

Mode	BDT bin	0.0 – 0.25	0.25 – 0.4	0.4 – 0.5	0.5 – 0.6	0.6 – 0.7	0.7 – 0.8	0.8 – 0.9	0.9 – 1.0
$B_s^0 \rightarrow \mu^+ \mu^-$ (2011)	Exp. comb. bkg	1880^{+33}_{-33}	$55.5^{+3.0}_{-2.9}$	$12.1^{+1.4}_{-1.3}$	$4.16^{+0.88}_{-0.79}$	$1.81^{+0.62}_{-0.51}$	$0.77^{+0.52}_{-0.38}$	$0.47^{+0.48}_{-0.36}$	$0.24^{+0.44}_{-0.20}$
	Exp. peak. bkg	$0.13^{+0.07}_{-0.05}$	$0.07^{+0.02}_{-0.02}$	$0.05^{+0.02}_{-0.02}$	$0.05^{+0.02}_{-0.01}$	$0.05^{+0.02}_{-0.01}$	$0.05^{+0.02}_{-0.01}$	$0.05^{+0.02}_{-0.01}$	$0.05^{+0.02}_{-0.01}$
	Exp. signal	$2.70^{+0.81}_{-0.80}$	$1.30^{+0.27}_{-0.23}$	$1.03^{+0.20}_{-0.17}$	$0.92^{+0.15}_{-0.13}$	$1.06^{+0.17}_{-0.15}$	$1.10^{+0.17}_{-0.15}$	$1.26^{+0.20}_{-0.17}$	$1.31^{+0.28}_{-0.25}$
	Observed	1818	39	12	6	1	2	1	1
$B^0 \rightarrow \mu^+ \mu^-$ (2011)	Exp. comb. bkg	1995^{+34}_{-34}	$59.2^{+3.3}_{-3.2}$	$12.6^{+1.6}_{-1.5}$	$4.44^{+0.99}_{-0.86}$	$1.67^{+0.66}_{-0.54}$	$0.75^{+0.58}_{-0.40}$	$0.44^{+0.57}_{-0.38}$	$0.22^{+0.48}_{-0.20}$
	Exp. peak. bkg	$0.78^{+0.38}_{-0.29}$	$0.40^{+0.14}_{-0.10}$	$0.31^{+0.11}_{-0.08}$	$0.28^{+0.09}_{-0.07}$	$0.31^{+0.10}_{-0.08}$	$0.30^{+0.10}_{-0.07}$	$0.31^{+0.10}_{-0.08}$	$0.30^{+0.11}_{-0.08}$
	Exp. cross-feed	$0.43^{+0.13}_{-0.13}$	$0.21^{+0.04}_{-0.04}$	$0.16^{+0.03}_{-0.03}$	$0.15^{+0.03}_{-0.02}$	$0.17^{+0.03}_{-0.03}$	$0.17^{+0.03}_{-0.02}$	$0.20^{+0.03}_{-0.03}$	$0.21^{+0.05}_{-0.04}$
	Exp. signal	$0.33^{+0.10}_{-0.10}$	$0.16^{+0.03}_{-0.03}$	$0.13^{+0.02}_{-0.02}$	$0.11^{+0.02}_{-0.02}$	$0.13^{+0.02}_{-0.02}$	$0.13^{+0.02}_{-0.02}$	$0.15^{+0.02}_{-0.02}$	$0.16^{+0.03}_{-0.03}$
	Observed	1904	50	20	5	2	1	4	1

Mode	BDT bin	0.0 – 0.25	0.25 – 0.4	0.4 – 0.5	0.5 – 0.6	0.6 – 0.7	0.7 – 0.8	0.8–1.0
$B_s^0 \rightarrow \mu^+ \mu^-$ (2012)	Exp. comb. bkg	2345^{+40}_{-40}	$56.7^{+3.0}_{-2.9}$	$13.1^{+1.5}_{-1.4}$	$4.42^{+0.91}_{-0.81}$	$2.10^{+0.67}_{-0.56}$	$0.35^{+0.42}_{-0.22}$	$0.39^{+0.33}_{-0.21}$
	Exp. peak. bkg	$0.250^{+0.08}_{-0.07}$	$0.15^{+0.05}_{-0.04}$	$0.08^{+0.03}_{-0.02}$	$0.08^{+0.02}_{-0.02}$	$0.07^{+0.02}_{-0.02}$	$0.06^{+0.02}_{-0.02}$	$0.10^{+0.03}_{-0.03}$
	Exp. signal	$3.69^{+0.59}_{-0.52}$	$2.14^{+0.37}_{-0.33}$	$1.20^{+0.21}_{-0.18}$	$1.16^{+0.18}_{-0.16}$	$1.17^{+0.18}_{-0.16}$	$1.15^{+0.19}_{-0.17}$	$2.13^{+0.33}_{-0.29}$
	Observed	2274	65	19	5	3	1	3
$B^0 \rightarrow \mu^+ \mu^-$ (2012)	Exp. comb. bkg	2491^{+42}_{-42}	$59.5^{+3.3}_{-3.2}$	$13.9^{+1.6}_{-1.5}$	$4.74^{+1.00}_{-0.89}$	$2.10^{+0.74}_{-0.61}$	$0.55^{+0.50}_{-0.31}$	$0.29^{+0.34}_{-0.19}$
	Exp. peak. bkg	$1.49^{+0.50}_{-0.36}$	$0.86^{+0.29}_{-0.22}$	$0.48^{+0.16}_{-0.12}$	$0.44^{+0.15}_{-0.11}$	$0.42^{+0.14}_{-0.10}$	$0.37^{+0.13}_{-0.09}$	$0.62^{+0.21}_{-0.15}$
	Exp. cross-feed	$0.63^{+0.10}_{-0.09}$	$0.36^{+0.07}_{-0.06}$	$0.20^{+0.04}_{-0.03}$	$0.20^{+0.03}_{-0.03}$	$0.20^{+0.03}_{-0.03}$	$0.20^{+0.03}_{-0.03}$	$0.36^{+0.06}_{-0.05}$
	Exp. signal	$0.44^{+0.06}_{-0.06}$	$0.26^{+0.04}_{-0.04}$	$0.14^{+0.02}_{-0.02}$	$0.14^{+0.02}_{-0.02}$	$0.14^{+0.02}_{-0.02}$	$0.14^{+0.02}_{-0.02}$	$0.26^{+0.04}_{-0.03}$
	Observed	2433	59	19	3	2	2	2