

Process	$t\bar{t}H(H\rightarrow c\bar{c})$ SR	$t\bar{t}H(H\rightarrow b\bar{b})$ SR	$t\bar{t}Z(Z\rightarrow c\bar{c})$ SR	$t\bar{t}Z(Z\rightarrow b\bar{b})$ SR	$t\bar{t}+\geq 2b$ CR	$t\bar{t}+b$ CR	$t\bar{t}+\geq 2c$ CR	$t\bar{t}+c$ CR	$t\bar{t}+\text{light}$ CR
$t\bar{t}H(H\rightarrow c\bar{c})$	-16 ± 22 (10 ± 14)	-0.5 ± 3.6 (0.3 ± 2.1)	-3.1 ± 8.9 (1.9 ± 5.4)	-0.2 ± 1.9 (0.1 ± 1.1)	-1.2 ± 2.6 (0.7 ± 1.5)	-0.5 ± 1.8 (0.3 ± 1.0)	-11.7 ± 8.8 (7.0 ± 5.3)	-5.4 ± 5.9 (3.3 ± 3.6)	-24 ± 13 (14.8 ± 7.7)
$t\bar{t}H(H\rightarrow b\bar{b})$	21 ± 18 (23 ± 19)	166 ± 55 (181 ± 60)	9 ± 11 (10 ± 12)	43 ± 25 (47 ± 27)	264 ± 31 (284 ± 34)	139 ± 22 (153 ± 25)	52 ± 12 (55 ± 13)	35 ± 10 (38 ± 11)	327 ± 32 (356 ± 35)
$t\bar{t}Z(Z\rightarrow c\bar{c})$	16 ± 16	1.1 ± 4.1	59 ± 35	1.5 ± 4.9	3.5 ± 3.6	1.6 ± 2.5	37 ± 12	18.1 ± 8.6	78 ± 18
$t\bar{t}Z(Z\rightarrow b\bar{b})$	6 ± 12	32 ± 28	8 ± 14	114 ± 58	136 ± 28	70 ± 20	25 ± 11	19.2 ± 9.7	166 ± 29
$t\bar{t}+\geq 2b$	109 ± 48	387 ± 91	85 ± 41	360 ± 88	2760 ± 120	957 ± 67	633 ± 51	293 ± 34	2830 ± 110
$t\bar{t}+b$	198 ± 96	205 ± 97	168 ± 88	165 ± 87	1300 ± 110	2700 ± 170	841 ± 88	719 ± 81	5760 ± 240
$t\bar{t}+\geq 2c$	470 ± 110	26 ± 24	389 ± 99	19 ± 21	153 ± 26	60 ± 18	2080 ± 110	718 ± 63	3400 ± 140
$t\bar{t}+c$	700 ± 190	61 ± 54	470 ± 150	45 ± 46	256 ± 48	291 ± 59	1910 ± 150	2680 ± 180	9220 ± 330
$t\bar{t}+\text{light}$	780 ± 110	73 ± 33	605 ± 94	69 ± 33	205 ± 24	226 ± 29	1180 ± 65	1326 ± 70	12620 ± 220
Other	190 ± 120	43 ± 48	320 ± 160	58 ± 55	249 ± 50	136 ± 33	550 ± 86	423 ± 70	3080 ± 190
Total	2470 ± 92	993 ± 52	2115 ± 80	875 ± 48	5330 ± 110	4580 ± 110	7300 ± 200	6230 ± 190	37450 ± 530
Data	2411	983	2108	879	5372	4594	7317	6209	37497