| | T1tttt(2000, 100) | T1tttt(1800, 1100) | T5ttcc(1750, 900) |
|---|---------------------|--------------------|-------------------|
| Expected events (35.9 fb ⁻¹ at $\sqrt{s} = 13$ TeV) | 35 | 99 | 129 |
| Preselection requirements | Events (efficiency) | | |
| Event filter | 35 (100%) | 99 (100%) | 129 (100%) |
| μ veto | 21 (62%) | 62 (63%) | 100 (78%) |
| e veto | 13 (63%) | 40 (64%) | 79 (79%) |
| Isolated track veto | 12 (91%) | 34 (85%) | 74 (94%) |
| $N_{j} \ge 4$ | 12 (99%) | 34 (100%) | 68 (91%) |
| $N_{\rm b} \ge 1$ | 12 (96%) | 33 (97%) | 58 (84%) |
| $H_{\rm T} \ge 300~{ m GeV}$ | 12 (100%) | 33 (100%) | 58 (99%) |
| $E_{\mathrm{T}}^{\mathrm{miss}} \ge 250 \ \mathrm{GeV}$ | 11 (91%) | 25 (75%) | 52 (89%) |
| $\Delta \phi(E_{\rm T}^{\rm miss}, j_{1,2,3}) > 0.5, 0.5, 0.3$ | 9 (81%) | 22 (88%) | 47 (91%) |
| $N_{ m t} \ge 1$ | 7 (86%) | 19 (87%) | 35 (73%) |
| $M_{\rm T2} > 200~{\rm GeV}$ | 7 (98%) | 19 (97%) | 34 (97%) |
| N _b , N _t regions | Events (efficiency) | | |
| $N_{\rm b} = 1, N_{\rm t} = 1$ | 0.6 (8%) | 1.8 (9%) | 12.0 (35%) |
| $N_{\rm b} = 1, N_{\rm t} = 2$ | 0.5 (6%) | 1.2 (6%) | 4.5 (13%) |
| $N_{ m b}=1, N_{ m t}\geq 3$ | 0.2 (2%) | 0.2 (0%) | 0.1 (0%) |
| $N_{\rm b} = 2$, $N_{\rm t} = 1$ | 1.2 (15%) | 3.2 (16%) | 9.4 (27%) |
| $N_{\rm b} = 2, N_{\rm t} = 2$ | 1.0 (13%) | 2.7 (13%) | 4.5 (13%) |
| $N_{ m b}=$ 2, $N_{ m t}\geq$ 3 | 0.4 (5%) | 0.6 (2%) | 0.1 (0%) |
| $N_{ m b} \ge 3, N_{ m t} = 1$ | 1.5 (19%) | 4.3 (22%) | 2.3 (6%) |
| $N_{ m b} \geq 3$, $N_{ m t} = 2$ | 1.5 (19%) | 4.0 (21%) | 1.1 (3%) |
| $N_{\rm b} \ge 3, N_{\rm t} \ge 3$ | 0.8 (10%) | 1.2 (6%) | 0.0 (0%) |
| $M_{\rm T2}, E_{\rm T}^{\rm miss}$ regions | Events (efficiency) | | |
| $200 \le M_{\rm T2} < 300 {\rm GeV}, 250 \le E_{\rm T}^{\rm miss} < 400 {\rm GeV}$ | 0.4 (5%) | 2.5 (13%) | 1.2 (3%) |
| $200 \le M_{\text{T2}} < 300 \text{ GeV}, 400 \le E_{\text{T}}^{\text{miss}} < 500 \text{ GeV}$ | 0.2 (2%) | 0.8 (4%) | 0.5 (1%) |
| $200 \le M_{\rm T2} < 300 {\rm GeV}, 500 \le E_{\rm T}^{\rm miss} < 600 {\rm GeV}$ | 0.2 (2%) | 0.4 (2%) | 0.3 (0%) |
| $200 \le M_{\rm T2} < 300 {\rm GeV}, 600 \le E_{\rm T}^{\rm miss} < 750 {\rm GeV}$ | 0.2 (2%) | 0.2 (1%) | 0.3 (0%) |
| $200 \le M_{\rm T2} < 300 {\rm GeV}, E_{\rm T}^{\rm miss} \ge 750 {\rm GeV}$ | 0.2 (2%) | 0.1 (0%) | 0.3 (0%) |
| $300 \le M_{\rm T2} < 400 {\rm GeV}, 250 \le E_{\rm T}^{\rm miss} < 400 {\rm GeV}$ | 0.3 (3%) | 3.1 (16%) | 2.3 (6%) |
| $300 \le M_{\rm T2} < 400 {\rm GeV}, 400 \le E_{\rm T}^{\rm miss} < 500 {\rm GeV}$ | 0.2 (2%) | 1.4 (7%) | 0.9 (2%) |
| $300 \le M_{\rm T2} < 400 {\rm GeV}, 500 \le E_{\rm T}^{\rm miss} < 600 {\rm GeV}$ | 0.2 (2%) | 0.7 (3%) | 0.5 (1%) |
| $300 \le M_{\rm T2} < 400 {\rm GeV}, 600 \le E_{\rm T}^{\rm miss} < 750 {\rm GeV}$ | 0.3 (3%) | 0.5 (2%) | 0.5 (1%) |
| $300 \le M_{\rm T2} < 400 {\rm GeV}, E_{\rm T}^{\rm miss} \ge 750 {\rm GeV}$ | 0.5 (6%) | 0.2 (1%) | 0.4 (1%) |
| $400 \le M_{\rm T2} < 550 {\rm GeV}, 250 \le E_{\rm T}^{\rm miss} < 400 {\rm GeV}$ | 0.2 (2%) | 1.0 (5%) | 1.2 (3%) |
| $400 \le M_{\rm T2} < 550 {\rm GeV}, 400 \le E_{\rm T}^{\rm miss} < 500 {\rm GeV}$ | 0.2 (2%) | 2.1 (10%) | 2.3 (6%) |
| $400 \le M_{\rm T2} < 550 {\rm GeV}, 500 \le E_{\rm T}^{\rm miss} < 600 {\rm GeV}$ | 0.2 (3%) | 1.5 (7%) | 1.6 (4%) |
| $400 \le M_{\rm T2} < 550 {\rm GeV}, 600 \le E_{\rm T}^{\rm miss} < 750 {\rm GeV}$ | 0.4 (4%) | 1.0 (5%) | 1.2 (3%) |
| $\begin{array}{l} 400 \leq M_{\rm T2} < 550 \; {\rm GeV}, E_{\rm T}^{\rm miss} \geq 750 \; {\rm GeV} \\ M_{\rm T2} \geq 550 \; {\rm GeV}, 250 \leq E_{\rm T}^{\rm miss} < 400 \; {\rm GeV} \end{array}$ | 0.8 (9%) | 0.4 (1%) | 0.9 (2%) |
| $M_{\rm T2} \ge 550 {\rm GeV}, 250 \le E_{\rm T}^{\rm miss} < 400 {\rm GeV}$ | 0.1 (0%) | 0.0 (0%) | 0.0 (0%) |
| $M_{\rm T2} \ge 550 { m GeV}, 400 \le E_{\rm T}^{\rm miss} < 500 { m GeV}$ | 0.1 (1%) | 0.2 (0%) | 0.3 (0%) |
| $M_{\rm T2} \ge 550 { m GeV}, 500 \le E_{\rm T}^{\rm miss} < 600 { m GeV}$ | 0.2 (2%) | 0.8 (4%) | 1.7 (4%) |
| $M_{\rm T2} \ge 550 { m GeV}, 600 \le E_{\rm T}^{\rm miss} < 750 { m GeV}$ | 0.5 (6%) | 1.5 (7%) | 4.8 (14%) |
| $M_{\rm T2} \ge 550 {\rm ~GeV}, E_{\rm T}^{\rm miss} \ge 750 {\rm ~GeV}$ | 2.5 (31%) | 0.9 (4%) | 12.8 (37%) |