_0^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 11314 | 1 | 93891 |
| 11316 | $J/\psi \to \rho^+ a_2^- \eta, \rho^+ \to \pi^0 \pi^+, a_2^- \to \bar{K}^0 K^-, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11315 | 1 | 93892 |
| 11317 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\gamma\gamma$ | 11316 | 1 | 93893 |
| 11318 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11317 | 1 | 93894 |
| 11319 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11318 | 1 | 93895 |
| 11320 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma$ | 5647 | 1 | 93896 |
| 11321 | $J/\psi \to \bar{\Xi}^+ \Xi^-, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^- \to \pi^- \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^0 n,$ $\pi^0 \to e^+ e^+ e^- e^-$ | $e^{+}e^{+}e^{-}e^{-}\pi^{+}\pi^{+}\pi^{-}n\bar{p}$ | 5648 | 1 | 93897 |
| 11322 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11321 | 1 | 93898 |
| 11323 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11322 | 1 | 93899 |
| 11324 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 11323 | 1 | 93900 |
| 11325 | $J/\psi \to \eta h_1(1170), \eta \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11324 | 1 | 93901 |
| 11326 | $J/\psi \to \rho^+ K^0 K^-, \rho^+ \to \pi^+ \gamma, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma$ | 11325 | 1 | 93902 |
| 11327 | $J/\psi \to \rho^- K^- K^-, \rho^- \to \kappa^-, K^- \to K_L^-$ $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-,$ $K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5649 | 1 | 93903 |
| 11328 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 11327 | 1 | 93904 |
| 11329 | $J/\psi \to \pi^0 \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 11328 | 1 | 93905 |
| 11330 | $J/\psi \to K^0 \bar{K}^* \eta' \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma\gamma$ | 11329 | 1 | 93906 |
| 11331 | $J/\psi \to \rho^- \bar{K}^0 K^{*+} \gamma, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 11330 | 1 | 93907 |
| 11332 | $J/\psi \to \pi^+ K^- K_0^0 \gamma^f, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 5650 | 1 | 93908 |
| 11333 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma^{F}$ | 11332 | 1 | 93909 |
| 11334 | $J/\psi \to \rho^- \bar{K}^* K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}$ | 11333 | 1 | 93910 |
| 11335 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 11334 | 1 | 93911 |
| 11336 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 11335 | 1 | 93912 |
| 11337 | $J/\psi \to K^+K^-\phi\phi, \phi \to K_L^0K_S^0, \phi \to K^+K^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-K^+K^+K^-K^-$ | 11336 | 1 | 93913 |
| 11338 | $J/\psi \to \pi^- a_2^+ \gamma^f, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11337 | 1 | 93914 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 11339 | $J/\psi \to \pi^0 K^+ a_0^0 K_1^-, a_0^0 \to \pi^0 \eta, K_1^- \to \rho^- \bar{K}^0, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma\gamma$ | 11338 | 1 | 93915 |
| 11340 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 11339 | 1 | 93916 |
| 11341 | $J/\psi \to \pi^0 \omega f_2(1270) \eta', \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, \eta' \to \rho^0 \gamma, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 3629 | 1 | 93917 |
| 11342 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11341 | 1 | 93918 |
| 11343 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11342 | 1 | 93919 |
| 11344 | $J/\psi 	o ho^0 \Lambda ar{\Sigma}^0, ho^0 	o \pi^+ \pi^-, \Lambda 	o \pi^0 n, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 11343 | 1 | 93920 |
| 11345 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} \phi, K^{*+} \to \pi^+ K^0, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma$ | 11344 | 1 | 93921 |
| 11346 | $J/\psi \to K^{*-}K_2^{*+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+\pi^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 3630 | 1 | 93922 |
| 11347 | $J/\psi \to f_2' h_1(1380), f_2' \to K_L^0 K_L^0, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^- K^+$ | 11346 | 1 | 93923 |
| 11348 | $J/\psi \to \pi^- \bar{\Sigma}^+ \Sigma^{*0}, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^{*0} \to \pi^- \Sigma^+, \Sigma^+ \to \pi^0 p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 11347 | 1 | 93924 |
| 11349 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^- \rho^+ \gamma^f, a_1^- \to \pi^0 \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11348 | 1 | 93925 |
| 11350 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11349 | 1 | 93926 |
| 11351 | $J/\psi \to K^0 \bar{K}^* K^+ K^-, K^0 \to K^0_L, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 11350 | 1 | 93927 |
| 11352 | $J/\psi \to \omega b_1^0 h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11351 | 1 | 93928 |
| 11353 | $J/\psi \to K^{-}K_{1}^{'+}\gamma^{F}, K_{1}^{'+} \to \pi^{+}K^{*}, K^{*} \to \pi^{0}K^{0}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 11352 | 1 | 93929 |
| 11354 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \rho^+ K^-, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 11353 | 1 | 93930 |
| 11355 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 11354 | 1 | 93931 |
| 11356 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to K^+K^-, K^{*-} \to \pi^0K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 11355 | 1 | 93932 |
| 11357 | $J/\psi 	o a_0^0 b_1^0, a_0^0 	o K_L^0 K_L^0, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 11356 | 1 | 93933 |
| 11358 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to K_L^0 K_L^0, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 1168 | 1 | 93934 |
| 11359 | $J/\psi 	o \pi^+\pi^-\pi^- ho^+b_1^0, ho^+ 	o \pi^0\pi^+, b_1^0 	o \pi^0\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 11358 | 1 | 93935 |
| 11360 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K_S^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11359 | 1 | 93936 |
| 11361 | $J/\psi \to \rho^0 \pi^+ p \bar{\Delta}^{++}, \rho^0 \to \pi^+ \pi^-, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 5654 | 1 | 93937 |
| 11362 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^+ \pi^- K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 1917 | 1 | 93938 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 11363 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 3633 | 1 | 93939 |
| 11364 | $J/\psi \to \pi^+ \rho^- \eta' f_0(1370), \rho^- \to \pi^0 \pi^-, \eta' \to \pi^0 \pi^0 \eta, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 11363 | 1 | 93940 |
| 11365 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^+ a_2^-, a_2^- ightarrow ho^0 \pi^-, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11364 | 1 | 93941 |
| 11366 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to \bar{K}^0 K^*, f_1(1420) \to \pi^+ K^0 K^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11365 | 1 | 93942 |
| 11367 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 353 | 1 | 93943 |
| 11368 | $J/\psi \to \bar{K}^0 b_1^- K_0^{*+}, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, \\ \omega \to \pi^0 \gamma, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 11367 | 1 | 93944 |
| 11369 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1285) \to \pi^0 a_0^0, K_S^0 \to \pi^+ \pi^-, a_0^0 \to K_L^0 K_L^0$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 5658 | 1 | 93945 |
| 11370 | $J/\psi \to K_2^{*-} K_1^+, K_2^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11369 | 1 | 93946 |
| 11371 | $J/\psi \to \eta_c \gamma, \eta_c \to K^{*+} K^{*-} h_1(1170), K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, \rho^- \to \pi^0 \pi^-, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11370 | 1 | 93947 |
| 11372 | $J/\psi 	o \pi^- a_2^+ \eta', a_2^+ 	o ho^0 \pi^+, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 11371 | 1 | 93948 |
| 11373 | $J/\psi \to K^{*-}K_2^{*+}\gamma^f, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \omega K^+, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 5659 | 1 | 93949 |
| 11374 | $J/\psi \to \pi^0 a_2^0 b_1^0, \pi^0 \to e^+ e^- \gamma^F, a_2^0 \to \pi^+ \pi^- \omega, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 11373 | 1 | 93950 |
| 11375 | $J/\psi \to K^+ a_0^- \bar{K}_1^{'0}, a_0^- \to \pi^- \eta, \bar{K}_1^{'0} \to \pi^+ K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2565 | 1 | 93951 |
| 11376 | $J/\psi ightarrow \pi^+ nar{p}a^0_0, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-nar{p}$ | 11375 | 1 | 93952 |
| 11377 | $J/\psi \rightarrow \rho^- \eta' a_0^+, \rho^- \rightarrow \pi^0 \pi^-, \eta' \rightarrow \pi^0 \pi^0 \eta, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0, \\ \eta \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11376 | 1 | 93953 |
| 11378 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^- a_1^+, \rho^0 \to \pi^+ \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 11377 | 1 | 93954 |
| 11379 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \pi^0\pi^0\eta, K^0 \to K_S^0, \eta \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11378 | 1 | 93955 |
| 11380 | $J/\psi 	o \pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 11379 | 1 | 93956 |
| 11381 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 \pi^+ \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11380 | 1 | 93957 |
| 11382 | $J/\psi \to \pi^+ K^0 K^{*-} b_1^0, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 11381 | 1 | 93958 |
| 11383 | $J/\psi \to \pi^+ \rho^- K^- K^{*+} \phi, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \phi \to \pi^0 \rho^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11382 | 1 | 93959 |
| 11384 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^- \gamma^f, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 11383 | 1 | 93960 |
| 11385 | $J/\psi \to \eta \phi f_0(980), \eta \to \gamma \gamma, \phi \to \pi^+ \rho^-, f_0(980) \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11384 | 1 | 93961 |
| 11386 | $J/\psi \to \eta K^- K_1^{'+}, \eta \to \gamma \gamma, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 5661 | 1 | 93962 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 11387 | $J/\psi \to K^+ K_2^{*-} \gamma^F, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 3636 | 1 | 93963 |
| 11388 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_L^0, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11387 | 1 | 93964 |
| 11389 | $J/\psi \to \pi^0 \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma,$ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 3637 | 1 | 93965 |
| 11390 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^0 \pi^+ \omega, a_0^0 \to \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 5664 | 1 | 93966 |
| 11391 | $J/\psi ightarrow a_2^0 \omega a_0^0, a_2^0 ightarrow \pi^+ ho^-, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, ho^- ightarrow \pi^0 \pi^-, \ \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11390 | 1 | 93967 |
| 11392 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 11391 | 1 | 93968 |
| 11393 | $J/\psi \to \omega K^0 \bar{K}_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11392 | 1 | 93969 |
| 11394 | $J/\psi 	o a_2^0 \pi^+ a_1^-, a_2^0 	o \pi^+ \pi^- \omega, a_1^- 	o ho^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 1919 | 1 | 93970 |
| 11395 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^-$ | 11394 | 1 | 93971 |
| 11396 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2567 | 1 | 93972 |
| 11397 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11396 | 1 | 93973 |
| 11398 | $J/\psi \to \phi f_0(1370), \phi \to K_L^0 K_S^0, f_0(1370) \to \rho^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 744 | 1 | 93974 |
| 11399 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 11398 | 1 | 93975 |
| 11400 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5668 | 1 | 93976 |
| 11401 | $J/\psi \to K^0 a_0^+ \bar{K}_1^{'-}, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, \bar{K}_1^{'-} \to \pi^+ \pi^- K^-, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11400 | 1 | 93977 |
| 11402 | $J/\psi \to K^* \bar{K}^* b_1^0, K^* \to K^0 \gamma, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 11401 | 1 | 93978 |
| 11403 | $J/\psi ightarrow K^+K^-f_2^{'}, f_2^{'} ightarrow \eta \eta, \eta ightarrow \pi^0\pi^0\pi^0, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 3641 | 1 | 93979 |
| 11404 | $J/\psi \rightarrow \rho^0 \omega a_0^0 \gamma, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^0 \rightarrow \pi^0 \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11403 | 1 | 93980 |
| 11405 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 11404 | 1 | 93981 |
| 11406 | $J/\psi \to a_2^0 \pi^+ \pi^- f_0(1370), a_2^0 \to \pi^- \rho^+, f_0(1370) \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11405 | 1 | 93982 |
| 11407 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 11406 | 1 | 93983 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 11408 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 11407 | 1 | 93984 |
| 11409 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^- \gamma^f, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11408 | 1 | 93985 |
| 11410 | $J/\psi 	o \pi^0\pi^0\pi^-a_1^+, a_1^+ 	o \pi^0 ho^+, ho^+ 	o \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11409 | 1 | 93986 |
| 11411 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11410 | 1 | 93987 |
| 11412 | $J/\psi \to \pi^0 a_2^0 K^+ K^{*-}, a_2^0 \to \pi^- \rho^+, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11411 | 1 | 93988 |
| 11413 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^{*+}, K_2^{*0} \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 2569 | 1 | 93989 |
| 11414 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11413 | 1 | 93990 |
| 11415 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^+\pi^-K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11414 | 1 | 93991 |
| 11416 | $J/\psi \rightarrow \rho^{+}a_{2}^{-}\eta, \rho^{+} \rightarrow \pi^{0}\pi^{+}, a_{2}^{-} \rightarrow \pi^{0}\pi^{-}\omega, \eta \rightarrow \gamma\gamma, \omega \rightarrow \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11415 | 1 | 93992 |
| 11417 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11416 | 1 | 93993 |
| 11418 | $J/\psi \rightarrow \pi^- \eta \eta b_1^+, \eta \rightarrow \gamma \gamma, \eta \rightarrow \pi^0 \pi^0 \pi^0, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\gamma\gamma$ | 11417 | 1 | 93994 |
| 11419 | $J/\psi \to \pi^0 \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11418 | 1 | 93995 |
| 11420 | $J/\psi \to \pi^0 \bar{\Xi}^0 \Xi^{*0}, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Xi^{*0} \to \pi^+ \Xi^-, \bar{\Lambda} \to \pi^0 \bar{n}, \Xi^- \to \pi^- \Lambda, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 11419 | 1 | 93996 |
| 11421 | $J/\psi 	o \pi^0 ho^0 \eta', ho^0 	o \pi^+ \pi^-, \eta' 	o \pi^0 \pi^0 \eta, \eta 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 5671 | 1 | 93997 |
| 11422 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 11421 | 1 | 93998 |
| 11423 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11422 | 1 | 93999 |
| 11424 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^0_S \to \pi^+ \pi^-, K^{*-}_0 \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11423 | 1 | 94000 |
| 11425 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11424 | 1 | 94001 |
| 11426 | $J/\psi \to \pi^- \bar{\Sigma}^{*0} \Sigma^+, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \Sigma^+ \to \pi^+ n, \pi^0 \to e^+ e^- \gamma^F, \bar{\Lambda} \to \pi^+ \bar{p}$ | $e^+e^-\pi^+\pi^+\pi^-n\bar{p}\gamma^F$ | 11425 | 1 | 94002 |
| 11427 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11426 | 1 | 94003 |
| 11428 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5672 | 1 | 94004 |
| 11429 | $J/\psi \to \pi^0 K_1^+ K_1^-, K_1^+ \to \pi^+ K^*, K_1^- \to \pi^- \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11428 | 1 | 94005 |
| 11430 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 11429 | 1 | 94006 |
| 11431 | $J/\psi 	o \pi^0\pi^0\pi^0\rho^0, ho^0 	o \pi^+\pi^-\gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 11430 | 1 | 94007 |
| 11432 | $J/\psi \rightarrow \pi^+\pi^-\rho^+\eta b_1^-, \rho^+ \rightarrow \pi^0\pi^+, \eta \rightarrow \pi^+\pi^-\gamma^F, b_1^- \rightarrow \pi^-\omega, \omega \rightarrow \pi^0\gamma$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 5673 | 1 | 94008 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11433 | $J/\psi \to \pi^0 \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11432 | 1 | 94009 |
| 11434 | $\begin{array}{c} K \rightarrow \pi K , K_S \rightarrow \pi \pi \\ J/\psi \rightarrow \eta_c \gamma, \eta_c \rightarrow \rho^+ K^0 K^{*-}, \rho^+ \rightarrow \pi^0 \pi^+, K^0 \rightarrow K_L^0, K^{*-} \rightarrow \pi^- \bar{K}^0, \\ \bar{K}^0 \rightarrow K_L^0 \end{array}$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 11433 | 1 | 94010 |
| 11435 | $J/\psi ightarrow \pi^- \eta b_1^+, \eta ightarrow \gamma \gamma, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 11434 | 1 | 94011 |
| 11436 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+ \gamma^f, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11435 | 1 | 94012 |
| 11437 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma$ | 11436 | 1 | 94013 |
| 11438 | $J/\psi \to \pi^- \omega \bar{K}^0 K^{*+}, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 11437 | 1 | 94014 |
| 11439 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11438 | 1 | 94015 |
| 11440 | $J/\psi \to \pi^{+}\rho^{-}K^{+}\bar{K}_{1}^{'-}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{K}_{1}^{'-} \to \pi^{0}K^{*-}, K^{*-} \to \pi^{-}\bar{K}^{0}, \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11439 | 1 | 94016 |
| 11441 | $J/\psi \to \pi^0 \pi^- f_2(1270) b_1^+, f_2(1270) \to K_S^0 K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11440 | 1 | 94017 |
| 11442 | $J/\psi 	o \eta\eta\phi, \eta 	o \pi^0\pi^+\pi^-, \eta 	o \pi^+\pi^-\gamma^F, \phi 	o K^+K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 5674 | 1 | 94018 |
| 11443 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 ho^0 \pi^+ ho^-, ho^0 ightarrow \pi^+ \pi^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11442 | 1 | 94019 |
| 11444 | $J/\psi \to K^+ \bar{\Delta}^0 \Sigma^{*-}, \bar{\Delta}^0 \to \pi^+ \bar{p}, \Sigma^{*-} \to \pi^- \Lambda, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-K^+par{p}$ | 11443 | 1 | 94020 |
| 11445 | $J/\psi \to \pi^0 K^+ K^+ K^- K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 11444 | 1 | 94021 |
| 11446 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5675 | 1 | 94022 |
| 11447 | $J/\psi \to \pi^0 \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11446 | 1 | 94023 |
| 11448 | $J/\psi 	o \eta f_0(1710)\gamma, \eta 	o \gamma\gamma, f_0(1710) 	o \omega\omega, \omega 	o \pi^0\gamma, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 11447 | 1 | 94024 |
| 11449 | $J/\psi 	o \phi f_2^{'}, \phi 	o \pi^- \rho^+, f_2^{'} 	o K_S^0 K_S^0, \rho^+ 	o \pi^0 \pi^+, K_S^0 	o \pi^+ \pi^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11448 | 1 | 94025 |
| 11450 | $J/\psi \to K^+ \eta' K_1^-, \eta' \to \pi^+ \pi^- \eta, K_1^- \to \rho^- \bar{K}^0, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 5676 | 1 | 94026 |
| 11451 | $J/\psi ightarrow \pi^+\pi^+\eta\Delta^-ar{p}, \eta ightarrow \pi^0\pi^0\pi^0, \Delta^- ightarrow \pi^-n$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-nar{p}$ | 11450 | 1 | 94027 |
| 11452 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^{\hat f}$ | 11451 | 1 | 94028 |
| 11453 | $J/\psi \to \omega K^* \bar{K}^0_1, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 11452 | 1 | 94029 |
| 11454 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11453 | 1 | 94030 |
| 11455 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to K_S^0 K_S^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 11454 | 1 | 94031 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 11456 | $J/\psi \to \rho^0 \pi^+ \pi^- \gamma^F, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 11455 | 1 | 94032 |
| 11457 | $J/\psi \to \pi^+ b_1^- f_0(1370) \gamma^f, b_1^- \to \pi^- \omega \gamma^f, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 11456 | 1 | 94033 |
| 11458 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11457 | 1 | 94034 |
| 11459 | $J/\psi \to \rho^0 \omega \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 11458 | 1 | 94035 |
| 11460 | $J/\psi \to \rho^- \bar{K}^0 K^{*+} \phi, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11459 | 1 | 94036 |
| 11461 | $J/\psi \to \bar{\Xi}^+ \Xi^-, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^- \to \pi^- \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to n\gamma$ | $\pi^+\pi^+\pi^-nar p\gamma$ | 11460 | 1 | 94037 |
| 11462 | $J/\psi \to \pi^0 \eta K^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 11461 | 1 | 94038 |
| 11463 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 11462 | 1 | 94039 |
| 11464 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 5677 | 1 | 94040 |
| 11465 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 11464 | 1 | 94041 |
| 11466 | $J/\psi \to K^+ \bar{\Sigma}^- \Xi^0, \bar{\Sigma}^- \to \pi^0 \bar{p}, \Xi^0 \to \pi^0 \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^0K^+nar{p}$ | 11465 | 1 | 94042 |
| 11467 | $J/\psi \to K_0^{*+} K_0^{*-}, K_0^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^- \gamma^f, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^f$ | 11466 | 1 | 94043 |
| 11468 | $J/\psi \to a_2^0 \pi^- a_1^+, a_2^0 \to \pi^+ \rho^-, a_1^+ \to \rho^0 \pi^+, \rho^- \to \pi^0 \pi^- \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 3643 | 1 | 94044 |
| 11469 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 11468 | 1 | 94045 |
| 11470 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- K^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11469 | 1 | 94046 |
| 11471 | $J/\psi \to K^- a_0^+ K_1^{'0}, a_0^+ \to \pi^+ \eta, K_1^{'0} \to \pi^0 K^*, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+ \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 11470 | 1 | 94047 |
| 11472 | $J/\psi \to \pi^+\pi^- a_0^0, a_0^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma$ | 11471 | 1 | 94048 |
| 11473 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 11472 | 1 | 94049 |
| 11474 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^+ \rho^-, a_2^- \to \pi^- \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 3644 | 1 | 94050 |
| 11475 | $J/\psi \to \eta K^0 \bar{K}_1^{'0}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11474 | 1 | 94051 |
| 11476 | $J/\psi ightarrow ar{K}^0 \Delta^0 ar{\Lambda}, ar{K}^0 ightarrow K_L^0, \Delta^0 ightarrow \pi^0 n, ar{\Lambda} ightarrow \pi^0 ar{n}$ | $\pi^0\pi^0K^0_Ln\bar{n}$ | 11475 | 1 | 94052 |
| 11477 | $J/\psi \to K_1^0 \bar{K}_1^0, K_1^0 \to \rho^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11476 | 1 | 94053 |
| 11478 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0\pi^-\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 3645 | 1 | 94054 |
| 11479 | $J/\psi 	o \eta \phi, \eta 	o \gamma \gamma, \phi 	o K_L^0 K_S^0, K_S^0 	o \pi^+ \pi^- \gamma^f$ | $K_L^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 11478 | 1 | 94055 |
| 11480 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 11479 | 1 | 94056 |
| 11481 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 3646 | 1 | 94057 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11482 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^- \gamma^f, K_2^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 11481 | 1 | 94058 |
| 11483 | $J/\psi \to \pi^+ \omega K^- K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5682 | 1 | 94059 |
| 11484 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \omega K^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11483 | 1 | 94060 |
| 11485 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 1921 | 1 | 94061 |
| 11486 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^0 \pi^0, \phi \to \pi^+ \rho^-, f_0(980) \to K^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11485 | 1 | 94062 |
| 11487 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11486 | 1 | 94063 |
| 11488 | $J/\psi 	o a_2^+ K^0 K^-, a_2^+ 	o \pi^+ \eta, K^0 	o K_L^0, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 11487 | 1 | 94064 |
| 11489 | $J/\psi \to ho^0 a_0^0 a_1^0, ho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_1^0 \to \pi^+ ho^-, \eta \to \gamma \gamma, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5684 | 1 | 94065 |
| 11490 | $J/\psi \to a_2^0 \omega f_0(1370), a_2^0 \to \pi^- \rho^+, \omega \to \pi^0 \gamma, f_0(1370) \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 2571 | 1 | 94066 |
| 11491 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K_1^+ \to \pi^0 K^{*+}, K^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11490 | 1 | 94067 |
| 11492 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^- \gamma^F, f_2(1270) \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11491 | 1 | 94068 |
| 11493 | $J/\psi \to \pi^0 \pi^+ K^* K^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11492 | 1 | 94069 |
| 11494 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \rho^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5686 | 1 | 94070 |
| 11495 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^+\pi^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 5687 | 1 | 94071 |
| 11496 | $J/\psi \to \pi^+ \rho^- \omega \gamma^F, \rho^- \to \pi^0 \pi^-, \omega \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 11495 | 1 | 94072 |
| 11497 | $J/\psi \to \omega K^{*-}K_0^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 3649 | 1 | 94073 |
| 11498 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0} \gamma^f, K^{*+} \to \pi^0 K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 11497 | 1 | 94074 |
| 11499 | $J/\psi \to K^*\bar{K}^*K^-K^{*+}, K^* \to \pi^-K^+, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, K^0 \to K^0_L$ | $K_L^0 \pi^+ \pi^+ \pi^- K^+ K^- K^-$ | 11498 | 1 | 94075 |
| 11500 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11499 | 1 | 94076 |
| 11501 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 11500 | 1 | 94077 |
| 11502 | $J/\psi \to \pi^+ K^{*-} n \bar{\Lambda}, K^{*-} \to \pi^- \bar{K}^0, \bar{\Lambda} \to \pi^0 \bar{n}, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 11501 | 1 | 94078 |
| 11503 | $J/\psi \to \eta K^{*-}K_1^{'+}, \eta \to \pi^0\pi^0\pi^0, K^{*-} \to \pi^0K^-, K_1^{'+} \to \pi^+K^*, K^* \to \pi^-K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5689 | 1 | 94079 |
| 11504 | $J/\psi 	o ho^0 K^* K_2^{*0}, ho^0 	o \pi^+ \pi^-, K^* 	o \pi^- K^+, K_2^{*0} 	o \pi^0 \pi^0 ar{K}^*, ar{K}^* 	o \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11503 | 1 | 94080 |
| 11505 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 11504 | 1 | 94081 |
| 11506 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_0(1710) \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 11505 | 1 | 94082 |
| 11507 | $J/\psi \to \rho^0 \rho^0 \eta \gamma, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 11506 | 1 | 94083 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 11508 | $J/\psi \to \bar{K}^0 a_0^0 K_1^0, \bar{K}^0 \to K_L^0, a_0^0 \to \pi^0 \eta, K_1^0 \to \rho^0 K^0, \eta \to \pi^+ \pi^- \gamma^F, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 11507 | 1 | 94084 |
| 11509 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^+ a_0^- \gamma^f, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma\gamma^f$ | 11508 | 1 | 94085 |
| 11510 | $J/\psi \to \pi^+ \omega K^0 K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 11509 | 1 | 94086 |
| 11511 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^*\bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 3650 | 1 | 94087 |
| 11512 | $J/\psi \to \pi^0 K^0 \eta' \bar{K}_1^{'0}, K^0 \to K_L^0, \eta' \to \rho^0 \gamma, \bar{K}_1^{'0} \to \pi^+ K^{*-} \gamma^f, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma^f$ | 11511 | 1 | 94088 |
| 11513 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^+ K^-, \rho^0 \to \pi^+ \pi^- \gamma^f \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma\gamma^f\gamma^f$ | 11512 | 1 | 94089 |
| 11514 | $J/\psi \to K^+ \phi \bar{K}_1^{'-}, \phi \to K^+ K^-, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 11513 | 1 | 94090 |
| 11515 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \pi^0 \rho^+, \bar{K}^0 \to K_L^0, \\ \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11514 | 1 | 94091 |
| 11516 | $J/\psi \to \omega \bar{K}^0 K^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \gamma \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}\gamma\gamma$ | 11515 | 1 | 94092 |
| 11517 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ K^0 K^-, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K^0_L$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 11516 | 1 | 94093 |
| 11518 | $J/\psi \to \pi^0 a_2^0 h_1(1170), \pi^0 \to e^+ e^- \gamma^F, a_2^0 \to \pi^+ \rho^-, h_1(1170) \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11517 | 1 | 94094 |
| 11519 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^* K^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 11518 | 1 | 94095 |
| 11520 | $J/\psi \to \rho^+ \Lambda \bar{\Sigma}^{*-}, \rho^+ \to \pi^0 \pi^+, \Lambda \to \pi^- p, \bar{\Sigma}^{*-} \to \pi^0 \bar{\Sigma}^-, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 11519 | 1 | 94096 |
| 11521 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^0 \eta, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 11520 | 1 | 94097 |
| 11522 | $J/\psi \to K^+ \phi K_1^-, \phi \to K_L^0 K_S^0, K_1^- \to \rho^0 K^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11521 | 1 | 94098 |
| 11523 | $J/\psi \to \pi^{+}\pi^{-}K_{1}^{-}K_{1}^{'+}, K_{1}^{-} \to \omega K^{-}, K_{1}^{'+} \to \pi^{0}K^{*+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 5691 | 1 | 94099 |
| 11524 | $J/\psi 	o \pi^+ \eta K_S^0 K^-, \eta 	o \pi^0 \pi^+ \pi^-, K_S^0 	o \pi^+ \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 5692 | 1 | 94100 |
| 11525 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11524 | 1 | 94101 |
| 11526 | $J/\psi \rightarrow \pi^0 \rho^+ \rho^- \omega, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11525 | 1 | 94102 |
| 11527 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_L^0, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11526 | 1 | 94103 |
| 11528 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \omega K^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11527 | 1 | 94104 |
| 11529 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ $K_S^0 \to \pi^+\pi^-\gamma^F, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 11528 | 1 | 94105 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11530 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11529 | 1 | 94106 |
| 11531 | $J/\psi \to \rho^+ f_2(1270) a_0^-, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 11530 | 1 | 94107 |
| 11532 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_1^+ \to \rho^0 K^+, K_0^{*-} \to \pi^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11531 | 1 | 94108 |
| 11533 | $J/\psi \to \rho^0 \pi^+ \pi^- K^0 \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 11532 | 1 | 94109 |
| 11534 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \pi^- K_0^{*+}, K_0^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11533 | 1 | 94110 |
| 11535 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 11534 | 1 | 94111 |
| 11536 | $J/\psi \to \pi^0 \Xi^0 \bar{\Xi}^0, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 11535 | 1 | 94112 |
| 11537 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2572 | 1 | 94113 |
| 11538 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 11537 | 1 | 94114 |
| 11539 | $J/\psi \to \pi^{0}\rho^{0}\pi^{-}\omega a_{1}^{+}, \rho^{0} \to \pi^{+}\pi^{-}\gamma^{f}, \omega \to \pi^{0}\gamma, a_{1}^{+} \to \rho^{0}\pi^{+}, \rho^{0} \to \pi^{+}\pi^{-}\gamma^{f}$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma^f\gamma^f$ | 1485 | 1 | 94115 |
| 11540 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0K_L^0$ | 11539 | 1 | 94116 |
| 11541 | $J/\psi \to \pi^+ f_2(1270) a_1^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5695 | 1 | 94117 |
| 11542 | $J/\psi \to \rho^0 \bar{K}^* K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5696 | 1 | 94118 |
| 11543 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11542 | 1 | 94119 |
| 11544 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+}\to \pi^0K^+, K^{*-}\to \pi^-\bar{K}^0, \phi\to \pi^0\rho^0, \bar{K}^0\to K^0_S, \rho^0\to \pi^+\pi^-, K^0_S\to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1923 | 1 | 94120 |
| 11545 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0\pi^+\pi^-, K^{*-} \to \pi^0K^-, K_1^+ \to \rho^+K^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 11544 | 1 | 94121 |
| 11546 | $J/\psi \to \eta' h_1(1380), \eta' \to \gamma \gamma, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 11545 | 1 | 94122 |
| 11547 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \rho^0 \gamma, K^0_S \to \pi^0 \pi^0, \ \bar{K}^0 \to K^0_L, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^0 \pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 11546 | 1 | 94123 |
| 11548 | $J/\psi \to \pi^- \rho^+ \eta', \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11547 | 1 | 94124 |
| 11549 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^+\pi^-\gamma^F, \omega \to \pi^0\pi^+\pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0\eta, \\ \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 11548 | 1 | 94125 |
| 11550 | $J/\psi \to \pi^0 \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11549 | 1 | 94126 |
| 11551 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi \phi, \phi \to K_L^0 K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-\gamma$ | 11550 | 1 | 94127 |
| 11552 | $J/\psi \to \Lambda \bar{\Sigma}^{*0}, \Lambda \to \pi^0 n, \bar{\Sigma}^{*0} \to \pi^+ \bar{\Sigma}^-, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}$ | 11551 | 1 | 94128 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 11553 | $J/\psi \to \rho^0 \pi^- a_0^+ f_0(1370), \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 11552 | 1 | 94129 |
| 11554 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 3654 | 1 | 94130 |
| 11555 | $J/\psi \to \bar{K}^0 \eta' K_1^{'0}, \bar{K}^0 \to K_L^0, \eta' \to \pi^0 \pi^0 \eta, K_1^{'0} \to \pi^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma$ | 11554 | 1 | 94131 |
| 11556 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 11555 | 1 | 94132 |
| 11557 | $J/\psi \to \rho^0 a_2^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_2^- \to \pi^0 \pi^- \omega, a_0^+ \to \pi^+ \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11556 | 1 | 94133 |
| 11558 | $J/\psi \to \pi^+\pi^-\omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3655 | 1 | 94134 |
| 11559 | $J/\psi \to \pi^+ K^0 K^{*-} b_1^0, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11558 | 1 | 94135 |
| 11560 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 11559 | 1 | 94136 |
| 11561 | $J/\psi \to \pi^+ K^+ K^{*-} b_1^-, K^{*-} \to \pi^0 K^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11560 | 1 | 94137 |
| 11562 | $J/\psi 	o \pi^0 \pi^+ K^* K^-, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 1924 | 1 | 94138 |
| 11563 | $J/\psi \to \pi^- \rho^+ K^{*+} K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5701 | 1 | 94139 |
| 11564 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 11563 | 1 | 94140 |
| 11565 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0$ | 11564 | 1 | 94141 |
| 11566 | $J/\psi \to \pi^- \rho^+ \rho^+ b_1^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11565 | 1 | 94142 |
| 11567 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 11566 | 1 | 94143 |
| 11568 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11567 | 1 | 94144 |
| 11569 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to K^+\gamma, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma$ | 11568 | 1 | 94145 |
| 11570 | $J/\psi \to \pi^- \eta K_S^0 K^+, \eta \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 5702 | 1 | 94146 |
| 11571 | $J/\psi \to \omega \eta' f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 306 | 1 | 94147 |
| 11572 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K^*, K^* \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11571 | 1 | 94148 |
| 11573 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11572 | 1 | 94149 |
| 11574 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11573 | 1 | 94150 |
| 11575 | $J/\psi \to \rho^0 K^+ K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11574 | 1 | 94151 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11576 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \omega K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, \omega \to \pi^0 \gamma, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 11575 | 1 | 94152 |
| 11577 | $J/\psi \to \rho^+ K^0 \bar{K}^0 b_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1172 | 1 | 94153 |
| 11578 | $J/\psi \to a_2^- \omega a_0^+, a_2^- \to \bar{K}^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11577 | 1 | 94154 |
| 11579 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 11578 | 1 | 94155 |
| 11580 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 2578 | 1 | 94156 |
| 11581 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^0 K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\gamma$ | 11580 | 1 | 94157 |
| 11582 | $J/\psi 	o K^0 ar{n} \Lambda, K^0 	o K_L^0, \Lambda 	o \pi^0 n, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-K^0_L nar{n}\gamma^F$ | 5706 | 1 | 94158 |
| 11583 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11582 | 1 | 94159 |
| 11584 | $J/\psi \to \bar{K}^*K^{*+}a_0^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^0K^+, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5707 | 1 | 94160 |
| 11585 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^0K^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 5708 | 1 | 94161 |
| 11586 | $J/\psi \to \pi^0 \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5709 | 1 | 94162 |
| 11587 | $J/\psi \to \pi^+\pi^-K_1^0\bar{K}_1^0, K_1^0 \to \pi^-K_0^{*+}, \bar{K}_1^0 \to \rho^0\bar{K}^0, K_0^{*+} \to \pi^+K^0, \rho^0 \to \pi^+\pi^-, \\ \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 5710 | 1 | 94163 |
| 11588 | $J/\psi \to f_2(1270)K^*\bar{K}^*, f_2(1270) \to \pi^+\pi^-, K^* \to \pi^-K^+, \bar{K}^* \to \pi^+K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11587 | 1 | 94164 |
| 11589 | $J/\psi \to \eta K^{*-}K_2^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 11588 | 1 | 94165 |
| 11590 | $J/\psi \to \pi^0 \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11589 | 1 | 94166 |
| 11591 | $J/\psi ightarrow \pi^0 \omega a_0^0, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 5711 | 1 | 94167 |
| 11592 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^f$ | 5712 | 1 | 94168 |
| 11593 | $J/\psi 	o \pi^0\pi^0\pi^+a_2^-, a_2^- 	o \pi^-\eta, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11592 | 1 | 94169 |
| 11594 | $J/\psi \to \omega \eta' \eta', \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \eta' \to \pi^+ \pi^- \eta, \eta \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 505 | 1 | 94170 |
| 11595 | $J/\psi \to \rho^0 K^+ K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11594 | 1 | 94171 |
| 11596 | $J/\psi \to K^- \Sigma^+ \bar{\Xi}^0, \Sigma^+ \to \pi^+ n, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+K^-n\bar{n}$ | 11595 | 1 | 94172 |
| 11597 | $J/\psi \to a_2^+b_1^-, a_2^+ \to \pi^0\rho^+, b_1^- \to \pi^-\omega, \rho^+ \to \pi^0\pi^+, \omega \to \pi^0\gamma,$ $\pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 11596 | 1 | 94173 |
| 11598 | $J/\psi \to K^0 \dot{\bar{K}}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 11597 | 1 | 94174 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 11599 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^-$ | 11598 | 1 | 94175 |
| 11600 | $J/\psi \to a_0^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 11599 | 1 | 94176 |
| 11601 | $J/\psi 	o \Lambda \bar{\Sigma}^0 \gamma, \Lambda 	o \pi^- p, \bar{\Sigma}^0 	o \bar{\Lambda} \gamma, \bar{\Lambda} 	o e^+ \nu_e \bar{p}$ | $e^+ u_e\pi^-par{p}\gamma\gamma$ | 11600 | 1 | 94177 |
| 11602 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11601 | 1 | 94178 |
| 11603 | $J/\psi \to \pi^- \bar{K}_1^0 K_0^{*+}, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K_0^{*+} \to \pi^+ K^0 \gamma^f, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11602 | 1 | 94179 |
| 11604 | $J/\psi 	o \pi^0\pi^0\pi^+a_1^-, a_1^- 	o ho^0\pi^-, ho^0 	o \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5714 | 1 | 94180 |
| 11605 | $J/\psi \to K^+ \eta' K_1^-, \eta' \to \pi^+ \pi^- \eta, K_1^- \to \rho^0 K^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11604 | 1 | 94181 |
| 11606 | $J/\psi \to a_2^- \omega a_0^+, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \gamma, a_0^+ \to \pi^+ \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 11605 | 1 | 94182 |
| 11607 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0K^0_L\pi^-K^+\gamma^F\gamma$ | 11606 | 1 | 94183 |
| 11608 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^+ K^0 K_1^-, ho^+ ightarrow \pi^0 \pi^+, K^0 ightarrow K_L^0, K_1^- ightarrow \pi^+ \pi^- K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 11607 | 1 | 94184 |
| 11609 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5715 | 1 | 94185 |
| 11610 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 11609 | 1 | 94186 |
| 11611 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 \pi^0 \pi^0 K_L^0 \pi^+ K^- \gamma^f$ | 11610 | 1 | 94187 |
| 11612 | $J/\psi \to \pi^- a_2^+ f_2(1270), a_2^+ \to \rho^0 \pi^+, f_2(1270) \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11611 | 1 | 94188 |
| 11613 | $J/\psi \to \bar{K}^* \phi K_1^{'0}, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 11612 | 1 | 94189 |
| 11614 | $J/\psi \to \eta_c \gamma, \eta_c \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^- \rho^+, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+\gamma$ | 5716 | 1 | 94190 |
| 11615 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5717 | 1 | 94191 |
| 11616 | $J/\psi \to f_2(1270)K^0\bar{K}_1^0, f_2(1270) \to \pi^+\pi^+\pi^-\pi^-, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+K_0^{*-}, K_0^{*-} \to \pi^-\bar{K}^0, \bar{K}_1^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11615 | 1 | 94192 |
| 11617 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ K^- \gamma^F$ | 3661 | 1 | 94193 |
| 11618 | $J/\psi \to K^0 \bar{K}^* K^+ K^-, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 11617 | 1 | 94194 |
| 11619 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11618 | 1 | 94195 |
| 11620 | $J/\psi \to \rho^- a_2^+ a_0^0, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11619 | 1 | 94196 |
| 11621 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^F$ | 11620 | 1 | 94197 |
| 11622 | $J/\psi ightarrow \pi^+ \pi^+ \pi^- \pi^- \omega \gamma^f \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}\gamma^{f}$ | 11621 | 1 | 94198 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 11623 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to \pi^0 \rho^0, h_1(1380) \to K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 11622 | 1 | 94199 |
| 11624 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_{G}^0, K_1^0 \to \pi^- K^{*+}, K_{G}^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 11623 | 1 | 94200 |
| 11625 | $J/\psi \to \omega a_0^0 a_1^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_1^0 \to \pi^- \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5719 | 1 | 94201 |
| 11626 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 11625 | 1 | 94202 |
| 11627 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L$ | 11626 | 1 | 94203 |
| 11628 | $J/\psi ightarrow \pi^0 ho^0, \pi^0 ightarrow e^+ e^- \gamma^F \gamma^f, ho^0 ightarrow \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma^f$ | 11627 | 1 | 94204 |
| 11629 | $J/\psi \to \pi^+ \rho^- K^{*-} K_2^{*+}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+$ | 11628 | 1 | 94205 |
| 11630 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11629 | 1 | 94206 |
| 11631 | $J/\psi \to \pi^- \omega K_S^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}\gamma^{f}$ | 11630 | 1 | 94207 |
| 11632 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \pi^0 \rho^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 11631 | 1 | 94208 |
| 11633 | $J/\psi \to a_2^0 K^0 \bar{K}^0 \gamma, a_2^0 \to \pi^0 \eta, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^F\gamma$ | 11632 | 1 | 94209 |
| 11634 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11633 | 1 | 94210 |
| 11635 | $J/\psi \to \omega K^0 \bar{K}_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5720 | 1 | 94211 |
| 11636 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^+ \gamma, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11635 | 1 | 94212 |
| 11637 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11636 | 1 | 94213 |
| 11638 | $J/\psi \to \pi^{0}\rho^{0}\pi^{+}\rho^{-}\eta\omega, \rho^{0}\to \pi^{+}\pi^{-}, \rho^{-}\to \pi^{0}\pi^{-}, \eta\to \pi^{0}\pi^{0}\pi^{0}, \omega\to \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11637 | 1 | 94214 |
| 11639 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11638 | 1 | 94215 |
| 11640 | $J/\psi \to \rho^0 \pi^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11639 | 1 | 94216 |
| 11641 | $J/\psi \to \pi^0 K^+ K^- \phi, \phi \to K^+ K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 11640 | 1 | 94217 |
| 11642 | $J/\psi \to \rho^+ K^* K^{*-} \gamma^f, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0 \pi^0 \pi^+ \pi^- K^+ K^- \gamma^f$ | 11641 | 1 | 94218 |
| 11643 | $J/\psi \to \rho^+ K^- K^+ \gamma^5, \rho^+ \to \pi^* \pi^+, K^+ \to \pi^- K^+, K^+ \to \pi^* K$ $J/\psi \to \eta K^0 \bar{K}_1^0, \eta \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}_1^0 \to \rho^+ K^-, \pi^0 \to e^+ e^- \gamma^F,$ $\rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 11642 | 1 | 94219 |
| 11644 | $J/\psi \to \pi^0 a_2^+ b_1^-, a_2^+ \to \rho^0 \pi^+, b_1^- \to \pi^- \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11643 | 1 | 94220 |
| 11645 | $J/\psi \to \eta a_1^0 \gamma, \eta \to \pi^0 \pi^+ \pi^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11644 | 1 | 94221 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 11646 | $J/\psi \to \pi^{0} \rho^{-} \bar{K}^{0} K_{1}^{'+}, \rho^{-} \to \pi^{0} \pi^{-}, \bar{K}^{0} \to K_{L}^{0}, K_{1}^{'+} \to \pi^{+} K^{*}, K^{*} \to \pi^{-} K^{+}$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11645 | 1 | 94222 |
| 11647 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 11646 | 1 | 94223 |
| 11648 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11647 | 1 | 94224 |
| 11649 | $J/\psi \rightarrow \pi^+ \rho^- \eta \gamma^f, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 11648 | 1 | 94225 |
| 11650 | $J/\psi \to \pi^+ \rho^- \eta \gamma^*, \rho^- \to \pi^- \pi^-, \eta^+ \to \pi^+ \pi^-, \pi^- \to e^+ e^- \gamma$ $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, f_0(1370) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F,$ $\rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11649 | 1 | 94226 |
| 11651 | $J/\psi \rightarrow \rho^0 \rho^0 \pi^+ \rho^-, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^- \gamma^F, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 2580 | 1 | 94227 |
| 11652 | $J/\psi \to \rho^0 \pi^+ \pi^- K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11651 | 1 | 94228 |
| 11653 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11652 | 1 | 94229 |
| 11654 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 11653 | 1 | 94230 |
| 11655 | $J/\psi 	o \pi^0 ar{K}^0 K_1^0, ar{K}^0 	o K_S^0, K_1^0 	o \pi^- K^{*+}, K_S^0 	o \pi^0 \pi^0, K^{*+} 	o \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 11654 | 1 | 94231 |
| 11656 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to K_S^0 K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11655 | 1 | 94232 |
| 11657 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^0 \pi^0, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11656 | 1 | 94233 |
| 11658 | $J/\psi \to \eta_c \gamma, \eta_c \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 11657 | 1 | 94234 |
| 11659 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^0 \bar{\Xi}^0, \Lambda \to \pi^0 n, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \\ \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0n\bar{n}$ | 11658 | 1 | 94235 |
| 11660 | $J/\psi \to \pi^0 \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11659 | 1 | 94236 |
| 11661 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}_0^{*0}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11660 | 1 | 94237 |
| 11662 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-K^-\gamma^f$ | 5722 | 1 | 94238 |
| 11663 | $J/\psi \to \omega K^0 \bar{K}^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 3663 | 1 | 94239 |
| 11664 | $J/\psi \to \pi^+ \omega K^- K_1^0, \omega \to \pi^0 \pi^+ \pi^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11663 | 1 | 94240 |
| 11665 | $J/\psi \to \phi f_0(2020), \phi \to \eta \gamma, f_0(2020) \to \eta \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma\gamma\gamma$ | 11664 | 1 | 94241 |
| 11666 | $J/\psi \to \pi^0 \pi^+ \eta \omega a_0^-, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 11665 | 1 | 94242 |
| 11667 | $J/\psi 	o ar{K}^* K_1^0 \gamma, ar{K}^* 	o \pi^0 ar{K}^0, K_1^0 	o \pi^0 K_0^0, ar{K}^0 	o K_L^0, K_0^0 	o \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 11666 | 1 | 94243 |
| 11668 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 5724 | 1 | 94244 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|----------------|--|--|--------|------|-------|
| 11669 | $J/\psi \to \rho^{+} a_{0}^{0} a_{0}^{-}, \rho^{+} \to \pi^{0} \pi^{+}, a_{0}^{0} \to \pi^{0} \eta, a_{0}^{-} \to \pi^{-} \eta, \eta \to \gamma \gamma, \eta \to \pi^{0} \pi^{+} \pi^{-}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 5725 | 1 | 94245 |
| 11670 | $J/\psi \to \rho^- a_0^+ f_1(1285), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_1(1285) \to \rho^0 \pi^+ \pi^-, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 11669 | 1 | 94246 |
| 11671 | $J/\psi \to \pi^0 \rho^0 \omega \omega, \rho^0 \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 11670 | 1 | 94247 |
| 11672 11673 | $J/\psi \to \pi^0 \pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, \eta \to \gamma \gamma$ $J/\psi \to \pi^- \rho^+ \rho^- b_1^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, \pi^0 \to e^+ e^- \gamma^F,$ $\omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 506 | 1 | 94248 |
| 11073 | | $e \cdot e \pi \cdot \pi \cdot \pi \cdot \pi \cdot \pi \pi \gamma$ | 11672 | 1 | 94249 |
| 11674 | $J/\psi \to \pi^{+}\pi^{-}K^{*+}\bar{K}_{1}^{'-}, K^{*+} \to \pi^{+}K^{0}, \bar{K}_{1}^{'-} \to \pi^{-}\bar{K}^{*}, K^{0} \to K_{S}^{0}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{L}^{0}$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 1929 | 1 | 94250 |
| 11675 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \eta', \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \eta' \to \rho^0 \gamma, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 11674 | 1 | 94251 |
| 11676 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11675 | 1 | 94252 |
| 11677 | $J/\psi \to \omega K^{*+}K_1^-, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K_1^- \to \rho^0K^-, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 3666 | 1 | 94253 |
| 11678 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 1930 | 1 | 94254 |
| 11679 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\gamma^{F}$ | 11678 | 1 | 94255 |
| 11680 | $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to K^+ K^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5730 | 1 | 94256 |
| 11681 | $J/\psi \to \pi^+\pi^-\omega, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 3668 | 1 | 94257 |
| 11682 | $J/\psi \to \omega h_1(1170)h_1(1170), \omega \to \pi^0\pi^+\pi^-, h_1(1170) \to \pi^0\rho^0, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11681 | 1 | 94258 |
| 11683 | $J/\psi \rightarrow a_2^0\pi^+a_2^-, a_2^0 \rightarrow \pi^+\pi^-\omega, a_2^- \rightarrow \pi^-\eta, \omega \rightarrow \pi^0\pi^+\pi^-, \eta \rightarrow \gamma\gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 11682 | 1 | 94259 |
| 11684 | $J/\psi \to ho^0 ho^0 \omega, ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^- \gamma^f, \omega \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11683 | 1 | 94260 |
| 11685 | $J/\psi \to \rho^+ \omega K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5732 | 1 | 94261 |
| 11686 | $J/\psi \to \phi\phi\phi, \phi \to \pi^0\rho^0, \phi \to K_L^0K_S^0, \phi \to K^+K^-, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 5733 | 1 | 94262 |
| 11687 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^0\bar{K}^0, K_2^{*0} \to \rho^-K^+, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 11686 | 1 | 94263 |
| 11688 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to \pi^- \rho^+, h_1(1380) \to \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma$ | 11687 | 1 | 94264 |
| 11689 | $J/\psi \to K^+ b_1^- \bar{K}_0^{*0}, b_1^- \to \pi^- \omega, \bar{K}_0^{*0} \to \pi^+ K^-, \omega \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 11688 | 1 | 94265 |
| 11690 | $J/\psi \to \pi^0 K^+ \bar{n} \Sigma^{*-}, \Sigma^{*-} \to \pi^- \Lambda, \Lambda \to \pi^- p$ | $\pi^0\pi^-\pi^-K^+\bar{n}p$ | 11689 | 1 | 94266 |
| 11691 | $J/\psi \to \pi^0 \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11690 | 1 | 94267 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11692 | $J/\psi \to \pi^0 K^0 \bar{K}^* \gamma, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, K^0_S \to \pi^0 \pi^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma$ | 11691 | 1 | 94268 |
| 11693 | $J/\psi \to \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11692 | 1 | 94269 |
| 11694 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^+ K^{*-}, \eta \to \gamma \gamma, K^{*-} \to \pi^0 K^-$ | $\pi^0 K^+ K^- \gamma \gamma \gamma$ | 11693 | 1 | 94270 |
| 11695 | $J/\psi \to \rho^- \eta a_0^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11694 | 1 | 94271 |
| 11696 | $J/\psi \to \rho^0 K^{*-} K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^{'+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 11695 | 1 | 94272 |
| 11697 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11696 | 1 | 94273 |
| 11698 | $J/\psi \to K_2^{*0}K^+a_0^-, K_2^{*0} \to \pi^+K^{*-}, a_0^- \to \pi^-\eta, K^{*-} \to \pi^0K^-, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 5734 | 1 | 94274 |
| 11699 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^- \rho^+, f_1(1285) \to \pi^0 K^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11698 | 1 | 94275 |
| 11700 | $J/\psi \to \rho^+ K^{*-} K^0_1, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K^0_1 \to \pi^0 K^0_0, K^0_0 \to \pi^0 K^0, K^0 \to K^0_L$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 11699 | 1 | 94276 |
| 11701 | $J/\psi \to \omega \bar{K}^* K_0^0, \omega \to \pi^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 11700 | 1 | 94277 |
| 11702 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 11701 | 1 | 94278 |
| 11703 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11702 | 1 | 94279 |
| 11704 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 \pi^+ \eta b_1^-, \eta 	o \gamma \gamma, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 11703 | 1 | 94280 |
| 11705 | $J/\psi ightarrow ar{\Lambda}\Sigma^0, ar{\Lambda} ightarrow \pi^0 ar{n}, \Sigma^0 ightarrow \Lambda \gamma, \Lambda ightarrow \pi^- p \gamma^f$ | $\pi^0\pi^-ar{n}p\gamma\gamma^f$ | 5735 | 1 | 94281 |
| 11706 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 11705 | 1 | 94282 |
| 11707 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 3669 | 1 | 94283 |
| 11708 | $J/\psi 	o \eta \phi f_0(1710), \eta 	o \pi^0 \pi^0 \pi^0, \phi 	o K^+ K^-, f_0(1710) 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 11707 | 1 | 94284 |
| 11709 | $J/\psi 	o \pi^0 ho^- ar{K}^0 K^+, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 11708 | 1 | 94285 |
| 11710 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 11709 | 1 | 94286 |
| 11711 | $J/\psi 	o \pi^- ar{\Sigma}^+ \Sigma^{*0}, ar{\Sigma}^+ 	o \pi^+ ar{n}, \Sigma^{*0} 	o \pi^0 \Lambda, \Lambda 	o \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 11710 | 1 | 94287 |
| 11712 | $J/\psi \to a_2^- \bar{K}^* K^+, a_2^- \to \pi^- \eta, \bar{K}^* \to \pi^+ K^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11711 | 1 | 94288 |
| 11713 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^F, h_1(1170) \to \pi^- \rho^+ \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f$ | 11712 | 1 | 94289 |
| 11714 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11713 | 1 | 94290 |
| 11715 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 3670 | 1 | 94291 |
| 11716 | $J/\psi 	o \pi^- ar{K}^0 K^+ f_2^{'}, ar{K}^0 	o K_L^0, f_2^{'} 	o K^+ K^-$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 11715 | 1 | 94292 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11717 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0 \gamma^F, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^F$ | 11716 | 1 | 94293 |
| 11718 | $J/\psi \to K^0 f_0(1370) \bar{K}_1^{'0}, K^0 \to K_S^0, f_0(1370) \to \rho^0 \rho^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11717 | 1 | 94294 |
| 11719 | $J/\psi ightarrow \eta' \phi, \eta' ightarrow \pi^0 \pi^0 \eta, \phi ightarrow K_L^0 K_S^0, \eta ightarrow \gamma \gamma, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 11718 | 1 | 94295 |
| 11720 | $J/\psi \to \phi f_1(1420), \phi \to \pi^0 \rho^0, f_1(1420) \to \pi^+ K^0 K^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11719 | 1 | 94296 |
| 11721 | $J/\psi \to \rho^0 \pi^- \bar{K}^* K_2^{*+}, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^* \to \pi^+ K^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma^f$ | 11720 | 1 | 94297 |
| 11722 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}^0_1 \to \pi^+ \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \bar{K}^0 \to K^0_L$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}\gamma^{f}$ | 11721 | 1 | 94298 |
| 11723 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^0K^-, f_0(1710) \to K^+K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 11722 | 1 | 94299 |
| 11724 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^+\pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11723 | 1 | 94300 |
| 11725 | $J/\psi \to \pi^- \bar K^0 \Delta^0 \bar \Sigma^+, \bar K^0 \to K^0_S, \Delta^0 \to \pi^- p, \bar \Sigma^+ \to \pi^+ \bar n \gamma^f, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma^f$ | 11724 | 1 | 94301 |
| 11726 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11725 | 1 | 94302 |
| 11727 | $J/\psi 	o ho^0 \pi^+ \pi^- \bar{K}^0 K^*, ho^0 	o \pi^+ \pi^-, \bar{K}^0 	o K_L^0, K^* 	o \pi^- K^+$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11726 | 1 | 94303 |
| 11728 | $J/\psi \to \pi^0 a_2^0 \omega, a_2^0 \to K^+ K^-, \omega \to \pi^+ \pi^- \gamma^f \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f\gamma^f$ | 11727 | 1 | 94304 |
| 11729 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \gamma\gamma, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma\gamma\gamma$ | 11728 | 1 | 94305 |
| 11730 | $J/\psi \to \pi^+ a_2^- K^+ K^{*-} \gamma^f, a_2^- \to \rho^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 11729 | 1 | 94306 |
| 11731 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11730 | 1 | 94307 |
| 11732 | $J/\psi \to \rho^- a_2^+ a_1^0, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, a_1^0 \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11731 | 1 | 94308 |
| 11733 | $J/\psi \to \pi^- K^+ \bar{K}^0_1, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11732 | 1 | 94309 |
| 11734 | $J/\psi \to \pi^0 a_0^+ b_1^-, a_0^+ \to \bar{K}^0 K^+, b_1^- \to \pi^- \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11733 | 1 | 94310 |
| 11735 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^* \to \pi^- K^+ \gamma^f, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 11734 | 1 | 94311 |
| 11736 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 a_2^+ a_0^-, a_2^+ \to \pi^0 \rho^+, a_0^- \to \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 11735 | 1 | 94312 |
| 11737 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 5738 | 1 | 94313 |
| 11738 | $J/\psi \to \rho^0 f_2(1270) a_0^0, \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3671 | 1 | 94314 |
| 11739 | $J/\psi \to \rho^0 \pi^- \eta' a_0^+, \rho^0 \to \pi^+ \pi^-, \eta' \to \rho^0 \gamma, a_0^+ \to \pi^+ \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma$ | 11738 | 1 | 94315 |
| 11740 | $J/\psi \to \pi^0 a_2^0 \pi^+ b_1^-, a_2^0 \to \pi^+ \rho^-, b_1^- \to \pi^- \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11739 | 1 | 94316 |
| 11741 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11740 | 1 | 94317 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 11742 | $J/\psi \to \pi^- \bar{K}^* K^{*+} h_1(1170), \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11741 | 1 | 94318 |
| 11743 | $J/\psi \rightarrow \rho^0 \rho^0 \omega, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f$ | 168 | 1 | 94319 |
| 11744 | $J/\psi \to \pi^0 \pi^0 \pi^- \bar{K}^* K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11743 | 1 | 94320 |
| 11745 | $J/\psi \to \pi^0 \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 11744 | 1 | 94321 |
| 11746 | $J/\psi 	o \pi^+ \Sigma^0 \bar{\Sigma}^{*-}, \Sigma^0 	o \Lambda \gamma, \bar{\Sigma}^{*-} 	o \pi^- \bar{\Lambda}, \Lambda 	o \pi^0 n, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-nar{n}\gamma$ | 11745 | 1 | 94322 |
| 11747 | $J/\psi \to \omega K^- K_0^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11746 | 1 | 94323 |
| 11748 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+\pi^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11747 | 1 | 94324 |
| 11749 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 5741 | 1 | 94325 |
| 11750 | $J/\psi \to a_2^- \bar{K}^0 K_2^{*+}, a_2^- \to \rho^0 \pi^-, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11749 | 1 | 94326 |
| 11751 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 11750 | 1 | 94327 |
| 11752 | $J/\psi \to ho^0 \pi^+ K^0 K^{*-} \gamma^f, ho^0 \to \pi^+ \pi^-, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 11751 | 1 | 94328 |
| 11753 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \rho^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 3673 | 1 | 94329 |
| 11754 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^+\pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11753 | 1 | 94330 |
| 11755 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 5743 | 1 | 94331 |
| 11756 | $J/\psi \to \omega h_1(1170)\gamma, \omega \to \pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11755 | 1 | 94332 |
| 11757 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$, $K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+K^-$ | 11756 | 1 | 94333 |
| 11758 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \rho^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11757 | 1 | 94334 |
| 11759 | $J/\psi \to \rho^- K_2^{*0} K^{*+}, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11758 | 1 | 94335 |
| 11760 | $J/\psi 	o a_2^0 \pi^+ a_2^-, a_2^0 	o \pi^0 \eta, a_2^- 	o ar K^0 K^-, \eta 	o \gamma \gamma, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 11759 | 1 | 94336 |
| 11761 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11760 | 1 | 94337 |
| 11762 | $J/\psi \rightarrow \rho^+\rho^-\eta\omega, \rho^+ \rightarrow \pi^0\pi^+, \rho^- \rightarrow \pi^0\pi^-, \eta \rightarrow \pi^0\pi^0\pi^0, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 11761 | 1 | 94338 |
| 11763 | $J/\psi \to \rho^0 \omega K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11762 | 1 | 94339 |
| 11764 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11763 | 1 | 94340 |
| 11765 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_L^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 11764 | 1 | 94341 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 11766 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \pi^0 \pi^+ \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11765 | 1 | 94342 |
| 11767 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11766 | 1 | 94343 |
| 11768 | $J/\psi 	o \eta' h_1(1170), \eta' 	o \pi^+\pi^-\eta, h_1(1170) 	o \pi^+ ho^-, \eta 	o \pi^0\pi^0\pi^0, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 11767 | 1 | 94344 |
| 11769 | $J/\psi \to \pi^- \rho^+ \rho^- a_2^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11768 | 1 | 94345 |
| 11770 | $J/\psi ightarrow ar{K}^* p ar{\Sigma}^-, ar{K}^* ightarrow \pi^0 ar{K}^0, ar{\Sigma}^- ightarrow \pi^0 ar{p}, ar{K}^0 ightarrow K_L^0$ | $\pi^0\pi^0K^0_L par p$ | 11769 | 1 | 94346 |
| 11771 | $J/\psi \to \pi^- a_2^+ \omega \omega, a_2^+ \to \pi^0 \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11770 | 1 | 94347 |
| 11772 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- f_2(1270), f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11771 | 1 | 94348 |
| 11773 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^+ \rho^-, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 11772 | 1 | 94349 |
| 11774 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^{'0}, K_0^0 \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3674 | 1 | 94350 |
| 11775 | $J/\psi ightarrow ho^+ \eta a_0^-, ho^+ ightarrow \pi^0 \pi^+ \gamma^f, \eta ightarrow \gamma \gamma, a_0^- ightarrow \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 11774 | 1 | 94351 |
| 11776 | $J/\psi ightarrow \pi^- \eta' b_1^+, \eta' ightarrow \pi^0 \pi^0 \eta, b_1^+ ightarrow \pi^+ \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 3675 | 1 | 94352 |
| 11777 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^+ \pi^- \gamma^F, \phi \to K^+ K^-, f_0(980) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 11776 | 1 | 94353 |
| 11778 | $J/\psi \to f_2' h_1(1380), f_2' \to \eta \eta, h_1(1380) \to K^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11777 | 1 | 94354 |
| 11779 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^0 K^-, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 3676 | 1 | 94355 |
| 11780 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 11779 | 1 | 94356 |
| 11781 | $J/\psi \to \pi^+\pi^-\pi^-a_2^+h_1(1170), a_2^+ \to \bar{K}^0K^+, h_1(1170) \to \pi^+\rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11780 | 1 | 94357 |
| 11782 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 11781 | 1 | 94358 |
| 11783 | $J/\psi ightarrow \pi^0\pi^0a_2^0\gamma, a_2^0 ightarrow \pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 11782 | 1 | 94359 |
| 11784 | $J/\psi 	o ar{K}^0 K^* a_1^0, ar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, a_1^0 	o \pi^+ ho^-, K_S^0 	o \pi^+ \pi^-, K_S^0 	o K_L^0, ho^- 	o \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11783 | 1 | 94360 |
| 11785 | $J/\psi \to \rho^0 \pi^+ \pi^- \bar{K}^0 K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11784 | 1 | 94361 |
| 11786 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 11785 | 1 | 94362 |
| 11787 | $J/\psi 	o \eta \eta' b_1^0, \eta 	o \gamma \gamma, \eta' 	o \omega \gamma, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-, \ \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 11786 | 1 | 94363 |
| 11788 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11787 | 1 | 94364 |
| 11789 | $J/\psi 	o ar{K}^* K_2^{*0} \gamma, ar{K}^* 	o \pi^+ K^-, K_2^{*0} 	o ho^- K^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11788 | 1 | 94365 |
| 11790 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 11789 | 1 | 94366 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 11791 | $J/\psi 	o f_2^{'} \gamma, f_2^{'} 	o \eta \eta, \eta 	o \gamma \gamma, \eta 	o \gamma \gamma$ | γγγγγ | 11790 | 1 | 94367 |
| 11792 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11791 | 1 | 94368 |
| 11793 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11792 | 1 | 94369 |
| 11794 | $J/\psi \to \pi^0 \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 11793 | 1 | 94370 |
| 11795 | $J/\psi 	o \pi^0 \eta \omega a_0^0, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11794 | 1 | 94371 |
| 11796 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_2^{*-} \to \omega K^-, K_S^0 \to \pi^0 \pi^0, \ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2585 | 1 | 94372 |
| 11797 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 2586 | 1 | 94373 |
| 11798 | $J/\psi 	o \pi^+ K^0 K^- a^0_1, K^0 	o K^0_S, a^0_1 	o \pi^- ho^+, K^0_S 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11797 | 1 | 94374 |
| 11799 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^- \gamma^f, a_2^0 	o K_L^0 K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 11798 | 1 | 94375 |
| 11800 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11799 | 1 | 94376 |
| 11801 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11800 | 1 | 94377 |
| 11802 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^- \gamma^f, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 11801 | 1 | 94378 |
| 11803 | $J/\psi \to \eta K^- K^{*+} a_1^0, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 5749 | 1 | 94379 |
| 11804 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 1176 | 1 | 94380 |
| 11805 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 11804 | 1 | 94381 |
| 11806 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \eta f_2(1270), \eta \to \pi^0 \pi^+ \pi^-, f_2(1270) \to K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 11805 | 1 | 94382 |
| 11807 | $J/\psi \to \rho^+ K^- K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11806 | 1 | 94383 |
| 11808 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11807 | 1 | 94384 |
| 11809 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^0K^-, f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 11808 | 1 | 94385 |
| 11810 | $J/\psi \to \pi^0 \pi^0 \rho^0 \rho^+ b_1^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 11809 | 1 | 94386 |
| 11811 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^+K^{*-}, f_1(1420) \to \pi^+K^0K^-, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11810 | 1 | 94387 |
| 11812 | $J/\psi \to K^0 K_2^{*-} a_0^+, K^0 \to K_L^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, a_0^+ \to \pi^+ \eta, K^{*-} \to \pi^0 K^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma$ | 11811 | 1 | 94388 |
| 11813 | $J/\psi 	o ar{\Sigma}^- \Sigma^{*+}, ar{\Sigma}^- 	o \pi^- ar{n}, \Sigma^{*+} 	o \pi^+ \Sigma^0, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^0 n$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 11812 | 1 | 94389 |
| 11814 | $J/\psi 	o \eta_c \gamma, \eta_c 	o K^0 \bar{K}^* \phi, K^0 	o K_L^0, \bar{K}^* 	o \pi^+ K^-, \phi 	o K^+ K^-$ | $K_L^0\pi^+K^+K^-K^-\gamma$ | 5751 | 1 | 94390 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11815 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5752 | 1 | 94391 |
| 11816 | $J/\psi \to \pi^- \bar{\Sigma}^0 \Sigma^{*+}, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \Sigma^{*+} \to \pi^+ \Sigma^0, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^0 \to \Lambda\gamma, \\ \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma\gamma$ | 5753 | 1 | 94392 |
| 11817 | $J/\psi \to K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11816 | 1 | 94393 |
| 11818 | $J/\psi 	o \pi^0\pi^-\eta \bar{n}\Delta^+, \eta 	o \gamma\gamma, \Delta^+ 	o \pi^0 p$ | $\pi^0\pi^0\pi^-ar{n}p\gamma\gamma$ | 11817 | 1 | 94394 |
| 11819 | $J/\psi \to \rho^- \bar{K}^0 K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_1^+ \to \rho^0 K^+, K_S^0 \to \pi^0 \pi^0, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11818 | 1 | 94395 |
| 11820 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 11819 | 1 | 94396 |
| 11821 | $J/\psi \to \pi^+\pi^-\rho^+\rho^-f_2(1270), \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, f_2(1270) \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11820 | 1 | 94397 |
| 11822 | $J/\psi \to K^0 \bar{K}_1^{'0} \gamma, K^0 \to K_S^0, \bar{K}_1^{'0} \to \rho^+ K^-, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 11821 | 1 | 94398 |
| 11823 | $J/\psi \to \pi^- a_2^+ K^0 \bar{K}^*, a_2^+ \to \rho^0 \pi^+, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 11822 | 1 | 94399 |
| 11824 | $J/\psi \to \pi^- \rho^+ \omega h_1(1170), \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5754 | 1 | 94400 |
| 11825 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to \eta \gamma, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 11824 | 1 | 94401 |
| 11826 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 11825 | 1 | 94402 |
| 11827 | $J/\psi \to \rho^0 f_0(1370) a_1^0, \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^+\pi^-\gamma^f, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11826 | 1 | 94403 |
| 11828 | $J/\psi ightarrow ar{K}^0 K^* \eta', ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^0 K^0, \eta' ightarrow ho^0 \gamma, K^0 ightarrow K_L^0, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 11827 | 1 | 94404 |
| 11829 | $J/\psi 	o \pi^0\pi^0\eta\gamma, \eta 	o \gamma\gamma$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 11828 | 1 | 94405 |
| 11830 | $J/\psi ightarrow \pi^- ho^+ \eta^\prime \gamma^f, ho^+ ightarrow \pi^0 \pi^+, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5755 | 1 | 94406 |
| 11831 | $J/\psi \to \eta p \bar{p} \gamma^f, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^- par p \gamma^F \gamma^f$ | 11830 | 1 | 94407 |
| 11832 | $J/\psi \to f_2(1270)K^+K^-, f_2(1270) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \gamma\gamma$ | $K^+K^-\gamma\gamma\gamma\gamma$ | 11831 | 1 | 94408 |
| 11833 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 11832 | 1 | 94409 |
| 11834 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^+ b_1^-, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 5756 | 1 | 94410 |
| 11835 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11834 | 1 | 94411 |
| 11836 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 5757 | 1 | 94412 |
| 11837 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}_0^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11836 | 1 | 94413 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 11838 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, \bar{K}^0 \to K_L^0, K^0 \to K_L^0, K^0 \to K_L^0, K^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 11837 | 1 | 94414 |
| 11839 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \pi^+ K_0^0, \eta \to \pi^0 \pi^0 \pi^0, K_0^0 \to \pi^0 K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11838 | 1 | 94415 |
| 11840 | $J/\psi \to \pi^- b_1^+ a_1^0, b_1^+ \to \pi^+ \omega, a_1^0 \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 2588 | 1 | 94416 |
| 11841 | $J/\psi \to \rho^+ a_2^- a_0^0, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, a_0^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11840 | 1 | 94417 |
| 11842 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_S^0, a_0^+ \to \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-K^+K^-$ | 11841 | 1 | 94418 |
| 11843 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0\gamma, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 11842 | 1 | 94419 |
| 11844 | $J/\psi \to \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 3681 | 1 | 94420 |
| 11845 | $J/\psi \to \eta K^* \bar{K}_1^0, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11844 | 1 | 94421 |
| 11846 | $J/\psi \to \phi f_0(2020), \phi \to K^+K^-, f_0(2020) \to \eta \eta', \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \pi^+\pi^- \eta, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma\gamma$ | 11845 | 1 | 94422 |
| 11847 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 11846 | 1 | 94423 |
| 11848 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 11847 | 1 | 94424 |
| 11849 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 11848 | 1 | 94425 |
| 11850 | $J/\psi \to \pi^{0} \rho^{0} \rho^{-} b_{1}^{+}, \pi^{0} \to e^{+} e^{-} \gamma^{F}, \rho^{0} \to \pi^{+} \pi^{-}, \rho^{-} \to \pi^{0} \pi^{-}, b_{1}^{+} \to \pi^{+} \omega,$ $\omega \to \pi^{0} \pi^{+} \pi^{-}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 11849 | 1 | 94426 |
| 11851 | $J/\psi \to \pi^0 \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_L^0, K_C^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 11850 | 1 | 94427 |
| 11852 | $J/\psi \to \pi^{-}\rho^{+}a_{0}^{0}a_{0}^{0}, \rho^{+} \to \pi^{0}\pi^{+}, a_{0}^{0} \to \pi^{0}\eta, a_{0}^{0} \to \pi^{0}\eta, \eta \to \pi^{0}\pi^{0}\pi^{0}, \eta \to \pi^{0}\pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11851 | 1 | 94428 |
| 11853 | $J/\psi \rightarrow n_c \gamma, n_c \rightarrow \rho^0 \pi^+ \rho^- \gamma^f, \rho^0 \rightarrow \pi^+ \pi^-, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 2589 | 1 | 94429 |
| 11854 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 11853 | 1 | 94430 |
| 11855 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5761 | 1 | 94431 |
| 11856 | $J/\psi \to \pi^0 \eta K^0 K^- a_0^+, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 11855 | 1 | 94432 |
| 11857 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^+ K_2^{*-}, \eta \to \gamma \gamma, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma\gamma\gamma$ | 11856 | 1 | 94433 |
| 11858 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^-\rho^+, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11857 | 1 | 94434 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 11859 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L$ | 11858 | 1 | 94435 |
| 11860 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11859 | 1 | 94436 |
| 11861 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11860 | 1 | 94437 |
| 11862 | $J/\psi \to K^+ K_2^{*-} b_1^0, K_2^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 1933 | 1 | 94438 |
| 11863 | $J/\psi \to \omega a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 11862 | 1 | 94439 |
| 11864 | $J/\psi \to \omega\omega\omega, \omega \to \pi^0\gamma, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 5763 | 1 | 94440 |
| 11865 | $J/\psi \to K^0 \phi \bar{K}^0_1, K^0 \to K^0_L, \phi \to K^+ K^-, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 11864 | 1 | 94441 |
| 11866 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \omega K^-, K_1^+ \to \pi^0 K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11865 | 1 | 94442 |
| 11867 | $J/\psi \to f_2(1270)b_1^0, f_2(1270) \to \pi^+\pi^+\pi^-\pi^-, b_1^0 \to \pi^0\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11866 | 1 | 94443 |
| 11868 | $J/\psi \to a_2^0 \eta h_1(1170), a_2^0 \to \pi^+ \rho^-, \eta \to \gamma \gamma, h_1(1170) \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11867 | 1 | 94444 |
| 11869 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^+ K^0, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 11868 | 1 | 94445 |
| 11870 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^- K^+ \gamma^f, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 11869 | 1 | 94446 |
| 11871 | $J/\psi \to \omega \bar{K}^* K_1^{'0}, \omega \to \pi^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 2591 | 1 | 94447 |
| 11872 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f\gamma^f$ | 11871 | 1 | 94448 |
| 11873 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \pi^0 K_0^{*-}, K_S^0 \to \pi^0 \pi^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 5765 | 1 | 94449 |
| 11874 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11873 | 1 | 94450 |
| 11875 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11874 | 1 | 94451 |
| 11876 | $J/\psi ightarrow \pi^0\pi^-\eta b_1^+, \eta ightarrow \gamma\gamma, b_1^+ ightarrow \pi^+\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11875 | 1 | 94452 |
| 11877 | $J/\psi \to \rho^- K^+ \bar{K}_1^{'0} \gamma^F, \rho^- \to \pi^0 \pi^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 11876 | 1 | 94453 |
| 11878 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11877 | 1 | 94454 |
| 11879 | $J/\psi \to \eta' h_1(1380), \eta' \to \gamma \gamma, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 11878 | 1 | 94455 |
| 11880 | $J/\psi \to \phi f_0(980), \phi \to K_L^0 K_S^0, f_0(980) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11879 | 1 | 94456 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 11881 | $J/\psi \to \pi^- \bar{K}^0 K_1^+ \gamma^F, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^F$ | 11880 | 1 | 94457 |
| 11882 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11881 | 1 | 94458 |
| 11883 | $J/\psi \to \pi^+ \pi^- \eta K^+ K^- \gamma^f, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 11882 | 1 | 94459 |
| 11884 | $J/\psi \to \pi^+\pi^-\pi^-a_2^+h_1(1170), a_2^+ \to \pi^0\pi^+\omega, h_1(1170) \to \pi^0\rho^0, \omega \to \pi^0\pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11883 | 1 | 94460 |
| 11885 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 11884 | 1 | 94461 |
| 11886 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 11885 | 1 | 94462 |
| 11887 | $J/\psi \to \pi^0 \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11886 | 1 | 94463 |
| 11888 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 11887 | 1 | 94464 |
| 11889 | $J/\psi ightarrow \pi^0 \omega K^0 ar{K}^*, \omega ightarrow \pi^0 \gamma, K^0 ightarrow K_L^0, ar{K}^* ightarrow \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 11888 | 1 | 94465 |
| 11890 | $J/\psi \to \pi^0 \rho^+ a_0^- a_1^0, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11889 | 1 | 94466 |
| 11891 | $J/\psi \to K^0 \bar{K}^0 \eta' h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 11890 | 1 | 94467 |
| 11892 | $J/\psi \to \pi^+\pi^- f_2(1270) f_0(1370), f_2(1270) \to \pi^0\pi^0, f_0(1370) \to \pi^0\pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 11891 | 1 | 94468 |
| 11893 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 11892 | 1 | 94469 |
| 11894 | $K_S \to \pi^+ \pi^-$ $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ h_1(1170) a_1^-, h_1(1170) \to \pi^+ \rho^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 11893 | 1 | 94470 |
| 11895 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+\pi^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 11894 | 1 | 94471 |
| 11896 | $J/\psi \to K^+ ar{K}_1^{'-}, ar{K}_1^{'-} \to ho^- ar{K}^0, ho^- \to \pi^0 \pi^-, ar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 11895 | 1 | 94472 |
| 11897 | $J/\psi \to \rho^- K^+ \bar{K}_1^{'0} \gamma^F, \rho^- \to \pi^0 \pi^-, \bar{K}_1^{'0} \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 11896 | 1 | 94473 |
| 11898 | $J/\psi \to \pi^0 \eta' \gamma, \eta' \to \pi^+ \pi^- \eta, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma$ | 5766 | 1 | 94474 |
| 11899 | $J/\psi \to K^*\bar{K}^0_2, K^* \to \pi^0 K^0, \bar{K}^0_2 \to \pi^0 K^{*0}_2, K^0 \to K^0_L, K^{*0}_2 \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 11898 | 1 | 94475 |
| 11900 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to K_L^0 K_L^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K^0_LK^0_LK^0_LK^0_L$ | 11899 | 1 | 94476 |
| 11901 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^-K^{*+}, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 5767 | 1 | 94477 |
| 11902 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 11901 | 1 | 94478 |
| 11903 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 11902 | 1 | 94479 |
| 11904 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^- \gamma^f, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 5768 | 1 | 94480 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 11905 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\pi^-K^+\gamma^F$ | 11904 | 1 | 94481 |
| 11906 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} f_0(1370), \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5769 | 1 | 94482 |
| 11907 | $J/\psi 	o \pi^0 ho^0, ho^0 	o \pi^+ \pi^- \gamma^f \gamma^f$ | $\pi^0\pi^+\pi^-\gamma^f\gamma^f$ | 11906 | 1 | 94483 |
| 11908 | $J/\psi \to \pi^0 f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^0\pi^0, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 11907 | 1 | 94484 |
| 11909 | $J/\psi ightarrow \pi^0 \omega a_1^0, \omega ightarrow \pi^+ \pi^-, a_1^0 ightarrow \pi^- ho^+, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11908 | 1 | 94485 |
| 11910 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^0 \pi^- \omega, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11909 | 1 | 94486 |
| 11911 | $J/\psi 	o K^0 ar{\Delta}^+ \Sigma^+, K^0 	o K_L^0, ar{\Delta}^+ 	o \pi^- ar{n}, \Sigma^+ 	o \pi^0 p$ | $\pi^0 K_L^0 \pi^- ar{n} p$ | 5770 | 1 | 94487 |
| 11912 | $J/\psi \to \pi^0 f_2(1270) b_1^0, f_2(1270) \to \pi^+\pi^-, b_1^0 \to \pi^0\omega, \omega \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5771 | 1 | 94488 |
| 11913 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^- \omega a_1^+, \omega ightarrow \pi^0 \pi^+ \pi^-, a_1^+ ightarrow ho^0 \pi^+, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 11912 | 1 | 94489 |
| 11914 | $J/\psi \to K^*\bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 11913 | 1 | 94490 |
| 11915 | $J/\psi \rightarrow \pi^- \rho^+ \rho^- a_2^+, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, a_2^+ \rightarrow \pi^+ \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11914 | 1 | 94491 |
| 11916 | $J/\psi ightarrow a_2^0 \pi^+ \pi^-, a_2^0 ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma$ | 11915 | 1 | 94492 |
| 11917 | $J/\psi \to \rho^0 \rho^0 \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^- K^+$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 11916 | 1 | 94493 |
| 11918 | $J/\psi 	o \eta K^0 ar{K}^0, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K^0_S, ar{K}^0 	o K^0_L, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11917 | 1 | 94494 |
| 11919 | $J/\psi \to \pi^+ K^0 K^{*-} f_1(1420), K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- K^- K^-$ | 11918 | 1 | 94495 |
| 11920 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0\gamma^f, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 11919 | 1 | 94496 |
| 11921 | $J/\psi \to K^0 ar{K}_1^{'0}, K^0 \to K_I^0, ar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0 K^0_L \pi^+ K^-$ | 11920 | 1 | 94497 |
| 11922 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}\gamma^{f}$ | 11921 | 1 | 94498 |
| 11923 | $J/\psi \to \pi^+ p \bar{p} a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 5772 | 1 | 94499 |
| 11924 | $J/\psi 	o a_2^0 \pi^+ a_1^- \gamma^f, a_2^0 	o \pi^+ \pi^- \omega, a_1^- 	o \pi^0 ho^-, \omega 	o \pi^0 \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11923 | 1 | 94500 |
| 11925 | $J/\psi \to \phi f_0(1790), \phi \to K_L^0 K_S^0, f_0(1790) \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1934 | 1 | 94501 |
| 11926 | $J/\psi 	o \pi^0 \Xi^0 ar{\Xi}^0, \Xi^0 	o \pi^0 \Lambda, ar{\Xi}^0 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 11925 | 1 | 94502 |
| 11927 | $J/\psi \to \pi^+\pi^-b_1^0h_1(1170), b_1^0 \to \pi^0\omega, h_1(1170) \to \pi^0\rho^0, \omega \to \pi^0\pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11926 | 1 | 94503 |
| 11928 | $J/\psi \to \pi^+ K^+ a_0^- K_1^-, a_0^- \to \pi^- \eta, K_1^- \to \pi^- \bar{K}_0^{*0}, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11927 | 1 | 94504 |
| 11929 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11928 | 1 | 94505 |
| 11930 | $J/\psi \to \pi^+\pi^-K^-K_0^{*+}, K_0^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 11929 | 1 | 94506 |
| 11931 | $J/\psi 	o a_2^0 \pi^- a_2^+, a_2^0 	o \pi^- ho^+, a_2^+ 	o \pi^+ \eta, ho^+ 	o \pi^0 \pi^+, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 11930 | 1 | 94507 |
| 11932 | $J/\psi \to \pi^0 \pi^- a_2^+ f_2(1270), a_2^+ \to \pi^0 \pi^+ \omega, f_2(1270) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11931 | 1 | 94508 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 11933 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 11932 | 1 | 94509 |
| 11934 | $J/\psi \to \pi^0 \pi^+ a_1^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11933 | 1 | 94510 |
| 11935 | $J/\psi 	o \pi^+ K^0 K_0^{*-} \gamma^f, K^0 	o K_S^0, K_0^{*-} 	o \pi^0 K^-, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^f$ | 11934 | 1 | 94511 |
| 11936 | $J/\psi \to K^0 \bar{K}^0 a_0^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 11935 | 1 | 94512 |
| 11937 | $J/\psi \to K^- K^{*+} a_0^0, K^{*+} \to K^+ \gamma, a_0^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma$ | 1935 | 1 | 94513 |
| 11938 | $J/\psi 	o \eta \omega f_2(1270), \eta 	o \gamma \gamma, \omega 	o \pi^0 \gamma, f_2(1270) 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 11937 | 1 | 94514 |
| 11939 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 3687 | 1 | 94515 |
| 11940 | $J/\psi \to \pi^0 \pi^- K^{*+} K^{*-} a_0^+, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K^0 \to K_L^0, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11939 | 1 | 94516 |
| 11941 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \pi^- \rho^+ a_1^0, \rho^+ \to \pi^0 \pi^+, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 1936 | 1 | 94517 |
| 11942 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \omega K^0, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 5777 | 1 | 94518 |
| 11943 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 11942 | 1 | 94519 |
| 11944 | $J/\psi \to \eta_c \gamma, \eta_c \to f_0(1710) h_1(1380), f_0(1710) \to \eta \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \gamma \gamma, $ $\eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma$ | 11943 | 1 | 94520 |
| 11945 | $J/\psi 	o ho^0 ho^0 \pi^- a_2^+, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, a_2^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11944 | 1 | 94521 |
| 11946 | $J/\psi \to K^0 \bar{n} \Lambda, K^0 \to K^0_S, \Lambda \to \pi^- p, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-\pi^-ar{n}p\gamma^f$ | 11945 | 1 | 94522 |
| 11947 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_1^+, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 11946 | 1 | 94523 |
| 11948 | $J/\psi \to \pi^0 \rho^0 \pi^+ a^0, \rho^0 \to \pi^+ \pi^-, a^0 \to \pi^- \eta \gamma^f, \eta \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 11947 | 1 | 94524 |
| 11949 | $J/\psi \to \pi^{0} K_{0}^{*-} K_{1}^{'+}, K_{0}^{*-} \to \pi^{0} K^{-}, K_{1}^{'+} \to \pi^{+} K^{*}, K^{*} \to \pi^{-} K^{+}$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 11948 | 1 | 94525 |
| 11950 | $J/\psi \to \bar{K}^0 \phi K_0^0 \gamma, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 11949 | 1 | 94526 |
| 11951 | $J/\psi \rightarrow \rho^{+}a_{2}^{-}\eta\gamma^{f}, \rho^{+} \rightarrow \pi^{0}\pi^{+}, a_{2}^{-} \rightarrow \rho^{0}\pi^{-}, \eta \rightarrow \gamma\gamma, \rho^{0} \rightarrow \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 11950 | 1 | 94527 |
| 11952 | $J/\psi \to \pi^- \rho^+ a_0^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 11951 | 1 | 94528 |
| 11953 | $J/\psi \to K^{*+}\phi \bar{K}_{1}^{'-}, K^{*+} \to \pi^{0}K^{+}, \phi \to K^{+}K^{-}, \bar{K}_{1}^{'-} \to \pi^{0}K^{*-}, K^{*-} \to \pi^{-}\bar{K}^{0}, \\ \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 11952 | 1 | 94529 |
| 11954 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 11953 | 1 | 94530 |
| 11955 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11954 | 1 | 94531 |
| 11956 | $J/\psi \to \eta h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 11955 | 1 | 94532 |
| 11957 | $J/\psi 	o \pi^+\pi^-ar{p}\Delta^+, \Delta^+ 	o \pi^+n$ | $\pi^+\pi^+\pi^-nar{p}$ | 11956 | 1 | 94533 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 11958 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^0 K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11957 | 1 | 94534 |
| 11959 | $J/\psi \to \rho^0 \pi^- a_2^+ \omega, \rho^0 \to \pi^+ \pi^-, a_2^+ \to \rho^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 11958 | 1 | 94535 |
| 11960 | $J/\psi \to \rho^0 K^{*+} \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 11959 | 1 | 94536 |
| 11961 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 11960 | 1 | 94537 |
| 11962 | $J/\psi \to \pi^+\pi^-b_1^0h_1(1170), b_1^0 \to \pi^0\omega, h_1(1170) \to \pi^-\rho^+, \omega \to \pi^0\pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 11961 | 1 | 94538 |
| 11963 | $J/\psi \to K^{-}a_{0}^{0}K_{1}^{'+}, a_{0}^{0} \to \pi^{0}\eta, K_{1}^{'+} \to \pi^{+}K^{*}, \eta \to \pi^{0}\pi^{+}\pi^{-}, K^{*} \to \pi^{0}K^{0}, K^{0} \to K_{L}^{0}$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 11962 | 1 | 94539 |
| 11964 | $J/\psi \to \pi^+\pi^-K^*K^{*-}a_0^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, a_0^+ \to \pi^+\eta, \bar{K}^0 \to K_L^0, \eta \to \gamma\gamma$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma \gamma$ | 11963 | 1 | 94540 |
| 11965 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^0 \rho^0, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 11964 | 1 | 94541 |
| 11966 | $J/\psi 	o \pi^0\pi^0K^+K^-\gamma^f, \pi^0 	o e^+e^-\gamma^F$ | $e^+e^-\pi^0K^+K^-\gamma^F\gamma^f$ | 11965 | 1 | 94542 |
| 11967 | $J/\psi ightarrow \pi^0 a_2^0 \pi^+ ho^-, a_2^0 ightarrow \pi^0 \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 11966 | 1 | 94543 |
| 11968 | $J/\psi \to \bar{K}^0 K_2^{*0} f_0(1370), \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^0 K^*, f_0(1370) \to \rho^+ \rho^-, K^* \to \pi^- K^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 11967 | 1 | 94544 |
| 11969 | $J/\psi \to f_2(1270)\gamma, f_2(1270) \to \pi^0 \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\gamma$ | 11968 | 1 | 94545 |
| 11970 | $J/\psi 	o \pi^0 \pi^0 ar{K}^0 K^*, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 11969 | 1 | 94546 |
| 11971 | $J/\psi ightarrow \pi^0 ho^0 \eta, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^-, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 11970 | 1 | 94547 |
| 11972 | $J/\psi 	o ar{K}^0 a_0^0 K_1^0, ar{K}^0 	o K_S^0, a_0^0 	o \pi^0 \eta, K_1^0 	o ho^- K^+, K_S^0 	o \pi^0 \pi^0, \ \eta 	o \pi^0 \pi^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 3689 | 1 | 94548 |
| 11973 | $J/\psi 	o K^- K_2^{*+} b_1^0, K_2^{*+} 	o \pi^+ K^0, b_1^0 	o \pi^0 \omega, K^0 	o K_L^0, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 1937 | 1 | 94549 |
| 11974 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+} \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 11973 | 1 | 94550 |
| 11975 | $J/\psi \to \pi^- K^{*+} K^{*-} a_0^+, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11974 | 1 | 94551 |
| 11976 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_2^{*-} \to \rho^- K^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5780 | 1 | 94552 |
| 11977 | $J/\psi \to \pi^0 \pi^0 \pi^+ \pi^- \gamma^F \gamma^f, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma^F\gamma^f$ | 2596 | 1 | 94553 |
| 11978 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \omega K^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11977 | 1 | 94554 |
| 11979 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to \pi^-\rho^+, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 618 | 1 | 94555 |
| 11980 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_S^0, $ $\rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11979 | 1 | 94556 |
| 11981 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-\gamma$ | 11980 | 1 | 94557 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 11982 | $J/\psi \to \pi^+ \rho^- h_1(1170) h_1(1170), \rho^- \to \pi^0 \pi^- \gamma^f, h_1(1170) \to \pi^0 \rho^0, h_1(1170) \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11981 | 1 | 94558 |
| 11983 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^{*-}, \Lambda \to \pi^0 n, \bar{\Sigma}^{*-} \to \pi^0 \bar{\Sigma}^-, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 11982 | 1 | 94559 |
| 11984 | $J/\psi \to \pi^0 \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5783 | 1 | 94560 |
| 11985 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 11984 | 1 | 94561 |
| 11986 | $J/\psi \to \eta K^- K_1^+, \eta \to \gamma \gamma, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 11985 | 1 | 94562 |
| 11987 | $J/\psi 	o \pi^0 ho^- ar{\Delta}^0 p, ho^- 	o \pi^0 \pi^-, ar{\Delta}^0 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 11986 | 1 | 94563 |
| 11988 | $J/\psi \to \rho^0 \pi^- \bar{K}^0 K^{*+} \gamma^f, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 11987 | 1 | 94564 |
| 11989 | $J/\psi \to \rho^+ \eta K^0 K^-, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 11988 | 1 | 94565 |
| 11990 | $J/\psi \to K^+K^{*-}f_0(1370)\gamma^f, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^0\pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 \pi^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 11989 | 1 | 94566 |
| 11991 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^0 K^-, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5784 | 1 | 94567 |
| 11992 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 11991 | 1 | 94568 |
| 11993 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, h_1(1170) \to \pi^-\rho^+, K^0 \to K_S^0, $ $\rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 11992 | 1 | 94569 |
| 11994 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11993 | 1 | 94570 |
| 11995 | $J/\psi \to K_0^{*+} \bar{K}_1^{'-}, K_0^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5785 | 1 | 94571 |
| 11996 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^0\pi^-\bar{K}^*, K_1^+ \to \pi^+K_0^0, \bar{K}^* \to \pi^+K^-, K_0^0 \to \pi^-K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5786 | 1 | 94572 |
| 11997 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 11996 | 1 | 94573 |
| 11998 | $J/\psi \to a_2^0 \pi^+ b_1^-, a_2^0 \to K_S^0 K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 11997 | 1 | 94574 |
| 11999 | $J/\psi \to a_2^+ \omega a_0^-, a_2^+ \to \pi^+ \eta, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 11998 | 1 | 94575 |
| 12000 | $J/\psi \to K^+ \phi K_0^{*-}, \phi \to K_L^0 K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^-K^+$ | 11999 | 1 | 94576 |
| 12001 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12000 | 1 | 94577 |
| 12002 | $J/\psi \to \rho^+ \rho^- a_1^0 \gamma, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5787 | 1 | 94578 |
| 12003 | $J/\psi \to \rho^+ a_2^- f_2(1270), \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12002 | 1 | 94579 |
| 12004 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 12003 | 1 | 94580 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12005 | $J/\psi 	o ho^0 \pi^+ \pi^- K^0 \bar{K}^*, ho^0 	o \pi^+ \pi^-, K^0 	o K_S^0, \bar{K}^* 	o \pi^+ K^-, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12004 | 1 | 94581 |
| 12006 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12005 | 1 | 94582 |
| 12007 | $J/\psi \to K^{*+} K_2^{*-} \gamma, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 12006 | 1 | 94583 |
| 12008 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^0 \rho^0, f_1(1285) \to \pi^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5788 | 1 | 94584 |
| 12009 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12008 | 1 | 94585 |
| 12010 | $J/\psi ightarrow ho^0 a_2^0 \eta, ho^0 ightarrow \pi^+ \pi^-, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 5789 | 1 | 94586 |
| 12011 | $J/\psi \to \pi^0 \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 3693 | 1 | 94587 |
| 12012 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^+e^-\pi^0K_L^0\pi^+K^-\gamma^F$ | 12011 | 1 | 94588 |
| 12013 | $J/\psi ightarrow ar{K}^0 n ar{\Lambda}, ar{K}^0 ightarrow K_S^0, ar{\Lambda} ightarrow \pi^+ ar{p}, K_S^0 ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-nar p\gamma^F$ | 12012 | 1 | 94589 |
| 12014 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \rho^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 12013 | 1 | 94590 |
| 12015 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 5791 | 1 | 94591 |
| 12016 | $J/\psi \to \pi^0 \bar{\Lambda} \Sigma^{*0}, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^{*0} \to \pi^+ \Sigma^-, \Sigma^- \to \pi^- n$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 12015 | 1 | 94592 |
| 12017 | $J/\psi ightarrow \pi^- \eta' b_1^+, \eta' ightarrow \pi^+ \pi^- \eta, b_1^+ ightarrow \pi^+ \omega, \eta ightarrow \pi^0 \pi^0 \pi^0, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2598 | 1 | 94593 |
| 12018 | $J/\psi \to \eta \eta' \phi, \eta \to \gamma \gamma, \eta' \to \pi^+ \pi^- \eta, \phi \to \pi^- \rho^+, \eta \to \gamma \gamma, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 12017 | 1 | 94594 |
| 12019 | $J/\psi \to K^-K^{*+}a_0^0, K^{*+} \to \pi^+K^0, a_0^0 \to \pi^0\eta, K^0 \to K_S^0, \eta \to \pi^+\pi^-\gamma^F, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 3695 | 1 | 94595 |
| 12020 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 12019 | 1 | 94596 |
| 12021 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 12020 | 1 | 94597 |
| 12022 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^+K^{*-}, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^0K^-, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12021 | 1 | 94598 |
| 12023 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0 \gamma^F, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 3696 | 1 | 94599 |
| 12024 | $J/\psi \to \pi^- \bar{K}^* K_2^{*+} \gamma^F, \bar{K}^* \to \pi^+ K^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 12023 | 1 | 94600 |
| 12025 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^+ \pi^- \pi^-$ | 12024 | 1 | 94601 |
| 12026 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12025 | 1 | 94602 |
| 12027 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^0 f_2(1270), f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\gamma$ | 5795 | 1 | 94603 |
| 12028 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^0K^+, K^{*-} \to \pi^0K^-, \eta' \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 12027 | 1 | 94604 |
| 12029 | $J/\psi 	o \eta K^+ ar{K}_1^{'-}, \eta 	o \pi^0 \pi^0 \pi^0, ar{K}_1^{'-} 	o \pi^- ar{K}^*, \pi^0 	o e^+ e^- \gamma^F, ar{K}^* 	o \pi^+ K^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 12028 | 1 | 94605 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|---------------|---|--|--------------|--------|----------------|
| 12030 | $J/\psi \to \eta K^0 \bar{K}_1^0, \eta \to \gamma \gamma, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K^{*-} \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma \gamma^f$ | 12029 | 1 | 94606 |
| 12031 | $J/\psi 	o ar{K}^0 K^*, ar{K}^0 	o K_S^0, K^* 	o \pi^0 K^0, K_S^0 	o \pi^+ \pi^-, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12030 | 1 | 94607 |
| 12032 12033 | $J/\psi \to \pi^- \eta' b_1^+ \gamma^f, \eta' \to \pi^+ \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \gamma$ $J/\psi \to \pi^0 K^+ K^{*-} b_1^0, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma^{f} \ \pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}$ | 12031 2599 | 1 1 | 94608 94609 |
| 12034 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to \bar{K}^0K^*, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12033 | 1 | 94610 |
| 12035 | $J/\psi 	o \pi^+ ho^- K^0 ar K^*, ho^- 	o \pi^0 \pi^-, K^0 	o K^0_S, ar K^* 	o \pi^+ K^-, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12034 | 1 | 94611 |
| 12036 | $J/\psi \to \pi^+ \rho^- \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5797 | 1 | 94612 |
| 12037 | $J/\psi \to \rho^+ \rho^- \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12036 | 1 | 94613 |
| 12038 | $J/\psi \to K_1^+ \bar{K}_1^{'-}, K_1^+ \to \rho^0 K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 12037 | 1 | 94614 |
| 12039 | $J/\psi \to \pi^0 a_2^0 \omega, a_2^0 \to \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12038 | 1 | 94615 |
| 12040 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \phi \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12039 | 1 | 94616 |
| 12041 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 12040 | 1 | 94617 |
| 12042 | $J/\psi \to \rho^0 \pi^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 12041 | 1 | 94618 |
| 12043 | $J/\psi \to \rho \ \pi \ K \ K \ , \rho \to \pi \ \pi \ \gamma^*, K \to K_S, K \to \pi \ K \ , K_S \to \pi \ \pi$ $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^0 K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0,$ $K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12042 | 1 | 94619 |
| 12044 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12043 | 1 | 94620 |
| 12045 | $J/\psi \to K^0 \bar{K}_0^{*0} \gamma, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+K^-\gamma^F\gamma$ | 12044 | 1 | 94621 |
| 12046 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \gamma, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 12045 | 1 | 94622 |
| 12047 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0 \gamma^f, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f \gamma^f$ | 12046 | 1 | 94623 |
| 12048 | $J/\psi \to K^+ K^{*-} f_0(1370), K^{*-} \to \pi^- \bar{K}^0, f_0(1370) \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 12047 | 1 | 94624 |
| 12049 | $J/\psi \to \pi^- \rho^+ \eta K^{*+} K^{*-}, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma\gamma$ | 3698 | 1 | 94625 |
| 12050 | $J/\psi ightarrow \pi^+\pi^-\omega\omega, \omega ightarrow \pi^0\gamma, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12049 | 1 | 94626 |
| 12051 | $J/\psi \to K^0 a_0^+ \bar{K}_1^{'-}, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, \bar{K}_1^{'-} \to \pi^0 K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3699 | 1 | 94627 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 12052 | $J/\psi \to \pi^+ \omega a_1^- \gamma^F, \omega \to \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 12051 | 1 | 94628 |
| 12053 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12052 | 1 | 94629 |
| 12054 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 12053 | 1 | 94630 |
| 12055 | $J/\psi \to \rho^0 f_0(1370) f_1(1285), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^0\pi^0, f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12054 | 1 | 94631 |
| 12056 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5800 | 1 | 94632 |
| 12057 | $J/\psi \to \pi^0 K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12056 | 1 | 94633 |
| 12058 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \rho^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \rho^0 \to \pi^+ \pi^- \gamma^F, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 3700 | 1 | 94634 |
| 12059 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 12058 | 1 | 94635 |
| 12060 | $J/\psi \to \pi^+ K^0 K^{*-} \phi, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}$ | 5802 | 1 | 94636 |
| 12061 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \rho^-\bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 12060 | 1 | 94637 |
| 12062 | $J/\psi \to ho^0 \eta a_0^0, ho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 3701 | 1 | 94638 |
| 12063 | $J/\psi \to \pi^+\pi^-b_1^-a_1^+, b_1^- \to \pi^-\omega, a_1^+ \to \rho^0\pi^+, \omega \to \pi^0\pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 12062 | 1 | 94639 |
| 12064 | $J/\psi 	o \eta \omega \eta', \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 12063 | 1 | 94640 |
| 12065 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \rho^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12064 | 1 | 94641 |
| 12066 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 12065 | 1 | 94642 |
| 12067 | $J/\psi \to ho^0 K^+ \bar{K}_1^{'-}, ho^0 \to \pi^+ \pi^-, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 12066 | 1 | 94643 |
| 12068 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^0 \bar{K}^*, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12067 | 1 | 94644 |
| 12069 | $J/\psi \to \pi^0 \pi^+ \pi^- f_2(1270), f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12068 | 1 | 94645 |
| 12070 | $J/\psi \to K^+K^-\phi\gamma^F\gamma^f, \phi \to K^+K^-$ | $K^+K^+K^-K^-\gamma^F\gamma^f$ | 12069 | 1 | 94646 |
| 12071 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to e^+e^-\gamma^F\gamma^f, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $e^+e^-\pi^0K_L^0\pi^+K^-\gamma^F\gamma^f$ | 1939 | 1 | 94647 |
| 12072 | $J/\psi \to a_2^0 \pi^- \bar{K}^0 K^{*+}, a_2^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12071 | 1 | 94648 |
| 12073 | $J/\psi \to K^- p \bar{\Lambda} \gamma^F, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+ K^- p ar p \gamma^F$ | 12072 | 1 | 94649 |
| 12074 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12073 | 1 | 94650 |
| 12075 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12074 | 1 | 94651 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 12076 | $J/\psi 	o \pi^- \bar{\Delta}^0 p, \bar{\Delta}^0 	o \bar{n} \gamma$ | $\pi^- \bar{n} p \gamma$ | 5805 | 1 | 94652 |
| 12077 | $J/\psi \to \pi^+ b_1^- h_1(1170) \gamma^F, b_1^- \to \pi^- \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 12076 | 1 | 94653 |
| 12078 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12077 | 1 | 94654 |
| 12079 | $J/\psi \to \bar{K}^0 \Delta^0 \bar{\Sigma}^{*0}, \bar{K}^0 \to K_S^0, \Delta^0 \to \pi^- p, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, K_S^0 \to \pi^0 \pi^0, \\ \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 12078 | 1 | 94655 |
| 12080 | $J/\psi \to K^0 a_0^+ \bar{K}_1^{'-}, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, \\ \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12079 | 1 | 94656 |
| 12081 | $J/\psi \to \omega a_0^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 12080 | 1 | 94657 |
| 12082 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5806 | 1 | 94658 |
| 12083 | $J/\psi \to \pi^+ \omega \omega a_1^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 12082 | 1 | 94659 |
| 12084 | $J/\psi 	o K^+ a_0^0 K_1^-, a_0^0 	o \pi^0 \eta, K_1^- 	o \omega K^-, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12083 | 1 | 94660 |
| 12085 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-\gamma^f, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-\gamma^f$ | 12084 | 1 | 94661 |
| 12086 | $J/\psi \to \rho^0 \rho^- a_0^+ \gamma, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 5807 | 1 | 94662 |
| 12087 | $J/\psi \to \pi^+ \eta \omega K^0 K^{*-}, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 5808 | 1 | 94663 |
| 12088 | $J/\psi \to \eta \omega f_0(1370), \eta \to \gamma \gamma, \omega \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12087 | 1 | 94664 |
| 12089 | $J/\psi 	o \pi^0 \omega \bar{K}^0 K_1^0, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_L^0, K_1^0 	o ho^- K^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 420 | 1 | 94665 |
| 12090 | $J/\psi \to \pi^0 K^+ K^{*-} f_0(1370), K^{*-} \to \pi^- \bar{K}^0, f_0(1370) \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12089 | 1 | 94666 |
| 12091 | $J/\psi \rightarrow \rho^+ a_2^- \gamma^f \gamma^f, \rho^+ \rightarrow \pi^0 \pi^+, a_2^- \rightarrow \pi^- \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 12090 | 1 | 94667 |
| 12092 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^0 \eta, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12091 | 1 | 94668 |
| 12093 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^- K^{*+}, K_2^{*-} \to \pi^0 K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12092 | 1 | 94669 |
| 12094 | $J/\psi \to \pi^0 K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 12093 | 1 | 94670 |
| 12095 | $J/\psi \to K^0 \bar{K}^0 K^* \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^* \to \pi^- K^+, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-, K^{*-}_0 \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12094 | 1 | 94671 |
| 12096 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^0 \rho^0, f_1(1285) \to \pi^0 \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12095 | 1 | 94672 |
| 12097 | $J/\psi \rightarrow \rho^0 a_2^+ a_0^-, \rho^0 \rightarrow \pi^+ \pi^-, a_2^+ \rightarrow \pi^0 \pi^+ \omega, a_0^- \rightarrow \pi^- \eta, \omega \rightarrow \pi^0 \pi^+ \pi^-, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 12096 | 1 | 94673 |
| 12098 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ K^-$ | 12097 | 1 | 94674 |
| 12099 | $J/\psi 	o ho^0 ho^0 \pi^+ a_1^-, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, a_1^- 	o \pi^0 ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5810 | 1 | 94675 |
| 12100 | $J/\psi 	o ho^0 n \bar{\Delta}^0, ho^0 	o \pi^+ \pi^- \gamma^f, \bar{\Delta}^0 	o \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}\gamma^f$ | 5811 | 1 | 94676 |
| 12101 | $J/\psi \to \pi^0 K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^{*-}, K_1^0 \to \pi^0 K_0^0, K^{*-} \to \pi^0 K^-, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12100 | 1 | 94677 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 12102 | $J/\psi \to \rho^+ K_1^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \pi^- K_0^{*+}, K_0^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 12101 | 1 | 94678 |
| 12103 | $J/\psi \to \pi^0 a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^+ \pi^- \omega, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12102 | 1 | 94679 |
| 12104 | $J/\psi \to \pi^{0}\rho^{0}\pi^{+}\omega b_{1}^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}\gamma^{f}, b_{1}^{-} \to \pi^{-}\omega, \omega \to \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 5812 | 1 | 94680 |
| 12105 | $J/\psi \to \pi^0 \pi^0 \pi^+ K^0 K^{*-} h_1(1170), K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, $ $\rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5813 | 1 | 94681 |
| 12106 | $J/\psi ightarrow \phi f_{2}^{'}, \phi ightarrow K^{+}K^{-}, f_{2}^{'} ightarrow \eta \eta, \eta ightarrow \pi^{0}\pi^{0}\pi^{0}, \eta ightarrow \pi^{0}\pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3704 | 1 | 94682 |
| 12107 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12106 | 1 | 94683 |
| 12108 | $J/\psi \to K_2^{*0} K^+ a_0^-, K_2^{*0} \to \pi^0 \bar{K}^0, a_0^- \to K^0 K^-, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^- K^+ K^-$ | 12107 | 1 | 94684 |
| 12109 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 12108 | 1 | 94685 |
| 12110 | $J/\psi 	o \pi^- K^+ ar{K}_1^{'0}, ar{K}_1^{'0} 	o \omega ar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 308 | 1 | 94686 |
| 12111 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^0K^-, f_0(1370) \to \gamma\gamma$ | $\pi^0 K^+ K^- \gamma \gamma$ | 5816 | 1 | 94687 |
| 12112 | $J/\psi \to K^+ K_2^{*-} a_0^0, K_2^{*-} \to \pi^- \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 12111 | 1 | 94688 |
| 12113 | $J/\psi \to \pi^+\pi^-K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 12112 | 1 | 94689 |
| 12114 | $J/\psi \to \pi^+ K^0 K^{*-} \gamma^f, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^f$ | 12113 | 1 | 94690 |
| 12115 | $J/\psi \to \rho^+ \eta K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12114 | 1 | 94691 |
| 12116 | $J/\psi \to K^* \bar{K}^0_1, K^* \to \pi^- K^+, \bar{K}^0_1 \to \pi^0 \bar{K}^{*0}_0, \bar{K}^{*0}_0 \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 12115 | 1 | 94692 |
| 12117 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \eta K^0, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 12116 | 1 | 94693 |
| 12118 | $J/\psi \to \pi^- \omega \bar{K}^* K^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12117 | 1 | 94694 |
| 12119 | $J/\psi \to \pi^+ \rho^- f_0(1370) \gamma^f, \rho^- \to \pi^0 \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12118 | 1 | 94695 |
| 12120 | $J/\psi \to \rho^- K^+ \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, \bar{K}^0_1 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3706 | 1 | 94696 |
| 12121 | $J/\psi \to a_2^- b_1^+, a_2^- \to ho^0 \pi^-, b_1^+ \to \pi^+ \omega, ho^0 \to \pi^+ \pi^-, \omega \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12120 | 1 | 94697 |
| 12122 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12121 | 1 | 94698 |
| 12123 | $J/\psi \to f_2(1270)h_1(1170), f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12122 | 1 | 94699 |
| 12124 | $J/\psi \to \pi^+ \rho^+ b_1^- b_1^-, \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 12123 | 1 | 94700 |
| 12125 | $J/\psi \rightarrow \pi^+\omega\omega b_1^-, \omega \rightarrow \pi^0\gamma, \omega \rightarrow \pi^0\pi^+\pi^-, b_1^- \rightarrow \pi^-\omega, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 12124 | 1 | 94701 |
| 12126 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^* \to \pi^+ K^-$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 12125 | 1 | 94702 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 12127 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 12126 | 1 | 94703 |
| 12128 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \pi^- \omega, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12127 | 1 | 94704 |
| 12129 | $J/\psi \to \pi^+\pi^-\omega K^-K_2^{*+}, \omega \to \pi^0\pi^+\pi^-, K_2^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 5818 | 1 | 94705 |
| 12130 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 12129 | 1 | 94706 |
| 12131 | $J/\psi 	o \Delta^0 ar{\Delta}^0 \gamma, \Delta^0 	o \pi^0 n, ar{\Delta}^0 	o \pi^0 ar{n}$ | $\pi^0\pi^0n\bar{n}\gamma$ | 12130 | 1 | 94707 |
| 12132 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^+ \pi^- \gamma^f, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 1495 | 1 | 94708 |
| 12133 | $J/\psi \to K^- \eta' K_1^+, \eta' \to \pi^+ \pi^- \eta, K_1^+ \to \pi^+ K_0^0, \eta \to \gamma \gamma, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma$ | 12132 | 1 | 94709 |
| 12134 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 12133 | 1 | 94710 |
| 12135 | $J/\psi ightarrow \pi^0 ho^0 \eta^\prime, ho^0 ightarrow \pi^+ \pi^-, \eta^\prime ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 12134 | 1 | 94711 |
| 12136 | $J/\psi 	o a_2^0 \pi^- a_2^+, a_2^0 	o \pi^0 \eta, a_2^+ 	o \pi^0 \pi^+ \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12135 | 1 | 94712 |
| 12137 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+K^-$ | 12136 | 1 | 94713 |
| 12138 | $J/\psi \to \omega \bar{K}^0 K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 5820 | 1 | 94714 |
| 12139 | $J/\psi \to \pi^+ \omega a_0^0 a_0^-, \omega \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_0^- \to \pi^- \eta, \eta \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 12138 | 1 | 94715 |
| 12140 | $J/\psi \to K^0 \phi \bar{K}_1^0, K^0 \to K_L^0, \phi \to K_L^0 K_S^0, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 12139 | 1 | 94716 |
| 12141 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5821 | 1 | 94717 |
| 12142 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12141 | 1 | 94718 |
| 12143 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \pi^- \eta, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $K_L^0\pi^-K^+\gamma\gamma$ | 5822 | 1 | 94719 |
| 12144 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 5823 | 1 | 94720 |
| 12145 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12144 | 1 | 94721 |
| 12146 | $J/\psi \to \pi^+ \Delta^+ \bar{\Delta}^{++} \gamma^F, \Delta^+ \to \pi^0 p, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^0\pi^+\pi^-p\bar{p}\gamma^F$ | 12145 | 1 | 94722 |
| 12147 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \rho^0 \gamma, \phi \to K_L^0 K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 12146 | 1 | 94723 |
| 12148 | $J/\psi \to \pi^+ b_1^0 a_0^-, b_1^0 \to \pi^0 \omega, a_0^- \to \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12147 | 1 | 94724 |
| 12149 | $J/\psi \to K^*\bar{K}_2^0, K^* \to \pi^0 K^0, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 12148 | 1 | 94725 |
| 12150 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12149 | 1 | 94726 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 12151 | $J/\psi \to \pi^0 a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^0 \eta, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 12150 | 1 | 94727 |
| 12152 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^+ \pi^- K^-$ | 5824 | 1 | 94728 |
| 12153 | $J/\psi \to \rho^0 K^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12152 | 1 | 94729 |
| 12154 | $J/\psi \to \eta \eta' \phi, \eta \to \gamma \gamma, \eta' \to \pi^0 \pi^0 \eta, \phi \to K_L^0 K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12153 | 1 | 94730 |
| 12155 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12154 | 1 | 94731 |
| 12156 | $J/\psi ightarrow a_2^0 \eta \omega, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 12155 | 1 | 94732 |
| 12157 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 12156 | 1 | 94733 |
| 12158 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to K^0 K^-, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12157 | 1 | 94734 |
| 12159 | $J/\psi \to ho^0 a_2^0 a_1^0, ho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \pi^- \omega, a_1^0 \to \pi^+ ho^-, \omega \to \pi^0 \gamma, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 12158 | 1 | 94735 |
| 12160 | $J/\psi \to \eta K^{*+} K_2^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 5825 | 1 | 94736 |
| 12161 | $J/\psi \to \pi^+ K^0_S K^- \phi, K^0_S \to \pi^+ \pi^-, \phi \to K^0_L K^0_S, K^0_S \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 12160 | 1 | 94737 |
| 12162 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 12161 | 1 | 94738 |
| 12163 | $J/\psi 	o \pi^0\pi^-a_0^0b_1^+, a_0^0 	o \pi^0\eta, b_1^+ 	o \pi^+\omega, \eta 	o \pi^0\pi^+\pi^-, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12162 | 1 | 94739 |
| 12164 | $J/\psi \to \pi^0 h_1(1170) a_1^0, h_1(1170) \to \pi^0 \rho^0, a_1^0 \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12163 | 1 | 94740 |
| 12165 | $J/\psi \to \phi f_1(1420), \phi \to \pi^+ \rho^-, f_1(1420) \to \pi^+ K^0 K^-, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12164 | 1 | 94741 |
| 12166 | $J/\psi \to \pi^0 K^{*+} K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 12165 | 1 | 94742 |
| 12167 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12166 | 1 | 94743 |
| 12168 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12167 | 1 | 94744 |
| 12169 | $J/\psi \to \phi f_0(1370), \phi \to \pi^+ \rho^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12168 | 1 | 94745 |
| 12170 | $J/\psi \to K^0 \bar{\Delta}^- \Sigma^-, K^0 \to K_L^0, \bar{\Delta}^- \to \pi^+ \bar{n}, \Sigma^- \to \pi^- n$ | $K_L^0\pi^+\pi^-nar{n}$ | 12169 | 1 | 94746 |
| 12171 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^- K_1^+, \eta \to \pi^0 \pi^0 \pi^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 12170 | 1 | 94747 |
| 12172 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^0 K^+$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 12171 | 1 | 94748 |
| 12173 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5826 | 1 | 94749 |
| 12174 | $J/\psi \to \rho^0 \bar{K}^* K_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 12173 | 1 | 94750 |
| 12175 | $J/\psi \to \pi^0 f_0(1370)\gamma, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 12174 | 1 | 94751 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 12176 | $J/\psi \to f_2(1270)K^-K^{*+}, f_2(1270) \to \pi^+\pi^-\gamma^f, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{f}$ | 12175 | 1 | 94752 |
| 12177 | $J/\psi 	o ho^0 a_0^0 f_0(1370), ho^0 	o \pi^+\pi^-, a_0^0 	o \pi^0 \eta, f_0(1370) 	o \pi^+\pi^-\gamma^f, \eta 	o \gamma\gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 12176 | 1 | 94753 |
| 12178 | $J/\psi \to \eta K^+ K_0^{*-}, \eta \to \gamma \gamma, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 12177 | 1 | 94754 |
| 12179 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12178 | 1 | 94755 |
| 12180 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \rho^0 K^0, K_2^{*0} \to \pi^+ K^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 5827 | 1 | 94756 |
| 12181 | $J/\psi \to K^* \bar{K}^0_2, K^* \to \pi^- K^+, \bar{K}^0_2 \to \pi^0 K^{*0}_2, K^{*0}_2 \to \pi^0 K^0, K^0 \to K^0_L$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 12180 | 1 | 94757 |
| 12182 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 12181 | 1 | 94758 |
| 12183 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12182 | 1 | 94759 |
| 12184 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 5828 | 1 | 94760 |
| 12185 | $J/\psi \to K^0 \bar{K}^* a^0_0, K^0 \to K^0_L, \bar{K}^* \to \pi^+ K^-, a^0_0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 12184 | 1 | 94761 |
| 12186 | $J/\psi \to \eta a_0^+ b_1^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12185 | 1 | 94762 |
| 12187 | $J/\psi \to \bar{K}^0 \Delta^+ \bar{\Sigma}^-, \bar{K}^0 \to K_S^0, \Delta^+ \to \pi^0 p, \bar{\Sigma}^- \to \pi^- \bar{n}, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 12186 | 1 | 94763 |
| 12188 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^* K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 5829 | 1 | 94764 |
| 12189 | $J/\psi \to \pi^0\pi^0\pi^+K^*K^{*-}, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12188 | 1 | 94765 |
| 12190 | $J/\psi \to K^-K^{*+}f_1(1285), K^{*+} \to \pi^+K^0, f_1(1285) \to \pi^0\pi^0\eta, K^0 \to K_L^0, \eta \to \gamma\gamma$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma$ | 12189 | 1 | 94766 |
| 12191 | $J/\psi \to \eta \omega f_1(1285), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 12190 | 1 | 94767 |
| 12192 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12191 | 1 | 94768 |
| 12193 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_1(1285) \to \pi^+ a_0^-, K_S^0 \to \pi^0 \pi^0, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 12192 | 1 | 94769 |
| 12194 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5830 | 1 | 94770 |
| 12195 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 12194 | 1 | 94771 |
| 12196 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^+ K^-, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12195 | 1 | 94772 |
| 12197 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 12196 | 1 | 94773 |
| 12198 | $J/\psi \to \pi^+\pi^-K^+K^{*-}a^0_0, K^{*-} \to \pi^-\bar{K}^0, a^0_0 \to \pi^0\eta, \bar{K}^0 \to K^0_L, \eta \to \gamma\gamma$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 12197 | 1 | 94774 |
| 12199 | $J/\psi \to \pi^+\pi^+\pi^-\rho^-h_1(1170), \rho^- \to \pi^0\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12198 | 1 | 94775 |
| 12200 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12199 | 1 | 94776 |
| 12201 | $J/\psi \rightarrow \pi^- \rho^+ \rho^+ b_1^-, \rho^+ \rightarrow \pi^0 \pi^+, \rho^+ \rightarrow \pi^0 \pi^+, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12200 | 1 | 94777 |
| 12202 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \rho^0 K^-, \eta \to \pi^0 \pi^0 \pi^0,$ $\rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 12201 | 1 | 94778 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12203 | $J/\psi \to \pi^+\pi^-\rho^+\rho^-f_0(1370), \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, f_0(1370) \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12202 | 1 | 94779 |
| 12204 | $J/\psi \to \rho^+ a_2^- \eta', \rho^+ \to \pi^0 \pi^+, a_2^- \to \bar{K}^0 K^-, \eta' \to \rho^0 \gamma, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 12203 | 1 | 94780 |
| 12205 | $J/\psi \to \pi^+ a_2^- \gamma^f, a_2^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 5831 | 1 | 94781 |
| 12206 | $J/\psi \to \pi^0 K_2^{*-} K_1^{'+}, K_2^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^+ \pi^- K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 12205 | 1 | 94782 |
| 12207 | $J/\psi \to \pi^+ K^0 K^- a_0^0, K^0 \to K_S^0, a_0^0 \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 12206 | 1 | 94783 |
| 12208 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 12207 | 1 | 94784 |
| 12209 | $J/\psi \to \omega \bar{K}^0 K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^0 K^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 12208 | 1 | 94785 |
| 12210 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K_1^+ \to \pi^0 K^{*+}, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 12209 | 1 | 94786 |
| 12211 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12210 | 1 | 94787 |
| 12212 | $J/\psi \to \eta K^- K_2^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 12211 | 1 | 94788 |
| 12213 | $J/\psi \to ho^0 K^+ K_0^{*-}, ho^0 \to \pi^+ \pi^- \gamma^f, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 12212 | 1 | 94789 |
| 12214 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, \phi \to \pi^- \rho^+, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5832 | 1 | 94790 |
| 12215 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^+K^0, K_1^- \to \rho^0K^-, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-\gamma^f$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 5833 | 1 | 94791 |
| 12216 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^+ K_2^{*-}, \bar{K}^0 \to K_L^0, K_2^{*-} \to \omega K^-, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12215 | 1 | 94792 |
| 12217 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 12216 | 1 | 94793 |
| 12218 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K_L^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12217 | 1 | 94794 |
| 12219 | $J/\psi 	o \eta \bar{K}^0 K_2^{*0}, \eta 	o \gamma \gamma, \bar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 12218 | 1 | 94795 |
| 12220 | $J/\psi \to \pi^+\pi^-\omega K^+K^-h_1(1170), \omega \to \pi^0\pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 5834 | 1 | 94796 |
| 12221 | $J/\psi \to \pi^+\pi^-K^0\bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-, K^0_S \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 12220 | 1 | 94797 |
| 12222 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12221 | 1 | 94798 |
| 12223 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12222 | 1 | 94799 |
| 12224 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma^f$ | 12223 | 1 | 94800 |
| 12225 | $J/\psi \to \pi^- \eta' b_1^+, \eta' \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12224 | 1 | 94801 |
| 12226 | $J/\psi 	o \Sigma^{*0} \bar{\Sigma}^{*0}, \Sigma^{*0} 	o \pi^0 \Lambda, \bar{\Sigma}^{*0} 	o \pi^+ \bar{\Sigma}^-, \Lambda 	o \pi^0 n, \bar{\Sigma}^- 	o \pi^0 ar{p}$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 12225 | 1 | 94802 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 12227 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^0 K^*, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12226 | 1 | 94803 |
| 12228 | $J/\psi \to \pi^- \bar{K}^* K^+ \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 12227 | 1 | 94804 |
| 12229 | $J/\psi \to K^0 \phi \bar{K}_1^{'0}, K^0 \to K_L^0, \phi \to K^+ K^-, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 5835 | 1 | 94805 |
| 12230 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12229 | 1 | 94806 |
| 12231 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12230 | 1 | 94807 |
| 12232 | $J/\psi \to \phi f_1(1285), \phi \to K_L^0 K_S^0, f_1(1285) \to \pi^- a_0^+, K_S^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, $ $\eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5836 | 1 | 94808 |
| 12233 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12232 | 1 | 94809 |
| 12234 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \gamma \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 5837 | 1 | 94810 |
| 12235 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \rho^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 12234 | 1 | 94811 |
| 12236 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12235 | 1 | 94812 |
| 12237 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 5838 | 1 | 94813 |
| 12238 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5839 | 1 | 94814 |
| 12239 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \eta \to \gamma \gamma, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 12238 | 1 | 94815 |
| 12240 | $J/\psi \to \phi f_0(1370), \phi \to \pi^+ \rho^-, f_0(1370) \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 12239 | 1 | 94816 |
| 12241 | $J/\psi \to \pi^0 \pi^+ K_1^{'0} \bar{K}_1^{'-}, K_1^{'0} \to \pi^- K^{*+}, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 12240 | 1 | 94817 |
| 12242 | $J/\psi \to \pi^- \rho^+ \omega \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 12241 | 1 | 94818 |
| 12243 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12242 | 1 | 94819 |
| 12244 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12243 | 1 | 94820 |
| 12245 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \gamma, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 12244 | 1 | 94821 |
| 12246 | $J/\psi \to K^- \phi K_1^{'+}, \phi \to K^+ K^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{-}K^{+}K^{+}K^{-}K^{-}$ | 12245 | 1 | 94822 |
| 12247 | $J/\psi \to \pi^0 a_2^0 h_1(1170), \pi^0 \to e^+ e^- \gamma^F \gamma^f, a_2^0 \to \pi^- \rho^+, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 12246 | 1 | 94823 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12248 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^+ \eta, K^0 \to K_S^0, \eta \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 12247 | 1 | 94824 |
| 12249 | $J/\psi ightarrow \omega K^0 ar K^0, \omega ightarrow \pi^0 \pi^+ \pi^-, K^0 ightarrow K^0_S, ar K^0 ightarrow K^0_L, K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 169 | 1 | 94825 |
| 12250 | $J/\psi ightarrow ho^0 ho^+ ho^-, ho^0 ightarrow \pi^+ \pi^-, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12249 | 1 | 94826 |
| 12251 | $J/\psi \to \pi^0 \eta f_2(1270) \gamma, \eta \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 5841 | 1 | 94827 |
| 12252 | $J/\psi \rightarrow \pi^+ \eta' b_1^-, \eta' \rightarrow \rho^0 \gamma, b_1^- \rightarrow \pi^- \omega, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma^f$ | 12251 | 1 | 94828 |
| 12253 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^+\pi^-\gamma^F, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^F$ | 5842 | 1 | 94829 |
| 12254 | $J/\psi \to K^0 \bar{K}^* K^- K^{*+}, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 12253 | 1 | 94830 |
| 12255 | $J/\psi \to \pi^0 f_0(1370)\gamma, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\gamma$ | 12254 | 1 | 94831 |
| 12256 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 12255 | 1 | 94832 |
| 12257 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta, f_0(1370) \to \rho^0 \rho^0, \eta \to \gamma \gamma, $ $\rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 5843 | 1 | 94833 |
| 12258 | $J/\psi \to K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+K^0, K_L^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 12257 | 1 | 94834 |
| 12259 | $J/\psi \to \pi^0 \omega, \omega \to \pi^0 \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\gamma^F\gamma$ | 12258 | 1 | 94835 |
| 12260 | $J/\psi \to \pi^0 \pi^0 K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \rho^0 \gamma, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 12259 | 1 | 94836 |
| 12261 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \rho^-K^0, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-\gamma^f, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12260 | 1 | 94837 |
| 12262 | $J/\psi \to \pi^0 K^{*-} K_1^+ \gamma, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 12261 | 1 | 94838 |
| 12263 | $J/\psi \to \bar{K}^0 \phi K_1^{'0}, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_1^{'0} \to \omega K^0, K_S^0 \to \pi^+ \pi^-, \ \omega \to \pi^0 \gamma, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 12262 | 1 | 94839 |
| 12264 | $J/\psi \to \eta \eta \phi, \eta \to \gamma \gamma, \eta \to \gamma \gamma, \phi \to K^+ K^-$ | $K^+K^-\gamma\gamma\gamma\gamma$ | 12263 | 1 | 94840 |
| 12265 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12264 | 1 | 94841 |
| 12266 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12265 | 1 | 94842 |
| 12267 | $J/\psi \to \pi^0 \pi^0 a_2^+ b_1^-, \pi^0 \to e^+ e^- \gamma^F, a_2^+ \to \pi^0 \rho^+, b_1^- \to \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12266 | 1 | 94843 |
| 12268 | $J/\psi \to \pi^+ \eta b_1^-, \eta \to \pi^0 \pi^0 \pi^0, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12267 | 1 | 94844 |
| 12269 | $J/\psi \to \eta \phi f_0(1710), \eta \to \pi^0 \pi^+ \pi^-, \phi \to K^+ K^-, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12268 | 1 | 94845 |
| 12270 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^-, \eta' \to \pi^+ \pi^- \eta, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12269 | 1 | 94846 |
| 12271 | $J/\psi 	o ar{K}^0 K_1^0, ar{K}^0 	o K_L^0, K_1^0 	o \pi^0 K_0^0, K_0^0 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0$ | 12270 | 1 | 94847 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12272 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^-, \Lambda \to e^- \bar{\nu}_e p, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $e^-ar{ u}_e\pi^0\pi^+par{p}$ | 2605 | 1 | 94848 |
| 12273 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o \pi^- \eta, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 12272 | 1 | 94849 |
| 12274 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^- \gamma^f, \eta' \to \rho^0 \gamma, a_0^+ \to \pi^+ \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma^f$ | 5845 | 1 | 94850 |
| 12275 | $J/\psi ightarrow ho^0 \pi^+ \pi^- p \bar{p} \gamma^f, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^- par p\gamma^f$ | 12274 | 1 | 94851 |
| 12276 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^0K^+, b_1^- \to \pi^-\omega, \omega \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12275 | 1 | 94852 |
| 12277 | $J/\psi ightarrow ar{n}pa_0^-, a_0^- ightarrow \pi^-\eta, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^-ar{n}p$ | 12276 | 1 | 94853 |
| 12278 | $J/\psi \to \pi^+\pi^-b_1^-a_1^+, b_1^- \to \pi^-\omega, a_1^+ \to \pi^0\rho^+, \omega \to \pi^0\pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 935 | 1 | 94854 |
| 12279 | $J/\psi \to a_0^0 b_1^0, a_0^0 \to K_S^0 K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12278 | 1 | 94855 |
| 12280 | $J/\psi \to \pi^+\pi^-\rho^+K^0K_1^-, \rho^+ \to \pi^0\pi^+, K^0 \to K_S^0, K_1^- \to \pi^-\bar{K}_0^{*0}, K_S^0 \to \pi^0\pi^0, \bar{K}_0^{*0} \to \pi^+K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5847 | 1 | 94856 |
| 12281 | $J/\psi \to \rho^0 K^* K_2^{*0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-} \gamma^f, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 12280 | 1 | 94857 |
| 12282 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 12281 | 1 | 94858 |
| 12283 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ \rho^- \eta', \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \eta' \to \rho^0 \gamma,$ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12282 | 1 | 94859 |
| 12284 | $J/\psi \to \rho^0 \pi^+ \pi^+ \pi^- b_1^-, \rho^0 \to \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 12283 | 1 | 94860 |
| 12285 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \rho^0K^-, K^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 12284 | 1 | 94861 |
| 12286 | $J/\psi \to \bar{K}^0 \eta' K_1^0, \bar{K}^0 \to K_L^0, \eta' \to \rho^0 \gamma, K_1^0 \to \pi^0 K_0^0, \rho^0 \to \pi^+ \pi^-, K_0^0 \to \pi^- K^+$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 5848 | 1 | 94862 |
| 12287 | $J/\psi \to \eta \bar{\Delta}^- \Delta^-, \eta \to \pi^0 \pi^+ \pi^-, \bar{\Delta}^- \to \pi^+ \bar{n}, \Delta^- \to \pi^- n$ | $\pi^0\pi^+\pi^+\pi^-\pi^-nar{n}$ | 12286 | 1 | 94863 |
| 12288 | $J/\psi \to \eta \Delta \Delta , \eta \to \pi \pi \pi , \Delta \to \pi n, \Delta \to \pi n$ $J/\psi \to \pi^+ \rho^+ \rho^- \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F,$ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}$ | 12287 | 1 | 94864 |
| 12289 | $J/\psi 	o \omega K^0 K_2^{*0}, \omega 	o \pi^0 \gamma, K^0 	o K_L^0, K_2^{*0} 	o \pi^0 \pi^0 ar{K}^*, ar{K}^* 	o \pi^0 ar{K}^0, \ ar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0\gamma$ | 5849 | 1 | 94865 |
| 12290 | $J/\psi \to K^- K^{*+} \phi \gamma^F, K^{*+} \to \pi^0 K^+, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 12289 | 1 | 94866 |
| 12291 | $J/\psi \to \bar{K}^{0}a_{0}^{-}K_{1}^{'+}, \bar{K}^{0} \to K_{L}^{0}, a_{0}^{-} \to \pi^{-}\eta, K_{1}^{'+} \to \pi^{+}K^{*}, \eta \to \pi^{0}\pi^{0}\pi^{0}, K^{*} \to \pi^{-}K^{+}$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 12290 | 1 | 94867 |
| 12292 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \omega \bar{K}^0, K_1^+ \to \pi^+ K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 12291 | 1 | 94868 |
| 12293 | $J/\psi \to \eta K^* \bar{K}^* \gamma, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 12292 | 1 | 94869 |
| 12294 | $J/\psi \to \pi^0 \pi^0 \bar{K}^* K^+ a_0^-, \bar{K}^* \to \pi^+ K^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 12293 | 1 | 94870 |
| 12295 | $J/\psi \to \pi^- K_2^{*0} K_0^{*+}, K_2^{*0} \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12294 | 1 | 94871 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 12296 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \omega\omega, h_1(1380) \to \bar{K}^0K^*, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, K^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-\pi^-$ | 12295 | 1 | 94872 |
| 12297 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1710) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12296 | 1 | 94873 |
| 12298 | $J/\psi \to \pi^+ a_0^0 b_1^-, a_0^0 \to \pi^0 \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5850 | 1 | 94874 |
| 12299 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^0K^+, b_1^- \to \pi^-\omega\gamma^f, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 511 | 1 | 94875 |
| 12300 | $J/\psi \to K^0 a_0^+ \bar{K}_1^{'-}, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12299 | 1 | 94876 |
| 12301 | $J/\psi \to \pi^+ \eta K^0 \bar{K}_1^{'-}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5852 | 1 | 94877 |
| 12302 | $J/\psi ightarrow \pi^+ K^* K^- \gamma^f, K^* ightarrow \pi^0 K^0, K^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^f$ | 12301 | 1 | 94878 |
| 12303 | $J/\psi \to \eta f_2(1270)K^+K^{*-}, \eta \to \gamma\gamma, f_2(1270) \to \pi^+\pi^-, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 12302 | 1 | 94879 |
| 12304 | $J/\psi \to a_2^0 K^{*+} K^{*-}, a_2^0 \to \pi^+ \rho^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1946 | 1 | 94880 |
| 12305 | $J/\psi \to K^*K^-a_1^+, K^* \to \pi^-K^+\gamma^f, a_1^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 12304 | 1 | 94881 |
| 12306 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1710) \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-$ | 12305 | 1 | 94882 |
| 12307 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 12306 | 1 | 94883 |
| 12308 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 12307 | 1 | 94884 |
| 12309 | $J/\psi \to \pi^0 \rho^0 \pi^+ \pi^- \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12308 | 1 | 94885 |
| 12310 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12309 | 1 | 94886 |
| 12311 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \rho^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12310 | 1 | 94887 |
| 12312 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12311 | 1 | 94888 |
| 12313 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ K^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12312 | 1 | 94889 |
| 12314 | $J/\psi \to \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 12313 | 1 | 94890 |
| 12315 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \bar{K}^0\gamma, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12314 | 1 | 94891 |
| 12316 | $J/\psi \to K^{*-}p\bar{\Sigma}^0, K^{*-} \to \pi^-\bar{K}^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{K}^0 \to K_S^0, \bar{\Lambda} \to \pi^+\bar{p}, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}\gamma$ | 2609 | 1 | 94892 |
| 12317 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12316 | 1 | 94893 |
| 12318 | $J/\psi \to \pi^0 \rho^0 \pi^+ \pi^- h_1(1170), \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12317 | 1 | 94894 |
| 12319 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to \eta\eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12318 | 1 | 94895 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 12320 | $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \pi^0 \rho^-, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0, \\ \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12319 | 1 | 94896 |
| 12321 | $J/\psi \to \pi^0 \rho^0 \pi^+ a_0^-, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 5855 | 1 | 94897 |
| 12322 | $J/\psi 	o \pi^0 a_2^0 K^+ K^{*-}, a_2^0 	o \pi^+ \rho^-, K^{*-} 	o \pi^0 K^-, \rho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3714 | 1 | 94898 |
| 12323 | $J/\psi \to \pi^- \bar{K}^* K^+ f_1(1285), \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12322 | 1 | 94899 |
| 12324 | $J/\psi \to \pi^+ f_2(1270) a_1^-, f_2(1270) \to \pi^0 \pi^0, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12323 | 1 | 94900 |
| 12325 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 12324 | 1 | 94901 |
| 12326 | $J/\psi \to K^+ K^{*-} \eta' \gamma^F, K^{*-} \to \pi^0 K^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 5857 | 1 | 94902 |
| 12327 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^f, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma^f$ | 12326 | 1 | 94903 |
| 12328 | $J/\psi 	o \eta_2(1870)\gamma, \eta_2(1870) 	o \eta f_2(1270), \eta 	o \pi^0\pi^+\pi^-, f_2(1270) 	o \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 12327 | 1 | 94904 |
| 12329 | $J/\psi \to \pi^+\pi^-\rho^+K^0K^{*-}, \rho^+ \to \pi^0\pi^+, K^0 \to K^0_S, K^{*-} \to \pi^0K^-, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12328 | 1 | 94905 |
| 12330 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \rho^0 K^+, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12329 | 1 | 94906 |
| 12331 | $J/\psi \to \pi^- \bar{K}_1^0 K_0^{*+}, \bar{K}_1^0 \to \omega \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_0^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12330 | 1 | 94907 |
| 12332 | $J/\psi \to \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 12331 | 1 | 94908 |
| 12333 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^+ \pi^- K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12332 | 1 | 94909 |
| 12334 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 12333 | 1 | 94910 |
| 12335 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12334 | 1 | 94911 |
| 12336 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 1183 | 1 | 94912 |
| 12337 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12336 | 1 | 94913 |
| 12338 | $J/\psi \to \pi^0 \pi^+ \pi^- K^- K^{*+} a_0^0, K^{*+} \to \pi^+ K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_S^0, \eta \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma^F$ | 12337 | 1 | 94914 |
| 12339 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5859 | 1 | 94915 |
| 12340 | $J/\psi \to \pi^0 \pi^0 \rho^- \bar{K}^0 K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 12339 | 1 | 94916 |
| 12341 | $J/\psi \to \pi^+ K_1^0 \bar{K}_1^{'-}, K_1^0 \to \rho^0 K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 12340 | 1 | 94917 |
| 12342 | $J/\psi \to \pi^0 \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 12341 | 1 | 94918 |
| 12343 | $J/\psi \to \pi^0 \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, \omega \to \pi^0 \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 12342 | 1 | 94919 |
| 12344 | $J/\psi \to \pi^0 K^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 12343 | 1 | 94920 |
| 12345 | $J/\psi \to \rho^0 \pi^+ K^0 K_1^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_1^- \to \pi^+ \pi^- K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 5860 | 1 | 94921 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12346 | $J/\psi \to \omega a_0^0 a_1^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_1^0 \to \pi^+ \rho^- \gamma^f, \eta \to \gamma \gamma, \\ \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma\gamma^{f}$ | 12345 | 1 | 94922 |
| 12347 | $J/\psi \to K^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 12346 | 1 | 94923 |
| 12348 | $J/\psi \to \pi^0 \eta K^0 \bar{K}^0_1, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^0 \bar{K}^0, K^0_S \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5861 | 1 | 94924 |
| 12349 | $J/\psi \to \rho^+ K^{*-} K_0^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to \pi^+ \pi^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5862 | 1 | 94925 |
| 12350 | $J/\psi \rightarrow \pi^0 \omega a^0_0, \omega \rightarrow \pi^0 \gamma, a^0_0 \rightarrow \pi^0 \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma^f$ | 12349 | 1 | 94926 |
| 12351 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^*\bar{K}^*, K^* \to \pi^-K^+, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 5863 | 1 | 94927 |
| 12352 | $J/\psi \to \pi^0 K^0 \bar{K}^* f_0(1710), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1710) \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 12351 | 1 | 94928 |
| 12353 | $J/\psi \to \eta a_0^0 h_1(1170), \eta \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 12352 | 1 | 94929 |
| 12354 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 12353 | 1 | 94930 |
| 12355 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 12354 | 1 | 94931 |
| 12356 | $J/\psi \to \pi^0 \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^0 \bar{\Sigma}^-, \Lambda \to \pi^- p, \bar{\Sigma}^- \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-par{p}$ | 12355 | 1 | 94932 |
| 12357 | $J/\psi ightarrow \pi^- ho^+ ho^- ar{K}^0 K^+, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, ar{K}^0 ightarrow K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 1500 | 1 | 94933 |
| 12358 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12357 | 1 | 94934 |
| 12359 | $J/\psi \to K^* \bar{K}_1^{'0} \gamma, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 3717 | 1 | 94935 |
| 12360 | $J/\psi \to \pi^+\pi^-\bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 12359 | 1 | 94936 |
| 12361 | $J/\psi \to \pi^- a_2^+ f_1(1285), a_2^+ \to \rho^0 \pi^+, f_1(1285) \to \pi^+ \pi^- \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 2612 | 1 | 94937 |
| 12362 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 3719 | 1 | 94938 |
| 12363 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12362 | 1 | 94939 |
| 12364 | $J/\psi \to K^+ \bar{\Delta}^0 \Sigma^-, \bar{\Delta}^0 \to \pi^+ \bar{p}, \Sigma^- \to \pi^- n$ | $\pi^+\pi^-K^+nar{p}$ | 12363 | 1 | 94940 |
| 12365 | $J/\psi \to \bar\Xi^+\Xi^-\gamma^f, \bar\Xi^+ \to \pi^+\bar\Lambda, \Xi^- \to \pi^-\Lambda, \bar\Lambda \to \pi^+\bar p, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma^f$ | 12364 | 1 | 94941 |
| 12366 | $J/\psi \to K^-K^{*+}f_1(1420), K^{*+} \to \pi^0K^+, f_1(1420) \to \pi^+K^0K^-, K^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ K^+ K^- K^-$ | 12365 | 1 | 94942 |
| 12367 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-\gamma^f, K_S^0 \to \pi^+\pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 12366 | 1 | 94943 |
| 12368 | $J/\psi \to K_1^0 \bar{K}_1^{'0}, K_1^0 \to \rho^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12367 | 1 | 94944 |
| 12369 | $J/\psi \to \pi^- a_2^+ K^+ K^-, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12368 | 1 | 94945 |
| 12370 | $J/\psi \to K^+K^-f_1(1285), f_1(1285) \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 5868 | 1 | 94946 |
| 12371 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1184 | 1 | 94947 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12372 | $J/\psi \to \pi^0 K^{*+} K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5870 | 1 | 94948 |
| 12373 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^0 K^0, K_2^{*-} \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12372 | 1 | 94949 |
| 12374 | $J/\psi \to \pi^0 \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 2614 | 1 | 94950 |
| 12375 | $J/\psi \to a_2^+ \omega a_0^-, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12374 | 1 | 94951 |
| 12376 | $J/\psi \to \pi^0 \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12375 | 1 | 94952 |
| 12377 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 12376 | 1 | 94953 |
| 12378 | $J/\psi \to \rho^0 K^- K_0^{*+}, \rho^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12377 | 1 | 94954 |
| 12379 | $J/\psi \to \pi^+\pi^-\bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 12378 | 1 | 94955 |
| 12380 | $J/\psi \to \pi^+ \eta K^{*-} K_1^0, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 12379 | 1 | 94956 |
| 12381 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 3722 | 1 | 94957 |
| 12382 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 12381 | 1 | 94958 |
| 12383 | $J/\psi \to \pi^+ K^0 K^{*-} b_1^0, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12382 | 1 | 94959 |
| 12384 | $J/\psi \to \bar{\Xi}^+ \Xi^{*-}, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^{*-} \to \pi^- \Xi^0, \bar{\Lambda} \to \pi^0 \bar{n}, \Xi^0 \to \pi^0 \Lambda,$ $\pi^0 \to e^+ e^- \gamma^F, \Lambda \to \pi^- p$ | $e^+e^-\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma^F$ | 5873 | 1 | 94960 |
| 12385 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^+ \pi^- \gamma^F, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 12384 | 1 | 94961 |
| 12386 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Lambda \to n \gamma, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 12385 | 1 | 94962 |
| 12387 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12386 | 1 | 94963 |
| 12388 | $J/\psi 	o K^0 ar{\Lambda} \Xi^0, K^0 	o K_S^0, ar{\Lambda} 	o \pi^0 ar{n}, \Xi^0 	o \pi^0 \Lambda, K_S^0 	o \pi^0 \pi^0, \Lambda 	o \pi^- p$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 12387 | 1 | 94964 |
| 12389 | $J/\psi \to \eta \bar{K}^0 K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_2^{*0} \to \rho^- K^+, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 12388 | 1 | 94965 |
| 12390 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12389 | 1 | 94966 |
| 12391 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 12390 | 1 | 94967 |
| 12392 | $J/\psi \to K^0 \bar{K}_1^0 f_0(1710), K^0 \to K_L^0, \bar{K}_1^0 \to \rho^+ K^-, f_0(1710) \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12391 | 1 | 94968 |
| 12393 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 12392 | 1 | 94969 |
| 12394 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12393 | 1 | 94970 |
| 12395 | $J/\psi 	o a_2^0 \pi^+ ho^- \eta, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-, \eta 	o \pi^0 \pi^0 \pi^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 5874 | 1 | 94971 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 12396 | $J/\psi \to K^+ K_1^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 12395 | 1 | 94972 |
| 12397 | $J/\psi \to \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 12396 | 1 | 94973 |
| 12398 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 12397 | 1 | 94974 |
| 12399 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12398 | 1 | 94975 |
| 12400 | $J/\psi ightarrow \eta \eta' \gamma, \eta ightarrow \pi^0 \pi^+ \pi^-, \eta' ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12399 | 1 | 94976 |
| 12401 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \gamma, K^0 \to K_S^0, \bar{K}^* \to \bar{K}^0 \gamma, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 12400 | 1 | 94977 |
| 12402 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12401 | 1 | 94978 |
| 12403 | $J/\psi \to K^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0 K^+ K^-$ | 12402 | 1 | 94979 |
| 12404 | $J/\psi 	o ho^0 ar{K}^0 K^* \gamma, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 12403 | 1 | 94980 |
| 12405 | $J/\psi \to K^0 \bar{K}_1^{'0} \gamma, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 12404 | 1 | 94981 |
| 12406 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0 \to K$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 12405 | 1 | 94982 |
| 12407 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^- K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^0 K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12406 | 1 | 94983 |
| 12408 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 K^0_L K^0_L K^0_L$ | 12407 | 1 | 94984 |
| 12409 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^0 K_0^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12408 | 1 | 94985 |
| 12410 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12409 | 1 | 94986 |
| 12411 | $J/\psi 	o K^0 ar{K}^0 a_0^0, K^0 	o K_S^0, ar{K}^0 	o K_L^0, a_0^0 	o \pi^0 \eta, K_S^0 	o \pi^+ \pi^-, \ \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12410 | 1 | 94987 |
| 12412 | $J/\psi 	o K^0 ar{K}^0 a_0^0, K^0 	o K_S^0, ar{K}^0 	o K_S^0, a_0^0 	o \pi^0 \eta, K_S^0 	o \pi^+ \pi^-, K_S^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12411 | 1 | 94988 |
| 12413 | $J/\psi \to \pi^0 \pi^+ K^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12412 | 1 | 94989 |
| 12414 | $J/\psi \rightarrow ho^+ \eta K^0 K^-, ho^+ \rightarrow \pi^0 \pi^+, \eta \rightarrow \gamma \gamma, K^0 \rightarrow K^0_S, K^0_S \rightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 12413 | 1 | 94990 |
| 12415 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^0K^-, b_1^+ \to \pi^+\omega, \omega \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 12414 | 1 | 94991 |
| 12416 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^-K^{*+}, K^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-K^-K^-$ | 423 | 1 | 94992 |
| 12417 | $J/\psi \to K^+ K_1^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-K_L^0\pi^-K^+\gamma^F\gamma^f$ | 12416 | 1 | 94993 |
| 12418 | $J/\psi \to \pi^+\pi^+\pi^-\rho^-\rho^-a_0^+, \rho^- \to \pi^0\pi^-, \rho^- \to \pi^0\pi^-, a_0^+ \to \pi^+\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 12417 | 1 | 94994 |
| 12419 | $J/\psi \to \bar{\Sigma}^+ \Sigma^{*-}, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^{*-} \to \pi^- \Lambda \gamma^f, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-ar{n}p\gamma^f$ | 3724 | 1 | 94995 |
| 12420 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 12419 | 1 | 94996 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 12421 | $J/\psi \to \pi^0 \pi^+ K^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12420 | 1 | 94997 |
| 12422 | $J/\psi \to \pi^0 \rho^- \omega \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}\gamma$ | 12421 | 1 | 94998 |
| 12423 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 12422 | 1 | 94999 |
| 12424 | $J/\psi 	o ho^0 K^0 K_2^{*0}, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0, K_2^{*0} 	o ho^+ K^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 5877 | 1 | 95000 |
| 12425 | $J/\psi \to \pi^+\pi^-K^+K^-K^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 12424 | 1 | 95001 |
| 12426 | $J/\psi \to \pi^- K_2^{*0} K^+ f_0(1370), K_2^{*0} \to \pi^+ K^{*-}, f_0(1370) \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5878 | 1 | 95002 |
| 12427 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12426 | 1 | 95003 |
| 12428 | $J/\psi \to \pi^+ K^* K^{*-} a_1^0, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, a_1^0 \to \pi^- \rho^+, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 12427 | 1 | 95004 |
| 12429 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 5879 | 1 | 95005 |
| 12430 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 12429 | 1 | 95006 |
| 12431 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0 \gamma^f, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f$ | 12430 | 1 | 95007 |
| 12432 | $J/\psi 	o a_2^0 \pi^+ b_1^-, a_2^0 	o \pi^+ \pi^- \omega, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 12431 | 1 | 95008 |
| 12433 | $J/\psi \to \pi^+ \rho^- \eta' f_0(1370), \rho^- \to \pi^0 \pi^-, \eta' \to \rho^0 \gamma, f_0(1370) \to \rho^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 12432 | 1 | 95009 |
| 12434 | $J/\psi \to \rho^0 \pi^- K^+ \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12433 | 1 | 95010 |
| 12435 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \gamma\gamma, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma\gamma$ | 12434 | 1 | 95011 |
| 12436 | $J/\psi \to \pi^0 \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^+ \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12435 | 1 | 95012 |
| 12437 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \omega a_1^+ \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma^f$ | 3725 | 1 | 95013 |
| 12438 | $J/\psi 	o K^0 \bar{p} \Sigma^{*+}, K^0 	o K^0_L, \Sigma^{*+} 	o \pi^+ \Lambda, \Lambda 	o \pi^0 n$ | $\pi^0 K_L^0 \pi^+ n ar p$ | 12437 | 1 | 95014 |
| 12439 | $J/\psi \to \rho^- \eta a_0^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^+ \pi^- \gamma^F, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 12438 | 1 | 95015 |
| 12440 | $J/\psi \to \pi^+ a_2^- f_1(1285), a_2^- \to \pi^0 \pi^- \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12439 | 1 | 95016 |
| 12441 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 938 | 1 | 95017 |
| 12442 | $J/\psi ightarrow ho^0 K^+ K^-, ho^0 ightarrow \pi^+ \pi^- \gamma^F \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | 3727 | 1 | 95018 |
| 12443 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ a_2^- f_0(1370), a_2^- \to \bar{K}^0 K^-, f_0(1370) \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 12442 | 1 | 95019 |
| 12444 | $J/\psi \to K^- \phi K_1^+, \phi \to K^+ K^-, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 12443 | 1 | 95020 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 12445 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 3728 | 1 | 95021 |
| 12446 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 12445 | 1 | 95022 |
| 12447 | $J/\psi \to \pi^0 \pi^0 h_1(1170), h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 12446 | 1 | 95023 |
| 12448 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \bar{K}^0 K^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^- K^+ K^-$ | 12447 | 1 | 95024 |
| 12449 | $J/\psi \to \bar{K}^* p \bar{\Sigma}^-, \bar{K}^* \to \pi^+ K^-, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^+\pi^-K^-ar{n}p$ | 12448 | 1 | 95025 |
| 12450 | $J/\psi \to K^+ b_1^- \bar{K}_0^{*0}, b_1^- \to \pi^- \omega, \bar{K}_0^{*0} \to \pi^+ K^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 12449 | 1 | 95026 |
| 12451 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^0 \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 12450 | 1 | 95027 |
| 12452 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_1^0 \to \pi^- K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12451 | 1 | 95028 |
| 12453 | $J/\psi \to K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 12452 | 1 | 95029 |
| 12454 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K_+^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_+^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 2617 | 1 | 95030 |
| 12455 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \rho^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \rho^- \to \pi^0 \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 12454 | 1 | 95031 |
| 12456 | $J/\psi \to K^+ K^{*-} h_1(1170) \gamma^f, K^{*-} \to \pi^0 K^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 \pi^0 \pi^+ \pi^- K^+ K^- \gamma^f$ | 12455 | 1 | 95032 |
| 12457 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \pi^+\pi^-\eta', \eta' \to \gamma\gamma$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 5885 | 1 | 95033 |
| 12458 | $J/\psi 	o ar{K}^* K_2^0, ar{K}^* 	o \pi^0 ar{K}^0, K_2^0 	o \pi^+ K_2^{*-}, ar{K}^0 	o K_L^0, K_2^{*-} 	o \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 12457 | 1 | 95034 |
| 12459 | $J/\psi \to \pi^0\pi^0\rho^0a_0^0, \rho^0 \to \pi^+\pi^-, a_0^0 \to \pi^0\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 12458 | 1 | 95035 |
| 12460 | $J/\psi \to \pi^0 K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \rho^0 K^-, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^-$ | 12459 | 1 | 95036 |
| 12461 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\omega\gamma^f, \omega \to \pi^0\gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 12460 | 1 | 95037 |
| 12462 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12461 | 1 | 95038 |
| 12463 | $J/\psi \to \pi^+ \omega K^* K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 12462 | 1 | 95039 |
| 12464 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12463 | 1 | 95040 |
| 12465 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^+ \pi^- \omega, h_1(1170) \to \pi^- \rho^+, \omega \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12464 | 1 | 95041 |
| 12466 | $J/\psi \to \rho^0 \pi^- \pi^- \rho^+ a_2^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, a_2^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 5886 | 1 | 95042 |
| 12467 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^+\pi^-K^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 12466 | 1 | 95043 |
| 12468 | $J/\psi \to f_2(1270)K^{*+}K^{*-}, f_2(1270) \to \pi^0\pi^0, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12467 | 1 | 95044 |
| 12469 | $J/\psi \to \pi^0 a_2^0 \pi^- \rho^+, a_2^0 \to \pi^- \rho^+ \gamma^f, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12468 | 1 | 95045 |
| 12470 | $J/\psi 	o ar{\Lambda} \Sigma^{*0} \gamma, ar{\Lambda} 	o \pi^+ ar{p}, \Sigma^{*0} 	o \pi^0 \Lambda, \Lambda 	o \pi^- p$ | $\pi^0\pi^+\pi^-par p\gamma$ | 3730 | 1 | 95046 |
| 12471 | $J/\psi \to a_2^+ K^* K^-, a_2^+ \to \rho^0 \pi^+, K^* \to \pi^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12470 | 1 | 95047 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 12472 | $J/\psi \to K^+ K_2^{*-} h_1(1170), K_2^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12471 | 1 | 95048 |
| 12473 | $J/\psi \to \pi^0 \pi^0 \rho^0 \pi^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12472 | 1 | 95049 |
| 12474 | $J/\psi \to \phi \phi \phi, \phi \to K_L^0 K_S^0, \phi \to K_L^0 K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12473 | 1 | 95050 |
| 12475 | $J/\psi \to f_2(1270)K^0\bar{K}_1^0, f_2(1270) \to \pi^0\pi^0, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^+K^-, K_S^0 \to \pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12474 | 1 | 95051 |
| 12476 | $J/\psi \to \pi^- \omega a_0^+ \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 12475 | 1 | 95052 |
| 12477 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_1^0 \to \pi^+ \rho^-, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12476 | 1 | 95053 |
| 12478 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to \pi^+ \rho^- \gamma^f, a_2^+ \to \rho^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 12477 | 1 | 95054 |
| 12479 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^+ K^0, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 12478 | 1 | 95055 |
| 12480 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to K^-K^{*+}, \eta \to \gamma\gamma, \eta \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 12479 | 1 | 95056 |
| 12481 | $J/\psi \to \rho^0 \eta \omega h_1(1170), \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \omega \to \pi^0 \gamma, h_1(1170) \to \pi^0 \rho^0, $ $\pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma\gamma\gamma^f$ | 12480 | 1 | 95057 |
| 12482 | $J/\psi \to \phi f_1(1420), \phi \to \pi^0 \rho^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12481 | 1 | 95058 |
| 12483 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12482 | 1 | 95059 |
| 12484 | $J/\psi \to \eta_c \gamma, \eta_c \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^-K^+\gamma$ | 12483 | 1 | 95060 |
| 12485 | $J/\psi \to \pi^0 K^{*-} K_1^+, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12484 | 1 | 95061 |
| 12486 | $J/\psi \to a_2^+ \omega a_0^-, a_2^+ \to \rho^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 12485 | 1 | 95062 |
| 12487 | $J/\psi \to \eta K^0 K_2^{*0}, \eta \to \gamma \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 12486 | 1 | 95063 |
| 12488 | $J/\psi \to \pi^+ \rho^- \rho^- a_1^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5888 | 1 | 95064 |
| 12489 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^0 \pi^+ K^*, K_2^{*-} \to \pi^0 K^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12488 | 1 | 95065 |
| 12490 | $J/\psi \to \pi^0 K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12489 | 1 | 95066 |
| 12491 | $J/\psi \to f_2(1270)K^-K_1^{'+}, f_2(1270) \to \pi^+\pi^-, K_1^{'+} \to \rho^0K^+, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12490 | 1 | 95067 |
| 12492 | $J/\psi 	o \omega ar{n} \Delta^0, \omega 	o \pi^0 \gamma, \Delta^0 	o \pi^- p$ | $\pi^0\pi^-ar{n}p\gamma$ | 12491 | 1 | 95068 |
| 12493 | $J/\psi \to \omega K^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12492 | 1 | 95069 |
| 12494 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12493 | 1 | 95070 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 12495 | $J/\psi 	o \pi^0 \omega \omega b_1^0, \omega 	o \pi^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 12494 | 1 | 95071 |
| 12496 | $J/\psi \to \phi f_0(1790), \phi \to \pi^0 \rho^0, f_0(1790) \to \pi^+ \pi^- \gamma^f, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 12495 | 1 | 95072 |
| 12497 | $J/\psi \to \pi^+\pi^+\Sigma^-\bar{\Sigma}^-, \Sigma^- \to \pi^-n, \bar{\Sigma}^- \to \pi^0\bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 12496 | 1 | 95073 |
| 12498 | $J/\psi \to K_2^{*+}K_1^-, K_2^{*+} \to \pi^+K^*, K_1^- \to \omega K^-, K^* \to \pi^-K^+, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 2618 | 1 | 95074 |
| 12499 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_2^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5890 | 1 | 95075 |
| 12500 | $J/\psi \to \eta_c \gamma, \eta_c \to K^{*+}K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 12499 | 1 | 95076 |
| 12501 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12500 | 1 | 95077 |
| 12502 | $J/\psi \to \omega f_1(1420), \omega \to \pi^+\pi^-, f_1(1420) \to \pi^0 K^+K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 12501 | 1 | 95078 |
| 12503 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 5891 | 1 | 95079 |
| 12504 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o ar K^0 K^-, a_0^0 	o \pi^0 \eta, ar K^0 	o K_L^0, \eta 	o \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 12503 | 1 | 95080 |
| 12505 | $J/\psi \to \omega f_0(980), \omega \to \pi^0 \pi^+ \pi^-, f_0(980) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 12504 | 1 | 95081 |
| 12506 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^+ \pi^- \gamma^f, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 12505 | 1 | 95082 |
| 12507 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 12506 | 1 | 95083 |
| 12508 | $J/\psi ightarrow \pi^0 ho^0 n ar{\Delta}^0, ho^0 ightarrow \pi^+ \pi^-, ar{\Delta}^0 ightarrow \pi^+ ar{p}$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 5892 | 1 | 95084 |
| 12509 | $J/\psi \to K^{+}a_{0}^{-}\bar{K}_{1}^{0}, a_{0}^{-} \to \pi^{-}\eta, \bar{K}_{1}^{0} \to \rho^{0}\bar{K}^{0}, \eta \to \gamma\gamma, \rho^{0} \to \pi^{+}\pi^{-}, \\ \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 12508 | 1 | 95085 |
| 12510 | $J/\psi \to \pi^0 K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 12509 | 1 | 95086 |
| 12511 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \gamma, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma^f$ | 12510 | 1 | 95087 |
| 12512 | $J/\psi \to \pi^- \rho^+ h_1(1170) \gamma^F, \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12511 | 1 | 95088 |
| 12513 | $J/\psi \to \rho^0 \eta f_0(1370), \rho^0 \to \pi^+\pi^-, \eta \to \pi^0\pi^+\pi^-, f_0(1370) \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12512 | 1 | 95089 |
| 12514 | $J/\psi \to \eta_c \gamma, \eta_c \to h_1(1380) f_1(1420), h_1(1380) \to K^- K^{*+}, f_1(1420) \to \pi^+ K^0 K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- K^- K^- \gamma$ | 12513 | 1 | 95090 |
| 12515 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}_0^0 \to K_L^0, K_0^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12514 | 1 | 95091 |
| 12516 | $J/\psi 	o \pi^0 \pi^+ a_2^- \eta, a_2^- 	o ho^0 \pi^-, \eta 	o \pi^0 \pi^0 \pi^0, ho^0 	o \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 12515 | 1 | 95092 |
| 12517 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^0\pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 12516 | 1 | 95093 |
| 12518 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^-, K^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma^f$ | 3732 | 1 | 95094 |
| 12519 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+ \gamma^f, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 12518 | 1 | 95095 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 12520 | $J/\psi \to \bar{K}^* K^{*+} a_0^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12519 | 1 | 95096 |
| 12521 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^0 \eta, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\gamma^{F}$ | 12520 | 1 | 95097 |
| 12522 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 12521 | 1 | 95098 |
| 12523 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12522 | 1 | 95099 |
| 12524 | $J/\psi \to \pi^+ b_1^0 b_1^- \gamma^F, b_1^0 \to \pi^0 \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5894 | 1 | 95100 |
| 12525 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^+ \pi^- K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 2619 | 1 | 95101 |
| 12526 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^-K^+$ | 3734 | 1 | 95102 |
| 12527 | $J/\psi \to \pi^{0} \rho^{0} \pi^{-} \omega \bar{K}^{0} K^{+}, \rho^{0} \to \pi^{+} \pi^{-}, \omega \to \pi^{0} \gamma, \bar{K}^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{+} \pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 12526 | 1 | 95103 |
| 12528 | $J/\psi \to \pi^0 \pi^+ K^- K_1^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12527 | 1 | 95104 |
| 12529 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0} a_1^0, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^*, a_1^0 \to \pi^+ \rho^-, K^* \to \pi^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 12528 | 1 | 95105 |
| 12530 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12529 | 1 | 95106 |
| 12531 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 939 | 1 | 95107 |
| 12532 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ a_0^- h_1(1170), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 12531 | 1 | 95108 |
| 12533 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to K^+ K^-, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12532 | 1 | 95109 |
| 12534 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 12533 | 1 | 95110 |
| 12535 | $J/\psi ightarrow ho^0 \omega \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 12534 | 1 | 95111 |
| 12536 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 12535 | 1 | 95112 |
| 12537 | $J/\psi 	o a_2^0 b_1^0, a_2^0 	o \pi^+ \pi^- \omega, b_1^0 	o \pi^0 \omega, \omega 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12536 | 1 | 95113 |
| 12538 | $J/\psi \to \pi^0 K^{*+} K_2^{*-} \gamma^f, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 5898 | 1 | 95114 |
| 12539 | $J/\psi 	o \eta f_2^{'} \gamma, \eta 	o \gamma \gamma, f_2^{'} 	o \eta \eta, \eta 	o \pi^0 \pi^+ \pi^-, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 12538 | 1 | 95115 |
| 12540 | $J/\psi \to \pi^0 \pi^- \omega \bar{n} p, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 12539 | 1 | 95116 |
| 12541 | $J/\psi \to \pi^- K_S^0 K^+ \phi, K_S^0 \to \pi^0 \pi^0, \phi \to \eta \gamma, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^-K^+\gamma\gamma\gamma$ | 12540 | 1 | 95117 |
| 12542 | $J/\psi \to K^{0}\bar{K}^{*}f_{2}^{'}, K^{0} \to K_{L}^{0}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, f_{2}^{'} \to K_{L}^{0}K_{L}^{0}, \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 12541 | 1 | 95118 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12543 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 12542 | 1 | 95119 |
| 12544 | $J/\psi \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 5899 | 1 | 95120 |
| 12545 | $J/\psi \to \eta K^0 K_2^{*0}, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 12544 | 1 | 95121 |
| 12546 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12545 | 1 | 95122 |
| 12547 | $J/\psi \to \pi^+ \rho^- K^* K_2^{*0}, \rho^- \to \pi^0 \pi^-, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12546 | 1 | 95123 |
| 12548 | $J/\psi \to \pi^- \rho^+ K^- K_1^+, \rho^+ \to \pi^0 \pi^+, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12547 | 1 | 95124 |
| 12549 | $J/\psi \to \pi^- \bar{\Lambda} \Sigma^{*+}, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^{*+} \to \pi^+ \Sigma^0, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 12548 | 1 | 95125 |
| 12550 | $J/\psi \to \pi^0 \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12549 | 1 | 95126 |
| 12551 | $J/\psi \rightarrow a_2^0\omega, a_2^0 \rightarrow \pi^0\eta, \omega \rightarrow \pi^0\pi^+\pi^-, \eta \rightarrow \pi^0\pi^0\pi^0, \pi^0 \rightarrow e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12550 | 1 | 95127 |
| 12552 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, \pi^0 \to e^+ e^- \gamma^F, K^{*-} \to \pi^0 K^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 12551 | 1 | 95128 |
| 12553 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12552 | 1 | 95129 |
| 12554 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^+K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 940 | 1 | 95130 |
| 12555 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 a_2^- a_0^+, a_2^- \to \pi^0 \pi^- \omega, a_0^+ \to \pi^+ \eta, \omega \to \pi^0 \pi^+ \pi^-, $ $\eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma\gamma$ | 12554 | 1 | 95131 |
| 12556 | $J/\psi 	o \eta \omega \eta', \eta 	o \pi^+\pi^-\gamma^F, \omega 	o \pi^0\pi^+\pi^-, \eta' 	o ho^0\gamma, ho^0 	o \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma$ | 12555 | 1 | 95132 |
| 12557 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12556 | 1 | 95133 |
| 12558 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \pi^+ \pi^- \eta, \phi \to K^+ K^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma\gamma$ | 12557 | 1 | 95134 |
| 12559 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^- K_1^+, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 624 | 1 | 95135 |
| 12560 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3738 | 1 | 95136 |
| 12561 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^+ \rho^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12560 | 1 | 95137 |
| 12562 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^+\pi^-\gamma^F, \omega \to \pi^0\pi^+\pi^-, f_1(1285) \to \pi^+\pi^-\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma$ | 3739 | 1 | 95138 |
| 12563 | $J/\psi \to \phi f_1(1420), \phi \to e^+e^-\eta, f_1(1420) \to \pi^0 K^+K^-, \eta \to \pi^0\pi^0\pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K^{+}K^{-}$ | 12562 | 1 | 95139 |
| 12564 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12563 | 1 | 95140 |
| 12565 | $J/\psi 	o a_2^0 \pi^+ a_1^- \gamma^f, a_2^0 	o \pi^+ \pi^- \omega, a_1^- 	o ho^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 5904 | 1 | 95141 |
| 12566 | $J/\psi \to \pi^+\pi^-\omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0\pi^+\pi^-\gamma^f, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^-K^+$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 12565 | 1 | 95142 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 12567 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta, f_0(1370) \to \rho^0 \rho^0, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 12566 | 1 | 95143 |
| 12568 | $J/\psi \to K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12567 | 1 | 95144 |
| 12569 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 5905 | 1 | 95145 |
| 12570 | $J/\psi \to \eta K^{*+}K_1^-, \eta \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+, K_1^- \to \pi^-\bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0\bar{K}^0, \bar{K}_0^{*0} \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12569 | 1 | 95146 |
| 12571 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 12570 | 1 | 95147 |
| 12572 | $J/\psi \to \omega \bar{K}^* K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 12571 | 1 | 95148 |
| 12573 | $J/\psi ightarrow \phi f_{2}^{'}, \phi ightarrow K^{+}K^{-}, f_{2}^{'} ightarrow \eta \eta, \eta ightarrow \gamma \gamma, \eta ightarrow \pi^{0}\pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 12572 | 1 | 95149 |
| 12574 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{\Sigma}^{*+} \Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 12573 | 1 | 95150 |
| 12575 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 3740 | 1 | 95151 |
| 12576 | $J/\psi \to \omega b_1^+ b_1^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \\ \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 12575 | 1 | 95152 |
| 12577 | $J/\psi \to \pi^0 \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 3741 | 1 | 95153 |
| 12578 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 12577 | 1 | 95154 |
| 12579 | $J/\psi \to \rho^0 \pi^+ a_2^- \omega, \rho^0 \to \pi^+ \pi^-, a_2^- \to \rho^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 1955 | 1 | 95155 |
| 12580 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 12579 | 1 | 95156 |
| 12581 | $J/\psi ightarrow ho^-ar{\Sigma}^0\Sigma^+, ho^- ightarrow \pi^0\pi^-, ar{\Sigma}^0 ightarrow ar{\Lambda}\gamma, \Sigma^+ ightarrow \pi^0p, ar{\Lambda} ightarrow \pi^+ar{p}$ | $\pi^0\pi^0\pi^+\pi^-par p\gamma$ | 12580 | 1 | 95157 |
| 12582 | $J/\psi \to \pi^0\pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0\pi^+, a_2^- \to \pi^0\pi^-\omega, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12581 | 1 | 95158 |
| 12583 | $J/\psi \to K^- f_0(1370) K_1^+, f_0(1370) \to \pi^+ \pi^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 12582 | 1 | 95159 |
| 12584 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12583 | 1 | 95160 |
| 12585 | $J/\psi \to \pi^- a_2^+ \eta', a_2^+ \to \pi^0 \rho^+, \eta' \to \pi^+ \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12584 | 1 | 95161 |
| 12586 | $J/\psi \to \rho^0 K^{*+} \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 12585 | 1 | 95162 |
| 12587 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^0 \pi^0 K^*, \bar{K}_1^0 \to \omega \bar{K}^0, K^* \to \pi^0 K^0, \omega \to \pi^0 \pi^+ \pi^-, \ \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 12586 | 1 | 95163 |
| 12588 | $J/\psi \to K^{-}a_{0}^{+}K_{1}^{'0}, a_{0}^{+} \to \pi^{+}\eta, K_{1}^{'0} \to \pi^{-}K^{*+}, \eta \to \pi^{0}\pi^{+}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 12587 | 1 | 95164 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12589 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^{*+}K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma$ | 12588 | 1 | 95165 |
| 12590 | $J/\psi \to \pi^0 \pi^+ \omega K^* K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3743 | 1 | 95166 |
| 12591 | $J/\psi ightarrow \omega K^- K_0^{*+}, \omega ightarrow \pi^0 \gamma, K_0^{*+} ightarrow \pi^0 K^+$ | $\pi^0\pi^0K^+K^-\gamma$ | 12590 | 1 | 95167 |
| 12592 | $J/\psi \to \rho^0 \pi^+ K^{*-} K_1^{'0}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*-} \to \pi^0 K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma^f$ | 5910 | 1 | 95168 |
| 12593 | $J/\psi \to K^*\bar{K}_2^0, K^* \to \pi^0 K^0, \bar{K}_2^0 \to \pi^- K_2^{*+}, K^0 \to K_S^0, K_2^{*+} \to \pi^0 \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2624 | 1 | 95169 |
| 12594 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \omega K^+, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 12593 | 1 | 95170 |
| 12595 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to \bar{K}^0 K^*, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0K_L^0$ | 12594 | 1 | 95171 |
| 12596 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to \bar{K}^0K^*, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12595 | 1 | 95172 |
| 12597 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 3745 | 1 | 95173 |
| 12598 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^0K^+, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12597 | 1 | 95174 |
| 12599 | $J/\psi \to \rho^0 a_2^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^-, f_0(1370) \to \pi^+ \pi^- \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 358 | 1 | 95175 |
| 12600 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \omega \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12599 | 1 | 95176 |
| 12601 | $J/\psi \to \pi^- \rho^+ f_0(1370) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 12600 | 1 | 95177 |
| 12602 | $J/\psi \to \pi^- \rho^+ f_1(1285)\gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 12601 | 1 | 95178 |
| 12603 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 \pi^+ \rho^-, a_2^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12602 | 1 | 95179 |
| 12604 | $J/\psi \to K^0 \bar{K}_1^0 \gamma, K^0 \to K_L^0, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 12603 | 1 | 95180 |
| 12605 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12604 | 1 | 95181 |
| 12606 | $J/\psi \to \eta \phi f_0(980), \eta \to \gamma \gamma, \phi \to \pi^+ \rho^-, f_0(980) \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 12605 | 1 | 95182 |
| 12607 | $J/\psi \to \pi^0\pi^-b_1^0a_0^+, b_1^0 \to \pi^0\omega, a_0^+ \to \pi^+\eta, \omega \to \pi^0\gamma, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma$ | 12606 | 1 | 95183 |
| 12608 | $J/\psi \to \rho^0 \pi^+ K^- K_1^{'0}, \rho^0 \to \pi^+ \pi^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 12607 | 1 | 95184 |
| 12609 | $J/\psi \to \bar{K}^0 K^+ b_1^-, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 3747 | 1 | 95185 |
| 12610 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2626 | 1 | 95186 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12611 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^-\rho^+, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 12610 | 1 | 95187 |
| 12612 | $J/\psi \to \omega K^{*-}K_0^{*+}, \omega \to \pi^0\pi^+\pi^-, K^{*-} \to \pi^0K^-, K_0^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12611 | 1 | 95188 |
| 12613 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 12612 | 1 | 95189 |
| 12614 | $J/\psi \to \rho^0 \pi^- \rho^+ K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 12613 | 1 | 95190 |
| 12615 | $J/\psi \to \rho^0 \bar{K}^* K_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^+ \pi^- K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 12614 | 1 | 95191 |
| 12616 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^0K^+, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 12615 | 1 | 95192 |
| 12617 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^- \rho^+, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12616 | 1 | 95193 |
| 12618 | $J/\psi ightarrow \eta K^0 ar{K}^0 a_0^0, \eta ightarrow \gamma \gamma, K^0 ightarrow K_L^0, ar{K}^0 ightarrow K_L^0, a_0^0 ightarrow \pi^0 \eta, \ \eta ightarrow \gamma \gamma$ | $\pi^0 K_L^0 K_L^0 \gamma \gamma \gamma \gamma$ | 1957 | 1 | 95194 |
| 12619 | $J/\psi \to K_1^+ K_1^-, K_1^+ \to \pi^+ K^*, K_1^- \to \rho^0 K^-, K^* \to \pi^- K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 5917 | 1 | 95195 |
| 12620 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^-K^+, a_0^+ \to \pi^+\eta, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 12619 | 1 | 95196 |
| 12621 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12620 | 1 | 95197 |
| 12622 | $J/\psi \to \pi^+ \omega K^* K^{*-}, \omega \to \pi^0 \gamma, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 267 | 1 | 95198 |
| 12623 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} h_1(1170), \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 12622 | 1 | 95199 |
| 12624 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 12623 | 1 | 95200 |
| 12625 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, $ $\rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 5919 | 1 | 95201 |
| 12626 | $J/\psi \to \pi^0 \pi^+ \pi^- \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12625 | 1 | 95202 |
| 12627 | $J/\psi \to \eta' f_1(1420)\gamma, \eta' \to \pi^+\pi^-\eta, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \eta \to \pi^0\pi^0\pi^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 12626 | 1 | 95203 |
| 12628 | $J/\psi \to \rho^0 \pi^+ K^* K^{*-}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12627 | 1 | 95204 |
| 12629 | $J/\psi 	o ar{K}^* K_1^0 \gamma, ar{K}^* 	o \pi^0 ar{K}^0, K_1^0 	o \omega K^0, ar{K}^0 	o K_L^0, \omega 	o \pi^0 \gamma, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 12628 | 1 | 95205 |
| 12630 | $J/\psi 	o \pi^- K^0 ar{K}^* b_1^+, K^0 	o K_L^0, ar{K}^* 	o \pi^+ K^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 12629 | 1 | 95206 |
| 12631 | $J/\psi ightarrow ho^0 \eta', ho^0 ightarrow \pi^+ \pi^-, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12630 | 1 | 95207 |
| 12632 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12631 | 1 | 95208 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 12633 | $J/\psi \to \eta K^{*+} K_1^-, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12632 | 1 | 95209 |
| 12634 | $J/\psi \to \eta K^* K_2^{*0}, \eta \to \pi^+ \pi^- \gamma^F, K^* \to \pi^- K^+, K_2^{*0} \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^F$ | 12633 | 1 | 95210 |
| 12635 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \omega K^+, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12634 | 1 | 95211 |
| 12636 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}^*, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 12635 | 1 | 95212 |
| 12637 | $J/\psi ightarrow \pi^+ ho^- \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12636 | 1 | 95213 |
| 12638 | $J/\psi \to \pi^+ K_1^0 K_1^-, K_1^0 \to \pi^- K_0^{*+}, K_1^- \to \rho^0 K^-, K_0^{*+} \to \pi^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12637 | 1 | 95214 |
| 12639 | $J/\psi \to \pi^0 \pi^+ \pi^- \rho^+ a_1^-, \rho^+ \to \pi^0 \pi^+, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12638 | 1 | 95215 |
| 12640 | $J/\psi 	o \pi^0 \pi^- ho^+ ar{K}^0 K^*, ho^+ 	o \pi^0 \pi^+, ar{K}^0 	o K_L^0, K^* 	o \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12639 | 1 | 95216 |
| 12641 | $J/\psi \to K^* \bar{K}^* f_0(1370), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12640 | 1 | 95217 |
| 12642 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^- K^+, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 5920 | 1 | 95218 |
| 12643 | $J/\psi 	o ho^- ar{K}^0 K^{*+} \gamma, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_S^0, K^{*+} 	o \pi^0 K^+, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 12642 | 1 | 95219 |
| 12644 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 5921 | 1 | 95220 |
| 12645 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^- a_0^+, K_S^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 12644 | 1 | 95221 |
| 12646 | $J/\psi \to \pi^0 a_2^0 \pi^- b_1^+, a_2^0 \to \pi^- \rho^+, b_1^+ \to \pi^+ \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12645 | 1 | 95222 |
| 12647 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^- \rho^+, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \ \bar{K}^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 5922 | 1 | 95223 |
| 12648 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12647 | 1 | 95224 |
| 12649 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12648 | 1 | 95225 |
| 12650 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^- \omega a_1^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 3751 | 1 | 95226 |
| 12651 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-\gamma$ | 12650 | 1 | 95227 |
| 12652 | $J/\psi \to \pi^+ K^* K^{*-} a_0^0, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12651 | 1 | 95228 |
| 12653 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 1509 | 1 | 95229 |
| 12654 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12653 | 1 | 95230 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12655 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \rho^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 758 | 1 | 95231 |
| 12656 | $J/\psi \to \pi^0 \eta \omega f_1(1285), \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 12655 | 1 | 95232 |
| 12657 | $J/\psi \to \pi^0 a_2^+ b_1^-, a_2^+ \to \rho^0 \pi^+, b_1^- \to \pi^- \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12656 | 1 | 95233 |
| 12658 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12657 | 1 | 95234 |
| 12659 | $J/\psi \to \omega f_0(1370) f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12658 | 1 | 95235 |
| 12660 | $J/\psi \to \eta \omega f_0(1370), \eta \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12659 | 1 | 95236 |
| 12661 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12660 | 1 | 95237 |
| 12662 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 12661 | 1 | 95238 |
| 12663 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 12662 | 1 | 95239 |
| 12664 | $J/\psi 	o a_2^0 \pi^+ \pi^- ho^+ ho^-, a_2^0 	o \pi^+ ho^-, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12663 | 1 | 95240 |
| 12665 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \rho^+ K^-, K_2^{*+} \to \pi^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12664 | 1 | 95241 |
| 12666 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 12665 | 1 | 95242 |
| 12667 | $J/\psi \to K^- \phi K_0^{*+}, \phi \to K_L^0 K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12666 | 1 | 95243 |
| 12668 | $J/\psi \to K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5926 | 1 | 95244 |
| 12669 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K_2^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 12668 | 1 | 95245 |
| 12670 | $J/\psi 	o \pi^+\pi^-a^0_1, a^0_1 	o \pi^- ho^+, ho^+ 	o \pi^0\pi^+, \pi^0 	o e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 5927 | 1 | 95246 |
| 12671 | $J/\psi \to \pi^+\pi^-\eta f_2(1270), \eta \to \pi^0\pi^+\pi^-, f_2(1270) \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12670 | 1 | 95247 |
| 12672 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K_1^-, K^0 \to K_L^0, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 5928 | 1 | 95248 |
| 12673 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Sigma^0, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 5929 | 1 | 95249 |
| 12674 | $J/\psi \to \pi^+ \rho^- K^+ K_1^-, \rho^- \to \pi^0 \pi^-, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12673 | 1 | 95250 |
| 12675 | $J/\psi 	o \pi^+ K^* K^-, K^* 	o K^0 \gamma, K^0 	o K^0_L$ | $K_L^0\pi^+K^-\gamma$ | 12674 | 1 | 95251 |
| 12676 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^- \bar{K}^0 \gamma^f, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K_1^0 \to K_2^0, K_2^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 3754 | 1 | 95252 |
| 12677 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12676 | 1 | 95253 |
| 12678 | $J/\psi 	o ho^+ a_2^- \gamma^f, ho^+ 	o \pi^0 \pi^+, a_2^- 	o \pi^- \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 12677 | 1 | 95254 |
| 12679 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 12678 | 1 | 95255 |
| 12680 | $J/\psi \to K^0 \phi \bar{K}_0^{*0}, K^0 \to K_L^0, \phi \to K_L^0 K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12679 | 1 | 95256 |
| 12681 | $J/\psi \to \pi^+ K^* \bar{K}_1^{'-}, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 12680 | 1 | 95257 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12682 | $J/\psi \to \rho^0 K^0 \bar{K}^0 \eta', \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12681 | 1 | 95258 |
| 12683 | $J/\psi \to \pi^+ a_2^- f_1(1285), a_2^- \to \rho^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, $ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12682 | 1 | 95259 |
| 12684 | $J/\psi \to ho^0 \Sigma^+ \bar{\Sigma}^-, ho^0 \to \pi^+ \pi^-, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^+\pi^+\pi^-\pi^-n\bar{n}$ | 12683 | 1 | 95260 |
| 12685 | $J/\psi \to \pi^- \rho^+ \eta', \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, \eta \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12684 | 1 | 95261 |
| 12686 | $J/\psi \to \pi^+\pi^-K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 12685 | 1 | 95262 |
| 12687 | $J/\psi \to \pi^0 \pi^+ a_2^- \gamma^f, \pi^0 \to e^+ e^- \gamma^F, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 5931 | 1 | 95263 |
| 12688 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^0K^-, f_0(1370) \to K^+K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 12687 | 1 | 95264 |
| 12689 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \rho^+ K^0, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12688 | 1 | 95265 |
| 12690 | $J/\psi \to \pi^0 K^- K^{*+} \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^f$ | 5932 | 1 | 95266 |
| 12691 | $J/\psi \to \rho^- K^+ \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 12690 | 1 | 95267 |
| 12692 | $J/\psi \to \pi^0 \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12691 | 1 | 95268 |
| 12693 | $J/\psi \to \rho^0 \pi^+ K^* K^{*-}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2631 | 1 | 95269 |
| 12694 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, K_S^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12693 | 1 | 95270 |
| 12695 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0 \gamma^f, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 12694 | 1 | 95271 |
| 12696 | $J/\psi 	o ar{K}^0 K^* b_1^0, ar{K}^0 	o K_L^0, K^* 	o \pi^- K^+ \gamma^f, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 12695 | 1 | 95272 |
| 12697 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12696 | 1 | 95273 |
| 12698 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12697 | 1 | 95274 |
| 12699 | $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \rho^0 \pi^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^0 \to \pi^+ \pi^- \gamma^f \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f\gamma^f$ | 12698 | 1 | 95275 |
| 12700 | $J/\psi \to \omega K^0 \bar{K}^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12699 | 1 | 95276 |
| 12701 | $J/\psi \to K^- K_2^{*+}, K_2^{*+} \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-$ | 945 | 1 | 95277 |
| 12702 | $J/\psi \to \pi^0 \pi^+ \pi^- f_0(1370), \pi^0 \to e^+ e^- \gamma^F, f_0(1370) \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12701 | 1 | 95278 |
| 12703 | $J/\psi ightarrow \pi^- ho^+ \eta, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \gamma \gamma, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma$ | 12702 | 1 | 95279 |
| 12704 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to K^0 K^-, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12703 | 1 | 95280 |
| 12705 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 5935 | 1 | 95281 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12706 | $J/\psi \to \rho^0 a_2^0 \eta', \rho^0 \to \pi^+ \pi^- \gamma^f, a_2^0 \to \pi^- \rho^+, \eta' \to \pi^0 \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 12705 | 1 | 95282 |
| 12707 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_1^- \to \pi^0 \rho^-, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12706 | 1 | 95283 |
| 12708 | $J/\psi \to \bar{K}^* n \bar{\Lambda}, \bar{K}^* \to \pi^+ K^- \gamma^f, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+K^-nar p\gamma^f$ | 5936 | 1 | 95284 |
| 12709 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-$ | 3757 | 1 | 95285 |
| 12710 | $J/\psi \to \rho^0 \bar{K}^* K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12709 | 1 | 95286 |
| 12711 | $J/\psi ightarrow ho^+ ho^- \gamma, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma$ | 12710 | 1 | 95287 |
| 12712 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12711 | 1 | 95288 |
| 12713 | $J/\psi \to \rho^0 K^+ K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 12712 | 1 | 95289 |
| 12714 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 12713 | 1 | 95290 |
| 12715 | $J/\psi 	o a_2^0 K^0 ar{K}^0, a_2^0 	o \pi^+ \pi^- \omega, K^0 	o K_S^0, ar{K}^0 	o K_S^0, \omega 	o \pi^0 \pi^+ \pi^-, K_S^0 	o \pi^0 \pi^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12714 | 1 | 95291 |
| 12716 | $J/\psi \to \phi f_0(1710), \phi \to \pi^+ \rho^-, f_0(1710) \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 12715 | 1 | 95292 |
| 12717 | $J/\psi \rightarrow \pi^0\pi^0\rho^+\rho^-\omega, \rho^+ \rightarrow \pi^0\pi^+, \rho^- \rightarrow \pi^0\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 12716 | 1 | 95293 |
| 12718 | $J/\psi \to \pi^+ a_2^- f_2(1270), a_2^- \to \pi^- \eta, f_2(1270) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12717 | 1 | 95294 |
| 12719 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{F}$ | 12718 | 1 | 95295 |
| 12720 | $J/\psi \to \rho^- K^0 \bar{K}^0 b_1^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12719 | 1 | 95296 |
| 12721 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 5938 | 1 | 95297 |
| 12722 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 3758 | 1 | 95298 |
| 12723 | $J/\psi 	o \pi^+\pi^-\eta a^0_0, \eta 	o \pi^0\pi^0\pi^0, a^0_0 	o \pi^0\eta, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1962 | 1 | 95299 |
| 12724 | $J/\psi \to \eta \omega f_0(1370), \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 12723 | 1 | 95300 |
| 12725 | $J/\psi \to \rho^- a_2^+ f_2(1270), \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, f_2(1270) \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 12724 | 1 | 95301 |
| 12726 | $J/\psi \to \eta' h_1(1170), \eta' \to \pi^+ \pi^- \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 5941 | 1 | 95302 |
| 12727 | $J/\psi 	o \pi^- a_0^0 b_1^+, a_0^0 	o \pi^0 \eta, b_1^+ 	o \pi^+ \omega, \eta 	o \mu^+ \mu^- \gamma^F, \omega 	o \pi^0 \pi^+ \pi^-$ | $\mu^{+}\mu^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12726 | 1 | 95303 |
| 12728 | $J/\psi 	o \pi^+ \omega K^0 K^-, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12727 | 1 | 95304 |
| 12729 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^0K^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 5942 | 1 | 95305 |
| 12730 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \omega \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12729 | 1 | 95306 |
| 12731 | $J/\psi \to K^+K^{*-}b_1^0, K^{*-} \to \pi^-\bar{K}^0, b_1^0 \to \pi^0\gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 12730 | 1 | 95307 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 12732 | $J/\psi \to \pi^+ \rho^- \eta, \rho^- \to \pi^- \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12731 | 1 | 95308 |
| 12733 | $J/\psi \to \pi^+ K^* K^{*-} h_1(1170), K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^- \rho^+, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 12732 | 1 | 95309 |
| 12734 | $J/\psi \rightarrow \pi^0 a_2^0 \omega, a_2^0 \rightarrow \pi^+ \rho^-, \omega \rightarrow \pi^0 \gamma, \rho^- \rightarrow \pi^0 \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 12733 | 1 | 95310 |
| 12735 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^+ \pi^- K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 12734 | 1 | 95311 |
| 12736 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^+K^0, K_1^- \to \rho^0K^-, K^0 \to K_S^0, \rho^0 \to \pi^+\pi^-\gamma^f, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 12735 | 1 | 95312 |
| 12737 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 12736 | 1 | 95313 |
| 12738 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^+ \rho^- b_1^0, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, b_1^0 \to \pi^0 \omega,$ $\omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 12737 | 1 | 95314 |
| 12739 | $J/\psi ightarrow ar{K}^0 K^* \phi, ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^0 K^0, \phi ightarrow \pi^- ho^+, K^0 ightarrow K_L^0, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 12738 | 1 | 95315 |
| 12740 | $J/\psi \to \pi^+ \rho^- \bar{K}^* K_1^0, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12739 | 1 | 95316 |
| 12741 | $J/\psi \to \pi^0 f_2(1270) K^0 \bar{K}^0, f_2(1270) \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 12740 | 1 | 95317 |
| 12742 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-\gamma^f$ | 12741 | 1 | 95318 |
| 12743 | $J/\psi \to \rho^- \bar{K}^0 K^{*+} b_1^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12742 | 1 | 95319 |
| 12744 | $J/\psi 	o ho^0 \eta a_0^0, ho^0 	o \pi^+ \pi^- \gamma^f, \eta 	o \pi^0 \pi^0 \pi^0, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 12743 | 1 | 95320 |
| 12745 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi h_1(1380), \phi \to K^+K^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-\gamma$ | 12744 | 1 | 95321 |
| 12746 | $J/\psi \to K^0 K_2^{*0} \phi, K^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-K^-$ | 12745 | 1 | 95322 |
| 12747 | $J/\psi \to \eta K^+ K_0^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5943 | 1 | 95323 |
| 12748 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 12747 | 1 | 95324 |
| 12749 | $J/\psi \to \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^- \gamma^f, f_0(1370) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 3760 | 1 | 95325 |
| 12750 | $J/\psi \to \pi^- K_2^{*+} \bar{K}_0^{*0}, K_2^{*+} \to \pi^0 K^{*+}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12749 | 1 | 95326 |
| 12751 | $J/\psi \to \pi^0 a_2^0 \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, a_2^0 \to \pi^+ \pi^- \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 12750 | 1 | 95327 |
| 12752 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 12751 | 1 | 95328 |
| 12753 | $J/\psi \rightarrow \eta' f_2' \gamma, \eta' \rightarrow \pi^+ \pi^- \eta, f_2' \rightarrow K^+ K^-, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 12752 | 1 | 95329 |
| 12754 | $J/\psi \to \pi^+ a_0^- f_0(1370) \gamma^F, a_0^- \to \pi^- \eta, f_0(1370) \to \rho^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 12753 | 1 | 95330 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 12755 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 12754 | 1 | 95331 |
| 12756 | $J/\psi \to \pi^0 f_2(1270) h_1(1170), f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12755 | 1 | 95332 |
| 12757 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^- \rho^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 12756 | 1 | 95333 |
| 12758 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to \pi^0 \rho^0, h_1(1380) \to K^+ K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 12757 | 1 | 95334 |
| 12759 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 12758 | 1 | 95335 |
| 12760 | $J/\psi \to \pi^0 \bar{K}^0 K^* a^0_0, \bar{K}^0 \to K^0_S, K^* \to \pi^- K^+, a^0_0 \to K^0_L K^0_L, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 12759 | 1 | 95336 |
| 12761 | $J/\psi \to \eta' h_1(1170), \eta' \to \pi^+\pi^-\eta, h_1(1170) \to \pi^0\rho^0, \eta \to \pi^0\pi^0\pi^0, \rho^0 \to \pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12760 | 1 | 95337 |
| 12762 | $J/\psi \rightarrow \rho^0 a_2^0 \eta, \rho^0 \rightarrow \pi^+ \pi^-, a_2^0 \rightarrow \pi^0 \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0, \eta \rightarrow \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 12761 | 1 | 95338 |
| 12763 | $J/\psi \to \bar{K}^0 h_1(1170) K_1^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^- \rho^+, K_1^0 \to \rho^- K^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12762 | 1 | 95339 |
| 12764 | $J/\psi 	o \Xi^0 ar\Xi^0, \Xi^0 	o \pi^0 \Lambda, ar\Xi^0 	o \pi^0 ar\Lambda, \Lambda 	o \pi^0 n, \pi^0 	o e^+ e^- \gamma^F, \ ar\Lambda 	o \pi^0 ar n$ | $e^+e^-\pi^0\pi^0\pi^0n\bar{n}\gamma^F$ | 12763 | 1 | 95340 |
| 12765 | $J/\psi \to f_2' f_0(1710) \gamma, f_2' \to K^+ K^-, f_0(1710) \to \pi^0 \pi^0$ | $\pi^0\pi^0K^+K^-\gamma$ | 12764 | 1 | 95341 |
| 12766 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1285) \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 12765 | 1 | 95342 |
| 12767 | $J/\psi 	o K^+ ar{\Sigma}^0 \Xi^-, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Xi^- 	o \pi^- \Lambda, ar{\Lambda} 	o \pi^+ ar{p}, \Lambda 	o \pi^- p$ | $\pi^+\pi^-\pi^-K^+par p\gamma$ | 5945 | 1 | 95343 |
| 12768 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12767 | 1 | 95344 |
| 12769 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to \pi^0 K^{*+}, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K^{*+} \to \pi^0 K^+$ | $e^+e^-\pi^0\pi^0K^+K^-\gamma^F\gamma^f$ | 12768 | 1 | 95345 |
| 12770 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^+ K^{*-}, K_2^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 12769 | 1 | 95346 |
| 12771 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0\gamma^f, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $K^0_L K^0_L \pi^+ \pi^- \gamma^f$ | 12770 | 1 | 95347 |
| 12772 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12771 | 1 | 95348 |
| 12773 | $J/\psi \rightarrow \pi^{+}a_{2}^{-}\omega\omega, a_{2}^{-}\rightarrow \rho^{0}\pi^{-}, \omega\rightarrow \pi^{0}\gamma, \omega\rightarrow \pi^{0}\pi^{+}\pi^{-}, \rho^{0}\rightarrow \pi^{+}\pi^{-}\gamma^{f}$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 12772 | 1 | 95349 |
| 12774 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^- a_2^+ \gamma^f, \rho^0 \to \pi^+ \pi^-, a_2^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma^f$ | 12773 | 1 | 95350 |
| 12775 | $J/\psi \rightarrow \pi^0 \rho^0 \eta', \rho^0 \rightarrow \pi^+ \pi^- \gamma^f, \eta' \rightarrow \pi^+ \pi^- \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 12774 | 1 | 95351 |
| 12776 | $J/\psi \to \pi^+ \rho^- \eta', \rho^- \to \pi^0 \pi^-, \eta' \to \pi^0 \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \eta \to \gamma \gamma$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma\gamma^f$ | 12775 | 1 | 95352 |
| 12777 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12776 | 1 | 95353 |
| 12778 | $J/\psi \to \eta a_0^+ b_1^-, \eta \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 12777 | 1 | 95354 |
| 12779 | $J/\psi \to \pi^- \bar{K}_1^0 K_0^{*+}, \bar{K}_1^0 \to \rho^+ K^-, K_0^{*+} \to \pi^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2634 | 1 | 95355 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 12780 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12779 | 1 | 95356 |
| 12781 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^+K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 12780 | 1 | 95357 |
| 12782 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \rho^+ K^0, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12781 | 1 | 95358 |
| 12783 | $J/\psi \to K^0 K^0 \bar{K}^0 K_2^{*0}, K^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\gamma^{F}$ | 12782 | 1 | 95359 |
| 12784 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 12783 | 1 | 95360 |
| 12785 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12784 | 1 | 95361 |
| 12786 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^0 K^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 5947 | 1 | 95362 |
| 12787 | $J/\psi \to \eta K^{*+}K^{*-}\gamma, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 12786 | 1 | 95363 |
| 12788 | $J/\psi \to \eta' f_0(1370)\gamma, \eta' \to \pi^+\pi^-\eta, f_0(1370) \to \pi^+\pi^+\pi^-\pi^-, \eta \to \gamma\gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma\gamma$ | 12787 | 1 | 95364 |
| 12789 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 \pi^0 K^*, K_2^{*0} \to \pi^+ K^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12788 | 1 | 95365 |
| 12790 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 12789 | 1 | 95366 |
| 12791 | $J/\psi \to K_0^{*+} \bar{K}_1^{'-}, K_0^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12790 | 1 | 95367 |
| 12792 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \rho^+ K^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 12791 | 1 | 95368 |
| 12793 | $J/\psi \to \bar{K}^0 \phi K_0^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 5948 | 1 | 95369 |
| 12794 | $J/\psi 	o ar{K}^*K_2^{*0}, ar{K}^* 	o \pi^+K^-, K_2^{*0} 	o \pi^0\pi^0K^*, K^* 	o \pi^0K^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 5949 | 1 | 95370 |
| 12795 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 12794 | 1 | 95371 |
| 12796 | $J/\psi ightarrow ho^- ar{K}^0 p ar{\Lambda}, ho^- ightarrow \pi^0 \pi^-, ar{K}^0 ightarrow K_L^0, ar{\Lambda} ightarrow \pi^+ ar{p}$ | $\pi^0 K_L^0 \pi^+ \pi^- p \bar{p}$ | 12795 | 1 | 95372 |
| 12797 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 12796 | 1 | 95373 |
| 12798 | $J/\psi \to \rho^0 \rho^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 12797 | 1 | 95374 |
| 12799 | $K^{0} \to K_{L}^{0}$ $J/\psi \to K^{0}\bar{K}^{*}f_{1}(1420), K^{0} \to K_{S}^{0}, \bar{K}^{*} \to \pi^{+}K^{-}, f_{1}(1420) \to \pi^{-}\bar{K}^{0}K^{+}, K_{S}^{0} \to \pi^{+}\pi^{-},$ $\bar{K}^{0} \to K_{L}^{0}$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12798 | 1 | 95375 |
| 12800 | $J/\psi \to \omega \bar{\Lambda} \Sigma^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma$ | 12799 | 1 | 95376 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12801 | $J/\psi \to \rho^0 a_0^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_1(1285) \to \pi^0 \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12800 | 1 | 95377 |
| 12802 | $J/\psi \to \pi^0 \pi^- a_2^+ f_1(1285), a_2^+ \to \rho^0 \pi^+, f_1(1285) \to \pi^+ \pi^- \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 12801 | 1 | 95378 |
| 12803 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 12802 | 1 | 95379 |
| 12804 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^0 K^{*-}, \phi \to K^+ K^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^+K^-K^-$ | 12803 | 1 | 95380 |
| 12805 | $J/\psi \to \pi^0 \omega K^+ K^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0K^+K^-\gamma$ | 12804 | 1 | 95381 |
| 12806 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12805 | 1 | 95382 |
| 12807 | $J/\psi \rightarrow \pi^+ \rho^- \eta', \rho^- \rightarrow \pi^0 \pi^-, \eta' \rightarrow \pi^0 \pi^0 \eta, \pi^0 \rightarrow e^+ e^- \gamma^F, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12806 | 1 | 95383 |
| 12808 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 5950 | 1 | 95384 |
| 12809 | $J/\psi \to K^+K^-\phi \gamma^f, \phi \to K_L^0K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^-K^+K^-\gamma^f$ | 12808 | 1 | 95385 |
| 12810 | $J/\psi \to \pi^0 \pi^+ \pi^- \rho^- \omega \bar{K}^0 K^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12809 | 1 | 95386 |
| 12811 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 12810 | 1 | 95387 |
| 12812 | $J/\psi \to \rho^0 \pi^+ \pi^- \omega a_1^0, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 12811 | 1 | 95388 |
| 12813 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 12812 | 1 | 95389 |
| 12814 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^0 b_1^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5951 | 1 | 95390 |
| 12815 | $J/\psi ightarrow ho^- a_2^+, ho^- ightarrow \pi^0 \pi^- \gamma^f, a_2^+ ightarrow \pi^+ \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 5952 | 1 | 95391 |
| 12816 | $J/\psi \to f_2^{'} h_1(1380), f_2^{'} \to \eta \eta, h_1(1380) \to K^0 \bar{K}^*, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma$ | 1963 | 1 | 95392 |
| 12817 | $J/\psi \to \pi^+ a_0^- f_1(1285) \gamma^F, a_0^- \to \pi^- \eta, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^F\gamma\gamma$ | 12816 | 1 | 95393 |
| 12818 | $J/\psi \to \pi^0 K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_2^{*0} \to \pi^0 \bar{K}^*, K^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 12817 | 1 | 95394 |
| 12819 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 12818 | 1 | 95395 |
| 12820 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^+ a_2^-, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 12819 | 1 | 95396 |
| 12821 | $J/\psi \to \pi^- \rho^+ K^{*+} K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 5954 | 1 | 95397 |
| 12822 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+K^-\gamma^F$ | 12821 | 1 | 95398 |
| 12823 | $J/\psi \to \eta h_1(1170) f_1(1285), \eta \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, f_1(1285) \to \pi^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12822 | 1 | 95399 |
| 12824 | $J/\psi \to \omega K^{*-}K_{1}^{'+}, \omega \to \pi^{0}\pi^{+}\pi^{-}\gamma^{f}, K^{*-} \to \pi^{0}K^{-}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 12823 | 1 | 95400 |
| 12825 | $J/\psi \to \pi^0 K^{*+} K_1^- \gamma, K^{*+} \to \pi^+ K^0, K_1^- \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 12824 | 1 | 95401 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 12826 | $J/\psi 	o \pi^- \omega \omega \bar{K}^0 K^+, \omega 	o \pi^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 12825 | 1 | 95402 |
| 12827 | $J/\psi \to K^* \bar{n} \Sigma^0, K^* \to \pi^- K^+, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^0 n$ | $\pi^0\pi^-K^+nar{n}\gamma$ | 12826 | 1 | 95403 |
| 12828 | $J/\psi \to ho^0 f_0(1370) a_1^0, ho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^0\pi^0, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12827 | 1 | 95404 |
| 12829 | $J/\psi \to \pi^0 \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, $ $\eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3763 | 1 | 95405 |
| 12830 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to \pi^-\bar{K}^0, f_1(1285) \to \pi^+\pi^-\eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1964 | 1 | 95406 |
| 12831 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12830 | 1 | 95407 |
| 12832 | $J/\psi \to \pi^0 \pi^+ K^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 12831 | 1 | 95408 |
| 12833 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \pi^+ \eta, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12832 | 1 | 95409 |
| 12834 | $J/\psi \rightarrow \eta \omega a_0^0, \eta \rightarrow \pi^0 \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^0 \rightarrow \pi^0 \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12833 | 1 | 95410 |
| 12835 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 12834 | 1 | 95411 |
| 12836 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0K^+, K_1^- \to \pi^-\bar{K}^*, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 12835 | 1 | 95412 |
| 12837 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12836 | 1 | 95413 |
| 12838 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 12837 | 1 | 95414 |
| 12839 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 K^*, K_2^{*0} \to \rho^0 \bar{K}^0, K^* \to \pi^- K^+, \rho^0 \to \pi^+ \pi^-, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12838 | 1 | 95415 |
| 12840 | $J/\psi \to K^*K^{*-}a_0^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K^0 \to K_L^0, \ \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 5957 | 1 | 95416 |
| 12841 | $J/\psi \to \pi^+ K^- p \bar{\Sigma}^{*-}, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-K^-ar{n}p$ | 12840 | 1 | 95417 |
| 12842 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 1965 | 1 | 95418 |
| 12843 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 12842 | 1 | 95419 |
| 12844 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-K^+K^-\gamma$ | 12843 | 1 | 95420 |
| 12845 | $J/\psi \to \eta f_0(1370) h_1(1170), \eta \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12844 | 1 | 95421 |
| 12846 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^- \omega a_0^+, \omega ightarrow \pi^0 \gamma, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 12845 | 1 | 95422 |
| 12847 | $J/\psi ightarrow \pi^- \eta K_S^0 K^+, \eta ightarrow \pi^0 \pi^+ \pi^-, K_S^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 12846 | 1 | 95423 |
| 12848 | $J/\psi \to \bar{K}^*K_2^{*0}, \bar{K}^* \to \pi^+K^-, K_2^{*0} \to \omega K^0, \omega \to \pi^0\pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2638 | 1 | 95424 |
| 12849 | $J/\psi \to \pi^0 \rho^+ \Sigma^- \bar{\Sigma}^0, \rho^+ \to \pi^0 \pi^+, \Sigma^- \to \pi^- n, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 12848 | 1 | 95425 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12850 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 12849 | 1 | 95426 |
| 12851 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12850 | 1 | 95427 |
| 12852 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12851 | 1 | 95428 |
| 12853 | $J/\psi \to \eta K^* \bar{K}^* \gamma, \eta \to \gamma \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma\gamma$ | 1966 | 1 | 95429 |
| 12854 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta \gamma^f, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 12853 | 1 | 95430 |
| 12855 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 5961 | 1 | 95431 |
| 12856 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^0K^+, K^{*-} \to \pi^0K^-, \eta' \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 5962 | 1 | 95432 |
| 12857 | $J/\psi 	o K^+K^-p\bar{p}$ | $K^+K^-p\bar{p}$ | 12856 | 1 | 95433 |
| 12858 | $J/\psi 	o \eta' p ar p, \eta' 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-p\bar{p}$ | 12857 | 1 | 95434 |
| 12859 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to \bar{K}^0 K^*, f_1(1420) \to \pi^+ K^0 K^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12858 | 1 | 95435 |
| 12860 | $J/\psi \to \pi^0 K^+ K^- h_1(1170), h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12859 | 1 | 95436 |
| 12861 | $J/\psi \rightarrow \pi^+ \omega a_0^-, \omega \rightarrow \pi^0 \pi^+ \pi^- \gamma^f, a_0^- \rightarrow K^0 K^-, K^0 \rightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 12860 | 1 | 95437 |
| 12862 | $J/\psi \to \pi^+\pi^-K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \omega K^+, \bar{K}^0 \to K_L^0, \omega \to \pi^0\gamma$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 12861 | 1 | 95438 |
| 12863 | $J/\psi \to \rho^0 a_2^0 \eta, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \pi^- \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12862 | 1 | 95439 |
| 12864 | $J/\psi \to \pi^0 K^* K_2^{*0}, \pi^0 \to e^+ e^- \gamma^F, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 12863 | 1 | 95440 |
| 12865 | $J/\psi \rightarrow \rho^- \omega b_1^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 12864 | 1 | 95441 |
| 12866 | $J/\psi \to \pi^0 \pi^+ \pi^- \pi^- \pi^- a_0^+ b_1^+, a_0^+ \to \pi^+ \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma\gamma$ | 12865 | 1 | 95442 |
| 12867 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K^0_S, K^{*+} \to \pi^0 K^+, K^0_S \to \pi^+ \pi^- \gamma^f \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f\gamma^f$ | 12866 | 1 | 95443 |
| 12868 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K^*, \pi^0 \to e^+ e^- \gamma^F, K^* \to \pi^- K^+$ | $e^+e^-K_L^0\pi^-K^+\gamma^F\gamma$ | 12867 | 1 | 95444 |
| 12869 | $J/\psi \to \pi^0 K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1710) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12868 | 1 | 95445 |
| 12870 | $J/\psi ightarrow \pi^0 ar{K}^0 K^* \gamma, ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^0 K^0, K^0 ightarrow K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\gamma$ | 12869 | 1 | 95446 |
| 12871 | $J/\psi \to \pi^0 K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^0 \pi^+ K^*, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 12870 | 1 | 95447 |
| 12872 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to K^+K^{*-}, \eta \to \gamma\gamma, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma$ | 12871 | 1 | 95448 |
| 12873 | $J/\psi \to \pi^0 \rho^0 \pi^+ \pi^- \rho^+ a_2^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 12872 | 1 | 95449 |
| 12874 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 12873 | 1 | 95450 |
| 12875 | $J/\psi \to \pi^- \omega a_0^+, \omega \to e^+ e^- \pi^0 \gamma^f, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $e^+e^-\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 3768 | 1 | 95451 |
| 12876 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0 \gamma^f, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 3769 | 1 | 95452 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 12877 | $J/\psi \to K^{*+}K^{*-}a_0^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, a_0^0 \to \pi^0\eta, K^0 \to K_L^0, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12876 | 1 | 95453 |
| 12878 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma^{F}$ | 12877 | 1 | 95454 |
| 12879 | $J/\psi ightarrow \eta b_1^0, \eta ightarrow \pi^0 \pi^0 \pi^0, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 12878 | 1 | 95455 |
| 12880 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 12879 | 1 | 95456 |
| 12881 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \omega\omega, h_1(1380) \to K^-K^{*+}, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12880 | 1 | 95457 |
| 12882 | $J/\psi \to K^- \eta' K_0^{*+}, \eta' \to \pi^+ \pi^- \eta, K_0^{*+} \to \pi^+ K^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 5965 | 1 | 95458 |
| 12883 | $J/\psi ightarrow \pi^- \eta K_S^0 K^+, \eta ightarrow e^+ e^- \gamma^F \gamma^f, K_S^0 ightarrow \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^-\pi^-K^+\gamma^F\gamma^f$ | 12882 | 1 | 95459 |
| 12884 | $J/\psi \to \eta_c \gamma, \eta_c \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-nar p\gamma$ | 12883 | 1 | 95460 |
| 12885 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^-K^{*+}, K^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- K^- K^-$ | 12884 | 1 | 95461 |
| 12886 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12885 | 1 | 95462 |
| 12887 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to \pi^0K^-, f_1(1285) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 12886 | 1 | 95463 |
| 12888 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ \rho^- \eta, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12887 | 1 | 95464 |
| 12889 | $J/\psi \to K^0 \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0$ | 12888 | 1 | 95465 |
| 12890 | $J/\psi \to \bar{\Sigma}^0 \Sigma^{*0} \gamma, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^0n\bar{n}\gamma\gamma$ | 12889 | 1 | 95466 |
| 12891 | $J/\psi \to \eta K^0 \bar{K}_1^0, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 12890 | 1 | 95467 |
| 12892 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12891 | 1 | 95468 |
| 12893 | $J/\psi 	o \pi^0 K^+ ar{K}_1^{'-}, ar{K}_1^{'-} 	o ho^- ar{K}^0, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 12892 | 1 | 95469 |
| 12894 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^- \pi^- \pi^- K^+ K^+$ | 12893 | 1 | 95470 |
| 12895 | $J/\psi \to \phi f_0(1710), \phi \to \pi^0 \rho^0, f_0(1710) \to \omega \omega, \rho^0 \to \pi^+ \pi^- \gamma^F, \omega \to \eta \gamma, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 12894 | 1 | 95471 |
| 12896 | $\omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ $J/\psi \to \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0,$ $K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 5966 | 1 | 95472 |
| 12897 | $J/\psi 	o \pi^+\pi^-\eta' a^0_0, \eta' 	o ho^0\gamma, a^0_0 	o \pi^0\eta, ho^0 	o \pi^+\pi^-\gamma^f, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 12896 | 1 | 95473 |
| 12898 | $J/\psi ightarrow K^+K^-f_2^\prime, f_2^\prime ightarrow \eta\eta, \eta ightarrow \pi^0\pi^0\pi^0, \eta ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 5967 | 1 | 95474 |
| 12899 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, \pi^0 \to e^+ e^- \gamma^F, K_2^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K_1^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12898 | 1 | 95475 |
| 12900 | $J/\psi \to K^+ K_2^{*-} \eta', K_2^{*-} \to \pi^0 K^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 12899 | 1 | 95476 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 12901 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 12900 | 1 | 95477 |
| 12902 | $J/\psi \to \pi^0 \pi^+ K^0 K^{*-} b_1^0, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12901 | 1 | 95478 |
| 12903 | $J/\psi \to a_2^+ \eta b_1^-, a_2^+ \to \bar{K}^0 K^+, \eta \to \gamma \gamma, b_1^- \to \pi^- \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 12902 | 1 | 95479 |
| 12904 | $J/\psi ightarrow \pi^0 \omega a_0^0, \omega ightarrow \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 12903 | 1 | 95480 |
| 12905 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^- \rho^+ \gamma^f, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12904 | 1 | 95481 |
| 12906 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 12905 | 1 | 95482 |
| 12907 | $J/\psi \to \pi^0 a_2^- \bar{K}^0 K^+, a_2^- \to \pi^0 \pi^- \omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 2640 | 1 | 95483 |
| 12908 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to K^+K^{*-}, \eta \to \pi^0\pi^+\pi^-, \eta \to \pi^0\pi^+\pi^-, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12907 | 1 | 95484 |
| 12909 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 12908 | 1 | 95485 |
| 12910 | $J/\psi \to \pi^0 K^* \bar{K}_1^0, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3771 | 1 | 95486 |
| 12911 | $J/\psi 	o \pi^0 ho^- a_0^+, ho^- 	o \pi^0 \pi^-, a_0^+ 	o ar K^0 K^+, ar K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 1512 | 1 | 95487 |
| 12912 | $J/\psi ightarrow a_2^0 K^0 ar{K}^*, a_2^0 ightarrow \pi^0 \eta, K^0 ightarrow K_L^0, ar{K}^* ightarrow \pi^0 ar{K}^0, \eta ightarrow \gamma \gamma, \ ar{K}^0 ightarrow K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\gamma\gamma$ | 12911 | 1 | 95488 |
| 12913 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 5971 | 1 | 95489 |
| 12914 | $J/\psi \to \pi^+ K^0 K^{*-} b_1^0, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 3773 | 1 | 95490 |
| 12915 | $J/\psi \to K^{*+}K^{*-}f_0(1710), K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-, f_0(1710) \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12914 | 1 | 95491 |
| 12916 | $J/\psi \to \eta \omega f_2(1270), \eta \to \gamma \gamma, \omega \to \pi^0 \gamma, f_2(1270) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\gamma^F\gamma\gamma\gamma$ | 2642 | 1 | 95492 |
| 12917 | $J/\psi \to \rho^0 K^{*-} K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12916 | 1 | 95493 |
| 12918 | $J/\psi 	o \pi^0 \pi^0 \pi^- ar{K}^0 K^+, \pi^0 	o e^+ e^- \gamma^F, ar{K}^0 	o K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}$ | 5974 | 1 | 95494 |
| 12919 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^+ \rho^-, f_1(1285) \to \pi^0 a_0^0, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, $ $\eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 12918 | 1 | 95495 |
| 12920 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 12919 | 1 | 95496 |
| 12921 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 12920 | 1 | 95497 |
| 12922 | $I/\psi \to \pi^+ \rho^- \gamma^f \ \rho^- \to \pi^0 \pi^- \ \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma^f$ | 12921 | 1 | 95498 |
| 12923 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ a_2^- \omega, \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 5975 | 1 | 95499 |
| 12924 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 12923 | 1 | 95500 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 12925 | $J/\psi 	o \omega f_0(1370) f_0(1370), \omega 	o \pi^0 \gamma, f_0(1370) 	o \pi^+ \pi^-, f_0(1370) 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12924 | 1 | 95501 |
| 12926 | $J/\psi \to K^{*+}K^{*-}\gamma^f, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 12925 | 1 | 95502 |
| 12927 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^+ \pi^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}$ | 12926 | 1 | 95503 |
| 12928 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to K^+ K^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12927 | 1 | 95504 |
| 12929 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 12928 | 1 | 95505 |
| 12930 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1710) \to K^+ K^- \gamma^f, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0 \pi^0 \pi^0 K^0_L K^+ K^- \gamma^f$ | 12929 | 1 | 95506 |
| 12931 | $J/\psi \to \pi^0 \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12930 | 1 | 95507 |
| 12932 | $J/\psi \to \rho^+ \rho^- \omega, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 5976 | 1 | 95508 |
| 12933 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12932 | 1 | 95509 |
| 12934 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 12933 | 1 | 95510 |
| 12935 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta \eta f_1(1420), \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K^0_L$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^- \gamma \gamma \gamma$ | 12934 | 1 | 95511 |
| 12936 | $J/\psi 	o \pi^0\pi^0a_2^0\pi^+ ho^-, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0\pi^-, ho^- 	o \pi^0\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 5977 | 1 | 95512 |
| 12937 | $J/\psi \to \phi f_2', \phi \to K_L^0 K_S^0, f_2' \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 12936 | 1 | 95513 |
| 12938 | $J/\psi \to \pi^- K^- K^{*+} b_1^+, K^{*+} \to \pi^+ K^0, b_1^+ \to \pi^+ \omega, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 12937 | 1 | 95514 |
| 12939 | $J/\psi \to \bar{K}^0 K_2^{*+} a_0^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \rho^+ K^0, a_0^- \to \pi^- \eta, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 426 | 1 | 95515 |
| 12940 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 12939 | 1 | 95516 |
| 12941 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 12940 | 1 | 95517 |
| 12942 | $J/\psi 	o \pi^0 \pi^+ ho^- \eta, ho^- 	o \pi^0 \pi^-, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 12941 | 1 | 95518 |
| 12943 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 2644 | 1 | 95519 |
| 12944 | $J/\psi \to \pi^0 K_2^{*-} K_0^{*+}, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K_0^{*+} \to \pi^0 K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 12943 | 1 | 95520 |
| 12945 | $J/\psi \to \rho^0 K^+ K_1^-, \rho^0 \to \pi^+ \pi^- \gamma^f, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^f$ | 12944 | 1 | 95521 |
| 12946 | $J/\psi \to K^- h_1(1170) K_1^+, h_1(1170) \to \pi^+ \rho^-, K_1^+ \to \rho^+ K^0, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12945 | 1 | 95522 |
| 12947 | $J/\psi \to \pi^0 \omega a_0^0, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{F}$ | 5980 | 1 | 95523 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 12948 | $J/\psi \to K^-K^{*+}f_0(1710), K^{*+} \to \pi^+K^0, f_0(1710) \to \omega\omega, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12947 | 1 | 95524 |
| 12949 | $J/\psi \to \pi^- \rho^+ h_1(1170) h_1(1170), \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^0 \rho^0, h_1(1170) \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12948 | 1 | 95525 |
| 12950 | $J/\psi \to \pi^0 \pi^+ \eta \omega a_0^-, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 12949 | 1 | 95526 |
| 12951 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12950 | 1 | 95527 |
| 12952 | $J/\psi \to K^0 \bar{K}^* f_2', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_2' \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 12951 | 1 | 95528 |
| 12953 | $J/\psi 	o \pi^0 K^0 \bar{K}^0_1, K^0 	o K^0_S, \bar{K}^0_1 	o \pi^+ K^{*-}_0, K^0_S 	o \pi^+ \pi^-, K^{*-}_0 	o \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 12952 | 1 | 95529 |
| 12954 | $J/\psi \to \bar{K}^0 b_1^- K_0^{*+}, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^1\pi^+\pi^-\pi^-$ | 12953 | 1 | 95530 |
| 12955 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 12954 | 1 | 95531 |
| 12956 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 12955 | 1 | 95532 |
| 12957 | $J/\psi \to a_0^0 \rho^+ a_0^-, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 12956 | 1 | 95533 |
| 12958 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^- K^{*+}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 12957 | 1 | 95534 |
| 12959 | $J/\psi \to \omega K^0 K_2^{*0}, \omega \to \pi^0 \gamma, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 12958 | 1 | 95535 |
| 12960 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \eta' b_1^-, \eta' \to \rho^0 \gamma, b_1^- \to \pi^- \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 12959 | 1 | 95536 |
| 12961 | $J/\psi \to K^{*-}\phi K_1^+, K^{*-} \to \pi^0 K^-, \phi \to K_L^0 K_S^0, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^0 \pi^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 5981 | 1 | 95537 |
| 12962 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 12961 | 1 | 95538 |
| 12963 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \eta K^+ K^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 5982 | 1 | 95539 |
| 12964 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 628 | 1 | 95540 |
| 12965 | $J/\psi \to \eta_c \gamma, \eta_c \to K^{*+}K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 12964 | 1 | 95541 |
| 12966 | $J/\psi \to \eta K^{*-}K_0^{*+}, \eta \to \pi^0\pi^0\pi^0, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^0K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 12965 | 1 | 95542 |
| 12967 | $J/\psi \to ho^0 ho^- \bar{K}^0 K^+, ho^0 \to \pi^+ \pi^- \gamma^f, ho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^f$ | 5984 | 1 | 95543 |
| 12968 | $J/\psi \to \omega K^- K_0^{*+}, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 5985 | 1 | 95544 |
| 12969 | $J/\psi \to \pi^0 \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 12968 | 1 | 95545 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 12970 | $J/\psi \to K_1^- K_1^{'+}, K_1^- \to \rho^- \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 12969 | 1 | 95546 |
| 12971 | $J/\psi \to \pi^0 \pi^+ a_0^- \gamma^F, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 12970 | 1 | 95547 |
| 12972 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^- \gamma^f, \Lambda \to \pi^- p, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^+\pi^-\pi^-ar{n}p\gamma^f$ | 12971 | 1 | 95548 |
| 12973 | $J/\psi \to K^{*+} \bar{p} \Sigma^0, K^{*+} \to \pi^+ K^0, \Sigma^0 \to \Lambda \gamma, K^0 \to K_S^0, \Lambda \to \pi^- p, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma$ | 12972 | 1 | 95549 |
| 12974 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 12973 | 1 | 95550 |
| 12975 | $J/\psi \to \rho^- \bar{K}^* K^{*+} \gamma, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 5986 | 1 | 95551 |
| 12976 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 12975 | 1 | 95552 |
| 12977 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K^+ a_1^-, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 5987 | 1 | 95553 |
| 12978 | $J/\psi \to a_0^+ f_0(1370) a_1^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12977 | 1 | 95554 |
| 12979 | $J/\psi ightarrow \pi^+ \eta' b_1^-, \eta' ightarrow \pi^+ \pi^- \eta, b_1^- ightarrow \pi^- \omega, \eta ightarrow \pi^+ \pi^- \gamma^F, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 12978 | 1 | 95555 |
| 12980 | $J/\psi \to \bar{K}^0 p \bar{\Sigma}^{*-}, \bar{K}^0 \to K_L^0, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0 K_L^0 \pi^- \bar{n} p$ | 948 | 1 | 95556 |
| 12981 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^0 \bar{K}^*, f_1(1420) \to \pi^- \bar{K}^0 K^+, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 12980 | 1 | 95557 |
| 12982 | $J/\psi \to \bar{K}^*K_2^0, \bar{K}^* \to \pi^+K^-, K_2^0 \to \pi^-K_2^{*+}, K_2^{*+} \to \pi^+\pi^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12981 | 1 | 95558 |
| 12983 | $J/\psi \to \eta_c \gamma, \eta_c \to f_2' h_1(1380), f_2' \to K_L^0 K_L^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 K_L^0 K_L^0 \pi^+ K^- \gamma$ | 12982 | 1 | 95559 |
| 12984 | $J/\psi \to \rho^0 \bar{K}^* K_0^0, \rho^0 \to \pi^+ \pi^- \gamma^F, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 12983 | 1 | 95560 |
| 12985 | $J/\psi \to \rho^0 \eta f_2(1270), \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, f_2(1270) \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12984 | 1 | 95561 |
| 12986 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^- \gamma^f, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 12985 | 1 | 95562 |
| 12987 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^*, K_1^- \to \pi^- \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 12986 | 1 | 95563 |
| 12988 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 12987 | 1 | 95564 |
| 12989 | $J/\psi ightarrow ho^0 ho^0 \omega, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 12988 | 1 | 95565 |
| 12990 | $J/\psi \to \pi^+ \rho^- K^- K^{*+}, \rho^- \to \pi^- \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 12989 | 1 | 95566 |
| 12991 | $J/\psi \to \rho^0 K^+ K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K_2^{*-} \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12990 | 1 | 95567 |
| 12992 | $J/\psi \to a_2^0 K^+ K_1^-, a_2^0 \to \pi^- \rho^+, K_1^- \to \rho^0 K^-, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 12991 | 1 | 95568 |
| 12993 | $J/\psi \to \pi^- \rho^+ a_0^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 12992 | 1 | 95569 |
| 12994 | $J/\psi \to \pi^0 \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 12993 | 1 | 95570 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 12995 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \pi^0 K^{*+}, \phi \to K^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^+K^-K^-$ | 5989 | 1 | 95571 |
| 12996 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 12995 | 1 | 95572 |
| 12997 | $J/\psi \to \pi^0 \bar{K}^* K^{*+} b_1^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 12996 | 1 | 95573 |
| 12998 | $J/\psi ightarrow a_0^0 b_1^0, a_0^0 ightarrow \pi^0 \eta, b_1^0 ightarrow \pi^0 \omega, \eta ightarrow e^+ e^- \gamma^F, \omega ightarrow \pi^0 \gamma$ | $e^+e^-\pi^0\pi^0\pi^0\gamma^F\gamma$ | 12997 | 1 | 95574 |
| 12999 | $J/\psi \to \pi^+\pi^-a_2^+a_0^-, a_2^+ \to \pi^0\pi^+\omega, a_0^- \to \pi^-\eta, \omega \to \pi^0\pi^+\pi^-, \eta \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 12998 | 1 | 95575 |
| 13000 | $J/\psi \to K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 12999 | 1 | 95576 |
| 13001 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 13000 | 1 | 95577 |
| 13002 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^0K^+, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13001 | 1 | 95578 |
| 13003 | $J/\psi \to \eta \omega \eta', \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \rho^0 \gamma, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 13002 | 1 | 95579 |
| 13004 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 1971 | 1 | 95580 |
| 13005 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^- \rho^+, a_2^- \to \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 2648 | 1 | 95581 |
| 13006 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ \rho^- a_0^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta,$ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 13005 | 1 | 95582 |
| 13007 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^+ \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 5992 | 1 | 95583 |
| 13008 | $J/\psi 	o ho^0 ho^0 \omega, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^- \gamma^F, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 13007 | 1 | 95584 |
| 13009 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 2649 | 1 | 95585 |
| 13010 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13009 | 1 | 95586 |
| 13011 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+K^-K^-$ | 13010 | 1 | 95587 |
| 13012 | $J/\psi 	o \pi^0 \pi^+ \pi^- K^0 \bar{K}^0, K^0 	o K_L^0, \bar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13011 | 1 | 95588 |
| 13013 | $J/\psi \to \eta \phi f_1(1420), \eta \to \pi^0 \pi^+ \pi^-, \phi \to K^+ K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13012 | 1 | 95589 |
| 13014 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 13013 | 1 | 95590 |
| 13015 | $J/\psi \to \pi^+ \eta' a_1^-, \eta' \to \pi^+ \pi^- \eta, a_1^- \to \rho^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13014 | 1 | 95591 |
| 13016 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^+ \pi^+ \pi^- \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13015 | 1 | 95592 |
| 13017 | $J/\psi \to \bar{K}^*K^+b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13016 | 1 | 95593 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 13018 | $J/\psi \to \rho^+ f_2(1270) K^0 K^-, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to K_L^0 K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 13017 | 1 | 95594 |
| 13019 | $J/\psi \to K^- K^{*+} \phi, K^{*+} \to \pi^0 K^+, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13018 | 1 | 95595 |
| 13020 | $J/\psi \to \pi^0 K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^{*+}, K_2^{*0} \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2650 | 1 | 95596 |
| 13021 | $J/\psi \to \eta K^- K_1^+, \eta \to \gamma \gamma, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 13020 | 1 | 95597 |
| 13022 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13021 | 1 | 95598 |
| 13023 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0\gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 5995 | 1 | 95599 |
| 13024 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13023 | 1 | 95600 |
| 13025 | $J/\psi \to \pi^0 K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13024 | 1 | 95601 |
| 13026 | $J/\psi \to \eta K^{*-}K_2^{*+}, \eta \to \pi^0\pi^0\pi^0, K^{*-} \to \pi^0K^-, K_2^{*+} \to \pi^0\pi^+K^*, K^* \to \pi^-K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13025 | 1 | 95602 |
| 13027 | $J/\psi \to K^+ \phi K_1^-, \phi \to K_L^0 K_S^0, K_1^- \to \pi^0 K_0^{*-}, K_S^0 \to \pi^0 \pi^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 13026 | 1 | 95603 |
| 13028 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}$ | 13027 | 1 | 95604 |
| 13029 | $J/\psi \to \pi^+ K_2^{*0} K_0^{*-}, K_2^{*0} \to \rho^- K^+, K_0^{*-} \to \pi^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13028 | 1 | 95605 |
| 13030 | $J/\psi \to \pi^+ \Delta^0 \bar{\Delta}^+ \gamma^f, \Delta^0 \to \pi^- p, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^+\pi^-\pi^-\bar{n}p\gamma^f$ | 13029 | 1 | 95606 |
| 13031 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta', \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 3783 | 1 | 95607 |
| 13032 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^- \bar{K}^*, \phi \to K_L^0 K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 196 | 1 | 95608 |
| 13033 | $J/\psi \to \rho^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \eta \gamma, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-$ | 13032 | 1 | 95609 |
| 13034 | $J/\psi \to \pi^+ \omega K^* K^-, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13033 | 1 | 95610 |
| 13035 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 13034 | 1 | 95611 |
| 13036 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \pi^0 \pi^0 \pi^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 13035 | 1 | 95612 |
| 13037 | $J/\psi \to \pi^0 K^0 K^- a_0^+, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 13036 | 1 | 95613 |
| 13038 | $J/\psi \to \rho^- \eta a_0^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 13037 | 1 | 95614 |
| 13039 | $J/\psi ightarrow \pi^0 a_2^0 \pi^- ho^+, a_2^0 ightarrow \pi^0 \eta, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 13038 | 1 | 95615 |
| 13040 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 13039 | 1 | 95616 |
| 13041 | $J/\psi \to K^0 b_1^+ K_1^-, K^0 \to K_L^0, b_1^+ \to \pi^+ \omega, K_1^- \to \pi^0 K_0^{*-}, \omega \to \pi^0 \gamma, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma$ | 13040 | 1 | 95617 |
| 13042 | $J/\psi \to \rho^0 \rho^- b_1^+, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^- \gamma^f, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13041 | 1 | 95618 |
| 13043 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 13042 | 1 | 95619 |
| 13044 | $J/\psi 	o \pi^0 ar{K}^* K^+ a_1^-, ar{K}^* 	o \pi^0 ar{K}^0, a_1^- 	o \pi^0 ho^-, ar{K}^0 	o K_L^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 13043 | 1 | 95620 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13045 | $J/\psi \to \pi^+ K^* \bar{K}^* a_0^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^- \to \pi^- \eta, \bar{K}^0 \to K_L^0, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 5998 | 1 | 95621 |
| 13046 | $J/\psi \to K^0 K^0 \bar{K}^0 \bar{K}^0_1, K^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13045 | 1 | 95622 |
| 13047 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13046 | 1 | 95623 |
| 13048 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \eta \eta, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13047 | 1 | 95624 |
| 13049 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^{*-} \eta' \gamma^f, K^{*-} \to \pi^0 K^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 13048 | 1 | 95625 |
| 13050 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^{0}K_{L}^{0}\pi^{-}K^{+}K^{+}K^{-}\gamma$ | 13049 | 1 | 95626 |
| 13051 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^0 K^0, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 13050 | 1 | 95627 |
| 13052 | $J/\psi \to K^{*+}K_2^{*-}\gamma, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 13051 | 1 | 95628 |
| 13053 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-\gamma^f, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 13052 | 1 | 95629 |
| 13054 | $J/\psi \to \pi^0 \omega K^0 \bar{K}_0^{*0}, \omega \to \pi^+ \pi^- \gamma^F, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 13053 | 1 | 95630 |
| 13055 | $J/\psi \to \pi^0 \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13054 | 1 | 95631 |
| 13056 | $J/\psi \to \omega K^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 13055 | 1 | 95632 |
| 13057 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \eta', \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma$ | 13056 | 1 | 95633 |
| 13058 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \omega\omega, \omega \to \pi^0\gamma, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 13057 | 1 | 95634 |
| 13059 | $J/\psi \to \pi^+ \rho^+ \rho^- b_1^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 13058 | 1 | 95635 |
| 13060 | $J/\psi \to K^0 f_0(1370) \bar{K}_1^0, K^0 \to K_S^0, f_0(1370) \to \pi^+\pi^-, \bar{K}_1^0 \to \pi^+\pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 2652 | 1 | 95636 |
| 13061 | $J/\psi \to K^{*+}\phi K_1^-, K^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^+K^-K^-$ | 13060 | 1 | 95637 |
| 13062 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta h_1(1380), \eta \to \gamma \gamma, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma\gamma$ | 13061 | 1 | 95638 |
| 13063 | $J/\psi \to \eta \phi, \eta \to e^+e^-\gamma^F\gamma^f, \phi \to K_L^0K_S^0, K_S^0 \to \pi^+\pi^-$ | $e^+e^-K^0_L\pi^+\pi^-\gamma^F\gamma^f$ | 13062 | 1 | 95639 |
| 13064 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 6000 | 1 | 95640 |
| 13065 | $J/\psi \to K_2^{*+}K_1^-, K_2^{*+} \to \pi^0 K^+, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6001 | 1 | 95641 |
| 13066 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \phi, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 13065 | 1 | 95642 |
| 13067 | $J/\psi \to \rho^- \bar{\Sigma}^0 \Sigma^+, \rho^- \to \pi^0 \pi^-, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Sigma^+ \to \pi^0 p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^-\bar{n}p\gamma$ | 13066 | 1 | 95643 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 13068 | $J/\psi \to \pi^0 \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 3786 | 1 | 95644 |
| 13069 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6003 | 1 | 95645 |
| 13070 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \omega\omega, h_1(1380) \to K^0\bar{K}^*, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^+K^-, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 6004 | 1 | 95646 |
| 13071 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^{*+} K^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 13070 | 1 | 95647 |
| 13072 | $J/\psi \to \eta \bar{K}^0 K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K_2^{*0} \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 13071 | 1 | 95648 |
| 13073 | $J/\psi \to K_0^{*-}K_1^{'+}, K_0^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0 K_L^0\pi^- K^+$ | 13072 | 1 | 95649 |
| 13074 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^+ \pi^- \gamma^F \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 13073 | 1 | 95650 |
| 13075 | $J/\psi \to K^* \bar{K}_1^0, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 6005 | 1 | 95651 |
| 13076 | $J/\psi \to \eta_c \gamma, \eta_c \to \Sigma^- \bar{\Sigma}^{*+}, \Sigma^- \to \pi^- n, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 13075 | 1 | 95652 |
| 13077 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13076 | 1 | 95653 |
| 13078 | $J/\psi \to \rho^+ K^0 K^{*-} \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 13077 | 1 | 95654 |
| 13079 | $J/\psi \to \eta' b_1^0, \eta' \to \pi^0 \pi^0 \eta, b_1^0 \to \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 13078 | 1 | 95655 |
| 13080 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \omega K^+, \bar{K}_1^{'-} \to \pi^+ \pi^- K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13079 | 1 | 95656 |
| 13081 | $J/\psi \to \pi^+ \rho^- \bar{K}^0 K_1^{'0}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^0 K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 13080 | 1 | 95657 |
| 13082 | $J/\psi \to K^0 \bar{K}_0^{*0} \gamma, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 3787 | 1 | 95658 |
| 13083 | $J/\psi \to \pi^+ a_2^- f_2(1270), a_2^- \to \rho^0 \pi^-, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 13082 | 1 | 95659 |
| 13084 | $J/\psi \to \bar{K}^* f_0(1370) K_0^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^+ \pi^-, K_0^0 \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 13083 | 1 | 95660 |
| 13085 | $J/\psi \to \omega f_0(1370)a_1^0, \omega \to \pi^0\pi^+\pi^-, f_0(1370) \to \rho^0\rho^0, a_1^0 \to \pi^+\rho^-, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13084 | 1 | 95661 |
| 13086 | $J/\psi \to \rho^- \bar{K}^0 K^+ f_1(1420), \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-\pi^-K^+K^+$ | 13085 | 1 | 95662 |
| 13087 | $J/\psi \to \pi^+ K^0 K_2^{*-} \eta', K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 13086 | 1 | 95663 |
| 13088 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, $ $\pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma\gamma$ | 13087 | 1 | 95664 |
| 13089 | $J/\psi \to \pi^+ K^+ K^{*-} a_1^-, K^{*-} \to \pi^0 K^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3788 | 1 | 95665 |
| 13090 | $J/\psi \to \pi^- \bar{K}^0 K_1^+ \gamma^F, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 6008 | 1 | 95666 |
| 13091 | $J/\psi ightarrow \omega \eta', \omega ightarrow \pi^0 \pi^+ \pi^-, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 2653 | 1 | 95667 |
| 13092 | $J/\psi ightarrow ho^0 K^0 ar K^0 \gamma, ho^0 ightarrow \pi^+ \pi^-, K^0 ightarrow K_L^0, ar K^0 ightarrow K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 13091 | 1 | 95668 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13093 | $J/\psi \to \pi^0 K^+ K^- f_0(1370), f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 13092 | 1 | 95669 |
| 13094 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 13093 | 1 | 95670 |
| 13095 | $J/\psi \to \eta h_1(1170)a_1^0, \eta \to \pi^0\pi^0\pi^0, h_1(1170) \to \pi^-\rho^+, a_1^0 \to \pi^+\rho^-, \pi^0 \to e^+e^-\gamma^F\gamma^f, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 3790 | 1 | 95671 |
| 13096 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | 13095 | 1 | 95672 |
| 13097 | $J/\psi \to K^- K^{*+} \eta', K^{*+} \to \pi^+ K^0, \eta' \to \pi^0 \pi^0 \eta, K^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 13096 | 1 | 95673 |
| 13098 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \rho^-K^0, K_1^{'+} \to \pi^+K^*, \rho^- \to \pi^0\pi^-, K^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13097 | 1 | 95674 |
| 13099 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13098 | 1 | 95675 |
| 13100 | $J/\psi \to \pi^0 \pi^+ a_1^0 a_1^-, a_1^0 \to \pi^- \rho^+, a_1^- \to \pi^0 \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 13099 | 1 | 95676 |
| 13101 | $J/\psi 	o \pi^0\pi^0 ho^-a_2^+, ho^- 	o \pi^0\pi^-, a_2^+ 	o \pi^0 ho^+, ho^+ 	o \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 13100 | 1 | 95677 |
| 13102 | $J/\psi 	o ar{K}_0^{*0} K_1^0, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, K_1^0 	o ho^- K^+, ar{K}^0 	o K_L^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 13101 | 1 | 95678 |
| 13103 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 13102 | 1 | 95679 |
| 13104 | $J/\psi ightarrow \eta' \phi, \eta' ightarrow ho^0 \gamma, \phi ightarrow \pi^- ho^+, ho^0 ightarrow \pi^+ \pi^-, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13103 | 1 | 95680 |
| 13105 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \omega p \bar{p} \gamma^f, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-par p\gamma\gamma^f$ | 13104 | 1 | 95681 |
| 13106 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \omega b_1^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 13105 | 1 | 95682 |
| 13107 | $J/\psi 	o \pi^0 \eta K^- K^{*+}, \eta 	o \pi^0 \pi^+ \pi^-, K^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 13106 | 1 | 95683 |
| 13108 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \gamma, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 13107 | 1 | 95684 |
| 13109 | $J/\psi \to \pi^+\pi^-K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^0K^+, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 6011 | 1 | 95685 |
| 13110 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to e^+ e^- \pi^0 \gamma^f, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $e^+e^-\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 13109 | 1 | 95686 |
| 13111 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 13110 | 1 | 95687 |
| 13112 | $J/\psi \to \eta K^* \bar{K}^0_1, \eta \to \gamma \gamma, K^* \to \pi^- K^+, \bar{K}^0_1 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 13111 | 1 | 95688 |
| 13113 | $J/\psi 	o ar{K}^0 K^* \phi, ar{K}^0 	o K^0_S, K^* 	o \pi^0 K^0, \phi 	o K^0_L K^0_S, K^0_S 	o \pi^0 \pi^0, \ K^0 	o K^0_L, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 13112 | 1 | 95689 |
| 13114 | $J/\psi \to \pi^0 \eta' b_1^0, \eta' \to \pi^0 \pi^0 \eta, b_1^0 \to \pi^0 \omega, \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 13113 | 1 | 95690 |
| 13115 | $J/\psi ightarrow \pi^+ \Delta^0 \bar{\Delta}^+, \Delta^0 ightarrow \pi^0 n, \bar{\Delta}^+ ightarrow \pi^0 ar{p}, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+nar{p}\gamma^F$ | 13114 | 1 | 95691 |
| 13116 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to \bar{K}^0K^*, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 13115 | 1 | 95692 |
| 13117 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 13116 | 1 | 95693 |
| 13118 | $J/\psi \rightarrow \eta_c \gamma, \eta_c \rightarrow \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \rightarrow K_S^0, K^{*+} \rightarrow \pi^+ K^0, K_S^0 \rightarrow \pi^0 \pi^0, K^0 \rightarrow K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 13117 | 1 | 95694 |
| 13119 | $J/\psi \to \pi^+\pi^-K^+K_1^-\gamma^F, K_1^- \to \rho^0K^-, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 6012 | 1 | 95695 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13120 | $J/\psi \to \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to K^+ K^-$ | $\pi^0 \pi^0 \pi^+ \pi^- K^+ K^- \gamma^f$ | 13119 | 1 | 95696 |
| 13121 | $J/\psi \to \rho^0 K^+ K_1^- \gamma^F, \rho^0 \to \pi^+ \pi^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 13120 | 1 | 95697 |
| 13122 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 13121 | 1 | 95698 |
| 13123 | $J/\psi \to \omega a_0^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma,$ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 13122 | 1 | 95699 |
| 13124 | $J/\psi \to K^0 \bar{K}^0 b_1^0 \gamma, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13123 | 1 | 95700 |
| 13125 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K_1^+ \to \rho^0 K^+, \bar{K}^* \to \pi^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6013 | 1 | 95701 |
| 13126 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^0 K^{*-}, K_1^+ \to \omega K^+, K^{*-} \to \pi^0 K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 3791 | 1 | 95702 |
| 13127 | $J/\psi \to \pi^- a_2^+ h_1(1170) \gamma^F, a_2^+ \to \rho^0 \pi^+, h_1(1170) \to \pi^+ \rho^- \gamma^f, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f$ | 13126 | 1 | 95703 |
| 13128 | $J/\psi \to p\bar{p}f_0(1370), f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma^F$ | 1517 | 1 | 95704 |
| 13129 | $J/\psi \to \rho^0 \pi^+ \pi^+ \pi^- \rho^- a_0^0, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13128 | 1 | 95705 |
| 13130 | $J/\psi \to \rho^- a_2^+ \eta', \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \eta' \to \pi^+ \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13129 | 1 | 95706 |
| 13131 | $J/\psi \to \Sigma^0 \bar{\Sigma}^{*0}, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^{*0} \to \pi^0 \bar{\Lambda}, \Lambda \to \pi^- p, \pi^0 \to e^+ e^- \gamma^F, \bar{\Lambda} \to \pi^0 \bar{n}$ | $e^+e^-\pi^0\pi^-ar{n}p\gamma^F\gamma$ | 13130 | 1 | 95707 |
| 13132 | $J/\psi \to \pi^0 \eta K^+ K^- h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13131 | 1 | 95708 |
| 13133 | $J/\psi \to \pi^+ K^* K^{*-} \gamma^f, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 13132 | 1 | 95709 |
| 13134 | $J/\psi \to \pi^0 \pi^+ \bar{K}^0 K^* b_1^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13133 | 1 | 95710 |
| 13135 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 13134 | 1 | 95711 |
| 13136 | $J/\psi \to ho^0 \bar{K}^0 K^*, ho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 13135 | 1 | 95712 |
| 13137 | $J/\psi \to \pi^0 K^* \bar{K}^* a_1^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13136 | 1 | 95713 |
| 13138 | $J/\psi \to \pi^+ K^* K^{*-} b_1^0, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13137 | 1 | 95714 |
| 13139 | $J/\psi \to \pi^+ \rho^- \rho^- \bar{K}^* K^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13138 | 1 | 95715 |
| 13140 | $J/\psi \to \rho^- b_1^+ h_1(1170), \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, h_1(1170) \to \pi^0 \rho^0, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 13139 | 1 | 95716 |
| 13141 | $J/\psi \to \phi f_0(2020), \phi \to K_L^0 K_S^0, f_0(2020) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma$ | 13140 | 1 | 95717 |
| 13142 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \\ \eta \to \gamma \gamma$ | $\pi^0\pi^0K^0_LK^0_L\gamma\gamma$ | 13141 | 1 | 95718 |
| 13143 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to K^+ \gamma$ | $\pi^0\pi^0K^+K^-\gamma$ | 13142 | 1 | 95719 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 13144 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^0 \to K^0_S, K^{*-}_0 \to \pi^- \bar{K}^0, K^0_S \to \pi^0 \pi^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13143 | 1 | 95720 |
| 13145 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to \pi^-\bar{K}^0, f_1(1285) \to \pi^+a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to K^0K^-, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 6016 | 1 | 95721 |
| 13146 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13145 | 1 | 95722 |
| 13147 | $J/\psi \to \pi^0\pi^-a_2^+\eta, a_2^+ \to \pi^0\rho^+, \eta \to \gamma\gamma, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 13146 | 1 | 95723 |
| 13148 | $J/\psi \to \pi^0 K^{*+} K^{*-} \phi, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, \phi \to \pi^+ \rho^-, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 13147 | 1 | 95724 |
| 13149 | $J/\psi \to K^+ K^{*-} \gamma^F, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-\pi^-K^+\gamma^F\gamma^f$ | 13148 | 1 | 95725 |
| 13150 | $J/\psi \to \pi^+\pi^-\bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13149 | 1 | 95726 |
| 13151 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 f_0(1370) h_1(1170), f_0(1370) \to \pi^0 \pi^0, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 13150 | 1 | 95727 |
| 13152 | $J/\psi \to K^{*-}K_1^+, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 13151 | 1 | 95728 |
| 13153 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \omega K^+, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13152 | 1 | 95729 |
| 13154 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \omega \omega, \omega \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13153 | 1 | 95730 |
| 13155 | $J/\psi ightarrow \eta K^0 ar{K}^0 \gamma, \eta ightarrow \gamma \gamma, K^0 ightarrow K_L^0, ar{K}^0 ightarrow K_L^0$ | $K^0_L K^0_L \gamma \gamma \gamma$ | 6017 | 1 | 95731 |
| 13156 | $J/\psi \to ho^0 \pi^- \bar{K}^0 K^+, ho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 13155 | 1 | 95732 |
| 13157 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13156 | 1 | 95733 |
| 13158 | $J/\psi 	o \eta \bar K^0 K^*, \eta 	o \pi^+ \pi^- \gamma^F, \bar K^0 	o K_L^0, K^* 	o \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 13157 | 1 | 95734 |
| 13159 | $J/\psi \to \eta \omega f_1(1285), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13158 | 1 | 95735 |
| 13160 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 13159 | 1 | 95736 |
| 13161 | $J/\psi \to \pi^0 \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13160 | 1 | 95737 |
| 13162 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^+ K_0^0, \eta \to \pi^0 \pi^+ \pi^-, K_0^0 \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 13161 | 1 | 95738 |
| 13163 | $J/\psi 	o \eta K^+K^-\gamma^F, \eta 	o \pi^+\pi^-\gamma^F$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma^F$ | 13162 | 1 | 95739 |
| 13164 | $J/\psi \to \pi^0 \pi^- \eta K_2^{*0} K^+, \eta \to \gamma \gamma, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma$ | 13163 | 1 | 95740 |
| 13165 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to \pi^+\pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13164 | 1 | 95741 |
| 13166 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 13165 | 1 | 95742 |
| 13167 | $J/\psi \to \pi^- \rho^+ f_2(1270) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 13166 | 1 | 95743 |
| 13168 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13167 | 1 | 95744 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 13169 | $J/\psi \to \pi^0 a_2^0 \pi^+ \rho^- \eta, a_2^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 13168 | 1 | 95745 |
| 13170 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13169 | 1 | 95746 |
| 13171 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6018 | 1 | 95747 |
| 13172 | $J/\psi \to \pi^- \eta' b_1^+, \eta' \to \pi^0 \pi^0 \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13171 | 1 | 95748 |
| 13173 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13172 | 1 | 95749 |
| 13174 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma\gamma$ | 13173 | 1 | 95750 |
| 13175 | $J/\psi \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^+ \rho^-, K^{*+} \to \pi^0 K^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 13174 | 1 | 95751 |
| 13176 | $J/\psi \rightarrow \rho^+ \eta a_0^-, \rho^+ \rightarrow \pi^0 \pi^+, \eta \rightarrow \pi^0 \pi^+ \pi^-, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13175 | 1 | 95752 |
| 13177 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta \gamma^f, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0K^0_L\pi^+\pi^-\gamma^F\gamma\gamma\gamma^f$ | 13176 | 1 | 95753 |
| 13178 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^0K^+, \phi \to \eta\gamma, \eta \to \gamma\gamma$ | $\pi^0 K^+ K^- \gamma \gamma \gamma$ | 6019 | 1 | 95754 |
| 13179 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^0K^+, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 13178 | 1 | 95755 |
| 13180 | $J/\psi \to ho^0 K^{*-} K_1^+, ho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13179 | 1 | 95756 |
| 13181 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{F}$ | 13180 | 1 | 95757 |
| 13182 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-\gamma^F\gamma^f, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \gamma^F \gamma^f$ | 13181 | 1 | 95758 |
| 13183 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 13182 | 1 | 95759 |
| 13184 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \eta \to \pi^+ \pi^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 13183 | 1 | 95760 |
| 13185 | $J/\psi \to \pi^0 K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \bar{K}^*, K_1^0 \to \rho^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 13184 | 1 | 95761 |
| 13186 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 13185 | 1 | 95762 |
| 13187 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 6020 | 1 | 95763 |
| 13188 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_0(1370) \to \eta \eta, K_S^0 \to \pi^0 \pi^0, $ $\eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 3793 | 1 | 95764 |
| 13189 | $J/\psi 	o a_2^+ \omega a_0^-, a_2^+ 	o ho^0 \pi^+, \omega 	o \pi^+ \pi^-, a_0^- 	o \pi^- \eta, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13188 | 1 | 95765 |
| 13190 | $J/\psi \to \rho^+ K^0 K^{*-} \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 13189 | 1 | 95766 |
| 13191 | $J/\psi \to \bar{K}^0 a_0^0 K_1^{'0}, \bar{K}^0 \to K_L^0, a_0^0 \to \pi^0 \eta, K_1^{'0} \to \pi^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13190 | 1 | 95767 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 13192 | $J/\psi \to K^0 K_2^{*0} \phi, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, \phi \to K^+ K^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 13191 | 1 | 95768 |
| 13193 | $J/\psi \to \pi^- \rho^+ \rho^- a_2^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 13192 | 1 | 95769 |
| 13194 | $J/\psi \to \eta a_0^- b_1^+, \eta \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13193 | 1 | 95770 |
| 13195 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 K^- K^{*+}, a_2^0 \to \pi^+ \rho^-, K^{*+} \to \pi^0 K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13194 | 1 | 95771 |
| 13196 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \rho^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13195 | 1 | 95772 |
| 13197 | $J/\psi \to \pi^0 \omega K^{*+} K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13196 | 1 | 95773 |
| 13198 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-} f_0(1370), K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6022 | 1 | 95774 |
| 13199 | $J/\psi \to \rho^0 \pi^+ b_1^- \gamma^F, \rho^0 \to \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^F$ | 13198 | 1 | 95775 |
| 13200 | $J/\psi ightarrow \eta \Lambda ar{\Lambda}, \eta ightarrow \pi^0 \pi^0 \pi^0, \Lambda ightarrow \pi^0 n, ar{\Lambda} ightarrow \pi^+ ar{p}$ | $\pi^0\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 13199 | 1 | 95776 |
| 13201 | $J/\psi \to \pi^0 \pi^0 \pi^- \rho^+ a_0^0, \rho^+ \to \pi^0 \pi^+, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 2655 | 1 | 95777 |
| 13202 | $J/\psi \to \rho^0 \pi^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K^0_S, K^{*+} \to \pi^0 K^+, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 13201 | 1 | 95778 |
| 13203 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1380) \to K^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^- \pi^- K^+$ | 13202 | 1 | 95779 |
| 13204 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 13203 | 1 | 95780 |
| 13205 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 13204 | 1 | 95781 |
| 13206 | $J/\psi \to \omega K^{*+} \bar{K}_{1}^{'-}, \omega \to \pi^{0} \pi^{+} \pi^{-}, K^{*+} \to \pi^{+} K^{0}, \bar{K}_{1}^{'-} \to \pi^{0} K^{*-}, K^{0} \to K_{S}^{0}, K^{*-} \to \pi^{0} K^{-}, K_{S}^{0} \to \pi^{+} \pi^{-}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13205 | 1 | 95782 |
| 13207 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta, f_0(1370) \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 13206 | 1 | 95783 |
| 13208 | $J/\psi 	o K^*K^{*-}a_0^+, K^* 	o \pi^-K^+, K^{*-} 	o \pi^0K^-, a_0^+ 	o \pi^+\eta, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13207 | 1 | 95784 |
| 13209 | $J/\psi \to \eta a_0^+ b_1^-, \eta \to \gamma \gamma, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \gamma \gamma, \ \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma\gamma$ | 13208 | 1 | 95785 |
| 13210 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 13209 | 1 | 95786 |
| 13211 | $J/\psi \to \rho^0 \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 13210 | 1 | 95787 |
| 13212 | $J/\psi \to \eta \phi, \eta \to \pi^0 \pi^+ \pi^-, \phi \to \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13211 | 1 | 95788 |
| 13213 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_1^+ \to \omega K^+, K_0^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 13212 | 1 | 95789 |
| 13214 | $J/\psi 	o ar{K}^0 \Delta^0 ar{\Lambda}, ar{K}^0 	o K^0_S, \Delta^0 	o \pi^- p, ar{\Lambda} 	o \pi^0 ar{n}, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 13213 | 1 | 95790 |
| 13215 | $J/\psi \to K^{*-}p\bar{\Lambda}, K^{*-} \to \pi^-\bar{K}^0, \bar{\Lambda} \to \pi^+\bar{p}, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-par p$ | 13214 | 1 | 95791 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 13216 | $J/\psi 	o \eta K^0 ar{K}^*, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K^0_S, ar{K}^* 	o \pi^0 ar{K}^0, K^0_S 	o \pi^0 \pi^0, \ ar{K}^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 13215 | 1 | 95792 |
| 13217 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \gamma, a_0^- ightarrow K^0 K^-, K^0 ightarrow K^0_L$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 13216 | 1 | 95793 |
| 13218 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \bar{K}^0 \gamma, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13217 | 1 | 95794 |
| 13219 | $J/\psi \to \rho^{+} K^{*} \bar{K}_{1}^{'-}, \rho^{+} \to \pi^{0} \pi^{+}, K^{*} \to \pi^{-} K^{+}, \bar{K}_{1}^{'-} \to \pi^{-} \bar{K}^{*}, \bar{K}^{*} \to \pi^{0} \bar{K}^{0}, \\ \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0} \pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13218 | 1 | 95795 |
| 13220 | $J/\psi 	o \pi^0 \eta \omega f_0(1370), \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \gamma, f_0(1370) 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 13219 | 1 | 95796 |
| 13221 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 13220 | 1 | 95797 |
| 13222 | $J/\psi 	o \pi^- b_1^+, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13221 | 1 | 95798 |
| 13223 | $J/\psi \to \pi^0 \rho^+ K^* K^- \gamma^f, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+$ | $\pi^0 \pi^0 \pi^+ \pi^- K^+ K^- \gamma^f$ | 13222 | 1 | 95799 |
| 13224 | $J/\psi \to \pi^0 \rho^+ a_2^- \eta, \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^-, \eta \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13223 | 1 | 95800 |
| 13225 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 13224 | 1 | 95801 |
| 13226 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13225 | 1 | 95802 |
| 13227 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^+ \pi^- \omega, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 13226 | 1 | 95803 |
| 13228 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \bar{K}^0 K^+, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K^+K^-$ | 6024 | 1 | 95804 |
| 13229 | $J/\psi \to K^+K^-f_0(1370), f_0(1370) \to \rho^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 13228 | 1 | 95805 |
| 13230 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13229 | 1 | 95806 |
| 13231 | $J/\psi \to \pi^0 a_2^0 \pi^+ \pi^- f_0(1370), a_2^0 \to K^+ K^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13230 | 1 | 95807 |
| 13232 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13231 | 1 | 95808 |
| 13233 | $J/\psi 	o \omega K^* \bar{K}^*, \omega 	o \pi^0 \gamma, K^* 	o \pi^0 K^0, \bar{K}^* 	o \pi^+ K^- \gamma^f, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma^f$ | 13232 | 1 | 95809 |
| 13234 | $J/\psi \to K^* \bar{K}^* f_1(1285), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13233 | 1 | 95810 |
| 13235 | $J/\psi \to \pi^+ a_1^0 a_1^-, a_1^0 \to \pi^+ \rho^-, a_1^- \to \rho^0 \pi^-, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13234 | 1 | 95811 |
| 13236 | $J/\psi \rightarrow \rho^+ \rho^- \eta \gamma, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 13235 | 1 | 95812 |
| 13237 | $J/\psi \to \rho^0 K^0 \bar{K}^0 \phi, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13236 | 1 | 95813 |
| 13238 | $J/\psi \to K^*K^{*-}a_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, a_1^+ \to \pi^0\rho^+, \bar{K}^0 \to K_S^0, \ \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13237 | 1 | 95814 |
| 13239 | $J/\psi \to \rho^- a_2^+ \gamma^f, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13238 | 1 | 95815 |
| 13240 | $J/\psi ightarrow ho^+ a_2^-, ho^+ ightarrow \pi^0 \pi^+, a_2^- ightarrow \pi^- \gamma$ | $\pi^0\pi^+\pi^-\gamma$ | 13239 | 1 | 95816 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13241 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma \gamma$ | 13240 | 1 | 95817 |
| 13242 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^- f_1(1285), f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13241 | 1 | 95818 |
| 13243 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 13242 | 1 | 95819 |
| 13244 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Lambda}, \Sigma^{*-} \to \pi^0 \Sigma^-, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^- \to \pi^- n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 13243 | 1 | 95820 |
| 13245 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \rho^- K^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13244 | 1 | 95821 |
| 13246 | $J/\psi \to \pi^+ K^0 \bar{K}^* b_1^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^- \to \pi^- \gamma, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 13245 | 1 | 95822 |
| 13247 | $J/\psi \to \pi^0 \pi^+ \pi^- \bar{K}^* K_1^{'0}, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 13246 | 1 | 95823 |
| 13248 | $J/\psi \to \eta \phi f_0(1710), \eta \to \pi^0 \pi^0 \pi^0, \phi \to K^+ K^-, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_LK^+_KK^-$ | 13247 | 1 | 95824 |
| 13249 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, \phi \to K_L^0K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13248 | 1 | 95825 |
| 13250 | $J/\psi \to \rho^+ \eta K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13249 | 1 | 95826 |
| 13251 | $J/\psi \to K^+ \bar{K}_1^{'-} \gamma^f, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma^f$ | 13250 | 1 | 95827 |
| 13252 | $J/\psi \to \pi^- f_2(1270) b_1^+ \gamma^f, f_2(1270) \to K^+ K^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 13251 | 1 | 95828 |
| 13253 | $J/\psi \to \pi^- \bar{K}_1^0 K_0^{*+}, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K_0^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13252 | 1 | 95829 |
| 13254 | $J/\psi \to \bar{\Lambda}\Sigma^{*0}, \bar{\Lambda} \to \pi^+\bar{p}, \Sigma^{*0} \to \pi^-\Sigma^+, \Sigma^+ \to \pi^+ n$ | $\pi^+\pi^+\pi^- nar{p}$ | 13253 | 1 | 95830 |
| 13255 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13254 | 1 | 95831 |
| 13256 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^0 K^{*+}, K_2^{*-} \to \rho^- K^0, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 13255 | 1 | 95832 |
| 13257 | $J/\psi \to \pi^- K^0_S K^+ \phi, K^0_S \to \pi^+ \pi^-, \phi \to K^0_L K^0_S, K^0_S \to \pi^+ \pi^- \gamma^f$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 13256 | 1 | 95833 |
| 13258 | $J/\psi \to \pi^+\pi^+\pi^-\rho^-b_1^0, \rho^- \to \pi^0\pi^-, b_1^0 \to \pi^0\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13257 | 1 | 95834 |
| 13259 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K_0^0 \to \pi^0 K^0, K_0^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 13258 | 1 | 95835 |
| 13260 | $J/\psi 	o \pi^0 K_0^0 \bar{K}_1^0, K_0^0 	o \pi^- K^+, \bar{K}_1^0 	o \pi^0 \bar{K}^*, \bar{K}^* 	o \pi^0 \bar{K}^0, \bar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 6025 | 1 | 95836 |
| 13261 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 13260 | 1 | 95837 |
| 13262 | $J/\psi \rightarrow \pi^- \eta' b_1^+, \eta' \rightarrow \pi^+ \pi^- \eta, b_1^+ \rightarrow \pi^+ \omega, \eta \rightarrow \pi^0 \pi^0 \pi^0, \omega \rightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13261 | 1 | 95838 |
| 13263 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 13262 | 1 | 95839 |
| 13264 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^+\pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13263 | 1 | 95840 |
| 13265 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 13264 | 1 | 95841 |
| 13266 | $J/\psi \to \bar{K}^0 K_2^{*0} a_1^0, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^0 K^*, a_1^0 \to \pi^+ \rho^-, K^* \to \pi^- K^+, \\ \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 13265 | 1 | 95842 |
| 13267 | $J/\psi \to \pi^-\pi^-\rho^+a_2^+\omega, \rho^+ \to \pi^0\pi^+, a_2^+ \to \rho^0\pi^+, \omega \to \pi^0\gamma, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 13266 | 1 | 95843 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13268 | $J/\psi \to \pi^+ K^* K^- h_1(1170), K^* \to \pi^0 K^0, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 13267 | 1 | 95844 |
| 13269 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 13268 | 1 | 95845 |
| 13270 | $J/\psi \to \pi^+ a_2^- f_1(1285), a_2^- \to \pi^0 \rho^-, f_1(1285) \to \pi^+ \pi^- \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13269 | 1 | 95846 |
| 13271 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K_1^+ \to \rho^+ K^0, \bar{K}^* \to \pi^+ K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13270 | 1 | 95847 |
| 13272 | $J/\psi \to \phi f_0(1370), \phi \to K_L^0 K_S^0, f_0(1370) \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-$ | 13271 | 1 | 95848 |
| 13273 | $J/\psi \to \eta \eta \omega, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 2656 | 1 | 95849 |
| 13274 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 13273 | 1 | 95850 |
| 13275 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13274 | 1 | 95851 |
| 13276 | $J/\psi 	o \pi^+ K^0 K^- a^0_0, K^0 	o K^0_S, a^0_0 	o \pi^0 \eta, K^0_S 	o \pi^0 \pi^0, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 13275 | 1 | 95852 |
| 13277 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^* \to \pi^+ K^-, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13276 | 1 | 95853 |
| 13278 | $J/\psi \to \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 13277 | 1 | 95854 |
| 13279 | $J/\psi 	o \omega \bar{K}^0 K^* K^+ K^-, \omega 	o \pi^0 \gamma, \bar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-\gamma$ | 13278 | 1 | 95855 |
| 13280 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 13279 | 1 | 95856 |
| 13281 | $J/\psi \to \rho^- \bar{K}^0 K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13280 | 1 | 95857 |
| 13282 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^- \gamma^f, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13281 | 1 | 95858 |
| 13283 | $J/\psi \rightarrow \pi^- \rho^+ b_1^0 \gamma^F \gamma^f, \rho^+ \rightarrow \pi^0 \pi^+, b_1^0 \rightarrow \pi^0 \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 13282 | 1 | 95859 |
| 13284 | $J/\psi \to \pi^0 f_0(1370)\gamma, f_0(1370) \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\gamma^F\gamma$ | 13283 | 1 | 95860 |
| 13285 | $J/\psi \to \pi^+ \pi^+ n \bar{\Delta}^{++}, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^+\pi^-nar{p}$ | 13284 | 1 | 95861 |
| 13286 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13285 | 1 | 95862 |
| 13287 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^- \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 13286 | 1 | 95863 |
| 13288 | $J/\psi \to \pi^0 \pi^+ \pi^+ \rho^- a_1^-, \rho^- \to \pi^0 \pi^-, a_1^- \to \pi^0 \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13287 | 1 | 95864 |
| 13289 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13288 | 1 | 95865 |
| 13290 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_1^- \to \rho^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13289 | 1 | 95866 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13291 | $J/\psi \to K^+K^{*-}\eta', K^{*-} \to \pi^-\bar{K}^0, \eta' \to \pi^+\pi^-\eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 13290 | 1 | 95867 |
| 13292 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- h_1(1170), \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13291 | 1 | 95868 |
| 13293 | $J/\psi \to \pi^0 f_2(1270) \bar{K}^0 K_1^0, f_2(1270) \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K_0^0 \to \pi^0 K^0, K_0^0 \to \pi^0 K^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13292 | 1 | 95869 |
| 13294 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^- K^+, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13293 | 1 | 95870 |
| 13295 | $J/\psi \to K^-K^{*+}f_0(1710), K^{*+} \to \pi^+K^0, f_0(1710) \to \pi^0\pi^0, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 13294 | 1 | 95871 |
| 13296 | $J/\psi \to \pi^+\pi^-K_2^{*-}K_1^+, K_2^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 13295 | 1 | 95872 |
| 13297 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13296 | 1 | 95873 |
| 13298 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Sigma}^0, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 13297 | 1 | 95874 |
| 13299 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-\pi^-K^+K^+$ | 3796 | 1 | 95875 |
| 13300 | $J/\psi \to \pi^0 b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \gamma, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 13299 | 1 | 95876 |
| 13301 | $J/\psi ightarrow \eta f_2^{\prime} \gamma, \eta ightarrow \pi^0 \pi^+ \pi^-, f_2^{\prime} ightarrow K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13300 | 1 | 95877 |
| 13302 | $J/\psi \to \eta b_1^0 f_1(1285), \eta \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 13301 | 1 | 95878 |
| 13303 | $J/\psi \to K^0 K_2^{*0} \eta', K^0 \to K_S^0, K_2^{*0} \to \rho^+ K^-, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 13302 | 1 | 95879 |
| 13304 | $J/\psi \to K_2^{*-}K_0^{*+}, K_2^{*-} \to \pi^0 K^{*-}, K_0^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 13303 | 1 | 95880 |
| 13305 | $J/\psi \rightarrow \eta(1405)\gamma, \eta(1405) \rightarrow \rho^0 \rho^0, \rho^0 \rightarrow \pi^+\pi^-, \rho^0 \rightarrow \pi^+\pi^-\gamma^f\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f\gamma^f$ | 13304 | 1 | 95881 |
| 13306 | $J/\psi \to \pi^- \rho^+ \eta' \gamma^f, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}\gamma^{f}$ | 13305 | 1 | 95882 |
| 13307 | $J/\psi \to \eta \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^F$ | 13306 | 1 | 95883 |
| 13308 | $J/\psi \to \pi^+ \eta b_1^- \gamma^f, \eta \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 13307 | 1 | 95884 |
| 13309 | $J/\psi \to \omega \bar{K}^* K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 3797 | 1 | 95885 |
| 13310 | $J/\psi \to \rho^0 a_2^0 a_0^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- \rho^+, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13309 | 1 | 95886 |
| 13311 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 2657 | 1 | 95887 |
| 13312 | $J/\psi \to \rho^0 K^0 \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 13311 | 1 | 95888 |
| 13313 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^+\pi^-, K^{*-} \to \pi^-\bar{K}^0\gamma^f, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 3799 | 1 | 95889 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13314 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \rho^- K^+, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 13313 | 1 | 95890 |
| 13315 | $J/\psi \to \pi^+ a_2^- K^0 \bar{K}^*, a_2^- \to \rho^0 \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 13314 | 1 | 95891 |
| 13316 | $J/\psi \to \pi^+\pi^+\pi^-\rho^-\omega a^0_0, \rho^- \to \pi^0\pi^-, \omega \to \pi^0\pi^+\pi^-, a^0_0 \to \pi^0\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13315 | 1 | 95892 |
| 13317 | $J/\psi \to K^0 a_0^0 \bar{K}_1^{'0}, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \eta \to \gamma \gamma, \ \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma$ | 13316 | 1 | 95893 |
| 13318 | $J/\psi \rightarrow \pi^+ \eta' a_1^-, \eta' \rightarrow \omega \gamma, a_1^- \rightarrow \pi^0 \rho^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13317 | 1 | 95894 |
| 13319 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 13318 | 1 | 95895 |
| 13320 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 13319 | 1 | 95896 |
| 13321 | $J/\psi \to \pi^{+} \eta a_{1}^{-} f_{1}(1285), \eta \to \pi^{0} \pi^{0} \pi^{0}, a_{1}^{-} \to \rho^{0} \pi^{-}, f_{1}(1285) \to \pi^{0} a_{0}^{0}, \rho^{0} \to \pi^{+} \pi^{-}, a_{0}^{0} \to \pi^{0} \eta, \eta \to \pi^{0} \pi^{0} \pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 1518 | 1 | 95897 |
| 13322 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^-, \eta' \to \pi^+ \pi^- \eta, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, $ $\eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 13321 | 1 | 95898 |
| 13323 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 6032 | 1 | 95899 |
| 13324 | $J/\psi \to \pi \ K \ K_2 \ , K_2 \to \pi \ \pi \ K \ , K \to \pi \ K \ , K \to \pi \ K_S, K_S \to \pi \ \pi$ $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^0 K^{*-}, K_1^+ \to \pi^0 K_0^{*+}, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^+ K^0,$ $K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 6033 | 1 | 95900 |
| 13325 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 13324 | 1 | 95901 |
| 13326 | $J/\psi 	o \pi^- a_0^0 b_1^+, a_0^0 	o \pi^0 \eta, b_1^+ 	o \pi^+ \omega, \eta 	o \pi^+ \pi^- \gamma^F, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 13325 | 1 | 95902 |
| 13327 | $J/\psi \to \pi^+ a_2^- f_2(1270), a_2^- \to \pi^- \eta, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13326 | 1 | 95903 |
| 13328 | $J/\psi \to \rho^0 \eta \omega \omega, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 13327 | 1 | 95904 |
| 13329 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 13328 | 1 | 95905 |
| 13330 | $J/\psi \to \pi^+ \rho^- \eta f_0(1370), \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13329 | 1 | 95906 |
| 13331 | $J/\psi \to K^{*-}K_1^{'+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 13330 | 1 | 95907 |
| 13332 | $J/\psi \to \pi^0 \omega K^{*+} K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13331 | 1 | 95908 |
| 13333 | $J/\psi \to K^0 \bar{\Sigma}^+ \Xi^-, K^0 \to K_S^0, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Xi^- \to \pi^- \Lambda, K_S^0 \to \pi^+ \pi^-, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-\pi^-\bar{n}p$ | 13332 | 1 | 95909 |
| 13334 | $J/\psi ightarrow \pi^- a_2^+ a_0^0, a_2^+ ightarrow \pi^+ \eta, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma, \pi^0 ightarrow e^+ e^- \gamma^F, \ \eta ightarrow \gamma \gamma$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma\gamma\gamma$ | 6034 | 1 | 95910 |
| 13335 | $J/\psi \to \omega \bar{K}^0 K_0^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13334 | 1 | 95911 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 13336 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 13335 | 1 | 95912 |
| 13337 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^0K^+, f_0(1370) \to \rho^0\rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13336 | 1 | 95913 |
| 13338 | $J/\psi \to K^0 f_0(1370) \bar{K}_1^0, K^0 \to K_S^0, f_0(1370) \to \pi^+\pi^-, \bar{K}_1^0 \to \pi^+K^{*-}, K_S^0 \to \pi^+\pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13337 | 1 | 95914 |
| 13339 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0K^0, K_1^0 \to K_2^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13338 | 1 | 95915 |
| 13340 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^+ \pi^- \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13339 | 1 | 95916 |
| 13341 | $J/\psi \to \pi^+\pi^-K^*\bar{K}^*, K^* \to \pi^-K^+, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13340 | 1 | 95917 |
| 13342 | $J/\psi \to \pi^+\pi^+\pi^-K^0K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13341 | 1 | 95918 |
| 13343 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^+ K^0, \eta \to \gamma \gamma, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 13342 | 1 | 95919 |
| 13344 | $J/\psi \to \pi^0 p\bar{p} f_0(1370), f_0(1370) \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-par{p}$ | 762 | 1 | 95920 |
| 13345 | $J/\psi \to K^0 \bar{\Delta}^+ \Sigma^+, K^0 \to K_S^0, \bar{\Delta}^+ \to \pi^0 \bar{p}, \Sigma^+ \to \pi^0 p, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0p\bar{p}$ | 13344 | 1 | 95921 |
| 13346 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1285) \to \pi^0 a_0^0, K_S^0 \to \pi^0 \pi^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\gamma\gamma$ | 6036 | 1 | 95922 |
| 13347 | $J/\psi \to \rho^+ \eta a_0^-, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0, a_0^- \to \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 13346 | 1 | 95923 |
| 13348 | $J/\psi \to \pi^+ \rho^- \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13347 | 1 | 95924 |
| 13349 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13348 | 1 | 95925 |
| 13350 | $J/\psi \to \bar{K}^0 K^+ b_1^- \gamma^F, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 13349 | 1 | 95926 |
| 13351 | $J/\psi \to \rho^- \bar{K}^0 K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_1^+ \to \omega K^+, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13350 | 1 | 95927 |
| 13352 | $J/\psi \to \pi^+ a_1^0 a_1^-, a_1^0 \to \pi^- \rho^+, a_1^- \to \rho^0 \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13351 | 1 | 95928 |
| 13353 | $J/\psi \to \eta' h_1(1380), \eta' \to \gamma \gamma, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 13352 | 1 | 95929 |
| 13354 | $J/\psi \to \eta \omega K^0 \bar{K}^0, \eta \to \gamma \gamma, \omega \to \pi^0 \gamma, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 1520 | 1 | 95930 |
| 13355 | $J/\psi 	o \omega K^0 K_2^{*0}, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, K_2^{*0} 	o \pi^0 \bar{K}^0, \bar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 13354 | 1 | 95931 |
| 13356 | $J/\psi \to \pi^0 K_2^{*+} K_2^{*-}, K_2^{*+} \to \rho^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 13355 | 1 | 95932 |
| 13357 | $J/\psi \to \pi^0 K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13356 | 1 | 95933 |
| 13358 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13357 | 1 | 95934 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13359 | $J/\psi \to K^0 K^- b_1^+, K^0 \to K_L^0, b_1^+ \to \pi^+ \omega, \omega \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 13358 | 1 | 95935 |
| 13360 | $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \pi^0 \rho^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 13359 | 1 | 95936 |
| 13361 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 ho^0 \omega, ho^0 ightarrow \pi^+ \pi^- \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 13360 | 1 | 95937 |
| 13362 | $J/\psi \to f_4(2050)\gamma, f_4(2050) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 6038 | 1 | 95938 |
| 13363 | $J/\psi \to \rho^0 K^+ K^{*-} \gamma^F, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 13362 | 1 | 95939 |
| 13364 | $J/\psi \to \pi^- \rho^+ \eta^\prime, \rho^+ \to \pi^0 \pi^+ \gamma^f, \eta^\prime \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 13363 | 1 | 95940 |
| 13365 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 K^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6039 | 1 | 95941 |
| 13366 | $J/\psi \to \rho^0 \rho^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13365 | 1 | 95942 |
| 13367 | $J/\psi \to \rho^0 \pi^+ K^0 K_1^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13366 | 1 | 95943 |
| 13368 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^0K^-, f_0(1370) \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^+K^-$ | 13367 | 1 | 95944 |
| 13369 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^0 K^*, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, K^* \to \pi^- K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 13368 | 1 | 95945 |
| 13370 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 13369 | 1 | 95946 |
| 13371 | $J/\psi \to \rho^- \bar{K}^0 K^+ \gamma^f, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 13370 | 1 | 95947 |
| 13372 | $J/\psi \to \pi^0 \pi^+ K^- K_0^0, K_0^0 \to \pi^- K^+ \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 13371 | 1 | 95948 |
| 13373 | $J/\psi \to \pi^+\pi^- f_1(1285), f_1(1285) \to \pi^0\pi^0 \eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 3803 | 1 | 95949 |
| 13374 | $J/\psi 	o \eta \phi, \eta 	o \gamma \gamma, \phi 	o \pi^0 ho^0, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 13373 | 1 | 95950 |
| 13375 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}K_{L}^{0}K^{+}K^{-}\gamma^{F}$ | 13374 | 1 | 95951 |
| 13376 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_L^0, \\ \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 13375 | 1 | 95952 |
| 13377 | $J/\psi \to \pi^0 \bar{K}^0 K^* K^+ K^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13376 | 1 | 95953 |
| 13378 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 13377 | 1 | 95954 |
| 13379 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \phi, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \phi \to K^+ K^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+K^+K^-$ | 13378 | 1 | 95955 |
| 13380 | $J/\psi 	o \pi^0 \pi^+ a_1^-, a_1^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13379 | 1 | 95956 |
| 13381 | $J/\psi \to \bar{K}^0 p \bar{\Sigma}^-, \bar{K}^0 \to K_S^0, \bar{\Sigma}^- \to \pi^- \bar{n}, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-ar{n}p$ | 13380 | 1 | 95957 |
| 13382 | $J/\psi \to \omega h_1(1170)h_1(1170), \omega \to \pi^0 \gamma, h_1(1170) \to \pi^+ \rho^-, h_1(1170) \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13381 | 1 | 95958 |
| 13383 | $J/\psi 	o \eta \eta' \phi, \eta 	o \pi^0 \pi^0 \pi^0, \eta' 	o \pi^+ \pi^- \eta, \phi 	o K_L^0 K_S^0, \eta 	o \pi^0 \pi^0 \pi^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13382 | 1 | 95959 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13384 | $J/\psi \to \rho^0 K^{*-} K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13383 | 1 | 95960 |
| 13385 | $J/\psi \to \rho^+ a_0^- \gamma^f, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 13384 | 1 | 95961 |
| 13386 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \rho^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13385 | 1 | 95962 |
| 13387 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \pi^+ K^*, \eta \to \gamma \gamma, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 13386 | 1 | 95963 |
| 13388 | $J/\psi \to \rho^0 h_1(1170) h_1(1170), \rho^0 \to \pi^+\pi^-, h_1(1170) \to \pi^0 \rho^0, h_1(1170) \to \pi^+\rho^-, \rho^0 \to \pi^+\pi^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 428 | 1 | 95964 |
| 13389 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \rho^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13388 | 1 | 95965 |
| 13390 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^0\pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 13389 | 1 | 95966 |
| 13391 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \rho^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 13390 | 1 | 95967 |
| 13392 | $J/\psi \to \pi^- \eta' b_1^+, \eta' \to \rho^0 \gamma, b_1^+ \to \pi^+ \omega, \rho^0 \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma$ | 13391 | 1 | 95968 |
| 13393 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_1^- \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 13392 | 1 | 95969 |
| 13394 | $J/\psi \to \omega K^+ K^{*-} \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^F$ | 13393 | 1 | 95970 |
| 13395 | $J/\psi \to \pi^0\pi^0\rho^+K^*K^-, \rho^+ \to \pi^0\pi^+, K^* \to \pi^0K^0, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 13394 | 1 | 95971 |
| 13396 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 13395 | 1 | 95972 |
| 13397 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 13396 | 1 | 95973 |
| 13398 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 6042 | 1 | 95974 |
| 13399 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\eta, \eta \to e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 13398 | 1 | 95975 |
| 13400 | $J/\psi \to \pi^- \eta a_0^+ \gamma^F, \eta \to \pi^0 \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 13399 | 1 | 95976 |
| 13401 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 13400 | 1 | 95977 |
| 13402 | $J/\psi \to \Sigma^{*0}\bar{\Sigma}^{*0}, \Sigma^{*0} \to \pi^+\Sigma^-, \bar{\Sigma}^{*0} \to \pi^0\bar{\Lambda}, \Sigma^- \to \pi^- n, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 13401 | 1 | 95978 |
| 13403 | $J/\psi \to \pi^0 K^0 \bar{K}_1^{'0}, K^0 \to K_L^0, \bar{K}_1^{'0} \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 13402 | 1 | 95979 |
| 13404 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma$ | 13403 | 1 | 95980 |
| 13405 | $J/\psi \to \rho^0 \pi^+ \pi^- K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^f$ | 13404 | 1 | 95981 |
| 13406 | $J/\psi \to K^0 K^- b_1^+, K^0 \to K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \gamma, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+K^-\gamma^F\gamma$ | 13405 | 1 | 95982 |
| 13407 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \rho^0K^-, K_1^{'+} \to \pi^0K^{*+}, \rho^0 \to \pi^+\pi^-, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13406 | 1 | 95983 |
| 13408 | $J/\psi \to \pi^+ \Delta^+ \bar{\Delta}^{++} \gamma^f, \Delta^+ \to \pi^+ n, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^+\pi^-nar{p}\gamma^f$ | 13407 | 1 | 95984 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13409 | $J/\psi \to \phi f_2', \phi \to K_L^0 K_S^0, f_2' \to \eta \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^0\pi^0K_L^0\gamma^F\gamma\gamma$ | 13408 | 1 | 95985 |
| 13410 | $J/\psi \to K^{*-}K_1^{'+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 13409 | 1 | 95986 |
| 13411 | $J/\psi \to \pi^+ K^{*-} K_1^0 \gamma^F, K^{*-} \to \pi^0 K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 13410 | 1 | 95987 |
| 13412 | $J/\psi \to \pi^+\pi^-\rho^+\rho^+\rho^-\rho^-, \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, \rho^- \to \pi^0\pi^-\gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13411 | 1 | 95988 |
| 13413 | $J/\psi \to a_0^- b_1^+, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, \omega \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13412 | 1 | 95989 |
| 13414 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13413 | 1 | 95990 |
| 13415 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6043 | 1 | 95991 |
| 13416 | $J/\psi \to \pi^+ \Lambda \bar{\Sigma}^{*-}, \Lambda \to \pi^0 n, \bar{\Sigma}^{*-} \to \pi^- \bar{\Sigma}^0, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 13415 | 1 | 95992 |
| 13417 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ f_2(1270) a_0^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 952 | 1 | 95993 |
| 13418 | $J/\psi \to a_2^0 K^* \bar{K}^*, a_2^0 \to \pi^+ \rho^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 13417 | 1 | 95994 |
| 13419 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \rho^0 K^-, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 13418 | 1 | 95995 |
| 13420 | $J/\psi \to \omega f_2(1270) f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13419 | 1 | 95996 |
| 13421 | $J/\psi \to \pi^0 K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13420 | 1 | 95997 |
| 13422 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^- \rho^+, a_2^- \to \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13421 | 1 | 95998 |
| 13423 | $J/\psi 	o ho^+ K^* K^-, ho^+ 	o \pi^0 \pi^+, K^* 	o \pi^0 K^0, \pi^0 	o e^+ e^- \gamma^F, K^0 	o K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 13422 | 1 | 95999 |
| 13424 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^+ \pi^- \gamma^F, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 13423 | 1 | 96000 |
| 13425 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma$ | 13424 | 1 | 96001 |
| 13426 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_1^0 \to \rho^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K_2^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 13425 | 1 | 96002 |
| 13427 | $J/\psi \to K^+ f_0(1370) K_1^-, f_0(1370) \to \pi^+ \pi^-, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13426 | 1 | 96003 |
| 13428 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 13427 | 1 | 96004 |
| 13429 | $J/\psi \to \pi^0 \rho^0 h_1(1170) \gamma, \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13428 | 1 | 96005 |
| 13430 | $J/\psi \to \pi^+ K^{*-} K_0^0 \gamma^f, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_L^0$ | $K^0_L\pi^+\pi^-\pi^-K^+\gamma^f$ | 13429 | 1 | 96006 |
| 13431 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to K^0 \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 13430 | 1 | 96007 |
| 13432 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \pi^+ K^*, K^* \to \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 13431 | 1 | 96008 |
| 13433 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^0\bar{\Sigma}^+, \Sigma^{*-} \to \pi^0\Sigma^-, \bar{\Sigma}^+ \to \pi^+\bar{n}, \Sigma^- \to \pi^- n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 6045 | 1 | 96009 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 13434 | $J/\psi \to \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 6046 | 1 | 96010 |
| 13435 | $J/\psi \to \pi^0\pi^0\pi^0b_1^0, b_1^0 \to \pi^0\omega, \pi^0 \to e^+e^-\gamma^F, \omega \to \pi^0\pi^+\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 13434 | 1 | 96011 |
| 13436 | $J/\psi ightarrow \pi^0 \omega \omega b_1^0, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 13435 | 1 | 96012 |
| 13437 | $J/\psi \to \pi^0\pi^0\rho^0\pi^+\pi^-\bar{K}^0K^*, \rho^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6047 | 1 | 96013 |
| 13438 | $J/\psi 	o \pi^0 K^+ K_1^-, K_1^- 	o ho^- ar{K}^0, ho^- 	o \pi^0 \pi^- \gamma^f, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 13437 | 1 | 96014 |
| 13439 | $J/\psi \to K_1^+ K_1^-, K_1^+ \to \rho^+ K^0, K_1^- \to \pi^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 13438 | 1 | 96015 |
| 13440 | $J/\psi ightarrow \pi^+\pi^-\eta a^0_0, \eta ightarrow \gamma\gamma, a^0_0 ightarrow \pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 13439 | 1 | 96016 |
| 13441 | $J/\psi \rightarrow \eta'\phi, \eta' \rightarrow \pi^+\pi^-\eta, \phi \rightarrow \pi^0\rho^0, \eta \rightarrow \pi^0\pi^+\pi^-, \rho^0 \rightarrow \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13440 | 1 | 96017 |
| 13442 | $J/\psi \to \rho^0 K^- K_1^+, \rho^0 \to \pi^+ \pi^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 13441 | 1 | 96018 |
| 13443 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 13442 | 1 | 96019 |
| 13444 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ b_1^0, \rho^+ \to \pi^0 \pi^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 3806 | 1 | 96020 |
| 13445 | $J/\psi \to \eta K^+ \bar{K}_1^{'-}, \eta \to \gamma \gamma, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 13444 | 1 | 96021 |
| 13446 | $J/\psi \to \pi^0 \rho^0 \pi^+ \pi^+ \pi^- b_1^-, \rho^0 \to \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 13445 | 1 | 96022 |
| 13447 | $J/\psi ightarrow ho^0 a_0^0 f_0(1370), ho^0 ightarrow \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, f_0(1370) ightarrow \pi^+ \pi^-, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13446 | 1 | 96023 |
| 13448 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \pi^0 \to e^+e^-\gamma^F, \pi^0 \to e^+e^-\gamma^F, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma^{F}\gamma^{F}$ | 13447 | 1 | 96024 |
| 13449 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 13448 | 1 | 96025 |
| 13450 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}$ | 13449 | 1 | 96026 |
| 13451 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13450 | 1 | 96027 |
| 13452 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 13451 | 1 | 96028 |
| 13453 | $J/\psi 	o \eta \eta' \phi, \eta 	o \gamma \gamma, \eta' 	o \pi^+ \pi^- \eta, \phi 	o K^+ K^-, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma$ | 13452 | 1 | 96029 |
| 13454 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 13453 | 1 | 96030 |
| 13455 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to \eta\eta, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma$ | 13454 | 1 | 96031 |
| 13456 | $J/\psi \to \phi f_0(1370), \phi \to K_L^0 K_S^0, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13455 | 1 | 96032 |
| 13457 | $J/\psi \to \rho^- K^- K^{*+} a_0^+, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, a_0^+ \to \pi^+ \eta, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 6049 | 1 | 96033 |
| 13458 | $J/\psi ightarrow \pi^0 \eta n ar{n}, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0n\bar{n}$ | 13457 | 1 | 96034 |
| 13459 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 13458 | 1 | 96035 |
| 13460 | $J/\psi ightarrow \pi^- ho^+ b_1^0 \gamma^F, ho^+ ightarrow \pi^0 \pi^+, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 13459 | 1 | 96036 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13461 | $J/\psi \to K^0 \bar{K}^* b_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13460 | 1 | 96037 |
| 13462 | $J/\psi \to \rho^0 \bar{K}^0 K_0^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13461 | 1 | 96038 |
| 13463 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma^f$ | 13462 | 1 | 96039 |
| 13464 | $J/\psi \to \rho^+ K^0 K^{*-} \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 13463 | 1 | 96040 |
| 13465 | $J/\psi 	o \pi^- K^+ \bar{K}^0_1 \gamma^F, \bar{K}^0_1 	o \omega \bar{K}^0, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f, \bar{K}^0 	o K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^F \gamma^f$ | 13464 | 1 | 96041 |
| 13466 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13465 | 1 | 96042 |
| 13467 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, $ $\rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 13466 | 1 | 96043 |
| 13468 | $J/\psi \to \eta \eta h_1(1380), \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma$ | 13467 | 1 | 96044 |
| 13469 | $J/\psi \to \eta K^- K_1^+, \eta \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13468 | 1 | 96045 |
| 13470 | $J/\psi ightarrow ar{n}\Delta^0\gamma, \Delta^0 ightarrow n\gamma$ | $nar{n}\gamma\gamma$ | 13469 | 1 | 96046 |
| 13471 | $J/\psi \to \bar{K}^0 \Delta^0 \bar{\Sigma}^0, \bar{K}^0 \to K_S^0, \Delta^0 \to \pi^- p, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, K_S^0 \to \pi^+ \pi^-, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 13470 | 1 | 96047 |
| 13472 | $J/\psi \to \pi^+ K^0 K^- a^0_0, K^0 \to K^0_S, a^0_0 \to \pi^0 \eta, K^0_S \to \pi^0 \pi^0, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 13471 | 1 | 96048 |
| 13473 | $J/\psi \to \eta K^0 \bar{K}_1^0 \gamma, \eta \to \gamma \gamma, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma\gamma\gamma$ | 170 | 1 | 96049 |
| 13474 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^0 \bar{K}^*, f_1(1420) \to \pi^- \bar{K}^0 K^+, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{f}$ | 13473 | 1 | 96050 |
| 13475 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2664 | 1 | 96051 |
| 13476 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \pi^0 K_0^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 3809 | 1 | 96052 |
| 13477 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K_1^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13476 | 1 | 96053 |
| 13478 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^{*+} \to \pi^0 K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13477 | 1 | 96054 |
| 13479 | $J/\psi \to K^+K^-h_1(1170), h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 13478 | 1 | 96055 |
| 13480 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma^{F}$ | 13479 | 1 | 96056 |
| 13481 | $J/\psi \to \eta \bar{K}^* K_2^{*0}, \eta \to \gamma \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma\gamma$ | 13480 | 1 | 96057 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13482 | $J/\psi \to \rho^{+} a_{2}^{-} f_{0}(1370), \rho^{+} \to \pi^{0} \pi^{+}, a_{2}^{-} \to \rho^{0} \pi^{-}, f_{0}(1370) \to \rho^{+} \rho^{-}, \rho^{0} \to \pi^{+} \pi^{-}, \rho^{+} \to \pi^{0} \pi^{+}, \rho^{-} \to \pi^{0} \pi^{-}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13481 | 1 | 96058 |
| 13483 | $J/\psi 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 13482 | 1 | 96059 |
| 13484 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^+K^{*-}, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 13483 | 1 | 96060 |
| 13485 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13484 | 1 | 96061 |
| 13486 | $J/\psi 	o \Sigma^0 ar{\Sigma}^{*0}, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p} \gamma^f$ | $\pi^0\pi^0\pi^+n\bar{p}\gamma\gamma^f$ | 13485 | 1 | 96062 |
| 13487 | $J/\psi 	o ho^0 \pi^+ \Delta^0 \bar{p}, ho^0 	o \pi^+ \pi^-, \Delta^0 	o \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 13486 | 1 | 96063 |
| 13488 | $J/\psi \to \pi^+ K^0 K^{*-} f_2^{'}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, f_2^{'} \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 13487 | 1 | 96064 |
| 13489 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^+ \pi^- K^0, \pi^0 \to e^+ e^- \gamma^F, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 13488 | 1 | 96065 |
| 13490 | $J/\psi \to \rho^0 \pi^- a_2^+ \gamma^F, \rho^0 \to \pi^+ \pi^-, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 13489 | 1 | 96066 |
| 13491 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13490 | 1 | 96067 |
| 13492 | $J/\psi 	o \pi^0 \pi^+ ho^- K^0 \bar{K}^*, ho^- 	o \pi^0 \pi^-, K^0 	o K_S^0, \bar{K}^* 	o \pi^+ K^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13491 | 1 | 96068 |
| 13493 | $J/\psi \to K^* K_2^{*0} \gamma, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 6053 | 1 | 96069 |
| 13494 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^0K^0, a_0^+ \to \pi^+\eta, K^0 \to K_L^0, \eta \to e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^0K_L^0\pi^+K^-\gamma^F\gamma^f$ | 13493 | 1 | 96070 |
| 13495 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 13494 | 1 | 96071 |
| 13496 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\gamma$ | 13495 | 1 | 96072 |
| 13497 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^- K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13496 | 1 | 96073 |
| 13498 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^- K^+ K^-$ | 13497 | 1 | 96074 |
| 13499 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 3810 | 1 | 96075 |
| 13500 | $J/\psi \to a_2^0 \pi^+ \rho^- f_0(1370), a_2^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13499 | 1 | 96076 |
| 13501 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^- \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 1524 | 1 | 96077 |
| 13502 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \pi^0\pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13501 | 1 | 96078 |
| 13503 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 13502 | 1 | 96079 |
| 13504 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^+K^{*-}, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-\pi^-K^+K^+$ | 13503 | 1 | 96080 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13505 | $J/\psi \to \omega f_0(1370) f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, $ $\eta \to \gamma \gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 362 | 1 | 96081 |
| 13506 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow a_2^0 \pi^+ \pi^-, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13505 | 1 | 96082 |
| 13507 | $J/\psi \to \rho^0 \omega \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 13506 | 1 | 96083 |
| 13508 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 13507 | 1 | 96084 |
| 13509 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 13508 | 1 | 96085 |
| 13510 | $J/\psi \to \eta \eta' h_1(1170), \eta \to \gamma \gamma, \eta' \to \rho^0 \gamma, h_1(1170) \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 13509 | 1 | 96086 |
| 13511 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^+ \pi^- \eta, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, $ $\eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma$ | 13510 | 1 | 96087 |
| 13512 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \gamma$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 13511 | 1 | 96088 |
| 13513 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K_2^{*0} K^{*-}, K_2^{*0} \to \rho^- K^+, K^{*-} \to \pi^0 K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13512 | 1 | 96089 |
| 13514 | $J/\psi \rightarrow \pi^0 \omega a_0^0, \pi^0 \rightarrow e^+ e^- \gamma^F, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^0 \rightarrow \pi^0 \eta, \eta \rightarrow \gamma \gamma$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 13513 | 1 | 96090 |
| 13515 | $J/\psi \to \bar{K}^* n \bar{\Sigma}^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{K}^0 \to K_S^0, \bar{\Lambda} \to \pi^+ \bar{p}, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}\gamma$ | 13514 | 1 | 96091 |
| 13516 | $J/\psi \to K^* \bar{K}_1^0, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_S^0, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{F}$ | 13515 | 1 | 96092 |
| 13517 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13516 | 1 | 96093 |
| 13518 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 13517 | 1 | 96094 |
| 13519 | $J/\psi \to \omega f_2(1270), \omega \to \pi^+\pi^-\gamma^F, f_2(1270) \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 6057 | 1 | 96095 |
| 13520 | $J/\psi \to \eta f_2(1270) h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, f_2(1270) \to \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6058 | 1 | 96096 |
| 13521 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 13520 | 1 | 96097 |
| 13522 | $J/\psi 	o \pi^0\pi^0\eta\omega, \eta 	o \gamma\gamma, \omega 	o \pi^0\pi^+\pi^-, \pi^0 	o e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 6059 | 1 | 96098 |
| 13523 | $J/\psi \to \pi^0\pi^-a_2^+, \pi^0 \to e^+e^-\gamma^F, a_2^+ \to \pi^+\eta, \eta \to \gamma\gamma$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma$ | 13522 | 1 | 96099 |
| 13524 | $J/\psi \to \pi^0 \pi^- \rho^+ a_0^0, \rho^+ \to \pi^0 \pi^+, a_0^0 \to K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 955 | 1 | 96100 |
| 13525 | $J/\psi \to \pi^+ \omega K_S^0 K^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 13524 | 1 | 96101 |
| 13526 | $J/\psi \to \omega \eta' \eta', \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13525 | 1 | 96102 |
| 13527 | $J/\psi \to K^0 \bar{K}^* K^+ K^{*-}, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 13526 | 1 | 96103 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13528 | $J/\psi \to \pi^- K_2^{*0} K^+ \gamma^f, K_2^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 13527 | 1 | 96104 |
| 13529 | $J/\psi \to \pi^0 \pi^+ \pi^- f_0(1370), f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13528 | 1 | 96105 |
| 13530 | $J/\psi \to K^{*+}K^{*-}f_0(1710), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to K^+K^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13529 | 1 | 96106 |
| 13531 | $J/\psi \to ho^0 \pi^- a_1^+ \gamma^F, ho^0 \to \pi^+ \pi^-, a_1^+ \to \pi^0 ho^+, ho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 13530 | 1 | 96107 |
| 13532 | $J/\psi \rightarrow \rho^0 \rho^0 \pi^- \rho^+, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^-, \rho^+ \rightarrow \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13531 | 1 | 96108 |
| 13533 | $J/\psi \to \omega K^{*+} K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 13532 | 1 | 96109 |
| 13534 | $J/\psi \rightarrow \pi^- \rho^+ \eta^\prime, \rho^+ \rightarrow \pi^0 \pi^+, \eta^\prime \rightarrow \pi^0 \pi^0 \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13533 | 1 | 96110 |
| 13535 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^0 \bar{K}^0, K_2^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 13534 | 1 | 96111 |
| 13536 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13535 | 1 | 96112 |
| 13537 | $J/\psi \rightarrow \rho^+ \omega b_1^-, \rho^+ \rightarrow \pi^0 \pi^+ \gamma^f, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 13536 | 1 | 96113 |
| 13538 | $J/\psi \to \pi^- a_1^+ f_1(1285), a_1^+ \to \pi^0 \rho^+, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13537 | 1 | 96114 |
| 13539 | $J/\psi \to \pi^+\pi^-a_2^+a_0^-, a_2^+ \to \pi^+\eta, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^+\pi^-, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13538 | 1 | 96115 |
| 13540 | $J/\psi \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 13539 | 1 | 96116 |
| 13541 | $J/\psi \to \phi f_1(1420), \phi \to \pi^+ \rho^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13540 | 1 | 96117 |
| 13542 | $J/\psi \to \rho^0 \pi^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13541 | 1 | 96118 |
| 13543 | $J/\psi \to \pi^+ \rho^- K^+ K^{*-} \phi, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^0 K^-, \phi \to K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 6061 | 1 | 96119 |
| 13544 | $J/\psi \to \pi^0 \eta K^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 13543 | 1 | 96120 |
| 13545 | $J/\psi \to \rho^0 \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13544 | 1 | 96121 |
| 13546 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0 \gamma^f, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 13545 | 1 | 96122 |
| 13547 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0$ | 13546 | 1 | 96123 |
| 13548 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13547 | 1 | 96124 |
| 13549 | $J/\psi \to \rho^- b_1^0 b_1^+, \rho^- \to \pi^0 \pi^-, b_1^0 \to \pi^0 \omega, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13548 | 1 | 96125 |
| 13550 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 6062 | 1 | 96126 |
| 13551 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K_0^{*-}, K^* \to \pi^- K^+, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13550 | 1 | 96127 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 13552 | $J/\psi 	o ho^0 ar{K}^0 K_1^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_L^0, K_1^0 	o \omega K^0, \omega 	o \pi^0 \pi^+ \pi^-, K_L^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 520 | 1 | 96128 |
| 13553 | $J/\psi \to \eta' \phi, \eta' \to \pi^+ \pi^- \eta, \phi \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13552 | 1 | 96129 |
| 13554 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^-K^{*+}, K^0 \to K_L^0, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- K^- K^-$ | 13553 | 1 | 96130 |
| 13555 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \pi^0 \bar{K}^*, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 957 | 1 | 96131 |
| 13556 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta \gamma^f, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13555 | 1 | 96132 |
| 13557 | $J/\psi \to \pi^- \rho^+ \eta f_2(1270), \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma, f_2(1270) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 13556 | 1 | 96133 |
| 13558 | $J/\psi \to \pi^+ K^* K^{*-} \eta', K^* \to \pi^- K^+ \gamma^f, K^{*-} \to \pi^0 K^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma^f$ | 6065 | 1 | 96134 |
| 13559 | $J/\psi \to \omega a_1^+ a_1^-, \omega \to \pi^0 \pi^+ \pi^-, a_1^+ \to \pi^0 \rho^+, a_1^- \to \rho^0 \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13558 | 1 | 96135 |
| 13560 | $J/\psi 	o \pi^+ K_2^{*0} K^- \gamma^f, K_2^{*0} 	o \pi^0 \pi^- K^{*+}, K^{*+} 	o \pi^+ K^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 13559 | 1 | 96136 |
| 13561 | $J/\psi \to \omega K^0 \bar{K}^0 h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13560 | 1 | 96137 |
| 13562 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \phi \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13561 | 1 | 96138 |
| 13563 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow a_2^0 \pi^+ ho^-, a_2^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13562 | 1 | 96139 |
| 13564 | $J/\psi ightarrow K^0 ar{K}^* \eta', K^0 ightarrow K^0_L, ar{K}^* ightarrow \pi^+ K^-, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^F$ | 13563 | 1 | 96140 |
| 13565 | $J/\psi \to \pi^+\pi^-\bar{K}^*K_1^{'0}\gamma^f, \bar{K}^* \to \pi^0\bar{K}^0, K_1^{'0} \to \pi^-K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 13564 | 1 | 96141 |
| 13566 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13565 | 1 | 96142 |
| 13567 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 13566 | 1 | 96143 |
| 13568 | $J/\psi ightarrow \pi^- \eta' \bar{n} p, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 13567 | 1 | 96144 |
| 13569 | $J/\psi \to \pi^+\pi^+\pi^+\pi^-\pi^-\rho^-a_0^0, \rho^- \to \pi^0\pi^-, a_0^0 \to \pi^0\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 13568 | 1 | 96145 |
| 13570 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to \eta\eta, \eta \to \pi^0\pi^+\pi^-, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 13569 | 1 | 96146 |
| 13571 | $J/\psi ightarrow nar{n}a_0^0, a_0^0 ightarrow \pi^0\eta, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0n\bar{n}$ | 1985 | 1 | 96147 |
| 13572 | $J/\psi \to \bar{K}^0 f_1(1285) K_1^{'0}, \bar{K}^0 \to K_L^0, f_1(1285) \to \pi^0 \pi^+ \rho^-, K_1^{'0} \to \pi^0 K^*, \rho^- \to \pi^0 \pi^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13571 | 1 | 96148 |
| 13573 | $J/\psi ightarrow \pi^0 ho^0 ho^+ ho^-, ho^0 ightarrow \pi^0 \gamma, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 13572 | 1 | 96149 |
| 13574 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, \pi^0 \to e^+ e^- \gamma^F, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma^{F}$ | 13573 | 1 | 96150 |
| 13575 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13574 | 1 | 96151 |
| 13576 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma$ | 13575 | 1 | 96152 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 13577 | $J/\psi \to K^*K^{*-}a_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^0K^-, a_1^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13576 | 1 | 96153 |
| 13578 | $J/\psi \to \rho^- \bar{K}^* K^{*+} \gamma^f, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 13577 | 1 | 96154 |
| 13579 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^0 \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 13578 | 1 | 96155 |
| 13580 | $J/\psi \to \pi^- K^+ \bar{K}^0_1, \bar{K}^0_1 \to \omega \bar{K}^0, \omega \to \pi^0 \gamma, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 13579 | 1 | 96156 |
| 13581 | $J/\psi \to \rho^0 f_0(1370) a_1^0, \rho^0 \to \pi^0 \gamma, f_0(1370) \to \pi^0 \pi^0, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 13580 | 1 | 96157 |
| 13582 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \pi^0 K_0^0, \eta \to \gamma \gamma, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 13581 | 1 | 96158 |
| 13583 | $J/\psi \to \pi^0 \pi^- a_2^+, \pi^0 \to e^+ e^- \gamma^F, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13582 | 1 | 96159 |
| 13584 | $J/\psi \to \rho^0 K^0 \bar{K}_0^{*0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13583 | 1 | 96160 |
| 13585 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow a_2^+ K^0 K^-, a_2^+ ightarrow \pi^+ \eta, K^0 ightarrow K_L^0, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 13584 | 1 | 96161 |
| 13586 | $J/\psi 	o ar{\Sigma}^0 \Sigma^{*0}, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Sigma^{*0} 	o \pi^0 \Lambda, ar{\Lambda} 	o \pi^+ ar{p}, \Lambda 	o \pi^- p \gamma^f$ | $\pi^0\pi^+\pi^-par p\gamma\gamma^f$ | 13585 | 1 | 96162 |
| 13587 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K^0_L K^0_L K^0_L \pi^+ K^-$ | 13586 | 1 | 96163 |
| 13588 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 13587 | 1 | 96164 |
| 13589 | $J/\psi 	o \eta K^+ K_1^-, \eta 	o \pi^0 \pi^0 \pi^0, K_1^- 	o \pi^0 K^{*-}, K^{*-} 	o \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 13588 | 1 | 96165 |
| 13590 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 13589 | 1 | 96166 |
| 13591 | $J/\psi \to \pi^0 K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^{*-}, K_1^0 \to \rho^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K_1^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 13590 | 1 | 96167 |
| 13592 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma$ | 13591 | 1 | 96168 |
| 13593 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^0 \bar{K}^0, K^0_S \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13592 | 1 | 96169 |
| 13594 | $J/\psi \to \eta K^* \bar{K}_1^0, \eta \to \gamma \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 13593 | 1 | 96170 |
| 13595 | $J/\psi \to \pi^+\pi^-\bar{K}^0K^*\phi, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+, \phi \to K_L^0K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\pi^-K^+$ | 13594 | 1 | 96171 |
| 13596 | $J/\psi \to \eta \bar{K}^* K_1^0, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13595 | 1 | 96172 |
| 13597 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^+ \gamma, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13596 | 1 | 96173 |
| 13598 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^+ K_2^{*-}, \bar{K}^0 \to K_L^0, K_2^{*-} \to \rho^0 K^-, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 13597 | 1 | 96174 |
| 13599 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13598 | 1 | 96175 |
| 13600 | $J/\psi \to K^0 \bar{K}^0 K^+ K^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-$ | 13599 | 1 | 96176 |
| 13601 | $J/\psi \to a_2^- \omega a_0^+, a_2^- \to \rho^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 13600 | 1 | 96177 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13602 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^0 \rho^0, f_1(1285) \to \pi^+ a_0^-, \rho^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 13601 | 1 | 96178 |
| 13603 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6067 | 1 | 96179 |
| 13604 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13603 | 1 | 96180 |
| 13605 | $J/\psi \rightarrow \rho^0\pi^+\rho^-b_1^0, \rho^0 \rightarrow \pi^+\pi^-, \rho^- \rightarrow \pi^0\pi^-, b_1^0 \rightarrow \pi^0\omega, \omega \rightarrow \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13604 | 1 | 96181 |
| 13606 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^- K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 13605 | 1 | 96182 |
| 13607 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 13606 | 1 | 96183 |
| 13608 | $J/\psi \to K^+ \eta' \bar{K}_1'^-, \eta' \to \rho^0 \gamma, \bar{K}_1'^- \to \pi^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 2671 | 1 | 96184 |
| 13609 | $J/\psi \to K^* \bar{K}^* h_1(1380), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}$ | 13608 | 1 | 96185 |
| 13610 | $J/\psi \to \eta K^{*-}K_2^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13609 | 1 | 96186 |
| 13611 | $J/\psi \to \pi^0 K^{*-} K_1^+, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 13610 | 1 | 96187 |
| 13612 | $J/\psi \to K^+K^-a_0^0, a_0^0 \to \pi^0\eta, \pi^0 \to e^+e^-\gamma^F, \eta \to \pi^0\pi^0\pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K^{+}K^{-}\gamma^{F}$ | 13611 | 1 | 96188 |
| 13613 | $J/\psi \to K^* K_2^{*0} \gamma, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma$ | 13612 | 1 | 96189 |
| 13614 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi h_1(1380), \phi \to K^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-\gamma$ | 13613 | 1 | 96190 |
| 13615 | $J/\psi \rightarrow \rho^- \omega b_1^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13614 | 1 | 96191 |
| 13616 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \rho^0 K^-, \eta \to \pi^+ \pi^- \gamma^F, $ $\rho^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^F$ | 13615 | 1 | 96192 |
| 13617 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \gamma^f, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 6069 | 1 | 96193 |
| 13618 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13617 | 1 | 96194 |
| 13619 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 3818 | 1 | 96195 |
| 13620 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 13619 | 1 | 96196 |
| 13621 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^0 \pi^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 13620 | 1 | 96197 |
| 13622 | $J/\psi \to K^+ \phi K_0^{*-}, \phi \to \pi^0 \rho^0, K_0^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13621 | 1 | 96198 |
| 13623 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 13622 | 1 | 96199 |
| 13624 | $J/\psi \to \phi\phi\phi, \phi \to K_L^0 K_S^0, \phi \to \pi^- \rho^+, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 3819 | 1 | 96200 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13625 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \omega K^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13624 | 1 | 96201 |
| 13626 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to K_S^0 K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13625 | 1 | 96202 |
| 13627 | $J/\psi ightarrow \eta \omega \eta', \eta ightarrow \pi^0 \pi^0 \pi^0, \omega ightarrow \pi^0 \gamma, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 13626 | 1 | 96203 |
| 13628 | $J/\psi \to \pi^0 \pi^0 f_2(1270) h_1(1170), f_2(1270) \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13627 | 1 | 96204 |
| 13629 | $J/\psi \to K^0 a_1^0 \bar{K}_1^{'0}, K^0 \to K_L^0, a_1^0 \to \pi^+ \rho^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6072 | 1 | 96205 |
| 13630 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 767 | 1 | 96206 |
| 13631 | $J/\psi 	o \pi^0 \eta \eta' \gamma, \eta 	o \pi^0 \pi^0 \pi^0, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 13630 | 1 | 96207 |
| 13632 | $J/\psi \rightarrow \bar{K}^0K^+b_1^-, \bar{K}^0 \rightarrow K_S^0, b_1^- \rightarrow \pi^-\omega, K_S^0 \rightarrow \pi^+\pi^-, \omega \rightarrow \pi^0\gamma$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 13631 | 1 | 96208 |
| 13633 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^- \gamma^f$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-\gamma^f$ | 13632 | 1 | 96209 |
| 13634 | $J/\psi \to \pi^+ K_1^0 K_1^-, K_1^0 \to \pi^0 K^*, K_1^- \to \rho^- \bar{K}^0, K^* \to \pi^- K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 13633 | 1 | 96210 |
| 13635 | $J/\psi \rightarrow \pi^- \rho^+ \rho^+ \rho^- \eta, \rho^+ \rightarrow \pi^0 \pi^+, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 13634 | 1 | 96211 |
| 13636 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 13635 | 1 | 96212 |
| 13637 | $J/\psi \to K^- \eta' K_1^+, \eta' \to ho^0 \gamma, K_1^+ \to \pi^+ K^*, ho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 13636 | 1 | 96213 |
| 13638 | $J/\psi \rightarrow \pi^0\pi^+\rho^-\omega b_1^0, \rho^- \rightarrow \pi^0\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, b_1^0 \rightarrow \pi^0\omega, \omega \rightarrow \pi^0\pi^+\pi^-\gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 13637 | 1 | 96214 |
| 13639 | $J/\psi \to K^0 \eta' \bar{K}_1^0, K^0 \to K_S^0, \eta' \to \pi^0 \pi^+ \pi^-, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^0 \pi^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13638 | 1 | 96215 |
| 13640 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^0 \eta', \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 13639 | 1 | 96216 |
| 13641 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0\pi^-K^+\gamma$ | 6074 | 1 | 96217 |
| 13642 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \pi^+\pi^-\gamma^F, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma^F$ | 13641 | 1 | 96218 |
| 13643 | $J/\psi \to \rho^0 \omega K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 13642 | 1 | 96219 |
| 13644 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \eta' a_0^+, \eta' \to \pi^+ \pi^- \eta, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 13643 | 1 | 96220 |
| 13645 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \\ \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^0K^0_L\pi^+\pi^-\gamma^F\gamma$ | 13644 | 1 | 96221 |
| 13646 | $J/\psi \to \bar{K}^*K_1^0 \gamma, \bar{K}^* \to \pi^+K^-, K_1^0 \to \pi^-K_0^{*+}, K_0^{*+} \to \pi^+K^0 \gamma^f, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma^f$ | 13645 | 1 | 96222 |
| 13647 | $J/\psi \to \pi^+\pi^-\omega\gamma^F, \omega \to \pi^0\gamma, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma^F\gamma$ | 13646 | 1 | 96223 |
| 13648 | $J/\psi \to \pi^0 K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6075 | 1 | 96224 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13649 | $J/\psi \to \eta \bar{K}^* K_2^{*0}, \eta \to \gamma \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \omega K^0, \bar{K}^0 \to K_L^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma\gamma$ | 13648 | 1 | 96225 |
| 13650 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \pi^0 \to e^+e^-\gamma^F, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 13649 | 1 | 96226 |
| 13651 | $J/\psi \to \pi^- \eta' b_1^+, \eta' \to \pi^0 \pi^0 \eta, b_1^+ \to \pi^+ \omega, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 13650 | 1 | 96227 |
| 13652 | $J/\psi \to \pi^0\pi^0\pi^+\rho^-K^+K^{*-}, \rho^- \to \pi^0\pi^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+$ | 13651 | 1 | 96228 |
| 13653 | $J/\psi \to \eta \bar{K}^0 K^0_0, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_L, K^0_0 \to \pi^- K^+ \gamma^f$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{f}$ | 13652 | 1 | 96229 |
| 13654 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- a_2^+ b_1^0, a_2^+ \to \bar{K}^0 K^+, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_S^0, \ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 13653 | 1 | 96230 |
| 13655 | $J/\psi \rightarrow \eta_c \gamma, \eta_c \rightarrow \pi^- a_2^+ a_0^0, a_2^+ \rightarrow \pi^0 \rho^+, a_0^0 \rightarrow \pi^0 \eta, \rho^+ \rightarrow \pi^0 \pi^+, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 13654 | 1 | 96231 |
| 13656 | $J/\psi \to \pi^0 \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6076 | 1 | 96232 |
| 13657 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^f, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13656 | 1 | 96233 |
| 13658 | $J/\psi \to \pi^0 a_0^0 h_1(1170), \pi^0 \to e^+ e^- \gamma^F, a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13657 | 1 | 96234 |
| 13659 | $J/\psi \to a_2^+ \omega a_0^-, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 13658 | 1 | 96235 |
| 13660 | $J/\psi 	o \pi^0 \pi^+ a_0^0 b_1^-, a_0^0 	o K_L^0 K_L^0, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13659 | 1 | 96236 |
| 13661 | $J/\psi \to \eta \Lambda \bar{\Lambda}, \eta \to \pi^+ \pi^- \gamma^F, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma^F$ | 6077 | 1 | 96237 |
| 13662 | $J/\psi \to K^*K^-b_1^+, K^* \to \pi^-K^+, b_1^+ \to \pi^+\omega, \omega \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 1987 | 1 | 96238 |
| 13663 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 13662 | 1 | 96239 |
| 13664 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13663 | 1 | 96240 |
| 13665 | $J/\psi \to \pi^- K^0 \bar{K}^* b_1^+, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_S^0, \ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13664 | 1 | 96241 |
| 13666 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 13665 | 1 | 96242 |
| 13667 | $J/\psi \to \pi^+ \eta K^* K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 13666 | 1 | 96243 |
| 13668 | $J/\psi \to \pi^0 \pi^0 \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^+ \pi^- K^0 \gamma^f, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13667 | 1 | 96244 |
| 13669 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^- K_2^{*+}, K_2^{*+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 13668 | 1 | 96245 |
| 13670 | $J/\psi \to \bar{K}^0 K^* K^- K^{*+}, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-K^+K^-$ | 2674 | 1 | 96246 |
| 13671 | $J/\psi \to \eta K^0 \bar{K}^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 13670 | 1 | 96247 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 13672 | $J/\psi \to \pi^+ \rho^- \eta f_2(1270), \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 13671 | 1 | 96248 |
| 13673 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13672 | 1 | 96249 |
| 13674 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^0\bar{K}^0, a_0^- \to \pi^-\eta, \pi^0 \to e^+e^-\gamma^F, \bar{K}^0 \to K_L^0, \eta \to \gamma\gamma$ | $e^+e^-K_L^0\pi^-K^+\gamma^F\gamma\gamma$ | 6080 | 1 | 96250 |
| 13675 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\pi^-\eta\gamma^f, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13674 | 1 | 96251 |
| 13676 | $J/\psi \to \eta K^0 \bar{K}^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13675 | 1 | 96252 |
| 13677 | $J/\psi \to \pi^0 K^+ K^{*-} h_1(1170), K^{*-} \to \pi^0 K^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13676 | 1 | 96253 |
| 13678 | $J/\psi \to K^+K^{*-}f_2^{'}, K^{*-} \to \pi^0K^-, f_2^{'} \to K_S^0K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13677 | 1 | 96254 |
| 13679 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 13678 | 1 | 96255 |
| 13680 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \rho^0 K^-, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13679 | 1 | 96256 |
| 13681 | $J/\psi \to K^{*+}K_2^{*-}\gamma, K^{*+} \to \pi^+K^0, K_2^{*-} \to \rho^0K^-, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 13680 | 1 | 96257 |
| 13682 | $J/\psi \to K K_2 \gamma, K \to K K_2 \to \rho K K_1, \rho \to K K_2, \rho \to K K_3, \rho \to K K_4, \rho \to K K_5, \rho \to K$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 6081 | 1 | 96258 |
| 13683 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13682 | 1 | 96259 |
| 13684 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13683 | 1 | 96260 |
| 13685 | $J/\psi ightarrow ho^+ ho^- \eta \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13684 | 1 | 96261 |
| 13686 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+ \gamma^f, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 6082 | 1 | 96262 |
| 13687 | $J/\psi \rightarrow \rho^- a_0^0 a_0^+, \rho^- \rightarrow \pi^0 \pi^-, a_0^0 \rightarrow \pi^0 \eta, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-, \eta \rightarrow \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 13686 | 1 | 96263 |
| 13688 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-K^-K^-$ | 13687 | 1 | 96264 |
| 13689 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 959 | 1 | 96265 |
| 13690 | $J/\psi \to \eta \eta' \phi, \eta \to \gamma \gamma, \eta' \to \pi^+ \pi^- \eta, \phi \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13689 | 1 | 96266 |
| 13691 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 13690 | 1 | 96267 |
| 13692 | $J/\psi \to K_2^{*0} K^+ b_1^-, K_2^{*0} \to \pi^0 \bar{K}^*, b_1^- \to \pi^- \omega, \bar{K}^* \to \pi^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3824 | 1 | 96268 |
| 13693 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 13692 | 1 | 96269 |
| 13694 | $J/\psi 	o \eta\eta\phi, \eta 	o \gamma\gamma, \eta 	o \pi^+\pi^-\gamma^F, \phi 	o \pi^0 ho^0, ho^0 	o \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 13693 | 1 | 96270 |
| 13695 | $J/\psi \to K^+ K^- a_1^0 \gamma^F, a_1^0 \to \pi^+ \rho^- \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | 13694 | 1 | 96271 |
| 13696 | $J/\psi \to \eta K^- K_2^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6085 | 1 | 96272 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 13697 | $J/\psi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma^f$ | 13696 | 1 | 96273 |
| 13698 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 13697 | 1 | 96274 |
| 13699 | $J/\psi 	o \pi^0\pi^0 f_2(1270) b_1^0, f_2(1270) 	o \pi^+\pi^-, b_1^0 	o \pi^0\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13698 | 1 | 96275 |
| 13700 | $J/\psi \to \rho^- \eta \bar{K}^0 K^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^F$ | 13699 | 1 | 96276 |
| 13701 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6086 | 1 | 96277 |
| 13702 | $J/\psi \to K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13701 | 1 | 96278 |
| 13703 | $J/\psi \to \eta K^* K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 13702 | 1 | 96279 |
| 13704 | $J/\psi \to K^+ \phi K_0^{*-}, \phi \to K_L^0 K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13703 | 1 | 96280 |
| 13705 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \omega K^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 13704 | 1 | 96281 |
| 13706 | $J/\psi \to K^- b_1^+ K_0^0, b_1^+ \to \pi^+ \omega, K_0^0 \to \pi^0 K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 13705 | 1 | 96282 |
| 13707 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^0 \bar{K}^0, K^0_S \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^-$ | 3825 | 1 | 96283 |
| 13708 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13707 | 1 | 96284 |
| 13709 | $J/\psi \to \pi^- \rho^+ f_2(1270) f_0(1370), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13708 | 1 | 96285 |
| 13710 | $J/\psi \to \pi^0 \rho^0 \rho^+ \rho^- \eta, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13709 | 1 | 96286 |
| 13711 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 6088 | 1 | 96287 |
| 13712 | $J/\psi \to \phi f_1(1420), \phi \to \pi^- \rho^+, f_1(1420) \to \pi^- \bar{K}^0 K^+, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6089 | 1 | 96288 |
| 13713 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0K_L^0$ | 3826 | 1 | 96289 |
| 13714 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \pi^0 \pi^- \omega, \bar{K}^0 \to K^0_S, \omega \to \pi^0 \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13713 | 1 | 96290 |
| 13715 | $J/\psi \to \eta \bar{\Delta}^- \Delta^-, \eta \to \pi^+ \pi^- \gamma^F, \bar{\Delta}^- \to \pi^+ \bar{n}, \Delta^- \to \pi^- n$ | $\pi^+\pi^+\pi^-\pi^-nar{n}\gamma^F$ | 13714 | 1 | 96291 |
| 13716 | $J/\psi \to \bar{K}^0 K^* K^+ K^{*-}, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- \pi^- K^+ K^+$ | 13715 | 1 | 96292 |
| 13717 | $J/\psi \to \pi^0 n \bar{\Delta}^0 \gamma, \bar{\Delta}^0 \to \pi^+ \bar{p}$ | $\pi^0\pi^+n\bar{p}\gamma$ | 13716 | 1 | 96293 |
| 13718 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \eta \gamma, \bar{K}^0 \to K_S^0, \\ \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma \gamma$ | 13717 | 1 | 96294 |
| 13719 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to K^+ K^-, a_2^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 13718 | 1 | 96295 |
| 13720 | $J/\psi \to K^0 \bar{K}^0 a_0^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 13719 | 1 | 96296 |
| 13721 | $J/\psi \to \pi^0 K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 13720 | 1 | 96297 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13722 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- a_2^+ h_1(1170), a_2^+ \to \rho^0 \pi^+, h_1(1170) \to \pi^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\gamma$ | 13721 | 1 | 96298 |
| 13723 | $J/\psi \to K^- a_0^+ K_1^{'0}, a_0^+ \to \pi^+ \eta, K_1^{'0} \to \pi^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 13722 | 1 | 96299 |
| 13724 | $J/\psi \to a_2^0 \pi^+ \pi^- a_0^0, a_2^0 \to \pi^+ \rho^-, a_0^0 \to \pi^0 \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13723 | 1 | 96300 |
| 13725 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, f_0(1370) \to \pi^0\pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 13724 | 1 | 96301 |
| 13726 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \gamma, a_0^+ \to \pi^+ \eta, $ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13725 | 1 | 96302 |
| 13727 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13726 | 1 | 96303 |
| 13728 | $J/\psi \to K^0 \bar{K}^0 K^+ K^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 13727 | 1 | 96304 |
| 13729 | $J/\psi \to \pi^+ \bar K^0 \Delta^0 \bar \Sigma^-, \bar K^0 \to K_L^0, \Delta^0 \to \pi^0 n, \bar \Sigma^- \to \pi^- \bar n$ | $\pi^0 K_L^0 \pi^+ \pi^- n \bar{n}$ | 13728 | 1 | 96305 |
| 13730 | $J/\psi \to \bar{K}^0 b_1^- K_1^+, \bar{K}^0 \to K_L^0, b_1^- \to \pi^- \omega, K_1^+ \to \pi^0 K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-\pi^-$ | 13729 | 1 | 96306 |
| 13731 | $J/\psi \to K^0 \bar{K}^0 f_2^{'}, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_2^{'} \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 13730 | 1 | 96307 |
| 13732 | $J/\psi \to \pi^0 \pi^+ \pi^- \eta K^0 \bar{K}^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13731 | 1 | 96308 |
| 13733 | $J/\psi \to \pi^- a_0^0 b_1^+, a_0^0 \to \pi^0 \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13732 | 1 | 96309 |
| 13734 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \rho^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 13733 | 1 | 96310 |
| 13735 | $J/\psi ightarrow \pi^0\pi^0 ho^-a_0^+, ho^- ightarrow \pi^0\pi^-, a_0^+ ightarrow \pi^+\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 13734 | 1 | 96311 |
| 13736 | $J/\psi \to \eta f_0(1370)h_1(1170), \eta \to \pi^+\pi^-\gamma^F, f_0(1370) \to \pi^0\pi^0\pi^+\pi^-, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 13735 | 1 | 96312 |
| 13737 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 13736 | 1 | 96313 |
| 13738 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 13737 | 1 | 96314 |
| 13739 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \phi, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 13738 | 1 | 96315 |
| 13740 | $J/\psi \to K^0 \bar{K}^0 K^+ K_2^{*-}, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_2^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 13739 | 1 | 96316 |
| 13741 | $J/\psi \to \rho^{0}\rho^{0}\pi^{+}\rho^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}\gamma^{F}, \rho^{-} \to \pi^{0}\pi^{-}, \pi^{0} \to e^{+}e^{-}\gamma^{F}$ | $e^+e^-\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^F$ | 13740 | 1 | 96317 |
| 13742 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^+ K_2^{*-}, \bar{K}^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13741 | 1 | 96318 |
| 13743 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ a_0^- a_1^0, a_0^- \to \pi^- \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13742 | 1 | 96319 |
| 13744 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 13743 | 1 | 96320 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13745 | $J/\psi \to \rho^+ \rho^- K^- K^{*+}, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 13744 | 1 | 96321 |
| 13746 | $J/\psi 	o \pi^0 K^{*-} K_2^{*+}, K^{*-} 	o \pi^0 K^-, K_2^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 13745 | 1 | 96322 |
| 13747 | $J/\psi \to K^-K^{*+}f_0(1710), K^{*+} \to \pi^+K^0, f_0(1710) \to \pi^0\pi^0, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 13746 | 1 | 96323 |
| 13748 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^+K^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0 K^+ K^+ K^- K^-$ | 13747 | 1 | 96324 |
| 13749 | $J/\psi 	o \Lambda ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o ar{n} \gamma$ | $\pi^0 n \bar{n} \gamma$ | 13748 | 1 | 96325 |
| 13750 | $J/\psi \to K^- K^{*+} \eta', K^{*+} \to \pi^0 K^+, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6091 | 1 | 96326 |
| 13751 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13750 | 1 | 96327 |
| 13752 | $J/\psi \to K_2^*, K_S^* \to \pi^* \pi$ $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \rho^+ K^0, K_2^{*-} \to \pi^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0,$ $K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 13751 | 1 | 96328 |
| 13753 | $J/\psi \to \rho^- \bar{K}^0 K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13752 | 1 | 96329 |
| 13754 | $J/\psi 	o K^0 ar K^0 b_1^0, K^0 	o K_S^0, ar K^0 	o K_S^0, b_1^0 	o \pi^0 \omega, K_S^0 	o \pi^0 \pi^0, \ K_S^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 13753 | 1 | 96330 |
| 13755 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \omega K^0, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13754 | 1 | 96331 |
| 13756 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 13755 | 1 | 96332 |
| 13757 | $J/\psi \to \pi^0 \pi^- a_2^+ \gamma^f, a_2^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 13756 | 1 | 96333 |
| 13758 | $J/\psi 	o \pi^0 \pi^- ar{K}^0 K^+, \pi^0 	o e^+ e^- \gamma^F, ar{K}^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^-\pi^-K^+\gamma^F$ | 13757 | 1 | 96334 |
| 13759 | $J/\psi \to \pi^- \bar{\Sigma}^{*0} \Sigma^+, \bar{\Sigma}^{*0} \to \pi^- \bar{\Sigma}^+, \Sigma^+ \to \pi^0 p, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 13758 | 1 | 96335 |
| 13760 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 13759 | 1 | 96336 |
| 13761 | $J/\psi \to K^0 \bar{K}^* \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-K^-\gamma^F\gamma$ | 13760 | 1 | 96337 |
| 13762 | $J/\psi \to \bar{K}^0 b_1^0 K_1^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, \\ \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3827 | 1 | 96338 |
| 13763 | $J/\psi \to K^{+}a_{0}^{0}\bar{K}_{1}^{'-}, a_{0}^{0} \to \pi^{0}\eta, \bar{K}_{1}^{'-} \to \pi^{-}\bar{K}^{*}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \bar{K}^{*} \to \pi^{+}K^{-}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6093 | 1 | 96339 |
| 13764 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 13763 | 1 | 96340 |
| 13765 | $J/\psi \to \pi^0 \rho^0 \rho^+ \rho^- \eta, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \eta \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13764 | 1 | 96341 |
| 13766 | $J/\psi \to \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma, b_1^- \to \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 13765 | 1 | 96342 |
| 13767 | $J/\psi \to \pi^0 \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 13766 | 1 | 96343 |
| 13768 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 13767 | 1 | 96344 |
| 13769 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 13768 | 1 | 96345 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 13770 | $J/\psi \to K^0 \bar{K}^0 f_2', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_2' \to K_L^0 K_L^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 13769 | 1 | 96346 |
| 13771 | $J/\psi \to K^- K_2^{*+} h_1(1170), K_2^{*+} \to \pi^+ K^0, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 13770 | 1 | 96347 |
| 13772 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0 \gamma^f, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 3828 | 1 | 96348 |
| 13773 | $J/\psi \to K^{*-}K_1^{'+}, K^{*-} \to \pi^0K^-, K_1^{'+} \to \pi^0K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 13772 | 1 | 96349 |
| 13774 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13773 | 1 | 96350 |
| 13775 | $J/\psi \to K^- K_1^+, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 13774 | 1 | 96351 |
| 13776 | $J/\psi \to \pi^0 \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13775 | 1 | 96352 |
| 13777 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \omega K^+, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 13776 | 1 | 96353 |
| 13778 | $J/\psi \to \pi^- a_2^+ \gamma^f, a_2^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 13777 | 1 | 96354 |
| 13779 | $J/\psi \to \pi^0 b_1^- a_1^+, b_1^- \to \pi^- \omega, a_1^+ \to \rho^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6095 | 1 | 96355 |
| 13780 | $J/\psi \to \rho^0 \pi^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13779 | 1 | 96356 |
| 13781 | $J/\psi \to K^* \bar{K}^0_2, K^* \to \pi^- K^+, \bar{K}^0_2 \to \pi^- K_2^{*+}, K_2^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 13780 | 1 | 96357 |
| 13782 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \rho^+ \rho^-, K_S^0 \to \pi^+ \pi^- \gamma^f, $ $\rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13781 | 1 | 96358 |
| 13783 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 13782 | 1 | 96359 |
| 13784 | $J/\psi 	o \pi^0 K^+ ar{\Delta}^+ \Lambda, ar{\Delta}^+ 	o \pi^0 ar{p}, \Lambda 	o \pi^- p$ | $\pi^0\pi^0\pi^-K^+p\bar{p}$ | 13783 | 1 | 96360 |
| 13785 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \pi^- K^{*+}, K_0^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13784 | 1 | 96361 |
| 13786 | $J/\psi \to a_2^+ b_1^-, a_2^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13785 | 1 | 96362 |
| 13787 | $J/\psi 	o \pi^0 \pi^+ a_2^- \eta, a_2^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13786 | 1 | 96363 |
| 13788 | $J/\psi \to \pi^0 \pi^- a_1^+ \gamma^f, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 13787 | 1 | 96364 |
| 13789 | $J/\psi \to \pi^0 \pi^- a_1^+ \gamma^J, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-,$ $K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 13788 | 1 | 96365 |
| 13790 | $J/\psi \to \pi^0 \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13789 | 1 | 96366 |
| 13791 | $J/\psi \to a_2^0 \pi^+ b_1^-, a_2^0 \to K^+ K^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13790 | 1 | 96367 |
| 13792 | $J/\psi \to \pi^0 f_1(1285)\gamma, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 13791 | 1 | 96368 |
| 13793 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^+\pi^-K^*, K_S^0 \to \pi^0\pi^0, K^* \to \pi^-K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13792 | 1 | 96369 |
| 13794 | $J/\psi \to \pi^+ \rho^- f_0(1370) a_1^0, \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^0 \pi^0, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13793 | 1 | 96370 |
| 13795 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^+ \pi^- K^*, K_2^{*0} \to \rho^+ K^-, K^* \to \pi^- K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13794 | 1 | 96371 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13796 | $J/\psi \to K^+K^-\phi, \phi \to f_0(980)\gamma, f_0(980) \to K^+K^-$ | $K^+K^+K^-K^-\gamma$ | 13795 | 1 | 96372 |
| 13797 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \pi^0 \pi^+ K^*, \phi \to \pi^0 \rho^0, K^* \to \pi^- K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3829 | 1 | 96373 |
| 13798 | $J/\psi \to \pi^0 K^+ K_1^- \gamma^f, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 13797 | 1 | 96374 |
| 13799 | $J/\psi 	o \pi^+\pi^+ ho^-\eta b_1^-, ho^- 	o \pi^0\pi^-, \eta 	o \pi^0\pi^0\pi^0, b_1^- 	o \pi^-\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13798 | 1 | 96375 |
| 13800 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^0 \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13799 | 1 | 96376 |
| 13801 | $J/\psi \to K_1^0 \bar{K}_1^0, K_1^0 \to \rho^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 13800 | 1 | 96377 |
| 13802 | $J/\psi \to \phi f_0(2020), \phi \to \pi^- \rho^+, f_0(2020) \to \eta \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 13801 | 1 | 96378 |
| 13803 | $J/\psi \to \phi f_0(1710), \phi \to \pi^+ \rho^-, f_0(1710) \to K^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13802 | 1 | 96379 |
| 13804 | $J/\psi \to \rho^0 \bar{K}^0 K_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 13803 | 1 | 96380 |
| 13805 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^0 \eta, \omega ightarrow \pi^+ \pi^-, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 13804 | 1 | 96381 |
| 13806 | $J/\psi \to \rho^0 \rho^0 \omega a_0^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13805 | 1 | 96382 |
| 13807 | $J/\psi ightarrow \pi^+ ho^- n ar{\Delta}{}^0, ho^- ightarrow \pi^0 \pi^-, ar{\Delta}{}^0 ightarrow \pi^0 ar{n}$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 13806 | 1 | 96383 |
| 13808 | $J/\psi 	o \omega n \bar{\Delta}^0, \omega 	o \pi^0 \gamma, \bar{\Delta}^0 	o \pi^+ \bar{p}$ | $\pi^0\pi^+n\bar{p}\gamma$ | 13807 | 1 | 96384 |
| 13809 | $J/\psi \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-\gamma^F$ | $\pi^+\pi^-\pi^-K^+\gamma^F$ | 13808 | 1 | 96385 |
| 13810 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^0 K^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 13809 | 1 | 96386 |
| 13811 | $J/\psi \to f_4(2050)\gamma, f_4(2050) \to \eta\eta, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma$ | 13810 | 1 | 96387 |
| 13812 | $J/\psi \to \pi^0 a_2^+ a_0^- \gamma, a_2^+ \to \pi^0 \rho^+, a_0^- \to \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 13811 | 1 | 96388 |
| 13813 | $J/\psi \to \rho^0 K^{*+} \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 13812 | 1 | 96389 |
| 13814 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^+ a_1^-, \bar{K}^0 \to K_S^0, a_1^- \to \rho^0 \pi^-, K_S^0 \to \pi^0 \pi^0, $ $\rho^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\pi^-K^+\gamma^F\gamma$ | 13813 | 1 | 96390 |
| 13815 | $J/\psi \to \pi^0 \pi^0 K^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-$ | 3830 | 1 | 96391 |
| 13816 | $J/\psi \to ho^0 ho^0 \pi^- b_1^+, ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^- \gamma^f, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 13815 | 1 | 96392 |
| 13817 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-, f_0(1370) \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13816 | 1 | 96393 |
| 13818 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}\gamma, \bar{\Sigma}^{*+} \to \pi^+\bar{\Lambda}, \Sigma^{*-} \to \pi^-\Lambda, \bar{\Lambda} \to \pi^+\bar{p}, \Lambda \to \pi^-p$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 13817 | 1 | 96394 |
| 13819 | $J/\psi ightarrow K^0 ar{\Delta}^0 \Lambda, K^0 ightarrow K^0_L, ar{\Delta}^0 ightarrow \pi^+ ar{p}, \Lambda ightarrow \pi^- p$ | $K_L^0\pi^+\pi^-par{p}$ | 13818 | 1 | 96395 |
| 13820 | $J/\psi \to K^- K_1^+, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 13819 | 1 | 96396 |
| 13821 | $J/\psi \to \rho^0 K^- K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 2676 | 1 | 96397 |
| 13822 | $J/\psi \to \phi f_0(1710), \phi \to \pi^+ \rho^-, f_0(1710) \to K^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13821 | 1 | 96398 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 13823 | $J/\psi \to h_1(1170)f_1(1285), h_1(1170) \to \pi^+ \rho^-, f_1(1285) \to \pi^+ a_0^-, \rho^- \to \pi^0 \pi^-, a_0^- \to \pi^- \eta, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 13822 | 1 | 96399 |
| 13824 | $J/\psi \to \pi^0 \bar{K}^* K^{*+} a_0^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, \bar{K}^0 \to K_S^0, $ $\eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma\gamma$ | 13823 | 1 | 96400 |
| 13825 | $J/\psi \to \pi^+ a^- a^0 a^- \to \pi^- n a^0 \to \pi^0 n n \to \pi^+ \pi^- \gamma^F n \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 13824 | 1 | 96401 |
| 13826 | $J/\psi \to \pi^{-}b_{1}^{+}f_{1}(1285), b_{1}^{+} \to \pi^{+}\omega, f_{1}(1285) \to \pi^{0}\pi^{-}\rho^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \pi^{0} \to e^{+}e^{-}\gamma^{F}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 1531 | 1 | 96402 |
| 13827 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^0K^0, a_0^+ \to \pi^+\eta, K^0 \to K_S^0, \eta \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13826 | 1 | 96403 |
| 13828 | $J/\psi \to \rho^0 \pi^+ \pi^- K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 13827 | 1 | 96404 |
| 13829 | $J/\psi \to K^* \bar{K}_0^{*0} \gamma, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 6100 | 1 | 96405 |
| 13830 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \omega K^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13829 | 1 | 96406 |
| 13831 | $J/\psi 	o ho^- K^+ ar{K}^0_1, ho^- 	o \pi^0 \pi^-, ar{K}^0_1 	o \omega ar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K^0_L$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 13830 | 1 | 96407 |
| 13832 | $J/\psi ightarrow \pi^0 ho^+ \Delta^0 ar p, ho^+ ightarrow \pi^0 \pi^+, \Delta^0 ightarrow \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 13831 | 1 | 96408 |
| 13833 | $J/\psi \to \pi^- \bar{K}^0 K^+ h_1(1170), \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13832 | 1 | 96409 |
| 13834 | $J/\psi \to a_2^+ K^* K^-, a_2^+ \to \pi^0 \pi^+ \omega, K^* \to \pi^- K^+, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13833 | 1 | 96410 |
| 13835 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13834 | 1 | 96411 |
| 13836 | $J/\psi \to K^- \Delta^{++} \bar{\Sigma}^{*-}, \Delta^{++} \to \pi^+ p, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-K^-ar{n}p$ | 13835 | 1 | 96412 |
| 13837 | $J/\psi \to \rho^0 K^{*+} K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \rho^- K^0, K^0 \to K_L^0, \\ \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 13836 | 1 | 96413 |
| 13838 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^*, K_2^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^- K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 13837 | 1 | 96414 |
| 13839 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0 \gamma^f, K_1^- \to \rho^0 K^-, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 13838 | 1 | 96415 |
| 13840 | $J/\psi \to \pi^0 a_2^0 h_1(1170), \pi^0 \to e^+ e^- \gamma^F, a_2^0 \to \pi^+ \rho^- \gamma^f, h_1(1170) \to \pi^0 \rho^0, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 13839 | 1 | 96416 |
| 13841 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^0 \pi^0 \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 13840 | 1 | 96417 |
| 13842 | $J/\psi \to \pi^+\pi^-K^0\bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 13841 | 1 | 96418 |
| 13843 | $J/\psi \to \omega \bar{K}^* K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13842 | 1 | 96419 |
| 13844 | $J/\psi \to K^+ K_2^{*-} a_0^0, K_2^{*-} \to \rho^0 K^-, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13843 | 1 | 96420 |
| 13845 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 13844 | 1 | 96421 |
| 13846 | $J/\psi \to \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 13845 | 1 | 96422 |
| 13847 | $J/\psi 	o \omega K^*ar{K}^*, \omega 	o \pi^0\gamma, K^* 	o \pi^0K^0, ar{K}^* 	o \pi^+K^-, K^0 	o K^0_L$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 13846 | 1 | 96423 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13848 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \rho^- K^+, K_2^{*-} \to \pi^0 K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6101 | 1 | 96424 |
| 13849 | $J/\psi \to K^- \eta' K_1^+, \eta' \to \pi^0 \pi^0 \eta, K_1^+ \to \pi^+ K_0^0, \eta \to \pi^0 \pi^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13848 | 1 | 96425 |
| 13850 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+} \gamma^f, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 13849 | 1 | 96426 |
| 13851 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^+ K^{*-}, \bar{K}^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6102 | 1 | 96427 |
| 13852 | $J/\psi \to \pi^0 \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13851 | 1 | 96428 |
| 13853 | $J/\psi \to \omega \omega K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13852 | 1 | 96429 |
| 13854 | $J/\psi \to \pi^0 K^{*+} K_1^- \gamma, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 13853 | 1 | 96430 |
| 13855 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}K^{-}\gamma$ | 6103 | 1 | 96431 |
| 13856 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13855 | 1 | 96432 |
| 13857 | $J/\psi 	o a_2^0 \omega, a_2^0 	o \pi^+ \pi^- \omega, \omega 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13856 | 1 | 96433 |
| 13858 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 13857 | 1 | 96434 |
| 13859 | $J/\psi \to \pi^0 \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 13858 | 1 | 96435 |
| 13860 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 13859 | 1 | 96436 |
| 13861 | $J/\psi \to \pi^0 \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 13860 | 1 | 96437 |
| 13862 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta \gamma^f, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13861 | 1 | 96438 |
| 13863 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ h_1(1170) \gamma^f, \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 1990 | 1 | 96439 |
| 13864 | $J/\psi \to \eta K^0 K_2^{*0}, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13863 | 1 | 96440 |
| 13865 | $J/\psi \to \eta K^{*+} K_0^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 6105 | 1 | 96441 |
| 13866 | $J/\psi \to \pi^0 K_2^{*0} K_2^{*0}, \pi^0 \to e^+ e^- \gamma^F, K_2^{*0} \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}$ | 1991 | 1 | 96442 |
| 13867 | $J/\psi \to \pi^+\pi^- f_2(1270)a_0^0, f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, a_0^0 \to \pi^0\eta, \eta \to \gamma\gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 13866 | 1 | 96443 |
| 13868 | $J/\psi \to \eta \omega K^- K^{*+}, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13867 | 1 | 96444 |
| 13869 | $J/\psi \to \eta \phi f_1(1420), \eta \to \pi^0 \pi^0 \pi^0, \phi \to K^+ K^-, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0K^+K^+K^-K^-$ | 6107 | 1 | 96445 |
| 13870 | $J/\psi \to \rho^- K^+ \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13869 | 1 | 96446 |
| 13871 | $J/\psi \to K^0 \phi \bar{K}^0_1, K^0 \to K^0_L, \phi \to K^+ K^-, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K^0_L \pi^+ K^+ K^- K^-$ | 13870 | 1 | 96447 |
| 13872 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^+K^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F\gamma^f\gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}\gamma^{f}\gamma^{f}$ | 1532 | 1 | 96448 |
| 13873 | $J/\psi ightarrow \pi^+\pi^-\omega b_1^0, \omega ightarrow \pi^0\pi^+\pi^-, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13872 | 1 | 96449 |
| 13874 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 13873 | 1 | 96450 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 13875 | $J/\psi ightarrow \pi^+ \eta K_S^0 K^- \gamma^f, \eta ightarrow \gamma \gamma, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma\gamma^f$ | 13874 | 1 | 96451 |
| 13876 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 13875 | 1 | 96452 |
| 13877 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 \pi^+ \pi^- \omega, \omega 	o \pi^0 \gamma, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 2681 | 1 | 96453 |
| 13878 | $J/\psi ightarrow \pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 6110 | 1 | 96454 |
| 13879 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to K^-\gamma, K_2^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma$ | 13878 | 1 | 96455 |
| 13880 | $J/\psi \to \rho^- \bar{K}^0 K^{*+} f_0(1370), \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13879 | 1 | 96456 |
| 13881 | $J/\psi \to K^* \bar{K}^0_1, K^* \to \pi^- K^+, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 13880 | 1 | 96457 |
| 13882 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \pi^- \eta \gamma^f, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 13881 | 1 | 96458 |
| 13883 | $J/\psi \to \pi^0 \bar{\Delta}^- \Delta^-, \bar{\Delta}^- \to \pi^+ \bar{n}, \Delta^- \to \pi^- n \gamma^f$ | $\pi^0\pi^+\pi^-nar{n}\gamma^f$ | 3837 | 1 | 96459 |
| 13884 | $J/\psi \to \rho^0 a_0^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_0^0 \to K_L^0 K_L^0, f_0(1370) \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13883 | 1 | 96460 |
| 13885 | $J/\psi 	o \pi^+\pi^- ho^+ ho^-f_0(1370), ho^+ 	o \pi^0\pi^+, ho^- 	o \pi^0\pi^-, f_0(1370) 	o \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13884 | 1 | 96461 |
| 13886 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 13885 | 1 | 96462 |
| 13887 | $J/\psi \to \rho^- \omega \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13886 | 1 | 96463 |
| 13888 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^0K^+, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_L^0, \\ \omega \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 13887 | 1 | 96464 |
| 13889 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K_{*+}^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13888 | 1 | 96465 |
| 13890 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+ \gamma^f, \phi \to \eta \gamma, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma\gamma^{f}$ | 3838 | 1 | 96466 |
| 13891 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \gamma \gamma, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 13890 | 1 | 96467 |
| 13892 | $J/\psi \to \rho^- \bar{\Sigma}^{*+} \Sigma^0, \rho^- \to \pi^0 \pi^-, \bar{\Sigma}^{*+} \to \pi^0 \bar{\Sigma}^+, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 13891 | 1 | 96468 |
| 13893 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 13892 | 1 | 96469 |
| 13894 | $J/\psi \to \pi^+ a_0^- h_1(1170) \gamma^f, a_0^- \to \pi^- \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 13893 | 1 | 96470 |
| 13895 | $J/\psi 	o ho^0 a_2^0, ho^0 	o \pi^+ \pi^- \gamma^f, a_2^0 	o \pi^- ho^+ \gamma^f, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 13894 | 1 | 96471 |
| 13896 | $J/\psi \to a_2^0 K^* \bar{K}^*, a_2^0 \to \pi^- \rho^+, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 6113 | 1 | 96472 |
| 13897 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^+ \gamma^f$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma^f$ | 13896 | 1 | 96473 |
| 13898 | $J/\psi \to \pi^0 K^+ \bar{K}_1^{'-} \gamma^f, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 13897 | 1 | 96474 |
| 13899 | $J/\psi \to \bar{K}^* K_1^0, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}$ | 13898 | 1 | 96475 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 13900 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 13899 | 1 | 96476 |
| 13901 | $J/\psi \to \pi^+ \omega a_0^0 a_0^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_0^0 \to \pi^0 \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13900 | 1 | 96477 |
| 13902 | $J/\psi ightarrow \pi^- ar{K}^* K^+ b^0_1, ar{K}^* ightarrow \pi^+ K^-, b^0_1 ightarrow \pi^0 \omega, \omega ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 13901 | 1 | 96478 |
| 13903 | $J/\psi ightarrow ho^- \omega b_1^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^+ \pi^- \gamma^F, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 13902 | 1 | 96479 |
| 13904 | $J/\psi \to \pi^0\pi^0\rho^0\rho^-b_1^+, \rho^0 \to \pi^+\pi^-, \rho^- \to \pi^0\pi^-, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13903 | 1 | 96480 |
| 13905 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \rho^0 K^-, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13904 | 1 | 96481 |
| 13906 | $J/\psi \to \pi^+ a_2^-, a_2^- \to \pi^0 \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13905 | 1 | 96482 |
| 13907 | $J/\psi 	o \pi^0 ho^0 K^0 ar{K}^*, ho^0 	o \pi^+ \pi^-, K^0 	o K_L^0, ar{K}^* 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 13906 | 1 | 96483 |
| 13908 | $J/\psi \to \rho^+ K^0 \bar{K}^0 b_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13907 | 1 | 96484 |
| 13909 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ho^0 \pi^- ho^+, ho^0 	o \pi^+ \pi^- \gamma^F, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 2682 | 1 | 96485 |
| 13910 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{p} \Delta^{++}, \Delta^{++} \to \pi^+ p$ | $\pi^+\pi^-par p\gamma$ | 13909 | 1 | 96486 |
| 13911 | $J/\psi \to \pi^0 \pi^0 \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6115 | 1 | 96487 |
| 13912 | $J/\psi \to \bar{K}^0 a_0^0 K_1^0, \bar{K}^0 \to K_L^0, a_0^0 \to \pi^0 \eta, K_1^0 \to \pi^- K_0^{*+}, \eta \to \gamma \gamma, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 13911 | 1 | 96488 |
| 13913 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^+\pi^+\pi^-\pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13912 | 1 | 96489 |
| 13914 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^- \gamma$ | 13913 | 1 | 96490 |
| 13915 | $J/\psi 	o \Xi^0 ar{\Xi}^0 \gamma, \Xi^0 	o \pi^0 \Lambda, ar{\Xi}^0 	o \pi^0 ar{\Lambda}, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^0\pi^0n\bar{n}\gamma$ | 13914 | 1 | 96491 |
| 13916 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \phi, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, \phi \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13915 | 1 | 96492 |
| 13917 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 13916 | 1 | 96493 |
| 13918 | $J/\psi \to h_1(1380)h_1(1380)\gamma, h_1(1380) \to K^0\bar{K}^*, h_1(1380) \to K^-K^{*+}, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^0K^+$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^- \gamma$ | 13917 | 1 | 96494 |
| 13919 | $J/\psi \to \rho^- \bar{K}_1^0 K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_1^+ \to \pi^+ K^*, K_0^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13918 | 1 | 96495 |
| 13920 | $J/\psi \to \omega\omega\omega, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F\gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 2683 | 1 | 96496 |
| 13921 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6117 | 1 | 96497 |
| 13922 | $J/\psi \to \pi^+ \rho^- \omega \omega \gamma^f, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13921 | 1 | 96498 |
| 13923 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 13922 | 1 | 96499 |
| 13924 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^+ \pi^-, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 13923 | 1 | 96500 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13925 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, K^0 \to K$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \gamma^f$ | 13924 | 1 | 96501 |
| 13926 | $J/\psi \to \eta \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^F$ | 13925 | 1 | 96502 |
| 13927 | $J/\psi ightarrow a_2^0 \omega, a_2^0 ightarrow \pi^0 \eta, \omega ightarrow \pi^0 \gamma, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6118 | 1 | 96503 |
| 13928 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 13927 | 1 | 96504 |
| 13929 | $J/\psi \to \pi^0 K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 13928 | 1 | 96505 |
| 13930 | $J/\psi 	o \eta' \phi, \eta' 	o \pi^0 \pi^0 \eta, \phi 	o \eta \gamma, \eta 	o \pi^0 \pi^+ \pi^-, \eta 	o e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma^f$ | 13929 | 1 | 96506 |
| 13931 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}^0_1 \to \pi^+ \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 13930 | 1 | 96507 |
| 13932 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 13931 | 1 | 96508 |
| 13933 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6119 | 1 | 96509 |
| 13934 | $J/\psi \to a_2^+ K^- K_1^{'0}, a_2^+ \to \pi^+ \eta, K_1^{'0} \to \pi^- K^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 13933 | 1 | 96510 |
| 13935 | $J/\psi ightarrow \pi^+ K^0 K^- \gamma^f, K^0 ightarrow K_L^0$ | $K_L^0\pi^+K^-\gamma^f$ | 13934 | 1 | 96511 |
| 13936 | $J/\psi \to \rho^0 \pi^- K^+ \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 13935 | 1 | 96512 |
| 13937 | $J/\psi \to K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 13936 | 1 | 96513 |
| 13938 | $J/\psi \to \pi^0 a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^0 \eta, a_2^- \to \pi^0 \rho^-, \eta \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 13937 | 1 | 96514 |
| 13939 | $J/\psi ightarrow \pi^+\pi^-\pi^-\omega ar{n}p, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma$ | 13938 | 1 | 96515 |
| 13940 | $J/\psi \to K^0 \eta' \bar{K}_1^0, K^0 \to K_S^0, \eta' \to \rho^0 \gamma, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^+ \pi^-, \\ \rho^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 6120 | 1 | 96516 |
| 13941 | $J/\psi \to K^+K^{*-}b_1^0, K^{*-} \to \pi^-\bar{K}^0, b_1^0 \to \pi^0\omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 13940 | 1 | 96517 |
| 13942 | $J/\psi \to \pi^0 \rho^- \omega \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma$ | 13941 | 1 | 96518 |
| 13943 | $J/\psi \to K^*K^{*-}a_1^+, K^* \to \pi^0K^0, K^{*-} \to \pi^-\bar{K}^0, a_1^+ \to \rho^0\pi^+, \pi^0 \to e^+e^-\gamma^F, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $e^{+}e^{-}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13942 | 1 | 96519 |
| 13944 | $K^{\circ} \to K_{\tilde{L}}, K^{\circ} \to K_{\tilde{L}}, \rho^{\circ} \to \pi^{+}\pi$ $J/\psi \to \pi^{-}a_{0}^{+}h_{1}(1170), a_{0}^{+} \to \pi^{+}\eta, h_{1}(1170) \to \pi^{0}\rho^{0}, \eta \to \gamma\gamma, \pi^{0} \to e^{+}e^{-}\gamma^{F}, \rho^{0} \to \pi^{+}\pi^{-}$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 13943 | 1 | 96520 |
| 13945 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 13944 | 1 | 96521 |
| 13946 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6121 | 1 | 96522 |
| 13947 | $J/\psi ightarrow \pi^0 ho^0 \eta', ho^0 ightarrow \pi^+ \pi^-, \eta' ightarrow \omega \gamma, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 13946 | 1 | 96523 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 13948 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 13947 | 1 | 96524 |
| 13949 | $J/\psi \to \pi^0 a_1^0 \gamma, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 13948 | 1 | 96525 |
| 13950 | $J/\psi \to \rho^0 \pi^- \bar{K}^* K_1^+, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13949 | 1 | 96526 |
| 13951 | $J/\psi \to \pi^0 \pi^+ \pi^- f_2(1270) f_1(1285), f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 13950 | 1 | 96527 |
| 13952 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K_L^0K_S^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 13951 | 1 | 96528 |
| 13953 | $J/\psi \to a_2^+ K^0 K^{*-}, a_2^+ \to \rho^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3841 | 1 | 96529 |
| 13954 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^0K_0^{*+}, K_0^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 13953 | 1 | 96530 |
| 13955 | $J/\psi \to \pi^+ a_2^- \gamma^f, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13954 | 1 | 96531 |
| 13956 | $J/\psi \to \bar{\Sigma}^0 \Sigma^{*0}, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \Sigma^{*0} \to \pi^+ \Sigma^-, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^- \to \pi^- n$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 13955 | 1 | 96532 |
| 13957 | $J/\psi ightarrow \pi^- \eta K_S^0 K^+, \eta ightarrow \gamma \gamma, K_S^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma^f$ | 13956 | 1 | 96533 |
| 13958 | $J/\psi \to \pi^0 \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 634 | 1 | 96534 |
| 13959 | $J/\psi \to \eta b_1^0 f_1(1285), \eta \to \pi^0 \pi^0 \pi^0, b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13958 | 1 | 96535 |
| 13960 | $J/\psi 	o \omega ar{K}^0 K_1^{'0}, \omega 	o \pi^0 \gamma, ar{K}^0 	o K_L^0, K_1^{'0} 	o \pi^+ \pi^- K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 13959 | 1 | 96536 |
| 13961 | $J/\psi \to f_2(1270)h_1(1170), f_2(1270) \to \pi^+\pi^+\pi^-\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13960 | 1 | 96537 |
| 13962 | $J/\psi \to \rho^0 K^0 \bar{K}^* \phi, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 13961 | 1 | 96538 |
| 13963 | $J/\psi 	o \pi^0 K_2^{*0} K_2^{*0}, K_2^{*0} 	o \pi^- K^+, K_2^{*0} 	o \pi^+ K^-$ | $\pi^0 \pi^+ \pi^- K^+ K^-$ | 13962 | 1 | 96539 |
| 13964 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0 \gamma^f, K_S^0 \to \pi^0 \pi^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 13963 | 1 | 96540 |
| 13965 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \phi, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 2685 | 1 | 96541 |
| 13966 | $J/\psi ightarrow ho^0 \eta' a_0^0, ho^0 ightarrow \pi^+ \pi^-, \eta' ightarrow \pi^0 \pi^0 \eta, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma, \ \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 13965 | 1 | 96542 |
| 13967 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-\pi^-K^+K^+$ | 13966 | 1 | 96543 |
| 13968 | $J/\psi \to \pi^{+}\pi^{-}K_{1}^{-}K_{1}^{'+}, K_{1}^{-} \to \pi^{0}K_{0}^{*-}, K_{1}^{'+} \to \pi^{+}K^{*}, K_{0}^{*-} \to \pi^{-}\bar{K}^{0}, K^{*} \to \pi^{-}K^{+}, \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 13967 | 1 | 96544 |
| 13969 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^0 \rho^0, \bar{K}^0 \to K_L^0, ho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 6125 | 1 | 96545 |
| 13970 | $J/\psi \to \pi^+\pi^+\pi^-\rho^-\omega f_0(1370), \rho^- \to \pi^0\pi^-, \omega \to \pi^0\pi^+\pi^-, f_0(1370) \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13969 | 1 | 96546 |
| 13971 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \rho^0\pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 13970 | 1 | 96547 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 13972 | $J/\psi \to \pi^0 a_2^0 \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, a_2^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 13971 | 1 | 96548 |
| 13973 | $J/\psi \to \rho^+ K_2^{*0} K^{*-}, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^- K^{*+}, K^{*-} \to \pi^0 K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6126 | 1 | 96549 |
| 13974 | $J/\psi \to \pi^- \rho^+ \rho^- a_2^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3844 | 1 | 96550 |
| 13975 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \omega \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 13974 | 1 | 96551 |
| 13976 | $J/\psi \to \rho^0 \pi^+ b_1^- h_1(1170), \rho^0 \to \pi^+ \pi^-, b_1^- \to \pi^- \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13975 | 1 | 96552 |
| 13977 | $J/\psi \rightarrow \phi f_0(2020), \phi \rightarrow K^+K^-, f_0(2020) \rightarrow \eta \eta, \eta \rightarrow \gamma \gamma, \eta \rightarrow \pi^+\pi^-\gamma^F$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma\gamma$ | 13976 | 1 | 96553 |
| 13978 | $J/\psi \to \pi^- \bar{K}^0 K^+ f_1(1420), \bar{K}^0 \to K_L^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^- \pi^- \pi^- K^+ K^+$ | 13977 | 1 | 96554 |
| 13979 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13978 | 1 | 96555 |
| 13980 | $J/\psi \to \pi^0 \pi^- a_2^+, a_2^+ \to \pi^+ \eta, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 13979 | 1 | 96556 |
| 13981 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \gamma, f_2(1270) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\gamma\gamma^f$ | 1534 | 1 | 96557 |
| 13982 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to K^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 13981 | 1 | 96558 |
| 13983 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \rho^- K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 13982 | 1 | 96559 |
| 13984 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \omega \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 13983 | 1 | 96560 |
| 13985 | $J/\psi \to a_2^0 \pi^+ \rho^- K^0 \bar{K}^0, a_2^0 \to \pi^+ \pi^- \omega, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 13984 | 1 | 96561 |
| 13986 | $J/\psi \to K^+ K_2^{*-} \gamma^F, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 1209 | 1 | 96562 |
| 13987 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 2688 | 1 | 96563 |
| 13988 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 13987 | 1 | 96564 |
| 13989 | $J/\psi \to K^0 K^{*-} a_1^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \pi^0 \rho^+, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 13988 | 1 | 96565 |
| 13990 | $J/\psi \to K^+K^-a_1^0\gamma^f, a_1^0 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 13989 | 1 | 96566 |
| 13991 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 431 | 1 | 96567 |
| 13992 | $J/\psi \to \pi^0 \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+ \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 13991 | 1 | 96568 |
| 13993 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 13992 | 1 | 96569 |
| 13994 | $J/\psi ightarrow ho^+ ho^- \eta' \gamma, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \eta' ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 770 | 1 | 96570 |
| 13995 | $J/\psi \to \pi^+ K_2^{*0} K^- \gamma^f, K_2^{*0} \to \pi^0 K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^+e^-K^0_L\pi^+K^-\gamma^F\gamma^f$ | 13994 | 1 | 96571 |
| 13996 | $J/\psi \to \eta f_0(1370) h_1(1170), \eta \to \gamma \gamma, f_0(1370) \to \pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 13995 | 1 | 96572 |
| 13997 | $J/\psi \to \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^- \gamma^f, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 3850 | 1 | 96573 |
| 13998 | $J/\psi \rightarrow a_2^0\pi^-a_2^+, a_2^0 \rightarrow \pi^+\pi^-\omega, a_2^+ \rightarrow \pi^+\eta, \omega \rightarrow \pi^0\pi^+\pi^-, \eta \rightarrow \gamma\gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 13997 | 1 | 96574 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 13999 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \omega\omega, h_1(1380) \to K^-K^{*+}, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-K^-$ | 13998 | 1 | 96575 |
| 14000 | $J/\psi \to K^0 \phi \bar{K}_1^0, K^0 \to K_L^0, \phi \to \eta \gamma, \bar{K}_1^0 \to \rho^+ K^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 6134 | 1 | 96576 |
| 14001 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \\ \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 14000 | 1 | 96577 |
| 14002 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 14001 | 1 | 96578 |
| 14003 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 14002 | 1 | 96579 |
| 14004 | $J/\psi \to \pi^0 a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^+ \rho^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14003 | 1 | 96580 |
| 14005 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^- \bar{K}^0 K^+ \gamma^f, \bar{K}^0 \to K_L^0$ | $K^0_L\pi^-K^+\gamma\gamma^f$ | 14004 | 1 | 96581 |
| 14006 | $J/\psi 	o a_2^0 \omega, a_2^0 	o \pi^+ ho^-, \omega 	o \pi^0 \gamma, ho^- 	o \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma^f$ | 14005 | 1 | 96582 |
| 14007 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^-\bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0\bar{K}^0, \bar{K}_0^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 14006 | 1 | 96583 |
| 14008 | $J/\psi \to K^0 \phi \bar{K}_0^{*0}, K^0 \to K_S^0, \phi \to K_L^0 K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14007 | 1 | 96584 |
| 14009 | $J/\psi \to \bar{K}^0 K_2^{*0} f_0(1370), \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^0, f_0(1370) \to \rho^+ \rho^-, K^0 \to K_L^0, $ $\rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 14008 | 1 | 96585 |
| 14010 | $J/\psi \to \eta K^{*+} K_0^{*-}, \eta \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 14009 | 1 | 96586 |
| 14011 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14010 | 1 | 96587 |
| 14012 | $J/\psi \to \pi^+\pi^-\omega K^0 \bar{K}^*, \omega \to \pi^0\pi^+\pi^-, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, K^0_S \to \pi^+\pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14011 | 1 | 96588 |
| 14013 | $J/\psi \to \pi^0 \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6135 | 1 | 96589 |
| 14014 | $J/\psi \to \Xi^0 \bar{\Xi}^0, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \pi^0 \to e^+ e^- \gamma^F, \Lambda \to \pi^- p, \\ \bar{\Lambda} \to \pi^+ \bar{p}$ | $e^+e^-\pi^0\pi^+\pi^-p\bar{p}\gamma^F$ | 14013 | 1 | 96590 |
| 14015 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14014 | 1 | 96591 |
| 14016 | $J/\psi \to \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f \gamma^f$ | 14015 | 1 | 96592 |
| 14017 | $J/\psi \to \omega K^0 \bar{K}^0 h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14016 | 1 | 96593 |
| 14018 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\gamma\gamma$ | 14017 | 1 | 96594 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 14019 | $J/\psi \to \bar{K}^0 K^* \phi \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 14018 | 1 | 96595 |
| 14020 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6136 | 1 | 96596 |
| 14021 | $J/\psi \to \eta \omega f_2(1270), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14020 | 1 | 96597 |
| 14022 | $J/\psi \to \omega K^- K_0^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14021 | 1 | 96598 |
| 14023 | $J/\psi \to \pi^0 \rho^0 \rho^- \bar{K}^* K^+, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14022 | 1 | 96599 |
| 14024 | $J/\psi \to \pi^+\pi^-K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 14023 | 1 | 96600 |
| 14025 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0\gamma^f, K_1^+ \to \pi^+K^*\gamma^f, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma^f\gamma^f$ | 14024 | 1 | 96601 |
| 14026 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 14025 | 1 | 96602 |
| 14027 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14026 | 1 | 96603 |
| 14028 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^+\pi^-K^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 14027 | 1 | 96604 |
| 14029 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}$ | 14028 | 1 | 96605 |
| 14030 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 2691 | 1 | 96606 |
| 14031 | $J/\psi \to \bar{K}^0 K_1^{'0} \gamma, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 14030 | 1 | 96607 |
| 14032 | $I(a) \rightarrow 0 0 a + a - a b a + a - a b a + a - a b a + a - a = a b a + a - a = a = a = a = a = a = a = a = a =$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 14031 | 1 | 96608 |
| 14033 | $J/\psi \to \rho \ \rho \ \pi \ \rho \ , \rho \to \pi \ \pi \ , \rho \to \pi \ \pi \ , \rho \to \pi \ \pi \ , \pi \to e \ e \ \gamma$ $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+,$ $\rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6138 | 1 | 96609 |
| 14034 | $J/\psi \to \pi^0\pi^-b_1^0a_0^+, b_1^0 \to \pi^0\omega, a_0^+ \to \pi^+\eta, \omega \to \pi^0\gamma, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\gamma$ | 14033 | 1 | 96610 |
| 14035 | $J/\psi \to K^+K^+K^{*-}K^{*-}, K^{*-} \to \pi^0K^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 14034 | 1 | 96611 |
| 14036 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 14035 | 1 | 96612 |
| 14037 | $J/\psi \to \rho^+ f_2(1270) a_0^-, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 14036 | 1 | 96613 |
| 14038 | $J/\psi \to \bar{\Xi}^{*+}\Xi^{*-}, \bar{\Xi}^{*+} \to \pi^{+}\bar{\Xi}^{0}, \Xi^{*-} \to \pi^{-}\Xi^{0}, \bar{\Xi}^{0} \to \pi^{0}\bar{\Lambda}, \Xi^{0} \to \pi^{0}\Lambda, \\ \bar{\Lambda} \to \pi^{0}\bar{n}, \Lambda \to \pi^{0}n$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 14037 | 1 | 96614 |
| 14039 | $J/\psi \to \pi^0 K^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14038 | 1 | 96615 |
| 14040 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 14039 | 1 | 96616 |
| 14041 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \eta f_2(1270), \eta \to \gamma\gamma, f_2(1270) \to \pi^+\pi^-$ | $\pi^+\pi^-\gamma\gamma\gamma$ | 14040 | 1 | 96617 |
| 14042 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 14041 | 1 | 96618 |
| 14043 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^0 K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 14042 | 1 | 96619 |
| 14044 | $J/\psi \to \pi^0 \pi^+ \pi^- f_2(1270), f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14043 | 1 | 96620 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 14045 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{\Sigma}^+ \Sigma^0, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-\bar{n}p\gamma\gamma$ | 14044 | 1 | 96621 |
| 14046 | $J/\psi \to \rho^+ K^0 \bar{K}_1^{'-} \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 6139 | 1 | 96622 |
| 14047 | $J/\psi \rightarrow \eta_c \gamma, \eta_c \rightarrow \pi^0 \omega h_1(1170), \omega \rightarrow \pi^0 \pi^+ \pi^-, h_1(1170) \rightarrow \pi^0 \rho^0, \rho^0 \rightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14046 | 1 | 96623 |
| 14048 | $J/\psi \to \eta \eta \omega, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6140 | 1 | 96624 |
| 14049 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K_1^0 \to K_2^0, K_3^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14048 | 1 | 96625 |
| 14050 | $J/\psi \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14049 | 1 | 96626 |
| 14051 | $J/\psi \to \omega K^0 \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14050 | 1 | 96627 |
| 14052 | $J/\psi 	o \Delta^0 ar{\Delta}^0 \gamma, \Delta^0 	o \pi^0 n, ar{\Delta}^0 	o \pi^+ ar{p}$ | $\pi^0\pi^+nar p\gamma$ | 14051 | 1 | 96628 |
| 14053 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 14052 | 1 | 96629 |
| 14054 | $J/\psi \to \pi^0 \pi^+ \rho^+ \Delta^- \bar{p}, \rho^+ \to \pi^0 \pi^+, \Delta^- \to \pi^- n$ | $\pi^0\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 14053 | 1 | 96630 |
| 14055 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^0\pi^0\gamma^F\gamma$ | 14054 | 1 | 96631 |
| 14056 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_L^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14055 | 1 | 96632 |
| 14057 | $J/\psi \to \pi^0 \rho^+ \rho^- \eta \omega, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14056 | 1 | 96633 |
| 14058 | $J/\psi \to K^0 f_0(1370) \bar{K}_1^{'0}, K^0 \to K_L^0, f_0(1370) \to \pi^+\pi^-, \bar{K}_1^{'0} \to \pi^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6141 | 1 | 96634 |
| 14059 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14058 | 1 | 96635 |
| 14060 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \pi^0\pi^0\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6142 | 1 | 96636 |
| 14061 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0 K_L^0 K_L^0 \pi^- K^+$ | 14060 | 1 | 96637 |
| 14062 | $J/\psi \to \rho^{0}K^{*-}K_{1}^{'+}, \rho^{0} \to \pi^{+}\pi^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{0}K^{*+}, \bar{K}^{0} \to K_{S}^{0}, K^{*+} \to \pi^{0}K^{+}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14061 | 1 | 96638 |
| 14063 | $J/\psi \to K_0^0 \bar{K}_0^{*0}, K_0^0 \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14062 | 1 | 96639 |
| 14064 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega \gamma^f, f_0(1370) \to \rho^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 14063 | 1 | 96640 |
| 14065 | $J/\psi \to \omega f_0(980), \omega \to \pi^0 \gamma, f_0(980) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\gamma$ | 14064 | 1 | 96641 |
| 14066 | $J/\psi \to K^- \phi K_1^+, \phi \to K_L^0 K_S^0, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^- K^+$ | $K_L^0 \pi^+ \pi^- \pi^- K^+ K^-$ | 14065 | 1 | 96642 |
| 14067 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 6143 | 1 | 96643 |
| 14068 | $J/\psi 	o ar{K}^* p ar{\Sigma}^-, ar{K}^* 	o \pi^+ K^-, ar{\Sigma}^- 	o \pi^0 ar{p}$ | $\pi^0\pi^+K^-par{p}$ | 14067 | 1 | 96644 |
| 14069 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \pi^- \eta, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 14068 | 1 | 96645 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 14070 | $J/\psi \to \rho^+ \rho^- \omega a_0^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \gamma, a_0^0 \to \pi^0 \eta, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 2692 | 1 | 96646 |
| 14071 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14070 | 1 | 96647 |
| 14072 | $J/\psi \to \pi^0 \pi^0 \pi^+ b_1^-, b_1^- \to \pi^- \omega, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14071 | 1 | 96648 |
| 14073 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^+ K^*, \eta \to \gamma \gamma, K^* \to \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 14072 | 1 | 96649 |
| 14074 | $J/\psi 	o \pi^0 K^+ K^- a^0_0, a^0_0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 14073 | 1 | 96650 |
| 14075 | $J/\psi \to \pi^0 \rho^0 \eta f_0(1370), \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14074 | 1 | 96651 |
| 14076 | $J/\psi \to \omega f_0(1370) f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14075 | 1 | 96652 |
| 14077 | $J/\psi 	o \omega p \bar{p}, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-par p\gamma^f$ | 14076 | 1 | 96653 |
| 14078 | $J/\psi \to K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-$ | 14077 | 1 | 96654 |
| 14079 | $J/\psi \to \pi^0 f_1(1285)\gamma, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 14078 | 1 | 96655 |
| 14080 | $J/\psi \to \rho^0 \pi^- a_2^+ \omega, \rho^0 \to \pi^+ \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14079 | 1 | 96656 |
| 14081 | $J/\psi \to K^- K^{*+} \phi, K^{*+} \to \pi^+ K^0, \phi \to \pi^0 \rho^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 2693 | 1 | 96657 |
| 14082 | $J/\psi \to K K \psi, K \to K , \psi \to K$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14081 | 1 | 96658 |
| 14083 | $J/\psi \to \bar{K}^* \eta' K_0^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, K_0^0 \to \pi^- K^+, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma$ | 3854 | 1 | 96659 |
| 14084 | $J/\psi \to \pi^0 \bar{K}^* K^+ b_1^-, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^- \to \pi^- \omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14083 | 1 | 96660 |
| 14085 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14084 | 1 | 96661 |
| 14086 | $J/\psi 	o \eta K^* ar K_1^0, \eta 	o \gamma \gamma, K^* 	o \pi^- K^+, ar K_1^0 	o \omega ar K^0, \omega 	o \pi^0 \pi^+ \pi^-, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 14085 | 1 | 96662 |
| 14087 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \rho^0 \pi^+, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^- \gamma^F \gamma^f$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma^f$ | 14086 | 1 | 96663 |
| 14088 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \rho^0 K^0, K_0^{*-} \to \pi^0 K^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 963 | 1 | 96664 |
| 14089 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^- \eta', \eta' \to \pi^+ \pi^- \eta, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F\gamma$ | 14088 | 1 | 96665 |
| 14090 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 14089 | 1 | 96666 |
| 14091 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \pi^+ K^* \gamma^f, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 14090 | 1 | 96667 |
| 14092 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^0 \bar{K}^0, K_2^{*+} \to \omega K^+, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14091 | 1 | 96668 |
| 14093 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^-K^{*+}, f_1(1420) \to \pi^-\bar{K}^0K^+, K^{*+} \to \pi^0K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 14092 | 1 | 96669 |
| 14094 | $J/\psi ightarrow ho^+ ho^- p ar p, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 3856 | 1 | 96670 |
| 14095 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma$ | 14094 | 1 | 96671 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 14096 | $J/\psi \to f_2(1270)b_1^0, f_2(1270) \to \eta\eta, b_1^0 \to \pi^0\omega, \eta \to \gamma\gamma, \eta \to \pi^0\pi^0\pi^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 6149 | 1 | 96672 |
| 14097 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 14096 | 1 | 96673 |
| 14098 | $J/\psi \to \pi^0 K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14097 | 1 | 96674 |
| 14099 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, $ $\rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 14098 | 1 | 96675 |
| 14100 | $J/\psi \to K^-K^{*+}b_1^0, K^{*+} \to \pi^+K^0, b_1^0 \to \pi^0\omega, K^0 \to K_S^0, \omega \to \pi^0\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 2695 | 1 | 96676 |
| 14101 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14100 | 1 | 96677 |
| 14102 | $J/\psi \to a_2^0 K^+ K^{*-}, a_2^0 \to \pi^- \rho^+, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 14101 | 1 | 96678 |
| 14103 | $J/\psi \to a_2^0 \omega, a_2^0 \to \pi^+ \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 14102 | 1 | 96679 |
| 14104 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^+ \gamma, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma$ | 14103 | 1 | 96680 |
| 14105 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 14104 | 1 | 96681 |
| 14106 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14105 | 1 | 96682 |
| 14107 | $J/\psi \to \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14106 | 1 | 96683 |
| 14108 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \rho^+ K^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14107 | 1 | 96684 |
| 14109 | $J/\psi \to \pi^+ K^0 K_2^{*0} a_0^-, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 14108 | 1 | 96685 |
| 14110 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14109 | 1 | 96686 |
| 14111 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14110 | 1 | 96687 |
| 14112 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6151 | 1 | 96688 |
| 14113 | $J/\psi \to K^+ K_1^- \gamma^f, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 6152 | 1 | 96689 |
| 14114 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 14113 | 1 | 96690 |
| 14115 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0$ | $e^+e^-K_L^0K_L^0\gamma^F$ | 14114 | 1 | 96691 |
| 14116 | $J/\psi \to \pi^+ \rho^- K^* \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14115 | 1 | 96692 |
| 14117 | $J/\psi \to \phi f_0(980), \phi \to K_L^0 K_S^0, f_0(980) \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K^+K^-$ | 14116 | 1 | 96693 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 14118 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \eta' \to \pi^+\pi^-\eta, K^0 \to K_L^0, \eta \to \gamma\gamma$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma\gamma$ | 14117 | 1 | 96694 |
| 14119 | $J/\psi \to \pi^0 K^* \bar{K}_1^0, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14118 | 1 | 96695 |
| 14120 | $J/\psi \to \pi^+\pi^-\pi^-\bar{K}^*K^{*+}, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 14119 | 1 | 96696 |
| 14121 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \bar{K}^0 K^+, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14120 | 1 | 96697 |
| 14122 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+} a_0^0, \bar{K}^0 \to K_L^0, K_2^{*+} \to \rho^+ K^0, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma\gamma$ | 14121 | 1 | 96698 |
| 14123 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^0K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14122 | 1 | 96699 |
| 14124 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 14123 | 1 | 96700 |
| 14125 | $J/\psi \to K^0 \bar{K}_1^{'0}, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 14124 | 1 | 96701 |
| 14126 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \rho^+ \rho^-, K_S^0 \to \pi^0 \pi^0, $ $\rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 14125 | 1 | 96702 |
| 14127 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 14126 | 1 | 96703 |
| 14128 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+ \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 14127 | 1 | 96704 |
| 14129 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 14128 | 1 | 96705 |
| 14130 | $J/\psi \to \pi^0 \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 14129 | 1 | 96706 |
| 14131 | $J/\psi 	o a_2^0 \omega, a_2^0 	o \pi^+ ho^-, \omega 	o \pi^0 \pi^+ \pi^-, ho^- 	o \pi^0 \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 14130 | 1 | 96707 |
| 14132 | $J/\psi ightarrow \eta ar{K}^0 K^*, \eta ightarrow e^+ e^- \gamma^F, ar{K}^0 ightarrow K_L^0, K^* ightarrow \pi^0 K^0, K^0 ightarrow K_L^0$ | $e^+e^-\pi^0K_L^0K_L^0\gamma^F$ | 14131 | 1 | 96708 |
| 14133 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^- \gamma^f, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14132 | 1 | 96709 |
| 14134 | $J/\psi \to K^{*+} \bar{K}_1^{'-} \gamma, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 14133 | 1 | 96710 |
| 14135 | $J/\psi \to \eta(1760)\gamma, \eta(1760) \to \rho^0 \rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-\gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 14134 | 1 | 96711 |
| 14136 | $J/\psi \to K^{*-}p\bar{\Sigma}^0, K^{*-} \to \pi^-\bar{K}^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{K}^0 \to K_L^0, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0 K_L^0 \pi^- ar{n} p \gamma$ | 14135 | 1 | 96712 |
| 14137 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \pi^+ \pi^- \eta, \phi \to K_L^0 K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 6153 | 1 | 96713 |
| 14138 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14137 | 1 | 96714 |
| 14139 | $J/\psi \to K^0 K_2^{*-} a_0^+, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14138 | 1 | 96715 |
| 14140 | $J/\psi \to K^0 K_2^{*0} \eta', K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K_S^{*-} \to \pi^0 K^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6154 | 1 | 96716 |
| 14141 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 14140 | 1 | 96717 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14142 | $J/\psi \to \pi^0 \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^- \gamma^f, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma^f$ | 14141 | 1 | 96718 |
| 14143 | $J/\psi \to K^- f_0(1370) K_1^+, f_0(1370) \to \rho^0 \rho^0, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 14142 | 1 | 96719 |
| 14144 | $J/\psi \to \rho^0 \rho^0 \pi^+ b_1^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 14143 | 1 | 96720 |
| 14145 | $J/\psi \to \eta K^0 \bar{K}_1^{'0}, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14144 | 1 | 96721 |
| 14146 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14145 | 1 | 96722 |
| 14147 | $J/\psi \to \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 14146 | 1 | 96723 |
| 14148 | $J/\psi \to \pi^+ f_0(1370) a_1^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14147 | 1 | 96724 |
| 14149 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 14148 | 1 | 96725 |
| 14150 | $J/\psi \to K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 14149 | 1 | 96726 |
| 14151 | $J/\psi \to K^* \bar{K}^0_1, K^* \to \pi^0 K^0, \bar{K}^0_1 \to \pi^+ \pi^- \bar{K}^0, K^0 \to K^0_L, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 14150 | 1 | 96727 |
| 14152 | $J/\psi \to \pi^+ \rho^- \eta' a_1^0, \rho^- \to \pi^0 \pi^-, \eta' \to \pi^+ \pi^- \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 1539 | 1 | 96728 |
| 14153 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14152 | 1 | 96729 |
| 14154 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \rho^+ K^0, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14153 | 1 | 96730 |
| 14155 | $J/\psi \to \pi^+ K^* K^- \gamma^F, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^F$ | 14154 | 1 | 96731 |
| 14156 | $J/\psi \to \omega K^{*-}K_0^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14155 | 1 | 96732 |
| 14157 | $J/\psi \to K^- h_1(1170) K_0^{*+}, h_1(1170) \to \pi^- \rho^+, K_0^{*+} \to \pi^0 K^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14156 | 1 | 96733 |
| 14158 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma^f$ | 14157 | 1 | 96734 |
| 14159 | $J/\psi \to K^- f_0(1370) K_1^+, f_0(1370) \to \pi^0 \pi^0, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14158 | 1 | 96735 |
| 14160 | $J/\psi \to \pi^0 \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14159 | 1 | 96736 |
| 14161 | $J/\psi \to \pi^+ K^0 K^{*-} \gamma^F, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma^F$ | 14160 | 1 | 96737 |
| 14162 | $J/\psi \to \pi^+\pi^-\omega\omega f_0(1370), \omega \to \pi^0\gamma, \omega \to \pi^0\pi^+\pi^-, f_0(1370) \to \rho^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 6156 | 1 | 96738 |
| 14163 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_2^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14162 | 1 | 96739 |
| 14164 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 522 | 1 | 96740 |
| 14165 | $J/\psi \to a_2^+ K^* K^-, a_2^+ \to \pi^+ \eta, K^* \to \pi^- K^+, \eta \to \gamma \gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 14164 | 1 | 96741 |
| 14166 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 14165 | 1 | 96742 |
| 14167 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^-K^{*+}, K^0 \to K_L^0, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ K^- K^-$ | 2698 | 1 | 96743 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14168 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 14167 | 1 | 96744 |
| 14169 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_1(1285) \to \pi^+ a_0^-, K^0 \to K_L^0, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+K^-$ | 14168 | 1 | 96745 |
| 14170 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \pi^- \bar{K}_0^{*0}, \eta \to \gamma \gamma, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 14169 | 1 | 96746 |
| 14171 | $J/\psi \to \rho^+ K^* K^- \phi, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, \phi \to K^+ K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^+K^-K^-$ | 14170 | 1 | 96747 |
| 14172 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 14171 | 1 | 96748 |
| 14173 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^- \bar{K}^* \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 14172 | 1 | 96749 |
| 14174 | $J/\psi \to K^* \bar{K}^* f_0(1370), K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \rho^+ \rho^-, \bar{K}^0 \to K_L^0, $ $\rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14173 | 1 | 96750 |
| 14175 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f\gamma^f$ | 14174 | 1 | 96751 |
| 14176 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^- a_2^+, a_2^+ ightarrow \pi^0 ho^+, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 14175 | 1 | 96752 |
| 14177 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3861 | 1 | 96753 |
| 14178 | $J/\psi \to \phi f_1(1420), \phi \to K^+K^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 14177 | 1 | 96754 |
| 14179 | $J/\psi 	o \pi^+ \eta b_1^-, \eta 	o \gamma \gamma, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-, \pi^0 	o e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma\gamma^f$ | 14178 | 1 | 96755 |
| 14180 | $J/\psi \to \pi^- K^{*+} \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14179 | 1 | 96756 |
| 14181 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^0K^-, h_1(1380) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 14180 | 1 | 96757 |
| 14182 | $J/\psi \to \rho^- \bar{K}^* K^+ a_0^0, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14181 | 1 | 96758 |
| 14183 | $J/\psi \to \eta K^+ \bar{K}_1^{'-}, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 14182 | 1 | 96759 |
| 14184 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ \eta', \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\gamma$ | 6160 | 1 | 96760 |
| 14185 | $J/\psi \to \pi^0 K^* \bar{K}^* \gamma, K^* \to \pi^- K^+ \gamma^f, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 14184 | 1 | 96761 |
| 14186 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to \pi^+\pi^+\pi^-\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 14185 | 1 | 96762 |
| 14187 | $J/\psi \to \pi^- \omega \bar{K}^0 K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 14186 | 1 | 96763 |
| 14188 | $J/\psi \to \pi^0 \rho^- \bar{K}^0 K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0 K_L^0\pi^- K^+$ | 14187 | 1 | 96764 |
| 14189 | $J/\psi \to K^+ K^{*-} a_1^0, K^{*-} \to \pi^- \bar{K}^0, a_1^0 \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14188 | 1 | 96765 |
| 14190 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14189 | 1 | 96766 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 14191 | $J/\psi \to K^0 K^0 \bar{K}^0 \bar{K}^*, K^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14190 | 1 | 96767 |
| 14192 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14191 | 1 | 96768 |
| 14193 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^- \gamma^f, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 14192 | 1 | 96769 |
| 14194 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^+ \pi^- \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma^f$ | 14193 | 1 | 96770 |
| 14195 | $J/\psi \to \pi^0 K^* \bar{K}_1^{'0}, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14194 | 1 | 96771 |
| 14196 | $J/\psi \to p\bar{p}f_0(1370), f_0(1370) \to K_L^0 K_L^0$ | $K_L^0K_L^0par{p}$ | 14195 | 1 | 96772 |
| 14197 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14196 | 1 | 96773 |
| 14198 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6161 | 1 | 96774 |
| 14199 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14198 | 1 | 96775 |
| 14200 | $J/\psi \to \pi^+ K^* K^{*-} \gamma^F, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^F$ | 6162 | 1 | 96776 |
| 14201 | $J/\psi \to \eta K^{*-}K_1^{'+}, \eta \to \gamma \gamma, K^{*-} \to \pi^0 K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 14200 | 1 | 96777 |
| 14202 | $J/\psi \to \bar{K}^* K_1^{'0} \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 14201 | 1 | 96778 |
| 14203 | $J/\psi \to \rho^0 \rho^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14202 | 1 | 96779 |
| 14204 | $J/\psi \to K^+ K^- f_0(1370), f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14203 | 1 | 96780 |
| 14205 | $J/\psi \to \pi^0 K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 14204 | 1 | 96781 |
| 14206 | $J/\psi \to \rho^0 h_1(1170)\gamma, \rho^0 \to \pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 14205 | 1 | 96782 |
| 14207 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14206 | 1 | 96783 |
| 14208 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \rho^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14207 | 1 | 96784 |
| 14209 | $J/\psi \to \pi^+ \rho^- \omega \gamma^F \gamma^f, \rho^- \to \pi^0 \pi^-, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 14208 | 1 | 96785 |
| 14210 | $J/\psi \to \pi^+ K_0^0 \bar{K}_1^{'-}, K_0^0 \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 1541 | 1 | 96786 |
| 14211 | $J/\psi \to \rho^0 \pi^+ \pi^- \omega f_0(1370), \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6164 | 1 | 96787 |
| 14212 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14211 | 1 | 96788 |
| 14213 | $J/\psi 	o ar{K}^0 a_0^0 K_1^{'0}, ar{K}^0 	o K_S^0, a_0^0 	o \pi^0 \eta, K_1^{'0} 	o \pi^0 K^*, K_S^0 	o \pi^0 \pi^0, \ \eta 	o \gamma \gamma, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\gamma\gamma$ | 14212 | 1 | 96789 |
| 14214 | $J/\psi \to \pi^+ K^0 K_1^- \gamma^F, K^0 \to K_S^0, K_1^- \to \rho^0 K^-, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 14213 | 1 | 96790 |
| 14215 | $J/\psi ightarrow \pi^0 ho^0 \omega \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 14214 | 1 | 96791 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 14216 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 14215 | 1 | 96792 |
| 14217 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1710) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14216 | 1 | 96793 |
| 14218 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 a_0^+ a_1^-, a_0^+ \to \pi^+ \eta, a_1^- \to \pi^0 \rho^-, \eta \to \pi^0 \pi^0 \pi^0, $ $\rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma$ | 14217 | 1 | 96794 |
| 14219 | $J/\psi ightarrow \pi^+ a_2^-, a_2^- ightarrow \pi^0 ho^-, ho^- ightarrow \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 14218 | 1 | 96795 |
| 14220 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, \\ \pi^0 \to e^+ e^- \gamma^F, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 14219 | 1 | 96796 |
| 14221 | $J/\psi \to \bar{K}^* p \bar{\Sigma}^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{\Sigma}^- \to \pi^- \bar{n}, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 14220 | 1 | 96797 |
| 14222 | $J/\psi \to \rho^+ K^* K^- \gamma^F, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 14221 | 1 | 96798 |
| 14223 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14222 | 1 | 96799 |
| 14224 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 14223 | 1 | 96800 |
| 14225 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14224 | 1 | 96801 |
| 14226 | $J/\psi \to \rho^0 f_0(1370) f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \rho^0 \rho^0, f_0(1370) \to \pi^+\pi^-, \rho^0 \to \pi^-\pi^-, \rho^0 \to \pi^-\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 6165 | 1 | 96802 |
| 14227 | $J/\psi 	o ho^0 \omega \gamma, ho^0 	o \pi^+ \pi^- \gamma^f, \omega 	o \pi^0 \pi^+ \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma^f$ | 14226 | 1 | 96803 |
| 14228 | $J/\psi \to \rho^0 K^+ K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 14227 | 1 | 96804 |
| 14229 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^- K^+ \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 14228 | 1 | 96805 |
| 14230 | $J/\psi 	o \pi^+ \Sigma^{*0} ar{\Sigma}^-, \Sigma^{*0} 	o \pi^0 \Lambda, ar{\Sigma}^- 	o \pi^0 ar{p}, \Lambda 	o \pi^0 n, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+nar p\gamma^F$ | 14229 | 1 | 96806 |
| 14231 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14230 | 1 | 96807 |
| 14232 | $J/\psi \to \pi^- \bar{K}^0 \eta' K_0^{*+}, \bar{K}^0 \to K_L^0, \eta' \to \pi^+ \pi^- \eta, K_0^{*+} \to \pi^0 K^+, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14231 | 1 | 96808 |
| 14233 | $J/\psi ightarrow ho^+ ho^- \omega, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^+ \pi^-, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14232 | 1 | 96809 |
| 14234 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to K_L^0 K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14233 | 1 | 96810 |
| 14235 | $J/\psi \to \pi^0 K^{*+} K^{*-}, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 14234 | 1 | 96811 |
| 14236 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 6166 | 1 | 96812 |
| 14237 | $J/\psi ightarrow \phi \phi \phi, \phi ightarrow \pi^0 ho^0, \phi ightarrow K_L^0 K_S^0, \phi ightarrow K^+ K^-, ho^0 ightarrow \pi^+ \pi^-, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 14236 | 1 | 96813 |
| 14238 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 14237 | 1 | 96814 |
| 14239 | $J/\psi ightarrow \pi^0 \pi^0 p ar p, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0par{p}\gamma^F$ | 6167 | 1 | 96815 |
| 14240 | $J/\psi \to \rho^- K_2^{*0} K^{*+}, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14239 | 1 | 96816 |
| 14241 | $J/\psi 	o K^0 ar{K}_1^{'0}, K^0 	o K_L^0, ar{K}_1^{'0} 	o \omega ar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 14240 | 1 | 96817 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 14242 | $J/\psi \to \pi^+ K^0 K^- a_0^0, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 14241 | 1 | 96818 |
| 14243 | $J/\psi \to \pi^0 \pi^+ a_2^-, \pi^0 \to e^+ e^- \gamma^F, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 2700 | 1 | 96819 |
| 14244 | $J/\psi ightarrow \pi^0 \pi^+ ho^- \eta^\prime, ho^- ightarrow \pi^0 \pi^-, \eta^\prime ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14243 | 1 | 96820 |
| 14245 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 14244 | 1 | 96821 |
| 14246 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, \bar{K}^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}$ | 14245 | 1 | 96822 |
| 14247 | $J/\psi 	o \eta K^+ K_1^-, \eta 	o \pi^0 \pi^0 \pi^0, K_1^- 	o ho^- ar{K}^0, ho^- 	o \pi^0 \pi^-, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 14246 | 1 | 96823 |
| 14248 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \gamma^f, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 14247 | 1 | 96824 |
| 14249 | $J/\psi \to \omega \eta' f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 14248 | 1 | 96825 |
| 14250 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^+ K^-, K_2^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 14249 | 1 | 96826 |
| 14251 | $J/\psi \to \pi^- \bar{\Sigma}^{*+} \Sigma^0, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Sigma^0 \to \Lambda \gamma, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 14250 | 1 | 96827 |
| 14252 | $J/\psi 	o K^-K^{*+}\eta', K^{*+} 	o \pi^+K^0, \eta' 	o \pi^0\pi^0\eta, K^0 	o K^0_S, \eta 	o \gamma\gamma, K^0_S 	o \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 14251 | 1 | 96828 |
| 14253 | $J/\psi 	o K_0^0 ar{K}_1^0, K_0^0 	o \pi^- K^+, ar{K}_1^0 	o \omega ar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 14252 | 1 | 96829 |
| 14254 | $J/\psi 	o \pi^0 ar{K}^0 K_1^0, ar{K}^0 	o K_L^0, K_1^0 	o \omega K^0, \omega 	o \pi^0 \gamma, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma$ | 14253 | 1 | 96830 |
| 14255 | $J/\psi \to \rho^+ a_2^- a_0^0, \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^-, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 14254 | 1 | 96831 |
| 14256 | $J/\psi \to K^+K^-f_1(1285), f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta, \eta \to \gamma\gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 14255 | 1 | 96832 |
| 14257 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \pi^0 K_0^0, \eta \to \pi^0 \pi^0 \pi^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14256 | 1 | 96833 |
| 14258 | $J/\psi \to \pi^0 K^* K_2^{*0}, \pi^0 \to e^+ e^- \gamma^F, K^* \to \pi^- K^+, K_2^{*0} \to \pi^+ K^-$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 14257 | 1 | 96834 |
| 14259 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K_1^0 K_1^-, K_1^0 \to \rho^- K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \rho^- \to \pi^0 \pi^-, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 14258 | 1 | 96835 |
| 14260 | $J/\psi 	o \pi^+\Lambda ar{\Sigma}^{*-}, \Lambda 	o \pi^- p, ar{\Sigma}^{*-} 	o \pi^- ar{\Sigma}^0, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma$ | 14259 | 1 | 96836 |
| 14261 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^0 \pi^0 \eta, \pi^0 	o e^+ e^- \gamma^F, \eta 	o \gamma \gamma$ | $e^+e^-\pi^0\gamma^F\gamma\gamma\gamma$ | 14260 | 1 | 96837 |
| 14262 | $J/\psi \to \omega K^{*+} \bar{K}_1^{'-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 14261 | 1 | 96838 |
| 14263 | $J/\psi \to K^0 \bar{K}_1^{'0} \gamma, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14262 | 1 | 96839 |
| 14264 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_L^0, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 14263 | 1 | 96840 |
| 14265 | $J/\psi \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 14264 | 1 | 96841 |
| 14266 | $J/\psi \to \eta \eta \phi, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 14265 | 1 | 96842 |
| 14267 | $J/\psi \to K^{*-}K_{1}^{'+}\gamma, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{+}\pi^{-}K^{+}, \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 14266 | 1 | 96843 |
| 14268 | $J/\psi \to \Lambda \bar{\Sigma}^0, \Lambda \to \pi^0 n, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \pi^0 \to e^+ e^- \gamma^F, \bar{\Lambda} \to \pi^0 \bar{n}$ | $e^+e^-\pi^0nar{n}\gamma^F\gamma$ | 14267 | 1 | 96844 |
| | V/ Y - 122 , 12 - 13 - 13 - 13 - 13 - 13 - 13 - 13 - | C C N TOTO | 11201 | | |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14269 | $J/\psi \to \pi^+\pi^-a_0^0, a_0^0 \to K_L^0 K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 14268 | 1 | 96845 |
| 14270 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 14269 | 1 | 96846 |
| 14271 | $J/\psi ightarrow \pi^- ho^+ \eta^\prime, ho^+ ightarrow \pi^+ \gamma, \eta^\prime ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14270 | 1 | 96847 |
| 14272 | $J/\psi \to \pi^0 K^* \bar{K}_1^0, K^* \to \pi^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14271 | 1 | 96848 |
| 14273 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 14272 | 1 | 96849 |
| 14274 | $J/\psi \to \pi^- a_1^0 a_1^+, a_1^0 \to \pi^+ \rho^-, a_1^+ \to \rho^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 14273 | 1 | 96850 |
| 14275 | $J/\psi \to b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14274 | 1 | 96851 |
| 14276 | $J/\psi \to \pi^0 K^{*+} K_1^-, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 14275 | 1 | 96852 |
| 14277 | $J/\psi \to \rho^0 f_0(1370) a_1^0, \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, a_1^0 \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14276 | 1 | 96853 |
| 14278 | $J/\psi \to \rho^+ K_2^{*0} K^{*-}, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14277 | 1 | 96854 |
| 14279 | $J/\psi \to K^*K^{*-}a_1^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \rho^0 \pi^+, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14278 | 1 | 96855 |
| 14280 | $J/\psi \to a_2^- \bar{K}^* K^{*+}, a_2^- \to \pi^- \eta, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 14279 | 1 | 96856 |
| 14281 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^+ \pi^- K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 6169 | 1 | 96857 |
| 14282 | $J/\psi \to \pi^+ K_1^0 K_1^-, K_1^0 \to \rho^0 K^0, K_1^- \to \rho^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14281 | 1 | 96858 |
| 14283 | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14282 | 1 | 96859 |
| 14284 | $J/\psi \to \pi^+\pi^- f_2(1270)\gamma^f, f_2(1270) \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14283 | 1 | 96860 |
| 14285 | $J/\psi \to \rho^0 \pi^+ K^* K^{*-}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6170 | 1 | 96861 |
| 14286 | $J/\psi \to \bar{K}^*K^{*+}a_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, a_1^- \to \pi^0\rho^-, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14285 | 1 | 96862 |
| 14287 | $J/\psi \to \rho^0 \eta' f_0(1370), \rho^0 \to \pi^+ \pi^-, \eta' \to \omega \gamma, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 14286 | 1 | 96863 |
| 14288 | $J/\psi \to \omega p \bar{\Delta}^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{\Delta}^+ \to \pi^- \bar{n}, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\pi^-ar{n}p\gamma^F$ | 14287 | 1 | 96864 |
| 14289 | $J/\psi \to \pi^0 K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14288 | 1 | 96865 |
| 14290 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^0 K^0, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14289 | 1 | 96866 |
| 14291 | $J/\psi ightarrow \omega a_1^0, \omega ightarrow \pi^0 \gamma, a_1^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 14290 | 1 | 96867 |
| 14292 | $J/\psi \to a_2^0 \pi^+ \pi^-, a_2^0 \to \pi^+ \pi^- \omega, \omega \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 14291 | 1 | 96868 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14293 | $J/\psi \to \phi f_0(1710), \phi \to K_L^0 K_S^0, f_0(1710) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 14292 | 1 | 96869 |
| 14294 | $J/\psi \to a_2^0 \rho^+ a_0^-, a_2^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, $ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 14293 | 1 | 96870 |
| 14295 | $J/\psi ightarrow ho^0 ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \eta \gamma, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14294 | 1 | 96871 |
| 14296 | $J/\psi \to \pi^+\pi^-K^+K_0^{*-}, K_0^{*-} \to \pi^0K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 14295 | 1 | 96872 |
| 14297 | $J/\psi \to \rho^0 f_2(1270), \rho^0 \to \pi^+\pi^-, f_2(1270) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 14296 | 1 | 96873 |
| 14298 | $J/\psi \to K^+ K_2^{*-} \gamma^F, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma^F$ | 14297 | 1 | 96874 |
| 14299 | $J/\psi 	o \Lambda ar{\Sigma}^{*0} \gamma, \Lambda 	o \pi^- p, ar{\Sigma}^{*0} 	o \pi^0 ar{\Lambda}, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^+\pi^-p\bar{p}\gamma$ | 14298 | 1 | 96875 |
| 14300 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 14299 | 1 | 96876 |
| 14301 | $J/\psi \to \rho^- K^+ \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14300 | 1 | 96877 |
| 14302 | $J/\psi \to \pi^- f_0(1370) a_1^+, f_0(1370) \to \pi^0 \pi^0, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 2701 | 1 | 96878 |
| 14303 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^+\pi^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14302 | 1 | 96879 |
| 14304 | $J/\psi \to K^{*+}a_0^-\bar{K}_0^{*0}, K^{*+} \to \pi^+K^0, a_0^- \to \pi^-\eta, \bar{K}_0^{*0} \to \pi^+K^-, K^0 \to K_L^0, \\ \eta \to \gamma\gamma$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 6172 | 1 | 96880 |
| 14305 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma^f$ | 14304 | 1 | 96881 |
| 14306 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 K^- K_1^+, K_1^+ ightarrow ho^0 K^+, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 14305 | 1 | 96882 |
| 14307 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to K^+ K^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14306 | 1 | 96883 |
| 14308 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14307 | 1 | 96884 |
| 14309 | $J/\psi \to K_0^{*-} K_1^{'+}, K_0^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 14308 | 1 | 96885 |
| 14310 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14309 | 1 | 96886 |
| 14311 | $J/\psi \to \rho^- \bar{K}^0 K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^{'+} \to \pi^+ K^*, \pi^0 \to e^+ e^- \gamma^F, K^* \to \pi^- K^+$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 6173 | 1 | 96887 |
| 14312 | $J/\psi \to \pi^- f_2(1270) a_1^+, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14311 | 1 | 96888 |
| 14313 | $J/\psi 	o \omega p ar{\Delta}^+, \omega 	o \pi^0 \gamma, ar{\Delta}^+ 	o \pi^- ar{n}$ | $\pi^0\pi^-ar{n}p\gamma$ | 14312 | 1 | 96889 |
| 14314 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14313 | 1 | 96890 |
| 14315 | $J/\psi \rightarrow \pi^-\pi^-\rho^+\rho^+a^0_0, \rho^+ \rightarrow \pi^0\pi^+, \rho^+ \rightarrow \pi^0\pi^+, a^0_0 \rightarrow \pi^0\eta, \eta \rightarrow \gamma\gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 14314 | 1 | 96891 |
| 14316 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_L^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 14315 | 1 | 96892 |
| 14317 | $J/\psi \to \pi^0 K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 6174 | 1 | 96893 |
| 14318 | $J/\psi \to \pi^0 a_2^0 \gamma, a_2^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^+e^-\pi^0\gamma^F\gamma\gamma\gamma$ | 14317 | 1 | 96894 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 14319 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \eta a_0^0, \eta ightarrow \pi^0 \pi^0 \pi^0, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 14318 | 1 | 96895 |
| 14320 | $J/\psi \to \eta \bar{K}^* K_1^0, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 3865 | 1 | 96896 |
| 14321 | $J/\psi \to K_2^{*+}K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0 \gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 6176 | 1 | 96897 |
| 14322 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to K^- \gamma, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 14321 | 1 | 96898 |
| 14323 | $J/\psi \to \pi^0 \eta K^0 \bar{K}_1^{'0}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14322 | 1 | 96899 |
| 14324 | $J/\psi \to \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^{*-} \to \pi^- \bar{\Sigma}^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 14323 | 1 | 96900 |
| 14325 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14324 | 1 | 96901 |
| 14326 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^- \gamma^f, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 14325 | 1 | 96902 |
| 14327 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^+K^{*-}, f_1(1420) \to \pi^0K^+K^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 14326 | 1 | 96903 |
| 14328 | $J/\psi \to K_1^0 \bar{K}_1^0, K_1^0 \to \rho^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \rho^- \to \pi^0 \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 14327 | 1 | 96904 |
| 14329 | $J/\psi 	o \omega \Lambda ar{\Lambda}, \omega 	o \pi^0 \pi^+ \pi^-, \Lambda 	o \pi^- p, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 14328 | 1 | 96905 |
| 14330 | $J/\psi \to \pi^- \bar{K}^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-\pi^-K^+\gamma^F$ | 3866 | 1 | 96906 |
| 14331 | $J/\psi \to \pi^- \bar{K}^* K^+ h_1(1380), \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 14330 | 1 | 96907 |
| 14332 | $J/\psi \to \pi^+\pi^-\rho^-a_2^+\omega, \rho^- \to \pi^0\pi^-, a_2^+ \to \pi^0\rho^+, \omega \to \pi^0\pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14331 | 1 | 96908 |
| 14333 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14332 | 1 | 96909 |
| 14334 | $J/\psi \to \rho^- a_2^+ f_1(1285), \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, f_1(1285) \to \pi^+ a_0^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14333 | 1 | 96910 |
| 14335 | $J/\psi \to \rho^+ a_2^- f_2(1270), \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 14334 | 1 | 96911 |
| 14336 | $J/\psi \to \rho^0 K^+ K_1^-, \rho^0 \to \pi^+ \pi^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 14335 | 1 | 96912 |
| 14337 | $J/\psi \to \rho^+ K^- K_1^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14336 | 1 | 96913 |
| 14338 | $J/\psi \to \bar{K}^*K^{*+}a_0^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, a_0^- \to \pi^-\eta, K^0 \to K_L^0, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14337 | 1 | 96914 |
| 14339 | $J/\psi \to \phi f_0(1710), \phi \to \pi^- \rho^+, f_0(1710) \to \omega \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14338 | 1 | 96915 |
| 14340 | $J/\psi \to \pi^0 K^+ \eta' K_1^-, \eta' \to \pi^0 \pi^0 \eta, K_1^- \to \pi^- \bar{K}_0^{*0}, \eta \to \gamma \gamma, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 14339 | 1 | 96916 |
| 14341 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 14340 | 1 | 96917 |
| 14342 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^0 \rho^0, f_1(1285) \to \pi^0 \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 14341 | 1 | 96918 |
| 14343 | $J/\psi \to \rho^0 a_2^- a_0^+, \rho^0 \to \pi^+ \pi^-, a_2^- \to \rho^0 \pi^-, a_0^+ \to \pi^+ \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14342 | 1 | 96919 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 14344 | $J/\psi \to K^0 a_0^+ \bar{K}_1^{'-}, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14343 | 1 | 96920 |
| 14345 | $J/\psi \to \pi^+ K^* \bar{K}_1^{'-}, K^* \to \pi^0 K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14344 | 1 | 96921 |
| 14346 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \rho^- K^0, \phi \to \pi^0 \rho^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14345 | 1 | 96922 |
| 14347 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^+ \pi^- K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14346 | 1 | 96923 |
| 14348 | $J/\psi \to K^- K_2^{*+} f_0(1370), K_2^{*+} \to \pi^0 K^+, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14347 | 1 | 96924 |
| 14349 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+, K_2^{*0} \to \pi^0\bar{K}^0, \pi^0 \to e^+e^-\gamma^F, \bar{K}^0 \to K_L^0$ | $e^+e^-K_L^0\pi^-K^+\gamma^F$ | 14348 | 1 | 96925 |
| 14350 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14349 | 1 | 96926 |
| 14351 | $J/\psi \to \pi^- \rho^+ \bar{K}^* K_2^{*0}, \rho^+ \to \pi^0 \pi^+, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14350 | 1 | 96927 |
| 14352 | $J/\psi \rightarrow \pi^+ \rho^- \eta', \rho^- \rightarrow \pi^0 \pi^-, \eta' \rightarrow \pi^+ \pi^- \eta, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 14351 | 1 | 96928 |
| 14353 | $J/\psi \to \pi^- a_1^0 a_1^+, a_1^0 \to \pi^- \rho^+, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14352 | 1 | 96929 |
| 14354 | $J/\psi \to \pi^0 K^+ K_2^{*-} \eta', K_2^{*-} \to \rho^0 K^-, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 14353 | 1 | 96930 |
| 14355 | $J/\psi \to \pi^0 \pi^0 \pi^+ b_1^- \gamma^f, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6178 | 1 | 96931 |
| 14356 | $J/\psi ightarrow \pi^0 \omega ar{n} \Delta^0, \omega ightarrow \pi^0 \pi^+ \pi^-, \Delta^0 ightarrow \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^+\pi^-nar{n}$ | 14355 | 1 | 96932 |
| 14357 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14356 | 1 | 96933 |
| 14358 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14357 | 1 | 96934 |
| 14359 | $J/\psi \to K^*K^{*-}a_0^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, a_0^+ \to \pi^+\eta, \bar{K}^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma$ | 14358 | 1 | 96935 |
| 14360 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^*, K_1^- \to \rho^- \bar{K}^0, K^* \to \pi^0 K^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14359 | 1 | 96936 |
| 14361 | $J/\psi \to \pi^0 K^* \bar{K}^0_1, K^* \to \pi^0 K^0, \bar{K}^0_1 \to \pi^+ K^{*-}, K^0 \to K^0_L, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 14360 | 1 | 96937 |
| 14362 | $J/\psi ightarrow a_2^0 \pi^+ \pi^- \eta, a_2^0 ightarrow \pi^+ \pi^- \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 14361 | 1 | 96938 |
| 14363 | $J/\psi \to \eta \bar{K}^0 K_1^{'0}, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 14362 | 1 | 96939 |
| 14364 | $J/\psi \to \pi^0 K^* \bar{K}_1^0, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14363 | 1 | 96940 |
| 14365 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \eta' \to \gamma \gamma, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 3867 | 1 | 96941 |
| 14366 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^0 K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, \ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3868 | 1 | 96942 |
| 14367 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14366 | 1 | 96943 |
| 14368 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14367 | 1 | 96944 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 14369 | $J/\psi \to \pi^0 \pi^- \rho^+ K^- K^{*+}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14368 | 1 | 96945 |
| 14370 | $J/\psi \to \rho^0 \rho^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14369 | 1 | 96946 |
| 14371 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^+ K^-, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}K^{+}K^{-}\gamma^{F}$ | 14370 | 1 | 96947 |
| 14372 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \pi^- \omega, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 14371 | 1 | 96948 |
| 14373 | $J/\psi \to \pi^+ \omega a_0^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 14372 | 1 | 96949 |
| 14374 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^+ K^- K^{*+}, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-K^-$ | 14373 | 1 | 96950 |
| 14375 | $J/\psi 	o \omega\omega\gamma, \omega 	o \pi^0\gamma, \omega 	o \pi^0\gamma$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 14374 | 1 | 96951 |
| 14376 | $J/\psi \to K^0 \bar{K}_1^0 \gamma, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14375 | 1 | 96952 |
| 14377 | $J/\psi \to \rho^+ K^- K_1^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \omega K^0, \omega \to \pi^0 \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma$ | 14376 | 1 | 96953 |
| 14378 | $J/\psi \to \pi^- \omega \bar{K}^* K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 6181 | 1 | 96954 |
| 14379 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^+\pi^-K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14378 | 1 | 96955 |
| 14380 | $J/\psi \to \pi^0 \rho^0 \pi^- \bar{K}^* K^+, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14379 | 1 | 96956 |
| 14381 | $J/\psi \to K^0 K^- a_0^+ \gamma^f, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 14380 | 1 | 96957 |
| 14382 | $J/\psi \to \pi^0 \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14381 | 1 | 96958 |
| 14383 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14382 | 1 | 96959 |
| 14384 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \omega b_1^0, \omega ightarrow \pi^0 \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 14383 | 1 | 96960 |
| 14385 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \omega \bar{K}^0, K^0 \to K^0_S, \\ \omega \to \pi^0 \gamma, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 14384 | 1 | 96961 |
| 14386 | $J/\psi ightarrow \pi^0 ho^0 a_0^0, ho^0 ightarrow \pi^+ \pi^- \gamma^f, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 14385 | 1 | 96962 |
| 14387 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 14386 | 1 | 96963 |
| 14388 | $J/\psi \to K^+K^-\phi, \phi \to \eta\gamma, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^+\pi^-K^+K^-\gamma^F\gamma$ | 14387 | 1 | 96964 |
| 14389 | $J/\psi \to \omega K^0 \bar{K}_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14388 | 1 | 96965 |
| 14390 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 14389 | 1 | 96966 |
| 14391 | $J/\psi \to \rho^0 \bar{K}^0 K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 14390 | 1 | 96967 |
| 14392 | $J/\psi \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 14391 | 1 | 96968 |
| 14393 | $J/\psi \to \pi^0 \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 14392 | 1 | 96969 |
| 14394 | $J/\psi \to \pi^+ K^0 K_1^- \gamma^F, K^0 \to K_L^0, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 14393 | 1 | 96970 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14395 | $J/\psi \to \eta K^- K_0^{*+}, \eta \to \gamma \gamma, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 14394 | 1 | 96971 |
| 14396 | $J/\psi \to \pi^0 \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14395 | 1 | 96972 |
| 14397 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \rho^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 14396 | 1 | 96973 |
| 14398 | $J/\psi \to \pi^+ \rho^- f_2(1270), \rho^- \to \pi^0 \pi^-, f_2(1270) \to \eta \eta, \eta \to \gamma \gamma, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 14397 | 1 | 96974 |
| 14399 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14398 | 1 | 96975 |
| 14400 | $J/\psi 	o \pi^+\pi^-\eta, \eta 	o \gamma\gamma$ | $\pi^+\pi^-\gamma\gamma$ | 14399 | 1 | 96976 |
| 14401 | $J/\psi \to \eta \phi f_1(1420), \eta \to \gamma \gamma, \phi \to \pi^- \rho^+, f_1(1420) \to \pi^+ K^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 14400 | 1 | 96977 |
| 14402 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^+ K^*, \eta \to \gamma \gamma, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 14401 | 1 | 96978 |
| 14403 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \pi^0 \pi^0 \eta, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 14402 | 1 | 96979 |
| 14404 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K^0_S, \bar{K}^* \to \bar{K}^0 \gamma, K^0_S \to \pi^0 \pi^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 14403 | 1 | 96980 |
| 14405 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 14404 | 1 | 96981 |
| 14406 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 14405 | 1 | 96982 |
| 14407 | $J/\psi 	o a_2^0 \pi^- a_2^+, a_2^0 	o \pi^+ \pi^- \omega, a_2^+ 	o \pi^+ \eta, \omega 	o \pi^0 \gamma, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14406 | 1 | 96983 |
| 14408 | $J/\psi \to \bar{K}^0 b_1^- K_0^{*+}, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 14407 | 1 | 96984 |
| 14409 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14408 | 1 | 96985 |
| 14410 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^+ K_0^0, \eta \to \pi^0 \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14409 | 1 | 96986 |
| 14411 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14410 | 1 | 96987 |
| 14412 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, \omega \to \pi^0\gamma, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma$ | 14411 | 1 | 96988 |
| 14413 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14412 | 1 | 96989 |
| 14414 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \rho^+ K^0, K_1^- \to \rho^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 6182 | 1 | 96990 |
| 14415 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1710) \to \omega \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 14414 | 1 | 96991 |
| 14416 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \rho^+ K^-, K_1^+ \to \pi^+ K^*, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 14415 | 1 | 96992 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14417 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 2002 | 1 | 96993 |
| 14418 | $J/\psi \to \rho^0 \rho^0 \rho^+ a_0^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \\ \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 14417 | 1 | 96994 |
| 14419 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^0 \eta, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14418 | 1 | 96995 |
| 14420 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^0 a_0^0, K_S^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-K^-$ | 14419 | 1 | 96996 |
| 14421 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14420 | 1 | 96997 |
| 14422 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14421 | 1 | 96998 |
| 14423 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \gamma\gamma, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma\gamma$ | 14422 | 1 | 96999 |
| 14424 | $J/\psi \to \phi f_1(1420), \phi \to \pi^0 \rho^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14423 | 1 | 97000 |
| 14425 | $J/\psi \to \eta a_0^0 b_1^0, \eta \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, b_1^0 \to \pi^0 \omega, \eta \to \gamma \gamma, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 14424 | 1 | 97001 |
| 14426 | $J/\psi \to \eta K^{*+} K_0^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14425 | 1 | 97002 |
| 14427 | $J/\psi \to \eta \omega, \eta \to e^+e^-\gamma^F\gamma^f, \omega \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^+e^-e^-\pi^+\pi^-\gamma^F\gamma^F\gamma^f$ | 14426 | 1 | 97003 |
| 14428 | $J/\psi \rightarrow \pi^0 \rho^0 \eta', \rho^0 \rightarrow \pi^+ \pi^-, \eta' \rightarrow \pi^0 \pi^0 \eta, \pi^0 \rightarrow e^+ e^- \gamma^F, \eta \rightarrow \gamma \gamma$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 6184 | 1 | 97004 |
| 14429 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ b_1^- h_1(1170), b_1^- \to \pi^- \omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 14428 | 1 | 97005 |
| 14430 | $J/\psi \to \pi^- \bar{\Xi}^+ \Xi^{*0}, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^{*0} \to \pi^+ \Xi^-, \bar{\Lambda} \to \pi^0 \bar{n}, \Xi^- \to \pi^- \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-nar{n}$ | 14429 | 1 | 97006 |
| 14431 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^- \gamma^F, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 14430 | 1 | 97007 |
| 14432 | $J/\psi \rightarrow \rho^- \omega b_1^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^+ \pi^- \gamma^f, b_1^+ \rightarrow \pi^+ \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 14431 | 1 | 97008 |
| 14433 | $J/\psi \to \pi^0 K^* \bar{K}^*, \pi^0 \to e^+ e^- \gamma^F, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma^f$ | 14432 | 1 | 97009 |
| 14434 | $J/\psi 	o \eta' f_2' \gamma, \eta' 	o \pi^+ \pi^- \eta, f_2' 	o \eta \eta, \eta 	o \pi^0 \pi^0 \pi^0, \eta 	o \gamma \gamma, \ \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma\gamma$ | 2703 | 1 | 97010 |
| 14435 | $J/\psi \to K^+K^{*-}f_0(1370)\gamma^f, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 14434 | 1 | 97011 |
| 14436 | $J/\psi \to K^+K^- J_0(1570)\gamma^5, K^- \to \pi^-K^-, J_0(1570) \to \pi^+\pi^-, K^- \to K_L$ $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \pi^0 \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^- \gamma^f,$ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 14435 | 1 | 97012 |
| 14437 | $J/\psi \rightarrow \pi^0\pi^+a_2^-a_0^0, a_2^- \rightarrow \pi^-\eta, a_0^0 \rightarrow \pi^0\eta, \eta \rightarrow \gamma\gamma, \eta \rightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 14436 | 1 | 97013 |
| 14438 | $J/\psi \to \eta' \eta' \gamma, \eta' \to \gamma \gamma, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma\gamma\gamma$ | 14437 | 1 | 97014 |
| 14439 | $J/\psi \to a_0^+ b_1^-, a_0^+ \to \pi^+ \eta \gamma^f, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 14438 | 1 | 97015 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14440 | $J/\psi \to \pi^- \bar{\Lambda} \Sigma^{*+}, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^{*+} \to \pi^0 \Sigma^+, \Sigma^+ \to \pi^+ n$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 14439 | 1 | 97016 |
| 14441 | $J/\psi \to \pi^0\pi^+\eta a_1^-, \eta \to \pi^0\pi^0\pi^0, a_1^- \to \pi^0\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14440 | 1 | 97017 |
| 14442 | $J/\psi \to K^- h_1(1170) K_1^+, h_1(1170) \to \pi^+ \rho^-, K_1^+ \to \omega K^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14441 | 1 | 97018 |
| 14443 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ar p \Delta^+, \Delta^+ 	o \pi^0 p$ | $\pi^0 p ar p \gamma$ | 14442 | 1 | 97019 |
| 14444 | $J/\psi \to K^{*-}K_1^+, K^{*-} \to \pi^0 K^-, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14443 | 1 | 97020 |
| 14445 | $J/\psi \to K^- \Sigma^0 \bar{\Xi}^+, \Sigma^0 \to \Lambda \gamma, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+K^-nar p\gamma$ | 14444 | 1 | 97021 |
| 14446 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14445 | 1 | 97022 |
| 14447 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 14446 | 1 | 97023 |
| 14448 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 6186 | 1 | 97024 |
| 14449 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma^f$ | 14448 | 1 | 97025 |
| 14450 | $J/\psi \to \pi^0 \eta K^0 \bar{K}^*, \eta \to \gamma \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 14449 | 1 | 97026 |
| 14451 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \rho^0 K^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 14450 | 1 | 97027 |
| 14452 | $J/\psi \to a_2^+ b_1^-, a_2^+ \to ho^0 \pi^+, b_1^- \to \pi^- \omega, ho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14451 | 1 | 97028 |
| 14453 | $J/\psi 	o \omega a_0^0, \omega 	o \eta \gamma, a_0^0 	o \pi^0 \eta, \eta 	o \pi^+ \pi^- \gamma^F, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma$ | 14452 | 1 | 97029 |
| 14454 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14453 | 1 | 97030 |
| 14455 | $J/\psi 	o \pi^0 \pi^- a_1^+, a_1^+ 	o ho^0 \pi^+, ho^0 	o \eta \gamma, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14454 | 1 | 97031 |
| 14456 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^+ K^0 K^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 14455 | 1 | 97032 |
| 14457 | $J/\psi \to \pi^0 \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 1542 | 1 | 97033 |
| 14458 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, f_0(1370) \to \rho^+ \rho^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14457 | 1 | 97034 |
| 14459 | $J/\psi \to \rho^0 a_0^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_0(1370) \to \rho^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 14458 | 1 | 97035 |
| 14460 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^0_L \pi^- K^+$ | 14459 | 1 | 97036 |
| 14461 | $J/\psi \to \pi^{+}\rho^{-}K^{*}\bar{K}_{1}^{0}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*} \to \pi^{0}K^{0}, \bar{K}_{1}^{0} \to \rho^{+}K^{-}, K^{0} \to K_{L}^{0}, \rho^{+} \to \pi^{0}\pi^{+}$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 14460 | 1 | 97037 |
| 14462 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to K^0 K^-, \eta \to \pi^0 \pi^0 \pi^0,$ $K^0 \to K^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 6188 | 1 | 97038 |
| 14463 | $J/\psi \to \pi^{0} \rho^{0} a_{0}^{0} a_{0}^{0}, \rho^{0} \to \pi^{+} \pi^{-}, a_{0}^{0} \to \pi^{0} \eta, a_{0}^{0} \to \pi^{0} \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^{0} \pi^{0} \pi^{0}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 14462 | 1 | 97039 |
| 14464 | $J/\psi \to \rho^- \bar{K}^0 K^+ h_1(1170), \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 14463 | 1 | 97040 |
| 14465 | $J/\psi \to \pi^- \bar{p} \Delta^{++}, \Delta^{++} \to \pi^+ p \gamma^f$ | $\pi^+\pi^-par p\gamma^f$ | 14464 | 1 | 97041 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 14466 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \pi^- K^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 14465 | 1 | 97042 |
| 14467 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^0 \bar{K}^*, f_1(1420) \to \pi^- \bar{K}^0 K^+, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 14466 | 1 | 97043 |
| 14468 | $J/\psi \to K^+ K_1^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^+ \pi^- \pi^- K^+$ | 14467 | 1 | 97044 |
| 14469 | $J/\psi \to \pi^0 \pi^0 f_1(1285) \gamma, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 14468 | 1 | 97045 |
| 14470 | $J/\psi \to \eta K^- K_0^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14469 | 1 | 97046 |
| 14471 | $J/\psi \to a_0^+ b_1^-, a_0^+ \to \bar{K}^0 K^+, b_1^- \to \pi^- \omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14470 | 1 | 97047 |
| 14472 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 14471 | 1 | 97048 |
| 14473 | $J/\psi \to \pi^0 \pi^0 \rho^0 \pi^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14472 | 1 | 97049 |
| 14474 | $J/\psi \to \pi^+ K^* \bar{K}^* b_1^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 14473 | 1 | 97050 |
| 14475 | $J/\psi 	o \eta K^+ K_0^{*-}, \eta 	o \pi^0 \pi^0 \pi^0, K_0^{*-} 	o \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 2705 | 1 | 97051 |
| 14476 | $J/\psi \to \omega b_1^+ b_1^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \\ \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 14475 | 1 | 97052 |
| 14477 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^+ ho^- \gamma^f, \omega ightarrow \pi^0 \gamma, ho^- ightarrow \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma\gamma^{f}$ | 14476 | 1 | 97053 |
| 14478 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 14477 | 1 | 97054 |
| 14479 | $J/\psi \to \pi^- f_0(1370) a_1^+, f_0(1370) \to \rho^+ \rho^-, a_1^+ \to \rho^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14478 | 1 | 97055 |
| 14480 | $J/\psi \to K^0 \bar{K}^0 a_1^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14479 | 1 | 97056 |
| 14481 | $J/\psi \to \pi^+\pi^-\bar{K}^*K_1^0, \bar{K}^* \to \pi^+K^-, K_1^0 \to \rho^-K^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14480 | 1 | 97057 |
| 14482 | $J/\psi \to \eta K^{*+}K_1^-, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K_1^- \to \rho^-\bar{K}^0, K^0 \to K_L^0, \\ \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 14481 | 1 | 97058 |
| 14483 | $J/\psi \to \rho^0 \pi^+ K^0 K^- a_1^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 14482 | 1 | 97059 |
| 14484 | $J/\psi \to \omega f_2(1270), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to K^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 14483 | 1 | 97060 |
| 14485 | $J/\psi ightarrow \pi^+ \omega K_S^0 K^- \gamma^f, \omega ightarrow \pi^0 \gamma, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma^f$ | 14484 | 1 | 97061 |
| 14486 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^+ K_0^0, \eta \to \gamma \gamma, K_0^0 \to \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 14485 | 1 | 97062 |
| 14487 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14486 | 1 | 97063 |
| 14488 | $J/\psi \to \bar{K}^* K^+ a_0^- \gamma^F, \bar{K}^* \to \pi^+ K^-, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $K_L^0\pi^+K^+K^-K^-\gamma^F$ | 14487 | 1 | 97064 |
| 14489 | $J/\psi \to \pi^0 K^- K_1^+, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 14488 | 1 | 97065 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 14490 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \rho^- a_0^+, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \\ \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 6190 | 1 | 97066 |
| 14491 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 6191 | 1 | 97067 |
| 14492 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 14491 | 1 | 97068 |
| 14493 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to K^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 14492 | 1 | 97069 |
| 14494 | $J/\psi \to \eta \bar{K}^* K_2^{*0}, \eta \to \gamma \gamma, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 14493 | 1 | 97070 |
| 14495 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 14494 | 1 | 97071 |
| 14496 | $J/\psi 	o a_2^0 \pi^- a_1^+, a_2^0 	o \pi^0 \eta, a_1^+ 	o ho^0 \pi^+, \eta 	o \gamma \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14495 | 1 | 97072 |
| 14497 | $J/\psi \to \pi^0 \pi^0 K^+ K^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0K^+K^-\gamma^F\gamma^f$ | 14496 | 1 | 97073 |
| 14498 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^0\pi^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14497 | 1 | 97074 |
| 14499 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to \pi^0 \eta, a_2^+ \to \pi^0 \rho^+, \eta \to \pi^+ \pi^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 14498 | 1 | 97075 |
| 14500 | $J/\psi \to K^- h_1(1170) K_1^+, h_1(1170) \to \pi^- \rho^+, K_1^+ \to \pi^+ K^*, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14499 | 1 | 97076 |
| 14501 | $J/\psi \to a_2^0 \pi^+ a_1^- \gamma^f, a_2^0 \to \pi^- \rho^+, a_1^- \to \rho^0 \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 14500 | 1 | 97077 |
| 14502 | $J/\psi \to \pi^0 \pi^+ \pi^- f_2(1270), f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 6192 | 1 | 97078 |
| 14503 | $J/\psi \to K^+ \phi K_0^{*-}, \phi \to K^+ K^-, K_0^{*-} \to \pi^0 K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 2004 | 1 | 97079 |
| 14504 | $J/\psi \to \pi^+\pi^-K^{*+}\bar{K}_1^{'-}, K^{*+} \to \pi^+K^0, \bar{K}_1^{'-} \to \pi^-\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6194 | 1 | 97080 |
| 14505 | $J/\psi \to K^{*+}K_2^{*-}\gamma^f, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^-\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 14504 | 1 | 97081 |
| 14506 | $J/\psi \to \omega \bar{K}^0 K^* \gamma, \omega \to \pi^0 \gamma, \bar{K}^0 \to K^0_S, K^* \to \pi^- K^+, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 14505 | 1 | 97082 |
| 14507 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to \pi^0 \eta, a_1^- \to \pi^0 \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 14506 | 1 | 97083 |
| 14508 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to K^+K^{*-}, \eta \to \pi^0\pi^+\pi^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 14507 | 1 | 97084 |
| 14509 | $J/\psi \to \pi^0 \omega \omega b_1^0, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 14508 | 1 | 97085 |
| 14510 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^*\bar{K}^*, K^* \to \pi^-K^+, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 14509 | 1 | 97086 |
| 14511 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14510 | 1 | 97087 |
| 14512 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to \eta \gamma, h_1(1380) \to K^0 \bar{K}^*, \eta \to \gamma \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma\gamma\gamma$ | 14511 | 1 | 97088 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 14513 | $J/\psi \to \pi^0 \pi^+ \rho^- a_0^0, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 14512 | 1 | 97089 |
| 14514 | $J/\psi \to K^0 \bar{K}^* a_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14513 | 1 | 97090 |
| 14515 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 K^- a_1^+, K^0 \to K_L^0, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 14514 | 1 | 97091 |
| 14516 | $J/\psi 	o K_2^{*0} K_0^0, K_2^{*0} 	o \pi^0 \bar{K}^0, K_0^0 	o \pi^- K^+, \bar{K}^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 14515 | 1 | 97092 |
| 14517 | $J/\psi \to \pi^0 \bar{\Lambda} \Sigma^{*0}, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^{*0} \to \pi^0 \Lambda, \pi^0 \to e^+ e^- \gamma^F, \Lambda \to \pi^- p$ | $e^+e^-\pi^0\pi^+\pi^-p\bar{p}\gamma^F$ | 14516 | 1 | 97093 |
| 14518 | $J/\psi \to \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 14517 | 1 | 97094 |
| 14519 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14518 | 1 | 97095 |
| 14520 | $J/\psi \to \eta_c \gamma, \eta_c \to \Delta^0 \bar{\Delta}^0, \Delta^0 \to \pi^- p, \bar{\Delta}^0 \to \pi^+ \bar{p}$ | $\pi^+\pi^-par p\gamma$ | 14519 | 1 | 97096 |
| 14521 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_1(1285) \to \pi^0 \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, $ $\rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 14520 | 1 | 97097 |
| 14522 | $J/\psi \to \rho^0 h_1(1170) h_1(1170), \rho^0 \to \pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, h_1(1170) \to \pi^-\rho^+, \rho^- \to \pi^0\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14521 | 1 | 97098 |
| 14523 | $J/\psi \to \eta \omega f_2(1270), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 14522 | 1 | 97099 |
| 14524 | $J/\psi \to f_2(1270)b_1^0, f_2(1270) \to K_S^0 K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14523 | 1 | 97100 |
| 14525 | $J/\psi \to K^{*-}a_0^+K_0^0, K^{*-} \to \pi^0K^-, a_0^+ \to \pi^+\eta, K_0^0 \to \pi^-K^+, \eta \to \gamma\gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 6195 | 1 | 97101 |
| 14526 | $J/\psi \to \rho^0 \pi^+ \rho^- h_1(1170), \rho^0 \to \pi^+ \pi^- \gamma^F, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 14525 | 1 | 97102 |
| 14527 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14526 | 1 | 97103 |
| 14528 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 14527 | 1 | 97104 |
| 14529 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^0K^0, a_0^+ \to \pi^+\eta, K^0 \to K_L^0, \eta \to e^+e^-\pi^+\pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}$ | 14528 | 1 | 97105 |
| 14530 | $J/\psi \to \eta \bar{K}^0 K_2^{*0}, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14529 | 1 | 97106 |
| 14531 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \omega K^0, K_2^{*0} \to \pi^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 6196 | 1 | 97107 |
| 14532 | $J/\psi \to \pi^+ K_0^{*-} K_1^{'0}, K_0^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14531 | 1 | 97108 |
| 14533 | $J/\psi 	o \pi^0 K^+ K_0^{*-}, K_0^{*-} 	o \pi^- ar K^0, ar K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 14532 | 1 | 97109 |
| 14534 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^+K^-\gamma^f, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $K_L^0\pi^+K^+K^-K^-\gamma^f$ | 6197 | 1 | 97110 |
| 14535 | $J/\psi ightarrow \omega a_0^0, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^0 ightarrow K_L^0 K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 14534 | 1 | 97111 |
| 14536 | $J/\psi \to \rho^0 \bar{K}^0 K_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_L^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 14535 | 1 | 97112 |
| 14537 | $J/\psi \to \bar{K}^0 K^+ \eta' a_1^-, \bar{K}^0 \to K_L^0, \eta' \to \pi^0 \pi^0 \eta, a_1^- \to \pi^0 \rho^-, \eta \to \gamma \gamma, \\ \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma\gamma$ | 14536 | 1 | 97113 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14538 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^+ K_2^{*-}, \bar{K}^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14537 | 1 | 97114 |
| 14539 | $J/\psi 	o \eta K^0 K_2^{*0}, \eta 	o \gamma \gamma, K^0 	o K_L^0, K_2^{*0} 	o \pi^0 ar{K}^*, ar{K}^* 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 14538 | 1 | 97115 |
| 14540 | $J/\psi 	o \pi^0 ho^0 a_0^0, ho^0 	o \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14539 | 1 | 97116 |
| 14541 | $J/\psi \to \pi^0 f_2(1270) h_1(1170), f_2(1270) \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14540 | 1 | 97117 |
| 14542 | $J/\psi \to \pi^+ K^+ \bar{\Delta}^{++} \Lambda, \bar{\Delta}^{++} \to \pi^- \bar{p}, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-K^+par{p}$ | 14541 | 1 | 97118 |
| 14543 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^+K^0, \phi \to K_L^0K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14542 | 1 | 97119 |
| 14544 | $J/\psi \to K^* \bar{K}^* f_0(1370), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \rho^+ \rho^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14543 | 1 | 97120 |
| 14545 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 14544 | 1 | 97121 |
| 14546 | $J/\psi \to K^{+}a_{0}^{-}\bar{K}_{1}^{0}, a_{0}^{-} \to \pi^{-}\eta, \bar{K}_{1}^{0} \to \rho^{0}\bar{K}^{0}, \eta \to \gamma\gamma, \rho^{0} \to \pi^{+}\pi^{-}\gamma^{f}, \\ \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma^f$ | 14545 | 1 | 97122 |
| 14547 | $J/\psi \to \pi^- \eta \bar{K}^0 K^{*+}, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 14546 | 1 | 97123 |
| 14548 | $J/\psi 	o \eta \Lambda \bar{\Lambda}, \eta 	o \gamma \gamma, \Lambda 	o \pi^0 n, \bar{\Lambda} 	o \pi^0 \bar{n}, \pi^0 	o e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0nar{n}\gamma^F\gamma\gamma\gamma^f$ | 6198 | 1 | 97124 |
| 14549 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 14548 | 1 | 97125 |
| 14550 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^+ \rho^-, a_2^- \to \bar{K}^0 K^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 14549 | 1 | 97126 |
| 14551 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14550 | 1 | 97127 |
| 14552 | $J/\psi \to \pi^- \bar{K}^* K_1^+ \gamma^F, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \omega K^+, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}\gamma^{F}$ | 14551 | 1 | 97128 |
| 14553 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^0 \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 14552 | 1 | 97129 |
| 14554 | $J/\psi \to \pi^+\pi^-K^{*-}K_2^{*+}, K^{*-} \to \pi^0K^-, K_2^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14553 | 1 | 97130 |
| 14555 | $J/\psi \rightarrow \pi K K_2, K \rightarrow \pi K, K_2 \rightarrow \pi K, K \rightarrow K_S, K_S \rightarrow \pi K$ $J/\psi \rightarrow \eta K^{*+} K_2^{*-}, \eta \rightarrow \gamma \gamma, K^{*+} \rightarrow \pi^+ K^0, K_2^{*-} \rightarrow \pi^- \bar{K}^0, K^0 \rightarrow K_L^0,$ $\bar{K}^0 \rightarrow K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 14554 | 1 | 97131 |
| 14556 | $J/\psi \to \pi^0 n \bar{\Lambda}^+ \gamma^F \bar{\Lambda}^+ \to \pi^0 \bar{n}$ | $\pi^0\pi^0 par p \gamma^F$ | 14555 | 1 | 97132 |
| 14557 | $J/\psi \to K^{*-}K_2^{*+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 14556 | 1 | 97133 |
| 14558 | $J/\psi \to \rho^- \bar{K}^0 K^+ h_1(1170), \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14557 | 1 | 97134 |
| 14559 | $J/\psi \to \rho^0 K^{*-} K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 6199 | 1 | 97135 |
| 14560 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 6200 | 1 | 97136 |
| 14561 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^{0}K_{L}^{0}\pi^{+}K^{+}K^{-}K^{-}$ | 14560 | 1 | 97137 |
| 14562 | $J/\psi \to \rho^- \bar{\Sigma}^+ \Sigma^0, \rho^- \to \pi^0 \pi^-, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 14561 | 1 | 97138 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 14563 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ a_2^- \omega, a_2^- 	o ho^0 \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 14562 | 1 | 97139 |
| 14564 | $J/\psi \to \pi^- K^+ \bar{K}_1^{'0}, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \bar{K}^0 \gamma, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 14563 | 1 | 97140 |
| 14565 | $J/\psi \to \eta f_0(1710)\gamma, \eta \to \pi^0 \pi^+ \pi^-, f_0(1710) \to \omega \omega, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14564 | 1 | 97141 |
| 14566 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^- \gamma^F, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 14565 | 1 | 97142 |
| 14567 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14566 | 1 | 97143 |
| 14568 | $J/\psi \to a_2^0 K^0 \bar{K}_0^{*0}, a_2^0 \to \pi^- \rho^+, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14567 | 1 | 97144 |
| 14569 | $J/\psi ightarrow \pi^0 ho^0 \pi^- a_0^+, ho^0 ightarrow \pi^+ \pi^- \gamma^f, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 14568 | 1 | 97145 |
| 14570 | $J/\psi \to \eta K^{*-}K_{1}^{'+}, \eta \to \pi^{0}\pi^{+}\pi^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{+}K^{*}, \bar{K}^{0} \to K_{S}^{0}, K^{*-} \to \pi^{-}K^{+}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 14569 | 1 | 97146 |
| 14571 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14570 | 1 | 97147 |
| 14572 | $J/\psi \to \pi^- \bar{\Delta}^+ \Delta^{++}, \bar{\Delta}^+ \to \bar{p}\gamma, \Delta^{++} \to \pi^+ p$ | $\pi^+\pi^-par p\gamma$ | 1214 | 1 | 97148 |
| 14573 | $J/\psi \to \bar{\Sigma}^{*+} \Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Lambda \gamma^f, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma^f$ | 14572 | 1 | 97149 |
| 14574 | $J/\psi \to \pi^0 f_2(1270) K^+ K^{*-}, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^- \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 14573 | 1 | 97150 |
| 14575 | $J/\psi \to \pi^0 K_0^{*+} K_1^-, K_0^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6202 | 1 | 97151 |
| 14576 | $J/\psi \to a_0^- b_1^+ f_0(1370), a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6203 | 1 | 97152 |
| 14577 | $J/\psi \to K^0 \bar{K}_1^0 \gamma, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 14576 | 1 | 97153 |
| 14578 | $J/\psi \to \pi^+ K_2^{*-} K_0^0, K_2^{*-} \to \pi^0 K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 14577 | 1 | 97154 |
| 14579 | $J/\psi \to K^{+}\eta'K_{1}^{-}, \eta' \to \pi^{+}\pi^{-}\eta, K_{1}^{-} \to \pi^{0}K^{*-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, \\ \bar{K}^{0} \to K_{L}^{0}$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14578 | 1 | 97155 |
| 14580 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^+ \pi^- \bar{K}^0, K^0 \to K^0_L, \\ \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 14579 | 1 | 97156 |
| 14581 | $J/\psi \to \pi^0 \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14580 | 1 | 97157 |
| 14582 | $J/\psi \to \eta \omega f_2(1270), \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14581 | 1 | 97158 |
| 14583 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} h_1(1170), K^{*+} \to \pi^+ K^0, h_1(1170) \to \pi^- \rho^+, K^0 \to K_S^0, $ $\rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 14582 | 1 | 97159 |
| 14584 | $J/\psi \to \rho^- a_2^+ \eta', \rho^- \to \pi^0 \pi^-, a_2^+ \to \bar{K}^0 K^+, \eta' \to \pi^+ \pi^- \eta \gamma^f, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma^f$ | 14583 | 1 | 97160 |
| 14585 | $J/\psi \to \pi^0 \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14584 | 1 | 97161 |
| 14586 | $J/\psi 	o \eta K^0 ar{K}^0, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K_L^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 14585 | 1 | 97162 |
| 14587 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14586 | 1 | 97163 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 14588 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}$ | 14587 | 1 | 97164 |
| 14589 | $J/\psi \to f_2(1270)K^-K^{*+}, f_2(1270) \to \pi^0\pi^0, K^{*+} \to \pi^+K^0, K^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 14588 | 1 | 97165 |
| 14590 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 14589 | 1 | 97166 |
| 14591 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to K_S^0 K_S^0, a_2^- \to \rho^0 \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \\ \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14590 | 1 | 97167 |
| 14592 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^+ \pi^- \eta, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 14591 | 1 | 97168 |
| 14593 | $J/\psi 	o \pi^0 ar{\Lambda} \Sigma^{*0}, ar{\Lambda} 	o \pi^0 ar{n}, \Sigma^{*0} 	o \pi^- \Sigma^+, \Sigma^+ 	o \pi^0 p$ | $\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 14592 | 1 | 97169 |
| 14594 | $J/\psi ightarrow ho^0 ho^+ ho^- \eta, ho^0 ightarrow \pi^+ \pi^-, ho^+ ightarrow \pi^0 \pi^+ \gamma^f, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 14593 | 1 | 97170 |
| 14595 | $J/\psi ightarrow ho^0 b_1^0 \gamma, ho^0 ightarrow \pi^+ \pi^- \gamma^f, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 14594 | 1 | 97171 |
| 14596 | $J/\psi \to \pi^{0}\pi^{-}\bar{K}^{0}K_{1}^{'+}, \bar{K}^{0} \to K_{L}^{0}, K_{1}^{'+} \to \pi^{0}K^{*+}, K^{*+} \to \pi^{0}K^{+}$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 14595 | 1 | 97172 |
| 14597 | $J/\psi \to K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 14596 | 1 | 97173 |
| 14598 | $J/\psi 	o \eta \eta' \phi, \eta 	o \pi^0 \pi^0 \pi^0, \eta' 	o ho^0 \gamma, \phi 	o K^+ K^-, ho^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 14597 | 1 | 97174 |
| 14599 | $J/\psi \to ho^- ar{\Sigma}^0 \Sigma^{*+}, ho^- \to \pi^0 \pi^-, ar{\Sigma}^0 \to ar{\Lambda} \gamma, \Sigma^{*+} \to \pi^+ \Lambda, ar{\Lambda} \to \pi^0 ar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 14598 | 1 | 97175 |
| 14600 | $J/\psi 	o \pi^0 ar{K}^* K_0^0, ar{K}^* 	o \pi^0 ar{K}^0, K_0^0 	o \pi^- K^+ \gamma^f, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 14599 | 1 | 97176 |
| 14601 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14600 | 1 | 97177 |
| 14602 | $J/\psi \to K^-K^{*+}\phi, K^{*+} \to \pi^+K^0, \phi \to K^0_LK^0_S, K^0 \to K^0_L, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+K^-$ | 2708 | 1 | 97178 |
| 14603 | $J/\psi \to \pi^0\pi^0\pi^+\pi^-\eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14602 | 1 | 97179 |
| 14604 | $J/\psi \to \pi^0\pi^0\pi^0a_2^+b_1^-, a_2^+ \to \pi^0\rho^+, b_1^- \to \pi^-\omega, \rho^+ \to \pi^0\pi^+, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14603 | 1 | 97180 |
| 14605 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14604 | 1 | 97181 |
| 14606 | $J/\psi 	o \pi^+ \eta b_1^-, \eta 	o \gamma \gamma, b_1^- 	o \pi^- \omega, \omega 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14605 | 1 | 97182 |
| 14607 | $J/\psi \to \phi f_1(1420), \phi \to \eta \gamma, f_1(1420) \to \pi^+ K^0 K^-, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 14606 | 1 | 97183 |
| 14608 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14607 | 1 | 97184 |
| 14609 | $J/\psi 	o \pi^0 \eta' b_1^0, \eta' 	o \pi^+ \pi^- \eta, b_1^0 	o \pi^0 \omega, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 14608 | 1 | 97185 |
| 14610 | $J/\psi 	o ar{K}^0 K_0^0 \gamma, ar{K}^0 	o K_S^0, K_0^0 	o \pi^0 K^0, K_S^0 	o \pi^0 \pi^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 14609 | 1 | 97186 |
| 14611 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 6205 | 1 | 97187 |
| 14612 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+ \gamma^f, K_2^{*0} \to \pi^+ K^-$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 14611 | 1 | 97188 |
| 14613 | $J/\psi ightarrow \pi^0 \eta b_1^0, \eta ightarrow \gamma \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 14612 | 1 | 97189 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 14614 | $J/\psi 	o a_2^0 \pi^- b_1^+, a_2^0 	o \pi^- ho^+, b_1^+ 	o \pi^+ \omega, ho^+ 	o \pi^0 \pi^+, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14613 | 1 | 97190 |
| 14615 | $J/\psi \to \pi^0 \pi^0 h_1(1170), h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 14614 | 1 | 97191 |
| 14616 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \omega K^+, K_2^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 3876 | 1 | 97192 |
| 14617 | $J/\psi \to \pi^- \rho^+ \bar{K}^* K_1^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 14616 | 1 | 97193 |
| 14618 | $J/\psi \to K^- \eta' K_1^+, \eta' \to \pi^+ \pi^- \eta, K_1^+ \to \pi^+ K_0^0, \eta \to \gamma \gamma, K_0^0 \to \pi^0 K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 14617 | 1 | 97194 |
| 14619 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^0 \pi^0 \eta', \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 6207 | 1 | 97195 |
| 14620 | $J/\psi \to \rho^0 \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 2709 | 1 | 97196 |
| 14621 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \gamma, \omega \to \pi^+ \pi^+ \pi^- \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 14620 | 1 | 97197 |
| 14622 | $J/\psi \to \rho^0 K^{*-} K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14621 | 1 | 97198 |
| 14623 | $J/\psi 	o ho^- K^+ ar{K}^0_1, ho^- 	o \pi^0 \pi^-, ar{K}^0_1 	o \pi^0 ar{K}^{*0}_0, ar{K}^{*0}_0 	o \pi^0 ar{K}^0, ar{K}^0 	o K^0_L$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 14622 | 1 | 97199 |
| 14624 | $J/\psi \to \pi^+ \rho^- K^{*+} K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 2710 | 1 | 97200 |
| 14625 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 14624 | 1 | 97201 |
| 14626 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14625 | 1 | 97202 |
| 14627 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, $ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14626 | 1 | 97203 |
| 14628 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \pi^+ \pi^- K^0, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 14627 | 1 | 97204 |
| 14629 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma^f$ | 14628 | 1 | 97205 |
| 14630 | $J/\psi ightarrow ho^0 ho^0 \pi^+ ho^-, ho^0 ightarrow \pi^+ \pi^-, ho^0 ightarrow \pi^+ \pi^- \gamma^f, ho^- ightarrow \pi^0 \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 14629 | 1 | 97206 |
| 14631 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \rho^0 \pi^+ \gamma^f, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 14630 | 1 | 97207 |
| 14632 | $J/\psi \to \pi^0 K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^*, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14631 | 1 | 97208 |
| 14633 | $J/\psi \to K_1^+ K_1^-, K_1^+ \to \pi^+ K_0^0, K_1^- \to \omega K^-, K_0^0 \to \pi^- K^+, \omega \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 2711 | 1 | 97209 |
| 14634 | $J/\psi \to \pi^0 \pi^+ K^* \bar{p} \Lambda, K^* \to \pi^- K^+, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-K^+p\bar{p}$ | 14633 | 1 | 97210 |
| 14635 | $J/\psi ightarrow \pi^0 ho^0 ho^+ ho^-, ho^0 ightarrow \pi^+ \pi^-, ho^+ ightarrow \pi^0 \pi^+ \gamma^f, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14634 | 1 | 97211 |
| 14636 | $J/\psi \rightarrow \pi^+ \omega a_0^-, \omega \rightarrow \pi^0 \pi^+ \pi^- \gamma^f, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14635 | 1 | 97212 |
| 14637 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \pi^0 K_0^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14636 | 1 | 97213 |
| 14638 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14637 | 1 | 97214 |
| 14639 | $J/\psi \to \omega \eta' f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \rho^0 \gamma, f_0(1370) \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14638 | 1 | 97215 |
| 14640 | $J/\psi ightarrow \pi^0 par{p}a_0^0, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-par{p}$ | 14639 | 1 | 97216 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14641 | $J/\psi \to \pi^+ \pi^+ \pi^- f_2(1270) a_0^-, f_2(1270) \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14640 | 1 | 97217 |
| 14642 | $J/\psi \to \pi^- \rho^+ p \bar{\Delta}^+, \rho^+ \to \pi^0 \pi^+, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 14641 | 1 | 97218 |
| 14643 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_L^0, \eta \to e^+ e^- \gamma^F$ | $e^+e^-K^0_LK^0_L\pi^+\pi^-\gamma^F$ | 14642 | 1 | 97219 |
| 14644 | $J/\psi \to \pi^0 \pi^+ a_2^- \gamma^f, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma^f$ | 14643 | 1 | 97220 |
| 14645 | $J/\psi 	o \pi^- ho^+ \omega \gamma^F, ho^+ 	o \pi^0 \pi^+ \gamma^f, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 14644 | 1 | 97221 |
| 14646 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14645 | 1 | 97222 |
| 14647 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^-K^+$ | 14646 | 1 | 97223 |
| 14648 | $J/\psi ightarrow \phi f_2^{'}, \phi ightarrow K_L^0 K_S^0, f_2^{'} ightarrow K_L^0 K_L^0, K_S^0 ightarrow \pi^+ \pi^- \gamma^f$ | $K^0_L K^0_L K^0_L \pi^+ \pi^- \gamma^f$ | 14647 | 1 | 97224 |
| 14649 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14648 | 1 | 97225 |
| 14650 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 14649 | 1 | 97226 |
| 14651 | $J/\psi \to \rho^0 \eta' a_0^0, \rho^0 \to \pi^+ \pi^-, \eta' \to \rho^0 \gamma, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \\ \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 14650 | 1 | 97227 |
| 14652 | $J/\psi \to \rho^0 \Sigma^0 \bar{\Sigma}^0, \rho^0 \to \pi^+ \pi^-, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Lambda \to \pi^- p, \\ \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma\gamma$ | 14651 | 1 | 97228 |
| 14653 | $J/\psi \rightarrow \eta\eta\phi, \eta \rightarrow \pi^0\pi^0\pi^0, \eta \rightarrow \pi^0\pi^+\pi^-, \phi \rightarrow K_L^0K_S^0, K_S^0 \rightarrow \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 6211 | 1 | 97229 |
| 14654 | $J/\psi \to \pi^+\pi^+\eta K^0K^-b_1^-, \eta \to \gamma\gamma, K^0 \to K_S^0, b_1^- \to \pi^-\omega, K_S^0 \to \pi^+\pi^-, \omega \to \pi^0\gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma\gamma$ | 14653 | 1 | 97230 |
| 14655 | $J/\psi \to \rho^+ a_2^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14654 | 1 | 97231 |
| 14656 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^0 K^0, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0$ | 14655 | 1 | 97232 |
| 14657 | $J/\psi \to \rho^- K^+ K^- b_1^+, \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14656 | 1 | 97233 |
| 14658 | $J/\psi \to \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14657 | 1 | 97234 |
| 14659 | $J/\psi \to \eta f_2(1270) h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, f_2(1270) \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14658 | 1 | 97235 |
| 14660 | $J/\psi \to \pi^+ \rho^- \eta', \rho^- \to \pi^0 \pi^-, \eta' \to \pi^+ \pi^- \eta \gamma^f, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14659 | 1 | 97236 |
| 14661 | $J/\psi \to \pi^- \rho^+ \omega \omega \gamma^f, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 14660 | 1 | 97237 |
| 14662 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \gamma, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 14661 | 1 | 97238 |
| 14663 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \pi^0 f_2(1270), f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 14662 | 1 | 97239 |
| 14664 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \rho^+ K^0, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+, K_2^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 14663 | 1 | 97240 |
| 14665 | $J/\psi ightarrow \pi^- \eta^\prime ar{n} p, \eta^\prime ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 14664 | 1 | 97241 |
| 14666 | $J/\psi 	o \eta \Lambda \bar{\Lambda}, \eta 	o \pi^0 \pi^0 \pi^0, \Lambda 	o \pi^- p, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 14665 | 1 | 97242 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 14667 | $J/\psi \to \rho^0 f_2(1270)\eta', \rho^0 \to \pi^+\pi^-, f_2(1270) \to \pi^+\pi^-, \eta' \to \rho^0\gamma, \rho^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 14666 | 1 | 97243 |
| 14668 | $J/\psi \to \pi^+ K^0 \bar{K}^0 n \bar{p}, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K^0_L K^0_L \pi^+ n \bar{p}$ | 14667 | 1 | 97244 |
| 14669 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14668 | 1 | 97245 |
| 14670 | $J/\psi \to \rho^- \omega \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14669 | 1 | 97246 |
| 14671 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^{*-}, K_1^0 \to \omega K^0, K^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14670 | 1 | 97247 |
| 14672 | $J/\psi \to \bar{K}^0 K_2^{*0} \phi, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- K^*, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 14671 | 1 | 97248 |
| 14673 | $J/\psi \to \omega K^0 \bar{K}^0_1, \omega \to \pi^0 \gamma, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^0 \bar{K}^{*0}_0, \bar{K}^{*0}_0 \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 14672 | 1 | 97249 |
| 14674 | $J/\psi \to K^+ K^{*+} K^{*-} K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^0 K^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+K^+K^-$ | 14673 | 1 | 97250 |
| 14675 | $J/\psi \to \pi^- \rho^+ \omega \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 14674 | 1 | 97251 |
| 14676 | $J/\psi \to \eta K^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma\gamma^f$ | 14675 | 1 | 97252 |
| 14677 | $J/\psi \to K^0 \phi \bar{K}_1^{'0}, K^0 \to K_L^0, \phi \to K_L^0 K_S^0, \bar{K}_1^{'0} \to \pi^+ \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14676 | 1 | 97253 |
| 14678 | $J/\psi \to \eta K^+ K_2^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14677 | 1 | 97254 |
| 14679 | $J/\psi 	o \eta \Delta^+ ar{\Delta}^+, \eta 	o \pi^0 \pi^0 \pi^0, \Delta^+ 	o \pi^0 p, ar{\Delta}^+ 	o \pi^- ar{n}$ | $\pi^0\pi^0\pi^0\pi^0\pi^-ar{n}p$ | 2712 | 1 | 97255 |
| 14680 | $J/\psi \to a_2^+ K^* K^{*-}, a_2^+ \to \pi^0 \rho^+, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14679 | 1 | 97256 |
| 14681 | $J/\psi \to \rho^+ K^* K^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 14680 | 1 | 97257 |
| 14682 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14681 | 1 | 97258 |
| 14683 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 14682 | 1 | 97259 |
| 14684 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K_2^{*0} K^{*-}, K_2^{*0} \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 14683 | 1 | 97260 |
| 14685 | $J/\psi 	o \eta \eta' \phi, \eta 	o \gamma \gamma, \eta' 	o ho^0 \gamma, \phi 	o \pi^0 ho^0, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 14684 | 1 | 97261 |
| 14686 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 14685 | 1 | 97262 |
| 14687 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 6213 | 1 | 97263 |
| 14688 | $J/\psi ightarrow nar{p}b_1^+, b_1^+ ightarrow \pi^+\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 14687 | 1 | 97264 |
| 14689 | $J/\psi \to \pi^- K^+ \bar{K}_1^{'0} \gamma^F, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 14688 | 1 | 97265 |
| 14690 | $J/\psi \to K^+K^-b_1^0\gamma^F, b_1^0 \to \pi^0\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 14689 | 1 | 97266 |
| 14691 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 6214 | 1 | 97267 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 14692 | $J/\psi ightarrow \pi^0 \eta n ar{n}, \eta ightarrow \gamma \gamma$ | $\pi^0 n \bar{n} \gamma \gamma$ | 14691 | 1 | 97268 |
| 14693 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^+\pi^-\gamma^f, K^{*-} \to \pi^0K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 6215 | 1 | 97269 |
| 14694 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6216 | 1 | 97270 |
| 14695 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^0 \pi^+ a_0^-, a_2^0 \to \pi^+ \pi^- \omega, a_0^- \to \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma$ | 14694 | 1 | 97271 |
| 14696 | $J/\psi \to \rho^+ K^0 K^- f_0(1370), \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, f_0(1370) \to \rho^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14695 | 1 | 97272 |
| 14697 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 14696 | 1 | 97273 |
| 14698 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 2713 | 1 | 97274 |
| 14699 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \bar{K}^0 K^+, f_0(1370) \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14698 | 1 | 97275 |
| 14700 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 14699 | 1 | 97276 |
| 14701 | $J/\psi \to \eta_c \gamma, \eta_c \to a_2^+ K^* K^-, a_2^+ \to \rho^0 \pi^+, K^* \to \pi^- K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 14700 | 1 | 97277 |
| 14702 | $J/\psi \to a_2^0 \pi^- a_2^+, a_2^0 \to \pi^0 \eta, a_2^+ \to \rho^0 \pi^+, \eta \to \pi^+ \pi^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 14701 | 1 | 97278 |
| 14703 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 14702 | 1 | 97279 |
| 14704 | $J/\psi \to \pi^0 \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14703 | 1 | 97280 |
| 14705 | $J/\psi \to \rho^0 \pi^+ \pi^- \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 14704 | 1 | 97281 |
| 14706 | $J/\psi \to \rho^+ K^- K_1^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14705 | 1 | 97282 |
| 14707 | $J/\psi \to f_2' h_1(1380), f_2' \to \eta \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \gamma \gamma, \eta \to e^+ e^- \gamma^F, \ \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^-\pi^-K^+\gamma^F\gamma\gamma$ | 14706 | 1 | 97283 |
| 14708 | $J/\psi \to f_0(1370)f_0(1370)h_1(1170), f_0(1370) \to \rho^0 \rho^0, f_0(1370) \to \pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 14707 | 1 | 97284 |
| 14709 | $J/\psi \to \pi^- \rho^+ K^+ K_1^-, \rho^+ \to \pi^0 \pi^+, K_1^- \to \omega K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14708 | 1 | 97285 |
| 14710 | $J/\psi \to \eta K^{*-}K_0^{*+}, \eta \to \gamma \gamma, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 14709 | 1 | 97286 |
| 14711 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^0 \pi^+ \omega, a_0^0 \to \pi^0 \eta, \omega \to \pi^0 \gamma, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 14710 | 1 | 97287 |
| 14712 | $J/\psi 	o \omega \eta', \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 14711 | 1 | 97288 |
| 14713 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14712 | 1 | 97289 |
| 14714 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^+ \pi^- K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 14713 | 1 | 97290 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14715 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0,$ $\pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 14714 | 1 | 97291 |
| 14716 | $J/\psi \to \eta \Delta^{++} \bar{\Delta}^{++}, \eta \to \gamma \gamma, \Delta^{++} \to \pi^+ p, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^-par p\gamma\gamma$ | 14715 | 1 | 97292 |
| 14717 | $J/\psi \to \pi^+\pi^-\bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6218 | 1 | 97293 |
| 14718 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^-\pi^-K^+K^+$ | 14717 | 1 | 97294 |
| 14719 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^+ \pi^-, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14718 | 1 | 97295 |
| 14720 | $J/\psi \to \pi^0 f_2(1270) h_1(1170), f_2(1270) \to \pi^+\pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14719 | 1 | 97296 |
| 14721 | $J/\psi \rightarrow \eta \eta \phi, \eta \rightarrow \pi^0 \pi^0 \pi^0, \eta \rightarrow \pi^0 \pi^0 \pi^0, \phi \rightarrow K^+ K^-, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K^{+}K^{-}\gamma^{F}\gamma^{f}$ | 14720 | 1 | 97297 |
| 14722 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^- \gamma^f, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 14721 | 1 | 97298 |
| 14723 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14722 | 1 | 97299 |
| 14724 | $J/\psi \to K^0 \phi \bar{K}^0_1, K^0 \to K^0_L, \phi \to \pi^0 \rho^0, \bar{K}^0_1 \to \rho^+ K^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 14723 | 1 | 97300 |
| 14725 | $J/\psi ightarrow ho^0 \pi^- ho^+ \gamma^F, ho^0 ightarrow \pi^+ \pi^- \gamma^F, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 14724 | 1 | 97301 |
| 14726 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to \bar{K}^0 K^*, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^-\pi^-K^+K^+$ | 14725 | 1 | 97302 |
| 14727 | $J/\psi \to \pi^- \bar{K}^0 K_1^+ \gamma^f, \bar{K}^0 \to K_S^0, K_1^+ \to \rho^+ K^0, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 14726 | 1 | 97303 |
| 14728 | $J/\psi ightarrow \pi^0 \pi^- ho^+ \eta, ho^+ ightarrow \pi^0 \pi^+, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14727 | 1 | 97304 |
| 14729 | $J/\psi \to \omega K^{*+} K_0^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14728 | 1 | 97305 |
| 14730 | $J/\psi 	o a_2^- b_1^+, a_2^- 	o ar K^0 K^-, b_1^+ 	o \pi^+ \omega, ar K^0 	o K_L^0, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14729 | 1 | 97306 |
| 14731 | $J/\psi \to K^0 \phi \bar{K}_0^{*0}, K^0 \to K_S^0, \phi \to K^+ K^-, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 6219 | 1 | 97307 |
| 14732 | $J/\psi \to \pi^- a_0^+ h_1(1170) \gamma^f, a_0^+ \to \bar{K}^0 K^+, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 14731 | 1 | 97308 |
| 14733 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to \eta \gamma, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma$ | 14732 | 1 | 97309 |
| 14734 | $J/\psi \to \pi^0 b_1^0, b_1^0 \to \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 14733 | 1 | 97310 |
| 14735 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14734 | 1 | 97311 |
| 14736 | $J/\psi \to \pi^0 K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma^f$ | 14735 | 1 | 97312 |
| 14737 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14736 | 1 | 97313 |
| 14738 | $J/\psi ightarrow ho^0\pi^+a_0^-, ho^0 ightarrow \pi^+\pi^-, a_0^- ightarrow \pi^-\eta, \eta ightarrow \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14737 | 1 | 97314 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 14739 | $J/\psi \to \rho^+ \eta a_0^-, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 14738 | 1 | 97315 |
| 14740 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14739 | 1 | 97316 |
| 14741 | $J/\psi \to \pi^0\pi^-a_0^0b_1^+, a_0^0 \to \pi^0\eta, b_1^+ \to \pi^+\omega, \eta \to \pi^0\pi^0\pi^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14740 | 1 | 97317 |
| 14742 | $J/\psi \rightarrow \rho^0 \eta a_0^0, \rho^0 \rightarrow \pi^+ \pi^- \gamma^f, \eta \rightarrow e^+ e^- \gamma^F \gamma^f, a_0^0 \rightarrow \pi^0 \eta, \eta \rightarrow \pi^+ \pi^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F\gamma^f\gamma^f$ | 14741 | 1 | 97318 |
| 14743 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 14742 | 1 | 97319 |
| 14744 | $J/\psi \to \pi^0 \pi^+ \pi^- K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14743 | 1 | 97320 |
| 14745 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, \phi \to K^+K^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14744 | 1 | 97321 |
| 14746 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \rho^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14745 | 1 | 97322 |
| 14747 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14746 | 1 | 97323 |
| 14748 | $J/\psi 	o \pi^+\pi^-\pi^-\omega b_1^+, \omega 	o \pi^0\pi^+\pi^-, b_1^+ 	o \pi^+\omega, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 3882 | 1 | 97324 |
| 14749 | $J/\psi \to \pi^0\pi^-\bar{K}^*K^{*+}, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^0K^+, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14748 | 1 | 97325 |
| 14750 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14749 | 1 | 97326 |
| 14751 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 K^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 14750 | 1 | 97327 |
| 14752 | $J/\psi \to K^{*+} \bar{p} \Sigma^0, K^{*+} \to \pi^+ K^0, \Sigma^0 \to \Lambda \gamma, K^0 \to K_L^0, \Lambda \to \pi^0 n$ | $\pi^0 K_L^0 \pi^+ n \bar{p} \gamma$ | 14751 | 1 | 97328 |
| 14753 | $J/\psi \to \rho^0 \pi^- b_1^0 b_1^+, \rho^0 \to \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6221 | 1 | 97329 |
| 14754 | $J/\psi \to K^+K^{*-}f_1(1285), K^{*-} \to \pi^0K^-, f_1(1285) \to \pi^-a_0^+, a_0^+ \to \pi^+\eta, \eta \to \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 14753 | 1 | 97330 |
| 14755 | $J/\psi \to \pi^+ \Sigma^0 \bar{\Sigma}^{*-}, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Lambda \to \pi^- p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p\gamma$ | 14754 | 1 | 97331 |
| 14756 | $J/\psi \to \rho^- \bar{K}^* K^{*+} \gamma^f, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 6222 | 1 | 97332 |
| 14757 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 14756 | 1 | 97333 |
| 14758 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 14757 | 1 | 97334 |
| 14759 | $J/\psi ightarrow \eta K^- K^{*+}, \eta ightarrow \gamma \gamma, K^{*+} ightarrow \pi^+ K^0, K^0 ightarrow K^0_S, K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 6223 | 1 | 97335 |
| 14760 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 14759 | 1 | 97336 |
| 14761 | $J/\psi \to \pi^-\pi^-\rho^+\rho^+f_0(1370), \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+, f_0(1370) \to \pi^0\pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14760 | 1 | 97337 |
| 14762 | $J/\psi \to \eta \bar{K}^0 K^* \gamma, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \gamma \gamma \gamma$ | 14761 | 1 | 97338 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 14763 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \omega K^0, \omega \to \pi^0 \gamma, K_1^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 2714 | 1 | 97339 |
| 14764 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_S^0, a_0^- \to K^0 K^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K^+K^-$ | 14763 | 1 | 97340 |
| 14765 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0 \gamma^f, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14764 | 1 | 97341 |
| 14766 | $J/\psi \to a_2^+ K^* K^-, a_2^+ \to \rho^0 \pi^+, K^* \to \pi^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14765 | 1 | 97342 |
| 14767 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi h_1(1380), \phi \to \pi^- \rho^+, h_1(1380) \to \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma$ | 14766 | 1 | 97343 |
| 14768 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \eta f_2(1270), \eta \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma^f$ | 14767 | 1 | 97344 |
| 14769 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \pi^+ \rho^- \rho^-, \rho^- 	o \pi^0 \pi^-, \rho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14768 | 1 | 97345 |
| 14770 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 14769 | 1 | 97346 |
| 14771 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14770 | 1 | 97347 |
| 14772 | $J/\psi \to \pi^0 \Delta^+ \bar{\Delta}^+, \Delta^+ \to \pi^+ n \gamma^f, \bar{\Delta}^+ \to \pi^0 \bar{p}$ | $\pi^0\pi^0\pi^+n\bar{p}\gamma^f$ | 14771 | 1 | 97348 |
| 14773 | $J/\psi \to \pi^+ K^* K^{*-} f_0(1370), K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 3884 | 1 | 97349 |
| 14774 | $J/\psi \to f_2' h_1(1380), f_2' \to \eta \eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 14773 | 1 | 97350 |
| 14775 | $J/\psi \to \pi^- \rho^+ \rho^+ b_1^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \gamma$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 14774 | 1 | 97351 |
| 14776 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+ \pi^-, a_2^0 ightarrow \pi^+ \pi^- \omega \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 14775 | 1 | 97352 |
| 14777 | $J/\psi 	o ho^0 ar{K}^0 K^* \gamma, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_S^0, K^* 	o \pi^- K^+, K_S^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma^f$ | 14776 | 1 | 97353 |
| 14778 | $J/\psi 	o \pi^- \eta a_0^0 b_1^+, \eta 	o \pi^0 \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, b_1^+ 	o \pi^+ \omega, \eta 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14777 | 1 | 97354 |
| 14779 | $J/\psi \to \rho^0 \rho^0 \pi^+ K^* K^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 14778 | 1 | 97355 |
| 14780 | $J/\psi \to \pi^- K_1^+ \bar{K}_1^{'0}, K_1^+ \to \omega K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 6226 | 1 | 97356 |
| 14781 | $J/\psi \to f_2(1270)K^+K^-, f_2(1270) \to \pi^0\pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14780 | 1 | 97357 |
| 14782 | $J/\psi \to \pi^+\pi^- a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+\pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 14781 | 1 | 97358 |
| 14783 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14782 | 1 | 97359 |
| 14784 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 14783 | 1 | 97360 |
| 14785 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta \omega f_0(1370), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^+ \pi^- \gamma^F, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 14784 | 1 | 97361 |
| 14786 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, a_1^0 \to \pi^- \rho^+, K^0 \to K_S^0, \ \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14785 | 1 | 97362 |
| 14787 | $J/\psi \to \pi^0 \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14786 | 1 | 97363 |
| 14788 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^0 K^{*-}, K_1^{'+} \to \pi^0 K^{*+}, K^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 14787 | 1 | 97364 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 14789 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \bar{K}^0 K^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^+ K^-$ | 14788 | 1 | 97365 |
| 14790 | $J/\psi \to \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^- \gamma^f \gamma^f, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 6227 | 1 | 97366 |
| 14791 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 14790 | 1 | 97367 |
| 14792 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14791 | 1 | 97368 |
| 14793 | $J/\psi ightarrow \pi^- \eta ar K^0 K^+, \eta ightarrow \gamma \gamma, ar K^0 ightarrow K_L^0$ | $K_L^0\pi^-K^+\gamma\gamma$ | 14792 | 1 | 97369 |
| 14794 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 14793 | 1 | 97370 |
| 14795 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 14794 | 1 | 97371 |
| 14796 | $J/\psi \rightarrow \rho^0 a_2^0, \rho^0 \rightarrow \pi^+ \pi^- \gamma^F, a_2^0 \rightarrow \pi^- \rho^+ \gamma^f, \rho^+ \rightarrow \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 6228 | 1 | 97372 |
| 14797 | $J/\psi \to \bar{K}^0 \eta' K_1^0, \bar{K}^0 \to K_S^0, \eta' \to \rho^0 \gamma, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^-, \\ \rho^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma$ | 14796 | 1 | 97373 |
| 14798 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \bar{K}^0 K^+, h_1(1170) \to \pi^- \rho^+, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 14797 | 1 | 97374 |
| 14799 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^0\pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0 \pi^0 K_L^0 \pi^- K^+$ | 14798 | 1 | 97375 |
| 14800 | $J/\psi \to \pi^0 \pi^0 f_2(1270) h_1(1170), f_2(1270) \to \pi^+ \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14799 | 1 | 97376 |
| 14801 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \rho^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14800 | 1 | 97377 |
| 14802 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^0K^-, f_0(1710) \to \eta\eta, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14801 | 1 | 97378 |
| 14803 | $J/\psi 	o \pi^0 \omega K^0 \bar{K}^*, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, \bar{K}^* 	o \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 14802 | 1 | 97379 |
| 14804 | $J/\psi \to \pi^0 h_1(1170), \pi^0 \to e^+ e^- \gamma^F, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 6229 | 1 | 97380 |
| 14805 | $J/\psi ightarrow K^+K^-\phi, \phi ightarrow e^+e^-$ | $e^{+}e^{-}K^{+}K^{-}$ | 14804 | 1 | 97381 |
| 14806 | $J/\psi \to \rho^0 \eta \bar{K}^0 K_0^0, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 14805 | 1 | 97382 |
| 14807 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 14806 | 1 | 97383 |
| 14808 | $J/\psi \to \rho^+ f_2(1270) a_0^-, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 14807 | 1 | 97384 |
| 14809 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0 \gamma, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 14808 | 1 | 97385 |
| 14810 | $J/\psi \to K^0 \bar{K}^0 f_2', K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_2' \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14809 | 1 | 97386 |
| 14811 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \omega \bar{K}^0, K^0 \to K^0_L, \\ \omega \to \pi^0 \gamma, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 14810 | 1 | 97387 |
| 14812 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^+ K^{*-}, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 14811 | 1 | 97388 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 14813 | $J/\psi \to \pi^0 \pi^- a_2^+ a_1^0, a_2^+ \to \pi^0 \rho^+, a_1^0 \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 14812 | 1 | 97389 |
| 14814 | $J/\psi 	o \pi^0 ho^- a_2^+, ho^- 	o \pi^0 \pi^-, a_2^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14813 | 1 | 97390 |
| 14815 | $J/\psi \to \omega f_2(1270) a_0^0, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14814 | 1 | 97391 |
| 14816 | $J/\psi \to \eta a_0^0 b_1^0, \eta \to \pi^0 \pi^0 \pi^0, a_0^0 \to \pi^0 \eta, b_1^0 \to \pi^0 \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14815 | 1 | 97392 |
| 14817 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-\pi^-K^+K^+K^-\gamma^f$ | 14816 | 1 | 97393 |
| 14818 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^+ K^*, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 14817 | 1 | 97394 |
| 14819 | $J/\psi \to \pi^+ \eta K^0 K^-, \eta \to \pi^+ \pi^- \gamma^F, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 14818 | 1 | 97395 |
| 14820 | $J/\psi 	o \Lambda ar{\Lambda} \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o e^+ u_e ar{p}$ | $e^+ u_e\pi^0nar{p}\gamma$ | 3885 | 1 | 97396 |
| 14821 | $J/\psi \to \pi^0 \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 14820 | 1 | 97397 |
| 14822 | $J/\psi \to a_2^- \bar{K}^* K^{*+}, a_2^- \to \pi^0 \pi^- \omega, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 14821 | 1 | 97398 |
| 14823 | $J/\psi \to f_0(1370)h_1(1170), f_0(1370) \to \rho^+\rho^-, h_1(1170) \to \pi^0\rho^0, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14822 | 1 | 97399 |
| 14824 | $J/\psi \to \pi^0 K^+ K_1^- \gamma^F, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 14823 | 1 | 97400 |
| 14825 | $J/\psi \to \pi^0 \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 2715 | 1 | 97401 |
| 14826 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14825 | 1 | 97402 |
| 14827 | $J/\psi \to \omega K^+ K^{*-}, \omega \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 14826 | 1 | 97403 |
| 14828 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1710) \to \eta \eta, \bar{K}^0 \to K_L^0, \\ \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 K_L^0 \gamma \gamma \gamma \gamma$ | 14827 | 1 | 97404 |
| 14829 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14828 | 1 | 97405 |
| 14830 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 2006 | 1 | 97406 |
| 14831 | $J/\psi \rightarrow ho^0 ho^0 \eta \gamma, ho^0 \rightarrow \pi^+ \pi^-, ho^0 \rightarrow \pi^+ \pi^-, \eta \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 14830 | 1 | 97407 |
| 14832 | $J/\psi \to \pi^+ K^0 K^{*-} h_1(1380), K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1380) \to K^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 14831 | 1 | 97408 |
| 14833 | $J/\psi \to K^0 \phi \bar{K}_0^{*0}, K^0 \to K_L^0, \phi \to \pi^+ \rho^-, \bar{K}_0^{*0} \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^- K^-$ | 14832 | 1 | 97409 |
| 14834 | $J/\psi \rightarrow \pi^0\pi^+a_1^-, a_1^- \rightarrow \pi^0\rho^-, \rho^- \rightarrow \pi^0\pi^-\gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 14833 | 1 | 97410 |
| 14835 | $J/\psi \to K^- a_0^0 K_1^+, a_0^0 \to \pi^0 \eta, K_1^+ \to \pi^0 K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 14834 | 1 | 97411 |
| 14836 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_1^- \to \omega K^-, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 14835 | 1 | 97412 |
| 14837 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^+ \pi^- K^*, \bar{K}_1^0 \to \pi^+ K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14836 | 1 | 97413 |
| 14838 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \bar{K}^0 \gamma, h_1(1380) \to K^+ K^{*-}, \bar{K}^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 K_L^0 K^+ K^- \gamma$ | 14837 | 1 | 97414 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14839 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \pi^- \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 14838 | 1 | 97415 |
| 14840 | $J/\psi 	o \pi^+ K^* K^-, K^* 	o \pi^- K^+ \gamma^f$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 14839 | 1 | 97416 |
| 14841 | $J/\psi \to \pi^+ K_2^{*0} K^- f_0(1370), K_2^{*0} \to \omega K^0, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 14840 | 1 | 97417 |
| 14842 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^0 \rho^+, K^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 14841 | 1 | 97418 |
| 14843 | $J/\psi 	o \pi^0 \omega \bar{K}^0 K_2^{*0}, \omega 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^0 \pi^- K^{*+}, K^{*+} 	o \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14842 | 1 | 97419 |
| 14844 | $J/\psi \to \pi^0 \eta \omega \eta', \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 14843 | 1 | 97420 |
| 14845 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 14844 | 1 | 97421 |
| 14846 | $J/\psi \to \pi^- \eta' \bar{n} p, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-\pi^-ar{n}p\gamma\gamma$ | 14845 | 1 | 97422 |
| 14847 | $J/\psi \to \pi^- \eta \bar{K}^0 K^+, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14846 | 1 | 97423 |
| 14848 | $J/\psi 	o \phi f_0(2020), \phi 	o \pi^0 ho^0, f_0(2020) 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14847 | 1 | 97424 |
| 14849 | $J/\psi \to \pi^0 K^- K_0^{*+} \gamma^F, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 14848 | 1 | 97425 |
| 14850 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^- K^{*+}, K_2^{*-} \to \pi^0 K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14849 | 1 | 97426 |
| 14851 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^0 \bar{K}^*, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 14850 | 1 | 97427 |
| 14852 | $J/\psi \to K^*\bar{K}^*b_1^0, K^* \to \pi^0K^0, \bar{K}^* \to \pi^0\bar{K}^0, b_1^0 \to \pi^0\omega, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 14851 | 1 | 97428 |
| 14853 | $J/\psi \to \eta \phi f_1(1420), \eta \to \gamma \gamma, \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 14852 | 1 | 97429 |
| 14854 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1380) \to K^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 14853 | 1 | 97430 |
| 14855 | $J/\psi \to K^- \phi K_1^+, \phi \to K_L^0 K_S^0, K_1^+ \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 6233 | 1 | 97431 |
| 14856 | $J/\psi \to \pi^0 \omega a_1^0, \omega \to \pi^0 \pi^+ \pi^-, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14855 | 1 | 97432 |
| 14857 | $J/\psi 	o K^0 ar{n} \Sigma^0, K^0 	o K_L^0, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^0 n$ | $\pi^0 K_L^0 n ar n \gamma$ | 14856 | 1 | 97433 |
| 14858 | $J/\psi \to ho^0 \bar{K}^0 K_1^0, ho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K_0^0, K_S^0 \to \pi^0 \pi^0, K_0^0 \to \pi^0 K_0^0, K_0^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 14857 | 1 | 97434 |
| 14859 | $J/\psi \to \pi^+\pi^-K^+K_0^{*-}, K_0^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 6234 | 1 | 97435 |
| 14860 | $J/\psi ightarrow \pi^+ \eta' b_1^-, \eta' ightarrow \omega \gamma, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 14859 | 1 | 97436 |
| 14861 | $J/\psi \to K^0 \phi \bar{K}_1^{'0}, K^0 \to K_L^0, \phi \to K^+ K^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 14860 | 1 | 97437 |
| 14862 | $J/\psi \to K^0 K^- b_1^+ \gamma^F, K^0 \to K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F\gamma$ | 14861 | 1 | 97438 |
| 14863 | $J/\psi 	o ar{K}^0 K_2^{*0}, ar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^0 \pi^- K^{*+}, K^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 14862 | 1 | 97439 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 14864 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \omega K^0, \omega \to \pi^0 \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma$ | 2007 | 1 | 97440 |
| 14865 | $J/\psi \to K^* \bar{K}^* f_0(1370), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \rho^0 \rho^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14864 | 1 | 97441 |
| 14866 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \pi^+ K^0, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14865 | 1 | 97442 |
| 14867 | $J/\psi \to \pi^+\pi^-K^-K_0^{*+}, K_0^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 14866 | 1 | 97443 |
| 14868 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14867 | 1 | 97444 |
| 14869 | $J/\psi 	o ar\Xi^+\Xi^-, ar\Xi^+ 	o \pi^+ar\Lambda, \Xi^- 	o \pi^-\Lambda, ar\Lambda 	o \pi^+ar p \gamma^f, \Lambda 	o \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}\gamma^f$ | 6236 | 1 | 97445 |
| 14870 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 14869 | 1 | 97446 |
| 14871 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^+ \pi^- K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14870 | 1 | 97447 |
| 14872 | $J/\psi \to \pi^- f_2(1270) a_1^+, f_2(1270) \to \pi^+ \pi^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14871 | 1 | 97448 |
| 14873 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14872 | 1 | 97449 |
| 14874 | $J/\psi \to \pi^+ K^- K^{*+} a_0^-, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14873 | 1 | 97450 |
| 14875 | $J/\psi 	o \eta K^- K_1^+, \eta 	o \pi^0 \pi^0 \pi^0, K_1^+ 	o \pi^+ K_0^0, K_0^0 	o \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14874 | 1 | 97451 |
| 14876 | $J/\psi 	o \omega K^- K_2^{*+}, \omega 	o \pi^0 \pi^+ \pi^-, K_2^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14875 | 1 | 97452 |
| 14877 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 14876 | 1 | 97453 |
| 14878 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^0K^+, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14877 | 1 | 97454 |
| 14879 | $J/\psi ightarrow \eta \eta' \gamma, \eta ightarrow \gamma \gamma, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 14878 | 1 | 97455 |
| 14880 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to K^+\gamma, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 14879 | 1 | 97456 |
| 14881 | $J/\psi \to f_2^{'} h_1(1380), f_2^{'} \to \eta \eta, h_1(1380) \to K^0 \bar{K}^*, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\gamma\gamma$ | 14880 | 1 | 97457 |
| 14882 | $J/\psi \to \pi^- \rho^+ f_1(1285) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\gamma^f$ | 14881 | 1 | 97458 |
| 14883 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14882 | 1 | 97459 |
| 14884 | $J/\psi \to \phi f_0(1710), \phi \to \pi^- \rho^+, f_0(1710) \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 14883 | 1 | 97460 |
| 14885 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^- \gamma^F, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 14884 | 1 | 97461 |
| 14886 | $J/\psi \to \eta_c \gamma, \eta_c \to f_1(1420) f_1(1420), f_1(1420) \to \pi^0 K^+ K^-, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0\pi^0K^+K^+K^-K^-\gamma$ | 14885 | 1 | 97462 |
| 14887 | $J/\psi \to \pi^0 \pi^0 a_1^0 \gamma, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 14886 | 1 | 97463 |
| 14888 | $J/\psi \to \rho^0 f_0(1370) a_1^0, \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^+\pi^-, a_1^0 \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14887 | 1 | 97464 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 14889 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 14888 | 1 | 97465 |
| 14890 | $J/\psi \to \pi^+ K_S^0 K^- \phi, K_S^0 \to \pi^+ \pi^-, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14889 | 1 | 97466 |
| 14891 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^+ K^* \gamma^f, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 14890 | 1 | 97467 |
| 14892 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 6237 | 1 | 97468 |
| 14893 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 14892 | 1 | 97469 |
| 14894 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^0, K_0^0 \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 2718 | 1 | 97470 |
| 14895 | $J/\psi \to \rho^- \bar{K}^0 K^+, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^f$ | 14894 | 1 | 97471 |
| 14896 | $J/\psi 	o \pi^0 \Sigma^0 ar{\Sigma}^0, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0\pi^0\pi^0n\bar{n}\gamma\gamma$ | 14895 | 1 | 97472 |
| 14897 | $J/\psi \to \pi^- \eta' b_1^+, \eta' \to \gamma \gamma, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 14896 | 1 | 97473 |
| 14898 | $J/\psi \to \pi^0 \bar{K}^* K^{*+} a_0^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_L^0, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 14897 | 1 | 97474 |
| 14899 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14898 | 1 | 97475 |
| 14900 | $J/\psi \to \pi^0 \pi^+ a_2^- a_0^0, a_2^- \to \pi^0 \rho^-, a_0^0 \to \pi^0 \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 14899 | 1 | 97476 |
| 14901 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14900 | 1 | 97477 |
| 14902 | $J/\psi \to \pi^+\pi^-K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14901 | 1 | 97478 |
| 14903 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \pi^0 \pi^0 \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14902 | 1 | 97479 |
| 14904 | $J/\psi \to \pi^0 \rho^0 K^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ $K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14903 | 1 | 97480 |
| 14905 | $J/\psi \to K^0 \bar{K}^0 a_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, \\ \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 14904 | 1 | 97481 |
| 14906 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \rho^0 \gamma, \phi \to K_L^0 K_S^0, \rho^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K^{0}_{L}\pi^{+}\pi^{-}\gamma\gamma^{f}$ | 14905 | 1 | 97482 |
| 14907 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 6239 | 1 | 97483 |
| 14908 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14907 | 1 | 97484 |
| 14909 | $J/\psi \to K^* \bar{K}_1^0, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 14908 | 1 | 97485 |
| 14910 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^0 K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14909 | 1 | 97486 |
| 14911 | $J/\psi \to \pi^0 \pi^+ \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14910 | 1 | 97487 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 14912 | $J/\psi \to \omega f_2(1270) f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14911 | 1 | 97488 |
| 14913 | $J/\psi ightarrow ho^0 \eta \omega \gamma, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 14912 | 1 | 97489 |
| 14914 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^0 \pi^0 K^*, K_2^{*0} \to \pi^+ K^-, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 14913 | 1 | 97490 |
| 14915 | $J/\psi 	o ho^0 \pi^+ \pi^- \pi^- ho^+, ho^0 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14914 | 1 | 97491 |
| 14916 | $J/\psi \to \eta_c \gamma, \eta_c \to f_1(1420) f_1(1420), f_1(1420) \to \pi^0 K^+ K^-, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}K^{+}K^{-}K^{-}\gamma$ | 14915 | 1 | 97492 |
| 14917 | $J/\psi \to \pi^+ K_0^0 \bar{K}_1^{'-}, K_0^0 \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 14916 | 1 | 97493 |
| 14918 | $J/\psi \to \bar{K}^0 K_2^{*0} \eta', \bar{K}^0 \to K_S^0, K_2^{*0} \to \rho^0 K^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 14917 | 1 | 97494 |
| 14919 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^0 \pi^+ b_1^- \gamma^f, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 14918 | 1 | 97495 |
| 14920 | $J/\psi \to \rho^0 \pi^+ \pi^- \rho^+ a_0^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 14919 | 1 | 97496 |
| 14921 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \gamma\gamma, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14920 | 1 | 97497 |
| 14922 | $J/\psi \to \pi^0 K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 14921 | 1 | 97498 |
| 14923 | $J/\psi \to \eta \bar{K}^0 K_1^{'0}, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14922 | 1 | 97499 |
| 14924 | $J/\psi \to \rho^0 \pi^+ b_1^0 b_1^-, \rho^0 \to \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14923 | 1 | 97500 |
| 14925 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \gamma, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, \\ \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma\gamma$ | 14924 | 1 | 97501 |
| 14926 | $J/\psi \to \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \rho^- K^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma^f$ | 14925 | 1 | 97502 |
| 14927 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K_S^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 14926 | 1 | 97503 |
| 14928 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega \gamma^f, f_0(1370) \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 14927 | 1 | 97504 |
| 14929 | $J/\psi \to \pi^0 \omega K^+ K^{*-}, \omega \to \pi^0 \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 14928 | 1 | 97505 |
| 14930 | $J/\psi \to \pi^- \bar{\Delta}^- n \gamma^F, \bar{\Delta}^- \to \pi^+ \bar{n}$ | $\pi^+\pi^-nar{n}\gamma^F$ | 14929 | 1 | 97506 |
| 14931 | $J/\psi \to a_2^0 \pi^- \bar{K}^* K^+, a_2^0 \to \pi^+ \rho^-, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 14930 | 1 | 97507 |
| 14932 | $J/\psi 	o \pi^+\pi^- \bar{n}\Delta^0, \Delta^0 	o \pi^- p$ | $\pi^+\pi^-\pi^-ar{n}p$ | 14931 | 1 | 97508 |
| 14933 | $J/\psi \to \eta \bar{K}^0 K_2^{*0}, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_L^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 14932 | 1 | 97509 |
| 14934 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 14933 | 1 | 97510 |
| 14935 | $J/\psi ightarrow \omega K^0K^-b_1^+, \omega ightarrow \pi^0\pi^+\pi^-, K^0 ightarrow K_L^0, b_1^+ ightarrow \pi^+\omega, \omega ightarrow \pi^0\gamma$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 14934 | 1 | 97511 |
| 14936 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K_S^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 14935 | 1 | 97512 |
| 14937 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+}\to \pi^+K^0, K^{*-}\to \pi^0K^-, \phi\to \eta\gamma, K^0\to K_S^0, \eta\to \pi^0\pi^0\pi^0, K_S^0\to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 14936 | 1 | 97513 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 14938 | $J/\psi \to \eta \phi, \eta \to \pi^+ \pi^- \gamma^F, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 14937 | 1 | 97514 |
| 14939 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ a_0^-, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14938 | 1 | 97515 |
| 14940 | $J/\psi \to \rho^0 \pi^- \eta \eta a_0^+, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 14939 | 1 | 97516 |
| 14941 | $J/\psi 	o \pi^0 ar{\Delta}^- \Delta^-, \pi^0 	o e^+ e^- \gamma^F \gamma^f, ar{\Delta}^- 	o \pi^+ ar{n}, \Delta^- 	o \pi^- n$ | $e^+e^-\pi^+\pi^-nar{n}\gamma^F\gamma^f$ | 14940 | 1 | 97517 |
| 14942 | $J/\psi \rightarrow \pi^+ \rho^- \eta a^0_0, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \pi^0 \pi^+ \pi^-, a^0_0 \rightarrow \pi^0 \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14941 | 1 | 97518 |
| 14943 | $J/\psi \to \bar{K}^0 K^+ \phi a_0^-, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 1544 | 1 | 97519 |
| 14944 | $J/\psi \to ho^0 f_2(1270) \eta', ho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14943 | 1 | 97520 |
| 14945 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to \bar{K}^0K^*, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14944 | 1 | 97521 |
| 14946 | $J/\psi \to \rho^0 \rho^0 \bar{K}^0 K_1^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6241 | 1 | 97522 |
| 14947 | $J/\psi \to \pi^0 \pi^+ \pi^- \eta f_0(1370), \eta \to \pi^0 \pi^0 \pi^0, f_0(1370) \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 14946 | 1 | 97523 |
| 14948 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^0 K^0, \bar{K}_2^0 \to \pi^- K_2^{*+}, K^0 \to K_S^0, K_2^{*+} \to \omega K^+, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 14947 | 1 | 97524 |
| 14949 | $J/\psi \to K^+ b_1^0 K_0^{*-}, b_1^0 \to \pi^0 \omega, K_0^{*-} \to \pi^0 K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14948 | 1 | 97525 |
| 14950 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 14949 | 1 | 97526 |
| 14951 | $J/\psi \to \rho^- \bar{\Sigma}^+ \Sigma^0, \rho^- \to \pi^0 \pi^-, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-nar{n}\gamma$ | 14950 | 1 | 97527 |
| 14952 | $J/\psi ightarrow \eta_2(1870) \gamma, \eta_2(1870) ightarrow \eta f_2(1270), \eta ightarrow \pi^0 \pi^+ \pi^-, f_2(1270) ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 14951 | 1 | 97528 |
| 14953 | $J/\psi \to K^0 K_0^{*-} a_1^+, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, a_1^+ \to \pi^0 \rho^+, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14952 | 1 | 97529 |
| 14954 | $J/\psi ightarrow \omega K^-K^{*+}, \omega ightarrow \pi^+\pi^-, K^{*+} ightarrow \pi^+K^0, K^0 ightarrow K^0_L$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 14953 | 1 | 97530 |
| 14955 | $J/\psi \to \pi^0 \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14954 | 1 | 97531 |
| 14956 | $J/\psi \to \pi^+ \rho^- \omega \omega, \rho^- \to \pi^0 \pi^-, \omega \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14955 | 1 | 97532 |
| 14957 | $J/\psi \rightarrow \pi^0 \omega a^0_0, \omega \rightarrow \pi^0 \pi^+ \pi^-, a^0_0 \rightarrow \pi^0 \eta, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f, \eta \rightarrow \gamma \gamma$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma\gamma^f$ | 14956 | 1 | 97533 |
| 14958 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_1(1285) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 14957 | 1 | 97534 |
| 14959 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 14958 | 1 | 97535 |
| 14960 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma^f$ | 14959 | 1 | 97536 |
| 14961 | $J/\psi \to \pi^0 \pi^0 \pi^+ \pi^- \gamma^F, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma^F\gamma^f$ | 14960 | 1 | 97537 |
| 14962 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \phi, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14961 | 1 | 97538 |
| 14963 | $J/\psi \to \pi^0 \rho^0 \pi^+ \rho^- \gamma^F, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 14962 | 1 | 97539 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 14964 | $J/\psi \to \pi^+ \rho^- \omega K^0 \bar{K}^*, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 2009 | 1 | 97540 |
| 14965 | $J/\psi ightarrow \pi^- ar{K}^0 K^+ a^0_0, ar{K}^0 ightarrow K^0_L, a^0_0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 14964 | 1 | 97541 |
| 14966 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 14965 | 1 | 97542 |
| 14967 | $J/\psi \to K^0 \bar{K}^0 a_0^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 14966 | 1 | 97543 |
| 14968 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1285) \to \pi^+ a_0^-, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6243 | 1 | 97544 |
| 14969 | $J/\psi \to \rho^- \omega b_1^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \gamma$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 14968 | 1 | 97545 |
| 14970 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 14969 | 1 | 97546 |
| 14971 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 14970 | 1 | 97547 |
| 14972 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 14971 | 1 | 97548 |
| 14973 | $J/\psi ightarrow \pi^- p ar{p} a_0^+, a_0^+ ightarrow \pi^+ \eta, \eta ightarrow \gamma \gamma$ | $\pi^+\pi^-par p\gamma\gamma$ | 1545 | 1 | 97549 |
| 14974 | $J/\psi \to \eta \omega f_1(1285), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 14973 | 1 | 97550 |
| 14975 | $J/\psi \to K^* \bar{K}_1^{'0} \gamma, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 14974 | 1 | 97551 |
| 14976 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 14975 | 1 | 97552 |
| 14977 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 14976 | 1 | 97553 |
| 14978 | $J/\psi \to \eta K^0 \bar{K}_1^{'0}, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 14977 | 1 | 97554 |
| 14979 | $J/\psi \to K^{*+}K^{*-}a_1^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, a_1^0 \to \pi^-\rho^+, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 3893 | 1 | 97555 |
| 14980 | $J/\psi ightarrow \pi^0 \omega a_0^0, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 14979 | 1 | 97556 |
| 14981 | $J/\psi \to \pi^0 \bar{\Sigma}^{*+} \Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 14980 | 1 | 97557 |
| 14982 | $J/\psi \to \eta \phi f_0(980), \eta \to \gamma \gamma, \phi \to K^+ K^-, f_0(980) \to \pi^0 \pi^0$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 14981 | 1 | 97558 |
| 14983 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \pi^0 \pi^+ \omega, a_1^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 14982 | 1 | 97559 |
| 14984 | $J/\psi \to \pi^0 \pi^0 \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 14983 | 1 | 97560 |
| 14985 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^+ \rho^-, a_2^- \to \pi^- \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 14984 | 1 | 97561 |
| 14986 | $J/\psi \to \rho^+ a_2^- \eta', \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, \eta' \to \rho^0 \gamma, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14985 | 1 | 97562 |

| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|--|-------|---|--|--------|------|-------|
| $ \begin{array}{c} K_{2}^{n} \rightarrow \pi^{n} & \pi & \pi & 1498 1 978 \\ 14989 J/\psi \rightarrow \pi^{0}f_{1}(1285) \rightarrow \rho^{0}\pi^{0}\pi^{0}, \rho^{0} \rightarrow \pi^{0}\pi^{-} \\ K_{2}^{n} \rightarrow \pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-} \\ K_{2}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-} \\ K_{3}^{n} \rightarrow \pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 14987 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 14986 | 1 | 97563 |
| | 14988 | | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14987 | 1 | 97564 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 14989 | 7 7 0 - () 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 14988 | 1 | 97565 |
| $ \begin{array}{c} 14991 \dot{K}^{O} - K_{L}^{O} \\ 14992 J/\psi - \nu f_{D}(1370) \gamma, \eta \to \pi^{0} \pi^{0} \pi^{0}, f_{D}(1370) \to \pi^{0} \pi^{0} \pi^{+} \pi^{-} \\ 14993 J/\psi \to \nu f_{D}(1370) \gamma, \eta \to \pi^{0} \pi^{0} \pi^{0}, f_{D}(1370) \to \pi^{0} \kappa^{0} \dot{\kappa}^{0}, \pi^{0} \to e^{+} e^{-} \gamma^{F}, K^{O} \to K_{L}^{O}, \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-}, f_{D}(1420) \to \pi^{0} K^{O} \dot{K}^{O}, \pi^{0} \to e^{+} e^{-} \gamma^{F}, K^{O} \to K_{L}^{O}, \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-}, K^{O} \to K_{L}^{O}, K^{O} \to \pi^{-} K^{+} \dot{K}^{O} \to K_{S}^{O}, K^{+} \to \pi^{+} K^{O}, \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} \to K^{O} \to K_{L}^{O}, K^{+} \to \pi^{-} K^{+} \dot{K}^{O} \to K_{S}^{O}, K^{+} \to \pi^{+} K^{O}, \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14993 & 1 & 975 \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14994 & 1 & 975 \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14994 & 1 & 975 \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14994 & 1 & 975 \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14994 & 1 & 975 \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14994 & 1 & 975 \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14994 & 1 & 975 \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14994 & 1 & 975 \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14994 & 1 & 975 \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14994 & 1 & 975 \\ K^{O} - K_{S}^{O}, K_{S}^{O} \to \pi^{+} \pi^{-} & 14994 & 1 & 975 \\ 14995 J/\psi \to \eta^{O} \pi^{O} - \eta^{O} \to \eta^{O} \pi^{-} + \eta^{O} +$ | 14990 | | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 14989 | 1 | 97566 |
| | 14991 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^+ K^-, K_2^0 \to \pi^- K_2^{*+}, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 14990 | 1 | 97567 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 14992 | $J/\psi 	o \eta f_0(1370)\gamma, \eta 	o \pi^0\pi^0\pi^0, f_0(1370) 	o \pi^0\pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 14991 | 1 | 97568 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 14993 | $J/\psi \to \omega f_1(1420), \omega \to \pi^0 \pi^+ \pi^-, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 14992 | 1 | 97569 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 14994 | | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 14993 | 1 | 97570 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 14995 | $J/\psi \to K^0 K^* \bar{K}^* \bar{K}^*, K^0 \to K_L^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^* \to \pi^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 14994 | 1 | 97571 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 14996 | 57 5 | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 14995 | 1 | 97572 |
| | 14997 | | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 14996 | 1 | 97573 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 14998 | | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 14997 | 1 | 97574 |
| $ \frac{1}{15000} \frac{1}{\eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-} = \frac{\pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^-}{15001} = \frac{1}{15001} \frac{1}{15001} \frac{1}{\eta \to \pi^0 \pi^0 \pi^- \pi^- \pi^- \pi^-} \frac{1}{15001} = \frac{1}{15001} \frac{1}{\eta \to \pi^0 \pi^0 \pi^- \pi^- \pi^-} \frac{1}{15001} = \frac{1}{15001} \frac{1}{\eta \to \pi^0 \pi^0 \pi^- \pi^- \pi^-} \frac{1}{15001} = \frac{1}{15001} \frac{1}{\eta \to \pi^0 \pi^0 \pi^- \pi^- \pi^-} \frac{1}{15001} = \frac{1}{15001} \frac{1}{150$ | 14999 | $J/\psi \to \rho^0 K^0 K^- a_1^+, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, a_1^+ \to \rho^0 \pi^+, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 14998 | 1 | 97575 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 15000 | | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 14999 | 1 | 97576 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 15001 | | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15000 | 1 | 97577 |
| | 15002 | | $\pi^0\pi^+\pi^-nar{n}\gamma\gamma$ | 637 | 1 | 97578 |
| $ \frac{15004}{\pi^{0} \to e^{+}e^{-}\gamma^{F}} = e^{+}e^{-}\gamma^{F} $ $ \frac{15005}{\sqrt{V}} = \frac{J/\psi \to \rho^{+}K^{*}K^{*-}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*} \to \pi^{-}K^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}, \pi^{0} \to e^{+}e^{-}\gamma^{F},}{\bar{K}^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{+}\pi^{-}} $ $ \frac{15006}{\sqrt{V}} = \frac{J/\psi \to K^{*}K^{*-}a^{+}_{1}, K^{*} \to \pi^{-}K^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}, a^{+}_{1} \to \rho^{0}\pi^{+}, \bar{K}^{0} \to K^{0}_{S},}{\bar{K}^{0} \to \pi^{+}\pi^{-}, K^{0}_{S} \to \pi^{+}\pi^{-}} $ $ \frac{15006}{\sqrt{V}} = \frac{J/\psi \to \rho^{0}\bar{K}^{*}K^{'}_{1}, \rho^{0} \to \pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{+}K^{-}, K^{'}_{1} \to \pi^{-}K^{*}, K^{*+} \to \pi^{+}K^{0},}{\bar{K}^{0} \to \pi^{-}K^{*}_{1}, K^{*}_{1} \to \pi^{-}K^{*}_{1}, K^{*+}_{2} \to \pi^{-}K^{*}_{2}} $ $ \frac{J/\psi \to \rho^{0}\bar{K}^{*}K^{'}_{1}, \rho^{0} \to \pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{+}K^{-}, K^{'}_{1} \to \pi^{-}K^{*}_{1}, K^{*+} \to \pi^{+}K^{0}_{2},}{\bar{K}^{0} \to \pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{+}K^{-}, K^{'}_{1} \to \pi^{-}K^{*}_{1}, K^{*+} \to \pi^{+}K^{0}_{2},}{\bar{K}^{0} \to \pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{+}K^{-}, K^{'}_{1} \to \pi^{-}K^{*}_{1}, K^{*+} \to \pi^{+}K^{0}_{2},} $ | 15003 | $J/\psi \to \pi^0 \pi^0 \Delta^{++} \bar{\Delta}^{++}, \Delta^{++} \to \pi^+ p, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 15002 | 1 | 97579 |
| $ \frac{15005}{\bar{K}^{0}} \rightarrow K_{S}^{0}, K_{S}^{0} \rightarrow \pi^{+}\pi^{-} \\ 15006 \qquad \frac{J/\psi \rightarrow K^{*}K^{*-}a_{1}^{+}, K^{*} \rightarrow \pi^{-}K^{+}, K^{*-} \rightarrow \pi^{-}\bar{K}^{0}, a_{1}^{+} \rightarrow \rho^{0}\pi^{+}, \bar{K}^{0} \rightarrow K_{S}^{0}, \\ \rho^{0} \rightarrow \pi^{+}\pi^{-}, K_{S}^{0} \rightarrow \pi^{+}\pi^{-} \\ 15007 \qquad \frac{J/\psi \rightarrow \rho^{0}\bar{K}^{*}K_{1}^{'0}, \rho^{0} \rightarrow \pi^{+}\pi^{-}, \bar{K}^{*} \rightarrow \pi^{+}K^{-}, K_{1}^{'0} \rightarrow \pi^{-}K^{*+}, K^{*+} \rightarrow \pi^{+}K^{0}, \\ 15008 \qquad 15006 $ | 15004 | | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 15003 | 1 | 97580 |
| $J/\psi \to \rho^0 \bar{K}^* K_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0,$ | 15005 | $ar{K}^0 ightarrow K^0_{c}, K^0_{c} ightarrow \pi^+\pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 15004 | 1 | 97581 |
| $J/\psi \to \rho^0 \bar{K}^* K_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0,$ | 15006 | $J/\psi \to K^*K^{*-}a_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, a_1^+ \to \rho^0\pi^+, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 15005 | 1 | 97582 |
| $\stackrel{\bullet \bullet}{\longrightarrow} L$ | 15007 | $J/\psi \to \rho^0 \bar{K}^* K_1^{'0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0,$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15006 | 1 | 97583 |
| $15008 	 J/\psi \to \pi^0 \pi^0 \phi, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^- 	 \pi^0 \pi^0 \pi^0 \pi^0 \pi^+ \pi^- 	 6247 	 1 	 975$ | 15008 | | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6247 | 1 | 97584 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 15009 | $J/\psi \to K^+K^-f_0(1370), f_0(1370) \to \rho^0\rho^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 15008 | 1 | 97585 |
| 15010 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 6248 | 1 | 97586 |
| 15011 | $J/\psi \to \rho^- \bar{K}^0 K^+ \gamma^F, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma^F\gamma^f$ | 15010 | 1 | 97587 |
| 15012 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 1547 | 1 | 97588 |
| 15013 | $J/\psi \to \rho^0 \rho^0 \rho^- a_0^+, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15012 | 1 | 97589 |
| 15014 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^+ K^-$ | 15013 | 1 | 97590 |
| 15015 | $J/\psi \to K^0 K_2^{*0} \eta', K^0 \to K_L^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, \eta' \to \pi^+ \pi^- \eta, K^{*-} \to \pi^0 K^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15014 | 1 | 97591 |
| 15016 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0K^+, K_1^- \to \pi^0K_0^{*-}, K_0^{*-} \to \pi^0K^-$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 15015 | 1 | 97592 |
| 15017 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \Sigma^0 \bar{\Sigma}^-, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^- \to \pi^- \bar{n}, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-\bar{n}p\gamma\gamma$ | 3896 | 1 | 97593 |
| 15018 | $J/\psi \to \pi^0 \pi^+ \pi^- \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 6251 | 1 | 97594 |
| 15019 | $J/\psi \to \pi^+ K^* K^{*-} a_0^0, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, a_0^0 \to \pi^0 \eta, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15018 | 1 | 97595 |
| 15020 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 15019 | 1 | 97596 |
| 15021 | $J/\psi \to K^+K^{*-}h_1(1170), K^{*-} \to \pi^-\bar{K}^0, h_1(1170) \to \pi^0\rho^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-\gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^F$ | 15020 | 1 | 97597 |
| 15022 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta' f_1(1420), \eta' \to \pi^0 \pi^0 \eta, f_1(1420) \to \pi^+ K^0 K^-, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_L$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 15021 | 1 | 97598 |
| 15023 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15022 | 1 | 97599 |
| 15024 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^0K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 15023 | 1 | 97600 |
| 15025 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^0 K^*, K_2^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 15024 | 1 | 97601 |
| 15026 | $J/\psi \to f_2^{'} h_1(1380), f_2^{'} \to \eta \eta, h_1(1380) \to K^- K^{*+}, \eta \to \gamma \gamma, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 \pi^+ K^- \gamma \gamma \gamma \gamma$ | 15025 | 1 | 97602 |
| 15027 | $J/\psi \to \pi^- \omega K_S^0 K^+ \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 15026 | 1 | 97603 |
| 15028 | $J/\psi \to \pi^0 \pi^0 \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 6252 | 1 | 97604 |
| 15029 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^0 \bar{\Xi}^0, \Lambda \to \pi^0 n, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+n\bar{p}\gamma^F$ | 15028 | 1 | 97605 |
| 15030 | $J/\psi 	o \pi^+ ho^- K^0 ar{K}_0^{*0}, ho^- 	o \pi^0 \pi^-, K^0 	o K_L^0, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 15029 | 1 | 97606 |
| 15031 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+, $ $\pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 15030 | 1 | 97607 |
| 15032 | $J/\psi 	o a_2^0 \pi^+ a_2^-, a_2^0 	o K_L^0 K_L^0, a_2^- 	o ho^0 \pi^-, ho^0 	o \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15031 | 1 | 97608 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15033 | $J/\psi \to K^* \bar{K}_1^0, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 15032 | 1 | 97609 |
| 15034 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^- \rho^+, f_1(1285) \to \pi^0 a_0^0, \rho^+ \to \pi^0 \pi^+, a_0^0 \to \pi^0 \eta, $ $\eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15033 | 1 | 97610 |
| 15035 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 15034 | 1 | 97611 |
| 15036 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 15035 | 1 | 97612 |
| 15037 | $J/\psi 	o \pi^0 \eta K^+ K^{*-}, \eta 	o \pi^0 \pi^0 \pi^0, K^{*-} 	o \pi^- ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 15036 | 1 | 97613 |
| 15038 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ a_1^0, \rho^+ \to \pi^0 \pi^+, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15037 | 1 | 97614 |
| 15039 | $J/\psi \to K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 15038 | 1 | 97615 |
| 15040 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0K^0_LK^0_L\gamma\gamma$ | 15039 | 1 | 97616 |
| 15041 | $J/\psi \to \pi^0 h_1(1170) a_1^0, h_1(1170) \to \pi^0 \rho^0, a_1^0 \to \pi^+ \rho^- \gamma^f, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15040 | 1 | 97617 |
| 15042 | $J/\psi \to ho^- K^0 ar{K}^0 a_0^+, ho^- \to \pi^0 \pi^-, K^0 \to K_S^0, ar{K}^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15041 | 1 | 97618 |
| 15043 | $J/\psi \to \rho^- \bar{K}^* K^{*+} \gamma^f, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 15042 | 1 | 97619 |
| 15044 | $J/\psi 	o \pi^- ar{K}^* K^{*+} \gamma^F, ar{K}^* 	o \pi^+ K^-, K^{*+} 	o \pi^+ K^0, K^0 	o K^0_S, K^0_S 	o \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 15043 | 1 | 97620 |
| 15045 | $J/\psi \to \pi^- \bar{K}^0 K^+ \eta', \bar{K}^0 \to K^0_S, \eta' \to \pi^0 \pi^0 \eta, K^0_S \to \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 15044 | 1 | 97621 |
| 15046 | $J/\psi \to \rho^+ a_0^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 15045 | 1 | 97622 |
| 15047 | $J/\psi \to \pi^0 \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15046 | 1 | 97623 |
| 15048 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 6253 | 1 | 97624 |
| 15049 | $J/\psi \to f_2(1270)K^-K^{*+}, f_2(1270) \to K_S^0 K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_I^0 \to K_I^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15048 | 1 | 97625 |
| 15050 | $J/\psi \to \pi^- b_1^+ a_1^0, b_1^+ \to \pi^+ \omega, a_1^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15049 | 1 | 97626 |
| 15051 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^+K^{*-}, f_1(1420) \to \pi^+K^0K^-, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 15050 | 1 | 97627 |
| 15052 | $J/\psi 	o K^* ar{K}^0_1, K^* 	o \pi^- K^+, ar{K}^0_1 	o \pi^+ \pi^- ar{K}^0, ar{K}^0 	o K^0_L$ | $K_L^0 \pi^+ \pi^- \pi^- K^+$ | 15051 | 1 | 97628 |
| 15053 | $J/\psi ightarrow ho^0\pi^-b_1^+\gamma^F, ho^0 ightarrow \pi^+\pi^-\gamma^f, b_1^+ ightarrow \pi^+\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 15052 | 1 | 97629 |
| 15054 | $J/\psi \to \pi^+\pi^-f_1(1285), f_1(1285) \to \pi^0a_0^0, a_0^0 \to \pi^0\eta, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 15053 | 1 | 97630 |
| 15055 | $J/\psi 	o ho^0 ho^0 b_1^0, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15054 | 1 | 97631 |
| 15056 | $J/\psi \to f_0(1710)\gamma, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma^f$ | 15055 | 1 | 97632 |
| 15057 | $J/\psi \to \pi^0 \pi^0 \pi^+ a_2^- \eta, a_2^- \to \pi^0 \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}$ | 3897 | 1 | 97633 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 15058 | $J/\psi 	o ho^0 \eta a_0^0, ho^0 	o \pi^+ \pi^-, \eta 	o \pi^+ \pi^- \gamma^F, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 15057 | 1 | 97634 |
| 15059 | $J/\psi \to ho^0 \eta a_0^0, ho^0 \to \pi^+ \pi^-, \eta \to e^+ e^- \gamma^F \gamma^f, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 15058 | 1 | 97635 |
| 15060 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 6255 | 1 | 97636 |
| 15061 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^0, K_0^0 \to \pi^0 K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^- \gamma^f, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 15060 | 1 | 97637 |
| 15062 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+\pi^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15061 | 1 | 97638 |
| 15063 | $J/\psi \to \rho^0 K^* \bar{K}^* \gamma, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 15062 | 1 | 97639 |
| 15064 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 15063 | 1 | 97640 |
| 15065 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 15064 | 1 | 97641 |
| 15066 | $J/\psi \to K^{0} \bar{K}^{0} f_{2}^{'}, K^{0} \to K_{L}^{0}, \bar{K}^{0} \to K_{S}^{0}, f_{2}^{'} \to \eta \eta, K_{S}^{0} \to \pi^{0} \pi^{0}, $ $\eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^0\pi^0K^0_L\gamma\gamma\gamma\gamma$ | 15065 | 1 | 97642 |
| 15067 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \phi \to \pi^0\rho^0, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15066 | 1 | 97643 |
| 15068 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^+ \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15067 | 1 | 97644 |
| 15069 | $J/\psi \to K^- K_0^{*+} \gamma^F, K_0^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma^F\gamma^f$ | 15068 | 1 | 97645 |
| 15070 | $J/\psi 	o \pi^0 ho^0 \pi^+ \pi^+ \pi^- ho^-, ho^0 	o \pi^+ \pi^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15069 | 1 | 97646 |
| 15071 | $J/\psi \to \rho^+ \eta a_0^-, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15070 | 1 | 97647 |
| 15072 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^* K_2^{*-}, K^* \to \pi^- K^+, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 3898 | 1 | 97648 |
| 15073 | $J/\psi \to \omega f_2(1270)\eta', \omega \to \pi^0\pi^+\pi^-, f_2(1270) \to \pi^+\pi^-, \eta' \to \rho^0\gamma, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 15072 | 1 | 97649 |
| 15074 | $J/\psi \to \pi^- \bar{K}^0 K^+ a_1^0, \bar{K}^0 \to K_S^0, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15073 | 1 | 97650 |
| 15075 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 15074 | 1 | 97651 |
| 15076 | $J/\psi \to a_2^0 \omega \eta', a_2^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \rho^0 \gamma, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 15075 | 1 | 97652 |
| 15077 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, b_1^0 \to \pi^0 \omega, \omega \to \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 15076 | 1 | 97653 |
| 15078 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 3899 | 1 | 97654 |
| 15079 | $J/\psi \rightarrow \omega \omega b_1^0, \omega \rightarrow \pi^+\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, b_1^0 \rightarrow \pi^0\omega, \omega \rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15078 | 1 | 97655 |
| 15080 | $J/\psi \to \omega K^* \bar{K}^0_1, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15079 | 1 | 97656 |
| 15081 | $J/\psi \to \Xi^{*0}\bar{\Xi}^{*0}, \Xi^{*0} \to \pi^0\Xi^0, \bar{\Xi}^{*0} \to \pi^0\bar{\Xi}^0, \Xi^0 \to \pi^0\Lambda, \bar{\Xi}^0 \to \pi^0\bar{\Lambda}, \Lambda \to \pi^0n, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0n\bar{n}$ | 15080 | 1 | 97657 |
| 15082 | $J/\psi \to \pi^+ \pi^- b_1^+ a_1^-, b_1^+ \to \pi^+ \omega, a_1^- \to \pi^0 \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 2724 | 1 | 97658 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15083 | $J/\psi \to \omega \omega K^0 \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15082 | 1 | 97659 |
| 15084 | $J/\psi 	o \pi^+ K^+ K^{*-} b_1^-, K^{*-} 	o \pi^- ar K^0, b_1^- 	o \pi^- \omega, ar K^0 	o K_L^0, \omega 	o \pi^0 \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 15083 | 1 | 97660 |
| 15085 | $J/\psi \to \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15084 | 1 | 97661 |
| 15086 | $J/\psi 	o \pi^0 ar{K}^* K_0^0, ar{K}^* 	o \pi^0 ar{K}^0, K_0^0 	o \pi^0 K^0, \pi^0 	o e^+ e^- \gamma^F, ar{K}^0 	o K_S^0, K^0 	o K_L^0, K_S^0 	o \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 15085 | 1 | 97662 |
| 15087 | $J/\psi \to \pi^+ K^0 K^- f_1(1420), K^0 \to K_S^0, f_1(1420) \to \pi^+ K^0 K^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^-K^-$ | 15086 | 1 | 97663 |
| 15088 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, $ $\eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 15087 | 1 | 97664 |
| 15089 | $J/\psi ightarrow \pi^0 a_2^0 \pi^+ \pi^- \gamma^f, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 15088 | 1 | 97665 |
| 15090 | $J/\psi \to \pi^- \rho^+ f_1(1285) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 15089 | 1 | 97666 |
| 15091 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15090 | 1 | 97667 |
| 15092 | $J/\psi ightarrow \eta ar{K}^0 K_0^0, \eta ightarrow \gamma \gamma, ar{K}^0 ightarrow K_L^0, K_0^0 ightarrow \pi^- K^+$ | $K_L^0\pi^-K^+\gamma\gamma$ | 15091 | 1 | 97668 |
| 15093 | $J/\psi 	o ho^0 \pi^+ \omega K^0 K^-, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^-$ | 15092 | 1 | 97669 |
| 15094 | $J/\psi 	o \pi^0\pi^-K^{*+}\bar{K}_1^{'0}, K^{*+} 	o \pi^+K^0, \bar{K}_1^{'0} 	o \pi^+K^{*-}, K^0 	o K_L^0, K^{*-} 	o \pi^0K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15093 | 1 | 97670 |
| 15095 | $J/\psi \to K^0 \bar{K}^0 f_2', K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_2' \to \eta \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 15094 | 1 | 97671 |
| 15096 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15095 | 1 | 97672 |
| 15097 | $J/\psi \to K^+K^{*-}f_2', K^{*-} \to \pi^0K^-, f_2' \to K_L^0K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 15096 | 1 | 97673 |
| 15098 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \omega K^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15097 | 1 | 97674 |
| 15099 | $J/\psi \to \omega K^- K_1^{'+}, \omega \to \pi^0 \gamma, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 15098 | 1 | 97675 |
| 15100 | $J/\psi \to \pi^+ n \bar{p} f_0(1370), f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-nar{p}$ | 15099 | 1 | 97676 |
| 15101 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma$ | 15100 | 1 | 97677 |
| 15102 | $J/\psi \to \pi^0 \pi^+ \pi^+ \rho^- \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15101 | 1 | 97678 |
| 15103 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 15102 | 1 | 97679 |
| 15104 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 15103 | 1 | 97680 |
| 15105 | $J/\psi \to \pi^0 K^* \bar{K}^* h_1(1170), K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 15104 | 1 | 97681 |
| 15106 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^+ \pi^-, \phi \to K_L^0 K_S^0, f_0(980) \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 966 | 1 | 97682 |
| 15107 | $J/\psi \to \eta K^0 \bar{K}_1^{'0}, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15106 | 1 | 97683 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 15108 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \rho^0 h_1(1170), \rho^0 \to \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 15107 | 1 | 97684 |
| 15109 | $J/\psi \to b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \rho^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15108 | 1 | 97685 |
| 15110 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \pi^+\pi^-\gamma^F, f_1(1420) \to \pi^0 K^+K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma$ | 15109 | 1 | 97686 |
| 15111 | $J/\psi \to \pi^0 \Xi^- \bar{\Xi}^{*+}, \Xi^- \to \pi^- \Lambda, \bar{\Xi}^{*+} \to \pi^+ \bar{\Xi}^0, \Lambda \to \pi^- p, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 15110 | 1 | 97687 |
| 15112 | $J/\psi ightarrow \pi^+ \eta b_1^- \gamma^f, \eta ightarrow \pi^0 \pi^+ \pi^-, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15111 | 1 | 97688 |
| 15113 | $J/\psi \to \pi^0 \pi^+ a_2^- \eta \gamma^f, a_2^- \to \pi^0 \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15112 | 1 | 97689 |
| 15114 | $J/\psi \to a_0^- b_1^+, a_0^- \to K^0 K^-, b_1^+ \to \pi^+ \omega, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 15113 | 1 | 97690 |
| 15115 | $J/\psi 	o \omega K^0 K_2^{*0}, \omega 	o \pi^0 \gamma, K^0 	o K_L^0, K_2^{*0} 	o \pi^+ \pi^- ar{K}^*, ar{K}^* 	o \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 15114 | 1 | 97691 |
| 15116 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15115 | 1 | 97692 |
| 15117 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^+ \pi^- K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15116 | 1 | 97693 |
| 15118 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15117 | 1 | 97694 |
| 15119 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- b_1^+ h_1(1170), b_1^+ \to \pi^+ \omega, h_1(1170) \to \pi^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 15118 | 1 | 97695 |
| 15120 | $J/\psi \to \omega K^{*-}K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 6260 | 1 | 97696 |
| 15121 | $J/\psi \to \rho^- a_2^+ \eta, \rho^- \to \pi^0 \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, \eta \to \pi^0 \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 15120 | 1 | 97697 |
| 15122 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^- K^+ \gamma^f, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+\gamma^f$ | 15121 | 1 | 97698 |
| 15123 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 15122 | 1 | 97699 |
| 15124 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, \phi \to \pi^0 \rho^0, K^0_S \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15123 | 1 | 97700 |
| 15125 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 6261 | 1 | 97701 |
| 15126 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 15125 | 1 | 97702 |
| 15127 | $J/\psi \to K^0 f_0(1370) \bar{K}_0^{*0}, K^0 \to K_L^0, f_0(1370) \to \rho^+ \rho^-, \bar{K}_0^{*0} \to \pi^+ K^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15126 | 1 | 97703 |
| 15128 | $J/\psi ightarrow K^*K^-a_0^+, K^* ightarrow \pi^0K^0, a_0^+ ightarrow \pi^+\eta, K^0 ightarrow K_S^0, \eta ightarrow \gamma\gamma, K_S^0 ightarrow \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma\gamma^f$ | 15127 | 1 | 97704 |
| 15129 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^0 K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^-K^+$ | 15128 | 1 | 97705 |
| 15130 | $J/\psi \to \rho^+ f_2(1270) K^0 K^-, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15129 | 1 | 97706 |
| 15131 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0 \gamma^f, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15130 | 1 | 97707 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15132 | $J/\psi \to \pi^0 \pi^- a_1^+, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f\gamma^f$ | 15131 | 1 | 97708 |
| 15133 | $J/\psi \to \eta \bar{K}^0 K_1^0, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15132 | 1 | 97709 |
| 15134 | $J/\psi \to \pi^0 \pi^- \rho^+ a_0^0, \rho^+ \to \pi^0 \pi^+, a_0^0 \to \pi^0 \eta, \eta \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 15133 | 1 | 97710 |
| 15135 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^- \gamma^f, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 15134 | 1 | 97711 |
| 15136 | $J/\psi \to \pi^+\pi^-\omega K^*\bar{K}_0^{*0}, \omega \to \pi^0\pi^+\pi^-, K^* \to \pi^-K^+, \bar{K}_0^{*0} \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 15135 | 1 | 97712 |
| 15137 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15136 | 1 | 97713 |
| 15138 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15137 | 1 | 97714 |
| 15139 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K_1^- \to \rho^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15138 | 1 | 97715 |
| 15140 | $J/\psi \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0K^0_L\gamma^F$ | 15139 | 1 | 97716 |
| 15141 | $J/\psi ightarrow \pi^+\pi^-b_1^0\gamma^F\gamma^f, b_1^0 ightarrow \pi^0\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 15140 | 1 | 97717 |
| 15142 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^0K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 15141 | 1 | 97718 |
| 15143 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15142 | 1 | 97719 |
| 15144 | $J/\psi \to \pi^+\pi^-\omega h_1(1170), \omega \to \pi^0\gamma, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15143 | 1 | 97720 |
| 15145 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \pi^+ a_0^-, \rho^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-$ | 15144 | 1 | 97721 |
| 15146 | $J/\psi 	o \pi^0 K^0 K_2^{*0}, K^0 	o K_S^0, K_2^{*0} 	o \pi^+ \pi^- \bar{K}^*, K_S^0 	o \pi^0 \pi^0, \bar{K}^* 	o \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15145 | 1 | 97722 |
| 15147 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 15146 | 1 | 97723 |
| 15148 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^F$ | 15147 | 1 | 97724 |
| 15149 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^{'+}, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_1^{'+} \to \pi^0 K^{*+}, K_0^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \\ \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15148 | 1 | 97725 |
| 15150 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6262 | 1 | 97726 |
| 15151 | $J/\psi \to K^* \bar{K}^* a_0^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15150 | 1 | 97727 |
| 15152 | $J/\psi 	o \eta \omega \eta', \eta 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-, \eta' 	o ho^0 \gamma, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 3902 | 1 | 97728 |
| 15153 | $J/\psi \to \eta \omega f_2(1270), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 15152 | 1 | 97729 |
| 15154 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15153 | 1 | 97730 |
| 15155 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15154 | 1 | 97731 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15156 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 15155 | 1 | 97732 |
| 15157 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 15156 | 1 | 97733 |
| 15158 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 15157 | 1 | 97734 |
| 15159 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^-K^{*+}, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 15158 | 1 | 97735 |
| 15160 | $J/\psi \to \eta f_1(1420)\gamma, \eta \to \pi^0 \pi^0 \pi^0, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 15159 | 1 | 97736 |
| 15161 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 49 | 1 | 97737 |
| 15162 | $J/\psi \to \pi^0 K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^f$ | 15161 | 1 | 97738 |
| 15163 | $J/\psi \to \pi^+ K^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15162 | 1 | 97739 |
| 15164 | $J/\psi 	o \pi^- ho^+ K^0 ar{K}^*, ho^+ 	o \pi^0 \pi^+, K^0 	o K_S^0, ar{K}^* 	o \pi^+ K^-, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15163 | 1 | 97740 |
| 15165 | $J/\psi \to \pi^+ \pi^+ K^0 K^{*-} b_1^-, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, b_1^- \to \pi^- \omega, \bar{K}^0 \to K_L^0, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15164 | 1 | 97741 |
| 15166 | $J/\psi \to \phi f_1(1285), \phi \to K_L^0 K_S^0, f_1(1285) \to \pi^+ a_0^-, K_S^0 \to \pi^+ \pi^- \gamma^f, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15165 | 1 | 97742 |
| 15167 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} h_1(1170), \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, h_1(1170) \to \pi^- \rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15166 | 1 | 97743 |
| 15168 | $J/\psi \to \pi^0 a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 15167 | 1 | 97744 |
| 15169 | $J/\psi \to \pi^- a_2^+ f_1(1285), a_2^+ \to \pi^0 \rho^+, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15168 | 1 | 97745 |
| 15170 | $J/\psi \to K^{*+}K^{*-}\phi, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \phi \to K_L^0K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 3904 | 1 | 97746 |
| 15171 | $J/\psi \to \pi^+\pi^-K_2^{*+}K_1^-, K_2^{*+} \to \pi^0K^+, K_1^- \to \pi^-\bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15170 | 1 | 97747 |
| 15172 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15171 | 1 | 97748 |
| 15173 | $J/\psi \to \pi^0 \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6266 | 1 | 97749 |
| 15174 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15173 | 1 | 97750 |
| 15175 | $J/\psi \to \rho^0 \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_2^{*0} \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15174 | 1 | 97751 |
| 15176 | $J/\psi \to \pi^+ a_1^0 a_1^-, a_1^0 \to \pi^- \rho^+, a_1^- \to \pi^0 \rho^-, \rho^+ \to \pi^0 \pi^+ \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15175 | 1 | 97752 |
| 15177 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \eta' \to \pi^0 \pi^0 \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 15176 | 1 | 97753 |
| 15178 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_1(1285) \to \pi^+ a_0^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15177 | 1 | 97754 |
| 15179 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 6267 | 1 | 97755 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15180 | $J/\psi \to K^0 \phi \bar{K}_1^0, K^0 \to K_L^0, \phi \to K^+ K^-, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}K^{+}K^{-}K^{-}\gamma^{F}$ | 15179 | 1 | 97756 |
| 15181 | $J/\psi \to K^- K_2^{*+} \gamma^F, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-\gamma^F$ | 15180 | 1 | 97757 |
| 15182 | $J/\psi \to K^0 \bar{K}^0 f_2^{'}, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_2^{'} \to K^+ K^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15181 | 1 | 97758 |
| 15183 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 15182 | 1 | 97759 |
| 15184 | $J/\psi \to \pi^+ K^* K^{*-} \gamma^F, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma^F$ | 6268 | 1 | 97760 |
| 15185 | $J/\psi \to \rho^{+} \omega K^{0} K^{*-}, \rho^{+} \to \pi^{0} \pi^{+}, \omega \to \pi^{0} \gamma, K^{0} \to K_{S}^{0}, K^{*-} \to \pi^{-} \bar{K}^{0}, K_{S}^{0} \to \pi^{+} \pi^{-}, \bar{K}^{0} \to K_{L}^{0}$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15184 | 1 | 97761 |
| 15186 | $J/\psi \to \eta \phi f_0(1710), \eta \to \pi^0 \pi^0 \pi^0, \phi \to K_L^0 K_S^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 15185 | 1 | 97762 |
| 15187 | $J/\psi \to \bar{K}^*K^+b_1^-, \bar{K}^* \to \pi^+K^-, b_1^- \to \pi^-\omega, \omega \to \pi^0\gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 15186 | 1 | 97763 |
| 15188 | $J/\psi \to \rho^0 \pi^- \bar{K}^* K^+, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15187 | 1 | 97764 |
| 15189 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, $ $\eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 15188 | 1 | 97765 |
| 15190 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^F, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15189 | 1 | 97766 |
| 15191 | $J/\psi 	o K^0 ar{K}^0 f_2^{'}, K^0 	o K_S^0, ar{K}^0 	o K_S^0, f_2^{'} 	o K_L^0 K_L^0, K_S^0 	o \pi^0 \pi^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 15190 | 1 | 97767 |
| 15192 | $J/\psi \to \omega K^- K^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 15191 | 1 | 97768 |
| 15193 | $J/\psi \to K^-K^{*+}f_1(1285), K^{*+} \to \pi^+K^0, f_1(1285) \to \pi^0\pi^0\eta, K^0 \to K_L^0, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 15192 | 1 | 97769 |
| 15194 | $J/\psi \to \rho^+ \rho^- K^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15193 | 1 | 97770 |
| 15195 | $J/\psi 	o \omega K^- K^{*+} \gamma^F, \omega 	o \pi^0 \gamma, K^{*+} 	o \pi^+ K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^F \gamma$ | 15194 | 1 | 97771 |
| 15196 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 15195 | 1 | 97772 |
| 15197 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} h_1(1170), K^{*+} \to \pi^+ K^0, h_1(1170) \to \pi^0 \rho^0, K^0 \to K_S^0, $ $\rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 15196 | 1 | 97773 |
| 15198 | $J/\psi \to \pi^0 \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15197 | 1 | 97774 |
| 15199 | $J/\psi \to \eta \eta' \phi, \eta \to e^+ e^- \gamma^F \gamma^f, \eta' \to \pi^0 \pi^0 \eta, \phi \to K^+ K^-, \eta \to \gamma \gamma$ | $e^+e^-\pi^0\pi^0K^+K^-\gamma^F\gamma\gamma\gamma^f$ | 15198 | 1 | 97775 |
| 15200 | $J/\psi ightarrow nar{n}a_0^0, a_0^0 ightarrow \pi^0\eta, \eta ightarrow e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^0nar{n}\gamma^F\gamma^f$ | 15199 | 1 | 97776 |
| 15201 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^0\pi^0, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15200 | 1 | 97777 |
| 15202 | $J/\psi 	o \pi^+ a_2^- \eta, a_2^- 	o ar K^0 K^-, \eta 	o \pi^0 \pi^+ \pi^-, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 15201 | 1 | 97778 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 15203 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 15202 | 1 | 97779 |
| 15204 | $J/\psi \to \pi^- \omega \bar{K}^0 K_1^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15203 | 1 | 97780 |
| 15205 | $J/\psi \to \rho^0 \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 15204 | 1 | 97781 |
| 15206 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^0\pi^-\bar{K}^*, K_1^+ \to \pi^+K_0^0, \bar{K}^* \to \pi^0\bar{K}^0, K_0^0 \to \pi^-K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 15205 | 1 | 97782 |
| 15207 | $J/\psi \to \pi^+\pi^+\pi^-h_1(1170)a_1^-, h_1(1170) \to \pi^0\rho^0, a_1^- \to \rho^0\pi^-, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15206 | 1 | 97783 |
| 15208 | $J/\psi \to \bar{K}^0 K^* f_1(1420), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-\pi^-K^+K^+$ | 15207 | 1 | 97784 |
| 15209 | $J/\psi \to \pi^+ a_2^- f_0(1370), a_2^- \to \pi^0 \rho^-, f_0(1370) \to \rho^0 \rho^0, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15208 | 1 | 97785 |
| 15210 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K_0^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15209 | 1 | 97786 |
| 15211 | $J/\psi \to \rho^0 \pi^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 15210 | 1 | 97787 |
| 15212 | $J/\psi 	o K^- b_1^+ K_0^0, b_1^+ 	o \pi^+ \omega, K_0^0 	o \pi^0 K^0, \omega 	o \pi^0 \gamma, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 6269 | 1 | 97788 |
| 15213 | $J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 15212 | 1 | 97789 |
| 15214 | $J/\psi \to \pi^+ K^- K^{*+} a_1^-, K^{*+} \to \pi^+ K^0, a_1^- \to \rho^0 \pi^-, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 15213 | 1 | 97790 |
| 15215 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \phi, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 15214 | 1 | 97791 |
| 15216 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 15215 | 1 | 97792 |
| 15217 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 15216 | 1 | 97793 |
| 15218 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15217 | 1 | 97794 |
| 15219 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 6270 | 1 | 97795 |
| 15220 | $J/\psi \to \pi^0 K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 15219 | 1 | 97796 |
| 15221 | $J/\psi \to \eta \phi f_0(1710), \eta \to \gamma \gamma, \phi \to \eta \gamma, f_0(1710) \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma\gamma\gamma$ | 15220 | 1 | 97797 |
| 15222 | $J/\psi \to \pi^- K^{*+} \bar{n} \Lambda, K^{*+} \to \pi^+ K^0, \Lambda \to \pi^- p, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-\bar{n}p$ | 15221 | 1 | 97798 |
| 15223 | $J/\psi \to K^- f_0(1370) K_1^+, f_0(1370) \to \pi^+ \pi^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15222 | 1 | 97799 |
| 15224 | $J/\psi \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 15223 | 1 | 97800 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 15225 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-\pi^-K^+K^+K^-\gamma^f$ | 15224 | 1 | 97801 |
| 15226 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to K^- \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 15225 | 1 | 97802 |
| 15227 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15226 | 1 | 97803 |
| 15228 | $J/\psi \to \pi^0 \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15227 | 1 | 97804 |
| 15229 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta\gamma^f, \eta \to \gamma\gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 15228 | 1 | 97805 |
| 15230 | $J/\psi \to \pi^0 K^+ K^{*-}, \pi^0 \to e^+ e^- \gamma^F, K^{*-} \to \pi^0 K^-$ | $e^+e^-\pi^0K^+K^-\gamma^F$ | 15229 | 1 | 97806 |
| 15231 | $J/\psi \to \pi^0 K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15230 | 1 | 97807 |
| 15232 | $J/\psi 	o \pi^0 ho^0 \eta, ho^0 	o \pi^+ \pi^- \gamma^f, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 15231 | 1 | 97808 |
| 15233 | $J/\psi 	o ho^- K^+ ar{K}^0_1, ho^- 	o \pi^0 \pi^-, ar{K}^0_1 	o \pi^0 ar{K}^{*0}_0, ar{K}^{*0}_0 	o \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15232 | 1 | 97809 |
| 15234 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15233 | 1 | 97810 |
| 15235 | $J/\psi \to \pi^0 \eta \omega a_1^0, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 15234 | 1 | 97811 |
| 15236 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 15235 | 1 | 97812 |
| 15237 | $J/\psi \to \pi^0 h_1(1170), h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 15236 | 1 | 97813 |
| 15238 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15237 | 1 | 97814 |
| 15239 | $J/\psi \to K^0 \bar{K}^0 K^* \bar{K}^*, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 15238 | 1 | 97815 |
| 15240 | $J/\psi 	o K^0 ar{K}^0 \phi, K^0 	o K^0_S, ar{K}^0 	o K^0_L, \phi 	o K^+ K^-, K^0_S 	o \pi^0 \pi^0$ | $\pi^0 \pi^0 K_L^0 K^+ K^-$ | 15239 | 1 | 97816 |
| 15241 | $J/\psi \to a_2^+ \eta b_1^-, a_2^+ \to \rho^0 \pi^+, \eta \to \gamma \gamma, b_1^- \to \pi^- \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 15240 | 1 | 97817 |
| 15242 | $J/\psi \to \pi^+ b_1^- a_1^0, b_1^- \to \pi^- \omega, a_1^0 \to \pi^- \rho^+ \gamma^f \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f\gamma^f$ | 15241 | 1 | 97818 |
| 15243 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 6271 | 1 | 97819 |
| 15244 | $J/\psi \to \pi^+ a_2^-, a_2^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15243 | 1 | 97820 |
| 15245 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- K^* \bar{K}^* \gamma^f, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma^f$ | 15244 | 1 | 97821 |
| 15246 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- f_0(1370), f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15245 | 1 | 97822 |
| 15247 | $J/\psi \to \pi^0 K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15246 | 1 | 97823 |
| 15248 | $J/\psi \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15247 | 1 | 97824 |
| 15249 | $J/\psi \to \pi^+ a_2^- f_2(1270), a_2^- \to \rho^0 \pi^-, f_2(1270) \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15248 | 1 | 97825 |
| 15250 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15249 | 1 | 97826 |
| 15251 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15250 | 1 | 97827 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15252 | $J/\psi \to \rho^+ K^- K_1^0, \rho^+ \to \pi^0 \pi^+, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15251 | 1 | 97828 |
| 15253 | $J/\psi \rightarrow \eta' b_1^0, \eta' \rightarrow \pi^+ \pi^- \eta, b_1^0 \rightarrow \pi^0 \omega, \eta \rightarrow \pi^0 \pi^0 \pi^0, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15252 | 1 | 97829 |
| 15254 | $J/\psi \to \pi^0 K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 15253 | 1 | 97830 |
| 15255 | $J/\psi \to K^- K_1^+ \gamma^F, K_1^+ \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 15254 | 1 | 97831 |
| 15256 | $J/\psi \to \pi^+\pi^-\bar{K}^*K_1^0, \bar{K}^* \to \pi^+K^-, K_1^0 \to \pi^-K_0^{*+}, K_0^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 15255 | 1 | 97832 |
| 15257 | $J/\psi \to \bar{K}^0 a_0^0 K_1^0, \bar{K}^0 \to K_L^0, a_0^0 \to \pi^0 \eta, K_1^0 \to \pi^- K_0^{*+}, \eta \to \gamma \gamma, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 15256 | 1 | 97833 |
| 15258 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 15257 | 1 | 97834 |
| 15259 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^0 \bar{K}^*, K^0_S \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15258 | 1 | 97835 |
| 15260 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15259 | 1 | 97836 |
| 15261 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 K^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 15260 | 1 | 97837 |
| 15262 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15261 | 1 | 97838 |
| 15263 | $J/\psi \to \pi^0 \rho^+ K^0 K^- \phi, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, \phi \to K^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 15262 | 1 | 97839 |
| 15264 | $J/\psi \to \pi^0\pi^0\rho^0K^0\bar{K}^0, \rho^0 \to \pi^+\pi^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 15263 | 1 | 97840 |
| 15265 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15264 | 1 | 97841 |
| 15266 | $J/\psi \to \pi^+ K^* K^- \gamma^f, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 15265 | 1 | 97842 |
| 15267 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 3905 | 1 | 97843 |
| 15268 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^+ \pi^- a_1^0, a_1^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15267 | 1 | 97844 |
| 15269 | $J/\psi \to \bar{K}^*K^+b_1^-\gamma^f, \bar{K}^* \to \pi^+K^-, b_1^- \to \pi^-\omega\gamma^f, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f\gamma^f$ | 15268 | 1 | 97845 |
| 15270 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 6273 | 1 | 97846 |
| 15271 | $J/\psi \to \pi^0 \pi^+ \pi^- \rho^- a_1^+, \rho^- \to \pi^0 \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15270 | 1 | 97847 |
| 15272 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 15271 | 1 | 97848 |
| 15273 | $J/\psi \to \pi^0 \rho^0 \omega \omega, \rho^0 \to \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15272 | 1 | 97849 |
| 15274 | $J/\psi \to \pi^0 f_1(1285)\gamma, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 15273 | 1 | 97850 |
| 15275 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 15274 | 1 | 97851 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 15276 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15275 | 1 | 97852 |
| 15277 | $J/\psi \to \eta \bar{K}^* K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 15276 | 1 | 97853 |
| 15278 | $J/\psi \to \rho^- K^+ \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 6274 | 1 | 97854 |
| 15279 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, \bar{K}^0 \to K_S^0, $ $\rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15278 | 1 | 97855 |
| 15280 | $J/\psi \to K^*K^{*-}b_1^+, K^* \to \pi^-K^+, K^{*-} \to \pi^0K^-, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-\gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 15279 | 1 | 97856 |
| 15281 | $J/\psi ightarrow ar{n}\Delta^0, \Delta^0 ightarrow \pi^- p$ | $\pi^- ar{n} p$ | 15280 | 1 | 97857 |
| 15282 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \eta p ar p, \eta ightarrow \gamma \gamma$ | $par{p}\gamma\gamma\gamma$ | 15281 | 1 | 97858 |
| 15283 | $J/\psi \to \phi f_0(1710), \phi \to \pi^0 \rho^0, f_0(1710) \to \omega \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15282 | 1 | 97859 |
| 15284 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 15283 | 1 | 97860 |
| 15285 | $J/\psi \to \rho^0 K^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15284 | 1 | 97861 |
| 15286 | $J/\psi \to K^{*+}\bar{K}_{1}^{'-}, K^{*+} \to \pi^{+}K^{0}, \bar{K}_{1}^{'-} \to \pi^{-}\bar{K}^{*}, K^{0} \to K_{S}^{0}, \bar{K}^{*} \to \pi^{+}K^{-}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15285 | 1 | 97862 |
| 15287 | $J/\psi \to \eta \bar{K}^0 K_2^{*0}, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15286 | 1 | 97863 |
| 15288 | $J/\psi \to K^-K^{*+}\phi, K^{*+}\to \pi^0K^+, \phi\to \pi^+\rho^-, \rho^-\to \pi^0\pi^-, \pi^0\to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 15287 | 1 | 97864 |
| 15289 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15288 | 1 | 97865 |
| 15290 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15289 | 1 | 97866 |
| 15291 | $J/\psi \to \bar{K}^0 a_0^- K_1^{'+}, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^{'+} \to \pi^+ K^*, \eta \to \gamma \gamma, K^* \to \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 524 | 1 | 97867 |
| 15292 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 15291 | 1 | 97868 |
| 15293 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^{0}\pi^+\pi^+\pi^-\pi^-$ | 15292 | 1 | 97869 |
| 15294 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^- K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 15293 | 1 | 97870 |
| 15295 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15294 | 1 | 97871 |
| 15296 | $J/\psi \to \bar{K}^* K^+ a_0^-, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^- \to \pi^- \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 15295 | 1 | 97872 |
| 15297 | $J/\psi 	o \pi^0 ho^0 ho^+ b_1^-, ho^0 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15296 | 1 | 97873 |
| 15298 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 15297 | 1 | 97874 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 15299 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15298 | 1 | 97875 |
| 15300 | $J/\psi \to \pi^+ \omega a_0^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15299 | 1 | 97876 |
| 15301 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^+ \eta b_1^-, \eta ightarrow \gamma \gamma, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 15300 | 1 | 97877 |
| 15302 | $J/\psi \to \pi^0 a_2^+ K^0 K^{*-}, a_2^+ \to \pi^+ \eta, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 525 | 1 | 97878 |
| 15303 | $J/\psi \to \pi^+\pi^-\bar{K}^0K^*\phi, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+, \phi \to K^+K^-$ | $K_L^0 \pi^+ \pi^- \pi^- K^+ K^+ K^-$ | 15302 | 1 | 97879 |
| 15304 | $J/\psi \to \pi^0 \eta' b_1^0, \eta' \to \pi^+ \pi^- \eta, b_1^0 \to \pi^0 \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to e^+ e^- \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 15303 | 1 | 97880 |
| 15305 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^- \gamma^f, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma^f$ | 15304 | 1 | 97881 |
| 15306 | $J/\psi \to \omega \omega h_1(1170), \omega \to e^+e^-\pi^0, \omega \to \pi^0\pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 15305 | 1 | 97882 |
| 15307 | $J/\psi \to \pi^- \bar{K}_1^{'0} K_1^{'+}, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_1^{'+} \to \pi^+ K^*, K^{*-} \to \pi^0 K^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15306 | 1 | 97883 |
| 15308 | $J/\psi \to \pi^+ K^0 K^- f_1(1285), K^0 \to K_L^0, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15307 | 1 | 97884 |
| 15309 | $J/\psi ightarrow ho^- a_2^+, ho^- ightarrow \pi^0 \pi^- \gamma^f, a_2^+ ightarrow ho^0 \pi^+, ho^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 6277 | 1 | 97885 |
| 15310 | $J/\psi \to K^{-}a_{0}^{+}K_{1}^{'0}, a_{0}^{+} \to \pi^{+}\eta, K_{1}^{'0} \to \pi^{-}K^{*+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15309 | 1 | 97886 |
| 15311 | $J/\psi \to \pi^- ho^+ a_0^0 \gamma^f, ho^+ \to \pi^0 \pi^+, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 15310 | 1 | 97887 |
| 15312 | $J/\psi \to \pi^0 \pi^0 \gamma, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\gamma^F\gamma\gamma^f$ | 15311 | 1 | 97888 |
| 15313 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15312 | 1 | 97889 |
| 15314 | $J/\psi \to K^0 \bar{K}_1^0 a_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \rho^+ K^-, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15313 | 1 | 97890 |
| 15315 | $J/\psi \to \omega K^0 \bar{K}^0 \phi, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \phi \to K^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 15314 | 1 | 97891 |
| 15316 | $J/\psi \to \rho^+ \rho^- K^+ K^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 15315 | 1 | 97892 |
| 15317 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 15316 | 1 | 97893 |
| 15318 | $J/\psi \to \pi^0 f_2(1270) h_1(1170), f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15317 | 1 | 97894 |
| 15319 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \rho^0 \gamma, a_0^- \to K^0 K^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 15318 | 1 | 97895 |
| 15320 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15319 | 1 | 97896 |
| 15321 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \rho^+ K^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 15320 | 1 | 97897 |
| 15322 | $J/\psi \to \pi^- a_2^+ \eta, a_2^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 6278 | 1 | 97898 |
| 15323 | $J/\psi \to K^0 \bar{K}^0 K^+ K^- \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^+K^-K^-$ | 15322 | 1 | 97899 |
| 15324 | $J/\psi ightarrow ho^0 ho^0 \gamma, ho^0 ightarrow \pi^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 15323 | 1 | 97900 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 15325 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6279 | 1 | 97901 |
| 15326 | $J/\psi \to \eta_c \gamma, \eta_c \to \Lambda \bar{\Sigma}^0, \Lambda \to \pi^- p, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^-ar{n}p\gamma\gamma$ | 15325 | 1 | 97902 |
| 15327 | $J/\psi \to \rho^0 \bar{K}^0 K_1^0 \gamma, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^- \gamma^f, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 15326 | 1 | 97903 |
| 15328 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_0(1370) \to \rho^+ \rho^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15327 | 1 | 97904 |
| 15329 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 15328 | 1 | 97905 |
| 15330 | $J/\psi \to \rho^0 \pi^+ \pi^- K^- K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}$ | 15329 | 1 | 97906 |
| 15331 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15330 | 1 | 97907 |
| 15332 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \phi, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15331 | 1 | 97908 |
| 15333 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 15332 | 1 | 97909 |
| 15334 | $J/\psi \to \bar{K}^0 K_0^0 \gamma, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15333 | 1 | 97910 |
| 15335 | $J/\psi 	o K^+ar{\Sigma}^-\Xi^0, ar{\Sigma}^- 	o \pi^-ar{n}, \Xi^0 	o \pi^0\Lambda, \Lambda 	o n\gamma$ | $\pi^0\pi^-K^+n\bar{n}\gamma$ | 6280 | 1 | 97911 |
| 15336 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^+\pi^-K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15335 | 1 | 97912 |
| 15337 | $J/\psi ightarrow a_2^0 \eta \omega, a_2^0 ightarrow \pi^+ ho^-, \eta ightarrow \pi^+ \pi^- \gamma^F, \omega ightarrow \pi^0 \pi^+ \pi^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 15336 | 1 | 97913 |
| 15338 | $J/\psi \to K^+K^-h_1(1380), h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 15337 | 1 | 97914 |
| 15339 | $J/\psi \to K^- h_1(1170) K_1^+, h_1(1170) \to \pi^+ \rho^-, K_1^+ \to \rho^+ K^0, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15338 | 1 | 97915 |
| 15340 | $J/\psi ightarrow \pi^0 \pi^0 \phi, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma^f$ | 15339 | 1 | 97916 |
| 15341 | $J/\psi \to \rho^0 \rho^+ K^* K^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15340 | 1 | 97917 |
| 15342 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- a_2^+ h_1(1170), a_2^+ \to \pi^0 \rho^+, h_1(1170) \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15341 | 1 | 97918 |
| 15343 | $J/\psi \to \bar{K}^0 K_2^{*0} \phi, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 15342 | 1 | 97919 |
| 15344 | $J/\psi \to \pi^-\pi^-\rho^+\rho^+f_1(1285), \rho^+ \to \pi^0\pi^+, \rho^+ \to \pi^0\pi^+, f_1(1285) \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15343 | 1 | 97920 |
| 15345 | $J/\psi \to K^- p \bar{\Sigma}^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{\Lambda} \to e^+ \nu_e \bar{p}\gamma^f$ | $e^+ u_e K^- p \bar{p} \gamma \gamma^f$ | 15344 | 1 | 97921 |
| 15346 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^0 \bar{\Xi}^0, \Lambda \to \pi^0 n, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda},$ $\pi^0 \to e^+ e^- \gamma^F, \bar{\Lambda} \to \pi^+ \bar{p}$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+n\bar{p}\gamma^F$ | 15345 | 1 | 97922 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 15347 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to \bar{K}^0 K^*, f_1(1420) \to \pi^0 K^+ K^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 15346 | 1 | 97923 |
| 15348 | $J/\psi \to \pi^- \bar{K}^0 K_1^+ \gamma^f, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 15347 | 1 | 97924 |
| 15349 | $J/\psi \to \eta_c \gamma, \eta_c \to f_2' f_1(1420), f_2' \to K_L^0 K_L^0, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0 K_L^0 K_L^0 K^+ K^- \gamma$ | 15348 | 1 | 97925 |
| 15350 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^- K^+, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 15349 | 1 | 97926 |
| 15351 | $J/\psi \to K^+ \bar{\Delta}^0 \Sigma^-, \bar{\Delta}^0 \to \pi^0 \bar{n}, \Sigma^- \to \pi^- n$ | $\pi^0\pi^-K^+nar{n}$ | 15350 | 1 | 97927 |
| 15352 | $J/\psi \to \pi^0 \pi^0 \omega \bar{K}^0 K_0^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15351 | 1 | 97928 |
| 15353 | $J/\psi \to K^- K^{*+} a_0^0, K^{*+} \to K^+ \gamma, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 15352 | 1 | 97929 |
| 15354 | $J/\psi 	o ho^0 p ar p, ho^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^-par p\gamma^f$ | 15353 | 1 | 97930 |
| 15355 | $J/\psi \to K^+ K_1^- a_1^0, K_1^- \to \rho^- \bar{K}^0, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 15354 | 1 | 97931 |
| 15356 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 15355 | 1 | 97932 |
| 15357 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ \rho^- f_2(1270), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15356 | 1 | 97933 |
| 15358 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0 \gamma^f, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 6281 | 1 | 97934 |
| 15359 | $J/\psi \to f_2^{'}h_1(1380), f_2^{'} \to K^+K^-, h_1(1380) \to K^+K^{*-}, K^{*-} \to \pi^0K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 15358 | 1 | 97935 |
| 15360 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15359 | 1 | 97936 |
| 15361 | $J/\psi \to ho^- \bar{K}^0 K^{*+} \gamma, ho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 15360 | 1 | 97937 |
| 15362 | $J/\psi \to K^0 \bar{K}^* b_1^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15361 | 1 | 97938 |
| 15363 | $J/\psi \to \rho^0 \omega b_1^0, \rho^0 \to \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \gamma, b_1^0 \to \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma\gamma^{f}$ | 15362 | 1 | 97939 |
| 15364 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 15363 | 1 | 97940 |
| 15365 | $J/\psi \to \pi^0 a_2^0 \pi^- \rho^+, a_2^0 \to K_L^0 K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 15364 | 1 | 97941 |
| 15366 | $J/\psi \to a_2^0 K^* \bar{K}^*, a_2^0 \to \pi^- \rho^+, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15365 | 1 | 97942 |
| 15367 | $J/\psi \to \pi^0 K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 15366 | 1 | 97943 |
| 15368 | $J/\psi \to \pi^+ K^* \bar{p}\Lambda, K^* \to \pi^- K^+, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-K^+par{p}$ | 15367 | 1 | 97944 |
| 15369 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \bar{K}^0 \gamma, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 15368 | 1 | 97945 |
| 15370 | $J/\psi \to \pi^0 K^+ a^0_0 K^1, a^0_0 \to \pi^0 \eta, K^1 \to \rho^0 K^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15369 | 1 | 97946 |
| 15371 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 15370 | 1 | 97947 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15372 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \rho^0\gamma, K^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 6282 | 1 | 97948 |
| 15373 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15372 | 1 | 97949 |
| 15374 | $J/\psi \to \pi^- \rho^+ \eta f_0(1370), \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma, f_0(1370) \to \rho^0 \rho^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 15373 | 1 | 97950 |
| 15375 | $J/\psi \to h_1(1380)f_1(1420), h_1(1380) \to K^0\bar{K}^*, f_1(1420) \to \pi^0K^+K^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 15374 | 1 | 97951 |
| 15376 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^0K^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 2729 | 1 | 97952 |
| 15377 | $J/\psi 	o \pi^0 \pi^+ \Delta^0 \bar{\Delta}^+, \Delta^0 	o \pi^0 n, \bar{\Delta}^+ 	o \pi^- \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 15376 | 1 | 97953 |
| 15378 | $J/\psi \to \pi^- K^+ K_2^{*-} a_0^+, K_2^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 15377 | 1 | 97954 |
| 15379 | $J/\psi 	o \pi^+ K_2^{*0} K^-, K_2^{*0} 	o \omega K^0, \omega 	o \pi^0 \gamma, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 15378 | 1 | 97955 |
| 15380 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15379 | 1 | 97956 |
| 15381 | $J/\psi \to \bar{K}^0 K_2^{*0} \phi, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^+, \phi \to K^+ K^-$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 6284 | 1 | 97957 |
| 15382 | $J/\psi \to \pi^+ K^0 \bar{K}^* a_1^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^+ \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}$ | 15381 | 1 | 97958 |
| 15383 | $J/\psi \to \rho^+ a_2^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_2^- \to \bar{K}^0 K^-, f_0(1370) \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15382 | 1 | 97959 |
| 15384 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0 \pi^0 \pi^+ \pi^- K^+ K^- \gamma^f$ | 15383 | 1 | 97960 |
| 15385 | $J/\psi \to \pi^+\pi^-\pi^-\rho^+\omega f_0(1370), \rho^+ \to \pi^0\pi^+, \omega \to \pi^0\pi^+\pi^-, f_0(1370) \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 15384 | 1 | 97961 |
| 15386 | $J/\psi \to \pi^- K^+ h_1(1170) \bar{K}_1^0, h_1(1170) \to \pi^- \rho^+, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 15385 | 1 | 97962 |
| 15387 | $J/\psi \to K^+ \eta' K_1^-, \eta' \to \rho^0 \gamma, K_1^- \to \pi^0 K_0^{*-}, \rho^0 \to \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 15386 | 1 | 97963 |
| 15388 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^0K^0, a_0^+ \to \pi^+\eta, K^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 15387 | 1 | 97964 |
| 15389 | $J/\psi \to K^- \phi K_1^+, \phi \to a_0^0 \gamma, K_1^+ \to \rho^+ K^0, a_0^0 \to \pi^0 \eta, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 15388 | 1 | 97965 |
| 15390 | $J/\psi \to K^+ K^{*-} \phi \gamma^F, K^{*-} \to \pi^0 K^-, \phi \to K^+ K^-$ | $\pi^0 K^+ K^+ K^- K^- \gamma^F$ | 15389 | 1 | 97966 |
| 15391 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 15390 | 1 | 97967 |
| 15392 | $J/\psi \to K^+ K_2^{*-} \eta', K_2^{*-} \to \pi^- \bar{K}^*, \eta' \to \pi^+ \pi^- \eta, \bar{K}^* \to \pi^0 \bar{K}^0, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15391 | 1 | 97968 |
| 15393 | $J/\psi \to K^0 \eta' \bar{K}_1^{'0}, K^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15392 | 1 | 97969 |
| 15394 | $J/\psi \to \pi^0 \rho^+ a^0, \rho^+ \to \pi^0 \pi^+, a^0 \to \pi^- \eta \gamma^f, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 15393 | 1 | 97970 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 15395 | $J/\psi \to K^0 \bar{K}^0 a_0^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 15394 | 1 | 97971 |
| 15396 | $J/\psi \to K^0 K_2^{*0} K^+ K^-, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}$ | 15395 | 1 | 97972 |
| 15397 | $J/\psi ightarrow \pi^+ \eta' b_1^-, \eta' ightarrow \omega \gamma, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 15396 | 1 | 97973 |
| 15398 | $J/\psi \to K_2^{*-} K_0^{*+}, K_2^{*-} \to \pi^- \bar{K}^*, K_0^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15397 | 1 | 97974 |
| 15399 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 15398 | 1 | 97975 |
| 15400 | $J/\psi \to \pi^0 K^* \bar{K}^* b_1^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15399 | 1 | 97976 |
| 15401 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta \gamma^f, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 15400 | 1 | 97977 |
| 15402 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^{'+}, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 15401 | 1 | 97978 |
| 15403 | $J/\psi \to a_2^0 \pi^- a_1^+, a_2^0 \to \pi^0 \eta, a_1^+ \to \pi^0 \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 15402 | 1 | 97979 |
| 15404 | $J/\psi 	o a_2^- \bar K^0 K^+, a_2^- 	o \pi^- \eta, \bar K^0 	o K_S^0, \eta 	o \pi^0 \pi^0 \pi^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 15403 | 1 | 97980 |
| 15405 | $J/\psi ightarrow \pi^0 \omega a_0^0, \omega ightarrow \pi^+ \pi^- \gamma^F, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^F\gamma^f$ | 15404 | 1 | 97981 |
| 15406 | $J/\psi \to a_2^+ K^0 K^-, a_2^+ \to \pi^+ \eta, K^0 \to K^0_S, \eta \to \pi^0 \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15405 | 1 | 97982 |
| 15407 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-\gamma$ | 15406 | 1 | 97983 |
| 15408 | $J/\psi \to \omega f_0(1370) f_0(1370), \omega \to \pi^0 \gamma, f_0(1370) \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 15407 | 1 | 97984 |
| 15409 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \gamma, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15408 | 1 | 97985 |
| 15410 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 15409 | 1 | 97986 |
| 15411 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15410 | 1 | 97987 |
| 15412 | $J/\psi \to \pi^+ f_2(1270) a_1^-, f_2(1270) \to \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 15411 | 1 | 97988 |
| 15413 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15412 | 1 | 97989 |
| 15414 | $J/\psi \to K^-\phi K_1^+, \phi \to K^+K^-, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^+K^-K^-$ | 15413 | 1 | 97990 |
| 15415 | $J/\psi \to \rho^0 \pi^+ K^0 K_1^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_1^- \to \pi^0 K_0^{*-}, K_S^0 \to \pi^0 \pi^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15414 | 1 | 97991 |
| 15416 | $J/\psi \to \pi^0 \pi^+ \pi^- K^0 K^{*-} a_1^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_1^+ \to \pi^0 \rho^+, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^-$ | 15415 | 1 | 97992 |
| 15417 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 15416 | 1 | 97993 |
| 15418 | $J/\psi \to \pi^- K_1^+ \bar{K}_1^{'0}, K_1^+ \to \rho^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15417 | 1 | 97994 |
| 15419 | $J/\psi \to \eta \omega f_1(1285), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 15418 | 1 | 97995 |
| 15420 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_L^0, \phi \to K^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 15419 | 1 | 97996 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 15421 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 15420 | 1 | 97997 |
| 15422 | $J/\psi \to \pi^0\pi^0K^0\bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+K^{*-}_0, K^{*-}_0 \to \pi^0K^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 15421 | 1 | 97998 |
| 15423 | $J/\psi 	o \eta' f_2^{'} \gamma, \eta' 	o \pi^0 \pi^0 \eta, f_2^{'} 	o \eta \eta, \eta 	o \gamma \gamma, \eta 	o \gamma \gamma, \eta 	o \gamma \gamma, \eta 	o \gamma \gamma, \eta 	o \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma\gamma$ | 15422 | 1 | 97999 |
| 15424 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o \pi^0 \pi^- \omega, a_0^0 	o \pi^0 \eta, \omega 	o \pi^0 \pi^+ \pi^-, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15423 | 1 | 98000 |
| 15425 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^- \bar{K}^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 15424 | 1 | 98001 |
| 15426 | $J/\psi 	o \pi^0 a_2^+ b_1^-, a_2^+ 	o \pi^0 ho^+, b_1^- 	o \pi^- \omega, ho^+ 	o \pi^0 \pi^+, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 15425 | 1 | 98002 |
| 15427 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15426 | 1 | 98003 |
| 15428 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^-K^+, a_0^+ \to \pi^+\eta\gamma^f, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 15427 | 1 | 98004 |
| 15429 | $J/\psi \to a_0^0 h_1(1170), a_0^0 \to \pi^0 \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 15428 | 1 | 98005 |
| 15430 | $J/\psi \to \pi^- \bar{\Sigma}^0 \Sigma^+, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Sigma^+ \to \pi^0 p, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^-ar{n}p\gamma$ | 15429 | 1 | 98006 |
| 15431 | $J/\psi \to \pi^0 \pi^+ a_2^- a_0^0, a_2^- \to \rho^0 \pi^-, a_0^0 \to \pi^0 \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 1220 | 1 | 98007 |
| 15432 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to K^0 \gamma, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 3910 | 1 | 98008 |
| 15433 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to \pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0K^+K^-\gamma^F$ | 15432 | 1 | 98009 |
| 15434 | $J/\psi \to \pi^0 \omega f_1(1285), \omega \to \pi^0 \gamma, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 6287 | 1 | 98010 |
| 15435 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 15434 | 1 | 98011 |
| 15436 | $J/\psi \to K^- K^{*+} h_1(1380), K^{*+} \to \pi^0 K^+, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+K^+K^-$ | 15435 | 1 | 98012 |
| 15437 | $J/\psi 	o \pi^0 \pi^+ \omega a_0^-, \omega 	o \pi^0 \pi^+ \pi^-, a_0^- 	o K^0 K^-, K^0 	o K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 1553 | 1 | 98013 |
| 15438 | $J/\psi ightarrow \pi^+\pi^-\eta^\prime, \eta^\prime ightarrow \pi^0\pi^0\eta, \eta ightarrow \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 15437 | 1 | 98014 |
| 15439 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^- \rho^- h_1(1170), \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15438 | 1 | 98015 |
| 15440 | $J/\psi \to \eta K^+ K_1^-, \eta \to \pi^0 \pi^0 \pi^0, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 15439 | 1 | 98016 |
| 15441 | $J/\psi \to \pi^+ K^0 K^{*-} \phi, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15440 | 1 | 98017 |
| 15442 | $J/\psi 	o \pi^0 \eta K^+ K^{*-}, \eta 	o \pi^0 \pi^+ \pi^-, K^{*-} 	o \pi^- ar K^0, ar K^0 	o K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 15441 | 1 | 98018 |
| 15443 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^0 K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 15442 | 1 | 98019 |
| 15444 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15443 | 1 | 98020 |
| 15445 | $J/\psi \rightarrow \rho^+ \rho^- \omega, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^+ \pi^+ \pi^- \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 3912 | 1 | 98021 |
| 15446 | $J/\psi \to \bar{K}^0 \Sigma^- \bar{\Xi}^+, \bar{K}^0 \to K_S^0, \Sigma^- \to \pi^- n, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, K_S^0 \to \pi^+ \pi^-, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^+\pi^-\pi^-n\bar{p}$ | 15445 | 1 | 98022 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15447 | $J/\psi \to \pi^- \omega a_0^0 a_0^+, \omega \to \pi^0 \gamma, a_0^0 \to \pi^0 \eta, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, $ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 15446 | 1 | 98023 |
| 15448 | $J/\psi \to K^{0}\bar{K}^{0}f_{2}^{'}, K^{0} \to K_{S}^{0}, \bar{K}^{0} \to K_{S}^{0}, f_{2}^{'} \to K^{+}K^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15447 | 1 | 98024 |
| 15449 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 15448 | 1 | 98025 |
| 15450 | $J/\psi 	o \Lambda ar{\Lambda}, \Lambda 	o \pi^- p \gamma^F, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^+\pi^-par p\gamma^F$ | 15449 | 1 | 98026 |
| 15451 | $J/\psi \to \bar{K}^0 K^* f_1(1285), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_1(1285) \to \pi^- a_0^+, K_S^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma$ | 15450 | 1 | 98027 |
| 15452 | $J/\psi \to \pi^+ b_1^0 b_1^- \gamma^F, b_1^0 \to \pi^0 \omega, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 6290 | 1 | 98028 |
| 15453 | $J/\psi \to \pi^0 \pi^0 \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 15452 | 1 | 98029 |
| 15454 | $J/\psi ightarrow ho^- b_1^+ \gamma \gamma^f, ho^- ightarrow \pi^0 \pi^-, b_1^+ ightarrow \pi^+ \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 15453 | 1 | 98030 |
| 15455 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15454 | 1 | 98031 |
| 15456 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15455 | 1 | 98032 |
| 15457 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^{*+} K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \rho^0 K^-, K^0 \to K_S^0, $ $\rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 15456 | 1 | 98033 |
| 15458 | $J/\psi \to K^{*-}K_1^{'+}\gamma, K^{*-} \to \pi^0 K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 6291 | 1 | 98034 |
| 15459 | $J/\psi \to \pi^0 \omega f_2(1270), \omega \to \pi^+ \pi^- \gamma^F, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15458 | 1 | 98035 |
| 15460 | $J/\psi \to \pi^0 K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 15459 | 1 | 98036 |
| 15461 | $J/\psi \to K^0 \bar{K}^* \phi \gamma, K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^0_L K^0_S, K^0_S \to \pi^0 \pi^0, \ \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-\gamma$ | 15460 | 1 | 98037 |
| 15462 | $J/\psi \to f_2(1270)K^-K^{*+}, f_2(1270) \to \pi^0\pi^0, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 15461 | 1 | 98038 |
| 15463 | $J/\psi ightarrow \pi^0\pi^-a_1^+, a_1^+ ightarrow ho^0\pi^+, ho^0 ightarrow \eta\gamma, \eta ightarrow \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 15462 | 1 | 98039 |
| 15464 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \gamma, a_0^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma$ | 15463 | 1 | 98040 |
| 15465 | $J/\psi \to \omega K^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 15464 | 1 | 98041 |
| 15466 | $J/\psi \to \rho^- K^+ \bar{K}_0^{*0}, \rho^- \to \pi^0 \pi^-, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 15465 | 1 | 98042 |
| 15467 | $J/\psi ightarrow \pi^0 \eta a_0^0 \gamma, \eta ightarrow \gamma \gamma, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma\gamma\gamma$ | 15466 | 1 | 98043 |
| 15468 | $J/\psi \to \pi^- a_0^+ f_0(1370) \gamma^F, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15467 | 1 | 98044 |
| 15469 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 15468 | 1 | 98045 |
| 15470 | $J/\psi \to K^+K^-\eta'\phi, \eta' \to \pi^+\pi^-\eta, \phi \to K^0_LK^0_S, \eta \to \pi^0\pi^0\pi^0, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 15469 | 1 | 98046 |
| 15471 | $J/\psi \to \pi^0 \rho^0 \rho^0 \pi^+ a_2^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 15470 | 1 | 98047 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 15472 | $J/\psi \to \rho^0 \pi^- a_2^+ \omega, \rho^0 \to \pi^+ \pi^-, a_2^+ \to \pi^+ \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 15471 | 1 | 98048 |
| 15473 | $J/\psi \to \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15472 | 1 | 98049 |
| 15474 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \pi^0\pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15473 | 1 | 98050 |
| 15475 | $J/\psi \to \eta K^+ K^- \phi, \eta \to \gamma \gamma, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 15474 | 1 | 98051 |
| 15476 | $J/\psi \to \phi f_0(2020), \phi \to K^+K^-, f_0(2020) \to \eta \eta', \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \pi^+\pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 364 | 1 | 98052 |
| 15477 | $J/\psi \to \pi^+\pi^-\Lambda\bar{\Lambda}, \Lambda \to \pi^-p, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p$ | 15476 | 1 | 98053 |
| 15478 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, K_1^- \to \pi^0 K_0^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15477 | 1 | 98054 |
| 15479 | $J/\psi \to \rho^+ K^0 \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 15478 | 1 | 98055 |
| 15480 | $J/\psi \to K^- K^{*+} \phi, K^{*+} \to \pi^+ K^0, \phi \to \eta \gamma, K^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 15479 | 1 | 98056 |
| 15481 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_L^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 15480 | 1 | 98057 |
| 15482 | $J/\psi \to \pi^0 \bar{K}^* K^+ a_0^-, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^- \to \pi^- \eta, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 15481 | 1 | 98058 |
| 15483 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^+ \rho^-, f_1(1285) \to \pi^0 a_0^0, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 15482 | 1 | 98059 |
| 15484 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^- K_1^+, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 15483 | 1 | 98060 |
| 15485 | $J/\psi \to \eta K^+ K_1^-, \eta \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15484 | 1 | 98061 |
| 15486 | $J/\psi \to \rho^+ a_2^- f_2(1270), \rho^+ \to \pi^+ \gamma, a_2^- \to \rho^0 \pi^-, f_2(1270) \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15485 | 1 | 98062 |
| 15487 | $J/\psi \to \pi^+ K^0 K_1^- \gamma^F, K^0 \to K_S^0, K_1^- \to \omega K^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 3914 | 1 | 98063 |
| 15488 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, f_0(1370) \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 15487 | 1 | 98064 |
| 15489 | $J/\psi \to \phi f_0(980), \phi \to \pi^+ \rho^-, f_0(980) \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15488 | 1 | 98065 |
| 15490 | $J/\psi \to \pi^0 K^0 \bar{K}^0 b_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 15489 | 1 | 98066 |
| 15491 | $J/\psi \to \pi^+ K^0 K^{*-} \gamma^f, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15490 | 1 | 98067 |
| 15492 | $J/\psi \to \pi^+ K^* \bar{p} \Lambda, K^* \to \pi^0 K^0, \Lambda \to \pi^- p, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- p ar p$ | 15491 | 1 | 98068 |
| 15493 | $J/\psi \to \pi^+ \rho^- f_2(1270)\gamma^f, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15492 | 1 | 98069 |
| 15494 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 15493 | 1 | 98070 |
| 15495 | $J/\psi \to \pi^0\pi^-\rho^+\rho^-\bar{K}^0K^+, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15494 | 1 | 98071 |
| 15496 | $J/\psi \to \pi^0 h_1(1170) a_1^0, h_1(1170) \to \pi^0 \rho^0, a_1^0 \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 15495 | 1 | 98072 |
| 15497 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 15496 | 1 | 98073 |
| 15498 | $J/\psi \to \pi^0 \bar{K}^* K^+ b_1^-, \bar{K}^* \to \pi^+ K^-, b_1^- \to \pi^- \omega, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15497 | 1 | 98074 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15499 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $K_L^0K_L^0\pi^+\pi^-$ | 15498 | 1 | 98075 |
| 15500 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^- \gamma^f, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 15499 | 1 | 98076 |
| 15501 | $J/\psi \to \rho^0 a_0^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15500 | 1 | 98077 |
| 15502 | $J/\psi \to \rho^- \bar{K}^* K^+ \phi, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 15501 | 1 | 98078 |
| 15503 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15502 | 1 | 98079 |
| 15504 | $J/\psi \to \pi^- K^+ \bar{K}^0_1, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15503 | 1 | 98080 |
| 15505 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \pi^+ K^* \gamma^f, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 15504 | 1 | 98081 |
| 15506 | $J/\psi \to \pi^+ K_2^{*0} K_0^{*-}, K_2^{*0} \to \pi^- K^{*+}, K_0^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15505 | 1 | 98082 |
| 15507 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \gamma\gamma$ | $K^+K^-\gamma\gamma\gamma\gamma$ | 15506 | 1 | 98083 |
| 15508 | $J/\psi \to K^0 \phi \bar{K}^0_1, K^0 \to K^0_S, \phi \to K^0_L K^0_S, \bar{K}^0_1 \to \rho^+ K^-, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 15507 | 1 | 98084 |
| 15509 | $J/\psi \to \pi^0 K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 15508 | 1 | 98085 |
| 15510 | $J/\psi \to \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega \gamma^f, f_1(1285) \to \rho^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 15509 | 1 | 98086 |
| 15511 | $J/\psi \to \pi^+ K_0^0 K_1^-, K_0^0 \to \pi^- K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 15510 | 1 | 98087 |
| 15512 | $J/\psi \to \pi^- a_0^0 a_1^+, a_0^0 \to K^+ K^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 15511 | 1 | 98088 |
| 15513 | $J/\psi \to \pi^0 \pi^+ \pi^- \omega b_1^0, \omega \to \pi^0 \pi^+ \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 6294 | 1 | 98089 |
| 15514 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \rho^- K^0, K_1^+ \to \pi^+ K_0^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 3915 | 1 | 98090 |
| 15515 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 15514 | 1 | 98091 |
| 15516 | $J/\psi 	o \pi^0 ho^0 a_2^0, ho^0 	o \pi^+ \pi^-, a_2^0 	o \pi^0 \eta, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15515 | 1 | 98092 |
| 15517 | $J/\psi \to \eta K^+ \bar{K}_1^{'-}, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15516 | 1 | 98093 |
| 15518 | $J/\psi 	o a_2^- ar{K}^* K^+, a_2^- 	o \pi^- \eta, ar{K}^* 	o \pi^0 ar{K}^0, \eta 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 15517 | 1 | 98094 |
| 15519 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 15518 | 1 | 98095 |
| 15520 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^0 \pi^0, $ $\rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15519 | 1 | 98096 |
| 15521 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0\pi^0K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15520 | 1 | 98097 |
| 15522 | $J/\psi \to \pi^0 \rho^0 \pi^+ \rho^- h_1(1170), \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15521 | 1 | 98098 |
| 15523 | $J/\psi \to K^-K^{*+}h_1(1170), K^{*+} \to \pi^0K^+, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-\gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{f}$ | 15522 | 1 | 98099 |
| 15524 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 15523 | 1 | 98100 |
| 15525 | $J/\psi \to K^- \phi K_1^+, \phi \to K_L^0 K_S^0, K_1^+ \to \rho^0 K^+, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 15524 | 1 | 98101 |
| 15526 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 15525 | 1 | 98102 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15527 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^- K^+$ | 15526 | 1 | 98103 |
| 15528 | $J/\psi \to \pi^- K^{*+} \bar{K}^0_1, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^+ K^{*-}, K^0 \to K^0_L, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 15527 | 1 | 98104 |
| 15529 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 6296 | 1 | 98105 |
| 15530 | $J/\psi \to K_2^{*0} K^+ a_0^-, K_2^{*0} \to \pi^+ K^-, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 15529 | 1 | 98106 |
| 15531 | $J/\psi \to a_2^- \bar{K}^0 K^+, a_2^- \to \pi^- \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15530 | 1 | 98107 |
| 15532 | $J/\psi \rightarrow \pi^+ \rho^- \eta', \rho^- \rightarrow \pi^0 \pi^-, \eta' \rightarrow \pi^+ \pi^- \eta, \pi^0 \rightarrow e^+ e^- \gamma^F, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15531 | 1 | 98108 |
| 15533 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 15532 | 1 | 98109 |
| 15534 | $J/\psi 	o \pi^+ K^0 K^- a^0_0, K^0 	o K^0_L, a^0_0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 15533 | 1 | 98110 |
| 15535 | $J/\psi \to \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 15534 | 1 | 98111 |
| 15536 | $J/\psi \to \rho^0 K^0 \bar{K}^0 \gamma, \rho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 15535 | 1 | 98112 |
| 15537 | $J/\psi \to K_{2}^{*-}K_{1}^{'+}, K_{2}^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{+}K^{*}, \bar{K}^{0} \to K_{S}^{0}, K^{*} \to \pi^{-}K^{+}, K_{S}^{0} \to \pi^{+}\pi^{-}\gamma^{f}$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 15536 | 1 | 98113 |
| 15538 | $J/\psi \to \bar{K}^*K^{*+}a_0^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, a_0^- \to \pi^-\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 15537 | 1 | 98114 |
| 15539 | $J/\psi \to \pi^- K^0_S K^+ \phi, K^0_S \to \pi^0 \pi^0, \phi \to K^0_L K^0_S, \pi^0 \to e^+ e^- \gamma^F, K^0_S \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 15538 | 1 | 98115 |
| 15540 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15539 | 1 | 98116 |
| 15541 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^0 \rho^0, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15540 | 1 | 98117 |
| 15542 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^0 K^*, \bar{K}_1^0 \to \omega \bar{K}^0, K^* \to \pi^0 K^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 15541 | 1 | 98118 |
| 15543 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 15542 | 1 | 98119 |
| 15544 | $J/\psi \to \pi^0 K^+ K^- f_1(1285), f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 15543 | 1 | 98120 |
| 15545 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^+ e^- e^-$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}K_{L}^{0}\pi^{+}K^{-}$ | 15544 | 1 | 98121 |
| 15546 | $J/\psi ightarrow ho^0 \eta K^0 ar{K}^*, ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \gamma \gamma, K^0 ightarrow K_L^0, ar{K}^* ightarrow \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 15545 | 1 | 98122 |
| 15547 | $J/\psi \to \pi^0 \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15546 | 1 | 98123 |
| 15548 | $J/\psi \to K^{*-}K_{1}^{'+}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'+} \to \pi^{0}K^{*+}, \bar{K}^{0} \to K_{S}^{0}, K^{*+} \to \pi^{+}K^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15547 | 1 | 98124 |
| 15549 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^0 K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 15548 | 1 | 98125 |
| 15550 | $J/\psi 	o \pi^- \omega K^+ ar{K}_1^{'0}, \omega 	o \pi^0 \pi^+ \pi^-, ar{K}_1^{'0} 	o ho^0 ar{K}^0, ho^0 	o \pi^+ \pi^-, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 15549 | 1 | 98126 |
| 15551 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^- K^+ \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 15550 | 1 | 98127 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 15552 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^0K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 15551 | 1 | 98128 |
| 15553 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \\ \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 15552 | 1 | 98129 |
| 15554 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \gamma^F, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 15553 | 1 | 98130 |
| 15555 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15554 | 1 | 98131 |
| 15556 | $J/\psi \to \pi^0 K_2^{*0} K_2^{*0}, K_2^{*0} \to \rho^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15555 | 1 | 98132 |
| 15557 | $J/\psi \to K^+ {\bar K}_1^{'-} \gamma^f, {\bar K}_1^{'-} \to \pi^- {\bar K}^*, {\bar K}^* \to \pi^0 {\bar K}^0, {\bar K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^f$ | 15556 | 1 | 98133 |
| 15558 | $J/\psi \to \pi^0 \pi^+ \pi^- f_2(1270) f_0(1370), f_2(1270) \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15557 | 1 | 98134 |
| 15559 | $J/\psi \to K^0 \bar{K}^0 K^+ K^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K^+K^-$ | 15558 | 1 | 98135 |
| 15560 | $J/\psi \to \pi^- \bar{p} \Delta^{++} \gamma^F, \Delta^{++} \to \pi^+ p$ | $\pi^+\pi^-par p\gamma^F$ | 15559 | 1 | 98136 |
| 15561 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15560 | 1 | 98137 |
| 15562 | $J/\psi \to \pi^0 K^- K^{*+} \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^f$ | 15561 | 1 | 98138 |
| 15563 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^0 \bar{K}_0^{*0}, \eta \to \gamma \gamma, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma \gamma$ | 642 | 1 | 98139 |
| 15564 | $J/\psi \to \pi^0 \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15563 | 1 | 98140 |
| 15565 | $J/\psi ightarrow \eta \eta' \gamma, \eta ightarrow \pi^0 \pi^0 \pi^0, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 15564 | 1 | 98141 |
| 15566 | $J/\psi \to \pi^+ \rho^- \eta f_0(1370), \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15565 | 1 | 98142 |
| 15567 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 15566 | 1 | 98143 |
| 15568 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- \eta', \rho^- \to \pi^0 \pi^-, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 15567 | 1 | 98144 |
| 15569 | $J/\psi \to \omega f_0(1370) f_0(1370), \omega \to \pi^0 \gamma, f_0(1370) \to \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15568 | 1 | 98145 |
| 15570 | $J/\psi \to \pi^0 \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^+ \Lambda, \bar{\Sigma}^{*-} \to \pi^- \bar{\Sigma}^0, \Lambda \to \pi^0 n, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 15569 | 1 | 98146 |
| 15571 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta' \to \rho^0 \gamma, \phi \to K^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 6298 | 1 | 98147 |
| 15572 | $J/\psi \to K^+K^{*-}f_0(1370), K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \rho^0\rho^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15571 | 1 | 98148 |
| 15573 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6299 | 1 | 98149 |
| 15574 | $J/\psi 	o a_2^0 \pi^- b_1^+, a_2^0 \overset{L}{	o} K^+ K^-, b_1^+ 	o \pi^+ \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15573 | 1 | 98150 |
| 15575 | $J/\psi \to \pi^0 \bar{K}^* K_1^{'0}, \bar{K}^* \to \pi^+ K^-, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 6300 | 1 | 98151 |
| 15576 | $J/\psi \to ho^0 a_2^0 f_2(1270), ho^0 \to \pi^+ \pi^-, a_2^0 \to K_L^0 K_L^0, f_2(1270) \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15575 | 1 | 98152 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 15577 | $J/\psi \to \omega a_0^0 a_1^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, a_1^0 \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15576 | 1 | 98153 |
| 15578 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 15577 | 1 | 98154 |
| 15579 | $J/\psi \to K^0 a_0^+ \bar{K}_1^{'-}, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, \bar{K}_1^{'-} \to \pi^- \bar{K}^* \gamma^f, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K^0_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^f$ | 15578 | 1 | 98155 |
| 15580 | $J/\psi 	o \pi^0 n ar{n}, \pi^0 	o e^+ e^- \gamma^F \gamma^f$ | $e^+e^-nar{n}\gamma^F\gamma^f$ | 6301 | 1 | 98156 |
| 15581 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\omega, \omega 	o \pi^+\pi^-\gamma^f$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15580 | 1 | 98157 |
| 15582 | $J/\psi \to K^* \bar{K}^* a_0^0 \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\gamma\gamma\gamma$ | 15581 | 1 | 98158 |
| 15583 | $J/\psi \to \eta K^{*+} K_1^-, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15582 | 1 | 98159 |
| 15584 | $J/\psi \to \rho^- \bar{K}^* K^+ \gamma^F, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 15583 | 1 | 98160 |
| 15585 | $J/\psi \to K_2^{*0} \bar{K}_0^{*0}, K_2^{*0} \to \pi^0 K^*, \bar{K}_0^{*0} \to \pi^+ K^-, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 15584 | 1 | 98161 |
| 15586 | $J/\psi \to \pi^0 \omega \omega \omega, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15585 | 1 | 98162 |
| 15587 | $J/\psi \to \eta' \phi, \eta' \to \pi^0 \pi^0 \eta, \phi \to K^+ K^-, \eta \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^0K^+K^-\gamma^F\gamma^f$ | 15586 | 1 | 98163 |
| 15588 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6302 | 1 | 98164 |
| 15589 | $J/\psi ightarrow ho^0 \eta \eta', ho^0 ightarrow \pi^+ \pi^-, \eta ightarrow \gamma \gamma, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 15588 | 1 | 98165 |
| 15590 | $J/\psi \rightarrow a_2^0\omega, a_2^0 \rightarrow \pi^-\rho^+, \omega \rightarrow \pi^0\pi^+\pi^-, \rho^+ \rightarrow \pi^0\pi^+, \pi^0 \rightarrow e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 15589 | 1 | 98166 |
| 15591 | $J/\psi \to \pi^0 K_2^{*+} K_2^{*-}, K_2^{*+} \to \omega K^+, K_2^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 15590 | 1 | 98167 |
| 15592 | $J/\psi \to \pi^+ K^0 K^{*-} h_1(1170), K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15591 | 1 | 98168 |
| 15593 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15592 | 1 | 98169 |
| 15594 | $J/\psi \to \pi^+ K^0 K^{*-} h_1(1170), K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15593 | 1 | 98170 |
| 15595 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 15594 | 1 | 98171 |
| 15596 | $J/\psi \to K^{*+}K^{*-}\eta', K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, \eta' \to \pi^+\pi^-\eta, K^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 15595 | 1 | 98172 |
| 15597 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ a_2^- \eta, a_2^- 	o \pi^0 ho^-, \eta 	o \pi^+ \pi^- \gamma^F, ho^- 	o \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 15596 | 1 | 98173 |
| 15598 | $J/\psi \to \pi^0 \pi^0 \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 15597 | 1 | 98174 |
| 15599 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15598 | 1 | 98175 |
| 15600 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ a_0^- a_1^0, a_0^- \to \pi^- \eta, a_1^0 \to \pi^- \rho^+, \eta \to \pi^+ \pi^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma$ | 15599 | 1 | 98176 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15601 | $J/\psi \to \pi^- \bar{K}^* p \bar{\Lambda}, \bar{K}^* \to \pi^+ K^-, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^+\pi^-K^-\bar{n}p$ | 15600 | 1 | 98177 |
| 15602 | $J/\psi \to \pi^+\pi^-\eta K^+K^-, \eta \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 15601 | 1 | 98178 |
| 15603 | $J/\psi \to K_2^{*0} K^+ a_0^-, K_2^{*0} \to \omega \bar{K}^0, a_0^- \to \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma \gamma$ | 15602 | 1 | 98179 |
| 15604 | $J/\psi \to \pi^+\pi^-\rho^+\omega a_0^-, \rho^+ \to \pi^0\pi^+, \omega \to \pi^0\pi^+\pi^-, a_0^- \to \pi^-\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 15603 | 1 | 98180 |
| 15605 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 15604 | 1 | 98181 |
| 15606 | $J/\psi \to \rho^0 \pi^+ \pi^+ \rho^- a_0^-, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 15605 | 1 | 98182 |
| 15607 | $J/\psi \to \pi^0 \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 15606 | 1 | 98183 |
| 15608 | $J/\psi \to \pi^0 \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K_L^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 15607 | 1 | 98184 |
| 15609 | $J/\psi \to \Xi^-\bar{\Xi}^{*+}, \Xi^- \to \pi^-\Lambda, \bar{\Xi}^{*+} \to \pi^0\bar{\Xi}^+, \Lambda \to \pi^0 n, \bar{\Xi}^+ \to \pi^+\bar{\Lambda}, \bar{\Lambda} \to \pi^0\bar{n}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 3917 | 1 | 98185 |
| 15610 | $J/\psi \to \bar{K}^*K^{*+}b_1^-, \bar{K}^* \to \pi^0\bar{K}^0, K^{*+} \to \pi^+K^0, b_1^- \to \pi^-\omega, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15609 | 1 | 98186 |
| 15611 | $I/2/\longrightarrow \pi^0 c^0 \pi^- \bar{K}^* K^{*+} c^0 \longrightarrow \pi^+ \pi^- \bar{K}^* \longrightarrow \pi^+ K^- K^{*+} \longrightarrow \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15610 | 1 | 98187 |
| 15612 | $J/\psi \to a_2^+ K^0 K_0^{*-}, a_2^+ \to \pi^0 \rho^+, K^0 \to K_S^0, K_0^{*-} \to \pi^0 K^-, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15611 | 1 | 98188 |
| 15613 | $J/\psi \to \pi^0 \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15612 | 1 | 98189 |
| 15614 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 15613 | 1 | 98190 |
| 15615 | $J/\psi \rightarrow \pi^+ \eta' b_1^-, \eta' \rightarrow \pi^0 \pi^0 \eta, b_1^- \rightarrow \pi^- \omega, \eta \rightarrow \pi^0 \pi^+ \pi^-, \omega \rightarrow \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 6304 | 1 | 98191 |
| 15616 | $J/\psi \to \pi^+ f_2(1270) a_1^-, f_2(1270) \to \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15615 | 1 | 98192 |
| 15617 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-$ | 2734 | 1 | 98193 |
| 15618 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15617 | 1 | 98194 |
| 15619 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15618 | 1 | 98195 |
| 15620 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 15619 | 1 | 98196 |
| 15621 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to K_L^0 K_L^0, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 6306 | 1 | 98197 |
| 15622 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \gamma \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 15621 | 1 | 98198 |
| 15623 | $J/\psi \to h_1(1380)f_1(1420), h_1(1380) \to K^0\bar{K}^*, f_1(1420) \to \pi^+K^0K^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-, K^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ K^- K^-$ | 6307 | 1 | 98199 |
| 15624 | $J/\psi \to \rho^0 a_2^0 \eta, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^0 \eta, \eta \to \gamma \gamma, \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 15623 | 1 | 98200 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 15625 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15624 | 1 | 98201 |
| 15626 | $J/\psi \to K^{0}\bar{K}^{0}f_{2}', K^{0} \to K_{S}^{0}, \bar{K}^{0} \to K_{L}^{0}, f_{2}' \to K_{S}^{0}K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 6308 | 1 | 98202 |
| 15627 | $J/\psi \to \eta \eta' h_1(1380), \eta \to \pi^+ \pi^- \gamma^F, \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to K^+ K^{*-}, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma^F\gamma\gamma$ | 15626 | 1 | 98203 |
| 15628 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15627 | 1 | 98204 |
| 15629 | $J/\psi \to \pi^0 \bar{K}^0 K^* \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 15628 | 1 | 98205 |
| 15630 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15629 | 1 | 98206 |
| 15631 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 15630 | 1 | 98207 |
| 15632 | $J/\psi \to f_0(1370)h_1(1170), f_0(1370) \to K^+K^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 15631 | 1 | 98208 |
| 15633 | $J/\psi \to \pi^0 a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^+ \pi^- \omega, a_2^- \to \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 15632 | 1 | 98209 |
| 15634 | $J/\psi \to K^+K^-f_1(1420)\gamma^f, f_1(1420) \to \pi^0K^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^- \gamma^f$ | 15633 | 1 | 98210 |
| 15635 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^0 \pi^- \omega, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 15634 | 1 | 98211 |
| 15636 | $J/\psi \to \pi^- \rho^+ a_2^+ b_1^-, \rho^+ \to \pi^0 \pi^+, a_2^+ \to \rho^0 \pi^+, b_1^- \to \pi^- \omega, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15635 | 1 | 98212 |
| 15637 | $J/\psi 	o \pi^- ar{\Sigma}^{*+} \Sigma^0, ar{\Sigma}^{*+} 	o \pi^+ ar{\Lambda}, \Sigma^0 	o \Lambda \gamma, ar{\Lambda} 	o \pi^+ ar{p}, \Lambda 	o \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 15636 | 1 | 98213 |
| 15638 | $J/\psi \to \rho^0 \rho^0 \pi^+ \pi^- f_1(1285), \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-$ | 15637 | 1 | 98214 |
| 15639 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 15638 | 1 | 98215 |
| 15640 | $J/\psi \to K^0 K^- a_0^+ \gamma^F, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-K^-\gamma^F\gamma\gamma$ | 15639 | 1 | 98216 |
| 15641 | $J/\psi \to \rho^+ K^0 K^{*-} \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15640 | 1 | 98217 |
| 15642 | $J/\psi \to ho^0 \pi^+ \pi^- \pi^- b_1^+, ho^0 \to \pi^+ \pi^- \gamma^F, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 15641 | 1 | 98218 |
| 15643 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 15642 | 1 | 98219 |
| 15644 | $J/\psi \to \rho^+ K^0 \bar{K}_1^{'-} \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 15643 | 1 | 98220 |
| 15645 | $J/\psi \to \rho^- \eta a_0^+, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma, a_0^+ \to \pi^+ \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^0 \pi^0$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 15644 | 1 | 98221 |
| 15646 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15645 | 1 | 98222 |
| 15647 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_0^+ \to \bar{K}^0 K^+, a_0^- \to \pi^- \eta \gamma^f, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f\gamma^f$ | 15646 | 1 | 98223 |
| 15648 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 2735 | 1 | 98224 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 15649 | $J/\psi \to \pi^{0} \rho^{0} a_{0}^{+} a_{0}^{-}, \rho^{0} \to \pi^{+} \pi^{-}, a_{0}^{+} \to \pi^{+} \eta, a_{0}^{-} \to \pi^{-} \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^{+} \pi^{-} \gamma^{F}$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma$ | 15648 | 1 | 98225 |
| 15650 | $J/\psi \to \pi^0 K^+ K^{*-} h_1(1170), K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 15649 | 1 | 98226 |
| 15651 | $J/\psi \to \pi^+ b_1^- f_0(1370), b_1^- \to \pi^- \omega, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15650 | 1 | 98227 |
| 15652 | $J/\psi \to \eta K^+ K^{*-} b_1^0, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 15651 | 1 | 98228 |
| 15653 | $J/\psi \to K^0 \bar{\Sigma}^0 \Xi^0, K^0 \to K_S^0, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \Xi^0 \to \pi^0 \Lambda, K_S^0 \to \pi^+ \pi^- \gamma^F, \\ \bar{\Lambda} \to \pi^0 \bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma^F\gamma$ | 15652 | 1 | 98229 |
| 15654 | $J/\psi \to \pi^- ho^+ K^0 \bar{K}^0_1, ho^+ \to \pi^0 \pi^+, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15653 | 1 | 98230 |
| 15655 | $J/\psi \to \rho^0 \pi^- K^0 \bar{K}^0 b_1^+, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, b_1^+ \to \pi^+ \omega, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15654 | 1 | 98231 |
| 15656 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \omega \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15655 | 1 | 98232 |
| 15657 | $J/\psi 	o a_2^0 K^0 ar K^0, a_2^0 	o \pi^- ho^+, K^0 	o K_S^0, ar K^0 	o K_L^0, ho^+ 	o \pi^0 \pi^+ \gamma^f, K_S^0 	o \pi^0 \pi^0$ | $\pi^0 \pi^0 \pi^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 15656 | 1 | 98233 |
| 15658 | $J/\psi ightarrow a_2^- ar{n} p, a_2^- ightarrow \pi^0 ho^-, ho^- ightarrow \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^-ar{n}p\gamma^f$ | 15657 | 1 | 98234 |
| 15659 | $J/\psi \to \pi^0 \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15658 | 1 | 98235 |
| 15660 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 15659 | 1 | 98236 |
| 15661 | $J/\psi \to \eta \Delta^{++} \bar{\Delta}^{++}, \eta \to \pi^+ \pi^- \gamma^F, \Delta^{++} \to \pi^+ p, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma^F$ | 3920 | 1 | 98237 |
| 15662 | $J/\psi \to \omega \omega h_1(1170), \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 15661 | 1 | 98238 |
| 15663 | $J/\psi \to \pi^0\pi^-\omega \bar{K}^0K_1^+, \omega \to \pi^0\pi^+\pi^-, \bar{K}^0 \to K_L^0, K_1^+ \to \pi^+K_0^0, K_0^0 \to \pi^-K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15662 | 1 | 98239 |
| 15664 | $J/\psi \to K^0 K_1^- a_1^+, K^0 \to K_S^0, K_1^- \to \rho^0 K^-, a_1^+ \to \pi^0 \rho^+, K_S^0 \to \pi^0 \pi^0, $ $\rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15663 | 1 | 98240 |
| 15665 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \phi \to K^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 15664 | 1 | 98241 |
| 15666 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to \pi^+\pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15665 | 1 | 98242 |
| 15667 | $J/\psi 	o K^0 ar{K}^0 K^+ K^-, K^0 	o K^0_S, ar{K}^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0, K^0_S 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15666 | 1 | 98243 |
| 15668 | $J/\psi \to K^0 \bar{K}^* b_1^0, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 15667 | 1 | 98244 |
| 15669 | $J/\psi \to \eta K^* K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15668 | 1 | 98245 |
| 15670 | $J/\psi \to \eta K^{*+} K_0^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 15669 | 1 | 98246 |
| 15671 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 15670 | 1 | 98247 |
| 15672 | $J/\psi \to K^- K_1^{'+} \gamma^f, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 15671 | 1 | 98248 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15673 | $J/\psi \to \rho^0 K^+ K_1^-, \rho^0 \to \pi^+ \pi^-, K_1^- \to \pi^+ \pi^- K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 15672 | 1 | 98249 |
| 15674 | $J/\psi \to \eta K^{*-}K_0^{*+}, \eta \to \gamma \gamma, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 15673 | 1 | 98250 |
| 15675 | $J/\psi \to \pi^+\pi^-\bar{K}^*K_1^{'0}, \bar{K}^* \to \pi^0\bar{K}^0, K_1^{'0} \to \pi^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 15674 | 1 | 98251 |
| 15676 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, $ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 15675 | 1 | 98252 |
| 15677 | $J/\psi \to \bar{K}^0 a_0^0 K_1^0, \bar{K}^0 \to K_S^0, a_0^0 \to \pi^0 \eta, K_1^0 \to \rho^- K^+, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 15676 | 1 | 98253 |
| 15678 | $J/\psi 	o \Delta^0 \bar{\Delta}^0, \Delta^0 	o \pi^0 n, \bar{\Delta}^0 	o \pi^+ \bar{p}, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^+nar{p}\gamma^F$ | 3921 | 1 | 98254 |
| 15679 | $J/\psi \to \pi^+ a_0^- h_1(1170), a_0^- \to \pi^- \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15678 | 1 | 98255 |
| 15680 | $J/\psi \to \rho^- a_0^+ f_1(1285), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_1(1285) \to \pi^0 K^+ K^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 3922 | 1 | 98256 |
| 15681 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^0 K^{*-}, K_1^+ \to \rho^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 15680 | 1 | 98257 |
| 15682 | $J/\psi \to \pi^- \eta \omega \bar{K}^0 K^{*+}, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 15681 | 1 | 98258 |
| 15683 | $J/\psi \to \pi^0 f_2(1270) K^+ K^{*-}, f_2(1270) \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15682 | 1 | 98259 |
| 15684 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 15683 | 1 | 98260 |
| 15685 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 15684 | 1 | 98261 |
| 15686 | $J/\psi \to \pi^- K^{*+} \bar{K}^0_1, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^0 \bar{K}^*, K^0 \to K^0_L, \bar{K}^* \to \pi^+ K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 15685 | 1 | 98262 |
| 15687 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^+ \pi^+ \pi^- \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 15686 | 1 | 98263 |
| 15688 | $J/\psi \to \bar{K}^* a_0^- K_0^{*+}, \bar{K}^* \to \pi^+ K^-, a_0^- \to \pi^- \eta, K_0^{*+} \to \pi^+ K^0, \eta \to \gamma \gamma, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 15687 | 1 | 98264 |
| 15689 | $J/\psi \to \pi^- \rho^+ \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+ \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 15688 | 1 | 98265 |
| 15690 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^+ \pi^- \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15689 | 1 | 98266 |
| 15691 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to K^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15690 | 1 | 98267 |
| 15692 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 15691 | 1 | 98268 |
| 15693 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^+\pi^-\eta, h_1(1380) \to K^-K^{*+}, \eta \to \pi^0\pi^0\pi^0, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15692 | 1 | 98269 |
| 15694 | $J/\psi \to \overline{K}^0 K^* f_1(1420), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, f_1(1420) \to \pi^+ K^0 K^-, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, K^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}K_{L}^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 15693 | 1 | 98270 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 15695 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^0 \Sigma^+, \bar{\Sigma}^{*-} \to \pi^0 \bar{\Sigma}^-, \Sigma^+ \to \pi^+ n, \bar{\Sigma}^- \to \pi^- \bar{n}$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}$ | 15694 | 1 | 98271 |
| 15696 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K^+ K^- \gamma$ | 15695 | 1 | 98272 |
| 15697 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^0, K_0^0 \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15696 | 1 | 98273 |
| 15698 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0K_L^0$ | 15697 | 1 | 98274 |
| 15699 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^0 \eta, a_2^- \to \pi^0 \rho^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15698 | 1 | 98275 |
| 15700 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 b_1^0 b_1^0, b_1^0 \to \pi^0 \omega, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15699 | 1 | 98276 |
| 15701 | $J/\psi \to \omega K^{*-}K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 15700 | 1 | 98277 |
| 15702 | $J/\psi \to K^- K_0^{*+} \gamma^F, K_0^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+K^-\gamma^F\gamma^F\gamma^f$ | 15701 | 1 | 98278 |
| 15703 | $J/\psi \to \pi^0 a_2^+ K^0 K^-, a_2^+ \to \pi^0 \rho^+, K^0 \to K^0_S, \rho^+ \to \pi^0 \pi^+, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15702 | 1 | 98279 |
| 15704 | $J/\psi \to \pi^+\pi^-K^*K^-a_1^+, K^* \to \pi^0K^0, a_1^+ \to \pi^0\rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15703 | 1 | 98280 |
| 15705 | $J/\psi \to \pi^+\pi^-K_1^-K_1^{'+}, K_1^- \to \rho^0K^-, K_1^{'+} \to \pi^0K^{*+}, \rho^0 \to \pi^+\pi^-\gamma^f, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma^f$ | 15704 | 1 | 98281 |
| 15706 | $J/\psi 	o ho^+ K^- K_1^0, ho^+ 	o \pi^0 \pi^+, K_1^0 	o \omega K^0, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15705 | 1 | 98282 |
| 15707 | $J/\psi \to K^{*+} \bar{K}_1^{'-} \gamma, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 15706 | 1 | 98283 |
| 15708 | $J/\psi ightarrow \eta' \gamma, \eta' ightarrow e^+ e^- \pi^+ \pi^- \gamma^f$ | $e^+e^-\pi^+\pi^-\gamma\gamma^f$ | 15707 | 1 | 98284 |
| 15709 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to \bar{K}^0 K^*, f_1(1420) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^-K^+$ | 15708 | 1 | 98285 |
| 15710 | $J/\psi \to K^*K^-a_0^+, K^* \to \pi^-K^+, a_0^+ \to \bar{K}^0K^+, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 15709 | 1 | 98286 |
| 15711 | $J/\psi \to \eta K^{*+} K_0^{*-}, \eta \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 15710 | 1 | 98287 |
| 15712 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^- \gamma^f, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 15711 | 1 | 98288 |
| 15713 | $J/\psi \to \pi^+\pi^-\rho^+K_2^{*0}K^{*-}, \rho^+ \to \pi^0\pi^+, K_2^{*0} \to \pi^-K^{*+}, K^{*-} \to \pi^0K^-, K^{*+} \to \pi^+K^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 15712 | 1 | 98289 |
| 15714 | $J/\psi \to \pi^0 \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15713 | 1 | 98290 |
| 15715 | $J/\psi \to \pi^0 \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15714 | 1 | 98291 |
| 15716 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^+ K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15715 | 1 | 98292 |
| 15717 | $J/\psi \to K^0 \bar{K}^* K^+ K^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 15716 | 1 | 98293 |
| 15718 | $J/\psi \to \pi^+\pi^-a_0^0a_1^0, a_0^0 \to \pi^0\eta, a_1^0 \to \pi^-\rho^+, \eta \to \gamma\gamma, \rho^+ \to \pi^0\pi^+, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 15717 | 1 | 98294 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15719 | $J/\psi \to \bar{K}^* K^+ a_0^-, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^- \to \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_S^0, \\ \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^+e^-e^-\pi^0\pi^-K^+\gamma^F\gamma^F\gamma\gamma$ | 15718 | 1 | 98295 |
| 15720 | $J/\psi \to K^+ \phi K_1^-, \phi \to K_L^0 K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^+ K^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15719 | 1 | 98296 |
| 15721 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0 \gamma^f, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}$ | 15720 | 1 | 98297 |
| 15722 | $J/\psi \rightarrow \eta' a_0^0 \gamma, \eta' \rightarrow \pi^+ \pi^- \eta, a_0^0 \rightarrow \pi^0 \eta, \eta \rightarrow \gamma \gamma, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma\gamma$ | 15721 | 1 | 98298 |
| 15723 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K_1^+ \to \pi^+ K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^- K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 15722 | 1 | 98299 |
| 15724 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15723 | 1 | 98300 |
| 15725 | $J/\psi 	o \pi^+\pi^-a_0^0 \gamma^f, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0\pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 15724 | 1 | 98301 |
| 15726 | $J/\psi \to \pi^0 \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15725 | 1 | 98302 |
| 15727 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma$ | 15726 | 1 | 98303 |
| 15728 | $J/\psi \rightarrow \rho^0\pi^-\rho^+b_1^0, \rho^0 \rightarrow \pi^+\pi^-, \rho^+ \rightarrow \pi^0\pi^+, b_1^0 \rightarrow \pi^0\omega, \omega \rightarrow \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15727 | 1 | 98304 |
| 15729 | $J/\psi \to \pi^+ p\bar{p}a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma^F$ | 15728 | 1 | 98305 |
| 15730 | $J/\psi \to \pi^+ \rho^- \eta, \rho^- \to \pi^0 \pi^- \gamma^f, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 15729 | 1 | 98306 |
| 15731 | $J/\psi \to \pi^0 \pi^+ \pi^- \rho^+ \rho^- a_0^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 15730 | 1 | 98307 |
| 15732 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_L^0, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 15731 | 1 | 98308 |
| 15733 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 3923 | 1 | 98309 |
| 15734 | $J/\psi \to \pi^+ K^* \bar{K}_1^{'-}, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 15733 | 1 | 98310 |
| 15735 | $J/\psi \to \pi^0 \pi^+ \eta \omega K^0 K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15734 | 1 | 98311 |
| 15736 | $J/\psi \to K^+ K^{*-} \eta', K^{*-} \to \pi^0 K^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 15735 | 1 | 98312 |
| 15737 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \gamma, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 15736 | 1 | 98313 |
| 15738 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^f$ | 15737 | 1 | 98314 |
| 15739 | $J/\psi 	o \omega K^+K^-\gamma^F, \omega 	o \pi^0\pi^+\pi^-, \pi^0 	o e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F\gamma^F\gamma^f$ | 15738 | 1 | 98315 |
| 15740 | $J/\psi ightarrow a_2^0 \pi^+ ho^-, a_2^0 ightarrow \pi^0 \eta, ho^- ightarrow \pi^0 \pi^-, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15739 | 1 | 98316 |
| 15741 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15740 | 1 | 98317 |
| 15742 | $J/\psi 	o \pi^0 \eta' b_1^0, \eta' 	o \pi^0 \pi^0 \eta, b_1^0 	o \pi^0 \gamma, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 15741 | 1 | 98318 |
| 15743 | $J/\psi 	o K^{-}K_{1}^{'+}\gamma^{F}, K_{1}^{'+} 	o ho^{+}K^{0}, ho^{+} 	o \pi^{0}\pi^{+}, K^{0} 	o K_{L}^{0}$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^F$ | 15742 | 1 | 98319 |
| 15744 | $J/\psi 	o K_2^{*0} ar{K}_1^{'0}, K_2^{*0} 	o \pi^0 K^0, ar{K}_1^{'0} 	o \pi^+ K^{*-}, K^0 	o K_L^0, K^{*-} 	o \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 15743 | 1 | 98320 |
| 15745 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 15744 | 1 | 98321 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 15746 | $J/\psi \to K^* \bar{K}_1^0, K^* \to \pi^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15745 | 1 | 98322 |
| 15747 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15746 | 1 | 98323 |
| 15748 | $J/\psi \to K_0^{*-}K_1^{'+}, K_0^{*-} \to \pi^0K^-, K_1^{'+} \to \pi^+K^*, K^* \to \pi^-K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 15747 | 1 | 98324 |
| 15749 | $J/\psi \to K_0^{*-}K_1^{+}, K_0^{*-} \to \pi^0 K^{-}, K_1^{+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 15748 | 1 | 98325 |
| 15750 | $J/\psi \to \eta \eta' h_1(1380), \eta \to \gamma \gamma, \eta' \to \pi^+ \pi^- \eta, h_1(1380) \to K^0 \bar{K}^*, \eta \to \gamma \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma\gamma\gamma$ | 15749 | 1 | 98326 |
| 15751 | $J/\psi \to \rho^+ \rho^- b_1^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, b_1^0 \to \pi^0 \omega, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15750 | 1 | 98327 |
| 15752 | $J/\psi \to a_2^0 b_1^0, a_2^0 \to K_S^0 K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15751 | 1 | 98328 |
| 15753 | $J/\psi \to ho^0 \bar{K}^* K_1^0, ho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to ho^0 K^0, \bar{K}^0 \to K_L^0, \\ ho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15752 | 1 | 98329 |
| 15754 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15753 | 1 | 98330 |
| 15755 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}K^{-}\gamma^{F}$ | 15754 | 1 | 98331 |
| 15756 | $J/\psi \to \omega \eta' f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15755 | 1 | 98332 |
| 15757 | $J/\psi \to \phi\phi\phi, \phi \to \pi^0\gamma, \phi \to K^+K^-, \phi \to K^+K^-$ | $\pi^0 K^+ K^+ K^- K^- \gamma$ | 15756 | 1 | 98333 |
| 15758 | $J/\psi \to \pi^+\pi^-\omega h_1(1170), \omega \to \pi^0\gamma, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15757 | 1 | 98334 |
| 15759 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15758 | 1 | 98335 |
| 15760 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^+ \pi^- \bar{K}^0, K^0 \to K^0_S, \\ \bar{K}^0 \to K^0_L, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15759 | 1 | 98336 |
| 15761 | $J/\psi ightarrow \eta \eta' \phi, \eta ightarrow \pi^0 \pi^0 \pi^0, \eta' ightarrow \pi^+ \pi^- \eta, \phi ightarrow \pi^0 ho^0, \eta ightarrow \pi^0 \pi^0 \pi^0, ho ho ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15760 | 1 | 98337 |
| 15762 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to \bar{K}^0 K^*, f_1(1420) \to \pi^+ K^0 K^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 15761 | 1 | 98338 |
| 15763 | $J/\psi \to \pi^+\pi^- \rho^+ \rho^- a^0_0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a^0_0 \to K^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15762 | 1 | 98339 |
| 15764 | $J/\psi \to \pi^- \bar{K}_1^0 K_0^{*+}, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15763 | 1 | 98340 |
| 15765 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma$ | 15764 | 1 | 98341 |
| 15766 | $J/\psi \to \eta \eta \phi, \eta \to \gamma \gamma, \eta \to e^+ e^- \gamma^F, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-K_L^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 15765 | 1 | 98342 |
| 15767 | $J/\psi \to \rho^- a_0^0 a_0^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma, \ \eta \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 15766 | 1 | 98343 |
| 15768 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 15767 | 1 | 98344 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 15769 | $J/\psi \to \pi^+ K^* K^{*-} \phi, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^- \pi^- K^+ K^+ K^-$ | 15768 | 1 | 98345 |
| 15770 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^+K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0 \pi^- K^+ K^+ K^-$ | 15769 | 1 | 98346 |
| 15771 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 15770 | 1 | 98347 |
| 15772 | $J/\psi \to \bar{K}^0 K^* K^+ \bar{K}_1^{'-}, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- \pi^- K^+ K^+$ | 15771 | 1 | 98348 |
| 15773 | $J/\psi \to \bar{K}^0 K_2^{*0} f_0(1370), \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, f_0(1370) \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 15772 | 1 | 98349 |
| 15774 | $J/\psi \to \pi^- \bar{K}_1^0 K_1^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K_1^+ \to \pi^+ K_0^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15773 | 1 | 98350 |
| 15775 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15774 | 1 | 98351 |
| 15776 | $J/\psi \to K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \ \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15775 | 1 | 98352 |
| 15777 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 15776 | 1 | 98353 |
| 15778 | $J/\psi \to K^0 \bar{K}_0^{*0} \gamma, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 15777 | 1 | 98354 |
| 15779 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^0 K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15778 | 1 | 98355 |
| 15780 | $J/\psi 	o ho^+ a_2^- \eta, ho^+ 	o \pi^0 \pi^+, a_2^- 	o \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15779 | 1 | 98356 |
| 15781 | $J/\psi \to K^0 ar{K}_1^0 \gamma, K^0 \to K_S^0, ar{K}_1^0 \to \omega ar{K}^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \ ar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 15780 | 1 | 98357 |
| 15782 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15781 | 1 | 98358 |
| 15783 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_0^0, K_0^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 1223 | 1 | 98359 |
| 15784 | $J/\psi \to \eta \bar{K}^0 K_2^{*0}, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 15783 | 1 | 98360 |
| 15785 | $J/\psi 	o ho^0 ho^0 \pi^+ b_1^-, ho^0 	o \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-, b_1^- 	o \pi^- \omega, \omega 	o \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 15784 | 1 | 98361 |
| 15786 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow K^0 ar{K}^0 \phi, K^0 ightarrow K^0_L, ar{K}^0 ightarrow K^0_L, \phi ightarrow K^0_L K^0_S, \ K^0_S ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0K_L^0\gamma$ | 15785 | 1 | 98362 |
| 15787 | $J/\psi \to \rho^0 K^* \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15786 | 1 | 98363 |
| 15788 | $J/\psi \to ho^0 ho^0 \pi^- a_2^+, ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^-, a_2^+ \to \pi^0 \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15787 | 1 | 98364 |
| 15789 | $J/\psi \to \pi^0 \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15788 | 1 | 98365 |
| 15790 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15789 | 1 | 98366 |
| 15791 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15790 | 1 | 98367 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15792 | $J/\psi \to \pi^0 \pi^- a_2^+ K^0 \bar{K}^0, a_2^+ \to \pi^0 \rho^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15791 | 1 | 98368 |
| 15793 | $J/\psi \to K_1^+ K_1^-, K_1^+ \to \omega K^+, K_1^- \to \pi^- \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15792 | 1 | 98369 |
| 15794 | $J/\psi \to \bar{K}^* K_2^{*0} \gamma, \bar{K}^* \to \pi^+ K^- \gamma^f, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma^f$ | 15793 | 1 | 98370 |
| 15795 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^- \eta, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15794 | 1 | 98371 |
| 15796 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \rho^+ a_0^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \\ \eta \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma^f$ | 15795 | 1 | 98372 |
| 15797 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K_1^0 \to \rho^- K^+, \bar{K}^* \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15796 | 1 | 98373 |
| 15798 | $J/\psi \to \pi^0 \rho^0 \pi^+ K^0 K_1^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15797 | 1 | 98374 |
| 15799 | $J/\psi \to \phi f_1(1285), \phi \to K_L^0 K_S^0, f_1(1285) \to \pi^+ a_0^-, K_S^0 \to \pi^0 \pi^0, a_0^- \to K^0 K^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15798 | 1 | 98375 |
| 15800 | $J/\psi \to K^* \bar{K}^* h_1(1380), K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to K^+ K^{*-}, \bar{K}^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^-K^+K^+K^-$ | 15799 | 1 | 98376 |
| 15801 | $J/\psi 	o K^0 ar K^* \eta', K^0 	o K_L^0, ar K^* 	o \pi^0 ar K^0, \eta' 	o ho^0 \gamma, ar K^0 	o K_L^0, ho^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 15800 | 1 | 98377 |
| 15802 | $J/\psi \to K^+K^{*-}f_1(1420), K^{*-} \to \pi^-\bar{K}^0, f_1(1420) \to \pi^-\bar{K}^0K^+, \bar{K}^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^-\pi^-K^+K^+$ | 15801 | 1 | 98378 |
| 15803 | $J/\psi 	o \eta' \gamma, \eta' 	o \pi^+ \pi^- \eta, \eta 	o \pi^0 \pi^+ \pi^-, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 15802 | 1 | 98379 |
| 15804 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^0 \bar{K}^0 \eta', \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \\ \eta' \to \rho^0 \gamma, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 15803 | 1 | 98380 |
| 15805 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15804 | 1 | 98381 |
| 15806 | $J/\psi \to \pi^+\pi^- f_1(1285), f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 15805 | 1 | 98382 |
| 15807 | $J/\psi \to \rho^0 \pi^- \omega a_1^+, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15806 | 1 | 98383 |
| 15808 | $J/\psi \to \pi^0 \pi^+ K^0 K_2^{*-}, K^0 \to K_L^0, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 15807 | 1 | 98384 |
| 15809 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^{*-} \eta', K^{*-} \to \pi^- \bar{K}^0, \eta' \to \gamma \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma$ | 15808 | 1 | 98385 |
| 15810 | $J/\psi \to \phi f_1(1285), \phi \to K_L^0 K_S^0, f_1(1285) \to \pi^0 \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15809 | 1 | 98386 |
| 15811 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15810 | 1 | 98387 |
| 15812 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^+ \pi^- \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15811 | 1 | 98388 |
| 15813 | $J/\psi \rightarrow \omega K^0 \bar{K}^0, \omega \rightarrow \pi^0 \gamma, K^0 \rightarrow K_L^0, \bar{K}^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\gamma$ | 15812 | 1 | 98389 |
| 15814 | $J/\psi \to \rho^0 a_2^+ a_0^-, \rho^0 \to \pi^+ \pi^-, a_2^+ \to \pi^0 \rho^+, a_0^- \to \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15813 | 1 | 98390 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15815 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, K^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 15814 | 1 | 98391 |
| 15816 | $J/\psi \to \rho^0 a_0^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_1(1285) \to \rho^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15815 | 1 | 98392 |
| 15817 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^0 \bar{K}^*, K^0 \to K^0_S, \\ \bar{K}^* \to \pi^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15816 | 1 | 98393 |
| 15818 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi h_1(1380), \phi \to K^+K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+K^+K^-\gamma$ | 15817 | 1 | 98394 |
| 15819 | $J/\psi \to \pi^0 \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15818 | 1 | 98395 |
| 15820 | $J/\psi \to \pi^+ K^- K_1^0 \gamma^F, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^F$ | 15819 | 1 | 98396 |
| 15821 | $J/\psi \to K^0 \bar{K}_1^0 \gamma, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^0 \pi^0, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 15820 | 1 | 98397 |
| 15822 | $J/\psi 	o \pi^0 ar{K}^* K_2^{*0}, ar{K}^* 	o \pi^+ K^-, K_2^{*0} 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 15821 | 1 | 98398 |
| 15823 | $J/\psi \to \pi^0 \pi^0 \rho^0 \pi^+ \rho^- \omega, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15822 | 1 | 98399 |
| 15824 | $J/\psi \to \eta K^+ K_1^-, \eta \to \gamma \gamma, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 15823 | 1 | 98400 |
| 15825 | $J/\psi \to \pi^0 \pi^0 \pi^+ a_2^-, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15824 | 1 | 98401 |
| 15826 | $J/\psi 	o \pi^0 K^* ar{K}^*, K^* 	o \pi^0 K^0, ar{K}^* 	o \pi^0 ar{K}^0, K^0 	o K_L^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L$ | 15825 | 1 | 98402 |
| 15827 | $J/\psi \to \bar{K}^0 K^* b_1^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, b_1^0 \to \pi^0 \omega, \omega \to \pi^+ \pi^- \gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^F$ | 15826 | 1 | 98403 |
| 15828 | $J/\psi \to f_2' h_1(1380), f_2' \to \eta \eta, h_1(1380) \to K^- K^{*+}, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma\gamma$ | 15827 | 1 | 98404 |
| 15829 | $J/\psi \to \pi^- K^{*+} K^{*-} b_1^+, \bar{K}^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15828 | 1 | 98405 |
| 15830 | $J/\psi \to \rho^0 f_1(1285), \rho^0 \to \pi^+\pi^-, f_1(1285) \to \pi^0 K^+K^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^-K^+K^-\gamma^F$ | 15829 | 1 | 98406 |
| 15831 | $J/\psi \to \rho^0 a_2^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15830 | 1 | 98407 |
| 15832 | $J/\psi \to K^{*+}K_1^-, K^{*+} \to \pi^+K^0, K_1^- \to \rho^0K^-, K^0 \to K_S^0, \rho^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 15831 | 1 | 98408 |
| 15833 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 15832 | 1 | 98409 |
| 15834 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 K^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0K^+K^-\gamma^F$ | 15833 | 1 | 98410 |
| 15835 | $J/\psi \to \pi^0 \rho^- \bar{K}^* K^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15834 | 1 | 98411 |
| 15836 | $J/\psi \to \pi^0 K^0 \bar{K}^*, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $e^+e^-K^0_L\pi^+K^-\gamma^F$ | 15835 | 1 | 98412 |
| 15837 | $J/\psi \to \pi^+ \eta a_0^- h_1(1170), \eta \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 15836 | 1 | 98413 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 15838 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K_1^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15837 | 1 | 98414 |
| 15839 | $J/\psi \to \pi^- \rho^+ K^{*-} K_1^+, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15838 | 1 | 98415 |
| 15840 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15839 | 1 | 98416 |
| 15841 | $J/\psi \to \pi^+\pi^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 15840 | 1 | 98417 |
| 15842 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^*, K_2^{*-} \to \pi^- \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 15841 | 1 | 98418 |
| 15843 | $J/\psi \to \pi^- \rho^+ \eta f_0(1370), \rho^+ \to \pi^0 \pi^+ \gamma^f, \eta \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 15842 | 1 | 98419 |
| 15844 | $J/\psi \to K^+ \phi K_1^-, \phi \to K_L^0 K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 15843 | 1 | 98420 |
| 15845 | $J/\psi \to \phi f_0(1370), \phi \to K_L^0 K_S^0, f_0(1370) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15844 | 1 | 98421 |
| 15846 | $J/\psi \to \eta K^* \bar{K}_1^0, \eta \to \gamma \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 15845 | 1 | 98422 |
| 15847 | $J/\psi \to \rho^+ a_0^- f_1(1285), \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta \gamma^f, f_1(1285) \to \pi^+ a_0^-, \eta \to \pi^0 \pi^0 \pi^0, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma\gamma^{f}$ | 15846 | 1 | 98423 |
| 15848 | $J/\psi \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 6315 | 1 | 98424 |
| 15849 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^- \pi^- K^+ K^+$ | 15848 | 1 | 98425 |
| 15850 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta \gamma^f, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 15849 | 1 | 98426 |
| 15851 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 15850 | 1 | 98427 |
| 15852 | $J/\psi \to ho^0 \eta f_0(1370), ho^0 \to \pi^+\pi^-, \eta \to \pi^0 \pi^0 \pi^0, f_0(1370) \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 15851 | 1 | 98428 |
| 15853 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to \bar{K}^0 K^*, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 15852 | 1 | 98429 |
| 15854 | $J/\psi \to \eta K^{*-}K_1^+, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15853 | 1 | 98430 |
| 15855 | $J/\psi \to \omega K^0 \bar{K}^0_1, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^0_1 \to \omega \bar{K}^0, K^0_S \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 15854 | 1 | 98431 |
| 15856 | $J/\psi \to \pi^0 \pi^+ a_2^- f_2(1270), a_2^- \to \rho^0 \pi^-, f_2(1270) \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15855 | 1 | 98432 |
| 15857 | $J/\psi \to \pi^0 a_2^+ K^0 K^-, a_2^+ \to \pi^0 \rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 3925 | 1 | 98433 |
| 15858 | $J/\psi \to \pi^0 K^{*+} K^{*-} \gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 15857 | 1 | 98434 |
| 15859 | $J/\psi \to \pi^0 \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 15858 | 1 | 98435 |
| 15860 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^0 \pi^0 \eta, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15859 | 1 | 98436 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15861 | $J/\psi \to \pi^+ K^{*-} K_1^0 \gamma^F, K^{*-} \to \pi^0 K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 15860 | 1 | 98437 |
| 15862 | $J/\psi 	o a_2^0 \pi^+ ho^-, a_2^0 	o \pi^0 \eta, ho^- 	o \pi^0 \pi^- \gamma^f, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 15861 | 1 | 98438 |
| 15863 | $J/\psi \to f_2(1270)\gamma, f_2(1270) \to K_L^0 K_L^0$ | $K_L^0 K_L^0 \gamma$ | 15862 | 1 | 98439 |
| 15864 | $J/\psi \to a_0^+ a_0^- h_1(1170), a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^-\pi^-\pi^-$ | 972 | 1 | 98440 |
| 15865 | $J/\psi ightarrow \eta' \phi, \eta' ightarrow \pi^0 \pi^0 \eta, \phi ightarrow K^+ K^-, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 15864 | 1 | 98441 |
| 15866 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \phi \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 6318 | 1 | 98442 |
| 15867 | $J/\psi \to \rho^0 \pi^+ \pi^- \omega f_2(1270), \rho^0 \to \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \gamma, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma^f$ | 15866 | 1 | 98443 |
| 15868 | $J/\psi \to \pi^+ K^+ a_0^- K_0^{*-}, a_0^- \to \pi^- \eta, K_0^{*-} \to \pi^0 K^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 15867 | 1 | 98444 |
| 15869 | $J/\psi 	o \omega ar K^0 K^* \gamma, \omega 	o \pi^0 \pi^+ \pi^-, ar K^0 	o K^0_S, K^* 	o \pi^- K^+, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 6319 | 1 | 98445 |
| 15870 | $J/\psi \to \pi^- \rho^+ f_1(1285) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 15869 | 1 | 98446 |
| 15871 | $J/\psi \to \pi^+ K^0 \phi K_0^{*-}, K^0 \to K_S^0, \phi \to K^+ K^-, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}$ | 15870 | 1 | 98447 |
| 15872 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15871 | 1 | 98448 |
| 15873 | $J/\psi \to \rho^- a_2^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15872 | 1 | 98449 |
| 15874 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15873 | 1 | 98450 |
| 15875 | $J/\psi \to \omega K^- K_2^{*+}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*+} \to \pi^0 \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15874 | 1 | 98451 |
| 15876 | $J/\psi \to \rho^{-} \bar{K}_{1}^{0} K_{1}^{'+}, \rho^{-} \to \pi^{0} \pi^{-}, \bar{K}_{1}^{0} \to \rho^{+} K^{-}, K_{1}^{'+} \to \pi^{+} K^{*}, \rho^{+} \to \pi^{0} \pi^{+}, K^{*} \to \pi^{0} K^{0}, K^{0} \to K^{0}_{S}, K^{0}_{S} \to \pi^{+} \pi^{-}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 15875 | 1 | 98452 |
| 15877 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15876 | 1 | 98453 |
| 15878 | $J/\psi \to \pi^0 \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 15877 | 1 | 98454 |
| 15879 | $J/\psi \to K^0 \bar{K}^0 f_2', K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_2' \to K_S^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15878 | 1 | 98455 |
| 15880 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15879 | 1 | 98456 |
| 15881 | $J/\psi \to a_2^0 h_1(1170), a_2^0 \to \pi^+ \rho^-, h_1(1170) \to \pi^0 \rho^0, \rho^- \to \pi^0 \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15880 | 1 | 98457 |
| 15882 | $J/\psi \to \pi^0 \eta \bar{K}^0 K^*, \eta \to \gamma \gamma, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 15881 | 1 | 98458 |
| 15883 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15882 | 1 | 98459 |
| 15884 | $ \begin{array}{l} K \to K_L \\ J/\psi \to \pi^- \rho^+ \bar{K}^* K_0^0, \rho^+ \to \pi^0 \pi^+, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, \\ K_S^0 \to \pi^0 \pi^0 \end{array} $ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 2023 | 1 | 98460 |
| 15885 | $J/\psi ightarrow ho^0 \omega b_1^0, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 15884 | 1 | 98461 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15886 | $J/\psi \to \eta \eta' h_1(1170), \eta \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, h_1(1170) \to \pi^- \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 15885 | 1 | 98462 |
| 15887 | $J/\psi \to \pi^- K^+ \bar{K}_1^{'0}, \bar{K}_1^{'0} \to \omega \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 15886 | 1 | 98463 |
| 15888 | $J/\psi \to K_2^{*+}K_1^-, K_2^{*+} \to \pi^0K^{*+}, K_1^- \to \omega K^-, K^{*+} \to \pi^0K^+, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15887 | 1 | 98464 |
| 15889 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^0K^+, f_0(1370) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 15888 | 1 | 98465 |
| 15890 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15889 | 1 | 98466 |
| 15891 | $J/\psi \to \rho^- \omega b_1^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, b_1^+ \to \pi^+ \omega, \pi^0 \to e^+ e^- \gamma^F,$ $\omega \to \pi^+ \pi^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}$ | 15890 | 1 | 98467 |
| 15892 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0 \gamma^F, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15891 | 1 | 98468 |
| 15893 | $J/\psi \to \pi^0 \pi^- \pi^- \bar{n} \Delta^{++}, \Delta^{++} \to \pi^+ p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 15892 | 1 | 98469 |
| 15894 | $J/\psi 	o ho^0 ho^+ ho^- \gamma^f, ho^0 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15893 | 1 | 98470 |
| 15895 | $J/\psi 	o \pi^0\pi^+\pi^-\Sigma^0ar{\Sigma}^0, \Sigma^0 	o \Lambda\gamma, ar{\Sigma}^0 	o ar{\Lambda}\gamma, \Lambda 	o \pi^-p, ar{\Lambda} 	o \pi^+ar{p}$ | $\pi^0\pi^+\pi^+\pi^-\pi^-par p\gamma\gamma$ | 15894 | 1 | 98471 |
| 15896 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15895 | 1 | 98472 |
| 15897 | $J/\psi \to \omega \eta' f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 15896 | 1 | 98473 |
| 15898 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \pi^0\pi^0K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^0\pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15897 | 1 | 98474 |
| 15899 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \pi^+a_0^-, a_0^- \to \pi^-\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15898 | 1 | 98475 |
| 15900 | $J/\psi \to K^- f_0(1370) K_1^+, f_0(1370) \to \rho^0 \rho^0, K_1^+ \to \rho^+ K^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^- \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 15899 | 1 | 98476 |
| 15901 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15900 | 1 | 98477 |
| 15902 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^+K^{*-}, \bar{K}^0 \to K_L^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K^0_L\pi^-\pi^-K^+K^+$ | 15901 | 1 | 98478 |
| 15903 | $J/\psi \to \pi^+\pi^-K^-K_0^{*+}, K_0^{*+} \to \pi^0K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 15902 | 1 | 98479 |
| 15904 | $J/\psi \to \pi^0 \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15903 | 1 | 98480 |
| 15905 | $J/\psi \to K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0K_L^0\pi^+\pi^-$ | 434 | 1 | 98481 |
| 15906 | $J/\psi \to \pi^0 \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_0^- \to \pi^- \eta, K^0 \to K_S^0, \\ \eta \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 15905 | 1 | 98482 |
| 15907 | $J/\psi \to \eta \gamma, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0\gamma^F\gamma$ | 15906 | 1 | 98483 |
| 15908 | $J/\psi \to K^+K^-f_0(1370)\gamma^F, f_0(1370) \to \rho^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-K^+K^-\gamma^F\gamma^F$ | 15907 | 1 | 98484 |
| 15909 | $J/\psi \to \pi^0 K_0^{*-} K_1^+, K_0^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 15908 | 1 | 98485 |
| 15910 | $J/\psi \to \Sigma^{*+} \bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^{+} \Sigma^{0}, \bar{\Sigma}^{*-} \to \pi^{0} \bar{\Sigma}^{-}, \Sigma^{0} \to \Lambda \gamma, \bar{\Sigma}^{-} \to \pi^{-} \bar{n}, \Lambda \to \pi^{-} p$ | $\pi^0\pi^+\pi^-\pi^-\bar{n}p\gamma$ | 6322 | 1 | 98486 |
| 15911 | $J/\psi ightarrow \omega K^0 ar K^0 \gamma, \omega ightarrow \pi^0 \gamma, K^0 ightarrow K^0_L, ar K^0 ightarrow K^0_L$ | $\pi^0 K^0_L K^0_L \gamma \gamma$ | 15910 | 1 | 98487 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 15912 | $J/\psi 	o \pi^0 ho^- ar{K}^* K_1^+, ho^- 	o \pi^0 \pi^-, ar{K}^* 	o \pi^0 ar{K}^0, K_1^+ 	o ho^+ K^0, ar{K}^0 	o K_L^0, \ ho^+ 	o \pi^0 \pi^+, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 15911 | 1 | 98488 |
| 15913 | $J/\psi \to \pi^0 \pi^+ \pi^- f_0(1370) f_1(1285), f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15912 | 1 | 98489 |
| 15914 | $J/\psi \to \pi^0 \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 15913 | 1 | 98490 |
| 15915 | $J/\psi \to \pi^0 \pi^0 \pi^+ a_2^-, a_2^- \to \pi^0 \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15914 | 1 | 98491 |
| 15916 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15915 | 1 | 98492 |
| 15917 | $J/\psi \to f_2' h_1(1380), f_2' \to K_S^0 K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 15916 | 1 | 98493 |
| 15918 | $J/\psi \to \pi^+ \rho^- a^0_0, \rho^- \to \pi^0 \pi^-, a^0_0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 15917 | 1 | 98494 |
| 15919 | $J/\psi \to \bar{K}^*K_1^0, \bar{K}^* \to \pi^0\bar{K}^0, K_1^0 \to \rho^-K^+, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 6323 | 1 | 98495 |
| 15920 | $J/\psi \to \eta \bar{K}^* K_1^0, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K_0^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 15919 | 1 | 98496 |
| 15921 | $J/\psi \to ho^0 K^+ K_1^-, ho^0 \to \pi^+ \pi^-, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 15920 | 1 | 98497 |
| 15922 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \gamma, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 15921 | 1 | 98498 |
| 15923 | $J/\psi \to \pi^+ a_2^- a_1^0, a_2^- \to \pi^- \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15922 | 1 | 98499 |
| 15924 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 15923 | 1 | 98500 |
| 15925 | $J/\psi \to K_2^{*+} K_0^{*-}, K_2^{*+} \to \rho^+ K^0, K_0^{*-} \to \pi^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 15924 | 1 | 98501 |
| 15926 | $J/\psi \rightarrow \rho^+ \rho^- \gamma, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma\gamma^f$ | 15925 | 1 | 98502 |
| 15927 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \eta' \to \rho^0 \gamma, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 15926 | 1 | 98503 |
| 15928 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^0 K^{*-}, K_1^+ \to \rho^+ K^0, K^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15927 | 1 | 98504 |
| 15929 | $J/\psi ightarrow \pi^- ho^+ ho^+ ho^-, ho^+ ightarrow \pi^0 \pi^+, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15928 | 1 | 98505 |
| 15930 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 15929 | 1 | 98506 |
| 15931 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \rho^+K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15930 | 1 | 98507 |
| 15932 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 15931 | 1 | 98508 |
| 15933 | $J/\psi \to K^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-$ | 15932 | 1 | 98509 |
| 15934 | $J/\psi 	o \pi^0 ho^- \eta a_0^+, ho^- 	o \pi^0 \pi^-, \eta 	o \pi^0 \pi^0, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 15933 | 1 | 98510 |
| 15935 | $J/\psi \to \rho^- K^+ \bar{K}_1^{'0} \gamma^f, \rho^- \to \pi^0 \pi^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 15934 | 1 | 98511 |
| 15936 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^0 \bar{K}^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 15935 | 1 | 98512 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 15937 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15936 | 1 | 98513 |
| 15938 | $J/\psi \to K^+K^-f_1(1420), f_1(1420) \to \pi^0K^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 15937 | 1 | 98514 |
| 15939 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^+\pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15938 | 1 | 98515 |
| 15940 | $J/\psi \to \pi^+ a_2^- a_1^0, a_2^- \to \rho^0 \pi^-, a_1^0 \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^- \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 6324 | 1 | 98516 |
| 15941 | $J/\psi \to K^-K^{*+}h_1(1380), K^{*+} \to \pi^+K^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, K^$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-}$ | 15940 | 1 | 98517 |
| 15942 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15941 | 1 | 98518 |
| 15943 | $J/\psi \to \pi^+ a_2^- f_1(1285), a_2^- \to \pi^0 \rho^-, f_1(1285) \to \pi^0 \pi^0 \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15942 | 1 | 98519 |
| 15944 | $J/\psi \to \pi^+\pi^-K_1^{'+}\bar{K}_1^{'-}, K_1^{'+} \to \pi^+K^*, \bar{K}_1^{'-} \to \rho^0K^-, K^* \to \pi^-K^+, \rho^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 15943 | 1 | 98520 |
| 15945 | $J/\psi \to \pi^0 a_2^0 \pi^- a_1^+, a_2^0 \to \pi^- \rho^+, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15944 | 1 | 98521 |
| 15946 | $J/\psi \to \eta \Sigma^0 \bar{\Sigma}^0, \eta \to \pi^0 \pi^0 \pi^0, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Lambda \to \pi^- p, \\ \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^0\pi^0\pi^+\pi^-p\bar{p}\gamma\gamma$ | 15945 | 1 | 98522 |
| 15947 | $J/\psi \to \pi^0 \pi^- K^0 \bar{K}^* a_1^+, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 15946 | 1 | 98523 |
| 15948 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15947 | 1 | 98524 |
| 15949 | $J/\psi \to \pi^0 \rho^- \bar{p}\Delta^{++}, \rho^- \to \pi^0 \pi^-, \Delta^{++} \to \pi^+ p$ | $\pi^0\pi^0\pi^+\pi^-par{p}$ | 15948 | 1 | 98525 |
| 15950 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \omega a_0^+, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta \gamma^f, $ $\eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma^f$ | 15949 | 1 | 98526 |
| 15951 | $J/\psi 	o \pi^0 \Sigma^0 ar{\Sigma}^0, \Sigma^0 	o \Lambda \gamma, ar{\Sigma}^0 	o ar{\Lambda} \gamma, \Lambda 	o \pi^0 n, ar{\Lambda} 	o \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+n\bar{p}\gamma\gamma$ | 15950 | 1 | 98527 |
| 15952 | $J/\psi \to K^0 \bar{K}^*, K^0 \to K^0_S, \bar{K}^* \to \pi^+ K^- \gamma^f, K^0_S \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^-\gamma^f$ | 15951 | 1 | 98528 |
| 15953 | $J/\psi \to \eta_c \gamma, \eta_c \to \Sigma^0 \bar{\Sigma}^0, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0n\bar{n}\gamma\gamma\gamma$ | 15952 | 1 | 98529 |
| 15954 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \pi^+\pi^-\eta, K^0 \to K^0_L, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 3929 | 1 | 98530 |
| 15955 | $J/\psi \to \rho^- \omega \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 15954 | 1 | 98531 |
| 15956 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 15955 | 1 | 98532 |
| 15957 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 15956 | 1 | 98533 |
| 15958 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15957 | 1 | 98534 |
| 15959 | $J/\psi \to \pi^0 \rho^+ K^0 K^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15958 | 1 | 98535 |
| 15960 | $J/\psi \to \bar{K^0}K^+a_0^-, \bar{K}^0 \to K_S^0, a_0^- \to \pi^-\eta, K_S^0 \to \pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15959 | 1 | 98536 |
| 15961 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^0 K^+, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 15960 | 1 | 98537 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 15962 | $J/\psi \to \eta K^* \bar{K}_0^{*0}, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 15961 | 1 | 98538 |
| 15963 | $J/\psi \to \pi^0 \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^- K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 15962 | 1 | 98539 |
| 15964 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15963 | 1 | 98540 |
| 15965 | $J/\psi ightarrow \pi^0 ho^0 \omega \gamma, ho^0 ightarrow \pi^+ \pi^- \gamma^f, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 15964 | 1 | 98541 |
| 15966 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma$ | 15965 | 1 | 98542 |
| 15967 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 15966 | 1 | 98543 |
| 15968 | $J/\psi 	o \pi^0\pi^0\omega a_1^0, \omega 	o \pi^0\pi^+\pi^-, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15967 | 1 | 98544 |
| 15969 | $J/\psi 	o \pi^0 K^- K_2^{*+}, K_2^{*+} 	o ho^0 K^+, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 15968 | 1 | 98545 |
| 15970 | $J/\psi 	o \pi^0 \pi^0 \omega a_1^0, \omega 	o \pi^0 \pi^+ \pi^-, a_1^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 3930 | 1 | 98546 |
| 15971 | $J/\psi ightarrow \eta \phi, \eta ightarrow \pi^0 \pi^0 \pi^0, \phi ightarrow \eta \gamma, \eta ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 6327 | 1 | 98547 |
| 15972 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^- K^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 15971 | 1 | 98548 |
| 15973 | $J/\psi 	o \pi^0 a_2^0 \pi^+ ho^-, a_2^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-, ho^- 	o \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 15972 | 1 | 98549 |
| 15974 | $J/\psi 	o \eta K^{*+} K^{*-} \gamma, \eta 	o \pi^0 \pi^0 \pi^0, K^{*+} 	o \pi^0 K^+, K^{*-} 	o \pi^- ar K^0, ar K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 6328 | 1 | 98550 |
| 15975 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^0 \bar{K}^*, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-K^-$ | 15974 | 1 | 98551 |
| 15976 | $J/\psi \to \rho^- a_2^+ f_2(1270), \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, f_2(1270) \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 15975 | 1 | 98552 |
| 15977 | $J/\psi 	o \eta K^* ar{K}_0^{*0}, \eta 	o \pi^0 \pi^+ \pi^-, K^* 	o \pi^- K^+, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 15976 | 1 | 98553 |
| 15978 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 15977 | 1 | 98554 |
| 15979 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^{*+} K^{*-}, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 15978 | 1 | 98555 |
| 15980 | $J/\psi \to \pi^+ K_1^- K_1^{'0}, K_1^- \to \pi^0 K_0^{*-}, K_1^{'0} \to \pi^- K^{*+}, K_0^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^0 K^+, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15979 | 1 | 98556 |
| 15981 | $J/\psi \to \pi^- \bar{K}^* K^+ \phi, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 15980 | 1 | 98557 |
| 15982 | $J/\psi ightarrow ho^0 a_2^0, ho^0 ightarrow \pi^+ \pi^-, a_2^0 ightarrow \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \gamma, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 6329 | 1 | 98558 |
| 15983 | $J/\psi ightarrow \eta K^+K^-a_1^0, \eta ightarrow \gamma \gamma, a_1^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 15982 | 1 | 98559 |
| 15984 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+ \gamma^f$ | $K_L^0K_L^0\pi^-\pi^-K^+K^+\gamma^f$ | 15983 | 1 | 98560 |
| 15985 | $J/\psi \to \pi^0 a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 15984 | 1 | 98561 |
| 15986 | $J/\psi \to \eta K^+ K^{*-} \gamma^f, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 15985 | 1 | 98562 |
| 15987 | $J/\psi \to \pi^- \rho^+ K^* \bar{K}^*, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 15986 | 1 | 98563 |
| 15988 | $J/\psi \to \pi^+ \rho^- \eta' f_0(1370), \rho^- \to \pi^0 \pi^-, \eta' \to \pi^0 \pi^0 \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15987 | 1 | 98564 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 15989 | $J/\psi \to \pi^- \eta' b_1^+, \eta' \to \pi^0 \pi^0 \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 15988 | 1 | 98565 |
| 15990 | $J/\psi \to \eta \eta \phi, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^+ \pi^- \gamma^F, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15989 | 1 | 98566 |
| 15991 | $J/\psi \to K^+ K_2^{*-} \gamma^F, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^F$ | 15990 | 1 | 98567 |
| 15992 | $J/\psi \to \rho^+ K^* \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 15991 | 1 | 98568 |
| 15993 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L$ | 15992 | 1 | 98569 |
| 15994 | $J/\psi \to \pi^+\pi^-a^0_1, a^0_1 \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 15993 | 1 | 98570 |
| 15995 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ f_0(1370), \rho^+ \to \pi^0 \pi^+, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 6330 | 1 | 98571 |
| 15996 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, h_1(1170) \to \pi^0\rho^0, K^0 \to K_L^0, $ $\rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 15995 | 1 | 98572 |
| 15997 | $J/\psi \to \eta K^{*+}K^{*-}, \eta \to \pi^+\pi^-\gamma^F, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-\gamma^f$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f$ | 15996 | 1 | 98573 |
| 15998 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K^0_S, \\ \pi^0 \to e^+ e^- \gamma^F, K^0_S \to \pi^+ \pi^- \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{F}\gamma^{f}$ | 15997 | 1 | 98574 |
| 15999 | $J/\psi \to K^0 K^- a_1^+, K^0 \to K_L^0, a_1^+ \to \rho^0 \pi^+ \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 15998 | 1 | 98575 |
| 16000 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ \pi^- \omega, \omega 	o \pi^0 \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma$ | 15999 | 1 | 98576 |
| 16001 | $J/\psi ightarrow \pi^+ \omega a_0^-, \omega ightarrow \pi^0 \gamma, a_0^- ightarrow \pi^- \eta, \eta ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma$ | 16000 | 1 | 98577 |
| 16002 | $J/\psi \rightarrow a_0^+b_1^-, a_0^+ \rightarrow \pi^+\eta, b_1^- \rightarrow \pi^-\omega, \eta \rightarrow \gamma\gamma, \omega \rightarrow \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16001 | 1 | 98578 |
| 16003 | $J/\psi \to \bar{K}^0 K^*, \bar{K}^0 \to K^0_S, K^* \to \pi^- K^+, K^0_S \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^-K^+\gamma^F$ | 16002 | 1 | 98579 |
| 16004 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \rho^+ a_0^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, $ $\eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 6331 | 1 | 98580 |
| 16005 | $J/\psi \to \pi^0 \rho^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16004 | 1 | 98581 |
| 16006 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_L^0, K_2^{*0} \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 16005 | 1 | 98582 |
| 16007 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 16006 | 1 | 98583 |
| 16008 | $J/\psi 	o \eta ar{K}^0 K^0_0, \eta 	o \pi^0 \pi^+ \pi^-, ar{K}^0 	o K^0_L, K^0_0 	o \pi^0 K^0, K^0 	o K^0_L$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 16007 | 1 | 98584 |
| 16009 | $J/\psi \rightarrow \pi^+ \rho^+ \rho^- \rho^- \gamma^f \gamma^f, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \rho^- \rightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f\gamma^f$ | 16008 | 1 | 98585 |
| 16010 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 16009 | 1 | 98586 |
| 16011 | $J/\psi \to \bar{K}^0 K^* f_2^{'}, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, f_2^{'} \to K^+ K^-$ | $K_L^0\pi^-K^+K^+K^-$ | 16010 | 1 | 98587 |
| 16012 | $J/\psi \to \bar{K}^0 b_1^- K_1^+, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_1^+ \to \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, \\ \omega \to \pi^0 \pi^+ \pi^- \gamma^f, K^* \to \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma^f$ | 6332 | 1 | 98588 |
| 16013 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^0 \pi^0, b_1^+ \to \pi^+ \omega \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16012 | 1 | 98589 |
| 16014 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 \pi^+ K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16013 | 1 | 98590 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16015 | $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0 \gamma^f, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 16014 | 1 | 98591 |
| 16016 | $J/\psi \to \pi^- \rho^+ \omega \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16015 | 1 | 98592 |
| 16017 | $J/\psi \to \rho^0 K^{*+} \bar{K}_1^{'-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16016 | 1 | 98593 |
| 16018 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0 K_L^0\pi^+ K^-$ | 16017 | 1 | 98594 |
| 16019 | $J/\psi \to K^0 a_0^0 \bar{K}_0^{*0}, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 16018 | 1 | 98595 |
| 16020 | $J/\psi \to K^+ K_2^{*-} \gamma^F, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma^F$ | 16019 | 1 | 98596 |
| 16021 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 16020 | 1 | 98597 |
| 16022 | $J/\psi \to \rho^0 \eta \omega \omega, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma$ | 3931 | 1 | 98598 |
| 16023 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 16022 | 1 | 98599 |
| 16024 | $J/\psi \to \pi^+ \omega K^0 K^- h_1(1170), \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16023 | 1 | 98600 |
| 16025 | $J/\psi \to \eta_c \gamma, \eta_c \to K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^-K^+\gamma$ | 16024 | 1 | 98601 |
| 16026 | $J/\psi \to \rho^+ \eta a_0^-, \rho^+ \to \pi^0 \pi^+, \eta \to e^+ e^- \gamma^F, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 16025 | 1 | 98602 |
| 16027 | $J/\psi \to \pi^0 \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^0 \rho^0, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16026 | 1 | 98603 |
| 16028 | $J/\psi \to \rho^0 K^* K_2^{*0}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 16027 | 1 | 98604 |
| 16029 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^- K^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma^f$ | 16028 | 1 | 98605 |
| 16030 | $J/\psi 	o \pi^0 \pi^+ a_2^- \eta, a_2^- 	o ho^0 \pi^-, \eta 	o \pi^0 \pi^+ \pi^-, ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16029 | 1 | 98606 |
| 16031 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^0 K^+, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 16030 | 1 | 98607 |
| 16032 | $J/\psi \to \bar{K}^0 K^* f_0(1710), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1710) \to \omega \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 16031 | 1 | 98608 |
| 16033 | $J/\psi \to \pi^+\pi^-\rho^+K^0K_2^{*-}, \rho^+ \to \pi^0\pi^+, K^0 \to K_S^0, K_2^{*-} \to \rho^0K^-, K_S^0 \to \pi^0\pi^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16032 | 1 | 98609 |
| 16034 | $J/\psi \to K_2^{*+}K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^+ \pi^- K^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 16033 | 1 | 98610 |
| 16035 | $J/\psi \to \pi^- a_2^+ \omega \gamma^F, a_2^+ \to \pi^+ \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 16034 | 1 | 98611 |
| 16036 | $J/\psi \to \pi^- K_2^{*+} \bar{K}_0^{*0}, K_2^{*+} \to \pi^0 K^+, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 16035 | 1 | 98612 |
| 16037 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \gamma, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+K^-\gamma$ | 16036 | 1 | 98613 |
| 16038 | $J/\psi \to \pi^0 \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16037 | 1 | 98614 |
| 16039 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \omega K^+, \bar{K}^0 \to K_L^0, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 16038 | 1 | 98615 |
| 16040 | $J/\psi \to K^0 \bar{K}^0 \phi a_0^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma\gamma$ | 16039 | 1 | 98616 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16041 | $J/\psi \to \eta \bar{K}^* K_0^0, \eta \to \gamma \gamma, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma\gamma$ | 16040 | 1 | 98617 |
| 16042 | $J/\psi \to ho^0 ho^0 K^+ K^-, ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16041 | 1 | 98618 |
| 16043 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 16042 | 1 | 98619 |
| 16044 | $J/\psi \to K^+ \bar{\Delta}^{++} \Sigma^{*+}, \bar{\Delta}^{++} \to \pi^- \bar{p}, \Sigma^{*+} \to \pi^+ \Sigma^0, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-K^+par p\gamma$ | 16043 | 1 | 98620 |
| 16045 | $J/\psi \to \pi^0 \omega K^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16044 | 1 | 98621 |
| 16046 | $J/\psi \to \pi^0 \pi^+ \pi^- f_0(1370), f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16045 | 1 | 98622 |
| 16047 | $J/\psi \to \rho^0 K^{*-} K_0^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 16046 | 1 | 98623 |
| 16048 | $J/\psi \to K^- K_2^{*+} \eta', K_2^{*+} \to \pi^0 K^+, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 16047 | 1 | 98624 |
| 16049 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 \pi^0 \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16048 | 1 | 98625 |
| 16050 | $J/\psi \to \eta K^0 K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 16049 | 1 | 98626 |
| 16051 | $J/\psi \to K^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+$ | 16050 | 1 | 98627 |
| 16052 | $J/\psi \to \eta \bar{K}^* K_1^0, \eta \to \gamma \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 16051 | 1 | 98628 |
| 16053 | $J/\psi \to \omega K^0 K_2^{*0}, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_2^{*0} \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 16052 | 1 | 98629 |
| 16054 | $J/\psi \to K^{*+}K_0^{*-}, K^{*+} \to \pi^+K^0, K_0^{*-} \to \pi^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-\gamma^f$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 16053 | 1 | 98630 |
| 16055 | $J/\psi 	o \pi^0 K^- K_2^{*+}, K_2^{*+} 	o \pi^+ K^0 \gamma^f, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 16054 | 1 | 98631 |
| 16056 | $J/\psi 	o \eta \omega \omega \omega, \eta 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \gamma, \omega 	o \pi^0 \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 16055 | 1 | 98632 |
| 16057 | $J/\psi \to \pi^0 \rho^+ \rho^- h_1(1170), \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16056 | 1 | 98633 |
| 16058 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^+\pi^- K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16057 | 1 | 98634 |
| 16059 | $J/\psi \to \pi^- \bar{\Sigma}^+ \bar{\Sigma}^0, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 16058 | 1 | 98635 |
| 16060 | $J/\psi \to \pi^0 \eta K^+ K^{*-}, \eta \to \pi^+ \pi^- \gamma^F, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 16059 | 1 | 98636 |
| 16061 | $J/\psi \to \eta f_0(1370)\gamma, \eta \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16060 | 1 | 98637 |
| 16062 | $J/\psi \to \pi^0 \rho^0 K^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 16061 | 1 | 98638 |
| 16063 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16062 | 1 | 98639 |
| 16064 | $J/\psi \to K^+ K_2^{*-}, K_2^{*-} \to \rho^- K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+$ | 16063 | 1 | 98640 |
| 16065 | $J/\psi 	o \pi^+ K_2^{*0} K^-, K_2^{*0} 	o \pi^0 \pi^0 K^*, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 16064 | 1 | 98641 |
| 16066 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1420) \to \pi^0 K^+ K^-$ | $\pi^0 K_L^0 \pi^+ K^+ K^- K^-$ | 16065 | 1 | 98642 |
| 16067 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \bar{K}^0 K^+, h_1(1170) \to \pi^0 \rho^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 16066 | 1 | 98643 |
| 16068 | $J/\psi \to \pi^0 \rho^0 \rho^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16067 | 1 | 98644 |
| 16069 | $J/\psi \to \pi^0 \rho^0 \pi^+ a_0^-, \rho^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}\gamma^{f}$ | 16068 | 1 | 98645 |
| 16070 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16069 | 1 | 98646 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 16071 | $J/\psi \to \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \pi^0 K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16070 | 1 | 98647 |
| 16072 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \omega a_1^0, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 16071 | 1 | 98648 |
| 16073 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to \bar{K}^0 K^*, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0K_L^0\pi^+\pi^-$ | 16072 | 1 | 98649 |
| 16074 | $J/\psi \to \eta' h_1(1380), \eta' \to \pi^0 \pi^0 \eta, h_1(1380) \to K^0 \bar{K}^*, \eta \to \gamma \gamma, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 16073 | 1 | 98650 |
| 16075 | $J/\psi \to \pi^0 K^+ \bar{K}_1^{'-}, \bar{K}_1^{'-} \to \pi^0 K^{*-}, \pi^0 \to e^+ e^- \gamma^F, K^{*-} \to \pi^0 K^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}K^{+}K^{-}\gamma^{F}$ | 16074 | 1 | 98651 |
| 16076 | $J/\psi \to \pi^0 \omega a_1^0, \omega \to \pi^0 \pi^+ \pi^-, a_1^0 \to \pi^+ \rho^-, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16075 | 1 | 98652 |
| 16077 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^0 \bar{K}^0, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 16076 | 1 | 98653 |
| 16078 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16077 | 1 | 98654 |
| 16079 | $J/\psi \to \pi^+ K^- \phi K_1^{'0}, \phi \to \pi^0 \rho^0, K_1^{'0} \to \pi^0 K^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16078 | 1 | 98655 |
| 16080 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16079 | 1 | 98656 |
| 16081 | $J/\psi \to \pi^0 K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^* \to \pi^+ K^-, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16080 | 1 | 98657 |
| 16082 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 16081 | 1 | 98658 |
| 16083 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16082 | 1 | 98659 |
| 16084 | $J/\psi \to K^- K_2^{*+} a_0^0, K_2^{*+} \to \rho^+ K^0, a_0^0 \to K^+ K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 16083 | 1 | 98660 |
| 16085 | $J/\psi \to \pi^+ K^- K_1^0 \gamma^F, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 16084 | 1 | 98661 |
| 16086 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^F$ | 16085 | 1 | 98662 |
| 16087 | $J/\psi \to K^+ b_1^0 K_0^{*-}, b_1^0 \to \pi^0 \omega, K_0^{*-} \to \pi^- \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16086 | 1 | 98663 |
| 16088 | $J/\psi \to \rho^- K^+ \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16087 | 1 | 98664 |
| 16089 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 K^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-K^-\gamma^F\gamma^f$ | 16088 | 1 | 98665 |
| 16090 | $J/\psi \to K_0^{*-} K_1^+, K_0^{*-} \to \pi^0 K^-, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 16089 | 1 | 98666 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 16091 | $J/\psi \to K^0 \bar{K}^* b_1^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^0 \pi^0, \\ \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 16090 | 1 | 98667 |
| 16092 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0\gamma^f, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0 \to K_S^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16091 | 1 | 98668 |
| 16093 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K_2^{*-} \to \pi^0 K^-, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 16092 | 1 | 98669 |
| 16094 | $J/\psi \to \bar{K}^*K^{*+}a_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, a_1^- \to \rho^0\pi^-, K^0 \to K_L^0, \rho^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16093 | 1 | 98670 |
| 16095 | $J/\psi \to K^{*-}K_2^{*+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 16094 | 1 | 98671 |
| 16096 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K^0_S, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16095 | 1 | 98672 |
| 16097 | $J/\psi \to \pi^- \rho^+ K^{*+} K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 16096 | 1 | 98673 |
| 16098 | $J/\psi 	o \pi^0 K^0 \bar{n} \Sigma^0, K^0 	o K_L^0, \Sigma^0 	o \Lambda \gamma, \Lambda 	o \pi^- p$ | $\pi^0 K_L^0 \pi^- ar{n} p \gamma$ | 16097 | 1 | 98674 |
| 16099 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_0(1710) \to \omega \omega, K_S^0 \to \pi^0 \pi^0, \omega \to e^+ e^- \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 16098 | 1 | 98675 |
| 16100 | $J/\psi \to \pi^+ K_2^{*0} K^{*-}, K_2^{*0} \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 16099 | 1 | 98676 |
| 16101 | $J/\psi \to \bar{K}^*K^{*+}a_0^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, a_0^- \to \pi^-\eta, K^0 \to K_L^0, \eta \to \gamma\gamma$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 16100 | 1 | 98677 |
| 16102 | $J/\psi ightarrow \pi^0 ho^- a_2^+, ho^- ightarrow \pi^0 \pi^-, a_2^+ ightarrow \pi^0 \pi^+ \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 16101 | 1 | 98678 |
| 16103 | $J/\psi 	o \pi^0 a_2^0 \eta \gamma, a_2^0 	o \pi^- ho^+, \eta 	o \pi^0 \pi^0 \pi^0, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 16102 | 1 | 98679 |
| 16104 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 16103 | 1 | 98680 |
| 16105 | $J/\psi ightarrow ho^0 K^+ K^- \eta', ho^0 ightarrow \pi^+ \pi^-, \eta' ightarrow ho^0 \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 16104 | 1 | 98681 |
| 16106 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16105 | 1 | 98682 |
| 16107 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 16106 | 1 | 98683 |
| 16108 | $J/\psi \to K^+ a_0^- \bar{K}_1^{'0}, a_0^- \to \pi^- \eta, \bar{K}_1^{'0} \to \pi^+ K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16107 | 1 | 98684 |
| 16109 | $J/\psi 	o ar{K}^* n ar{\Sigma}^0, ar{K}^* 	o \pi^0 ar{K}^0, ar{\Sigma}^0 	o ar{\Lambda} \gamma, ar{K}^0 	o K_S^0, ar{\Lambda} 	o \pi^0 ar{n}, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 16108 | 1 | 98685 |
| 16110 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to \pi^+ \rho^- \gamma^f, h_1(1380) \to K^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma\gamma^{f}$ | 16109 | 1 | 98686 |
| 16111 | $J/\psi \to a_2^0 \pi^- \rho^+ f_1(1285), a_2^0 \to \pi^+ \pi^- \omega, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 16110 | 1 | 98687 |
| 16112 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 16111 | 1 | 98688 |
| 16113 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^0 K^0, \bar{K}_2^0 \to \pi^+ K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 16112 | 1 | 98689 |
| 16114 | $J/\psi \to \rho^0 K^{*-} K_1^{'+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^{'+} \to \pi^+ \pi^- K^+, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16113 | 1 | 98690 |
| 16115 | $J/\psi \to ho^0 K^- K_1^+, ho^0 \to \pi^+ \pi^-, K_1^+ \to ho^0 K^+, ho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 16114 | 1 | 98691 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 16116 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16115 | 1 | 98692 |
| 16117 | $J/\psi \to \eta h_1(1170) f_1(1285), \eta \to \pi^0 \pi^0 \pi^0, h_1(1170) \to \pi^0 \rho^0, f_1(1285) \to \pi^0 K^+ K^-, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 6334 | 1 | 98693 |
| 16118 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 16117 | 1 | 98694 |
| 16119 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^+ K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16118 | 1 | 98695 |
| 16120 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_L^0, K_1^0 \to \rho^- K^+, \rho^- \to \pi^0 \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^f$ | 16119 | 1 | 98696 |
| 16121 | $J/\psi \to \bar{K}^* K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^- K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ K^0, K_2^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 3932 | 1 | 98697 |
| 16122 | $J/\psi \to \pi^+ \Sigma^0 \bar{\Sigma}^{*-}, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \Lambda \to \pi^0 n, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar p\gamma$ | 16121 | 1 | 98698 |
| 16123 | $J/\psi \to \pi^+\pi^-\eta\gamma^F, \eta \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 16122 | 1 | 98699 |
| 16124 | $J/\psi \to \pi^0 \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16123 | 1 | 98700 |
| 16125 | $J/\psi \to \pi^+ \eta K_S^0 K^-, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 16124 | 1 | 98701 |
| 16126 | $J/\psi \to \pi^+ K^* K^{*-} f_0(1370), K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, f_0(1370) \to \rho^+ \rho^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16125 | 1 | 98702 |
| 16127 | $J/\psi \to \pi^+ K^0 K^{*-} h_1(1170), K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 16126 | 1 | 98703 |
| 16128 | $J/\psi \to \omega f_0(1370) f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16127 | 1 | 98704 |
| 16129 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \phi \to \eta \gamma, \eta \to \gamma \gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma\gamma$ | 16128 | 1 | 98705 |
| 16130 | $J/\psi \to \pi^- \bar{K}^0 n \bar{\Sigma}^{*+}, \bar{K}^0 \to K_L^0, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0 K_L^0 \pi^+ \pi^- n \bar{n}$ | 16129 | 1 | 98706 |
| 16131 | $J/\psi \to \pi^+ K_2^{*0} K_0^{*-}, K_2^{*0} \to \pi^- K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 16130 | 1 | 98707 |
| 16132 | $J/\psi 	o K_S^0 n \bar{\Lambda}, K_S^0 	o \pi^0 \pi^0, \bar{\Lambda} 	o \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0nar{n}$ | 16131 | 1 | 98708 |
| 16133 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16132 | 1 | 98709 |
| 16134 | $J/\psi \to \pi^0 \rho^0 \eta', \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 16133 | 1 | 98710 |
| 16135 | $J/\psi \to \rho^+ a_2^- \eta', \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \pi^- \omega, \eta' \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 16134 | 1 | 98711 |
| 16136 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 16135 | 1 | 98712 |
| 16137 | $J/\psi 	o ho^- ar{K}^* K^+, ho^- 	o \pi^0 \pi^-, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 16136 | 1 | 98713 |
| 16138 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16137 | 1 | 98714 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 16139 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^0 \bar{\Sigma}^+, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Lambda \to \pi^0 n,$ $\pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-n\bar{n}\gamma^F$ | 16138 | 1 | 98715 |
| 16140 | $J/\psi ightarrow nar{n}a_1^0, a_1^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0\pi^-$ | $\pi^0\pi^+\pi^-nar{n}$ | 16139 | 1 | 98716 |
| 16141 | $J/\psi \to \pi^0 K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \phi \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 16140 | 1 | 98717 |
| 16142 | $J/\psi \to \pi^0 \rho^+ K^- K_0^0, \rho^+ \to \pi^0 \pi^+, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16141 | 1 | 98718 |
| 16143 | $J/\psi \to h_1(1170)f_1(1285), h_1(1170) \to \pi^- \rho^+, f_1(1285) \to \pi^0 \pi^0 \rho^0, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16142 | 1 | 98719 |
| 16144 | $J/\psi \to \pi^+ \eta \eta \omega a_0^-, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 16143 | 1 | 98720 |
| 16145 | $J/\psi \to K^- K^{*+} f_0(1710), K^{*+} \to \pi^+ K^0, f_0(1710) \to \eta \eta, K^0 \to K_L^0, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 16144 | 1 | 98721 |
| 16146 | $J/\psi 	o ho^- ar{K}^* K^+ \gamma^F, ho^- 	o \pi^0 \pi^-, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma^F$ | 16145 | 1 | 98722 |
| 16147 | $J/\psi 	o \pi^0 K^0 ar{K}^0_1, K^0 	o K^0_S, ar{K}^0_1 	o \pi^+ \pi^- ar{K}^0, K^0_S 	o \pi^+ \pi^-, ar{K}^0 	o K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16146 | 1 | 98723 |
| 16148 | $J/\psi \to K^+ K_1^- \gamma^F, K_1^- \to \pi^+ \pi^- K^-$ | $\pi^+\pi^-K^+K^-\gamma^F$ | 16147 | 1 | 98724 |
| 16149 | $J/\psi \to \pi^- \rho^+ \rho^- a_1^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16148 | 1 | 98725 |
| 16150 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^- ar{K}^* K^+, ar{K}^* ightarrow \pi^0 ar{K}^0, ar{K}^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma$ | 16149 | 1 | 98726 |
| 16151 | $J/\psi \to K^* \bar{K}^* K^+ K^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 16150 | 1 | 98727 |
| 16152 | $J/\psi \to \rho^0 a_0^0 f_1(1285), \rho^0 \to \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, f_1(1285) \to \pi^+ K^0 K^-, \eta \to \pi^+ \pi^- \gamma^F, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma^F$ | 16151 | 1 | 98728 |
| 16153 | $J/\psi 	o \pi^0 ho^0 \eta, ho^0 	o \pi^+ \pi^-, \eta 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 16152 | 1 | 98729 |
| 16154 | $J/\psi \to \pi^+ a_2^-, a_2^- \to \pi^- \eta \gamma^f, \eta \to \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma^f$ | 16153 | 1 | 98730 |
| 16155 | $J/\psi \to a_2^0 \bar{K}^0 K^*, a_2^0 \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+ \gamma^f, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 16154 | 1 | 98731 |
| 16156 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^+K^{*-}, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 16155 | 1 | 98732 |
| 16157 | $J/\psi 	o \pi^- K^+ \phi \bar{K}^0_1, \phi 	o K^+ K^-, \bar{K}^0_1 	o ho^0 \bar{K}^0, ho^0 	o \pi^+ \pi^-, \bar{K}^0 	o K^0_L$ | $K_L^0\pi^+\pi^-\pi^-K^+K^+K^-$ | 16156 | 1 | 98733 |
| 16158 | $J/\psi \to \pi^0 \rho^0 \bar{K}^* K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^- K^+ \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 16157 | 1 | 98734 |
| 16159 | $J/\psi 	o \pi^0\pi^0\pi^0ar{K}^0K^*, ar{K}^0 	o K_S^0, K^* 	o \pi^-K^+, K_S^0 	o \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 16158 | 1 | 98735 |
| 16160 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^-K^+$ | 16159 | 1 | 98736 |
| 16161 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^- \gamma^f, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 16160 | 1 | 98737 |
| 16162 | $J/\psi ightarrow \eta \eta' \gamma, \eta ightarrow \gamma \gamma, \eta' ightarrow \pi^+ \pi^- \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 16161 | 1 | 98738 |
| 16163 | $J/\psi 	o \pi^0 n ar{n}, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-nar{n}\gamma^F$ | 16162 | 1 | 98739 |
| 16164 | $J/\psi \to \eta \bar{K}^0 K_2^{*0}, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^0 K^*, K^* \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 16163 | 1 | 98740 |
| 16165 | $J/\psi \to \rho^+ K^0 K^- \phi, \rho^+ \to \pi^0 \pi^+, K^0 \to K^0_S, \phi \to K^+ K^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 16164 | 1 | 98741 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 16166 | $J/\psi \to K^+K^{*-}f_0(1710), K^{*-} \to \pi^-\bar{K}^0, f_0(1710) \to \omega\omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 16165 | 1 | 98742 |
| 16167 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \pi^- \omega \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16166 | 1 | 98743 |
| 16168 | $J/\psi \to \pi^0 K^* \bar{K}^* h_1(1170), K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^0 \rho^0, \bar{K}^0 \to K_S^0,$ $\rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16167 | 1 | 98744 |
| 16169 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16168 | 1 | 98745 |
| 16170 | $J/\psi \to K^0 a_0^0 \bar{K}_1^{'0}, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 16169 | 1 | 98746 |
| 16171 | $J/\psi \to K^+K^-f_1(1285), f_1(1285) \to \pi^0K^+K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 16170 | 1 | 98747 |
| 16172 | $J/\psi \to \eta \omega \eta', \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16171 | 1 | 98748 |
| 16173 | $J/\psi \to \eta \eta h_1(1170), \eta \to \gamma \gamma, \eta \to \gamma \gamma, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 16172 | 1 | 98749 |
| 16174 | $J/\psi \to \rho^0 K^0 \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 16173 | 1 | 98750 |
| 16175 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^+ K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 16174 | 1 | 98751 |
| 16176 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 16175 | 1 | 98752 |
| 16177 | $J/\psi \to \eta K_0^{*+} K_1^-, \eta \to \pi^0 \pi^+ \pi^-, K_0^{*+} \to \pi^0 K^+, K_1^- \to \omega K^-, \omega \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16176 | 1 | 98753 |
| 16178 | $J/\psi ightarrow nar{n}a_0^0, a_0^0 ightarrow K^+K^-$ | $K^+K^-n\bar{n}$ | 16177 | 1 | 98754 |
| 16179 | $J/\psi \to \omega K^{*+} \bar{K}_{1}^{'-}, \omega \to \pi^{0} \pi^{+} \pi^{-}, K^{*+} \to \pi^{0} K^{+}, \bar{K}_{1}^{'-} \to \pi^{-} \bar{K}^{*}, \bar{K}^{*} \to \pi^{+} K^{-}$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16178 | 1 | 98755 |
| 16180 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \pi^0K_0^{*-}, K^0 \to K_S^0, K_0^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 16179 | 1 | 98756 |
| 16181 | $J/\psi \to a_2^- K_2^{*0} K^+, a_2^- \to \pi^- \eta, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-$ | 16180 | 1 | 98757 |
| 16182 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^- ar{\Delta}{}^0 p, ar{\Delta}{}^0 ightarrow \pi^0 ar{n}$ | $\pi^0\pi^-ar{n}p\gamma$ | 16181 | 1 | 98758 |
| 16183 | $J/\psi \to \pi^0 a_0^+ b_1^-, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16182 | 1 | 98759 |
| 16184 | $J/\psi \to \pi^- f_2(1270) b_1^+, f_2(1270) \to \pi^0 \pi^0, b_1^+ \to \pi^+ \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16183 | 1 | 98760 |
| 16185 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^{'0}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16184 | 1 | 98761 |
| 16186 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+ \gamma^f, f_2(1270) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 16185 | 1 | 98762 |
| 16187 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 K^- a_1^+, K^0 \to K_L^0, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma$ | 16186 | 1 | 98763 |
| 16188 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 16187 | 1 | 98764 |
| 16189 | $J/\psi \to \pi^- \rho^+ f_1(1285) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 16188 | 1 | 98765 |
| 16190 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 16189 | 1 | 98766 |
| 16191 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \rho^0 K^+ K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 16190 | 1 | 98767 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 16192 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 16191 | 1 | 98768 |
| 16193 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1285) \to \pi^0 a_0^0, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_S^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^- \gamma^f, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16192 | 1 | 98769 |
| 16194 | $J/\psi \rightarrow \pi^0\pi^+a_0^-\gamma^F\gamma^f, a_0^-\rightarrow \pi^-\eta, \eta\rightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 16193 | 1 | 98770 |
| 16195 | $J/\psi ightarrow \pi^0 ho^0 \eta', ho^0 ightarrow \pi^+ \pi^- \gamma^f, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 16194 | 1 | 98771 |
| 16196 | $J/\psi ightarrow ar{K}^0 n ar{\Sigma}^0, ar{K}^0 ightarrow K_S^0, ar{\Sigma}^0 ightarrow ar{\Lambda} \gamma, K_S^0 ightarrow \pi^0 \pi^0, ar{\Lambda} ightarrow \pi^+ ar{p}$ | $\pi^0\pi^0\pi^+nar{p}\gamma$ | 6336 | 1 | 98772 |
| 16197 | $J/\psi 	o f_2(1270) b_1^0, f_2(1270) 	o \pi^0 \pi^0, b_1^0 	o \pi^0 \omega, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 16196 | 1 | 98773 |
| 16198 | $J/\psi \to \pi^+\pi^-K^*\bar{K}^0_1, K^* \to \pi^-K^+, \bar{K}^0_1 \to \rho^0\bar{K}^0, \rho^0 \to \pi^+\pi^-, \bar{K}^0 \to K^0_L$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 16197 | 1 | 98774 |
| 16199 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0 K_L^0\pi^- K^+$ | 16198 | 1 | 98775 |
| 16200 | $J/\psi \to \pi^+\pi^- f_2(1270) a_0^0, f_2(1270) \to \pi^+\pi^-, a_0^0 \to \pi^0 \eta, \pi^0 \to e^+e^- \gamma^F, \eta \to \pi^0\pi^+\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 16199 | 1 | 98776 |
| 16201 | $J/\psi \to \pi^+ a_0^0 a_1^-, a_0^0 \to \pi^0 \eta, a_1^- \to \rho^0 \pi^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 16200 | 1 | 98777 |
| 16202 | $J/\psi \to \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^-, \pi^0 \to e^+ e^+ e^- e^-$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 16201 | 1 | 98778 |
| 16203 | $J/\psi \to K^0 K_2^{*-} a_0^+, K^0 \to K_S^0, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^0 K^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^-$ | 16202 | 1 | 98779 |
| 16204 | $J/\psi \to \pi^+\pi^-K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+$ | 16203 | 1 | 98780 |
| 16205 | $J/\psi \to \pi^+ K^* \bar{K}_1^{'-}, K^* \to \pi^- K^+, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 16204 | 1 | 98781 |
| 16206 | $J/\psi \to \bar{\Lambda}\Sigma^{*0}, \bar{\Lambda} \to \pi^0 \bar{n}, \Sigma^{*0} \to \pi^0 \Lambda, \pi^0 \to e^+ e^- \gamma^F, \Lambda \to \pi^0 n$ | $e^+e^-\pi^0\pi^0nar{n}\gamma^F$ | 2025 | 1 | 98782 |
| 16207 | $J/\psi \to \pi^- \rho^+ f_1(1285)\gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma^f$ | 16206 | 1 | 98783 |
| 16208 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ \eta', \rho^+ \to \pi^0 \pi^+, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16207 | 1 | 98784 |
| 16209 | $J/\psi \to a_0^+ b_1^-, a_0^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 16208 | 1 | 98785 |
| 16210 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \omega K^+, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}\gamma^{f}$ | 16209 | 1 | 98786 |
| 16211 | $J/\psi \to \bar{K}^{0} K_{1}^{'0} \gamma, \bar{K}^{0} \to K_{S}^{0}, K_{1}^{'0} \to \pi^{-} K^{*+}, K_{S}^{0} \to \pi^{+} \pi^{-}, K^{*+} \to \pi^{+} K^{0}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+} \pi^{-}$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 16210 | 1 | 98787 |
| 16212 | $J/\psi \to \rho^0 \eta' a_1^0, \rho^0 \to \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, a_1^0 \to \pi^+ \rho^-, \eta \to \gamma \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 16211 | 1 | 98788 |
| 16213 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 K^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^{*+} \to \pi^0 K^+$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}$ | 16212 | 1 | 98789 |
| 16214 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \phi, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \phi \to K_L^0 K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 16213 | 1 | 98790 |
| 16215 | $J/\psi \to K^+ b_1^- \bar{K}_0^{*0}, b_1^- \to \pi^- \omega, \bar{K}_0^{*0} \to \pi^+ K^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 16214 | 1 | 98791 |
| 16216 | $J/\psi \to K^+ 0_1^- K_0^-, 0_1^- \to \pi^- \omega, K_0^- \to \pi^+ K^-, \omega \to \pi^- \gamma$ $J/\psi \to \pi^0 K^{*+} K_0^{*-}, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0,$ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}K^{-}\gamma^{F}$ | 16215 | 1 | 98792 |
| 16217 | $J/\psi \to \pi^0 \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 16216 | 1 | 98793 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 16218 | $J/\psi \to K^0 h_1(1170) \bar{K}_1^0, K^0 \to K_L^0, h_1(1170) \to \pi^- \rho^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16217 | 1 | 98794 |
| 16219 | $J/\psi \to \pi^- \bar{K}^* K^{*+} \eta', \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, \eta' \to \rho^0 \gamma, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$ | 3934 | 1 | 98795 |
| 16220 | $J/\psi \to \pi^0 \Sigma^+ \bar{\Sigma}^{*-}, \Sigma^+ \to \pi^0 p, \bar{\Sigma}^{*-} \to \pi^- \bar{\Lambda}, \bar{\Lambda} \to \pi^0 \bar{n}$ | $\pi^0\pi^0\pi^0\pi^-\bar{n}p$ | 16219 | 1 | 98796 |
| 16221 | $J/\psi \to \rho^0 \pi^+ K^* K^{*-}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 3935 | 1 | 98797 |
| 16222 | $J/\psi \to a_2^0 \pi^- \bar{K}^0 K^+, a_2^0 \to \pi^+ \pi^- \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 16221 | 1 | 98798 |
| 16223 | $J/\psi ightarrow \pi^- ho^+ \omega K^+ K^-, ho^+ ightarrow \pi^0 \pi^+, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16222 | 1 | 98799 |
| 16224 | $J/\psi \to \pi^+\pi^-a_1^0\gamma^f, a_1^0 \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f$ | 6340 | 1 | 98800 |
| 16225 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_1^0 \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 16224 | 1 | 98801 |
| 16226 | $J/\psi ightarrow \pi^0\pi^0\phi, \phi ightarrow \pi^0 ho^0, ho^0 ightarrow \pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 16225 | 1 | 98802 |
| 16227 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi \phi, \phi \to K_L^0 K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 16226 | 1 | 98803 |
| 16228 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}$ | 6341 | 1 | 98804 |
| 16229 | $J/\psi 	o \pi^0 \pi^+ \pi^- \omega, \omega 	o \eta \gamma, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 16228 | 1 | 98805 |
| 16230 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16229 | 1 | 98806 |
| 16231 | $J/\psi \to \pi^0 K^+ K_2^{*-}, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16230 | 1 | 98807 |
| 16232 | $J/\psi \to K^- \phi K_1^+, \phi \to K_L^0 K_S^0, K_1^+ \to \omega K^+, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 16231 | 1 | 98808 |
| 16233 | $J/\psi \to \omega K^{*+} K_0^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16232 | 1 | 98809 |
| 16234 | $J/\psi \to \pi^0 \rho^- b_1^+ \gamma, \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, \pi^0 \to e^+ e^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 16233 | 1 | 98810 |
| 16235 | $J/\psi 	o \pi^- \eta \bar{K}^0 K_1^+, \eta 	o \pi^0 \pi^+ \pi^-, \bar{K}^0 	o K_L^0, K_1^+ 	o ho^0 K^+, ho^0 	o \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 16234 | 1 | 98811 |
| 16236 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^0 \pi^0, $ $\rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16235 | 1 | 98812 |
| 16237 | $J/\psi ightarrow ar{K}^0 n ar{\Lambda}, ar{K}^0 ightarrow K_S^0, ar{\Lambda} ightarrow \pi^+ ar{p}, K_S^0 ightarrow \pi^+ \pi^- \gamma^f$ | $\pi^+\pi^+\pi^-nar p\gamma^f$ | 16236 | 1 | 98813 |
| 16238 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6342 | 1 | 98814 |
| 16239 | $J/\psi \to f_2' h_1(1380), f_2' \to \eta \eta, h_1(1380) \to K^+ K^{*-}, \eta \to \gamma \gamma, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma\gamma\gamma\gamma$ | 16238 | 1 | 98815 |
| 16240 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16239 | 1 | 98816 |
| 16241 | $J/\psi \to \eta K^- K^{*+}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0,$ $\pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+K^-\gamma^F\gamma\gamma$ | 16240 | 1 | 98817 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 16242 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 16241 | 1 | 98818 |
| 16243 | $J/\psi \to \omega K^{*+}K^{*-}, \omega \to \pi^0\pi^+\pi^-, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-\gamma^f, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 16242 | 1 | 98819 |
| 16244 | $J/\psi \to \pi^0 \eta K^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16243 | 1 | 98820 |
| 16245 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^- \gamma^f, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16244 | 1 | 98821 |
| 16246 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 16245 | 1 | 98822 |
| 16247 | $J/\psi \to \pi^+ f_2(1270) K^0 K^-, f_2(1270) \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16246 | 1 | 98823 |
| 16248 | $J/\psi \to \pi^+ \rho^- K^{*-} K_1^+, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K^*, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16247 | 1 | 98824 |
| 16249 | $J/\psi \to \bar{K}^*K_2^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^0 \to \pi^- K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16248 | 1 | 98825 |
| 16250 | $J/\psi ightarrow \phi par{p}, \phi ightarrow K_L^0 K_S^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L p\bar{p}$ | 16249 | 1 | 98826 |
| 16251 | $J/\psi \to \pi^0 \pi^+ \pi^- f_1(1285), f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 16250 | 1 | 98827 |
| 16252 | $J/\psi \to \pi^0 \pi^- \rho^+ K^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16251 | 1 | 98828 |
| 16253 | $J/\psi \to \pi^0 K^{*-} K_0^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_0^{*+} \to \pi^+ K^0 \gamma^f, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 16252 | 1 | 98829 |
| 16254 | $J/\psi ightarrow a_2^0 \omega, a_2^0 ightarrow \pi^- ho^+, \omega ightarrow \pi^0 \pi^+ \pi^- \gamma^f, ho^+ ightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16253 | 1 | 98830 |
| 16255 | $J/\psi \to \rho^0 \pi^+ \pi^- \rho^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, \\ \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 16254 | 1 | 98831 |
| 16256 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16255 | 1 | 98832 |
| 16257 | $J/\psi \to \pi^- \omega a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta \gamma^f, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16256 | 1 | 98833 |
| 16258 | $J/\psi \to \pi^0 K_2^{*0} K_0^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_0^0 \to \pi^- K^+ \gamma^f, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 16257 | 1 | 98834 |
| 16259 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 16258 | 1 | 98835 |
| 16260 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16259 | 1 | 98836 |
| 16261 | $J/\psi \to a_2^- K_2^{*0} K^+, a_2^- \to \pi^0 \rho^-, K_2^{*0} \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16260 | 1 | 98837 |
| 16262 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^+\pi^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^-K^+, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 16261 | 1 | 98838 |
| 16263 | $J/\psi \to f_0(1370) f_0(1370), f_0(1370) \to \pi^0 \pi^0, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-$ | 16262 | 1 | 98839 |
| 16264 | $J/\psi \to \pi^+ \pi^+ \rho^- K^* K^-, \rho^- \to \pi^0 \pi^-, K^* \to \pi^- K^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 16263 | 1 | 98840 |
| 16265 | $J/\psi \rightarrow \pi^+ \eta' b_1^-, \eta' \rightarrow \pi^+ \pi^- \eta, b_1^- \rightarrow \pi^- \omega \gamma^f, \eta \rightarrow \pi^0 \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 16264 | 1 | 98841 |
| 16266 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \rho^0\rho^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-\gamma^F$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^F$ | 779 | 1 | 98842 |
| 16267 | $J/\psi \to K^+ K^{*-} a_1^0, K^{*-} \to \pi^0 K^-, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16266 | 1 | 98843 |
| 16268 | $J/\psi 	o ho^0 \omega \gamma, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 16267 | 1 | 98844 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 16269 | $J/\psi \to K^{*+}K^{*-}b_1^0, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, b_1^0 \to \pi^0\omega, K^0 \to K_S^0, \ \omega \to \pi^0\gamma, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 16268 | 1 | 98845 |
| 16270 | $J/\psi 	o K^+ K^{*-} a^0_0, K^{*-} 	o \pi^- ar K^0, a^0_0 	o \pi^0 \eta, ar K^0 	o K^0_L, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^F$ | 16269 | 1 | 98846 |
| 16271 | $J/\psi \to \omega \bar{K}^0 K_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16270 | 1 | 98847 |
| 16272 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 16271 | 1 | 98848 |
| 16273 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^0 \rho^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 16272 | 1 | 98849 |
| 16274 | $J/\psi \to K^0 \bar{p} \Sigma^+, K^0 \to K^0_S, \Sigma^+ \to \pi^0 p, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0p\bar{p}$ | 16273 | 1 | 98850 |
| 16275 | $J/\psi \to \pi^+\pi^-a_1^0 f_1(1285), a_1^0 \to \pi^-\rho^+, f_1(1285) \to \pi^+a_0^-, \rho^+ \to \pi^0\pi^+, a_0^- \to \pi^-\eta, $ $\eta \to \gamma\gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 16274 | 1 | 98851 |
| 16276 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16275 | 1 | 98852 |
| 16277 | $J/\psi \to K^- \phi K_1^+, \phi \to K^+ K^-, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 16276 | 1 | 98853 |
| 16278 | $J/\psi \rightarrow \rho^0 \eta a_0^0, \rho^0 \rightarrow \pi^+\pi^-, \eta \rightarrow \pi^+\pi^-\gamma^F, a_0^0 \rightarrow \pi^0 \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 16277 | 1 | 98854 |
| 16279 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 16278 | 1 | 98855 |
| 16280 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \rho^+ K^-, K^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 16279 | 1 | 98856 |
| 16281 | $J/\psi \to K^{+}a_{0}^{-}\bar{K}_{1}^{0}, a_{0}^{-} \to \pi^{-}\eta, \bar{K}_{1}^{0} \to \pi^{+}K^{*-}, \eta \to \gamma\gamma, K^{*-} \to \pi^{-}\bar{K}^{0}, \\ \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma$ | 16280 | 1 | 98857 |
| 16282 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^+K^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 16281 | 1 | 98858 |
| 16283 | $J/\psi \rightarrow \pi^- \rho^+ \eta^\prime, \rho^+ \rightarrow \pi^0 \pi^+, \eta^\prime \rightarrow \rho^0 \gamma, \pi^0 \rightarrow e^+ e^- \gamma^F, \rho^0 \rightarrow \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 16282 | 1 | 98859 |
| 16284 | $J/\psi \to \pi^+ a_2^- a_0^0, a_2^- \to \bar{K}^0 K^-, a_0^0 \to \pi^0 \eta, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 16283 | 1 | 98860 |
| 16285 | $J/\psi ightarrow \omega K^- K_2^{*+}, \omega ightarrow \pi^0 \gamma, K_2^{*+} ightarrow \pi^+ K^0, K^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 16284 | 1 | 98861 |
| 16286 | $J/\psi \to \pi^0 \eta' h_1(1170), \eta' \to \pi^+ \pi^- \eta, h_1(1170) \to \pi^0 \rho^0, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16285 | 1 | 98862 |
| 16287 | $J/\psi ightarrow a_2^0 \pi^+ K^0 K^-, a_2^0 ightarrow \pi^0 \eta, K^0 ightarrow K_L^0, \eta ightarrow \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 16286 | 1 | 98863 |
| 16288 | $J/\psi 	o K^*K_2^{*0}, K^* 	o \pi^-K^+\gamma^f, K_2^{*0} 	o \pi^0 ar K^0, ar K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^f$ | 16287 | 1 | 98864 |
| 16289 | $J/\psi \to K^0 \phi \bar{K}_1^0, K^0 \to K_L^0, \phi \to K^+ K^-, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^- K^+ K^-$ | 16288 | 1 | 98865 |
| 16290 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{\Sigma}^{*+} \Sigma^{*-}, \bar{\Sigma}^{*+} \to \pi^+ \bar{\Lambda}, \Sigma^{*-} \to \pi^- \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma$ | 16289 | 1 | 98866 |
| 16291 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \phi \to \pi^0 \rho^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 16290 | 1 | 98867 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16292 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^0 K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 16291 | 1 | 98868 |
| 16293 | $J/\psi \to \pi^{0}K^{-}K_{2}^{*+}, K_{2}^{*+} \to \pi^{0}\pi^{0}K^{*+}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 6344 | 1 | 98869 |
| 16294 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}^0 \phi, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0K_L^0\pi^+\pi^-$ | 16293 | 1 | 98870 |
| 16295 | $J/\psi \to K^+ f_0(1370) K_0^{*-}, f_0(1370) \to \rho^+ \rho^-, K_0^{*-} \to \pi^- \bar{K}^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 16294 | 1 | 98871 |
| 16296 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16295 | 1 | 98872 |
| 16297 | $J/\psi \to \pi^+\pi^- f_2(1270) f_1(1285), f_2(1270) \to \pi^+\pi^-, f_1(1285) \to \pi^0 K^+K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16296 | 1 | 98873 |
| 16298 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \pi^+ a_2^- \eta, a_2^- ightarrow ho^0 \pi^-, \eta ightarrow \gamma \gamma, ho^0 ightarrow \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 16297 | 1 | 98874 |
| 16299 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\gamma\gamma\gamma$ | 16298 | 1 | 98875 |
| 16300 | $J/\psi \to K^{*-}K_0^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_0^{*+} \to \pi^+K^0\gamma^f, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16299 | 1 | 98876 |
| 16301 | $J/\psi \to \rho^- b_1^+ h_1(1170), \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16300 | 1 | 98877 |
| 16302 | $J/\psi \to \pi^- K_2^{*0} K^+, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 16301 | 1 | 98878 |
| 16303 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16302 | 1 | 98879 |
| 16304 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16303 | 1 | 98880 |
| 16305 | $J/\psi \to \pi^0\pi^-\rho^+K^*\bar{K}^0_1, \rho^+ \to \pi^0\pi^+, K^* \to \pi^-K^+, \bar{K}^0_1 \to \rho^+K^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16304 | 1 | 98881 |
| 16306 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 16305 | 1 | 98882 |
| 16307 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^+ \rho^-, h_1(1170) \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^- \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16306 | 1 | 98883 |
| 16308 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-K^+K^-K^-$ | 16307 | 1 | 98884 |
| 16309 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+ \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 16308 | 1 | 98885 |
| 16310 | $J/\psi \to \pi^0 K^* \bar{K}_1^{'0}, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 16309 | 1 | 98886 |
| 16311 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \omega \to \mu^+ \mu^- \pi^0 \gamma^f, K_S^0 \to \pi^+ \pi^-$ | $\mu^{+}\mu^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 16310 | 1 | 98887 |
| 16312 | $J/\psi \to \pi^+ f_2(1270) b_1^-, f_2(1270) \to \pi^0 \pi^0, b_1^- \to \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 16311 | 1 | 98888 |
| 16313 | $J/\psi \to K^0 K^{*-} a_1^+ \gamma, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 3937 | 1 | 98889 |
| 16314 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- a_0^0 b_1^+, a_0^0 \to \pi^0 \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, \ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 16313 | 1 | 98890 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16315 | $J/\psi \to ho^0 f_1(1285), ho^0 \to \pi^+\pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 16314 | 1 | 98891 |
| 16316 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to K^+ K^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 16315 | 1 | 98892 |
| 16317 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16316 | 1 | 98893 |
| 16318 | $J/\psi \to \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 16317 | 1 | 98894 |
| 16319 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16318 | 1 | 98895 |
| 16320 | $J/\psi \to \rho^- \bar{K}^0 K_2^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 16319 | 1 | 98896 |
| 16321 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16320 | 1 | 98897 |
| 16322 | $J/\psi \to \pi^0 K^* K^{*-} a_1^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, a_1^+ \to \pi^0 \rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 16321 | 1 | 98898 |
| 16323 | $J/\psi \to \eta \bar{K}^0 K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 16322 | 1 | 98899 |
| 16324 | $J/\psi \to K^+ K_1^-, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 16323 | 1 | 98900 |
| 16325 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0K^+, K_1^- \to \pi^-\bar{K}^*, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 16324 | 1 | 98901 |
| 16326 | $J/\psi \to \pi^0 K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0$ | 16325 | 1 | 98902 |
| 16327 | $J/\psi 	o ar{K}^0 K^* b_1^0, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, b_1^0 	o \pi^0 \omega, K^0 	o K_L^0, \ \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 16326 | 1 | 98903 |
| 16328 | $J/\psi \to \pi^- \bar{K}^0 K^+ \eta', \bar{K}^0 \to K^0_S, \eta' \to \rho^0 \gamma, K^0_S \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 16327 | 1 | 98904 |
| 16329 | $J/\psi 	o \eta_c \gamma, \eta_c 	o \pi^+ K^* K^-, K^* 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma$ | 16328 | 1 | 98905 |
| 16330 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^0 K^0, K_0^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16329 | 1 | 98906 |
| 16331 | $J/\psi \to K^+ K_1^- a_1^0, K_1^- \to \rho^- \bar{K}^0, a_1^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16330 | 1 | 98907 |
| 16332 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 16331 | 1 | 98908 |
| 16333 | $J/\psi \to K^{*+} \bar{p}\Lambda, K^{*+} \to K^{+}\gamma, \Lambda \to \pi^{0}n$ | $\pi^0 K^+ n \bar{p} \gamma$ | 16332 | 1 | 98909 |
| 16334 | $J/\psi \to \eta K^0 K_2^{*0}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, K_2^{*0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 16333 | 1 | 98910 |
| 16335 | $J/\psi \to K^0 K^- a_1^+ \gamma^F, K^0 \to K_L^0, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma^F$ | 16334 | 1 | 98911 |
| 16336 | $J/\psi \to x(1835)\gamma, x(1835) \to \pi^+\pi^-\eta', \eta' \to \pi^0\pi^0\eta, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 16335 | 1 | 98912 |
| 16337 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^- K^{*+} \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 16336 | 1 | 98913 |
| 16338 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16337 | 1 | 98914 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 16339 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^+ \pi^- \gamma^F, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}$ | 16338 | 1 | 98915 |
| 16340 | $J/\psi \to K_0^{*-}K_1^+, K_0^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K_L^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^-$ | 16339 | 1 | 98916 |
| 16341 | $J/\psi \to \rho^- \bar{K}^0 K_1^+ \gamma, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 16340 | 1 | 98917 |
| 16342 | $J/\psi \to f_0(1370)h_1(1170)a_1^0, f_0(1370) \to \pi^+\pi^-, h_1(1170) \to \pi^0\rho^0, a_1^0 \to \pi^+\rho^-, \rho^0 \to \pi^+\pi^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 1560 | 1 | 98918 |
| 16343 | $J/\psi \to \rho^0 a_2^0 \eta', \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^- \rho^+, \eta' \to \pi^+ \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$ | 16342 | 1 | 98919 |
| 16344 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16343 | 1 | 98920 |
| 16345 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 16344 | 1 | 98921 |
| 16346 | $J/\psi \to \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 16345 | 1 | 98922 |
| 16347 | $J/\psi \to \pi^0 \rho^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma\gamma$ | 16346 | 1 | 98923 |
| 16348 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16347 | 1 | 98924 |
| 16349 | $J/\psi \to K^* \bar{K}_1^{'0} \gamma, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 16348 | 1 | 98925 |
| 16350 | $J/\psi \to K^- K_1^+ f_1(1285), K_1^+ \to \pi^+ K^*, f_1(1285) \to \pi^- \bar{K}^0 K^+, K^* \to \pi^0 K^0, \bar{K}^0 \to K_L^0, $ $\pi^0 \to e^+ e^- \gamma^F, K^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 16349 | 1 | 98926 |
| 16351 | $J/\psi \to \pi^0 \eta h_1(1170) a_1^0, \eta \to \gamma \gamma, h_1(1170) \to \pi^0 \rho^0, a_1^0 \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16350 | 1 | 98927 |
| 16352 | $J/\psi \to K^- \eta' K_1^+, \eta' \to \pi^+ \pi^- \eta, K_1^+ \to \pi^+ K^*, \eta \to \gamma \gamma, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 16351 | 1 | 98928 |
| 16353 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma^f$ | 16352 | 1 | 98929 |
| 16354 | $J/\psi \to \eta K^0 \bar{K}_1^0, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 1227 | 1 | 98930 |
| 16355 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_L^0, \omega \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16354 | 1 | 98931 |
| 16356 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^+ K_2^{*-}, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 16355 | 1 | 98932 |
| 16357 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 16356 | 1 | 98933 |
| 16358 | $J/\psi \rightarrow \rho^+ \eta a_0^-, \rho^+ \rightarrow \pi^0 \pi^+, \eta \rightarrow \gamma \gamma, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 16357 | 1 | 98934 |
| 16359 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \rho^- K^+, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16358 | 1 | 98935 |
| 16360 | $J/\psi \to K^+ K^{*-} a^0_0, K^{*-} \to \pi^- \bar{K}^0, a^0_0 \to \pi^0 \eta, \bar{K}^0 \to K^0_S, \eta \to \pi^0 \pi^0 \pi^0, K^0_S \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 16359 | 1 | 98936 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 16361 | $J/\psi \to K^0 \bar{K}^0 h_1(1380) \gamma, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-$ | $K_L^0 K_L^0 K_L^0 \pi^+ K^- \gamma$ | 2029 | 1 | 98937 |
| 16362 | $J/\psi \to K^+ \eta' \bar{K}_1^{'-}, \eta' \to \pi^+ \pi^- \eta, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16361 | 1 | 98938 |
| 16363 | $J/\psi \rightarrow \pi^0 \rho^0 \pi^+ \omega b_1^-, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, b_1^- \rightarrow \pi^- \omega, \omega \rightarrow \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$ | 16362 | 1 | 98939 |
| 16364 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to K_S^0K_S^0, K^{*-} \to \pi^-\bar{K}^0, K_S^0 \to \pi^0\pi^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 16363 | 1 | 98940 |
| 16365 | $J/\psi \to \pi^- \bar{K}^* K^+ h_1(1170), \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 16364 | 1 | 98941 |
| 16366 | $J/\psi \to \rho^- \bar{K}^0 K_0^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 16365 | 1 | 98942 |
| 16367 | $J/\psi \to \omega K^0 K^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16366 | 1 | 98943 |
| 16368 | $J/\psi 	o \eta K^0 ar{K}^* \gamma, \eta 	o \pi^0 \pi^0 \pi^0, K^0 	o K^0_S, ar{K}^* 	o \pi^+ K^-, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 16367 | 1 | 98944 |
| 16369 | $J/\psi \to \pi^- a_2^+ a_1^0, a_2^+ \to \pi^+ \eta, a_1^0 \to \pi^- \rho^+, \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16368 | 1 | 98945 |
| 16370 | $J/\psi 	o \omega K^0 K_2^{*0}, \omega 	o \pi^0 \gamma, K^0 	o K_L^0, K_2^{*0} 	o \pi^0 ar K^0, ar K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\gamma$ | 16369 | 1 | 98946 |
| 16371 | $J/\psi 	o K^0 K^- a_0^+ \gamma^F, K^0 	o K_L^0, a_0^+ 	o \pi^+ \eta, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^F$ | 16370 | 1 | 98947 |
| 16372 | $J/\psi \to ho^+ K^* K^- \gamma^F, ho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma^F$ | 16371 | 1 | 98948 |
| 16373 | $J/\psi \to \eta' h_1(1380), \eta' \to \gamma \gamma, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 K^+ K^- \gamma \gamma$ | 16372 | 1 | 98949 |
| 16374 | $J/\psi \to \pi^0 K^- K^{*+} a_0^0, K^{*+} \to \pi^0 K^+, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0K^+K^-\gamma\gamma$ | 16373 | 1 | 98950 |
| 16375 | $J/\psi 	o \pi^- b_1^+ a_1^0, b_1^+ 	o \pi^+ \omega, a_1^0 	o \pi^+ ho^-, \omega 	o \pi^0 \gamma, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16374 | 1 | 98951 |
| 16376 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^0 \pi^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16375 | 1 | 98952 |
| 16377 | $J/\psi \to \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 16376 | 1 | 98953 |
| 16378 | $J/\psi \to \phi f_1(1285), \phi \to K^+K^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16377 | 1 | 98954 |
| 16379 | $J/\psi \to \pi^0 \bar{\Sigma}^- \Sigma^{*+}, \bar{\Sigma}^- \to \pi^- \bar{n}, \Sigma^{*+} \to \pi^+ \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 16378 | 1 | 98955 |
| 16380 | $J/\psi \to \pi^0 K_2^{*+} K_0^{*-}, K_2^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16379 | 1 | 98956 |
| 16381 | $J/\psi \to \phi f_1(1420), \phi \to \pi^- \rho^+, f_1(1420) \to \pi^+ K^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 16380 | 1 | 98957 |
| 16382 | $J/\psi \to \pi^0 \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^0 a_0^0, \omega \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, \eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 16381 | 1 | 98958 |
| 16383 | $J/\psi \to \pi^- \eta \omega \bar{K}^* K^+, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma$ | 16382 | 1 | 98959 |
| 16384 | $V_{2} \longrightarrow \pi^{-} \overline{K}^{0} K^{+} \gamma^{f} \overline{K}^{0} \longrightarrow K^{0} K^{0} \longrightarrow \pi^{+} \pi^{-} \gamma^{f}$ | $\pi^+\pi^-\pi^-K^+\gamma^f\gamma^f$ | 16383 | 1 | 98960 |
| 16385 | $J/\psi \to \bar{\Xi}^+ \Xi^{*-}, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^{*-} \to \pi^0 \Xi^-, \bar{\Lambda} \to \pi^0 \bar{n}, \Xi^- \to \pi^- \Lambda, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-nar{n}$ | 16384 | 1 | 98961 |
| 16386 | $J/\psi \to \pi^- \rho^+ h_1(1170) \gamma^F, \rho^+ \to \pi^0 \pi^+, h_1(1170) \to \pi^- \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}$ | 16385 | 1 | 98962 |
| 16387 | $J/\psi \to \pi^- \rho^+ f_1(1285)\gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16386 | 1 | 98963 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 16388 | $J/\psi \to \eta \omega f_1(1285), \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 16387 | 1 | 98964 |
| 16389 | $J/\psi \to \pi^0 \pi^+ f_2(1270) a_1^-, f_2(1270) \to \pi^0 \pi^0, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16388 | 1 | 98965 |
| 16390 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 16389 | 1 | 98966 |
| 16391 | $J/\psi \rightarrow \rho^+ a_2^- \omega \gamma, \rho^+ \rightarrow \pi^0 \pi^+, a_2^- \rightarrow \rho^0 \pi^-, \omega \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 16390 | 1 | 98967 |
| 16392 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^- \rho^+, K^0 \to K_S^0, $ $\rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 3941 | 1 | 98968 |
| 16393 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 16392 | 1 | 98969 |
| 16394 | $J/\psi 	o \pi^0\pi^+a^0_0b^1, a^0_0 	o \pi^0\eta, b^1 	o \pi^-\omega, \eta 	o \pi^0\pi^0\pi^0, \omega 	o \pi^0\gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 16393 | 1 | 98970 |
| 16395 | $J/\psi \to \eta' \eta' b_1^0, \eta' \to \rho^0 \gamma, \eta' \to \pi^+ \pi^- \eta, b_1^0 \to \pi^0 \omega, \rho^0 \to \pi^+ \pi^-, \\ \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma$ | 16394 | 1 | 98971 |
| 16396 | $J/\psi \to \phi f_1(1285), \phi \to \pi^- \rho^+, f_1(1285) \to \rho^0 \gamma, \rho^+ \to \pi^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16395 | 1 | 98972 |
| 16397 | $J/\psi \to K^{0}\bar{K}^{*}f_{2}', K^{0} \to K_{S}^{0}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, f_{2}' \to K_{S}^{0}K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{L}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 16396 | 1 | 98973 |
| 16398 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16397 | 1 | 98974 |
| 16399 | $J/\psi 	o ho^0 a_0^0, ho^0 	o \pi^+ \pi^- \gamma^F, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 16398 | 1 | 98975 |
| 16400 | $J/\psi \to \pi^+ \rho^+ n \bar{\Delta}^{++}, \rho^+ \to \pi^0 \pi^+, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 16399 | 1 | 98976 |
| 16401 | $J/\psi \to a_2^0 \pi^+ a_1^-, a_2^0 \to K^+ K^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 16400 | 1 | 98977 |
| 16402 | $J/\psi \to K^0 \bar{K}^0 \phi \gamma, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 16401 | 1 | 98978 |
| 16403 | $J/\psi \to \rho^+ a_2^-, \rho^+ \to \pi^0 \pi^+, a_2^- \to \rho^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^f\gamma^f$ | 16402 | 1 | 98979 |
| 16404 | $J/\psi \to \pi^0 \bar{K}^* K_1^0, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16403 | 1 | 98980 |
| 16405 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 16404 | 1 | 98981 |
| 16406 | $J/\psi \to \pi^+ K^* K^- a_0^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16405 | 1 | 98982 |
| 16407 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 16406 | 1 | 98983 |
| 16408 | $J/\psi \rightarrow \pi^- \eta' b_1^+, \eta' \rightarrow \pi^0 \pi^0 \eta, b_1^+ \rightarrow \pi^+ \omega, \eta \rightarrow \pi^0 \pi^0 \pi^0, \omega \rightarrow \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 16407 | 1 | 98984 |
| 16409 | $J/\psi \to ho^0 K^- K_1^+, ho^0 \to \pi^+ \pi^-, K_1^+ \to \pi^+ K_0^0, K_0^0 \to \pi^- K^+$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 16408 | 1 | 98985 |
| 16410 | $J/\psi \to \pi^+\pi^-K^{*-}K_2^{*+}, K^{*-} \to \pi^0K^-, K_2^{*+} \to \pi^0K^{*+}, K^{*+} \to \pi^0K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16409 | 1 | 98986 |
| 16411 | $J/\psi \to \pi^0 K^0 K_2^{*0}, K^0 \to K_L^0, K_2^{*0} \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-$ | 16410 | 1 | 98987 |
| 16412 | $J/\psi ightarrow \pi^0 \eta' b_1^0, \eta' ightarrow ho^0 \gamma, b_1^0 ightarrow \pi^0 \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 16411 | 1 | 98988 |
| 16413 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, \omega \to \pi^0 \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0K_L^0\pi^-K^+\gamma^F\gamma$ | 16412 | 1 | 98989 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 16414 | $J/\psi \to \pi^+ \rho^- f_0(1370) \gamma^f, \rho^- \to \pi^0 \pi^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16413 | 1 | 98990 |
| 16415 | $J/\psi \to K^* \bar{K}_1^{'0}, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16414 | 1 | 98991 |
| 16416 | $J/\psi \to K^* \bar{K}^* h_1(1170), K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, h_1(1170) \to \pi^+ \rho^-, K^0 \to K_S^0, $ $\rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16415 | 1 | 98992 |
| 16417 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16416 | 1 | 98993 |
| 16418 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F \gamma^f \gamma^f$ | $e^+e^-\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma^F\gamma^f\gamma^f$ | 16417 | 1 | 98994 |
| 16419 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16418 | 1 | 98995 |
| 16420 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16419 | 1 | 98996 |
| 16421 | $J/\psi \to K^0 K^- b_1^+, K^0 \to K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 16420 | 1 | 98997 |
| 16422 | $J/\psi \rightarrow \rho^{0}\rho^{0}\omega, \rho^{0} \rightarrow \pi^{+}\pi^{-}, \rho^{0} \rightarrow \eta\gamma, \omega \rightarrow \pi^{0}\pi^{+}\pi^{-}, \eta \rightarrow \gamma\gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 16421 | 1 | 98998 |
| 16423 | $J/\psi \to K^0 \eta' \bar{K}_1^0, K^0 \to K_L^0, \eta' \to \rho^0 \gamma, \bar{K}_1^0 \to \rho^+ K^-, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma$ | 16422 | 1 | 98999 |
| 16424 | $J/\psi \to K^- \phi K_0^{*+}, \phi \to K_L^0 K_S^0, K_0^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-$ | 16423 | 1 | 99000 |
| 16425 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16424 | 1 | 99001 |
| 16426 | $J/\psi \to K^*K^{*-}a_0^+, K^* \to \pi^-K^+, K^{*-} \to \pi^-\bar{K}^0, a_0^+ \to \pi^+\eta, \bar{K}^0 \to K_L^0, \eta \to \pi^+\pi^-\gamma^F$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^F$ | 16425 | 1 | 99002 |
| 16427 | $J/\psi \to ho^0 ho^+ ho^- \eta, ho^0 \to \pi^+ \pi^-, ho^+ \to \pi^0 \pi^+, ho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 2745 | 1 | 99003 |
| 16428 | $J/\psi \to \pi^+\pi^-K^*\bar{K}^*\gamma^f, K^* \to \pi^-K^+, \bar{K}^* \to \pi^+K^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 16427 | 1 | 99004 |
| 16429 | $J/\psi ightarrow a_2^0 n ar{n}, a_2^0 ightarrow \pi^+ ho^-, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-nar{n}$ | 6351 | 1 | 99005 |
| 16430 | $J/\psi \to \pi^+ K^0 K_2^{*-} \gamma^f, K^0 \to K_S^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 16429 | 1 | 99006 |
| 16431 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \eta a_1^-, \eta \to \pi^0 \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16430 | 1 | 99007 |
| 16432 | $J/\psi \to \pi^0 K^0 \bar{\Delta}^- \Sigma^-, K^0 \to K_L^0, \bar{\Delta}^- \to \pi^+ \bar{n}, \Sigma^- \to \pi^- n$ | $\pi^0 K_L^0 \pi^+ \pi^- n \bar{n}$ | 16431 | 1 | 99008 |
| 16433 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \rho^0 K^+, \bar{K}^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 16432 | 1 | 99009 |
| 16434 | $J/\psi \to a_2^0 \rho^+ a_0^-, a_2^0 \to \pi^+ \rho^-, \rho^+ \to \pi^0 \pi^+, a_0^- \to \pi^- \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16433 | 1 | 99010 |
| 16435 | $J/\psi \to \omega \bar{K}^* K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 16434 | 1 | 99011 |
| 16436 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^0 K_1^-, K^0 \to K_S^0, K_1^- \to \pi^0 K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma^f$ | 16435 | 1 | 99012 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16437 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to \pi^- \eta, $ $\eta \to \gamma \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 16436 | 1 | 99013 |
| 16438 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16437 | 1 | 99014 |
| 16439 | $J/\psi 	o \eta \eta' \phi, \eta 	o \gamma \gamma, \eta' 	o \pi^0 \pi^0 \eta, \phi 	o \pi^+ ho^-, \eta 	o \pi^0 \pi^+ \pi^-, \ ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16438 | 1 | 99015 |
| 16440 | $J/\psi 	o a_2^0 \pi^+ a_2^-, a_2^0 	o \pi^0 \eta, a_2^- 	o \pi^0 ho^-, \eta 	o \pi^0 \pi^0 \pi^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 16439 | 1 | 99016 |
| 16441 | $J/\psi \to \rho^0 h_1(1170)\gamma, \rho^0 \to \pi^+\pi^-, h_1(1170) \to \pi^-\rho^+\gamma^f, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 16440 | 1 | 99017 |
| 16442 | $J/\psi \to K^0 \bar{K}^* f_1(1420), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0, K_S^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0K_L^0$ | 16441 | 1 | 99018 |
| 16443 | $J/\psi \to \pi^0 \eta h_1(1170), \eta \to \pi^0 \pi^0 \pi^0, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 16442 | 1 | 99019 |
| 16444 | $J/\psi ightarrow ho^+ ho^- n ar{n}, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 16443 | 1 | 99020 |
| 16445 | $J/\psi \to K^+ a_0^- \bar{K}_1^{'0}, a_0^- \to \pi^- \eta, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16444 | 1 | 99021 |
| 16446 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \eta f_2(1270), \eta \to \gamma\gamma, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 16445 | 1 | 99022 |
| 16447 | $J/\psi 	o K^{0} \bar{K}^{*} f_{2}^{'}, K^{0} 	o K_{L}^{0}, \bar{K}^{*} 	o \pi^{+} K^{-}, f_{2}^{'} 	o \eta \eta, \eta 	o \pi^{0} \pi^{0} \pi^{0}, \ \eta 	o \pi^{0} \pi^{+} \pi^{-} \gamma^{f}$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-\gamma^f$ | 16446 | 1 | 99023 |
| 16448 | $J/\psi \to K^- K^{*+} \eta', K^{*+} \to \pi^0 K^+, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16447 | 1 | 99024 |
| 16449 | $J/\psi \to \rho^+ K^0 K^- f_0(1710), \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, f_0(1710) \to \pi^+ \pi^- \gamma^f$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 16448 | 1 | 99025 |
| 16450 | $J/\psi \to \pi^0 ho^0 \pi^+ K^- K_1^0, ho^0 \to \pi^+ \pi^- \gamma^f, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 16449 | 1 | 99026 |
| 16451 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+K^0\gamma^f, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16450 | 1 | 99027 |
| 16452 | $J/\psi \rightarrow \rho^+ a_0^0 a_0^-, \rho^+ \rightarrow \pi^0 \pi^+, a_0^0 \rightarrow \pi^0 \eta, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \gamma \gamma, \\ \eta \rightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 16451 | 1 | 99028 |
| 16453 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16452 | 1 | 99029 |
| 16454 | $J/\psi \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K_I^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-K^-K^-$ | 16453 | 1 | 99030 |
| 16455 | $J/\psi ightarrow \pi^- ar{\Lambda} \Sigma^+, ar{\Lambda} ightarrow \pi^+ ar{p} \gamma^f, \Sigma^+ ightarrow \pi^0 p$ | $\pi^0\pi^+\pi^-p\bar{p}\gamma^f$ | 16454 | 1 | 99031 |
| 16456 | $J/\psi \to K_1^0 \bar{K}_1^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}_1^0 \to \pi^+ K^{*-}, K_0^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16455 | 1 | 99032 |
| 16457 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^0 K^{*-}, K_1^{'+} \to \rho^+ K^0, K^{*-} \to \pi^0 K^-, \rho^+ \to \pi^0 \pi^+, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16456 | 1 | 99033 |
| 16458 | $J/\psi \rightarrow \rho^- \omega a_0^+ \gamma, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16457 | 1 | 99034 |
| 16459 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to K^+ \gamma, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 16458 | 1 | 99035 |
| 16460 | $J/\psi \to K_1^0 \bar{K}_1^{'0}, K_1^0 \to \pi^0 K^*, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16459 | 1 | 99036 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16461 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 16460 | 1 | 99037 |
| 16462 | $J/\psi \to \rho^0 a_2^0 \eta', \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^-, \eta' \to \pi^0 \pi^0 \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16461 | 1 | 99038 |
| 16463 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-\pi^-K^+K^+$ | 16462 | 1 | 99039 |
| 16464 | $J/\psi \to a_2^+ K^* K^-, a_2^+ \to \pi^0 \rho^+, K^* \to \pi^0 K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16463 | 1 | 99040 |
| 16465 | $J/\psi \to \pi^+\pi^+\pi^-\eta a_0^- f_0(1370), \eta \to \pi^0\pi^0\pi^0, a_0^- \to \pi^-\eta, f_0(1370) \to \pi^+\pi^-, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16464 | 1 | 99041 |
| 16466 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^0 \rho^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 16465 | 1 | 99042 |
| 16467 | $J/\psi \to \pi^+ K^0 \bar{K}^* a_1^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16466 | 1 | 99043 |
| 16468 | $J/\psi \to \bar{K}^0 K_1^0 \gamma, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\gamma$ | 16467 | 1 | 99044 |
| 16469 | $J/\psi \to \pi^+ a_2^- f_0(1370), a_2^- \to \bar{K}^0 K^-, f_0(1370) \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16468 | 1 | 99045 |
| 16470 | $J/\psi \to \omega K^0 \bar{K}^* \gamma, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16469 | 1 | 99046 |
| 16471 | $J/\psi \to \pi^+\pi^-\pi^-a_2^+h_1(1170), a_2^+ \to \pi^0\rho^+, h_1(1170) \to \pi^0\rho^0, \rho^+ \to \pi^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16470 | 1 | 99047 |
| 16472 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 16471 | 1 | 99048 |
| 16473 | $J/\psi 	o \eta \bar K^0 K^* \gamma, \eta 	o \pi^0 \pi^+ \pi^-, \bar K^0 	o K^0_L, K^* 	o \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma$ | 16472 | 1 | 99049 |
| 16474 | $J/\psi \to \pi^- K_S^0 K^+ \phi, K_S^0 \to \pi^+ \pi^-, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 16473 | 1 | 99050 |
| 16475 | $J/\psi \to \pi^- K^- K^{*+} b_1^+, K^{*+} \to \pi^0 K^+, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16474 | 1 | 99051 |
| 16476 | $J/\psi \to \omega a_0^+ a_0^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, a_0^- \to \pi^- \eta, \eta \to \pi^+ \pi^- \gamma^F, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma\gamma$ | 16475 | 1 | 99052 |
| 16477 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16476 | 1 | 99053 |
| 16478 | $J/\psi \to \pi^0 \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16477 | 1 | 99054 |
| 16479 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16478 | 1 | 99055 |
| 16480 | $J/\psi \to \rho^- a_0^+ f_0(1370), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 16479 | 1 | 99056 |
| 16481 | $J/\psi \to \pi^+\pi^-K^0ar{K}^*a^0_0, K^0 \to K^0_L, ar{K}^* \to \pi^+K^-, a^0_0 \to \pi^0\eta, \eta \to \gamma\gamma$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 16480 | 1 | 99057 |
| 16482 | $J/\psi \to \pi^- \eta K_S^0 K^+, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 16481 | 1 | 99058 |
| 16483 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \eta', \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 16482 | 1 | 99059 |
| 16484 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 16483 | 1 | 99060 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 16485 | $J/\psi ightarrow \eta \eta \omega, \eta ightarrow \pi^0 \pi^0 \pi^0, \eta ightarrow \pi^0 \pi^0 \pi^0, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 16484 | 1 | 99061 |
| 16486 | $J/\psi 	o K_2^{*+}K_2^{*-}, K_2^{*+} 	o \pi^+ K^0, K_2^{*-} 	o \pi^0 K^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ K^-$ | 16485 | 1 | 99062 |
| 16487 | $J/\psi \to \pi^0 \eta K^{*+} K_1^-, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16486 | 1 | 99063 |
| 16488 | $J/\psi \to \rho^+ K^* K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_2^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 16487 | 1 | 99064 |
| 16489 | $J/\psi \to \eta \bar{K}^0 K^*, \eta \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_S^0, K^* \to K^0 \gamma, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 16488 | 1 | 99065 |
| 16490 | $J/\psi \to \rho^0 \pi^- a_0^+ f_0(1370), \rho^0 \to \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 16489 | 1 | 99066 |
| 16491 | $J/\psi \to \pi^0 \pi^- \eta K_2^{*0} K^+, \eta \to \gamma \gamma, K_2^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 16490 | 1 | 99067 |
| 16492 | $J/\psi \to \pi^+\pi^-K^*\bar{K}^*, K^* \to \pi^0K^0, \bar{K}^* \to \pi^+K^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 16491 | 1 | 99068 |
| 16493 | $J/\psi \to K_2^{*+} K_0^{*-}, K_2^{*+} \to \pi^0 K^+, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 16492 | 1 | 99069 |
| 16494 | $J/\psi \to \Xi^0 \bar{\Xi}^{*0}, \Xi^0 \to \pi^0 \Lambda, \bar{\Xi}^{*0} \to \pi^0 \bar{\Xi}^0, \Lambda \to \pi^- p, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \\ \bar{\Lambda} \to \bar{n} \gamma$ | $\pi^0\pi^0\pi^0\pi^-\bar{n}p\gamma$ | 16493 | 1 | 99070 |
| 16495 | $J/\psi \to \pi^0 \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16494 | 1 | 99071 |
| 16496 | $J/\psi \to K^0 \bar{K}_1^0, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16495 | 1 | 99072 |
| 16497 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16496 | 1 | 99073 |
| 16498 | $J/\psi \to \pi^+ K^0 K^{*-} f_2', K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, f_2' \to K_L^0 K_L^0$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ K^-$ | 16497 | 1 | 99074 |
| 16499 | $J/\psi 	o \pi^0 K_0^{*-} K_1^+, K_0^{*-} 	o \pi^- ar{K}^0, K_1^+ 	o ho^0 K^+, ar{K}^0 	o K_L^0, ho^0 	o \pi^+ \pi^-$ | $\pi^0 K^0_L \pi^+ \pi^- \pi^- K^+$ | 16498 | 1 | 99075 |
| 16500 | $J/\psi \to \eta \omega f_1(1285), \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 16499 | 1 | 99076 |
| 16501 | $J/\psi \to \pi^0 \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16500 | 1 | 99077 |
| 16502 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 16501 | 1 | 99078 |
| 16503 | $J/\psi \to \pi^0 K^+ K^{*-} f_0(1710), K^{*-} \to \pi^- \bar{K}^0, f_0(1710) \to \eta \eta, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma\gamma$ | 16502 | 1 | 99079 |
| 16504 | $J/\psi 	o \omega a_0^0 a_1^0, \omega 	o \pi^0 \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, a_1^0 	o \pi^+ ho^-, \eta 	o \pi^0 \pi^0 \pi^0, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16503 | 1 | 99080 |
| 16505 | $J/\psi \to \pi^0 a_2^0 h_1(1170), a_2^0 \to \pi^+ \pi^- \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \gamma, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 2746 | 1 | 99081 |
| 16506 | $J/\psi \to h_1(1380) f_1(1420), h_1(1380) \to K^0 \bar{K}^*, f_1(1420) \to \pi^+ K^0 K^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+K^-K^-$ | 16505 | 1 | 99082 |
| 16507 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 16506 | 1 | 99083 |
| 16508 | $J/\psi \to \pi^0 \rho^0 K^+ K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 16507 | 1 | 99084 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16509 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16508 | 1 | 99085 |
| 16510 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to \pi^+ \rho^-, h_1(1380) \to \bar{K}^0 K^*, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 6353 | 1 | 99086 |
| 16511 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^+ \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 16510 | 1 | 99087 |
| 16512 | $J/\psi \to \rho^+ a_2^- f_0(1370), \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, f_0(1370) \to \rho^+ \rho^-, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16511 | 1 | 99088 |
| 16513 | $J/\psi \to \pi^- \eta' a_1^+, \eta' \to \pi^+ \pi^- \eta, a_1^+ \to \pi^0 \rho^+, \eta \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16512 | 1 | 99089 |
| 16514 | $J/\psi \to \pi^+\pi^-K^*\bar{K}^*, K^* \to \pi^0K^0, \bar{K}^* \to \pi^0\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 16513 | 1 | 99090 |
| 16515 | $J/\psi \to \rho^0 K^* \bar{K}_1^0, \rho^0 \to \pi^+ \pi^- \gamma^f, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 16514 | 1 | 99091 |
| 16516 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+ \gamma^f, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16515 | 1 | 99092 |
| 16517 | $J/\psi \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0\gamma^f, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma^f$ | 16516 | 1 | 99093 |
| 16518 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \gamma \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K^0 \to K_L^0$ | $\pi^0 K^0_L \pi^+ K^- \gamma \gamma \gamma^f$ | 16517 | 1 | 99094 |
| 16519 | $J/\psi \to \pi^0 \rho^+ K^* K^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+K^-$ | 16518 | 1 | 99095 |
| 16520 | $J/\psi \to K^0 \bar{K}_1^0 \gamma, K^0 \to K_L^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0K_L^0\pi^+\pi^-\gamma^F\gamma$ | 16519 | 1 | 99096 |
| 16521 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 16520 | 1 | 99097 |
| 16522 | $J/\psi \rightarrow a_2^0 \eta \omega, a_2^0 \rightarrow \pi^0 \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0, \omega \rightarrow \pi^0 \pi^+ \pi^-, \eta \rightarrow \pi^0 \pi^+ \pi^-, $ $\pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16521 | 1 | 99098 |
| 16523 | $J/\psi \to \pi^- a_1^+ f_1(1285), a_1^+ \to \rho^0 \pi^+, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 16522 | 1 | 99099 |
| 16524 | $J/\psi \to \pi^0 K^{*-} K_1^+, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16523 | 1 | 99100 |
| 16525 | $J/\psi \rightarrow \pi^+ \rho^+ \rho^- \rho^-, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \rho^- \rightarrow \pi^0 \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 16524 | 1 | 99101 |
| 16526 | $J/\psi \to \eta \eta' \phi, \eta \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \phi \to K^+ K^-, \pi^0 \to e^+ e^- \gamma^F, \eta \to \gamma \gamma$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}\gamma\gamma$ | 16525 | 1 | 99102 |
| 16527 | $J/\psi ightarrow \eta K^0 ar K^0, \eta ightarrow \pi^+ \pi^- \gamma^F, K^0 ightarrow K^0_L, ar K^0 ightarrow K^0_L$ | $K^0_L K^0_L \pi^+ \pi^- \gamma^F$ | 16526 | 1 | 99103 |
| 16528 | $J/\psi \to \pi^0 \pi^- \rho^+ \eta f_2(1270), \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 16527 | 1 | 99104 |
| 16529 | $J/\psi 	o \pi^0 \Sigma^+ ar{\Sigma}^-, \Sigma^+ 	o \pi^0 p, ar{\Sigma}^- 	o \pi^0 ar{p}, \pi^0 	o e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^0par{p}\gamma^F$ | 780 | 1 | 99105 |
| 16530 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1710) \to \eta \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 16529 | 1 | 99106 |
| 16531 | $J/\psi \to \pi^- \rho^+ K^0 \bar{K}_1^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}_1^0 \to \omega \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \\ \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16530 | 1 | 99107 |
| 16532 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16531 | 1 | 99108 |
| 16533 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0\gamma^f, K_1^+ \to \pi^0K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+, \\ \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-\pi^0K_L^0\pi^-K^+\gamma^F\gamma\gamma^f$ | 16532 | 1 | 99109 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 16534 | $J/\psi \to \pi^- \rho^+ K^+ K_1^-, \rho^+ \to \pi^0 \pi^+, K_1^- \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16533 | 1 | 99110 |
| 16535 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} \gamma^F, \bar{K}^0 \to K^0_S, K^{*+} \to \pi^0 K^+, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 16534 | 1 | 99111 |
| 16536 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 16535 | 1 | 99112 |
| 16537 | $J/\psi \to \pi^0 \pi^+ \omega K^* K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+$ | 16536 | 1 | 99113 |
| 16538 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^+K^-$ | 16537 | 1 | 99114 |
| 16539 | $K^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{0}\pi^{0}$ $J/\psi \to \pi^{0}\rho^{+}\rho^{-}h_{1}(1170), \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, h_{1}(1170) \to \pi^{-}\rho^{+}, \pi^{0} \to e^{+}e^{-}\gamma^{F},$ $\rho^{+} \to \pi^{0}\pi^{+}$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16538 | 1 | 99115 |
| 16540 | $J/\psi 	o a_2^0 \pi^- a_2^+, a_2^0 	o \pi^0 \eta, a_2^+ 	o \pi^0 ho^+, \eta 	o \pi^0 \pi^0 \pi^0, ho^+ 	o \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 16539 | 1 | 99116 |
| 16541 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 16540 | 1 | 99117 |
| 16542 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \pi^0 \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16541 | 1 | 99118 |
| 16543 | $J/\psi \to K_2^{*-}K_1^+, K_2^{*-} \to \rho^- K^0, K_1^+ \to \rho^+ K^0, \rho^- \to \pi^0 \pi^-, K^0 \to K_S^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16542 | 1 | 99119 |
| 16544 | $J/\psi \rightarrow \pi^+ \eta' b_1^-, \eta' \rightarrow \pi^0 \pi^0 \eta, b_1^- \rightarrow \pi^- \omega, \eta \rightarrow \pi^+ \pi^- \gamma^F, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 16543 | 1 | 99120 |
| 16545 | $J/\psi \to \rho^0 \pi^+ \omega a_1^-, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 16544 | 1 | 99121 |
| 16546 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16545 | 1 | 99122 |
| 16547 | $J/\psi \to \eta_c \gamma, \eta_c \to K^- K^{*+} \phi, K^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^+K^-K^-\gamma$ | 16546 | 1 | 99123 |
| 16548 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0 K^0, K_L^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16547 | 1 | 99124 |
| 16549 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow \omega a_0^0 b_1^0, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, b_1^0 ightarrow \pi^0 \omega, \ \eta ightarrow \pi^0 \pi^0, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16548 | 1 | 99125 |
| 16550 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_0(1710) \to K^+ K^-$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 16549 | 1 | 99126 |
| 16551 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 6355 | 1 | 99127 |
| 16552 | $J/\psi \to K^-K^{*+}f_0(1710), K^{*+} \to \pi^0K^+, f_0(1710) \to K^+K^-$ | $\pi^0 K^+ K^+ K^- K^-$ | 16551 | 1 | 99128 |
| 16553 | $J/\psi \rightarrow ho^0\pi^-\rho^+\omega, ho^0 \rightarrow \pi^+\pi^-, ho^+ \rightarrow \pi^0\pi^+, \omega \rightarrow \pi^+\pi^-\gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 16552 | 1 | 99129 |
| 16554 | $J/\psi \to \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} \to \pi^0 K^*, K_2^{*-} \to \pi^- \bar{K}^0, K^* \to \pi^- K^+, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 16553 | 1 | 99130 |
| 16555 | $J/\psi \to \pi^0 K^- K_1^{'+}, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^- K^+ \gamma^f$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 16554 | 1 | 99131 |
| 16556 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \pi^+ K_0^0, \pi^0 \to e^+ e^- \gamma^F, K_0^0 \to \pi^- K^+$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 16555 | 1 | 99132 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16557 | $J/\psi \to \eta K^+ K_1^-, \eta \to \gamma \gamma, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma$ | 16556 | 1 | 99133 |
| 16558 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 16557 | 1 | 99134 |
| 16559 | $J/\psi \rightarrow \pi^- \rho^+ \eta \omega \omega, \rho^+ \rightarrow \pi^0 \pi^+, \eta \rightarrow \pi^0 \pi^0 \pi^0, \omega \rightarrow \pi^0 \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16558 | 1 | 99135 |
| 16560 | $J/\psi \to K^*K^{*-}a_0^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K^0 \to K_L^0, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16559 | 1 | 99136 |
| 16561 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K_1^0 \to \rho^0 K^0, K^{*-} \to \pi^0 K^-, \rho^0 \to \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16560 | 1 | 99137 |
| 16562 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^+\pi^-K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16561 | 1 | 99138 |
| 16563 | $J/\psi 	o ar{K}^0 K_2^{*0} a_0^0, ar{K}^0 	o K_L^0, K_2^{*0} 	o \pi^- K^+, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 16562 | 1 | 99139 |
| 16564 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 16563 | 1 | 99140 |
| 16565 | $J/\psi \to \rho^0 \pi^+ K^0 K_1^-, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 16564 | 1 | 99141 |
| 16566 | $J/\psi \to \pi^0 \pi^+ \eta a_1^-, \eta \to \pi^0 \pi^+ \pi^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16565 | 1 | 99142 |
| 16567 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+K^0, K_2^{*-} \to \rho^-K^0, K^0 \to K_L^0, \rho^- \to \pi^0\pi^-, K^0 \to K_L^0, \pi^0 \to e^+e^-\gamma^F$ | $e^+e^-K^0_LK^0_L\pi^+\pi^-\gamma^F$ | 16566 | 1 | 99143 |
| 16568 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16567 | 1 | 99144 |
| 16569 | $J/\psi ightarrow a_2^0 \pi^+ \pi^-, a_2^0 ightarrow \pi^0 \eta, \eta ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F$ | 16568 | 1 | 99145 |
| 16570 | $J/\psi \to \pi^+\pi^-K^{*-}K_1^+, K^{*-} \to \pi^0K^-, K_1^+ \to \pi^+\pi^-K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16569 | 1 | 99146 |
| 16571 | $J/\psi \to \pi^0\pi^-a_2^+, a_2^+ \to \pi^0\rho^+, \pi^0 \to e^+e^-\gamma^F, \rho^+ \to \pi^0\pi^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 16570 | 1 | 99147 |
| 16572 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16571 | 1 | 99148 |
| 16573 | $J/\psi \to \pi^+ \bar{K}^0 K^* b_1^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, b_1^- \to \pi^- \omega \gamma^f, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma^f$ | 16572 | 1 | 99149 |
| 16574 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16573 | 1 | 99150 |
| 16575 | $J/\psi \to \pi^+ K^{*-} K^0_0, K^{*-} \to \pi^0 K^-, K^0_0 \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 16574 | 1 | 99151 |
| 16576 | $J/\psi \to \rho^- a_0^0 a_0^+, \rho^- \to \pi^0 \pi^-, a_0^0 \to \pi^0 \eta, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma,$ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma\gamma$ | 16575 | 1 | 99152 |
| 16577 | $J/\psi \to K^{*+} \bar{K}_1'^- \gamma, K^{*+} \to \pi^+ K^0, \bar{K}_1'^- \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma$ | 16576 | 1 | 99153 |
| 16578 | $J/\psi \to \pi^+ K^0 K_1^- \gamma^f, K^0 \to K_S^0, K_1^- \to \rho^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | 16577 | 1 | 99154 |
| 16579 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^+ K^{*-} \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 16578 | 1 | 99155 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 16580 | $J/\psi \to K^- b_1^0 K_0^{*+}, b_1^0 \to \pi^0 \omega, K_0^{*+} \to \pi^0 K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16579 | 1 | 99156 |
| 16581 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^- \rho^+, f_1(1285) \to \pi^+ \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 6356 | 1 | 99157 |
| 16582 | $J/\psi \rightarrow \pi^0 \rho^+ \rho^- \eta \gamma, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 16581 | 1 | 99158 |
| 16583 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16582 | 1 | 99159 |
| 16584 | $J/\psi \to \pi^- \rho^+ f_1(1285) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{f}$ | 16583 | 1 | 99160 |
| 16585 | $J/\psi \to K_0^{*+} K_1^-, K_0^{*+} \to \pi^0 K^+, K_1^- \to \pi^+ \pi^- K^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 16584 | 1 | 99161 |
| 16586 | $J/\psi \to K^+K^-K^-K_2^{*+}, K_2^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $K_L^0 \pi^+ K^+ K^- K^-$ | 16585 | 1 | 99162 |
| 16587 | $J/\psi \to \pi^+ a_0^- f_0(1370) \gamma^F, a_0^- \to \pi^- \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 16586 | 1 | 99163 |
| 16588 | $J/\psi \to \phi f_1(1420), \phi \to \eta \gamma, f_1(1420) \to \pi^0 K^+ K^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-\gamma$ | 16587 | 1 | 99164 |
| 16589 | $J/\psi \to \pi^- a_2^+ \eta', a_2^+ \to \rho^0 \pi^+, \eta' \to \pi^+ \pi^- \eta \gamma^f, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 16588 | 1 | 99165 |
| 16590 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to \pi^0\pi^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16589 | 1 | 99166 |
| 16591 | $J/\psi \to \pi^- a_2^+ K^* \bar{K}^*, a_2^+ \to \bar{K}^0 K^+, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16590 | 1 | 99167 |
| 16592 | $J/\psi \to K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 16591 | 1 | 99168 |
| 16593 | $J/\psi \to \pi^0 K^+ K^{*-} \phi, K^{*-} \to \pi^- \bar{K}^0, \phi \to K^+ K^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+K^+K^-$ | 16592 | 1 | 99169 |
| 16594 | $J/\psi \to f_2(1270)K^0\bar{K}^*, f_2(1270) \to K_S^0K_S^0, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16593 | 1 | 99170 |
| 16595 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 16594 | 1 | 99171 |
| 16596 | $J/\psi \to K_2^{*0} K_1^{'0}, K_2^{*0} \to \rho^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16595 | 1 | 99172 |
| 16597 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_1(1285) \to \pi^- a_0^+, K_S^0 \to \pi^0 \pi^0, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16596 | 1 | 99173 |
| 16598 | $J/\psi \to \pi^- a_2^+, a_2^+ \to \pi^0 \rho^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma^f$ | 16597 | 1 | 99174 |
| 16599 | $J/\psi \to \pi^- \bar{K}^* K_2^{*+} \gamma^F, \bar{K}^* \to \pi^+ K^-, K_2^{*+} \to \pi^0 K^+$ | $\pi^0 \pi^+ \pi^- K^+ K^- \gamma^F$ | 16598 | 1 | 99175 |
| 16600 | $J/\psi \to ho^0 \pi^+ K^* K_2^{*-}, ho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16599 | 1 | 99176 |
| 16601 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^0 K^0, \bar{K}_2^0 \to \pi^0 K_2^{*0}, K^0 \to K_S^0, K_2^{*0} \to \pi^- K^{*+}, K_S^0 \to \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16600 | 1 | 99177 |
| 16602 | $J/\psi \to \pi^+ \Sigma^{*-} \bar{\Lambda}, \Sigma^{*-} \to \pi^0 \Sigma^-, \bar{\Lambda} \to \pi^+ \bar{p}, \Sigma^- \to \pi^- n$ | $\pi^0\pi^+\pi^+\pi^-nar{p}$ | 16601 | 1 | 99178 |
| 16603 | $J/\psi \to \rho^- \bar{K}^0 K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^0 K_0^{*+}, K_S^0 \to \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 16602 | 1 | 99179 |
| 16604 | $J/\psi \to \pi^0 K^+ K_1^-, K_1^- \to \pi^0 K_0^{*-}, \pi^0 \to e^+ e^- \gamma^F, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}$ | 16603 | 1 | 99180 |
| 16605 | $J/\psi \rightarrow \pi^+ \eta \omega a_0^-, \eta \rightarrow \gamma \gamma, \omega \rightarrow \pi^0 \pi^+ \pi^-, a_0^- \rightarrow \pi^- \eta, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 16604 | 1 | 99181 |
| 16606 | $J/\psi \to \rho^0 K^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{f}$ | 16605 | 1 | 99182 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 16607 | $J/\psi \to \pi^+\pi^-K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16606 | 1 | 99183 |
| 16608 | $J/\psi \to \pi^- \bar{K}^0 K^* b_1^+, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 16607 | 1 | 99184 |
| 16609 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^+ K^0, \eta \to \gamma \gamma, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 16608 | 1 | 99185 |
| 16610 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to \pi^0 K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 16609 | 1 | 99186 |
| 16611 | $J/\psi \to \pi^- \omega K^{*+} \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_L^0, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 16610 | 1 | 99187 |
| 16612 | $J/\psi \to \bar{K}^* K_2^{*0} \gamma, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 16611 | 1 | 99188 |
| 16613 | $J/\psi \to K^{*-}K_1^{'+}\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16612 | 1 | 99189 |
| 16614 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^+ \rho^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16613 | 1 | 99190 |
| 16615 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K^+ K^- \gamma$ | 16614 | 1 | 99191 |
| 16616 | $J/\psi \to \pi^0 \pi^+ a_2^- \eta', a_2^- \to \pi^- \eta, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16615 | 1 | 99192 |
| 16617 | $J/\psi \to K_2^{*+} K_1^-, K_2^{*+} \to \pi^0 K^{*+}, K_1^- \to \pi^- \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 16616 | 1 | 99193 |
| 16618 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_S^0, K_2^{*0} \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16617 | 1 | 99194 |
| 16619 | $J/\psi \to \pi^0 \pi^0 \pi^- a_2^+ f_2(1270), a_2^+ \to \rho^0 \pi^+, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16618 | 1 | 99195 |
| 16620 | $J/\psi \to \rho^0 K^* \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 16619 | 1 | 99196 |
| 16621 | $J/\psi \to \pi^+ K^* \bar{p}\Lambda, K^* \to \pi^- K^+ \gamma^f, \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^-K^+nar p\gamma^f$ | 16620 | 1 | 99197 |
| 16622 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ \eta', \rho^+ \to \pi^0 \pi^+, \eta' \to \omega \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16621 | 1 | 99198 |
| 16623 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \gamma, K^* \to K^0 \gamma, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 16622 | 1 | 99199 |
| 16624 | $J/\psi \to \pi^+ \eta K^0 K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K^0_S, K^{*-} \to \pi^0 K^-, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 16623 | 1 | 99200 |
| 16625 | $J/\psi \to K^0 \bar{K}^0 \phi \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 16624 | 1 | 99201 |
| 16626 | $J/\psi \to \phi \phi \gamma, \phi \to K_L^0 K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 16625 | 1 | 99202 |
| 16627 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_L^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 16626 | 1 | 99203 |
| 16628 | $J/\psi \to \pi^0 \rho^0, \rho^0 \to \pi^0 \gamma, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\gamma^F\gamma$ | 16627 | 1 | 99204 |
| 16629 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \rho^+ \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 16628 | 1 | 99205 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 16630 | $J/\psi \to \pi^0 f_0(1370) h_1(1170), f_0(1370) \to \rho^0 \rho^0, h_1(1170) \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^- \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16629 | 1 | 99206 |
| 16631 | $J/\psi \to K^0 \bar{K}^* f_0(1370), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\gamma^{F}$ | 16630 | 1 | 99207 |
| 16632 | $J/\psi ightarrow ho^0 \omega K^+ K^-, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16631 | 1 | 99208 |
| 16633 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-} \gamma^F, K^0 \to K_S^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K_S^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16632 | 1 | 99209 |
| 16634 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^+ \pi^- K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16633 | 1 | 99210 |
| 16635 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \pi^0 K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16634 | 1 | 99211 |
| 16636 | $J/\psi 	o \Sigma^+ ar{\Sigma}^- \gamma^f, \Sigma^+ 	o \pi^+ n, ar{\Sigma}^- 	o \pi^- ar{n}$ | $\pi^+\pi^-n\bar{n}\gamma^f$ | 16635 | 1 | 99212 |
| 16637 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^- \rho^+, a_2^- \to \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16636 | 1 | 99213 |
| 16638 | $J/\psi \to \pi^0 K^0 \bar{K}^0 K^* \bar{K}^*, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 16637 | 1 | 99214 |
| 16639 | $J/\psi \to \eta_2(1870)\gamma, \eta_2(1870) \to \pi^0 a_2^0, \pi^0 \to e^+ e^- \gamma^F, a_2^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $e^+e^-\pi^0\pi^+\pi^-\gamma^F\gamma$ | 16638 | 1 | 99215 |
| 16640 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \rho^+ K^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 16639 | 1 | 99216 |
| 16641 | $J/\psi \to K^+K^{*-}\eta', K^{*-} \to \pi^0K^-, \eta' \to \pi^0\pi^0\eta, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 6357 | 1 | 99217 |
| 16642 | $J/\psi \to \pi^+\pi^-a_2^-a_0^+, a_2^- \to \pi^0\rho^-, a_0^+ \to \pi^+\eta, \rho^- \to \pi^0\pi^-, \eta \to \gamma\gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16641 | 1 | 99218 |
| 16643 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^- \gamma^f, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma^f$ | 16642 | 1 | 99219 |
| 16644 | $J/\psi \to f_1(1285)\gamma, f_1(1285) \to \pi^+ K^0 K^-, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma$ | 16643 | 1 | 99220 |
| 16645 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^+K^0, K_1^- \to \rho^-\bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0\pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 16644 | 1 | 99221 |
| 16646 | $J/\psi \to \rho^0 a_2^0 a_2^0, \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^-, a_2^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16645 | 1 | 99222 |
| 16647 | $J/\psi \to \phi f_2^{'}, \phi \to K_L^0 K_S^0, f_2^{'} \to \eta \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \gamma \gamma, \ \eta \to \gamma \gamma$ | $\pi^0\pi^0K_L^0\gamma\gamma\gamma\gamma$ | 16646 | 1 | 99223 |
| 16648 | $J/\psi \to \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-, \pi^0 \to e^+ e^+ e^- e^-$ | $e^{+}e^{+}e^{-}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 16647 | 1 | 99224 |
| 16649 | $J/\psi 	o \eta \eta' \phi, \eta 	o \gamma \gamma, \eta' 	o \pi^+ \pi^- \eta, \phi 	o K^+ K^-, \eta 	o \gamma \gamma$ | $\pi^+\pi^-K^+K^-\gamma\gamma\gamma\gamma$ | 16648 | 1 | 99225 |
| 16650 | $J/\psi \to a_2^0 \omega f_0(1370), a_2^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16649 | 1 | 99226 |
| 16651 | $J/\psi 	o \omega K^- K_1^+, \omega 	o \pi^0 \pi^+ \pi^-, K_1^+ 	o \pi^+ K_0^0, K_0^0 	o \pi^0 K^0, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 16650 | 1 | 99227 |
| 16652 | $J/\psi \to K^+K^{*-}\phi\gamma^F, K^{*-} \to \pi^0K^-, \phi \to K_L^0K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0K_L^0K^+K^-\gamma^F$ | 16651 | 1 | 99228 |
| 16653 | $J/\psi \to \pi^0 \pi^0 \pi^- \rho^+ \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 16652 | 1 | 99229 |
| 16654 | $J/\psi \to \pi^- \bar{K}^* K^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^F$ | 16653 | 1 | 99230 |
| 16655 | $J/\psi \to \pi^0 \pi^0 \pi^0 \rho^0, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 16654 | 1 | 99231 |
| 16656 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 6358 | 1 | 99232 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16657 | $J/\psi \to \pi^+ \rho^- \eta \eta', \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 16656 | 1 | 99233 |
| 16658 | $J/\psi \to \pi^+ a_2^- f_2(1270), a_2^- \to \bar{K}^0 K^-, f_2(1270) \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 16657 | 1 | 99234 |
| 16659 | $J/\psi \to \rho^0 \pi^+ \pi^+ a_0^- a_1^-, \rho^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, a_1^- \to \rho^0 \pi^-, \eta \to \gamma \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma\gamma$ | 16658 | 1 | 99235 |
| 16660 | $J/\psi \to \rho^- \bar{K}^0 K^{*+} \phi, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, \phi \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^- \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 16659 | 1 | 99236 |
| 16661 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_0^{*+}, \bar{K}_0^{*0} \to \pi^+ K^-, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^-$ | 16660 | 1 | 99237 |
| 16662 | $J/\psi \to \phi f_0(2020), \phi \to \pi^+ \rho^-, f_0(2020) \to K^+ K^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-$ | 16661 | 1 | 99238 |
| 16663 | $J/\psi \to K^* \bar{K}^* b_1^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16662 | 1 | 99239 |
| 16664 | $J/\psi \to f_2(1270)K^0\bar{K}^0, f_2(1270) \to \pi^+\pi^+\pi^-\pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16663 | 1 | 99240 |
| 16665 | $J/\psi \to \eta \bar{K}^* K_0^0, \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-, K_0^0 \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16664 | 1 | 99241 |
| 16666 | $J/\psi \rightarrow \pi^0 \omega \eta', \omega \rightarrow \pi^0 \pi^+ \pi^-, \eta' \rightarrow \pi^+ \pi^- \eta, \pi^0 \rightarrow e^+ e^- \gamma^F, \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16665 | 1 | 99242 |
| 16667 | $J/\psi \to K^- \phi K_1^+, \phi \to K_L^0 K_S^0, K_1^+ \to \rho^+ K^0, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{f}$ | 16666 | 1 | 99243 |
| 16668 | $J/\psi \to \phi f_0(1370), \phi \to K^+K^-, f_0(1370) \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 16667 | 1 | 99244 |
| 16669 | $J/\psi \rightarrow \pi^+ \eta' b_1^-, \eta' \rightarrow \pi^+ \pi^- \eta, b_1^- \rightarrow \pi^- \omega, \eta \rightarrow \pi^0 \pi^0 \pi^0, \omega \rightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16668 | 1 | 99245 |
| 16670 | $J/\psi \to \pi^+ K^0 K^{*-} \phi, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16669 | 1 | 99246 |
| 16671 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \omega \bar{K}^0, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 16670 | 1 | 99247 |
| 16672 | $J/\psi \to \pi^- \bar{\Sigma}^{*+} \Sigma^0, \bar{\Sigma}^{*+} \to \pi^0 \bar{\Sigma}^+, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-n\bar{n}\gamma$ | 16671 | 1 | 99248 |
| 16673 | $J/\psi \to \pi^0 \bar{p}\Delta^+, \Delta^+ \to \pi^+ n$ | $\pi^0\pi^+n\bar{p}$ | 16672 | 1 | 99249 |
| 16674 | $J/\psi \to \bar{K}^* K_0^0, \bar{K}^* \to \pi^+ K^- \gamma^f, K_0^0 \to \pi^- K^+$ | $\pi^+\pi^-K^+K^-\gamma^f$ | 16673 | 1 | 99250 |
| 16675 | $J/\psi \to \pi^0 \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 16674 | 1 | 99251 |
| 16676 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \pi^+\pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16675 | 1 | 99252 |
| 16677 | $J/\psi \to \pi^0 K^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 16676 | 1 | 99253 |
| 16678 | $J/\psi \to \pi^0 \rho^0 \eta \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 16677 | 1 | 99254 |
| 16679 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 16678 | 1 | 99255 |
| 16680 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16679 | 1 | 99256 |
| 16681 | $J/\psi 	o \pi^0 ho^0 ar p \Delta^+, ho^0 	o \pi^+ \pi^-, \Delta^+ 	o \pi^0 p$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 16680 | 1 | 99257 |
| 16682 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 \eta \omega, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16681 | 1 | 99258 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16683 | $J/\psi \to \eta_c \gamma, \eta_c \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 6359 | 1 | 99259 |
| 16684 | $J/\psi \to \pi^0 \rho^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16683 | 1 | 99260 |
| 16685 | $J/\psi \to K^+ a_0^- \bar{K}_1^0, a_0^- \to \pi^- \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16684 | 1 | 99261 |
| 16686 | $J/\psi \to \omega h_1(1170)\gamma, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 16685 | 1 | 99262 |
| 16687 | $J/\psi \to \pi^+\pi^+\pi^-\pi^-\eta, \eta \to e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16686 | 1 | 99263 |
| 16688 | $J/\psi \to \pi^+\pi^+\pi^-a_2^-h_1(1170), a_2^- \to \pi^-\eta, h_1(1170) \to \pi^-\rho^+, \eta \to \pi^0\pi^+\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 16687 | 1 | 99264 |
| 16689 | $J/\psi \to K_1^0 \bar{K}_1^{'0}, K_1^0 \to \rho^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16688 | 1 | 99265 |
| 16690 | $J/\psi 	o \pi^0 ho^0 \pi^- ho^+ \gamma^F, ho^0 	o \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16689 | 1 | 99266 |
| 16691 | $J/\psi 	o \omega K^0 ar K^0, \omega 	o \pi^0 \gamma, K^0 	o K^0_S, ar K^0 	o K^0_L, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 16690 | 1 | 99267 |
| 16692 | $J/\psi \to \bar{K}^*K^+a_0^-, \bar{K}^* \to \pi^0\bar{K}^0, a_0^- \to \pi^-\eta, \bar{K}^0 \to K_S^0, \eta \to \gamma\gamma, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 16691 | 1 | 99268 |
| 16693 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16692 | 1 | 99269 |
| 16694 | $J/\psi \to K^0 K_1^- a_1^+, K^0 \to K_S^0, K_1^- \to \pi^- \bar{K}_0^{*0}, a_1^+ \to \rho^0 \pi^+, K_S^0 \to \pi^0 \pi^0, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 16693 | 1 | 99270 |
| 16695 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- K^* \bar{K}^*, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16694 | 1 | 99271 |
| 16696 | $J/\psi \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16695 | 1 | 99272 |
| 16697 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1285) \to \pi^0 a_0^0, K_S^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_L^0, a_0^0 \to K_L^0 K_L^0$ | $\pi^0\pi^0K_L^0K_L^0K_L^0\pi^+\pi^-\gamma^f$ | 16696 | 1 | 99273 |
| 16698 | $J/\psi \to \bar{K}^0 K_2^{*0} f_0(1370), \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^*, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16697 | 1 | 99274 |
| 16699 | $J/\psi \to K^+ \phi K_1^-, \phi \to K^+ K^-, K_1^- \to \pi^- \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K^0_L \pi^- K^+ K^+ K^-$ | 16698 | 1 | 99275 |
| 16700 | $J/\psi \to ho^+ a_2^- \eta, ho^+ \to \pi^0 \pi^+, a_2^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 16699 | 1 | 99276 |
| 16701 | $J/\psi \to \pi^0 \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^- \gamma^F, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^F$ | 16700 | 1 | 99277 |
| 16702 | $J/\psi \to \rho^- K_2^{*0} K^{*+}, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16701 | 1 | 99278 |
| 16703 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 16702 | 1 | 99279 |
| 16704 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ a_2^- f_0(1370), a_2^- \to \pi^0 \rho^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 16703 | 1 | 99280 |
| 16705 | $J/\psi \to \pi^0 \omega f_1(1285), \omega \to \pi^0 \gamma, f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 16704 | 1 | 99281 |
| 16706 | $J/\psi \to \pi^0 \pi^+ K^0 K^- a_1^0, K^0 \to K_L^0, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 16705 | 1 | 99282 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 16707 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 16706 | 1 | 99283 |
| 16708 | $J/\psi \to \rho^- \omega a_0^+ \gamma, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, \pi^0 \to e^+ e^- \gamma^F, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 3945 | 1 | 99284 |
| 16709 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 16708 | 1 | 99285 |
| 16710 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K^+K^-, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0\bar{K}^0, K_S^0 \to \pi^+\pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- K^+ K^- \gamma$ | 16709 | 1 | 99286 |
| 16711 | $J/\psi \to K^0 \bar{K}^* f_2^{'}, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_2^{'} \to K_L^0 K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}K_{L}^{0}K_{L}^{0}$ | 16710 | 1 | 99287 |
| 16712 | $J/\psi \to \phi f_1(1420), \phi \to \pi^- \rho^+, f_1(1420) \to \pi^+ K^0 K^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16711 | 1 | 99288 |
| 16713 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 16712 | 1 | 99289 |
| 16714 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \pi^0\pi^0\eta, K^0 \to K_S^0, \eta \to \pi^0\pi^0\pi^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16713 | 1 | 99290 |
| 16715 | $J/\psi \rightarrow \eta_c \gamma, \eta_c \rightarrow K^+ K^{*-} b_1^0, K^{*-} \rightarrow \pi^- \bar{K}^0, b_1^0 \rightarrow \pi^0 \omega, \bar{K}^0 \rightarrow K_L^0, \ \omega \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 3946 | 1 | 99291 |
| 16716 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \omega K^0, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 16715 | 1 | 99292 |
| 16717 | $J/\psi 	o \pi^+\pi^-\omega, \omega 	o e^+e^-\pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{-}$ | 16716 | 1 | 99293 |
| 16718 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, f_0(1370) \to K_L^0 K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 16717 | 1 | 99294 |
| 16719 | $J/\psi \to K^- K_2^{*+} \phi, K_2^{*+} \to \pi^0 K^{*+}, \phi \to K^+ K^-, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K^+K^+K^-K^-$ | 16718 | 1 | 99295 |
| 16720 | $J/\psi \to \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 16719 | 1 | 99296 |
| 16721 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16720 | 1 | 99297 |
| 16722 | $J/\psi \rightarrow \omega K^0 K^- a_0^+, \omega \rightarrow \pi^0 \pi^+ \pi^-, K^0 \rightarrow K_L^0, a_0^+ \rightarrow \pi^+ \eta, \eta \rightarrow \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma \gamma$ | 16721 | 1 | 99298 |
| 16723 | $J/\psi \to \Sigma^0 \bar{\Sigma}^{*0}, \Sigma^0 \to \Lambda \gamma, \bar{\Sigma}^{*0} \to \pi^- \bar{\Sigma}^+, \Lambda \to \pi^0 n, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 16722 | 1 | 99299 |
| 16724 | $J/\psi ightarrow \eta \eta' \phi, \eta ightarrow \pi^0 \pi^0 \pi^0, \eta' ightarrow \pi^0 \pi^0 \eta, \phi ightarrow K_L^0 K_S^0, \eta ightarrow \gamma \gamma, K_S^0 ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma\gamma$ | 16723 | 1 | 99300 |
| 16725 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \eta' \to \pi^+ \pi^- \eta, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma$ | 16724 | 1 | 99301 |
| 16726 | $J/\psi 	o \pi^- \eta' b_1^+, \eta' 	o ho^0 \gamma, b_1^+ 	o \pi^+ \omega \gamma^f, ho^0 	o \pi^+ \pi^-, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma^f$ | 16725 | 1 | 99302 |
| 16727 | $J/\psi \to \bar{K}^*K^{*+}a_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^0K^+, a_1^- \to \rho^0\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16726 | 1 | 99303 |
| 16728 | $J/\psi \to K^- K_1^{'+} \gamma^f, K_1^{'+} \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma^f$ | 16727 | 1 | 99304 |
| 16729 | $J/\psi \to \pi^0 K_0^0 \bar{K}_1^{'0}, K_0^0 \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16728 | 1 | 99305 |
| 16730 | $J/\psi \to K^- K_2^{*+} \gamma^f, K_2^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+K^-\gamma^f$ | 16729 | 1 | 99306 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16731 | $J/\psi \to \pi^0 \pi^+ a_0^- \gamma^F, a_0^- \to K^0 K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma^F$ | 16730 | 1 | 99307 |
| 16732 | $J/\psi \to \pi^0 \bar{K}_0^{*0} K_1^{'0}, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^{'0} \to \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 16731 | 1 | 99308 |
| 16733 | $J/\psi \to K^* \bar{K}^* f_0(1370) \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma$ | 16732 | 1 | 99309 |
| 16734 | $J/\psi \to \pi^+ K^* K^- h_1(1380), K^* \to \pi^- K^+, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 16733 | 1 | 99310 |
| 16735 | $J/\psi \to K^{+}a_{0}^{-}\bar{K}_{1}^{'0}, a_{0}^{-} \to \pi^{-}\eta, \bar{K}_{1}^{'0} \to \pi^{+}\pi^{-}\bar{K}^{0}, \eta \to \pi^{+}\pi^{-}\gamma^{F}, \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma^F$ | 16734 | 1 | 99311 |
| 16736 | $J/\psi \to \omega \bar K^0 K^* \gamma, \omega \to \pi^0 \pi^+ \pi^-, \bar K^0 \to K_L^0, K^* \to \pi^- K^+$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 16735 | 1 | 99312 |
| 16737 | $J/\psi 	o \eta\eta\phi, \eta 	o \pi^0\pi^0\pi^0, \eta 	o \pi^0\pi^0\pi^0, \phi 	o K_L^0K_S^0, K_S^0 	o \pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16736 | 1 | 99313 |
| 16738 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16737 | 1 | 99314 |
| 16739 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 16738 | 1 | 99315 |
| 16740 | $J/\psi \to K^+K^-K^{*+}K^{*-}, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 16739 | 1 | 99316 |
| 16741 | $J/\psi \to \pi^+ \rho^- h_1(1170) \gamma^F, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16740 | 1 | 99317 |
| 16742 | $J/\psi \to \pi^+ K_1^- K_1^{'0}, K_1^- \to \rho^- \bar{K}^0, K_1^{'0} \to \omega K^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16741 | 1 | 99318 |
| 16743 | $J/\psi \to \pi^- a_0^0 b_1^+, a_0^0 \to \pi^0 \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma$ | 16742 | 1 | 99319 |
| 16744 | $J/\psi \to f_0(1370)h_1(1170), f_0(1370) \to \rho^+\rho^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16743 | 1 | 99320 |
| 16745 | $J/\psi \to \bar{K}^0 K^* h_1(1170), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16744 | 1 | 99321 |
| 16746 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \phi \to \eta \gamma, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-K^-\gamma\gamma\gamma$ | 16745 | 1 | 99322 |
| 16747 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^0 \pi^- \omega, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16746 | 1 | 99323 |
| 16748 | $J/\psi \to \pi^+ K^+ K^{*-} b_1^-, K^{*-} \to \pi^- \bar{K}^0, b_1^- \to \pi^- \omega, \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 16747 | 1 | 99324 |
| 16749 | $J/\psi \to f_2(1270)\bar{K}^0K^*, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16748 | 1 | 99325 |
| 16750 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \omega K^0, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16749 | 1 | 99326 |
| 16751 | $J/\psi \to \Sigma^{*+}\bar{\Sigma}^{*-}, \Sigma^{*+} \to \pi^{+}\Lambda, \bar{\Sigma}^{*-} \to \pi^{0}\bar{\Sigma}^{-}, \Lambda \to \pi^{0}n, \bar{\Sigma}^{-} \to \pi^{0}\bar{p}$ | $\pi^0\pi^0\pi^0\pi^+n\bar{p}$ | 16750 | 1 | 99327 |
| 16752 | $J/\psi \to \omega \eta' f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, f_0(1370) \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16751 | 1 | 99328 |
| 16753 | $J/\psi \to \pi^0 K^- K_1^+ \gamma^F, K_1^+ \to \pi^+ K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^- \gamma^F$ | 16752 | 1 | 99329 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 16754 | $J/\psi \to \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0 \pi^+, K_2^{*0} \to \pi^0 \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16753 | 1 | 99330 |
| 16755 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \omega \bar{K}^0, K^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16754 | 1 | 99331 |
| 16756 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^- \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16755 | 1 | 99332 |
| 16757 | $J/\psi \to \pi^+\pi^-K^{*-}K_1^+, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \pi^+K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^0K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 16756 | 1 | 99333 |
| 16758 | $J/\psi \to K^{*+}K^{*-}, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^-K^+$ | 16757 | 1 | 99334 |
| 16759 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 16758 | 1 | 99335 |
| 16760 | $J/\psi \rightarrow \rho^0\pi^-\omega b_1^+, \rho^0 \rightarrow \pi^+\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, b_1^+ \rightarrow \pi^+\omega, \omega \rightarrow \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 16759 | 1 | 99336 |
| 16761 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^0, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16760 | 1 | 99337 |
| 16762 | $J/\psi \to \pi^+ \eta K^0 K^- f_1(1285), \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, f_1(1285) \to \pi^+ a_0^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16761 | 1 | 99338 |
| 16763 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \rho^+ K^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16762 | 1 | 99339 |
| 16764 | $J/\psi \to \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \pi^0 K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^- K^+$ | $\pi^0\pi^+\pi^-\pi^-K^+$ | 16763 | 1 | 99340 |
| 16765 | $J/\psi \rightarrow \rho^0 \eta a_1^0, \rho^0 \rightarrow \pi^+ \pi^-, \eta \rightarrow \gamma \gamma, a_1^0 \rightarrow \pi^- \rho^+, \rho^+ \rightarrow \pi^0 \pi^+ \gamma^f$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma^f$ | 16764 | 1 | 99341 |
| 16766 | $J/\psi \to \eta \phi f_2', \eta \to \pi^0 \pi^0 \pi^0, \phi \to K_L^0 K_S^0, f_2' \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-$ | 16765 | 1 | 99342 |
| 16767 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^0 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma^f$ | 16766 | 1 | 99343 |
| 16768 | $J/\psi 	o \pi^- \eta \omega a_0^+, \eta 	o \gamma \gamma, \omega 	o \pi^0 \pi^+ \pi^-, a_0^+ 	o \pi^+ \eta, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 16767 | 1 | 99344 |
| 16769 | $J/\psi \to \pi^0\pi^-\rho^+K^+\bar{K}_1^{'-}, \rho^+ \to \pi^0\pi^+, \bar{K}_1^{'-} \to \pi^-\bar{K}^*, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16768 | 1 | 99345 |
| 16770 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16769 | 1 | 99346 |
| 16771 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^0 \rho^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 6362 | 1 | 99347 |
| 16772 | $J/\psi \to \pi^0 \pi^- \rho^+ f_2(1270), \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 16771 | 1 | 99348 |
| 16773 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16772 | 1 | 99349 |
| 16774 | $J/\psi \to \eta K^0 \bar{K}_1^{'0}, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 16773 | 1 | 99350 |
| 16775 | $J/\psi \to \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^0 \rho^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 16774 | 1 | 99351 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 16776 | $J/\psi \to \rho^0 K^0 \bar{K}_1^{'0}, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 16775 | 1 | 99352 |
| 16777 | $J/\psi \to K^0 \phi \bar{K}_1^{'0}, K^0 \to K_L^0, \phi \to K_L^0 K_S^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, K_S^{*-} \to \pi^0 K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 16776 | 1 | 99353 |
| 16778 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^0K^{*-}, K_1^{'+} \to \pi^+K^*, K^{*-} \to \pi^-\bar{K}^0, K^* \to \pi^0K^0, \\ \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 16777 | 1 | 99354 |
| 16779 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta, h_1(1170) \to \pi^+ \rho^-, \eta \to \pi^+ \pi^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 16778 | 1 | 99355 |
| 16780 | $J/\psi ightarrow \pi^0 a_2^0 \omega, a_2^0 ightarrow \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \gamma, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 16779 | 1 | 99356 |
| 16781 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma$ | 16780 | 1 | 99357 |
| 16782 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 16781 | 1 | 99358 |
| 16783 | $J/\psi \to \omega K^+ K_0^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16782 | 1 | 99359 |
| 16784 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \pi^0 K^{*+}, \pi^0 \to e^+ e^- \gamma^F, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $e^+e^-K_L^0\pi^+K^-\gamma^F$ | 16783 | 1 | 99360 |
| 16785 | $J/\psi \to \pi^- \rho^+ f_1(1285) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \rho^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16784 | 1 | 99361 |
| 16786 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 16785 | 1 | 99362 |
| 16787 | $J/\psi \to \pi^0 \pi^+ K^{*-} K^0_0, K^{*-} \to \pi^- \bar{K}^0, K^0_0 \to \pi^- K^+, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16786 | 1 | 99363 |
| 16788 | $J/\psi \to \rho^+ \rho^- f_2(1270)\gamma, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, f_2(1270) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16787 | 1 | 99364 |
| 16789 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, h_1(1380) \to K^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L \pi^+ \pi^+ \pi^- K^-$ | 16788 | 1 | 99365 |
| 16790 | $J/\psi \to K_1^0 \bar{K}_1^0, K_1^0 \to \pi^- K_0^{*+}, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K_0^{*+} \to \pi^0 K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16789 | 1 | 99366 |
| 16791 | $J/\psi ightarrow a_0^0 b_1^0, a_0^0 ightarrow \pi^0 \eta, b_1^0 ightarrow \pi^0 \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 16790 | 1 | 99367 |
| 16792 | $J/\psi \to a_2^- b_1^+, a_2^- \to ho^0 \pi^-, b_1^+ \to \pi^+ \omega, ho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16791 | 1 | 99368 |
| 16793 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \omega \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16792 | 1 | 99369 |
| 16794 | $J/\psi 	o \omega K^0 ar{K}^0, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_L^0, ar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16793 | 1 | 99370 |
| 16795 | $J/\psi \to \pi^0 \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_L^0, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16794 | 1 | 99371 |
| 16796 | $J/\psi \to \pi^+\pi^-K^*\bar{K}^0_1, K^* \to \pi^0K^0, \bar{K}^0_1 \to \pi^0\bar{K}^{*0}, K^0 \to K^0_S, \bar{K}^{*0}_0 \to \pi^0\bar{K}^0, K^0_S \to \pi^0\bar{K}^{*0}, K^0_S \to \pi^0\bar{K}^{*0}, K^0_S \to \pi^0\bar{K}^{*0}, K^0_S \to \pi^0\bar{K}^{*0}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16795 | 1 | 99372 |
| 16797 | $J/\psi \to \rho^0 a_2^0 f_0(1370), \rho^0 \to \pi^+ \pi^-, a_2^0 \to \pi^+ \rho^-, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 16796 | 1 | 99373 |
| 16798 | $J/\psi 	o \pi^0 \omega K^* \bar{K}^*, \omega 	o \pi^0 \pi^+ \pi^-, K^* 	o \pi^0 K^0, \bar{K}^* 	o \pi^+ K^-, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 16797 | 1 | 99374 |
| 16799 | $J/\psi \to \rho^- a_2^+, \rho^- \to \pi^0 \pi^-, a_2^+ \to \rho^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16798 | 1 | 99375 |
| 16800 | $J/\psi \to \bar{K}^0 K_2^{*0} f_0(1370), \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^0, f_0(1370) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16799 | 1 | 99376 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16801 | $J/\psi \to \rho^+ \rho^- K^0 \bar{K}^0_1, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, K^0 \to K^0_L, \bar{K}^0_1 \to \pi^+ K^{*-}_0, K^{*-}_0 \to K^0_L, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0K^0_LK^0_L\pi^+\pi^+\pi^-\pi^-$ | 16800 | 1 | 99377 |
| 16802 | $J/\psi \to \pi^- \omega \bar{K}^0 K^{*+}, \omega \to \pi^0 \gamma, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma$ | 16801 | 1 | 99378 |
| 16803 | $J/\psi \to \omega K^+ K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K_2^{*-} \to \pi^0 \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 16802 | 1 | 99379 |
| 16804 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16803 | 1 | 99380 |
| 16805 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16804 | 1 | 99381 |
| 16806 | $J/\psi \to K^+K^-f_0(1710), f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 16805 | 1 | 99382 |
| 16807 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_L^0, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16806 | 1 | 99383 |
| 16808 | $J/\psi \to \bar{\Sigma}^- \Sigma^{*+} \gamma, \bar{\Sigma}^- \to \pi^- \bar{n}, \Sigma^{*+} \to \pi^+ \Lambda, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-ar{n}p\gamma$ | 16807 | 1 | 99384 |
| 16809 | $J/\psi \to \pi^+\pi^-\bar{K}_1^0 K_1^{'0}, \bar{K}_1^0 \to \omega \bar{K}^0, K_1^{'0} \to \pi^-K^{*+}, \omega \to \pi^0\pi^+\pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-$ | 16808 | 1 | 99385 |
| 16810 | $J/\psi \to a_2^0 K^0 \bar{K}^*, a_2^0 \to \pi^+ \rho^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16809 | 1 | 99386 |
| 16811 | $J/\psi \to \rho^- a_0^+ f_1(1285), \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, f_1(1285) \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 16810 | 1 | 99387 |
| 16812 | $J/\psi \to \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \pi^+ K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 16811 | 1 | 99388 |
| 16813 | $J/\psi \to K^* \bar{K}_2^0, K^* \to \pi^- K^+, \bar{K}_2^0 \to \pi^+ K_2^{*-}, K_2^{*-} \to \rho^0 K^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}$ | 16812 | 1 | 99389 |
| 16814 | $J/\psi \to f_0(1370)h_1(1170), f_0(1370) \to \pi^+\pi^+\pi^-\pi^-, h_1(1170) \to \pi^0\rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16813 | 1 | 99390 |
| 16815 | $J/\psi \to a_0^- b_1^+, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16814 | 1 | 99391 |
| 16816 | $J/\psi \to \rho^- K_2^{*0} K^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16815 | 1 | 99392 |
| 16817 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^0 K^*, \bar{K}_1^0 \to \omega \bar{K}^0, K^* \to \pi^- K^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16816 | 1 | 99393 |
| 16818 | $J/\psi \to \pi^- \bar{K}^0 K^+ \gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma^f$ | 16817 | 1 | 99394 |
| 16819 | $J/\psi 	o \pi^0 \pi^+ \eta b_1^-, \eta 	o \pi^0 \pi^0 \pi^0, b_1^- 	o \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16818 | 1 | 99395 |
| 16820 | $J/\psi \to \pi^0 K^- K_2^{*+}, K_2^{*+} \to K^+ \gamma$ | $\pi^0 K^+ K^- \gamma$ | 16819 | 1 | 99396 |
| 16821 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^0 K^0, \bar{K}_1^0 \to \rho^+ K^-, K^0 \to K_L^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0 \pi^0 K_L^0 \pi^+ K^-$ | 16820 | 1 | 99397 |
| 16822 | $J/\psi \to \omega K^+ K_1^-, \omega \to \pi^0 \gamma, K_1^- \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 16821 | 1 | 99398 |
| 16823 | $J/\psi \to f_2(1270)\bar{K}^0K_1^0, f_2(1270) \to \pi^+\pi^-, \bar{K}^0 \to K_S^0, K_1^0 \to \omega K^0, K_S^0 \to \pi^+\pi^-, \omega \to \pi^0\gamma, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 16822 | 1 | 99399 |
| 16824 | $J/\psi \to \eta f_0(1710)\gamma, \eta \to \pi^0 \pi^+ \pi^-, f_0(1710) \to K^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 16823 | 1 | 99400 |
| 16825 | $J/\psi \to K^0 K^+ K^{*-} \bar{K}_1^0, K^0 \to K_L^0, K^{*-} \to \pi^0 K^-, \bar{K}_1^0 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^+K^-K^-$ | 16824 | 1 | 99401 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 16826 | $J/\psi \to \pi^+ K^0 \bar{K}_1^{'-}, K^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16825 | 1 | 99402 |
| 16827 | $J/\psi 	o \pi^0 \eta \bar{\Delta}^- \Delta^-, \eta 	o \pi^0 \pi^+ \pi^-, \bar{\Delta}^- 	o \pi^+ \bar{n}, \Delta^- 	o \pi^- n$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-nar{n}$ | 16826 | 1 | 99403 |
| 16828 | $J/\psi \to K^0 \bar{p} \Sigma^{*+}, K^0 \to K^0_S, \Sigma^{*+} \to \pi^+ \Lambda, K^0_S \to \pi^+ \pi^-, \Lambda \to \pi^- p$ | $\pi^+\pi^+\pi^-\pi^-par{p}$ | 16827 | 1 | 99404 |
| 16829 | $J/\psi \rightarrow \pi^+ \rho^- \eta', \rho^- \rightarrow \pi^0 \pi^- \gamma^f, \eta' \rightarrow \pi^+ \pi^- \eta, \eta \rightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16828 | 1 | 99405 |
| 16830 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 16829 | 1 | 99406 |
| 16831 | $J/\psi \to \phi f_0(1710), \phi \to K^+K^-, f_0(1710) \to K^0\bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0 \pi^0 K_L^0 K^+ K^-$ | 16830 | 1 | 99407 |
| 16832 | $J/\psi \to \rho^0 \pi^+ a_0^-, \rho^0 \to \pi^+ \pi^-, a_0^- \to K^0 K^-, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 16831 | 1 | 99408 |
| 16833 | $J/\psi \to a_2^- \bar{K}^0 K^{*+}, a_2^- \to \pi^0 \rho^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16832 | 1 | 99409 |
| 16834 | $J/\psi \to \pi^- a_0^+ h_1(1170), a_0^+ \to \pi^+ \eta \gamma^f, h_1(1170) \to \pi^0 \rho^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16833 | 1 | 99410 |
| 16835 | $J/\psi \to f_2(1270)K^+K^{*-}, f_2(1270) \to K_L^0K_L^0, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 16834 | 1 | 99411 |
| 16836 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_S^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 16835 | 1 | 99412 |
| 16837 | $J/\psi \to K^0 \bar{K}^* \phi, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+\pi^-$ | 16836 | 1 | 99413 |
| 16838 | $J/\psi \to K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^+ \pi^- K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16837 | 1 | 99414 |
| 16839 | $J/\psi \to \bar{K}^*K_2^0, \bar{K}^* \to \pi^+K^-, K_2^0 \to \pi^0K_2^{*0}, \pi^0 \to e^+e^-\gamma^F, K_2^{*0} \to \pi^0\pi^-K^{*+}, K^{*+} \to \pi^0K^+$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 16838 | 1 | 99415 |
| 16840 | $J/\psi \to \pi^+\pi^-\eta \bar{K}^*K_1^0, \eta \to \gamma\gamma, \bar{K}^* \to \pi^0\bar{K}^0, K_1^0 \to \pi^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16839 | 1 | 99416 |
| 16841 | $J/\psi ightarrow \eta par p, \eta ightarrow \pi^0\pi^+\pi^-, \pi^0 ightarrow e^+e^-\gamma^F$ | $e^+e^-\pi^+\pi^-p\bar{p}\gamma^F$ | 16840 | 1 | 99417 |
| 16842 | $J/\psi \to \omega\omega\gamma, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^+\pi^+\pi^-\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 16841 | 1 | 99418 |
| 16843 | $J/\psi \to \rho^+ K^0 \bar{K}_1^{'-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16842 | 1 | 99419 |
| 16844 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_S^0, K_1^+ \to \pi^+ K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16843 | 1 | 99420 |
| 16845 | $J/\psi \to \eta K^0 \bar{K}^0, \eta \to \pi^0 \pi^+ \pi^-, K^0 \to K^0_S, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16844 | 1 | 99421 |
| 16846 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^+ \pi^- K^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16845 | 1 | 99422 |
| 16847 | $J/\psi \to K^0 \bar{K}^0 h_1(1380), K^0 \to K_L^0, \bar{K}^0 \to K_L^0, h_1(1380) \to K^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^- K^+$ | 16846 | 1 | 99423 |
| 16848 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16847 | 1 | 99424 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16849 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^0 \bar{K}^0, K_2^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 16848 | 1 | 99425 |
| 16850 | $J/\psi \to K^* \bar{n}\Lambda, K^* \to \pi^- K^+ \gamma^f, \Lambda \to \pi^- p$ | $\pi^-\pi^-K^+ar{n}p\gamma^f$ | 16849 | 1 | 99426 |
| 16851 | $J/\psi \to \pi^0 K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \omega \bar{K}^0, K^0_S \to \pi^0 \pi^0, \omega \to \pi^0 \gamma, \ \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 16850 | 1 | 99427 |
| 16852 | $J/\psi \to K^0 \bar{K}^0_1 \gamma, K^0 \to K^0_S, \bar{K}^0_1 \to \rho^+ K^-, K^0_S \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 16851 | 1 | 99428 |
| 16853 | $J/\psi \to \pi^0 K_2^{*+} K_2^{*-}, K_2^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0K^+K^-$ | 16852 | 1 | 99429 |
| 16854 | $J/\psi \to \pi^+ \rho^- a_1^0, \rho^- \to \pi^0 \pi^- \gamma^f, a_1^0 \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 16853 | 1 | 99430 |
| 16855 | $J/\psi \to \pi^+ \rho^- f_1(1285) \gamma^f, \rho^- \to \pi^0 \pi^-, f_1(1285) \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma^f$ | 16854 | 1 | 99431 |
| 16856 | $J/\psi 	o \pi^0 \pi^+ \pi^- \omega, \omega 	o \eta \gamma, \eta 	o \gamma \gamma$ | $\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 16855 | 1 | 99432 |
| 16857 | $J/\psi \to \eta f_0(1710)\gamma, \eta \to \pi^0 \pi^+ \pi^-, f_0(1710) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 16856 | 1 | 99433 |
| 16858 | $J/\psi \to K^0 K^- a_1^+, K^0 \to K_L^0, a_1^+ \to \pi^0 \rho^+ \gamma^f, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma^f$ | 16857 | 1 | 99434 |
| 16859 | $J/\psi ightarrow par{p}a_0^0, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^-par p\gamma^F$ | 16858 | 1 | 99435 |
| 16860 | $J/\psi \to \pi^- K^+ \bar{K}_1^0 \gamma^f, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K^0_L\pi^+\pi^-\pi^-K^+\gamma^f$ | 16859 | 1 | 99436 |
| 16861 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^+ K_1^-, \rho^0 \to \pi^+ \pi^-, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma$ | 16860 | 1 | 99437 |
| 16862 | $J/\psi \to \eta_c \gamma, \eta_c \to \phi f_0(1710), \phi \to K^+ K^-, f_0(1710) \to K^0 \bar{K}^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 16861 | 1 | 99438 |
| 16863 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \omega \bar{K}^0, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 16862 | 1 | 99439 |
| 16864 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\gamma$ | 16863 | 1 | 99440 |
| 16865 | $J/\psi \to \rho^- \bar{K}^0 K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_1^{'+} \to \pi^+ K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16864 | 1 | 99441 |
| 16866 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, \bar{K}^0 \to K_S^0, \\ \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 16865 | 1 | 99442 |
| 16867 | $J/\psi \to \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \omega K^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 16866 | 1 | 99443 |
| 16868 | $J/\psi \to \pi^- \bar{\Sigma}^{*+} \Lambda, \bar{\Sigma}^{*+} \to \pi^0 \bar{\Sigma}^+, \Lambda \to \pi^- p, \bar{\Sigma}^+ \to \pi^+ \bar{n}$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 16867 | 1 | 99444 |
| 16869 | $J/\psi \to \pi^+ \rho^- K^0 \bar{K}^*, \rho^- \to \pi^0 \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 16868 | 1 | 99445 |
| 16870 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 16869 | 1 | 99446 |
| 16871 | $J/\psi \to \pi^+ K^0 \bar{K}^0 b_1^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^f$ | 16870 | 1 | 99447 |
| 16872 | $J/\psi \to \rho^0 \omega f_0(1370) \gamma, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 16871 | 1 | 99448 |
| 16873 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^-\pi^-K^+\gamma$ | 16872 | 1 | 99449 |
| 16874 | $J/\psi ightarrow \pi^0 \eta b_1^0, \eta ightarrow \pi^0 \pi^0 \pi^0, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^0 \gamma$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\gamma$ | 16873 | 1 | 99450 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 16875 | $J/\psi \to \rho^+ K^0 K_1^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16874 | 1 | 99451 |
| 16876 | $J/\psi \to K^{0} \bar{K}^{0} f_{2}^{'}, K^{0} \to K_{L}^{0}, \bar{K}^{0} \to K_{L}^{0}, f_{2}^{'} \to K_{S}^{0} K_{S}^{0}, K_{S}^{0} \to \pi^{0} \pi^{0}, K_{S}^{0} \to \pi^{+} \pi^{-}$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 16875 | 1 | 99452 |
| 16877 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^+K^0, \eta' \to \omega\gamma, K^0 \to K_S^0, \omega \to \pi^0\pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$ | 16876 | 1 | 99453 |
| 16878 | $J/\psi \to \pi^0 \rho^+ K^* K_1^-, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^- K^+, K_1^- \to \pi^0 K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16877 | 1 | 99454 |
| 16879 | $J/\psi \to \phi f_0(2020), \phi \to K_L^0 K_S^0, f_0(2020) \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 16878 | 1 | 99455 |
| 16880 | $J/\psi \to \pi^+\pi^-K^0K^+K^-ar{K}_1^{'0}, K^0 \to K_S^0, ar{K}_1^{'0} \to \pi^0ar{K}^*, K_S^0 \to \pi^+\pi^-, ar{K}^* \to \pi^+K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-K^-$ | 16879 | 1 | 99456 |
| 16881 | $J/\psi \to \pi^+\pi^- K^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16880 | 1 | 99457 |
| 16882 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16881 | 1 | 99458 |
| 16883 | $J/\psi \to \pi^0 \eta K^- K^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16882 | 1 | 99459 |
| 16884 | $J/\psi \to ho^0 K^0 \bar{K}^0, ho^0 \to \pi^+ \pi^- \gamma^f, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16883 | 1 | 99460 |
| 16885 | $J/\psi \to \bar{K}^0 K^{*+} a_1^- \gamma^f, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, a_1^- \to \pi^0 \rho^-, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16884 | 1 | 99461 |
| 16886 | $J/\psi \to ho^- ar{K}^0 K_1^+, ho^- \to \pi^0 \pi^-, ar{K}^0 \to K_L^0, K_1^+ \to \omega K^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 16885 | 1 | 99462 |
| 16887 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^- \bar{K}^0, \phi \to \pi^- \rho^+, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16886 | 1 | 99463 |
| 16888 | $J/\psi \to \bar{K}^0 K_2^{*0} a_0^0, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, a_0^0 \to \pi^0 \eta, K^{*+} \to \pi^+ K^0, \\ \eta \to \gamma \gamma, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 16887 | 1 | 99464 |
| 16889 | $J/\psi \to \pi^- \bar{K}^* K_1^+ \gamma^f, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^f$ | 16888 | 1 | 99465 |
| 16890 | $J/\psi \to \pi^0 \rho^0 K^+ K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16889 | 1 | 99466 |
| 16891 | $J/\psi \rightarrow \rho^+ a_2^- \gamma^f, \rho^+ \rightarrow \pi^0 \pi^+, a_2^- \rightarrow \pi^0 \pi^- \omega, \omega \rightarrow \pi^0 \pi^+ \pi^-, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 16890 | 1 | 99467 |
| 16892 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 \pi^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16891 | 1 | 99468 |
| 16893 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \Sigma^- \bar{\Sigma}^0, \Sigma^- \to \pi^- n, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-nar p\gamma\gamma$ | 16892 | 1 | 99469 |
| 16894 | $J/\psi \to \pi^0 \pi^0 a_2^0 K^+ K^{*-}, a_2^0 \to \pi^+ \rho^-, K^{*-} \to \pi^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16893 | 1 | 99470 |
| 16895 | $J/\psi \to \pi^0 \omega K^{*-} K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16894 | 1 | 99471 |
| 16896 | $J/\psi \to K^0 \phi \bar{K}^0_1, K^0 \to K^0_L, \phi \to K^0_L K^0_S, \bar{K}^0_1 \to \pi^0 \bar{K}^*, K^0_S \to \pi^0 \pi^0, \\ \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0K^0_LK^0_L\pi^+K^-$ | 16895 | 1 | 99472 |
| 16897 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^+ \pi^- \gamma^F, \phi \to \pi^+ \rho^-, f_0(980) \to \pi^+ \pi^- \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f$ | 16896 | 1 | 99473 |
| 16898 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^{'+} \to \pi^+ \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 16897 | 1 | 99474 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 16899 | $J/\psi \to \eta \omega \eta', \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, \pi^0 \to e^+ e^- \gamma^F, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16898 | 1 | 99475 |
| 16900 | $J/\psi \to K^-K^{*+}\eta'\gamma^F, K^{*+} \to \pi^+K^0, \eta' \to \pi^0\pi^0\eta, K^0 \to K_L^0, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-\gamma^F$ | 16899 | 1 | 99476 |
| 16901 | $J/\psi \rightarrow \rho^0 \rho^0 \omega, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \gamma, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma$ | 16900 | 1 | 99477 |
| 16902 | $J/\psi \to \rho^0 \pi^+ \omega K^* K^-, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16901 | 1 | 99478 |
| 16903 | $J/\psi \to K_2^{*+} \bar{K}_1^{'-}, K_2^{*+} \to \pi^0 K^+, \bar{K}_1^{'-} \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16902 | 1 | 99479 |
| 16904 | $J/\psi \to a_0^0 a_0^- b_1^+, a_0^0 \to \pi^0 \eta, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \gamma \gamma, $ $\eta \to \gamma \gamma, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 16903 | 1 | 99480 |
| 16905 | $J/\psi \to \rho^0 K^0 \bar{K}^* \phi, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^* \to \pi^+ K^-, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 16904 | 1 | 99481 |
| 16906 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 K^+ K^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16905 | 1 | 99482 |
| 16907 | $J/\psi \to \pi^0 \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^+ K^-, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16906 | 1 | 99483 |
| 16908 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16907 | 1 | 99484 |
| 16909 | $J/\psi \to \pi^+\pi^-K^+K^-h_1(1380), h_1(1380) \to K^0\bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^+K^-$ | $K_L^0\pi^+\pi^+\pi^-K^+K^-K^-$ | 16908 | 1 | 99485 |
| 16910 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \rho^0 \bar{K}^0, K^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 16909 | 1 | 99486 |
| 16911 | $J/\psi \to K_2^{*0} K^- a_0^+, K_2^{*0} \to \pi^0 K^*, a_0^+ \to \pi^+ \eta, K^* \to \pi^- K^+, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 16910 | 1 | 99487 |
| 16912 | $J/\psi \to \omega K^* \bar{K}^0_1, \omega \to \pi^0 \gamma, K^* \to \pi^- K^+, \bar{K}^0_1 \to \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 16911 | 1 | 99488 |
| 16913 | $J/\psi \to \pi^0 \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_L^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 16912 | 1 | 99489 |
| 16914 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^- a_0^+, \omega \to \pi^0 \pi^+ \pi^-, a_0^+ \to \pi^+ \eta, $ $\eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16913 | 1 | 99490 |
| 16915 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_L^0, K_0^0 \to \pi^- K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 16914 | 1 | 99491 |
| 16916 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16915 | 1 | 99492 |
| 16917 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 K^+ K^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0K^+K^-\gamma$ | 16916 | 1 | 99493 |
| 16918 | $J/\psi \to \pi^+ K^* \bar{K}_1^{'-}, K^* \to \pi^0 K^0, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16917 | 1 | 99494 |
| 16919 | $K_S \to \pi^+\pi^-, K^+ \to K_S, K_S \to \pi^-\pi^-$ $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ a_0^-, \omega \to \pi^+\pi^-, a_0^- \to \pi^-\eta,$ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16918 | 1 | 99495 |
| 16920 | $J/\psi \to \pi^0 \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to e^+ e^- \pi^0, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}$ | 16919 | 1 | 99496 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16921 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \eta' \to \rho^0 \gamma, \bar{K}^0 \to K_S^0, \\ \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 16920 | 1 | 99497 |
| 16922 | $J/\psi \to K^{0}\bar{K}^{*}f_{2}', K^{0} \to K_{S}^{0}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, f_{2}' \to \pi^{+}\pi^{-}, K_{S}^{0} \to \pi^{+}\pi^{-}, \pi^{0} \to e^{+}e^{-}\gamma^{F}\gamma^{f}, \bar{K}^{0} \to K_{S}^{0}, K_{S}^{0} \to \pi^{+}\pi^{-}$ | $e^+e^-\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^f$ | 16921 | 1 | 99498 |
| 16923 | $J/\psi \to \pi^{+}a_{2}^{-}f_{1}(1285), a_{2}^{-} \to \rho^{0}\pi^{-}, f_{1}(1285) \to \pi^{-}a_{0}^{+}, \rho^{0} \to \pi^{+}\pi^{-}, a_{0}^{+} \to \pi^{+}\eta, $ $\eta \to \pi^{0}\pi^{0}\pi^{0}$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16922 | 1 | 99499 |
| 16924 | $J/\psi \to K_2^{*0} \bar{K}_1^{'0}, K_2^{*0} \to \pi^0 K^*, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16923 | 1 | 99500 |
| 16925 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16924 | 1 | 99501 |
| 16926 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_L, \bar{K}^0_1 \to \rho^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16925 | 1 | 99502 |
| 16927 | $J/\psi \to \bar{K}^0 K_2^{*0} \gamma, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 16926 | 1 | 99503 |
| 16928 | $J/\psi 	o \pi^0 K^{*-} K_2^{*+}, K^{*-} 	o \pi^- \bar{K}^0, K_2^{*+} 	o \pi^0 K^+, \bar{K}^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 16927 | 1 | 99504 |
| 16929 | $J/\psi \to \omega K^* \bar{K}^*, \omega \to \pi^0 \gamma, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma$ | 16928 | 1 | 99505 |
| 16930 | $J/\psi \to \eta \bar{K}^0 K_1^{'0}, \eta \to \gamma \gamma, \bar{K}^0 \to K_L^0, K_1^{'0} \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K_L^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16929 | 1 | 99506 |
| 16931 | $J/\psi 	o ar{K}^0 K_2^{*0} \gamma, ar{K}^0 	o K_S^0, K_2^{*0} 	o \pi^0 K^0, K_S^0 	o \pi^0 \pi^0, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 16930 | 1 | 99507 |
| 16932 | $J/\psi \to K^-K^{*+}f_0(1370), K^{*+} \to \pi^+K^0, f_0(1370) \to \rho^+\rho^-, K^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 16931 | 1 | 99508 |
| 16933 | $J/\psi \to \pi^+ \rho^- \eta f_2(1270), \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^- \gamma^f, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 16932 | 1 | 99509 |
| 16934 | $J/\psi \to \omega K^{*+} K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \omega K^-, K^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16933 | 1 | 99510 |
| 16935 | $J/\psi ightarrow \pi^- ho^+ \eta^\prime, ho^+ ightarrow \pi^0 \pi^+, \eta^\prime ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16934 | 1 | 99511 |
| 16936 | $J/\psi \to h_1(1170)f_1(1285), h_1(1170) \to \pi^- \rho^+, f_1(1285) \to \pi^+ \pi^- \eta, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16935 | 1 | 99512 |
| 16937 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^+ K^-, K_0^{*+} \to \pi^0 K^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 16936 | 1 | 99513 |
| 16938 | $J/\psi \to \rho^0 K^{*-} K_2^{*+}, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 \pi^+ K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 16937 | 1 | 99514 |
| 16939 | $J/\psi \to \eta h_1(1380), \eta \to \pi^0 \pi^0 \pi^0, h_1(1380) \to K^0 \bar{K}^*, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0$ | 16938 | 1 | 99515 |
| 16940 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+ \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 16939 | 1 | 99516 |
| 16941 | $J/\psi \to \pi^0 K^+ K^{*-}, \pi^0 \to e^+ e^- \gamma^F, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $e^+e^-K_L^0\pi^-K^+\gamma^F$ | 16940 | 1 | 99517 |
| 16942 | $J/\psi \to K^0 \bar{K}^0 f_0(1370), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_0(1370) \to K^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $K_L^0 \pi^+ \pi^- K^+ K^-$ | 16941 | 1 | 99518 |
| 16943 | $J/\psi \to K^+ \bar{\Delta}^+ \Lambda, \bar{\Delta}^+ \to \pi^0 \bar{p}, \Lambda \to \pi^- p$ | $\pi^0\pi^-K^+par{p}$ | 16942 | 1 | 99519 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16944 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16943 | 1 | 99520 |
| 16945 | $J/\psi 	o \pi^0 ho^0 \eta, ho^0 	o \pi^+ \pi^- \gamma^f, \eta 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16944 | 1 | 99521 |
| 16946 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 16945 | 1 | 99522 |
| 16947 | $J/\psi \to \eta \phi f_0(980), \eta \to \pi^0 \pi^0 \pi^0, \phi \to K_L^0 K_S^0, f_0(980) \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\gamma^{F}$ | 16946 | 1 | 99523 |
| 16948 | $J/\psi \rightarrow \pi^+ \rho^- \eta', \rho^- \rightarrow \pi^0 \pi^-, \eta' \rightarrow \pi^+ \pi^- \eta, \pi^0 \rightarrow e^+ e^- \gamma^F, \eta \rightarrow \pi^+ \pi^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma^F$ | 16947 | 1 | 99524 |
| 16949 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}^0_1 \to \pi^+ K^{*-}, K^0 \to K^0_S, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-$ | 16948 | 1 | 99525 |
| 16950 | $J/\psi 	o \eta_c \gamma, \eta_c 	o ar{K}^0 K^* a_0^0, ar{K}^0 	o K_L^0, K^* 	o \pi^0 K^0, a_0^0 	o \pi^0 \eta, \ K^0 	o K_L^0, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0K_L^0\gamma$ | 16949 | 1 | 99526 |
| 16951 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 16950 | 1 | 99527 |
| 16952 | $J/\psi ightarrow a_2^0 \pi^+ \pi^- \gamma^f, a_2^0 ightarrow \pi^+ \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16951 | 1 | 99528 |
| 16953 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16952 | 1 | 99529 |
| 16954 | $J/\psi \to \pi^- \bar{K}^0 K_1^+, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}$ | 16953 | 1 | 99530 |
| 16955 | $J/\psi ightarrow \eta f_2^{'}\gamma, \eta ightarrow \gamma \gamma, f_2^{'} ightarrow \eta \eta, \eta ightarrow \gamma \gamma, \eta ightarrow \gamma \gamma$ | $\gamma\gamma\gamma\gamma\gamma\gamma\gamma$ | 16954 | 1 | 99531 |
| 16956 | $J/\psi \to \rho^+ K^{*-} K_1^{'0}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 16955 | 1 | 99532 |
| 16957 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_1^- \to \pi^- \bar{K}^*, K^{*+} \to \pi^+ K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 16956 | 1 | 99533 |
| 16958 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1285) \to \pi^+ a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma \gamma$ | 16957 | 1 | 99534 |
| 16959 | $J/\psi \to \pi^+ K^+ \bar{p} \Sigma^{*-}, \Sigma^{*-} \to \pi^- \Lambda, \Lambda \to \pi^- p$ | $\pi^+\pi^-\pi^-K^+par{p}$ | 16958 | 1 | 99535 |
| 16960 | $J/\psi \to \omega K^{*+} K_2^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16959 | 1 | 99536 |
| 16961 | $J/\psi \to K_2^{*-}K_1^{'+}, K_2^{*-} \to \pi^-\bar{K}^0, K_1^{'+} \to \pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^0\pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 16960 | 1 | 99537 |
| 16962 | $J/\psi \to \bar{K}^0 K^* h_1(1380), \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, h_1(1380) \to K^- K^{*+}, K^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 16961 | 1 | 99538 |
| 16963 | $J/\psi \to K^+K^-\eta', \eta' \to \rho^0\gamma, \rho^0 \to \pi^+\pi^-\gamma^f$ | $\pi^+\pi^-K^+K^-\gamma\gamma^f$ | 16962 | 1 | 99539 |
| 16964 | $J/\psi \to \eta f_2(1270) h_1(1170), \eta \to \gamma \gamma, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16963 | 1 | 99540 |
| 16965 | $J/\psi \to \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 16964 | 1 | 99541 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 16966 | $J/\psi \to \pi^+\pi^-\pi^-\bar{K}^*K_2^{*+}, \bar{K}^* \to \pi^0\bar{K}^0, K_2^{*+} \to \pi^+K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 16965 | 1 | 99542 |
| 16967 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \eta^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 16966 | 1 | 99543 |
| 16968 | $J/\psi \to \pi^+ K_0^0 \bar{K}_1^{'-}, K_0^0 \to \pi^0 K^0, \bar{K}_1^{'-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 16967 | 1 | 99544 |
| 16969 | $J/\psi \to \rho^+ n \bar{\Delta}^+, \rho^+ \to \pi^0 \pi^+ \gamma^f, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^+\pi^-nar{n}\gamma^f$ | 3947 | 1 | 99545 |
| 16970 | $J/\psi \to K^0 \bar{K}^0 \phi \gamma, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0K_L^0K_L^0\gamma$ | 16969 | 1 | 99546 |
| 16971 | $J/\psi \to K_2^{*0} K_2^{*0}, K_2^{*0} \to \rho^- K^+, K_2^{*0} \to \pi^0 \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 16970 | 1 | 99547 |
| 16972 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_0(1710) \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 16971 | 1 | 99548 |
| 16973 | $J/\psi \to \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16972 | 1 | 99549 |
| 16974 | $J/\psi \to ho^0 \eta' a_1^0, ho^0 \to \pi^+ \pi^-, \eta' \to \pi^+ \pi^- \eta, a_1^0 \to \pi^+ ho^-, \eta \to \pi^0 \pi^0 \pi^0, ho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16973 | 1 | 99550 |
| 16975 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 16974 | 1 | 99551 |
| 16976 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^- \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma$ | 16975 | 1 | 99552 |
| 16977 | $J/\psi \to \omega K^- K_1^+, \omega \to \pi^0 \pi^+ \pi^-, K_1^+ \to \pi^+ K_0^0, \pi^0 \to e^+ e^- \gamma^F, K_0^0 \to \pi^0 K^0, K_0^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{F}$ | 16976 | 1 | 99553 |
| 16978 | $J/\psi \to ho^0 \eta a_0^0, ho^0 \to \pi^+ \pi^-, \eta \to e^+ e^- \gamma^F, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 16977 | 1 | 99554 |
| 16979 | $J/\psi \to \pi^0 \pi^+ \rho^- \rho^- b_1^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, b_1^+ \to \pi^+ \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16978 | 1 | 99555 |
| 16980 | $J/\psi \to \pi^+ K_1^0 K_1^-, K_1^0 \to \pi^- K^{*+}, K_1^- \to \pi^- \bar{K}_0^{*0}, K^{*+} \to \pi^+ K^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}$ | 16979 | 1 | 99556 |
| 16981 | $J/\psi \to \pi^0 \pi^0 \pi^- \rho^+, \pi^0 \to e^+ e^- \gamma^F, \rho^+ \to \pi^0 \pi^+$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F$ | 16980 | 1 | 99557 |
| 16982 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma^f$ | 16981 | 1 | 99558 |
| 16983 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_1^{'+}, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 16982 | 1 | 99559 |
| 16984 | $J/\psi \to \eta f_0(1370) h_1(1170), \eta \to \gamma \gamma, f_0(1370) \to \pi^+\pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 16983 | 1 | 99560 |
| 16985 | $J/\psi \to \pi^0 \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^- \gamma^F, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 16984 | 1 | 99561 |
| 16986 | $J/\psi \to \pi^0 \eta a_0^0 b_1^0, \eta \to \pi^0 \pi^+ \pi^-, a_0^0 \to \pi^0 \eta, b_1^0 \to \pi^0 \omega, \eta \to \pi^0 \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 16985 | 1 | 99562 |
| 16987 | $J/\psi \to \pi^+ K^0 K^{*-} h_1(1380), K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, h_1(1380) \to K^0 \bar{K}^*, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 16986 | 1 | 99563 |
| 16988 | $J/\psi \to \rho^- \omega \bar{K}^0 K^{*+}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 16987 | 1 | 99564 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 16989 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0 \gamma^f, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma^f$ | 16988 | 1 | 99565 |
| 16990 | $J/\psi \to \pi^0\pi^0\pi^+\rho^-\omega b_1^0, \rho^- \to \pi^0\pi^-, \omega \to \pi^0\pi^+\pi^-, b_1^0 \to \pi^0\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 16989 | 1 | 99566 |
| 16991 | $J/\psi \to K^0 h_1(1170) \bar{K}_1^{'0}, K^0 \to K_S^0, h_1(1170) \to \pi^0 \rho^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K_S^0 \to \pi^+ \pi^-, \\ \rho^0 \to \pi^+ \pi^- \gamma^f, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^f$ | 16990 | 1 | 99567 |
| 16992 | $J/\psi \to \rho^0 K^0 \bar{K}^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16991 | 1 | 99568 |
| 16993 | $J/\psi \rightarrow \pi^0 a_2^0 \omega, a_2^0 \rightarrow \pi^- \rho^+ \gamma^f, \omega \rightarrow \pi^0 \pi^+ \pi^-, \rho^+ \rightarrow \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 16992 | 1 | 99569 |
| 16994 | $J/\psi \to \rho^0 K^+ K_2^{*-}, \rho^0 \to \pi^+ \pi^-, K_2^{*-} \to \pi^0 K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 16993 | 1 | 99570 |
| 16995 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \omega K^+, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 16994 | 1 | 99571 |
| 16996 | $J/\psi \to \pi^+ f_2(1270) b_1^- \gamma^f, f_2(1270) \to \pi^0 \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 16995 | 1 | 99572 |
| 16997 | $J/\psi ightarrow ho^0 \omega b_1^0, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^0 \gamma, b_1^0 ightarrow \pi^0 \omega, \omega ightarrow \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16996 | 1 | 99573 |
| 16998 | $J/\psi \to \pi^+ K^* K^{*-} \gamma^f, K^* \to \pi^- K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 16997 | 1 | 99574 |
| 16999 | $J/\psi \to K^0 K^{*-} b_1^+ \gamma, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0, \ \bar{K}^0 \to K_L^0, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 16998 | 1 | 99575 |
| 17000 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ K^- K_1^0, K_1^0 \to \pi^0 K_0^0, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 16999 | 1 | 99576 |
| 17001 | $J/\psi ightarrow K^0 ar{K}^0 a_0^0, K^0 ightarrow K_L^0, ar{K}^0 ightarrow K_L^0, a_0^0 ightarrow \pi^0 \eta, \eta ightarrow \gamma \gamma$ | $\pi^0 K_L^0 K_L^0 \gamma \gamma$ | 17000 | 1 | 99577 |
| 17002 | $J/\psi \to \pi^0 \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17001 | 1 | 99578 |
| 17003 | $J/\psi \to \bar{K}^0 K^* \eta', \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 17002 | 1 | 99579 |
| 17004 | $J/\psi \to ho^0 K^{*-} K_1^+, ho^0 \to \pi^+ \pi^- \gamma^F, K^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ \pi^- K^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$ | 17003 | 1 | 99580 |
| 17005 | $J/\psi \to \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 17004 | 1 | 99581 |
| 17006 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} h_1(1170), \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 17005 | 1 | 99582 |
| 17007 | $J/\psi 	o \Lambda ar{\Lambda} \gamma, \Lambda 	o n \gamma, ar{\Lambda} 	o \pi^0 ar{n}$ | $\pi^0 n \bar{n} \gamma \gamma$ | 17006 | 1 | 99583 |
| 17008 | $J/\psi ightarrow ho^+ ho^- \omega \gamma^f, ho^+ ightarrow \pi^0 \pi^+, ho^- ightarrow \pi^0 \pi^-, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma^f$ | 17007 | 1 | 99584 |
| 17009 | $J/\psi \to \pi^0 \eta K^+ K^{*-}, \eta \to \gamma \gamma, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 17008 | 1 | 99585 |
| 17010 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 \pi^- K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17009 | 1 | 99586 |
| 17011 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17010 | 1 | 99587 |
| 17012 | $J/\psi 	o K^0 ar{K}_1^0, K^0 	o K_S^0, ar{K}_1^0 	o \pi^0 ar{K}_0^{*0}, K_S^0 	o \pi^0 \pi^0, ar{K}_0^{*0} 	o \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^+K^-$ | 17011 | 1 | 99588 |
| 17013 | $J/\psi \to \bar{K}^0 K_2^{*0}, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 \pi^0 K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 17012 | 1 | 99589 |
| 17014 | $J/\psi \to \eta(2225)\gamma, \eta(2225) \to \phi\phi, \phi \to \pi^0 \rho^0, \phi \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 17013 | 1 | 99590 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 17015 | $J/\psi \to \pi^+\pi^-\rho^+b_1^-, \rho^+ \to \pi^0\pi^+\gamma^f, b_1^- \to \pi^-\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 17014 | 1 | 99591 |
| 17016 | $J/\psi \to K^0 \bar{K}^* h_1(1170), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1170) \to \pi^+ \rho^-, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17015 | 1 | 99592 |
| 17017 | $J/\psi \to \omega K^0 \bar{K}^*, \omega \to \pi^0 \gamma, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 17016 | 1 | 99593 |
| 17018 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^- K^+ \gamma^f, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 17017 | 1 | 99594 |
| 17019 | $J/\psi \to \omega \bar{K}^0 K_2^{*0}, \omega \to \pi^+ \pi^- \gamma^F, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- K^*, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma^F$ | 17018 | 1 | 99595 |
| 17020 | $J/\psi 	o par{p}a_1^0, a_1^0 	o \pi^- ho^+, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-par{p}$ | 17019 | 1 | 99596 |
| 17021 | $J/\psi \to K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to K_L^0 K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 17020 | 1 | 99597 |
| 17022 | $J/\psi \to \eta \eta' \phi, \eta \to \gamma \gamma, \eta' \to \pi^+ \pi^- \eta, \phi \to K_L^0 K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 17021 | 1 | 99598 |
| 17023 | $J/\psi \to \pi^+ \rho^- \rho^- a_1^+, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 17022 | 1 | 99599 |
| 17024 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 17023 | 1 | 99600 |
| 17025 | $J/\psi \to \phi f_0(1710), \phi \to \pi^0 \rho^0, f_0(1710) \to \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-$ | 17024 | 1 | 99601 |
| 17026 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \\ \bar{K}^0 \to K_L^0, \eta \to \pi^+ \pi^- \gamma^F$ | $K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^F$ | 17025 | 1 | 99602 |
| 17027 | $J/\psi \to K^0 \bar{n} \Sigma^0, K^0 \to K_L^0, \Sigma^0 \to \Lambda \gamma, \Lambda \to \pi^- p$ | $K_L^0\pi^-ar{n}p\gamma$ | 17026 | 1 | 99603 |
| 17028 | $J/\psi \to h_1(1170) f_1(1285), h_1(1170) \to \pi^+ \rho^-, f_1(1285) \to \pi^+ \pi^- \eta, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17027 | 1 | 99604 |
| 17029 | $J/\psi \to \pi^+\pi^-K^-K^{*+}h_1(1170), K^{*+} \to \pi^+K^0, h_1(1170) \to \pi^-\rho^+, K^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 17028 | 1 | 99605 |
| 17030 | $J/\psi 	o \pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f\gamma^f$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f\gamma^f$ | 17029 | 1 | 99606 |
| 17031 | $J/\psi \to \pi^+ b_1^- a_1^0 \gamma^f, b_1^- \to \pi^- \omega, a_1^0 \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 17030 | 1 | 99607 |
| 17032 | $J/\psi \to K^0 K_2^{*0} \gamma, K^0 \to K_S^0, K_2^{*0} \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 17031 | 1 | 99608 |
| 17033 | $J/\psi \to \pi^+ K^{*+} K^{*-} a_0^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, a_0^- \to \pi^- \eta, K^0 \to K_S^0, \\ \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma$ | 17032 | 1 | 99609 |
| 17034 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \eta a_1^-, \eta \to \gamma \gamma, a_1^- \to \pi^0 \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 17033 | 1 | 99610 |
| 17035 | $J/\psi 	o \pi^+ a_2^- a_0^0, a_2^- 	o ho^0 \pi^-, a_0^0 	o K^+ K^-, ho^0 	o \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 17034 | 1 | 99611 |
| 17036 | $J/\psi \to \pi^- \eta' a_1^+, \eta' \to \rho^0 \gamma, a_1^+ \to \pi^0 \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 17035 | 1 | 99612 |
| 17037 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K_1^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17036 | 1 | 99613 |
| 17038 | $J/\psi \to f_1(1420)\gamma, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\gamma$ | 17037 | 1 | 99614 |
| 17039 | $J/\psi \to \pi^0\pi^-b_1^0a_0^+, b_1^0 \to \pi^0\omega, a_0^+ \to \pi^+\eta, \omega \to \pi^0\pi^+\pi^-, \eta \to \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17038 | 1 | 99615 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 17040 | $J/\psi \to \phi f_2', \phi \to \pi^+ \rho^-, f_2' \to \eta \eta, \rho^- \to \pi^0 \pi^-, \eta \to \gamma \gamma, $ $\eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 17039 | 1 | 99616 |
| 17041 | $J/\psi \to K^0 \bar{K}^0 f_1(1420), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_1(1420) \to \pi^- \bar{K}^0 K^+, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 17040 | 1 | 99617 |
| 17042 | $J/\psi ightarrow a_2^0\pi^-b_1^+, a_2^0 ightarrow \pi^0\gamma, b_1^+ ightarrow \pi^+\omega, \omega ightarrow \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 17041 | 1 | 99618 |
| 17043 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 17042 | 1 | 99619 |
| 17044 | $J/\psi \to \pi^0 \rho^0 \bar{K}^0 K_0^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17043 | 1 | 99620 |
| 17045 | $J/\psi \to \omega K^0 \bar{K}^0 f_0(1370), \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_0(1370) \to \rho^+ \rho^-, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17044 | 1 | 99621 |
| 17046 | $J/\psi \to \pi^- K^+ f_0(1370) \bar{K}_0^{*0}, f_0(1370) \to \rho^+ \rho^-, \bar{K}_0^{*0} \to \pi^+ K^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 17045 | 1 | 99622 |
| 17047 | $J/\psi \to \pi^0 \pi^- K^+ \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0 \pi^+ \pi^- K^+ K^-$ | 17046 | 1 | 99623 |
| 17048 | $J/\psi ightarrow \pi^0 a^0_0 b^0_1, a^0_0 ightarrow \pi^0 \eta, b^0_1 ightarrow \pi^0 \omega, \eta ightarrow \gamma \gamma, \omega ightarrow \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\gamma\gamma\gamma$ | 17047 | 1 | 99624 |
| 17049 | $J/\psi \to \pi^+ K^0 K^{*-} b_1^0, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, b_1^0 \to \pi^0 \omega, \bar{K}^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17048 | 1 | 99625 |
| 17050 | $J/\psi \to \pi^0 \pi^0 h_1(1170), h_1(1170) \to \pi^+ \rho^- \gamma^f, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^f$ | 17049 | 1 | 99626 |
| 17051 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^0 K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 17050 | 1 | 99627 |
| 17052 | $J/\psi \to \rho^0 \omega h_1(1170), \rho^0 \to \pi^+\pi^-, \omega \to \pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17051 | 1 | 99628 |
| 17053 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \rho^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \rho^0 \to \pi^+ \pi^-, K^0 \to K_S^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17052 | 1 | 99629 |
| 17054 | $J/\psi \to \pi^- b_1^+ f_1(1285), b_1^+ \to \pi^+ \omega, f_1(1285) \to \pi^- \bar{K}^0 K^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 17053 | 1 | 99630 |
| 17055 | $J/\psi \to K_2^{*0} K_0^0, K_2^{*0} \to \pi^+ \pi^- \bar{K}^*, K_0^0 \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 17054 | 1 | 99631 |
| 17056 | $J/\psi 	o ar{K}^0 K_2^{*0}, ar{K}^0 	o K_S^0, K_2^{*0} 	o \pi^0 K^0, K_S^0 	o \pi^+ \pi^-, K^0 	o K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^-$ | 17055 | 1 | 99632 |
| 17057 | $J/\psi \to a_0^- b_1^+, a_0^- \to \pi^- \eta, b_1^+ \to \pi^+ \omega, \eta \to \pi^+ \pi^- \gamma^F, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 17056 | 1 | 99633 |
| 17058 | $J/\psi \to \omega K^{*+}K_1^-, \omega \to \pi^0 \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}^*, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17057 | 1 | 99634 |
| 17059 | $J/\psi \to \eta f_0(1710)\gamma, \eta \to \pi^0 \pi^+ \pi^-, f_0(1710) \to \eta \eta, \eta \to \gamma \gamma, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma$ | 17058 | 1 | 99635 |
| 17060 | $J/\psi \to K^0 \bar{K}^0_1, K^0 \to K^0_S, \bar{K}^0_1 \to \pi^+ K^{*-}, K^0_S \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K^0_L$ | $K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 17059 | 1 | 99636 |
| 17061 | $J/\psi \to \phi h_1(1380)\gamma, \phi \to K_L^0 K_S^0, h_1(1380) \to K^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^{0}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{-}K^{+}\gamma$ | 17060 | 1 | 99637 |
| 17062 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, \ \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma$ | 17061 | 1 | 99638 |
| 17063 | $J/\psi \to \pi^+ K^* K_0^{*-}, K^* \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 17062 | 1 | 99639 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 17064 | $J/\psi \to K^0 a_0^+ K_1^-, K^0 \to K_S^0, a_0^+ \to \pi^+ \eta, K_1^- \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \pi^0 \pi^0 \pi^0, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-K^-$ | 17063 | 1 | 99640 |
| 17065 | $J/\psi \to \rho^+ K^{*-} K_1^0, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, K_1^0 \to \pi^0 K_0^0, \bar{K}^0 \to K_S^0, K_0^0 \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17064 | 1 | 99641 |
| 17066 | $J/\psi \to h_1(1380)f_1(1420), h_1(1380) \to K^-K^{*+}, f_1(1420) \to \pi^0K^0\bar{K}^0, K^{*+} \to \pi^+K^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^0_L \pi^+ K^-$ | 17065 | 1 | 99642 |
| 17067 | $J/\psi 	o \pi^0 p ar p \gamma^f$ | $\pi^0 p \bar p \gamma^f$ | 17066 | 1 | 99643 |
| 17068 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 17067 | 1 | 99644 |
| 17069 | $J/\psi \to b_1^0 f_0(1370), b_1^0 \to \pi^0 \omega, f_0(1370) \to \rho^0 \rho^0, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 17068 | 1 | 99645 |
| 17070 | $J/\psi \to K^0 \bar{n} \Sigma^0, K^0 \to K^0_S, \Sigma^0 \to \Lambda \gamma, K^0_S \to \pi^0 \pi^0, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^-\bar{n}p\gamma$ | 17069 | 1 | 99646 |
| 17071 | $J/\psi \to \eta K^0 \bar{K}^0_1, \eta \to \gamma \gamma, K^0 \to K^0_S, \bar{K}^0_1 \to \omega \bar{K}^0, K^0_S \to \pi^0 \pi^0, \\ \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 17070 | 1 | 99647 |
| 17072 | $J/\psi \to \pi^+\pi^-a^0_1, a^0_1 \to \pi^-\rho^+\gamma^f, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 17071 | 1 | 99648 |
| 17073 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^- K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0 \pi^+ \pi^+ \pi^- K^-$ | 17072 | 1 | 99649 |
| 17074 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_0(1710) \to \eta \eta, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^0 K_L^0 \pi^+ \pi^- \gamma \gamma \gamma \gamma$ | 17073 | 1 | 99650 |
| 17075 | $J/\psi \to \omega f_1(1285), \omega \to \pi^0 \pi^+ \pi^-, f_1(1285) \to \pi^0 \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17074 | 1 | 99651 |
| 17076 | $J/\psi \to \pi^0 \pi^+ \rho^- b_1^0 h_1(1170), \rho^- \to \pi^0 \pi^-, b_1^0 \to \pi^0 \omega, h_1(1170) \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17075 | 1 | 99652 |
| 17077 | $J/\psi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^+\pi^-\gamma^F\gamma^f$ | 17076 | 1 | 99653 |
| 17078 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega \bar{K}^0 K^*, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 17077 | 1 | 99654 |
| 17079 | $J/\psi \to \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K^0 \to K_L^0, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 17078 | 1 | 99655 |
| 17080 | $J/\psi ightarrow \pi^0 \omega a_0^0, \omega ightarrow \pi^0 \pi^+ \pi^-, a_0^0 ightarrow \pi^0 \eta, \pi^0 ightarrow e^+ e^- \gamma^F, \eta ightarrow \gamma \gamma$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 17079 | 1 | 99656 |
| 17081 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \rho^0 \bar{K}^0, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}$ | 17080 | 1 | 99657 |
| 17082 | $J/\psi \to \pi^0 K^0 \bar{K}^* a_0^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17081 | 1 | 99658 |
| 17083 | $J/\psi \to \pi^- \bar{K}^0 K_1^{'+}, \bar{K}^0 \to K_L^0, K_1^{'+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 17082 | 1 | 99659 |
| 17084 | $J/\psi \to \eta K^* \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \ \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 17083 | 1 | 99660 |
| 17085 | $J/\psi \to K^0 \bar{K}^0 b_1^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, b_1^0 \to \pi^0 \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 17084 | 1 | 99661 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 17086 | $J/\psi \to a_2^0 \rho^- a_0^+, a_2^0 \to \pi^- \rho^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \rho^+ \to \pi^0 \pi^+, \\ \pi^0 \to e^+ e^- \gamma^F \gamma^f, \eta \to \pi^0 \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 17085 | 1 | 99662 |
| 17087 | $J/\psi \to K^- K^{*+} \gamma^F, K^{*+} \to \pi^0 K^+, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-K^+K^-\gamma^F\gamma^F$ | 17086 | 1 | 99663 |
| 17088 | $J/\psi \to K^* \bar{K}^* \eta', K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma$ | 17087 | 1 | 99664 |
| 17089 | $J/\psi \to \pi^+ K^- K^0_1, K^0_1 \to \pi^0 K^0_0, K^0_0 \to \pi^0 K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 17088 | 1 | 99665 |
| 17090 | $J/\psi \to \rho^- K_2^{*0} K_1^+, \rho^- \to \pi^0 \pi^-, K_2^{*0} \to \pi^+ K^{*-}, K_1^+ \to \rho^+ K^0, K^{*-} \to \pi^- \bar{K}^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17089 | 1 | 99666 |
| 17091 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^+ \pi^- K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 6364 | 1 | 99667 |
| 17092 | $J/\psi \to \pi^0 \rho^0 K^{*-} K_1^+, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^0 K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 17091 | 1 | 99668 |
| 17093 | $J/\psi \to \eta' h_1(1380), \eta' \to \rho^0 \gamma, h_1(1380) \to \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^- \gamma^f \gamma^f, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma^f \gamma^f$ | 17092 | 1 | 99669 |
| 17094 | $J/\psi \to \pi^+ K_1^0 K_0^{*-}, K_1^0 \to \pi^0 K^*, K_0^{*-} \to \pi^0 K^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 17093 | 1 | 99670 |
| 17095 | $J/\psi \to \pi^+\pi^-K_1^0\bar{K}_1^0, K_1^0 \to \rho^0K^0, \bar{K}_1^0 \to \pi^0\bar{K}^*, \rho^0 \to \pi^+\pi^-, K^0 \to K_L^0, \\ \bar{K}^* \to \pi^+K^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^-$ | 17094 | 1 | 99671 |
| 17096 | $J/\psi \to \eta K^0 \bar{K}_1^0, \eta \to \gamma \gamma, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K_S^0 \to \pi^+ \pi^-, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 17095 | 1 | 99672 |
| 17097 | $J/\psi ightarrow \pi^- \omega ar{K}^0 K^+, \omega ightarrow \pi^0 \pi^+ \pi^-, ar{K}^0 ightarrow K_S^0, K_S^0 ightarrow \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 17096 | 1 | 99673 |
| 17098 | $J/\psi \to \pi^0 K^* K_2^{*0}, K^* \to \pi^- K^+, K_2^{*0} \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 17097 | 1 | 99674 |
| 17099 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K^{*+}, \bar{K}^0 \to K_S^0, K_1^{*+} \to \pi^0 K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 17098 | 1 | 99675 |
| 17100 | $J/\psi \to \rho^+ \eta' a_0^-, \rho^+ \to \pi^0 \pi^+, \eta' \to \pi^0 \pi^0 \eta, a_0^- \to \pi^- \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^1\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 17099 | 1 | 99676 |
| 17101 | $J/\psi \to K^{*+} \bar{p}\Lambda, K^{*+} \to \pi^+ K^0, \Lambda \to \pi^0 n, K^0 \to K^0_S, \pi^0 \to e^+ e^- \gamma^F, K^0_S \to \pi^+ \pi^-$ | $e^+e^-\pi^+\pi^+\pi^-n\bar{p}\gamma^F$ | 17100 | 1 | 99677 |
| 17102 | $J/\psi \to K^0 \eta' \bar{K}^0_1, K^0 \to K^0_L, \eta' \to \pi^0 \pi^+ \pi^-, \bar{K}^0_1 \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 17101 | 1 | 99678 |
| 17103 | $J/\psi \to \pi^- a_2^+ a_0^0, a_2^+ \to \pi^+ \eta, a_0^0 \to \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17102 | 1 | 99679 |
| 17104 | $J/\psi \to K^0 K_2^{*0}, \bar{K^0} \to K_L^0, K_2^{*0} \to \pi^0 \pi^+ K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 17103 | 1 | 99680 |
| 17105 | $J/\psi \to K^0 \bar{K}^0 h_1(1170), K^0 \to K_S^0, \bar{K}^0 \to K_S^0, h_1(1170) \to \pi^- \rho^+, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17104 | 1 | 99681 |
| 17106 | $J/\psi \to \pi^+ K_0^0 K_1^-, K_0^0 \to \pi^0 K^0, K_1^- \to \rho^- \bar{K}^0, K^0 \to K_S^0, \rho^- \to \pi^0 \pi^-, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 17105 | 1 | 99682 |
| 17107 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K^{*+} \to \pi^+ K^0, \pi^0 \to e^+ e^- \gamma^F, \\ \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 17106 | 1 | 99683 |
| 17108 | $J/\psi \to \bar{K}_0^{*0} K_1^0, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^0 \to \rho^0 K^0, \rho^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-$ | 17107 | 1 | 99684 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 17109 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^+ \pi^- \eta \gamma^f, \eta \to \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma\gamma^f$ | 17108 | 1 | 99685 |
| 17110 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 \rho^0 \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 17109 | 1 | 99686 |
| 17111 | $J/\psi \to \pi^+ \rho^- \eta a_1^0, \rho^- \to \pi^0 \pi^-, \eta \to \pi^0 \pi^0 \pi^0, a_1^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17110 | 1 | 99687 |
| 17112 | $J/\psi \to \eta f_0(1710)\gamma, \eta \to \pi^0\pi^0\pi^0, f_0(1710) \to \eta\eta, \eta \to \gamma\gamma, \eta \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma\gamma$ | 17111 | 1 | 99688 |
| 17113 | $J/\psi \to \pi^- K^{*+} \bar{K}_1^{'0}, K^{*+} \to \pi^0 K^+, \bar{K}_1^{'0} \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 17112 | 1 | 99689 |
| 17114 | $J/\psi \to K^* \bar{K}_1^0 \gamma, K^* \to \pi^- K^+, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 17113 | 1 | 99690 |
| 17115 | $J/\psi \to \pi^+ K^{*-} K_1^{'0}, K^{*-} \to \pi^- \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17114 | 1 | 99691 |
| 17116 | $J/\psi \to \rho^0 \rho^- a_0^+ \gamma, \rho^0 \to \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F\gamma$ | 17115 | 1 | 99692 |
| 17117 | $J/\psi \to \pi^+ \omega K^* K^{*-}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17116 | 1 | 99693 |
| 17118 | $J/\psi \to \pi^+\pi^+\rho^-a_2^-\omega, \rho^- \to \pi^0\pi^-, a_2^- \to \rho^0\pi^-, \omega \to \pi^0\pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 17117 | 1 | 99694 |
| 17119 | $J/\psi \to f_1(1510)\gamma, f_1(1510) \to K^-K^{*+}, K^{*+} \to \pi^+K^0, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma$ | 17118 | 1 | 99695 |
| 17120 | $J/\psi 	o \pi^0 a_2^0 \eta \omega, a_2^0 	o \pi^- ho^+, \eta 	o \pi^0 \pi^0 \pi^0, \omega 	o \pi^0 \pi^+ \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17119 | 1 | 99696 |
| 17121 | $J/\psi \to \pi^0\pi^-\pi^-\bar{K}^0K^+b_1^+, \bar{K}^0 \to K_L^0, b_1^+ \to \pi^+\omega, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17120 | 1 | 99697 |
| 17122 | $J/\psi \to K^+ K_2^{*-} \phi, K_2^{*-} \to \pi^+ \pi^- K^{*-}, \phi \to K^+ K^-, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^+\pi^-K^+K^+K^-K^-$ | 17121 | 1 | 99698 |
| 17123 | $J/\psi \to \pi^+ K^0 K_2^{*-}, K^0 \to K_S^0, K_2^{*-} \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 17122 | 1 | 99699 |
| 17124 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^0 K^+, \eta \to \gamma \gamma, $ $\rho^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 17123 | 1 | 99700 |
| 17125 | $J/\psi \to \pi^- b_1^+ f_0(1370), b_1^+ \to \pi^+ \omega \gamma^f, f_0(1370) \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 17124 | 1 | 99701 |
| 17126 | $J/\psi \to \eta K^- K^{*+}, \eta \to \pi^0 \pi^+ \pi^- \gamma^f, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{f}$ | 17125 | 1 | 99702 |
| 17127 | $J/\psi 	o \eta' n ar{n}, \eta' 	o \omega \gamma, \omega 	o \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^-nar{n}\gamma$ | 17126 | 1 | 99703 |
| 17128 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^-, \eta' \to \rho^0 \gamma, a_0^+ \to \pi^+ \eta, \rho^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 17127 | 1 | 99704 |
| 17129 | $J/\psi \to f_2(1950)\gamma, f_2(1950) \to K_S^0 K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^+\pi^+\pi^-\pi^-\gamma$ | 17128 | 1 | 99705 |
| 17130 | $J/\psi \to \pi^- K_S^0 K^+ \phi, K_S^0 \to \pi^+ \pi^-, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17129 | 1 | 99706 |
| 17131 | $J/\psi \to \pi^0 \omega f_0(1370), \omega \to \pi^0 \pi^+ \pi^- \gamma^f, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 17130 | 1 | 99707 |
| 17132 | $J/\psi \to \pi^0 \pi^0 \pi^0 \rho^0 \pi^- \bar{K}^0 K^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17131 | 1 | 99708 |
| 17133 | $J/\psi \to \rho^+ K^0 K_0^{*-}, \rho^+ \to \pi^0 \pi^+ \gamma^f, K^0 \to K_S^0, K_0^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^f$ | 17132 | 1 | 99709 |
| 17134 | $J/\psi \to \pi^- a_2^+ \gamma^f, a_2^+ \to \pi^+ \eta, \eta \to \gamma \gamma$ | $\pi^+\pi^-\gamma\gamma\gamma^f$ | 17133 | 1 | 99710 |
| 17135 | $J/\psi \to \eta_c \gamma, \eta_c \to \omega K^- K^{*+}, \omega \to \pi^0 \gamma, K^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 17134 | 1 | 99711 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|-------|
| 17136 | $J/\psi 	o \pi^0 K^0 ar{K}^* \eta', K^0 	o K_S^0, ar{K}^* 	o \pi^+ K^-, \eta' 	o ho^0 \gamma, K_S^0 	o \pi^0 \pi^0, \ ho^0 	o \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 17135 | 1 | 99712 |
| 17137 | $J/\psi ightarrow \omega \eta', \omega ightarrow \pi^0 \pi^+ \pi^-, \eta' ightarrow \pi^0 \pi^0 \eta, \eta ightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 17136 | 1 | 99713 |
| 17138 | $J/\psi \to \pi^+\pi^-\pi^-\pi^-\rho^+a_2^+, \rho^+ \to \pi^0\pi^+, a_2^+ \to \rho^0\pi^+, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 17137 | 1 | 99714 |
| 17139 | $J/\psi \to \pi^- \rho^+ f_2(1270) \gamma^f, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 17138 | 1 | 99715 |
| 17140 | $J/\psi \to \pi^0 K^{*-} K_1^{'+}, K^{*-} \to \pi^0 K^-, K_1^{'+} \to \pi^0 K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^0K^+K^-$ | 17139 | 1 | 99716 |
| 17141 | $J/\psi \to \pi^0 \pi^+ K^* K^{*-}, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17140 | 1 | 99717 |
| 17142 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_L^0, $ $\rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 17141 | 1 | 99718 |
| 17143 | $J/\psi \to \pi^+\pi^-\omega K^*\bar{K}^*, \omega \to \pi^0\pi^+\pi^-, K^* \to \pi^0K^0, \bar{K}^* \to \pi^+K^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17142 | 1 | 99719 |
| 17144 | $J/\psi \to K^0 \bar{K}^0 \gamma, K^0 \to K^0_S, \bar{K}^0 \to K^0_L, K^0_S \to \pi^+ \pi^- \gamma^f$ | $K_L^0\pi^+\pi^-\gamma\gamma^f$ | 17143 | 1 | 99720 |
| 17145 | $J/\psi 	o \pi^+\pi^+\pi^-\omega nar p, \omega 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-n\bar{p}$ | 17144 | 1 | 99721 |
| 17146 | $J/\psi 	o \pi^+\pi^-\eta' a^0_0, \eta' 	o \pi^0\pi^0\eta, a^0_0 	o \pi^0\eta, \eta 	o \pi^0\pi^0\pi^0, \eta 	o \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17145 | 1 | 99722 |
| 17147 | $J/\psi \to \pi^0 \rho^0 f_2(1270), \rho^0 \to \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 17146 | 1 | 99723 |
| 17148 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^+ K^- \gamma^f, K_0^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $K_L^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 17147 | 1 | 99724 |
| 17149 | $J/\psi \to \pi^0 \pi^+ K^* K_1^-, K^* \to \pi^0 K^0, K_1^- \to \omega K^-, K^0 \to K_S^0, \omega \to \pi^0 \gamma, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 17148 | 1 | 99725 |
| 17150 | $J/\psi \to K^+ \phi K_1^-, \phi \to K_L^0 K_S^0, K_1^- \to \omega K^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$ | 17149 | 1 | 99726 |
| 17151 | $J/\psi \to \eta K^+ K_0^{*-}, \eta \to e^+ e^- \gamma^F, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{-}K^{+}\gamma^{F}$ | 17150 | 1 | 99727 |
| 17152 | $J/\psi \to \bar{K}^0 K^* f_0(1370), \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, f_0(1370) \to \gamma \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 17151 | 1 | 99728 |
| 17153 | $J/\psi 	o ar{K}_1^0 K_1^{'0}, ar{K}_1^0 	o ho^+ K^-, K_1^{'0} 	o \pi^0 K^*, ho^+ 	o \pi^0 \pi^+, K^* 	o \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 17152 | 1 | 99729 |
| 17154 | $J/\psi \to \pi^0 K^{*+} K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to K_S^0, K_S^0 \to K_S^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-$ | 17153 | 1 | 99730 |
| 17155 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^-K^+\gamma^f, K_2^{*0} \to \pi^0\pi^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^f$ | 17154 | 1 | 99731 |
| 17156 | $J/\psi \to \pi^- K_2^{*0} K_2^{*+}, K_2^{*0} \to \pi^+ K^{*-}, K_2^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17155 | 1 | 99732 |
| 17157 | $J/\psi \to \pi^+\pi^-K^0\bar{K}^0K^{*+}K^{*-}, K^0 \to K_L^0, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0K^+, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 17156 | 1 | 99733 |
| 17158 | $J/\psi 	o \eta_c \gamma, \eta_c 	o K^+ K^- a_1^0, a_1^0 	o \pi^+ ho^-, ho^- 	o \pi^0 \pi^-$ | $\pi^0\pi^+\pi^-K^+K^-\gamma$ | 17157 | 1 | 99734 |
| 17159 | $J/\psi \to \pi^- \rho^+ \eta' f_0(1370), \rho^+ \to \pi^0 \pi^+, \eta' \to \gamma \gamma, f_0(1370) \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 17158 | 1 | 99735 |
| 17160 | $J/\psi \to \bar{K}^0 K^* a_0^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^+ \pi^- \gamma^f, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 17159 | 1 | 99736 |
| 17161 | $J/\psi \to K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17160 | 1 | 99737 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 17162 | $J/\psi \to K^* \bar{K}^* \gamma, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 17161 | 1 | 99738 |
| 17163 | $J/\psi \to \pi^0 K^* \bar{K}^* \phi, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \phi \to \pi^+ \rho^-, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17162 | 1 | 99739 |
| 17164 | $J/\psi \to \eta f_2(1270)h_1(1170), \eta \to \pi^+\pi^-\gamma^F, f_2(1270) \to \pi^+\pi^-, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 17163 | 1 | 99740 |
| 17165 | $J/\psi \to K^{+}a_{0}^{0}\bar{K}_{1}^{'-}, a_{0}^{0} \to \pi^{0}\eta, \bar{K}_{1}^{'-} \to \pi^{-}\bar{K}^{*}, \eta \to \gamma\gamma, \bar{K}^{*} \to \pi^{+}K^{-}$ | $\pi^0\pi^+\pi^-K^+K^-\gamma\gamma$ | 17164 | 1 | 99741 |
| 17166 | $J/\psi \to \pi^0 \omega K^* \bar{K}_1^{'0}, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^- K^+, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 17165 | 1 | 99742 |
| 17167 | $J/\psi \to K_2^{*0} K_1^0, K_2^{*0} \to \rho^+ K^-, K_1^0 \to \rho^- K^+, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 17166 | 1 | 99743 |
| 17168 | $J/\psi \to \eta K^{*-} K_2^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \omega K^+, \pi^0 \to e^+ e^- \gamma^F, \\ \omega \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}K^{+}K^{-}\gamma^{F}$ | 17167 | 1 | 99744 |
| 17169 | $J/\psi 	o \omega K^0 \bar{K}_0^{*0}, \omega 	o \pi^0 \pi^+ \pi^-, K^0 	o K_S^0, \bar{K}_0^{*0} 	o \pi^+ K^-, K_S^0 	o \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17168 | 1 | 99745 |
| 17170 | $J/\psi \to K^0 \bar{K}^0 K^+ K^{*-}, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17169 | 1 | 99746 |
| 17171 | $J/\psi \to K^0 \bar{K}^0 f_2^{'}, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, f_2^{'} \to K_S^0 K_S^0, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^- \gamma^f, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 17170 | 1 | 99747 |
| 17172 | $J/\psi \to \pi^0 \pi^+ a_2^-, a_2^- \to \pi^0 \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 17171 | 1 | 99748 |
| 17173 | $J/\psi \to \pi^0\pi^0\pi^+\eta'a_1^-, \eta' \to \rho^0\gamma, a_1^- \to \rho^0\pi^-, \rho^0 \to \pi^+\pi^-, \rho^0 \to \pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 17172 | 1 | 99749 |
| 17174 | $J/\psi \to a_2^0 K^0 \bar{K}^0, a_2^0 \to \pi^0 \eta, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, \eta \to \gamma \gamma, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 17173 | 1 | 99750 |
| 17175 | $J/\psi \to \pi^0 K^* \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 17174 | 1 | 99751 |
| 17176 | $J/\psi \to \pi^- \rho^+ \omega \gamma^F, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F$ | $e^+e^-\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma^F$ | 17175 | 1 | 99752 |
| 17177 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \\ \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 17176 | 1 | 99753 |
| 17178 | $J/\psi 	o ho^+ \eta a_0^-, ho^+ 	o \pi^0 \pi^+, \eta 	o \pi^0 \pi^0 \pi^0, a_0^- 	o K^0 K^-, K^0 	o K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 17177 | 1 | 99754 |
| 17179 | $J/\psi \to K^- K_2^{*+} \eta', K_2^{*+} \to \pi^0 K^+, \eta' \to \pi^+ \pi^- \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 17178 | 1 | 99755 |
| 17180 | $J/\psi 	o \eta K^- K^{*+}, \eta 	o \pi^0 \pi^0 \pi^0, K^{*+} 	o \pi^+ K^0, K^0 	o K^0_S, K^0_S 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 17179 | 1 | 99756 |
| 17181 | $J/\psi \to f_2(1270)K^{*+}K^{*-}, f_2(1270) \to \pi^+\pi^-\gamma^f, K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^- \gamma^f$ | 17180 | 1 | 99757 |
| 17182 | $J/\psi \to \pi^- \bar{K}^* K_1^{'+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^0 K^{*+}, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, K_L^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17181 | 1 | 99758 |
| 17183 | $J/\psi ightarrow \eta_c \gamma, \eta_c ightarrow ho^0 ho^+ a_0^-, ho^0 ightarrow \pi^+ \pi^-, ho^+ ightarrow \pi^0 \pi^+, a_0^- ightarrow \pi^- \eta, \ \eta ightarrow \pi^+ \pi^- \gamma^F$ | $\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 17182 | 1 | 99759 |
| 17184 | $J/\psi \to \pi^0 \Delta^+ \bar{\Delta}^+, \Delta^+ \to p \gamma, \bar{\Delta}^+ \to \pi^- \bar{n}$ | $\pi^0\pi^-\bar{n}p\gamma$ | 17183 | 1 | 99760 |
| 17185 | $J/\psi \to \rho^- K^{*+} \bar{K}^0_1, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}^0_1 \to \pi^+ \pi^- \bar{K}^0, \bar{K}^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 17184 | 1 | 99761 |
| 17186 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^+ \omega a_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma^{f}$ | 17185 | 1 | 99762 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 17187 | $J/\psi \to \pi^- b_1^+, b_1^+ \to \pi^+ \omega, \omega \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 17186 | 1 | 99763 |
| 17188 | $J/\psi \to K^{*-}K_1^+\gamma, K^{*-} \to \pi^-\bar{K}^0, K_1^+ \to \rho^+K^0, \bar{K}^0 \to K_L^0, \rho^+ \to \pi^0\pi^+, K_L^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 17187 | 1 | 99764 |
| 17189 | $J/\psi \to \pi^0 K^- K^{*+} \eta', K^{*+} \to \pi^0 K^+, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 17188 | 1 | 99765 |
| 17190 | $J/\psi \to \pi^- K^+ \bar{K}_1^{'0}, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 17189 | 1 | 99766 |
| 17191 | $J/\psi 	o \pi^+ K_2^{*0} K^-, K_2^{*0} 	o \pi^0 \pi^0 K^*, K^* 	o \pi^0 K^0, K^0 	o K_S^0, K_S^0 	o \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 17190 | 1 | 99767 |
| 17192 | $J/\psi 	o K_2^{*0} ar{K}_1^0, K_2^{*0} 	o \pi^- K^+, ar{K}_1^0 	o \pi^0 ar{K}_0^{*0}, ar{K}_0^{*0} 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+$ | 17191 | 1 | 99768 |
| 17193 | $J/\psi \to \bar{\Sigma}^{*+}\Sigma^{*-}\gamma, \bar{\Sigma}^{*+} \to \pi^+\bar{\Lambda}, \Sigma^{*-} \to \pi^-\Lambda, \bar{\Lambda} \to \pi^0\bar{n}, \Lambda \to \pi^0 n$ | $\pi^0\pi^0\pi^+\pi^-nar{n}\gamma$ | 17192 | 1 | 99769 |
| 17194 | $J/\psi \to \bar{K}^* K_1^0 \gamma, \bar{K}^* \to \pi^+ K^-, K_1^0 \to \pi^- K_0^{*+} \gamma^f, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma^f$ | 17193 | 1 | 99770 |
| 17195 | $J/\psi \to f_2' h_1(1380), f_2' \to K^+ K^-, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0 K^0_L K^0_L K^+ K^-$ | 17194 | 1 | 99771 |
| 17196 | $J/\psi \to \pi^0\pi^0b_1^0a_1^0, b_1^0 \to \pi^0\omega, a_1^0 \to \pi^+\rho^-, \omega \to \pi^0\pi^+\pi^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17195 | 1 | 99772 |
| 17197 | $J/\psi \to \pi^0 K_2^{*0} K_1^0, K_2^{*0} \to \pi^+ K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17196 | 1 | 99773 |
| 17198 | $J/\psi \to \bar{K}^0 K^{*+} a_0^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17197 | 1 | 99774 |
| 17199 | $J/\psi ightarrow \pi^+\pi^- ho^- ar{n}p, ho^- ightarrow \pi^0\pi^-$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 17198 | 1 | 99775 |
| 17200 | $J/\psi \to \pi^- \bar{K}^0 K^{*+} b_1^0, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, b_1^0 \to \pi^0 \omega, K^0 \to K_S^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17199 | 1 | 99776 |
| 17201 | $J/\psi \to \rho^0 \omega h_1(1170), \rho^0 \to \pi^+\pi^-, \omega \to \pi^0 \gamma, h_1(1170) \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 17200 | 1 | 99777 |
| 17202 | $J/\psi 	o f_1(1285) \gamma, f_1(1285) 	o \pi^0 \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 17201 | 1 | 99778 |
| 17203 | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \bar{K}^0 \gamma, K^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_S^0, \\ \pi^0 \to e^+ e^- \gamma^F, K_S^0 \to \pi^+ \pi^-$ | $e^+e^-\pi^0\pi^+\pi^-\pi^-K^+\gamma^F\gamma$ | 17202 | 1 | 99779 |
| 17204 | $J/\psi \to K^*K_2^{*0}, K^* \to \pi^0 K^0, K_2^{*0} \to \pi^0 \pi^0 \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 17203 | 1 | 99780 |
| 17205 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- b_1^0 a_1^+, b_1^0 \to \pi^0 \omega, a_1^+ \to \rho^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma$ | 3948 | 1 | 99781 |
| 17206 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \eta\eta, h_1(1380) \to \bar{K}^0K^*, \eta \to \pi^0\pi^0\pi^0, \eta \to \pi^0\pi^0\pi^0, \bar{K}^0 \to K_L^0, K^* \to \pi^-K^+, \pi^0 \to e^+e^-\gamma^F, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{-}K^{+}\gamma^{F}\gamma^{F}$ | 17205 | 1 | 99782 |
| 17207 | $J/\psi ightarrow \Lambda ar{\Lambda}, \Lambda ightarrow \pi^0 n, ar{\Lambda} ightarrow \pi^+ ar{p}, \pi^0 ightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^+nar{p}\gamma^F$ | 17206 | 1 | 99783 |
| 17208 | $J/\psi ightarrow \pi^0\pi^0a_0^0\gamma, a_0^0 ightarrow \pi^0\eta, \eta ightarrow \pi^0\pi^+\pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}\gamma$ | 17207 | 1 | 99784 |
| 17209 | $J/\psi \to \pi^0 \pi^+ b_1^- f_1(1285), b_1^- \to \pi^- \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 17208 | 1 | 99785 |
| 17210 | $J/\psi ightarrow \pi^- ho^+ ar{n} \Delta^0, ho^+ ightarrow \pi^0 \pi^+, \Delta^0 ightarrow \pi^0 n, \pi^0 ightarrow e^+ e^- \gamma^F \gamma^f$ | $e^+e^-\pi^0\pi^+\pi^-nar{n}\gamma^F\gamma^f$ | 17209 | 1 | 99786 |
| 17211 | $J/\psi \to \rho^0 f_0(1370), \rho^0 \to \pi^+ \pi^- \gamma^F, f_0(1370) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^F$ | 17210 | 1 | 99787 |
| 17212 | $J/\psi \to x(1835)\gamma, x(1835) \to \pi^+\pi^-\eta', \eta' \to \pi^+\pi^-\eta, \eta \to \pi^0\pi^0\pi^0, \pi^0 \to e^+e^-\gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 17211 | 1 | 99788 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 17213 | $J/\psi \to \rho^- \bar{K}^* K_1^{'+}, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'+} \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17212 | 1 | 99789 |
| 17214 | $J/\psi \to \pi^- \bar{K}_0^{*0} K_1^+, \bar{K}_0^{*0} \to \pi^+ K^-, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 17213 | 1 | 99790 |
| 17215 | $J/\psi \to \rho^0 \eta' \eta', \rho^0 \to \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \eta' \to \pi^+ \pi^- \eta, \eta \to \gamma \gamma, \\ \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma$ | 17214 | 1 | 99791 |
| 17216 | $J/\psi \to \pi^+ \Sigma^{*0} \bar{\Sigma}^-, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Sigma}^- \to \pi^0 \bar{p}, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^+\pi^-p\bar{p}$ | 17215 | 1 | 99792 |
| 17217 | $J/\psi \to \pi^0 \pi^+ \pi^+ n \bar{\Delta}^{++}, \bar{\Delta}^{++} \to \pi^- \bar{p}$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}$ | 17216 | 1 | 99793 |
| 17218 | $J/\psi \to \rho^0 f_0(1370) f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^+\pi^-, f_0(1370) \to \rho^+\rho^-, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17217 | 1 | 99794 |
| 17219 | $J/\psi \to \bar{K}^0 K^{*+} a_1^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^+ K^0, a_1^- \to \rho^0 \pi^-, K^0 \to K_L^0, \rho^0 \to \pi^+ \pi^- \gamma^F$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma^F$ | 17218 | 1 | 99795 |
| 17220 | $J/\psi \to \pi^- \omega K^0 \bar{K}^0 b_1^+, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-$ | 17219 | 1 | 99796 |
| 17221 | $J/\psi \to K^* K_2^{*0}, K^* \to \pi^- K^+ \gamma^f, K_2^{*0} \to \rho^+ K^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 17220 | 1 | 99797 |
| 17222 | $J/\psi \to \eta K^{*-} K_2^{*+}, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^-K^+$ | 17221 | 1 | 99798 |
| 17223 | $J/\psi \to \pi^0 a_2^+ b_1^-, a_2^+ \to \pi^+ \eta, b_1^- \to \pi^- \omega, \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17222 | 1 | 99799 |
| 17224 | $J/\psi \to \bar{K}^0 K^* a_1^0, \bar{K}^0 \to K_S^0, K^* \to \pi^- K^+, a_1^0 \to \pi^- \rho^+, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 17223 | 1 | 99800 |
| 17225 | $J/\psi 	o \bar{\Sigma}^- \Sigma^{*+}, \bar{\Sigma}^- 	o \pi^0 \bar{p}, \Sigma^{*+} 	o \pi^0 \Sigma^+, \Sigma^+ 	o \pi^0 p$ | $\pi^0\pi^0\pi^0 par p$ | 17224 | 1 | 99801 |
| 17226 | $J/\psi \to K^+ a_0^0 \bar{K}_1^{'-}, a_0^0 \to \pi^0 \eta, \bar{K}_1^{'-} \to \pi^0 K^{*-}, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^-K^+\gamma\gamma$ | 17225 | 1 | 99802 |
| 17227 | $J/\psi \to K^+ \phi \bar{K}_1^{'-}, \phi \to K^+ K^-, \bar{K}_1^{'-} \to \pi^0 K^{*-}, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ K^+ K^-$ | 17226 | 1 | 99803 |
| 17228 | $J/\psi \to ho^0 ho^- \bar{K}^0 K^{*+}, ho^0 \to \pi^+ \pi^-, ho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0, K^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+$ | 17227 | 1 | 99804 |
| 17229 | $J/\psi \to K^0 \bar{K}^0 K^{*+} K^{*-}, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0_S \to \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17228 | 1 | 99805 |
| 17230 | $J/\psi \to \omega \bar{K}^0 K_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^0 \to \pi^+ \pi^- K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 17229 | 1 | 99806 |
| 17231 | $J/\psi 	o \pi^0\pi^0\eta'\gamma, \eta' 	o \pi^0\pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\gamma$ | 17230 | 1 | 99807 |
| 17232 | $J/\psi \to \pi^0 K^0 \bar{K}_1^0, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K_S^0 \to \pi^0 \pi^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\gamma^{F}$ | 17231 | 1 | 99808 |
| 17233 | $J/\psi \to \bar{K}^0 \phi K_1^0, \bar{K}^0 \to K_L^0, \phi \to K_L^0 K_S^0, K_1^0 \to \pi^0 K_0^0, K_S^0 \to \pi^+ \pi^-, K_0^0 \to \pi^0 K^0, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0K_L^0K_L^0\pi^+\pi^-$ | 17232 | 1 | 99809 |
| 17234 | $J/\psi \to \phi f_0(1790), \phi \to \pi^0 \rho^0, f_0(1790) \to \pi^+ \pi^- \gamma^f, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 17233 | 1 | 99810 |
| 17235 | $J/\psi \to \pi^+ K^{*-} K_0^0, K^{*-} \to \pi^- \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17234 | 1 | 99811 |
| 17236 | $J/\psi \to \pi^+ a_1^- f_1(1285), a_1^- \to \pi^0 \rho^-, f_1(1285) \to \pi^- a_0^+, \rho^- \to \pi^0 \pi^-, a_0^+ \to \pi^+ \eta, $ $\eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17235 | 1 | 99812 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 17237 | $J/\psi \to \pi^0 \rho^+ \rho^- h_1(1170), \rho^+ \to \pi^0 \pi^+ \gamma^f, \rho^- \to \pi^0 \pi^-, h_1(1170) \to \pi^+ \rho^-, \rho^- \to \pi^0 \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{f}$ | 17236 | 1 | 99813 |
| 17238 | $J/\psi \to K^+ a_1^- \bar{K}_1^{'0}, a_1^- \to \pi^0 \rho^-, \bar{K}_1^{'0} \to \pi^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*-} \to \pi^- \bar{K}^0, \\ \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-\pi^-K^+$ | 17237 | 1 | 99814 |
| 17239 | $J/\psi \to K^0 a_0^+ \bar{K}_1^{'-}, K^0 \to K_L^0, a_0^+ \to \pi^+ \eta, \bar{K}_1^{'-} \to \pi^0 K^{*-}, \eta \to \pi^0 \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 17238 | 1 | 99815 |
| 17240 | $J/\psi \to \pi^+\pi^-\Lambda \bar{\Sigma}^0, \Lambda \to \pi^- p, \bar{\Sigma}^0 \to \bar{\Lambda}\gamma, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^+\pi^+\pi^-\pi^-par p\gamma$ | 17239 | 1 | 99816 |
| 17241 | $J/\psi 	o \pi^+ K_2^{*0} K^-, K_2^{*0} 	o \pi^0 \pi^0 K^*, K^* 	o K^0 \gamma, K^0 	o K_L^0$ | $\pi^0\pi^0K_L^0\pi^+K^-\gamma$ | 17240 | 1 | 99817 |
| 17242 | $J/\psi \to \eta(1405)\gamma, \eta(1405) \to \pi^+ K^0 K^- \gamma^f, K^0 \to K_L^0$ | $K_L^0\pi^+K^-\gamma\gamma^f$ | 17241 | 1 | 99818 |
| 17243 | $J/\psi \to \eta K^{*-}K_2^{*+}, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, K_2^{*+} \to \pi^+ K^*, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+$ | $K_L^0\pi^+\pi^-\pi^-K^+\gamma\gamma$ | 17242 | 1 | 99819 |
| 17244 | $J/\psi \to \bar{K}^*K^{*+}a_1^-, \bar{K}^* \to \pi^+K^-, K^{*+} \to \pi^+K^0, a_1^- \to \pi^0\rho^-, K^0 \to K_L^0, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 17243 | 1 | 99820 |
| 17245 | $J/\psi \to \omega K^* \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_S^0, \\ \bar{K}_0^{*0} \to \pi^+ K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17244 | 1 | 99821 |
| 17246 | $J/\psi \to \pi^0 K^0 K^{*-} a_0^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, a_0^+ \to \pi^+ \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 17245 | 1 | 99822 |
| 17247 | $J/\psi \to \eta \omega f_1(1285), \eta \to e^+e^-\gamma^F, \omega \to \pi^0\pi^+\pi^-, f_1(1285) \to \pi^0a_0^0, a_0^0 \to \pi^0\eta, \eta \to \gamma\gamma$ | $e^+e^-\pi^0\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 17246 | 1 | 99823 |
| 17248 | $J/\psi \to \pi^+\pi^- f_1(1285), f_1(1285) \to \pi^0 a_0^0, a_0^0 \to \pi^0 \eta, \eta \to \pi^+\pi^- \gamma^F$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 17247 | 1 | 99824 |
| 17249 | $\tau / (0.0 + - 0.0 + - 0.0)$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma$ | 17248 | 1 | 99825 |
| 17250 | $J/\psi \to \pi^{\circ} \rho^{\circ} \pi^{+} \pi^{-} \omega, \rho^{\circ} \to \pi^{+} \pi^{-}, \omega \to \pi^{\circ} \gamma$ $J/\psi \to K^{0} \phi \bar{K}_{1}^{0}, K^{0} \to K_{L}^{0}, \phi \to \pi^{+} \rho^{-}, \bar{K}_{1}^{0} \to \rho^{+} K^{-}, \rho^{-} \to \pi^{0} \pi^{-},$ $\rho^{+} \to \pi^{0} \pi^{+}$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 17249 | 1 | 99826 |
| 17251 | $J/\psi \to \pi^- \bar{K}^* K_1^+, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \rho^0 K^+, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+$ | 17250 | 1 | 99827 |
| 17252 | $J/\psi 	o \pi^0\pi^0 ho^0\pi^+\pi^-\omega, \pi^0 	o e^+e^-\gamma^F, ho^0 	o \pi^+\pi^-, \omega 	o \pi^0\gamma$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 17251 | 1 | 99828 |
| 17253 | $J/\psi \to \rho^- \eta' a_0^+, \rho^- \to \pi^0 \pi^-, \eta' \to \pi^+ \pi^- \eta, a_0^+ \to \pi^+ \eta, \eta \to \gamma \gamma, \eta \to \gamma \gamma$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$ | 17252 | 1 | 99829 |
| 17254 | $J/\psi \to \bar{K}^0 K^{*+} b_1^-, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+\gamma$ | 17253 | 1 | 99830 |
| 17255 | $J/\psi \to K^0 \bar{K}^0 \phi, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \phi \to \eta \gamma, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $K_L^0\pi^+\pi^-\gamma\gamma\gamma$ | 17254 | 1 | 99831 |
| 17256 | $J/\psi \to \pi^0 \bar{\Xi}^0 \Xi^{*0}, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \Xi^{*0} \to \pi^0 \Xi^0, \bar{\Lambda} \to \pi^+ \bar{p}, \Xi^0 \to \pi^0 \Lambda, \Lambda \to \pi^- p$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-par{p}$ | 17255 | 1 | 99832 |
| 17257 | $J/\psi 	o ar{K}^0 \phi K_1^0, ar{K}^0 	o K_S^0, \phi 	o K_L^0 K_S^0, K_1^0 	o \pi^- K_0^{*+}, K_S^0 	o \pi^0 \pi^0, \ K_S^0 	o \pi^+ \pi^-, K_0^{*+} 	o \pi^+ K^0, K^0 	o K_S^0, K_S^0 	o \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 17256 | 1 | 99833 |
| 17258 | $J/\psi \to \pi^+ K^- K^{*+} b_1^-, K^{*+} \to \pi^+ K^0, b_1^- \to \pi^- \omega, K^0 \to K_S^0, \omega \to \pi^0 \gamma, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 17257 | 1 | 99834 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 17259 | $J/\psi \to \rho^{0} \rho^{+} \rho^{-} \eta', \rho^{0} \to \pi^{+} \pi^{-}, \rho^{+} \to \pi^{0} \pi^{+}, \rho^{-} \to \pi^{0} \pi^{-}, \eta' \to \pi^{0} \pi^{0} \eta,$ $\eta \to \pi^{0} \pi^{0} \pi^{0}$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$ | 17258 | 1 | 99835 |
| 17260 | $J/\psi \to \rho^0 \rho^+ K^0 K^{*-}, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17259 | 1 | 99836 |
| 17261 | $J/\psi \to \pi^+ \Sigma^{*0} \bar{\Sigma}^-, \Sigma^{*0} \to \pi^0 \Lambda, \bar{\Sigma}^- \to \pi^- \bar{n}, \Lambda \to \pi^- p$ | $\pi^0\pi^+\pi^-\pi^-ar{n}p$ | 17260 | 1 | 99837 |
| 17262 | $J/\psi \to \eta_c \gamma, \eta_c \to \bar{\Xi}^+ \Xi^-, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Xi^- \to \pi^- \Lambda, \bar{\Lambda} \to \pi^+ \bar{p}, \\ \Lambda \to \pi^0 n$ | $\pi^0\pi^+\pi^+\pi^-n\bar{p}\gamma$ | 17261 | 1 | 99838 |
| 17263 | $J/\psi \to \phi f_1(1420), \phi \to K_L^0 K_S^0, f_1(1420) \to \pi^0 K^0 \bar{K}^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 17262 | 1 | 99839 |
| 17264 | $J/\psi \to \pi^+ \rho^- f_1(1285), \rho^- \to \pi^0 \pi^-, f_1(1285) \to \rho^0 \pi^+ \pi^-, \pi^0 \to e^+ e^- \gamma^F, \rho^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{F}$ | 17263 | 1 | 99840 |
| 17265 | $J/\psi \to \pi^0 K_2^{*+} K_0^{*-}, K_2^{*+} \to \pi^+ \pi^- K^{*+}, K_0^{*-} \to \pi^- \bar{K}^0, K^{*+} \to \pi^+ K^0, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 17264 | 1 | 99841 |
| 17266 | $J/\psi \to K^0 \bar{K}^0 f_0(1710), K^0 \to K_L^0, \bar{K}^0 \to K_S^0, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 17265 | 1 | 99842 |
| 17267 | $J/\psi \to \bar{K}^0 K^* \phi, \bar{K}^0 \to K_L^0, K^* \to \pi^0 K^0, \phi \to K_L^0 K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 17266 | 1 | 99843 |
| 17268 | $J/\psi \to K^0 \bar{K}^* \eta', K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, \eta \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma^F$ | 17267 | 1 | 99844 |
| 17269 | $J/\psi \to \pi^0 K_2^{*-} K_1^+, K_2^{*-} \to \pi^0 K^-, K_1^+ \to \pi^+ \pi^- K^+$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 17268 | 1 | 99845 |
| 17270 | $J/\psi \to K^- \Sigma^+ \bar{\Xi}^0, \Sigma^+ \to \pi^+ n, \bar{\Xi}^0 \to \pi^0 \bar{\Lambda}, \bar{\Lambda} \to \pi^+ \bar{p}$ | $\pi^0\pi^+\pi^+K^-nar{p}$ | 17269 | 1 | 99846 |
| 17271 | $J/\psi \to K^0 a_0^0 \bar{K}_1^0, K^0 \to K_S^0, a_0^0 \to \pi^0 \eta, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_S^0 \to \pi^0 \pi^0, $ $\eta \to \gamma \gamma, K_0^{*-} \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma\gamma$ | 17270 | 1 | 99847 |
| 17272 | $J/\psi \to \pi^+ \rho^- K^- K^{*+}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_S, K^0_S \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 17271 | 1 | 99848 |
| 17273 | $J/\psi \to K^0 K_1^- a_1^+, K^0 \to K_L^0, K_1^- \to \rho^- \bar{K}^0, a_1^+ \to \pi^0 \rho^+, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-$ | 17272 | 1 | 99849 |
| 17274 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \rho^0 K^0, \bar{K}^0 \to K_S^0, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17273 | 1 | 99850 |
| 17275 | $J/\psi ightarrow ho^0 \pi^+ \pi^- \omega, ho^0 ightarrow \pi^+ \pi^-, \omega ightarrow \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 17274 | 1 | 99851 |
| 17276 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_L^0, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0 K_L^0 K^+ K^-$ | 17275 | 1 | 99852 |
| 17277 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^- h_1(1170) a_1^+, h_1(1170) \to \pi^- \rho^+, a_1^+ \to \pi^0 \rho^+, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 17276 | 1 | 99853 |
| 17278 | $J/\psi ightarrow ar{K}^0 K^* \eta', ar{K}^0 ightarrow K_S^0, K^* ightarrow \pi^- K^+, \eta' ightarrow \pi^0 \pi^0 \eta, K_S^0 ightarrow \pi^0 \pi^0, \ \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+\gamma\gamma$ | 17277 | 1 | 99854 |
| 17279 | $J/\psi \to \rho^0 K^* \bar{K}^*, \rho^0 \to \pi^+ \pi^- \gamma^f, K^* \to \pi^0 K^0, \bar{K}^* \to \pi^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^f$ | 17278 | 1 | 99855 |
| 17280 | $J/\psi \to K^0 \bar{K}^* f_1(1285), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, f_1(1285) \to \pi^+ \pi^- \eta, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_S^0, \eta \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17279 | 1 | 99856 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 17281 | $J/\psi \to \pi^+ K^{*-} n \bar{\Lambda}, K^{*-} \to \pi^- \bar{K}^0, \bar{\Lambda} \to \pi^+ \bar{p}, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-n\bar{p}$ | 17280 | 1 | 99857 |
| 17282 | $J/\psi \to \bar{K}^* K_1^{'0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^{'0} \to \pi^- K^{*+}, \bar{K}^0 \to K_S^0, K^{*+} \to \pi^0 K^+, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 17281 | 1 | 99858 |
| 17283 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to \pi^+\pi^-, h_1(1380) \to \bar{K}^0K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^-$ | 17282 | 1 | 99859 |
| 17284 | $J/\psi \to a_2^0 \pi^+ a_2^-, a_2^0 \to \pi^- \rho^+ \gamma^f, a_2^- \to \pi^0 \pi^- \omega, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 17283 | 1 | 99860 |
| 17285 | $J/\psi \to \omega \bar{p}\Delta^+, \omega \to \pi^0\pi^+\pi^-, \Delta^+ \to \pi^0 p, \pi^0 \to e^+e^-\gamma^F\gamma^f$ | $e^+e^-\pi^0\pi^+\pi^-p\bar{p}\gamma^F\gamma^f$ | 17284 | 1 | 99861 |
| 17286 | $J/\psi \to \eta_c \gamma, \eta_c \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0 \pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 17285 | 1 | 99862 |
| 17287 | $J/\psi \to \pi^- \rho^+ f_2(1270)\gamma^f, \rho^+ \to \pi^0 \pi^+, f_2(1270) \to \pi^+ \pi^+ \pi^- \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 17286 | 1 | 99863 |
| 17288 | $J/\psi \to f_2' h_1(1380), f_2' \to \eta \eta, h_1(1380) \to K^0 \bar{K}^*, \eta \to \pi^0 \pi^0 \pi^0, \eta \to e^+ e^- \gamma^F \gamma^f \gamma^f, K^0 \to K_L^0, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma^{f}\gamma^{f}$ | 17287 | 1 | 99864 |
| 17289 | $J/\psi \to ho^0 \bar{K}^0 K_2^{*0}, ho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_2^{*0} \to \pi^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+$ | 17288 | 1 | 99865 |
| 17290 | $J/\psi \to K^0 \bar{K}^0 \eta', K^0 \to K_S^0, \bar{K}^0 \to K_L^0, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^0 \pi^0,$ $\rho^0 \to \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma^F\gamma$ | 17289 | 1 | 99866 |
| 17291 | $J/\psi \to \rho^0 \bar{K}^0 K^*, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17290 | 1 | 99867 |
| 17292 | $J/\psi \to \pi^0 K^* \bar{K}_0^{*0}, K^* \to \pi^0 K^0, \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0$ | 17291 | 1 | 99868 |
| 17293 | $J/\psi \to \pi^0 b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^0 K^0 \bar{K}^0, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17292 | 1 | 99869 |
| 17294 | $J/\psi \to \pi^+ K_2^{*0} K_0^{*-}, K_2^{*0} \to \pi^0 K^0, K_0^{*-} \to \pi^- \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 17293 | 1 | 99870 |
| 17295 | $J/\psi \to \rho^0 K^- K_1^+, \rho^0 \to \pi^+ \pi^-, K_1^+ \to \pi^0 K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17294 | 1 | 99871 |
| 17296 | $J/\psi \to K^0 \bar{K}_1^0 \gamma, K^0 \to K_S^0, \bar{K}_1^0 \to \pi^+ K^{*-}, K_S^0 \to \pi^0 \pi^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 17295 | 1 | 99872 |
| 17297 | $J/\psi \to \pi^0 K^* \bar{K}_1^{'0}, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 17296 | 1 | 99873 |
| 17298 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0\pi^+K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0K^0, K_S^0 \to \pi^+\pi^-, K^0 \to K_L^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17297 | 1 | 99874 |
| 17299 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 K^0 \bar{K}^0, K^0 \to K_S^0, \bar{K}^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17298 | 1 | 99875 |
| 17300 | $J/\psi \to \pi^- \omega \bar{K}^0 K_1^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_1^+ \to \rho^+ K^0, K_S^0 \to \pi^+ \pi^-, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-$ | 17299 | 1 | 99876 |
| 17301 | $J/\psi \to \pi^+ K^* K^{*-} f_0(1370), K^* \to \pi^- K^+, K^{*-} \to \pi^0 K^-, f_0(1370) \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 17300 | 1 | 99877 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 17302 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0K_L^0$ | 17301 | 1 | 99878 |
| 17303 | $J/\psi \to \rho^- \bar{K}^0 K^+, \rho^- \to \pi^- \gamma, \bar{K}^0 \to K_L^0$ | $K_L^0\pi^-K^+\gamma$ | 17302 | 1 | 99879 |
| 17304 | $J/\psi \to \pi^0 \rho^- K^{*+} \bar{K}_1^0, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^0 K^+, \bar{K}_1^0 \to \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \\ \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^-K^+$ | 17303 | 1 | 99880 |
| 17305 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 17304 | 1 | 99881 |
| 17306 | $J/\psi \to \pi^- \bar{K}^* K_0^{*+}, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^{*+} \to \pi^0 K^+, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0 K_L^0\pi^- K^+$ | 17305 | 1 | 99882 |
| 17307 | $J/\psi \to K_0^0 \bar{K}_1^0, K_0^0 \to \pi^0 K^0, \bar{K}_1^0 \to \pi^0 \bar{K}_0^{*0}, K^0 \to K_L^0, \bar{K}_0^{*0} \to \pi^+ K^-$ | $\pi^0\pi^0 K_L^0\pi^+ K^-$ | 17306 | 1 | 99883 |
| 17308 | $J/\psi ightarrow \pi^0 \pi^+ \pi^- \omega, \omega ightarrow \mu^+ \mu^- \pi^0$ | $\mu^+\mu^-\pi^0\pi^0\pi^+\pi^-$ | 17307 | 1 | 99884 |
| 17309 | $J/\psi \to f_2(1270)h_1(1170), f_2(1270) \to \pi^0\pi^0\pi^+\pi^-, h_1(1170) \to \pi^-\rho^+, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17308 | 1 | 99885 |
| 17310 | $J/\psi \to \pi^+\pi^-K^*\bar{K}_1^{'0}, K^* \to \pi^-K^+, \bar{K}_1^{'0} \to \pi^+K^{*-}, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}$ | 17309 | 1 | 99886 |
| 17311 | $K_S \to \pi^+ \pi^ J/\psi \to K^0 K^{*-} b_1^+, K^0 \to K_S^0, K^{*-} \to K^- \gamma, b_1^+ \to \pi^+ \omega, K_S^0 \to \pi^0 \pi^0,$ $\omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma$ | 17310 | 1 | 99887 |
| 17312 | $J/\psi \to \bar{\Sigma}^+ \Sigma^- \gamma, \bar{\Sigma}^+ \to \pi^+ \bar{n} \gamma^f, \Sigma^- \to \pi^- n$ | $\pi^+\pi^-nar{n}\gamma\gamma^f$ | 17311 | 1 | 99888 |
| 17313 | $J/\psi \to \pi^+\pi^- \rho^+ K_2^{*0} K^-, \rho^+ \to \pi^0\pi^+, K_2^{*0} \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 17312 | 1 | 99889 |
| 17314 | $J/\psi \to \pi^- \rho^+ f_1(1285), \rho^+ \to \pi^0 \pi^+, f_1(1285) \to \pi^0 a_0^0, a_0^0 \to K_L^0 K_L^0$ | $\pi^0\pi^0K_L^0K_L^0\pi^+\pi^-$ | 17313 | 1 | 99890 |
| 17315 | $J/\psi \to ho^0 ho^0 \pi^- a_2^+, ho^0 \to \pi^+ \pi^-, ho^0 \to \pi^+ \pi^-, a_2^+ \to \pi^0 ho^+, ho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17314 | 1 | 99891 |
| 17316 | $J/\psi \to F F K a_2, F \to K K, F \to K K, a_2 \to K F, F \to K K$ $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^0 K^+, K_2^{*-} \to \pi^- \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f,$ $\bar{K}^0 \to K_L^0$ | $e^+e^-\pi^0K_L^0\pi^-K^+\gamma^F\gamma^f$ | 17315 | 1 | 99892 |
| 17317 | $J/\psi \to K^0 f_0(1370) \bar{K}_1^{'0}, K^0 \to K_S^0, f_0(1370) \to \pi^+\pi^-, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, K_S^0 \to \pi^+\pi^-, \bar{K}^* \to \pi^+K^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17316 | 1 | 99893 |
| 17318 | $J/\psi 	o \pi^0\pi^-ar{\Delta}^-\Delta^0, ar{\Delta}^- 	o \pi^+ar{n}, \Delta^0 	o \pi^0n$ | $\pi^0\pi^0\pi^+\pi^-nar{n}$ | 17317 | 1 | 99894 |
| 17319 | $J/\psi \to b_1^0 f_1(1285), b_1^0 \to \pi^0 \omega, f_1(1285) \to \pi^+ \pi^- \eta, \omega \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17318 | 1 | 99895 |
| 17320 | $J/\psi \to K^0 \bar{K}^0 f_1(1285), K^0 \to K_S^0, \bar{K}^0 \to K_L^0, f_1(1285) \to \pi^+ a_0^-, K_S^0 \to \pi^+ \pi^-, a_0^- \to \pi^- \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-\pi^-$ | 17319 | 1 | 99896 |
| 17321 | $J/\psi \to \bar{K}^0 K_2^{*0} \phi, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^+ \pi^- K^*, \phi \to K^+ K^-, K_S^0 \to \pi^+ \pi^-, K^* \to \pi^- K^+$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^+K^-$ | 17320 | 1 | 99897 |
| 17322 | $J/\psi \to \pi^0 \pi^+ K^0 K^{*-}, K^0 \to K_L^0, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 17321 | 1 | 99898 |
| 17323 | $J/\psi \to \pi^0 K_2^{*+} K_1^-, K_2^{*+} \to \pi^+ K^0, K_1^- \to \pi^0 K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^0 K^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 17322 | 1 | 99899 |
| 17324 | $J/\psi 	o \pi^0\pi^-\eta b_1^+, \eta 	o e^+e^-\gamma^F, b_1^+ 	o \pi^+\omega, \omega 	o \pi^0\pi^+\pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 17323 | 1 | 99900 |
| 17325 | $J/\psi \to \bar{K}^0 K^+ a_0^-, \bar{K}^0 \to K_L^0, a_0^- \to \pi^- \eta \gamma^f, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^-K^+\gamma^f$ | 17324 | 1 | 99901 |
| 17326 | $J/\psi \rightarrow \rho^0 \rho^0 \omega, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^- \gamma^f, \omega \rightarrow \pi^0 \gamma, \pi^0 \rightarrow e^+ e^- \gamma^F$ | $e^+e^-\pi^+\pi^+\pi^-\pi^-\gamma^F\gamma\gamma^f$ | 17325 | 1 | 99902 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|---|--------|------|-------|
| 17327 | $J/\psi \to K_2^{*0} \bar{K}_1^0, K_2^{*0} \to \pi^- K^+, \bar{K}_1^0 \to \pi^+ K_0^{*-}, K_0^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 17326 | 1 | 99903 |
| 17328 | $J/\psi \to K^{*+}K^{*-}\gamma, K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- \bar{K}^0 \gamma^f, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^- K^+ \gamma \gamma^f$ | 17327 | 1 | 99904 |
| 17329 | $J/\psi \to \pi^- \rho^+ \bar{K}^0 K^*, \rho^+ \to \pi^0 \pi^+, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^0 \pi^0, $ $\pi^0 \to e^+ e^- \gamma^F, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}$ | 17328 | 1 | 99905 |
| 17330 | $J/\psi \to \pi^0 a_2^0 \omega, a_2^0 \to \pi^+ \rho^-, \omega \to \pi^0 \pi^+ \pi^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^- \gamma^F, \\ \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{+}e^{-}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{F}$ | 17329 | 1 | 99906 |
| 17331 | $J/\psi \to K^0 \bar{K}^0_1 \gamma, K^0 \to K^0_S, \bar{K}^0_1 \to \omega \bar{K}^0, K^0_S \to \pi^0 \pi^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K^0_L$ | $\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\gamma$ | 17330 | 1 | 99907 |
| 17332 | $J/\psi \to \rho^0 \bar{K}^* K_1^0, \rho^0 \to \pi^+ \pi^- \gamma^f, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^0 \to \rho^- K^+, \bar{K}^0 \to K_S^0, \\ \rho^- \to \pi^0 \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 17331 | 1 | 99908 |
| 17333 | $J/\psi \to f_2' h_1(1380), f_2' \to K_L^0 K_L^0, h_1(1380) \to \bar{K}^0 K^*, \bar{K}^0 \to K_S^0, K^* \to \pi^0 K^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 K_L^0 \pi^+ \pi^-$ | 17332 | 1 | 99909 |
| 17334 | $J/\psi \to \phi f_0(1790), \phi \to \pi^0 \pi^0 \gamma, f_0(1790) \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^-\gamma$ | 17333 | 1 | 99910 |
| 17335 | $J/\psi \to \pi^+ f_2(1270)b_1^-, f_2(1270) \to K_S^0 K_S^0, b_1^- \to \pi^- \omega, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^0 \pi^0, \omega \to \pi^0 \gamma$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\gamma$ | 17334 | 1 | 99911 |
| 17336 | $J/\psi \to \rho^+ K^* K^{*-}, \rho^+ \to \pi^0 \pi^+, K^* \to K^0 \gamma, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma$ | 17335 | 1 | 99912 |
| 17337 | $J/\psi \to \pi^0 \omega f_2(1270) \eta', \omega \to \pi^0 \pi^+ \pi^-, f_2(1270) \to \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17336 | 1 | 99913 |
| 17338 | $J/\psi \to \eta(2225)\gamma, \eta(2225) \to \phi\phi, \phi \to K_L^0 K_S^0, \phi \to K_L^0 K_S^0, K_S^0 \to \pi^+\pi^-, K_S^0 \to \pi^+\pi^-$ | $K_L^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma$ | 17337 | 1 | 99914 |
| 17339 | $J/\psi \to K^{*+}K^{*-}f_0(1370), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^-\bar{K}^0, f_0(1370) \to \rho^+\rho^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17338 | 1 | 99915 |
| 17340 | $J/\psi \to \pi^- K^+ K^{*-} b_1^+, K^{*-} \to \pi^- \bar{K}^0, b_1^+ \to \pi^+ \omega, \bar{K}^0 \to K_S^0, \omega \to \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{F}$ | 17339 | 1 | 99916 |
| 17341 | $J/\psi \to \pi^0 K^- K^{*+}, K^{*+} \to \pi^+ K^0 \gamma^f, K^0 \to K^0_S, K^0_S \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-K^-\gamma^f$ | 17340 | 1 | 99917 |
| 17342 | $J/\psi \to \rho^0 K^{*+} K^{*-}, \rho^0 \to \pi^+ \pi^- \gamma^F, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 17341 | 1 | 99918 |
| 17343 | $J/\psi 	o K^0 K_2^{*0}, K^0 	o K_L^0, K_2^{*0} 	o \pi^0 ar{K}^*, ar{K}^* 	o \pi^0 ar{K}^0, ar{K}^0 	o K_L^0$ | $\pi^0\pi^0K_L^0K_L^0$ | 17342 | 1 | 99919 |
| 17344 | $J/\psi \to \pi^0 \omega a_0^0, \omega \to \pi^0 \pi^+ \pi^- \gamma^f, a_0^0 \to \pi^0 \eta, \pi^0 \to e^+ e^- \gamma^F, \eta \to \pi^0 \pi^+ \pi^-$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma^{f}$ | 17343 | 1 | 99920 |
| 17345 | $J/\psi \to \rho^0 K^{*+} K_1^-, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+, K_1^- \to \rho^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 17344 | 1 | 99921 |
| 17346 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, K_2^{*0} \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-$ | 17345 | 1 | 99922 |
| 17347 | $J/\psi \to \pi^+\pi^-K_1^+K_1^-, K_1^+ \to \rho^0K^+, K_1^- \to \pi^0K_0^{*-}, \rho^0 \to \pi^+\pi^-, K_0^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 17346 | 1 | 99923 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 17348 | $J/\psi \to \rho^+ a_2^- \eta, \rho^+ \to \pi^0 \pi^+, a_2^- \to \pi^0 \rho^-, \eta \to \gamma \gamma, \pi^0 \to e^+ e^- \gamma^F, \rho^- \to \pi^0 \pi^-$ | $e^+e^-\pi^0\pi^0\pi^+\pi^-\gamma^F\gamma\gamma$ | 17347 | 1 | 99924 |
| 17349 | $J/\psi \to K^-K^{*+}\eta', K^{*+} \to \pi^0K^+, \eta' \to \omega\gamma, \omega \to \pi^0\pi^+\pi^-$ | $\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma$ | 17348 | 1 | 99925 |
| 17350 | $J/\psi \to K^0 \bar{K}^* f_0(1710), K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, f_0(1710) \to K^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, K^0 \to K_L^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 17349 | 1 | 99926 |
| 17351 | $J/\psi 	o \pi^+\pi^-ar{K}^*K_1^0, ar{K}^* 	o \pi^+K^-, K_1^0 	o ho^0K^0, ho^0 	o \pi^+\pi^-, K^0 	o K_L^0$ | $K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17350 | 1 | 99927 |
| 17352 | $J/\psi \to \pi^+ K^- K_1^0, K_1^0 \to \pi^- K_0^{*+}, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}$ | 17351 | 1 | 99928 |
| 17353 | $J/\psi \to \pi^+ \rho^- f_0(1370), \rho^- \to \pi^0 \pi^- \gamma^f, f_0(1370) \to \rho^+ \rho^-, \rho^+ \to \pi^0 \pi^+, \rho^- \to \pi^0 \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 17352 | 1 | 99929 |
| 17354 | $J/\psi \to \eta_c \gamma, \eta_c \to \pi^0 K^{*+} K_1^-, K^{*+} \to \pi^+ K^0, K_1^- \to \pi^- \bar{K}_0^{*0}, K^0 \to K_L^0, \\ \bar{K}_0^{*0} \to \pi^0 \bar{K}^0, \pi^0 \to e^+ e^- \gamma^F, \bar{K}^0 \to K_L^0$ | $e^{+}e^{-}\pi^{0}K_{L}^{0}K_{L}^{0}\pi^{+}\pi^{-}\gamma^{F}\gamma$ | 17353 | 1 | 99930 |
| 17355 | $J/\psi \to \rho^0 \pi^+ b_1^- h_1(1170), \rho^0 \to \pi^+ \pi^-, b_1^- \to \pi^- \omega, h_1(1170) \to \pi^- \rho^+, \omega \to \pi^0 \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$ | 17354 | 1 | 99931 |
| 17356 | $J/\psi \to \pi^0 \pi^+ K^0 \bar{K}^* b_1^-, K^0 \to K_S^0, \bar{K}^* \to \pi^+ K^-, b_1^- \to \pi^- \omega, K_S^0 \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-$ | 17355 | 1 | 99932 |
| 17357 | $J/\psi \to \eta K^- K_0^{*+}, \eta \to \pi^0 \pi^+ \pi^-, K_0^{*+} \to \pi^+ K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17356 | 1 | 99933 |
| 17358 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0K^+K^-$ | 17357 | 1 | 99934 |
| 17359 | $J/\psi ightarrow \pi^0 \pi^+ K_2^{*0} K_2^{*-}, K_2^{*0} ightarrow \pi^+ \pi^- K^*, K_2^{*-} ightarrow \pi^- ar{K}^0, K^* ightarrow \pi^- K^+, ar{K}^0 ightarrow K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+$ | 17358 | 1 | 99935 |
| 17360 | $J/\psi \to \pi^+ K_2^{*0} K^-, K_2^{*0} \to \pi^0 \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-$ | 17359 | 1 | 99936 |
| 17361 | $J/\psi \to \pi^0 a_2^0 \pi^+ \pi^- \eta', a_2^0 \to \pi^+ \pi^- \omega, \eta' \to \rho^0 \gamma, \omega \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma$ | 17360 | 1 | 99937 |
| 17362 | $J/\psi \to \pi^- \omega \bar{K}^0 K_1^+, \omega \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L^0, K_1^+ \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K_L^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17361 | 1 | 99938 |
| 17363 | $J/\psi \to f_0(1710)h_1(1380), f_0(1710) \to K^0\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, K^0 \to K_S^0$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17362 | 1 | 99939 |
| 17364 | $J/\psi \to \eta_c \gamma, \eta_c \to K^0 \bar{K}^* h_1(1380), K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, h_1(1380) \to \bar{K}^0 K^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, \bar{K}^0 \to K_L^0, K^* \to \pi^- K^+, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma$ | 17363 | 1 | 99940 |
| 17365 | $J/\psi \to \bar{K}^0 b_1^- K_0^{*+}, \bar{K}^0 \to K_S^0, b_1^- \to \pi^- \omega, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, \\ \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17364 | 1 | 99941 |
| 17366 | $J/\psi \to K^{*+}K_1^-\gamma, K^{*+} \to \pi^0 K^+, K_1^- \to \pi^0 K^{*-}, \pi^0 \to e^+e^-\gamma^F, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $e^+e^-\pi^0\pi^+\pi^-\pi^-K^+\gamma^F\gamma$ | 17365 | 1 | 99942 |
| 17367 | $J/\psi 	o a_2^0 \pi^- a_1^+, a_2^0 	o \pi^+ ho^- \gamma^f, a_1^+ 	o \pi^0 ho^+, ho^- 	o \pi^0 \pi^-, ho^+ 	o \pi^0 \pi^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 17366 | 1 | 99943 |
| 17368 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^+ K^- \gamma^f, K_1^+ \to \pi^0 K_0^{*+}, K_0^{*+} \to \pi^0 K^+$ | $\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-\gamma^f$ | 17367 | 1 | 99944 |
| 17369 | $J/\psi \to \rho^0 \bar{K}^0 K^+ a_0^-, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_S^0 \to \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+$ | 17368 | 1 | 99945 |
| 17370 | $J/\psi \to K^{*-}K_2^{*+}, K^{*-} \to \pi^-\bar{K}^0, K_2^{*+} \to \pi^0K^+\gamma^f, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+\pi^-$ | $\pi^0\pi^+\pi^-\pi^-K^+\gamma^f$ | 17369 | 1 | 99946 |
| 17371 | $J/\psi \to \rho^- \bar{K}^* K_1^+, \rho^- \to \pi^0 \pi^-, \bar{K}^* \to \pi^0 \bar{K}^0, K_1^+ \to \pi^0 K_0^{*+}, \bar{K}^0 \to K_S^0, K_0^{*+} \to \pi^+ K^0, K_S^0 \to \pi^0 \pi^0, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-$ | 17370 | 1 | 99947 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|--|--------|------|-------|
| 17372 | $J/\psi \to \rho^+ \omega b_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, b_1^- \to \pi^- \omega, \pi^0 \to e^+ e^- \gamma^F, \\ \omega \to \pi^0 \gamma$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma$ | 17371 | 1 | 99948 |
| 17373 | $J/\psi ightarrow \pi^+ \eta b_1^- \gamma^f, \eta ightarrow \pi^0 \pi^0 \pi^0, b_1^- ightarrow \pi^- \omega, \omega ightarrow \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^f$ | 17372 | 1 | 99949 |
| 17374 | $J/\psi \rightarrow \rho^+ \eta' a_0^-, \rho^+ \rightarrow \pi^0 \pi^+, \eta' \rightarrow \rho^0 \gamma, a_0^- \rightarrow \pi^- \eta, \rho^0 \rightarrow \pi^+ \pi^-, \\ \eta \rightarrow \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 17373 | 1 | 99950 |
| 17375 | $J/\psi \to \eta' f_0(1710)\gamma, \eta' \to \pi^+\pi^-\eta, f_0(1710) \to \pi^0\pi^0, \eta \to \pi^0\pi^+\pi^-, \pi^0 \to e^+e^-\gamma^F\gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma^{F}\gamma\gamma^{f}$ | 17374 | 1 | 99951 |
| 17376 | $J/\psi \to K^- K_1^+ a_1^0, K_1^+ \to \rho^0 K^+, a_1^0 \to \pi^- \rho^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+$ | $\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 17375 | 1 | 99952 |
| 17377 | $J/\psi \to K^- K^{*+} a_0^0, K^{*+} \to \pi^+ K^0, a_0^0 \to \pi^0 \eta, K^0 \to K_S^0, \eta \to \pi^0 \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 17376 | 1 | 99953 |
| 17378 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+}, \bar{K}^0 \to K_S^0, K_2^{*+} \to \rho^+ K^0, K_S^0 \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17377 | 1 | 99954 |
| 17379 | $J/\psi \to K^+K^-\phi f_0(1370), \phi \to K_L^0K_S^0, f_0(1370) \to \rho^+\rho^-, K_S^0 \to \pi^0\pi^0, \rho^+ \to \pi^0\pi^+, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-K^+K^-$ | 17378 | 1 | 99955 |
| 17380 | $J/\psi \to \rho^0 K^- K^{*+} \phi, \rho^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, \phi \to K^+ K^-, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0, \pi^0 \to e^+ e^- \gamma^F \gamma^f$ | $e^{+}e^{-}\pi^{0}\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}\gamma^{F}\gamma^{f}$ | 17379 | 1 | 99956 |
| 17381 | $J/\psi ightarrow ar{\Lambda}\Sigma^{*0}, ar{\Lambda} ightarrow \pi^0 ar{n}, \Sigma^{*0} ightarrow \pi^0 \Lambda, \Lambda ightarrow \pi^- p$ | $\pi^0\pi^0\pi^-ar{n}p$ | 17380 | 1 | 99957 |
| 17382 | $J/\psi \to K^+K^{*-}h_1(1380), K^{*-} \to \pi^-\bar{K}^0, h_1(1380) \to K^0\bar{K}^*, \bar{K}^0 \to K_L^0, K^0 \to K_S^0, \bar{K}^* \to \pi^+K^-, K_S^0 \to \pi^0\pi^0$ | $\pi^0\pi^0K^0_L\pi^+\pi^-K^+K^-$ | 17381 | 1 | 99958 |
| 17383 | $J/\psi 	o \pi^+ ho^- a_0^0, ho^- 	o \pi^0 \pi^-, a_0^0 	o \pi^0 \eta, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}$ | 17382 | 1 | 99959 |
| 17384 | $J/\psi \to \pi^0 \bar{n} \Delta^0 \gamma, \Delta^0 \to \pi^0 n$ | $\pi^0\pi^0n\bar{n}\gamma$ | 17383 | 1 | 99960 |
| 17385 | $J/\psi \to \eta f_0(1710)\gamma, \eta \to \pi^0 \pi^0 \pi^0, f_0(1710) \to \eta \eta, \eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\gamma$ | 17384 | 1 | 99961 |
| 17386 | $J/\psi \to f_2(1270)\phi, f_2(1270) \to \pi^+\pi^-, \phi \to \pi^+\rho^-, \rho^- \to \pi^0\pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17385 | 1 | 99962 |
| 17387 | $J/\psi \to \bar{K}^* K_2^{*0}, \bar{K}^* \to \pi^+ K^-, K_2^{*0} \to \pi^0 \pi^0 K^*, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^-$ | 17386 | 1 | 99963 |
| 17388 | $J/\psi \to K^{*+}K_2^{*-}, K^{*+} \to \pi^+ K^0, K_2^{*-} \to \pi^- \bar{K}^*, K^0 \to K_S^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_S^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17387 | 1 | 99964 |
| 17389 | $J/\psi \to \bar{K}^0 K_1^{'0}, \bar{K}^0 \to K_S^0, K_1^{'0} \to \pi^- K^{*+}, K_S^0 \to \pi^+ \pi^-, K^{*+} \to \pi^+ K^0, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 17388 | 1 | 99965 |
| 17390 | $J/\psi \to K^* \bar{K}_1^{'0} \gamma, K^* \to \pi^0 K^0, \bar{K}_1^{'0} \to \pi^+ K^{*-}, K^0 \to K_S^0, K^{*-} \to \pi^- \bar{K}^0, K_S^0 \to \pi^0 \pi^0, \bar{K}^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K^0_L\pi^+\pi^-\gamma$ | 17389 | 1 | 99966 |
| 17391 | $J/\psi \to \phi f_0(1370), \phi \to K_L^0 K_S^0, f_0(1370) \to \pi^0 \pi^0 \pi^+ \pi^-, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-$ | 17390 | 1 | 99967 |
| 17392 | $J/\psi \to \pi^0 \eta K^{*+} K_0^{*-}, \eta \to \gamma \gamma, K^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^-, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-K^-\gamma\gamma$ | 17391 | 1 | 99968 |
| 17393 | $J/\psi \to \pi^- \bar{K}^0 K_2^{*+} \gamma^f, \bar{K}^0 \to K_S^0, K_2^{*+} \to \rho^0 K^+, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^f$ | 17392 | 1 | 99969 |
| 17394 | $J/\psi \to \pi^+ K^0 \bar{K_1'}^- \gamma^F, K^0 \to K_S^0, \bar{K_1'}^- \to \pi^- \bar{K}^*, K_S^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^-$ | $\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^F$ | 17393 | 1 | 99970 |
| 17395 | $J/\psi \to \rho^+ K^+ K^- b_1^-, \rho^+ \to \pi^0 \pi^+, b_1^- \to \pi^- \omega, \omega \to \pi^0 \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$ | 17394 | 1 | 99971 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|---|---|--------|------|-------|
| 17396 | $J/\psi \to \rho^+ \omega K^* K^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, K^* \to \pi^0 K^0, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-K^-$ | 17395 | 1 | 99972 |
| 17397 | $J/\psi \to \rho^- \bar{K}^0 K^+ \eta', \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_S^0, \eta' \to \rho^0 \gamma, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma$ | 17396 | 1 | 99973 |
| 17398 | $J/\psi \to K^0 \bar{K}^0 a_0^0, K^0 \to K_S^0, \bar{K}^0 \to K_S^0, a_0^0 \to \pi^0 \eta, K_S^0 \to \pi^0 \pi^0, K_S^0 \to \pi^+ \pi^-, \eta \to \gamma \gamma$ | $\pi^0\pi^0\pi^0\pi^+\pi^-\gamma\gamma$ | 17397 | 1 | 99974 |
| 17399 | $J/\psi \to K^- K_1^{'+}, K_1^{'+} \to \omega K^+, \omega \to \pi^0 \gamma$ | $\pi^0 K^+ K^- \gamma$ | 17398 | 1 | 99975 |
| 17400 | $J/\psi \to \rho^0 f_0(1370) f_0(1370), \rho^0 \to \pi^+\pi^-, f_0(1370) \to \pi^+\pi^-, f_0(1370) \to \pi^+\pi^-$ | $\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ | 17399 | 1 | 99976 |
| 17401 | $J/\psi 	o \eta ar K^0 K_2^{*0}, \eta 	o \gamma \gamma, ar K^0 	o K_L^0, K_2^{*0} 	o \omega K^0, \omega 	o \pi^0 \gamma, K^0 	o K_L^0$ | $\pi^0 K^0_L K^0_L \gamma \gamma \gamma$ | 17400 | 1 | 99977 |
| 17402 | $J/\psi \to f_2' h_1(1380), f_2' \to K_L^0 K_L^0, h_1(1380) \to K^- K^{*+}, K^{*+} \to \pi^0 K^+$ | $\pi^0 K_L^0 K_L^0 K^+ K^-$ | 17401 | 1 | 99978 |
| 17403 | $J/\psi ightarrow a_2^0 K^- K^{*+}, a_2^0 ightarrow \pi^0 \eta, K^{*+} ightarrow \pi^0 K^+, \eta ightarrow \gamma \gamma$ | $\pi^0\pi^0K^+K^-\gamma\gamma$ | 17402 | 1 | 99979 |
| 17404 | $J/\psi \to \pi^+ K^* K^{*-} \gamma^f, K^* \to \pi^0 K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L^0, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 K_L^0 \pi^+ \pi^- \gamma^f$ | 17403 | 1 | 99980 |
| 17405 | $J/\psi \to \rho^+ K^0 K_2^{*-}, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0, K_2^{*-} \to \pi^0 \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-$ | 17404 | 1 | 99981 |
| 17406 | $J/\psi \to \pi^0 \bar{K}^0 K_1^0, \bar{K}^0 \to K_S^0, K_1^0 \to \rho^0 K^0, K_S^0 \to \pi^+ \pi^-, \rho^0 \to \pi^+ \pi^-, K_S^0 \to K_S^0, K_S^0 \to \pi^+ \pi^- \gamma^f$ | $\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma^f$ | 17405 | 1 | 99982 |
| 17407 | $J/\psi \to \pi^0 \rho^0 \bar{K}^0 K_2^{*0}, \rho^0 \to \pi^+ \pi^-, \bar{K}^0 \to K_S^0, K_2^{*0} \to \pi^0 K^*, K_S^0 \to \pi^0 \pi^0, K^* \to \pi^- K^+$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+$ | 17406 | 1 | 99983 |
| 17408 | $J/\psi \to \bar{K}^0 a_0^- K_1^+, \bar{K}^0 \to K_S^0, a_0^- \to \pi^- \eta, K_1^+ \to \rho^+ K^0, K_S^0 \to \pi^+ \pi^-, \\ \eta \to \gamma \gamma, \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma$ | 17407 | 1 | 99984 |
| 17409 | $J/\psi \to K^0 K^- a_0^+, K^0 \to K_L^0, a_0^+ \to \bar{K}^0 K^+, \bar{K}^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $K_L^0\pi^+\pi^-K^+K^-$ | 17408 | 1 | 99985 |
| 17410 | $J/\psi 	o a_2^0 \omega a_0^0, a_2^0 	o \pi^+ \pi^- \omega, \omega 	o \pi^0 \pi^+ \pi^-, a_0^0 	o \pi^0 \eta, \omega 	o \pi^0 \pi^+ \pi^-, \eta 	o \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ | 17409 | 1 | 99986 |
| 17411 | $J/\psi \to \pi^0 \rho^0 \omega h_1(1170), \rho^0 \to \pi^+ \pi^- \gamma^f, \omega \to \pi^0 \pi^+ \pi^-, h_1(1170) \to \pi^0 \rho^0, \rho^0 \to \pi^+ \pi^-$ | $\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{f}$ | 17410 | 1 | 99987 |
| 17412 | $J/\psi \to K^{*+}K^{*-}h_1(1170), K^{*+} \to \pi^+K^0, K^{*-} \to \pi^0K^-, h_1(1170) \to \pi^-\rho^+, K^0 \to K_L^0, \rho^+ \to \pi^0\pi^+$ | $\pi^0\pi^0K^0_L\pi^+\pi^+\pi^-K^-$ | 17411 | 1 | 99988 |
| 17413 | $J/\psi \to \pi^+\pi^- f_1(1285), f_1(1285) \to \pi^- a_0^+, a_0^+ \to \pi^+ \eta, \eta \to \pi^0 \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-$ | 17412 | 1 | 99989 |
| 17414 | $J/\psi 	o ho^+ a_0^-, ho^+ 	o \pi^0 \pi^+, a_0^- 	o \pi^- \eta, \eta 	o \pi^+ \pi^- \gamma^F$ | $\pi^0\pi^+\pi^+\pi^-\pi^-\gamma^F$ | 17413 | 1 | 99990 |
| 17415 | $J/\psi \to \pi^+ K_1^0 K_1^-, K_1^0 \to \pi^- K_0^{*+}, K_1^- \to \pi^0 K_0^{*-}, K_0^{*+} \to \pi^+ K^0, K_0^{*-} \to \pi^0 K^-, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17414 | 1 | 99991 |
| 17416 | $J/\psi \to \eta K^{*-} K_2^{*+}, \eta \to \gamma \gamma, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \pi^+ K^0, K^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ K^- \gamma \gamma$ | 17415 | 1 | 99992 |
| 17417 | $J/\psi \to \bar{K}^* K_0^0, \bar{K}^* \to \pi^0 \bar{K}^0, K_0^0 \to \pi^0 K^0, \bar{K}^0 \to K_S^0, K^0 \to K_L^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0K_L^0\pi^+\pi^-$ | 17416 | 1 | 99993 |
| 17418 | $J/\psi \to \pi^0 K^{*-} K_2^{*+}, K^{*-} \to \pi^0 K^-, K_2^{*+} \to \rho^+ K^0, \rho^+ \to \pi^0 \pi^+, K^0 \to K_L^0$ | $\pi^0\pi^0\pi^0K_L^0\pi^+K^-$ | 17417 | 1 | 99994 |
| 17419 | $J/\psi \to \pi^0 \pi^+ K^{*-} K_1^0, K^{*-} \to \pi^0 K^-, K_1^0 \to \omega K^0, \omega \to \pi^0 \gamma, K^0 \to K_S^0, K_S^0 \to \pi^0 \pi^0$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+K^-\gamma$ | 17418 | 1 | 99995 |

| rowNo | decay tree | decay final state | iDcyTr | nEtr | nCEtr |
|-------|--|--|--------|------|--------|
| 17420 | $J/\psi \to \eta K^{*-} K_1^+, \eta \to \gamma \gamma, K^{*-} \to \pi^- \bar{K}^0, K_1^+ \to \rho^+ K^0, \bar{K}^0 \to K_L^0, \\ \rho^+ \to \pi^0 \pi^+, K^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0 K_L^0 \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$ | 17419 | 1 | 99996 |
| 17421 | $J/\psi \to \eta K^* \bar{K}^0_1, \eta \to \pi^0 \pi^0 \pi^0, K^* \to \pi^- K^+, \bar{K}^0_1 \to \pi^+ K^{*-}_*, K^{*-}_* \to \pi^0 K^-$ | $\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$ | 17420 | 1 | 99997 |
| 17422 | $J/\psi \to K^- a_0^+ K_1^0, a_0^+ \to \pi^+ \eta, K_1^0 \to \rho^0 K^0, \eta \to \pi^0 \pi^0 \pi^0, \rho^0 \to \pi^+ \pi^-, K_0^0 \to K_S^0, K_S^0 \to \pi^+ \pi^-$ | $\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-$ | 17421 | 1 | 99998 |
| | $J/\psi \to \rho^- \bar{K}^* K^{*+}, \rho^- \to \pi^0 \pi^- \gamma^f, \bar{K}^* \to \pi^+ K^-, K^{*+} \to \pi^+ K^0, K^0 \to K^0_L$ | $\pi^{0}K_{L}^{0}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{f}$ | 17422 | 1 | 99999 |
| 17424 | $J/\psi \to \pi^+ K_2^{*0} K^{*-} \gamma^F, K_2^{*0} \to \rho^- K^+, K^{*-} \to \pi^- \bar{K}^0, \rho^- \to \pi^0 \pi^-, \bar{K}^0 \to K_L^0$ | $\pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ \gamma^F$ | 17423 | 1 | 100000 |