

Cutflows

		Gluino-stop (off-shell) $[\tilde{g}, \tilde{\chi}_1^0] : [1100, 400] \text{ [GeV]}$	Gluino-squark (via $\tilde{\chi}_1^\pm$), $x = 1/2$ $[\tilde{g}, \tilde{\chi}_1^0] : [905, 345] \text{ [GeV]}$
Trigger (6 jets with $E_T > 45 \text{ GeV}$)		168	624
Primary vertex and event cleaning		166	622
Lepton Veto		78	469
Further event cleaning		72	426
‘Multi-jet + flavour’ stream	$8j50, \eta < 2.0$	16.3	51.7
	$\& E_T^{\text{miss}}/\sqrt{H_T} > 4.0 \text{ GeV}^{1/2}$	14.1	41.7
	$\& 0 \text{ bjet}$	0.85	23
	$\& 1 \text{ bjet}$	3	14
	$\& \geq 2 \text{ bjets}$	11	5.4
	$9j50, \eta < 2.0$	9.6	15.4
	$\& E_T^{\text{miss}}/\sqrt{H_T} > 4.0 \text{ GeV}^{1/2}$	8.0	12.7
	$\& 0 \text{ bjet}$	0.33	5.8
	$\& 1 \text{ bjet}$	1.7	4.4
	$\& \geq 2 \text{ bjets}$	6.5	2.7
	$\geq 10j50, \eta < 2.0$	5.7	6.2
	$\& E_T^{\text{miss}}/\sqrt{H_T} > 4.0 \text{ GeV}^{1/2}$	4.7	4.1
	$7j80, \eta < 2.0$	7.53	27.5
	$\& E_T^{\text{miss}}/\sqrt{H_T} > 4.0 \text{ GeV}^{1/2}$	6.25	21.4
	$\& 0 \text{ bjet}$	0.31	11
	$\& 1 \text{ bjet}$	1.3	8.1
	$\& \geq 2 \text{ bjets}$	5.1	3.1
‘Multi-jet + M_J^Σ ’ stream	$\geq 8j80, \eta < 2.0$	3.2	8.4
	$\& E_T^{\text{miss}}/\sqrt{H_T} > 4.0 \text{ GeV}^{1/2}$	2.6	5.9
	$\& 0 \text{ bjet}$	0.13	2.9
	$\& 1 \text{ bjet}$	0.55	2.0
	$\& \geq 2 \text{ bjets}$	2.1	1.1
	$\geq 8j50, \eta < 2.8$	34	89
	$\& E_T^{\text{miss}}/\sqrt{H_T} > 4.0 \text{ GeV}^{1/2}$	29	71
	$\& M_J^\Sigma > 340$	19	32
	$\& M_J^\Sigma > 420$	11	17
	$\geq 9j50, \eta < 2.8$	17	29
	$\& E_T^{\text{miss}}/\sqrt{H_T} > 4.0 \text{ GeV}^{1/2}$	14	23
	$\& M_J^\Sigma > 340$	11	14
	$\& M_J^\Sigma > 420$	7.0	8.5
	$\geq 10j50, \eta < 2.8$	6.8	8.4
	$\& E_T^{\text{miss}}/\sqrt{H_T} > 4.0 \text{ GeV}^{1/2}$	5.6	6.2
	$\& M_J^\Sigma > 340$	4.6	4.7
	$\& M_J^\Sigma > 420$	3.3	2.8

Table 1: Cutflow for two supersymmetric models; a ‘gluino-stop (off-shell)’ model, where gluinos have mass of 900 GeV and the $\tilde{\chi}_1^0$ has a mass of 150 GeV (99998 generated events); and a ‘gluino-squark (via $\tilde{\chi}_1^\pm$)’ model (with $x = 1/2$), where gluinos have mass of 905 GeV and the $\tilde{\chi}_1^0$ has a mass of 345 GeV (20000 generated events). The numbers are normalized to the luminosity, 20.3 fb^{-1} . The b-jet requirements are made separately, as in the signal region definitions.