

## Reference Analysis 4 Jet+Met+Muon

Total Event Number: 10000

Muon cutflow	=1	=2	>=3
Number of Candidates	2395	1517	2091
has innerTrack	2381	1479	2066
Number of innerTrack hits >= 11	2538	1445	1827
eta  <= 2.1	2627	1440	1478
is combined muon	3096	950	284
pt >= 10	2378	489	77
GlobalMuonPromptTight	2290	462	66
globalTrack fit chi2/ndof < 10	2290	462	66
d0 (from primary vertex) < 0.2 cm	2285	462	66
Tracker Isolation < 6.0 GeV	1488	171	15
HCAL Isolation < 6.0 GeV	1454	167	13
ECAL Isolation < 6.0 GeV	1415	154	12

Exactly one good muon,  
zero electrons,  
≥ 3 jets,  
MET > 100

6003
5926
5810
5545
4330
2944
...

Event cutflow

exactly one good muon 1415

Electron cutflow	≥1
Number of Candidates	1089
has innerTrack	1089
eta  <= 2.5	1088
pt >= 20 GeV	639
d0 (from primary vertex) < 0.2 cm	639
Combined Relative isol. <= 0.1	132
Electron Id e.g.: 'eidRobustTight'	93

zero electrons 1322  
 ≥ 3 jets 737  
 MET > 100 452

Selection cutflow



## Event selection in RA4 (Jet+MET+Electron)

	LM0		LM1		W+Jets	
	100	100	100	100	100	100
electron trigger	54,08	54,1	47,0	47,0	21,53	21,5
no good muons	48,62	48,6	43,03	43,0	21,31	21,3
exactly one electron	8,09	8,10	6,7	6,7	14,23	14,3
$\geq 3$ jets	4,72	4,67	3,49	3,44	0,03	0,02
MET > 100	3,11	3,07	3,12	3,08	0,01	0,00
	HU	CU	HU	CU	HU	CU

	Z+jets		TTbar	
	100	100	100	100
electron trigger	31,5	31,5	57,02	57,1
no good muons	30,81	30,8	50,75	50,8
exactly one electron	12,92	12,9	11,53	11,6
$\geq 3$ jets	0,04	0,03	3,92	3,86
MET > 100	0,00	0,00	0,73	0,71