

SR noZc: (ATLAS_CONF_2013_035)

- Process: $pp \rightarrow \tilde{\chi}_1^\pm \tilde{\chi}_2^0 \rightarrow (\ell^\pm \nu \tilde{\chi}_1^0)(\ell^+ \ell^- \tilde{\chi}_1^0)$ via an on-shell $\tilde{\ell}_L$.
- Mass: $m_{\tilde{\chi}_1^\pm} = m_{\tilde{\chi}_2^0} = 500$ GeV, $m_{\tilde{\ell}_L} = 250$ GeV, $m_{\tilde{\chi}_1^0} = 0$ 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	Lepton multiplicity	100.0 ± 0.63	100.0 ± 3.53			-1	\pm	\pm		
1	SFOS requirement	98.6 ± 0.63	98.41 ± 3.5	1.0	-0.05	0	0.99 ± 0.01	0.98 ± 0.04	1.0	-0.05
2	b -jet veto	87.37 ± 0.59	92.2 ± 3.41	1.06	1.4	1	0.89 ± 0.01	0.94 ± 0.03	1.06	1.44
3	Z veto	84.56 ± 0.58	87.57 ± 3.33	1.04	0.89	2	0.97 ± 0.01	0.95 ± 0.04	0.98	-0.49
4	SRnoZc: MET > 75	77.54 ± 0.56	78.18 ± 3.17	1.01	0.2	3	0.92 ± 0.01	0.89 ± 0.04	0.97	-0.66
5	SRnoZc: $m_T > 110$	67.37 ± 0.52	67.77 ± 2.98	1.01	0.13	4	0.87 ± 0.01	0.87 ± 0.04	1.0	-0.05
6	SRnoZc: $p_T(\ell_3) > 30$	64.56 ± 0.51	64.74 ± 2.92	1.0	0.06	5	0.96 ± 0.01	0.96 ± 0.04	1.0	-0.07

Table 1: The cut-flow table for the noZc signal region.