0.1 SR Zb: (ATLAS_CONF_2013_035)

• Process: $pp \to \tilde{\chi}_1^{\pm} \tilde{\chi}_2^0 \to (W^{\pm} \chi_1^0)(Z \tilde{\chi}_1^0)$.

• 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 | $\epsilon_{ m Exp}$ | $\epsilon_{	ext{Atom}}$ | Atom Exp | $\frac{\text{(Exp-Atom)}}{\text{Error}}$ | #/? | $R_{\rm Exp}$ | R_{Atom} | Atom Exp | (Exp-Atom) Error |
|---|------------------------|---------------------|-------------------------|-------------|--|-----|-----------------|---------------------|-------------|---------------------|
| 0 | Lepton multiplicity | 100.0 | 100.0 | | | | | | | |
| 1 | SFOS requirement | 99.31 ± 8.59 | 99.01 ± 6.98 | 1.0 | -0.03 | 0 | 0.99 ± 0.09 | 0.99 ± 0.07 | 1.0 | -0.03 |
| 2 | b-jet veto | 92.38 ± 8.28 | 92.57 ± 6.75 | 1.0 | 0.02 | 1 | 0.93 ± 0.08 | 0.93 ± 0.07 | 1.01 | 0.04 |
| 3 | Z requirement | 87.41 ± 8.06 | 84.65 ± 6.46 | 0.97 | -0.27 | 2 | 0.95 ± 0.09 | 0.91 ± 0.07 | 0.97 | -0.28 |
| 4 | SRZb: $75 < MET < 120$ | 26.06 ± 4.4 | 23.76 ± 3.43 | 0.91 | -0.41 | 3 | 0.3 ± 0.05 | 0.28 ± 0.04 | 0.94 | -0.27 |
| 5 | SRZb: $m_T > 110$ | 10.7 ± 2.82 | 9.41 ± 2.16 | 0.88 | -0.36 | 4 | 0.41 ± 0.11 | 0.4 ± 0.09 | 0.96 | -0.1 |

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