Topology Analysis \* (v1.6.1)

Xingyu Zhou <sup>†</sup> Beihang University December 2, 2018

<sup>\*</sup>This package is implemented with reference to a program called Topo, which is developed by Prof. Shuxian Du from Zhengzhou University in China and has been widely used by people in BESIII collaboration. Several years ago, when I was a PhD student working on BESIII experiment, I learned the idea of topology analysis and a lot of programming techniques from the Topo program. So, I really appreciate Prof. Du's original work 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 last year (2017), my co-supervisor, Prof. Chengping Shen reminded me that it could be a useful tool for Belle II experiment as well. So, I revised and extended it, making it more well-rounded and suitable for Belle II experiment. Here, I would like to thank Prof. Du for his original work, Prof. Shen for his suggestion and encouragement, and Wencheng Yan, Sen Jia, Yubo Li, Suxian Li, Longke Li, Guanda Gong, Junhao Yin, Xiaoping Qin, Xiqing Hao, HongPeng Wang, JiaWei Zhang and Yeqi Chen for their efforts in helping me test the program.

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Table 1: Event trees and their respective initial-final states.

	Table 1. Event trees and then respective intera-man states.				
index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
1	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^0 \pi^+ \omega D^-, \bar{B}^0 \to \pi^0 \pi^+ \pi^- \pi^- D^{*+}, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma, D^- \to \mu^- \bar{\nu}_\mu K^*,$ $D^{*+} \to \pi^+ D^0, K^* \to \pi^- K^+, D^0 \to K^- a_1^+, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ $(\Upsilon(4S) \to \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma \gamma)$	0	0	1	1
2	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*}\chi_{c0}, \bar{B}^{0} \to D^{*+}D_{s}^{-}, K^{*} \to \pi^{-}K^{+}, \chi_{c0} \to \omega K^{+}K^{-}, D^{*+} \to \pi^{+}D^{0},$ $D_{s}^{-} \to \pi^{0}\pi^{-}\bar{K}^{*}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{0} \to K_{S}K^{+}K^{-}, \bar{K}^{*} \to \bar{K}^{0}\gamma, K_{S} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{L}$ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma)$	1	1	1	2
3	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{+}\bar{D}^{*-}D^{*0}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D_{0}^{*+}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*0} \to \pi^{0}D^{0}, D_{0}^{*+} \to \pi^{0}D^{+},$ $D^{-} \to e^{-}\bar{\nu}_{e}K^{*}, D^{0} \to \pi^{0}\pi^{+}K^{-}, D^{+} \to K_{L}a_{1}^{+}, K^{*} \to \pi^{-}K^{+}, a_{1}^{+} \to \rho^{0}\pi^{+}, \rho^{0} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	2	2	1	3
4	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\bar{D}^{*-}, \bar{B}^{0} \to D^{*+}D_{s}^{*-}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*+} \to \pi^{+}D^{0}, D_{s}^{*-} \to D_{s}^{-}\gamma, $ $D^{-} \to K_{L}a_{1}^{-}, D^{0} \to K^{+}K^{-}, D_{s}^{-} \to \rho^{-}\eta', a_{1}^{-} \to \rho^{0}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \eta' \to \pi^{+}\pi^{-}\eta, $ $\rho^{0} \to \pi^{+}\pi^{-}, \eta \to \gamma\gamma $ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	3	3	1	4
5	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}D^{-}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\pi^{-}D^{*+}, D^{-} \to e^{-}\bar{\nu}_{e}K^{0}, D^{*+} \to \pi^{+}D^{0}, K^{0} \to K_{S},$ $D^{0} \to e^{+}\nu_{e}K^{*-}, K_{S} \to \pi^{+}\pi^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, \bar{K}^{0} \to K_{L}$ $(\Upsilon(4S) \to e^{+}e^{+}e^{-}\nu_{e}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma)$	4	4	1	5
6	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \pi^{-}\rho^{+}\bar{D}^{*0}, B^{0} \to K^{*+}\bar{D}^{*-}D^{*0}, \rho^{+} \to \pi^{0}\pi^{+}, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, K^{*+} \to \pi^{0}K^{+}, \\ \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*0} \to \pi^{0}D^{0}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}\pi^{0}K^{+}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}K^{+}, D^{0} \to \pi^{0}\pi^{0}\pi^{+}\pi^{-} \\ (\Upsilon(4S) \to e^{-}e^{-}\bar{\nu}_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	5	5	1	6
7	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{-}\bar{D}^{0}D_{s}^{*+}, \bar{B}^{0} \to \pi^{0}\rho^{0}\pi^{-}\pi^{-}\rho^{+}D^{+}, \bar{D}^{0} \to \pi^{+}\pi^{-}\pi^{-}K^{+}, D_{s}^{*+} \to D_{s}^{+}\gamma, \rho^{0} \to \pi^{+}\pi^{-}, \\ \rho^{+} \to \pi^{0}\pi^{+}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, D_{s}^{+} \to \mu^{+}\nu_{\mu}\phi, \bar{K}^{0} \to K_{S}, \phi \to K_{L}K_{S}, K_{S} \to \pi^{+}\pi^{-}, \\ K_{S} \to \pi^{0}\pi^{0} \\ (\Upsilon(4S) \to \mu^{+}\mu^{+}\nu_{\mu}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	6	6	1	7
8	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \tau^+ \nu_\tau D^-, \bar{B}^0 \to e^- \bar{\nu}_e D^{*+}, \tau^+ \to \bar{\nu}_\tau \pi^+ \pi^+ \pi^-, D^- \to \pi^0 \pi^- \pi^- K^+, D^{*+} \to \pi^+ D^0,$ $D^0 \to \pi^0 \pi^+ K^-$ $(\Upsilon(4S) \to e^- \bar{\nu}_e \nu_\tau \bar{\nu}_\tau \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma)$	7	7	1	8
9	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^0 \pi^- \rho^+ \eta p \bar{\Lambda}_c^-, \bar{B}^0 \to e^- \bar{\nu}_e \pi^0 D^+, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-, \bar{\Lambda}_c^- \to \pi^- \eta' \bar{n},$ $D^+ \to \mu^+ \nu_\mu \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ $(\Upsilon(4S) \to e^- \bar{\nu}_e \mu^+ \nu_\mu \pi^+ \pi^+ \pi^- \pi^- \pi^- K^- \bar{n} p \gamma \gamma)$	8	8	1	9
10	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D_{1}^{-}, \bar{B}^{0} \to \rho^{-}D_{2}^{*+}, D_{1}^{-} \to \pi^{-}\bar{D}^{*0}, \rho^{-} \to \pi^{0}\pi^{-}, D_{2}^{*+} \to \pi^{+}D^{*0}, \\ \bar{D}^{*0} \to \bar{D}^{0}\gamma, D^{*0} \to \pi^{0}D^{0}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, D^{0} \to K_{S}K_{S}K_{S}, K_{S} \to \pi^{0}\pi^{0}, K_{S} \to \pi^{+}\pi^{-}, \\ K_{S} \to \pi^{+}\pi^{-} \\ (\Upsilon(4S) \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	9	9	1	10

index	event tree	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
maca	(event initial-final states)	12,011	IEV CIT S CS	III V 65	II CHIII CE V 65
11	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\rho^{+}\eta D^{-}, \bar{B}^{0} \to \pi^{-}\rho^{+}\rho^{-}D^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \gamma\gamma, D^{-} \to \pi^{0}K_{L}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, D^{+} \to e^{+}\nu_{e}\pi^{+}K^{-} $ $(\Upsilon(4S) \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	10	10	1	11
12	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^0 \pi^+ \Sigma^- \bar{\Xi}_c^{*0}, \bar{B}^0 \to \pi^- \bar{\Delta}^+ \Sigma_c^{++}, \Sigma^- \to \pi^- n, \bar{\Xi}_c^{*0} \to \bar{\Xi}_c^0 \gamma, \bar{\Delta}^+ \to \pi^- \bar{n},$ $\Sigma_c^{++} \to \pi^+ \Lambda_c^+, \bar{\Xi}_c^0 \to \rho^- \bar{\Xi}^+, \Lambda_c^+ \to \pi^0 \pi^+ \pi^- \Sigma^+, \rho^- \to \pi^0 \pi^-, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Sigma^+ \to \pi^0 p,$ $\bar{\Lambda} \to \pi^0 \bar{n}$ $(\Upsilon(4S) \to \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- n \bar{n} \bar{n} p \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	11	11	1	12
13	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{0}D^{*0}\bar{D}^{*0}, \bar{B}^{0} \to D^{*+}a_{1}^{-}, K^{0} \to K_{S}, D^{*0} \to D^{0}\gamma, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0},$ $D^{*+} \to \pi^{+}D^{0}, a_{1}^{-} \to \pi^{0}\rho^{-}, K_{S} \to \pi^{+}\pi^{-}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}\bar{K}^{*}, \bar{D}^{0} \to K_{S}K^{+}K^{-}, D^{0} \to e^{+}\nu_{e}\pi^{-}\bar{K}^{0},$ $\rho^{-} \to \pi^{0}\pi^{-}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, K_{S} \to \pi^{0}\pi^{0}, \bar{K}^{0} \to K_{S}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-},$ $K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma$	12	12	1	13
14	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D_{1}^{\prime+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D_{1}^{\prime+} \to \pi^{0}D^{*+}, \bar{D}^{0} \to \pi^{-}K^{+},$ $D^{*+} \to \pi^{+}D^{0}, D^{0} \to K^{-}a_{1}^{+}, a_{1}^{+} \to \pi^{0}\rho^{+}, \rho^{+} \to \pi^{0}\pi^{+}$ $(\Upsilon(4S) \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$	13	13	1	14
15	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{0}K^{-}\bar{D}^{0}D_{s}^{+}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, K^{0} \to K_{L}, \bar{D}^{0} \to \pi^{0}\pi^{0}K^{+}K^{-}, D_{s}^{+} \to \rho^{+}\eta,$ $D^{*+} \to \pi^{+}D^{0}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{0}\pi^{+}\pi^{-}, D^{0} \to e^{+}\nu_{e}K^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}Y^{\gamma}\gamma\gamma\gamma\gamma\gamma)$	14	14	1	15
16	$\Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to e^{-\bar{\nu}_{e}}D^{*+}, \bar{B}^{0} \to \pi^{0}\pi^{-\bar{K}^{*}}K^{+}D^{0}, D^{*+} \to \pi^{+}D^{0}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S},$ $D^{0} \to \pi^{0}\pi^{+}K^{-}, \bar{K}^{0} \to K_{L}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{-\bar{\nu}_{e}}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	15	15	1	16
17	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}K^{+}D_{s}^{*-}, \bar{B}^{0} \to \pi^{+}\pi^{+}\pi^{-}\pi^{-}\omega\bar{K}^{0}, D_{s}^{*-} \to D_{s}^{-}\gamma, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{K}^{0} \to K_{S},$ $D_{s}^{-} \to \rho^{-}\eta, K_{S} \to \pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0}$ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	16	16	1	17
18	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{+}\bar{D}^{*-}D^{0}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}D^{*0}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}, D^{*0} \to \pi^{0}D^{0},$ $D^{-} \to \pi^{0}K_{L}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, D^{0} \to \pi^{+}K_{1}^{-}, K_{1}^{-} \to \rho^{-}\bar{K}^{0}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{K}^{0} \to K_{S},$ $K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	17	17	1	18
19	$\Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \bar{K}^{0}D^{*+}\bar{D}^{*-}, \bar{B}^{0} \to e^{-\bar{\nu}_{e}\pi^{+}}D^{*0}, \bar{K}^{0} \to K_{L}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \\ D^{*0} \to \pi^{0}D^{0}, D^{0} \to \pi^{0}\pi^{+}K^{*-}, \bar{D}^{0} \to \pi^{-}K_{1}^{+}, D^{0} \to \pi^{0}\pi^{+}K^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{+} \to \pi^{0}\pi^{+}K^{0}, \\ \bar{K}^{0} \to K_{S}, K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-} \\ (\Upsilon(4S) \to e^{-\bar{\nu}_{e}}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	18	18	1	19
20	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{+}D^{-}, \bar{B}^{0} \to \pi^{+}K^{0}\bar{K}^{0}\bar{K}^{0}K^{*}K^{*-}, \rho^{+} \to \pi^{0}\pi^{+}, D^{-} \to \pi^{-}\eta, K^{0} \to K_{S}, \\ \bar{K}^{0} \to K_{L}, \bar{K}^{0} \to K_{L}, K^{*} \to \pi^{-}K^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}, \eta \to \pi^{0}\pi^{0}\pi^{0}, K_{S} \to \pi^{+}\pi^{-}, \\ \bar{K}^{0} \to K_{L} \\ (\Upsilon(4S) \to K_{L}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	19	19	1	20

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
21	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}D^{-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{+}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{*}, D^{+} \to \pi^{0}\pi^{0}\pi^{0}\pi^{+}\bar{K}^{0}, K^{*} \to \pi^{0}K^{0}, \\ \bar{K}^{0} \to K_{L}, K^{0} \to K_{L} \\ (\Upsilon(4S) \to e^{+}\nu_{e}\mu^{-}\mu^{-}\bar{\nu}_{\mu}\bar{\nu}_{\mu}K_{L}K_{L}\pi^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	20	20	1	21
22	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}K^{0}\eta_{c}, \bar{B}^{0} \to \pi^{0}D^{*+}D_{s}^{-}, \rho^{0} \to \pi^{+}\pi^{-}, K^{0} \to K_{S}, \eta_{c} \to \pi^{+}\pi^{-}K^{+}K^{-},$ $D^{*+} \to \pi^{+}D^{0}, D_{s}^{-} \to \pi^{+}\pi^{-}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, D^{0} \to \pi^{-}\rho^{+}, \rho^{+} \to \pi^{0}\pi^{+}$ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma)$	21	21	1	22
23	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \pi^{-}\bar{D}^{0}D_{s}^{+}, B^{0} \to \pi^{0}\pi^{+}\eta\omega\bar{D}^{*-}, \bar{D}^{0} \to \pi^{-}\omega K^{+}, D_{s}^{+} \to e^{+}\nu_{e}\eta, \eta \to \gamma\gamma,$ $\omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{0} \to K_{L}\pi^{+}\pi^{-}, K_{L} \to e^{-}\nu_{e}\pi^{+}$ $(\Upsilon(4S) \to e^{+}e^{-}\nu_{e}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	22	22	1	23
24	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}D_{1}^{\prime-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{+}, D_{1}^{\prime-} \to \pi^{-}\bar{D}^{*0}, D^{+} \to \pi^{0}\pi^{+}\phi, \bar{D}^{*0} \to \bar{D}^{0}\gamma,$ $\phi \to K_{L}K_{S}, \bar{D}^{0} \to \rho^{0}\pi^{-}K^{+}, K_{L} \to \mu^{+}\nu_{\mu}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma)$	23	23	1	24
25	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^0 \pi^- \rho^+ \rho^+ \eta D^-, \bar{B}^0 \to \pi^- \bar{\Delta}^0 \Lambda_c^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+,$ $\eta \to \pi^0 \pi^0 \pi^0, D^- \to \mu^- \bar{\nu}_\mu K^*, \bar{\Delta}^0 \to \pi^0 \bar{n}, \Lambda_c^+ \to K^{*+} \Lambda, K^* \to \pi^- K^+, K^{*+} \to \pi^0 K^+,$ $\Lambda \to \pi^0 n$ $(\Upsilon(4S) \to \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^+ n \bar{n} \gamma \gamma)$	24	24	1	25
26	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{+}\rho^{+}\rho^{-}\omega D^{-}, \bar{B}^{0} \to D^{+}D_{s0}^{*-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, \\ \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{-} \to K_{S}K^{*-}, D^{+} \to \pi^{+}K^{0}\bar{K}^{*}, D_{s0}^{*-} \to \pi^{0}D_{s}^{-}, K_{S} \to \pi^{+}\pi^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, \\ K^{0} \to K_{L}, \bar{K}^{*} \to \pi^{+}K^{-}, D_{s}^{-} \to K_{L}\pi^{+}\pi^{-}\pi^{-}, \bar{K}^{0} \to K_{L} \\ (\Upsilon(4S) \to K_{L}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	25	25	1	26
27	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\rho^{+}\omega\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}K^{0}K^{-}D^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$ $K^{0} \to K_{L}, D^{+} \to \pi^{+}\pi^{+}\pi^{+}\pi^{-}K^{-}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}\pi^{+}K^{0}, K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$	26	26	1	27
28	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\pi^{+}K^{0}D^{-}D^{*0}, \bar{B}^{0} \to \pi^{0}\rho^{0}K^{0}K^{-}D^{*+}, K^{0} \to K_{L}, D^{-} \to \rho^{-}K^{*}, D^{*0} \to D^{0}\gamma,$ $\rho^{0} \to \pi^{+}\pi^{-}, K^{0} \to K_{L}, D^{*+} \to \pi^{0}D^{+}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*} \to \pi^{-}K^{+}, D^{0} \to \pi^{0}\pi^{+}K^{*-},$ $K_{L} \to \mu^{-}\nu_{\mu}\pi^{+}, D^{+} \to \pi^{+}\pi^{+}K^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, \bar{K}^{0} \to K_{L}$ $(\Upsilon(4S) \to \mu^{-}\nu_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	27	27	1	28
29	$\Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \bar{B}^{0} \to \rho^{0}\pi^{-}D^{*+}, D^{*+} \to \pi^{+}D^{0}, \rho^{0} \to \pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0},$ $D^{0} \to \pi^{0}\pi^{+}K^{-}, D^{0} \to e^{+}\nu_{e}K^{-}$ $(\Upsilon(4S) \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-}\gamma\gamma)$	28	28	1	29
30	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \mu^+ \nu_\mu \bar{D}^{*-}, \bar{B}^0 \to \mu^- \bar{\nu}_\mu D^+, \bar{D}^{*-} \to \pi^- \bar{D}^0, D^+ \to \pi^0 \pi^0 \pi^+ \pi^+ K^-, \bar{D}^0 \to \pi^+ \pi^- \pi^- K^+ $ $(\Upsilon(4S) \to \mu^+ \mu^- \nu_\mu \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma)$	29	29	1	30
31	$\Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \pi^{+} \pi^{-} D^{-} \bar{n} p, \bar{B}^{0} \to K^{*-} D^{+} \bar{D}^{0}, D^{-} \to K^{*} a_{1}^{-}, K^{*-} \to \pi^{-} \bar{K}^{0}, D^{+} \to \pi^{0} \pi^{+} \phi,$ $\bar{D}^{0} \to \mu^{-} \bar{\nu}_{\mu} K^{+}, K^{*} \to \pi^{-} K^{+}, a_{1}^{-} \to \rho^{0} \pi^{-}, \bar{K}^{0} \to K_{S}, \phi \to K^{+} K^{-}, \rho^{0} \to \pi^{+} \pi^{-},$ $K_{S} \to \pi^{+} \pi^{-}$ $(\Upsilon(4S) \to \mu^{-} \bar{\nu}_{\mu} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{+} K^{+} K^{+} K^{-} \bar{n} p \gamma \gamma)$	30	30	1	31

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
32	$\Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \pi^{0} \rho^{0} \pi^{+} \pi^{-} \rho^{-} K^{+} K^{*+} D_{s}^{-}, \bar{B}^{0} \to K^{-} \bar{\Delta}^{0} \Lambda_{c}^{+}, \rho^{0} \to \pi^{+} \pi^{-}, \rho^{-} \to \pi^{0} \pi^{-}, K^{*+} \to \pi^{+} K^{0},$ $D_{s}^{-} \to \pi^{+} \pi^{-} K_{S} K^{-}, \bar{\Delta}^{0} \to \pi^{0} \bar{n}, \Lambda_{c}^{+} \to \mu^{+} \nu_{\mu} \Lambda, K^{0} \to K_{S}, K_{S} \to \pi^{+} \pi^{-}, \Lambda \to \pi^{0} n,$ $K_{S} \to \pi^{0} \pi^{0}$ $(\Upsilon(4S) \to \mu^{+} \nu_{\mu} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{+} K^{-} K^{-} n \bar{n} \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$ $\Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \bar{D}^{*-} D_{s0}^{*+}, \bar{B}^{0} \to \pi^{0} \pi^{+} \pi^{-} \pi^{-} D^{*+}, \bar{D}^{*-} \to \pi^{-} \bar{D}^{0}, D_{s0}^{*+} \to \pi^{0} D_{s}^{+}, D^{*+} \to \pi^{0} D^{+},$	31	31	1	32
33	$\bar{D}^{0} \to \pi^{0} \pi^{+} \pi^{-} K^{*}, D_{s}^{+} \to \pi^{0} \pi^{0} \pi^{+}, D^{+} \to e^{+} \nu_{e} \pi^{+} K^{-}, K^{*} \to \pi^{-} K^{+} $ $(\Upsilon(4S) \to e^{+} \nu_{e} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{+} K^{-} \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	32	32	1	33
34	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{+}\bar{D}^{*-}D^{*0}, \bar{B}^{0} \to \bar{K}^{0}\bar{n}\Sigma_{c}^{0}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*0} \to \pi^{0}D^{0}, \bar{K}^{0} \to K_{S},$ $\Sigma_{c}^{0} \to \pi^{-}\Lambda_{c}^{+}, D^{-} \to K^{*}a_{1}^{-}, D^{0} \to \pi^{0}\pi^{+}K^{-}, K_{S} \to \pi^{0}\pi^{0}, \Lambda_{c}^{+} \to pf_{0}(980), K^{*} \to \pi^{0}K^{0},$ $a_{1}^{-} \to \pi^{0}\rho^{-}, f_{0}(980) \to \pi^{+}\pi^{-}, K^{0} \to K_{L}, \rho^{-} \to \pi^{0}\pi^{-}$ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	33	33	1	34
35	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \bar{D}^{*0} \Delta^+ \bar{\Delta}^+, \bar{B}^0 \to \mu^- \bar{\nu}_\mu D^{*+}, \bar{D}^{*0} \to \pi^0 \bar{D}^0, \Delta^+ \to \pi^+ n, \bar{\Delta}^+ \to \pi^- \bar{n},$ $D^{*+} \to \pi^+ D^0, \bar{D}^0 \to e^- \bar{\nu}_e K_2^{*+}, D^0 \to \pi^0 \pi^+ \pi^- K_S, K_2^{*+} \to \pi^0 K^+, K_S \to \pi^+ \pi^-$ $(\Upsilon(4S) \to e^- \bar{\nu}_e \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ n \bar{n} \gamma \gamma \gamma \gamma \gamma \gamma)$	34	34	1	35
36	$ \Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \pi^{0} \pi^{0} \pi^{+} \omega D^{-}, \bar{B}^{0} \to \rho^{0} \pi^{-} \bar{K}^{0} \bar{K}^{*} D_{s}^{*+}, \omega \to \pi^{0} \pi^{+} \pi^{-}, D^{-} \to \rho^{-} K^{*}, \rho^{0} \to \pi^{+} \pi^{-}, \\ \bar{K}^{0} \to K_{L}, \bar{K}^{*} \to \pi^{+} K^{-}, D_{s}^{*+} \to D_{s}^{+} \gamma, \rho^{-} \to \pi^{0} \pi^{-}, K^{*} \to \pi^{-} K^{+}, D_{s}^{+} \to \pi^{+} \pi^{+} \pi^{-} \omega, \\ \omega \to \pi^{0} \pi^{+} \pi^{-} \\ (\Upsilon(4S) \to K_{L} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{+} K^{-} \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma) $	35	35	1	36
37	$\Upsilon(4S) \to \bar{B}^0 \bar{B}^0, \bar{B}^0 \to \pi^- \bar{\Delta}^+ \Sigma_c^{++}, \bar{B}^0 \to \pi^+ \pi^- \pi^- \eta K^0 \bar{K}^0 D^+, \bar{\Delta}^+ \to \pi^0 \bar{p}, \Sigma_c^{++} \to \pi^+ \Lambda_c^+, \eta \to \pi^0 \pi^0 \pi^0, K^0 \to K_L, \bar{K}^0 \to K_S, D^+ \to \pi^+ K_S, \Lambda_c^+ \to \pi^0 \bar{K}^0 p, K_S \to \pi^0 \pi^0, K_S \to \pi^+ \pi^-, \bar{K}^0 \to K_L $ $(\Upsilon(4S) \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- p \bar{p} \gamma \gamma)$	36	36	1	37
38	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{-}K^{+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{+}\pi^{-}\rho^{+}\rho^{-}K^{-}D_{s}^{*+}, \bar{D}^{*-} \to \pi^{0}D^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, D_{s}^{*+} \to D_{s}^{+}\gamma, D^{-} \to e^{-}\bar{\nu}_{e}K^{*}, D_{s}^{+} \to \bar{K}^{*}K^{*+}, K^{*} \to \pi^{-}K^{+}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, K^{*+} \to \pi^{+}K^{0}, \bar{K}^{0} \to K_{L}, K^{0} \to K_{L}, K_{L} \to \pi^{0}\pi^{0}\pi^{0}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	37	37	1	38
39	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}D_{s}^{*+}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D_{2}^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D_{s}^{*+} \to \pi^{0}D_{s}^{*}, D_{2}^{*+} \to \pi^{0}D^{*+},$ $\bar{D}^{0} \to \rho^{-}K^{*+}, D_{s}^{+} \to \rho^{+}\eta, D^{*+} \to \pi^{+}D^{0}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, \rho^{+} \to \pi^{0}\pi^{+},$ $\eta \to \gamma\gamma, D^{0} \to K_{L}\phi, K^{0} \to K_{L}, \phi \to \pi^{0}\rho^{0}, \rho^{0} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	38	38	1	39
40	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^- K^+ D^0 \bar{D}^{*0}, \bar{B}^0 \to \pi^0 \bar{K}^* J/\psi, D^0 \to e^+ \nu_e K^{*-}, \bar{D}^{*0} \to \bar{D}^0 \gamma, \bar{K}^* \to \pi^+ K^-, \\ J/\psi \to \pi^0 \pi^+ \pi^- \eta, K^{*-} \to \pi^- \bar{K}^0, \bar{D}^0 \to K^+ a_1^-, \eta \to \pi^0 \pi^+ \pi^-, \bar{K}^0 \to K_L, a_1^- \to \pi^0 \rho^-, \\ K_L \to \mu^- \nu_\mu \pi^+, \rho^- \to \pi^0 \pi^- \\ (\Upsilon(4S) \to e^+ \nu_e \mu^- \nu_\mu \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^- \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	39	39	1	40

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
41	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*}D^{*+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{-}K^{0}D^{+}, K^{*} \to \pi^{0}K^{0}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{*-} \to \pi^{0}D^{-}, K^{0} \to K_{L}, D^{+} \to \pi^{0}\pi^{0}\pi^{+}\pi^{+}K^{-}, K^{0} \to K_{S}, D^{0} \to \mu^{+}\nu_{\mu}K^{-}, D^{-} \to \pi^{0}\pi^{-}K^{*}, \pi^{0} \to e^{+}e^{-}, K^{S} \to \pi^{+}\pi^{-}, K^{*} \to \pi^{-}K^{+} $ $(\Upsilon(4S) \to e^{+}e^{-}\mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	40	40	1	41
42	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\eta D^{-}, \bar{B}^{0} \to \pi^{0}\pi^{0}\pi^{0}\pi^{-}\rho^{+}K^{+}K^{-}D^{0}, \eta \to \pi^{0}\pi^{+}\pi^{-}, D^{-} \to K_{L}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, D^{0} \to K^{-}a_{1}^{+}, a_{1}^{+} \to \pi^{0}\rho^{+}, \rho^{+} \to \pi^{0}\pi^{+} $ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	41	41	1	42
43	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \mu^{+}\nu_{\mu}\pi^{-}\bar{D}^{*0}, B^{0} \to \rho^{0}\pi^{+}K^{0}D^{-}, \bar{D}^{*0} \to \bar{D}^{0}\gamma, \rho^{0} \to \pi^{+}\pi^{-}, K^{0} \to K_{L},$ $D^{-} \to \pi^{0}K_{L}\pi^{-}, \bar{D}^{0} \to \rho^{-}K^{*+}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*+} \to \pi^{0}K^{+}$ $(\Upsilon(4S) \to \mu^{+}\nu_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	42	42	1	43
44	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{-}\bar{D}^{0}D_{s}^{+}, \bar{B}^{0} \to \pi^{+}\pi^{-}D^{+}D_{s}^{*-}, \bar{D}^{0} \to \pi^{+}\rho^{-}, D_{s}^{+} \to \pi^{+}\phi, D^{+} \to \mu^{+}\nu_{\mu}\pi^{+}K^{-},$ $D_{s}^{*-} \to D_{s}^{-}\gamma, \rho^{-} \to \pi^{0}\pi^{-}, \phi \to K_{L}K_{S}, D_{s}^{-} \to \rho^{-}\eta', K_{S} \to \pi^{0}\pi^{0}, \rho^{-} \to \pi^{0}\pi^{-},$ $\eta' \to \gamma\gamma$ $(\Upsilon(4S) \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	43	43	1	44
45	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\rho^{+}\omega\bar{K}^{0}K^{*}\bar{D}^{*-}, \bar{B}^{0} \to K_{S}J/\psi, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{K}^{0} \to K_{L},$ $K^{*} \to \pi^{-}K^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, K_{S} \to \pi^{+}\pi^{-}, J/\psi \to \pi^{0}\omega\omega, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-},$ $\omega \to \pi^{0}\pi^{+}\pi^{-}$ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	44	44	1	45
46	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{+}\bar{D}^{*-}D^{*0}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*0} \to \pi^{0}D^{0}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}, \\ \bar{D}^{0} \to \pi^{-}\eta K^{+}, D^{0} \to e^{+}\nu_{e}K^{-}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, \eta \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{0}\pi^{0} \\ (\Upsilon(4S) \to e^{+}\nu_{e}\mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	45	45	1	46
47	$ \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to D^{+}a_{1}^{-}, \bar{B}^{0} \to \pi^{0}\rho^{+}\omega K^{*-}D^{*0}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, a_{1}^{-} \to \pi^{0}\rho^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \\ \omega \to \pi^{0}\pi^{+}\pi^{-}, K^{*-} \to \pi^{0}K^{-}, D^{*0} \to \pi^{0}D^{0}, \bar{K}^{0} \to K_{L}, \rho^{-} \to \pi^{0}\pi^{-}, D^{0} \to K_{L}\omega, \\ \omega \to \pi^{0}\pi^{+}\pi^{-} \\ (\Upsilon(4S) \to \mu^{+}\nu_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma) $	46	46	1	47
48	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to D^{+}D^{-}, B^{0} \to D^{-}D_{s}^{*+}, D^{+} \to e^{+}\nu_{e}\pi^{+}K^{-}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{*}, D^{-} \to \pi^{0}\pi^{-}K_{S},$ $D_{s}^{*+} \to D_{s}^{+}\gamma, K^{*} \to \pi^{-}K^{+}, K_{S} \to \pi^{0}\pi^{0}, D_{s}^{+} \to \pi^{+}\phi, \phi \to K_{L}K_{S}, K_{L} \to e^{+}\nu_{e}\pi^{-},$ $K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{+}e^{+}\nu_{e}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$	47	47	1	48
49	$\Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \tau^{-}\bar{\nu}_{\tau}D_{2}^{*+}, \bar{B}^{0} \to D^{*+}\Delta^{-}\bar{\Delta}^{0}, \tau^{-} \to \mu^{-}\bar{\nu}_{\mu}\nu_{\tau}, D_{2}^{*+} \to \pi^{+}D^{0}, D^{*+} \to \pi^{0}D^{+},$ $\Delta^{-} \to \pi^{-}n, \bar{\Delta}^{0} \to \pi^{+}\bar{p}, D^{0} \to \pi^{0}\pi^{+}K^{-}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, \bar{K}^{0} \to K_{L}, K_{L} \to e^{+}\nu_{e}\pi^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}n\bar{p}\gamma\gamma\gamma\gamma)$	48	48	1	49
50	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\rho^{+}\bar{K}^{0}K^{*}D^{-}, \bar{B}^{0} \to \pi^{0}\rho^{0}\pi^{+}\pi^{-}\rho^{-}\eta D^{*+}, \rho^{+} \to \pi^{0}\pi^{+}, \bar{K}^{0} \to K_{L}, K^{*} \to \pi^{-}K^{+},$ $D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \gamma\gamma, D^{*+} \to \pi^{0}D^{+}, K^{0} \to K_{S},$ $D^{+} \to K_{L}\pi^{+}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	49	49	1	50

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
51	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{+}\bar{D}^{*-}D^{*0}, \bar{B}^{0} \to \pi^{-}\bar{\Delta}^{0}\Sigma_{c}^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*0} \to \pi^{0}D^{0}, \bar{\Delta}^{0} \to \pi^{0}\bar{n},$ $\Sigma_{c}^{*+} \to \pi^{0}\Lambda_{c}^{+}, \bar{D}^{0} \to \mu^{-}\bar{\nu}_{\mu}K^{+}, D^{0} \to \pi^{+}K^{-}, \Lambda_{c}^{+} \to \rho^{0}\pi^{+}\Lambda, \rho^{0} \to \pi^{+}\pi^{-}, \Lambda \to \pi^{-}p$ $(\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma)$	50	50	1	51
52	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}K^{0}K^{0}D_{s}^{-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{+}, K^{0} \to K_{L}, K^{0} \to K_{L}, D_{s}^{-} \to \rho^{-}\phi,$ $D^{+} \to \pi^{+}\pi^{+}K^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \phi \to K^{+}K^{-}$ $(\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma)$	51	51	1	52
53	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\rho^{0}\rho^{-}D^{*+}\gamma, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, D^{*+} \to \pi^{0}D^{+}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}K^{+}, D^{+} \to \pi^{0}\pi^{+}K^{+}K^{-} (\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	52	52	1	53
54	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{0}\pi^{-}\pi^{-}\rho^{+}D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{+} \to \pi^{0}\pi^{+}, D^{*+} \to \pi^{+}D^{0}, \\ \bar{D}^{0} \to \pi^{+}\pi^{-}K_{S}K_{S}, D^{0} \to \pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}, K_{S} \to \pi^{0}\pi^{0}, K_{S} \to \pi^{+}\pi^{-} \\ (\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}$	53	53	1	54
55	$\Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to D^{*+}D_{s}^{*-}, \bar{B}^{0} \to \pi^{-}\bar{\Delta}^{+}\Sigma_{c}^{++}, D^{*+} \to \pi^{+}D^{0}, D_{s}^{*-} \to D_{s}^{-}\gamma, \bar{\Delta}^{+} \to \pi^{-}\bar{n},$ $\Sigma_{c}^{++} \to \pi^{+}\Lambda_{c}^{+}, D^{0} \to \pi^{0}\pi^{+}K^{-}, D_{s}^{-} \to \rho^{-}\eta, \Lambda_{c}^{+} \to K^{*+}\Sigma^{*0}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-},$ $K^{*+} \to \pi^{0}K^{+}, \Sigma^{*0} \to \pi^{0}\Lambda, \Lambda \to \pi^{0}n$ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	54	54	1	55
56	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\bar{D}^{*-}, B^{0} \to \pi^{+}\omega\bar{D}^{*-}\bar{p}\Delta^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \Delta^{+} \to \pi^{0}p, \bar{D}^{0} \to \pi^{-}\eta K^{+}, \bar{D}^{0} \to \rho^{0}K^{*}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \rho^{0} \to \pi^{+}\pi^{-}, K^{*} \to \pi^{-}K^{+} $ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}p\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	55	55	1	56
57	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^0 \pi^+ \pi^+ \pi^- \bar{D}^{*-}, \bar{B}^0 \to K^- D^+ \bar{D}^{*0}, \bar{D}^{*-} \to \pi^0 D^-, D^+ \to \pi^+ \pi^+ K^-, \bar{D}^{*0} \to \pi^0 \bar{D}^0, \\ D^- \to \pi^0 \pi^- K^*, \bar{D}^0 \to K^+ a_1^-, K^* \to \pi^- K^+, a_1^- \to \rho^0 \pi^-, \rho^0 \to \pi^+ \pi^- \\ (\Upsilon(4S) \to \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^- K^- \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	56	56	1	57
58	$ \Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \pi^{+} \pi^{-} K^{0} \chi_{c1}, \bar{B}^{0} \to \pi^{0} \rho^{0} \rho^{-} D^{*+}, K^{0} \to K_{L}, \chi_{c1} \to \rho^{0} \pi^{+} K^{0} K^{*-}, \rho^{0} \to \pi^{+} \pi^{-}, \\ \rho^{-} \to \pi^{0} \pi^{-}, D^{*+} \to \pi^{+} D^{0}, \rho^{0} \to \pi^{+} \pi^{-}, K^{0} \to K_{L}, K^{*-} \to \pi^{-} \bar{K}^{0}, D^{0} \to \pi^{0} \pi^{+} \pi^{-} K_{S}, \\ \bar{K}^{0} \to K_{L}, K_{S} \to \pi^{+} \pi^{-} \\ (\Upsilon(4S) \to K_{L} K_{L} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \gamma \gamma \gamma \gamma \gamma) $	57	57	1	58
59	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\bar{D}^{*-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to \pi^{+}K_{S}K^{-},$ $D^{0} \to e^{+}\nu_{e}K^{-}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{+}e^{+}e^{-}\nu_{e}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-})$	58	58	1	59
60	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to K^{*+} \bar{D}^{*-} D^{*0}, \bar{B}^0 \to \mu^- \bar{\nu}_\mu D^{*+}, K^{*+} \to \pi^+ K^0, \bar{D}^{*-} \to \pi^0 D^-, D^{*0} \to D^0 \gamma,$ $D^{*+} \to \pi^+ D^0, K^0 \to K_L, D^- \to e^- \bar{\nu}_e \pi^- K^+, D^0 \to K_L \pi^- K^+, D^0 \to e^+ \nu_e K^{*-}, K^{*-} \to \pi^0 K^-$ $(\Upsilon(4S) \to e^+ e^- \nu_e \bar{\nu}_e \mu^- \bar{\nu}_\mu K_L K_L \pi^+ \pi^+ \pi^- \pi^- K^+ K^+ K^- \gamma \gamma \gamma \gamma \gamma)$	59	59	1	60
61	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}\bar{\Delta}^{-}n, \bar{B}^{0} \to \pi^{+}\bar{\Delta}^{+}\Sigma_{c}^{*0}, \bar{D}^{*-} \to D^{-}\gamma, \bar{\Delta}^{-} \to \pi^{+}\bar{n}, \bar{\Delta}^{+} \to \pi^{0}\bar{p}, \\ \Sigma_{c}^{*0} \to \pi^{-}\Lambda_{c}^{+}, D^{-} \to e^{-}\bar{\nu}_{e}K^{*}, \Lambda_{c}^{+} \to \pi^{0}\pi^{+}\Lambda, K^{*} \to \pi^{-}K^{+}, \Lambda \to \pi^{-}p \\ (\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{n}p\bar{p}\gamma\gamma\gamma\gamma\gamma)$	60	60	1	61

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
62	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}D_{1}^{-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, D_{1}^{-} \to \pi^{0}\bar{D}^{*-}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{*-} \to \pi^{0}D^{-},$ $D^{0} \to K^{-}a_{1}^{+}, D^{-} \to e^{-}\bar{\nu}_{e}K^{*}, a_{1}^{+} \to \rho^{0}\pi^{+}, K^{*} \to \pi^{-}K^{+}, \rho^{0} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma)$	61	61	1	62
63	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{+}\eta D^{-}, \bar{B}^{0} \to D^{+}D_{s}^{*-}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{0}\pi^{0}, D^{-} \to \pi^{-}\pi^{-}K^{+},$ $D^{+} \to \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{*-} \to D_{s}^{-}\gamma, \bar{K}_{1}^{'0} \to \pi^{+}K^{*-}, D_{s}^{-} \to \pi^{+}\pi^{-}K^{-}, K^{*-} \to \pi^{0}K^{-}$ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	62	62	1	63
64	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}K^{0}J/\psi, \bar{B}^{0} \to \rho^{0}\rho^{-}\eta D^{+}, K^{0} \to K_{L}, J/\psi \to \pi^{+}\rho^{-}\eta, \rho^{0} \to \pi^{+}\pi^{-},$ $\rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0}, D^{+} \to e^{+}\nu_{e}\bar{K}^{*}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \gamma\gamma, \bar{K}^{*} \to \pi^{+}K^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	63	63	1	64
65	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{0}\rho^{0}\pi^{+}D^{-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, D^{-} \to \pi^{0}\pi^{-}\phi,$ $D^{*+} \to \pi^{0}D^{+}, \phi \to \pi^{0}\rho^{0}, \pi^{0} \to e^{+}e^{-}, D^{+} \to \pi^{+}\bar{K}_{1}^{'0}, \rho^{0} \to \pi^{+}\pi^{-}, \bar{K}_{1}^{'0} \to \pi^{0}\bar{K}^{*},$ $\pi^{0} \to e^{+}e^{-}, \bar{K}^{*} \to \pi^{+}K^{-}$ $(\Upsilon(4S) \to e^{+}e^{+}e^{-}e^{-}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$	64	64	1	65
66	$\Upsilon(4S) \to \bar{B}^0 \bar{B}^0, \bar{B}^0 \to \tau^- \bar{\nu}_\tau D^{*+}, \bar{B}^0 \to \pi^- \eta \omega \eta' D^+, \tau^- \to \nu_\tau \pi^0 \pi^-, D^{*+} \to \pi^+ D^0, \eta \to \gamma \gamma,$ $\omega \to \pi^0 \pi^+ \pi^-, \eta' \to \pi^0 \pi^0 \eta, D^+ \to e^+ \nu_e \bar{K}^*, D^0 \to e^+ \nu_e K^{*-}, \eta \to \gamma \gamma, \bar{K}^* \to \pi^0 \bar{K}^0,$ $K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S, \bar{K}^0 \to K_L, K_S \to \pi^0 \pi^0$ $(\Upsilon(4S) \to e^+ e^+ \nu_e \nu_e \nu_\tau \bar{\nu}_\tau K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^- \gamma \gamma)$	65	65	1	66
67	$\Upsilon(4S) \to \bar{B}^{0} \bar{B}^{0}, \bar{B}^{0} \to D^{+} a_{1}^{-}, \bar{B}^{0} \to \pi^{0} \eta' D^{*+} \bar{D}^{*-}, D^{+} \to \mu^{+} \nu_{\mu} \bar{K}^{0}, a_{1}^{-} \to \rho^{0} \pi^{-}, \eta' \to \pi^{+} \pi^{-} \eta,$ $D^{*+} \to \pi^{+} D^{0}, \bar{D}^{*-} \to \pi^{-} \bar{D}^{0}, \bar{K}^{0} \to K_{S}, \rho^{0} \to \pi^{+} \pi^{-}, \eta \to \pi^{0} \pi^{0} \pi^{0}, D^{0} \to e^{+} \nu_{e} K^{-},$ $\bar{D}^{0} \to K_{S} K^{+} K^{-}, K_{S} \to \pi^{0} \pi^{0}, K_{S} \to \pi^{0} \pi^{0}$ $(\Upsilon(4S) \to e^{+} \nu_{e} \mu^{+} \nu_{\mu} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{+} K^{-} \chi^{\gamma} \gamma^{\gamma} \gamma^{\gamma} \gamma^{\gamma} \gamma^{\gamma} \gamma^{\gamma} \gamma^{\gamma} \gamma^{\gamma})$	66	66	1	67
68	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\rho^{0}\rho^{0}\rho^{-}D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{0}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to K^{+}a_{1}^{-}, D^{0} \to \pi^{0}\pi^{+}K^{-}, a_{1}^{-} \to \rho^{0}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{-}\pi^{-}, \rho^{0} \to \pi^{-}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{-}\pi^{-}, \rho^{0} \to \pi$	67	67	1	68
69	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{K}^{*}K^{+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\rho^{0}\eta\omega, \bar{K}^{*} \to \pi^{+}K^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{0} \to \pi^{-}K^{+}$ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	68	68	1	69
70	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^+ K^+ K^- D^-, \bar{B}^0 \to \pi^0 \pi^+ \pi^- \pi^- D^+, \rho^+ \to \pi^0 \pi^+, D^- \to e^- \bar{\nu}_e \rho^0, D^+ \to K_S K^{*+}, \\ \rho^0 \to \pi^+ \pi^-, K_S \to \pi^+ \pi^-, K^{*+} \to \pi^0 K^+ \\ (\Upsilon(4S) \to e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^- \gamma \gamma \gamma \gamma \gamma \gamma)$	69	69	1	70
71	$\Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to D^{*+}D^{*-}_{s}, \bar{B}^{0} \to \rho^{-}\bar{\Delta}^{0}\Sigma^{+}_{c}, D^{*+} \to \pi^{+}D^{0}, D^{*-}_{s} \to D^{-}_{s}\gamma, \rho^{-} \to \pi^{0}\pi^{-},$ $\bar{\Delta}^{0} \to \pi^{0}\bar{n}, \Sigma^{+}_{c} \to \pi^{0}\Lambda^{+}_{c}, D^{0} \to \mu^{+}\nu_{\mu}K^{-}, D^{-}_{s} \to \pi^{-}\eta', \Lambda^{+}_{c} \to \mu^{+}\nu_{\mu}\pi^{-}p, \eta' \to \rho^{0}\gamma,$ $\rho^{0} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{+}\mu^{+}\nu_{\mu}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	70	70	1	71

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
72	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to e^{+}\nu_{e}\bar{D}^{*-}, B^{0} \to \rho^{0}\pi^{+}\eta D^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, D^{-} \to \pi^{-}\omega K^{*}, \bar{D}^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K^{*} \to \pi^{-}K^{+}, K_{S} \to \pi^{0}\pi^{0}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	71	71	1	72
73	$ \Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^0 \pi^+ \pi^+ \pi^- \bar{D}^{*-}, \bar{B}^0 \to \pi^0 \bar{K}^0 D^+ \bar{D}^{*-}, \bar{D}^{*-} \to \pi^- \bar{D}^0, \bar{K}^0 \to K_L, D^+ \to \pi^0 \pi^+ K_S, \\ \bar{D}^{*-} \to \pi^0 D^-, \bar{D}^0 \to \pi^0 K_S, K_L \to e^+ \nu_e \pi^-, K_S \to \pi^+ \pi^-, D^- \to \pi^- \pi^- K^+, K_S \to \pi^0 \pi^0 \\ (\Upsilon(4S) \to e^+ \nu_e \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma) $	72	72	1	73
74	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \tau^{+}\nu_{\tau}\bar{D}^{*-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{+}, \tau^{+} \to \mu^{+}\nu_{\mu}\bar{\nu}_{\tau}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{+} \to e^{+}\nu_{e}\pi^{+}K^{-}, \\ \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+} \\ (\Upsilon(4S) \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma)$	73	73	1	74
75	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{-}K^{*+}D^{0}\bar{D}^{0}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\pi^{-}D^{*+}, K^{*+} \to \pi^{0}K^{+}, D^{0} \to \rho^{+}K^{*-}, \bar{D}^{0} \to \pi^{+}\pi^{-}\eta,$ $D^{*+} \to \pi^{+}D^{0}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}, \eta \to \gamma\gamma, D^{0} \to K_{L}\pi^{+}\pi^{-}, \pi^{0} \to e^{+}e^{-},$ $\bar{K}^{0} \to K_{L}$ $(\Upsilon(4S) \to e^{+}e^{-}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma)$	74	74	1	75
76	$\Upsilon(4S) \to B^0 B^0, B^0 \to \mu^+ \nu_\mu D^-, B^0 \to \pi^0 \pi^0 \rho^+ \omega \bar{D}^{*-}, D^- \to \pi^0 \pi^+ \pi^- \pi^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, \\ \bar{D}^{*-} \to \pi^- \bar{D}^0, \bar{D}^0 \to \pi^- K_1^+, K_1^+ \to \rho^0 K^+, \rho^0 \to \pi^+ \pi^- \\ (\Upsilon(4S) \to \mu^+ \nu_\mu \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	75	75	1	76
77	$ \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to K^{+}\bar{D}^{*-}D^{*0}, B^{0} \to \rho^{0}\pi^{+}\omega\bar{D}^{*-}, \bar{D}^{*-}\to\pi^{-}\bar{D}^{0}, D^{*0}\to\pi^{0}D^{0}, \rho^{0}\to\pi^{+}\pi^{-}, \\ \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-}\to\pi^{-}\bar{D}^{0}, \bar{D}^{0}\to\pi^{0}\pi^{-}K^{+}, D^{0}\to\pi^{0}\bar{K}^{*}, \bar{D}^{0}\to\pi^{0}K_{L}\pi^{+}\pi^{-}, \bar{K}^{*}\to\pi^{0}\bar{K}^{0}, \\ \bar{K}^{0}\to K_{L} \\ (\Upsilon(4S)\to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma) $	76	76	1	77
78	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^+ \Delta^0 \bar{\Sigma}_c^{*-}, \bar{B}^0 \to \mu^- \bar{\nu}_\mu D^{*+}, \rho^+ \to \pi^0 \pi^+, \Delta^0 \to \pi^0 n, \bar{\Sigma}_c^{*-} \to \pi^0 \bar{\Lambda}_c^-,$ $D^{*+} \to \pi^+ D^0, \bar{\Lambda}_c^- \to \pi^0 \pi^- \eta \bar{\Sigma}^0, D^0 \to \pi^0 \pi^+ \pi^- K_S, \eta \to \gamma \gamma, \bar{\Sigma}^0 \to \bar{\Lambda} \gamma, K_S \to \pi^+ \pi^-,$ $\bar{\Lambda} \to \pi^0 \bar{n}$ $(\Upsilon(4S) \to \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- n \bar{n} \gamma \gamma)$	77	77	1	78
79	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to D^{-}a_{1}^{+}\gamma, \bar{B}^{0} \to \pi^{0}\rho^{0}\rho^{-}\eta D^{*+}, D^{-} \to e^{-}\bar{\nu}_{e}K^{0}, a_{1}^{+} \to \pi^{0}\rho^{+}, \rho^{0} \to \pi^{+}\pi^{-},$ $\rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0}, D^{*+} \to \pi^{+}D^{0}, K^{0} \to K_{L}, \rho^{+} \to \pi^{0}\pi^{+}, D^{0} \to e^{+}\nu_{e}\pi^{0}K^{-}$ $(\Upsilon(4S) \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma$	78	78	1	79
80	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to e^+ \nu_e \bar{D}^{*-}, \bar{B}^0 \to \bar{K}^0 D^- D^{*+}, \bar{D}^{*-} \to \pi^- \bar{D}^0, \bar{K}^0 \to K_L, D^- \to \pi^0 \pi^- K_S, D^{*+} \to \pi^+ D^0, \bar{D}^0 \to \pi^+ \pi^- K^*, K_S \to \pi^+ \pi^-, D^0 \to \pi^+ \pi^- \bar{K}^*, K^* \to \pi^- K^+, \bar{K}^* \to \pi^+ K^- (\Upsilon(4S) \to e^+ \nu_e K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma)$	79	79	1	80
81	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \mu^+ \nu_\mu D_1'^-, \bar{B}^0 \to \pi^+ \pi^- \rho^- \omega D^+, D_1'^- \to \pi^0 \bar{D}^{*-}, \rho^- \to \pi^0 \pi^-, \omega \to \pi^0 \pi^+ \pi^-, D^+ \to \pi^+ \pi^+ K^-, \bar{D}^{*-} \to \pi^- \bar{D}^0, \pi^0 \to e^+ e^-, \bar{D}^0 \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+ (\Upsilon(4S) \to e^+ e^- \mu^+ \nu_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma \gamma \gamma \gamma)$	80	80	1	81
82	$\Upsilon(4S) \to \bar{B}^0 \bar{B}^0, \bar{B}^0 \to e^- \bar{\nu}_e D^+, \bar{B}^0 \to \pi^+ \pi^+ \pi^- \pi^- \pi^- D^{*+}, D^+ \to \pi^0 \pi^+ \bar{K}^*, D^{*+} \to \pi^+ D^0, \bar{K}^* \to \pi^+ K^-, D^0 \to \pi^+ \omega K^-, \omega \to \pi^0 \pi^+ \pi^- (\Upsilon(4S) \to e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^- K^- \gamma \gamma \gamma \gamma)$	81	81	1	82

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
83	$\Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \tau^{-}\bar{\nu}_{\tau}D^{+}, \bar{B}^{0} \to \pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}D^{+}, \tau^{-} \to \nu_{\tau}\pi^{+}\pi^{-}\pi^{-}, D^{+} \to K_{L}a_{1}^{+}, D^{+} \to \pi^{0}\pi^{+}\bar{K}^{*}, $ $a_{1}^{+} \to \rho^{0}\pi^{+}, \bar{K}^{*} \to \pi^{+}K^{-}, \rho^{0} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma)$	82	82	1	83
84	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \pi^{0}\pi^{0}\pi^{+}\omega D^{-}, B^{0} \to \rho^{0}\pi^{-}K^{+}D^{0}\bar{D}^{*0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{-} \to \pi^{+}\pi^{-}\pi^{-}K_{S}, \rho^{0} \to \pi^{+}\pi^{-}, D^{0} \to K^{-}a_{1}^{+}, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, K_{S} \to \pi^{+}\pi^{-}, a_{1}^{+} \to \rho^{0}\pi^{+}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \rho^{0} \to \pi^{+}\pi^{-} (\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	83	83	1	84
85	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}X_{u}^{-}, \bar{B}^{0} \to \pi^{0}\pi^{-}\omega D^{*+}, X_{u}^{-} \to K^{*}K^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, K^{*} \to \pi^{0}K^{0}, D^{0} \to \pi^{+}\pi^{-}K_{S}, K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-} (\Upsilon(4S) \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$	84	84	1	85
86	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\pi^{+}\pi^{+}\rho^{-}D^{-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \rho^{-} \to \pi^{0}\pi^{-}, D^{-} \to \pi^{0}\pi^{-}K^{+}K^{-}, D^{*+} \to \pi^{+}D^{0},$ $D^{0} \to \pi^{0}K_{L}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	85	85	1	86
87	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\rho^{+}\rho^{-}\omega D^{-}, \bar{B}^{0} \to D^{*+}D_{s}^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-},$ $D^{-} \to e^{-}\bar{\nu}_{e}K^{0}, D^{*+} \to \pi^{+}D^{0}, D_{s}^{-} \to \rho^{-}\eta, \pi^{0} \to e^{+}e^{-}, K^{0} \to K_{L}, D^{0} \to \pi^{+}\pi^{-}\bar{K}^{*},$ $\rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{+}K^{-}$ $(\Upsilon(4S) \to e^{+}e^{-}e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	86	86	1	87
88	$ \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D_{1}^{\prime-}, \bar{B}^{0} \to \rho^{-}D_{2}^{*+}\gamma, D_{1}^{\prime-} \to \pi^{-}\bar{D}^{*0}, \rho^{-} \to \pi^{0}\pi^{-}, D_{2}^{*+} \to \pi^{+}D^{*0},  \bar{D}^{*0} \to \bar{D}^{0}\gamma, D^{*0} \to D^{0}\gamma, \bar{D}^{0} \to \rho^{-}K^{*+}, D^{0} \to \mu^{+}\nu_{\mu}K^{-}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*+} \to \pi^{+}K^{0},  K^{0} \to K_{L}  (\Upsilon(4S) \to \mu^{+}\mu^{+}\nu_{\mu}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma) $	87	87	1	88
89	$\Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to D_{2}^{*+}D_{s}^{-}, \bar{B}^{0} \to \pi^{0}\pi^{-}\omega D^{*+}, D_{2}^{*+} \to \pi^{+}D^{*0}, D_{s}^{-} \to \pi^{+}\pi^{-}\pi^{-}\omega, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, D^{*0} \to D^{0}\gamma, \omega \to \pi^{0}\gamma, D^{0} \to \pi^{-}\rho^{+}, D^{0} \to \pi^{0}\eta K_{S}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \gamma\gamma, K_{S} \to \pi^{+}\pi^{-} (\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	88	88	1	89
90	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \tau^{+}\nu_{\tau}\bar{D}^{*-}, B^{0} \to \pi^{-}\rho^{+}K^{0}\bar{K}^{0}\bar{K}^{*}K^{+}D^{-}, \tau^{+} \to \bar{\nu}_{\tau}\pi^{+}, \bar{D}^{*-} \to \pi^{0}D^{-}, \rho^{+} \to \pi^{0}\pi^{+}, K^{0} \to K_{S}, \bar{K}^{0} \to K_{L}, \bar{K}^{*} \to \pi^{+}K^{-}, D^{-} \to \pi^{0}\pi^{-}K^{*}, D^{-} \to \pi^{0}\pi^{0}\pi^{-}\pi^{-}K^{+}, K_{S} \to \pi^{0}\pi^{0}, K^{L} \to \pi^{0}\pi^{0}\pi^{0}, K^{*} \to \pi^{0}K^{0}, K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-} (\Upsilon(4S) \to \nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	89	89	1	90
91	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\bar{D}^{*-}, \bar{B}^{0} \to \rho^{0}\pi^{+}\pi^{-}\rho^{-}\eta D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \\ \eta \to \pi^{0}\pi^{0}\pi^{0}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to \pi^{0}K_{L}\eta, D^{0} \to \omega K_{S}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \\ K_{S} \to \pi^{+}\pi^{-} \\ (\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	90	90	1	91
92	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{0}\pi^{+}\rho^{-}\bar{K}^{0}K^{+}D^{-}, \bar{B}^{0} \to K^{0}\bar{K}^{0}\bar{K}^{*}\phi, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{K}^{0} \to K_{L},$ $D^{-} \to \pi^{0}K_{L}\pi^{-}, K^{0} \to K_{L}, \bar{K}^{0} \to K_{L}, \bar{K}^{*} \to \pi^{+}K^{-}, \phi \to K^{+}K^{-}, K_{L} \to \pi^{0}\pi^{+}\pi^{-},$ $K_{L} \to \pi^{0}\pi^{0}\pi^{0}$ $(\Upsilon(4S) \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}K^{-}\gamma$	91	91	1	92

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
93	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to e^+ \nu_e D^-, \bar{B}^0 \to \rho^- K^+ K^- D^+, D^- \to \pi^0 \pi^- K^*, \rho^- \to \pi^0 \pi^-, D^+ \to \mu^+ \nu_\mu \pi^+ K^-, K^* \to \pi^- K^+ $ $(\Upsilon(4S) \to e^+ \nu_e \mu^+ \nu_\mu \pi^+ \pi^- \pi^- \pi^- K^+ K^+ K^- K^- \gamma \gamma \gamma \gamma)$	92	92	1	93
94	$\Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \mu^{+} \nu_{\mu} D^{-}, \bar{B}^{0} \to \pi^{0} \bar{p} \Lambda_{c}^{+}, D^{-} \to \pi^{+} \pi^{-} \pi^{-} K_{S}, \Lambda_{c}^{+} \to \rho^{0} \Sigma^{*+}, K_{S} \to \pi^{0} \pi^{0},$ $\rho^{0} \to \pi^{+} \pi^{-}, \Sigma^{*+} \to \pi^{+} \Lambda, \Lambda \to \pi^{-} p$ $(\Upsilon(4S) \to \mu^{+} \nu_{\mu} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} p \bar{p} \gamma \gamma \gamma \gamma \gamma)$	93	93	1	94
95	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{-}\omega\omega, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{0}D^{+}, $ $D^{+} \to \pi^{0}\pi^{+}K_{S}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	94	94	1	95
96	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to K_S J/\psi, \bar{B}^0 \to D^+ D_s^{*-}, K_S \to \pi^+ \pi^-, J/\psi \to \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^-, D^+ \to e^+ \nu_e \bar{K}^0, D_s^{*-} \to D_s^{*-} \gamma, \bar{K}^0 \to K_S, D_s^{-} \to \pi^- \omega, K_S \to \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^- (\Upsilon(4S) \to e^+ \nu_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \gamma \gamma \gamma \gamma \gamma)$	95	95	1	96
97	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{+}\pi^{-}\bar{D}^{*0}, \bar{B}^{0} \to K^{-}D^{*+}\bar{D}^{*0}, \rho^{0} \to \pi^{+}\pi^{-}, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, D^{*+} \to \pi^{+}D^{0},$ $\bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, \bar{D}^{0} \to \pi^{-}K^{+}, D^{0} \to \eta\eta, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{*+}, \eta \to \gamma\gamma, \eta \to \pi^{0}\pi^{0}\pi^{0},$ $K^{*+} \to \pi^{0}K^{+}$ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	96	96	1	97
98	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\bar{K}^{*}K^{+}\bar{D}^{*-}, \bar{B}^{0} \to \bar{K}^{*}\bar{D}^{0}D^{*0}, \bar{K}^{*} \to \pi^{+}K^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0},$ $\bar{D}^{0} \to \pi^{-}\omega K^{+}, D^{*0} \to D^{0}\gamma, \bar{D}^{0} \to K^{+}a_{1}^{-}, \bar{K}^{0} \to K_{L}, \omega \to \pi^{0}\gamma, D^{0} \to \pi^{+}K^{-},$ $a_{1}^{-} \to \pi^{0}\rho^{-}, \rho^{-} \to \pi^{0}\pi^{-}$ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	97	97	1	98
99	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to D^{*+}\bar{D}^{*-}\gamma\gamma, \bar{B}^{0} \to \pi^{0}\pi^{0}\rho^{0}\pi^{+}\pi^{-}\rho^{-}D^{+}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \\ \rho^{-} \to \pi^{0}\pi^{-}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}, D^{0} \to \pi^{0}\pi^{+}K^{-}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \bar{K}^{*} \to \pi^{+}K^{-} \\ (\Upsilon(4S) \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	98	98	1	99
100	$\Upsilon(4S) \to \bar{B}^0 \bar{B}^0, \bar{B}^0 \to \rho^- \bar{n} \Sigma_c^+, \bar{B}^0 \to \pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- D^{*+}, \rho^- \to \pi^0 \pi^-, \Sigma_c^+ \to \pi^0 \Lambda_c^+, D^{*+} \to \pi^+ D^0,$ $\Lambda_c^+ \to e^+ \nu_e \Sigma^{*0}, D^0 \to \mu^+ \nu_\mu \pi^- \bar{K}^0, \Sigma^{*0} \to \pi^0 \Lambda, \bar{K}^0 \to K_S, \Lambda \to \pi^- p, K_S \to \pi^+ \pi^-$ $(\Upsilon(4S) \to e^+ \nu_e \mu^+ \nu_\mu \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \bar{n} p \gamma \gamma \gamma \gamma \gamma \gamma)$	99	99	1	100
101	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\bar{D}^{*-}, \bar{B}^{0} \to \eta K^{*}K^{*-}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \eta \to \pi^{0}\pi^{0}\pi^{0}, K^{*} \to \pi^{0}K^{0}, K^{0} \to K^{0}K^{0}, K^{$	100	100	1	101
102	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \eta K^{*}D^{0}\bar{D}^{0}, \bar{B}^{0} \to \rho^{-}D^{*+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, K^{*} \to \pi^{-}K^{+}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S},$ $\bar{D}^{0} \to \pi^{-}K^{+}, \rho^{-} \to \pi^{0}\pi^{-}, D^{*+} \to \pi^{0}D^{+}, K_{S} \to \pi^{+}\pi^{-}, D^{+} \to \pi^{+}\pi^{+}K^{-}$ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	101	101	1	102
103	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D_{1}^{-}, \bar{B}^{0} \to \pi^{+}\rho^{-}\bar{K}^{*}D^{0}\bar{D}^{0}, D_{1}^{-} \to \pi^{-}\bar{D}^{*0}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{K}^{*} \to \pi^{+}K^{-},$ $D^{0} \to \mu^{+}\nu_{\mu}K^{-}, \bar{D}^{0} \to \mu^{-}\bar{\nu}_{\mu}K^{+}, \bar{D}^{*0} \to \bar{D}^{0}\gamma, \bar{D}^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{+}\mu^{+}\mu^{-}\nu_{\mu}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma)$	102	102	1	103

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
104	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\pi^{+}\rho^{+}K^{*}K^{-}\bar{D}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*} \to \pi^{-}K^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$ $D^{*+} \to \pi^{0}D^{+}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}K^{+}, D^{+} \to e^{+}\nu_{e}\bar{K}^{0}, \bar{K}^{0} \to K_{L}$ $(\Upsilon(4S) \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	103	103	1	104
105	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\pi^{-}\rho^{+}\rho^{+}\rho^{-}K^{0}D^{0}, \bar{B}^{0} \to D^{+}\Delta^{0}\bar{\Delta}^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, K^{0} \to K_{L}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}, D^{+} \to \pi^{+}\pi^{+}K_{S}K^{-}, \Delta^{0} \to \pi^{-}p, \bar{\Delta}^{+} \to \pi^{-}\bar{n}, K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-} \to K_{S} \to \pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}$	104	104	1	105
106	$\rho^{-} \to \pi^{0}\pi^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, K^{0} \to K_{S}, K^{0} \to K_{S}, D^{0} \to \rho^{+}K^{*-}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}\pi^{+}K^{0}, K_{S} \to \pi^{0}\pi^{0}, K_{S} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}, K^{0} \to K_{L}, \bar{K}^{0} \to K_{L} $ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	105	105	1	106
107	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\eta\bar{D}^{*-}, \bar{B}^{0} \to \pi^{-}\eta'D^{+}, \eta \to \gamma\gamma, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \eta' \to \pi^{0}\pi^{0}\eta,$ $D^{+} \to \pi^{0}\pi^{+}K_{S}, \bar{D}^{0} \to \pi^{-}K_{1}^{+}, \eta \to \gamma\gamma, K_{S} \to \pi^{+}\pi^{-}, K_{1}^{+} \to \rho^{+}K^{0}, \rho^{+} \to \pi^{0}\pi^{+},$ $K^{0} \to K_{S}, K_{S} \to e^{+}\nu_{e}\pi^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	106	106	1	107
108	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{-}\omega D^{*+}n\bar{n}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0},$ $\bar{D}^{0} \to \pi^{0}\rho^{-}K^{+}, D^{0} \to \pi^{0}\pi^{+}K^{-}, \rho^{-} \to \pi^{0}\pi^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	107	107	1	108
109	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{-}\bar{K}^{0}K^{*+}D^{-}, B^{0} \to \rho^{0}\pi^{+}\pi^{-}\rho^{+}\eta D^{-}, \bar{K}^{0} \to K_{S}, K^{*+} \to \pi^{0}K^{+}, D^{-} \to \pi^{-}\pi^{-}K^{+},$ $\rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, D^{-} \to \pi^{-}K_{1}^{'0}, K_{S} \to \pi^{+}\pi^{-}, K_{1}^{'0} \to \pi^{0}K^{*},$ $K^{*} \to \pi^{-}K^{+}$ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}\gamma$	108	108	1	109
110	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^0 \pi^0 \pi^+ \omega \bar{D}^{*-}, \bar{B}^0 \to J/\psi \bar{K}_1^0, \omega \to \pi^0 \pi^+ \pi^-, \bar{D}^{*-} \to D^- \gamma, J/\psi \to \eta \eta' \gamma,$ $\bar{K}_1^0 \to \rho^+ K^-, D^- \to K_S a_1^-, \eta \to \gamma \gamma, \eta' \to \pi^+ \pi^- \eta, \rho^+ \to \pi^0 \pi^+, K_S \to \pi^0 \pi^0,$ $a_1^- \to \pi^0 \rho^-, \eta \to \pi^0 \pi^0, \rho^- \to \pi^0 \pi^-$ $(\Upsilon(4S) \to \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^- \gamma \gamma$	109	109	1	110
111	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\bar{D}^{*-}, \bar{B}^{0} \to D^{*0}n\bar{\Delta}^{0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*0} \to D^{0}\gamma, \bar{\Delta}^{0} \to \pi^{+}\bar{p}, \\ \bar{D}^{0} \to \pi^{0}K_{L}, D^{0} \to e^{+}\nu_{e}K^{-} \\ (\Upsilon(4S) \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{-}K^{-}n\bar{p}\gamma\gamma\gamma\gamma\gamma)$	110	110	1	111
112	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{+}\rho^{+}\rho^{-}D^{-}, \bar{B}^{0} \to \pi^{0}\bar{n}\Xi_{c}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, D^{-} \to \pi^{-}\pi^{-}K^{+}, \Xi_{c}^{0} \to \pi^{+}\bar{K}^{0}\Sigma^{-}, \bar{K}^{0} \to K_{L}, \Sigma^{-} \to \pi^{-}n $ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma)$	111	111	1	112
113	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to \pi^{0}\rho^{-}K^{+},$ $D^{0} \to \pi^{0}\pi^{+}K^{-}, \rho^{-} \to \pi^{0}\pi^{-}$ $(\Upsilon(4S) \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$	112	13	1	113

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
114	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\eta\bar{D}^{*-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{+}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{+} \to \rho^{+}\bar{K}^{*}, D^{-} \to \pi^{0}\pi^{-}K^{*}, \rho^{+} \to \pi^{0}\pi^{+}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, K^{*} \to \pi^{-}K^{+}, \bar{K}^{0} \to K_{L}, K_{L} \to \pi^{0}\pi^{0}\pi^{0}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	113	112	1	114
115	$ \Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \eta K^0 D^{*0} \bar{D}^{*0}, \bar{B}^0 \to \pi^0 \pi^- \omega \omega D^+, \eta \to \gamma \gamma, K^0 \to K_L, D^{*0} \to \pi^0 D^0, $ $ \bar{D}^{*0} \to \pi^0 \bar{D}^0, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, D^+ \to e^+ \nu_e \bar{K}^0, D^0 \to \pi^0 \pi^+ K^-, \bar{D}^0 \to \pi^0 \pi^- K^+, $ $ \bar{K}^0 \to K_S, K_S \to \pi^+ \pi^- $ $ (\Upsilon(4S) \to e^+ \nu_e K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma) $	114	113	1	115
116	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\pi^{-}\bar{D}^{*0}, \bar{B}^{0} \to \pi^{-}\omega D^{+}, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{+} \to \pi^{0}\pi^{+}\bar{K}^{*}, \\ \bar{D}^{0} \to \eta\eta, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, \eta \to \gamma\gamma, \eta \to \pi^{0}\pi^{+}\pi^{-}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{0}\pi^{0} \\ (\Upsilon(4S) \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	115	114	1	116
117	$\Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to D^{+}D'_{s1}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{+}, D^{+} \to \pi^{0}\pi^{+}\phi, D'_{s1} \to \pi^{0}D_{s}^{*-}, D^{+} \to \pi^{0}K_{L}\pi^{+},$ $\phi \to \eta\gamma, D_{s}^{*-} \to D_{s}^{-}\gamma, \eta \to \pi^{0}\pi^{0}\pi^{0}, D_{s}^{-} \to \tau^{-}\bar{\nu}_{\tau}, \tau^{-} \to \nu_{\tau}\pi^{-}$ $(\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	116	115	1	117
118	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \omega p\bar{\Lambda}_{c}^{-}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\pi^{-}D^{*+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{\Lambda}_{c}^{-} \to K^{0}\bar{p}, D^{*+} \to \pi^{+}D^{0}, K^{0} \to K_{S}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}, K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-} (\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}p\bar{p}\gamma\gamma\gamma\gamma\gamma)$	117	116	1	118
119	$\Upsilon(4S) \to B^0 B^0, B^0 \to \pi^+ \eta \bar{D}^{*-}, B^0 \to K^+ \bar{D}^{*-} D^{*0}, \eta \to \gamma \gamma, \bar{D}^{*-} \to \pi^- \bar{D}^0, \bar{D}^{*-} \to \pi^- \bar{D}^0,$ $D^{*0} \to D^0 \gamma, \bar{D}^0 \to \omega K_S, \bar{D}^0 \to \pi^0 K^*, D^0 \to \eta K_S, \omega \to \pi^0 \pi^+ \pi^-, K_S \to \pi^+ \pi^-,$ $K^* \to \pi^0 K^0, \eta \to \pi^0 \pi^0 \pi^0, K_S \to \pi^0 \pi^0, K^0 \to K_S, K_S \to \pi^0 \pi^0$ $(\Upsilon(4S) \to \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma \gamma$	118	117	1	119
120	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}K^{0}\bar{K}^{*}K^{+}D^{-}, \bar{B}^{0} \to \pi^{+}\pi^{-}D^{+}D_{s}^{-}, K^{0} \to K_{L}, \bar{K}^{*} \to \pi^{+}K^{-}, D^{-} \to \pi^{-}K_{S}, D^{+} \to \pi^{0}\pi^{+}\pi^{+}K^{-}, D_{s}^{-} \to K^{*}K^{*-}, K_{S} \to \pi^{+}\pi^{-}, K^{*} \to \pi^{0}K^{0}, K^{*-} \to \pi^{-}\bar{K}^{0}, K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{0}\pi^{0}$ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	119	118	1	120
121	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to D^{-}\bar{\Delta}^{-}\Delta^{0}, \bar{B}^{0} \to \pi^{+}\pi^{+}\rho^{-}\rho^{-}\bar{K}^{0}\eta', D^{-} \to \pi^{0}K_{L}\pi^{-}, \bar{\Delta}^{-} \to \pi^{+}\bar{n}, \Delta^{0} \to \pi^{-}p,$ $\rho^{-} \to \pi^{0}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{K}^{0} \to K_{S}, \eta' \to \pi^{+}\pi^{-}\eta, K_{S} \to \pi^{+}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}$ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	120	119	1	121
122	$ \Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^0 \rho^+ \omega \omega \bar{D}^{*-}, \bar{B}^0 \to D^{*+} a_1^-, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, \\ \bar{D}^{*-} \to \pi^- \bar{D}^0, D^{*+} \to \pi^0 D^+, a_1^- \to \pi^0 \rho^-, \bar{D}^0 \to \pi^0 \rho^0, D^+ \to \pi^0 \pi^+ \bar{K}^*, \rho^- \to \pi^0 \pi^-, \\ \rho^0 \to \pi^+ \pi^-, \bar{K}^* \to \pi^+ K^- \\ (\Upsilon(4S) \to \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma$	121	120	1	122
123	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to K^+ \bar{D}^{*-} D^{*0}, \bar{B}^0 \to \bar{K}^0 D^{*0} \bar{D}^{*0}, \bar{D}^{*-} \to \pi^0 D^-, D^{*0} \to \pi^0 D^0, \bar{K}^0 \to K_L,$ $D^{*0} \to \pi^0 D^0, \bar{D}^{*0} \to \pi^0 \bar{D}^0, D^- \to e^- \bar{\nu}_e \pi^- K^+, D^0 \to \rho^+ K^{*-}, D^0 \to \pi^+ \pi^+ \pi^- \pi^-, \bar{D}^0 \to \pi^- K^+,$ $\rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S, K_S \to \pi^+ \pi^-$ $(\Upsilon(4S) \to e^- \bar{\nu}_e K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^+ \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	122	121	1	123

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
124	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\rho^{0}\pi^{+}\eta'\bar{D}^{*-}, \bar{B}^{0} \to K^{*-}D^{*+}\bar{D}^{*0}, \rho^{0} \to \pi^{+}\pi^{-}, \eta' \to \pi^{+}\pi^{-}\eta, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$ $K^{*-} \to \pi^{-}\bar{K}^{0}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, \eta \to \gamma\gamma, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}K^{+}, \bar{K}^{0} \to K_{S},$ $D^{0} \to e^{+}\nu_{e}\pi^{-}\bar{K}^{0}, \pi^{0} \to e^{+}e^{-}, \bar{D}^{0} \to \pi^{+}\pi^{-}K_{S}, K_{S} \to \pi^{0}\pi^{0}, \bar{K}^{0} \to K_{L}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{+}e^{+}e^{-}e^{-}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	123	122	1	124
125	$\Upsilon(4S) \to \bar{B}^0 \bar{B}^0, \bar{B}^0 \to K^- D^{*+} \bar{D}^{*0}, \bar{B}^0 \to \pi^0 \rho^- \omega D^+, D^{*+} \to \pi^0 D^+, \bar{D}^{*0} \to \pi^0 \bar{D}^0, \rho^- \to \pi^0 \pi^-,$ $\omega \to \pi^0 \pi^+ \pi^-, D^+ \to \pi^+ \pi^+ \pi^- K^-, D^+ \to \pi^+ \bar{K}_1^{'0}, \bar{D}^0 \to K^+ a_1^-, \bar{K}_1^{'0} \to \pi^0 \bar{K}^*, a_1^- \to \pi^0 \rho^-,$ $\bar{K}^* \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-, \pi^0 \to e^+ e^-$ $(\Upsilon(4S) \to e^+ e^- \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- K^- K^- \gamma \gamma)$	124	123	1	125
126	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}\bar{\Delta}^{-}\Delta^{0}, \bar{B}^{0} \to \pi^{0}\pi^{0}\pi^{+}\pi^{-}\pi^{-}D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \bar{\Delta}^{-} \to \pi^{+}\bar{n}, \Delta^{0} \to \pi^{0}n,$ $D^{*+} \to \pi^{0}D^{+}, \bar{D}^{0} \to \pi^{-}K^{+}, D^{+} \to \pi^{0}\pi^{+}K_{S}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	125	124	1	126
127	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}D'^{+}_{s1}, \bar{B}^{0} \to \pi^{0}\pi^{-}\eta\omega D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D'^{+}_{s1} \to \pi^{0}D^{*+}_{s}, \eta \to \gamma\gamma,$ $\omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}K^{*+}, D^{*+}_{s} \to D^{+}_{s}\gamma, D^{0} \to \pi^{0}\pi^{+}K^{*-}, K^{*+} \to \pi^{+}K^{0},$ $D^{+}_{s} \to \bar{K}^{*}K^{*+}, K^{*-} \to \pi^{-}\bar{K}^{0}, K^{0} \to K_{S}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, K^{*+} \to \pi^{0}K^{+}, \bar{K}^{0} \to K_{S},$ $K_{S} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{L}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	126	125	1	127
128	$\Upsilon(4S) \to \bar{B}^0 \bar{B}^0, \bar{B}^0 \to \mu^- \bar{\nu}_\mu D_1'^+, \bar{B}^0 \to \bar{K}^* K^- D^+, D_1'^+ \to \pi^+ D^{*0}, \bar{K}^* \to \pi^0 \bar{K}^0, D^+ \to \pi^0 \pi^+ K_S, \\ D^{*0} \to D^0 \gamma, \bar{K}^0 \to K_L, K_S \to \pi^+ \pi^-, D^0 \to K_L K^+ K^- \\ (\Upsilon(4S) \to \mu^- \bar{\nu}_\mu K_L K_L \pi^+ \pi^+ \pi^- K^+ K^- K^- \gamma \gamma \gamma \gamma \gamma)$	127	126	1	128
129	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D^{-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, D^{-} \to \rho^{-}K^{*}, D^{*+} \to \pi^{+}D^{0}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*} \to \pi^{-}K^{+}, D^{0} \to K^{-}a_{1}^{+}, a_{1}^{+} \to \pi^{0}\rho^{+}, \rho^{+} \to \pi^{0}\pi^{+} (\Upsilon(4S) \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma)$	128	13	1	129
130	$\Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \pi^{+} K^{0} K^{0} D_{s}^{-}, \bar{B}^{0} \to \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} D^{*+}, K^{0} \to K_{S}, K^{0} \to K_{S}, D_{s}^{-} \to \pi^{0} \pi^{-} \omega,$ $D^{*+} \to \pi^{+} D^{0}, K_{S} \to \pi^{+} \pi^{-}, K_{S} \to \pi^{0} \pi^{0}, \omega \to \pi^{0} \pi^{+} \pi^{-}, D^{0} \to K^{-} a_{1}^{+}, a_{1}^{+} \to \rho^{0} \pi^{+},$ $\rho^{0} \to \pi^{+} \pi^{-}$ $(\Upsilon(4S) \to \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{-} \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	129	127	1	130
131	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to D^{+}a_{1}^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{+} \to K_{S}K_{S}K^{+}, a_{1}^{-} \to \pi^{0}\rho^{-},$ $\bar{D}^{0} \to K_{L}\eta', K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \eta' \to \pi^{+}\pi^{-}\eta, \eta \to \gamma\gamma$ $(\Upsilon(4S) \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma)$	130	128	1	131
132	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{0}\pi^{+}\pi^{+}\pi^{-}\eta D^{-}, \bar{B}^{0} \to \pi^{0}\rho^{-}\eta D^{+}, \rho^{0} \to \pi^{+}\pi^{-}, \eta \to \gamma\gamma, D^{-} \to \pi^{-}\rho^{-}K^{+}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \gamma\gamma, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{K}^{0} \to K_{L} $ $(\Upsilon(4S) \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	131	129	1	132
133	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^0 \pi^0 \pi^0 \pi^0 \pi^0 \pi^0 \rho^+ \omega \omega D^-, \bar{B}^0 \to \bar{K}^* \bar{\Sigma}^{*0} \Xi_c^0, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \gamma, \omega \to \pi^0 \pi^+ \pi^-, D^- \to \pi^- K_S, \bar{K}^* \to \pi^+ K^-, \bar{\Sigma}^{*0} \to \pi^+ \bar{\Sigma}^-, \Xi_c^0 \to \bar{K}^0 \Sigma^0, \pi^0 \to e^+ e^-, K_S \to \pi^+ \pi^-, \bar{\Sigma}^- \to \pi^- \bar{n}, \bar{K}^0 \to K_S, \Sigma^0 \to \Lambda \gamma, K_S \to \pi^0 \pi^0, \Lambda \to \pi^- p$ $(\Upsilon(4S) \to e^+ e^- \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^- \bar{n} p \gamma $	132	130	1	133

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
134	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^+ D^-, \bar{B}^0 \to e^- \bar{\nu}_e \pi^+ D^{*0}, \rho^+ \to \pi^0 \pi^+, D^- \to \pi^0 \pi^- K^*, D^{*0} \to \pi^0 D^0, K^* \to \pi^- K^+, D^0 \to K^- a_1^+, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^- (\Upsilon(4S) \to e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma \gamma)$	133	131	1	134
135	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \tau^{+}\nu_{\tau}\bar{D}^{*-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{+}, \tau^{+} \to \bar{\nu}_{\tau}\pi^{+}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0},$ $\bar{D}^{0} \to \pi^{0}\rho^{-}K^{+}, \bar{K}^{0} \to K_{L}, \rho^{-} \to \pi^{0}\pi^{-}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma)$	134	132	1	135
136	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\bar{K}^{*}K^{+}D^{-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D_{2}^{*+}, \bar{K}^{*} \to \pi^{+}K^{-}, D^{-} \to e^{-}\bar{\nu}_{e}K^{0}, D_{2}^{*+} \to \pi^{0}D^{*+}, K_{S} \to \pi^{+}\pi^{-}, D^{+} \to \pi^{0}\pi^{+}\bar{K}^{*}, \bar{K}^{*} \to \pi^{+}K^{-} $ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	135	133	1	136
137	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}D^{-}, \bar{B}^{0} \to \pi^{-}\eta D^{*+}, D^{-} \to e^{-}\bar{\nu}_{e}\pi^{-}K^{+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, D^{*+} \to \pi^{+}D^{0},$ $D^{0} \to K^{-}a_{1}^{+}, a_{1}^{+} \to \pi^{0}\rho^{+}, \rho^{+} \to \pi^{0}\pi^{+}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	136	134	1	137
138	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{+}\eta K^{0}\bar{K}^{*}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{-}\pi^{-}\rho^{+}\omega D^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, K^{0} \to K_{S},$ $\bar{K}^{*} \to \pi^{+}K^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{+} \to \pi^{+}\bar{K}_{1}^{'0}, K_{S} \to \pi^{+}\pi^{-},$ $\bar{D}^{0} \to K_{L}\pi^{+}\pi^{-}, \bar{K}_{1}^{'0} \to \pi^{+}K^{*-}, K^{*-} \to \pi^{-}\bar{K}^{0}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{0}\pi^{0}$ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	137	135	1	138
139	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\rho^{+}D^{-}, \bar{B}^{0} \to \pi^{-}\bar{\Delta}^{+}\Sigma_{c}^{*++}, \rho^{+} \to \pi^{0}\pi^{+}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{*}, \bar{\Delta}^{+} \to \pi^{0}\bar{p},$ $\Sigma_{c}^{*++} \to \pi^{+}\Lambda_{c}^{+}, K^{*} \to \pi^{0}K^{0}, \Lambda_{c}^{+} \to K^{+}\Xi^{*0}, K^{0} \to K_{S}, \Xi^{*0} \to \pi^{+}\Xi^{-}, K_{S} \to \pi^{+}\pi^{-},$ $\Xi^{-} \to \pi^{-}\Lambda, \Lambda \to \pi^{0}n$ $(\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	138	136	1	139
140	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\eta\omega D^{-}, \bar{B}^{0} \to \tau^{-}\bar{\nu}_{\tau}D^{*+}, \eta \to \gamma\gamma, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{-} \to K_{L}a_{1}^{-}, \tau^{-} \to \nu_{\tau}\pi^{0}\pi^{0}\pi^{-}, D^{*+} \to \pi^{0}D^{+}, a_{1}^{-} \to \rho^{0}\pi^{-}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}, \rho^{0} \to \pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{+}K^{-} (\Upsilon(4S) \to \mu^{+}\nu_{\mu}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	139	137	1	140
141	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to D^{*+}D_{s0}^{*-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*+} \to \pi^{0}D^{+}, D_{s0}^{*-} \to \pi^{0}D_{s}^{-}, \\ \bar{D}^{0} \to e^{-}\bar{\nu}_{e}K^{*+}, D^{+} \to e^{+}\nu_{e}\pi^{+}K^{-}, D_{s}^{-} \to K_{L}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{S}, K_{S} \to \pi^{0}\pi^{0} \\ (\Upsilon(4S) \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	140	138	1	141
142	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to D^{-}D_{s}^{*+}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{+}, D^{-} \to e^{-}\bar{\nu}_{e}K^{0}, D_{s}^{*+} \to D_{s}^{+}\gamma, D^{+} \to e^{+}\nu_{e}\bar{K}^{0}, K^{0} \to K_{S}, D_{s}^{+} \to \bar{K}^{*}K^{*+}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{+}K^{-}, K^{*+} \to \pi^{0}K^{+}, K_{S} \to \pi^{0}\pi^{0}$ $(\Upsilon(4S) \to e^{+}e^{-}e^{-}\nu_{e}\bar{\nu}_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$	141	139	1	142
143	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^0 \pi^+ \pi^- \rho^+ \bar{D}^{*-}, \bar{B}^0 \to \pi^0 \pi^+ \pi^- \pi^- D^{*+}, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, \bar{D}^{*-} \to \pi^- \bar{D}^0,$ $D^{*+} \to \pi^+ D^0, \bar{D}^0 \to \pi^0 \pi^+ \pi^- K^*, D^0 \to \pi^0 \eta K_S, K^* \to \pi^- K^+, \eta \to \gamma \gamma, K_S \to \pi^+ \pi^-$ $(\Upsilon(4S) \to \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	142	140	1	143
144	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \omega\bar{D}^{*-}D_{s}^{+}\gamma, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{0}D^{-}, D_{s}^{+} \to e^{+}\nu_{e}\eta,$ $D^{*+} \to \pi^{+}D^{0}, D^{-} \to e^{-}\bar{\nu}_{e}K^{*}, \eta \to \gamma\gamma, D^{0} \to e^{+}\nu_{e}K^{-}, K^{*} \to \pi^{-}K^{+}$ $(\Upsilon(4S) \to e^{+}e^{+}e^{-}e^{-}\nu_{e}\nu_{e}\bar{\nu}_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	143	141	1	144

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
145	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{+}\pi^{-}\eta K^{*}, \bar{B}^{0} \to \pi^{0}\pi^{0}\pi^{0}\rho^{-}\eta D^{*+}, \rho^{0} \to \pi^{+}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, K^{*} \to \pi^{-}K^{+},$ $\rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, D^{0} \to \omega \bar{K}^{*}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0},$ $\bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	144	142	1	145
146	$\Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{+}, \bar{B}^{0} \to \pi^{-}\eta'D^{+}, D^{+} \to \mu^{+}\nu_{\mu}\eta, \eta' \to \pi^{+}\pi^{-}\eta, D^{+} \to K_{S}a_{1}^{+}, \\ \eta \to \pi^{+}\pi^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0}, K_{S} \to \pi^{+}\pi^{-}, a_{1}^{+} \to \pi^{0}\rho^{+}, \rho^{+} \to \pi^{0}\pi^{+} \\ (\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	145	143	1	146
147	$\Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \bar{D}^{*-} D_{s}^{*+}, \bar{B}^{0} \to \tau^{-} \bar{\nu}_{\tau} D^{+}, \bar{D}^{*-} \to \pi^{0} D^{-}, D_{s}^{*+} \to D_{s}^{+} \gamma, \tau^{-} \to e^{-} \bar{\nu}_{e} \nu_{\tau},$ $D^{+} \to \pi^{+} K_{S}, D^{-} \to \mu^{-} \bar{\nu}_{\mu} K^{*}, D_{s}^{+} \to \rho^{+} \phi, K_{S} \to \pi^{+} \pi^{-}, K^{*} \to \pi^{-} K^{+}, \rho^{+} \to \pi^{0} \pi^{+},$ $\phi \to K_{L} K_{S}, K_{S} \to \pi^{+} \pi^{-}$ $(\Upsilon(4S) \to e^{-} \bar{\nu}_{e} \mu^{-} \bar{\nu}_{\mu} \nu_{\tau} \bar{\nu}_{\tau} K_{L} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} K^{+} \gamma \gamma \gamma \gamma \gamma)$	146	144	1	147
148	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{-}\bar{K}^{0}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \bar{K}^{0} \to K_{S}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0},$ $\bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, K_{S} \to \pi^{0}\pi^{0}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{0}\pi^{0}$ $(\Upsilon(4S) \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	147	145	1	148
149	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D^{-}, \bar{B}^{0} \to D^{*+}a_{1}^{-}, D^{-} \to e^{-}\bar{\nu}_{e}K_{2}^{*0}, D^{*+} \to \pi^{0}D^{+}, a_{1}^{-} \to \pi^{0}\rho^{-}, K_{2}^{*0} \to \pi^{0}K^{0}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}, \rho^{-} \to \pi^{0}\pi^{-}, K^{0} \to K_{L}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-} $ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{+}\mu^{+}\nu_{\mu}\nu_{\mu}K_{L}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	148	146	1	149
150	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \pi^{+}\pi^{-}\bar{D}^{0}, B^{0} \to \pi^{+}\omega D^{-}n\bar{n}, \bar{D}^{0} \to K^{+}a_{1}^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{-} \to \pi^{0}\pi^{-}K^{*},$ $a_{1}^{-} \to \pi^{0}\rho^{-}, K^{*} \to \pi^{0}K^{0}, \rho^{-} \to \pi^{0}\pi^{-}, K^{0} \to K_{L}$ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	149	147	1	150
151	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{-}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}\pi^{0}K^{+}, \\ \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-} \\ (\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma)$	150	148	1	151
152	$ \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \tau^{+}\nu_{\tau}\bar{D}^{*-}, B^{0} \to K^{0}D^{0}\bar{D}^{*0}, \tau^{+} \to \bar{\nu}_{\tau}\pi^{0}\pi^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, K^{0} \to K_{S}, $ $ D^{0} \to \pi^{0}\pi^{+}\pi^{-}\bar{K}^{*}, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}\pi^{+}K^{0}, K_{S} \to \pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, \bar{D}^{0} \to \pi^{-}K_{1}^{+}, $ $ K^{0} \to K_{S}, \bar{K}^{0} \to K_{L}, K_{1}^{+} \to \rho^{+}K^{0}, K_{S} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, K^{0} \to K_{L} $ $ (\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\nu_{\tau}\bar{\nu}_{\tau}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma) $	151	149	1	152
153	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\bar{D}^{*-}\Sigma^{+}\bar{\Sigma}^{-}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\rho^{-}K^{0}\bar{K}^{0}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \Sigma^{+} \to \pi^{+}n, \bar{\Sigma}^{-} \to \pi^{-}\bar{n},$ $\rho^{-} \to \pi^{0}\pi^{-}, K^{0} \to K_{S}, \bar{K}^{0} \to K_{L}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}, \bar{D}^{0} \to K_{L}\pi^{+}\pi^{-}, K_{S} \to \pi^{0}\pi^{0},$ $\bar{K}^{*} \to \pi^{+}K^{-}, K_{L} \to \pi^{0}\pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	152	150	1	153
154	$ \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \pi^{0}\pi^{-}\omega D^{+}p\bar{p}, \bar{B}^{0} \to \pi^{0}\pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\rho^{+}\omega D^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{+} \to \pi^{+}\bar{K}_{1}^{'0}, \rho^{+} \to \pi^{0}\pi^{+}, \\ \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{0} \to \rho^{+}K^{*-}, \bar{K}_{1}^{'0} \to \pi^{+}K^{*-}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}, K^{*-} \to \pi^{0}K^{-}, \\ \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{0}\pi^{0} \\ (\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}p\bar{p}\gamma$	153	151	1	154

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
155	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\rho^{0}\pi^{+}\pi^{-}\rho^{+}D^{-}, \bar{B}^{0} \to \pi^{0}\pi^{+}K^{-}D^{+}\bar{D}^{*-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, D^{-} \to e^{-}\bar{\nu}_{e}K^{0},$ $D^{+} \to \mu^{+}\nu_{\mu}\pi^{+}K^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, K^{0} \to K_{L}, \bar{D}^{0} \to K_{L}\pi^{-}K^{+}, K_{L} \to \pi^{0}\pi^{0}\pi^{0}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	154	152	1	155
156	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^+ \pi^+ \pi^- \eta D^- \bar{\Sigma}^+ \Sigma^-, \bar{B}^0 \to \mu^- \bar{\nu}_\mu D^{*+}, \eta \to \gamma \gamma, D^- \to \mu^- \bar{\nu}_\mu \pi^- K^+, \bar{\Sigma}^+ \to \pi^+ \bar{n},$ $\Sigma^- \to \pi^- n, D^{*+} \to \pi^+ D^0, D^0 \to K^- a_1^+, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ $(\Upsilon(4S) \to \mu^- \mu^- \bar{\nu}_\mu \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^- n \bar{n} \gamma \gamma)$	155	153	1	156
157	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*0}\bar{p}\Delta^{+}, \bar{B}^{0} \to \pi^{0}\pi^{0}\rho^{0}\rho^{0}\rho^{-}D^{*+}, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, \Delta^{+} \to \pi^{+}n, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, D^{*+} \to \pi^{0}D^{+}, \bar{D}^{0} \to \mu^{-}\bar{\nu}_{\mu}K^{+}, D^{+} \to \pi^{+}\pi^{+}K^{-} (\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}n\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	156	154	1	157
158	$\Upsilon(4S) \to \bar{B}^0 \bar{B}^0, \bar{B}^0 \to \pi^- D^{*+}, \bar{B}^0 \to \bar{K}^* J/\psi, D^{*+} \to \pi^+ D^0, \bar{K}^* \to \pi^0 \bar{K}^0, J/\psi \to \rho^+ a_2^-, D^0 \to \mu^+ \nu_\mu K^-, \bar{K}^0 \to K_S, \rho^+ \to \pi^0 \pi^+, a_2^- \to \bar{K}^0 K^-, K_S \to \pi^+ \pi^-, \bar{K}^0 \to K_L (\Upsilon(4S) \to \mu^+ \nu_\mu K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- K^- \gamma \gamma \gamma \gamma)$	157	155	1	158
159	$\Upsilon(4S) \to \bar{B}^0 \bar{B}^0, \bar{B}^0 \to D^{*+} D_s^{*-}, \bar{B}^0 \to e^- \bar{\nu}_e \pi^+ D^{*0}, D^{*+} \to \pi^0 D^+, D_s^{*-} \to D_s^- \gamma, D^{*0} \to \pi^0 D^0,$ $D^+ \to \pi^0 K_L \pi^+, D_s^- \to K^0 K^{*-}, D^0 \to \pi^+ \pi^- K^+ K^-, K^0 \to K_L, K^{*-} \to \pi^- \bar{K}^0, \bar{K}^0 \to K_S,$ $K_S \to \pi^+ \pi^-$ $(\Upsilon(4S) \to e^- \bar{\nu}_e K_L K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma \gamma \gamma)$	158	156	1	159
160	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^- K^0 D^{*+}, \bar{B}^0 \to \pi^- \rho^+ \rho^- K^+ K^- D^+, K^0 \to K_L, D^{*+} \to \pi^0 D^+, \rho^+ \to \pi^0 \pi^+, \\ \rho^- \to \pi^0 \pi^-, D^+ \to e^+ \nu_e \bar{K}^0, D^+ \to \mu^+ \nu_\mu \bar{K}^*, \bar{K}^0 \to K_S, \bar{K}^* \to \pi^+ K^-, K_S \to \pi^+ \pi^- \\ (\Upsilon(4S) \to e^+ \nu_e \mu^+ \nu_\mu K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^- K^- \gamma \gamma \gamma \gamma \gamma)$	159	157	1	160
161	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}D_{0}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\rho^{+}\omega\omega D^{*+}, D_{0}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{0}\gamma,$ $\omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{0}D^{+}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}\rho^{+}, D^{+} \to \pi^{+}\pi^{+}K^{-}, \rho^{+} \to \pi^{0}\pi^{+}$ $(\Upsilon(4S) \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	160	158	1	161
162	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \omega \bar{K}^{0}K^{+}\bar{D}^{*-}, \bar{B}^{0} \to K^{-}D^{*+}\bar{D}^{*0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{K}^{0} \to K_{S}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{*0} \to \bar{D}^{0}\gamma, K_{S} \to \pi^{+}\pi^{-}, D^{-} \to \pi^{-}\pi^{-}K^{+}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}, \bar{D}^{0} \to \rho^{-}K^{*+}, K_{S} \to \pi^{0}\pi^{0}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-} (\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	161	159	1	162
163	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*+}\bar{D}^{*-}D^{*0}, \bar{B}^{0} \to \pi^{0}\pi^{0}\pi^{+}K^{-}\bar{D}^{0}D^{*0}, K^{*+} \to \pi^{+}K^{0}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*0} \to \pi^{0}D^{0}, K^{0} \to K_{S}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{-}K^{+}, D^{0} \to \pi^{0}\rho^{0}, D^{0} \to \pi^{0}\pi^{+}K^{-}, K_{S} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-} $ $(\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	162	160	1	163
164	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\bar{D}^{*-}D^{*0}, \bar{B}^{0} \to \eta D^{*+}D_{s}^{-}, \bar{D}^{*-} \to D^{-}\gamma, D^{*0} \to D^{0}\gamma, \eta \to \gamma\gamma,$ $D^{*+} \to \pi^{0}D^{+}, D_{s}^{-} \to \mu^{-}\bar{\nu}_{\mu}\eta', D^{-} \to K_{S}K_{S}K^{-}, D^{0} \to e^{+}\nu_{e}\pi^{-}\bar{K}^{0}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, \eta' \to \pi^{0}\pi^{0}\eta,$ $K_{S} \to \pi^{0}\pi^{0}, K_{S} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{S}, \bar{K}^{0} \to K_{S}, \eta \to \gamma\gamma, K_{S} \to \pi^{+}\pi^{-},$ $K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	163	161	1	164

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
165	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}K^{0}\bar{K}^{0}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{0}\pi^{-}D^{*+}, K^{0} \to K_{L}, \bar{K}^{0} \to K_{L}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$ $D^{*+} \to \pi^{0}D^{+}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, D^{+} \to \pi^{0}\pi^{+}\phi, \phi \to K_{L}K_{S}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to K_{L}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	164	162	1	165
166	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{-}p\bar{\Xi}_{c}^{*0}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \bar{\Xi}_{c}^{*0} \to \pi^{0}\bar{\Xi}_{c}^{0}, D^{*+} \to \pi^{+}D^{0}, \bar{\Xi}_{c}^{0} \to K^{0}\bar{\Sigma}^{0}, \\ D^{0} \to \rho^{+}K^{*-}, K^{0} \to K_{S}, \bar{\Sigma}^{0} \to \bar{\Lambda}\gamma, \rho^{+} \to \pi^{0}\pi^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{S} \to \pi^{0}\pi^{0}, \\ \bar{\Lambda} \to \pi^{+}\bar{p}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-} \\ (\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}p\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	165	163	1	166
167	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\bar{D}^{*-}, \bar{B}^{0} \to \rho^{-}D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{-} \to \pi^{0}\pi^{-}, D^{*+} \to D^{+}\gamma,$ $\bar{D}^{0} \to \pi^{+}\rho^{-}, D^{+} \to \pi^{+}\pi^{+}K^{-}, \rho^{-} \to \pi^{0}\pi^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma)$	166	164	1	167
168	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to K^{*+}\bar{D}^{*-}D^{0}, B^{0} \to \pi^{0}\pi^{0}\pi^{+}D^{-}, K^{*+} \to \pi^{+}K^{0}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{0} \to \rho^{+}K^{*-},$ $D^{-} \to \pi^{-}K_{1}^{'0}, K^{0} \to K_{S}, D^{-} \to \pi^{-}K_{S}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}, K_{1}^{'0} \to \pi^{-}K^{*+},$ $K_{S} \to \pi^{0}\pi^{0}, K_{S} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{S}, K^{*+} \to \pi^{+}K^{0}, K_{S} \to \pi^{+}\pi^{-}, K^{0} \to K_{L}$ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	167	165	1	168
169	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to K^{*+}\bar{D}^{*-}D^{*0}, B^{0} \to \pi^{0}\eta\bar{K}^{0}K^{+}D^{-}, K^{*+} \to \pi^{+}K^{0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*0} \to D^{0}\gamma,$ $\eta \to \pi^{0}\pi^{0}\pi^{0}, \bar{K}^{0} \to K_{S}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}\eta, K^{0} \to K_{L}, \bar{D}^{0} \to \pi^{+}\rho^{-}, D^{0} \to \pi^{0}\pi^{+}K^{-},$ $K_{S} \to \pi^{+}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \pi^{0} \to e^{+}e^{-}$ $(\Upsilon(4S) \to e^{+}e^{-}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	168	166	1	169
170	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \tau^{+}\nu_{\tau}D_{2}^{*-}, \bar{B}^{0} \to \rho^{0}\pi^{-}\rho^{+}\rho^{-}\eta\omega D^{+}, \tau^{+} \to \bar{\nu}_{\tau}\pi^{0}\pi^{+}, D_{2}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{+} \to e^{+}\nu_{e}\pi^{+}K^{-}, \bar{D}^{0} \to K_{L}\pi^{+}\pi^{-} (\Upsilon(4S) \to e^{+}\nu_{e}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	169	167	1	170
171	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{K}^{*}K^{*+}D^{-}, \bar{B}^{0} \to K^{-}D^{+}\bar{D}^{*0}, \bar{K}^{*} \to \pi^{+}K^{-}, K^{*+} \to \pi^{+}K^{0}, D^{-} \to \pi^{0}K_{L}\pi^{-},$ $D^{+} \to e^{+}\nu_{e}\bar{K}^{0}, \bar{D}^{*0} \to \bar{D}^{0}\gamma, K^{0} \to K_{S}, K_{L} \to e^{+}\nu_{e}\pi^{-}, \bar{K}^{0} \to K_{S}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+},$ $K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{0}\pi^{0}$ $(\Upsilon(4S) \to e^{+}e^{+}\nu_{e}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	170	168	1	171
172	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\rho^{0}\pi^{+}D^{-}, \bar{B}^{0} \to \pi^{+}\rho^{-}\rho^{-}K^{0}\bar{K}^{0}D^{*+}, \rho^{0} \to \pi^{+}\pi^{-}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{-}K^{+}, \rho^{-} \to \pi^{0}\pi^{-}, \\ \rho^{-} \to \pi^{0}\pi^{-}, K^{0} \to K_{L}, \bar{K}^{0} \to K_{S}, D^{*+} \to \pi^{+}D^{0}, K_{S} \to \pi^{0}\pi^{0}, D^{0} \to \pi^{+}\pi^{-}\bar{K}^{*}, \\ \bar{K}^{*} \to \pi^{+}K^{-} \\ (\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	171	169	1	172
173	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\eta K^{0}D^{+}\bar{D}^{*-}, \bar{B}^{0} \to \rho^{0}D^{*+}n\bar{p}, \eta \to \pi^{0}\pi^{0}\pi^{0}, K^{0} \to K_{L}, D^{+} \to K_{S}a_{1}^{+}, \\ \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, K_{S} \to \pi^{0}\pi^{0}, a_{1}^{+} \to \pi^{0}\rho^{+}, \bar{D}^{0} \to \eta\eta', \\ D^{0} \to \pi^{-}K_{S}K^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \gamma\gamma, \eta' \to \pi^{0}\pi^{0}\eta, K_{S} \to \pi^{+}\pi^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0} \\ (\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{p}\gamma))$	172	170	1	173
174	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\eta\bar{K}^{0}K^{+}D^{-}, \bar{B}^{0} \to \pi^{-}\rho^{-}D^{*+}\bar{n}p, \eta \to \pi^{0}\pi^{0}\pi^{0}, \bar{K}^{0} \to K_{L}, D^{-} \to e^{-}\bar{\nu}_{e}\pi^{-}K^{+}, \\ \rho^{-} \to \pi^{0}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}, K_{S} \to \pi^{+}\pi^{-} \\ (\Upsilon(4S) \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	173	171	1	174

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
175	$\Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \rho^{0} n \bar{\Sigma}_{c}^{*0}, \bar{B}^{0} \to \pi^{-} \pi^{-} \rho^{+} D^{+}, \rho^{0} \to \pi^{+} \pi^{-}, \bar{\Sigma}_{c}^{*0} \to \pi^{+} \bar{\Lambda}_{c}^{-}, \rho^{+} \to \pi^{0} \pi^{+},$ $D^{+} \to \pi^{+} \bar{K}_{1}^{'0}, \bar{\Lambda}_{c}^{-} \to \pi^{-} \bar{n}, \bar{K}_{1}^{'0} \to \pi^{+} K^{*-}, K^{*-} \to \pi^{-} \bar{K}^{0}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+} \pi^{-}$ $(\Upsilon(4S) \to \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} n \bar{n} \bar{n} \gamma \gamma)$	174	172	1	175
176	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\bar{D}^{*-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \\ \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-} \\ (\Upsilon(4S) \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma\gamma)$	175	173	1	176
177	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\bar{D}^{*-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*+} \to \pi^{0}D^{+}, D^{-} \to e^{-}\bar{\nu}_{e}K^{0},$ $D^{+} \to \pi^{+}K_{S}, K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{+}e^{-}e^{-}\nu_{e}\bar{\nu}_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma)$	176	174	1	177
178	$\Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \mu^{+} \nu_{\mu} D^{-}, \bar{B}^{0} \to \bar{K}^{*} \phi \eta_{c}, D^{-} \to K_{L} a_{1}^{-}, \bar{K}^{*} \to \pi^{+} K^{-}, \phi \to K_{L} K_{S},$ $\eta_{c} \to \pi^{0} \pi^{+} \pi^{-} \pi^{-} \rho^{+} \omega, a_{1}^{-} \to \pi^{0} \rho^{-}, K_{S} \to \pi^{0} \pi^{0}, \rho^{+} \to \pi^{0} \pi^{+}, \omega \to \pi^{0} \pi^{+} \pi^{-}, \rho^{-} \to \pi^{0} \pi^{-}$ $(\Upsilon(4S) \to \mu^{+} \nu_{\mu} K_{L} K_{L} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{-} \gamma \gamma)$	177	175	1	178
179	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\rho^{0}\pi^{+}D^{-}, \bar{B}^{0} \to \rho^{-}\omega\bar{K}^{*}D_{s}^{+}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, D^{-} \to \pi^{-}\pi^{-}K^{+}, \rho^{-} \to \pi^{0}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, D_{s}^{+} \to \pi^{+}\phi, \bar{K}^{0} \to K_{L}, \phi \to \pi^{0}\pi^{+}\pi^{-} (\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	178	176	1	179
180	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*+}\bar{D}^{*-}D^{*0}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, K^{*+} \to \pi^{+}K^{0}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*0} \to D^{0}\gamma,$ $D^{*+} \to \pi^{0}D^{+}, K^{0} \to K_{S}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{-}K^{+}, D^{0} \to \omega K_{S}, D^{+} \to \mu^{+}\nu_{\mu}\pi^{+}K^{-}, K_{S} \to \pi^{+}\pi^{-},$ $\omega \to \pi^{0}\pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$	179	177	1	180
181	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{-}\bar{D}^{0}D_{s}^{*+}, \bar{B}^{0} \to D^{+}D_{s}^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{D}^{0} \to \mu^{-}\bar{\nu}_{\mu}\pi^{0}K^{+}, D_{s}^{*+} \to D_{s}^{+}\gamma,$ $D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}, D_{s}^{-} \to \rho^{-}\eta, D_{s}^{+} \to \pi^{+}\pi^{+}\pi^{-}\omega, \bar{K}^{*} \to \pi^{+}K^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0},$ $\omega \to \pi^{0}\pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	180	178	1	181
182	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\bar{K}^{0}K^{+}\bar{D}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \bar{K}^{0} \to K_{L}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*+} \to \pi^{+}D^{0},$ $K_{L} \to e^{+}\nu_{e}\pi^{-}, \bar{D}^{0} \to \mu^{-}\bar{\nu}_{\mu}K^{+}, D^{0} \to \pi^{0}\pi^{+}K^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\mu^{-}\mu^{-}\bar{\nu}_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$	181	179	1	182
183	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\Sigma^{0}\bar{\Xi}_{c}^{0}, \bar{B}^{0} \to \rho^{-}D^{*+}, \Sigma^{0} \to \Lambda\gamma, \bar{\Xi}_{c}^{0} \to \pi^{-}K^{0}\bar{\Sigma}^{+}, \rho^{-} \to \pi^{0}\pi^{-}, \\ D^{*+} \to D^{+}\gamma, \Lambda \to \pi^{0}n, K^{0} \to K_{L}, \bar{\Sigma}^{+} \to \pi^{+}\bar{n}, D^{+} \to \pi^{0}\pi^{+}K_{S}, K_{S} \to \pi^{+}\pi^{-} \\ (\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	182	180	1	183
184	$ \Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \pi^{0} \pi^{+} \pi^{+} \pi^{-} \bar{D}^{*-}, \bar{B}^{0} \to D^{*+} \Delta^{0} \bar{\Delta}^{+}, \bar{D}^{*-} \to \pi^{-} \bar{D}^{0}, D^{*+} \to \pi^{0} D^{+}, \Delta^{0} \to \pi^{0} n,  \bar{\Delta}^{+} \to \pi^{0} \bar{p}, \bar{D}^{0} \to \rho^{-} K^{*+}, D^{+} \to \pi^{0} K_{L} \pi^{+}, \rho^{-} \to \pi^{0} \pi^{-}, K^{*+} \to \pi^{+} K^{0}, K^{0} \to K_{L},  K_{L} \to \pi^{0} \pi^{0} \pi^{0}  (\Upsilon(4S) \to K_{L} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} n \bar{p} \gamma \gamma$	183	181	1	184
185	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}, \bar{B}^{0} \to \tau^{-}\bar{\nu}_{\tau}D_{1}^{+}, \tau^{-} \to \mu^{-}\bar{\nu}_{\mu}\nu_{\tau}, D_{1}^{+} \to \pi^{0}D^{*+}, D^{*+} \to \pi^{+}D^{0},$ $D^{0} \to K^{-}a_{1}^{+}, a_{1}^{+} \to \rho^{0}\pi^{+}, \rho^{0} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	184	182	1	185

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
186	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{-}\omega\bar{K}^{*}K^{+}\bar{D}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{K}^{*} \to \pi^{+}K^{-}, \bar{D}^{*-} \to \pi^{0}D^{-},$ $D^{*+} \to \pi^{0}D^{+}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{*}, D^{+} \to \mu^{+}\nu_{\mu}\pi^{+}K^{-}, K^{*} \to \pi^{0}K^{0}, K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{+}\mu^{-}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	185	183	1	186
187	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}D_{s}^{*+}, \bar{B}^{0} \to \pi^{+}\pi^{+}\pi^{-}\pi^{-}\bar{D}^{*0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D_{s}^{*+} \to D_{s}^{+}\gamma, \bar{D}^{*0} \to \bar{D}^{0}\gamma, \\ \bar{D}^{0} \to \pi^{-}K^{+}, D_{s}^{+} \to \rho^{+}\phi, \bar{D}^{0} \to \pi^{+}\pi^{-}K_{S}, \rho^{+} \to \pi^{0}\pi^{+}, \phi \to K^{+}K^{-}, K_{S} \to \pi^{0}\pi^{0} \\ (\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	186	184	1	187
188	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to D^{-}D_{s}^{*+}, \bar{B}^{0} \to \pi^{0}\pi^{+}\omega K^{-}D^{0}, D^{-} \to K_{L}a_{1}^{-}, D_{s}^{*+} \to D_{s}^{+}\gamma, \omega \to \pi^{0}\pi^{+}\pi^{-},$ $D^{0} \to \rho^{+}K^{*-}, K_{L} \to e^{-}\nu_{e}\pi^{+}, a_{1}^{-} \to \rho^{0}\pi^{-}, D_{s}^{+} \to \rho^{+}\eta, \rho^{+} \to \pi^{0}\pi^{+}, K^{*-} \to \pi^{-}\bar{K}^{0},$ $\rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \gamma\gamma, \bar{K}^{0} \to K_{L}$ $(\Upsilon(4S) \to e^{-}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	187	185	1	188
189	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{-}K^{+}D^{*0}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, D^{*0} \to \pi^{0}D^{0}, D^{*+} \to \pi^{+}D^{0}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}\bar{K}^{*},$ $D^{0} \to \pi^{0}\pi^{+}K^{-}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, \bar{K}^{0} \to K_{L}, K_{L} \to \mu^{-}\nu_{\mu}\pi^{+}$ $(\Upsilon(4S) \to \mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	188	186	1	189
190	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{-}\pi^{-}\rho^{+}\rho^{+}\eta, \bar{B}^{0} \to \rho^{0}\rho^{0}D^{0}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, D^{0} \to \pi^{0}\pi^{0}\pi^{+}\pi^{-} $ $(\Upsilon(4S) \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	189	187	1	190
191	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}n\bar{\Xi}_{c}^{'-}, \bar{B}^{0} \to \pi^{0}\pi^{-}\omega\omega D^{+}, \bar{\Xi}_{c}^{'-} \to \bar{\Xi}_{c}^{-}\gamma, \omega \to \pi^{0}\pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{+} \to K_{S}K^{*+}, \bar{\Xi}_{c}^{-} \to \pi^{0}\pi^{-}\bar{\Xi}^{0}, K_{S} \to \pi^{+}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, \bar{\Xi}^{0} \to \pi^{0}\bar{\Lambda}, K^{0} \to K_{L}, \bar{\Lambda} \to \pi^{0}\bar{n}$	190	188	1	191
192	$(\Upsilon(4S) \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- n \bar{n} \bar{n} \gamma \gamma)$ $\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^+ \bar{D}^{*-}, \bar{B}^0 \to \rho^- D_1'^+, \rho^+ \to \pi^0 \pi^+, \bar{D}^{*-} \to \pi^- \bar{D}^0, \rho^- \to \pi^0 \pi^-,$ $D_1'^+ \to \pi^0 D^{*+}, \bar{D}^0 \to \pi^+ \pi^- K_S, D^{*+} \to \pi^+ D^0, K_S \to \pi^0 \pi^0, D^0 \to \pi^0 \pi^0 \bar{K}^*, \bar{K}^* \to \pi^0 \bar{K}^0,$ $\bar{K}^0 \to K_L$ $(\Upsilon(4S) \to K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma \gamma)$	191	189	1	192
193	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}D^{-}D_{s}^{+}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\rho^{-}D^{+}, D^{-} \to K^{*}a_{1}^{-}, D_{s}^{+} \to \rho^{+}\eta', \rho^{-} \to \pi^{0}\pi^{-},$ $D^{+} \to e^{+}\nu_{e}\bar{K}^{0}, K^{*} \to \pi^{0}K^{0}, a_{1}^{-} \to \pi^{0}\rho^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \eta' \to \pi^{0}\pi^{0}\eta, \bar{K}^{0} \to K_{L},$ $K^{0} \to K_{S}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	192	190	1	193
194	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \rho^{-}\bar{D}^{0}D_{s}^{+}, B^{0} \to \pi^{-}\rho^{+}\rho^{+}\eta\bar{D}^{*-}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{D}^{0} \to K_{S}\eta', D_{s}^{+} \to \pi^{+}f_{0}(980),$ $\rho^{+} \to \pi^{0}\pi^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \bar{D}^{*-} \to \pi^{0}D^{-}, K_{S} \to \pi^{0}\pi^{0}, \eta' \to \omega\gamma,$ $f_{0}(980) \to \pi^{0}\pi^{0}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{-}K^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma)$	193	191	1	194
195	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \mu^{+}\nu_{\mu}D_{1}^{\prime-}, B^{0} \to \pi^{0}\pi^{0}\rho^{0}\pi^{+}\omega D^{-}, D_{1}^{\prime-} \to \pi^{0}\bar{D}^{*-}, \rho^{0} \to \pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{-} \to \pi^{-}\pi^{-}K^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \bar{D}^{0} \to \pi^{+}\pi^{+}\pi^{-}\pi^{-} (\Upsilon(4S) \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	194	192	1	195

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
196	$\Upsilon(4S) \to \bar{B}^0 \bar{B}^0, \bar{B}^0 \to \pi^0 \pi^+ \pi^- \pi^- D^{*+}, \bar{B}^0 \to \pi^0 \rho^0 \pi^+ K^+ K^- K^{*-} D^0, D^{*+} \to \pi^+ D^0, \rho^0 \to \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0,$ $D^0 \to \pi^0 \rho^+ K^-, D^0 \to \rho^+ K^{*-}, \bar{K}^0 \to K_S, \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0,$ $K_S \to \pi^+ \pi^-, \bar{K}^0 \to K_L$ $(\Upsilon(4S) \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- K^- \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	195	193	1	196
197	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^0 D^- \bar{\Sigma}^+ \Sigma^0, \bar{B}^0 \to K^* K^- D^+, D^- \to \pi^0 \pi^0 \pi^0 \pi^- K^0, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \Sigma^0 \to \Lambda \gamma,$ $K^* \to \pi^0 K^0, D^+ \to \pi^0 K_L \pi^+, K^0 \to K_S, \Lambda \to \pi^- p, K^0 \to K_S, K_S \to \pi^0 \pi^0,$ $K_S \to \pi^+ \pi^-$ $(\Upsilon(4S) \to K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^- \bar{n} p \gamma \gamma)$	196	194	1	197
198	$\Upsilon(4S) \to B^{0} \bar{B}^{0}, B^{0} \to \pi^{0} \rho^{0} \pi^{+} D^{-}, \bar{B}^{0} \to \pi^{+} \pi^{-} \pi^{-} \omega D^{*+}, \rho^{0} \to \pi^{+} \pi^{-}, D^{-} \to \pi^{-} K_{S}, \omega \to \pi^{0} \pi^{+} \pi^{-}, D^{*+} \to \pi^{+} D^{0}, K_{S} \to \pi^{+} \pi^{-}, D^{0} \to K_{L} \eta', \eta' \to \pi^{+} \pi^{-} \eta, \eta \to \pi^{0} \pi^{0} \pi^{0} $ $(\Upsilon(4S) \to K_{L} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	197	195	1	198
199	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{+}\eta\omega D^{-}, \bar{B}^{0} \to D^{+}a_{1}^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-},$ $D^{-} \to \pi^{0}\pi^{-}K^{*}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, a_{1}^{-} \to \rho^{0}\pi^{-}, K^{*} \to \pi^{-}K^{+}, \bar{K}^{0} \to K_{S}, \rho^{0} \to \pi^{+}\pi^{-},$ $K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	198	196	1	199
200	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to e^+ \nu_e D^-, \bar{B}^0 \to D_s^{*-} D_1^+, D^- \to \pi^- \pi^- K^+, D_s^{*-} \to D_s^- \gamma, D_1^+ \to \pi^+ D^{*0}, D_s^- \to \rho^- \eta, D^{*0} \to \pi^0 D^0, \rho^- \to \pi^0 \pi^-, \eta \to \pi^+ \pi^-, D^0 \to \pi^+ \pi^- \bar{K}^*, \bar{K}^* \to \pi^+ K^- (\Upsilon(4S) \to e^+ \nu_e \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma)$	199	197	1	200

Table 2: Event initial-final states.

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
1	$e^+e^- \to \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma$	13	3	3
2	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma$	1	1	4
3	$e^+e^- \to e^-\bar{\nu}_e\mu^-\bar{\nu}_\mu K_L\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	2	1	5
4	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma$	3	1	6
5	$e^{+}e^{-} \rightarrow e^{+}e^{+}e^{-}\nu_{e}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$	4	1	7
6	$e^{+}e^{-} \rightarrow e^{-}e^{-}\bar{\nu}_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}\gamma$	5	1	8
7	$e^+e^- \to \mu^+\mu^+\nu_\mu\nu_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	6	1	9
8	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma$	7	1	10
9	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\bar{n}p\gamma$	8	1	11
10	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	9	1	12
11	$e^+e^- \to e^+\nu_e K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma$	10	1	13
12	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{\bar{n}}\bar{n}p\gamma$	11	1	14
13	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma$	12	1	15
14	$e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma$	0	1	16
15	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	14	1	17
16	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	15	1	18
17	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	16	1	19
18	$e^+e^- \to \mu^-\bar{\nu}_\mu K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma$	17	1	20
19	$e^+e^- \to e^-\bar{\nu}_e K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma$	18	1	21
20	$e^+e^- \to K_L K_L K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma$	19	1	22
21	$e^+e^- \to e^+\nu_e\mu^-\mu^-\bar{\nu}_\mu\bar{\nu}_\mu K_L K_L \pi^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	20	1	23
22	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma$	21	1	24
23	$e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	22	1	25
24	$e^{+}e^{-} \to e^{+}\nu_{e}\mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma$	23	1	26
25	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}n\bar{n}\gamma$	24	1	27
26	$e^{+}e^{-} \to K_L K_L K_L \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{-} \gamma \gamma$	25	1	28
27	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	26	1	29
28	$e^{+}e^{-} \rightarrow \mu^{-}\nu_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	27	1	30
29	$e^{+}e^{-} \rightarrow e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-}\gamma\gamma$	28	1	31
30	$e^{+}e^{-} \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma$	29	1	32
31	$e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}K^{-}\bar{n}p\gamma\gamma$	30	1	33
32	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}n\bar{n}\gamma$	31	1	34

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
33	$e^+e^- \to e^+\nu_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma$	32	1	35
34	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \bar{n} p \gamma $	33	1	36
35	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma$	34	1	37
36	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma$	35	1	38
37	$e^+e^- \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- p \bar{p} \gamma \gamma$	36	1	39
38	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	37	1	40
39	$e^+e^- \to e^-\bar{\nu}_e K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$	38	1	41
40	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{-}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	39	1	42
41	$e^{+}e^{-} \rightarrow e^{+}e^{-}\mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	40	1	43
42	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- K^- \gamma \gamma$	41	1	44
43	$e^+e^- \to \mu^+\nu_\mu K_L K_L \pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	42	1	45
44	$e^+e^- \to \mu^+\nu_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma$	43	1	46
45	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	44	1	47
46	$e^+e^- \to e^+\nu_e\mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^-\pi^-\pi^-K^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	45	1	48
47	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma$	46	1	49
48	$e^+e^- \to e^+e^+\nu_e\nu_e\mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	47	1	50
49	$e^+e^- \to e^+\nu_e\mu^+\mu^-\nu_\mu\bar{\nu}_\mu\nu_\tau\bar{\nu}_\tau\pi^+\pi^+\pi^+\pi^-\pi^-K^-n\bar{p}\gamma\gamma\gamma\gamma$	48	1	51
50	$e^+e^- \to \mu^-\bar{\nu}_\mu K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma$	49	1	52
51	$e^+e^- \to \mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma$	50	1	53
52	$e^+e^- \to \mu^-\bar{\nu}_\mu K_L K_L \pi^+\pi^+\pi^+\pi^- K^+ K^- K^- \gamma \gamma \gamma \gamma$	51	1	54
53	$e^+e^- \to e^-\bar{\nu}_e\mu^+\nu_\mu\pi^+\pi^+\pi^-\pi^-K^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	52	1	55
54	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	53	1	56
55	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-n\bar{n}\gamma$	54	1	57
56	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+p\bar{p}\gamma$	55	1	58
57	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+K^-K^-\gamma$	56	1	59
58	$e^{+}e^{-} \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	57	1	60
59	$e^{+}e^{-} \rightarrow e^{+}e^{+}e^{-}\nu_{e}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-}$	58	1	61
60	$e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma$	59	1	62
61	$e^+e^- \to e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^-\pi^-K^+n\bar{n}p\bar{p}\gamma\gamma\gamma\gamma\gamma$	60	1	63
62	$e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma$	61	1	64
63	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-K^-\gamma$	62	1	65
64	$e^+e^- \to e^+\nu_e K_L \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma$	63	1	66

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
65	$e^{+}e^{-} \to e^{+}e^{+}e^{-}e^{-}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	64	1	67
66	$e^{+}e^{-} \rightarrow e^{+}e^{+}\nu_{e}\nu_{e}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	65	1	68
67	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	66	1	69
68	$e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	67	1	70
69	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	68	1	71
70	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	69	1	72
71	$e^+e^- \to \mu^+\mu^+\nu_\mu\nu_\mu\pi^+\pi^+\pi^-\pi^-\pi^-K^-\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	70	1	73
72	$e^+e^- \to e^+\nu_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	71	1	74
73	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	72	1	75
74	$e^{+}e^{-} \rightarrow e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma$	73	1	76
75	$e^{+}e^{-} \to e^{+}e^{-}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma$	74	1	77
76	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	75	1	78
77	$e^{+}e^{-} \rightarrow K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma$	76	1	79
78	$e^+e^-  o \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- n \bar{n} \gamma \gamma$	77	1	80
79	$e^+e^- \to e^+e^-\nu_e\bar{\nu}_eK_L\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$	78	1	81
80	$e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma$	79	1	82
81	$e^{+}e^{-} \rightarrow e^{+}e^{-}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	80	1	83
82	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}K^{-}\gamma\gamma\gamma\gamma$	81	1	84
83	$e^{+}e^{-} \rightarrow \nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma$	82	1	85
84	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}$	83	1	86
85	$e^+e^- \rightarrow \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma$	84	1	87
86	$e^+e^- \to e^- \bar{\nu}_e K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma \gamma$	85	1	88
87	$e^{+}e^{-} \to e^{+}e^{-}e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$	86	1	89
88	$e^+e^- \to \mu^+\mu^+\nu_\mu\nu_\mu K_L\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	87	1	90
89	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	88	1	91
90	$e^{+}e^{-} \rightarrow \nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	89	1	92
91	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \gamma \gamma$	90	1	93
92	$e^+e^- \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^- K^- \gamma \gamma$	91	1	94
93	$e^{+}e^{-} \to e^{+}\nu_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma$	92	1	95
94	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-p\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma$	93	1	96
95	$e^+e^- \to \mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	94	1	97
96	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma$	95	1	98

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
97	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	96	1	99
98	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^+ K^- K^- \gamma \gamma$	97	1	100
99	$e^+e^- \rightarrow \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-K^-\gamma$	98	1	101
100	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	99	1	102
101	$e^+e^- \to e^- \bar{\nu}_e K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \gamma \gamma$	100	1	103
102	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	101	1	104
103	$e^{+}e^{-} \to \mu^{+}\mu^{+}\mu^{-}\nu_{\mu}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma$	102	1	105
104	$e^+e^- \rightarrow e^+e^-\nu_e\bar{\nu}_e\mu^-\bar{\nu}_\mu K_L\pi^+\pi^+\pi^-\pi^-K^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	103	1	106
105	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	104	1	107
106	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	105	1	108
107	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	106	1	109
108	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}n\bar{n}\gamma$	107	1	110
109	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+K^+\gamma$	108	1	111
110	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma$	109	1	112
111	$e^+e^- \to e^+\nu_e K_L \pi^+\pi^+\pi^- K^- n\bar{p}\gamma\gamma\gamma\gamma\gamma$	110	1	113
112	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ n \bar{n} \gamma \gamma \gamma \gamma \gamma \gamma$	111	1	114
113	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	112	1	115
114	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma$	113	1	116
115	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	114	1	117
116	$e^+e^- \to \mu^- \bar{\nu}_\mu \nu_\tau \bar{\nu}_\tau K_L \pi^+ \pi^+ \pi^- \gamma \gamma$	115	1	118
117	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-p\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma$	116	1	119
118	$e^+e^- \to \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma$	117	1	120
119	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	118	1	121
120	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \bar{n} p \gamma $	119	1	122
121	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma$	120	1	123
122	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}\gamma$	121	1	124
123	$e^{+}e^{-} \to e^{+}e^{+}e^{-}e^{-}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	122	1	125
124	$e^+e^- \to e^+e^-\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-K^-K^-\gamma$	123	1	126
125	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+n\bar{n}\gamma$	124	1	127
126	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	125	1	128
127	$e^+e^- \to \mu^-\bar{\nu}_\mu K_L K_L \pi^+\pi^+\pi^+\pi^- K^+K^-K^-\gamma\gamma\gamma\gamma\gamma$	126	1	129
128	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}$	127	1	130

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129	$e^+e^- \to \mu^+\nu_\mu K_L \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma\gamma$	128	1	131
130	$e^+e^- \to \mu^+\nu_\mu K_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma$	129	1	132
131	$e^+e^- \to e^+e^-\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\bar{n}p\gamma$	130	1	133
132	$e^+e^- \rightarrow e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma$	131	1	134
133	$e^+e^- \rightarrow e^-\bar{\nu}_e\mu^+\nu_\mu\nu_\tau\bar{\nu}_\tau K_L\pi^+\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma\gamma$	132	1	135
134	$e^+e^- \rightarrow e^-\bar{\nu}_e\mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-K^+K^-K^-\gamma$	133	1	136
135	$e^+e^- \to e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	134	1	137
136	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma$	135	1	138
137	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{p}\gamma$	136	1	139
138	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$	137	1	140
139	$e^+e^- \to e^+e^-\nu_e\bar{\nu}_e\mu^+\nu_\mu K_L\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	138	1	141
140	$e^+e^- \to e^+e^-e^-\nu_e\bar{\nu}_e\bar{\nu}_e\pi^+\pi^+\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	139	1	142
141	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	140	1	143
142	$e^+e^- \to e^+e^+e^-e^-\nu_e\nu_e\bar{\nu}_e\bar{\nu}_e\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	141	1	144
143	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	142	1	145
144	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	143	1	146
145	$e^+e^- \to e^-\bar{\nu}_e\mu^-\bar{\nu}_\mu\nu_\tau\bar{\nu}_\tau K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma$	144	1	147
146	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	145	1	148
147	$e^+e^- \to e^-\bar{\nu}_e\mu^+\mu^+\nu_\mu\nu_\mu K_L\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	146	1	149
148	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ n \bar{n} \gamma \gamma$	147	1	150
149	$e^+e^- \to e^-\bar{\nu}_e\mu^+\nu_\mu\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma\gamma$	148	1	151
150	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\nu_{\tau}\bar{\nu}_{\tau}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	149	1	152
151	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}n\bar{n}\gamma$	150	1	153
152	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^-p\bar{p}\gamma$	151	1	154
153	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	152	1	155
154	$e^{+}e^{-} \to \mu^{-}\mu^{-}\bar{\nu}_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}n\bar{n}\gamma\gamma$	153	1	156
155	$e^+e^- \to \mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-n\bar{p}\gamma$	154	1	157
156	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-}\gamma\gamma\gamma\gamma$	155	1	158
157	$e^+e^- \rightarrow e^-\bar{\nu}_e K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma \gamma \gamma \gamma$	156	1	159
158	$e^{+}e^{-} \to e^{+}\nu_{e}\mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	157	1	160
159	$e^+e^- \to e^+e^-\nu_e\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma$	158	1	161
160	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	159	1	162

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161	$e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	160	1	163
162	$e^+e^- \to e^+\nu_e\mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma$	161	1	164
163	$e^+e^- \to K_L K_L K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma$	162	1	165
164	$e^+e^- \to e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	163	1	166
165	$e^+e^- \rightarrow e^+\nu_e\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma$	164	1	167
166	$e^{+}e^{-} \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \gamma \gamma$	165	1	168
167	$e^{+}e^{-} \rightarrow e^{+}e^{-}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma$	166	1	169
168	$e^+e^- \to e^+\nu_e\nu_\tau\bar{\nu}_\tau K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	167	1	170
169	$e^{+}e^{-} \rightarrow e^{+}e^{+}\nu_{e}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	168	1	171
170	$e^+e^- \to \mu^- \bar{\nu}_\mu K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma$	169	1	172
171	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{p}\gamma$	170	1	173
172	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\bar{n}p\gamma$	171	1	174
173	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}n\bar{n}\gamma\gamma$	172	1	175
174	$e^{+}e^{-} \rightarrow e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma$	173	1	176
175	$e^+e^- \to e^+e^-e^-\nu_e\bar{\nu}_e\bar{\nu}_e\pi^+\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$	174	1	177
176	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$	175	1	178
177	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma$	176	1	179
178	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma$	177	1	180
179	$e^+e^- \to \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma$	178	1	181
180	$e^{+}e^{-} \to e^{+}\nu_{e}\mu^{-}\mu^{-}\bar{\nu}_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	179	1	182
181	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- n \bar{n} \gamma \gamma$	180	1	183
182	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- n\bar{p}\gamma$	181	1	184
183	$e^+e^- \to \mu^- \bar{\nu}_\mu \nu_\tau \bar{\nu}_\tau \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma \gamma$	182	1	185
184	$e^{+}e^{-} \to \mu^{+}\mu^{-}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	183	1	186
185	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma$	184	1	187
186	$e^+e^- \to e^- \nu_e K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma$	185	1	188
187	$e^+e^- \to \mu^-\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	186	1	189
188	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	187	1	190
189	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- n \bar{n} \gamma \gamma$	188	1	191
190	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma \gamma$	189	1	192
191	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	190	1	193
192	$e^+e^- \to \mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+\gamma$	191	1	194

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193	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	192	1	195
194	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	193	1	196
195	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^- \bar{n} p \gamma $	194	1	197
196	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	195	1	198
197	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	196	1	199
198	$e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma$	197	1	200