

0.1 $\tilde{\chi}_1^\pm(350) \rightarrow (\ell\tilde{\nu}(175) \text{ or } \nu\tilde{\ell}(175)) \rightarrow \nu\ell\tilde{\chi}_1^0(0)$ (ATLAS_2014_I1286761 (1403.5294))

- Process: $\tilde{\chi}_1^+ \tilde{\chi}_1^- : \tilde{\chi}_1^\pm \rightarrow (\ell\tilde{\nu} \text{ or } \nu\tilde{\ell}) \rightarrow \nu\ell\tilde{\chi}_1^0$.
- Mass: $m_{\tilde{\chi}_1^\pm} = 350$ GeV, $m_{\tilde{\ell}/\tilde{\nu}} = 175$ GeV, $m_{\tilde{\chi}_1^0} = 0$ GeV.
- The number of events: 10^4 .
- 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	= 2 OSlep $p_T > 35, 20$: SF	100.0	100.0							
1	Jet veto: SF	43.19 ± 0.73	39.08 ± 0.95	0.91	-3.43	0	0.43 ± 0.01	0.39 ± 0.01	0.91	-3.43
2	Z veto: SF	40.58 ± 0.71	36.87 ± 0.92	0.91	-3.19	1	0.94 ± 0.02	0.94 ± 0.02	1.0	0.13
3	$m_{T2} > 90$: SF	24.25 ± 0.55	21.21 ± 0.71	0.87	-3.38	2	0.6 ± 0.01	0.58 ± 0.02	0.96	-0.94
4	$m_{T2} > 120$: SF	18.14 ± 0.48	15.41 ± 0.61	0.85	-3.53	3	0.75 ± 0.02	0.73 ± 0.03	0.97	-0.62
5	$m_{T2} > 150$: SF	11.92 ± 0.39	10.38 ± 0.5	0.87	-2.44	4	0.66 ± 0.02	0.67 ± 0.03	1.02	0.42

Table 1: The cut-flow table for the same flavour channel.

#	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	= 2 OSlep $p_T > 35, 20$: DF	100.0	100.0							
1	Jet veto: DF	41.7 ± 0.72	40.24 ± 0.95	0.96	-1.23	0	0.42 ± 0.01	0.4 ± 0.01	0.96	-1.23
2	Z veto: DF	41.7 ± 0.72	40.24 ± 0.95	0.96	-1.23	1	1.0 ± 0.02	1.0 ± 0.02	1.0	0.0
3	$m_{T2} > 90$: DF	24.58 ± 0.55	22.88 ± 0.73	0.93	-1.86	2	0.59 ± 0.01	0.57 ± 0.02	0.96	-0.93
4	$m_{T2} > 120$: DF	18.92 ± 0.48	17.16 ± 0.64	0.91	-2.19	3	0.77 ± 0.02	0.75 ± 0.03	0.97	-0.57
5	$m_{T2} > 150$: DF	13.0 ± 0.4	11.45 ± 0.52	0.88	-2.35	4	0.69 ± 0.02	0.67 ± 0.03	0.97	-0.54

Table 2: The cut-flow table for the different flavour channel.