Run=7099046, Event=29815
hSmdu
Entries 22
Mean 213.5
RMS 4.672
Triggers
127641
127652
127622
127262
0
2
4
6
8
10
12
14
16
18
180
200
220
240
260

p_T=6.2 GeV, E=9.4 GeV
hSmdv
Entries 29
Mean 198.1
RMS 7.781
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

Run=7099047, Event=136553
hSmdu
Entries 35
Mean 205.9
RMS 8.023
Triggers
127641
0
2
4
6
8
10
12
14
160
180
200
220
240

p_T=8.3 GeV, E=13.9 GeV
hSmdv
Entries 32
Mean 183.9
RMS 9.109
0
2
4
6
8
10
12
14
140
160
180
200
220

Run=7099047, Event=136994
hSmdu
Entries 73
Mean 121
RMS 12.9
Triggers
127271
127641
127652
127622
0
2
4
6
8
10
12
14
16
80
100
120
140
160
180

p_T=11.2 GeV, E=24.7 GeV
hSmdv
Entries 71
Mean 117.5
RMS 15.94
0
2
4
6
8
10
12
14
16
80
100
120
140
160

Run=7099047, Event=137500
hSmdu
Entries 33
Mean 242.7
RMS 7.338
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
190 200 210 220 230 240 250 260 270 280

p_T=5.6 GeV, E=10.1 GeV
hSmdv
Entries 32
Mean 151.2
RMS 10.43
0
2
4
6
8
10
12
14
16
18
20
22
120 140 160 180 200

Run=7099047, Event=137588
hSmdu
Entries 34
Mean 36.68
RMS 8.201
Triggers
127641
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60
70
80

p_T=5.1 GeV, E=20.1 GeV
hSmdv
Entries 26
Mean 24.35
RMS 5.579
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60
70

Run=7099047, Event=137747
hSmdu
Entries 36
Mean 139.9
RMS 11.11
Triggers
127641
127652
127622
0
2
4
6
8
10
12
100
120
140
160
180

p_T=5.4 GeV, E=8.8 GeV
hSmdv
Entries 25
Mean 198.4
RMS 5.165
0
2
4
6
8
10
12
160
180
200
220
240

Run=7099047, Event=137911
hSmdu
Entries 23
Mean 18.81
RMS 4.394
Triggers
127641
127262
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60

p_T=6.2 GeV, E=20.2 GeV
hSmdv
Entries 23
Mean 43.88
RMS 5.274
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=138078
hSmdu
Entries 25
Mean 162.6
RMS 5.193
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

p_T=5.1 GeV, E=9.6 GeV
hSmdv
Entries 29
Mean 200.8
RMS 8.259
0
2
4
6
8
10
12
14
16
18
20
22
160
180
200
220
240

Run=7099047, Event=138265
hSmdu
Entries 23
Mean 53
RMS 4.037
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
35
40
20
40
60
80
100

p_T=5.2 GeV, E=22.6 GeV
hSmdv
Entries 29
Mean 23.73
RMS 7.134
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70

Run=7099047, Event=138493
hSmdu
Entries 20
Mean 39.7
RMS 3.749
Triggers
127641
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
90

p_T=5.7 GeV, E=14.7 GeV
hSmdv
Entries 23
Mean 99.61
RMS 7.073
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099047, Event=138662
hSmdu
Entries 29
Mean 185
RMS 6.395
Triggers
127271
127641
127262
0
5
10
15
20
25
30
140
160
180
200
220

p_T=10.6 GeV, E=17.3 GeV
hSmdv
Entries 25
Mean 163
RMS 6.589
0
5
10
15
20
25
30
120
140
160
180
200

Run=7099047, Event=138996
hSmdu
Entries 20
Mean 201
RMS 10.7
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
160
180
200
220
240

p_T=5.2 GeV, E=9.6 GeV
hSmdv
Entries 23
Mean 217.5
RMS 8.707
0
2
4
6
8
10
12
14
16
18
20
180
200
220
240
260

Run=7099047, Event=139354
hSmdu
Entries 24
Mean 44.25
RMS 5.914
Triggers
127641
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
90

p_T=6.3 GeV, E=15.3 GeV
hSmdv
Entries 20
Mean 107.2
RMS 4.395
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099047, Event=139356
hSmdu
Entries 41
Mean 97.43
RMS 9.365
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
60
80
100
120
140

p_T=6.2 GeV, E=13.6 GeV
hSmdv
Entries 32
Mean 191.8
RMS 6.718
0
5
10
15
20
25
160
180
200
220
240

Run=7099047, Event=139521
hSmdu
Entries 30
Mean 116.9
RMS 12.68
Triggers
127271
127641
0
2
4
6
8
10
12
14
80
100
120
140
160

p_T=6.7 GeV, E=10.6 GeV
hSmdv
Entries 41
Mean 188
RMS 15.28
0
2
4
6
8
10
12
14
120
140
160
180
200

Run=7099047, Event=140386
hSmdu
Entries 42
Mean 213.1
RMS 14.53
Triggers
127641
127262
0
5
10
15
20
25
30
180
200
220
240
260

p_T=5.7 GeV, E=9.4 GeV
hSmdv
Entries 25
Mean 195.9
RMS 4.914
0
5
10
15
20
25
30
160
180
200
220
240

Run=7099047, Event=140563
hSmdu
Entries 27
Mean 154.4
RMS 9.808
Triggers
127221
127271
127611
127641
127652
127622
127212
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
100
120
140
160
180

p_T=6.4 GeV, E=13.1 GeV
hSmdv
Entries 24
Mean 210.2
RMS 4.302
0
2
4
6
8
10
12
14
16
18
20
22
24
160
180
200
220
240

Run=7099047, Event=47435
hSmdu
Entries 24
Mean 132
RMS 4.716
Triggers
127641
24
22
20
18
16
14
12
10
8
6
4
2
0
100
120
140
160
180

p_T=5.1 GeV, E=7.9 GeV
hSmdv
Entries 28
Mean 240.5
RMS 4.441
24
22
20
18
16
14
12
10
8
6
4
2
0
190
200
210
220
230
240
250
260
270
280

Run=7099047, Event=48146
hSmdu
Entries 34
Mean 43.42
RMS 6.289
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70
80
90

p_T=7.8 GeV, E=22.0 GeV
hSmdv
Entries 31
Mean 46.42
RMS 5.676
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=48647
hSmdu
Entries 29
Mean 129.6
RMS 8.808
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=5.1 GeV, E=10.2 GeV
hSmdv
Entries 56
Mean 138.4
RMS 13.79
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

Run=7099047, Event=48730
hSmdu
Entries 19
Mean 141.2
RMS 4.061
Triggers
127641
127262
30
25
20
15
10
5
0
100
120
140
160
180

p_T=5.3 GeV, E=10.9 GeV
hSmdv
Entries 24
Mean 149.5
RMS 7.717
30
25
20
15
10
5
0
120
140
160
180
200

Run=7099047, Event=49851
hSmdu
Entries 33
Mean 78.39
RMS 7.317
Triggers
127271
127641
127262
0
5
10
15
20
25
40
60
80
100
120

p_T=9.1 GeV, E=16.2 GeV
hSmdv
Entries 38
Mean 114.2
RMS 6.946
0
5
10
15
20
25
80
100
120
140
160

Run=7099047, Event=49892
hSmdu
Entries 38
Mean 103.7
RMS 4.022
Triggers
127641
0
2
4
6
8
10
12
14
16
18
60
80
100
120
140

p_T=5.1 GeV, E=8.6 GeV
hSmdv
Entries 40
Mean 212.2
RMS 13.1
0
2
4
6
8
10
12
14
16
18
180
200
220
240
260

Run=7099047, Event=50114
hSmdu
Entries 31
Mean 109.6
RMS 6.012
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
60
80
100
120
140
160

p_T=5.4 GeV, E=11.8 GeV
hSmdv
Entries 34
Mean 162.1
RMS 10.07
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

Run=7099047, Event=50352
hSmdu
Entries 27
Mean 102.8
RMS 5.631
Triggers
127271
127641
127652
127262
0
2
4
6
8
10
12
14
16
18
20
22
60
80
100
120
140

p_T=5.7 GeV, E=16.6 GeV
hSmdv
Entries 38
Mean 137.9
RMS 13.59
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

Run=7099047, Event=50918
hSmdu
Entries 24
Mean 90.94
RMS 5.152
Triggers
127271
127641
127652
127262
0
10
20
30
40
50
60
80
100
120
140

p_T=8.2 GeV, E=25.7 GeV
hSmdv
Entries 26
Mean 50.07
RMS 5.037
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=51429
hSmdu
Entries 34
Mean 144.8
RMS 8.391
Triggers
127271
127641
127652
0
5
10
15
20
25
30
100
120
140
160
180

p_T=5.3 GeV, E=9.3 GeV
hSmdv
Entries 29
Mean 218.9
RMS 7.004
0
5
10
15
20
25
30
180
200
220
240
260

Run=7099047, Event=43788
hSmdu
Entries 24
Mean 74.83
RMS 4.881
Triggers
127641
127262
0
5
10
15
20
25
30
40
60
80
100
120

p_T=5.3 GeV, E=21.7 GeV
hSmdv
Entries 21
Mean 69.18
RMS 6.327
0
5
10
15
20
25
30
20
40
60
80
100

Run=7099047, Event=44253
hSmdu
Entries 46
Mean 232.6
RMS 16.17
Triggers
127271
127641
127652
0
2
4
6
8
10
12
14
180
200
220
240
260

p_T=5.7 GeV, E=12.1 GeV
hSmdv
Entries 54
Mean 224.4
RMS 10.51
0
2
4
6
8
10
12
14
200
220
240
260
280

Run=7099047, Event=44407
hSmdu
Entries 30
Mean 123.5
RMS 6.018
Triggers
127641
35
30
25
20
15
10
5
0
80
100
120
140
160

p_T=7.1 GeV, E=15.2 GeV
hSmdv
Entries 31
Mean 73.43
RMS 6.248
35
30
25
20
15
10
5
0
40
60
80
100
120

Run=7099047, Event=44632
hSmdu
Entries 25
Mean 129.7
RMS 5.612
Triggers
127271
127641
127262
0
5
10
15
20
25
80
100
120
140
160
180

p_T=9.3 GeV, E=20.4 GeV
hSmdv
Entries 31
Mean 96.32
RMS 5.911
0
5
10
15
20
25
60
80
100
120
140

Run=7099047, Event=45369
hSmdu
Entries 21
Mean 68.77
RMS 4.701
Triggers
127641
30
25
20
15
10
5
0
20
40
60
80
100

p_T=7.2 GeV, E=19.8 GeV
hSmdv
Entries 31
Mean 39.51
RMS 7.698
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=45815
hSmdu
Entries 39
Mean 103.2
RMS 6.282
Triggers
127271
127641
127262
45
40
35
30
25
20
15
10
5
0
60
80
100
120
140

p_T=10.3 GeV, E=23.3 GeV
hSmdv
Entries 33
Mean 210.1
RMS 4.777
45
40
35
30
25
20
15
10
5
0
160
180
200
220
240

Run=7099047, Event=45871
hSmdu
Entries 26
Mean 222.6
RMS 4.174
Triggers
127641
127262
35
30
25
20
15
10
5
0
180
200
220
240
260

p_T=8.0 GeV, E=11.6 GeV
hSmdv
Entries 34
Mean 203
RMS 6.438
35
30
25
20
15
10
5
0
160
180
200
220
240

Run=7099047, Event=128297
hSmdu
Entries 46
Mean 80.45
RMS 9.893
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

p_T=6.8 GeV, E=18.6 GeV
hSmdv
Entries 47
Mean 145.7
RMS 9.46
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180
200

Run=7099047, Event=128462
hSmdu
Entries 37
Mean 76.84
RMS 8.967
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

p_T=9.1 GeV, E=18.9 GeV
hSmdv
Entries 34
Mean 158.9
RMS 8.407
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200

Run=7099047, Event=128906
hSmdu
Entries 23
Mean 52.82
RMS 4.912
Triggers
127641
45
40
35
30
25
20
15
10
5
0
20
40
60
80
100

p_T=5.8 GeV, E=16.5 GeV
hSmdv
Entries 25
Mean 52.89
RMS 4.521
45
40
35
30
25
20
15
10
5
0
20
40
60
80
100

Run=7099047, Event=129016
hSmdu
Entries 30
Mean 156.3
RMS 6.568
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
120
140
160
180
200

p_T=6.7 GeV, E=15.3 GeV
hSmdv
Entries 37
Mean 180.6
RMS 6.747
0
5
10
15
20
25
30
35
40
140
160
180
200
220

Run=7099047, Event=129899
hSmdu
Entries 28
Mean 79.35
RMS 6.368
Triggers
127271
127641
127262
0
5
10
15
20
25
30
40
60
80
100
120

p_T=5.5 GeV, E=13.3 GeV
hSmdv
Entries 20
Mean 156.2
RMS 3.948
0
5
10
15
20
25
30
120
140
160
180
200

Run=7099047, Event=129969
hSmdu
Entries 30
Mean 151.8
RMS 9.697
Triggers
127271
127641
127262
25
20
15
10
5
0
100
120
140
160
180

p_T=6.3 GeV, E=14.5 GeV
hSmdv
Entries 27
Mean 218
RMS 4.833
25
20
15
10
5
0
180
200
220
240
260

Run=7099047, Event=130153
hSmdu
Entries 44
Mean 237.8
RMS 5.595
Triggers
127271
127641
p_T=6.9 GeV, E=17.2 GeV
hSmdv
Entries 44
Mean 234.5
RMS 10.07
0
5
10
15
20
25
30
35
190 200 210 220 230 240 250 260 270 280

Run=7099047, Event=130369
hSmdu
Entries 31
Mean 91.41
RMS 7.753
Triggers
127641
0
2
4
6
8
10
12
40
60
80
100
120

p_T=5.4 GeV, E=13.7 GeV
hSmdv
Entries 34
Mean 78.84
RMS 9.038
0
2
4
6
8
10
12
40
60
80
100
120

Run=7099047, Event=130382
hSmdu
Entries 5
Mean 223.6
RMS 4.667
Triggers
127641
2.5
2
1.5
1
0.5
0
180
200
220
240
260

p_T=6.4 GeV, E=9.8 GeV
hSmdv
Entries 11
Mean 112.4
RMS 12.41
2.5
2
1.5
1
0.5
0
60
80
100
120
140

Run=7099047, Event=131338
hSmdu
Entries 39
Mean 47.89
RMS 11.1
Triggers
127641
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60
70
80
90

p_T=6.1 GeV, E=16.9 GeV
hSmdv
Entries 39
Mean 98.7
RMS 9.074
0
5
10
15
20
25
30
35
60
80
100
120
140

Run=7099047, Event=132063
hSmdu
Entries 29
Mean 109.5
RMS 6.245
Triggers
127271
127641
127652
127551
127262
0
5
10
15
20
25
30
35
40
60
80
100
120
140

p_T=8.3 GeV, E=17.3 GeV
hSmdv
Entries 28
Mean 205.2
RMS 7.27
0
5
10
15
20
25
30
35
40
160
180
200
220
240

Run=7099047, Event=39132
hSmdu
Entries 32
Mean 153.6
RMS 10.52
Triggers
127641
127262
0
5
10
15
20
25
120
140
160
180
200

p_T=5.8 GeV, E=10.1 GeV
hSmdv
Entries 26
Mean 194.9
RMS 7.352
0
5
10
15
20
25
160
180
200
220
240

Run=7099047, Event=39342
hSmdu
Entries 36
Mean 114.2
RMS 7.907
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
60
80
100
120
140
160

p_T=7.2 GeV, E=17.2 GeV
hSmdv
Entries 32
Mean 98.9
RMS 6.344
0
2
4
6
8
10
12
14
16
18
20
22
60
80
100
120
140

Run=7099047, Event=39798
hSmdu
Entries 33
Mean 46.54
RMS 7.734
Triggers
127641
127652
127622
0
5
10
15
20
25
0 10 20 30 40 50 60 70 80 90

p_T=5.0 GeV, E=17.2 GeV
hSmdv
Entries 28
Mean 38.91
RMS 5.74
0
5
10
15
20
25
0 10 20 30 40 50 60 70 80 90

Run=7099047, Event=40923
hSmdu
Entries 33
Mean 179.1
RMS 6.458
Triggers
127271
127641
127262
35
30
25
20
15
10
5
0
140
160
180
200
220

p_T=9.9 GeV, E=16.3 GeV
hSmdv
Entries 31
Mean 163.3
RMS 6.427
35
30
25
20
15
10
5
0
120
140
160
180
200

Run=7099047, Event=41478
hSmdu
Entries 26
Mean 134.1
RMS 7.317
Triggers
127641
127652
0
2
4
6
8
10
100
120
140
160
180

p_T=6.8 GeV, E=17.4 GeV
hSmdv
Entries 38
Mean 116.3
RMS 10.87
0
2
4
6
8
10
80
100
120
140
160

Run=7099047, Event=41657
hSmdu
Entries 25
Mean 15.87
RMS 4.84
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
0
10
20
30
40
50
60

p_T=5.3 GeV, E=17.9 GeV
hSmdv
Entries 31
Mean 61.24
RMS 7.86
0
2
4
6
8
10
12
14
16
18
20
22
24
20
40
60
80
100

Run=7099047, Event=42392
hSmdu
Entries 26
Mean 115.2
RMS 8.73
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
80
100
120
140
160

p_T=6.4 GeV, E=13.6 GeV
hSmdv
Entries 30
Mean 175.6
RMS 7.579
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220

Run=7099047, Event=42824
hSmdu
Entries 23
Mean 140.4
RMS 6.72
Triggers
127271
127641
127652
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=5.3 GeV, E=9.8 GeV
hSmdv
Entries 26
Mean 215.4
RMS 6.344
0
2
4
6
8
10
12
14
16
18
20
22
180
200
220
240
260

Run=7099047, Event=120288
hSmdu
Entries 17
Mean 99.09
RMS 6.012
Triggers
127641
35
30
25
20
15
10
5
0
60
80
100
120
140

p_T=5.0 GeV, E=17.1 GeV
hSmdv
Entries 29
Mean 43.65
RMS 9.64
35
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80

Run=7099047, Event=120642
hSmdu
Entries 36
Mean 32.15
RMS 6.293
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60
70
80

p_T=6.1 GeV, E=27.2 GeV
hSmdv
Entries 34
Mean 85.05
RMS 7.18
0
5
10
15
20
25
30
35
40
60
80
100
120

Run=7099047, Event=121004
hSmdu
Entries 18
Mean 83.79
RMS 3.59
Triggers
127271
127641
127262
0
5
10
15
20
25
30
40
60
80
100
120

p_T=5.6 GeV, E=12.4 GeV
hSmdv
Entries 23
Mean 156.6
RMS 6.897
0
5
10
15
20
25
30
120
140
160
180
200

Run=7099047, Event=121772
hSmdu
Entries 26
Mean 167.8
RMS 13.96
Triggers
127641
0
2
4
6
8
10
12
140
160
180
200
220

p_T=5.3 GeV, E=9.1 GeV
hSmdv
Entries 29
Mean 200.4
RMS 8.72
0
2
4
6
8
10
12
160
180
200
220
240

Run=7099047, Event=122178
hSmdu
Entries 23
Mean 20.44
RMS 3.977
Triggers
127271
127641
127262
0
5
10
15
20
25
0
10
20
30
40
50
60
70

p_T=5.3 GeV, E=17.4 GeV
hSmdv
Entries 29
Mean 80.02
RMS 6.119
0
5
10
15
20
25
40
60
80
100
120

Run=7099047, Event=122648
hSmdu
Entries 34
Mean 128.3
RMS 6.275
Triggers
127221
127271
127641
127652
127622
127262
0
5
10
15
20
25
30
80
100
120
140
160

p_T=10.7 GeV, E=18.7 GeV
hSmdv
Entries 42
Mean 215.4
RMS 8.068
0
5
10
15
20
25
30
180
200
220
240
260

Run=7099047, Event=123099
hSmdu
Entries 21
Mean 138.6
RMS 5.246
Triggers
127271
127641
127262
30
25
20
15
10
5
0
100
120
140
160
180

p_T=7.8 GeV, E=15.9 GeV
hSmdv
Entries 30
Mean 73.89
RMS 5.794
30
25
20
15
10
5
0
40
60
80
100
120

Run=7099047, Event=124070
hSmdu
Entries 34
Mean 57.11
RMS 8.648
Triggers
127641
35
30
25
20
15
10
5
0
20
40
60
80
100

p_T=5.8 GeV, E=17.8 GeV
hSmdv
Entries 38
Mean 62.63
RMS 11.36
35
30
25
20
15
10
5
0
20
40
60
80
100

Run=7099047, Event=124081
hSmdu
Entries 21
Mean 117.1
RMS 5.832
Triggers
127641
127262
45
40
35
30
25
20
15
10
5
0
80
100
120
140
160

p_T=5.0 GeV, E=14.4 GeV
hSmdv
Entries 23
Mean 46.22
RMS 5.027
45
40
35
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=124759
hSmdu
Entries 44
Mean 195.5
RMS 12.82
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
160
180
200
220
240

p_T=6.9 GeV, E=16.1 GeV
hSmdv
Entries 29
Mean 179.5
RMS 6.337
0
5
10
15
20
25
30
35
40
140
160
180
200
220

Run=7099047, Event=125928
hSmdu
Entries 47
Mean 80.08
RMS 9.873
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
40
60
80
100
120

p_T=6.1 GeV, E=20.1 GeV
hSmdv
Entries 46
Mean 146.7
RMS 14.3
0
2
4
6
8
10
12
14
16
100
120
140
160
180

Run=7099047, Event=126500
hSmdu
Entries 30
Mean 159.9
RMS 7.753
Triggers
127641
127262
0
5
10
15
20
25
120
140
160
180
200
p_T=5.9 GeV, E=10.5 GeV
hSmdv
Entries 29
Mean 208.3
RMS 6.071
0
5
10
15
20
25
160
180
200
220
240

Run=7099047, Event=127618
hSmdu
Entries 36
Mean 88.31
RMS 9.631
Triggers
127641
127652
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

p_T=6.8 GeV, E=11.5 GeV
hSmdv
Entries 22
Mean 142.6
RMS 6.003
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

Run=7099046, Event=85137
hSmdu
Entries 28
Mean 220.2
RMS 8.153
Triggers
127641
0
2
4
6
8
10
180
200
220
240
260

p_T=6.9 GeV, E=9.3 GeV
hSmdv
Entries 26
Mean 160
RMS 7.449
0
2
4
6
8
10
120
140
160
180
200

Run=7099047, Event=51835
hSmdu
Entries 27
Mean 117.7
RMS 9.496
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
80
100
120
140
160

p_T=5.1 GeV, E=13.0 GeV
hSmdv
Entries 30
Mean 154.4
RMS 6.744
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

Run=7099047, Event=53090
hSmdu
Entries 45
Mean 243.5
RMS 10.26
Triggers
127271
127641
127652
127262
0
2
4
6
8
10
12
200 210 220 230 240 250 260 270 280
p_T=7.4 GeV, E=14.8 GeV
hSmdv
Entries 45
Mean 117.4
RMS 5.052
0
2
4
6
8
10
12
80 100 120 140 160

Run=7099047, Event=92241
hSmdu
Entries 37
Mean 59.97
RMS 8.066
Triggers
127641
0
5
10
15
20
25
20
40
60
80
100

p_T=6.1 GeV, E=19.4 GeV
hSmdv
Entries 30
Mean 35.7
RMS 7.222
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80

Run=7099046, Event=1654
hSmdu
Entries 24
Mean 25.73
RMS 3.589
Triggers
127641
127262
0
10
20
30
40
50
60
70

p_T=5.6 GeV, E=25.0 GeV
hSmdv
Entries 36
Mean 54.81
RMS 6.885
0
10
20
30
40
50
60
70
20
40
60
80
100

Run=7099047, Event=115804
hSmdu
Entries 20
Mean 42.01
RMS 6.366
Triggers
127641
127262
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80

p_T=5.7 GeV, E=21.8 GeV
hSmdv
Entries 18
Mean 42.76
RMS 4.162
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=116271
hSmdu
Entries 29
Mean 153.4
RMS 8.64
Triggers
127271
127641
127262
25
20
15
10
5
0
120
140
160
180
200

p_T=6.7 GeV, E=13.9 GeV
hSmdv
Entries 30
Mean 101.6
RMS 8.665
25
20
15
10
5
0
60
80
100
120
140

Run=7099047, Event=116560
hSmdu
Entries 61
Mean 53.07
RMS 7.431
Triggers
127271
127641
0 2 4 6 8 10 12 14 16 18 20 22
0 10 20 30 40 50 60 70 80 90

p_T=8.0 GeV, E=19.7 GeV
hSmdv
Entries 50
Mean 105.3
RMS 22.77
0 2 4 6 8 10 12 14 16 18 20 22
60 80 100 120 140 160

Run=7099047, Event=116673
hSmdu
Entries 25
Mean 154.7
RMS 7.238
Triggers
127641
14
12
10
8
6
4
2
0
120
140
160
180
200

p_T=5.9 GeV, E=10.4 GeV
hSmdv
Entries 31
Mean 80.32
RMS 12.12
14
12
10
8
6
4
2
0
40
60
80
100
120

Run=7099047, Event=117057
hSmdu
Entries 28
Mean 240.9
RMS 7.421
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
200 210 220 230 240 250 260 270 280

p_T=8.0 GeV, E=15.0 GeV
hSmdv
Entries 23
Mean 141.8
RMS 4.999
0
2
4
6
8
10
12
14
16
18
20
22
100 120 140 160 180

Run=7099047, Event=117344
hSmdu
Entries 34
Mean 84.91
RMS 10.93
Triggers
127641
0
2
4
6
8
10
12
14
16
60
80
100
120
140

p_T=5.2 GeV, E=19.6 GeV
hSmdv
Entries 40
Mean 47.14
RMS 11.85
0
2
4
6
8
10
12
14
16
20
40
60
80
100

Run=7099047, Event=117879
hSmdu
Entries 49
Mean 79.41
RMS 12.25
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
40
60
80
100
120

p_T=6.8 GeV, E=16.3 GeV
hSmdv
Entries 43
Mean 164.6
RMS 10.42
0
2
4
6
8
10
12
14
16
120
140
160
180
200

Run=7099047, Event=118087
hSmdu
Entries 21
Mean 148.3
RMS 2.98
Triggers
127641
127262
0
5
10
15
20
25
30
100
120
140
160
180

p_T=6.4 GeV, E=12.6 GeV
hSmdv
Entries 23
Mean 68.78
RMS 3.572
0
5
10
15
20
25
30
20
40
60
80
100

Run=7099047, Event=118322
hSmdu
Entries 30
Mean 139.4
RMS 7.537
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

p_T=5.7 GeV, E=13.2 GeV
hSmdv
Entries 29
Mean 141.3
RMS 6.348
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

Run=7099047, Event=118491
hSmdu
Entries 31
Mean 158.3
RMS 8.43
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200

p_T=5.0 GeV, E=11.0 GeV
hSmdv
Entries 24
Mean 72.65
RMS 9.292
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

Run=7099047, Event=118627
hSmdu
Entries 29
Mean 63.13
RMS 7.72
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100

p_T=6.8 GeV, E=21.1 GeV
hSmdv
Entries 31
Mean 57.39
RMS 7.496
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100

Run=7099046, Event=67349
hSmdu
Entries 33
Mean 234.8
RMS 11.9
Triggers
127641
10
8
6
4
2
0
200
220
240
260
280

p_T=6.8 GeV, E=9.7 GeV
hSmdv
Entries 35
Mean 130.7
RMS 12.51
10
8
6
4
2
0
80
100
120
140
160

Run=7099046, Event=67820
hSmdu
Entries 32
Mean 227.7
RMS 9.49
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
180
200
220
240
260

p_T=9.0 GeV, E=16.7 GeV
hSmdv
Entries 34
Mean 174
RMS 8.133
0
5
10
15
20
25
30
140
160
180
200
220

Run=7099046, Event=67826
hSmdu
Entries 34
Mean 129.1
RMS 4.261
Triggers
127641
0
2
4
6
8
10
12
80
100
120
140
160

p_T=5.1 GeV, E=8.3 GeV
hSmdv
Entries 24
Mean 268.9
RMS 4.743
0
2
4
6
8
10
12
220
230
240
250
260
270
280

Run=7099046, Event=68092
hSmdu
Entries 32
Mean 191.8
RMS 9.794
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
140
160
180
200
220
240

p_T=8.1 GeV, E=16.0 GeV
hSmdv
Entries 46
Mean 114.6
RMS 12.3
0
2
4
6
8
10
12
14
16
60
80
100
120
140

Run=7099046, Event=68469
hSmdu
Entries 25
Mean 168.2
RMS 11.26
Triggers
127271
127641
127262
0
1
2
3
4
5
6
7
8
9
120
140
160
180
200

p_T=5.6 GeV, E=14.2 GeV
hSmdv
Entries 26
Mean 172.6
RMS 7.513
0
1
2
3
4
5
6
7
8
9
120
140
160
180
200

Run=7099046, Event=68654
hSmdu
Entries 39
Mean 134.9
RMS 11.23
Triggers
127641
0
5
10
15
20
25
100
120
140
160
180

p_T=6.2 GeV, E=10.7 GeV
hSmdv
Entries 27
Mean 89.74
RMS 6.647
0
5
10
15
20
25
40
60
80
100
120
140

Run=7099046, Event=68880
hSmdu
Entries 34
Mean 62.26
RMS 8.377
Triggers
127271
127641
127262
0
10
20
30
40
50
20
40
60
80
100

p_T=6.2 GeV, E=21.0 GeV
hSmdv
Entries 24
Mean 73.38
RMS 3.697
0
10
20
30
40
50
40
60
80
100
120

Run=7099046, Event=68882
hSmdu
Entries 29
Mean 143.2
RMS 8.317
Triggers
127641
127262
16
14
12
10
8
6
4
2
0
100
120
140
160
180

p_T=6.2 GeV, E=14.1 GeV
hSmdv
Entries 20
Mean 75.37
RMS 4.347
16
14
12
10
8
6
4
2
0
40
60
80
100
120

Run=7099046, Event=69879
hSmdu
Entries 18
Mean 271.3
RMS 4.147
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
220
230
240
250
260
270
280
p_T=5.2 GeV, E=7.7 GeV
hSmdv
Entries 19
Mean 134.8
RMS 4.894
0
2
4
6
8
10
12
14
16
100
120
140
160
180

Run=7099046, Event=70053
hSmdu
Entries 26
Mean 101.1
RMS 10.46
Triggers
127271
127641
127652
127622
25
20
15
10
5
0
60
80
100
120
140

p_T=7.0 GeV, E=12.1 GeV
hSmdv
Entries 29
Mean 118.8
RMS 7.494
25
20
15
10
5
0
80
100
120
140
160

Run=7099046, Event=70277
hSmdu
Entries 36
Mean 122.2
RMS 8.231
Triggers
127271
127641
127262
0
5
10
15
20
25
30
80
100
120
140
160

p_T=6.8 GeV, E=16.1 GeV
hSmdv
Entries 21
Mean 152.2
RMS 3.928
0
5
10
15
20
25
30
120
140
160
180
200

Run=7099047, Event=34859
hSmdu
Entries 19
Mean 113.4
RMS 4.026
Triggers
127641
40
35
30
25
20
15
10
5
0
80
100
120
140
160

p_T=5.8 GeV, E=16.6 GeV
hSmdv
Entries 37
Mean 79.58
RMS 8.537
40
35
30
25
20
15
10
5
0
40
60
80
100
120

Run=7099047, Event=35189
hSmdu
Entries 29
Mean 233
RMS 9.114
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
180
200
220
240
260

p_T=6.5 GeV, E=12.2 GeV
hSmdv
Entries 32
Mean 124.8
RMS 7.022
0
2
4
6
8
10
12
14
16
80
100
120
140
160

Run=7099047, Event=35228
hSmdu
Entries 40
Mean 233.2
RMS 9.223
Triggers
127641
0
2
4
6
8
10
12
14
16
18
180
200
220
240
260

p_T=6.4 GeV, E=9.8 GeV
hSmdv
Entries 39
Mean 132.6
RMS 6.219
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160
180

Run=7099047, Event=35348
hSmdu
Entries 23
Mean 126.5
RMS 4.869
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
80
100
120
140
160

p_T=5.2 GeV, E=11.2 GeV
hSmdv
Entries 37
Mean 196.6
RMS 10.78
0
2
4
6
8
10
12
14
16
18
20
160
180
200
220
240

Run=7099047, Event=35519
hSmdu
Entries 28
Mean 197.4
RMS 5.258
Triggers
127641
127262
p_T=5.0 GeV, E=10.5 GeV
hSmdv
Entries 28
Mean 206.1
RMS 11.34
0
5
10
15
20
25
160
180
200
220
240

Run=7099047, Event=35803
hSmdu
Entries 60
Mean 174.7
RMS 10.44
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
35
40
140
160
180
200
220

p_T=9.1 GeV, E=19.1 GeV
hSmdv
Entries 39
Mean 93.21
RMS 10.05
0
5
10
15
20
25
30
35
40
40
60
80
100
120
140

Run=7099047, Event=36646
hSmdu
Entries 25
Mean 165.9
RMS 5.35
Triggers
127271
127641
127262
0
10
20
30
40
50
120
140
160
180
200

p_T=7.6 GeV, E=13.5 GeV
hSmdv
Entries 28
Mean 232.4
RMS 3.922
0
10
20
30
40
50
200
220
240
260
280

Run=7099047, Event=36917
hSmdu
Entries 29
Mean 33.19
RMS 4.498
Triggers
127271
127641
127262
0
10
20
30
40
50
60
0
10
20
30
40
50
60
70
80

p_T=7.8 GeV, E=29.5 GeV
hSmdv
Entries 32
Mean 99.29
RMS 4.104
0
10
20
30
40
50
60
60
80
100
120
140

Run=7099047, Event=37906
hSmdu
Entries 21
Mean 160.3
RMS 4.019
Triggers
127641
127262
0
5
10
15
20
25
30
120
140
160
180
200

p_T=5.8 GeV, E=10.5 GeV
hSmdv
Entries 23
Mean 229.5
RMS 12.37
0
5
10
15
20
25
30
200
220
240
260
280

Run=7099047, Event=38571
hSmdu
Entries 20
Mean 250.1
RMS 3.989
Triggers
127641
35
30
25
20
15
10
5
0
200 210 220 230 240 250 260 270 280

p_T=5.6 GeV, E=10.6 GeV
hSmdv
Entries 20
Mean 161.7
RMS 4.38
35
30
25
20
15
10
5
0
120 140 160 180 200

Run=7099045, Event=12152
hSmdu
Entries 26
Mean 166.4
RMS 5.13
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
120
140
160
180
200

p_T=9.8 GeV, E=20.0 GeV
hSmdv
Entries 37
Mean 73.85
RMS 7.27
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100

Run=7099045, Event=21724
hSmdu
Entries 29
Mean 86.2
RMS 7.672
Triggers
127641
0
5
10
15
20
25
30
35
40
40
60
80
100
120
140

p_T=5.7 GeV, E=12.8 GeV
hSmdv
Entries 23
Mean 112.2
RMS 4.185
0
5
10
15
20
25
30
35
40
80
100
120
140
160

Run=7099047, Event=523
hSmdu
Entries 43
Mean 100.8
RMS 7.441
Triggers
127271
127641
0
10
20
30
40
50
60
80
100
120
140
p_T=14.9 GeV, E=29.5 GeV
hSmdv
Entries 41
Mean 114.6
RMS 5.811
0
10
20
30
40
50
60
80
100
120
140
160

Run=7099047, Event=1331
hSmdu
Entries 22
Mean 124.2
RMS 6.066
Triggers
127641
0
2
4
6
8
10
12
14
80
100
120
140
160

p_T=5.1 GeV, E=10.6 GeV
hSmdv
Entries 38
Mean 114.9
RMS 9.691
0
2
4
6
8
10
12
14
80
100
120
140
160

Run=7099047, Event=1569
hSmdu
Entries 20
Mean 109.3
RMS 5.809
Triggers
127641
0
2
4
6
8
10
12
14
60
80
100
120
140
160

p_T=5.5 GeV, E=10.3 GeV
hSmdv
Entries 29
Mean 203.8
RMS 10.07
0
2
4
6
8
10
12
14
160
180
200
220
240

Run=7099047, Event=2025
hSmdu
Entries 31
Mean 71.95
RMS 7.9
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
40
60
80
100
120

p_T=5.5 GeV, E=15.1 GeV
hSmdv
Entries 35
Mean 74.64
RMS 9.063
0
2
4
6
8
10
12
14
16
18
20
22
24
40
60
80
100
120

Run=7099047, Event=2519
hSmdu
Entries 24
Mean 226.3
RMS 4.915
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
180
200
220
240
260
280

p_T=7.2 GeV, E=9.7 GeV
hSmdv
Entries 30
Mean 166.5
RMS 9.671
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200
220

Run=7099047, Event=2537
hSmdu
Entries 35
Mean 75.59
RMS 9.512
Triggers
127641
0
2
4
6
8
10
12
14
40
60
80
100
120

p_T=5.9 GeV, E=16.2 GeV
hSmdv
Entries 46
Mean 111.2
RMS 18.65
0
2
4
6
8
10
12
14
80
100
120
140
160

Run=7099047, Event=2793
hSmdu
Entries 36
Mean 233.6
RMS 6.639
Triggers
127271
127641
127262
0
5
10
15
20
25
30
200
220
240
260
280
p_T=6.3 GeV, E=12.3 GeV
hSmdv
Entries 34
Mean 160.1
RMS 6.134
0
5
10
15
20
25
30
120
140
160
180
200

Run=7099047, Event=3182
hSmdu
Entries 32
Mean 181.3
RMS 5.96
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
140
160
180
200
220

p_T=11.8 GeV, E=20.9 GeV
hSmdv
Entries 37
Mean 177.4
RMS 7.205
0
5
10
15
20
25
140
160
180
200
220

Run=7099047, Event=4102
hSmdu
Entries 24
Mean 98.76
RMS 5.062
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
60
80
100
120
140

p_T=6.3 GeV, E=13.3 GeV
hSmdv
Entries 30
Mean 203.4
RMS 8.913
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

Run=7099047, Event=25277
hSmdu
Entries 42
Mean 25.83
RMS 8.565
Triggers
127271
127641
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60
70

p_T=8.8 GeV, E=26.4 GeV
hSmdv
Entries 32
Mean 59.58
RMS 7.252
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

Run=7099047, Event=25277
hSmdu
Entries 33
Mean 102.4
RMS 9.139
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
60
80
100
120
140

p_T=5.7 GeV, E=10.9 GeV
hSmdv
Entries 34
Mean 151
RMS 10.88
0
2
4
6
8
10
12
14
16
120
140
160
180
200

Run=7099047, Event=27089
hSmdu
Entries 35
Mean 80.59
RMS 6.441
Triggers
127641
117602
0
5
10
15
20
25
40
60
80
100
120

p_T=7.5 GeV, E=11.2 GeV
hSmdv
Entries 29
Mean 167.7
RMS 7.977
0
5
10
15
20
25
120
140
160
180
200
220

Run=7099047, Event=27611
hSmdu
Entries 31
Mean 194.2
RMS 9.505
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
160
180
200
220
240

p_T=5.3 GeV, E=10.8 GeV
hSmdv
Entries 36
Mean 170.9
RMS 10.11
0
2
4
6
8
10
12
14
16
18
20
140
160
180
200
220

Run=7099047, Event=27670
hSmdu
Entries 56
Mean 171.4
RMS 10.19
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220

p_T=6.3 GeV, E=13.7 GeV
hSmdv
Entries 40
Mean 77.47
RMS 4.212
0
2
4
6
8
10
12
14
16
18
20
22
40
60
80
100
120

Run=7099047, Event=27874
hSmdu
Entries 22
Mean 169.8
RMS 4.589
Triggers
127641
0
2
4
6
8
10
12
14
16
18
120
140
160
180
200

p_T=5.4 GeV, E=11.7 GeV
hSmdv
Entries 25
Mean 95.68
RMS 4.136
0
2
4
6
8
10
12
14
16
18
60
80
100
120
140

Run=7099047, Event=27992
hSmdu
Entries 28
Mean 208.1
RMS 7.729
Triggers
127271
127641
127262
45
40
35
30
25
20
15
10
5
0
160
180
200
220
240

p_T=5.7 GeV, E=12.2 GeV
hSmdv
Entries 26
Mean 116.1
RMS 4.858
45
40
35
30
25
20
15
10
5
0
80
100
120
140
160

Run=7099047, Event=28136
hSmdu
Entries 34
Mean 156.5
RMS 9.336
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

p_T=5.0 GeV, E=10.5 GeV
hSmdv
Entries 39
Mean 112.7
RMS 8.872
0
2
4
6
8
10
12
14
16
18
20
22
80
100
120
140
160

Run=7099047, Event=28261
hSmdu
Entries 23
Mean 256.8
RMS 4.897
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
210
220
230
240
250
260
270
280

p_T=5.1 GeV, E=9.1 GeV
hSmdv
Entries 24
Mean 154
RMS 4.492
0
2
4
6
8
10
12
14
16
18
20
22
24
120
140
160
180
200

Run=7099047, Event=28532
hSmdu
Entries 23
Mean 160
RMS 3.741
Triggers
127271
127641
127262
30
25
20
15
10
5
0
120
140
160
180
200

p_T=6.1 GeV, E=12.6 GeV
hSmdv
Entries 31
Mean 111.4
RMS 8.66
30
25
20
15
10
5
0
80
100
120
140
160

Run=7099047, Event=29356
hSmdu
Entries 28
Mean 147.1
RMS 5.349
Triggers
127641
127262
25
20
15
10
5
0
100
120
140
160
180

p_T=5.3 GeV, E=14.2 GeV
hSmdv
Entries 28
Mean 110
RMS 5.091
25
20
15
10
5
0
60
80
100
120
140
160

Run=7099047, Event=29888
hSmdu
Entries 16
Mean 110.7
RMS 11.78
Triggers
127271
127641
0
2
4
6
8
10
12
14
80
100
120
140
160

p_T=6.5 GeV, E=18.5 GeV
hSmdv
Entries 11
Mean 66.78
RMS 8.469
0
2
4
6
8
10
12
14
20
40
60
80
100

Run=7099046, Event=41387
hSmdu
Entries 34
Mean 56.6
RMS 6.031
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

p_T=5.6 GeV, E=15.7 GeV
hSmdv
Entries 27
Mean 127.6
RMS 5.117
0
5
10
15
20
25
30
35
40
45
80
100
120
140
160

Run=7099046, Event=41884
hSmdu
Entries 20
Mean 37.68
RMS 4.556
Triggers
127641
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80

p_T=7.8 GeV, E=17.1 GeV
hSmdv
Entries 22
Mean 71.78
RMS 3.774
0
5
10
15
20
25
40
60
80
100
120

Run=7099046, Event=42541
hSmdu
Entries 25
Mean 71.49
RMS 8.979
Triggers
127271
127641
127580
0
2
4
6
8
10
12
14
16
40
60
80
100
120

p_T=5.1 GeV, E=14.6 GeV
hSmdv
Entries 28
Mean 127.3
RMS 5.099
0
2
4
6
8
10
12
14
16
80
100
120
140
160

Run=7099046, Event=42559
hSmdu
Entries 45
Mean 48.82
RMS 10.58
Triggers
127271
127641
127262
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
90

p_T=5.7 GeV, E=18.7 GeV
hSmdv
Entries 30
Mean 115.4
RMS 8.171
0
5
10
15
20
25
30
80
100
120
140
160

Run=7099046, Event=42744
hSmdu
Entries 21
Mean 38.25
RMS 4.039
Triggers
127271
127641
127262
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80

p_T=7.0 GeV, E=22.1 GeV
hSmdv
Entries 26
Mean 106.1
RMS 4.406
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099046, Event=43212
hSmdu
Entries 28
Mean 29.58
RMS 8.205
Triggers
127271
127641
127652
127622
127262
0
2
4
6
8
10
12
14
16
0
10
20
30
40
50
60
70
80

p_T=6.2 GeV, E=17.9 GeV
hSmdv
Entries 28
Mean 84.72
RMS 5.87
0
2
4
6
8
10
12
14
16
40
60
80
100
120

Run=7099046, Event=43568
hSmdu
Entries 35
Mean 165.6
RMS 9.532
Triggers
127271
127641
127262
0
5
10
15
20
25
30
120
140
160
180
200

p_T=7.4 GeV, E=15.6 GeV
hSmdv
Entries 24
Mean 159.6
RMS 4.665
0
5
10
15
20
25
30
120
140
160
180
200

Run=7099046, Event=43976
hSmdu
Entries 24
Mean 182
RMS 9.73
Triggers
127641
20
18
16
14
12
10
8
6
4
2
0
140
160
180
200
220

p_T=5.2 GeV, E=12.2 GeV
hSmdv
Entries 25
Mean 100.2
RMS 3.711
20
18
16
14
12
10
8
6
4
2
0
60
80
100
120
140

Run=7099046, Event=45098
hSmdu
Entries 30
Mean 70.56
RMS 6.801
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
20
40
60
80
100

p_T=5.1 GeV, E=20.7 GeV
hSmdv
Entries 36
Mean 30.63
RMS 7.439
0
2
4
6
8
10
12
14
16
18
20
22
24
0
10
20
30
40
50
60
70
80

Run=7099046, Event=59068
hSmdu
Entries 30
Mean 46.48
RMS 10.59
Triggers
127271
127641
127262
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
90

p_T=7.4 GeV, E=23.7 GeV
hSmdv
Entries 27
Mean 19.57
RMS 6.072
0
5
10
15
20
25
30
0
10
20
30
40
50
60

Run=7099046, Event=59460
hSmdu
Entries 31
Mean 163.1
RMS 5.731
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

p_T=7.2 GeV, E=12.3 GeV
hSmdv
Entries 28
Mean 148.4
RMS 4.731
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180
200

Run=7099046, Event=60030
hSmdu
Entries 29
Mean 221.2
RMS 8.109
Triggers
127271
127641
127262
40
35
30
25
20
15
10
5
0
180
200
220
240
260

p_T=5.9 GeV, E=12.5 GeV
hSmdv
Entries 37
Mean 111.8
RMS 9.821
40
35
30
25
20
15
10
5
0
80
100
120
140
160

Run=7099046, Event=60052
hSmdu
Entries 27
Mean 57.59
RMS 5.766
Triggers
127641
0
5
10
15
20
25
30
35
20
40
60
80
100

p_T=5.1 GeV, E=18.0 GeV
hSmdv
Entries 25
Mean 29.84
RMS 7.107
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60
70

Run=7099046, Event=60810
hSmdu
Entries 26
Mean 85.11
RMS 5.083
Triggers
127641
127262
0
5
10
15
20
25
30
35
40
40
60
80
100
120

p_T=5.1 GeV, E=12.1 GeV
hSmdv
Entries 21
Mean 116.9
RMS 3.061
0
5
10
15
20
25
30
35
40
80
100
120
140
160

Run=7099046, Event=61100
hSmdu
Entries 25
Mean 188
RMS 4.077
Triggers
127641
127652
127622
25
20
15
10
5
0
140
160
180
200
220

p_T=6.5 GeV, E=11.5 GeV
hSmdv
Entries 26
Mean 120.4
RMS 7.402
25
20
15
10
5
0
80
100
120
140
160

Run=7099046, Event=61647
hSmdu
Entries 33
Mean 87.84
RMS 9.46
Triggers
127641
0
2
4
6
8
10
12
14
40
60
80
100
120

p_T=5.9 GeV, E=10.8 GeV
hSmdv
Entries 33
Mean 177.2
RMS 11.18
0
2
4
6
8
10
12
14
140
160
180
200
220

Run=7099046, Event=62353
hSmdu
Entries 30
Mean 244.1
RMS 5.555
Triggers
127271
127641
127262
0
5
10
15
20
25
200 210 220 230 240 250 260 270 280

p_T=8.9 GeV, E=15.0 GeV
hSmdv
Entries 37
Mean 146.4
RMS 8.34
0
5
10
15
20
25
100 120 140 160 180

Run=7099046, Event=62400
hSmdu
Entries 31
Mean 129.1
RMS 7.622
Triggers
127271
127641
127262
0
5
10
15
20
25
30
80
100
120
140
160

p_T=6.1 GeV, E=15.8 GeV
hSmdv
Entries 25
Mean 87.62
RMS 5.032
0
5
10
15
20
25
30
40
60
80
100
120

Run=7099046, Event=54450
hSmdu
Entries 30
Mean 241.3
RMS 9.353
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
200
210
220
230
240
250
260
270
280

p_T=5.7 GeV, E=12.4 GeV
hSmdv
Entries 35
Mean 153.3
RMS 10.94
0
2
4
6
8
10
12
14
16
18
20
22
24
100
120
140
160
180

Run=7099046, Event=54842
hSmdu
Entries 33
Mean 118
RMS 7.092
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
80
100
120
140
160

p_T=8.9 GeV, E=12.8 GeV
hSmdv
Entries 29
Mean 168.5
RMS 4.688
0
2
4
6
8
10
12
14
16
18
20
22
24
120
140
160
180
200

Run=7099046, Event=55979
hSmdu
Entries 32
Mean 187.8
RMS 9.868
Triggers
127271
127641
127652
127262
35
30
25
20
15
10
5
0
140
160
180
200
220

p_T=5.8 GeV, E=12.9 GeV
hSmdv
Entries 31
Mean 138.6
RMS 5.52
35
30
25
20
15
10
5
0
100
120
140
160
180

Run=7099046, Event=56465
hSmdu
Entries 21
Mean 122.9
RMS 5.337
Triggers
127641
0
5
10
15
20
25
30
80
100
120
140
160

p_T=5.8 GeV, E=10.0 GeV
hSmdv
Entries 23
Mean 199.1
RMS 6.013
0
5
10
15
20
25
30
160
180
200
220
240

Run=7099046, Event=56842
hSmdu
Entries 41
Mean 251.9
RMS 7.55
Triggers
127271
127641
0
2
4
6
8
10
12
14
200 210 220 230 240 250 260 270 280

p_T=6.5 GeV, E=13.2 GeV
hSmdv
Entries 36
Mean 251.2
RMS 6.963
0
2
4
6
8
10
12
14
210 220 230 240 250 260 270 280

Run=7099045, Event=60053
hSmdu
Entries 33
Mean 190.4
RMS 5.798
Triggers
127271
127641
127652
127580
127262
35
30
25
20
15
10
5
0
140
160
180
200
220
240

p_T=6.0 GeV, E=12.9 GeV
hSmdv
Entries 27
Mean 153.7
RMS 4.833
35
30
25
20
15
10
5
0
120
140
160
180
200

Run=7099045, Event=70849
hSmdu
Entries 31
Mean 154.3
RMS 20.82
Triggers
127641
0
2
4
6
8
10
12
14
120
140
160
180
200
220

p_T=6.9 GeV, E=13.2 GeV
hSmdv
Entries 41
Mean 171
RMS 10.92
0
2
4
6
8
10
12
14
120
140
160
180
200

Run=7099045, Event=71921
hSmdu
Entries 56
Mean 173.2
RMS 16.73
Triggers
127271
127641
127262
35
30
25
20
15
10
5
0
140
160
180
200
220

p_T=10.2 GeV, E=21.8 GeV
hSmdv
Entries 33
Mean 82.19
RMS 6.101
35
30
25
20
15
10
5
0
40
60
80
100
120

Run=7099045, Event=73370
hSmdu
Entries 32
Mean 97.47
RMS 9.809
Triggers
127641
p_T=5.3 GeV, E=12.2 GeV
hSmdv
Entries 30
Mean 171.6
RMS 8.212

Run=7099046, Event=45813
hSmdu
Entries 34
Mean 45.18
RMS 10.95
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60
70
80
90

p_T=8.3 GeV, E=28.7 GeV
hSmdv
Entries 25
Mean 68.07
RMS 4.018
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

Run=7099046, Event=46992
hSmdu
Entries 32
Mean 224.9
RMS 6.902
Triggers
127271
127641
127262
0
5
10
15
20
25
180
200
220
240
260
p_T=8.1 GeV, E=16.4 GeV
hSmdv
Entries 38
Mean 132.1
RMS 8.103
0
5
10
15
20
25
80
100
120
140
160

Run=7099046, Event=48033
hSmdu
Entries 29
Mean 80.74
RMS 6.492
Triggers
127641
127551
127262
0
5
10
15
20
25
30
35
40
40
60
80
100
120

p_T=5.0 GeV, E=13.6 GeV
hSmdv
Entries 27
Mean 150.7
RMS 4.69
0
5
10
15
20
25
30
35
40
100
120
140
160
180
200

Run=7099046, Event=48448
hSmdu
Entries 22
Mean 92.84
RMS 4.246
Triggers
127641
127262
35
30
25
20
15
10
5
0
60
80
100
120
140

p_T=7.3 GeV, E=17.0 GeV
hSmdv
Entries 34
Mean 136.3
RMS 7.313
35
30
25
20
15
10
5
0
80
100
120
140
160
180

Run=7099046, Event=49111
hSmdu
Entries 29
Mean 54.75
RMS 6.557
Triggers
127221
127641
127652
127622
0
5
10
15
20
25
30
35
20
40
60
80
100

p_T=8.6 GeV, E=15.8 GeV
hSmdv
Entries 33
Mean 124.6
RMS 8.628
0
5
10
15
20
25
30
35
80
100
120
140
160

Run=7099047, Event=30626
hSmdu
Entries 23
Mean 48.58
RMS 4.598
Triggers
127641
0
5
10
15
20
25
30
0 10 20 30 40 50 60 70 80 90

p_T=5.5 GeV, E=15.2 GeV
hSmdv
Entries 17
Mean 120.4
RMS 4.603
0
5
10
15
20
25
30
80 100 120 140 160

Run=7099047, Event=31332
hSmdu
Entries 25
Mean 47.98
RMS 5.079
Triggers
127271
127641
127262
0
10
20
30
40
50
20
40
60
80
100

p_T=6.3 GeV, E=27.4 GeV
hSmdv
Entries 26
Mean 39.13
RMS 3.491
0
10
20
30
40
50
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=31425
hSmdu
Entries 36
Mean 169.9
RMS 17.84
Triggers
127271
127641
0
5
10
15
20
25
140
160
180
200
220

p_T=5.2 GeV, E=12.8 GeV
hSmdv
Entries 19
Mean 136.8
RMS 5.588
0
5
10
15
20
25
100
120
140
160
180

Run=7099047, Event=32715
hSmdu
Entries 26
Mean 66.38
RMS 5.956
Triggers
127641
0
5
10
15
20
25
30
35
40
20
40
60
80
100

p_T=5.1 GeV, E=15.3 GeV
hSmdv
Entries 28
Mean 26.59
RMS 7.783
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70

Run=7099047, Event=33504
hSmdu
Entries 44
Mean 184.6
RMS 17.38
Triggers
127271
127641
127652
0
5
10
15
20
25
30
160
180
200
220
240

p_T=7.4 GeV, E=16.7 GeV
hSmdv
Entries 33
Mean 152.1
RMS 22.36
0
5
10
15
20
25
30
100
120
140
160
180

Run=7099047, Event=34097
hSmdu
Entries 32
Mean 35.3
RMS 6.015
Triggers
127641
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60
70
80

p_T=6.5 GeV, E=22.0 GeV
hSmdv
Entries 27
Mean 32.01
RMS 5.066
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60
70
80

Run=7099047, Event=34147
hSmdu
Entries 27
Mean 35.12
RMS 9.454
Triggers
127641
0
2
4
6
8
10
12
14
16
18
0
10
20
30
40
50
60
70
80

p_T=5.0 GeV, E=13.3 GeV
hSmdv
Entries 27
Mean 70.09
RMS 6.01
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

Run=7099046, Event=39596
hSmdu
Entries 32
Mean 164
RMS 10.7
Triggers
127641
0
5
10
15
20
25
120
140
160
180
200

p_T=6.2 GeV, E=13.8 GeV
hSmdv
Entries 34
Mean 92.93
RMS 6.806
0
5
10
15
20
25
60
80
100
120
140

Run=7099046, Event=39747
hSmdu
Entries 31
Mean 84.38
RMS 6.495
Triggers
127271
127641
127652
127262
0
10
20
30
40
50
40
60
80
100
120

p_T=8.5 GeV, E=16.1 GeV
hSmdv
Entries 36
Mean 171.5
RMS 6.439
0
10
20
30
40
50
140
160
180
200
220

Run=7099046, Event=39810
hSmdu
Entries 53
Mean 72.4
RMS 9.137
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
20
40
60
80
100
120

p_T=14.4 GeV, E=25.4 GeV
hSmdv
Entries 58
Mean 61.02
RMS 9.631
0
2
4
6
8
10
12
14
16
20
40
60
80
100

Run=7099046, Event=39879
hSmdu
Entries 24
Mean 105.8
RMS 6.224
Triggers
127641
0
2
4
6
8
10
12
14
16
60
80
100
120
140

p_T=6.3 GeV, E=15.2 GeV
hSmdv
Entries 31
Mean 60.64
RMS 7.391
0
2
4
6
8
10
12
14
16
20
40
60
80
100

Run=7099046, Event=40100
hSmdu
Entries 28
Mean 245.8
RMS 8.55
Triggers
127641
16
14
12
10
8
6
4
2
0
200 210 220 230 240 250 260 270 280

p_T=5.3 GeV, E=7.6 GeV
hSmdv
Entries 29
Mean 151.9
RMS 8.686
16
14
12
10
8
6
4
2
0
120 140 160 180 200

Run=7099046, Event=40183
hSmdu
Entries 28
Mean 227
RMS 4.783
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
180
200
220
240
260

p_T=8.5 GeV, E=12.8 GeV
hSmdv
Entries 38
Mean 127.8
RMS 7.194
0
5
10
15
20
25
30
80
100
120
140
160

Run=7099046, Event=71124
hSmdu
Entries 32
Mean 117
RMS 10.58
Triggers
127641
127262
16
14
12
10
8
6
4
2
0
80
100
120
140
160

p_T=6.1 GeV, E=10.2 GeV
hSmdv
Entries 30
Mean 219.6
RMS 9.61
16
14
12
10
8
6
4
2
0
180
200
220
240
260

Run=7099046, Event=72710
hSmdu
Entries 57
Mean 40.93
RMS 14.47
Triggers
127641
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80

p_T=5.9 GeV, E=16.5 GeV
hSmdv
Entries 46
Mean 85.32
RMS 17.43
0
5
10
15
20
25
30
40
60
80
100
120

Run=7099047, Event=68015
hSmdu
Entries 44
Mean 51.18
RMS 9.156
Triggers
127271
127641
127262
0
5
10
15
20
25
30
0 10 20 30 40 50 60 70 80 90

p_T=8.1 GeV, E=27.4 GeV
hSmdv
Entries 30
Mean 29.52
RMS 5.558
0
5
10
15
20
25
30
0 10 20 30 40 50 60 70 80

Run=7099047, Event=68279
hSmdu
Entries 31
Mean 138.5
RMS 6.562
Triggers
127271
127641
0
5
10
15
20
25
100
120
140
160
180

p_T=5.0 GeV, E=11.0 GeV
hSmdv
Entries 25
Mean 174.7
RMS 6.868
0
5
10
15
20
25
140
160
180
200
220

Run=7099047, Event=69026
hSmdu
Entries 31
Mean 143.9
RMS 9.891
Triggers
127641
30
25
20
15
10
5
0
100
120
140
160
180
200

p_T=5.0 GeV, E=10.8 GeV
hSmdv
Entries 25
Mean 194.7
RMS 8.376
30
25
20
15
10
5
0
160
180
200
220
240

Run=7099047, Event=69220
hSmdu
Entries 30
Mean 41.87
RMS 5.6
Triggers
127271
127641
127262
0
10
20
30
40
50
0
10
20
30
40
50
60
70
80
90

p_T=9.7 GeV, E=27.1 GeV
hSmdv
Entries 25
Mean 77.95
RMS 3.838
0
10
20
30
40
50
40
60
80
100
120

Run=7099047, Event=69278
hSmdu
Entries 27
Mean 181.3
RMS 9.863
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220

p_T=5.6 GeV, E=12.5 GeV
hSmdv
Entries 23
Mean 130.5
RMS 4.598
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

Run=7099047, Event=69348
hSmdu
Entries 31
Mean 154.1
RMS 5.74
Triggers
127641
0
5
10
15
20
25
30
120
140
160
180
200

p_T=5.4 GeV, E=8.9 GeV
hSmdv
Entries 21
Mean 235.9
RMS 8.3
0
5
10
15
20
25
30
200
220
240
260
280

Run=7099047, Event=69704
hSmdu
Entries 20
Mean 180.4
RMS 6.655
Triggers
127271
127641
18
16
14
12
10
8
6
4
2
0
140
160
180
200
220

p_T=6.5 GeV, E=13.9 GeV
hSmdv
Entries 21
Mean 94.72
RMS 6.971
18
16
14
12
10
8
6
4
2
0
60
80
100
120
140

Run=7099047, Event=69891
hSmdu
Entries 46
Mean 75.51
RMS 11.13
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

p_T=5.9 GeV, E=13.3 GeV
hSmdv
Entries 35
Mean 124.7
RMS 8.119
0
2
4
6
8
10
12
14
16
18
20
80
100
120
140
160

Run=7099047, Event=70100
hSmdu
Entries 21
Mean 126.1
RMS 6.336
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
80
100
120
140
160

p_T=5.4 GeV, E=11.8 GeV
hSmdv
Entries 16
Mean 243.7
RMS 4.475
0
2
4
6
8
10
12
14
16
18
20
200
210
220
230
240
250
260
270
280

Run=7099047, Event=70587
hSmdu
Entries 55
Mean 45.1
RMS 20.97
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
0
10
20
30
40
50
60
70
80
90

p_T=5.3 GeV, E=24.0 GeV
hSmdv
Entries 48
Mean 54.58
RMS 17.13
0
2
4
6
8
10
12
14
16
20
40
60
80
100

Run=7099047, Event=71795
hSmdu
Entries 24
Mean 59.39
RMS 7.877
Triggers
127641
0
5
10
15
20
25
30
20
40
60
80
100

p_T=5.3 GeV, E=14.7 GeV
hSmdv
Entries 23
Mean 105.2
RMS 5.292
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099047, Event=71867
hSmdu
Entries 29
Mean 123.5
RMS 7.246
Triggers
127221
127271
127641
127652
127622
127262
0
5
10
15
20
25
30
35
80
100
120
140
160

p_T=8.4 GeV, E=18.7 GeV
hSmdv
Entries 38
Mean 61.18
RMS 7.047
0
5
10
15
20
25
30
35
20
40
60
80
100

Run=7099047, Event=59782
hSmdu
Entries 46
Mean 253
RMS 15.57
Triggers
127271
127641
127652
127262
0
2
4
6
8
10
12
14
16
190 200 210 220 230 240 250 260 270 280

p_T=6.0 GeV, E=11.7 GeV
hSmdv
Entries 38
Mean 128.5
RMS 5.57
0
2
4
6
8
10
12
14
16
80 100 120 140 160

Run=7099047, Event=59915
hSmdu
Entries 32
Mean 112.6
RMS 8.159
Triggers
127641
127652
127622
127262
0
5
10
15
20
25
60
80
100
120
140
160
p_T=7.5 GeV, E=14.7 GeV
hSmdv
Entries 26
Mean 205
RMS 5.817
0
5
10
15
20
25
160
180
200
220
240

Run=7099047, Event=60176
hSmdu
Entries 31
Mean 134.8
RMS 9.061
Triggers
127641
127652
0
5
10
15
20
25
30
100
120
140
160
180

p_T=5.1 GeV, E=14.8 GeV
hSmdv
Entries 23
Mean 114.3
RMS 3.604
0
5
10
15
20
25
30
80
100
120
140
160

Run=7099047, Event=60211
hSmdu
Entries 33
Mean 108.1
RMS 8.498
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
60
80
100
120
140

p_T=5.1 GeV, E=12.5 GeV
hSmdv
Entries 26
Mean 179.4
RMS 5.18
0
2
4
6
8
10
12
14
16
18
20
140
160
180
200
220

Run=7099047, Event=62248
hSmdu
Entries 31
Mean 146.1
RMS 5.79
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
120
140
160
180
200

p_T=8.1 GeV, E=16.2 GeV
hSmdv
Entries 36
Mean 167.8
RMS 9.065
0
2
4
6
8
10
12
14
16
18
20
22
24
120
140
160
180
200

Run=7099047, Event=62583
hSmdu
Entries 31
Mean 44.45
RMS 4.523
Triggers
127271
127641
127652
127262
0 5 10 15 20 25 30 35 40 45
0 10 20 30 40 50 60 70 80 90

p_T=9.4 GeV, E=36.7 GeV
hSmdv
Entries 37
Mean 24.39
RMS 8.344
0 5 10 15 20 25 30 35 40 45
0 10 20 30 40 50 60 70

Run=7099047, Event=62907
hSmdu
Entries 28
Mean 56.98
RMS 16
Triggers
127271
127641
127262
0
1
2
3
4
5
6
20
40
60
80
100

p_T=7.3 GeV, E=13.8 GeV
hSmdv
Entries 25
Mean 135.7
RMS 12.87
0
1
2
3
4
5
6
100
120
140
160
180

Run=7099047, Event=62951
hSmdu
Entries 32
Mean 216.3
RMS 6.258
Triggers
127271
127641
127262
0
10
20
30
40
50
60
180
200
220
240
260

p_T=5.9 GeV, E=14.7 GeV
hSmdv
Entries 21
Mean 107.8
RMS 2.779
0
10
20
30
40
50
60
60
80
100
120
140

Run=7099047, Event=63262
hSmdu
Entries 23
Mean 92.97
RMS 5.427
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
60
80
100
120
140

p_T=5.3 GeV, E=10.8 GeV
hSmdv
Entries 39
Mean 169.5
RMS 12.45
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

Run=7099047, Event=4950
hSmdu
Entries 54
Mean 121.6
RMS 16.38
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
100
120
140
160
180

p_T=5.9 GeV, E=13.7 GeV
hSmdv
Entries 55
Mean 57.15
RMS 9.868
0
2
4
6
8
10
12
14
16
20
40
60
80
100

Run=7099047, Event=6208
hSmdu
Entries 28
Mean 133.9
RMS 6.26
Triggers
127641
25
20
15
10
5
0
100
120
140
160
180

p_T=5.5 GeV, E=10.8 GeV
hSmdv
Entries 29
Mean 260
RMS 10.21
25
20
15
10
5
0
220
230
240
250
260
270
280

Run=7099047, Event=6451
hSmdu
Entries 20
Mean 121.9
RMS 3.738
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160

p_T=5.2 GeV, E=11.6 GeV
hSmdv
Entries 29
Mean 183.3
RMS 7.497
0
2
4
6
8
10
12
14
16
18
140
160
180
200
220

Run=7099047, Event=6676
hSmdu
Entries 29
Mean 58.62
RMS 6.769
Triggers
127641
0
5
10
15
20
25
20
40
60
80
100
p_T=5.6 GeV, E=17.1 GeV
hSmdv
Entries 27
Mean 51.53
RMS 5.975
0
5
10
15
20
25
0
20
40
60
80
100

Run=7099047, Event=7210
hSmdu
Entries 26
Mean 169
RMS 8.261
Triggers
127641
0
2
4
6
8
10
12
14
120
140
160
180
200
220

p_T=7.3 GeV, E=12.0 GeV
hSmdv
Entries 46
Mean 75.63
RMS 6.325
0
2
4
6
8
10
12
14
40
60
80
100
120

Run=7099047, Event=7556
hSmdu
Entries 31
Mean 44.03
RMS 6.766
Triggers
127271
127641
127262
0
10
20
30
40
50
60
70
0
10
20
30
40
50
60
70
80
90

p_T=7.6 GeV, E=24.1 GeV
hSmdv
Entries 33
Mean 95.64
RMS 9.161
0
10
20
30
40
50
60
70
60
80
100
120
140

Run=7099047, Event=7720
hSmdu
Entries 30
Mean 171.4
RMS 5.374
Triggers
127641
0
1
2
3
4
5
6
7
140
160
180
200
220

p_T=7.6 GeV, E=10.6 GeV
hSmdv
Entries 40
Mean 79.28
RMS 7.248
0
1
2
3
4
5
6
7
40
60
80
100
120

Run=7099047, Event=7811
hSmdu
Entries 23
Mean 24.56
RMS 5.327
Triggers
127271
127641
127262
0
10
20
30
40
50
0
10
20
30
40
50
60
70

p_T=5.3 GeV, E=19.1 GeV
hSmdv
Entries 24
Mean 82.65
RMS 6.078
0
10
20
30
40
50
40
60
80
100
120

Run=7099047, Event=152615
hSmdu
Entries 35
Mean 38.24
RMS 8.386
Triggers
127641
127652
127622
0
2
4
6
8
10
12
14
16
0
10
20
30
40
50
60
70
80
90

p_T=6.3 GeV, E=18.4 GeV
hSmdv
Entries 36
Mean 71.61
RMS 9.804
0
2
4
6
8
10
12
14
16
40
60
80
100
120

Run=7099047, Event=153090
hSmdu
Entries 18
Mean 137
RMS 5.978
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=6.1 GeV, E=10.3 GeV
hSmdv
Entries 25
Mean 248.4
RMS 5.253
0
2
4
6
8
10
12
14
16
18
20
22
200
210
220
230
240
250
260
270
280

Run=7099047, Event=153732
hSmdu
Entries 24
Mean 130.6
RMS 5.287
Triggers
127641
0
2
4
6
8
10
12
14
16
18
100
120
140
160
180

p_T=5.1 GeV, E=10.5 GeV
hSmdv
Entries 20
Mean 128.1
RMS 8.652
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160

Run=7099047, Event=155087
hSmdu
Entries 35
Mean 91.55
RMS 5.921
Triggers
127641
0
5
10
15
20
25
30
35
40
60
80
100
120
140

p_T=6.1 GeV, E=12.5 GeV
hSmdv
Entries 32
Mean 71.6
RMS 6.403
0
5
10
15
20
25
30
35
40
60
80
100
120

Run=7099047, Event=155274
hSmdu
Entries 20
Mean 40.41
RMS 6.014
Triggers
127271
127641
127262
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80
90

p_T=5.5 GeV, E=20.8 GeV
hSmdv
Entries 30
Mean 30.02
RMS 9.183
0
5
10
15
20
25
0
10
20
30
40
50
60
70

Run=7099047, Event=155791
hSmdu
Entries 24
Mean 259.7
RMS 5.202
Triggers
127641
127262
0
2
4
6
8
10
12
14
210
220
230
240
250
260
270
280

p_T=5.1 GeV, E=10.7 GeV
hSmdv
Entries 34
Mean 122.1
RMS 2.556
0
2
4
6
8
10
12
14
80
100
120
140
160

Run=7099047, Event=155890
hSmdu
Entries 24
Mean 138.8
RMS 5.803
Triggers
127641
0
2
4
6
8
10
12
14
16
18
100
120
140
160
180

p_T=5.1 GeV, E=10.9 GeV
hSmdv
Entries 20
Mean 169.8
RMS 9.949
0
2
4
6
8
10
12
14
16
18
140
160
180
200
220

Run=7099047, Event=155940
hSmdu
Entries 23
Mean 226.1
RMS 4.232
Triggers
127641
0
5
10
15
20
25
180
200
220
240
260

p_T=5.1 GeV, E=9.3 GeV
hSmdv
Entries 26
Mean 183.4
RMS 5.843
0
5
10
15
20
25
140
160
180
200
220

Run=7099047, Event=155963
hSmdu
Entries 27
Mean 63.32
RMS 5.106
Triggers
127641
35
30
25
20
15
10
5
0
20
40
60
80
100

p_T=5.6 GeV, E=16.4 GeV
hSmdv
Entries 22
Mean 96.8
RMS 4.953
35
30
25
20
15
10
5
0
60
80
100
120
140

Run=7099047, Event=156172
hSmdu
Entries 23
Mean 201.4
RMS 4.786
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

p_T=6.2 GeV, E=10.8 GeV
hSmdv
Entries 18
Mean 206
RMS 3.624
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

Run=7099047, Event=105699
hSmdu
Entries 42
Mean 89.17
RMS 10.97
Triggers
127641
127652
p_T=6.6 GeV, E=18.3 GeV
hSmdv
Entries 42
Mean 63.5
RMS 16.92

Run=7099047, Event=106213
hSmdu
Entries 21
Mean 46.2
RMS 5.356
Triggers
127641
0
2
4
6
8
10
12
14
16
18
0
10
20
30
40
50
60
70
80
90

p_T=5.0 GeV, E=19.7 GeV
hSmdv
Entries 24
Mean 21.49
RMS 7.529
0
2
4
6
8
10
12
14
16
18
0
10
20
30
40
50
60

Run=7099047, Event=106863
hSmdu
Entries 24
Mean 222.5
RMS 7.561
Triggers
127641
0
2
4
6
8
10
12
14
180
200
220
240
260

p_T=5.1 GeV, E=9.3 GeV
hSmdv
Entries 28
Mean 116.3
RMS 9.552
0
2
4
6
8
10
12
14
80
100
120
140
160

Run=7099047, Event=108427
hSmdu
Entries 34
Mean 139.3
RMS 7.595
Triggers
127641
0
5
10
15
20
25
30
100
120
140
160
180

p_T=5.1 GeV, E=11.2 GeV
hSmdv
Entries 28
Mean 168
RMS 9.311
0
5
10
15
20
25
30
140
160
180
200
220

Run=7099047, Event=108506
hSmdu
Entries 26
Mean 75.6
RMS 6.976
Triggers
127641
127262
30
25
20
15
10
5
0
40
60
80
100
120

p_T=5.4 GeV, E=14.9 GeV
hSmdv
Entries 28
Mean 122.5
RMS 8.304
30
25
20
15
10
5
0
80
100
120
140
160

Run=7099047, Event=108869
hSmdu
Entries 33
Mean 200.1
RMS 7.801
Triggers
127271
127641
127262
0
5
10
15
20
25
160
180
200
220
240

p_T=8.7 GeV, E=17.4 GeV
hSmdv
Entries 28
Mean 98.48
RMS 4.967
0
5
10
15
20
25
60
80
100
120
140

Run=7099047, Event=145142
hSmdu
Entries 25
Mean 96.85
RMS 5.461
Triggers
127641
0
2
4
6
8
10
12
14
16
60
80
100
120
140

p_T=6.0 GeV, E=11.2 GeV
hSmdv
Entries 27
Mean 173
RMS 8.645
0
2
4
6
8
10
12
14
16
140
160
180
200
220

Run=7099047, Event=72620
hSmdu
Entries 27
Mean 262.6
RMS 6.794
Triggers
127271
127641
127652
0
2
4
6
8
10
12
14
16
18
20
220
230
240
250
260
270
280

p_T=6.2 GeV, E=13.3 GeV
hSmdv
Entries 37
Mean 128.7
RMS 3.523
0
2
4
6
8
10
12
14
16
18
20
80
100
120
140
160

Run=7099047, Event=73645
hSmdu
Entries 20
Mean 234
RMS 3.697
Triggers
127641
127262
25
20
15
10
5
0
200
220
240
260
280

p_T=5.5 GeV, E=9.9 GeV
hSmdv
Entries 34
Mean 141.1
RMS 9.437
25
20
15
10
5
0
100
120
140
160
180

Run=7099047, Event=73758
hSmdu
Entries 32
Mean 204.9
RMS 11.1
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
160
180
200
220
240

p_T=5.8 GeV, E=9.8 GeV
hSmdv
Entries 21
Mean 140.1
RMS 3.803
0
2
4
6
8
10
12
14
16
18
20
22
24
100
120
140
160
180

Run=7099047, Event=74403
hSmdu
Entries 45
Mean 131.7
RMS 4.198
Triggers
127271
127641
0
5
10
15
20
25
30
35
100
120
140
160
180

p_T=8.5 GeV, E=19.1 GeV
hSmdv
Entries 58
Mean 69.78
RMS 16.71
0
5
10
15
20
25
30
35
20
40
60
80
100

Run=7099047, Event=74792
hSmdu
Entries 22
Mean 259.9
RMS 4.191
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
210
220
230
240
250
260
270
280

p_T=7.1 GeV, E=12.9 GeV
hSmdv
Entries 28
Mean 140.7
RMS 5.731
0
5
10
15
20
25
30
35
100
120
140
160
180

Run=7099047, Event=75908
hSmdu
Entries 31
Mean 31.4
RMS 6.531
Triggers
127641
0
5
10
15
20
25
0
10
20
30
40
50
60
70

p_T=6.6 GeV, E=21.7 GeV
hSmdv
Entries 35
Mean 62.89
RMS 8.918
0
5
10
15
20
25
20
40
60
80
100

Run=7099047, Event=85590
hSmdu
Entries 26
Mean 178.7
RMS 5.014
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
140
160
180
200
220

p_T=5.8 GeV, E=14.8 GeV
hSmdv
Entries 22
Mean 94.46
RMS 4.11
0
5
10
15
20
25
30
35
40
60
80
100
120
140

Run=7099047, Event=117066
hSmdu
Entries 34
Mean 189.8
RMS 9.374
Triggers
127641
0
2
4
6
8
10
12
160
180
200
220
240

p_T=5.5 GeV, E=9.7 GeV
hSmdv
Entries 36
Mean 171.6
RMS 10.46
0
2
4
6
8
10
12
120
140
160
180
200

Run=7099047, Event=123187
hSmdu
Entries 38
Mean 41.4
RMS 6.914
Triggers
127271
127641
p_T=8.0 GeV, E=24.0 GeV
hSmdv
Entries 48
Mean 85.39
RMS 15.59

Run=7099047, Event=138192
hSmdu
Entries 32
Mean 208.2
RMS 6.275
Triggers
127271
127641
127262
25
20
15
10
5
0
160
180
200
220
240

p_T=5.7 GeV, E=11.2 GeV
hSmdv
Entries 37
Mean 209.9
RMS 8.314
25
20
15
10
5
0
180
200
220
240
260

Run=7099047, Event=146080
hSmdu
Entries 21
Mean 137.9
RMS 4.036
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
100
120
140
160
180

p_T=5.2 GeV, E=11.3 GeV
hSmdv
Entries 32
Mean 192.3
RMS 7.238
0
5
10
15
20
25
160
180
200
220
240

Run=7099047, Event=146114
hSmdu
Entries 41
Mean 216.3
RMS 8.963
Triggers
127271
127641
0
2
4
6
8
10
180
200
220
240
260

p_T=5.7 GeV, E=12.5 GeV
hSmdv
Entries 32
Mean 119.5
RMS 5.752
0
2
4
6
8
10
80
100
120
140
160

Run=7099047, Event=146880
hSmdu
Entries 38
Mean 58.46
RMS 12.04
Triggers
127641
35
30
25
20
15
10
5
0
20
40
60
80
100

p_T=5.7 GeV, E=15.4 GeV
hSmdv
Entries 34
Mean 115.2
RMS 4.823
35
30
25
20
15
10
5
0
80
100
120
140
160

Run=7099047, Event=147247
hSmdu
Entries 25
Mean 43.65
RMS 5.09
Triggers
127641
0
5
10
15
20
25
0 10 20 30 40 50 60 70 80 90

p_T=5.8 GeV, E=21.5 GeV
hSmdv
Entries 33
Mean 24.25
RMS 6.405
0
5
10
15
20
25
0 10 20 30 40 50 60 70

Run=7099047, Event=38601
hSmdu
Entries 28
Mean 56.76
RMS 5.583
Triggers
127641
127652
127622
0
5
10
15
20
25
30
35
40
20
40
60
80
100

p_T=6.1 GeV, E=13.9 GeV
hSmdv
Entries 35
Mean 119.9
RMS 9.817
0
5
10
15
20
25
30
35
40
80
100
120
140
160

Run=7099047, Event=56069
hSmdu
Entries 31
Mean 133.8
RMS 11.41
Triggers
127641
0
2
4
6
8
10
12
14
100
120
140
160
180

p_T=5.6 GeV, E=11.3 GeV
hSmdv
Entries 24
Mean 132.3
RMS 8.748
0
2
4
6
8
10
12
14
100
120
140
160
180

Run=7099047, Event=56192
hSmdu
Entries 26
Mean 28.97
RMS 4.361
Triggers
127271
127641
127262
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70

p_T=5.9 GeV, E=22.8 GeV
hSmdv
Entries 31
Mean 76.77
RMS 7.034
0
5
10
15
20
25
30
40
60
80
100
120

Run=7099047, Event=56490
hSmdu
Entries 30
Mean 21.53
RMS 6.393
Triggers
127641
0
5
10
15
20
25
0
10
20
30
40
50
60
70

p_T=5.3 GeV, E=16.9 GeV
hSmdv
Entries 28
Mean 54.45
RMS 5.674
0
5
10
15
20
25
20
40
60
80
100

Run=7099047, Event=56713
hSmdu
Entries 20
Mean 81.23
RMS 3.291
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
35
40
60
80
100
120

p_T=5.3 GeV, E=15.8 GeV
hSmdv
Entries 31
Mean 110.6
RMS 7.117
0
5
10
15
20
25
30
35
60
80
100
120
140
160

Run=7099047, Event=57068
hSmdu
Entries 69
Mean 135.2
RMS 11.8
Triggers
127271
127641
127262
0
5
10
15
20
25
100
120
140
160
180

p_T=5.3 GeV, E=13.1 GeV
hSmdv
Entries 75
Mean 55.8
RMS 11.05
0
5
10
15
20
25
20
40
60
80
100

Run=7099047, Event=57495
hSmdu
Entries 32
Mean 150.8
RMS 9.718
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
100
120
140
160
180

p_T=5.1 GeV, E=12.5 GeV
hSmdv
Entries 37
Mean 220.4
RMS 8.696
0
2
4
6
8
10
12
14
16
18
20
22
24
160
180
200
220
240

Run=7099047, Event=57541
hSmdu
Entries 29
Mean 129.2
RMS 5.311
Triggers
127221
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160

p_T=9.7 GeV, E=17.5 GeV
hSmdv
Entries 34
Mean 93.18
RMS 7.454
0
2
4
6
8
10
12
14
16
18
60
80
100
120
140

Run=7099047, Event=109815
hSmdu
Entries 24
Mean 118.6
RMS 3.758
Triggers
127641
127652
127622
127262
0
10
20
30
40
50
80
100
120
140
160

p_T=7.7 GeV, E=17.7 GeV
hSmdv
Entries 30
Mean 52.76
RMS 5.217
0
10
20
30
40
50
20
40
60
80
100

Run=7099047, Event=110569
hSmdu
Entries 26
Mean 208.3
RMS 5.448
Triggers
127641
0
2
4
6
8
10
12
14
160
180
200
220
240
260

p_T=5.9 GeV, E=11.0 GeV
hSmdv
Entries 23
Mean 118.3
RMS 6.06
0
2
4
6
8
10
12
14
80
100
120
140
160

Run=7099047, Event=110727
hSmdu
Entries 28
Mean 237.8
RMS 5.843
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
190 200 210 220 230 240 250 260 270 280

p_T=5.8 GeV, E=10.2 GeV
hSmdv
Entries 26
Mean 184.3
RMS 8.368
0
2
4
6
8
10
12
14
16
18
140 160 180 200 220

Run=7099047, Event=110944
hSmdu
Entries 39
Mean 276.2
RMS 3.917
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
230
240
250
260
270
280

p_T=7.2 GeV, E=14.0 GeV
hSmdv
Entries 49
Mean 276.8
RMS 6.005
0
2
4
6
8
10
12
14
16
18
20
230
240
250
260
270
280

Run=7099047, Event=112478
hSmdu
Entries 20
Mean 90.61
RMS 4.555
Triggers
127641
0
2
4
6
8
10
12
60
80
100
120
140

p_T=7.0 GeV, E=12.7 GeV
hSmdv
Entries 24
Mean 201.5
RMS 8.016
0
2
4
6
8
10
12
160
180
200
220
240
260

Run=7099047, Event=112671
hSmdu
Entries 25
Mean 48.64
RMS 8.56
Triggers
127271
127641
127262
35
30
25
20
15
10
5
0
20
40
60
80
100

p_T=5.3 GeV, E=25.2 GeV
hSmdv
Entries 31
Mean 75.84
RMS 8.205
35
30
25
20
15
10
5
0
40
60
80
100
120

Run=7099047, Event=112966
hSmdu
Entries 29
Mean 88.87
RMS 8.571
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
40
60
80
100
120

p_T=5.8 GeV, E=12.9 GeV
hSmdv
Entries 28
Mean 100.1
RMS 6.562
0
2
4
6
8
10
12
14
16
18
20
22
24
60
80
100
120
140

Run=7099047, Event=24099
hSmdu
Entries 59
Mean 52.58
RMS 21.44
Triggers
127271
127641
p_T=7.1 GeV, E=22.9 GeV
hSmdv
Entries 62
Mean 24.94
RMS 12.31

Run=7099047, Event=24998
hSmdu
Entries 30
Mean 53.94
RMS 3.752
Triggers
127271
127641
0
5
10
15
20
25
30
35
40
20
40
60
80
100

p_T=5.3 GeV, E=17.3 GeV
hSmdv
Entries 44
Mean 93.75
RMS 12.65
0
5
10
15
20
25
30
35
40
40
60
80
100
120
140

Run=7099047, Event=25140
hSmdu
Entries 34
Mean 78.44
RMS 6.382
Triggers
127271
127641
127652
0
5
10
15
20
25
30
40
60
80
100
120

p_T=6.8 GeV, E=21.0 GeV
hSmdv
Entries 49
Mean 23.56
RMS 10.38
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70

Run=7099047, Event=25265
hSmdu
Entries 49
Mean 179.6
RMS 16.55
Triggers
127271
127641
127652
127622
127262
0
2
4
6
8
10
12
120
140
160
180
200

p_T=6.9 GeV, E=13.4 GeV
hSmdv
Entries 37
Mean 191.4
RMS 13.27
0
2
4
6
8
10
12
140
160
180
200
220

Run=7099047, Event=62876
hSmdu
Entries 26
Mean 129.9
RMS 8.098
Triggers
127641
0
1
2
3
4
5
6
7
100
120
140
160
180

p_T=6.2 GeV, E=10.9 GeV
hSmdv
Entries 26
Mean 124.9
RMS 7.507
0
1
2
3
4
5
6
7
80
100
120
140
160

Run=7099047, Event=86752
hSmdu
Entries 28
Mean 124.2
RMS 6.427
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
80
100
120
140
160

p_T=5.5 GeV, E=14.5 GeV
hSmdv
Entries 40
Mean 105.7
RMS 8.391
0
2
4
6
8
10
12
14
16
60
80
100
120
140

Run=7099047, Event=86816
hSmdu
Entries 34
Mean 68.06
RMS 5.709
Triggers
127641
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

p_T=5.8 GeV, E=17.7 GeV
hSmdv
Entries 26
Mean 57.81
RMS 4.743
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

Run=7099047, Event=86862
hSmdu
Entries 31
Mean 181.1
RMS 5.492
Triggers
127271
127641
0
5
10
15
20
25
30
35
40
45
140
160
180
200
220

p_T=8.7 GeV, E=17.8 GeV
hSmdv
Entries 23
Mean 99.78
RMS 5.585
0
5
10
15
20
25
30
35
40
45
60
80
100
120
140

Run=7099047, Event=87055
hSmdu
Entries 39
Mean 44.34
RMS 10.2
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
0
10
20
30
40
50
60
70
80

p_T=6.7 GeV, E=20.7 GeV
hSmdv
Entries 39
Mean 72.5
RMS 8.815
0
2
4
6
8
10
12
14
16
18
20
22
40
60
80
100
120

Run=7099047, Event=87334
hSmdu
Entries 23
Mean 155.1
RMS 5.649
Triggers
127641
0
2
4
6
8
10
12
14
16
120
140
160
180
200

p_T=5.5 GeV, E=11.4 GeV
hSmdv
Entries 26
Mean 118.4
RMS 8.19
0
2
4
6
8
10
12
14
16
80
100
120
140
160

Run=7099047, Event=87739
hSmdu
Entries 36
Mean 155.8
RMS 11.38
Triggers
127641
0
2
4
6
8
10
12
14
16
100
120
140
160
180
200

p_T=6.2 GeV, E=10.6 GeV
hSmdv
Entries 32
Mean 214.9
RMS 10.16
0
2
4
6
8
10
12
14
16
180
200
220
240
260

Run=7099047, Event=96290
hSmdu
Entries 25
Mean 131.4
RMS 5.857
Triggers
127641
127262
0
5
10
15
20
25
30
80
100
120
140
160

p_T=6.0 GeV, E=14.0 GeV
hSmdv
Entries 21
Mean 94.19
RMS 3.237
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099047, Event=96840
hSmdu
Entries 30
Mean 47.61
RMS 6.498
Triggers
127271
127641
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60
70
80
90

p_T=5.3 GeV, E=14.1 GeV
hSmdv
Entries 25
Mean 107.5
RMS 4.92
0
5
10
15
20
25
30
35
60
80
100
120
140

Run=7099047, Event=97182
hSmdu
Entries 31
Mean 81.1
RMS 8.311
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

p_T=5.3 GeV, E=12.8 GeV
hSmdv
Entries 30
Mean 75.19
RMS 7.497
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

Run=7099047, Event=97449
hSmdu
Entries 24
Mean 269.7
RMS 5.455
Triggers
127641
127262
0
2
4
6
8
10
12
14
220
230
240
250
260
270
280

p_T=5.1 GeV, E=8.9 GeV
hSmdv
Entries 27
Mean 135.8
RMS 8.865
0
2
4
6
8
10
12
14
100
120
140
160
180

Run=7099047, Event=97666
hSmdu
Entries 45
Mean 191.8
RMS 12.39
Triggers
127271
127641
127652
0
5
10
15
20
25
160
180
200
220
240

p_T=5.8 GeV, E=10.1 GeV
hSmdv
Entries 35
Mean 104.7
RMS 8.317
0
5
10
15
20
25
60
80
100
120
140

Run=7099047, Event=98163
hSmdu
Entries 26
Mean 198.9
RMS 6.815
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

p_T=6.5 GeV, E=12.4 GeV
hSmdv
Entries 32
Mean 139.6
RMS 8.618
0
2
4
6
8
10
12
14
16
18
100
120
140
160
180

Run=7099047, Event=99079
hSmdu
Entries 22
Mean 273.7
RMS 3.382
Triggers
127641
127262
0
5
10
15
20
25
30
230
240
250
260
270
280

p_T=6.3 GeV, E=11.4 GeV
hSmdv
Entries 22
Mean 141.4
RMS 3.741
0
5
10
15
20
25
30
100
120
140
160
180

Run=7099047, Event=99258
hSmdu
Entries 33
Mean 54.49
RMS 5.006
Triggers
127641
127262
0
5
10
15
20
25
20
40
60
80
100

p_T=5.0 GeV, E=17.8 GeV
hSmdv
Entries 26
Mean 26.75
RMS 5.245
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80

Run=7099047, Event=99509
hSmdu
Entries 34
Mean 217.6
RMS 11.25
Triggers
127641
127262
0
2
4
6
8
10
12
180
200
220
240
260

p_T=5.0 GeV, E=9.9 GeV
hSmdv
Entries 41
Mean 224.3
RMS 4.389
0
2
4
6
8
10
12
180
200
220
240
260

Run=7099047, Event=99916
hSmdu
Entries 40
Mean 181.5
RMS 12.56
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
140
160
180
200
220

p_T=6.5 GeV, E=16.0 GeV
hSmdv
Entries 41
Mean 81.19
RMS 8.83
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

Run=7099047, Event=100175
hSmdu
Entries 25
Mean 178.9
RMS 6.763
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
140
160
180
200
220

p_T=5.7 GeV, E=12.2 GeV
hSmdv
Entries 28
Mean 117.6
RMS 8.204
0
2
4
6
8
10
12
14
16
18
20
22
24
80
100
120
140
160

Run=7099047, Event=100214
hSmdu
Entries 31
Mean 198.8
RMS 9.705
Triggers
127271
127641
127262
45
40
35
30
25
20
15
10
5
0
160
180
200
220
240

p_T=5.4 GeV, E=12.0 GeV
hSmdv
Entries 28
Mean 161.2
RMS 5.867
45
40
35
30
25
20
15
10
5
0
120
140
160
180
200

Run=7099047, Event=100792
hSmdu
Entries 23
Mean 221
RMS 4.93
Triggers
127641
16
14
12
10
8
6
4
2
0
180
200
220
240
260

p_T=5.5 GeV, E=10.3 GeV
hSmdv
Entries 25
Mean 189.3
RMS 4.756
16
14
12
10
8
6
4
2
0
140
160
180
200
220
240

Run=7099047, Event=100978
hSmdu
Entries 29
Mean 99.32
RMS 8.889
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
60
80
100
120
140

p_T=6.5 GeV, E=14.3 GeV
hSmdv
Entries 26
Mean 210
RMS 4.53
0
2
4
6
8
10
12
14
16
18
20
180
200
220
240
260

Run=7099047, Event=101587
hSmdu
Entries 51
Mean 136.2
RMS 15.37
Triggers
127271
127641
0
2
4
6
8
10
12
14
80
100
120
140
160

p_T=8.0 GeV, E=12.0 GeV
hSmdv
Entries 39
Mean 238.8
RMS 13.93
0
2
4
6
8
10
12
14
180
200
220
240
260

Run=7099047, Event=101653
hSmdu
Entries 27
Mean 163.2
RMS 7.496
Triggers
127271
127641
127262
0
5
10
15
20
25
120
140
160
180
200

p_T=6.7 GeV, E=15.2 GeV
hSmdv
Entries 27
Mean 88.56
RMS 5.151
0
5
10
15
20
25
40
60
80
100
120

Run=7099047, Event=101968
hSmdu
Entries 27
Mean 217
RMS 6.866
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
180
200
220
240
260

p_T=6.4 GeV, E=11.5 GeV
hSmdv
Entries 32
Mean 175.4
RMS 7.633
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220

Run=7099047, Event=102596
hSmdu
Entries 22
Mean 149.1
RMS 4.357
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

p_T=5.6 GeV, E=10.8 GeV
hSmdv
Entries 32
Mean 203.8
RMS 13.15
0
2
4
6
8
10
12
14
16
18
20
160
180
200
220
240

Run=7099047, Event=103295
hSmdu
Entries 27
Mean 116.5
RMS 5.886
Triggers
127271
127641
127652
127262
0
2
4
6
8
10
12
14
80
100
120
140
160

p_T=6.7 GeV, E=15.1 GeV
hSmdv
Entries 28
Mean 106.4
RMS 9.139
0
2
4
6
8
10
12
14
60
80
100
120
140

Run=7099047, Event=103887
hSmdu
Entries 47
Mean 161.4
RMS 13.75
Triggers
127641
0
5
10
15
20
25
30
100
120
140
160
180

p_T=9.9 GeV, E=20.6 GeV
hSmdv
Entries 46
Mean 138.5
RMS 9.804
0
5
10
15
20
25
30
100
120
140
160
180

Run=7099047, Event=104066
hSmdu
Entries 27
Mean 180.3
RMS 5.065
Triggers
127641
0
2
4
6
8
10
12
14
140
160
180
200
220

p_T=5.1 GeV, E=8.7 GeV
hSmdv
Entries 25
Mean 138.2
RMS 6.848
0
2
4
6
8
10
12
14
100
120
140
160
180

Run=7099047, Event=104548
hSmdu
Entries 34
Mean 229.8
RMS 6.241
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
35
200
220
240
260
280

p_T=7.1 GeV, E=12.5 GeV
hSmdv
Entries 35
Mean 183.5
RMS 8.484
0
5
10
15
20
25
30
35
140
160
180
200
220

Run=7099047, Event=92302
hSmdu
Entries 34
Mean 263.6
RMS 8.033
Triggers
127641
127652
127622
127262
0
2
4
6
8
10
12
14
16
18
20
22
220
230
240
250
260
270
280

p_T=6.9 GeV, E=11.0 GeV
hSmdv
Entries 29
Mean 134.1
RMS 5.579
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

Run=7099047, Event=93472
hSmdu
Entries 56
Mean 135
RMS 12.86
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
100
120
140
160
180

p_T=5.9 GeV, E=16.8 GeV
hSmdv
Entries 54
Mean 59.29
RMS 11.98
0
2
4
6
8
10
12
14
16
18
20
22
24
20
40
60
80
100

Run=7099047, Event=94018
hSmdu
Entries 37
Mean 91.29
RMS 7.226
Triggers
127641
p_T=5.3 GeV, E=17.1 GeV
hSmdv
Entries 37
Mean 77.68
RMS 7.615
0
2
4
6
8
10
12
14
16
18
20
22
40
60
80
100
120

Run=7099047, Event=94428
hSmdu
Entries 30
Mean 69.11
RMS 5.443
Triggers
127641
0
5
10
15
20
25
20
40
60
80
100

p_T=5.4 GeV, E=15.9 GeV
hSmdv
Entries 30
Mean 77.94
RMS 7.393
0
5
10
15
20
25
40
60
80
100
120

Run=7099047, Event=94774
hSmdu
Entries 26
Mean 74.63
RMS 6.085
Triggers
127641
127262
0
5
10
15
20
25
40
60
80
100
120

p_T=5.4 GeV, E=15.4 GeV
hSmdv
Entries 22
Mean 100.8
RMS 5.932
0
5
10
15
20
25
60
80
100
120
140

Run=7099047, Event=95312
hSmdu
Entries 29
Mean 173.6
RMS 5.446
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
120
140
160
180
200
220

p_T=7.8 GeV, E=14.2 GeV
hSmdv
Entries 25
Mean 129.8
RMS 4.711
0
2
4
6
8
10
12
14
16
80
100
120
140
160
180

Run=7099047, Event=95467
hSmdu
Entries 34
Mean 141.4
RMS 7.293
Triggers
127641
0
2
4
6
8
10
12
14
16
100
120
140
160
180

p_T=6.6 GeV, E=10.9 GeV
hSmdv
Entries 29
Mean 72.31
RMS 9.582
0
2
4
6
8
10
12
14
16
40
60
80
100
120

Run=7099047, Event=95496
hSmdu
Entries 30
Mean 210.6
RMS 11.12
Triggers
127641
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

p_T=5.2 GeV, E=10.7 GeV
hSmdv
Entries 30
Mean 118.7
RMS 10.25
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160

Run=7099047, Event=95917
hSmdu
Entries 30
Mean 50.48
RMS 6.738
Triggers
127641
35
30
25
20
15
10
5
0
20
40
60
80
100

p_T=5.1 GeV, E=20.0 GeV
hSmdv
Entries 28
Mean 16.13
RMS 6.826
35
30
25
20
15
10
5
0
0
10
20
30
40
50
60

Run=7099047, Event=20420
hSmdu
Entries 36
Mean 149.3
RMS 17.68
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=6.0 GeV, E=9.1 GeV
hSmdv
Entries 49
Mean 248.2
RMS 16.48
0
2
4
6
8
10
12
14
16
18
20
22
220
230
240
250
260
270
280

Run=7099047, Event=20816
hSmdu
Entries 32
Mean 255.9
RMS 12.34
Triggers
127641
0
2
4
6
8
10
12
14
220
230
240
250
260
270
280

p_T=5.1 GeV, E=9.3 GeV
hSmdv
Entries 34
Mean 268.8
RMS 5.744
0
2
4
6
8
10
12
14
220
230
240
250
260
270
280

Run=7099047, Event=21197
hSmdu
Entries 31
Mean 26.02
RMS 5.491
Triggers
127271
127641
0
10
20
30
40
50
0
10
20
30
40
50
60
70
p_T=6.3 GeV, E=23.6 GeV
hSmdv
Entries 31
Mean 53.27
RMS 6.874
0
10
20
30
40
50
20
40
60
80
100

Run=7099047, Event=21881
hSmdu
Entries 32
Mean 65.55
RMS 12.17
Triggers
127271
127641
127652
35
30
25
20
15
10
5
0
20
40
60
80
100

p_T=8.1 GeV, E=21.9 GeV
hSmdv
Entries 42
Mean 109.5
RMS 16.19
35
30
25
20
15
10
5
0
80
100
120
140
160

Run=7099047, Event=22342
hSmdu
Entries 28
Mean 175.7
RMS 9.581
Triggers
127641
16
14
12
10
8
6
4
2
0
140
160
180
200
220

p_T=5.8 GeV, E=12.2 GeV
hSmdv
Entries 36
Mean 88.33
RMS 10.43
16
14
12
10
8
6
4
2
0
40
60
80
100
120

Run=7099047, Event=22553
hSmdu
Entries 35
Mean 105.4
RMS 3.728
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
60
80
100
120
140

p_T=6.3 GeV, E=15.8 GeV
hSmdv
Entries 26
Mean 214.5
RMS 2.076
0
5
10
15
20
25
30
180
200
220
240
260

Run=7099047, Event=22587
hSmdu
Entries 31
Mean 211.5
RMS 8.358
Triggers
127271
127641
127652
127622
0
2
4
6
8
10
180
200
220
240
260

p_T=7.1 GeV, E=10.8 GeV
hSmdv
Entries 34
Mean 139.1
RMS 11.39
0
2
4
6
8
10
100
120
140
160
180

Run=7099047, Event=23206
hSmdu
Entries 27
Mean 204.7
RMS 5.943
Triggers
127271
127641
127262
0
5
10
15
20
25
160
180
200
220
240

p_T=6.6 GeV, E=12.5 GeV
hSmdv
Entries 26
Mean 111.3
RMS 4.477
0
5
10
15
20
25
80
100
120
140
160

Run=7099047, Event=15402
hSmdu
Entries 26
Mean 44.53
RMS 7.287
Triggers
127641
127262
0
2
4
6
8
10
12
14
0
10
20
30
40
50
60
70
80
90

p_T=6.2 GeV, E=21.8 GeV
hSmdv
Entries 26
Mean 25.85
RMS 8.785
0
2
4
6
8
10
12
14
0
10
20
30
40
50
60
70

Run=7099047, Event=16285
hSmdu
Entries 45
Mean 219.9
RMS 7.554
Triggers
127641
30
25
20
15
10
5
0
180
200
220
240
260

p_T=5.4 GeV, E=8.7 GeV
hSmdv
Entries 44
Mean 107.4
RMS 5.588
30
25
20
15
10
5
0
60
80
100
120
140

Run=7099047, Event=16331
hSmdu
Entries 37
Mean 111.3
RMS 7.766
Triggers
127641
0
5
10
15
20
25
30
80
100
120
140
160

p_T=5.9 GeV, E=15.0 GeV
hSmdv
Entries 25
Mean 50.71
RMS 6.464
0
5
10
15
20
25
30
20
40
60
80
100

Run=7099047, Event=16557
hSmdu
Entries 28
Mean 139.3
RMS 5.289
Triggers
127271
127641
127262
30
25
20
15
10
5
0
100
120
140
160
180

p_T=5.1 GeV, E=12.5 GeV
hSmdv
Entries 38
Mean 94.53
RMS 9.291
30
25
20
15
10
5
0
40
60
80
100
120
140

Run=7099047, Event=17102
hSmdu
Entries 32
Mean 257
RMS 9.741
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
220
230
240
250
260
270
280

p_T=7.4 GeV, E=14.5 GeV
hSmdv
Entries 46
Mean 129.4
RMS 5.584
0
2
4
6
8
10
12
14
16
18
20
22
80
100
120
140
160
180

Run=7099047, Event=17926
hSmdu
Entries 32
Mean 126.9
RMS 8.631
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
80
100
120
140
160

p_T=7.3 GeV, E=17.4 GeV
hSmdv
Entries 33
Mean 64.64
RMS 6.37
0
5
10
15
20
25
30
35
20
40
60
80
100

Run=7099047, Event=18230
hSmdu
Entries 29
Mean 106
RMS 5.995
Triggers
127641
0
5
10
15
20
25
60
80
100
120
140
p_T=7.2 GeV, E=12.7 GeV
hSmdv
Entries 22
Mean 175.8
RMS 4.506
0
5
10
15
20
25
140
160
180
200
220

Run=7099047, Event=18347
hSmdu
Entries 32
Mean 94.43
RMS 11.07
Triggers
127641
127262
0
2
4
6
8
10
12
40
60
80
100
120

p_T=5.9 GeV, E=20.5 GeV
hSmdv
Entries 28
Mean 68.9
RMS 12.61
0
2
4
6
8
10
12
40
60
80
100
120

Run=7099047, Event=18434
hSmdu
Entries 27
Mean 41.38
RMS 3.686
Triggers
127271
127641
127262
0
10
20
30
40
50
60
0
10
20
30
40
50
60
70
80
90

p_T=9.7 GeV, E=28.1 GeV
hSmdv
Entries 30
Mean 90.28
RMS 4.514
0
10
20
30
40
50
60
40
60
80
100
120
140

Run=7099047, Event=18548
hSmdu
Entries 40
Mean 126.6
RMS 13.73
Triggers
127271
127641
25
20
15
10
5
0
100
120
140
160
180

p_T=5.2 GeV, E=9.8 GeV
hSmdv
Entries 35
Mean 221.6
RMS 7.797
25
20
15
10
5
0
180
200
220
240
260

Run=7099047, Event=19504
hSmdu
Entries 34
Mean 208.9
RMS 7.9
Triggers
127641
0
2
4
6
8
10
12
14
180
200
220
240
260

p_T=5.9 GeV, E=12.3 GeV
hSmdv
Entries 30
Mean 110.5
RMS 10.41
0
2
4
6
8
10
12
14
60
80
100
120
140

Run=7099047, Event=465
hSmdu
Entries 33
Mean 162.2
RMS 6.348
Triggers
127271
127641
127262
0
5
10
15
20
25
120
140
160
180
200

p_T=5.6 GeV, E=10.0 GeV
hSmdv
Entries 22
Mean 243
RMS 3.847
0
5
10
15
20
25
200
210
220
230
240
250
260
270
280

Run=7099047, Event=989
hSmdu
Entries 33
Mean 156.7
RMS 8.08
Triggers
127641
127262
0
5
10
15
20
25
120
140
160
180
200

p_T=5.2 GeV, E=10.6 GeV
hSmdv
Entries 29
Mean 209.6
RMS 8.359
0
5
10
15
20
25
160
180
200
220
240

Run=7099047, Event=9221
hSmdu
Entries 22
Mean 50.13
RMS 3.827
Triggers
127641
0
5
10
15
20
25
0 10 20 30 40 50 60 70 80 90 100

p_T=5.8 GeV, E=13.4 GeV
hSmdv
Entries 25
Mean 123.4
RMS 5.272
0
5
10
15
20
25
80 100 120 140 160

Run=7099047, Event=9663
hSmdu
Entries 27
Mean 94.02
RMS 3.89
Triggers
127271
127641
0
5
10
15
20
25
30
35
40
60
80
100
120
140

p_T=8.1 GeV, E=25.1 GeV
hSmdv
Entries 40
Mean 43.53
RMS 7.73
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=10000
hSmdu
Entries 34
Mean 165.5
RMS 10.56
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200

p_T=5.6 GeV, E=8.9 GeV
hSmdv
Entries 21
Mean 247.2
RMS 5.562
0
2
4
6
8
10
12
14
16
18
20
200
210
220
230
240
250
260
270
280

Run=7099047, Event=10539
hSmdu
Entries 16
Mean 198
RMS 9.606
Triggers
127271
127641
127652
0
1
2
3
4
5
160
180
200
220
240

p_T=6.3 GeV, E=9.3 GeV
hSmdv
Entries 23
Mean 202
RMS 12.46
0
1
2
3
4
5
160
180
200
220
240

Run=7099047, Event=88355
hSmdu
Entries 34
Mean 151.4
RMS 7.249
Triggers
127271
127641
127652
127622
127262
0
2
4
6
8
10
12
14
100
120
140
160
180
200

p_T=7.5 GeV, E=14.3 GeV
hSmdv
Entries 33
Mean 150.5
RMS 9.401
0
2
4
6
8
10
12
14
100
120
140
160
180
200

Run=7099047, Event=88915
hSmdu
Entries 33
Mean 236.2
RMS 8.867
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
180
200
220
240
260

p_T=5.5 GeV, E=10.3 GeV
hSmdv
Entries 30
Mean 138.6
RMS 6.28
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

Run=7099047, Event=91623
hSmdu
Entries 20
Mean 90.65
RMS 4.546
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
60
80
100
120
140

p_T=7.2 GeV, E=15.4 GeV
hSmdv
Entries 25
Mean 133.3
RMS 9.008
0
5
10
15
20
25
30
35
80
100
120
140
160

Run=7099047, Event=91768
hSmdu
Entries 40
Mean 139.2
RMS 8.777
Triggers
127271
127641
0
5
10
15
20
25
30
100
120
140
160
180

p_T=6.3 GeV, E=12.6 GeV
hSmdv
Entries 31
Mean 216.3
RMS 5.832
0
5
10
15
20
25
30
180
200
220
240
260

Run=7099047, Event=91859
hSmdu
Entries 32
Mean 52.35
RMS 6.317
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
20
40
60
80
100

p_T=5.2 GeV, E=18.8 GeV
hSmdv
Entries 22
Mean 23.66
RMS 3.739
0
2
4
6
8
10
12
14
16
18
20
22
0
10
20
30
40
50
60
70

Run=7099046, Event=13666
hSmdu
Entries 11
Mean 91.86
RMS 4.908
Triggers
127271
127641
127262
25
20
15
10
5
0
60
80
100
120
140

p_T=8.6 GeV, E=15.1 GeV
hSmdv
Entries 15
Mean 169.3
RMS 5.865
25
20
15
10
5
0
120
140
160
180
200
220

Run=7099046, Event=13705
hSmdu
Entries 34
Mean 63.71
RMS 6.681
Triggers
127641
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

p_T=7.5 GeV, E=21.5 GeV
hSmdv
Entries 24
Mean 31.93
RMS 4.267
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60
70
80

Run=7099046, Event=16342
hSmdu
Entries 24
Mean 103.5
RMS 4.659
Triggers
127641
127262
0
5
10
15
20
25
60
80
100
120
140

p_T=9.6 GeV, E=15.1 GeV
hSmdv
Entries 21
Mean 190.8
RMS 5.73
0
5
10
15
20
25
140
160
180
200
220
240

Run=7099046, Event=19005
hSmdu
Entries 33
Mean 175
RMS 8.144
Triggers
127641
0
2
4
6
8
10
12
14
140
160
180
200
220

p_T=6.0 GeV, E=9.8 GeV
hSmdv
Entries 37
Mean 163.3
RMS 10.9
0
2
4
6
8
10
12
14
120
140
160
180
200

Run=7099046, Event=20099
hSmdu
Entries 50
Mean 39.99
RMS 12.46
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
0
10
20
30
40
50
60
70
80

p_T=6.0 GeV, E=17.9 GeV
hSmdv
Entries 38
Mean 102.7
RMS 5.326
0
2
4
6
8
10
12
14
16
18
20
22
60
80
100
120
140

Run=7099046, Event=74032
hSmdu
Entries 30
Mean 111.1
RMS 8.013
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
80
100
120
140
160

p_T=5.5 GeV, E=16.6 GeV
hSmdv
Entries 28
Mean 133.7
RMS 7.065
0
2
4
6
8
10
12
14
16
18
20
22
80
100
120
140
160
180

Run=7099046, Event=42718
hSmdu
Entries 29
Mean 165.5
RMS 5.089
Triggers
127271
127641
127652
127262
35
30
25
20
15
10
5
0
120
140
160
180
200

p_T=5.8 GeV, E=13.1 GeV
hSmdv
Entries 35
Mean 169.1
RMS 9.081
35
30
25
20
15
10
5
0
120
140
160
180
200
220

Run=7099046, Event=47726
hSmdu
Entries 39
Mean 160
RMS 12.43
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200

p_T=5.5 GeV, E=11.5 GeV
hSmdv
Entries 23
Mean 154.5
RMS 4.164
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200

Run=7099046, Event=49065
hSmdu
Entries 25
Mean 50.17
RMS 5.6
Triggers
127641
0
5
10
15
20
25
0 10 20 30 40 50 60 70 80 90 100

p_T=5.5 GeV, E=20.6 GeV
hSmdv
Entries 32
Mean 16.29
RMS 7.619
0
5
10
15
20
25
0 10 20 30 40 50 60 70

Run=7099046, Event=49353
hSmdu
Entries 30
Mean 127.5
RMS 10.13
Triggers
127641
25
20
15
10
5
0
80
100
120
140
160

p_T=6.2 GeV, E=10.9 GeV
hSmdv
Entries 24
Mean 84.29
RMS 5.065
25
20
15
10
5
0
40
60
80
100
120

Run=7099046, Event=52875
hSmdu
Entries 25
Mean 57.41
RMS 5.005
Triggers
127641
45
40
35
30
25
20
15
10
5
0
20
40
60
80
100

p_T=5.0 GeV, E=20.7 GeV
hSmdv
Entries 29
Mean 23.58
RMS 5.345
45
40
35
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70

Run=7099046, Event=61318
hSmdu
Entries 38
Mean 63.38
RMS 6.414
Triggers
127641
0
2
4
6
8
10
12
20
40
60
80
100

p_T=5.2 GeV, E=12.9 GeV
hSmdv
Entries 34
Mean 70.37
RMS 18.94
0
2
4
6
8
10
12
20
40
60
80
100
120

Run=7099047, Event=141125
hSmdu
Entries 22
Mean 239.6
RMS 4.209
Triggers
127641
127262
35
30
25
20
15
10
5
0
190 200 210 220 230 240 250 260 270 280

p_T=5.4 GeV, E=10.3 GeV
hSmdv
Entries 34
Mean 137.9
RMS 7.73
35
30
25
20
15
10
5
0
100 120 140 160 180

Run=7099047, Event=141939
hSmdu
Entries 48
Mean 192.1
RMS 7.691
Triggers
127271
127641
127262
0
10
20
30
40
50
60
70
160
180
200
220
240

p_T=13.2 GeV, E=29.7 GeV
hSmdv
Entries 31
Mean 158.2
RMS 5.065
0
10
20
30
40
50
60
70
120
140
160
180
200

Run=7099047, Event=141979
hSmdu
Entries 20
Mean 153.9
RMS 4.843
Triggers
127641
0
2
4
6
8
10
12
14
16
120
140
160
180
200

p_T=5.4 GeV, E=9.5 GeV
hSmdv
Entries 35
Mean 150.8
RMS 8.772
0
2
4
6
8
10
12
14
16
100
120
140
160
180

Run=7099047, Event=143538
hSmdu
Entries 33
Mean 105.5
RMS 9.824
Triggers
127641
127652
0
2
4
6
8
10
12
14
16
18
20
22
80
100
120
140
160

p_T=5.0 GeV, E=13.0 GeV
hSmdv
Entries 40
Mean 51.77
RMS 6.812
0
2
4
6
8
10
12
14
16
18
20
22
0
20
40
60
80
100

Run=7099047, Event=143696
hSmdu
Entries 33
Mean 141
RMS 7.427
Triggers
127641
25
20
15
10
5
0
100
120
140
160
180

p_T=5.1 GeV, E=12.2 GeV
hSmdv
Entries 36
Mean 57.8
RMS 2.523
25
20
15
10
5
0
20
40
60
80
100

Run=7099047, Event=144210
hSmdu
Entries 33
Mean 187.8
RMS 6.526
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
140
160
180
200
220

p_T=5.4 GeV, E=10.6 GeV
hSmdv
Entries 32
Mean 139
RMS 8.24
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

Run=7099047, Event=11349
hSmdu
Entries 34
Mean 212.5
RMS 9.572
Triggers
127641
0
2
4
6
8
10
12
180
200
220
240
260

p_T=5.3 GeV, E=8.1 GeV
hSmdv
Entries 34
Mean 204.2
RMS 11.28
0
2
4
6
8
10
12
160
180
200
220
240

Run=7099047, Event=12284
hSmdu
Entries 32
Mean 136.2
RMS 12.09
Triggers
127641
10
8
6
4
2
0
100
120
140
160
180

p_T=6.5 GeV, E=9.3 GeV
hSmdv
Entries 28
Mean 249
RMS 6.653
10
8
6
4
2
0
210
220
230
240
250
260
270
280

Run=7099047, Event=13311
hSmdu
Entries 23
Mean 120
RMS 4.381
Triggers
127641
127652
127262
0
5
10
15
20
25
30
80
100
120
140
160

p_T=6.3 GeV, E=15.8 GeV
hSmdv
Entries 22
Mean 54.13
RMS 4.578
0
5
10
15
20
25
30
20
40
60
80
100

Run=7099047, Event=13780
hSmdu
Entries 29
Mean 59.69
RMS 6.86
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

p_T=6.2 GeV, E=22.1 GeV
hSmdv
Entries 20
Mean 52.59
RMS 4.186
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

Run=7099047, Event=14035
hSmdu
Entries 30
Mean 109.9
RMS 7.905
Triggers
127641
0
5
10
15
20
25
30
80
100
120
140
160

p_T=5.1 GeV, E=13.6 GeV
hSmdv
Entries 28
Mean 50.56
RMS 6.022
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=14698
hSmdu
Entries 25
Mean 180.1
RMS 6.179
Triggers
127641
0
2
4
6
8
10
12
14
140
160
180
200
220

p_T=5.7 GeV, E=10.2 GeV
hSmdv
Entries 35
Mean 167.9
RMS 11.08
0
2
4
6
8
10
12
14
140
160
180
200
220

Run=7099047, Event=15233
hSmdu
Entries 35
Mean 115.8
RMS 5.394
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
35
80
100
120
140
160

p_T=10.0 GeV, E=17.0 GeV
hSmdv
Entries 46
Mean 213.4
RMS 14.58
0
5
10
15
20
25
30
35
180
200
220
240
260

Run=7099047, Event=132531
hSmdu
Entries 36
Mean 126.3
RMS 5.676
Triggers
127641
0
5
10
15
20
25
30
35
40
80
100
120
140
160

p_T=5.3 GeV, E=16.9 GeV
hSmdv
Entries 36
Mean 127.5
RMS 4.547
0
5
10
15
20
25
30
35
40
80
100
120
140
160

Run=7099047, Event=132580
hSmdu
Entries 42
Mean 143.9
RMS 3.613
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=8.0 GeV, E=16.3 GeV
hSmdv
Entries 48
Mean 68.62
RMS 5.932
0
2
4
6
8
10
12
14
16
18
20
22
20
40
60
80
100

Run=7099047, Event=132635
hSmdu
Entries 36
Mean 67.14
RMS 8.601
Triggers
127641
127652
127622
127262
0
5
10
15
20
25
30
35
40
20
40
60
80
100

p_T=7.3 GeV, E=23.3 GeV
hSmdv
Entries 23
Mean 46.21
RMS 4.682
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=132925
hSmdu
Entries 26
Mean 194.9
RMS 5.35
Triggers
127221
127271
127641
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

p_T=5.4 GeV, E=10.1 GeV
hSmdv
Entries 43
Mean 217.1
RMS 12.23
0
2
4
6
8
10
12
14
16
18
200
220
240
260
280

Run=7099047, Event=133602
hSmdu
Entries 35
Mean 47.52
RMS 10.93
Triggers
127641
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
90

p_T=5.6 GeV, E=15.2 GeV
hSmdv
Entries 34
Mean 101.1
RMS 8.292
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099047, Event=134064
hSmdu
Entries 56
Mean 215.6
RMS 21.88
Triggers
127271
127641
127652
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

p_T=5.8 GeV, E=14.8 GeV
hSmdv
Entries 46
Mean 107.3
RMS 9.464
0
2
4
6
8
10
12
14
16
18
60
80
100
120
140

Run=7099047, Event=134777
hSmdu
Entries 23
Mean 38.49
RMS 3.799
Triggers
127641
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60
70
80

p_T=5.4 GeV, E=15.5 GeV
hSmdv
Entries 22
Mean 72.9
RMS 5.482
0
5
10
15
20
25
30
35
40
60
80
100
120

Run=7099047, Event=134825
hSmdu
Entries 43
Mean 49.04
RMS 13.39
Triggers
127271
127641
0
5
10
15
20
25
0 10 20 30 40 50 60 70 80 90 100

p_T=8.0 GeV, E=23.2 GeV
hSmdv
Entries 56
Mean 24.48
RMS 14.95
0
5
10
15
20
25
0 10 20 30 40 50 60

Run=7099047, Event=135415
hSmdu
Entries 28
Mean 183.2
RMS 6.065
Triggers
127641
30
25
20
15
10
5
0
140
160
180
200
220

p_T=6.1 GeV, E=10.5 GeV
hSmdv
Entries 32
Mean 217.3
RMS 9.823
30
25
20
15
10
5
0
180
200
220
240
260

Run=7099047, Event=81943
hSmdu
Entries 30
Mean 131.2
RMS 7.389
Triggers
127641
0
2
4
6
8
10
12
14
16
100
120
140
160
180

p_T=5.0 GeV, E=11.4 GeV
hSmdv
Entries 35
Mean 100.9
RMS 11.84
0
2
4
6
8
10
12
14
16
60
80
100
120
140
160

Run=7099047, Event=82374
hSmdu
Entries 23
Mean 124.8
RMS 5.075
Triggers
127641
0
5
10
15
20
25
30
35
40
80
100
120
140
160

p_T=5.8 GeV, E=8.7 GeV
hSmdv
Entries 28
Mean 230
RMS 10.24
0
5
10
15
20
25
30
35
40
200
220
240
260
280

Run=7099047, Event=85059
hSmdu
Entries 32
Mean 144.5
RMS 9.499
Triggers
127641
35
30
25
20
15
10
5
0
100
120
140
160
180

p_T=6.4 GeV, E=12.9 GeV
hSmdv
Entries 30
Mean 101.3
RMS 6.373
35
30
25
20
15
10
5
0
60
80
100
120
140

Run=7099047, Event=150491
hSmdu
Entries 22
Mean 89.26
RMS 9.847
Triggers
127641
0
5
10
15
20
25
30
40
60
80
100
120

p_T=5.5 GeV, E=16.3 GeV
hSmdv
Entries 31
Mean 61.16
RMS 12.51
0
5
10
15
20
25
30
20
40
60
80
100

Run=7099047, Event=156299
hSmdu
Entries 46
Mean 148.9
RMS 16.57
Triggers
127641
0
2
4
6
8
10
12
14
16
100
120
140
160
180

p_T=6.5 GeV, E=15.5 GeV
hSmdv
Entries 42
Mean 128.9
RMS 19.63
0
2
4
6
8
10
12
14
16
100
120
140
160
180

Run=7099047, Event=118648
hSmdu
Entries 22
Mean 159.8
RMS 3.064
Triggers
127641
127652
127262
0
10
20
30
40
50
120
140
160
180
200

p_T=6.8 GeV, E=11.4 GeV
hSmdv
Entries 26
Mean 261.8
RMS 5.842
0
10
20
30
40
50
220
230
240
250
260
270
280

Run=7099047, Event=120824
hSmdu
Entries 16
Mean 34.55
RMS 4.817
Triggers
127221
127611
127641
127212
0
2
4
6
8
10
12
14
16
18
20
22
0
10
20
30
40
50
60
70
80

p_T=5.1 GeV, E=13.8 GeV
hSmdv
Entries 21
Mean 95.41
RMS 8.192
0
2
4
6
8
10
12
14
16
18
20
22
60
80
100
120
140

Run=7099047, Event=61715
hSmdu
Entries 45
Mean 41.09
RMS 10.47
Triggers
127271
127641
0
5
10
15
20
25
30
0 10 20 30 40 50 60 70 80 90 100

p_T=6.0 GeV, E=21.2 GeV
hSmdv
Entries 34
Mean 85.43
RMS 11.29
0
5
10
15
20
25
30
40 60 80 100 120

Run=7099047, Event=71692
hSmdu
Entries 34
Mean 192.3
RMS 8.639
Triggers
127271
127641
127652
127262
0
2
4
6
8
10
12
160
180
200
220
240

p_T=9.8 GeV, E=12.5 GeV
hSmdv
Entries 40
Mean 139.5
RMS 8.48
0
2
4
6
8
10
12
100
120
140
160
180

Run=7099047, Event=74255
hSmdu
Entries 48
Mean 143
RMS 10.01
Triggers
127271
127641
127652
127622
0
2
4
6
8
10
12
100
120
140
160
180
200

p_T=6.4 GeV, E=12.7 GeV
hSmdv
Entries 43
Mean 114.8
RMS 13.55
0
2
4
6
8
10
12
80
100
120
140
160

Run=7099047, Event=28651
hSmdu
Entries 30
Mean 155.3
RMS 7.551
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
120
140
160
180
200

p_T=6.9 GeV, E=12.3 GeV
hSmdv
Entries 28
Mean 217.3
RMS 6.053
0
2
4
6
8
10
12
14
16
18
20
22
24
180
200
220
240
260

Run=7099047, Event=35452
hSmdu
Entries 39
Mean 121.7
RMS 16.51
Triggers
127641
35
30
25
20
15
10
5
0
60
80
100
120
140

p_T=7.2 GeV, E=12.6 GeV
hSmdv
Entries 33
Mean 130.5
RMS 11.7
35
30
25
20
15
10
5
0
100
120
140
160
180

Run=7099047, Event=45117
hSmdu
Entries 36
Mean 97.96
RMS 9.427
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
60
80
100
120
140

p_T=6.9 GeV, E=13.6 GeV
hSmdv
Entries 39
Mean 184.8
RMS 10.81
0
2
4
6
8
10
12
14
16
140
160
180
200
220

Run=7099047, Event=49929
hSmdu
Entries 34
Mean 33.46
RMS 6.461
Triggers
127271
127641
127652
127622
127262
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80

p_T=6.4 GeV, E=20.7 GeV
hSmdv
Entries 35
Mean 95.64
RMS 8.841
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099047, Event=158222
hSmdu
Entries 24
Mean 101.4
RMS 7.758
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
60
80
100
120
140

p_T=5.6 GeV, E=13.7 GeV
hSmdv
Entries 26
Mean 198.5
RMS 5.122
0
2
4
6
8
10
12
14
16
18
20
22
24
160
180
200
220
240

Run=7099047, Event=158467
hSmdu
Entries 53
Mean 69.85
RMS 6.904
Triggers
127221
127271
127641
127652
127622
127262
0
2
4
6
8
10
12
14
16
18
20
20
40
60
80
100
120

p_T=8.7 GeV, E=15.2 GeV
hSmdv
Entries 44
Mean 156.7
RMS 7.094
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200

Run=7099047, Event=102920
hSmdu
Entries 36
Mean 78.04
RMS 8.54
Triggers
127641
0
5
10
15
20
25
30
40
60
80
100
120

p_T=7.9 GeV, E=12.4 GeV
hSmdv
Entries 26
Mean 139.9
RMS 10.96
0
5
10
15
20
25
30
100
120
140
160
180

Run=7099047, Event=104561
hSmdu
Entries 33
Mean 162.4
RMS 7.736
Triggers
127641
127652
127262
0
2
4
6
8
10
12
14
16
18
120
140
160
180
200

p_T=7.8 GeV, E=12.2 GeV
hSmdv
Entries 42
Mean 209.9
RMS 9.464
0
2
4
6
8
10
12
14
16
18
180
200
220
240
260

Run=7099047, Event=105599
hSmdu
Entries 47
Mean 107.9
RMS 8.214
Triggers
127641
0
5
10
15
20
25
30
60
80
100
120
140
160

p_T=5.4 GeV, E=15.3 GeV
hSmdv
Entries 37
Mean 105.1
RMS 5.149
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099047, Event=106088
hSmdu
Entries 48
Mean 126.3
RMS 12.02
Triggers
127271
127641
127652
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=9.2 GeV, E=16.7 GeV
hSmdv
Entries 54
Mean 134.6
RMS 14.53
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

Run=7099047, Event=107629
hSmdu
Entries 24
Mean 134.8
RMS 6.794
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=5.1 GeV, E=13.4 GeV
hSmdv
Entries 28
Mean 142.3
RMS 6.612
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

Run=7099047, Event=111453
hSmdu
Entries 28
Mean 156.4
RMS 5.99
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

p_T=6.6 GeV, E=14.9 GeV
hSmdv
Entries 29
Mean 109.8
RMS 6.136
0
2
4
6
8
10
12
14
16
18
20
22
60
80
100
120
140
160

Run=7099047, Event=12602
hSmdu
Entries 23
Mean 190.5
RMS 5.67
Triggers
127221
127641
127262
0
2
4
6
8
10
12
14
16
18
140
160
180
200
220
240

p_T=5.8 GeV, E=10.4 GeV
hSmdv
Entries 28
Mean 210.1
RMS 8.224
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240
260

Run=7099047, Event=21381
hSmdu
Entries 34
Mean 64.85
RMS 9.187
Triggers
127271
127641
127652
127622
0
5
10
15
20
25
30
20
40
60
80
100

p_T=6.2 GeV, E=21.2 GeV
hSmdv
Entries 45
Mean 84.94
RMS 12.3
0
5
10
15
20
25
30
40
60
80
100
120
140

Run=7099047, Event=87661
hSmdu
Entries 49
Mean 131.2
RMS 7.262
Triggers
127641
0
5
10
15
20
25
100
120
140
160
180
p_T=5.4 GeV, E=17.5 GeV
hSmdv
Entries 36
Mean 124.1
RMS 8.042
0
5
10
15
20
25
80
100
120
140
160

Run=7099047, Event=91199
hSmdu
Entries 26
Mean 107.4
RMS 11.4
Triggers
127641
0
5
10
15
20
25
60
80
100
120
140
160

p_T=5.4 GeV, E=12.5 GeV
hSmdv
Entries 30
Mean 136.4
RMS 9.211
0
5
10
15
20
25
100
120
140
160
180

Run=7099047, Event=92670
hSmdu
Entries 24
Mean 59.68
RMS 4.965
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
20
40
60
80
100

p_T=5.1 GeV, E=12.6 GeV
hSmdv
Entries 27
Mean 138.3
RMS 9.884
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

Run=7099047, Event=94838
hSmdu
Entries 37
Mean 138.5
RMS 13.85
Triggers
127641
0
2
4
6
8
10
12
100
120
140
160
180

p_T=5.9 GeV, E=10.7 GeV
hSmdv
Entries 31
Mean 161.3
RMS 8.055
0
2
4
6
8
10
12
120
140
160
180
200

Run=7099047, Event=148518
hSmdu
Entries 29
Mean 83.74
RMS 7.933
Triggers
127641
0
2
4
6
8
10
12
14
40
60
80
100
120

p_T=5.3 GeV, E=12.2 GeV
hSmdv
Entries 30
Mean 182.8
RMS 6.423
0
2
4
6
8
10
12
14
140
160
180
200
220

Run=7099047, Event=148653
hSmdu
Entries 32
Mean 128.4
RMS 9.381
Triggers
127641
0
2
4
6
8
10
12
14
16
18
100
120
140
160
180

p_T=5.7 GeV, E=12.0 GeV
hSmdv
Entries 27
Mean 150.7
RMS 5.701
0
2
4
6
8
10
12
14
16
18
120
140
160
180
200

Run=7099047, Event=148885
hSmdu
Entries 24
Mean 187.7
RMS 5.631
Triggers
127271
127641
127262
30
25
20
15
10
5
0
140
160
180
200
220

p_T=7.0 GeV, E=12.9 GeV
hSmdv
Entries 32
Mean 202.5
RMS 10.65
30
25
20
15
10
5
0
160
180
200
220
240

Run=7099047, Event=149046
hSmdu
Entries 24
Mean 106.6
RMS 4.941
Triggers
127641
127262
0
5
10
15
20
25
30
35
60
80
100
120
140

p_T=6.1 GeV, E=13.2 GeV
hSmdv
Entries 29
Mean 150.9
RMS 4.422
0
5
10
15
20
25
30
35
100
120
140
160
180
200

Run=7099047, Event=149519
hSmdu
Entries 24
Mean 139.2
RMS 5.291
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
45
100
120
140
160
180

p_T=5.7 GeV, E=15.5 GeV
hSmdv
Entries 29
Mean 75.01
RMS 6.572
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100
120

Run=7099047, Event=149656
hSmdu
Entries 23
Mean 161.8
RMS 7.285
Triggers
127641
0
2
4
6
8
10
12
14
16
18
120
140
160
180
200

p_T=6.0 GeV, E=10.7 GeV
hSmdv
Entries 23
Mean 105.5
RMS 4.917
0
2
4
6
8
10
12
14
16
18
60
80
100
120
140

Run=7099047, Event=150069
hSmdu
Entries 34
Mean 72.95
RMS 10.47
Triggers
127641
0
5
10
15
20
25
30
40
60
80
100
120

p_T=5.3 GeV, E=15.0 GeV
hSmdv
Entries 44
Mean 99.09
RMS 10.05
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099047, Event=150644
hSmdu
Entries 29
Mean 159.9
RMS 5.701
Triggers
127641
0
2
4
6
8
10
12
14
16
18
120
140
160
180
200

p_T=5.9 GeV, E=10.0 GeV
hSmdv
Entries 48
Mean 67.69
RMS 9.088
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100

Run=7099047, Event=151224
hSmdu
Entries 29
Mean 100.5
RMS 7.039
Triggers
127271
127641
127652
0
2
4
6
8
10
12
14
16
60
80
100
120
140
p_T=7.1 GeV, E=18.3 GeV
hSmdv
Entries 35
Mean 72.34
RMS 11.32
0
2
4
6
8
10
12
14
16
40
60
80
100
120

Run=7099047, Event=151272
hSmdu
Entries 46
Mean 29.07
RMS 10.67
Triggers
127641
127652
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70

p_T=5.1 GeV, E=18.0 GeV
hSmdv
Entries 43
Mean 88.79
RMS 10.38
0
5
10
15
20
25
30
40
60
80
100
120
140

Run=7099047, Event=151606
hSmdu
Entries 29
Mean 168.5
RMS 8.683
Triggers
127641
0
2
4
6
8
10
12
120
140
160
180
200

p_T=5.1 GeV, E=11.4 GeV
hSmdv
Entries 27
Mean 89.94
RMS 9.501
0
2
4
6
8
10
12
40
60
80
100
120

Run=7099047, Event=151871
hSmdu
Entries 22
Mean 155.1
RMS 3.649
Triggers
127641
127262
0
5
10
15
20
25
30
120
140
160
180
200

p_T=5.2 GeV, E=12.7 GeV
hSmdv
Entries 21
Mean 94.09
RMS 5.244
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099047, Event=151883
hSmdu
Entries 37
Mean 264
RMS 7.078
Triggers
127641
0
2
4
6
8
10
210
220
230
240
250
260
270
280

p_T=5.4 GeV, E=9.2 GeV
hSmdv
Entries 43
Mean 130.2
RMS 5.242
0
2
4
6
8
10
80
100
120
140
160

Run=7099047, Event=151907
hSmdu
Entries 56
Mean 127.4
RMS 17.77
Triggers
127641
0
2
4
6
8
10
100
120
140
160
180

p_T=5.9 GeV, E=13.0 GeV
hSmdv
Entries 56
Mean 140
RMS 15.34
0
2
4
6
8
10
100
120
140
160
180

Run=7099047, Event=152143
hSmdu
Entries 37
Mean 66.2
RMS 9.132
Triggers
127221
127271
127611
127641
127652
127622
127212
30
25
20
15
10
5
0
20
40
60
80
100

p_T=6.0 GeV, E=17.5 GeV
hSmdv
Entries 38
Mean 113.9
RMS 15.73
30
25
20
15
10
5
0
60
80
100
120
140

Run=7099047, Event=113593
hSmdu
Entries 22
Mean 44.38
RMS 7.891
Triggers
127641
0
5
10
15
20
25
30
0 10 20 30 40 50 60 70 80 90

p_T=5.1 GeV, E=21.6 GeV
hSmdv
Entries 26
Mean 42.71
RMS 4.566
0
5
10
15
20
25
30
0 10 20 30 40 50 60 70 80 90

Run=7099047, Event=114215
hSmdu
Entries 24
Mean 75.3
RMS 17.77
Triggers
127641
0
5
10
15
20
25
30
40
60
80
100
120

p_T=5.7 GeV, E=14.0 GeV
hSmdv
Entries 30
Mean 132
RMS 13.04
0
5
10
15
20
25
30
80
100
120
140
160

Run=7099047, Event=114982
hSmdu
Entries 28
Mean 129.7
RMS 5.984
Triggers
127641
127262
0
5
10
15
20
25
80
100
120
140
160
180

p_T=5.1 GeV, E=12.1 GeV
hSmdv
Entries 31
Mean 135
RMS 9.003
0
5
10
15
20
25
100
120
140
160
180

Run=7099047, Event=115309
hSmdu
Entries 28
Mean 81.81
RMS 5.689
Triggers
127641
30
25
20
15
10
5
0
40
60
80
100
120

p_T=5.0 GeV, E=14.9 GeV
hSmdv
Entries 34
Mean 61.16
RMS 8.159
30
25
20
15
10
5
0
20
40
60
80
100

Run=7099047, Event=148851
hSmdu
Entries 23
Mean 20.96
RMS 4.559
Triggers
127641
127652
127622
0
5
10
15
20
25
0
10
20
30
40
50
60
70

p_T=6.1 GeV, E=13.3 GeV
hSmdv
Entries 23
Mean 78.44
RMS 5.316
0
5
10
15
20
25
40
60
80
100
120

Run=7099047, Event=151814
hSmdu
Entries 32
Mean 171.8
RMS 10.29
Triggers
127641
0
2
4
6
8
10
120
140
160
180
200

p_T=6.2 GeV, E=10.4 GeV
hSmdv
Entries 37
Mean 164.4
RMS 9.652
0
2
4
6
8
10
120
140
160
180
200

Run=7099047, Event=80896
hSmdu
Entries 20
Mean 152.1
RMS 11.48
Triggers
127271
127641
127652
127262
0
2
4
6
8
10
120
140
160
180
200

p_T=5.6 GeV, E=11.5 GeV
hSmdv
Entries 19
Mean 204.6
RMS 8.972
0
2
4
6
8
10
160
180
200
220
240

Run=7099047, Event=81277
hSmdu
Entries 23
Mean 198.3
RMS 4.507
Triggers
127641
127262
30
25
20
15
10
5
0
160
180
200
220
240

p_T=5.4 GeV, E=10.0 GeV
hSmdv
Entries 30
Mean 179.1
RMS 6.383
30
25
20
15
10
5
0
140
160
180
200
220

Run=7099047, Event=81473
hSmdu
Entries 34
Mean 231.6
RMS 9.593
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
200
220
240
260
280

p_T=5.5 GeV, E=10.1 GeV
hSmdv
Entries 29
Mean 131.4
RMS 10.84
0
2
4
6
8
10
12
14
16
80
100
120
140
160

Run=7099047, Event=82329
hSmdu
Entries 32
Mean 55.15
RMS 10.84
Triggers
127641
0
5
10
15
20
25
30
0 10 20 30 40 50 60 70 80 90 100

p_T=6.2 GeV, E=13.4 GeV
hSmdv
Entries 26
Mean 113
RMS 5.709
0
5
10
15
20
25
30
80 100 120 140 160

Run=7099047, Event=82797
hSmdu
Entries 49
Mean 131.3
RMS 7.192
Triggers
127271
127641
25
20
15
10
5
0
100
120
140
160
180

p_T=5.3 GeV, E=15.6 GeV
hSmdv
Entries 43
Mean 129.2
RMS 6.525
25
20
15
10
5
0
100
120
140
160
180

Run=7099047, Event=64253
hSmdu
Entries 19
Mean 192.3
RMS 3.713
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

p_T=5.4 GeV, E=10.5 GeV
hSmdv
Entries 17
Mean 144.5
RMS 3.747
0
2
4
6
8
10
12
14
16
18
100
120
140
160
180

Run=7099047, Event=64354
hSmdu
Entries 25
Mean 110.8
RMS 4.522
Triggers
127641
127262
0
10
20
30
40
50
80
100
120
140
160

p_T=8.4 GeV, E=18.8 GeV
hSmdv
Entries 28
Mean 73.75
RMS 5.877
0
10
20
30
40
50
40
60
80
100
120

Run=7099047, Event=66112
hSmdu
Entries 43
Mean 151.6
RMS 11.47
Triggers
127641
0
5
10
15
20
25
30
120
140
160
180
200

p_T=5.3 GeV, E=14.6 GeV
hSmdv
Entries 45
Mean 66.27
RMS 4.024
0
5
10
15
20
25
30
20
40
60
80
100

Run=7099047, Event=66856
hSmdu
Entries 32
Mean 211.6
RMS 10.96
Triggers
127641
127551
0
2
4
6
8
10
160
180
200
220
240

p_T=5.2 GeV, E=9.9 GeV
hSmdv
Entries 33
Mean 108.5
RMS 9.253
0
2
4
6
8
10
60
80
100
120
140

Run=7099047, Event=67096
hSmdu
Entries 22
Mean 101.7
RMS 6.091
Triggers
127641
0
5
10
15
20
25
30
60
80
100
120
140

p_T=5.6 GeV, E=10.4 GeV
hSmdv
Entries 29
Mean 133.9
RMS 6.838
0
5
10
15
20
25
30
100
120
140
160
180

Run=7099047, Event=67159
hSmdu
Entries 41
Mean 103.2
RMS 6.467
Triggers
127641
0
5
10
15
20
25
30
35
40
60
80
100
120
140

p_T=5.2 GeV, E=17.1 GeV
hSmdv
Entries 29
Mean 103.8
RMS 5.45
0
5
10
15
20
25
30
35
40
60
80
100
120
140

Run=7099047, Event=67366
hSmdu
Entries 26
Mean 38.31
RMS 6.045
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
0
10
20
30
40
50
60
70
80

p_T=6.3 GeV, E=23.6 GeV
hSmdv
Entries 29
Mean 46.39
RMS 6.51
0
2
4
6
8
10
12
14
16
18
20
0
10
20
30
40
50
60
70
80
90
100

Run=7099047, Event=67391
hSmdu
Entries 25
Mean 255.3
RMS 7.613
Triggers
127641
127262
0
2
4
6
8
10
210
220
230
240
250
260
270
280

p_T=6.8 GeV, E=10.8 GeV
hSmdv
Entries 19
Mean 135.6
RMS 5.639
0
2
4
6
8
10
100
120
140
160
180

Run=7099047, Event=67767
hSmdu
Entries 30
Mean 78.36
RMS 9.856
Triggers
127641
0
5
10
15
20
25
40
60
80
100
120

p_T=5.0 GeV, E=12.3 GeV
hSmdv
Entries 24
Mean 140
RMS 6.827
0
5
10
15
20
25
100
120
140
160
180

Run=7099047, Event=77378
hSmdu
Entries 32
Mean 66.87
RMS 5.802
Triggers
127641
0
5
10
15
20
25
20
40
60
80
100

p_T=6.4 GeV, E=19.0 GeV
hSmdv
Entries 37
Mean 47.67
RMS 9.994
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=77430
hSmdu
Entries 30
Mean 221.4
RMS 7.691
Triggers
127641
127652
0
2
4
6
8
10
12
180
200
220
240
260

p_T=7.0 GeV, E=10.7 GeV
hSmdv
Entries 37
Mean 146.1
RMS 13.42
0
2
4
6
8
10
12
120
140
160
180
200

Run=7099047, Event=77599
hSmdu
Entries 24
Mean 61.33
RMS 4.731
Triggers
127641
127262
0
5
10
15
20
25
30
20
40
60
80
100

p_T=7.3 GeV, E=14.1 GeV
hSmdv
Entries 21
Mean 139.6
RMS 4.266
0
5
10
15
20
25
30
100
120
140
160
180

Run=7099047, Event=77684
hSmdu
Entries 33
Mean 212.2
RMS 8.29
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
180
200
220
240
260

p_T=8.4 GeV, E=13.5 GeV
hSmdv
Entries 47
Mean 153.6
RMS 10.27
0
2
4
6
8
10
12
14
16
18
100
120
140
160
180

Run=7099047, Event=77974
hSmdu
Entries 40
Mean 145.4
RMS 10.87
Triggers
127641
127262
0
5
10
15
20
25
30
100
120
140
160
180

p_T=5.9 GeV, E=13.7 GeV
hSmdv
Entries 31
Mean 80.45
RMS 5.831
0
5
10
15
20
25
30
40
60
80
100
120

Run=7099047, Event=78482
hSmdu
Entries 35
Mean 65.28
RMS 7.124
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
20
40
60
80
100
120

p_T=5.2 GeV, E=19.3 GeV
hSmdv
Entries 37
Mean 47.51
RMS 7.801
0
2
4
6
8
10
12
14
16
18
20
22
24
0
10
20
30
40
50
60
70
80
90

Run=7099047, Event=78489
hSmdu
Entries 26
Mean 68.55
RMS 6.066
Triggers
127641
127262
0
5
10
15
20
25
30
35
40
20
40
60
80
100

p_T=6.1 GeV, E=15.0 GeV
hSmdv
Entries 31
Mean 159.4
RMS 7.188
0
5
10
15
20
25
30
35
40
120
140
160
180
200

Run=7099047, Event=79163
hSmdu
Entries 26
Mean 109.3
RMS 12.92
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
80
100
120
140
160

p_T=5.3 GeV, E=15.2 GeV
hSmdv
Entries 23
Mean 70.71
RMS 4.918
0
2
4
6
8
10
12
14
16
18
20
22
24
20
40
60
80
100
120

Run=7099047, Event=79348
hSmdu
Entries 31
Mean 101.5
RMS 9.709
Triggers
127271
127641
127652
127262
35
30
25
20
15
10
5
0
60
80
100
120
140

p_T=7.7 GeV, E=16.2 GeV
hSmdv
Entries 34
Mean 175.6
RMS 16.31
35
30
25
20
15
10
5
0
140
160
180
200
220

Run=7099047, Event=80307
hSmdu
Entries 31
Mean 208
RMS 6.846
Triggers
127641
127652
0
2
4
6
8
10
12
14
160
180
200
220
240

p_T=5.5 GeV, E=10.8 GeV
hSmdv
Entries 32
Mean 136.4
RMS 11.93
0
2
4
6
8
10
12
14
100
120
140
160
180

Run=7099047, Event=80681
hSmdu
Entries 33
Mean 48.46
RMS 7.771
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70
80
90

p_T=5.6 GeV, E=21.8 GeV
hSmdv
Entries 18
Mean 14.12
RMS 3.035
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60

Run=7099046, Event=5225
hSmdu
Entries 34
Mean 157.3
RMS 11.1
Triggers
127641
0
5
10
15
20
25
120
140
160
180
200

p_T=6.5 GeV, E=13.5 GeV
hSmdv
Entries 39
Mean 126.8
RMS 7.077
0
5
10
15
20
25
80
100
120
140
160
180

Run=7099046, Event=5471
hSmdu
Entries 27
Mean 99.64
RMS 6.104
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
60
80
100
120
140

p_T=5.3 GeV, E=9.2 GeV
hSmdv
Entries 27
Mean 189.7
RMS 6.237
0
2
4
6
8
10
12
14
16
140
160
180
200
220

Run=7099046, Event=5495
hSmdu
Entries 31
Mean 108.1
RMS 7.744
Triggers
127271
127641
127262
0
5
10
15
20
25
60
80
100
120
140

p_T=5.1 GeV, E=11.0 GeV
hSmdv
Entries 34
Mean 210.7
RMS 7.065
0
5
10
15
20
25
160
180
200
220
240
260

Run=7099046, Event=5766
hSmdu
Entries 19
Mean 223.5
RMS 4.163
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
180
200
220
240
260

p_T=6.0 GeV, E=9.1 GeV
hSmdv
Entries 32
Mean 191.8
RMS 15.04
0
2
4
6
8
10
12
14
16
160
180
200
220
240

Run=7099046, Event=6255
hSmdu
Entries 32
Mean 66.46
RMS 20.16
Triggers
127641
0
5
10
15
20
25
40
60
80
100
120

p_T=5.9 GeV, E=22.6 GeV
hSmdv
Entries 33
Mean 21.85
RMS 6.98
0
5
10
15
20
25
0
10
20
30
40
50
60
70

Run=7099046, Event=6566
hSmdu
Entries 33
Mean 113.5
RMS 8.384
Triggers
127641
127652
127262
0
5
10
15
20
25
60
80
100
120
140

p_T=6.5 GeV, E=16.6 GeV
hSmdv
Entries 54
Mean 118.8
RMS 12.29
0
5
10
15
20
25
80
100
120
140
160

Run=7099046, Event=7339
hSmdu
Entries 27
Mean 222.4
RMS 9.675
Triggers
127641
25
20
15
10
5
0
180
200
220
240
260

p_T=6.5 GeV, E=11.7 GeV
hSmdv
Entries 21
Mean 171
RMS 4.645
25
20
15
10
5
0
120
140
160
180
200
220

Run=7099046, Event=7357
hSmdu
Entries 29
Mean 181.1
RMS 4.954
Triggers
127271
127641
127652
127622
127262
0
2
4
6
8
10
12
14
16
18
20
140
160
180
200
220

p_T=5.7 GeV, E=11.9 GeV
hSmdv
Entries 39
Mean 217.8
RMS 8.639
0
2
4
6
8
10
12
14
16
18
20
180
200
220
240
260

Run=7099046, Event=7791
hSmdu
Entries 24
Mean 40.6
RMS 7.228
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
0
10
20
30
40
50
60
70
80

p_T=7.2 GeV, E=14.3 GeV
hSmdv
Entries 22
Mean 94.74
RMS 4.933
0
2
4
6
8
10
12
14
16
18
20
22
60
80
100
120
140

Run=7099046, Event=33091
hSmdu
Entries 25
Mean 109.6
RMS 4.791
Triggers
127641
127262
45
40
35
30
25
20
15
10
5
0
60
80
100
120
140
160

p_T=5.2 GeV, E=12.6 GeV
hSmdv
Entries 27
Mean 109.8
RMS 4.898
45
40
35
30
25
20
15
10
5
0
60
80
100
120
140
160

Run=7099046, Event=136
hSmdu
Entries 28
Mean 76.07
RMS 5.847
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
45
40
60
80
100
120

p_T=10.1 GeV, E=24.2 GeV
hSmdv
Entries 27
Mean 140.9
RMS 6.34
0
5
10
15
20
25
30
35
40
45
100
120
140
160
180

Run=7099046, Event=442
hSmdu
Entries 31
Mean 118.4
RMS 11.31
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
80
100
120
140
160

p_T=6.0 GeV, E=10.0 GeV
hSmdv
Entries 21
Mean 213.5
RMS 5.888
0
2
4
6
8
10
12
14
16
18
20
180
200
220
240
260

Run=7099046, Event=507
hSmdu
Entries 31
Mean 136.8
RMS 8.45
Triggers
127641
0
1
2
3
4
5
6
7
8
100
120
140
160
180

p_T=5.6 GeV, E=9.9 GeV
hSmdv
Entries 27
Mean 86.52
RMS 7.773
0
1
2
3
4
5
6
7
8
40
60
80
100
120

Run=7099046, Event=1851
hSmdu
Entries 27
Mean 24.8
RMS 5.691
Triggers
127271
127641
127652
127262
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70

p_T=7.1 GeV, E=27.3 GeV
hSmdv
Entries 30
Mean 68.95
RMS 5.025
0
5
10
15
20
25
30
20
40
60
80
100
120

Run=7099046, Event=2252
hSmdu
Entries 60
Mean 23.84
RMS 18.33
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
0
10
20
30
40
50
60
70

p_T=7.5 GeV, E=28.2 GeV
hSmdv
Entries 45
Mean 54.07
RMS 10.15
0
2
4
6
8
10
12
14
16
18
20
22
0
10
20
30
40
50
60
70
80
90
100

Run=7099046, Event=2425
hSmdu
Entries 29
Mean 64.22
RMS 5.961
Triggers
127271
127641
127652
127622
0
10
20
30
40
50
20
40
60
80
100

p_T=8.6 GeV, E=20.2 GeV
hSmdv
Entries 35
Mean 63.32
RMS 6.877
0
10
20
30
40
50
20
40
60
80
100

Run=7099046, Event=2522
hSmdu
Entries 35
Mean 180.6
RMS 9.083
Triggers
127641
35
30
25
20
15
10
5
0
140
160
180
200
220

p_T=5.0 GeV, E=10.5 GeV
hSmdv
Entries 21
Mean 159.4
RMS 4.808
35
30
25
20
15
10
5
0
120
140
160
180
200

Run=7099046, Event=2604
hSmdu
Entries 19
Mean 82.29
RMS 4.053
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
40
60
80
100
120

p_T=6.2 GeV, E=15.9 GeV
hSmdv
Entries 31
Mean 168
RMS 9.024
0
2
4
6
8
10
12
14
16
18
20
22
24
120
140
160
180
200

Run=7099046, Event=3034
hSmdu
Entries 27
Mean 158.8
RMS 7.404
Triggers
127641
0
2
4
6
8
10
12
120
140
160
180
200

p_T=5.0 GeV, E=10.3 GeV
hSmdv
Entries 24
Mean 139.5
RMS 9.325
0
2
4
6
8
10
12
100
120
140
160
180

Run=7099046, Event=3148
hSmdu
Entries 34
Mean 215.6
RMS 7.425
Triggers
127271
127641
127262
35
30
25
20
15
10
5
0
180
200
220
240
260

p_T=6.4 GeV, E=13.8 GeV
hSmdv
Entries 29
Mean 145.2
RMS 6.166
35
30
25
20
15
10
5
0
100
120
140
160
180

Run=7099046, Event=3531
hSmdu
Entries 37
Mean 66.66
RMS 11.22
Triggers
127641
0
2
4
6
8
10
12
20
40
60
80
100

p_T=6.3 GeV, E=14.3 GeV
hSmdv
Entries 30
Mean 118.6
RMS 8.08
0
2
4
6
8
10
12
60
80
100
120
140
160

Run=7099046, Event=4038
hSmdu
Entries 31
Mean 89.87
RMS 8.153
Triggers
127641
127580
0
5
10
15
20
25
30
60
80
100
120
140

p_T=5.0 GeV, E=11.6 GeV
hSmdv
Entries 24
Mean 131.1
RMS 9.593
0
5
10
15
20
25
30
80
100
120
140
160

Run=7099046, Event=50005
hSmdu
Entries 15
Mean 83.35
RMS 3.034
Triggers
127641
35
30
25
20
15
10
5
0
40
60
80
100
120

p_T=6.0 GeV, E=13.5 GeV
hSmdv
Entries 24
Mean 29.76
RMS 5.074
35
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80

Run=7099046, Event=50225
hSmdu
Entries 29
Mean 214.8
RMS 7.243
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240
260

p_T=5.0 GeV, E=10.8 GeV
hSmdv
Entries 38
Mean 124.1
RMS 11.87
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160
180

Run=7099046, Event=51026
hSmdu
Entries 25
Mean 146.4
RMS 5.225
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

p_T=8.1 GeV, E=11.2 GeV
hSmdv
Entries 37
Mean 234.6
RMS 10.03
0
2
4
6
8
10
12
14
16
18
20
180
200
220
240
260
280

Run=7099046, Event=51086
hSmdu
Entries 27
Mean 53.4
RMS 12.76
Triggers
127641
127262
0
10
20
30
40
50
20
40
60
80
100

p_T=6.4 GeV, E=21.8 GeV
hSmdv
Entries 32
Mean 61.81
RMS 6.6
0
10
20
30
40
50
20
40
60
80
100

Run=7099046, Event=51421
hSmdu
Entries 25
Mean 171.6
RMS 4.283
Triggers
127641
127262
0
5
10
15
20
25
120
140
160
180
200
220

p_T=5.5 GeV, E=10.7 GeV
hSmdv
Entries 18
Mean 161
RMS 3.775
0
5
10
15
20
25
120
140
160
180
200

Run=7099046, Event=51867
hSmdu
Entries 23
Mean 135.9
RMS 7.462
Triggers
127641
0
2
4
6
8
10
100
120
140
160
180

p_T=5.2 GeV, E=12.4 GeV
hSmdv
Entries 15
Mean 73.43
RMS 5.921
0
2
4
6
8
10
40
60
80
100
120

Run=7099046, Event=52172
hSmdu
Entries 23
Mean 45.37
RMS 4.651
Triggers
127641
127262
0
5
10
15
20
25
0 10 20 30 40 50 60 70 80 90

p_T=5.8 GeV, E=22.0 GeV
hSmdv
Entries 20
Mean 18.56
RMS 3.527
0
5
10
15
20
25
0 10 20 30 40 50 60

Run=7099046, Event=52209
hSmdu
Entries 59
Mean 202.1
RMS 8.514
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
160
180
200
220
240

p_T=8.8 GeV, E=15.1 GeV
hSmdv
Entries 61
Mean 95.82
RMS 7.859
0
2
4
6
8
10
12
14
60
80
100
120
140

Run=7099046, Event=52724
hSmdu
Entries 27
Mean 228
RMS 6.57
Triggers
127641
127580
0
2
4
6
8
10
12
14
16
18
20
22
180
200
220
240
260

p_T=5.5 GeV, E=9.0 GeV
hSmdv
Entries 26
Mean 157.8
RMS 6.44
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

Run=7099046, Event=53275
hSmdu
Entries 30
Mean 145.3
RMS 8.293
Triggers
127641
127262
0
2
4
6
8
10
12
14
120
140
160
180
200

p_T=5.0 GeV, E=12.4 GeV
hSmdv
Entries 25
Mean 113.2
RMS 5.919
0
2
4
6
8
10
12
14
80
100
120
140
160

Run=7099046, Event=53337
hSmdu
Entries 36
Mean 151.7
RMS 9.481
Triggers
127271
127641
127652
127622
0
2
4
6
8
10
12
14
100
120
140
160
180

p_T=5.7 GeV, E=12.3 GeV
hSmdv
Entries 44
Mean 117
RMS 8.157
0
2
4
6
8
10
12
14
80
100
120
140
160

Run=7099046, Event=53373
hSmdu
Entries 31
Mean 149.2
RMS 5.388
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
45
100
120
140
160
180

p_T=6.9 GeV, E=17.8 GeV
hSmdv
Entries 24
Mean 63.31
RMS 5.426
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

Run=7099046, Event=53677
hSmdu
Entries 36
Mean 224.9
RMS 8.713
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
180
200
220
240
260

p_T=6.5 GeV, E=10.7 GeV
hSmdv
Entries 29
Mean 132.1
RMS 7.616
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

Run=7099046, Event=77948
hSmdu
Entries 37
Mean 76.23
RMS 10.52
Triggers
127271
127641
127652
127262
0
10
20
30
40
50
40
60
80
100
120

p_T=7.1 GeV, E=18.1 GeV
hSmdv
Entries 24
Mean 126.8
RMS 4.513
0
10
20
30
40
50
80
100
120
140
160

Run=7099046, Event=77976
hSmdu
Entries 32
Mean 45.36
RMS 9.145
Triggers
127641
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70
80
90

p_T=5.6 GeV, E=16.0 GeV
hSmdv
Entries 24
Mean 63.06
RMS 4.904
0
5
10
15
20
25
30
35
40
20
40
60
80
100

Run=7099046, Event=78014
hSmdu
Entries 45
Mean 174.5
RMS 4.943
Triggers
127271
127641
0
2
4
6
8
10
12
14
140
160
180
200
220

p_T=5.6 GeV, E=14.5 GeV
hSmdv
Entries 39
Mean 166.1
RMS 9.198
0
2
4
6
8
10
12
14
120
140
160
180
200
220

Run=7099046, Event=78034
hSmdu
Entries 36
Mean 198.1
RMS 10.99
Triggers
127641
0
2
4
6
8
10
160
180
200
220
240

p_T=5.1 GeV, E=11.2 GeV
hSmdv
Entries 48
Mean 102.8
RMS 8.052
0
2
4
6
8
10
60
80
100
120
140

Run=7099046, Event=78237
hSmdu
Entries 28
Mean 191.9
RMS 10.38
Triggers
127641
0
1
2
3
4
5
6
7
8
9
160
180
200
220
240

p_T=6.1 GeV, E=10.0 GeV
hSmdv
Entries 31
Mean 190.6
RMS 10.56
0
1
2
3
4
5
6
7
8
9
140
160
180
200
220

Run=7099046, Event=78260
hSmdu
Entries 29
Mean 162.4
RMS 6.256
Triggers
127271
127641
127262
45
40
35
30
25
20
15
10
5
0
120
140
160
180
200

p_T=8.7 GeV, E=13.5 GeV
hSmdv
Entries 36
Mean 216.9
RMS 7.812
45
40
35
30
25
20
15
10
5
0
180
200
220
240
260

Run=7099046, Event=78370
hSmdu
Entries 26
Mean 180.7
RMS 3.144
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
140
160
180
200
220

p_T=5.6 GeV, E=17.9 GeV
hSmdv
Entries 33
Mean 81.07
RMS 4.38
0
5
10
15
20
25
30
35
40
40
60
80
100
120

Run=7099046, Event=79275
hSmdu
Entries 32
Mean 129.2
RMS 10.35
Triggers
127641
127262
0
2
4
6
8
10
12
100
120
140
160
180

p_T=5.7 GeV, E=10.1 GeV
hSmdv
Entries 24
Mean 232.5
RMS 5.643
0
2
4
6
8
10
12
180
200
220
240
260
280

Run=7099046, Event=80404
hSmdu
Entries 29
Mean 123.2
RMS 6.21
Triggers
127641
0
5
10
15
20
25
80
100
120
140
160

p_T=5.3 GeV, E=13.0 GeV
hSmdv
Entries 28
Mean 75.02
RMS 6.634
0
5
10
15
20
25
40
60
80
100
120

Run=7099046, Event=72176
hSmdu
Entries 40
Mean 82.77
RMS 10.76
Triggers
127641
0
5
10
15
20
25
40
60
80
100
120

p_T=5.3 GeV, E=14.6 GeV
hSmdv
Entries 29
Mean 107.6
RMS 6.152
0
5
10
15
20
25
60
80
100
120
140

Run=7099046, Event=72576
hSmdu
Entries 43
Mean 42.72
RMS 5.902
Triggers
127641
0
5
10
15
20
25
0 10 20 30 40 50 60 70 80 90
p_T=5.1 GeV, E=19.6 GeV
hSmdv
Entries 43
Mean 97.52
RMS 9.774
0
5
10
15
20
25
60 80 100 120 140

Run=7099046, Event=73102
hSmdu
Entries 36
Mean 66.22
RMS 9.586
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100

p_T=5.9 GeV, E=16.5 GeV
hSmdv
Entries 25
Mean 64.99
RMS 8.689
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100

Run=7099046, Event=73244
hSmdu
Entries 23
Mean 177.7
RMS 6.833
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
140
160
180
200
220

p_T=5.3 GeV, E=9.6 GeV
hSmdv
Entries 21
Mean 181.6
RMS 5.38
0
2
4
6
8
10
12
14
16
18
20
140
160
180
200
220

Run=7099046, Event=73528
hSmdu
Entries 25
Mean 230.2
RMS 5.5
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
200
220
240
260
280

p_T=6.6 GeV, E=8.8 GeV
hSmdv
Entries 21
Mean 185.6
RMS 4.595
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220

Run=7099046, Event=73769
hSmdu
Entries 47
Mean 78.07
RMS 11.95
Triggers
127271
127641
127652
127622
0
1
2
3
4
5
6
7
8
40
60
80
100
120

p_T=5.7 GeV, E=13.3 GeV
hSmdv
Entries 39
Mean 181.2
RMS 10
0
1
2
3
4
5
6
7
8
140
160
180
200
220

Run=7099046, Event=73897
hSmdu
Entries 32
Mean 108.4
RMS 6.358
Triggers
127641
0
5
10
15
20
25
60
80
100
120
140

p_T=7.2 GeV, E=13.5 GeV
hSmdv
Entries 40
Mean 204.1
RMS 8.632
0
5
10
15
20
25
160
180
200
220
240

Run=7099046, Event=74241
hSmdu
Entries 28
Mean 253.7
RMS 3.148
Triggers
127641
0
5
10
15
20
25
30
35
40
210
220
230
240
250
260
270
280

p_T=5.4 GeV, E=9.4 GeV
hSmdv
Entries 35
Mean 141.8
RMS 4.954
0
5
10
15
20
25
30
35
40
100
120
140
160
180

Run=7099046, Event=74370
hSmdu
Entries 13
Mean 29.99
RMS 2.051
Triggers
127641
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80

p_T=6.1 GeV, E=16.7 GeV
hSmdv
Entries 20
Mean 73.75
RMS 5.143
0
5
10
15
20
25
40
60
80
100
120

Run=7099046, Event=75284
hSmdu
Entries 45
Mean 161.7
RMS 6.896
Triggers
127641
0
2
4
6
8
10
12
14
16
18
120
140
160
180
200

p_T=5.6 GeV, E=12.4 GeV
hSmdv
Entries 44
Mean 72.46
RMS 4.856
0
2
4
6
8
10
12
14
16
18
40
60
80
100
120

Run=7099046, Event=75347
hSmdu
Entries 13
Mean 46.49
RMS 4.295
Triggers
127641
127262
0
5
10
15
20
25
0 10 20 30 40 50 60 70 80 90

p_T=5.6 GeV, E=20.2 GeV
hSmdv
Entries 13
Mean 16.66
RMS 3.233
0
5
10
15
20
25
0 10 20 30 40 50 60

Run=7099046, Event=75815
hSmdu
Entries 43
Mean 193.5
RMS 5.532
Triggers
127641
30
25
20
15
10
5
0
160
180
200
220
240

p_T=5.2 GeV, E=13.1 GeV
hSmdv
Entries 38
Mean 95.5
RMS 7.479
30
25
20
15
10
5
0
60
80
100
120
140

Run=7099046, Event=81177
hSmdu
Entries 26
Mean 148
RMS 5.404
Triggers
127641
0
2
4
6
8
10
12
14
16
100
120
140
160
180
200

p_T=6.0 GeV, E=12.8 GeV
hSmdv
Entries 34
Mean 63.17
RMS 6.363
0
2
4
6
8
10
12
14
16
20
40
60
80
100

Run=7099046, Event=81259
hSmdu
Entries 30
Mean 89.94
RMS 7.63
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

p_T=7.0 GeV, E=15.4 GeV
hSmdv
Entries 25
Mean 176.3
RMS 4.936
0
2
4
6
8
10
12
14
16
18
20
140
160
180
200
220

Run=7099046, Event=81348
hSmdu
Entries 31
Mean 206.5
RMS 5.978
Triggers
127641
25
20
15
10
5
0
160
180
200
220
240

p_T=6.1 GeV, E=11.1 GeV
hSmdv
Entries 42
Mean 104.8
RMS 5.815
25
20
15
10
5
0
60
80
100
120
140

Run=7099046, Event=81825
hSmdu
Entries 23
Mean 92.09
RMS 4.564
Triggers
127271
127641
0
5
10
15
20
25
60
80
100
120
140

p_T=6.5 GeV, E=16.6 GeV
hSmdv
Entries 27
Mean 143.5
RMS 5.178
0
5
10
15
20
25
100
120
140
160
180

Run=7099046, Event=81941
hSmdu
Entries 30
Mean 161.3
RMS 8.297
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
120
140
160
180
200

p_T=5.7 GeV, E=9.4 GeV
hSmdv
Entries 34
Mean 205.3
RMS 10.05
0
2
4
6
8
10
12
14
16
160
180
200
220
240

Run=7099046, Event=82177
hSmdu
Entries 39
Mean 116.2
RMS 16.6
Triggers
127271
127641
0
2
4
6
8
10
80
100
120
140
160

p_T=6.8 GeV, E=13.2 GeV
hSmdv
Entries 35
Mean 232.5
RMS 17.63
0
2
4
6
8
10
160
180
200
220
240

Run=7099046, Event=82834
hSmdu
Entries 20
Mean 179.2
RMS 4.207
Triggers
127641
0
2
4
6
8
10
12
140
160
180
200
220

p_T=6.6 GeV, E=10.5 GeV
hSmdv
Entries 26
Mean 158.6
RMS 6.776
0
2
4
6
8
10
12
120
140
160
180
200

Run=7099046, Event=83853
hSmdu
Entries 29
Mean 179.3
RMS 6.954
Triggers
127641
0
5
10
15
20
25
30
35
140
160
180
200
220

p_T=5.7 GeV, E=10.2 GeV
hSmdv
Entries 29
Mean 155
RMS 4.988
0
5
10
15
20
25
30
35
120
140
160
180
200

Run=7099046, Event=84356
hSmdu
Entries 44
Mean 175.6
RMS 17.29
Triggers
127641
0
2
4
6
8
10
12
140
160
180
200
220

p_T=7.5 GeV, E=12.6 GeV
hSmdv
Entries 41
Mean 193.9
RMS 13.86
0
2
4
6
8
10
12
160
180
200
220
240

Run=7099046, Event=35514
hSmdu
Entries 26
Mean 213.6
RMS 8.28
Triggers
127641
0
2
4
6
8
10
12
14
16
18
180
200
220
240
260

p_T=5.2 GeV, E=9.5 GeV
hSmdv
Entries 17
Mean 176.7
RMS 3.143
0
2
4
6
8
10
12
14
16
18
140
160
180
200
220

Run=7099046, Event=35608
hSmdu
Entries 43
Mean 140.2
RMS 6.383
Triggers
127271
127641
127652
0
5
10
15
20
25
100
120
140
160
180

p_T=7.2 GeV, E=17.2 GeV
hSmdv
Entries 62
Mean 94.69
RMS 27.52
0
5
10
15
20
25
60
80
100
120
140

Run=7099046, Event=36052
hSmdu
Entries 24
Mean 111.9
RMS 6.089
Triggers
127641
0
2
4
6
8
10
12
80
100
120
140
160
p_T=5.6 GeV, E=12.0 GeV
hSmdv
Entries 33
Mean 195
RMS 9.123
0
2
4
6
8
10
12
160
180
200
220
240

Run=7099046, Event=36472
hSmdu
Entries 38
Mean 131.1
RMS 7.032
Triggers
127271
127641
127652
127622
0
2
4
6
8
10
12
14
80
100
120
140
160

p_T=5.2 GeV, E=13.7 GeV
hSmdv
Entries 58
Mean 58.67
RMS 13.82
0
2
4
6
8
10
12
14
20
40
60
80
100

Run=7099046, Event=36974
hSmdu
Entries 29
Mean 186.1
RMS 7.298
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220

p_T=5.5 GeV, E=11.1 GeV
hSmdv
Entries 34
Mean 170.2
RMS 6.195
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200
220

Run=7099046, Event=37126
hSmdu
Entries 22
Mean 99.73
RMS 3.594
Triggers
127641
127652
127262
0
10
20
30
40
50
60
60
80
100
120
140

p_T=5.0 GeV, E=14.5 GeV
hSmdv
Entries 23
Mean 111.3
RMS 11.83
0
10
20
30
40
50
60
60
80
100
120
140

Run=7099046, Event=37312
hSmdu
Entries 20
Mean 158.4
RMS 7.654
Triggers
127641
0
5
10
15
20
25
120
140
160
180
200

p_T=5.1 GeV, E=10.6 GeV
hSmdv
Entries 21
Mean 154.4
RMS 9.356
0
5
10
15
20
25
120
140
160
180
200

Run=7099046, Event=37973
hSmdu
Entries 22
Mean 41.17
RMS 4.727
Triggers
127641
127262
0 2 4 6 8 10 12 14 16 18
0 10 20 30 40 50 60 70 80 90

p_T=7.3 GeV, E=24.4 GeV
hSmdv
Entries 21
Mean 18.05
RMS 4.668
0 2 4 6 8 10 12 14 16 18
0 10 20 30 40 50 60

Run=7099046, Event=39289
hSmdu
Entries 36
Mean 169.1
RMS 10.28
Triggers
127271
127641
127652
0
2
4
6
8
10
12
14
16
120
140
160
180
200

p_T=6.4 GeV, E=12.9 GeV
hSmdv
Entries 29
Mean 185.3
RMS 5.614
0
2
4
6
8
10
12
14
16
140
160
180
200
220

Run=7099046, Event=65856
hSmdu
Entries 28
Mean 189.3
RMS 5.809
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220
240

p_T=9.9 GeV, E=14.9 GeV
hSmdv
Entries 40
Mean 173.6
RMS 7.693
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220

Run=7099046, Event=66778
hSmdu
Entries 22
Mean 54.17
RMS 4.041
Triggers
127641
127262
0
5
10
15
20
25
30
35
40
20
40
60
80
100

p_T=8.3 GeV, E=23.2 GeV
hSmdv
Entries 27
Mean 31.83
RMS 6.819
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70
80

Run=7099046, Event=66837
hSmdu
Entries 20
Mean 55.31
RMS 4.006
Triggers
127641
127262
0
5
10
15
20
25
30
35
40
20
40
60
80
100

p_T=5.3 GeV, E=19.1 GeV
hSmdv
Entries 22
Mean 26.24
RMS 3.621
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70

Run=7099035, Event=67943
hSmdu
Entries 51
Mean 26.66
RMS 7.159
Triggers
127641
127262
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60
70

p_T=6.7 GeV, E=17.5 GeV
hSmdv
Entries 37
Mean 88.47
RMS 4.831
0
5
10
15
20
25
30
35
40
60
80
100
120
140

Run=7099046, Event=20803
hSmdu
Entries 33
Mean 118.9
RMS 9.041
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160

p_T=5.0 GeV, E=11.8 GeV
hSmdv
Entries 28
Mean 116.1
RMS 8.575
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160

Run=7099046, Event=21671
hSmdu
Entries 22
Mean 94.78
RMS 4.824
Triggers
127641
25
20
15
10
5
0
60
80
100
120
140

p_T=6.0 GeV, E=12.8 GeV
hSmdv
Entries 30
Mean 119.7
RMS 7.862
25
20
15
10
5
0
80
100
120
140
160

Run=7099046, Event=21716
hSmdu
Entries 24
Mean 266
RMS 5.463
Triggers
127641
127652
127622
127262
0
2
4
6
8
10
12
14
16
220
230
240
250
260
270
280
p_T=6.1 GeV, E=8.9 GeV
hSmdv
Entries 26
Mean 134.2
RMS 6.212
0
2
4
6
8
10
12
14
16
100
120
140
160
180

Run=7099046, Event=22834
hSmdu
Entries 22
Mean 132.9
RMS 6.812
Triggers
127641
0
5
10
15
20
25
100
120
140
160
180

p_T=5.2 GeV, E=10.8 GeV
hSmdv
Entries 21
Mean 165.1
RMS 6.509
0
5
10
15
20
25
120
140
160
180
200

Run=7099046, Event=71143
hSmdu
Entries 30
Mean 33.1
RMS 6.709
Triggers
127641
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60
70
80

p_T=7.4 GeV, E=15.1 GeV
hSmdv
Entries 32
Mean 93.98
RMS 6.206
0
5
10
15
20
25
30
35
40
45
60
80
100
120
140

Run=7099046, Event=71301
hSmdu
Entries 40
Mean 148.3
RMS 9.741
Triggers
127271
127641
127652
127622
127262
0
5
10
15
20
25
100
120
140
160
180

p_T=9.5 GeV, E=17.5 GeV
hSmdv
Entries 42
Mean 83.29
RMS 9.627
0
5
10
15
20
25
40
60
80
100
120

Run=7099046, Event=71441
hSmdu
Entries 31
Mean 39.96
RMS 6.348
Triggers
127271
127641
127652
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80
p_T=5.5 GeV, E=24.1 GeV
hSmdv
Entries 35
Mean 30.38
RMS 6.899
0
5
10
15
20
25
0
10
20
30
40
50
60
70

Run=7099046, Event=71632
hSmdu
Entries 29
Mean 108.7
RMS 9.021
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
60
80
100
120
140

p_T=5.9 GeV, E=14.1 GeV
hSmdv
Entries 26
Mean 118.7
RMS 6.057
0
2
4
6
8
10
12
14
16
18
20
22
24
80
100
120
140
160

Run=7099046, Event=71836
hSmdu
Entries 23
Mean 159
RMS 3.839
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
120
140
160
180
200

p_T=6.1 GeV, E=12.2 GeV
hSmdv
Entries 19
Mean 85.48
RMS 4.352
0
2
4
6
8
10
12
14
16
18
20
22
24
40
60
80
100
120

Run=7099046, Event=2130
hSmdu
Entries 32
Mean 92.25
RMS 5.208
Triggers
127271
127641
127262
50
40
30
20
10
0
60
80
100
120
140

p_T=8.9 GeV, E=17.8 GeV
hSmdv
Entries 37
Mean 194.4
RMS 7.838
50
40
30
20
10
0
160
180
200
220
240

Run=7099046, Event=8525
hSmdu
Entries 31
Mean 189.1
RMS 9.059
Triggers
127641
0
1
2
3
4
5
6
7
160
180
200
220
240

p_T=6.6 GeV, E=10.0 GeV
hSmdv
Entries 32
Mean 211.9
RMS 8.595
0
1
2
3
4
5
6
7
160
180
200
220
240

Run=7099046, Event=8723
hSmdu
Entries 26
Mean 153.8
RMS 7.531
Triggers
127641
127262
30
25
20
15
10
5
0
120
140
160
180
200

p_T=6.6 GeV, E=12.8 GeV
hSmdv
Entries 24
Mean 67.45
RMS 5.178
30
25
20
15
10
5
0
20
40
60
80
100

Run=7099046, Event=9523
hSmdu
Entries 71
Mean 143
RMS 19.46
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=6.2 GeV, E=14.6 GeV
hSmdv
Entries 54
Mean 70.63
RMS 11.54
0
2
4
6
8
10
12
14
16
18
20
22
20
40
60
80
100
120

Run=7099046, Event=10925
hSmdu
Entries 28
Mean 173.3
RMS 7.766
Triggers
127271
127641
0
5
10
15
20
25
30
35
40
140
160
180
200
220

p_T=6.4 GeV, E=15.0 GeV
hSmdv
Entries 24
Mean 107.1
RMS 4.415
0
5
10
15
20
25
30
35
40
60
80
100
120
140

Run=7099046, Event=12104
hSmdu
Entries 25
Mean 109.7
RMS 4.947
Triggers
127641
35
30
25
20
15
10
5
0
80
100
120
140
160

p_T=7.6 GeV, E=18.7 GeV
hSmdv
Entries 32
Mean 76.48
RMS 6.291
35
30
25
20
15
10
5
0
40
60
80
100
120

Run=7099046, Event=30942
hSmdu
Entries 33
Mean 171.7
RMS 3.935
Triggers
127271
127641
127262
0
5
10
15
20
25
140
160
180
200
220

p_T=6.1 GeV, E=15.7 GeV
hSmdv
Entries 54
Mean 78.03
RMS 7.663
0
5
10
15
20
25
40
60
80
100
120

Run=7099046, Event=30986
hSmdu
Entries 48
Mean 94.61
RMS 14.84
Triggers
127271
127641
0
5
10
15
20
25
30
35
40
60
80
100
120
140

p_T=7.7 GeV, E=21.6 GeV
hSmdv
Entries 39
Mean 65.72
RMS 12.43
0
5
10
15
20
25
30
35
20
40
60
80
100

Run=7099046, Event=31120
hSmdu
Entries 28
Mean 40.1
RMS 6.31
Triggers
127641
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80

p_T=5.3 GeV, E=17.3 GeV
hSmdv
Entries 32
Mean 78.8
RMS 8.584
0
5
10
15
20
25
30
40
60
80
100
120

Run=7099046, Event=31403
hSmdu
Entries 29
Mean 187.2
RMS 7.239
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
160
180
200
220
240

p_T=5.3 GeV, E=9.3 GeV
hSmdv
Entries 25
Mean 239.2
RMS 6.529
0
2
4
6
8
10
12
14
16
18
20
22
24
200
220
240
260
280

Run=7099046, Event=31482
hSmdu
Entries 30
Mean 139.2
RMS 9.355
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=5.1 GeV, E=11.2 GeV
hSmdv
Entries 23
Mean 180.2
RMS 5.417
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220

Run=7099046, Event=31534
hSmdu
Entries 35
Mean 48.7
RMS 10.4
Triggers
127641
0
5
10
15
20
25
30
0
10
20
30
40
50
60
70
80
90

p_T=6.6 GeV, E=15.6 GeV
hSmdv
Entries 39
Mean 118.5
RMS 13.44
0
5
10
15
20
25
30
100
120
140
160
180

Run=7099046, Event=31931
hSmdu
Entries 33
Mean 95.62
RMS 8.626
Triggers
127641
127262
0
2
4
6
8
10
12
60
80
100
120
140

p_T=5.6 GeV, E=20.1 GeV
hSmdv
Entries 28
Mean 43.93
RMS 8.071
0
2
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90

Run=7099046, Event=32390
hSmdu
Entries 26
Mean 160.9
RMS 5.038
Triggers
127271
127641
127262
0
5
10
15
20
25
120
140
160
180
200

p_T=6.8 GeV, E=12.8 GeV
hSmdv
Entries 19
Mean 100.6
RMS 3.739
0
5
10
15
20
25
60
80
100
120
140

Run=7099046, Event=32944
hSmdu
Entries 49
Mean 48.4
RMS 10.19
Triggers
127271
127641
127652
127622
127262
0
10
20
30
40
50
0
10
20
30
40
50
60
70
80
90

p_T=7.4 GeV, E=27.4 GeV
hSmdv
Entries 51
Mean 108
RMS 8.331
0
10
20
30
40
50
80
100
120
140
160

Run=7099046, Event=19279
hSmdu
Entries 22
Mean 128.7
RMS 6.998
Triggers
127641
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160

p_T=5.1 GeV, E=9.6 GeV
hSmdv
Entries 30
Mean 254
RMS 11.21
0
2
4
6
8
10
12
14
16
18
200
210
220
230
240
250
260
270
280

Run=7099046, Event=23520
hSmdu
Entries 25
Mean 239.9
RMS 6.402
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
190 200 210 220 230 240 250 260 270 280

p_T=6.1 GeV, E=11.0 GeV
hSmdv
Entries 21
Mean 168.1
RMS 4.239
0
2
4
6
8
10
12
14
16
18
20
22
120 140 160 180 200

Run=7099046, Event=24225
hSmdu
Entries 28
Mean 158.7
RMS 8.406
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

p_T=5.3 GeV, E=12.7 GeV
hSmdv
Entries 27
Mean 166
RMS 6.982
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

Run=7099046, Event=25147
hSmdu
Entries 23
Mean 121.6
RMS 10.07
Triggers
127271
127641
127262
0
2
4
6
8
10
12
80
100
120
140
160

p_T=5.5 GeV, E=14.4 GeV
hSmdv
Entries 17
Mean 60.32
RMS 8.637
0
2
4
6
8
10
12
20
40
60
80
100

Run=7099046, Event=25740
hSmdu
Entries 38
Mean 159.9
RMS 7.326
Triggers
127271
127641
25
20
15
10
5
0
120
140
160
180
200

p_T=9.6 GeV, E=20.2 GeV
hSmdv
Entries 23
Mean 82.05
RMS 5.002
25
20
15
10
5
0
40
60
80
100
120

Run=7099046, Event=26235
hSmdu
Entries 26
Mean 114
RMS 5.385
Triggers
127641
0
2
4
6
8
10
12
14
80
100
120
140
160

p_T=5.2 GeV, E=10.3 GeV
hSmdv
Entries 30
Mean 126.6
RMS 8.034
0
2
4
6
8
10
12
14
80
100
120
140
160

Run=7099046, Event=26854
hSmdu
Entries 31
Mean 107.6
RMS 6.619
Triggers
127641
127262
0
5
10
15
20
25
30
60
80
100
120
140

p_T=5.1 GeV, E=15.0 GeV
hSmdv
Entries 27
Mean 73.49
RMS 6.681
0
5
10
15
20
25
30
40
60
80
100
120

Run=7099046, Event=26876
hSmdu
Entries 38
Mean 131
RMS 6.749
Triggers
127641
0
2
4
6
8
10
12
100
120
140
160
180

p_T=6.8 GeV, E=9.7 GeV
hSmdv
Entries 29
Mean 262.1
RMS 3.326
0
2
4
6
8
10
12
220
230
240
250
260
270
280

Run=7099046, Event=27673
hSmdu
Entries 17
Mean 34.24
RMS 3.507
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
0
10
20
30
40
50
60
70
80

p_T=6.2 GeV, E=16.9 GeV
hSmdv
Entries 30
Mean 58.37
RMS 6.239
0
2
4
6
8
10
12
14
16
18
20
22
24
20
40
60
80
100

Run=7099046, Event=28126
hSmdu
Entries 46
Mean 235.2
RMS 11.48
Triggers
127641
0
2
4
6
8
10
12
190 200 210 220 230 240 250 260 270 280

p_T=8.2 GeV, E=13.2 GeV
hSmdv
Entries 44
Mean 132.1
RMS 9.263
0
2
4
6
8
10
12
100 120 140 160 180

Run=7099046, Event=28301
hSmdu
Entries 33
Mean 104.9
RMS 9.725
Triggers
127271
127641
0
5
10
15
20
25
60
80
100
120
140

p_T=6.4 GeV, E=12.2 GeV
hSmdv
Entries 49
Mean 137.9
RMS 10.37
0
5
10
15
20
25
100
120
140
160
180

Run=7099046, Event=28812
hSmdu
Entries 26
Mean 167.5
RMS 4.549
Triggers
127271
127641
127262
50
40
30
20
10
0
120
140
160
180
200

p_T=7.8 GeV, E=18.8 GeV
hSmdv
Entries 30
Mean 85.36
RMS 5.757
50
40
30
20
10
0
40
60
80
100
120

Run=7099046, Event=28981
hSmdu
Entries 48
Mean 92.7
RMS 8.078
Triggers
127271
127641
127262
0
10
20
30
40
50
60
80
100
120
140
p_T=5.4 GeV, E=15.0 GeV
hSmdv
Entries 25
Mean 108.8
RMS 4.171
0
10
20
30
40
50
60
80
100
120
140

Run=7099046, Event=29867
hSmdu
Entries 27
Mean 141.5
RMS 9.921
Triggers
127271
127641
14
12
10
8
6
4
2
0
100
120
140
160
180

p_T=5.9 GeV, E=12.8 GeV
hSmdv
Entries 30
Mean 80.21
RMS 9.152
14
12
10
8
6
4
2
0
40
60
80
100
120

Run=7099046, Event=29927
hSmdu
Entries 32
Mean 61.04
RMS 7.821
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
20
40
60
80
100

p_T=7.9 GeV, E=22.1 GeV
hSmdv
Entries 38
Mean 28.8
RMS 7.655
0
2
4
6
8
10
12
14
16
18
20
22
0
10
20
30
40
50
60
70
80

Run=7099046, Event=30027
hSmdu
Entries 28
Mean 107.5
RMS 8.858
Triggers
127641
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160

p_T=6.6 GeV, E=12.7 GeV
hSmdv
Entries 21
Mean 194.9
RMS 4.881
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

Run=7099046, Event=30138
hSmdu
Entries 31
Mean 75.23
RMS 5.581
Triggers
127641
0
5
10
15
20
25
40
60
80
100
120

p_T=6.4 GeV, E=22.1 GeV
hSmdv
Entries 29
Mean 41.37
RMS 6.217
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80

Run=7099046, Event=30422
hSmdu
Entries 27
Mean 228.5
RMS 6.038
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
200
220
240
260
280

p_T=7.2 GeV, E=9.5 GeV
hSmdv
Entries 38
Mean 180.2
RMS 9.765
0
2
4
6
8
10
12
14
16
18
140
160
180
200
220

Run=7099035, Event=37479
hSmdu
Entries 19
Mean 86.33
RMS 6.731
Triggers
127641
127652
127622
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
40
60
80
100
120

p_T=5.1 GeV, E=11.3 GeV
hSmdv
Entries 22
Mean 195.3
RMS 5.114
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
160
180
200
220
240

Run=7099035, Event=40706
hSmdu
Entries 43
Mean 107.7
RMS 11.34
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
60
80
100
120
140

p_T=5.0 GeV, E=11.5 GeV
hSmdv
Entries 27
Mean 154.6
RMS 6.918
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200

Run=7099035, Event=47992
hSmdu
Entries 30
Mean 84.67
RMS 3.15
Triggers
127641
0
2
4
6
8
10
12
14
16
18
40
60
80
100
120

p_T=8.0 GeV, E=9.4 GeV
hSmdv
Entries 22
Mean 192.2
RMS 6.273
0
2
4
6
8
10
12
14
16
18
160
180
200
220
240

Run=7099045, Event=20442
hSmdu
Entries 40
Mean 44.02
RMS 10.42
Triggers
127271
127641
0 2 4 6 8 10 12 14 16 18 20 22
0 10 20 30 40 50 60 70 80 90

p_T=5.6 GeV, E=19.3 GeV
hSmdv
Entries 31
Mean 41.57
RMS 5.831
0 2 4 6 8 10 12 14 16 18 20 22
0 10 20 30 40 50 60 70 80 90

Run=7099045, Event=20742
hSmdu
Entries 27
Mean 197
RMS 10.78
Triggers
127641
127652
127622
0
2
4
6
8
10
140
160
180
200
220

p_T=6.2 GeV, E=9.5 GeV
hSmdv
Entries 30
Mean 184.1
RMS 9.329
0
2
4
6
8
10
140
160
180
200
220

Run=7099034, Event=141834
hSmdu
Entries 19
Mean 173.2
RMS 3.979
Triggers
127271
127641
0
5
10
15
20
25
30
140
160
180
200
220

p_T=5.2 GeV, E=13.3 GeV
hSmdv
Entries 42
Mean 138.5
RMS 10.38
0
5
10
15
20
25
30
100
120
140
160
180

Run=7099034, Event=142811
hSmdu
Entries 52
Mean 226.8
RMS 8.996
Triggers
127641
0
2
4
6
8
10
12
14
16
18
200
220
240
260
280

p_T=6.9 GeV, E=11.9 GeV
hSmdv
Entries 39
Mean 224.6
RMS 7.897
0
2
4
6
8
10
12
14
16
18
180
200
220
240
260

Run=7099034, Event=142917
hSmdu
Entries 18
Mean 66.96
RMS 4.501
Triggers
127641
0
5
10
15
20
25
30
20
40
60
80
100

p_T=6.1 GeV, E=13.1 GeV
hSmdv
Entries 22
Mean 120.6
RMS 3.496
0
5
10
15
20
25
30
80
100
120
140
160

Run=7099034, Event=143998
hSmdu
Entries 59
Mean 114.9
RMS 6.93
Triggers
127271
127641
0
5
10
15
20
25
30
35
80
100
120
140
160
p_T=5.6 GeV, E=18.9 GeV
hSmdv
Entries 34
Mean 112.2
RMS 5.316
0
5
10
15
20
25
30
35
60
80
100
120
140
160

Run=7099034, Event=148911
hSmdu
Entries 36
Mean 240.8
RMS 8.837
Triggers
127221
127271
127641
127262
0
10
20
30
40
50
200 210 220 230 240 250 260 270 280

p_T=9.0 GeV, E=17.7 GeV
hSmdv
Entries 44
Mean 183.6
RMS 11.94
0
10
20
30
40
50
140 160 180 200 220

Run=7099045, Event=77509
hSmdu
Entries 27
Mean 143.9
RMS 6.501
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=5.4 GeV, E=9.7 GeV
hSmdv
Entries 23
Mean 187.7
RMS 4.133
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220

Run=7099045, Event=77966
hSmdu
Entries 30
Mean 130.5
RMS 8.068
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

p_T=5.5 GeV, E=12.2 GeV
hSmdv
Entries 30
Mean 144.3
RMS 7.867
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

Run=7099045, Event=79005
hSmdu
Entries 41
Mean 130.8
RMS 9.885
Triggers
127271
127641
127262
0
2
4
6
8
10
100
120
140
160
180

p_T=6.1 GeV, E=11.1 GeV
hSmdv
Entries 39
Mean 240.5
RMS 10.44
0
2
4
6
8
10
200
210
220
230
240
250
260
270
280

Run=7099045, Event=79144
hSmdu
Entries 34
Mean 74.61
RMS 13.89
Triggers
127271
127641
0
5
10
15
20
25
30
40
60
80
100
120

p_T=6.5 GeV, E=18.2 GeV
hSmdv
Entries 19
Mean 67.86
RMS 3.637
0
5
10
15
20
25
30
20
40
60
80
100

Run=7099045, Event=11
hSmdu
Entries 18
Mean 107.3
RMS 3.966
Triggers
127641
0
5
10
15
20
25
30
35
60
80
100
120
140
160

p_T=6.2 GeV, E=14.3 GeV
hSmdv
Entries 40
Mean 132.9
RMS 8.785
0
5
10
15
20
25
30
35
80
100
120
140
160
180

Run=7099045, Event=390
hSmdu
Entries 36
Mean 94.15
RMS 7.423
Triggers
127641
25
20
15
10
5
0
60
80
100
120
140

p_T=5.3 GeV, E=13.4 GeV
hSmdv
Entries 29
Mean 86.78
RMS 5.962
25
20
15
10
5
0
40
60
80
100
120

Run=7099045, Event=562
hSmdu
Entries 39
Mean 87.33
RMS 3.251
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
40
60
80
100
120

p_T=5.3 GeV, E=18.2 GeV
hSmdv
Entries 34
Mean 85.98
RMS 5.612
0
5
10
15
20
25
30
35
40
40
60
80
100
120

Run=7099045, Event=609
hSmdu
Entries 30
Mean 153.4
RMS 6.964
Triggers
127641
35
30
25
20
15
10
5
0
120
140
160
180
200

p_T=7.9 GeV, E=11.9 GeV
hSmdv
Entries 29
Mean 107.9
RMS 6.337
35
30
25
20
15
10
5
0
60
80
100
120
140

Run=7099045, Event=1660
hSmdu
Entries 34
Mean 249.6
RMS 12.36
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
210
220
230
240
250
260
270
280

p_T=5.9 GeV, E=9.8 GeV
hSmdv
Entries 19
Mean 149.4
RMS 4.293
0
2
4
6
8
10
12
14
16
18
20
22
24
120
140
160
180
200

Run=7099045, Event=2101
hSmdu
Entries 24
Mean 162
RMS 7.779
Triggers
127271
127641
127652
0
5
10
15
20
25
120
140
160
180
200

p_T=5.2 GeV, E=13.2 GeV
hSmdv
Entries 29
Mean 203.1
RMS 12.92
0
5
10
15
20
25
160
180
200
220
240

Run=7099045, Event=3007
hSmdu
Entries 18
Mean 208.7
RMS 5.558
Triggers
127641
127262
25
20
15
10
5
0
160
180
200
220
240

p_T=5.3 GeV, E=9.8 GeV
hSmdv
Entries 26
Mean 218.1
RMS 7.427
25
20
15
10
5
0
180
200
220
240
260

Run=7099045, Event=3410
hSmdu
Entries 47
Mean 56.85
RMS 14.93
Triggers
127271
127641
0 10 20 30 40 50 60 70 80 90 100
0 2 4 6 8 10 12 14 16 18 20 22 24

p_T=7.0 GeV, E=27.8 GeV
hSmdv
Entries 37
Mean 50.7
RMS 9.432
20 40 60 80 100
0 2 4 6 8 10 12 14 16 18 20 22 24

Run=7099045, Event=3513
hSmdu
Entries 31
Mean 67.11
RMS 8.428
Triggers
127641
0
5
10
15
20
25
40
60
80
100
120

p_T=7.8 GeV, E=14.5 GeV
hSmdv
Entries 38
Mean 128.4
RMS 19.08
0
5
10
15
20
25
100
120
140
160
180

Run=7099045, Event=3635
hSmdu
Entries 28
Mean 238.6
RMS 6.067
Triggers
127221
127271
127641
127262
0
5
10
15
20
25
200
220
240
260
280

p_T=7.8 GeV, E=14.1 GeV
hSmdv
Entries 41
Mean 175.3
RMS 9.326
0
5
10
15
20
25
140
160
180
200
220

Run=7099045, Event=3780
hSmdu
Entries 31
Mean 30.48
RMS 7.143
Triggers
127641
0
5
10
15
20
25
30
35
40
0
10
20
30
40
50
60
70

p_T=5.0 GeV, E=17.1 GeV
hSmdv
Entries 38
Mean 75.1
RMS 8.985
0
5
10
15
20
25
30
35
40
40
60
80
100
120

Run=7099034, Event=134003
hSmdu
Entries 28
Mean 145.7
RMS 10.5
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

p_T=5.3 GeV, E=11.8 GeV
hSmdv
Entries 30
Mean 155.6
RMS 5.664
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

Run=7099034, Event=72859
hSmdu
Entries 26
Mean 57.36
RMS 4.811
Triggers
127641
0
5
10
15
20
25
20
40
60
80
100

p_T=6.1 GeV, E=11.6 GeV
hSmdv
Entries 25
Mean 125.7
RMS 5.804
0
5
10
15
20
25
80
100
120
140
160

Run=7099034, Event=83209
hSmdu
Entries 30
Mean 69.18
RMS 9.092
Triggers
127271
127641
45
40
35
30
25
20
15
10
5
0
20
40
60
80
100
120

p_T=7.4 GeV, E=21.6 GeV
hSmdv
Entries 42
Mean 80.75
RMS 16.97
45
40
35
30
25
20
15
10
5
0
40
60
80
100
120

Run=7099034, Event=86956
hSmdu
Entries 40
Mean 219.1
RMS 9.468
Triggers
127271
127641
127652
127622
127262
0
5
10
15
20
25
180
200
220
240
260

p_T=7.0 GeV, E=12.5 GeV
hSmdv
Entries 39
Mean 203.3
RMS 8.167
0
5
10
15
20
25
180
200
220
240
260

Run=7099034, Event=88706
hSmdu
Entries 16
Mean 134.5
RMS 3.014
Triggers
127641
127262
30
25
20
15
10
5
0
100
120
140
160
180

p_T=5.4 GeV, E=10.5 GeV
hSmdv
Entries 24
Mean 58.87
RMS 4.39
30
25
20
15
10
5
0
20
40
60
80
100

Run=7099045, Event=9112
hSmdu
Entries 34
Mean 137.2
RMS 3.375
Triggers
127641
0
2
4
6
8
10
12
14
16
18
100
120
140
160
180

p_T=5.6 GeV, E=9.9 GeV
hSmdv
Entries 34
Mean 276.9
RMS 3.285
0
2
4
6
8
10
12
14
16
18
230
240
250
260
270
280

Run=7099045, Event=10269
hSmdu
Entries 24
Mean 225.9
RMS 10.27
Triggers
127641
127262
25
20
15
10
5
0
180
200
220
240
260

p_T=5.8 GeV, E=11.8 GeV
hSmdv
Entries 21
Mean 151.2
RMS 12.7
25
20
15
10
5
0
120
140
160
180
200

Run=7099045, Event=10360
hSmdu
Entries 22
Mean 105.4
RMS 5.801
Triggers
127641
25
20
15
10
5
0
60
80
100
120
140

p_T=5.6 GeV, E=13.4 GeV
hSmdv
Entries 28
Mean 114.4
RMS 8.711
25
20
15
10
5
0
60
80
100
120
140
160

Run=7099045, Event=10982
hSmdu
Entries 28
Mean 203.9
RMS 7.246
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
160
180
200
220
240
260

p_T=5.3 GeV, E=10.1 GeV
hSmdv
Entries 36
Mean 169.7
RMS 9.948
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

Run=7099045, Event=25586
hSmdu
Entries 25
Mean 159.4
RMS 4.622
Triggers
127641
127262
0
5
10
15
20
25
120
140
160
180
200

p_T=5.8 GeV, E=10.4 GeV
hSmdv
Entries 24
Mean 244
RMS 4.613
0
5
10
15
20
25
200
210
220
230
240
250
260
270
280

Run=7099045, Event=32577
hSmdu
Entries 23
Mean 29.92
RMS 7.407
Triggers
127641
127262
0
5
10
15
20
25
0
10
20
30
40
50
60
70

p_T=5.1 GeV, E=16.5 GeV
hSmdv
Entries 27
Mean 80.98
RMS 8.193
0
5
10
15
20
25
40
60
80
100
120

Run=7099045, Event=51379
hSmdu
Entries 30
Mean 22.36
RMS 5.304
Triggers
127641
0
5
10
15
20
25
0
10
20
30
40
50
60
70

p_T=6.4 GeV, E=19.5 GeV
hSmdv
Entries 34
Mean 70.18
RMS 8.577
0
5
10
15
20
25
40
60
80
100
120

Run=7099045, Event=53391
hSmdu
Entries 27
Mean 83.06
RMS 7.031
Triggers
127641
0
5
10
15
20
25
40
60
80
100
120

p_T=5.5 GeV, E=16.1 GeV
hSmdv
Entries 28
Mean 53.93
RMS 5.674
0
5
10
15
20
25
20
40
60
80
100

Run=7099045, Event=68202
hSmdu
Entries 20
Mean 184.3
RMS 6.255
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
140
160
180
200
220

p_T=5.2 GeV, E=9.9 GeV
hSmdv
Entries 28
Mean 153.9
RMS 10.94
0
2
4
6
8
10
12
14
16
18
20
22
100
120
140
160
180

Run=7099045, Event=80026
hSmdu
Entries 30
Mean 220.9
RMS 8.748
Triggers
127641
127262
0
5
10
15
20
25
180
200
220
240
260

p_T=5.6 GeV, E=9.4 GeV
hSmdv
Entries 39
Mean 179.9
RMS 14.7
0
5
10
15
20
25
140
160
180
200
220

Run=7099045, Event=80849
hSmdu
Entries 39
Mean 74.06
RMS 10.27
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

p_T=5.2 GeV, E=16.4 GeV
hSmdv
Entries 31
Mean 61.11
RMS 10.86
0
2
4
6
8
10
12
14
16
18
20
20
40
60
80
100

Run=7099045, Event=80996
hSmdu
Entries 42
Mean 195.1
RMS 10.25
Triggers
127271
127641
127262
0
5
10
15
20
25
160
180
200
220
240
p_T=5.2 GeV, E=12.3 GeV
hSmdv
Entries 41
Mean 100.8
RMS 16.42
0
5
10
15
20
25
40
60
80
100
120
140

Run=7099045, Event=81307
hSmdu
Entries 24
Mean 204.8
RMS 4.252
Triggers
127641
0
5
10
15
20
25
160
180
200
220
240

p_T=5.0 GeV, E=9.2 GeV
hSmdv
Entries 25
Mean 196.8
RMS 10.68
0
5
10
15
20
25
160
180
200
220
240

Run=7099045, Event=81650
hSmdu
Entries 67
Mean 80.88
RMS 17.58
Triggers
127271
127641
35
30
25
20
15
10
5
0
40
60
80
100
120
140

p_T=5.7 GeV, E=21.4 GeV
hSmdv
Entries 68
Mean 30.97
RMS 12.26
35
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70

Run=7099045, Event=81685
hSmdu
Entries 45
Mean 99.52
RMS 10.66
Triggers
127641
127652
127622
0
2
4
6
8
10
12
14
16
60
80
100
120
140

p_T=6.7 GeV, E=14.8 GeV
hSmdv
Entries 36
Mean 65.92
RMS 9.206
0
2
4
6
8
10
12
14
16
20
40
60
80
100

Run=7099045, Event=82240
hSmdu
Entries 29
Mean 181.3
RMS 8.515
Triggers
127641
0
2
4
6
8
10
12
14
16
18
140
160
180
200
220

p_T=6.3 GeV, E=10.7 GeV
hSmdv
Entries 33
Mean 181.6
RMS 9.162
0
2
4
6
8
10
12
14
16
18
140
160
180
200
220

Run=7099045, Event=82665
hSmdu
Entries 22
Mean 160
RMS 4.004
Triggers
127271
127641
127652
127622
127262
30
25
20
15
10
5
0
120
140
160
180
200

p_T=7.1 GeV, E=16.8 GeV
hSmdv
Entries 24
Mean 73.52
RMS 4.681
30
25
20
15
10
5
0
40
60
80
100
120

Run=7099045, Event=82875
hSmdu
Entries 34
Mean 54.06
RMS 9.914
Triggers
127641
0
10
20
30
40
50
20
40
60
80
100

p_T=6.7 GeV, E=17.0 GeV
hSmdv
Entries 37
Mean 40.63
RMS 8.098
0
10
20
30
40
50
0
10
20
30
40
50
60
70
80

Run=7099045, Event=82965
hSmdu
Entries 31
Mean 48.65
RMS 8.477
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
0
10
20
30
40
50
60
70
80
90

p_T=5.1 GeV, E=20.0 GeV
hSmdv
Entries 23
Mean 18.76
RMS 5.103
0
2
4
6
8
10
12
14
16
0
10
20
30
40
50
60

Run=7099045, Event=83585
hSmdu
Entries 41
Mean 178.7
RMS 6.28
Triggers
127271
127641
0
5
10
15
20
25
140
160
180
200
220

p_T=5.7 GeV, E=11.4 GeV
hSmdv
Entries 55
Mean 179.2
RMS 3.733
0
5
10
15
20
25
140
160
180
200
220

Run=7099046, Event=16547
hSmdu
Entries 27
Mean 197
RMS 5.546
Triggers
127641
0
2
4
6
8
10
12
14
16
160
180
200
220
240

p_T=6.1 GeV, E=11.7 GeV
hSmdv
Entries 30
Mean 99.03
RMS 8.29
0
2
4
6
8
10
12
14
16
60
80
100
120
140

Run=7099046, Event=16556
hSmdu
Entries 28
Mean 137.5
RMS 4.987
Triggers
127641
16
14
12
10
8
6
4
2
0
100
120
140
160
180

p_T=7.2 GeV, E=10.6 GeV
hSmdv
Entries 34
Mean 195.7
RMS 12.13
16
14
12
10
8
6
4
2
0
140
160
180
200
220

Run=7099046, Event=16607
hSmdu
Entries 32
Mean 95.09
RMS 12.03
Triggers
127641
50
40
30
20
10
0
60
80
100
120
140

p_T=5.1 GeV, E=13.6 GeV
hSmdv
Entries 31
Mean 70.86
RMS 6.104
50
40
30
20
10
0
20
40
60
80
100

Run=7099046, Event=16832
hSmdu
Entries 22
Mean 111.1
RMS 5.098
Triggers
127641
127262
0
5
10
15
20
25
60
80
100
120
140
160
p_T=5.3 GeV, E=10.3 GeV
hSmdv
Entries 26
Mean 234.7
RMS 5.141
0
5
10
15
20
25
200
220
240
260
280

Run=7099046, Event=17197
hSmdu
Entries 28
Mean 232.4
RMS 6.472
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
180
200
220
240
260
280

p_T=5.7 GeV, E=10.7 GeV
hSmdv
Entries 36
Mean 125.7
RMS 9.279
0
2
4
6
8
10
12
14
16
18
80
100
120
140
160
180

Run=7099046, Event=17414
hSmdu
Entries 72
Mean 36.83
RMS 15.73
Triggers
127271
127641
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60
70

p_T=7.3 GeV, E=33.1 GeV
hSmdv
Entries 62
Mean 55.48
RMS 11.8
0
5
10
15
20
25
30
35
20
40
60
80
100

Run=7099046, Event=18218
hSmdu
Entries 38
Mean 181.2
RMS 8.979
Triggers
127271
127641
127262
0
5
10
15
20
25
30
140
160
180
200
220

p_T=8.0 GeV, E=19.5 GeV
hSmdv
Entries 30
Mean 106.2
RMS 5.114
0
5
10
15
20
25
30
60
80
100
120
140

Run=7099046, Event=18466
hSmdu
Entries 20
Mean 169.4
RMS 3.77
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
120
140
160
180
200
220

p_T=5.4 GeV, E=12.3 GeV
hSmdv
Entries 21
Mean 84.75
RMS 7.005
0
2
4
6
8
10
12
14
16
18
20
22
24
40
60
80
100
120

Run=7099046, Event=18774
hSmdu
Entries 22
Mean 40.13
RMS 4.325
Triggers
127641
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60
70
80
90

p_T=5.6 GeV, E=14.0 GeV
hSmdv
Entries 30
Mean 75.4
RMS 5.865
0
5
10
15
20
25
30
35
40
60
80
100
120

Run=7099046, Event=19345
hSmdu
Entries 21
Mean 201.2
RMS 11.16
Triggers
127641
0
1
2
3
4
5
6
160
180
200
220
240

p_T=5.3 GeV, E=11.2 GeV
hSmdv
Entries 22
Mean 127.1
RMS 17.02
0
1
2
3
4
5
6
100
120
140
160
180

Run=7099046, Event=19632
hSmdu
Entries 24
Mean 53.39
RMS 6.686
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
20
40
60
80
100

p_T=5.9 GeV, E=21.3 GeV
hSmdv
Entries 22
Mean 75.13
RMS 9.458
0
2
4
6
8
10
12
14
16
18
20
22
40
60
80
100
120

Run=7099046, Event=19710
hSmdu
Entries 24
Mean 79.04
RMS 5.323
Triggers
127271
127641
127262
0
5
10
15
20
25
30
40
60
80
100
120

p_T=7.4 GeV, E=17.8 GeV
hSmdv
Entries 26
Mean 147.7
RMS 7.975
0
5
10
15
20
25
30
100
120
140
160
180
200

Run=7099046, Event=19915
hSmdu
Entries 45
Mean 66.27
RMS 7.717
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
24
20
40
60
80
100

p_T=7.3 GeV, E=24.3 GeV
hSmdv
Entries 64
Mean 33.85
RMS 11.65
0
2
4
6
8
10
12
14
16
18
20
22
24
0
10
20
30
40
50
60
70

Run=7099035, Event=72620
hSmdu
Entries 35
Mean 149.5
RMS 9.48
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200

p_T=5.6 GeV, E=11.3 GeV
hSmdv
Entries 28
Mean 148.2
RMS 5.15
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

Run=7099035, Event=72993
hSmdu
Entries 26
Mean 165.9
RMS 12.81
Triggers
127641
127262
16
14
12
10
8
6
4
2
0
120
140
160
180
200
220

p_T=5.9 GeV, E=13.2 GeV
hSmdv
Entries 41
Mean 78.65
RMS 11.77
16
14
12
10
8
6
4
2
0
40
60
80
100
120

Run=7099035, Event=72998
hSmdu
Entries 23
Mean 53.93
RMS 6.309
Triggers
127641
0
5
10
15
20
25
20
40
60
80
100

p_T=5.9 GeV, E=17.0 GeV
hSmdv
Entries 26
Mean 95.67
RMS 5.679
0
5
10
15
20
25
60
80
100
120
140

Run=7099035, Event=73507
hSmdu
Entries 29
Mean 138.4
RMS 7.759
Triggers
127641
127262
0
5
10
15
20
25
30
100
120
140
160
180

p_T=7.1 GeV, E=14.6 GeV
hSmdv
Entries 22
Mean 181.1
RMS 4.662
0
5
10
15
20
25
30
140
160
180
200
220

Run=7099035, Event=73987
hSmdu
Entries 51
Mean 161.6
RMS 14.68
Triggers
127221
127271
127611
127641
127652
127622
127212
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200

p_T=11.5 GeV, E=17.7 GeV
hSmdv
Entries 49
Mean 203.7
RMS 11.74
0
2
4
6
8
10
12
14
16
18
20
160
180
200
220
240
260

Run=7099045, Event=72890
hSmdu
Entries 29
Mean 149.9
RMS 7.183
Triggers
127641
127262
0
2
4
6
8
10
12
100
120
140
160
180

p_T=5.8 GeV, E=12.1 GeV
hSmdv
Entries 22
Mean 143.2
RMS 7.043
0
2
4
6
8
10
12
100
120
140
160
180

Run=7099045, Event=73601
hSmdu
Entries 23
Mean 231.7
RMS 10.23
Triggers
127641
0
2
4
6
8
10
12
14
16
180
200
220
240
260

p_T=5.2 GeV, E=10.7 GeV
hSmdv
Entries 33
Mean 139.8
RMS 10.02
0
2
4
6
8
10
12
14
16
80
100
120
140
160
180

Run=7099045, Event=74575
hSmdu
Entries 29
Mean 196.8
RMS 8.213
Triggers
127641
0
5
10
15
20
25
160
180
200
220
240

p_T=5.5 GeV, E=8.7 GeV
hSmdv
Entries 31
Mean 207.5
RMS 7.154
0
5
10
15
20
25
160
180
200
220
240
260

Run=7099045, Event=74957
hSmdu
Entries 10
Mean 172.4
RMS 18.55
Triggers
127641
127262
4
3.5
3
2.5
2
1.5
1
0.5
0
140
160
180
200
220

p_T=6.6 GeV, E=11.9 GeV
hSmdv
Entries 12
Mean 113.1
RMS 14
4
3.5
3
2.5
2
1.5
1
0.5
0
80
100
120
140
160

Run=7099045, Event=76210
hSmdu
Entries 54
Mean 94.84
RMS 9.148
Triggers
127271
127641
127262
0
5
10
15
20
25
40
60
80
100
120
140
p_T=8.7 GeV, E=16.5 GeV
hSmdv
Entries 51
Mean 191.7
RMS 15.74
0
5
10
15
20
25
160
180
200
220
240

Run=7099045, Event=76353
hSmdu
Entries 38
Mean 66.23
RMS 7.14
Triggers
127641
0
5
10
15
20
25
20
40
60
80
100

p_T=5.3 GeV, E=21.3 GeV
hSmdv
Entries 38
Mean 54.76
RMS 6.884
0
5
10
15
20
25
20
40
60
80
100

Run=7099045, Event=76739
hSmdu
Entries 30
Mean 52.71
RMS 5.144
Triggers
127641
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

p_T=6.5 GeV, E=19.4 GeV
hSmdv
Entries 42
Mean 34.61
RMS 7.651
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60
70
80

Run=7099045, Event=56361
hSmdu
Entries 41
Mean 75.68
RMS 11.28
Triggers
127271
127641
127262
0
10
20
30
40
50
60
70
40
60
80
100
120

p_T=8.6 GeV, E=21.8 GeV
hSmdv
Entries 26
Mean 114
RMS 6.595
0
10
20
30
40
50
60
70
80
100
120
140
160

Run=7099045, Event=57088
hSmdu
Entries 32
Mean 52.75
RMS 7.302
Triggers
127641
0
5
10
15
20
25
20
40
60
80
100

p_T=5.7 GeV, E=15.7 GeV
hSmdv
Entries 30
Mean 123.7
RMS 8.929
0
5
10
15
20
25
80
100
120
140
160

Run=7099045, Event=57990
hSmdu
Entries 62
Mean 67.34
RMS 15.64
Triggers
127271
127641
127652
127262
30
25
20
15
10
5
0
40
60
80
100
120

p_T=8.1 GeV, E=26.2 GeV
hSmdv
Entries 54
Mean 65.68
RMS 11.03
30
25
20
15
10
5
0
20
40
60
80
100

Run=7099045, Event=58332
hSmdu
Entries 25
Mean 165.9
RMS 7.72
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
120
140
160
180
200

p_T=5.8 GeV, E=11.8 GeV
hSmdv
Entries 23
Mean 120.5
RMS 6.432
0
2
4
6
8
10
12
14
16
18
20
80
100
120
140
160

Run=7099045, Event=58652
hSmdu
Entries 30
Mean 39.92
RMS 6.551
Triggers
127641
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60
70
80

p_T=5.4 GeV, E=19.7 GeV
hSmdv
Entries 23
Mean 58.99
RMS 4.591
0
5
10
15
20
25
30
35
40
45
20
40
60
80
100

Run=7099045, Event=59279
hSmdu
Entries 28
Mean 232.2
RMS 5.982
Triggers
127271
127641
127652
127262
0
2
4
6
8
10
12
14
16
18
20
22
200
220
240
260
280

p_T=6.9 GeV, E=16.6 GeV
hSmdv
Entries 42
Mean 123.2
RMS 10.35
0
2
4
6
8
10
12
14
16
18
20
22
80
100
120
140
160

Run=7099045, Event=59673
hSmdu
Entries 26
Mean 139.8
RMS 4.237
Triggers
127641
127262
0
5
10
15
20
25
100
120
140
160
180

p_T=5.4 GeV, E=14.3 GeV
hSmdv
Entries 42
Mean 54.2
RMS 7.927
0
5
10
15
20
25
20
40
60
80
100

Run=7099045, Event=59689
hSmdu
Entries 39
Mean 49.93
RMS 16.51
Triggers
127271
127641
127652
0
5
10
15
20
25
30
20
40
60
80
100

p_T=5.4 GeV, E=21.9 GeV
hSmdv
Entries 44
Mean 54.62
RMS 9.593
0
5
10
15
20
25
30
20
40
60
80
100

Run=7099045, Event=59828
hSmdu
Entries 25
Mean 161.5
RMS 6.084
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
22
120
140
160
180
200

p_T=5.6 GeV, E=9.0 GeV
hSmdv
Entries 26
Mean 250.4
RMS 9.006
0
2
4
6
8
10
12
14
16
18
20
22
200
210
220
230
240
250
260
270
280

Run=7099034, Event=91983
hSmdu
Entries 45
Mean 99.82
RMS 5.784
Triggers
127271
127641
127262
0
10
20
30
40
50
60
70
80
60
80
100
120
140

p_T=8.7 GeV, E=28.5 GeV
hSmdv
Entries 52
Mean 39.39
RMS 6.869
0
10
20
30
40
50
60
70
80
0
10
20
30
40
50
60
70
80

Run=7099034, Event=94878
hSmdu
Entries 31
Mean 98.21
RMS 12.48
Triggers
127641
0
2
4
6
8
10
12
14
16
18
60
80
100
120
140

p_T=6.2 GeV, E=11.6 GeV
hSmdv
Entries 26
Mean 137.2
RMS 7.343
0
2
4
6
8
10
12
14
16
18
100
120
140
160
180

Run=7099034, Event=104413
hSmdu
Entries 27
Mean 188.7
RMS 6.536
Triggers
127641
127262
0
2
4
6
8
10
12
140
160
180
200
220

p_T=5.4 GeV, E=9.9 GeV
hSmdv
Entries 35
Mean 192.4
RMS 10.05
0
2
4
6
8
10
12
160
180
200
220
240

Run=7099045, Event=52007
hSmdu
Entries 45
Mean 146
RMS 10.21
Triggers
127271
127641
127262
0
5
10
15
20
25
30
100
120
140
160
180

p_T=6.1 GeV, E=13.8 GeV
hSmdv
Entries 46
Mean 85.99
RMS 19.84
0
5
10
15
20
25
30
40
60
80
100
120

Run=7099045, Event=52518
hSmdu
Entries 23
Mean 162
RMS 4.132
Triggers
127271
127641
30
25
20
15
10
5
0
120
140
160
180
200

p_T=8.4 GeV, E=18.0 GeV
hSmdv
Entries 45
Mean 94.65
RMS 8.514
30
25
20
15
10
5
0
60
80
100
120
140

Run=7099045, Event=52648
hSmdu
Entries 53
Mean 90.35
RMS 10.68
Triggers
127271
127641
0
2
4
6
8
10
12
14
16
18
20
22
40
60
80
100
120

p_T=8.0 GeV, E=20.3 GeV
hSmdv
Entries 56
Mean 80.08
RMS 14.39
0
2
4
6
8
10
12
14
16
18
20
22
40
60
80
100
120

Run=7099045, Event=53518
hSmdu
Entries 29
Mean 241.8
RMS 6.264
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
200 210 220 230 240 250 260 270 280

p_T=7.1 GeV, E=10.0 GeV
hSmdv
Entries 28
Mean 119.2
RMS 7.282
0
2
4
6
8
10
12
14
16
80 100 120 140 160

Run=7099045, Event=54267
hSmdu
Entries 31
Mean 140.2
RMS 8.897
Triggers
127641
35
30
25
20
15
10
5
0
100
120
140
160
180

p_T=5.9 GeV, E=11.6 GeV
hSmdv
Entries 28
Mean 165.7
RMS 5.111
35
30
25
20
15
10
5
0
120
140
160
180
200

Run=7099045, Event=54402
hSmdu
Entries 26
Mean 136.5
RMS 5.397
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180

p_T=6.1 GeV, E=15.9 GeV
hSmdv
Entries 27
Mean 69.33
RMS 6.744
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

Run=7099045, Event=55760
hSmdu
Entries 32
Mean 113.2
RMS 7.161
Triggers
127271
127641
127652
127262
50
40
30
20
10
0
80
100
120
140
160

p_T=8.6 GeV, E=19.5 GeV
hSmdv
Entries 22
Mean 146.2
RMS 3.91
50
40
30
20
10
0
100
120
140
160
180

Run=7099045, Event=39376
hSmdu
Entries 35
Mean 49.66
RMS 13.27
Triggers
127641
p_T=7.4 GeV, E=20.1 GeV
hSmdv
Entries 37
Mean 39.62
RMS 9.157

Run=7099045, Event=39556
hSmdu
Entries 41
Mean 228.2
RMS 16.78
Triggers
127271
127641
127652
0
2
4
6
8
10
12
200
210
220
230
240
250
260
270
280

p_T=5.6 GeV, E=11.4 GeV
hSmdv
Entries 36
Mean 110.2
RMS 7.502
0
2
4
6
8
10
12
60
80
100
120
140

Run=7099045, Event=39789
hSmdu
Entries 22
Mean 155.2
RMS 4.395
Triggers
127641
127262
0
5
10
15
20
25
30
35
120
140
160
180
200

p_T=5.1 GeV, E=10.8 GeV
hSmdv
Entries 29
Mean 176.6
RMS 7.694
0
5
10
15
20
25
30
35
140
160
180
200
220

Run=7099045, Event=39900
hSmdu
Entries 19
Mean 150
RMS 5.31
Triggers
127641
127262
0
5
10
15
20
25
120
140
160
180
200

p_T=5.1 GeV, E=9.1 GeV
hSmdv
Entries 19
Mean 245.3
RMS 3.889
0
5
10
15
20
25
200
210
220
230
240
250
260
270
280

Run=7099045, Event=40145
hSmdu
Entries 43
Mean 114.6
RMS 4.36
Triggers
127641
127262
25
20
15
10
5
0
80
100
120
140
160

p_T=5.8 GeV, E=10.9 GeV
hSmdv
Entries 41
Mean 235
RMS 5.219
25
20
15
10
5
0
200
220
240
260
280

Run=7099045, Event=40188
hSmdu
Entries 39
Mean 37.64
RMS 8.75
Triggers
127641
0
2
4
6
8
10
12
14
16
18
20
0
10
20
30
40
50
60
70
80

p_T=5.5 GeV, E=15.1 GeV
hSmdv
Entries 32
Mean 79.99
RMS 6.604
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120

Run=7099045, Event=40400
hSmdu
Entries 27
Mean 80.33
RMS 5.507
Triggers
127271
127641
127262
0
5
10
15
20
25
30
35
40
60
80
100
120

p_T=6.3 GeV, E=17.4 GeV
hSmdv
Entries 33
Mean 115.3
RMS 8.654
0
5
10
15
20
25
30
35
80
100
120
140
160

Run=7099045, Event=40442
hSmdu
Entries 31
Mean 47.99
RMS 6.151
Triggers
127641
0
10
20
30
40
50
0
10
20
30
40
50
60
70
80
90

p_T=10.6 GeV, E=23.7 GeV
hSmdv
Entries 33
Mean 61.95
RMS 5.616
0
10
20
30
40
50
20
40
60
80
100

Run=7099045, Event=40509
hSmdu
Entries 27
Mean 53.01
RMS 4.921
Triggers
127641
35
30
25
20
15
10
5
0
20
40
60
80
100

p_T=7.3 GeV, E=15.7 GeV
hSmdv
Entries 30
Mean 93.21
RMS 7.642
35
30
25
20
15
10
5
0
60
80
100
120
140

Run=7099045, Event=41490
hSmdu
Entries 39
Mean 180.3
RMS 10.26
Triggers
127271
127641
127580
0
5
10
15
20
25
30
120
140
160
180
200
220

p_T=8.0 GeV, E=13.8 GeV
hSmdv
Entries 37
Mean 180
RMS 9.291
0
5
10
15
20
25
30
140
160
180
200
220

Run=7099045, Event=41953
hSmdu
Entries 27
Mean 112.4
RMS 7.791
Triggers
127641
0
5
10
15
20
25
30
35
40
60
80
100
120
140
160

p_T=6.8 GeV, E=16.3 GeV
hSmdv
Entries 28
Mean 75.83
RMS 5.654
0
5
10
15
20
25
30
35
40
40
60
80
100
120

Run=7099045, Event=41963
hSmdu
Entries 42
Mean 73.36
RMS 5.688
Triggers
127641
0
10
20
30
40
50
60
40
60
80
100
120

p_T=5.9 GeV, E=20.0 GeV
hSmdv
Entries 44
Mean 70.09
RMS 12.29
0
10
20
30
40
50
60
40
60
80
100
120

Run=7099045, Event=42952
hSmdu
Entries 24
Mean 150.9
RMS 7.688
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
100
120
140
160
180

p_T=7.2 GeV, E=12.4 GeV
hSmdv
Entries 27
Mean 214.4
RMS 7.811
0
2
4
6
8
10
12
14
16
18
180
200
220
240
260

Run=7099045, Event=84381
hSmdu
Entries 32
Mean 99.55
RMS 7.08
Triggers
127641
0
5
10
15
20
25
60
80
100
120
140

p_T=5.3 GeV, E=12.7 GeV
hSmdv
Entries 35
Mean 108.4
RMS 11.09
0
5
10
15
20
25
60
80
100
120
140

Run=7099045, Event=84676
hSmdu
Entries 36
Mean 154
RMS 23.02
Triggers
127271
127641
127262
0
5
10
15
20
25
100
120
140
160
180

p_T=7.1 GeV, E=15.5 GeV
hSmdv
Entries 33
Mean 219.3
RMS 22.59
0
5
10
15
20
25
200
210
220
230
240
250
260
270
280

Run=7099045, Event=85182
hSmdu
Entries 33
Mean 56.51
RMS 10.14
Triggers
127641
0
5
10
15
20
25
20
40
60
80
100

p_T=5.6 GeV, E=20.3 GeV
hSmdv
Entries 35
Mean 50.59
RMS 8.451
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80
90
100

Run=7099045, Event=85206
hSmdu
Entries 25
Mean 40.93
RMS 5.831
Triggers
127641
0 2 4 6 8 10 12 14 16 18 20 22 24
0 10 20 30 40 50 60 70 80

p_T=5.2 GeV, E=18.6 GeV
hSmdv
Entries 28
Mean 42.03
RMS 6.092
0 2 4 6 8 10 12 14 16 18 20 22 24
0 10 20 30 40 50 60 70 80 90

Run=7099045, Event=85840
hSmdu
Entries 53
Mean 135.1
RMS 16.4
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
100
120
140
160
180
p_T=6.3 GeV, E=16.1 GeV
hSmdv
Entries 42
Mean 59.62
RMS 8.903
0
2
4
6
8
10
12
14
16
18
20
20
40
60
80
100

Run=7099045, Event=85987
hSmdu
Entries 28
Mean 161.8
RMS 9.177
Triggers
127271
127641
25
20
15
10
5
0
120
140
160
180
200

p_T=5.0 GeV, E=11.6 GeV
hSmdv
Entries 20
Mean 111.6
RMS 5.932
25
20
15
10
5
0
80
100
120
140
160

Run=7099045, Event=86680
hSmdu
Entries 31
Mean 52.64
RMS 7.722
Triggers
127641
0
5
10
15
20
25
20
40
60
80
100

p_T=5.2 GeV, E=13.8 GeV
hSmdv
Entries 39
Mean 101.3
RMS 19.43
0
5
10
15
20
25
80
100
120
140
160

Run=7099045, Event=86939
hSmdu
Entries 25
Mean 213
RMS 4.919
Triggers
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
180
200
220
240
260

p_T=5.4 GeV, E=9.5 GeV
hSmdv
Entries 23
Mean 202.3
RMS 4.184
0
2
4
6
8
10
12
14
16
18
20
22
160
180
200
220
240

Run=7099045, Event=87509
hSmdu
Entries 24
Mean 111.7
RMS 4.974
Triggers
127271
127641
0
5
10
15
20
25
30
35
40
80
100
120
140
160

p_T=5.4 GeV, E=14.0 GeV
hSmdv
Entries 29
Mean 134.4
RMS 11.84
0
5
10
15
20
25
30
35
40
80
100
120
140
160

Run=7099045, Event=87695
hSmdu
Entries 34
Mean 247.4
RMS 11.05
Triggers
127641
0
5
10
15
20
25
190 200 210 220 230 240 250 260 270 280

p_T=6.2 GeV, E=11.0 GeV
hSmdv
Entries 29
Mean 127.7
RMS 5.929
0
5
10
15
20
25
80 100 120 140 160

Run=7099034, Event=5403
hSmdu
Entries 30
Mean 130.9
RMS 9.683
Triggers
127641
25
20
15
10
5
0
100
120
140
160
180

p_T=5.9 GeV, E=11.4 GeV
hSmdv
Entries 23
Mean 98.54
RMS 3.749
25
20
15
10
5
0
60
80
100
120
140

Run=7099034, Event=15522
hSmdu
Entries 36
Mean 111.3
RMS 4.288
Triggers
127271
127641
127262
0
2
4
6
8
10
12
14
16
18
20
22
24
60
80
100
120
140
160

p_T=6.4 GeV, E=13.1 GeV
hSmdv
Entries 31
Mean 238.7
RMS 3.999
0
2
4
6
8
10
12
14
16
18
20
22
24
190
200
210
220
230
240
250
260
270
280