

0-lepton 7-jet channel, Gtt model (ATLAS_CONF_2013_061)

- Process: $\tilde{g}\tilde{g} \rightarrow (t\bar{t}\tilde{\chi}_1^0)(t\bar{t}\tilde{\chi}_1^0)$.
- Mass: $m_{\tilde{g}} = 1300$ GeV, $m_{\tilde{\chi}_1^0} = 100$ GeV.
- The number of events: $5 \cdot 10^3$.
- Event Generator: Herwig++ 2.5.2.

#	cut name	ϵ_{Exp}	ϵ_{Atom}	$\frac{\text{Atom}}{\text{Exp}}$	$\frac{(\text{Exp}-\text{Atom})}{\text{Error}}$	#/?	R_{Exp}	R_{Atom}	$\frac{\text{Atom}}{\text{Exp}}$	$\frac{(\text{Exp}-\text{Atom})}{\text{Error}}$
0	No cut	100.0	100.0							
1	0l-base: ≥ 4 jets ($p_T > 30$)	96.9 ± 0.31	99.42 ± 0.11	1.03	7.65	0	0.97 ± 0.0	0.99 ± 0.0	1.03	7.65
2	0l-base: $p_T(j_1) > 90$	96.9 ± 0.31	99.32 ± 0.12	1.02	7.28	1	1.0 ± 0.0	1.0 ± 0.0	1.0	-0.29
3	0l-base: MET > 150	88.3 ± 0.3	90.38 ± 0.42	1.02	4.06	2	0.91 ± 0.0	0.91 ± 0.0	1.0	-0.24
4	0l-base: Lepton veto	45.9 ± 0.21	46.68 ± 0.71	1.02	1.06	3	0.52 ± 0.0	0.52 ± 0.01	0.99	-0.41
5	0l-base: $\Delta\phi_{\min}^{4j} > 0.5$	30.0 ± 0.17	33.34 ± 0.67	1.11	4.85	4	0.65 ± 0.0	0.71 ± 0.01	1.09	4.1
6	0l-base: MET/ $m_{\text{eff}}^{4j} > 0.2$	25.9 ± 0.16	29.14 ± 0.64	1.13	4.89	5	0.86 ± 0.01	0.87 ± 0.02	1.01	0.53
7	SR-0l-7j: ≥ 7 jets ($p_T > 30$)	24.6 ± 0.16	26.84 ± 0.63	1.09	3.47	6	0.95 ± 0.01	0.92 ± 0.02	0.97	-1.29
8	SR-0l-7j: ≥ 3 b-jets ($p_T > 30$)	11.5 ± 0.11	10.38 ± 0.43	0.9	-2.52	7	0.47 ± 0.0	0.39 ± 0.02	0.83	-4.85
9	SR-0l-7j-A: MET > 200	11.3 ± 0.11	10.28 ± 0.43	0.91	-2.31	8	0.98 ± 0.01	0.99 ± 0.04	1.01	0.18
10	SR-0l-7j-A	11.3 ± 0.11	10.22 ± 0.43	0.9	-2.45	9	1.0 ± 0.01	0.99 ± 0.04	0.99	-0.14
11	SR-0l-7j-B: MET > 350	9.2 ± 0.1	8.32 ± 0.39	0.9	-2.19	8	0.8 ± 0.01	0.8 ± 0.04	1.0	0.04
12	SR-0l-7j-B	9.2 ± 0.1	8.32 ± 0.39	0.9	-2.19	11	1.0 ± 0.01	1.0 ± 0.05	1.0	0.0
13	SR-0l-7j-C: MET > 250	10.8 ± 0.1	9.92 ± 0.42	0.92	-2.02	8	0.94 ± 0.01	0.96 ± 0.04	1.02	0.4
14	SR-0l-7j-C	9.5 ± 0.1	8.56 ± 0.4	0.9	-2.31	13	0.88 ± 0.01	0.86 ± 0.04	0.98	-0.41

Table 1: The cut-flow table for the 0-lepton 7-jet channel in Gtt model.