

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
$t\bar{t}H(H\rightarrow c\bar{c})$	-27 ± 40 (17 ± 25)	-0.9 ± 6.7 (0.5 ± 3.8)	-5 ± 16 (3.2 ± 9.5)	-0.3 ± 3.7 (0.2 ± 2.1)	-2.0 ± 5.4 (1.2 ± 3.1)	-0.8 ± 3.6 (0.5 ± 2.1)	-16 ± 16 (9.8 ± 9.8)	-6.3 ± 9.3 (3.9 ± 5.7)	-46 ± 28 (28 ± 17)
$t\bar{t}H(H\rightarrow b\bar{b})$	35 ± 31 (38 ± 34)	310 ± 100 (340 ± 110)	16 ± 20 (17 ± 21)	81 ± 45 (88 ± 49)	441 ± 65 (475 ± 71)	220 ± 45 (242 ± 50)	71 ± 22 (75 ± 24)	40 ± 15 (43 ± 17)	557 ± 67 (607 ± 73)
$t\bar{t}Z(Z\rightarrow c\bar{c})$	25 ± 28	2.0 ± 7.6	105 ± 63	2.9 ± 9.4	5.8 ± 7.3	2.7 ± 5.3	51 ± 23	21 ± 14	143 ± 40
$t\bar{t}Z(Z\rightarrow b\bar{b})$	10 ± 21	57 ± 51	14 ± 25	220 ± 110	218 ± 58	108 ± 40	34 ± 20	22 ± 15	263 ± 58
$t\bar{t}+\geq 2b$	194 ± 88	770 ± 180	152 ± 76	730 ± 170	4680 ± 260	1530 ± 140	862 ± 95	335 ± 53	4890 ± 240
$t\bar{t}+b$	300 ± 160	320 ± 160	250 ± 140	270 ± 150	1830 ± 200	3740 ± 310	1050 ± 150	800 ± 120	8520 ± 450
$t\bar{t}+\geq 2c$	830 ± 210	50 ± 49	710 ± 190	41 ± 43	244 ± 56	96 ± 39	2950 ± 220	850 ± 100	6330 ± 320
$t\bar{t}+c$	920 ± 270	84 ± 78	640 ± 230	64 ± 70	321 ± 77	358 ± 94	2210 ± 230	2960 ± 250	13030 ± 590
$t\bar{t}+\text{light}$	1050 ± 160	102 ± 51	810 ± 140	92 ± 49	257 ± 39	280 ± 47	1362 ± 99	1430 ± 96	18390 ± 410
Other	240 ± 180	58 ± 76	450 ± 250	82 ± 88	303 ± 87	169 ± 56	630 ± 140	453 ± 100	3950 ± 350
Total	3580 ± 160	1750 ± 100	3150 ± 140	1580 ± 97	8300 ± 210	6500 ± 200	9210 ± 290	6910 ± 240	56040 ± 950
Data	3545	1744	3143	1593	8322	6492	9245	6909	56014