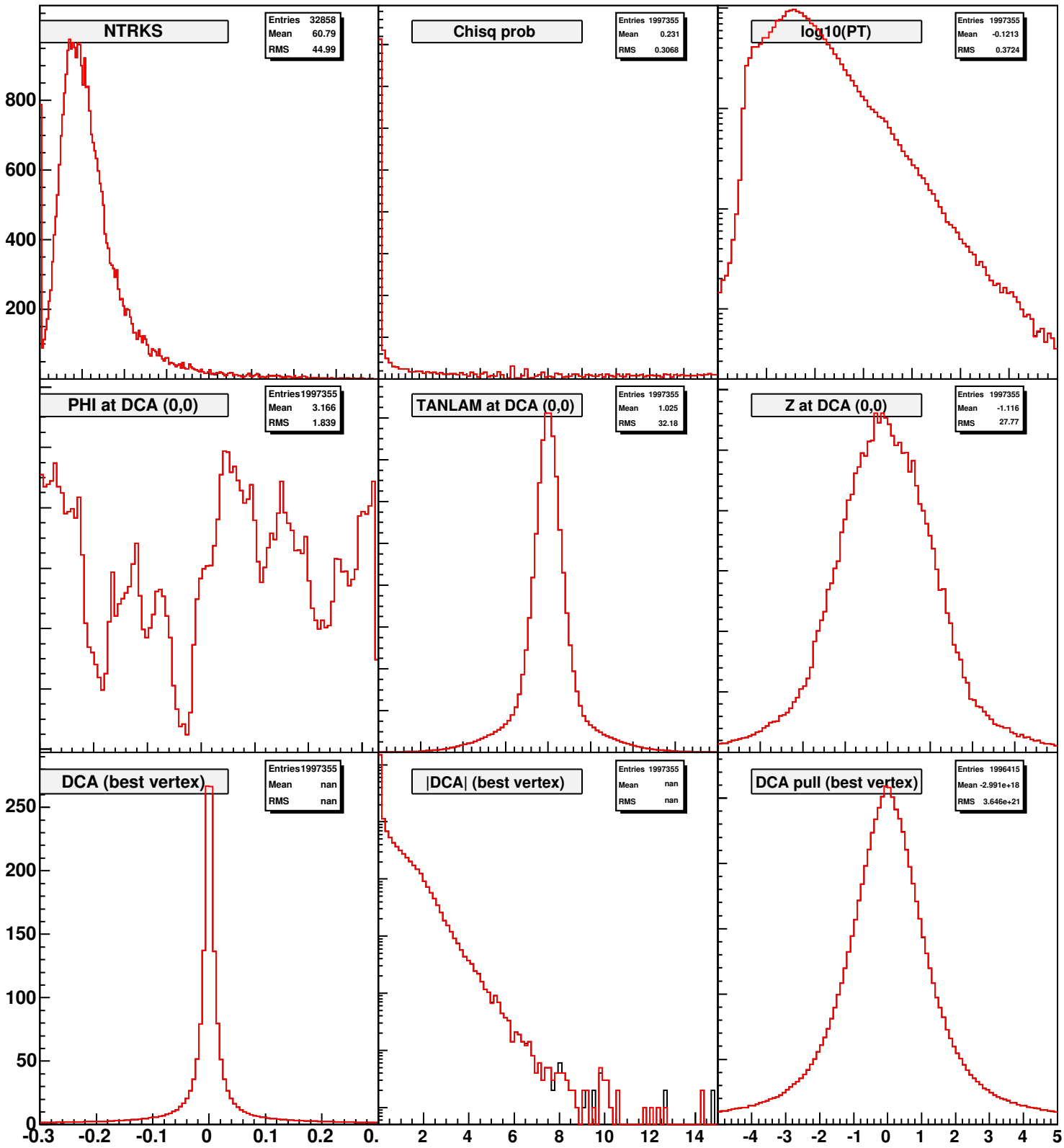
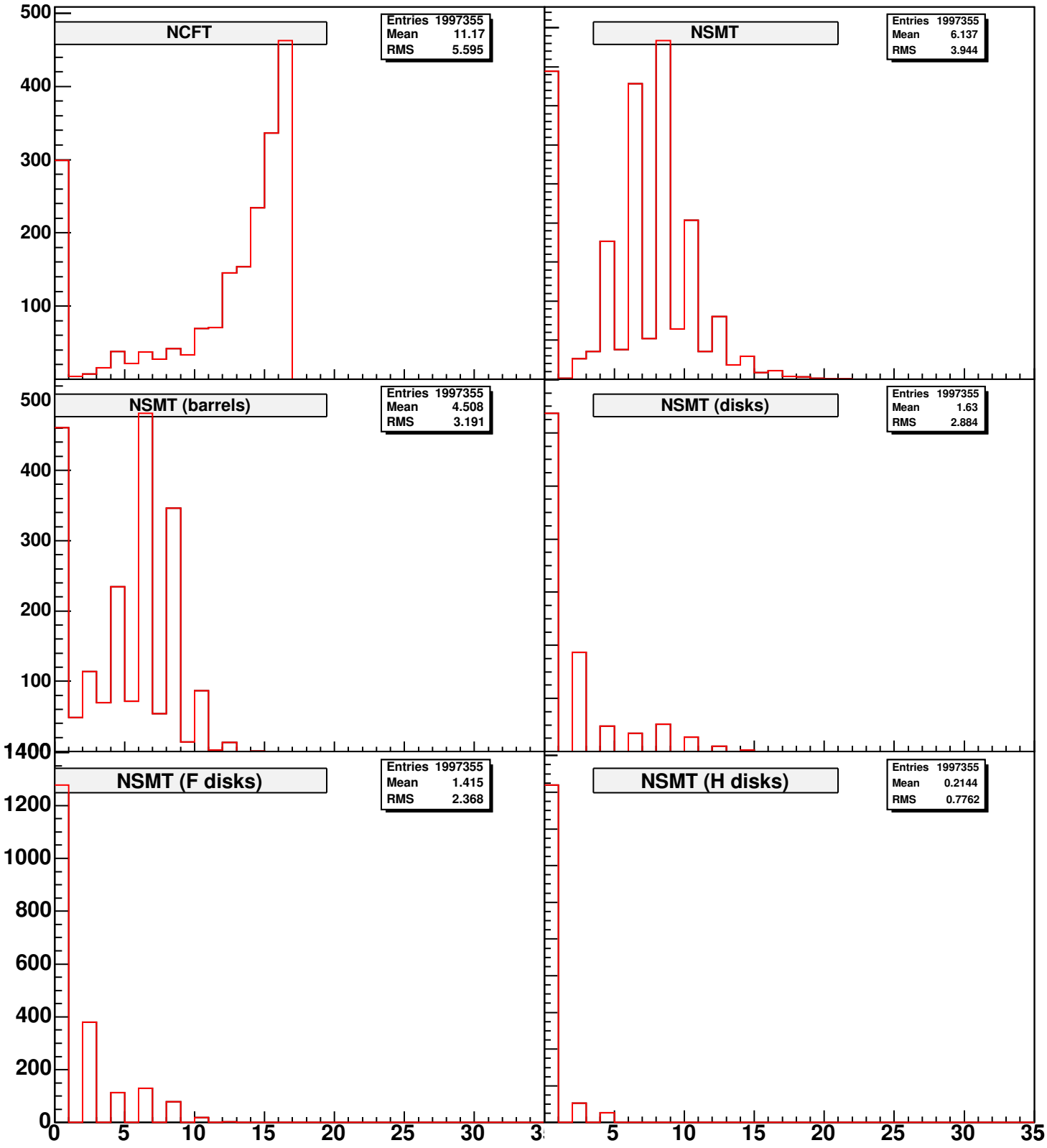
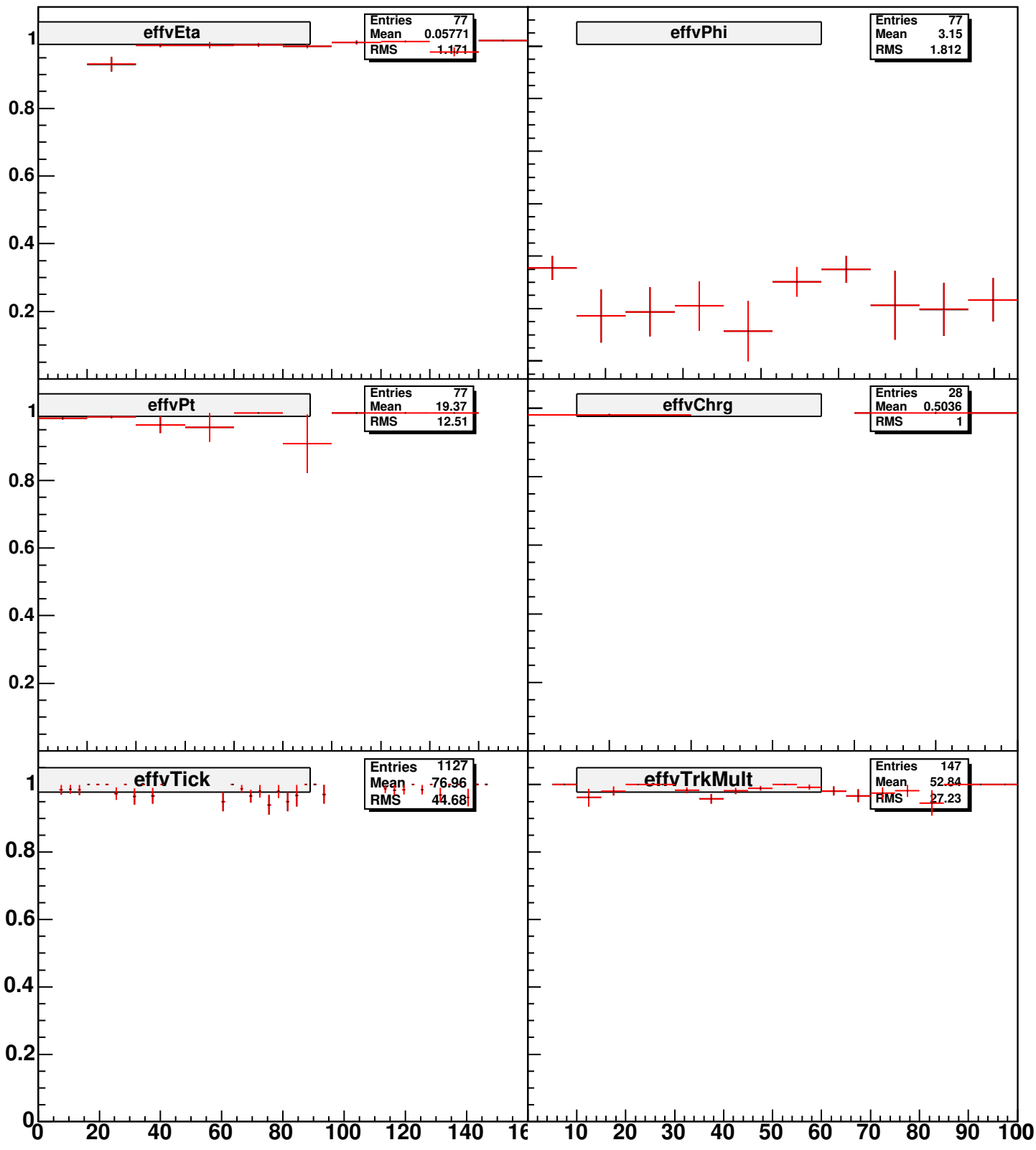
dayset-2004-08-18-196489-0_certification_200507

../D0Farm/D0Farm_3rd_Reference.root

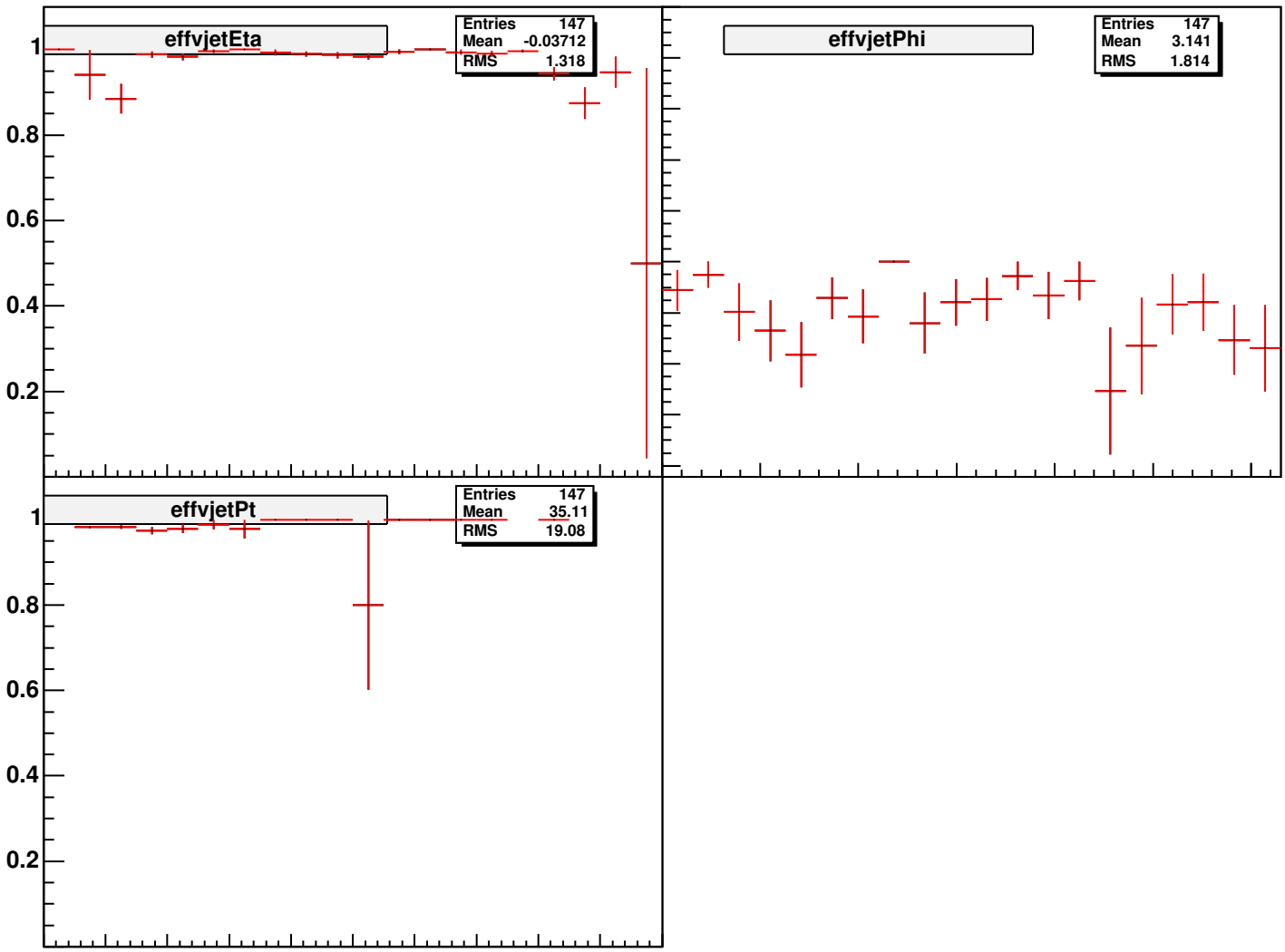

NTRKS
Entries 32858
Mean 60.79
RMS 44.99
Chisq prob
Entries 1997355
Mean 0.231
RMS 0.3068
log10(PT)
Entries 1997355
Mean -0.1213
RMS 0.3724
PHI at DCA (0,0)
Entries 1997355
Mean 3.166
RMS 1.839
TANLAM at DCA (0,0)
Entries 1997355
Mean 1.025
RMS 32.18
Z at DCA (0,0)
Entries 1997355
Mean -1.116
RMS 27.77
DCA (best vertex)
Entries 1997355
Mean nan
RMS nan
|DCA| (best vertex)
Entries 1997355
Mean nan
RMS nan
DCA pull (best vertex)
Entries 1996415
Mean -2.991e+18
RMS 3.646e+21
800
600
400
200
250
200
150
100
50
0
-0.3
-0.2
-0.1
0
0.1
0.2
0.
2
4
6
8
10
12
14
-4
-3
-2
-1
0
1
2
3
4
5

Tracks (All)

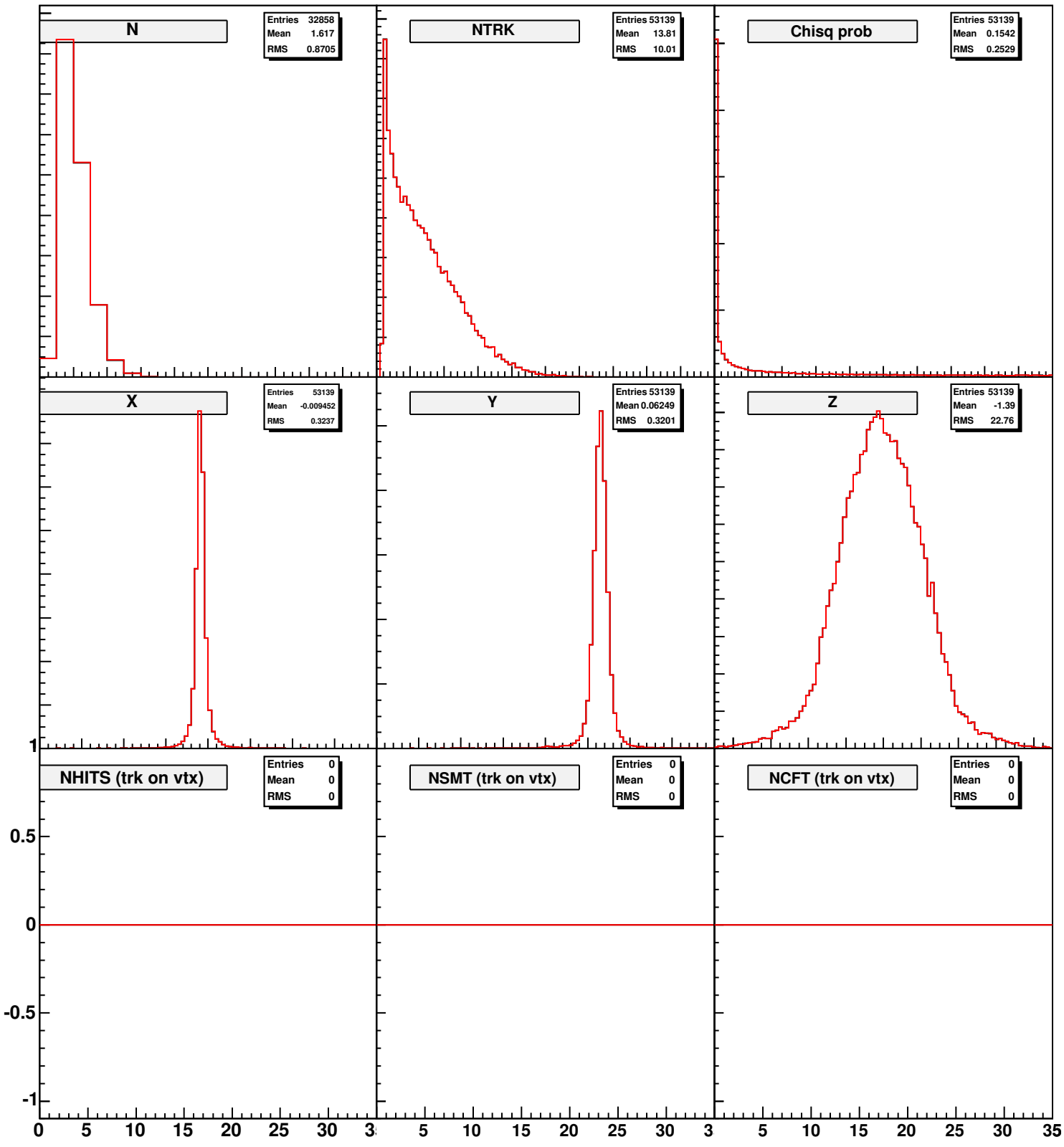

NCFT
Entries 1997355
Mean 11.17
RMS 5.595
NSMT
Entries 1997355
Mean 6.137
RMS 3.944
NSMT (barrels)
Entries 1997355
Mean 4.508
RMS 3.191
NSMT (disks)
Entries 1997355
Mean 1.63
RMS 2.884
NSMT (F disks)
Entries 1997355
Mean 1.415
RMS 2.368
NSMT (H disks)
Entries 1997355
Mean 0.2144
RMS 0.7762
Track Hits (All)



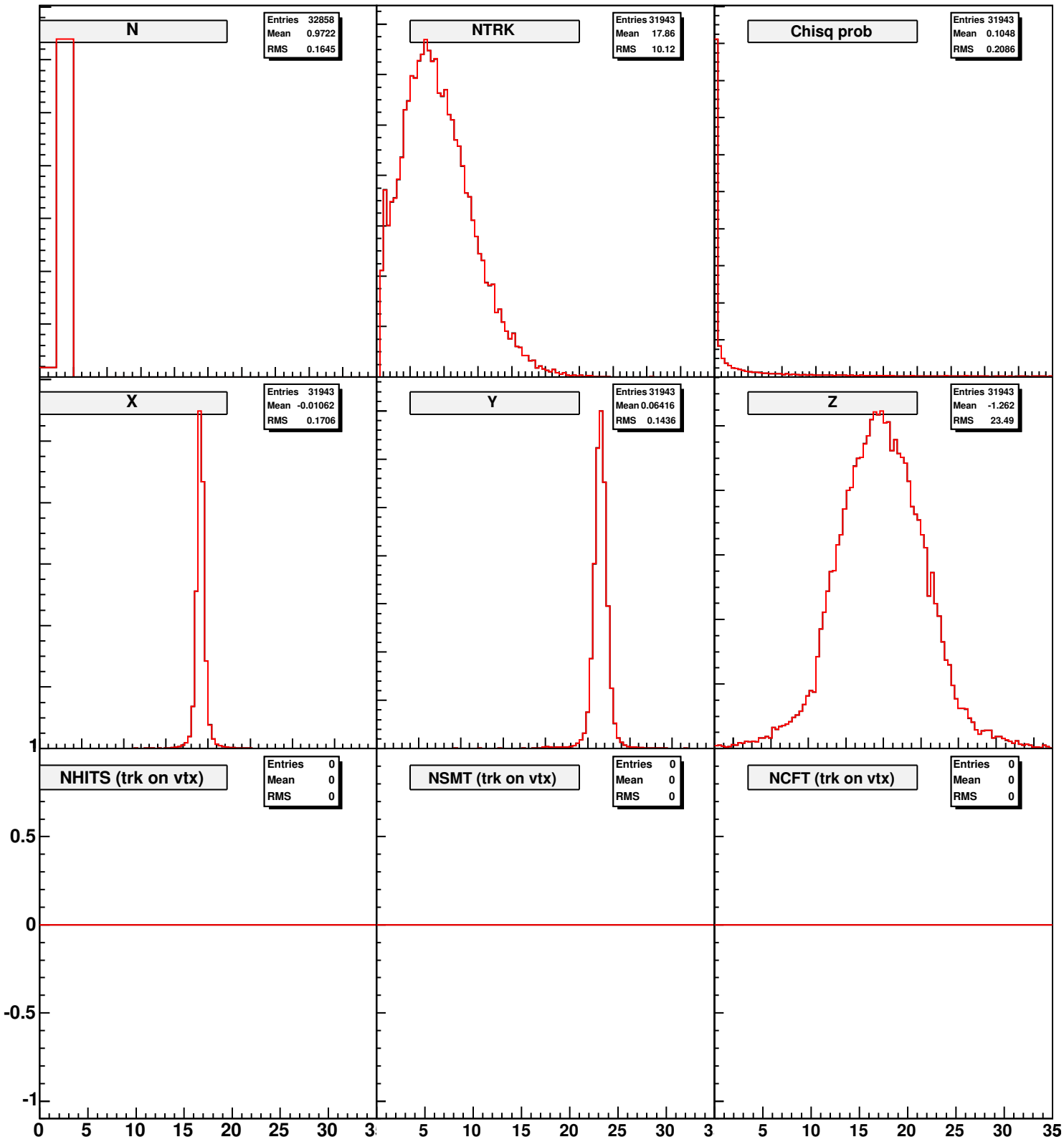
Tracking (Efficiency-Isolated)

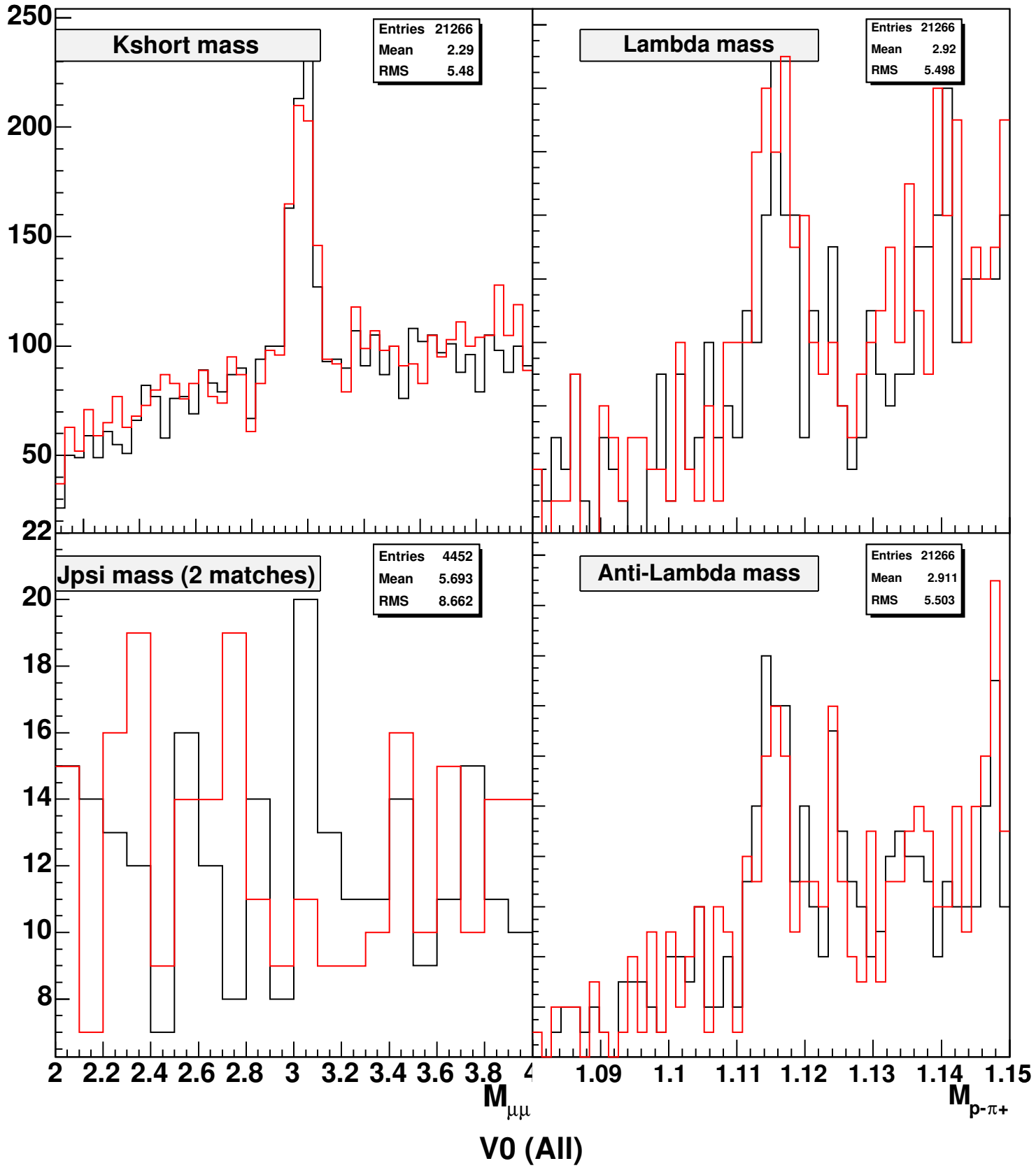


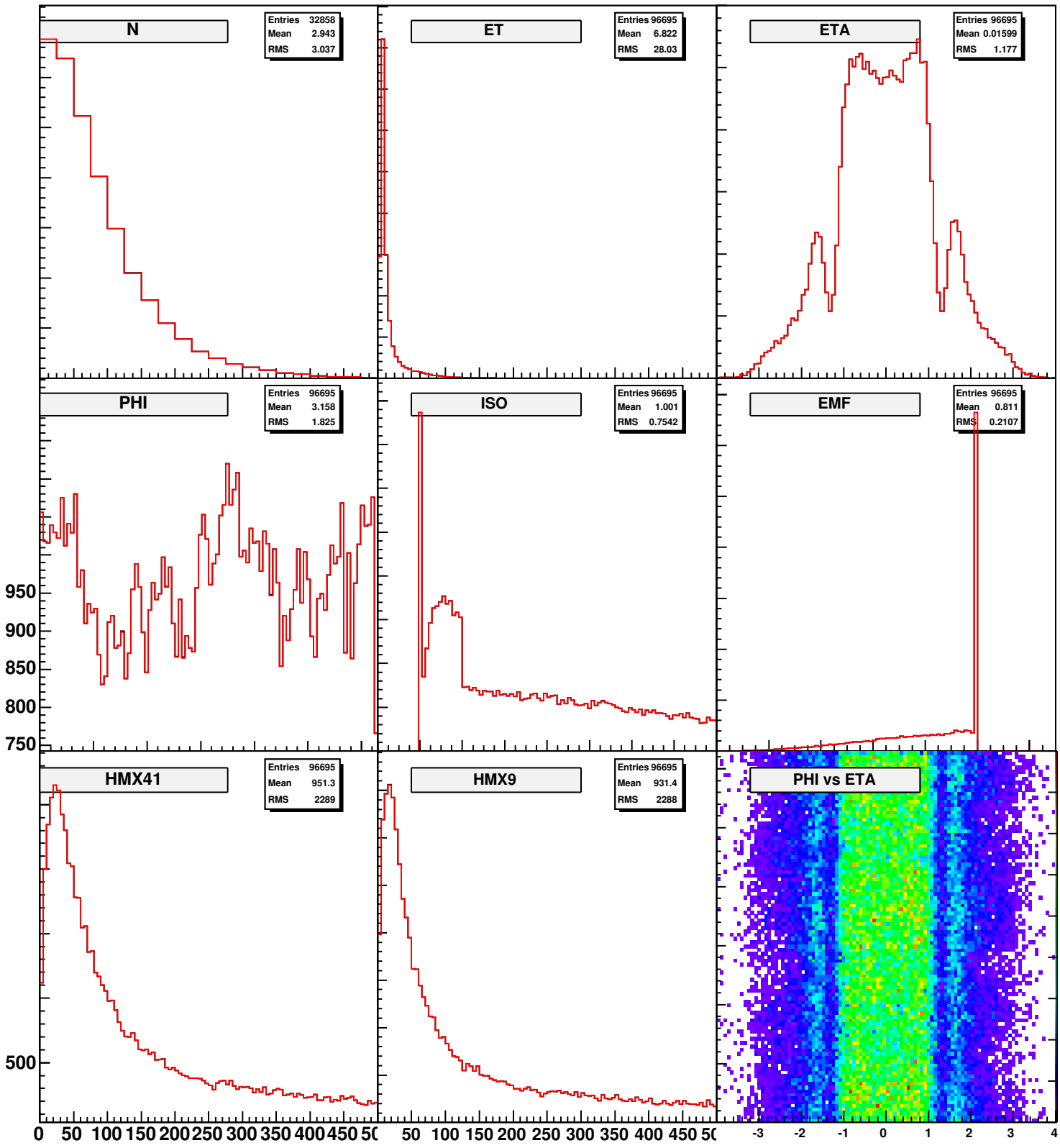
Tracking (Efficiency-InJets)



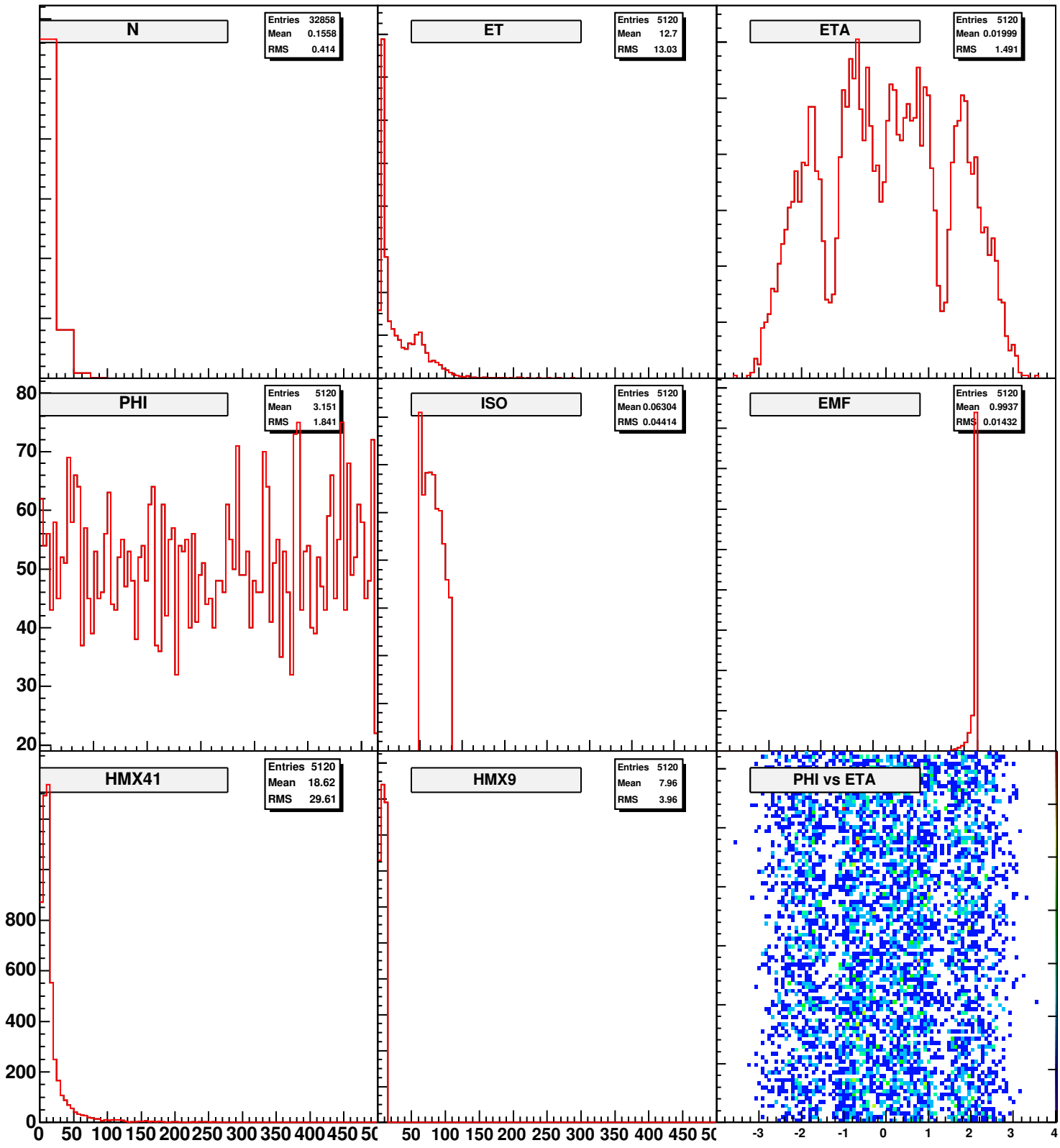
Vertices (Primary - all candidates)


N
Entries 32858
Mean 0.9722
RMS 0.1645
NTRK
Entries 31943
Mean 17.86
RMS 10.12
Chisq prob
Entries 31943
Mean 0.1048
RMS 0.2086
X
Entries 31943
Mean -0.01062
RMS 0.1706
Y
Entries 31943
Mean 0.06416
RMS 0.1436
Z
Entries 31943
Mean -1.262
RMS 23.49
NHITS (trk on vtx)
Entries 0
Mean 0
RMS 0
NSMT (trk on vtx)
Entries 0
Mean 0
RMS 0
NCFT (trk on vtx)
Entries 0
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0 5 10 15 20 25 30 3
5 10 15 20 25 30 3
5 10 15 20 25 30 35
Vertices (Primary - best)

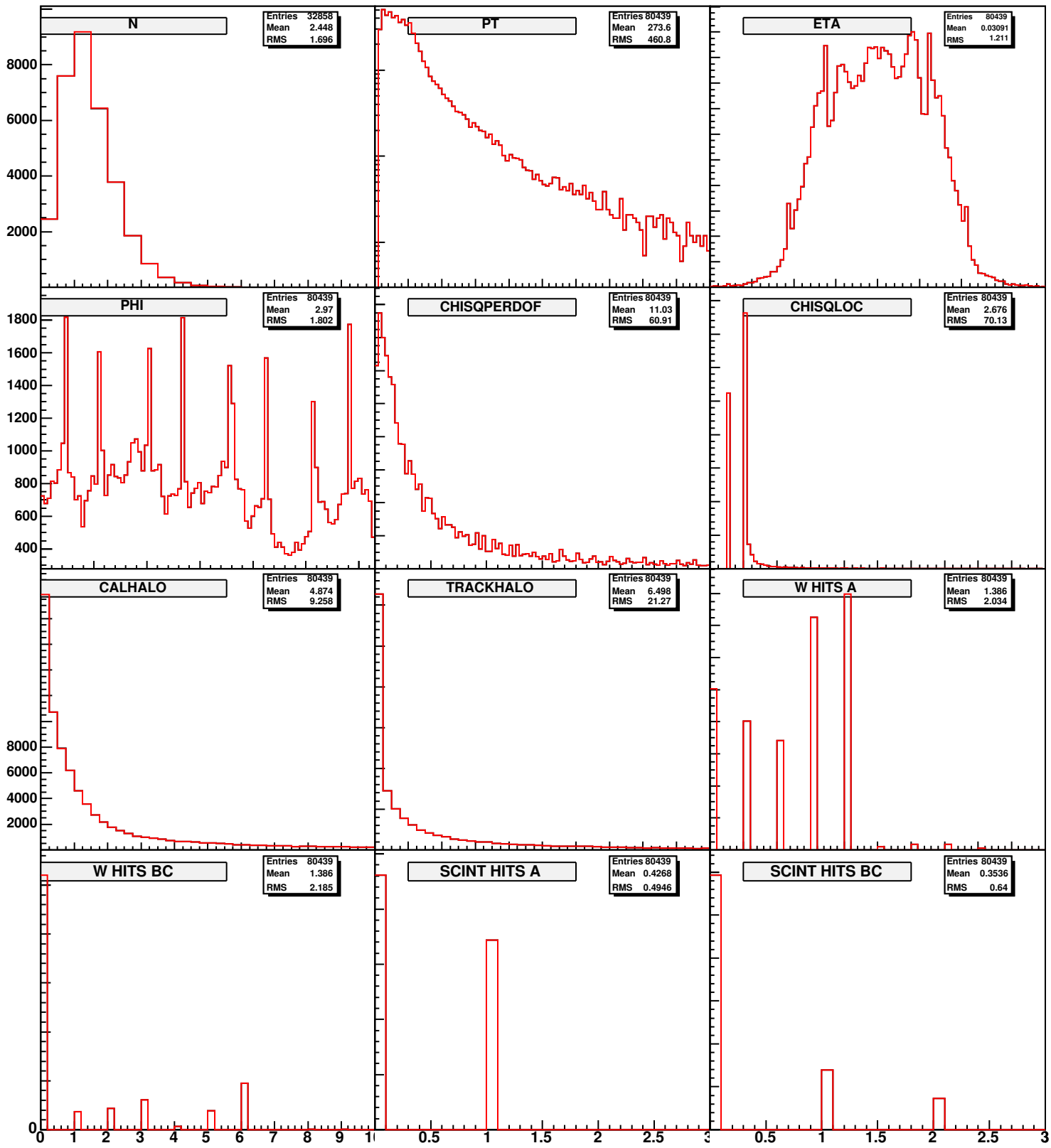

Kshort mass
Entries 21266
Mean 2.29
RMS 5.48
Lambda mass
Entries 21266
Mean 2.92
RMS 5.498
Jpsi mass (2 matches)
Entries 4452
Mean 5.693
RMS 8.662
Anti-Lambda mass
Entries 21266
Mean 2.911
RMS 5.503
250
200
150
100
50
22
20
18
16
14
12
10
8
2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4
M_μμ
1.09 1.1 1.11 1.12 1.13 1.14 1.15
M_p-π+
V0 (All)



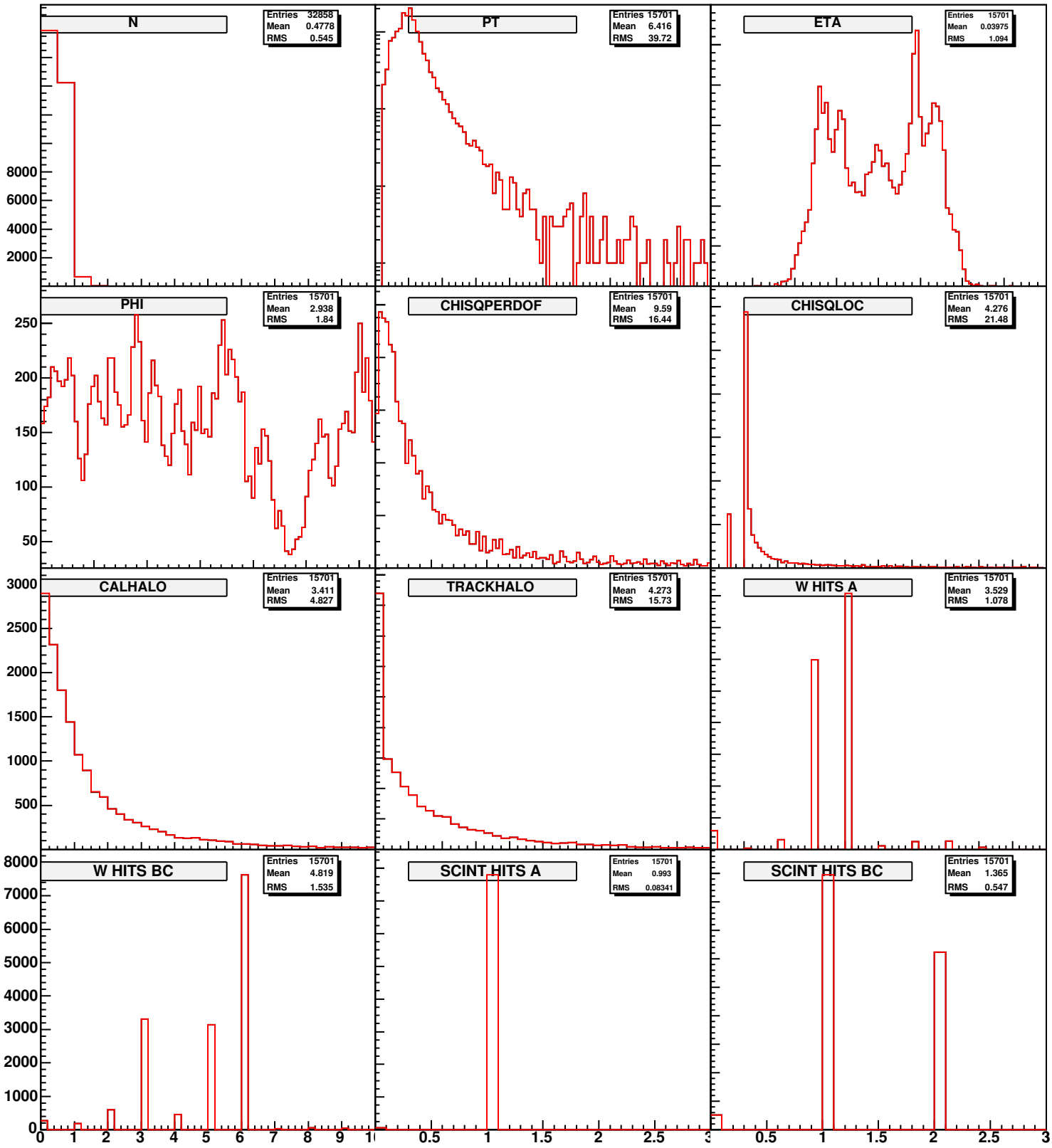
Electrons (SCONE All)



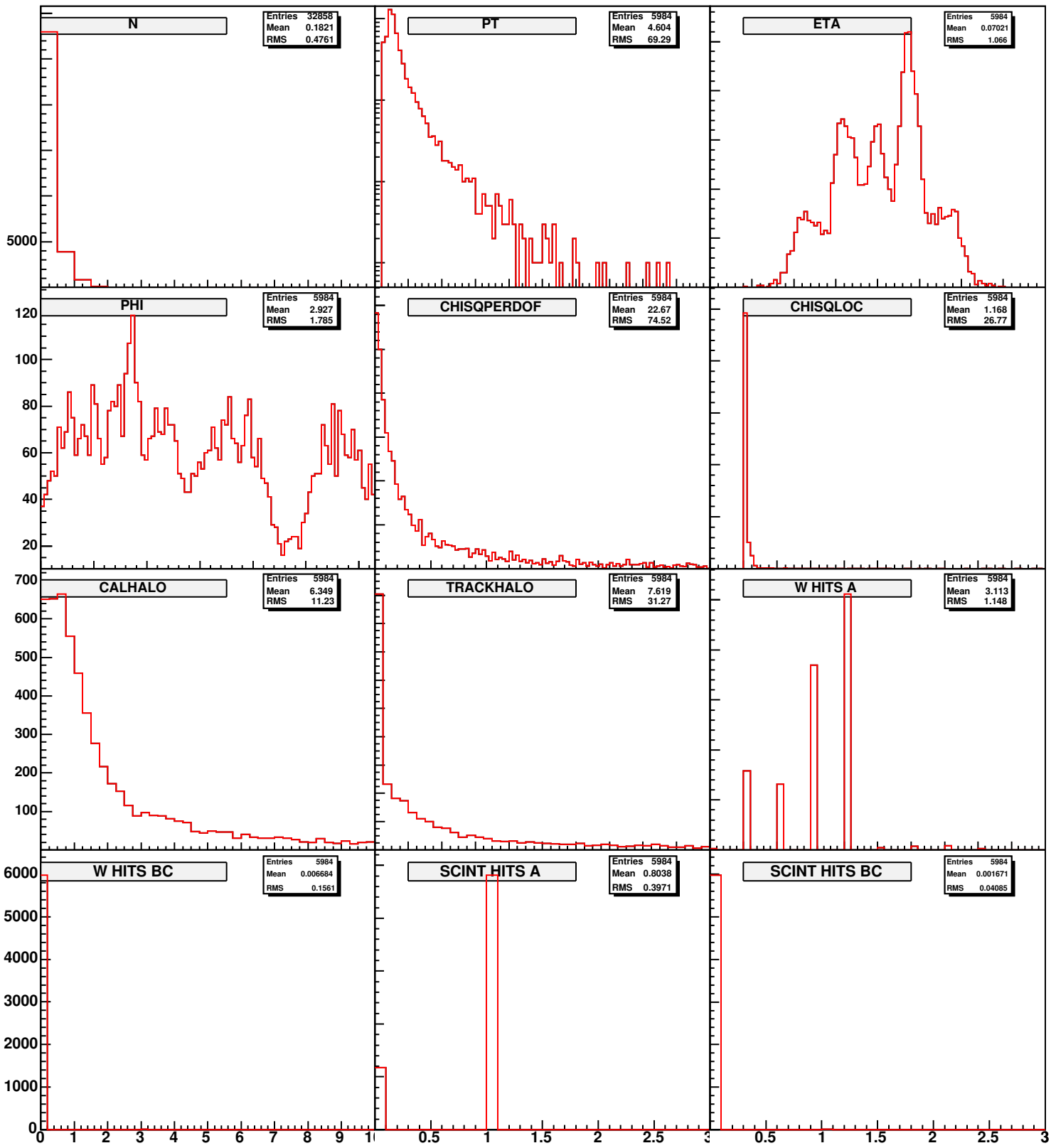
Electrons (SCONE Tight)


N
Entries 32858
Mean 2.448
RMS 1.696
PT
Entries 80439
Mean 273.6
RMS 460.8
ETA
Entries 80439
Mean 0.03091
RMS 1.211
PHI
Entries 80439
Mean 2.97
RMS 1.802
CHISQPERDOF
Entries 80439
Mean 11.03
RMS 60.91
CHISQLOC
Entries 80439
Mean 2.676
RMS 70.13
CALHALO
Entries 80439
Mean 4.874
RMS 9.258
TRACKHALO
Entries 80439
Mean 6.498
RMS 21.27
W HITS A
Entries 80439
Mean 1.386
RMS 2.034
W HITS BC
Entries 80439
Mean 1.386
RMS 2.185
SCINT HITS A
Entries 80439
Mean 0.4268
RMS 0.4946
SCINT HITS BC
Entries 80439
Mean 0.3536
RMS 0.64

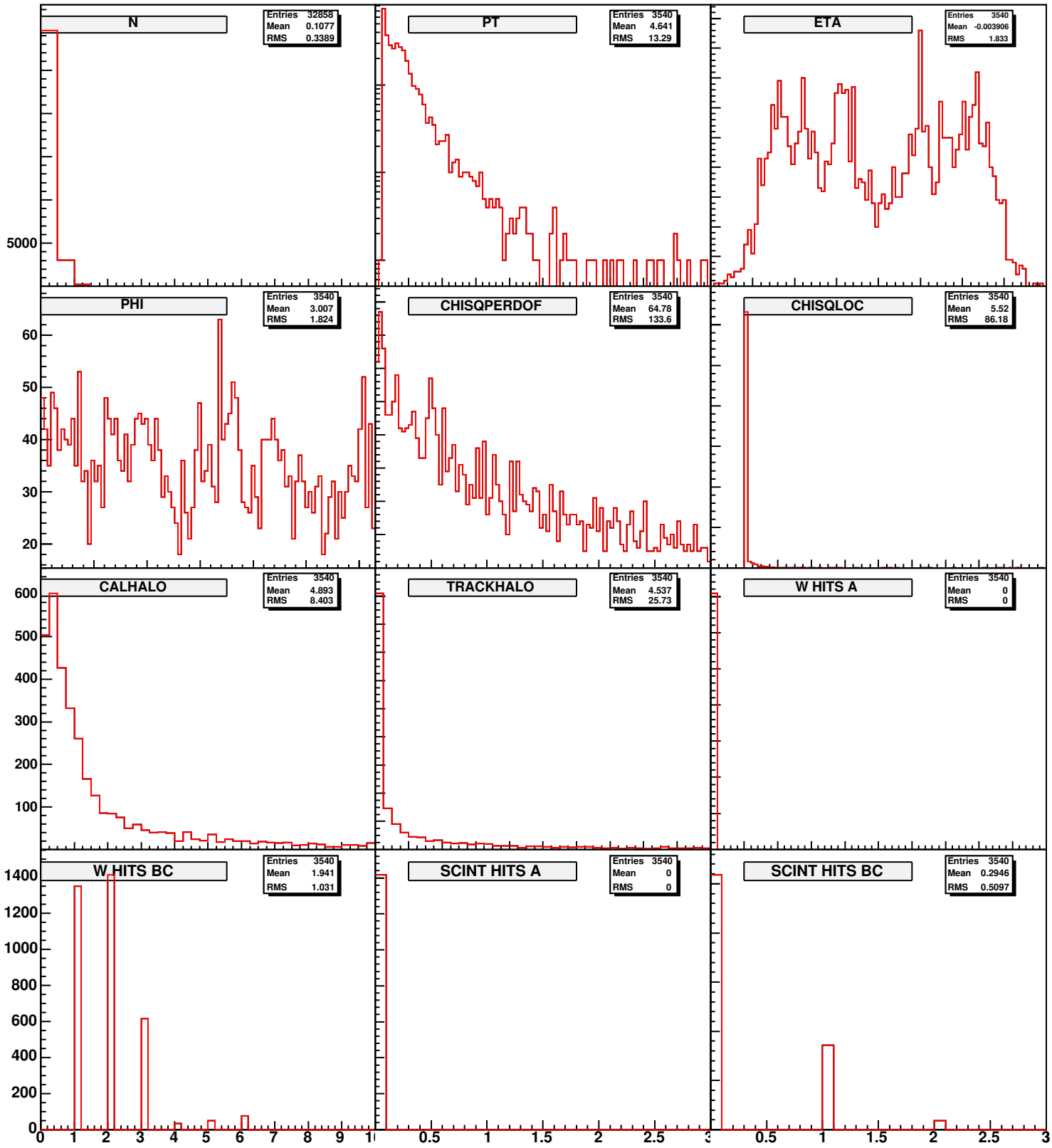
Muons (All)



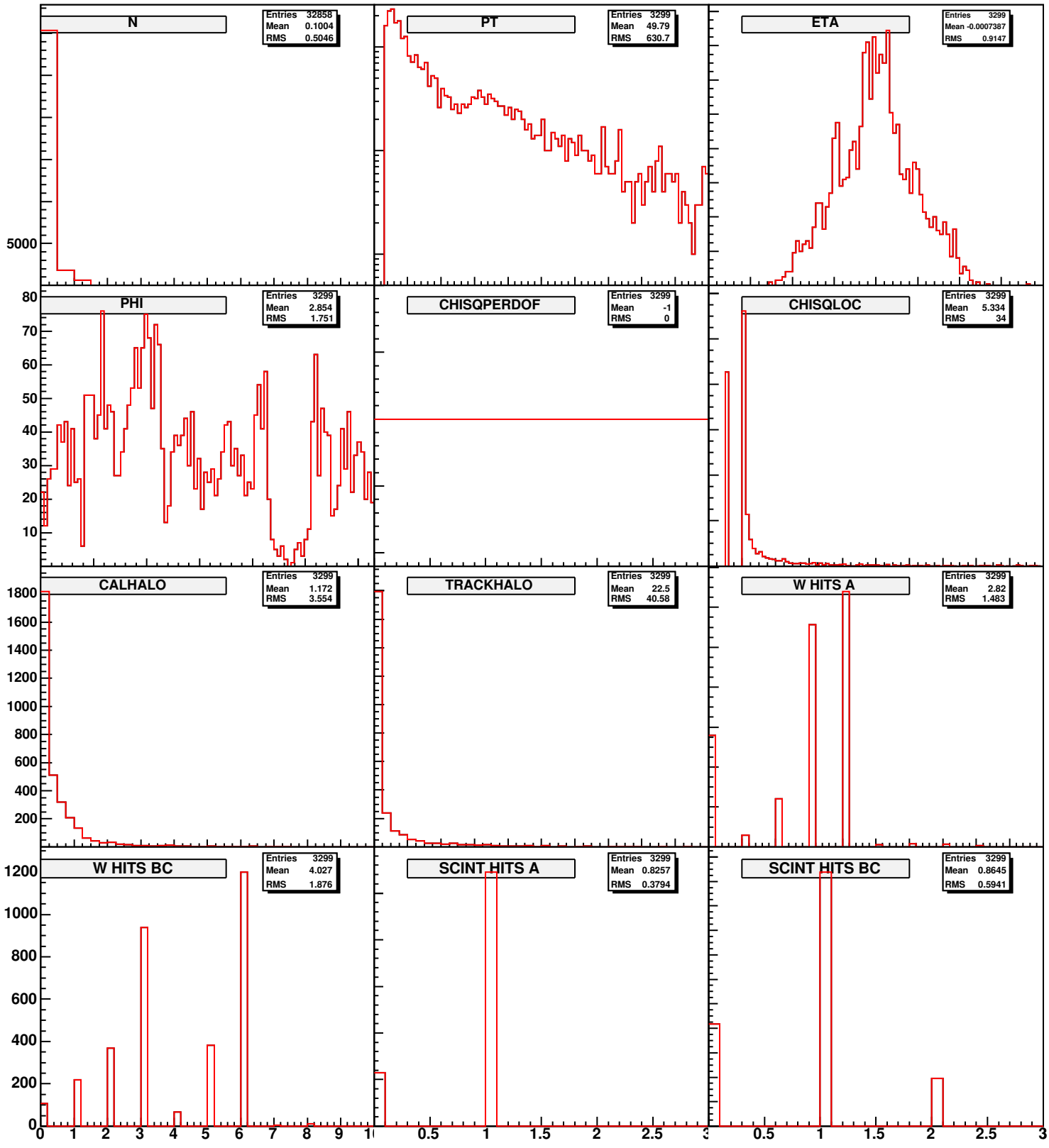
Muons (Matched)


N
Entries 32858
Mean 0.1821
RMS 0.4761
PT
Entries 5984
Mean 4.604
RMS 69.29
ETA
Entries 5984
Mean 0.07021
RMS 1.066
PHI
Entries 5984
Mean 2.927
RMS 1.785
CHISQPERDOF
Entries 5984
Mean 22.67
RMS 74.52
CHISQLOC
Entries 5984
Mean 1.168
RMS 26.77
CALHALO
Entries 5984
Mean 6.349
RMS 11.23
TRACKHALO
Entries 5984
Mean 7.619
RMS 31.27
W HITS A
Entries 5984
Mean 3.113
RMS 1.148
W HITS BC
Entries 5984
Mean 0.006684
RMS 0.1561
SCINT HITS A
Entries 5984
Mean 0.8038
RMS 0.3971
SCINT HITS BC
Entries 5984
Mean 0.001671
RMS 0.04085

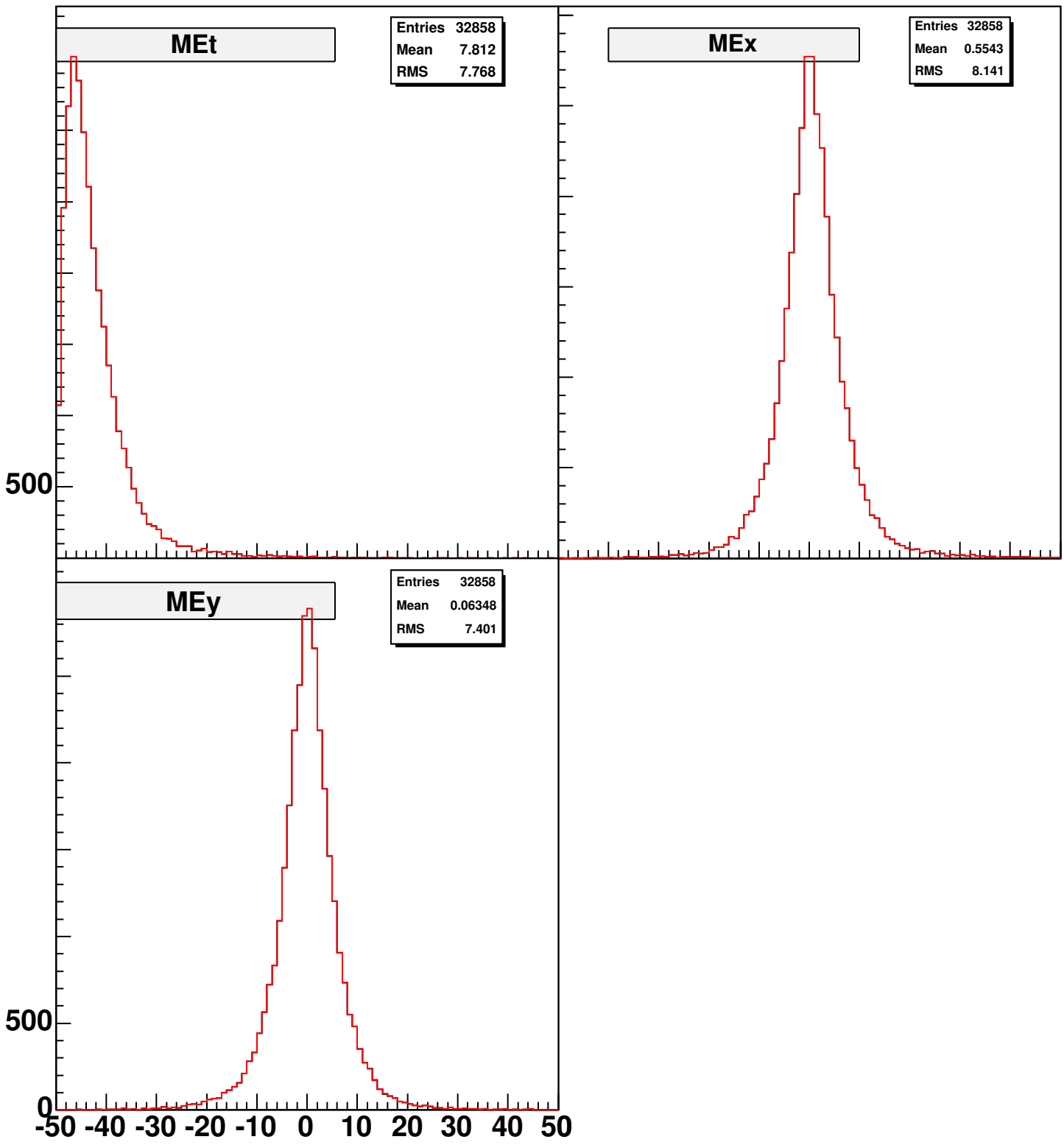
Muons (Astub)

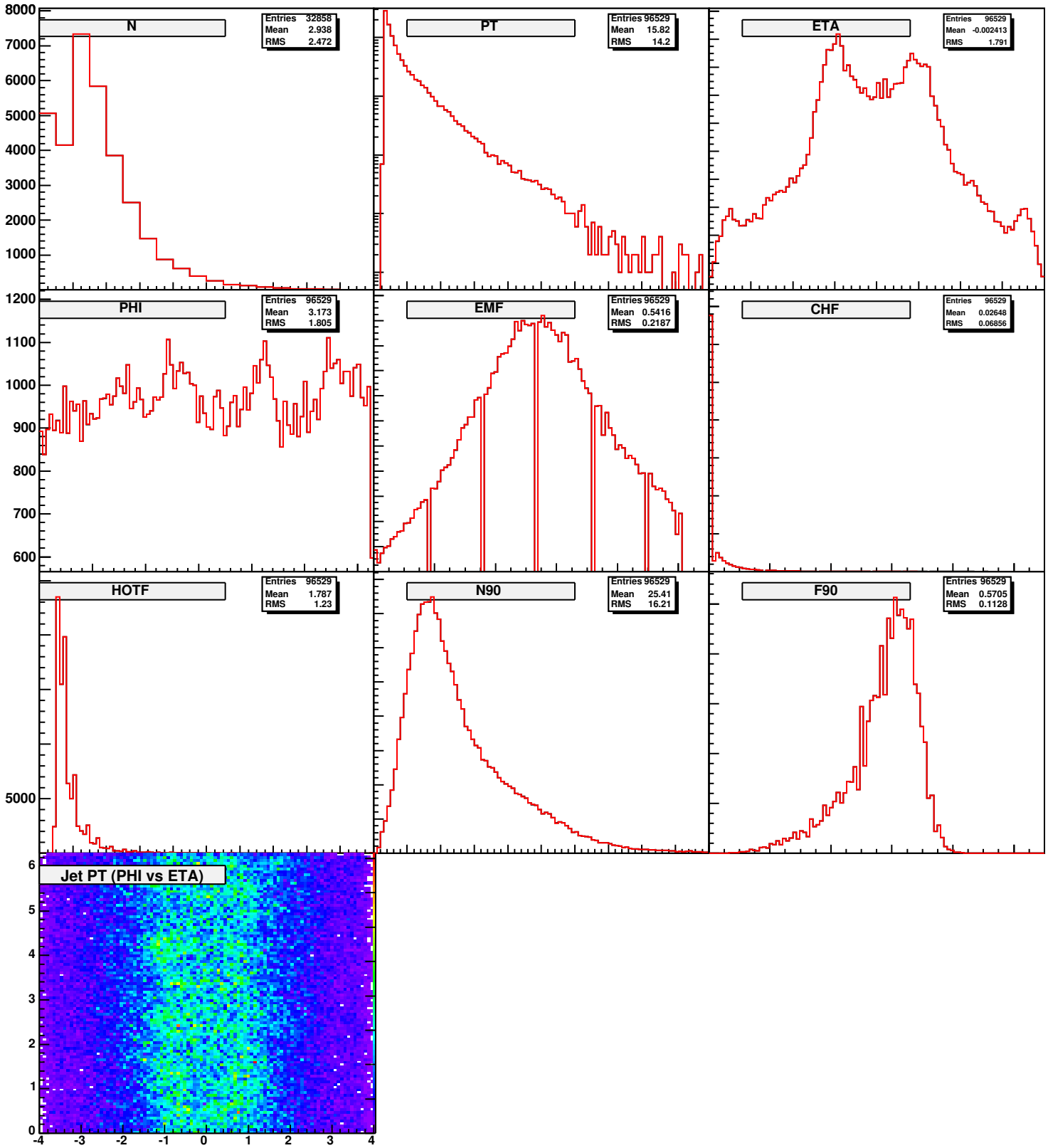


Muons (BCstub)

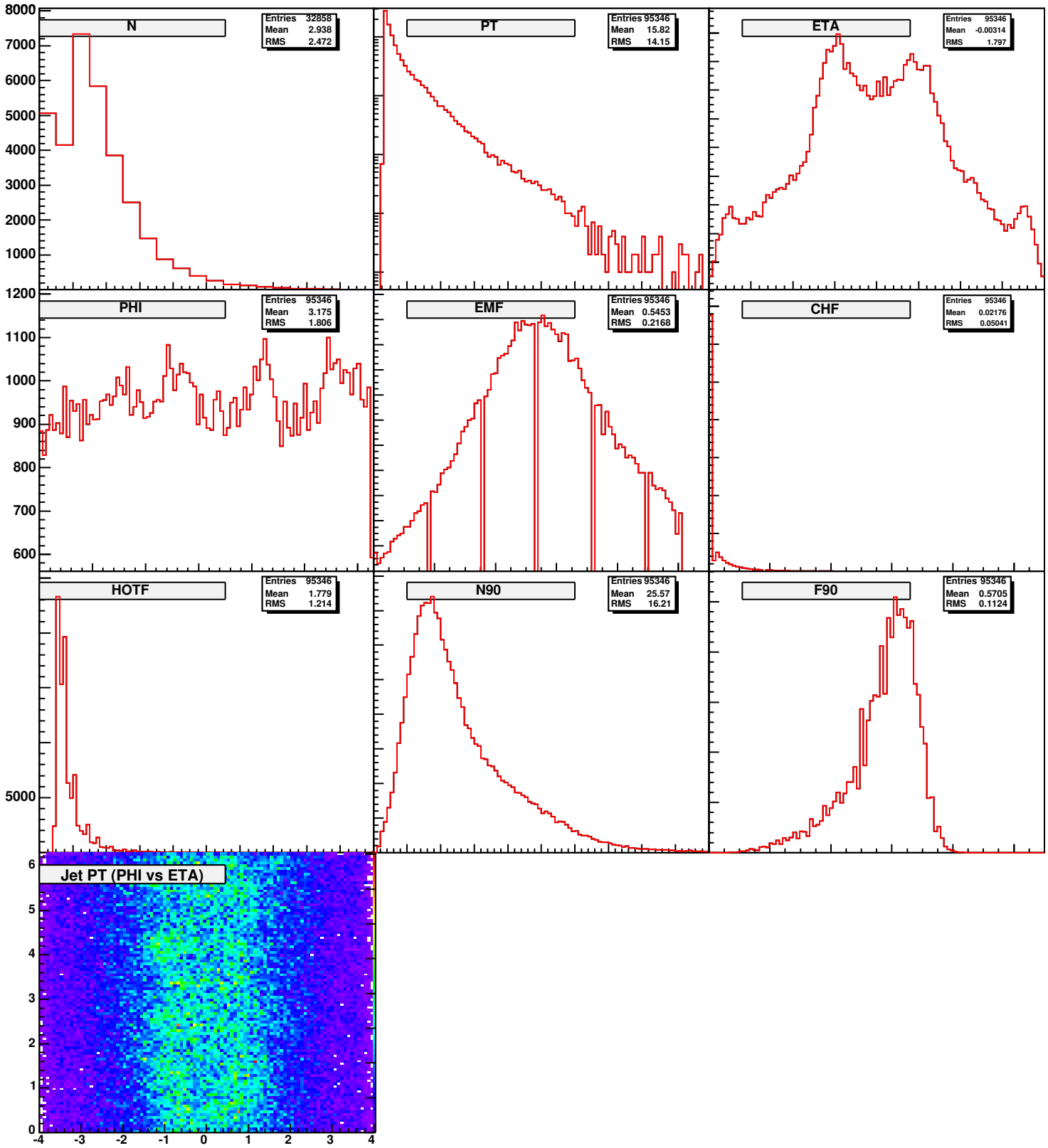


Muons (Unmatched)

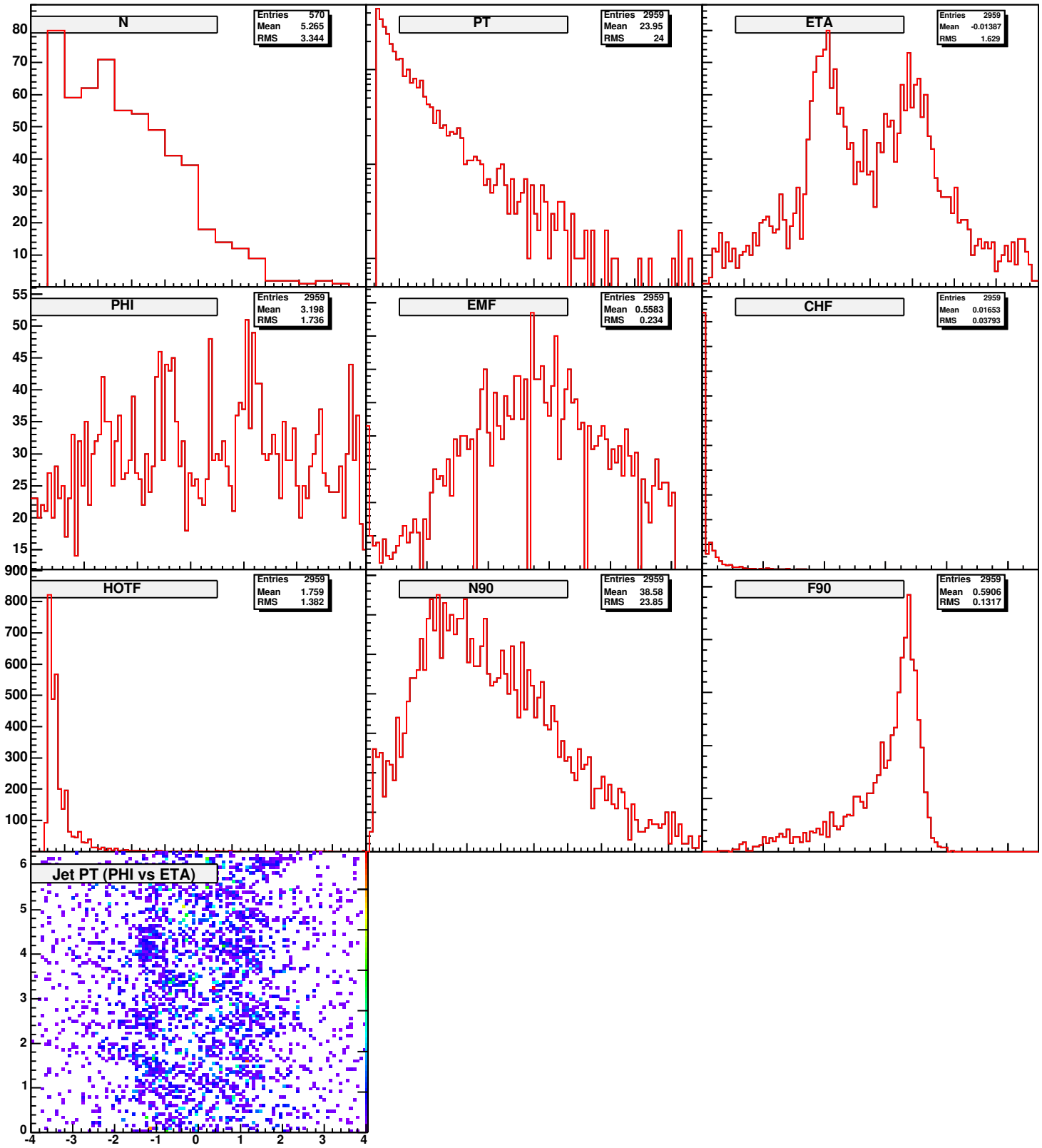

MEt
Entries 32858
Mean 7.812
RMS 7.768
MEx
Entries 32858
Mean 0.5543
RMS 8.141
MEy
Entries 32858
Mean 0.06348
RMS 7.401
500
500
0
-50 -40 -30 -20 -10 0 10 20 30 40 50
Met (No cuts)



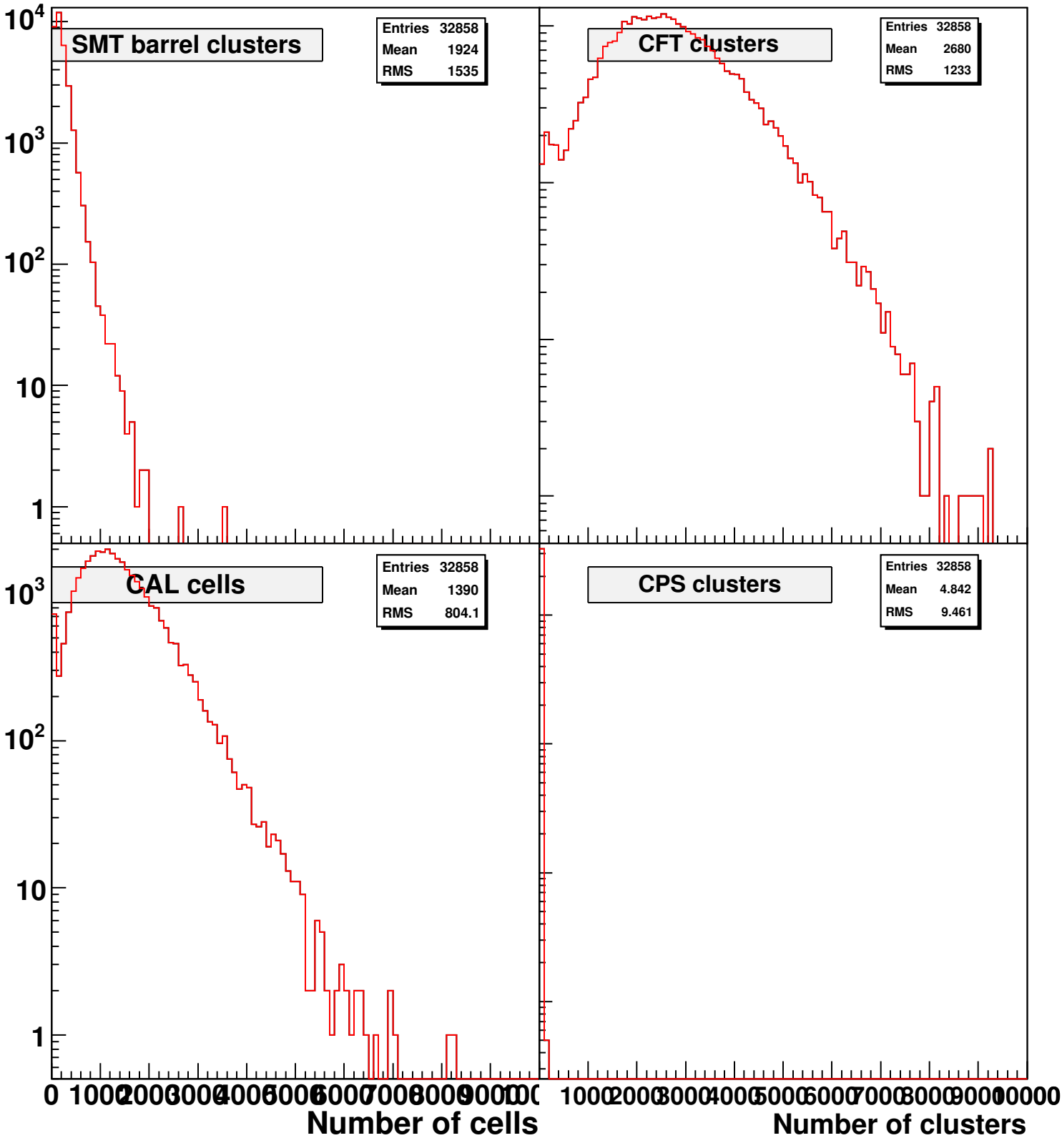
Jets (Cone R 0.7 (no cuts))

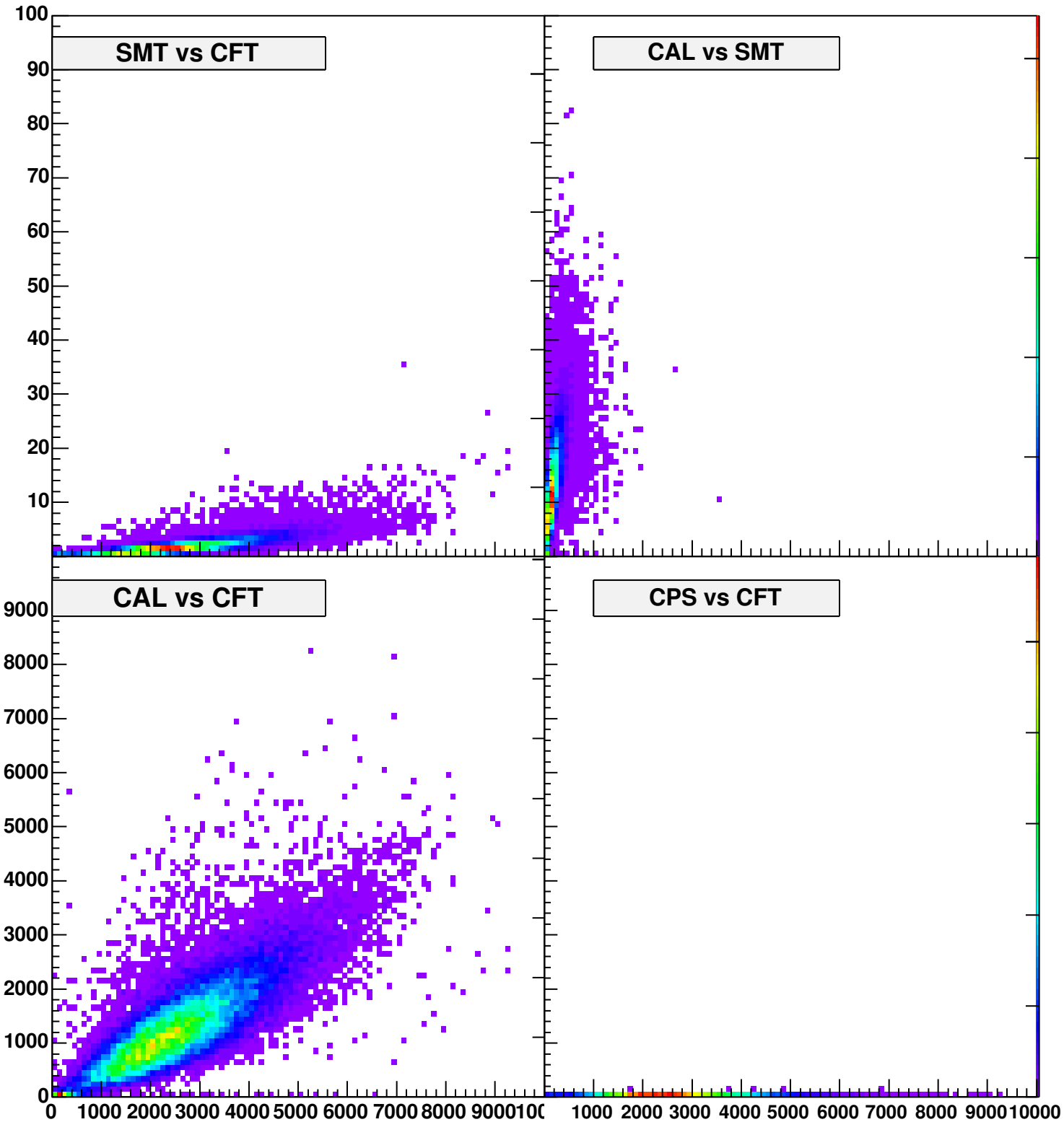


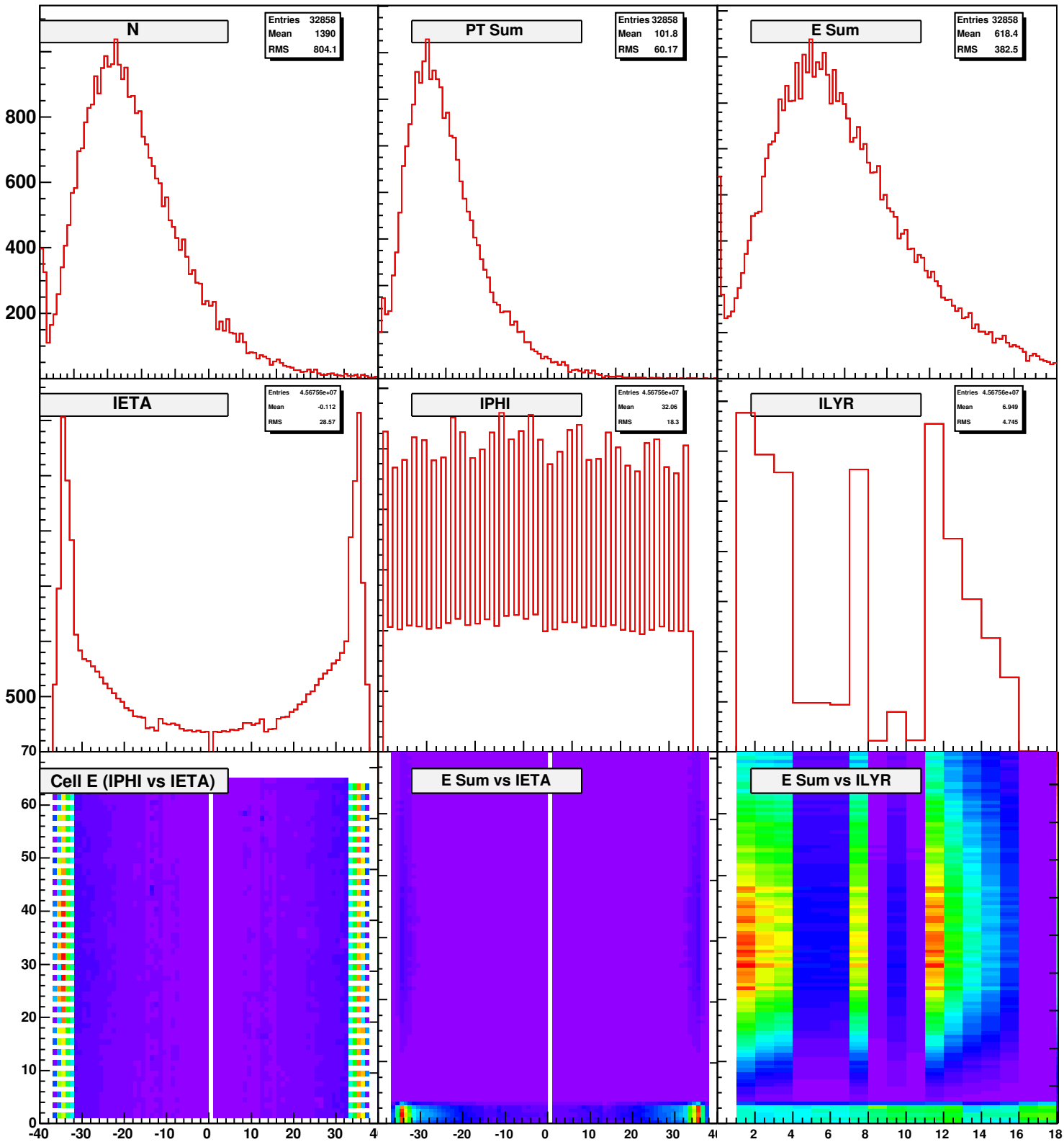
Jets (Cone R 0.7 (standard cuts))



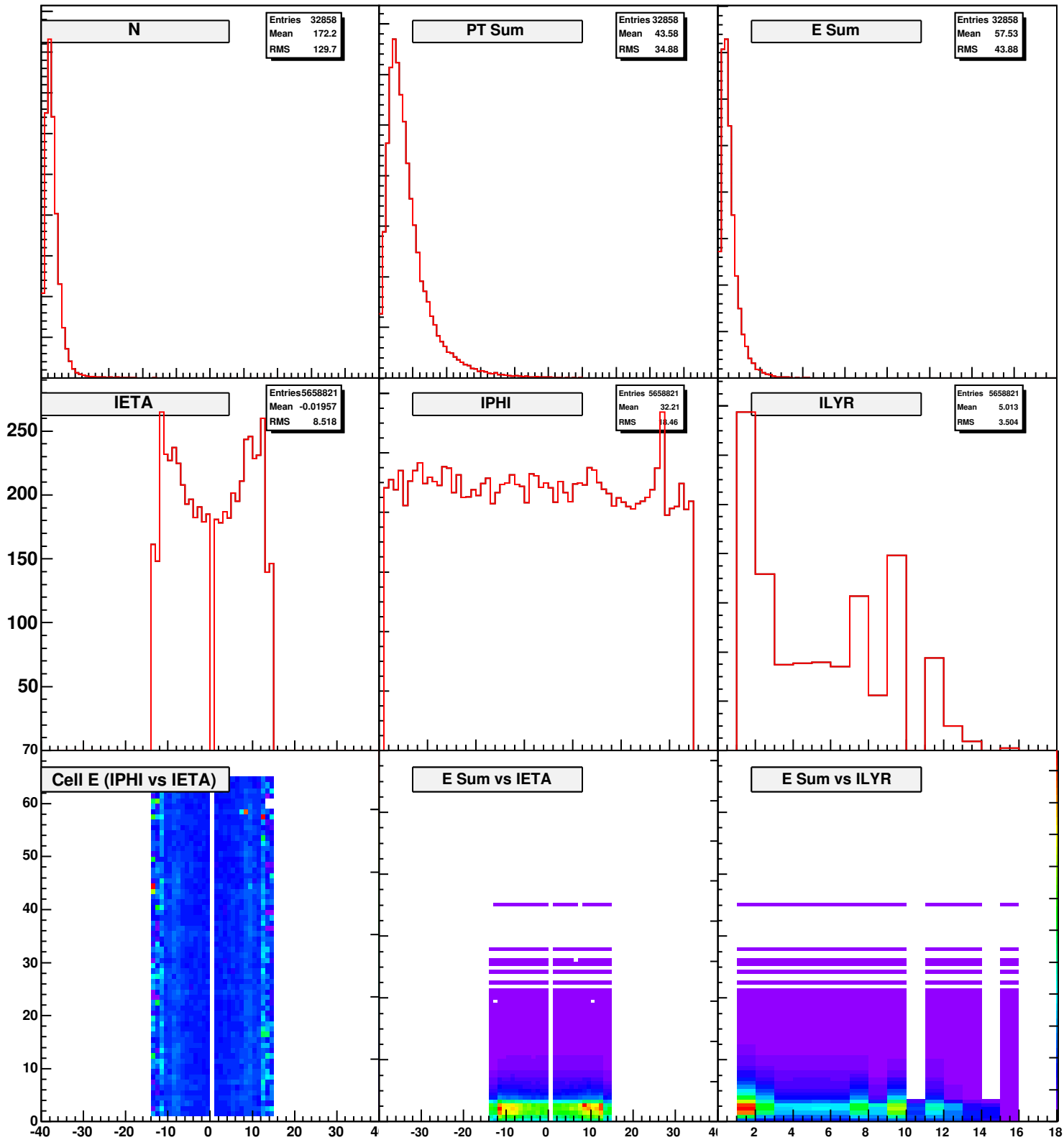
Jets (Cone R 0.7 (standard cuts, MET>30))


SMT barrel clusters
Entries 32858
Mean 1924
RMS 1535
CFT clusters
Entries 32858
Mean 2680
RMS 1233
CAL cells
Entries 32858
Mean 1390
RMS 804.1
CPS clusters
Entries 32858
Mean 4.842
RMS 9.461
Number of cells
Number of clusters
Detector Occupancy (Detector)

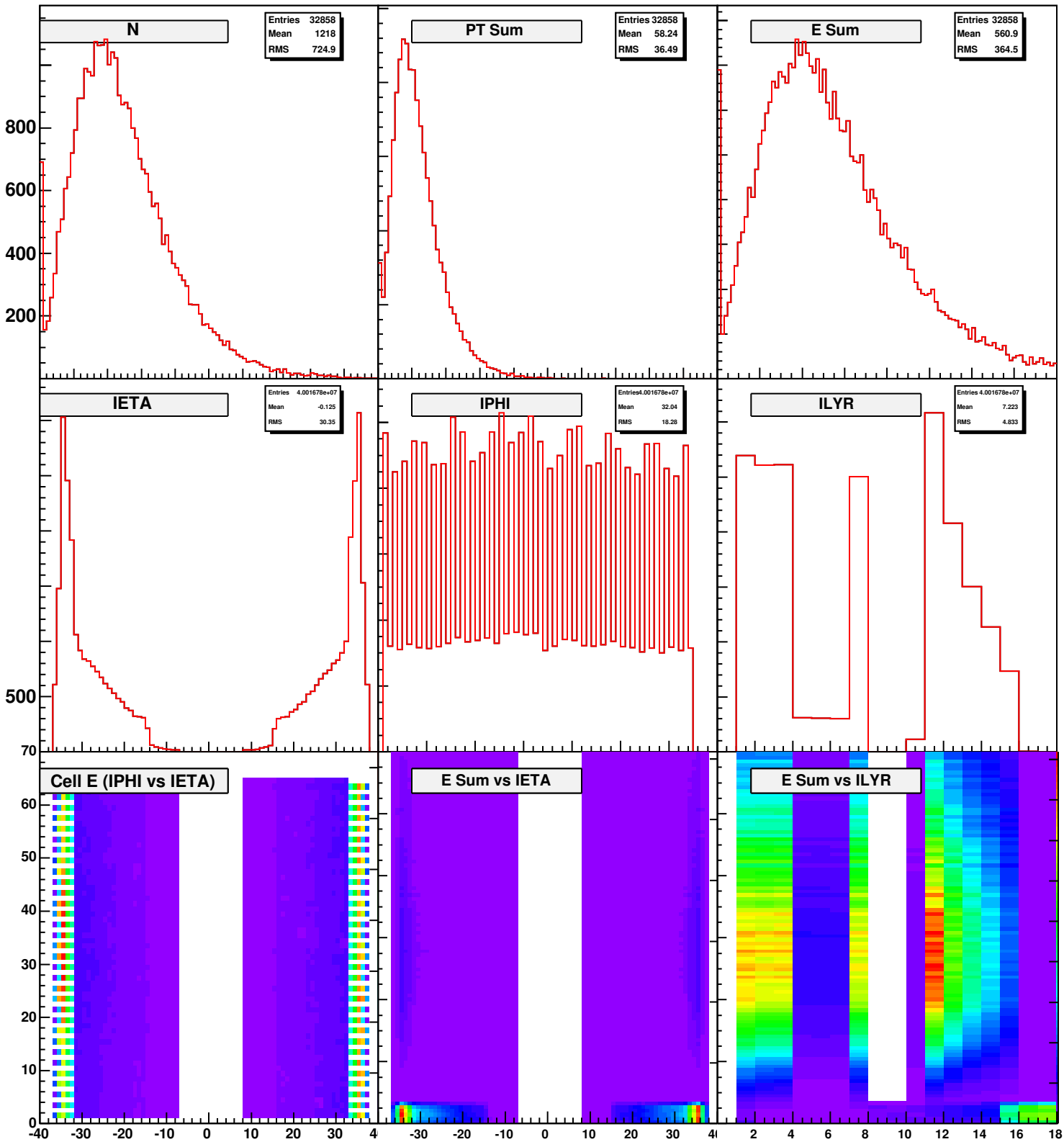

SMT vs CFT
CAL vs SMT
CAL vs CFT
CPS vs CFT
100
90
80
70
60
50
40
30
20
10
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
0 1000 2000 3000 4000 5000 6000 7000 8000 9000
1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
Detector Occupancy (Detector)



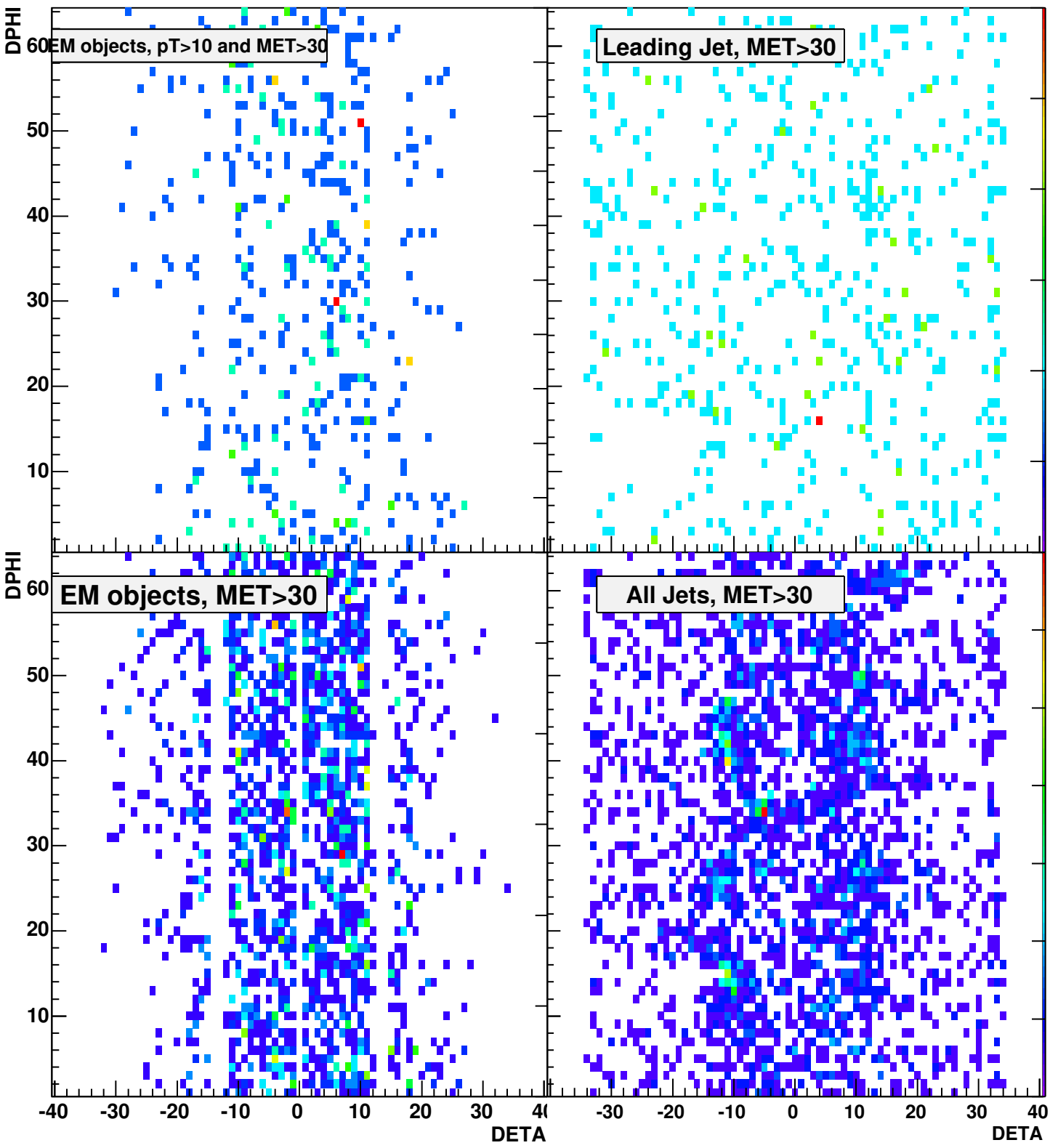
Calorimeter (All cells)



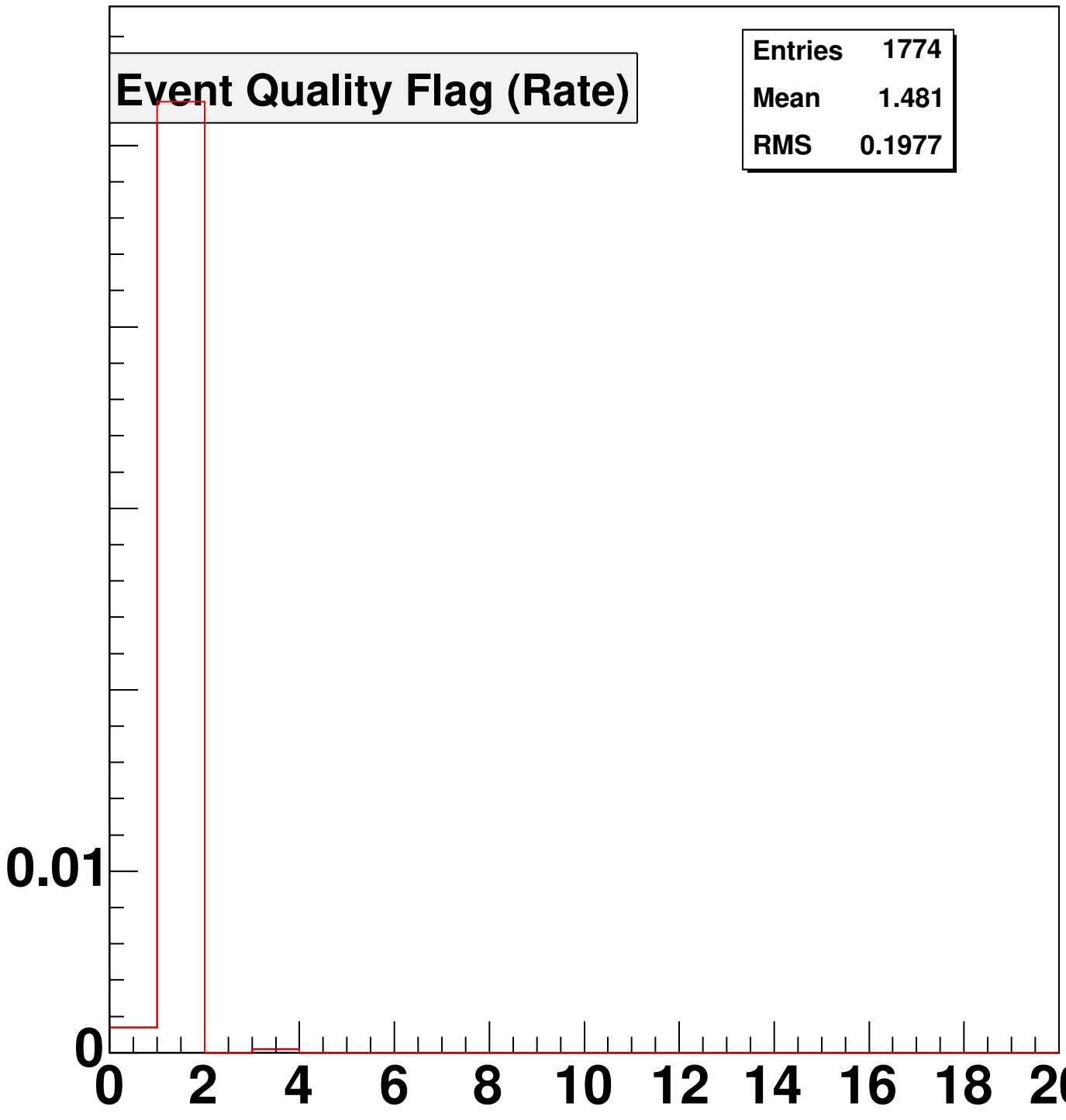
Calorimeter (All CC cells)

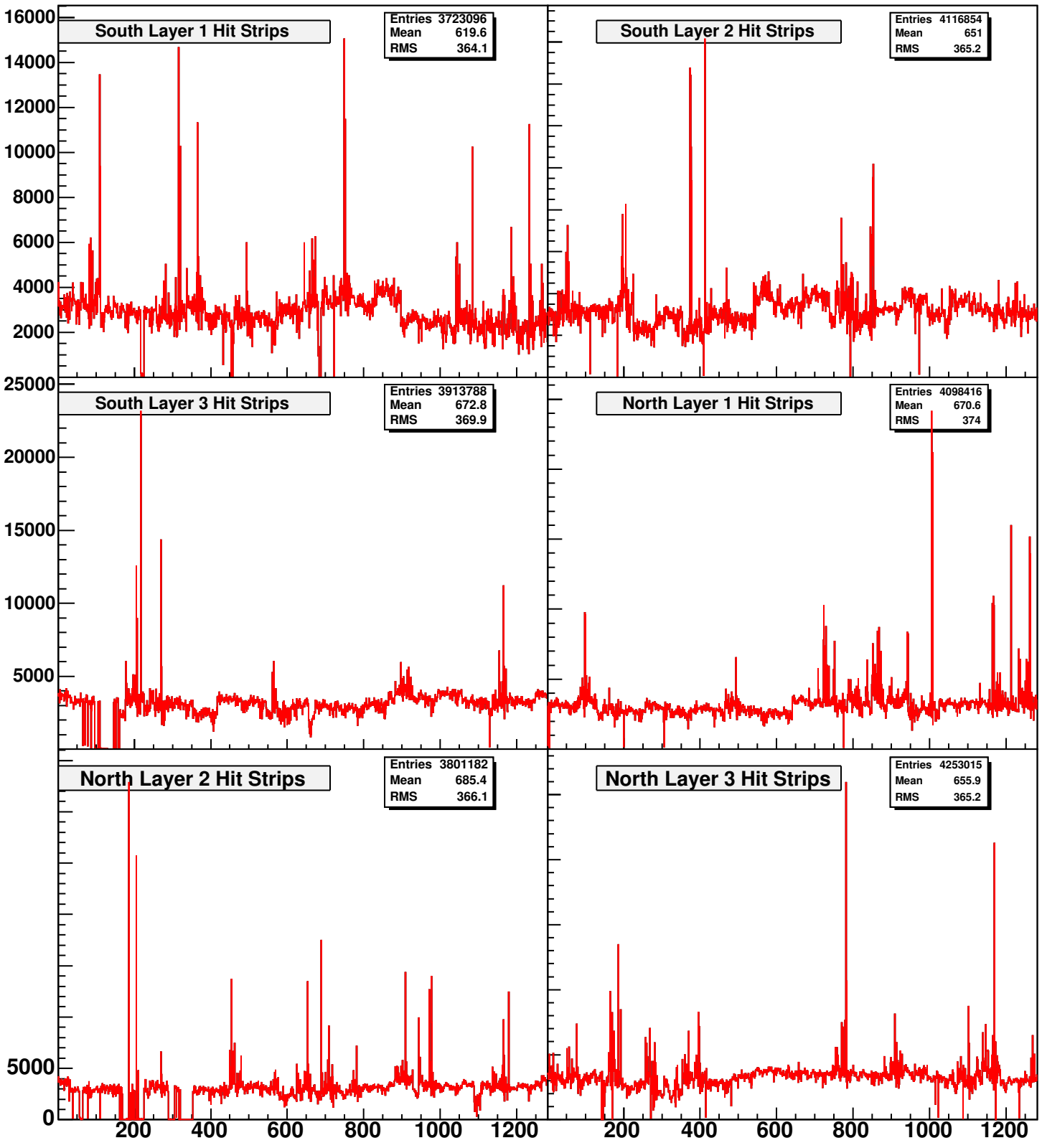


Calorimeter (All EC cells)

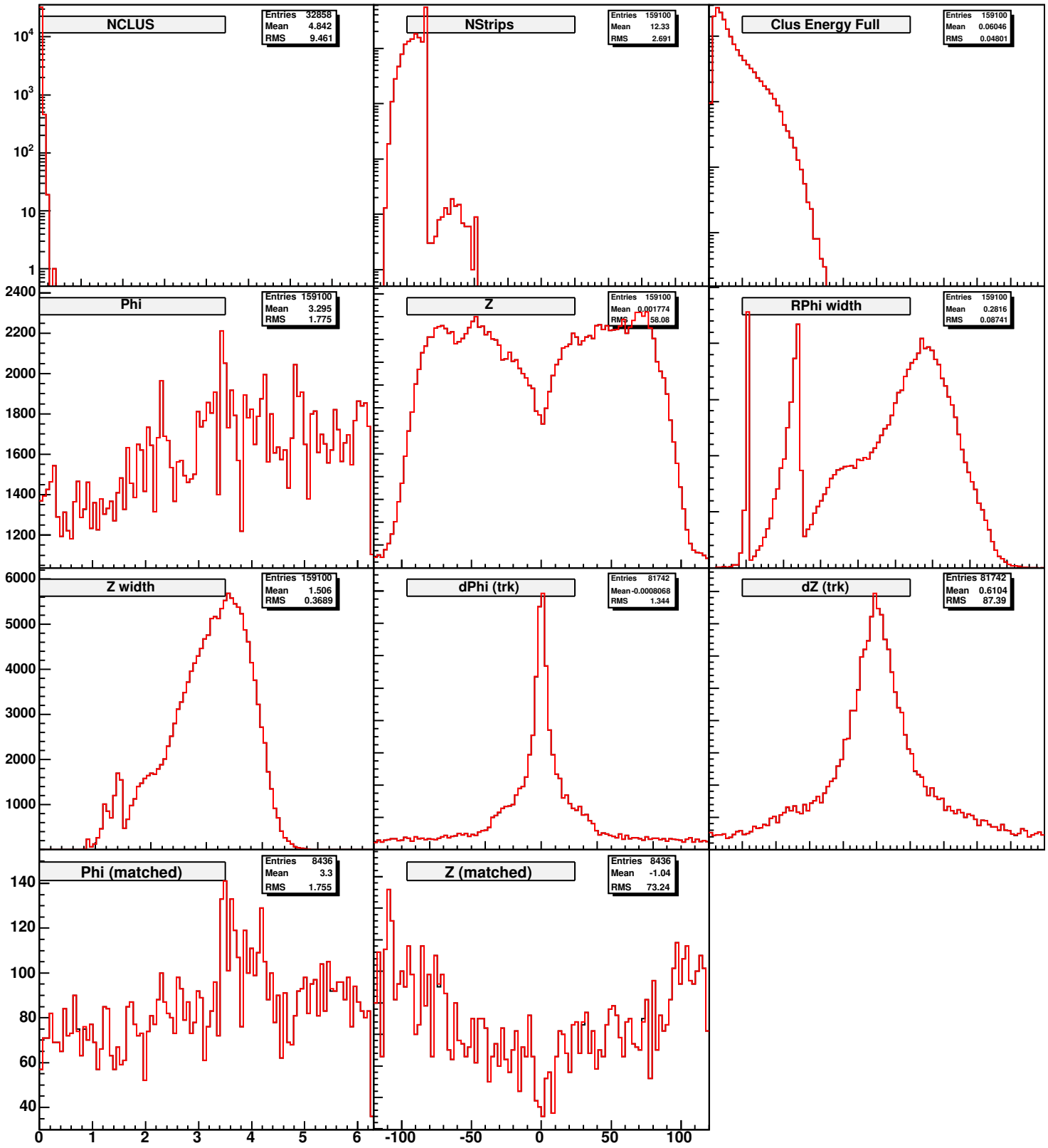


Cal Objects with MET>30 (All cells)

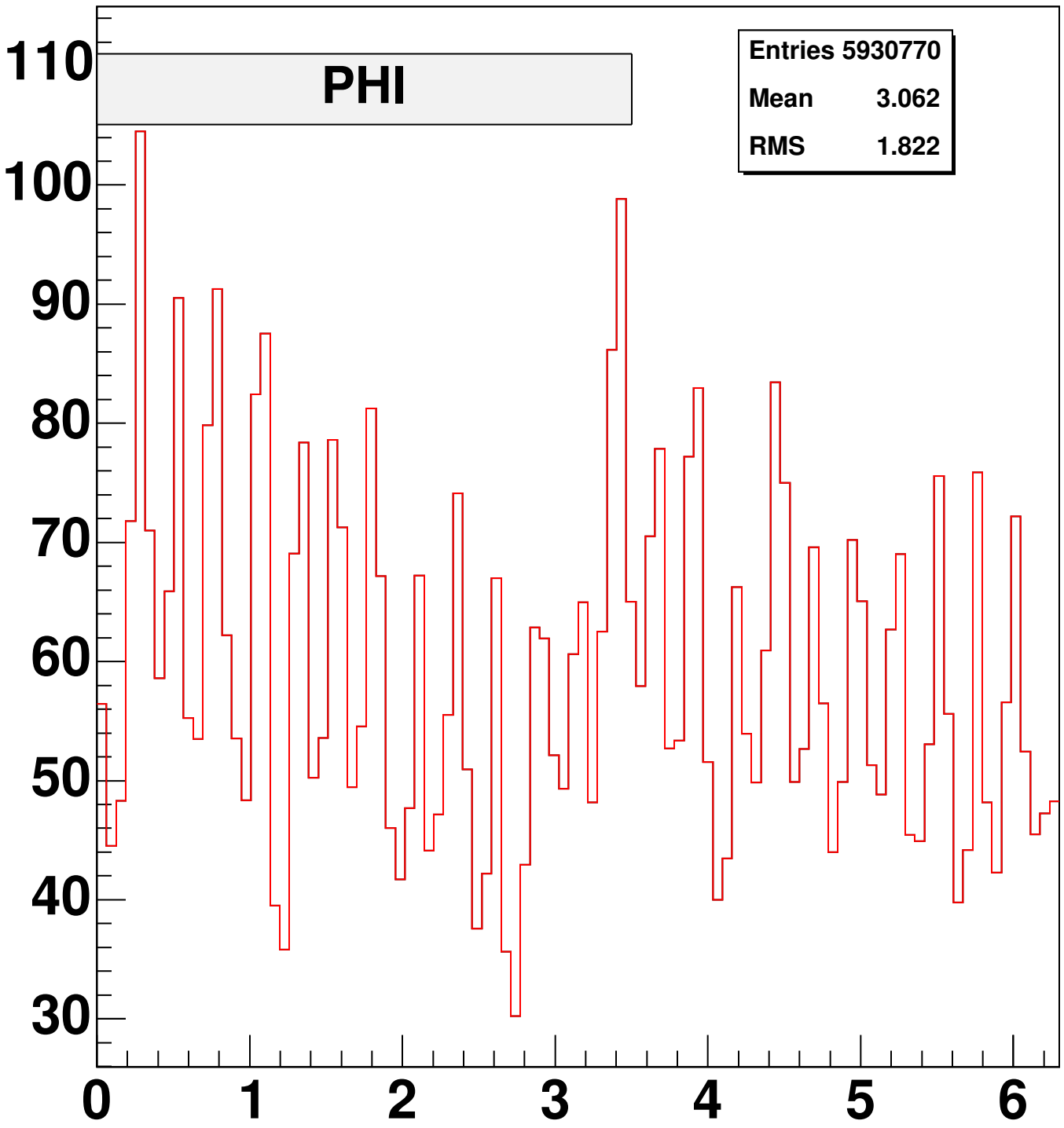

Event Quality Flag (Rate)
Entries 1774
Mean 1.481
RMS 0.1977
0.01
0
0 2 4 6 8 10 12 14 16 18 20
Calorimeter Event Quality (All cells)

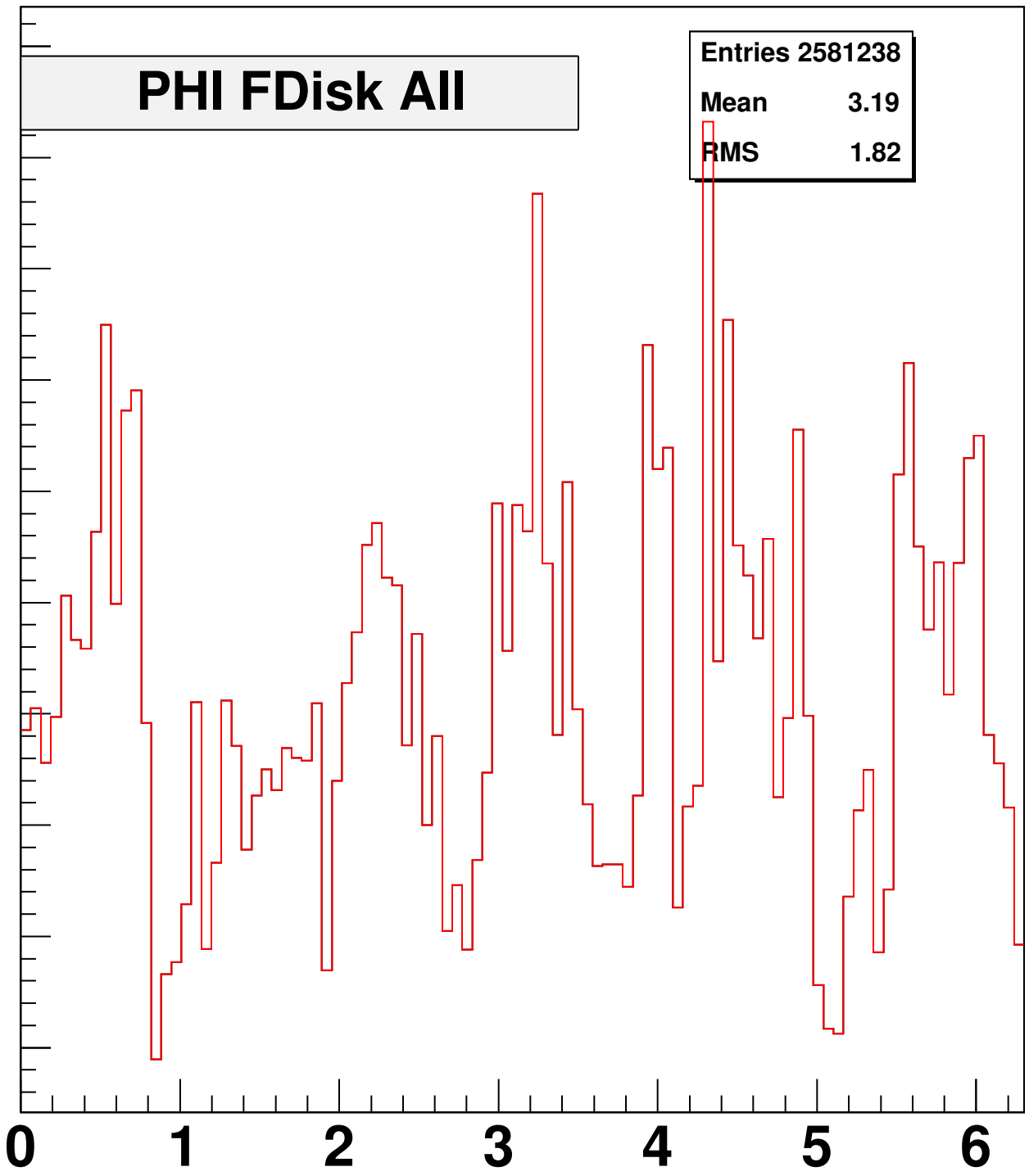


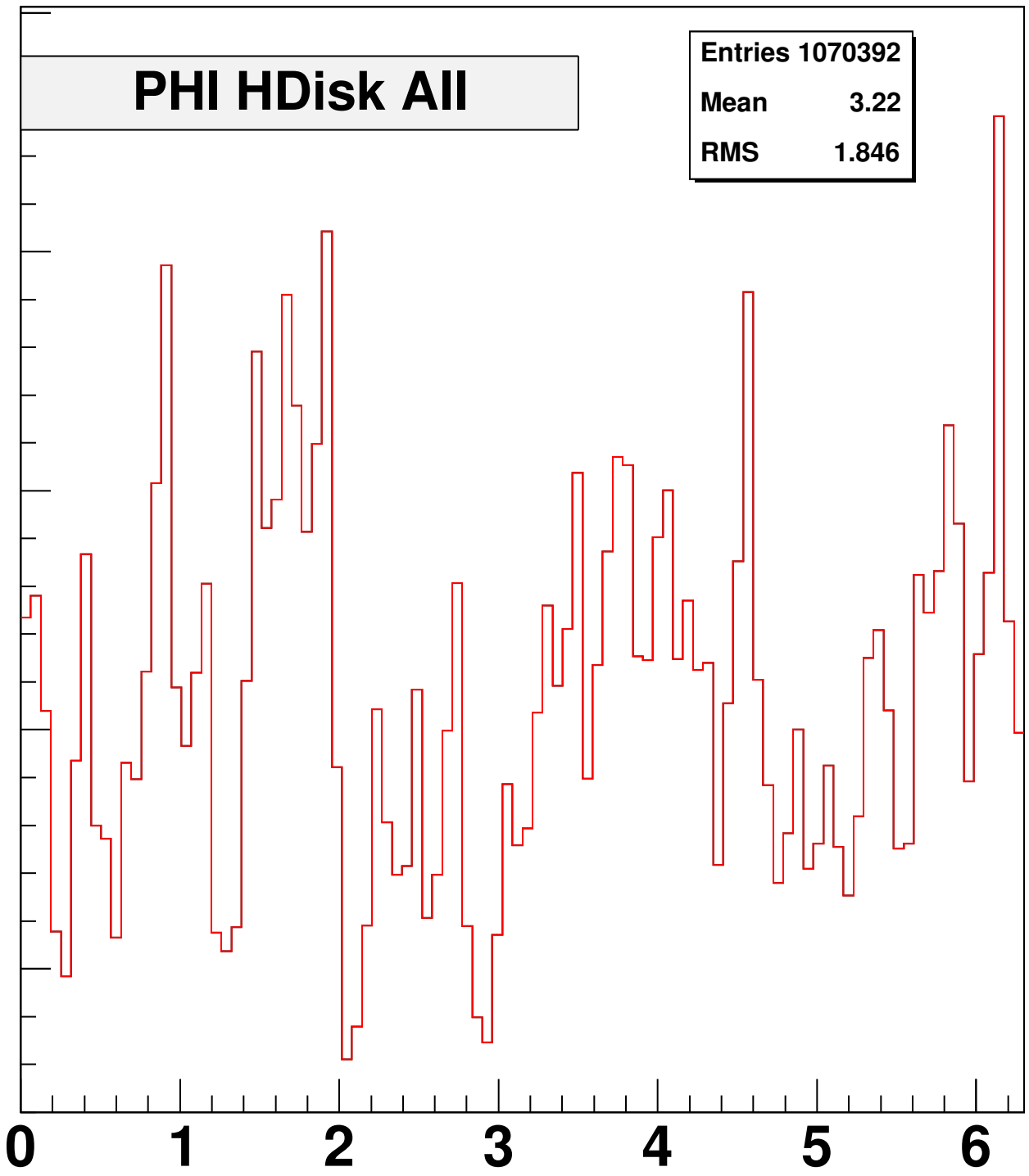
CPS Hit Strips (All Clusters)

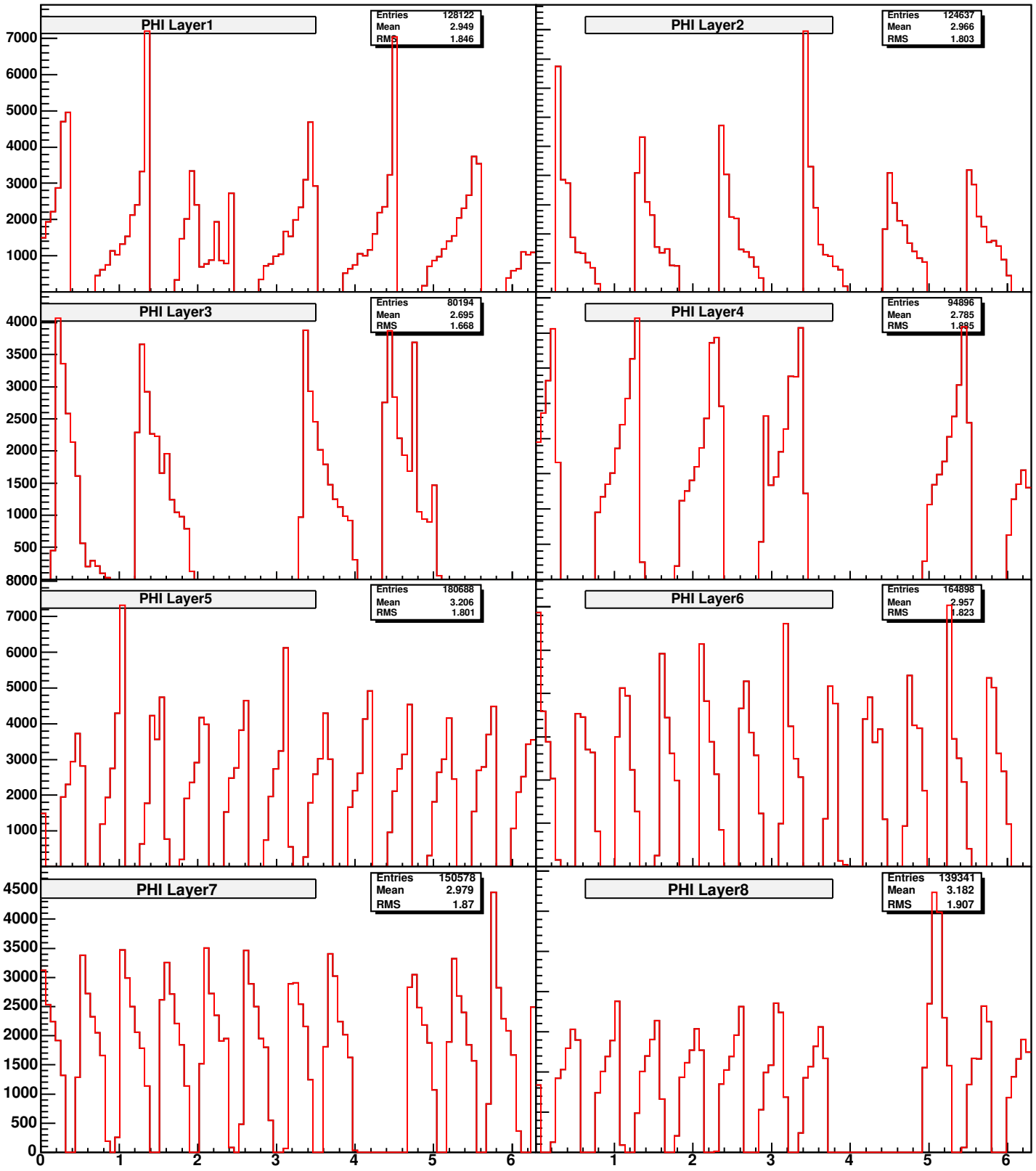


CPS Clusters (All Clusters)

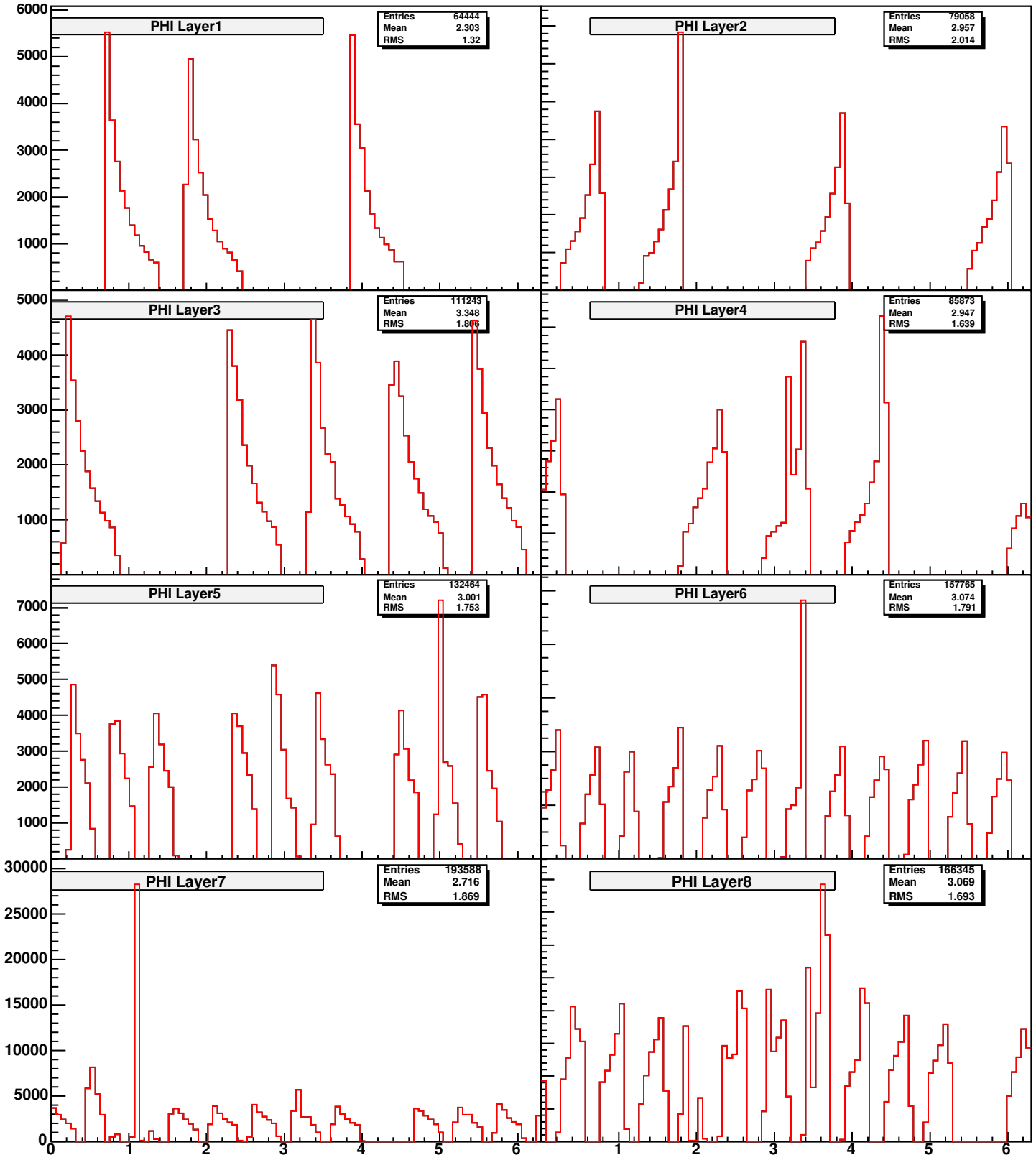

PHI
Entries 5930770
Mean 3.062
RMS 1.822
110
100
90
80
70
60
50
40
30
0
1
2
3
4
5
6
SmtClusters (allBarClusters)


PHI FDisk All
Entries 2581238
Mean 3.19
RMS 1.82
0
1
2
3
4
5
6
SmtClusters (allFDiskClusters)

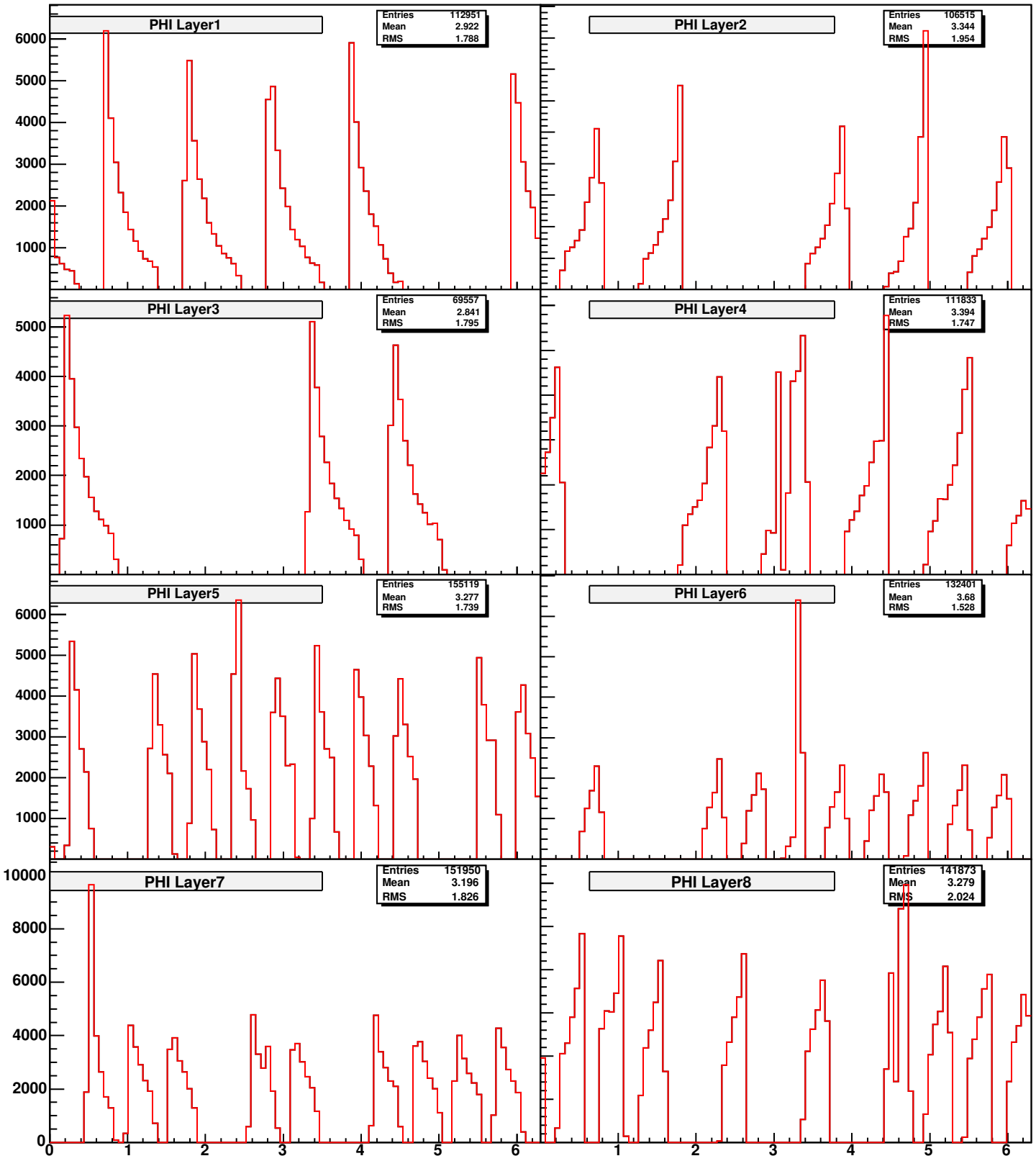

PHI HDisk All
Entries 1070392
Mean 3.22
RMS 1.846
0
1
2
3
4
5
6
SmtClusters (allHDiskClusters)



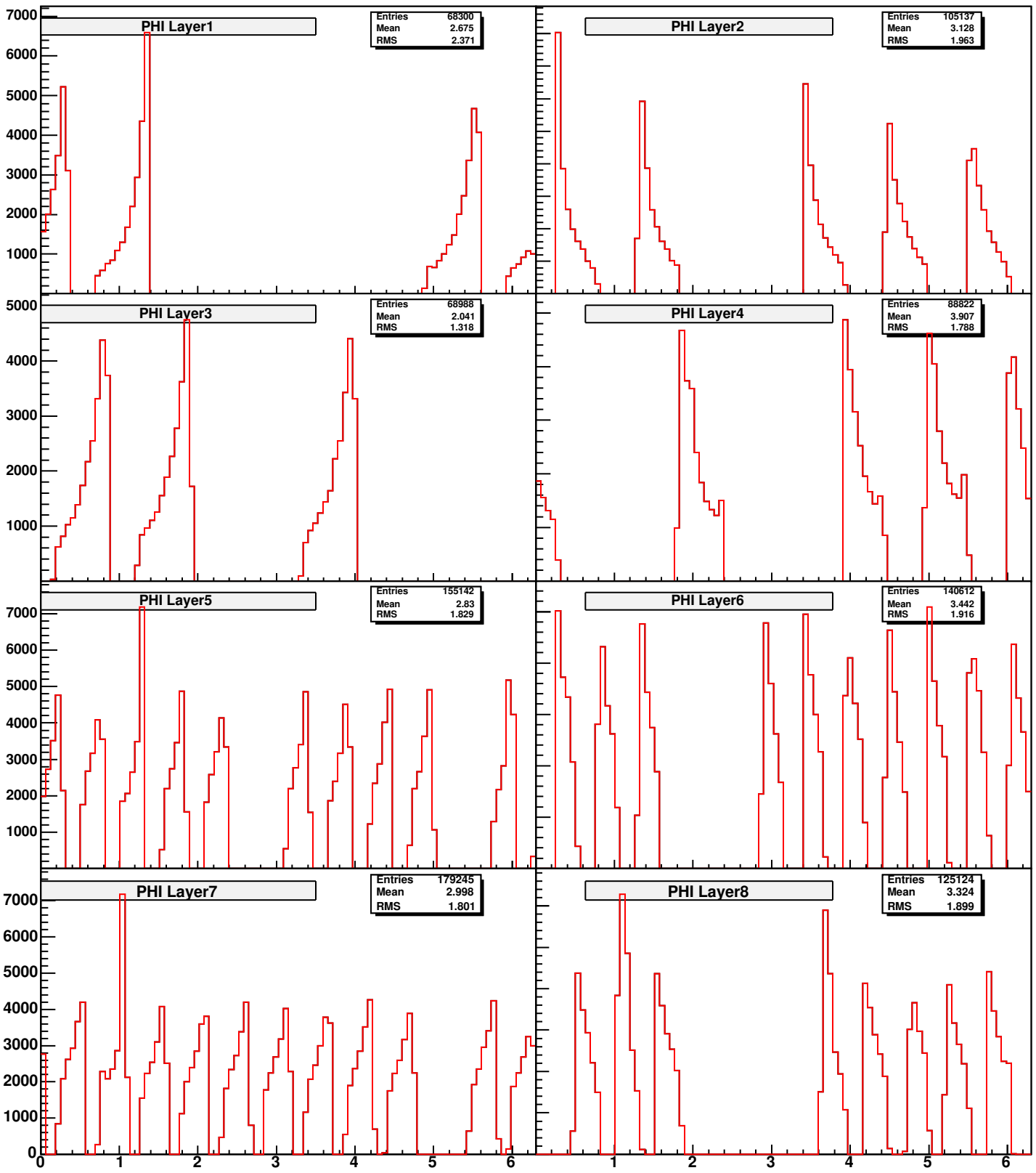
SmtClusters (ClustrBar1)



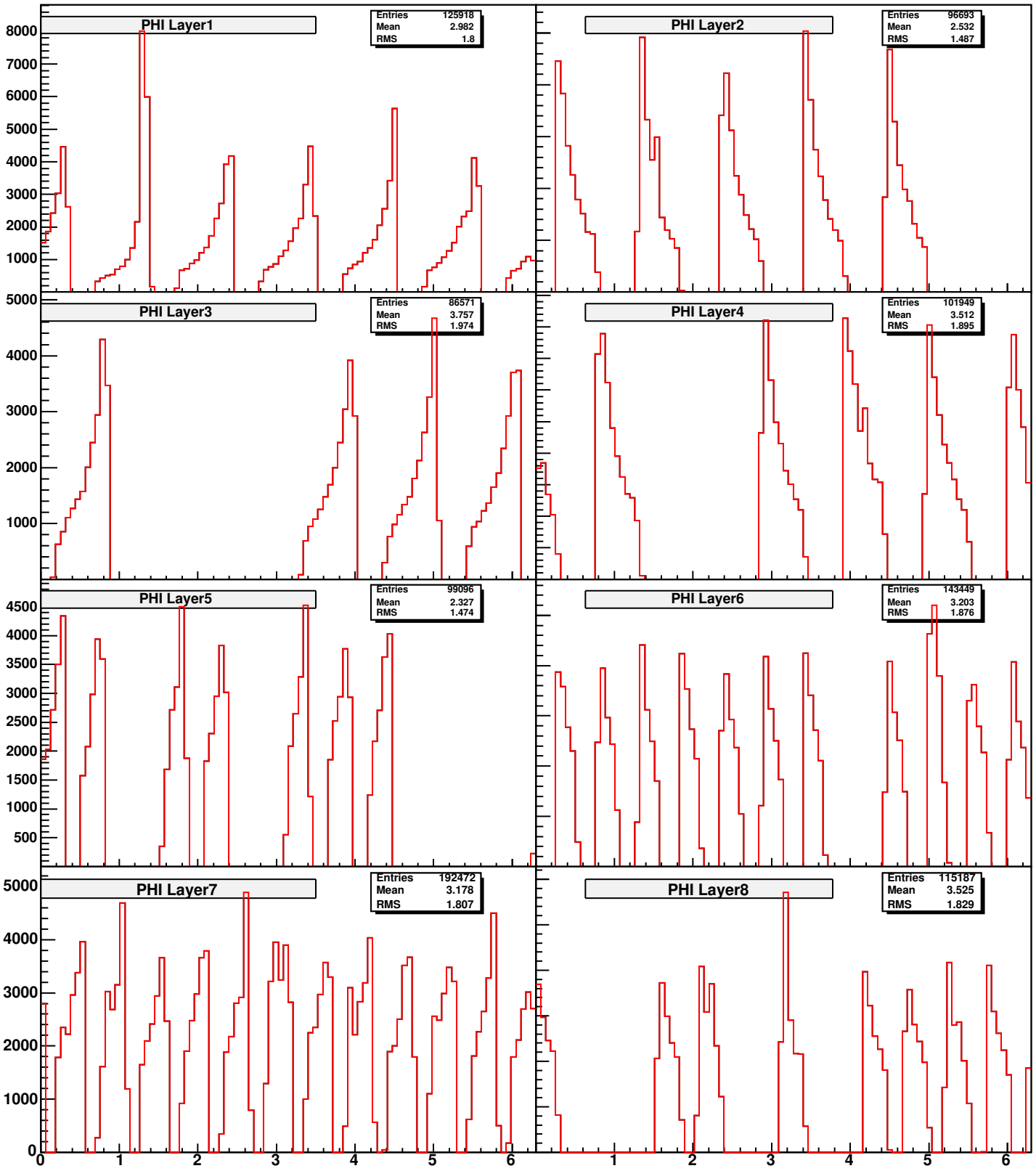
SmtClusters (ClustrBar2)



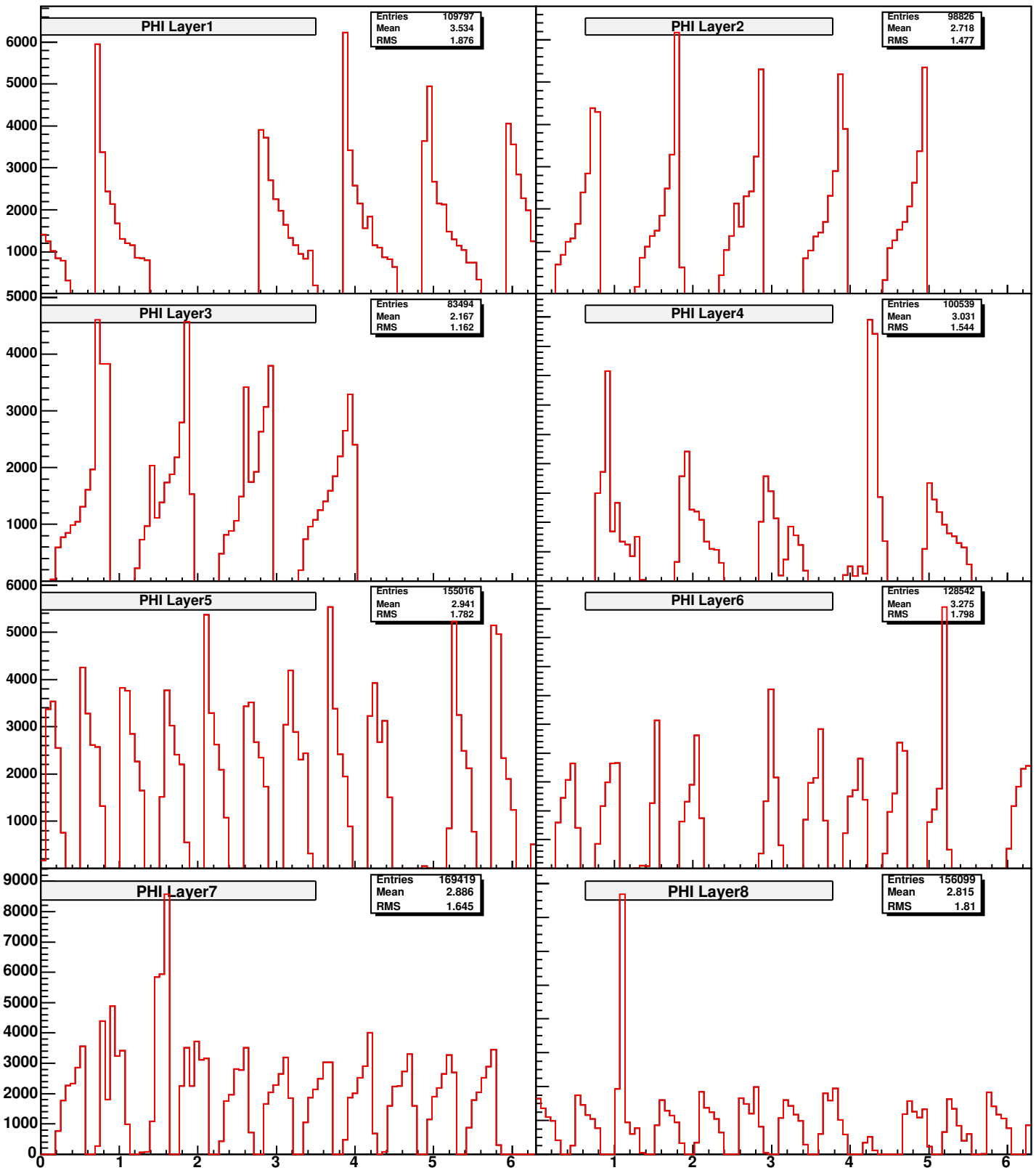
SmtClusters (ClustrBar3)



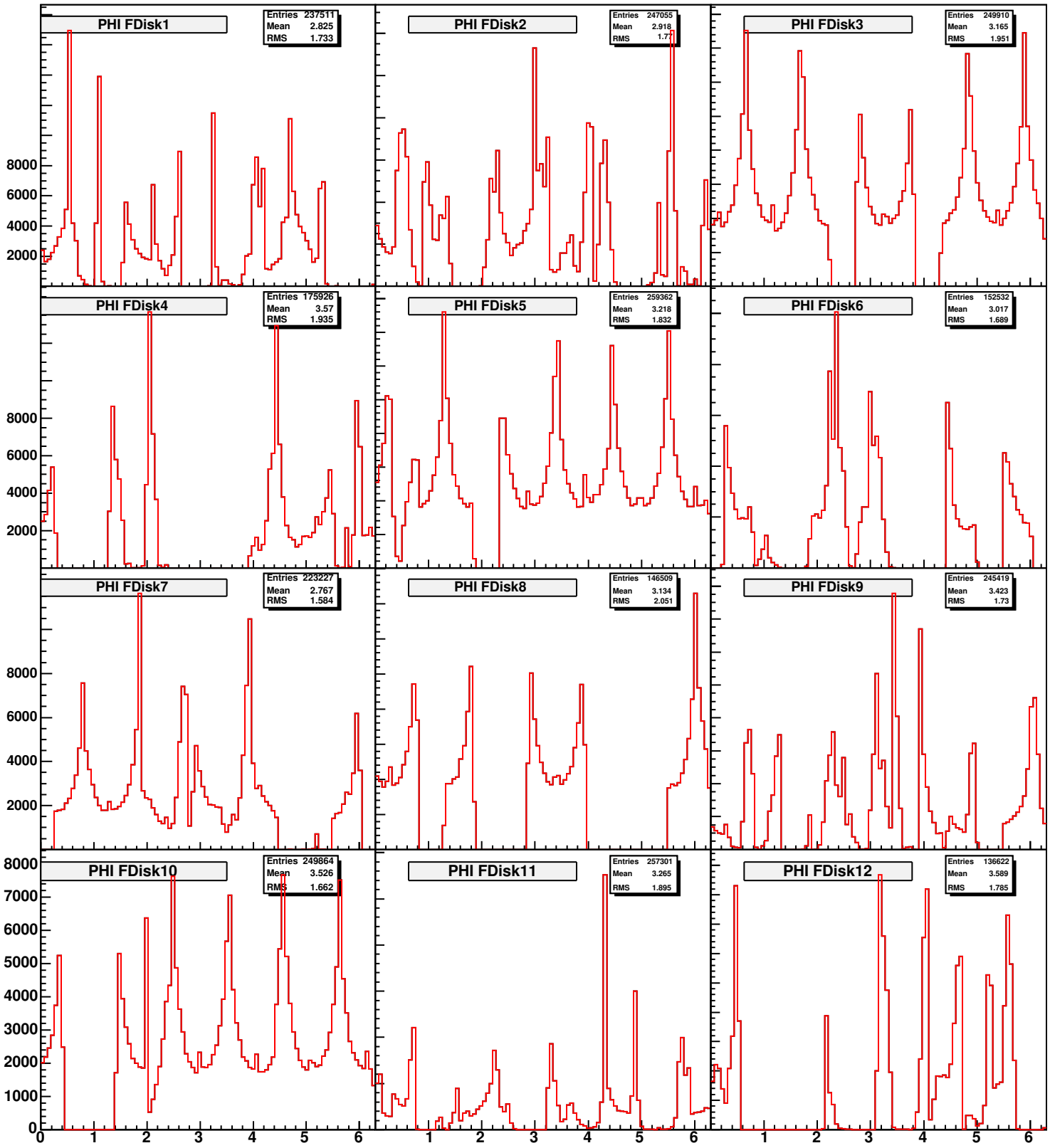
SmtClusters (ClustrBar4)



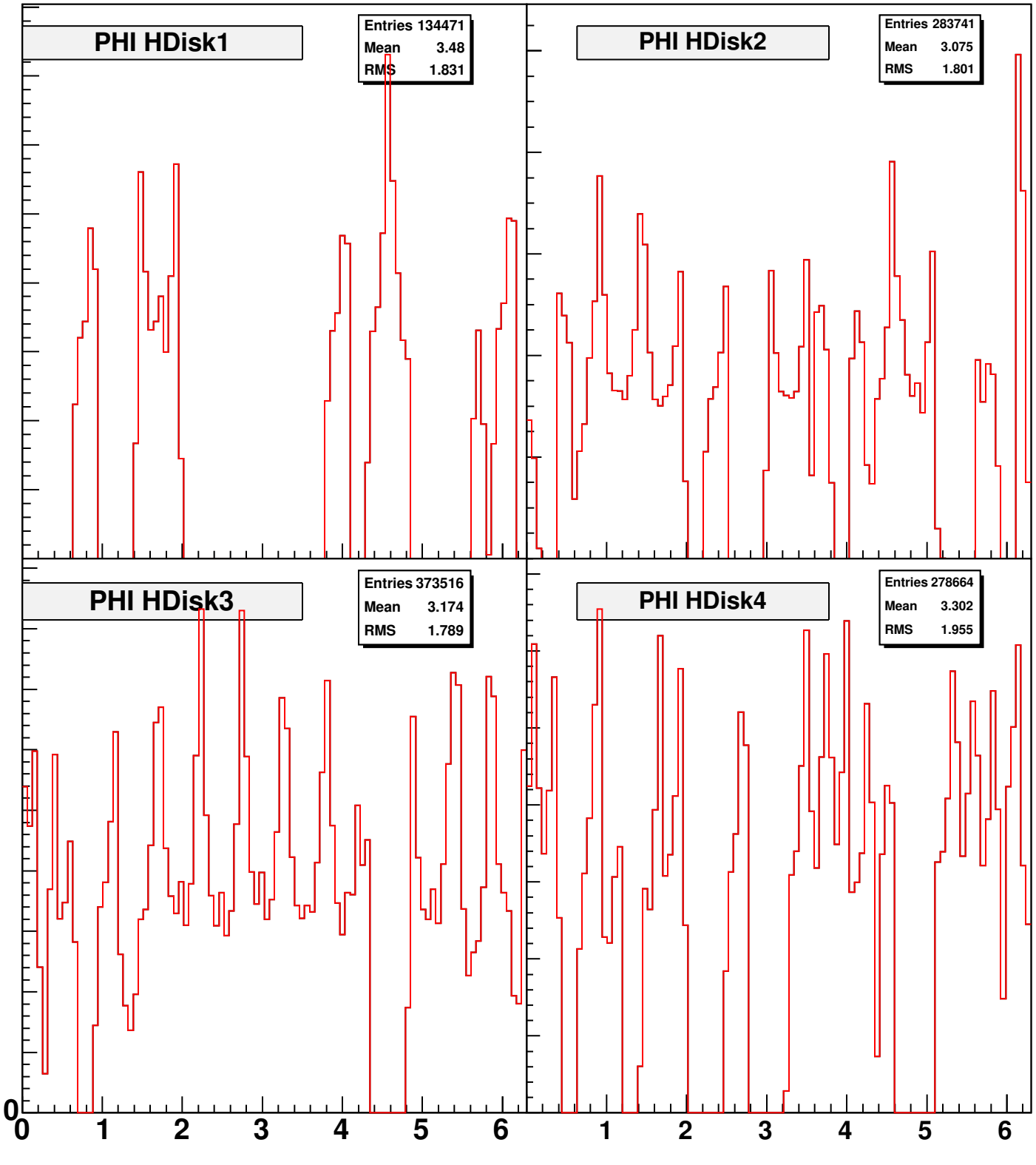
SmtClusters (ClustrBar5)

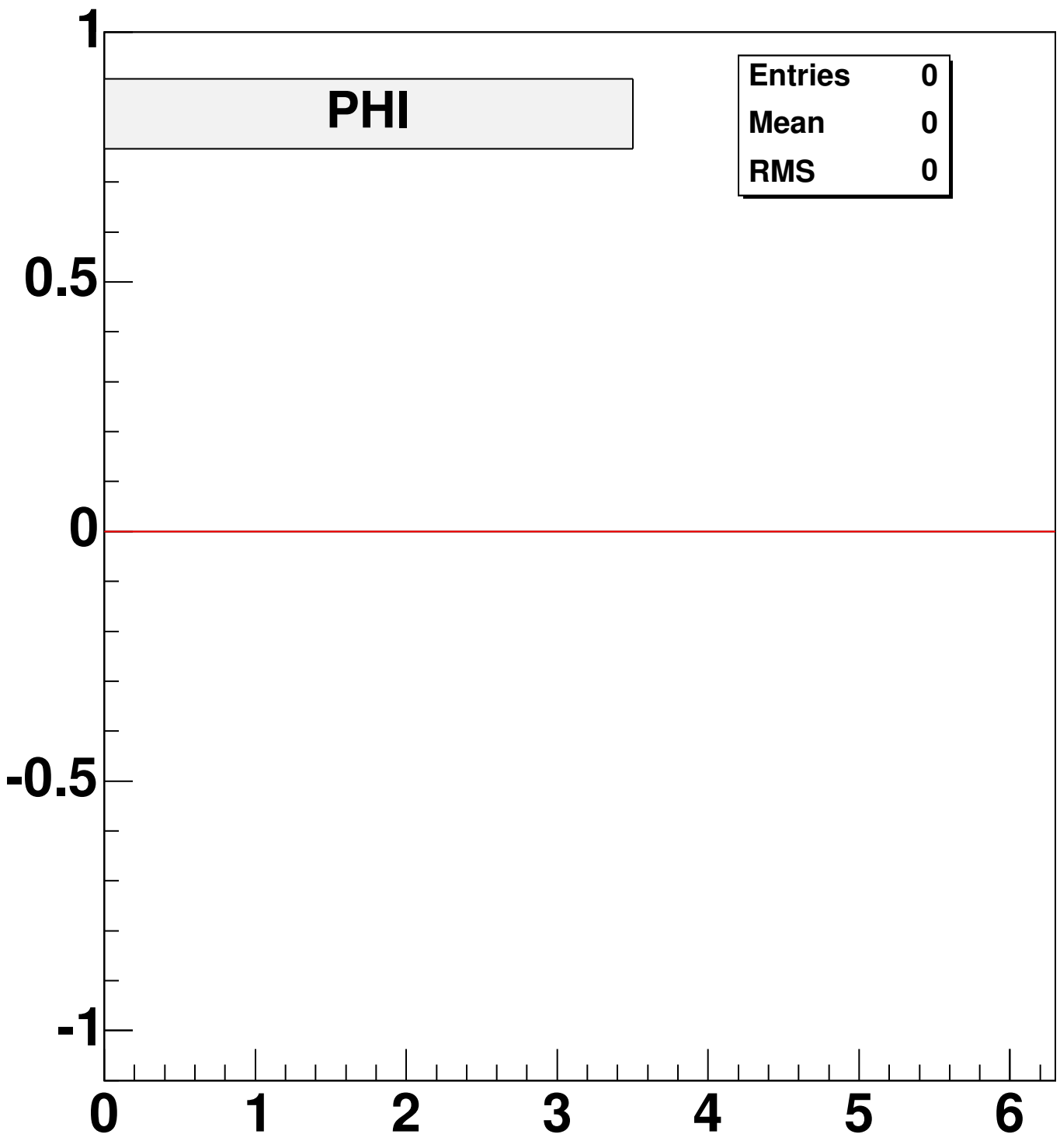


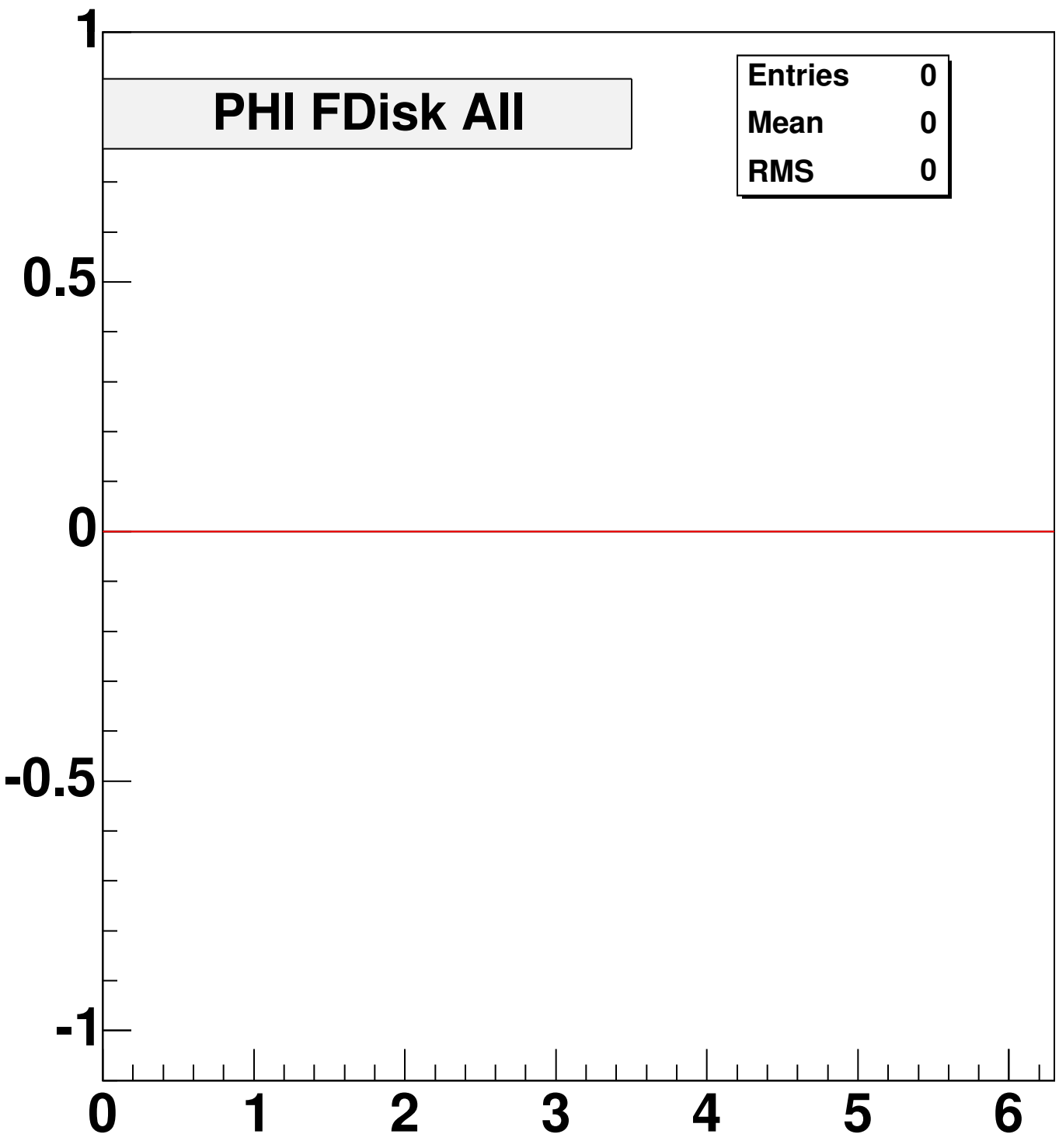
SmtClusters (ClustrBar6)

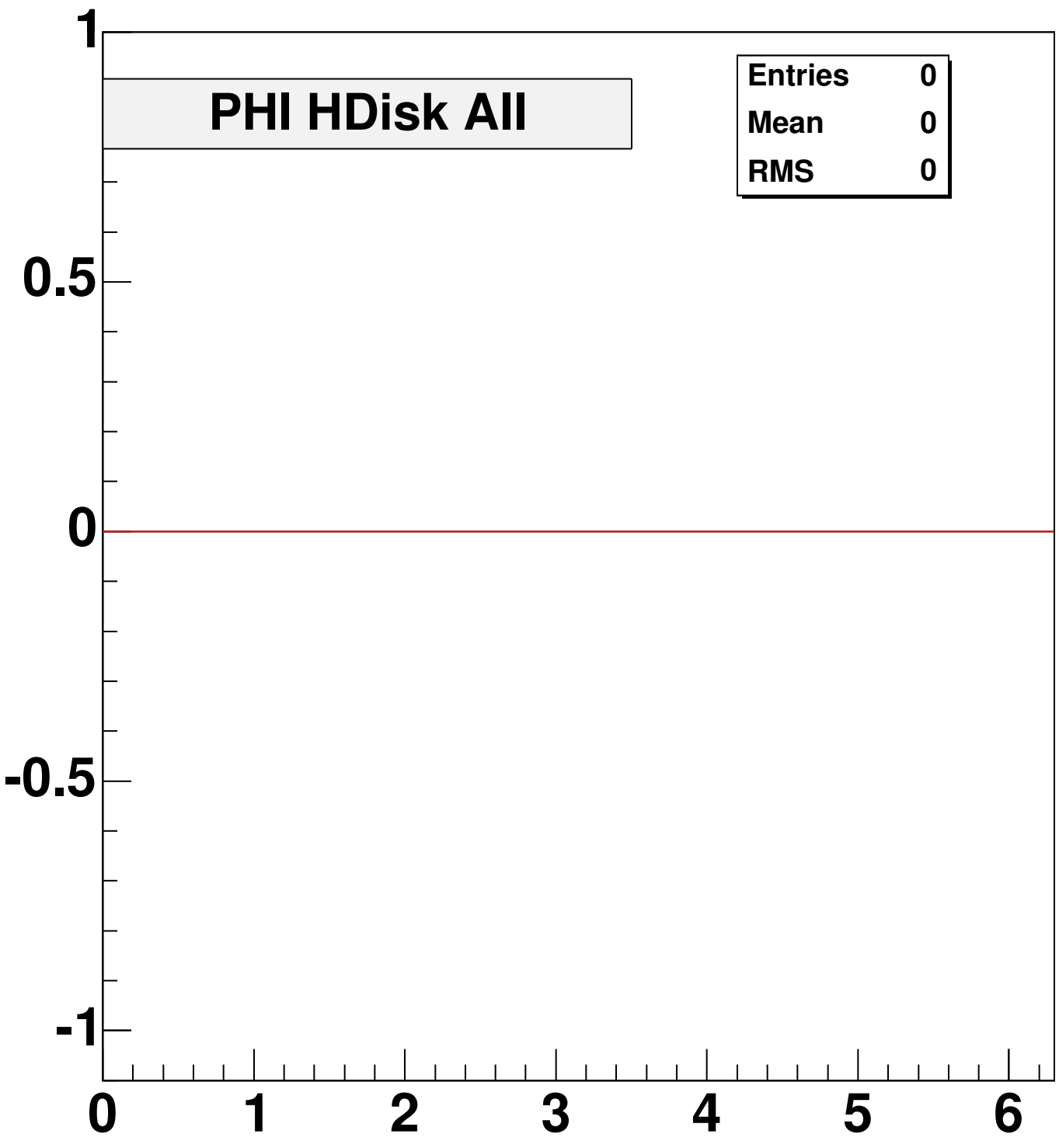


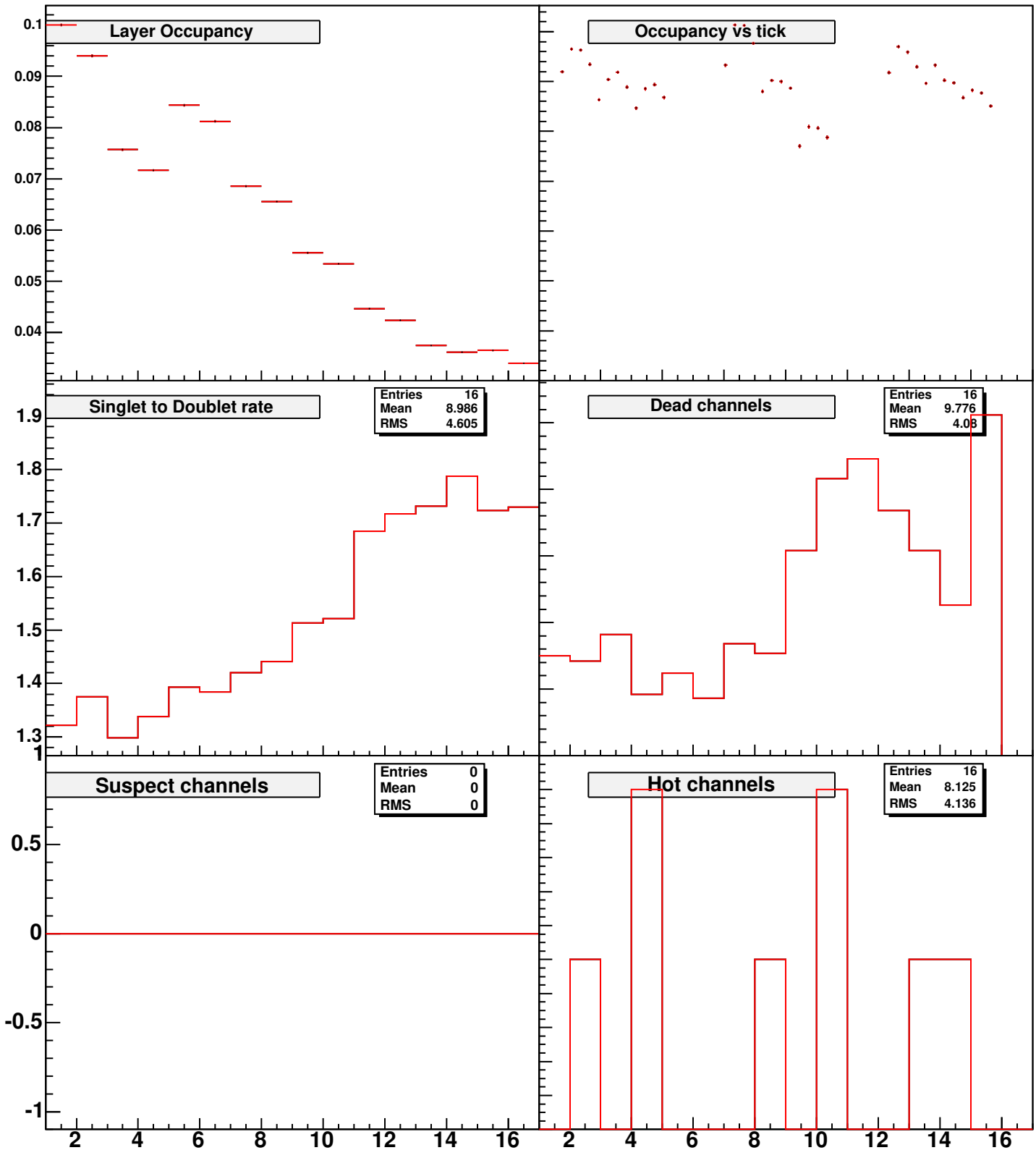
SmtClusters (FDiskClusters)


PHI HDisk1
Entries 134471
Mean 3.48
RMS 1.831
PHI HDisk2
Entries 283741
Mean 3.075
RMS 1.801
PHI HDisk3
Entries 373516
Mean 3.174
RMS 1.789
PHI HDisk4
Entries 278664
Mean 3.302
RMS 1.955
0
0
1
2
3
4
5
6
1
2
3
4
5
6
SmtClusters (HDiskClusters)

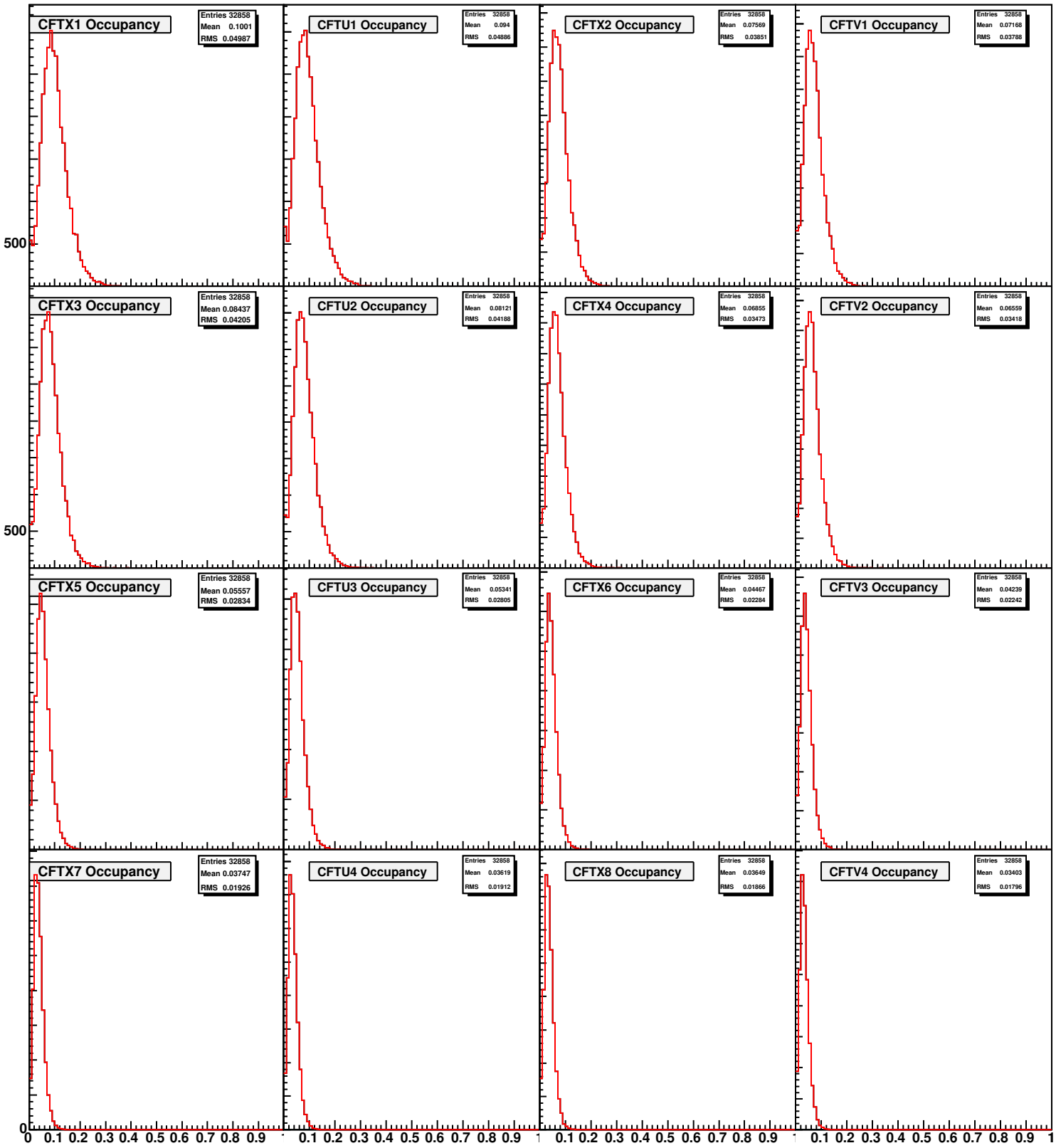

PHI
Entries 0
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0
1
2
3
4
5
6
SmtClusters (allBarTClusters)


PHI FDisk All
Entries 0
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0
1
2
3
4
5
6
SmtClusters (allFDiskTClusters)

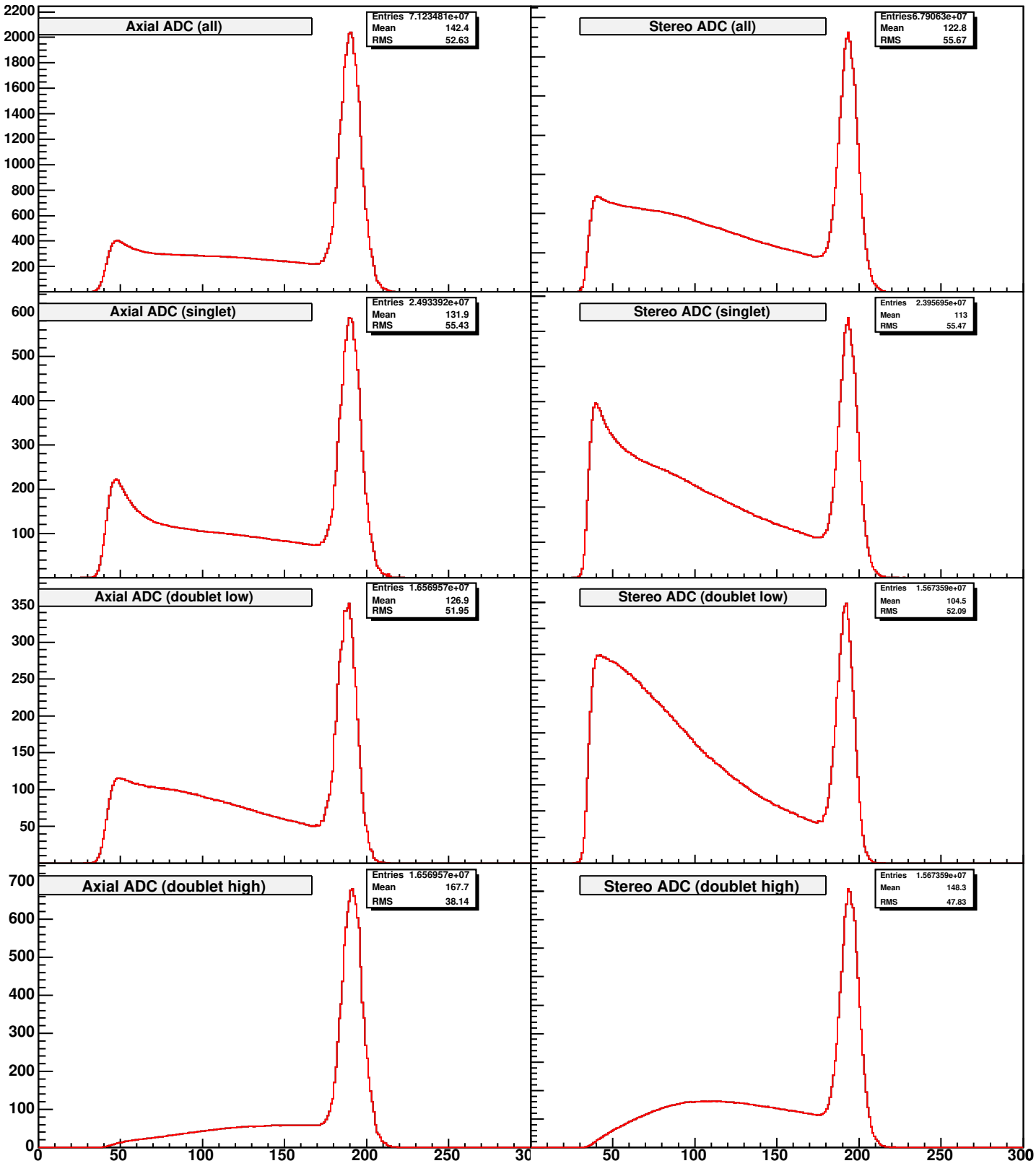

PHI HDisk All
Entries 0
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0
1
2
3
4
5
6
SmtClusters (allHDiskTClusters)



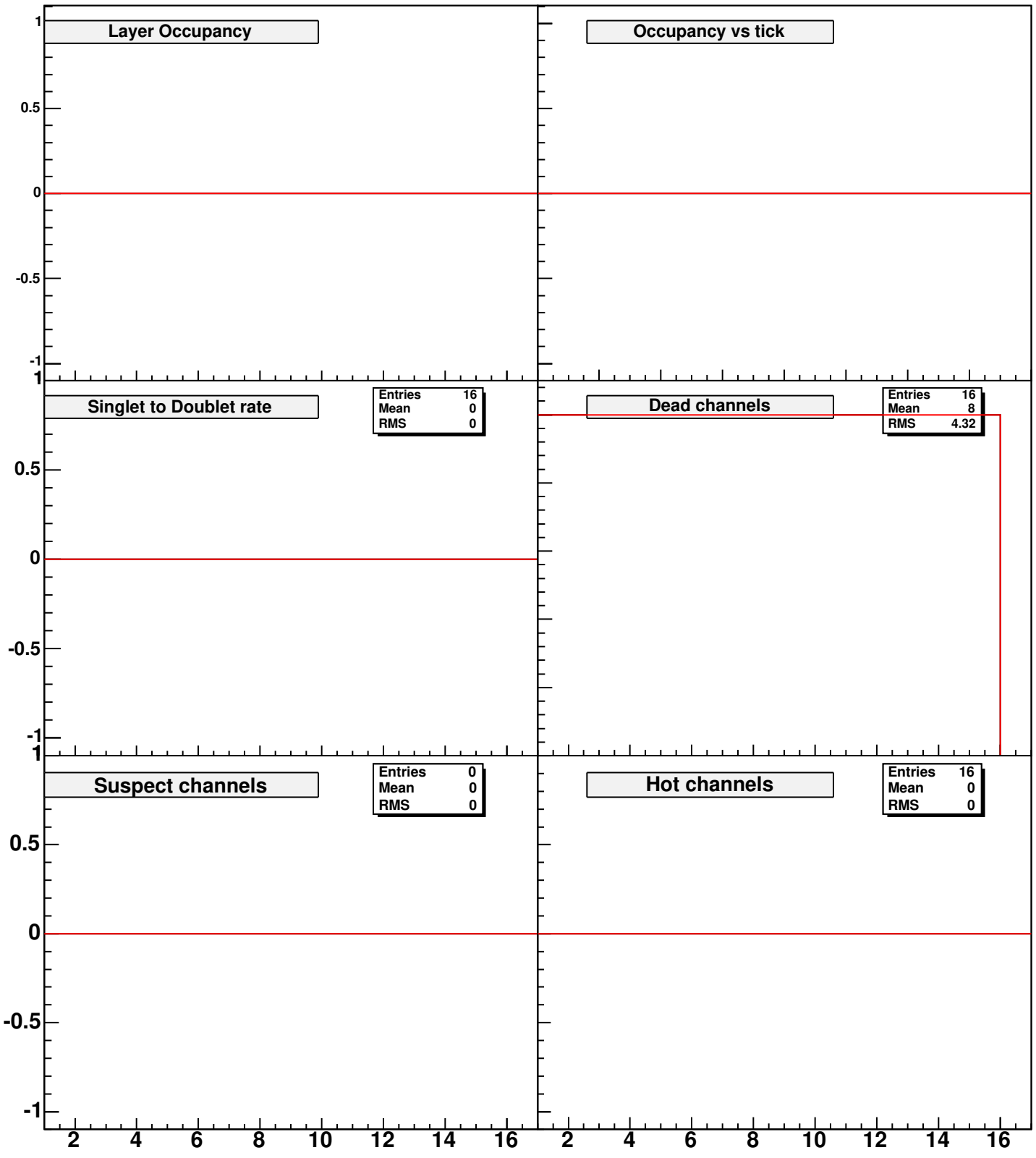
CFT Summary (All Clusters)



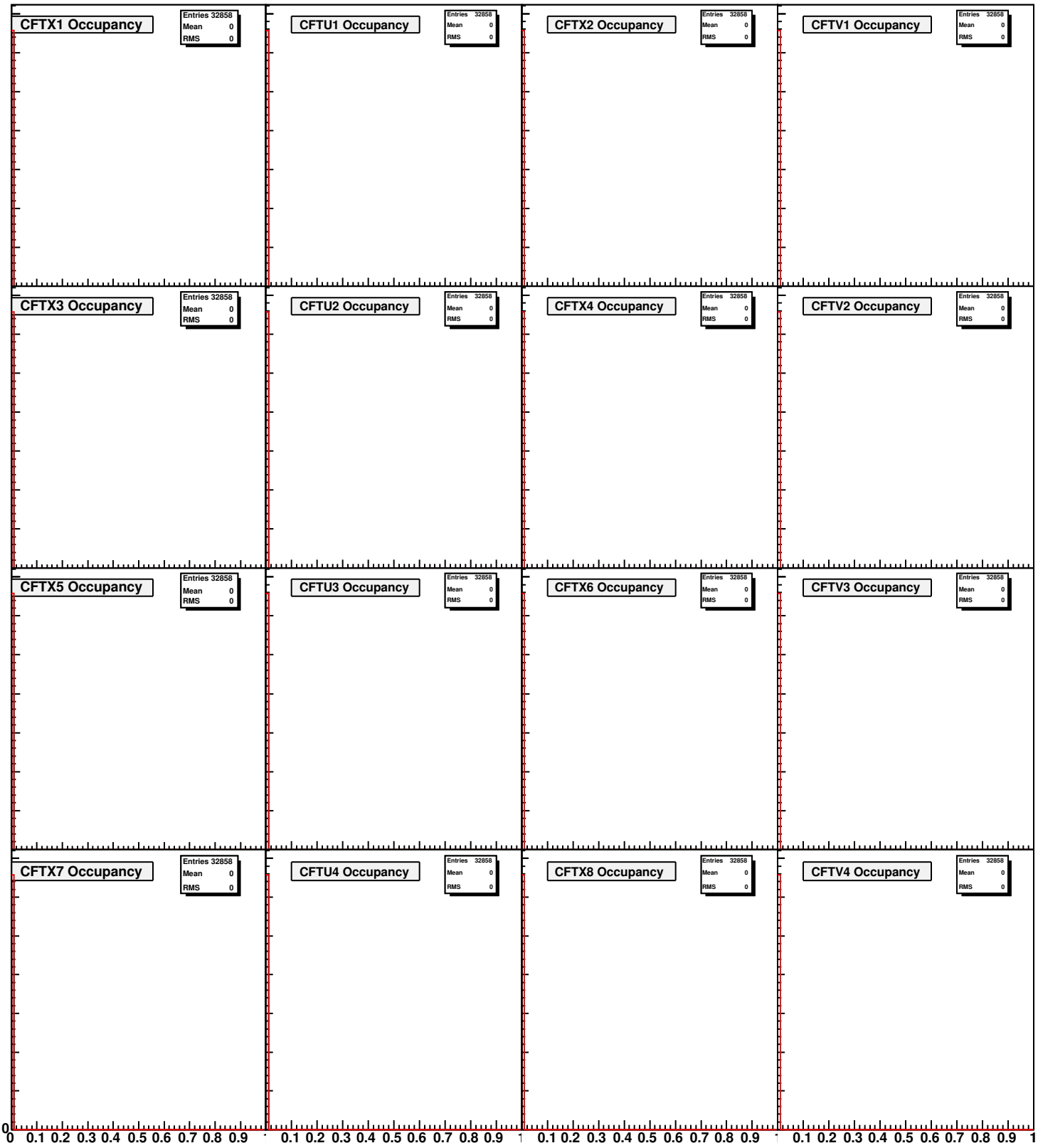
CFT Occupancy (All Clusters)



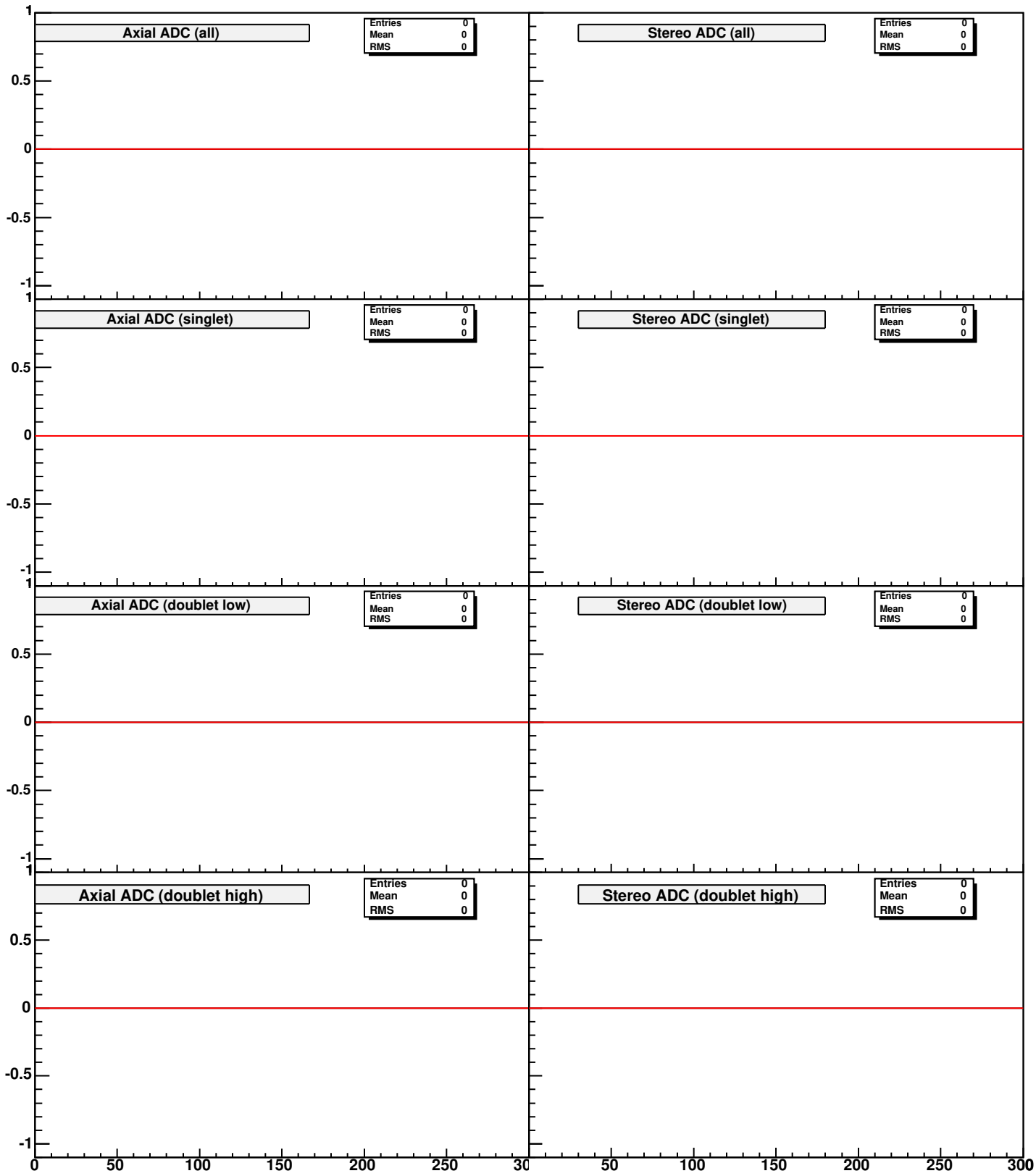
CFT ADC Summary (All Clusters)



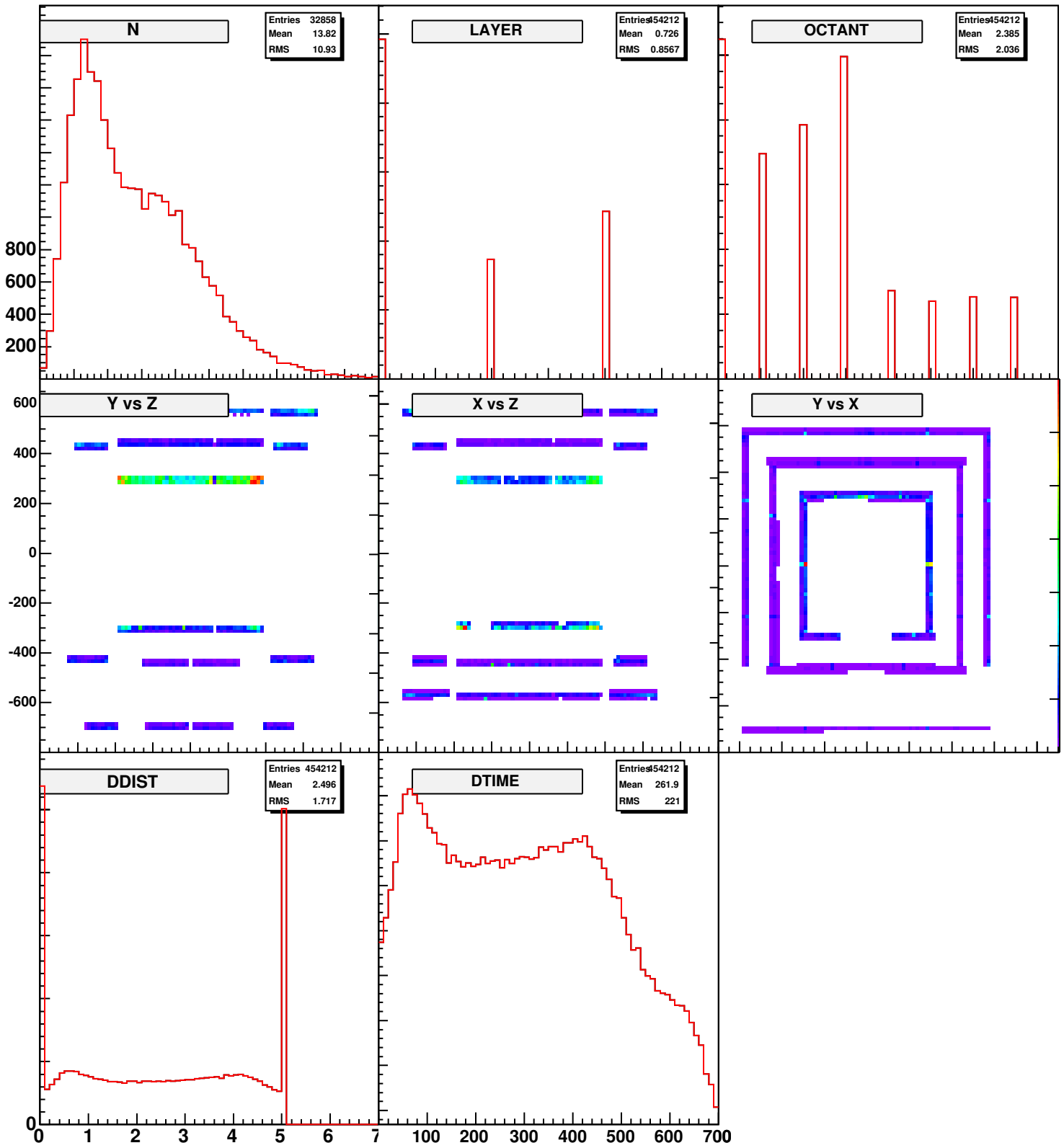
CFT Summary (Clusters on tracks)



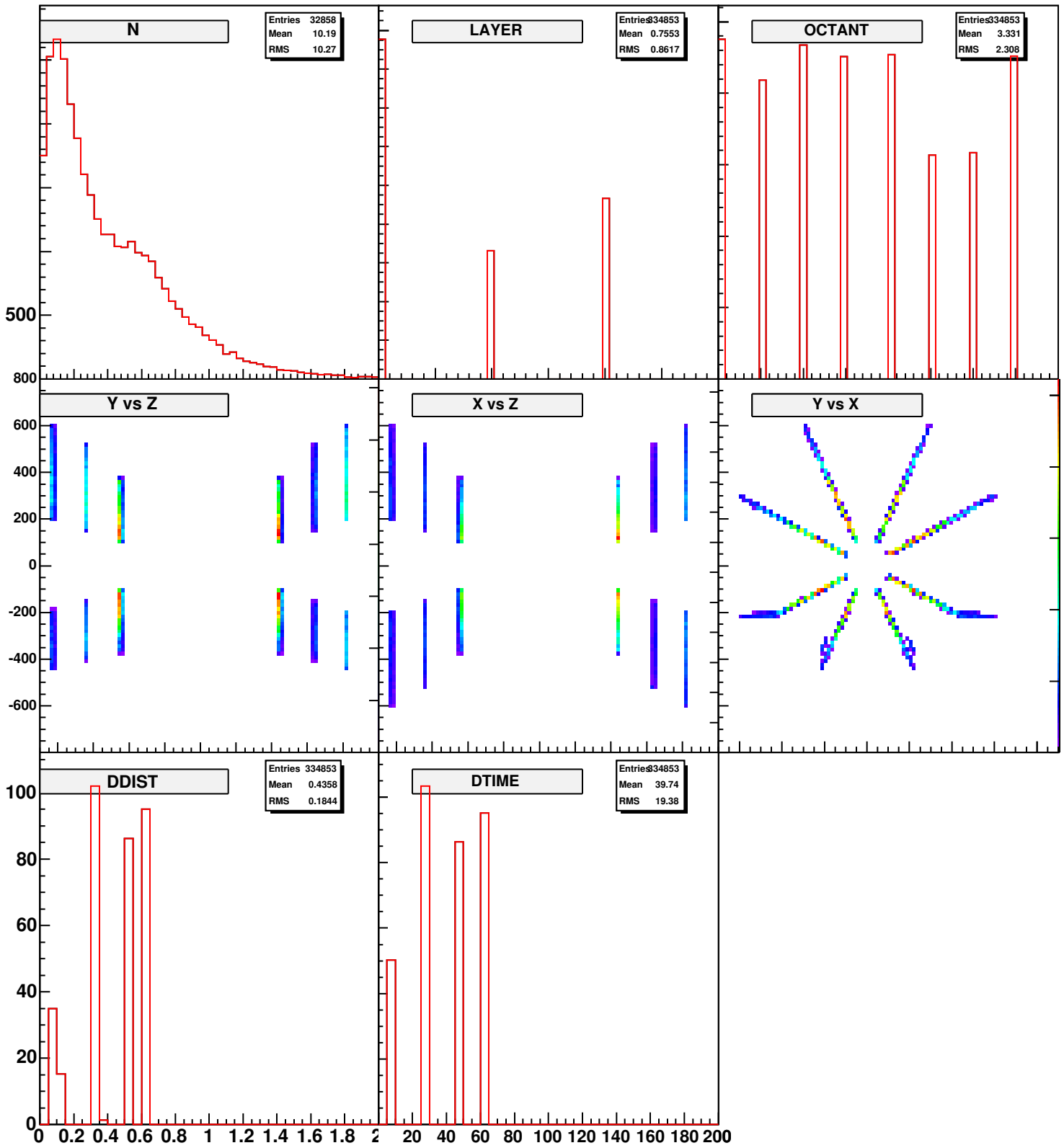
CFT Occupancy (Clusters on tracks)



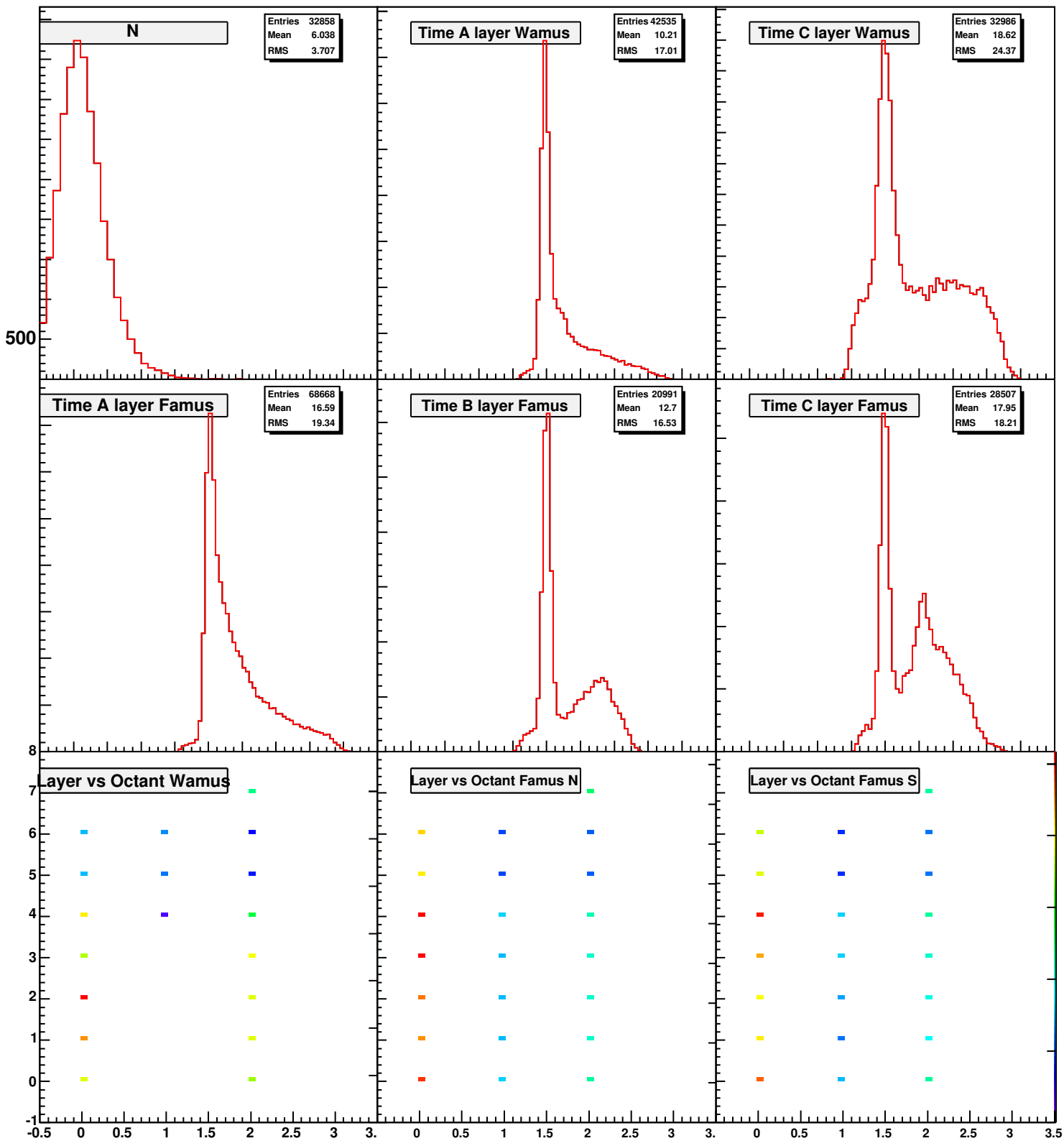
CFT ADC Summary (Clusters on tracks)


N
Entries 32858
Mean 13.82
RMS 10.93
LAYER
Entries 454212
Mean 0.726
RMS 0.8567
OCTANT
Entries 454212
Mean 2.385
RMS 2.036
Y vs Z
X vs Z
Y vs X
DDIST
Entries 454212
Mean 2.496
RMS 1.717
DTIME
Entries 454212
Mean 261.9
RMS 221

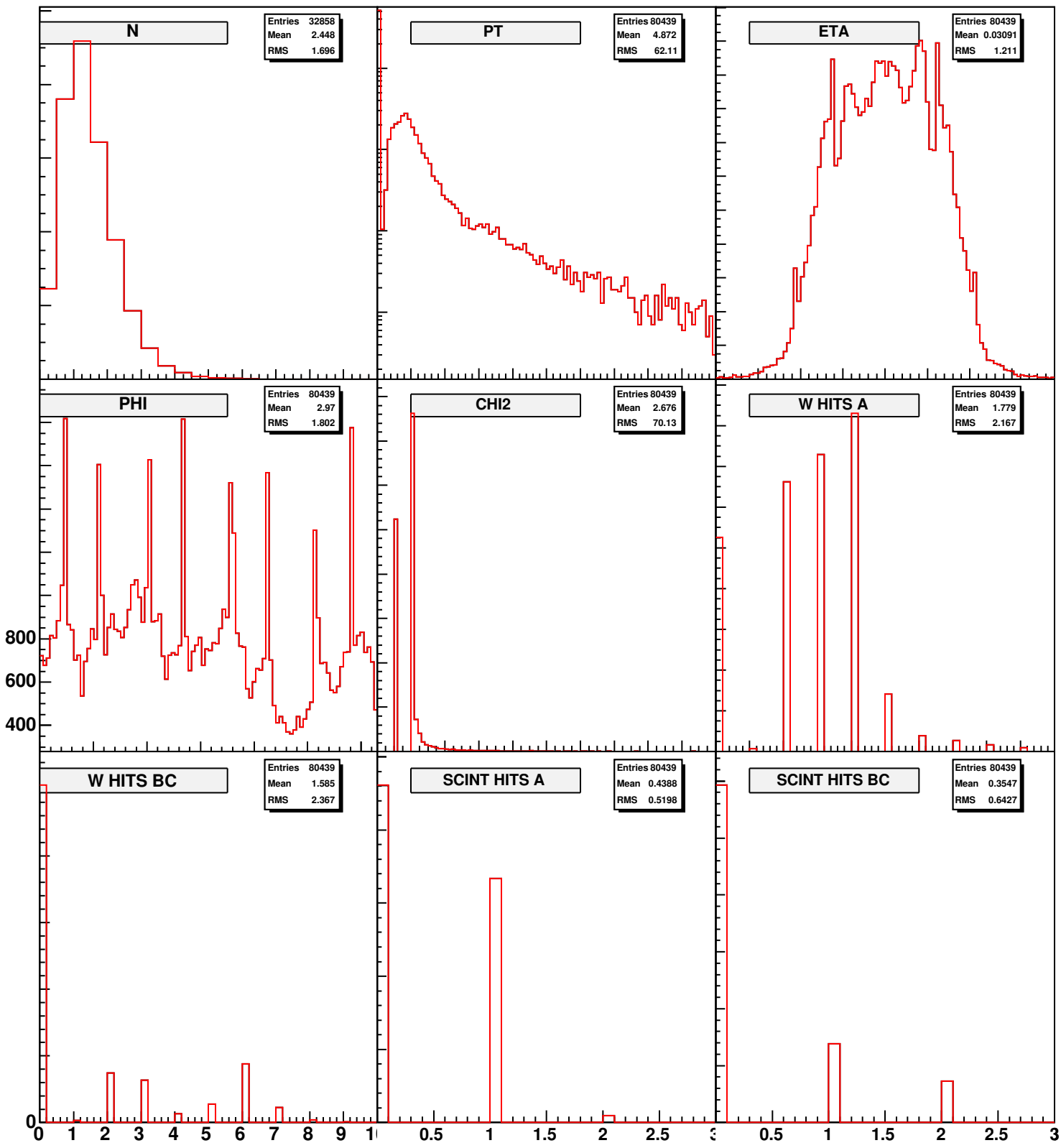
MuonPDT (All)


N
Entries 32858
Mean 10.19
RMS 10.27
LAYER
Entries 334853
Mean 0.7553
RMS 0.8617
OCTANT
Entries 334853
Mean 3.331
RMS 2.308
Y vs Z
X vs Z
Y vs X
DDIST
Entries 334853
Mean 0.4358
RMS 0.1844
DTIME
Entries 334853
Mean 39.74
RMS 19.38

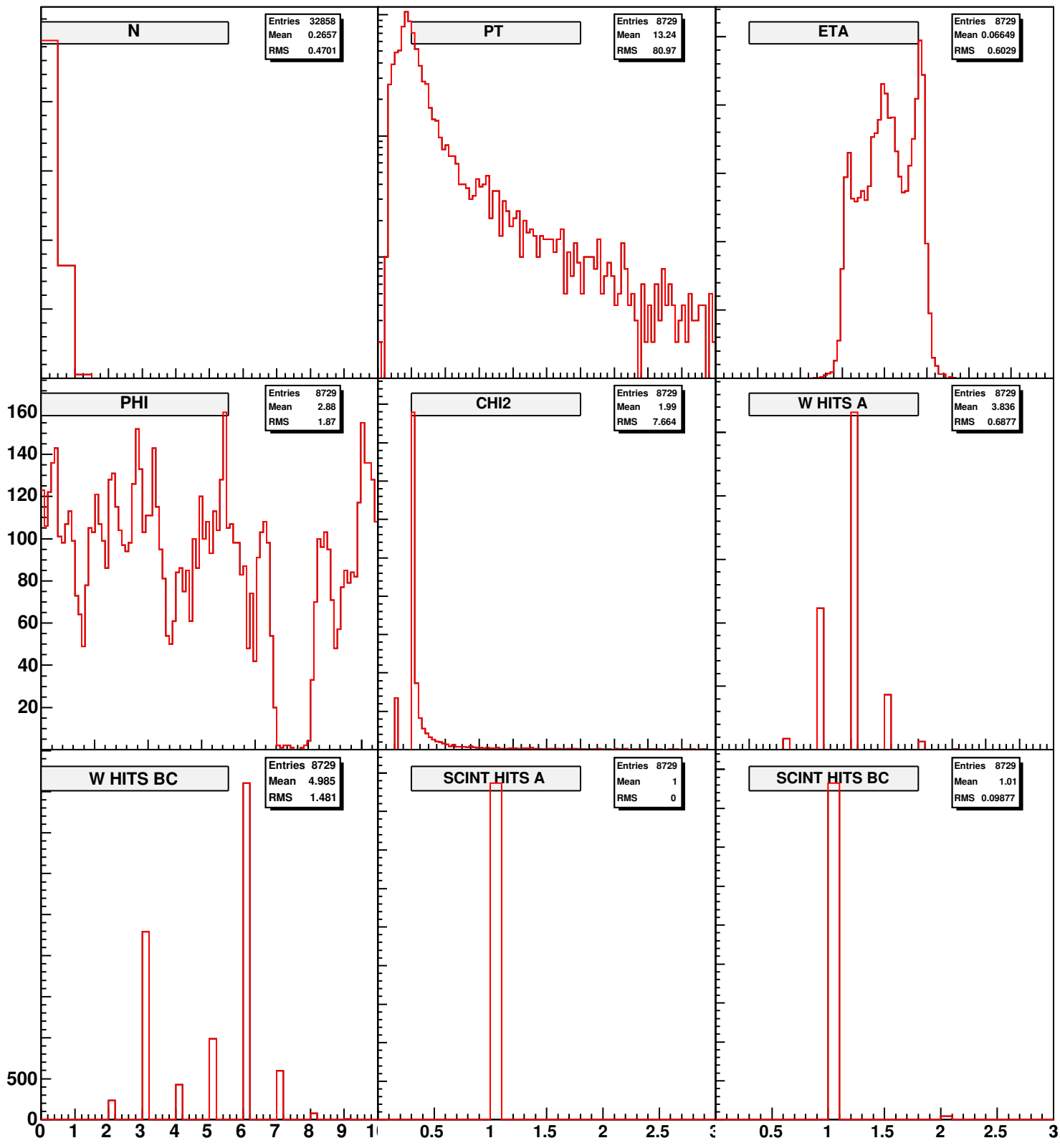
MuonMDT (All)


N
Entries 32858
Mean 6.038
RMS 3.707
Time A layer Wamus
Entries 42535
Mean 10.21
RMS 17.01
Time C layer Wamus
Entries 32986
Mean 18.62
RMS 24.37
Time A layer Famus
Entries 68668
Mean 16.59
RMS 19.34
Time B layer Famus
Entries 20991
Mean 12.7
RMS 16.53
Time C layer Famus
Entries 28507
Mean 17.95
RMS 18.21
Layer vs Octant Wamus
Layer vs Octant Famus N
Layer vs Octant Famus S
500
8
7
6
5
4
3
2
1
0
-1
-0.5
0
0.5
1
1.5
2
2.5
3
3.5

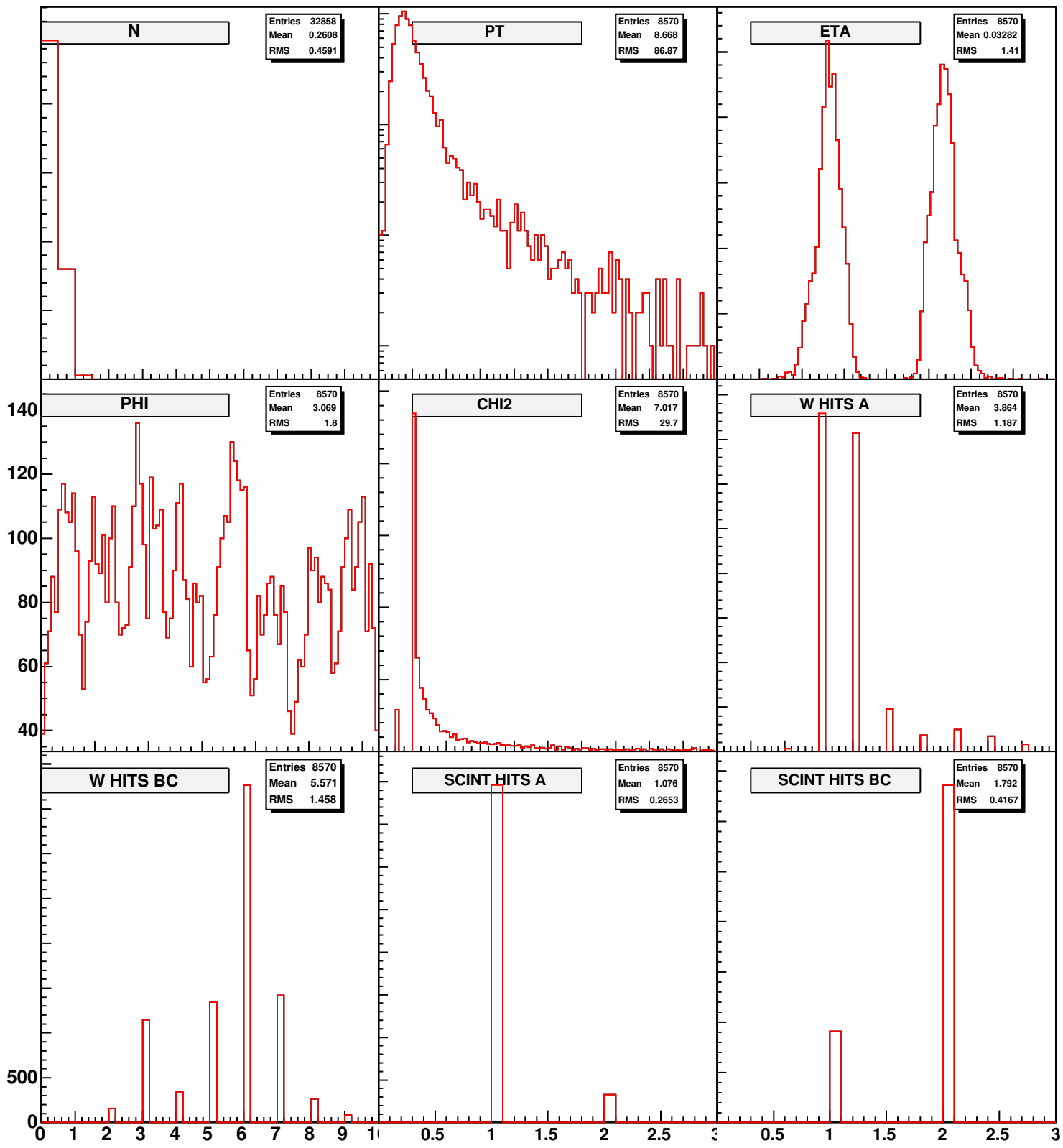
MuonMSC (All)



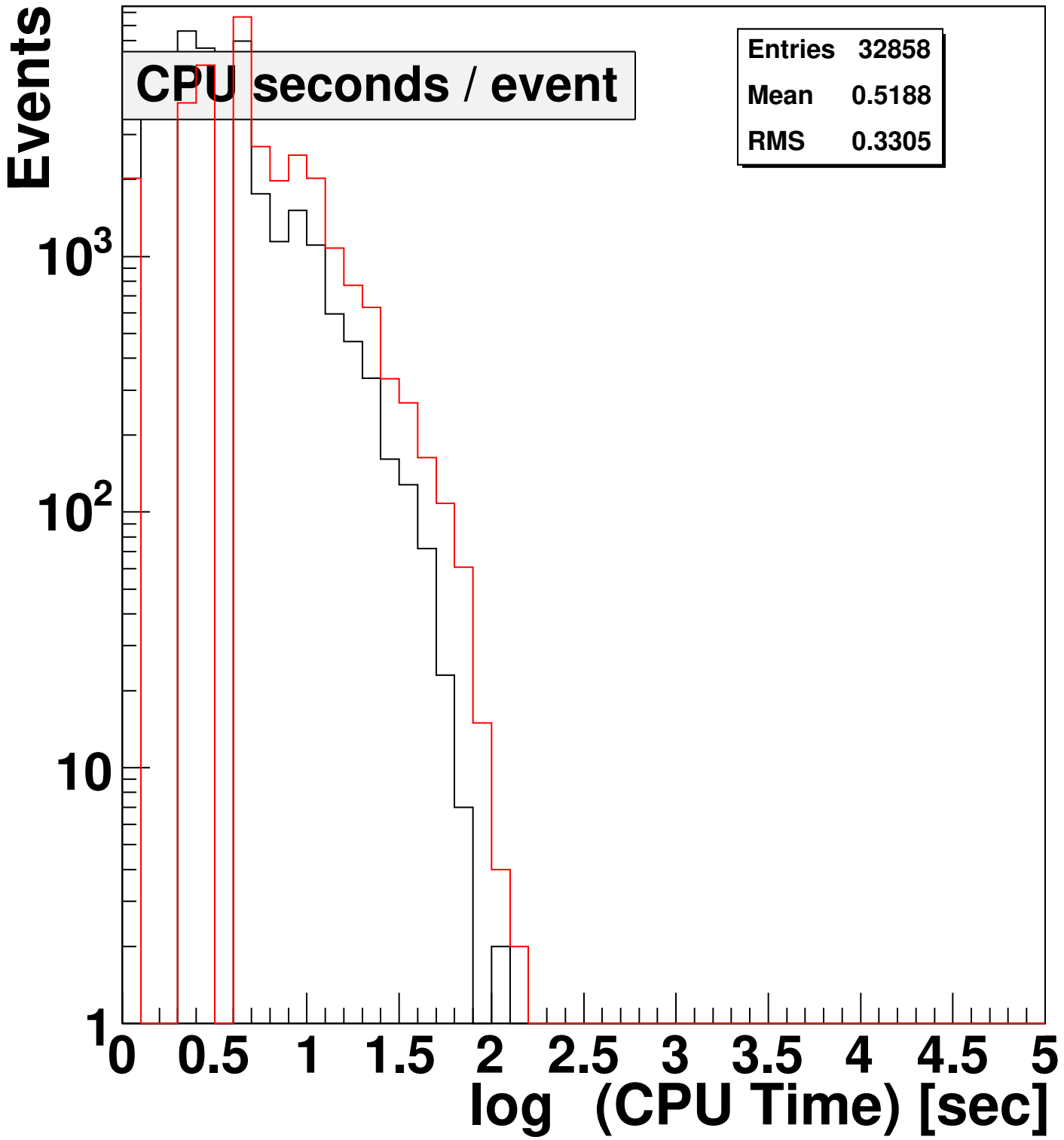
Muon Local Tracks (All)



Muon Local Tracks (MediumWamus)



Muon Local Tracks (MediumFamus)



RECO Performance (Timing)