## SR noZc: $(ATLAS\_CONF\_2013\_035)$

• Process:  $pp \to \tilde{\chi}_1^{\pm} \tilde{\chi}_2^0 \to (\ell^{\pm} \nu \tilde{\chi}_1^0) (\ell^+ \ell^- \tilde{\chi}_1^0)$  via an on-shell  $\tilde{\ell}_L$ .

 $\bullet \ \text{Mass:} \ m_{\tilde{\chi}_1^\pm} = m_{\tilde{\chi}_2^0} = 500 \ \text{GeV}, \, m_{\tilde{\ell}_L} = 250 \ \text{GeV}, \, m_{\tilde{\chi}_1^0} = 0 \ \text{GeV}.$ 

• The number of events:  $5 \cdot 10^3$ .

• Event Generator: Herwig++ 2.5.2.

#	cut name	$\epsilon_{ m Exp}$	$\epsilon_{ ext{Atom}}$	Atom Exp	$\frac{\text{(Exp-Atom)}}{\text{Error}}$	#/?	$R_{\mathrm{Exp}}$	$R_{ m Atom}$	Atom Exp	(Exp-Atom) Error
0	Lepton multiplicity	100.0	100.0							
1	SFOS requirement	$98.6 \pm 1.33$	$98.41 \pm 3.5$	1.0	-0.05	0	$0.99 \pm 0.01$	$0.98 \pm 0.04$	1.0	-0.05
2	<i>b</i> -jet veto	$87.37 \pm 1.26$	$92.2 \pm 3.41$	1.06	1.33	1	$0.89 \pm 0.01$	$0.94 \pm 0.03$	1.06	1.37
3	Z veto	$84.56 \pm 1.24$	$87.57 \pm 3.33$	1.04	0.85	2	$0.97 \pm 0.01$	$0.95 \pm 0.04$	0.98	-0.46
4	SRnoZc: MET $> 75$	$77.54 \pm 1.18$	$78.18 \pm 3.17$	1.01	0.19	3	$0.92 \pm 0.01$	$0.89 \pm 0.04$	0.97	-0.62
5	SRnoZc: $m_T > 110$	$67.37 \pm 1.1$	$67.77 \pm 2.98$	1.01	0.13	4	$0.87 \pm 0.01$	$0.87 \pm 0.04$	1.0	-0.05
6	SRnoZc: $p_T(\ell_3) > 30$	$64.56 \pm 1.08$	$64.74 \pm 2.92$	1.0	0.06	5	$0.96 \pm 0.02$	$0.96 \pm 0.04$	1.0	-0.07

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