

**SRA**

|  |                                 |                      |
|--|---------------------------------|----------------------|
| Gluino GMSB model, gluino mass: 1400 GeV, $\tilde{\chi}_1^0$ mass: 700 GeV                   | Events in 35.9 fb <sup>-1</sup> |                      |
| Expected events  | 174.14                          |                      |
| $\geq 2$ Leptons ( $e^\pm e^\mp$ or $\mu^\pm \mu^\mp$ ) with (sub)leading $p_T > 25(20)$ GeV | 65.24                           |                      |
| Extra lepton vetos   | 57.81                           |                      |
| Dilepton mass $\in Z$ mass window (86,96) GeV  | 44.86                           |                      |
| 2-3 Jets   | 1.88                            |                      |
| $\Delta\Phi$ between MET and two highest $p_T$ jets $> 0.4$ rad                              | 1.54                            |                      |
| <b>Btag requirement</b>  | <b>B Veto</b>                   | $\geq 1$ <b>Btag</b> |
|  | 1.14                            | 0.40                 |
| $M_{T2}(\ell\ell) >$   | <b>80 GeV</b>                   | <b>100 GeV</b>       |
|  | 0.36                            | 0.34                 |
| $H_T >$  | <b>500 GeV</b>                  | <b>200 GeV</b>       |
|  | 0.36                            | 0.34                 |
| $E_T^{miss} > 100$ GeV   | 0.36                            | 0.34                 |
| $E_T^{miss} > 150$ GeV   | 0.36                            | 0.34                 |
| $E_T^{miss} > 250$ GeV   | 0.29                            | 0.29                 |

**SRB**

|  |                                 |                      |
|--|---------------------------------|----------------------|
| Gluino GMSB model, gluino mass: 1400 GeV, $\tilde{\chi}_1^0$ mass: 700 GeV                   | Events in 35.9 fb <sup>-1</sup> |                      |
| Expected events  | 174.14                          |                      |
| $\geq 2$ Leptons ( $e^\pm e^\mp$ or $\mu^\pm \mu^\mp$ ) with (sub)leading $p_T > 25(20)$ GeV | 65.24                           |                      |
| Extra lepton vetos   | 57.81                           |                      |
| Dilepton mass $\in Z$ mass window (86,96) GeV  | 44.86                           |                      |
| 4-5 Jets   | 15.32                           |                      |
| $\Delta\Phi$ between MET and two highest $p_T$ jets $> 0.4$ rad                              | 13.02                           |                      |
| <b>Btag requirement</b>  | <b>B Veto</b>                   | $\geq 1$ <b>Btag</b> |
|  | 6.46                            | 6.56                 |
| $M_{T2}(\ell\ell) >$   | <b>80 GeV</b>                   | <b>100 GeV</b>       |
|  | 5.86                            | 5.66                 |
| $H_T >$  | <b>500 GeV</b>                  | <b>200 GeV</b>       |
|  | 5.83                            | 5.66                 |
| $E_T^{miss} > 100$ GeV   | 5.69                            | 5.54                 |
| $E_T^{miss} > 150$ GeV   | 5.54                            | 5.41                 |
| $E_T^{miss} > 250$ GeV   | 5.00                            | 4.89                 |

**SRC**

|  |                                 |                      |
|--|---------------------------------|----------------------|
| Gluino GMSB model, gluino mass: 1400 GeV, $\tilde{\chi}_1^0$ mass: 700 GeV                   | Events in 35.9 fb <sup>-1</sup> |                      |
| Expected events  | 174.14                          |                      |
| $\geq 2$ Leptons ( $e^\pm e^\mp$ or $\mu^\pm \mu^\mp$ ) with (sub)leading $p_T > 25(20)$ GeV | 65.24                           |                      |
| Extra lepton vetos   | 57.81                           |                      |
| Dilepton mass $\in Z$ mass window (86,96) GeV  | 44.86                           |                      |
| $\geq 6$ Jets  | 27.67                           |                      |
| $\Delta\Phi$ between MET and two highest $p_T$ jets $> 0.4$ rad                              | 23.24                           |                      |
| <b>Btag requirement</b>  | <b>B Veto</b>                   | $\geq 1$ <b>Btag</b> |
|  | 10.31                           | 12.93                |
| $M_{T2}(\ell\ell) >$   | <b>80 GeV</b>                   | <b>100 GeV</b>       |
|  | 11.12                           | 10.60                |
| $E_T^{miss} > 100$ GeV   | 10.87                           | 10.51                |
| $E_T^{miss} > 150$ GeV   | 10.44                           | 10.09                |