$\tilde{\chi}_1^{\pm}(425) \rightarrow (\ell\tilde{\nu}(250) \text{ or } \nu\tilde{\ell}(250)) \rightarrow \nu\ell\tilde{\chi}_1^0(75)$ (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: $m_{\tilde{\chi}_1^{\pm}} = 425$ GeV, $m_{\tilde{\ell}/\tilde{\nu}} = 250$ GeV, $m_{\tilde{\chi}_1^0} = 75$ 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 ± 0.5	100.0 ± 2.01			-1	±	±		
1	Jet veto: SF	40.35 ± 0.32	30.02 ± 1.19	0.74	-8.36	0	0.4 ± 0.0	0.3 ± 0.01	0.74	-8.36
2	Z veto: SF	38.37 ± 0.31	28.15 ± 1.16	0.73	-8.52	1	0.95 ± 0.01	0.94 ± 0.04	0.99	-0.34
3	$m_{T2} > 90$: SF	24.01 ± 0.24	17.33 ± 0.92	0.72	-7.02	2	0.63 ± 0.01	0.62 ± 0.03	0.98	-0.3
4	$m_{T2} > 120$: SF	19.06 ± 0.22	12.94 ± 0.8	**0.68**	-7.4	3	0.79 ± 0.01	0.75 ± 0.05	0.94	-1.01
5	$m_{T2} > 150$: SF	14.11 ± 0.19	9.3 ± 0.68	**0.66**	-6.83	4	0.74 ± 0.01	0.72 ± 0.05	0.97	-0.4

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 ± 0.5	100.0 ± 2.0			-1	±	±		
1	Jet veto: DF	39.3 ± 0.31	29.12 ± 1.17	0.74	-8.4	0	0.39 ± 0.0	0.29 ± 0.01	0.74	-8.4
2	Z veto: DF	39.3 ± 0.31	29.12 ± 1.17	0.74	-8.4	1	1.0 ± 0.01	1.0 ± 0.04	1.0	0.0
3	$m_{T2} > 90$: DF	25.24 ± 0.25	17.93 ± 0.93	0.71	-7.59	2	0.64 ± 0.01	0.62 ± 0.03	0.96	-0.81
4	$m_{T2} > 120$: DF	20.13 ± 0.22	14.74 ± 0.85	0.73	-6.17	3	0.8 ± 0.01	0.82 ± 0.05	1.03	0.51
5	$m_{T2} > 50$: DF	14.7 ± 0.19	11.04 ± 0.73	0.75	-4.82	4	0.73 ± 0.01	0.75 ± 0.05	1.03	0.37

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