

SR Zb: (ATLAS_CONF_2013_035)

- Process: $pp \rightarrow \tilde{\chi}_1^\pm \tilde{\chi}_2^0 \rightarrow (W^\pm \chi_1^0)(Z \tilde{\chi}_1^0)$.
- Mass: $m_{\tilde{\chi}_1^\pm} = m_{\tilde{\chi}_2^0} = 150$ GeV, $m_{\tilde{\chi}_1^0} = 0$ GeV.
- The number of events: $3 \cdot 10^4$.
- 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	Lepton multiplicity	100.0 ± 0.82	100.0 ± 7.01			-1	\pm	\pm		
1	SFOS requirement	99.31 ± 0.81	99.01 ± 6.98	1.0	-0.04	0	0.99 ± 0.01	0.99 ± 0.07	1.0	-0.04
2	b -jet veto	92.38 ± 0.78	92.57 ± 6.75	1.0	0.03	1	0.93 ± 0.01	0.93 ± 0.07	1.01	0.07
3	Z requirement	87.41 ± 0.76	84.65 ± 6.46	0.97	-0.42	2	0.95 ± 0.01	0.91 ± 0.07	0.97	-0.45
4	SRZb: $75 < \text{MET} < 120$	26.06 ± 0.42	23.76 ± 3.43	0.91	-0.67	3	0.3 ± 0.0	0.28 ± 0.04	0.94	-0.43
5	SRZb: $m_T > 110$	10.7 ± 0.27	9.41 ± 2.16	0.88	-0.6	4	0.41 ± 0.01	0.4 ± 0.09	0.96	-0.16

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