Topology Analysis [*][†][‡][§]

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

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
1	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^{*0}, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	5654	34	34
2	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	2935	32	66
3	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	614	26	92
4	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	3768	26	118
5	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^0, B^- \to \rho^-D^0, \bar{D}^0 \to \pi^0\pi^-K^+, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	6529	25	143
6	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^{*0}, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	6467	24	167
7	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \rho^-D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, \rho^- \to \pi^0\pi^-,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-)$	2236	22	189
8	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to D^0\gamma,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma)$	3908	21	210
9	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^0, B^- \to \rho^-D^0, \bar{D}^0 \to \pi^0\pi^-K^+, \rho^- \to \pi^0\pi^-, D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	1804	20	230
10	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	2285	18	248
11	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^{*0}, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^0\pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	3201	18	266
12	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^{*0}, B^- \to \rho^-D^0, \bar{D}^{*0} \to \bar{D}^0\gamma, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-\gamma)$	1494	17	283
13	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	5828	17	300

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
14	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+ \bar{D}^0, B^- \to \mu^- \bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0 \pi^+, \bar{D}^0 \to \pi^- K^+, D^{*0} \to D^0 \gamma,$ $D^0 \to \pi^0 \pi^+ K^-$ $(\Upsilon(4S) \dashrightarrow \mu^- \bar{\nu}_\mu \pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^+ K^- \gamma)$	1331	16	316
15	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+ \nu_e \bar{D}^0, B^- \to \rho^- D^0, \bar{D}^0 \to \pi^0 \pi^- K^+, \rho^- \to \pi^0 \pi^-, D^0 \to \pi^+ K^-$ $(\Upsilon(4S) \dashrightarrow e^+ \nu_e \pi^0 \pi^0 \pi^+ \pi^- \pi^- K^+ K^-)$	1897	15	331
16	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+ \nu_e \bar{D}^{*0} \gamma^F, B^- \to \rho^- D^0, \bar{D}^{*0} \to \pi^0 \bar{D}^0, \rho^- \to \pi^0 \pi^-, D^0 \to \pi^+ K^-,$ $\bar{D}^0 \to \pi^0 \pi^- K^+$ $(\Upsilon(4S) \dashrightarrow e^+ \nu_e \pi^0 \pi^0 \pi^0 \pi^+ \pi^- \pi^- K^+ K^- \gamma^F)$	2468	14	345
17	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+ \bar{D}^0, B^- \to e^- \bar{\nu}_e D^{*0} \gamma^F, \rho^+ \to \pi^0 \pi^+, \bar{D}^0 \to \pi^- K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0 \pi^+ K^-$ $(\Upsilon(4S) \dashrightarrow e^- \bar{\nu}_e \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^+ K^- \gamma^F)$	4526	14	359
18	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+ \bar{D}^0, B^- \to e^- \bar{\nu}_e D^{*0}, \rho^+ \to \pi^0 \pi^+, \bar{D}^0 \to \pi^0 \pi^- K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0 \pi^+ K^-$ $(\Upsilon(4S) \dashrightarrow e^- \bar{\nu}_e \pi^0 \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^+ K^-)$	17175	14	373
19	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+ \bar{D}^0, B^- \to \rho^- D^0, \rho^+ \to \pi^0 \pi^+, \bar{D}^0 \to \pi^0 \pi^- K^+, \rho^- \to \pi^0 \pi^-,$ $D^0 \to \pi^0 \pi^+ K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0 \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-)$	22131	14	387
20	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+ \nu_\mu \bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \bar{D}^0 \gamma, \rho^- \to \pi^0 \pi^-, D^0 \to \pi^+ K^-,$ $\bar{D}^0 \to \pi^0 \pi^- K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+ \nu_\mu \pi^0 \pi^0 \pi^+ \pi^- \pi^- K^+ K^- \gamma)$	19461	13	400
21	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+ \nu_e \bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \pi^0 \bar{D}^0, \rho^- \to \pi^0 \pi^-, D^0 \to \pi^0 \pi^+ K^-,$ $\bar{D}^0 \to \pi^0 \pi^- K^+$ $(\Upsilon(4S) \dashrightarrow e^+ \nu_e \pi^0 \pi^0 \pi^0 \pi^0 \pi^+ \pi^- \pi^- K^+ K^-)$	108	12	412
22	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+ \bar{D}^0, B^- \to \rho^- D^0, \rho^+ \to \pi^0 \pi^+, \bar{D}^0 \to \pi^0 \pi^- K^+, \rho^- \to \pi^0 \pi^-,$ $D^0 \to \pi^+ K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-)$	3784	12	424
23	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+ \bar{D}^0, B^- \to \mu^- \bar{\nu}_\mu D^0, \rho^+ \to \pi^0 \pi^+, \bar{D}^0 \to \pi^0 \pi^- K^+, D^0 \to \pi^0 \pi^+ K^-$ $(\Upsilon(4S) \dashrightarrow \mu^- \bar{\nu}_\mu \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^+ K^-)$	10233	12	436
24	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+ \bar{D}^0, B^- \to \pi^0 \pi^- \pi^- D^{*+}, \rho^+ \to \pi^0 \pi^+, \bar{D}^0 \to \pi^- K^+, D^{*+} \to \pi^+ D^0,$ $D^0 \to \pi^0 \pi^+ K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^-)$	207	11	447
25	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+ \bar{D}^0, B^- \to \mu^- \bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0 \pi^+, \bar{D}^0 \to K^+ K^-, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0 \pi^+ K^-$ $(\Upsilon(4S) \dashrightarrow \mu^- \bar{\nu}_\mu \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ K^+ K^- K^-)$	437	11	458
26	$\Upsilon(4S) \to B^+B^-, B^+ \to \pi^0 \pi^+ \pi^+ \pi^- \bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \pi^0 \bar{D}^0, \rho^- \to \pi^0 \pi^-, D^0 \to \pi^+ K^-,$ $\bar{D}^0 \to \pi^0 \pi^- K^+$ $(\Upsilon(4S) \dashrightarrow \pi^0 \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^-)$	2695	11	469

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
27	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e \bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \pi^0 \bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to K^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^0\pi^-\pi^-K^+K^+K^-)$	3443	11	480
28	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	3277	10	490
29	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu \bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \bar{D}^0\gamma, \rho^- \to \pi^0\pi^-, D^0 \to K^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^-\pi^-K^+K^+K^-\gamma)$	4553	10	500
30	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e \bar{D}^{*0}\gamma^F, B^- \to \rho^- D^0, \bar{D}^{*0} \to \bar{D}^0\gamma, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-\gamma^F\gamma)$	12577	10	510
31	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu \bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \pi^0 \bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to K^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^-\pi^-K^+K^+K^-)$	3885	9	519
32	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^0 \to K^-a_1^+,$ $a_1^+ \to \pi^0\rho^+, \rho^+ \to \pi^0\pi^+$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	7785	9	528
33	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to e^+\nu_e K^-$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^+\pi^-K^+K^-)$	11844	9	537
34	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \pi^0\pi^+\pi^-\pi^- D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-)$	20843	9	546
35	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \pi^+\pi^-\pi^- D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-)$	52	8	554
36	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \rho^+K^{*-}, \rho^+ \to \pi^0\pi^+, K^{*-} \to \pi^0 K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	742	8	562
37	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu \bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \pi^0 \bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^0\pi^+K^-,$ $\bar{D}^0 \to \pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	743	8	570
38	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^0 \to \mu^+\nu_\mu K^-$ $(\Upsilon(4S) \dashrightarrow \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^0\pi^+\pi^-K^+K^-)$	985	8	578
39	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+\gamma^F, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-\gamma^F)$	1050	8	586

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rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
40	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to K^+K^-, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^+\pi^+K^+K^-K^-)$	2551	8	594
41	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to K^+a_1^-, a_1^- \to \rho^0\pi^-, \rho^0 \to \pi^+\pi^-$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-)$	4482	8	602
42	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \bar{D}^0\gamma, \rho^- \to \pi^0\pi^-, D^0 \to \pi^0\pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-\gamma)$	11568	8	610
43	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \rho^- D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, \rho^- \to \pi^0\pi^-,$ $D^0 \to K^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^+K^-)$	27356	8	618
44	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \pi^0\pi^+\pi^-\pi^- D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to D^0\gamma,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma)$	35962	8	626
45	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \mu^-\bar{\nu}_\mu K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^0\pi^0\pi^+\pi^-K^+K^-)$	4341	7	633
46	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^0\gamma^F, B^- \to \rho^- D^0, \bar{D}^0 \to \pi^0\pi^-K^+, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-\gamma^F)$	4419	7	640
47	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, D^{*0} \to D^0\gamma,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-\gamma)$	4988	7	647
48	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^0 \to e^+\nu_e K^-$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\mu^-\bar{\nu}_\mu\pi^0\pi^+\pi^-K^+K^-)$	5083	7	654
49	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	6648	7	661
50	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \bar{D}^0\gamma, \rho^- \to \pi^0\pi^-, D^0 \to \pi^0\pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-\gamma)$	8418	7	668
51	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^{*0}, B^- \to \rho^- D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to K^+a_1^-, a_1^- \to \pi^0\rho^-, \rho^- \to \pi^0\pi^-$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	9606	7	675
52	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^0, B^- \to \rho^- D^0, \bar{D}^0 \to \mu^-\bar{\nu}_\mu K^+, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^0\pi^+\pi^-K^+K^-)$	9681	7	682

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rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
53	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \rho^-D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to K^+K^-, \rho^- \to \pi^0\pi^-,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-K^-)$	14711	7	689
54	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \rho^0\pi^-D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, \rho^0 \to \pi^+\pi^-,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-)$	16607	7	696
55	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to e^-\bar{\nu}_e K^+\gamma^F, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+K^+K^-\gamma^F)$	24787	7	703
56	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^{*0}\gamma^F, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to K^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^0\pi^-\pi^-K^+K^+K^-\gamma^F)$	1011	6	709
57	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^0, B^- \to \rho^-D^0, \bar{D}^0 \to \rho^-K^{*+}, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\rho^- \to \pi^0\pi^-, K^{*+} \to \pi^0K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	1069	6	715
58	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \mu^+\nu_\mu K^-$ $(\Upsilon(4S) \dashrightarrow \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-)$	1165	6	721
59	$\Upsilon(4S) \to B^+B^-, B^+ \to \pi^0\pi^+\pi^+D^{*-}, B^- \to \rho^-D^0, D^{*-} \to \pi^-\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-)$	1178	6	727
60	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^{*0}, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	1244	6	733
61	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^{*0}, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \pi^+\pi^-K^*, K^* \to \pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-)$	1322	6	739
62	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^0 \to \rho^+K^{*-},$ $\rho^+ \to \pi^0\pi^+, K^{*-} \to \pi^0K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	1394	6	745
63	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}\gamma^F, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-\gamma^F)$	1985	6	751
64	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^{*0}\gamma^F, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-\gamma^F)$	2419	6	757

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
65	$\Upsilon(4S) \to B^+B^-, B^+ \to \pi^+\pi^+\pi^+\pi^-\pi^-\bar{D}^{*0}, B^- \to \rho^-D^0, \bar{D}^{*0} \to \bar{D}^0\gamma, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma)$	2570	6	763
66	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+\gamma^F, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-\gamma^F)$	4438	6	769
67	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	4869	6	775
68	$\Upsilon(4S) \to B^+B^-, B^+ \to \pi^0\rho^+\bar{D}^0, B^- \to \rho^-D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, \rho^- \to \pi^0\pi^-,$ $D^0 \to \pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-)$	4870	6	781
69	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^{*0}\gamma^F, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-\gamma^F)$	5019	6	787
70	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	6243	6	793
71	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^{*0}, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $\bar{D}^0 \to \rho^-K^{*+}, \rho^- \to \pi^0\pi^-, K^{*+} \to \pi^0K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	8299	6	799
72	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^0, B^- \to \rho^-D^0, \bar{D}^0 \to e^-\bar{\nu}_e K^+, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^+e^-\nu_e\bar{\nu}_e\pi^0\pi^+\pi^-K^+K^-)$	8791	6	805
73	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^0, B^- \to \rho^-D^0, \bar{D}^0 \to \pi^0\pi^-K^+, \rho^- \to \pi^0\pi^-, D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	9457	6	811
74	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \mu^+\nu_\mu K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\mu^+\nu_\mu\pi^0\pi^0\pi^+\pi^-K^+K^-)$	10002	6	817
75	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^{*0}\gamma^F, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \pi^0\pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-\gamma^F)$	10820	6	823
76	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \rho^-D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, \rho^- \to \pi^0\pi^-,$ $D^{*0} \to \pi^0 D^0, D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-)$	13901	6	829
77	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to D^0\gamma,$ $D^0 \to \mu^+\nu_\mu K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\mu^+\nu_\mu\pi^0\pi^+\pi^-K^+K^-\gamma)$	15605	6	835

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
78	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}\gamma^F, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to K^+K^-, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^+\pi^+K^+K^-K^-\gamma^F)$	16334	6	841
79	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \rho^-D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, \rho^- \to \pi^0\pi^-,$ $D^{*0} \to \pi^0 D^0, D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-)$	19613	6	847
80	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to D^0\gamma,$ $D^0 \to \pi^0\pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-\gamma)$	24993	6	853
81	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^0, B^- \to \rho^-D^0, \bar{D}^0 \to K^+a_1^-, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $a_1^- \to \pi^0\rho^-, \rho^- \to \pi^0\pi^-$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	27901	6	859
82	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to D^0\gamma,$ $D^0 \to \mu^+\nu_\mu K^-$ $(\Upsilon(4S) \dashrightarrow \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^0\pi^+\pi^-K^+K^-\gamma)$	118	5	864
83	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^+\omega K^-, \omega \to \pi^0\pi^+\pi^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-)$	359	5	869
84	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \rho^+K^{*-}, \rho^+ \to \pi^0\pi^+, K^{*-} \to \pi^0 K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	409	5	874
85	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \rho^+K^{*-}, \rho^+ \to \pi^0\pi^+, K^{*-} \to \pi^0 K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	836	5	879
86	$\Upsilon(4S) \to B^+B^-, B^+ \to \pi^0\pi^+\pi^+D^{*-}, B^- \to \rho^-D^0, D^{*-} \to \pi^0 D^-, \rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-,$ $D^- \to \mu^-\bar{\nu}_\mu K^*, K^* \to \pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-)$	2158	5	884
87	$\Upsilon(4S) \to B^+B^-, B^+ \to \mu^+\nu_\mu\bar{D}^{*0}, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to K^+K^-,$ $\bar{D}^0 \to \pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^-\pi^-K^+K^+K^-)$	2335	5	889
88	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^{*0}\gamma^F, B^- \to \rho^-D^0, \bar{D}^{*0} \to \bar{D}^0\gamma, \rho^- \to \pi^0\pi^-, D^0 \to \pi^0\pi^+K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-\gamma^F\gamma)$	2774	5	894
89	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to D^0\gamma,$ $D^0 \to \pi^0\pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-\gamma)$	3032	5	899

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rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
90	$\Upsilon(4S) \to B^+B^-, B^+ \to e^+\nu_e\bar{D}^{*0}\gamma^F, B^- \to \rho^-D^0, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-, D^0 \to \mu^+\nu_\mu K^-,$ $\bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow e^+\nu_e\mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^-\pi^-K^+K^-\gamma^F)$	3132	5	904
91	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^{*0}\gamma^F, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-\gamma^F)$	3743	5	909
92	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^{*0}, B^- \to \rho^-D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^{*0} \to \pi^0\bar{D}^0, \rho^- \to \pi^0\pi^-,$ $D^0 \to \pi^+K^-, \bar{D}^0 \to \pi^0\pi^-K^+$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-)$	3867	5	914
93	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \rho^-D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, \rho^- \to \pi^0\pi^-,$ $D^0 \to \mu^+\nu_\mu K^-$ $(\Upsilon(4S) \dashrightarrow \mu^+\nu_\mu\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-)$	4685	5	919
94	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^0\pi^+\omega\bar{D}^0, B^- \to \rho^-D^0, \rho^0 \to \pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-, \bar{D}^0 \to \pi^0\pi^-K^+,$ $\rho^- \to \pi^0\pi^-, D^0 \to \pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-)$	4906	5	924
95	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^0 \to \pi^0\pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	5282	5	929
96	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \pi^0\pi^+\pi^-\pi^-D^{*0}\gamma^F, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma^F)$	5331	5	934
97	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \rho^-D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, \rho^- \to \pi^0\pi^-,$ $D^0 \to \pi^+K^-\gamma^F$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F)$	6433	5	939
98	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \pi^-\omega\omega D^0, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, \omega \to \pi^0\pi^+\pi^-,$ $\omega \to \pi^0\pi^+\pi^-, D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-)$	7328	5	944
99	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to \mu^-\bar{\nu}_\mu D^{*0}, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, D^{*0} \to \pi^0 D^0,$ $D^0 \to \pi^+K^-$ $(\Upsilon(4S) \dashrightarrow \mu^-\bar{\nu}_\mu\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-)$	7483	5	949
100	$\Upsilon(4S) \to B^+B^-, B^+ \to \rho^+\bar{D}^0, B^- \to e^-\bar{\nu}_e D^0\gamma^F, \rho^+ \to \pi^0\pi^+, \bar{D}^0 \to \pi^0\pi^-K^+, D^0 \to \pi^0\pi^+K^-$ $(\Upsilon(4S) \dashrightarrow e^-\bar{\nu}_e\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-K^+K^-\gamma^F)$	7519	5	954
rest	$\Upsilon(4S) \to$ others (76062 in total) $(\Upsilon(4S) \dashrightarrow$ corresponding to others)	—	81836	82790

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