certify_p17_05_01_run_208204_certification_200512011817
certify_p17_05_01_run_208204_certification_200512011817

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Page 3: Tracks Hits (All)
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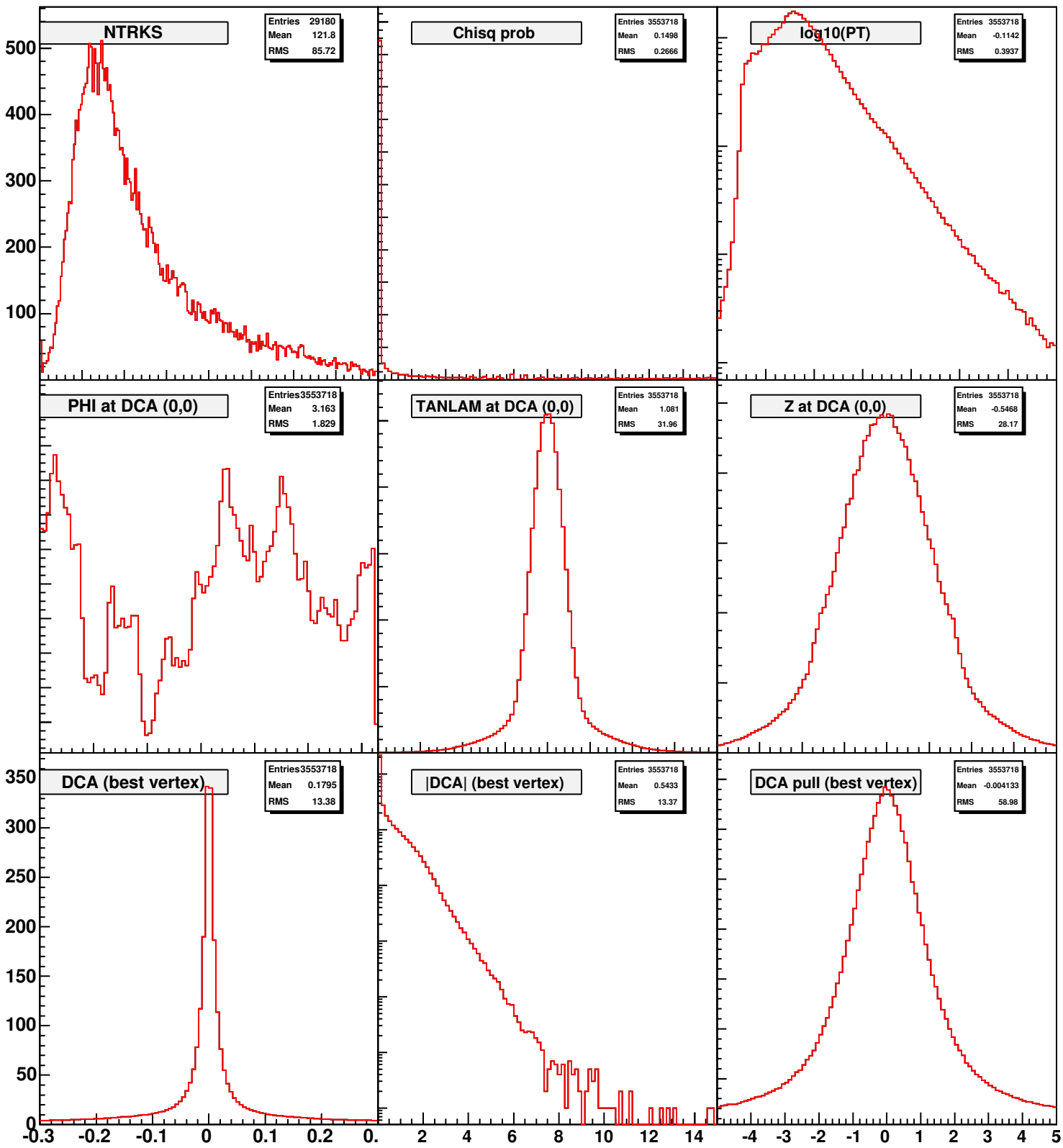
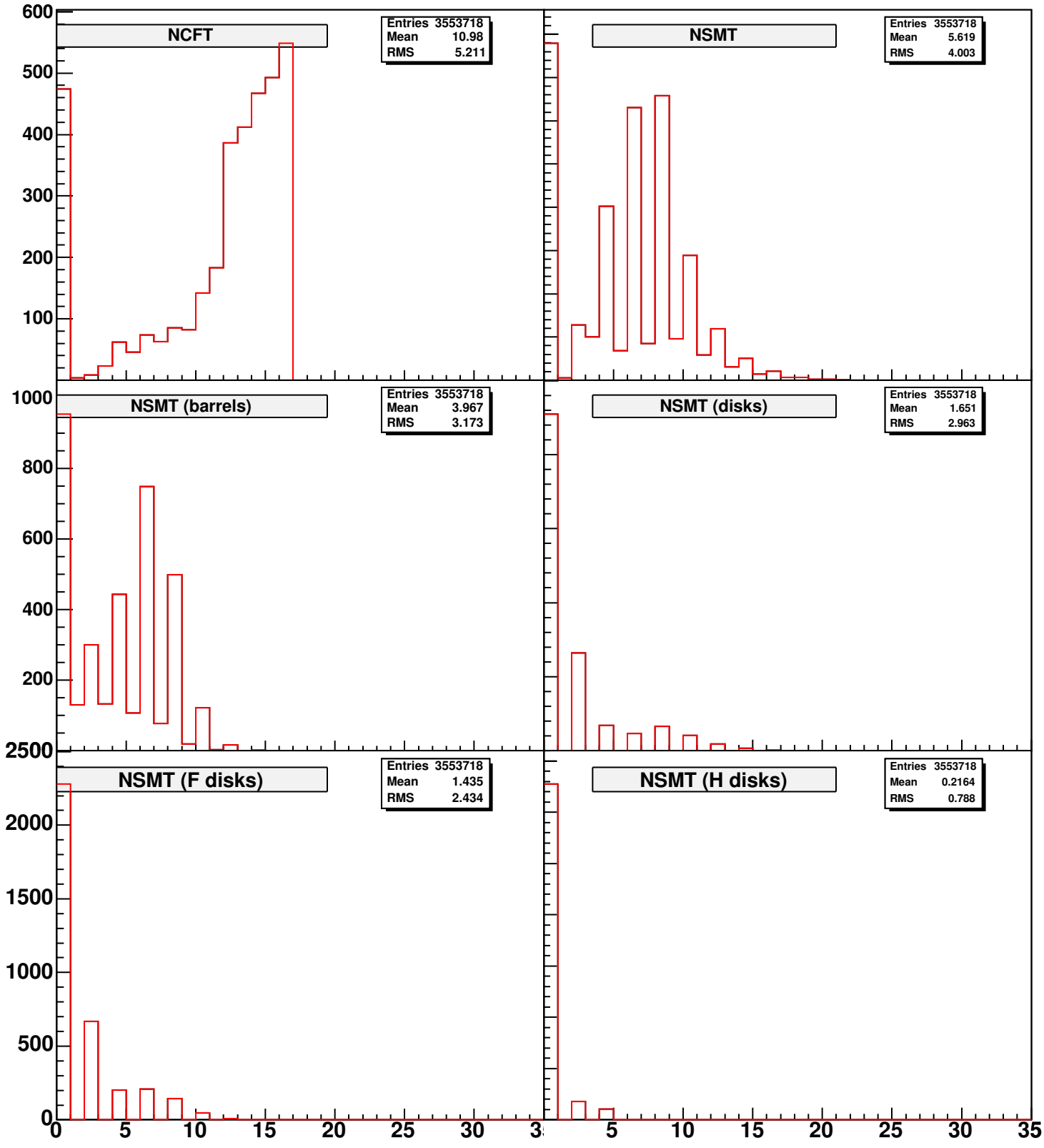
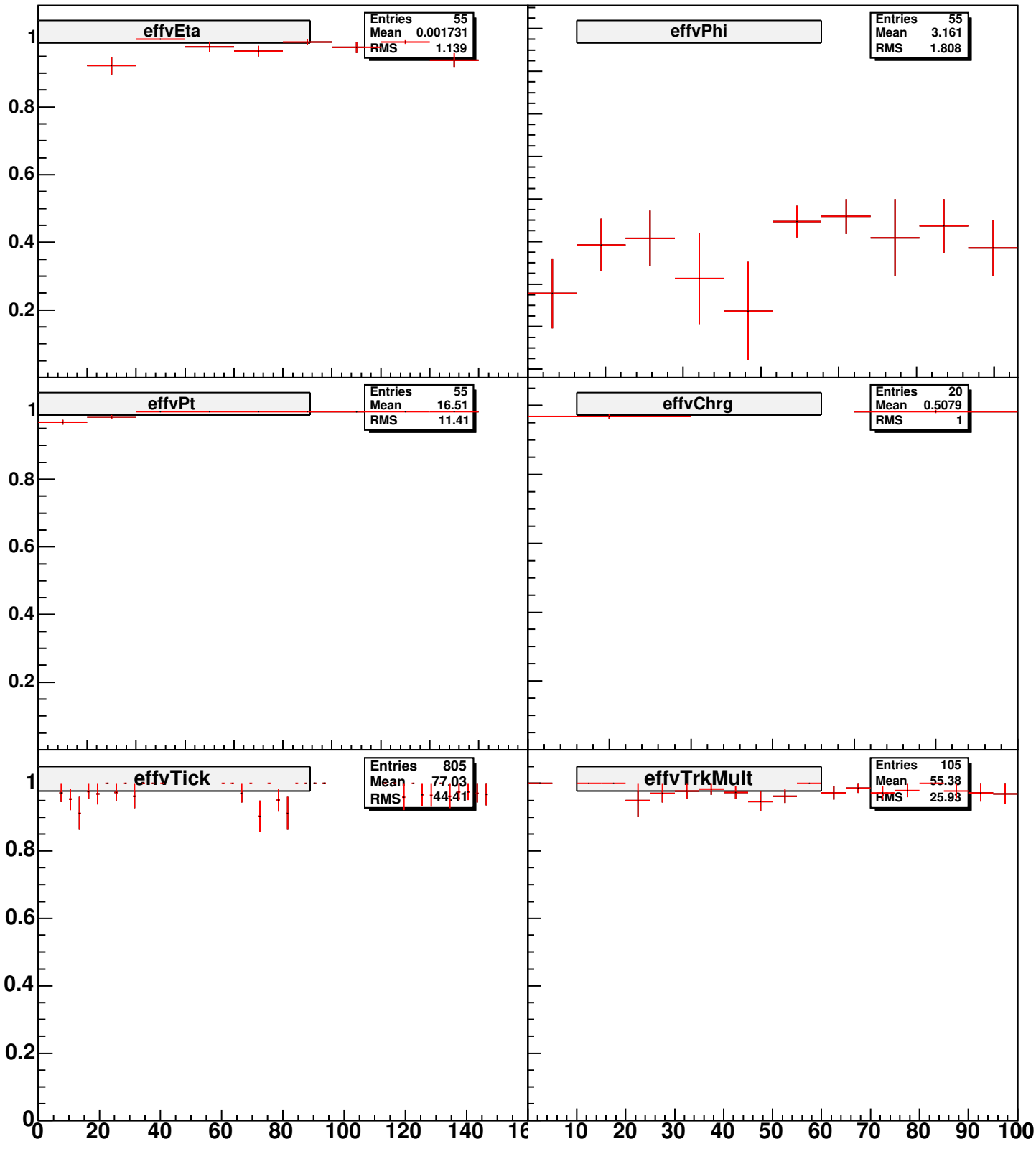
RecoCert_Plots (Index)

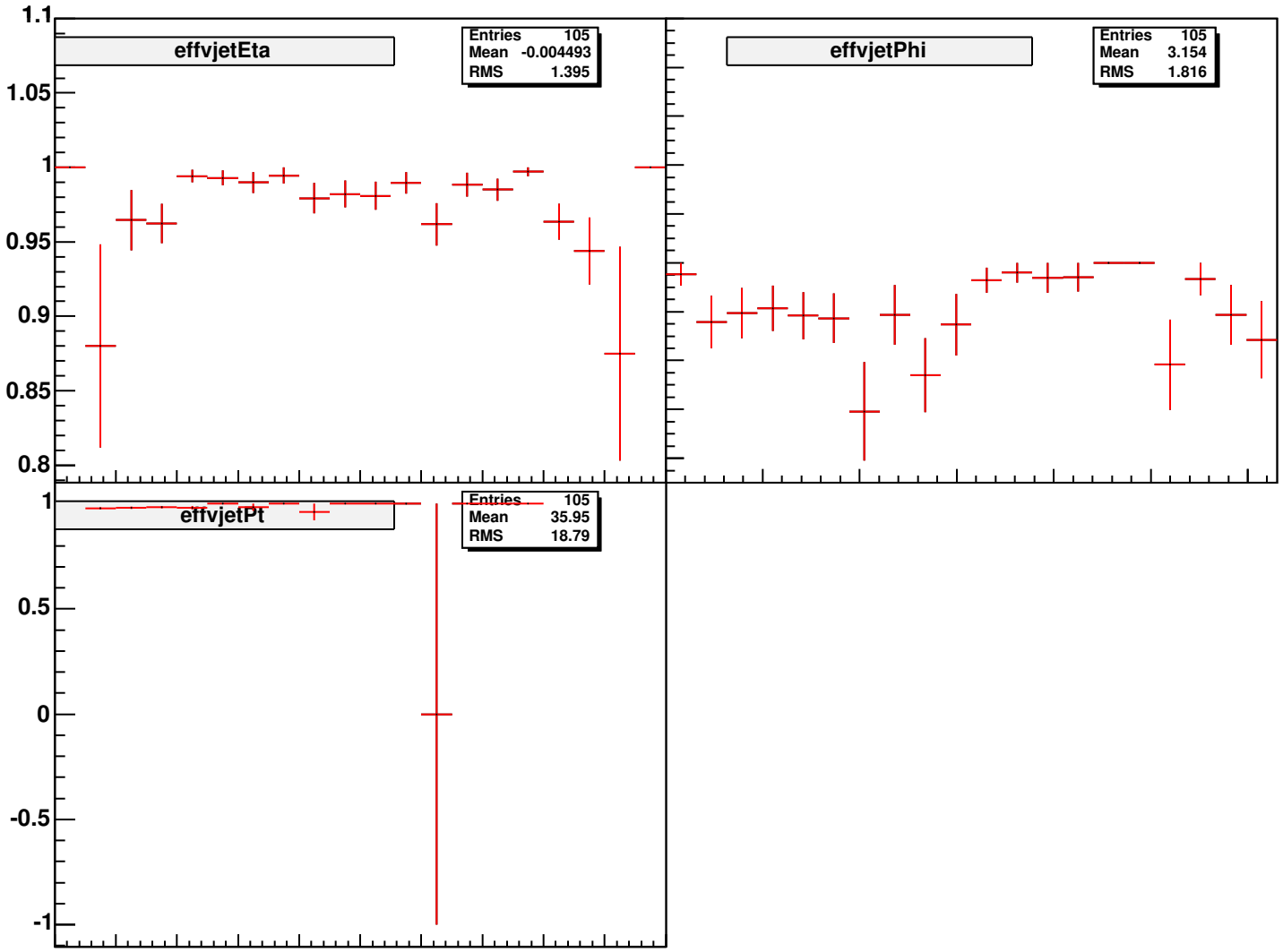

NTRKS
Entries 29180
Mean 121.8
RMS 85.72
Chisq prob
Entries 3553718
Mean 0.1498
RMS 0.2666
log10(PT)
Entries 3553718
Mean -0.1142
RMS 0.3937
PHI at DCA (0,0)
Entries 3553718
Mean 3.163
RMS 1.829
TANLAM at DCA (0,0)
Entries 3553718
Mean 1.081
RMS 31.96
Z at DCA (0,0)
Entries 3553718
Mean -0.5468
RMS 28.17
DCA (best vertex)
Entries 3553718
Mean 0.1795
RMS 13.38
|DCA| (best vertex)
Entries 3553718
Mean 0.5433
RMS 13.37
DCA pull (best vertex)
Entries 3553718
Mean -0.004133
RMS 58.98

Tracks (All)

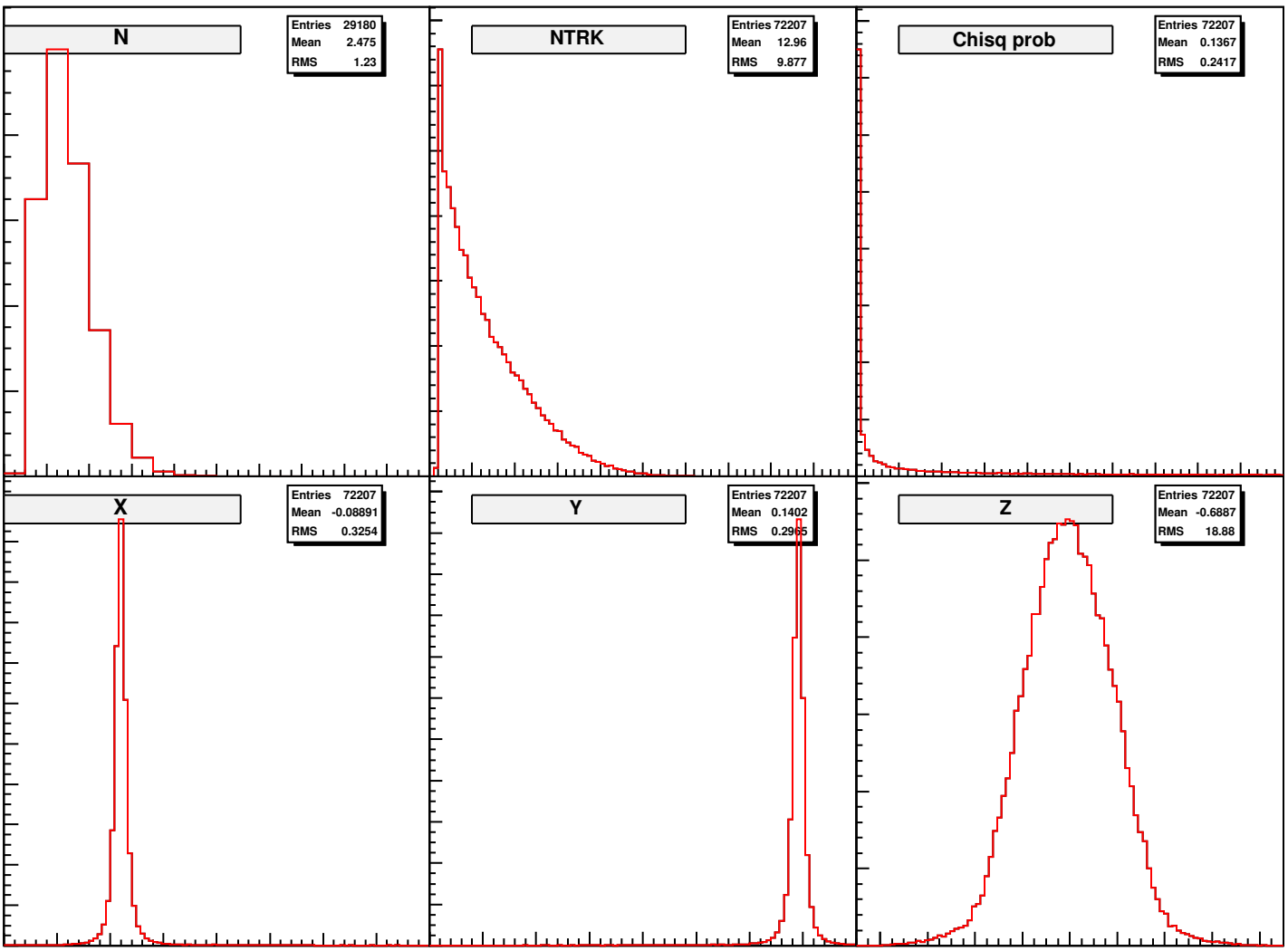

NCFT
Entries 3553718
Mean 10.98
RMS 5.211
NSMT
Entries 3553718
Mean 5.619
RMS 4.003
NSMT (barrels)
Entries 3553718
Mean 3.967
RMS 3.173
NSMT (disks)
Entries 3553718
Mean 1.651
RMS 2.963
NSMT (F disks)
Entries 3553718
Mean 1.435
RMS 2.434
NSMT (H disks)
Entries 3553718
Mean 0.2164
RMS 0.788
Track Hits (All)



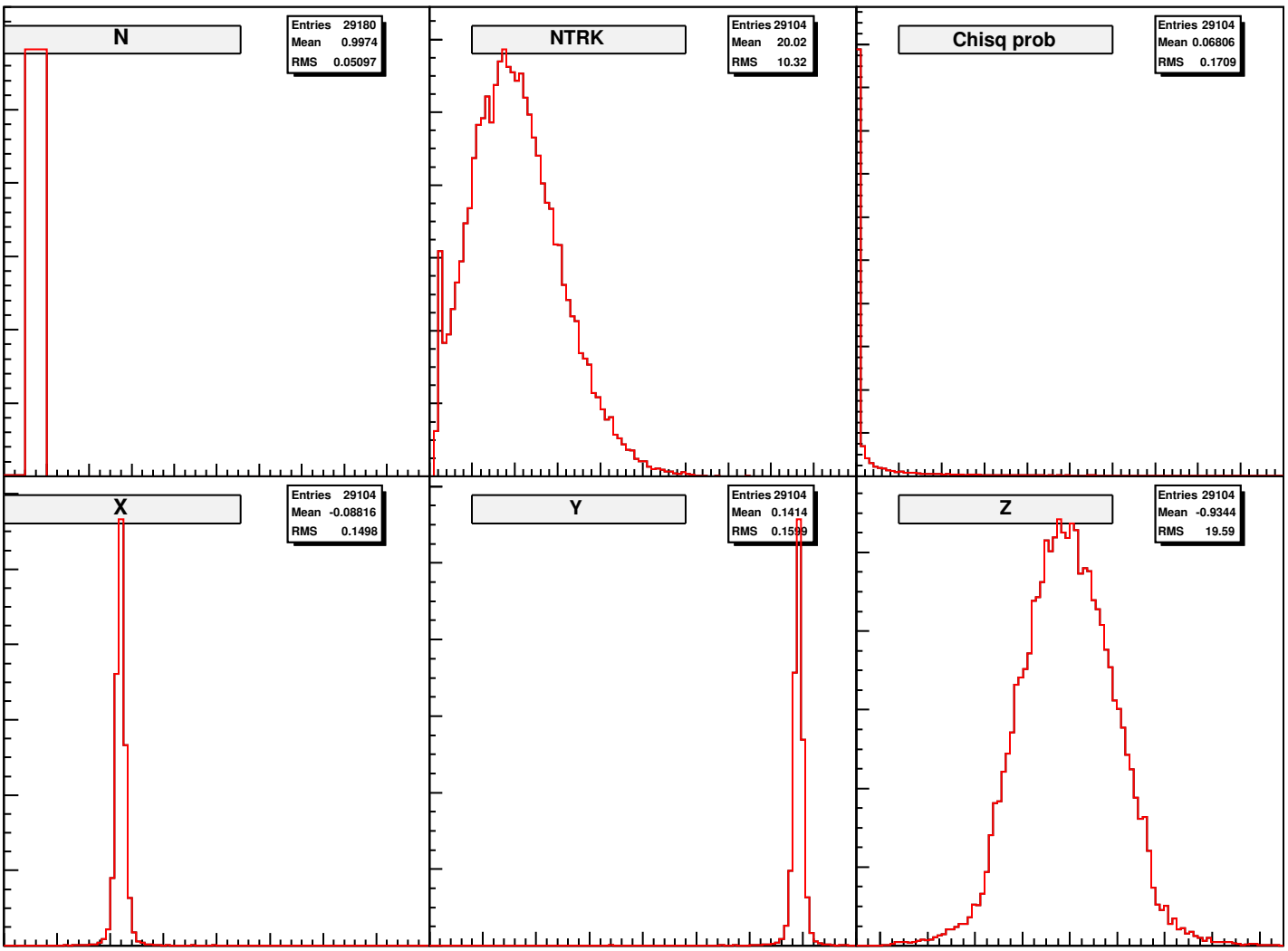
Tracking (Efficiency-Isolated)



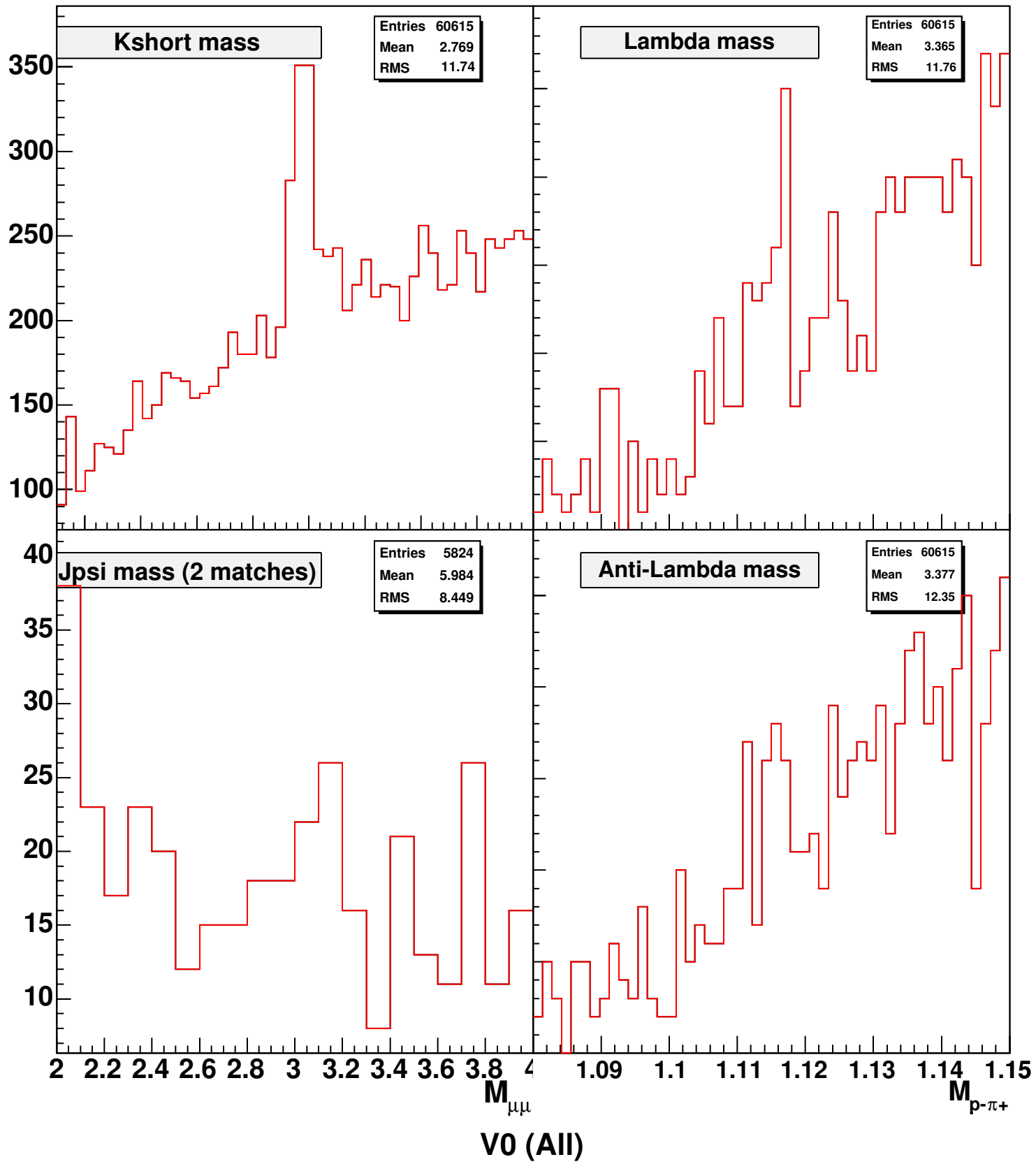
Tracking (Efficiency-InJets)

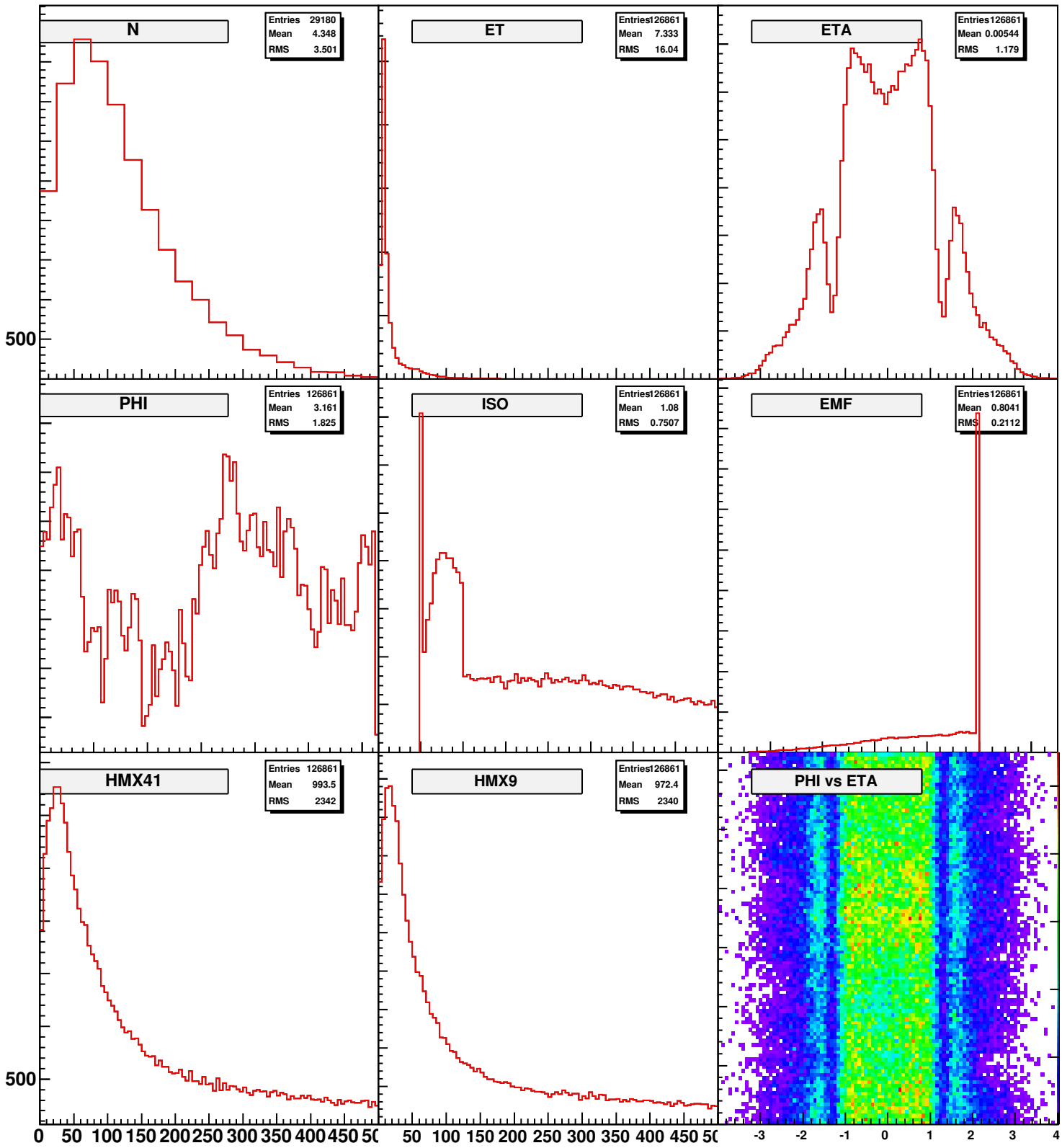


Vertices (Primary - all candidates)

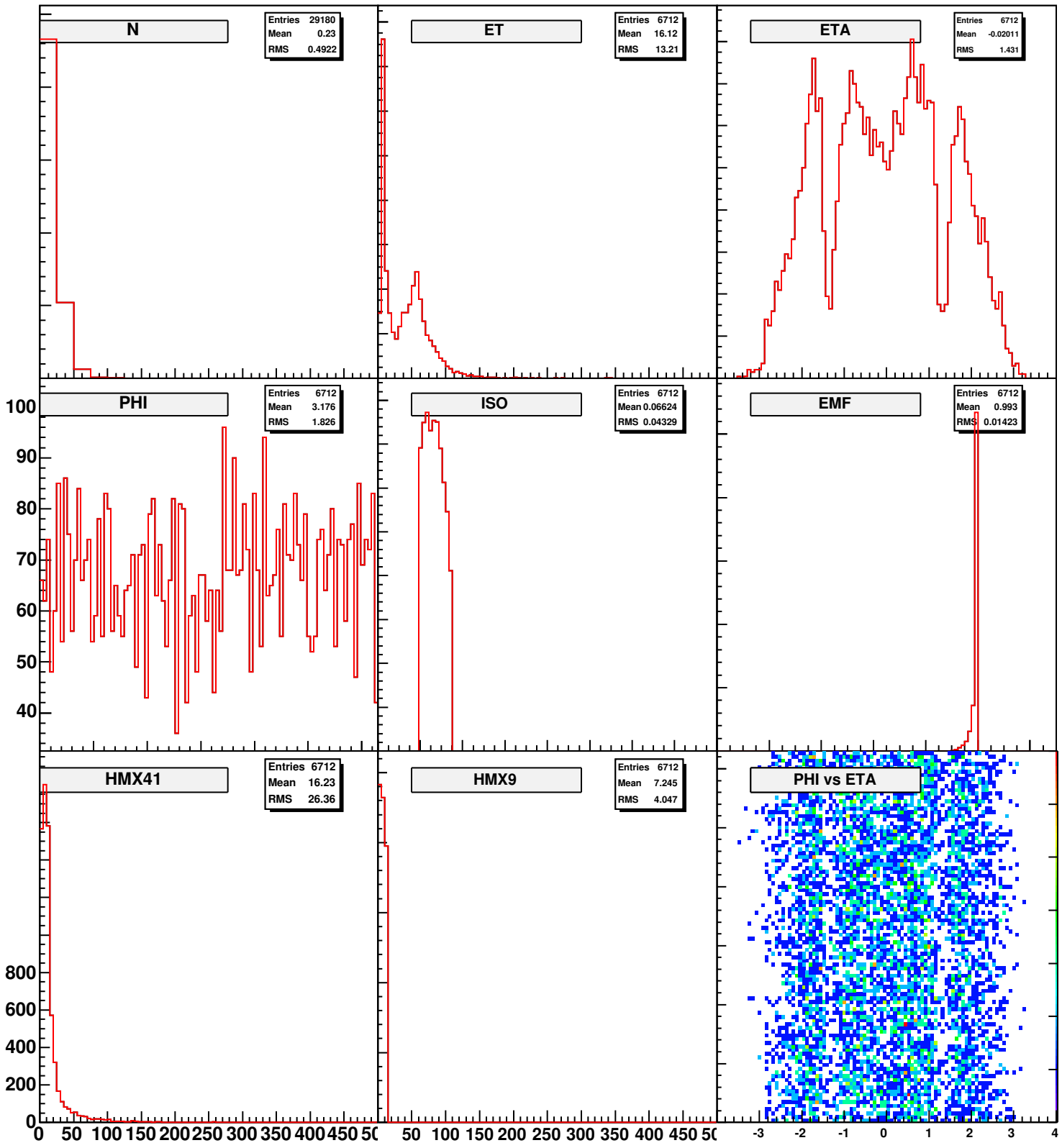


Vertices (Primary - best)

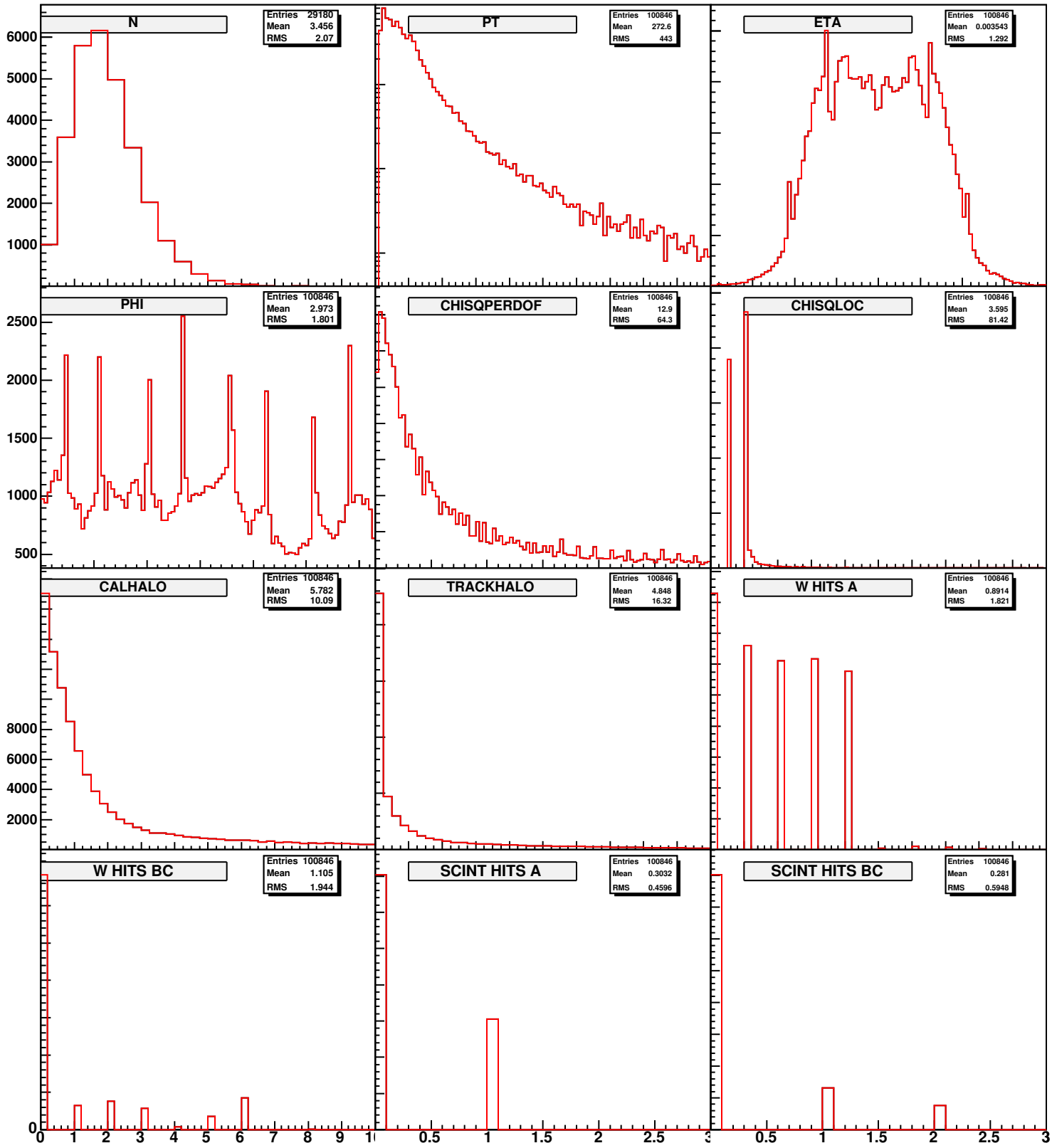

Kshort mass
Entries 60615
Mean 2.769
RMS 11.74
Lambda mass
Entries 60615
Mean 3.365
RMS 11.76
Jpsi mass (2 matches)
Entries 5824
Mean 5.984
RMS 8.449
Anti-Lambda mass
Entries 60615
Mean 3.377
RMS 12.35
M$_{\mu\mu}$
M$_{p\text{-}\pi+}$
V0 (All)



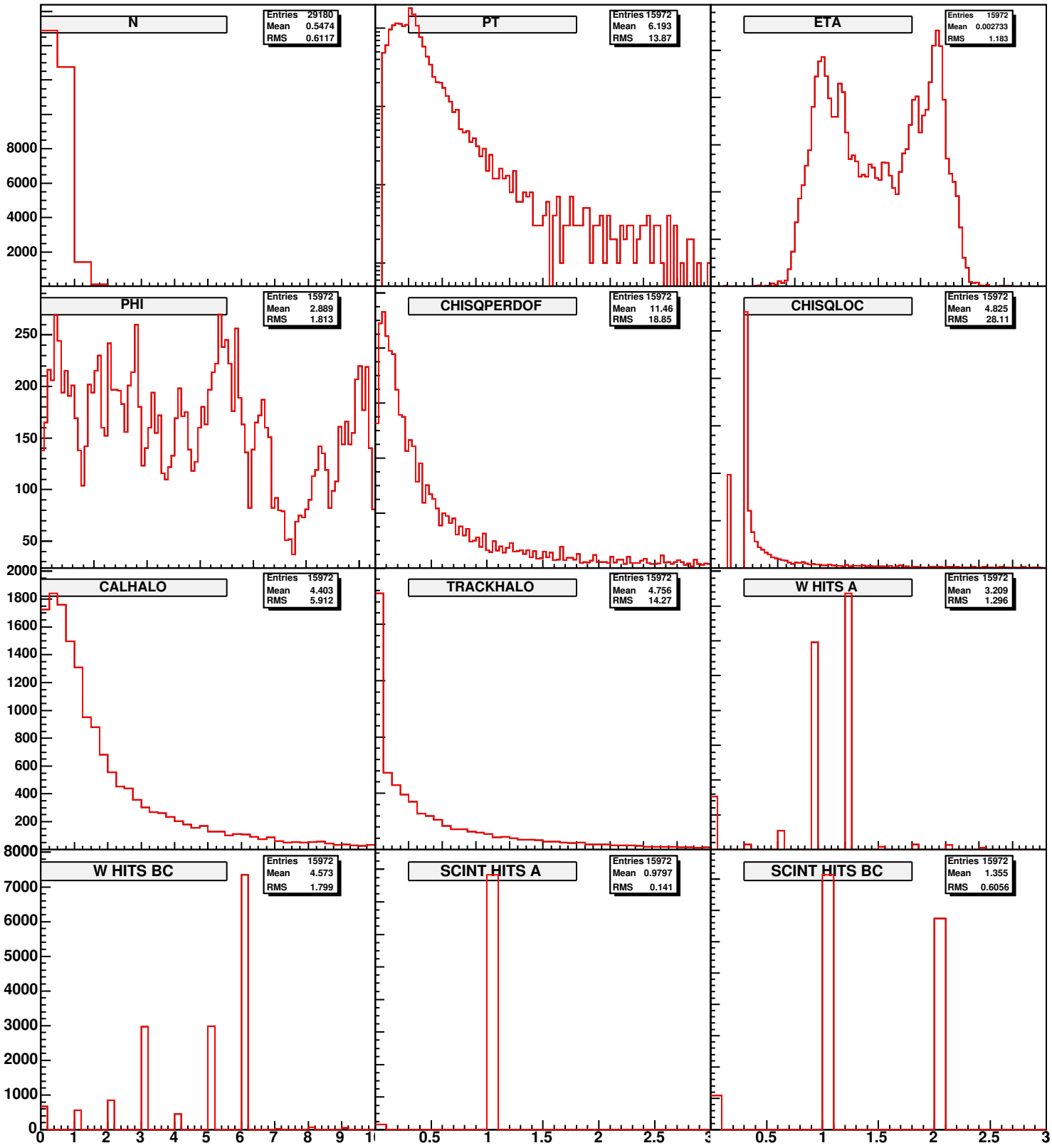
Electrons (SCONE All)



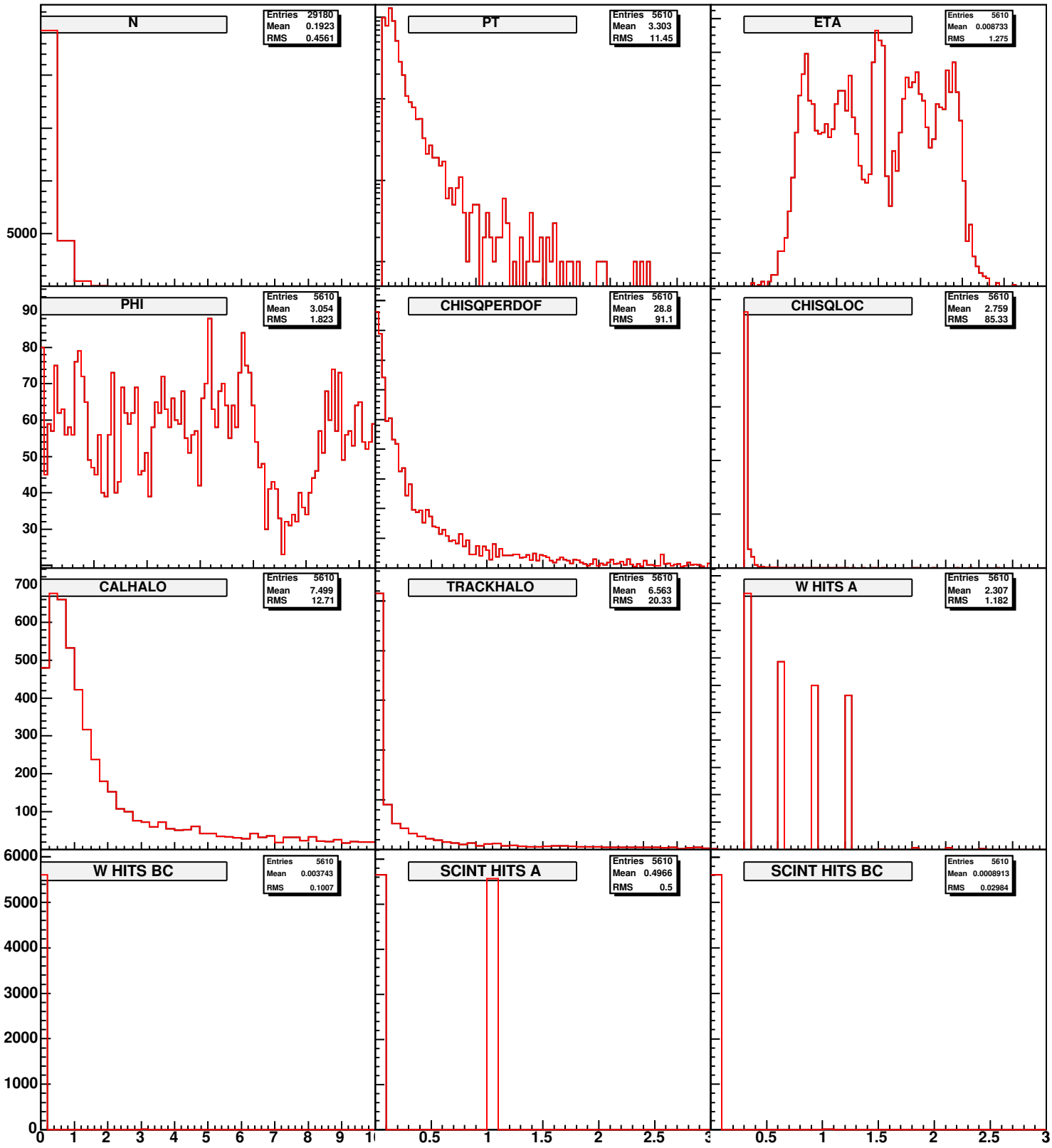
Electrons (SCONE Tight)


N
Entries 29180
Mean 3.456
RMS 2.07
PT
Entries 100846
Mean 272.6
RMS 443
ETA
Entries 100846
Mean 0.003543
RMS 1.292
PHI
Entries 100846
Mean 2.973
RMS 1.801
CHISQPERDOF
Entries 100846
Mean 12.9
RMS 64.3
CHISQLOC
Entries 100846
Mean 3.595
RMS 81.42
CALHALO
Entries 100846
Mean 5.782
RMS 10.09
TRACKHALO
Entries 100846
Mean 4.848
RMS 16.32
W HITS A
Entries 100846
Mean 0.8914
RMS 1.821
W HITS BC
Entries 100846
Mean 1.105
RMS 1.944
SCINT HITS A
Entries 100846
Mean 0.3032
RMS 0.4596
SCINT HITS BC
Entries 100846
Mean 0.281
RMS 0.5948

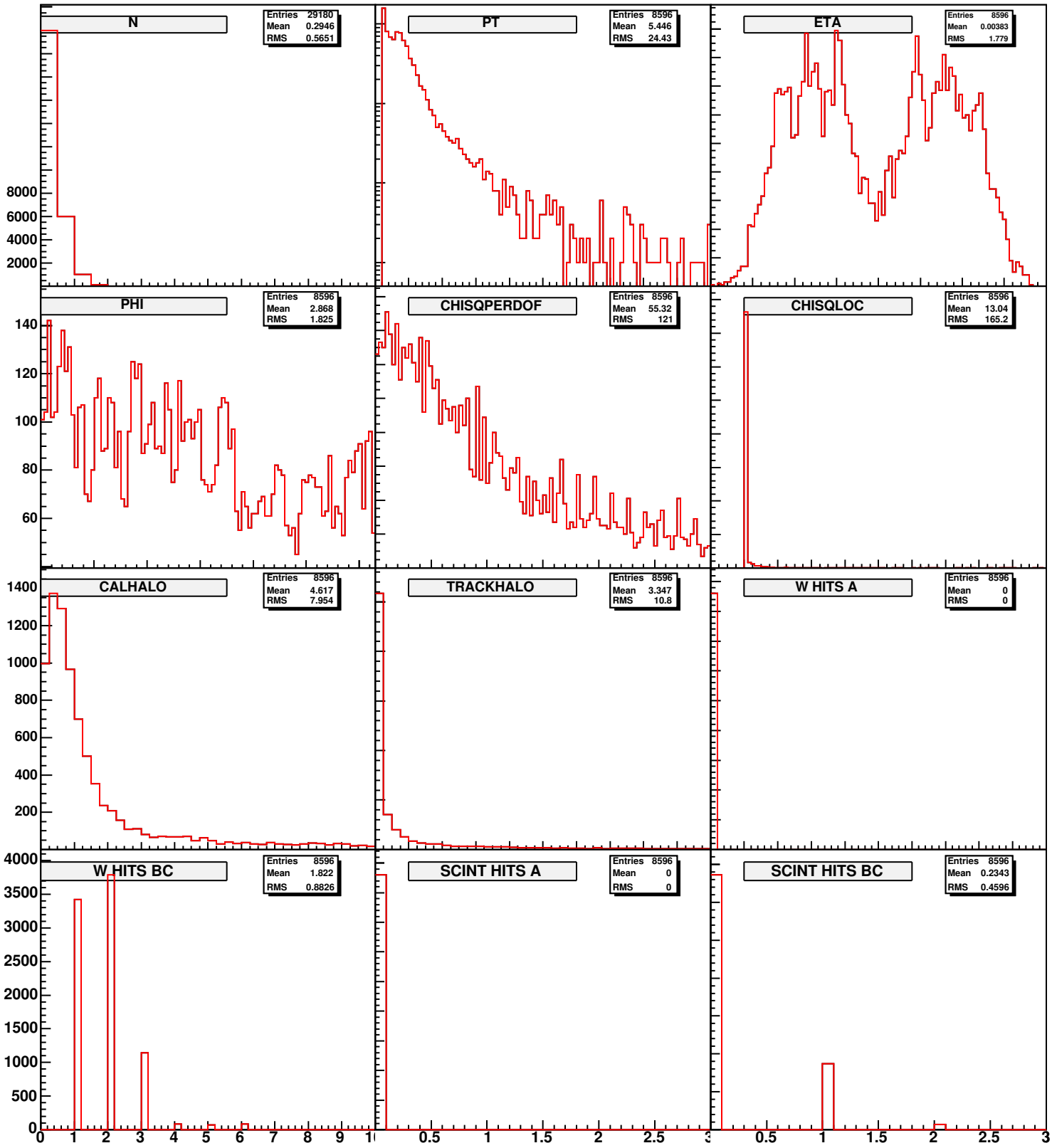
Muons (All)



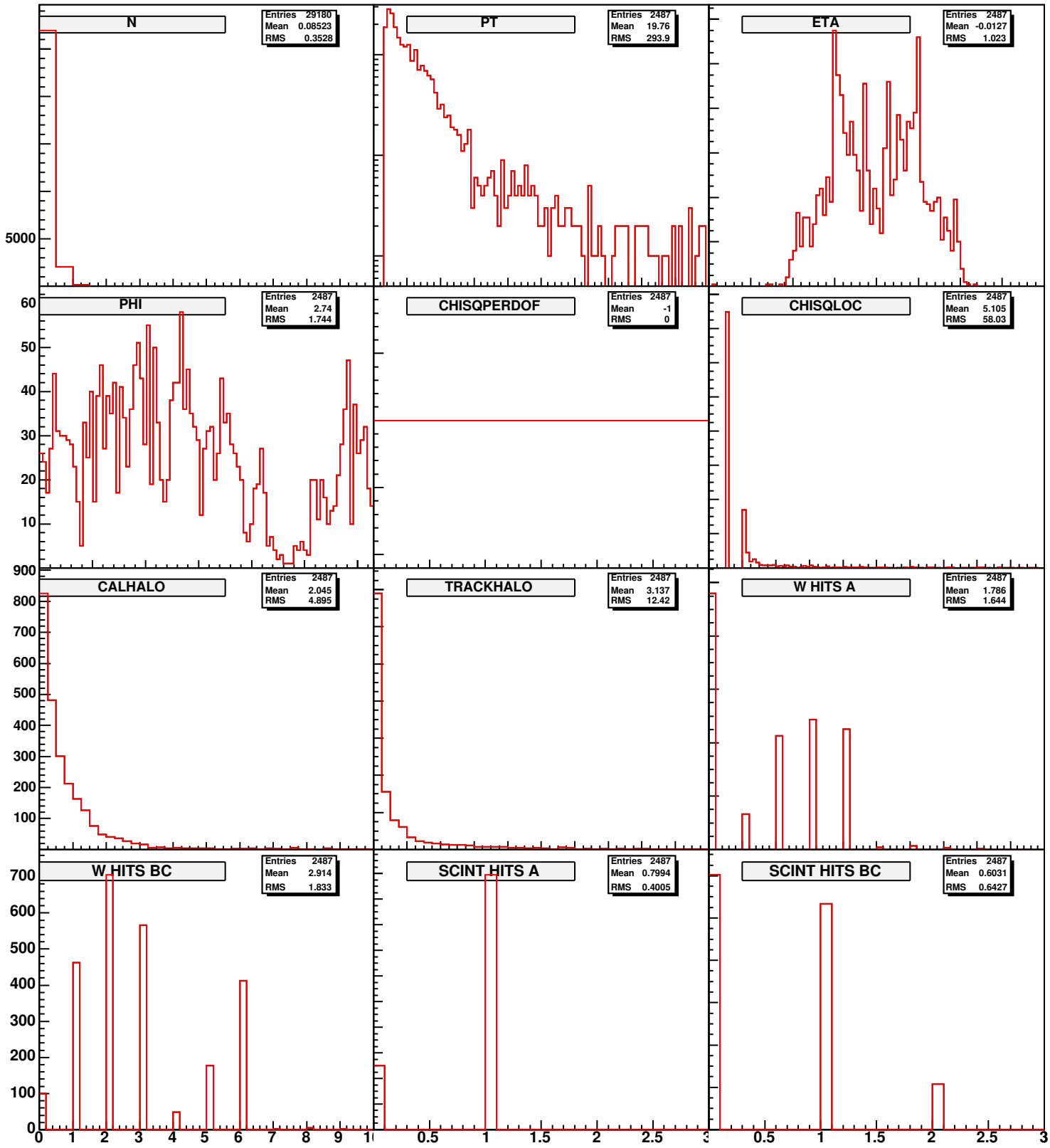
Muons (Matched)


N
Entries 29180
Mean 0.1923
RMS 0.4561
PT
Entries 5610
Mean 3.303
RMS 11.45
ETA
Entries 5610
Mean 0.008733
RMS 1.275
PHI
Entries 5610
Mean 3.054
RMS 1.823
CHISQPERDOF
Entries 5610
Mean 28.8
RMS 91.1
CHISQLOC
Entries 5610
Mean 2.759
RMS 85.33
CALHALO
Entries 5610
Mean 7.499
RMS 12.71
TRACKHALO
Entries 5610
Mean 6.563
RMS 20.33
W HITS A
Entries 5610
Mean 2.307
RMS 1.182
W HITS BC
Entries 5610
Mean 0.003743
RMS 0.1007
SCINT HITS A
Entries 5610
Mean 0.4966
RMS 0.5
SCINT HITS BC
Entries 5610
Mean 0.0008913
RMS 0.02984

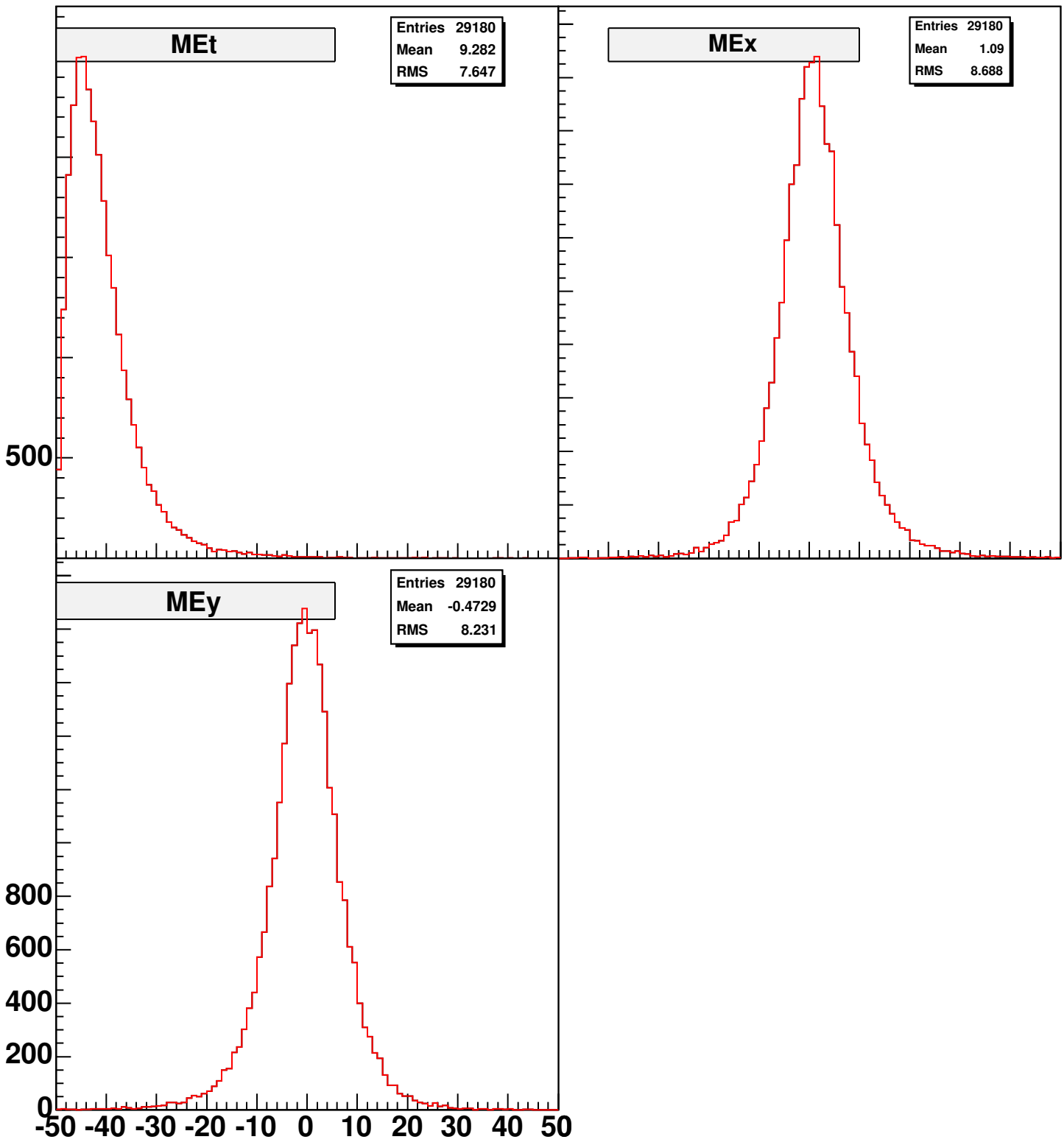
Muons (Astub)

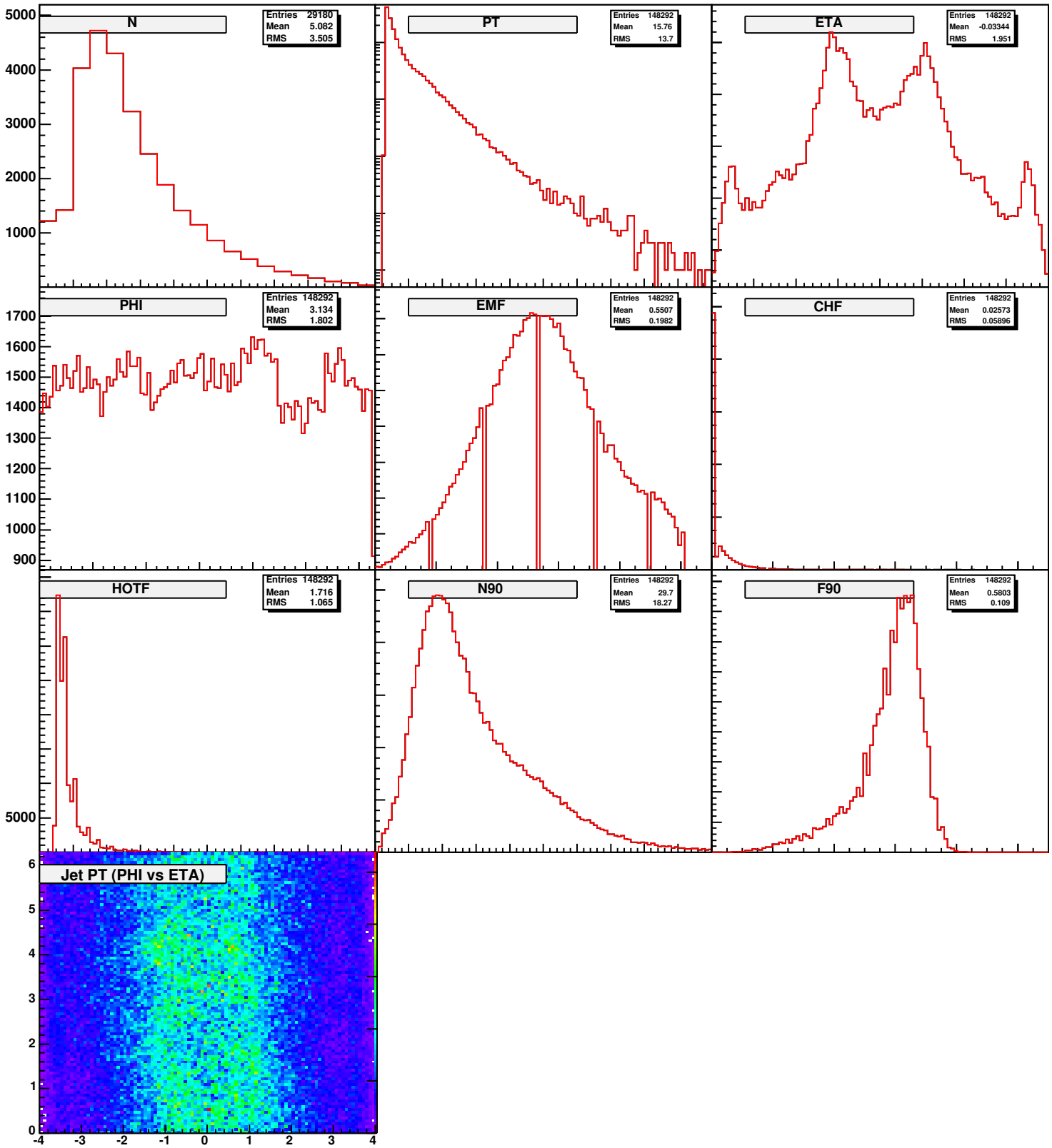


Muons (BCstub)

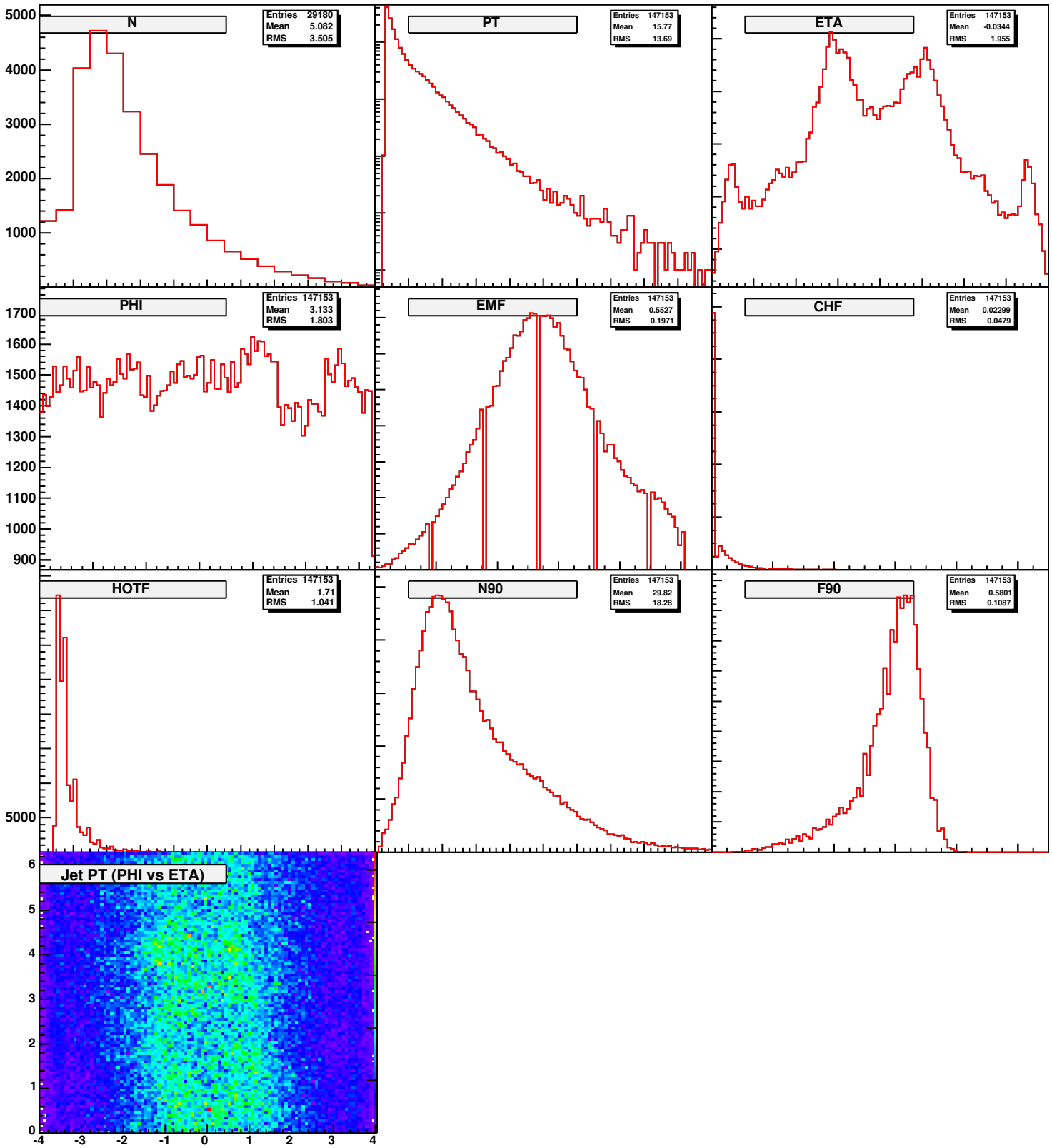


Muons (Unmatched)

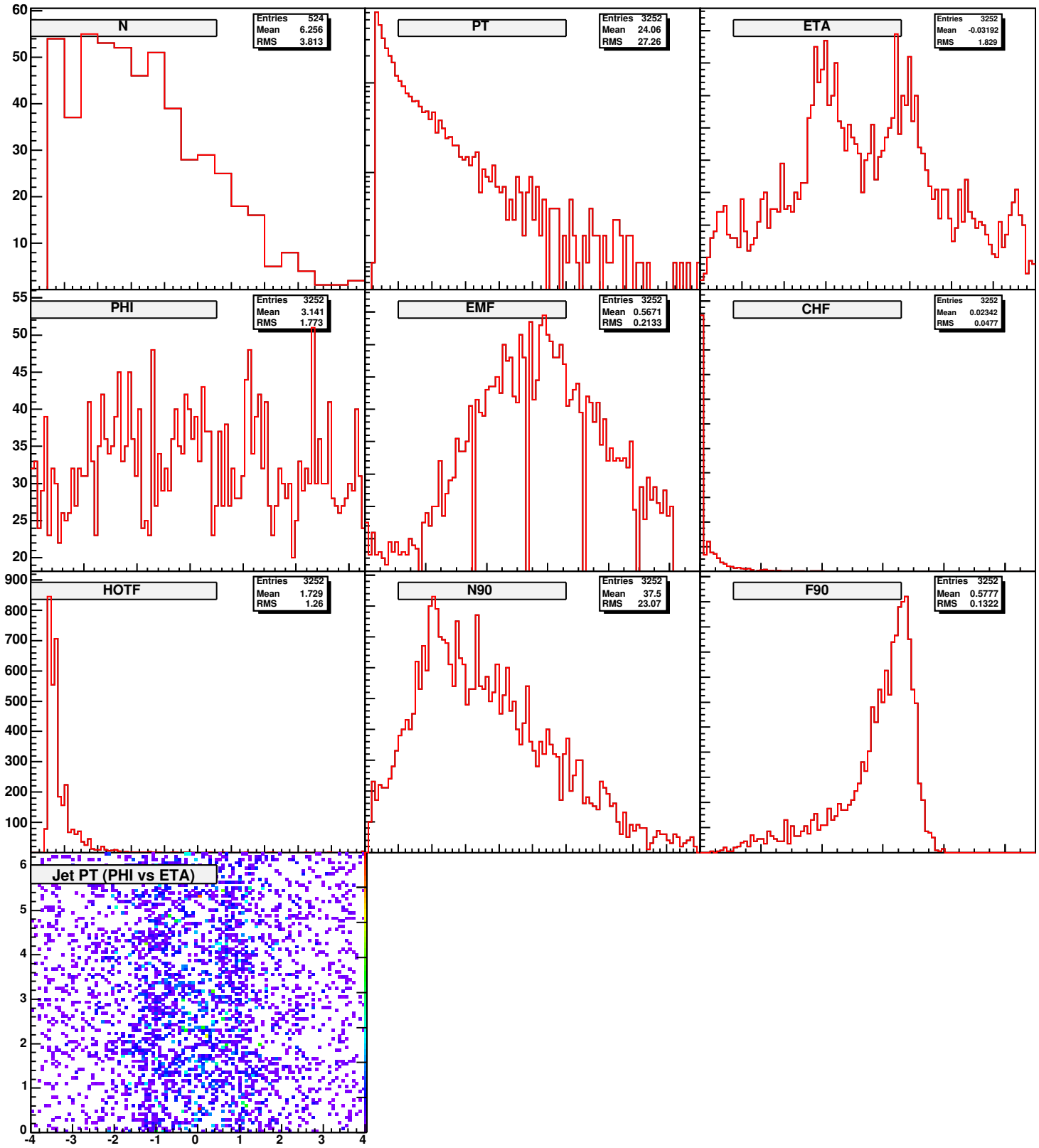

MEt
Entries 29180
Mean 9.282
RMS 7.647
MEx
Entries 29180
Mean 1.09
RMS 8.688
MEy
Entries 29180
Mean -0.4729
RMS 8.231
500
800
600
400
200
0
-50 -40 -30 -20 -10 0 10 20 30 40 50
Met (No cuts)



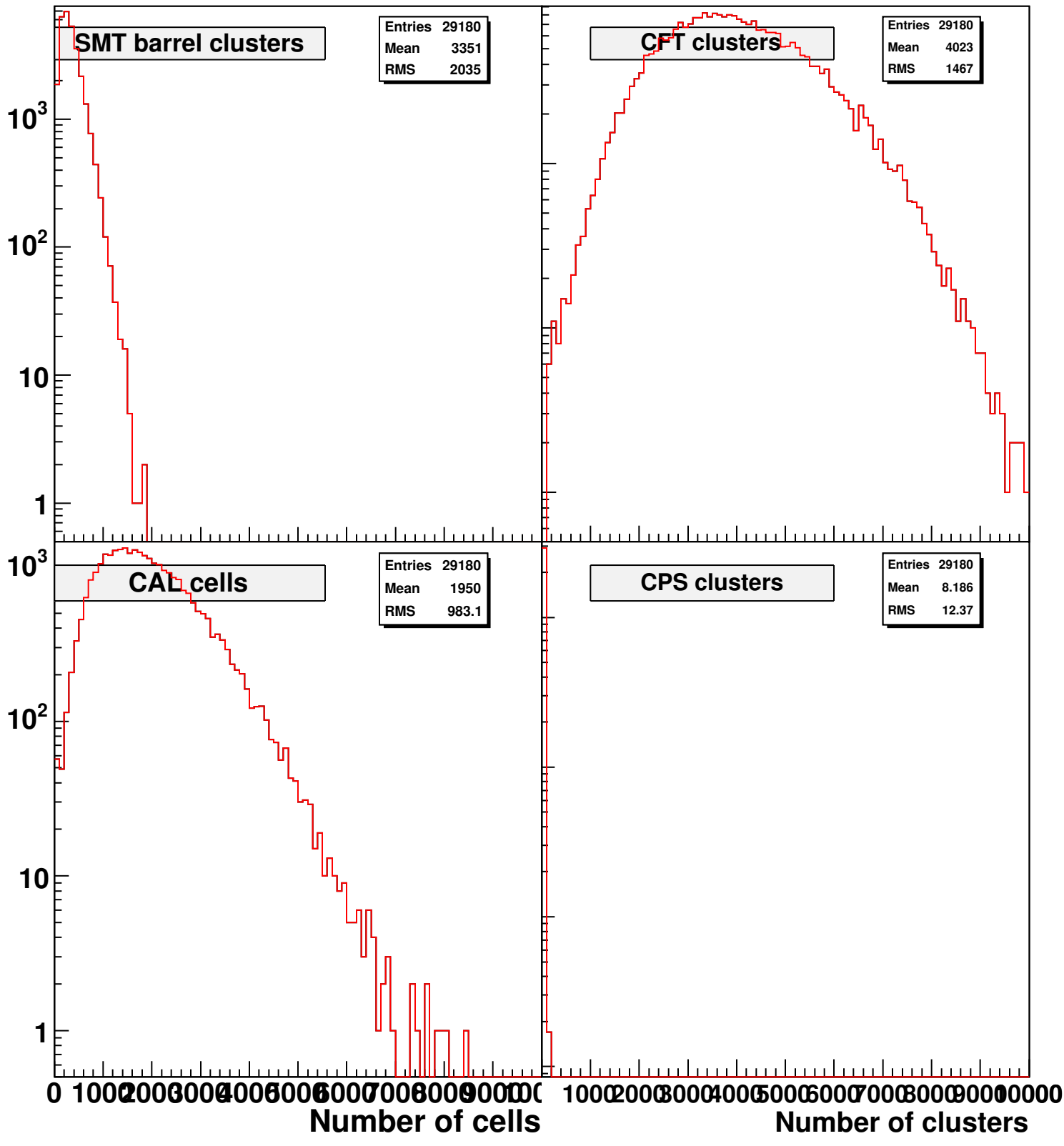
Jets (Cone R 0.7 (no cuts))

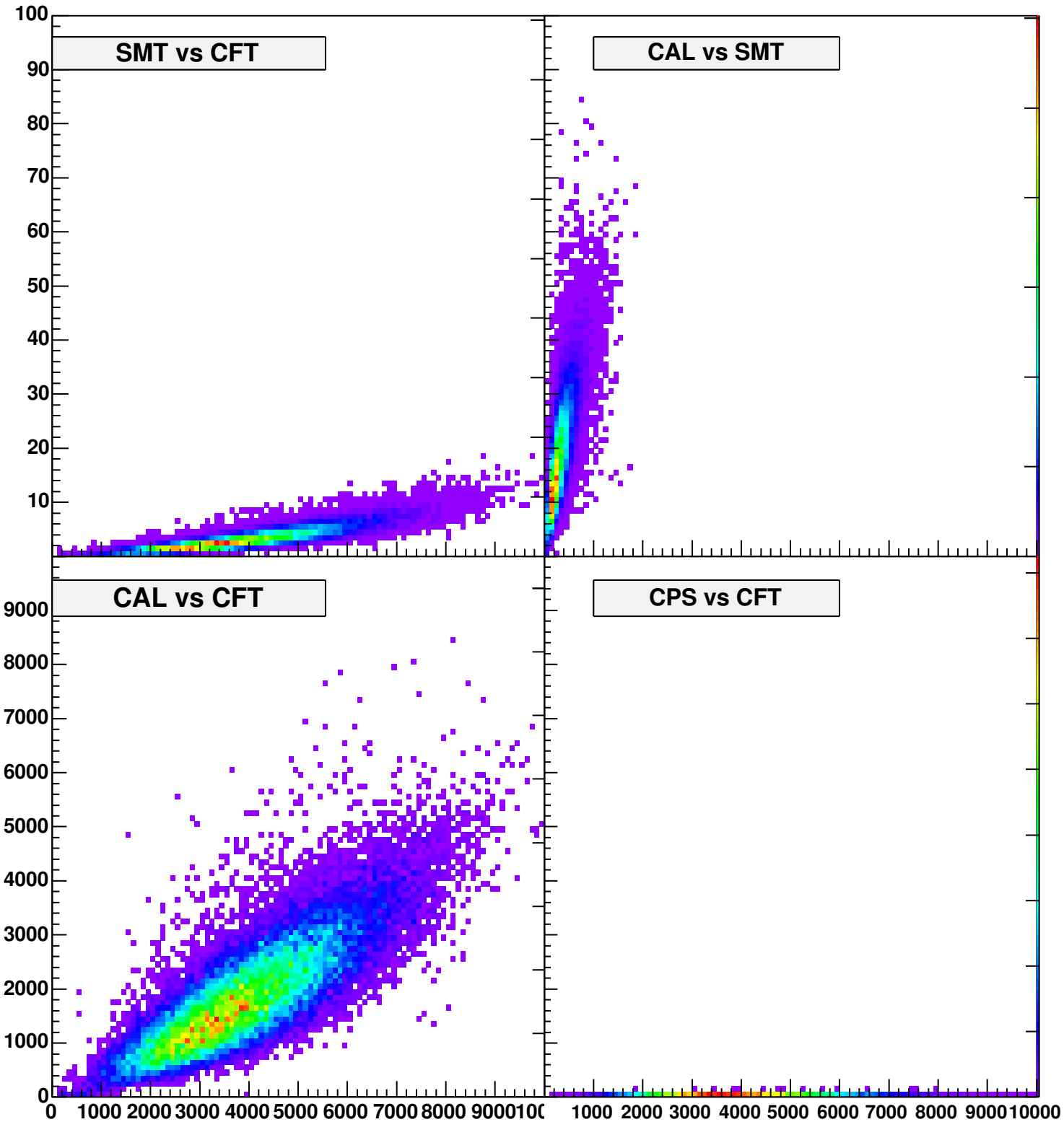


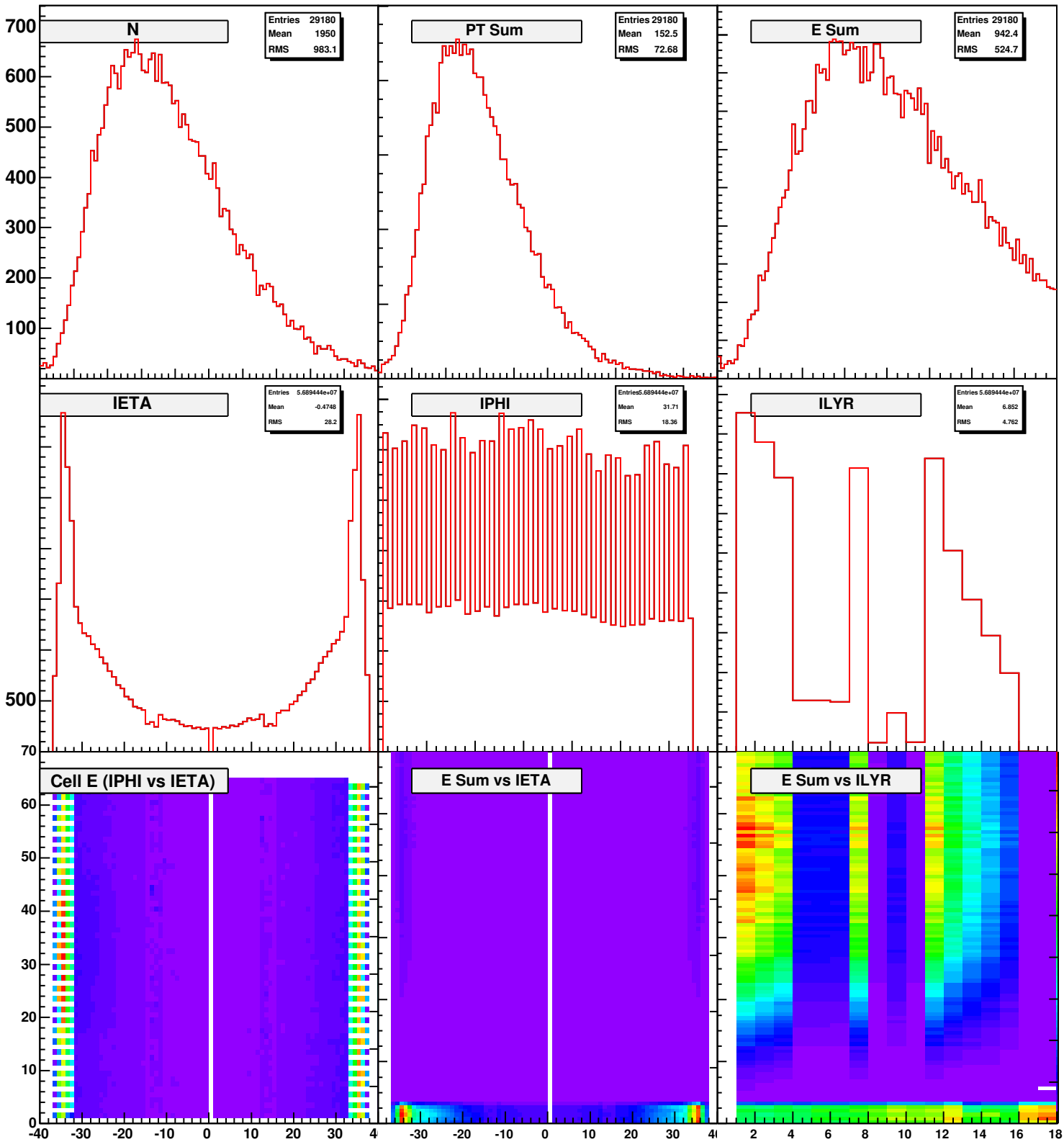
Jets (Cone R 0.7 (standard cuts))



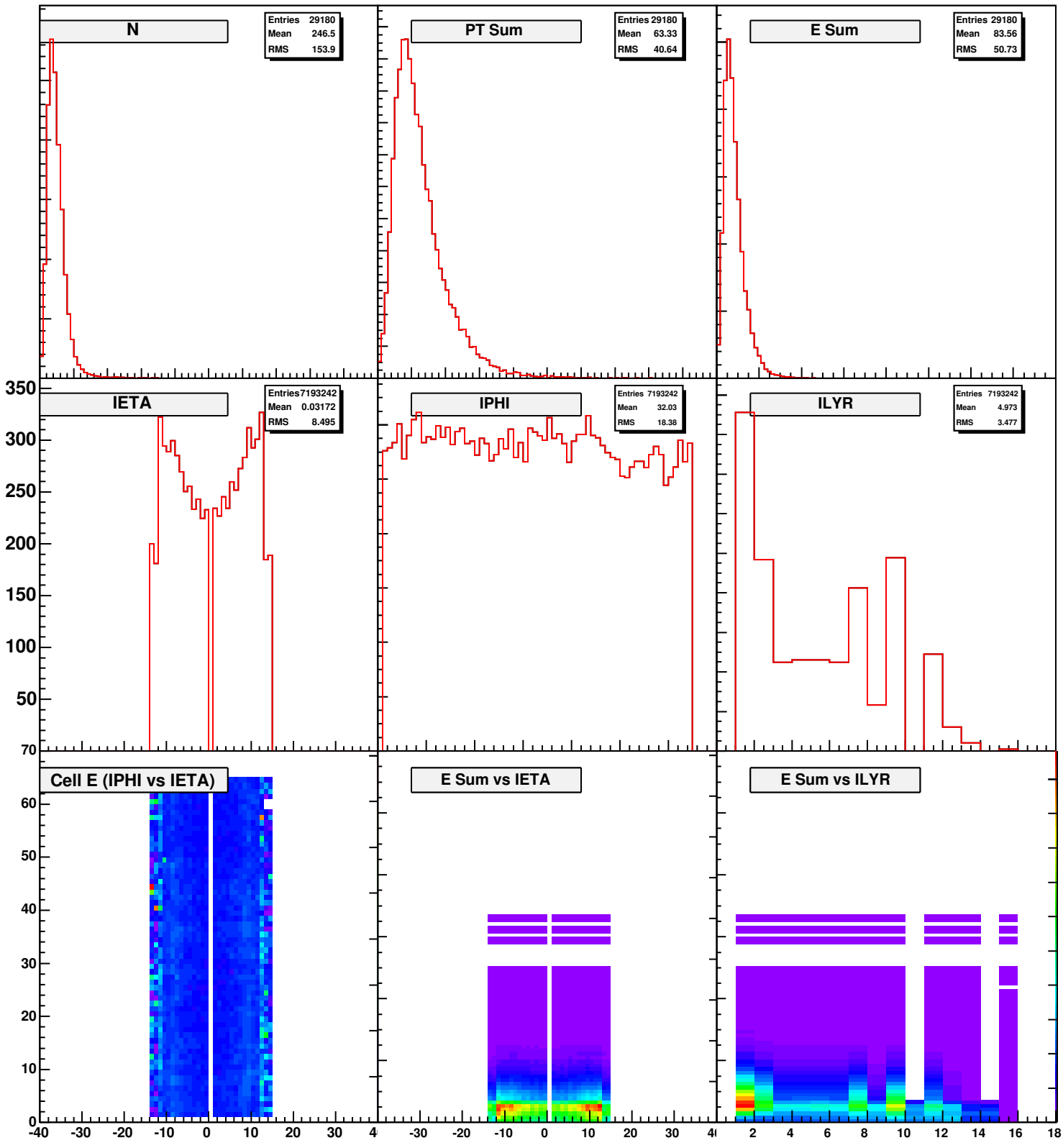
Jets (Cone R 0.7 (standard cuts, MET>30))


SMT barrel clusters
Entries 29180
Mean 3351
RMS 2035
CFT clusters
Entries 29180
Mean 4023
RMS 1467
CAL cells
Entries 29180
Mean 1950
RMS 983.1
CPS clusters
Entries 29180
Mean 8.186
RMS 12.37
10^3
10^2
10
1
Number of cells
Number of clusters
Detector Occupancy (Detector)

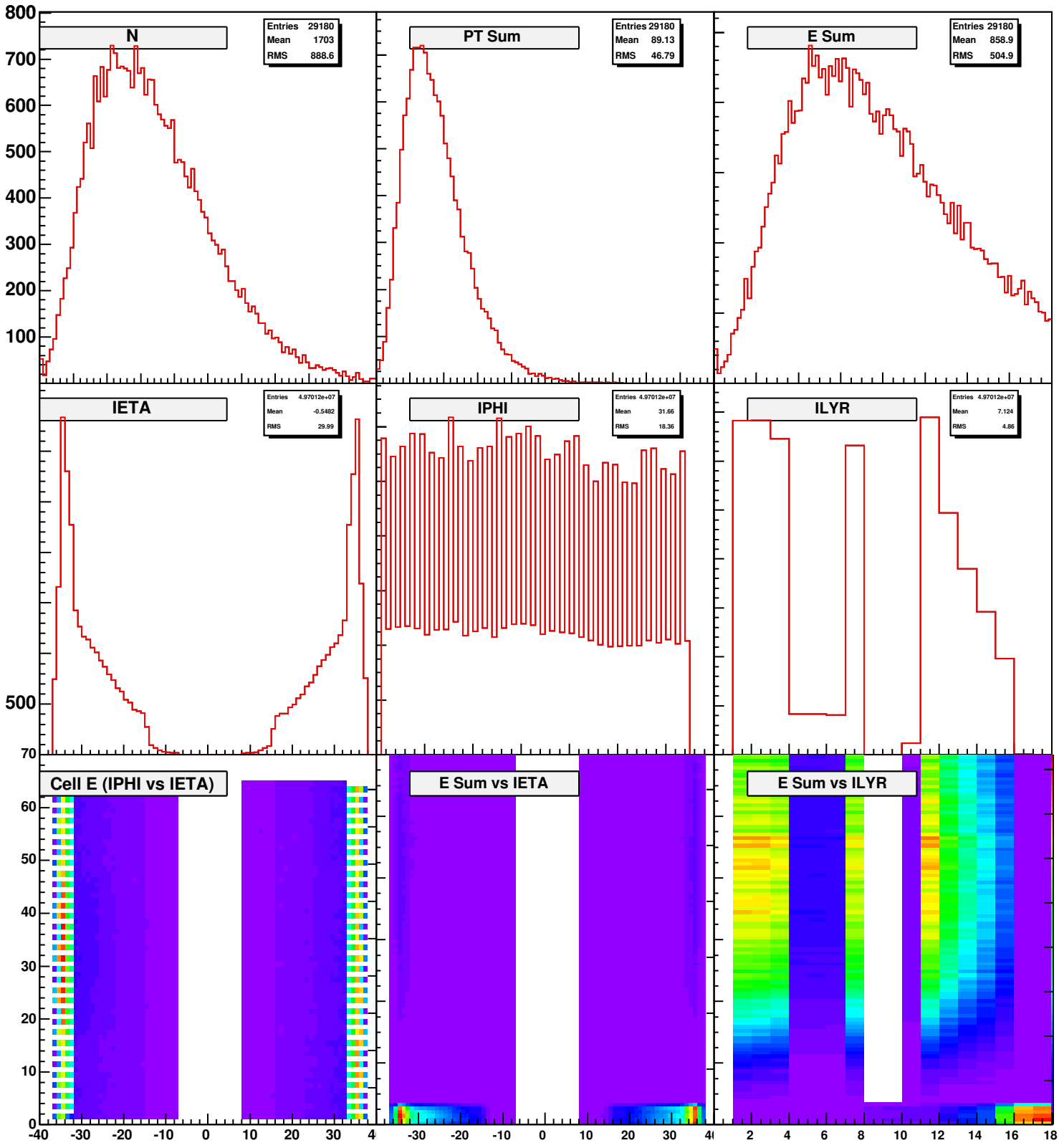

SMT vs CFT
CAL vs SMT
CAL vs CFT
CPS vs CFT
100
90
80
70
60
50
40
30
20
10
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
0 1000 2000 3000 4000 5000 6000 7000 8000 9000
1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
Detector Occupancy (Detector)



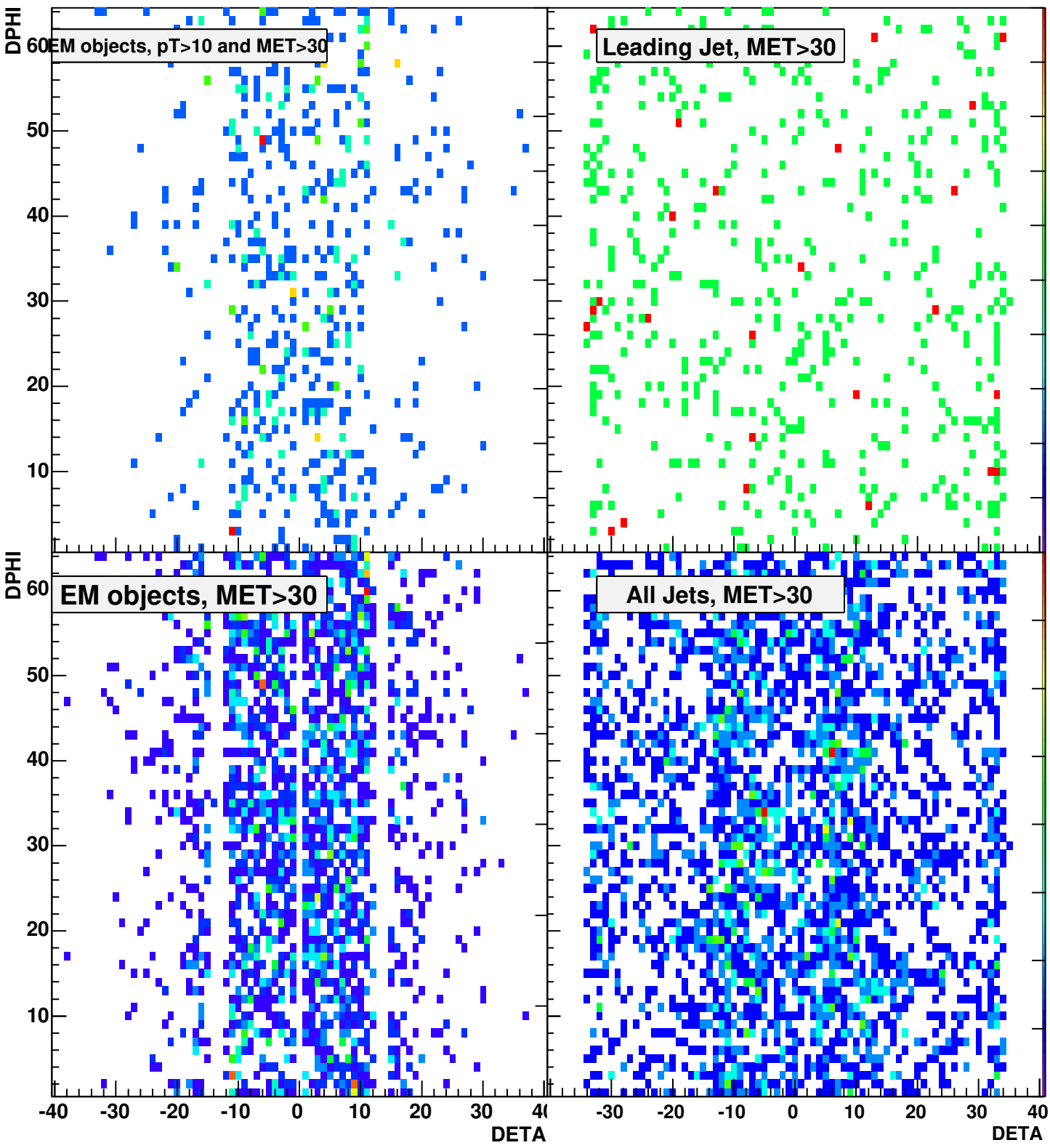
Calorimeter (All cells)



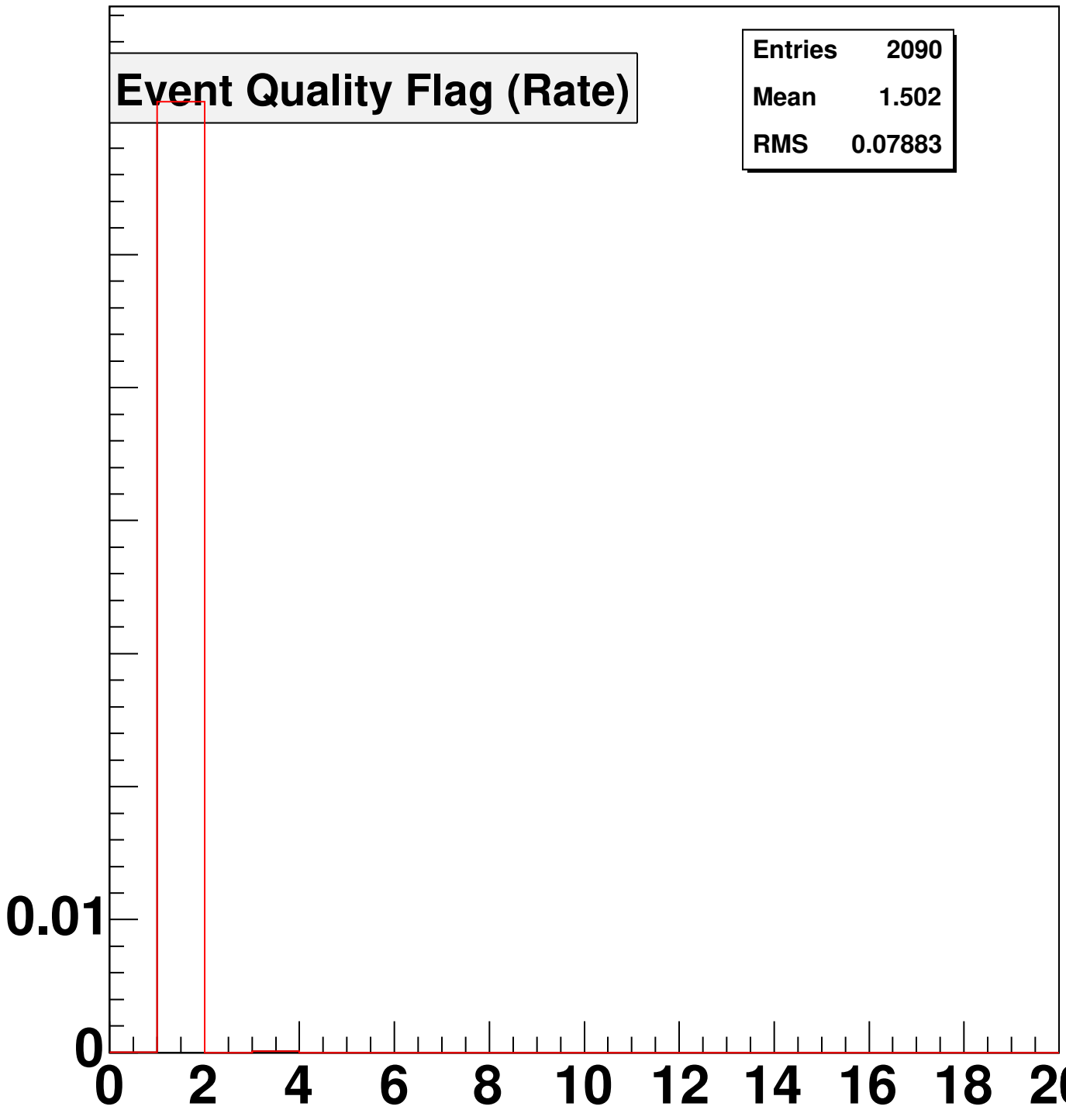
Calorimeter (All CC cells)

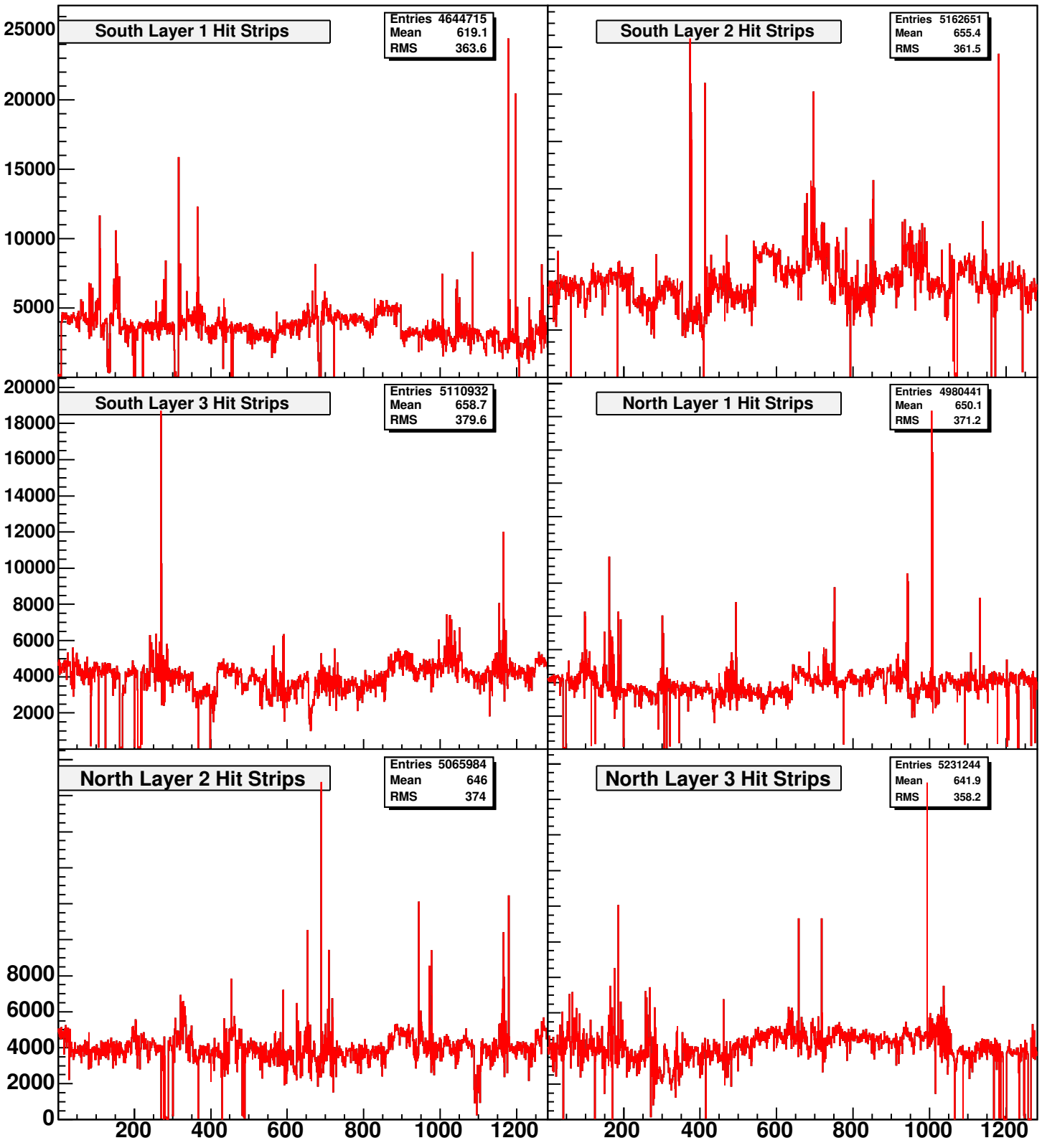


Calorimeter (All EC cells)

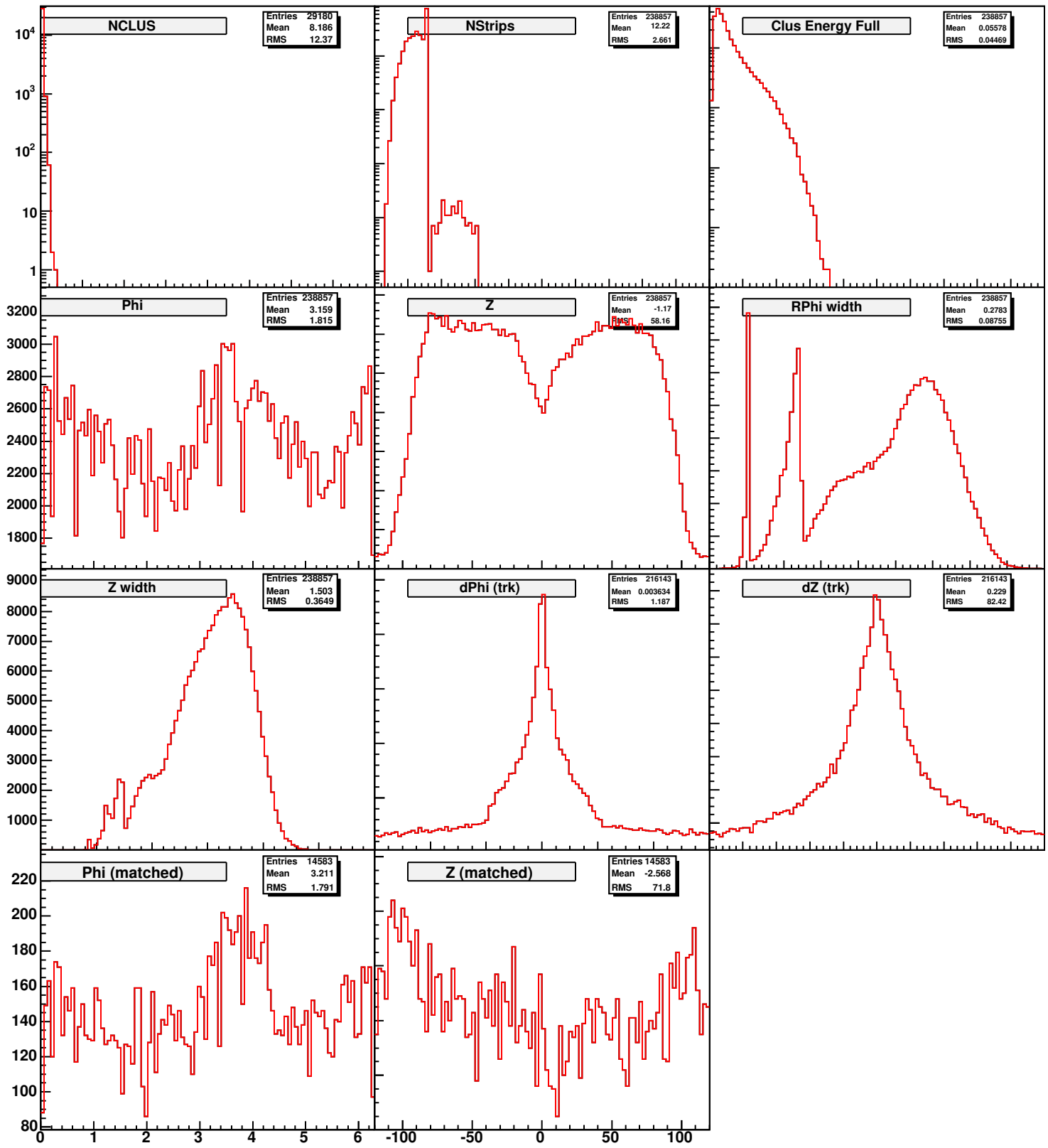


Cal Objects with MET>30 (All cells)

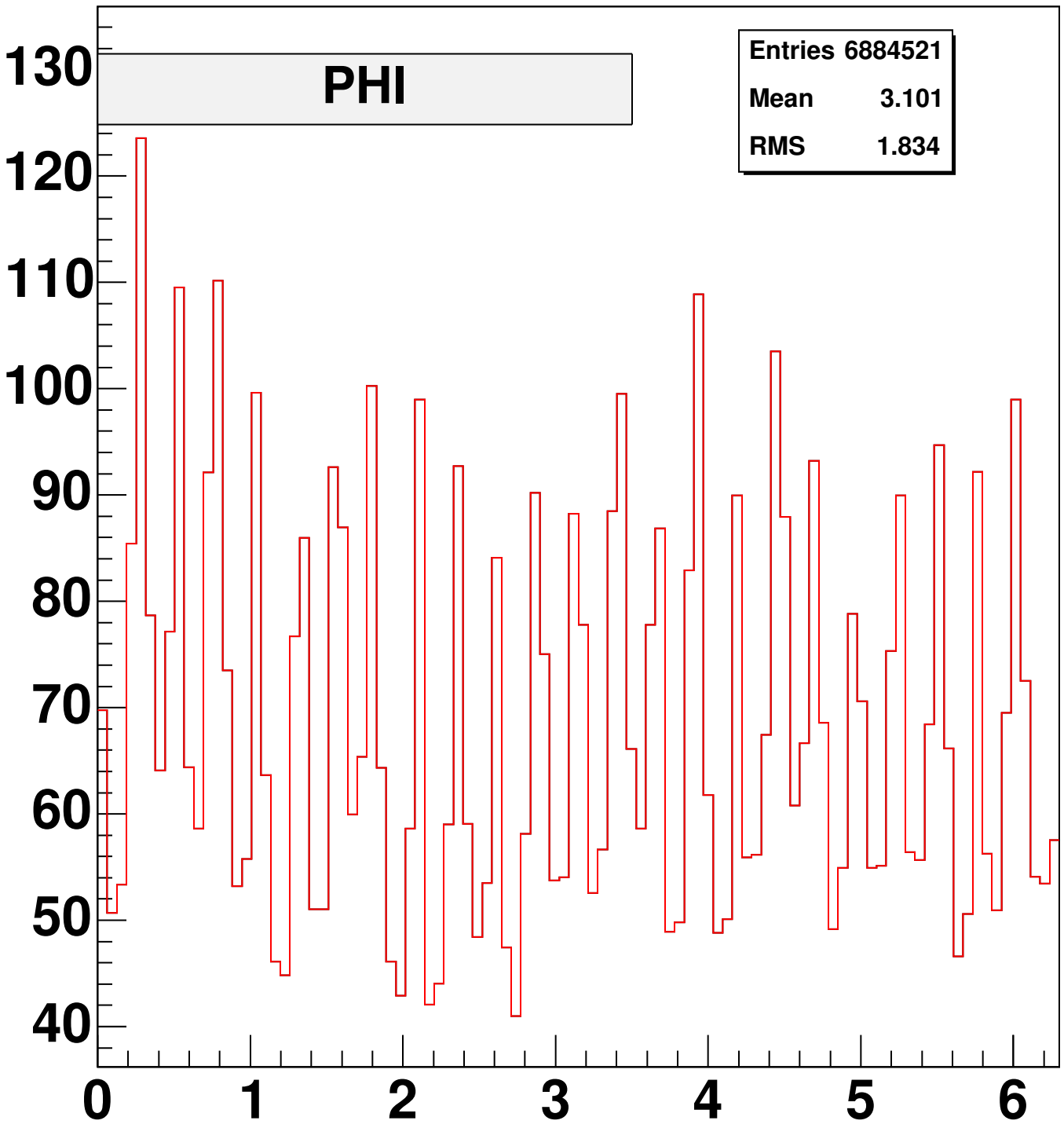

Event Quality Flag (Rate)
Entries 2090
Mean 1.502
RMS 0.07883
0.01
0
0 2 4 6 8 10 12 14 16 18 20
Calorimeter Event Quality (All cells)

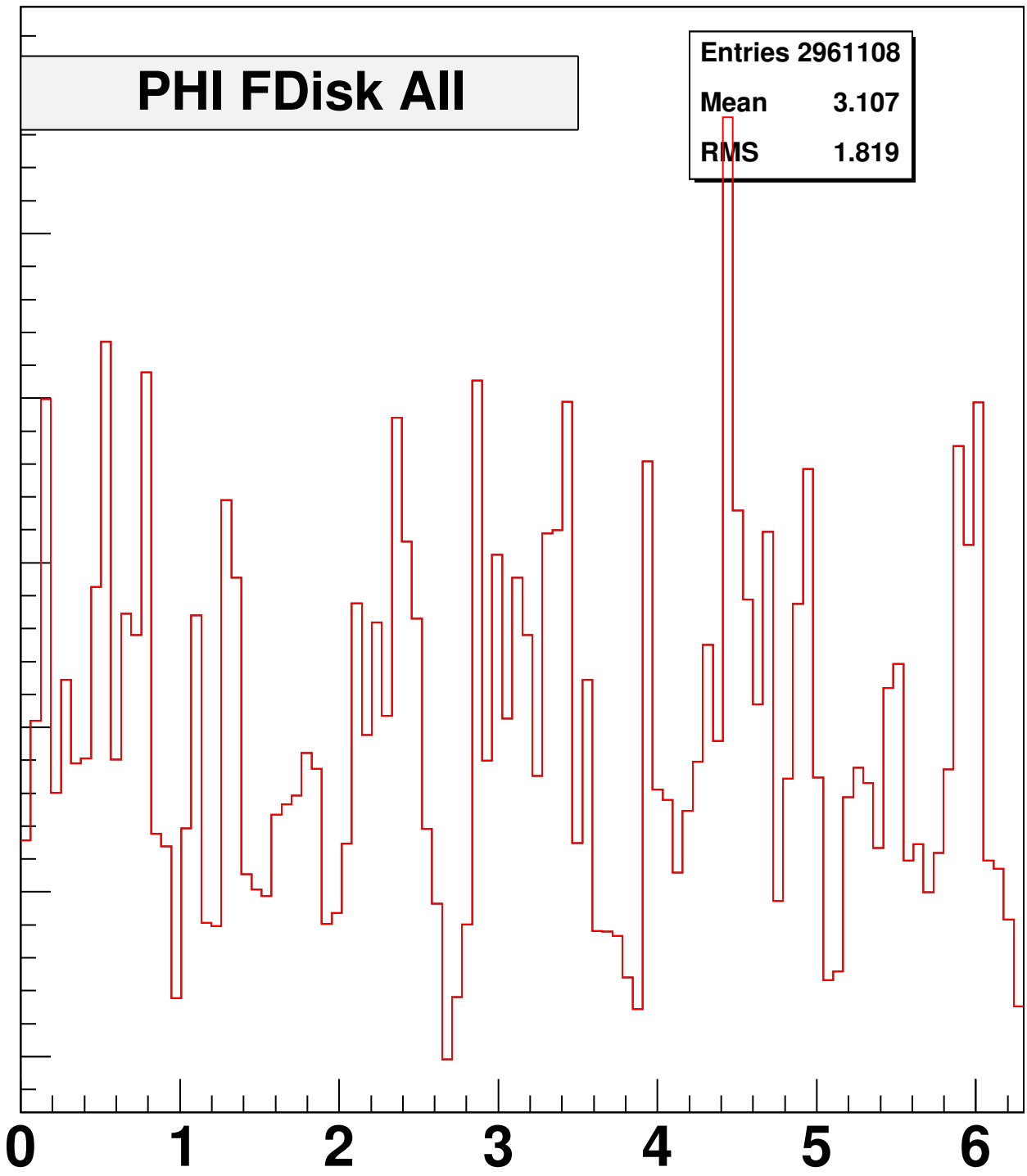


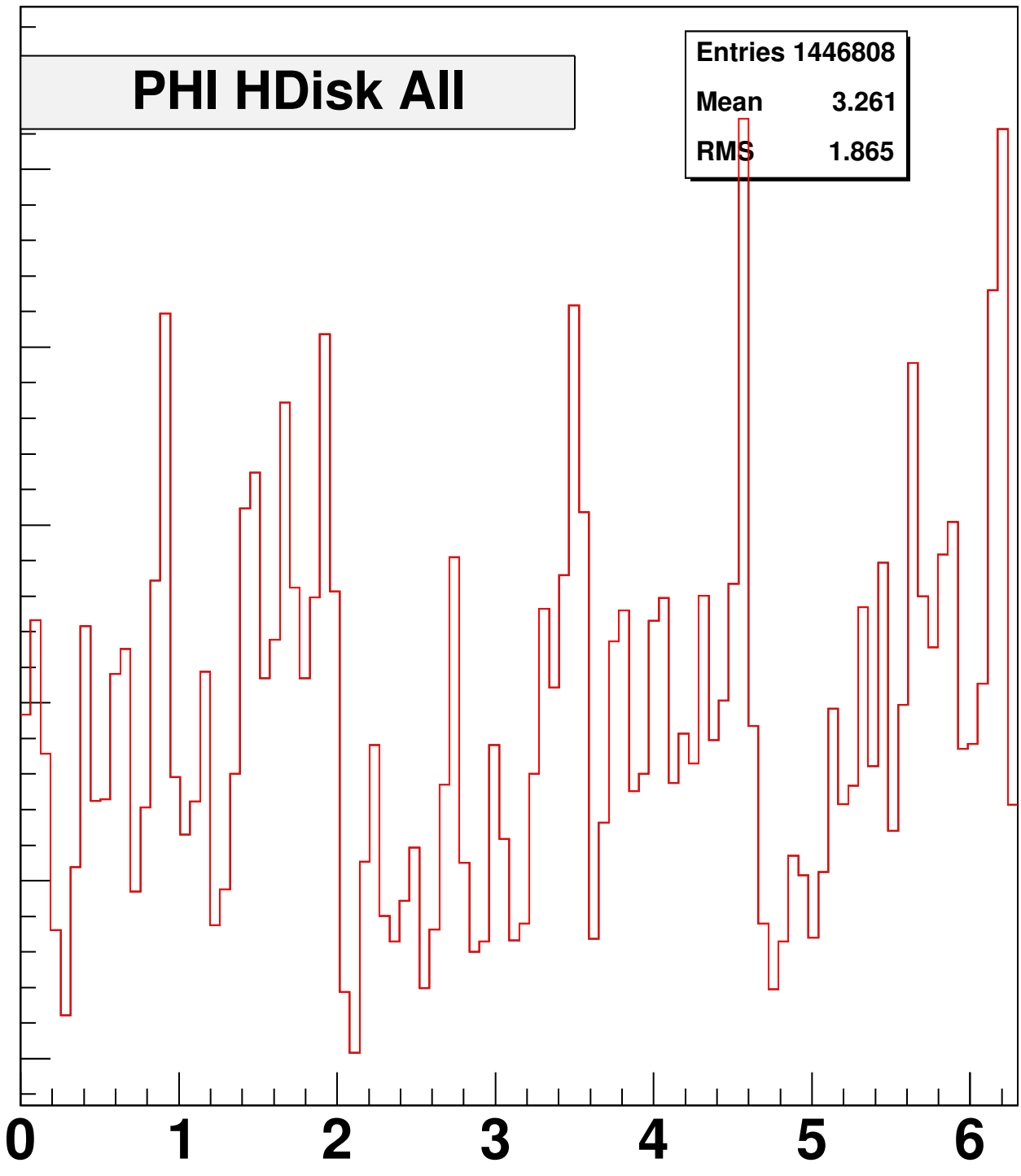
CPS Hit Strips (All Clusters)

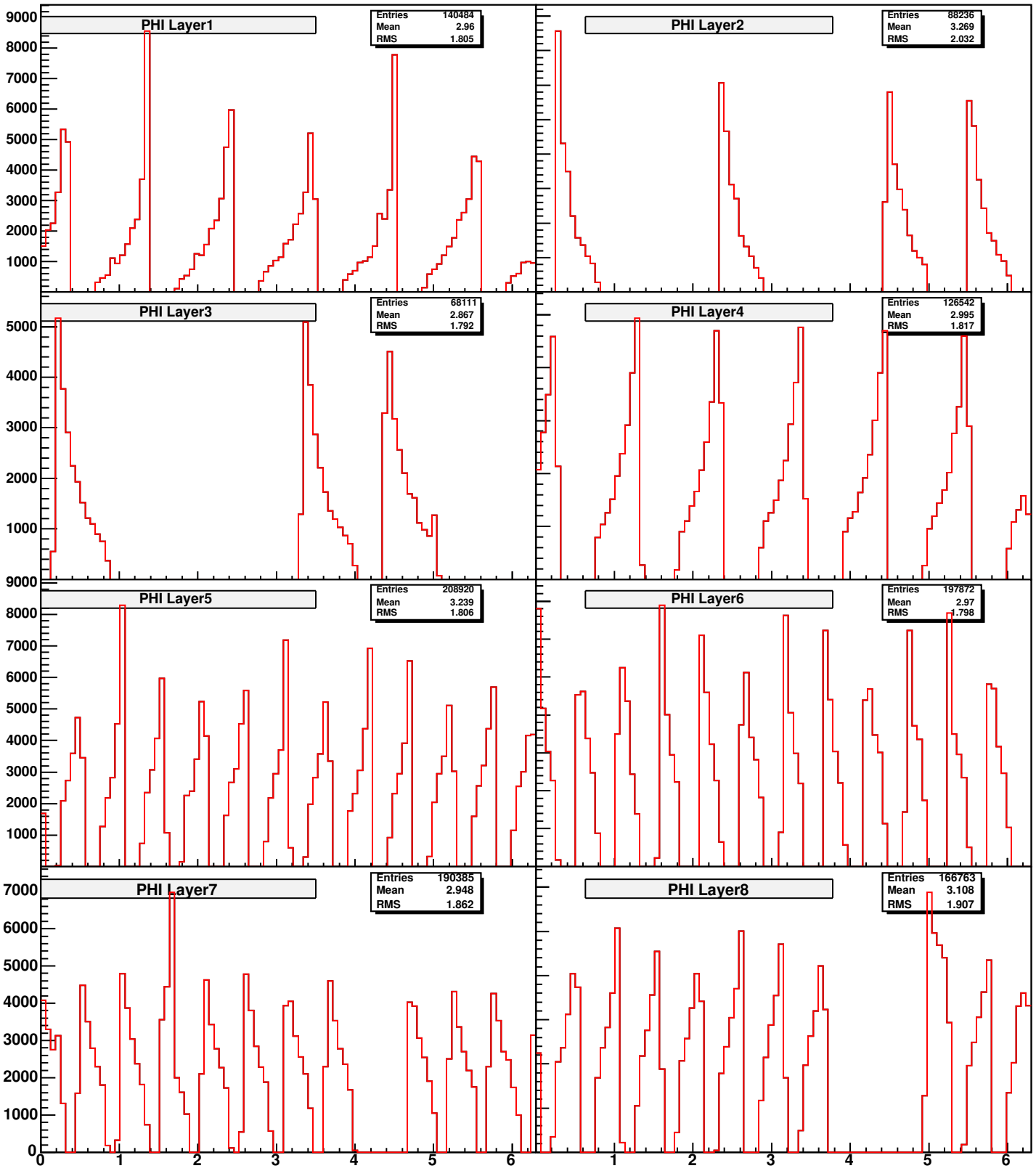


CPS Clusters (All Clusters)

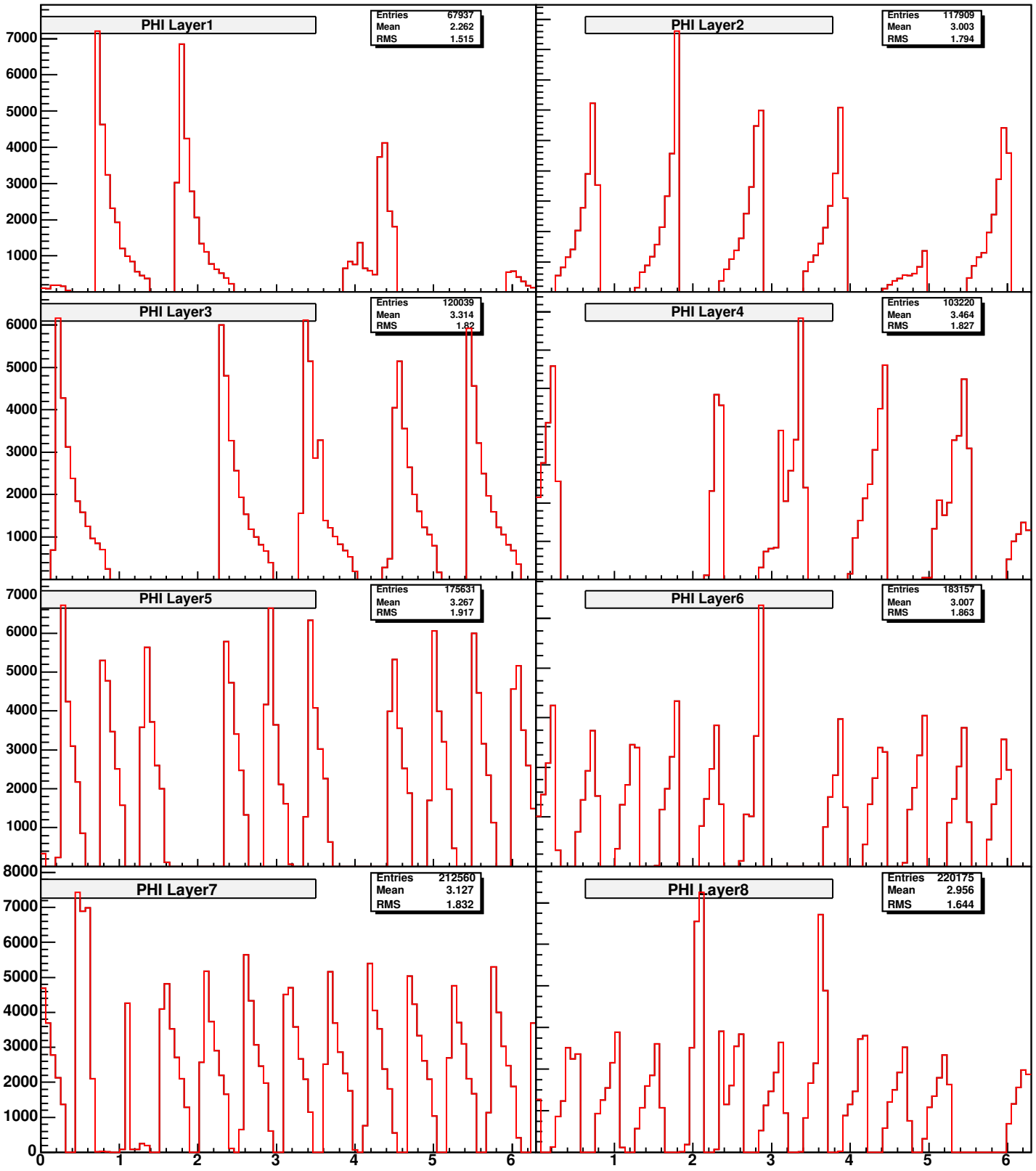

PHI
Entries 6884521
Mean 3.101
RMS 1.834
130
120
110
100
90
80
70
60
50
40
0
1
2
3
4
5
6
SmtClusters (allBarClusters)


PHI FDisk All
Entries 2961108
Mean 3.107
RMS 1.819
0
1
2
3
4
5
6
SmtClusters (allFDiskClusters)

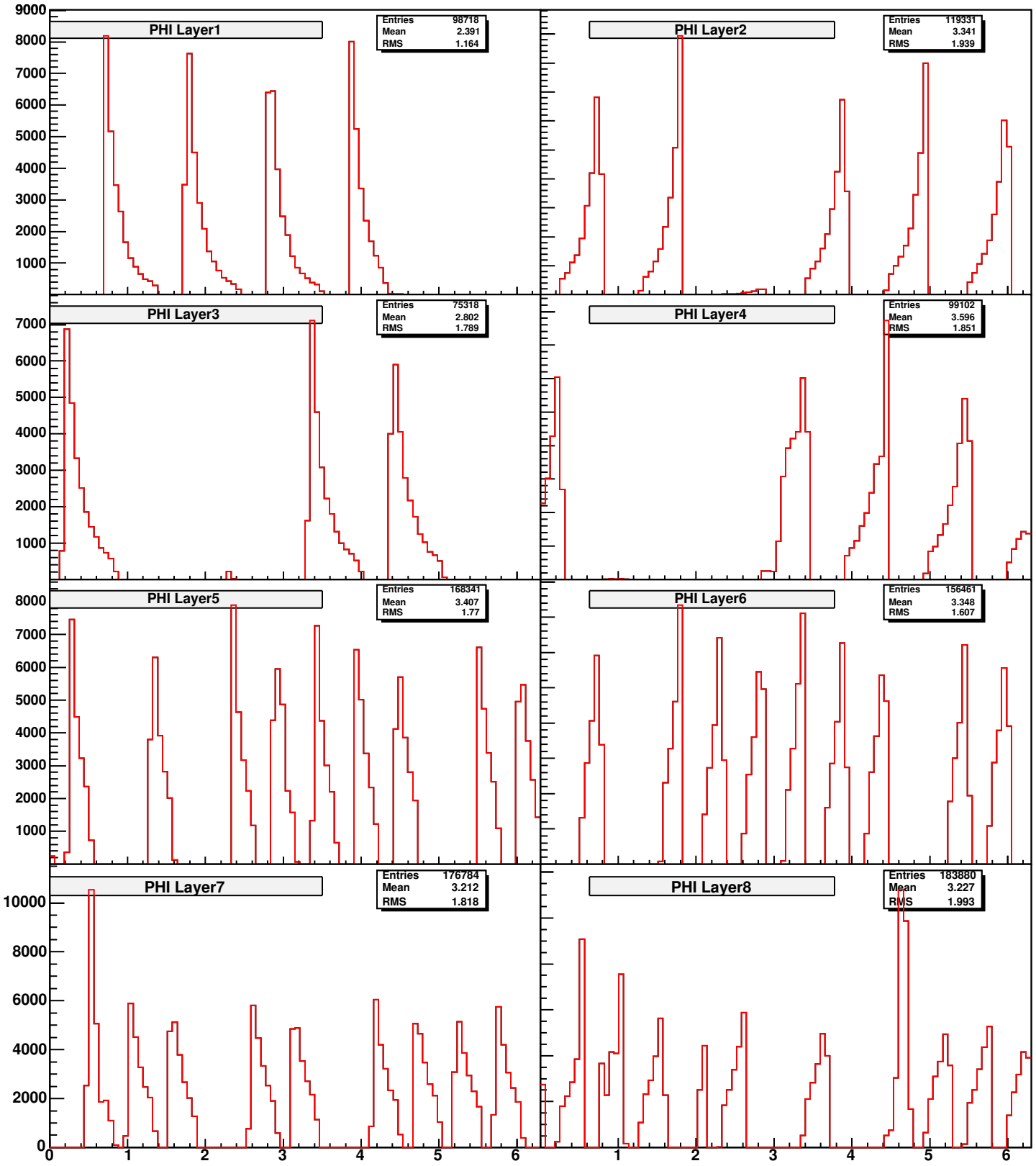

PHI HDisk All
Entries 1446808
Mean 3.261
RMS 1.865
0
1
2
3
4
5
6
SmtClusters (allHDiskClusters)



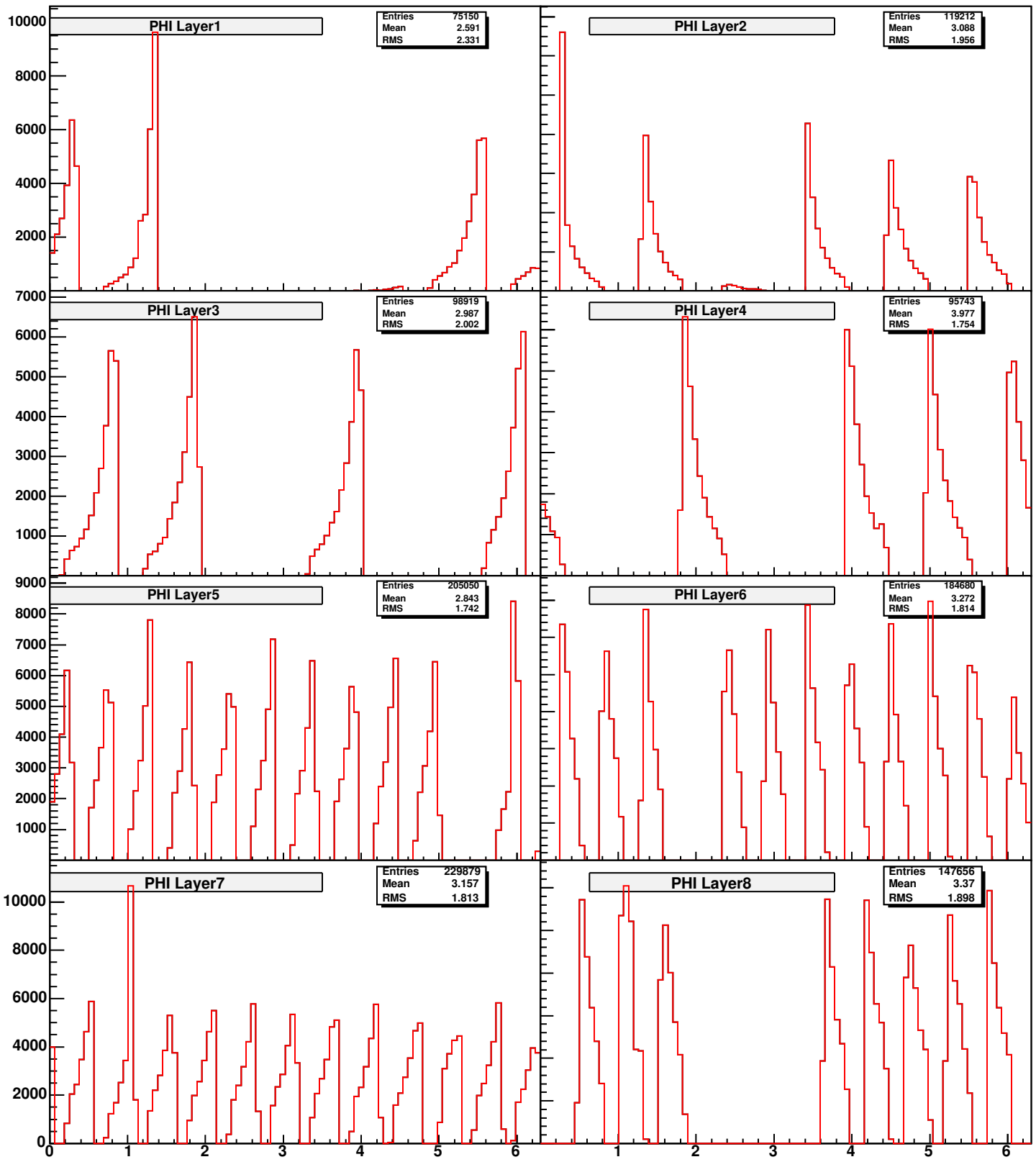
SmtClusters (ClustrBar1)



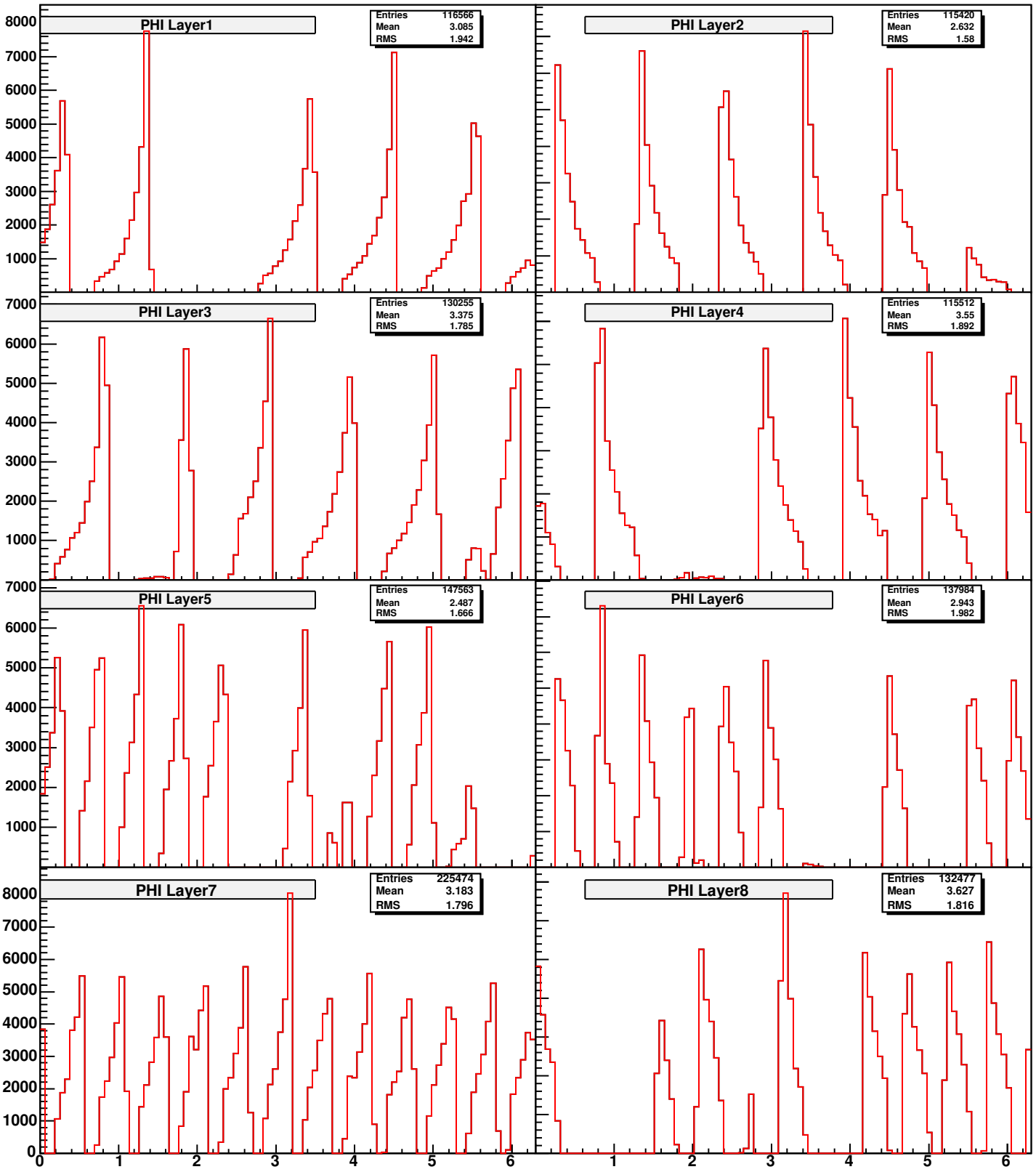
SmtClusters (ClustrBar2)



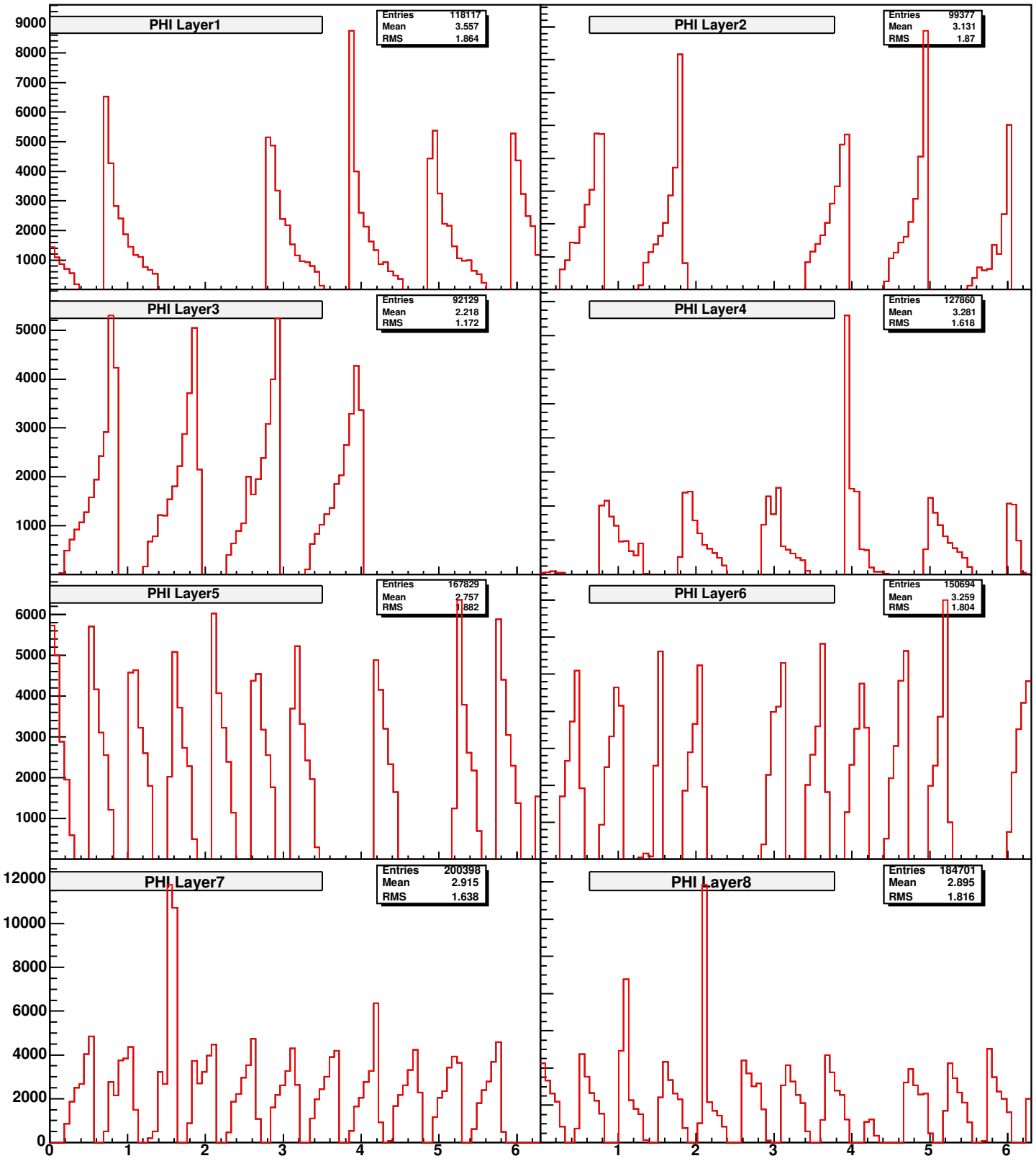
SmtClusters (ClustrBar3)



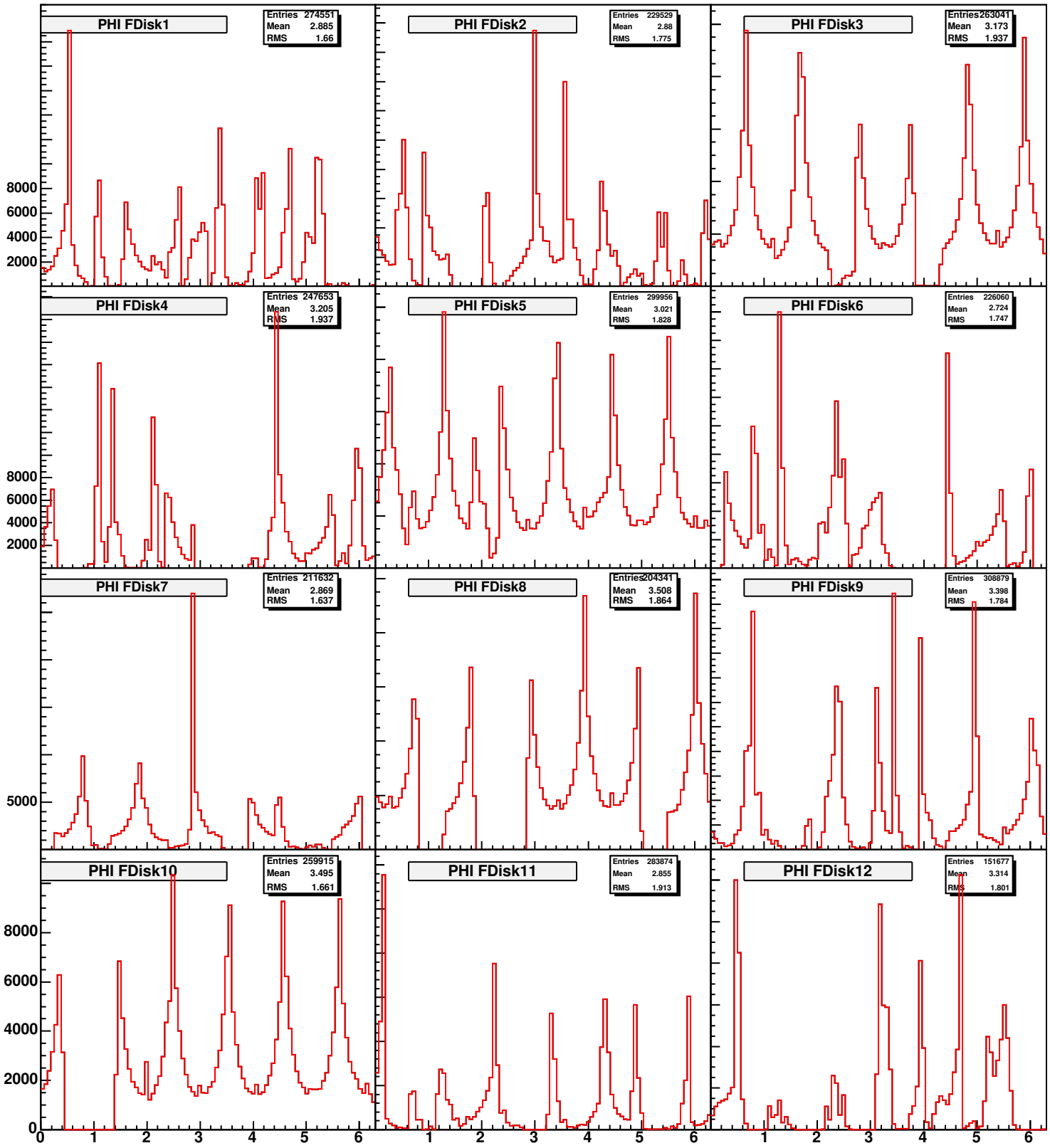
SmtClusters (ClustrBar4)



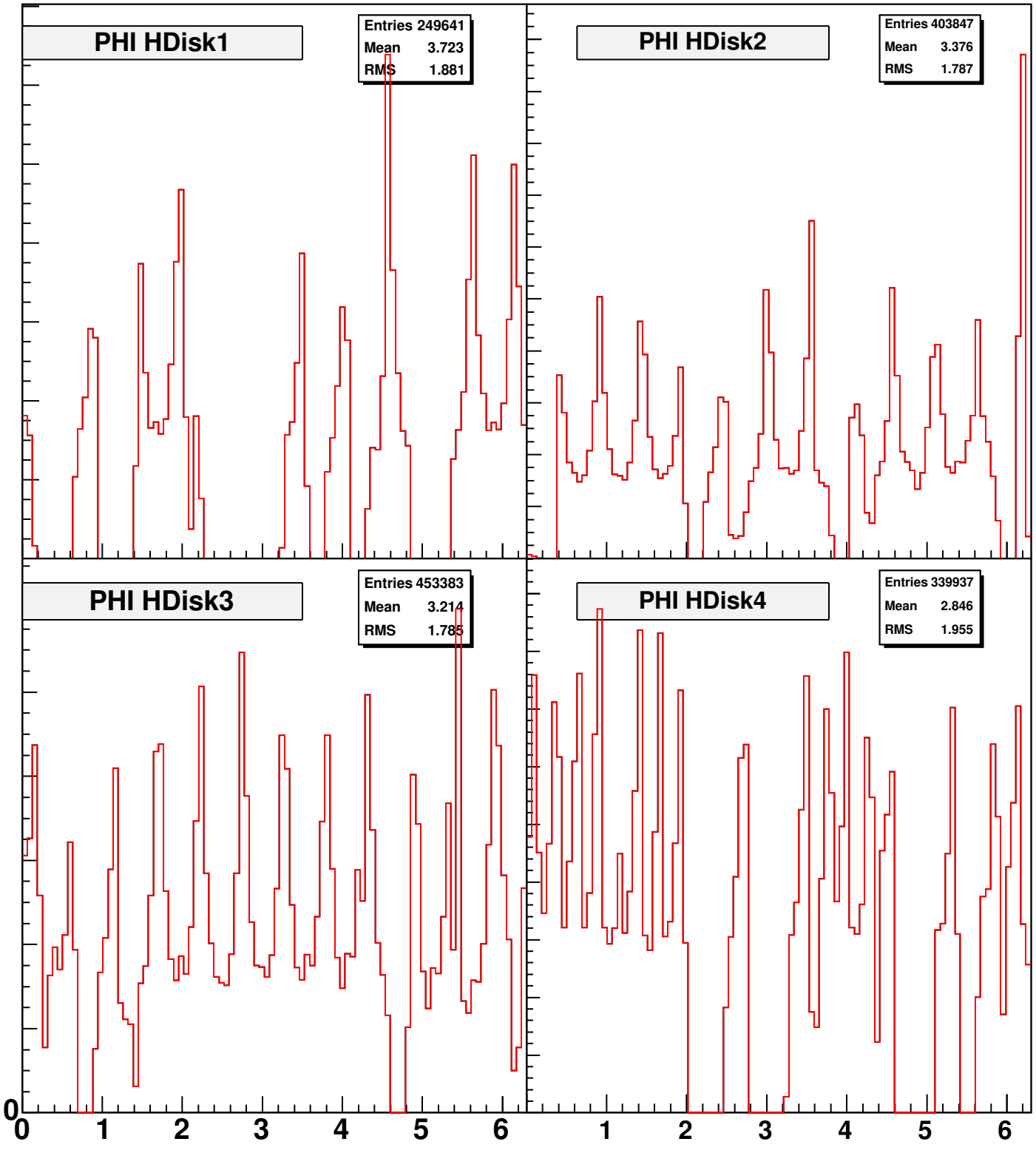
SmtClusters (ClustrBar5)

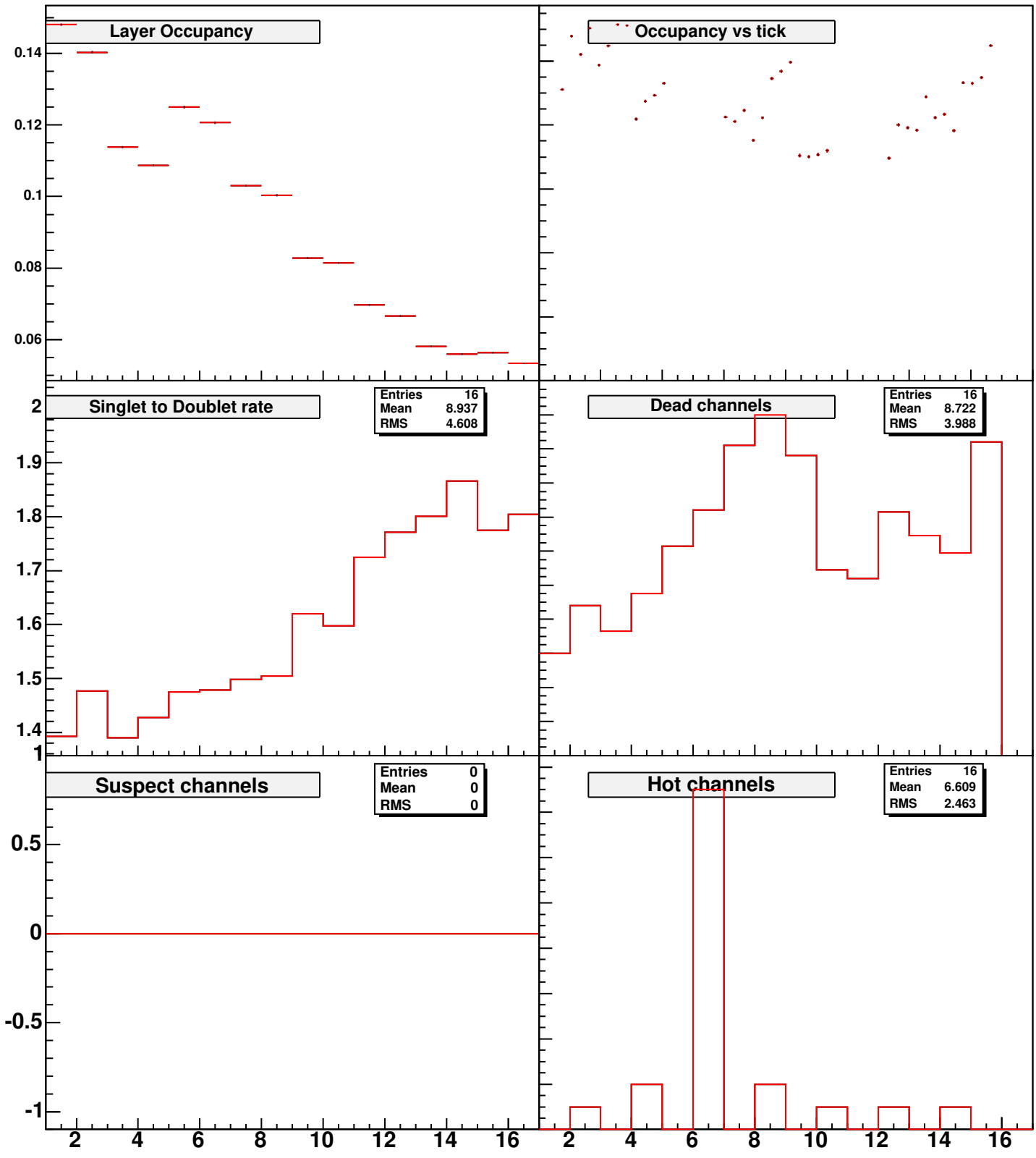


SmtClusters (ClustrBar6)

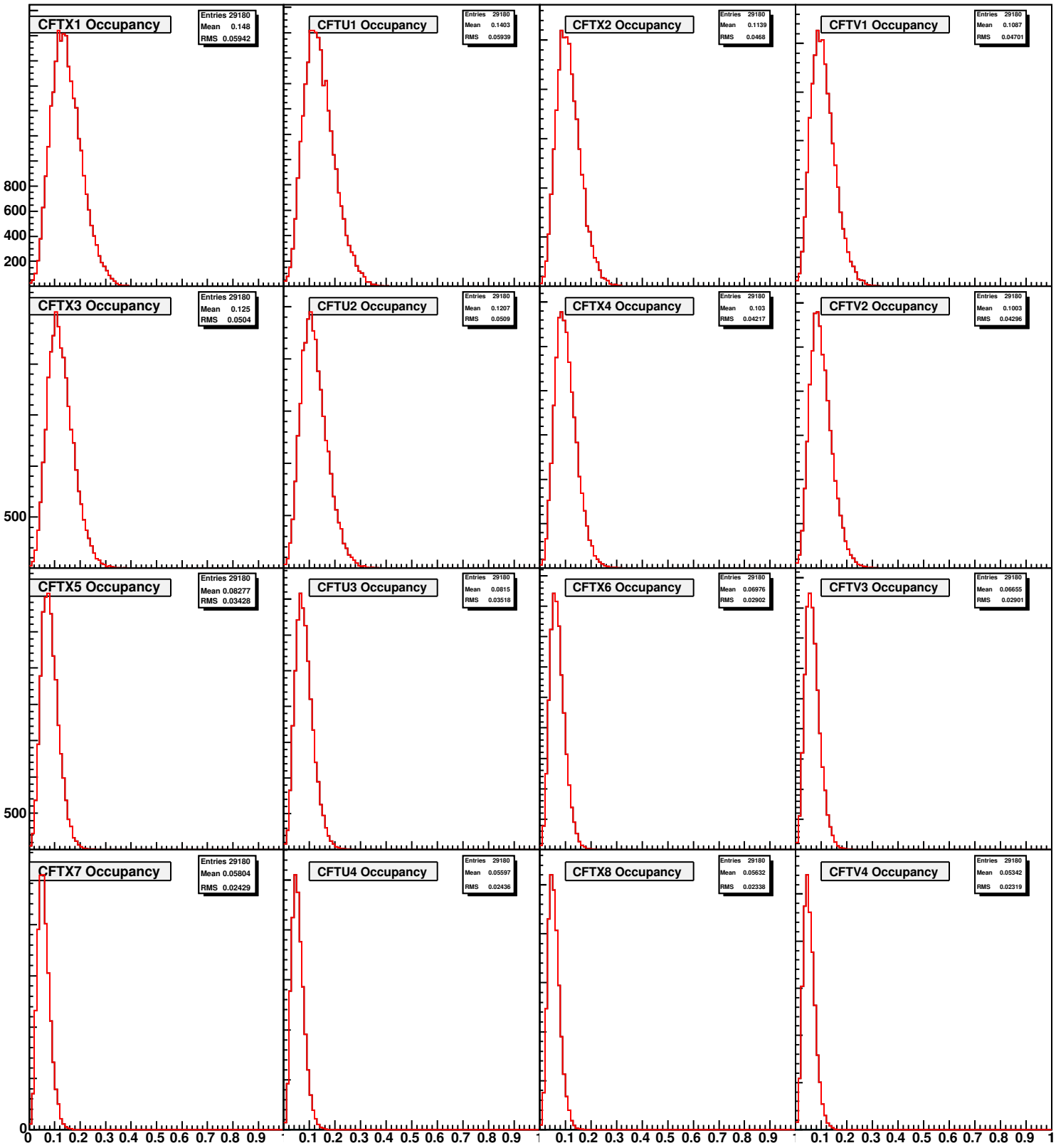


SmtClusters (FDiskClusters)

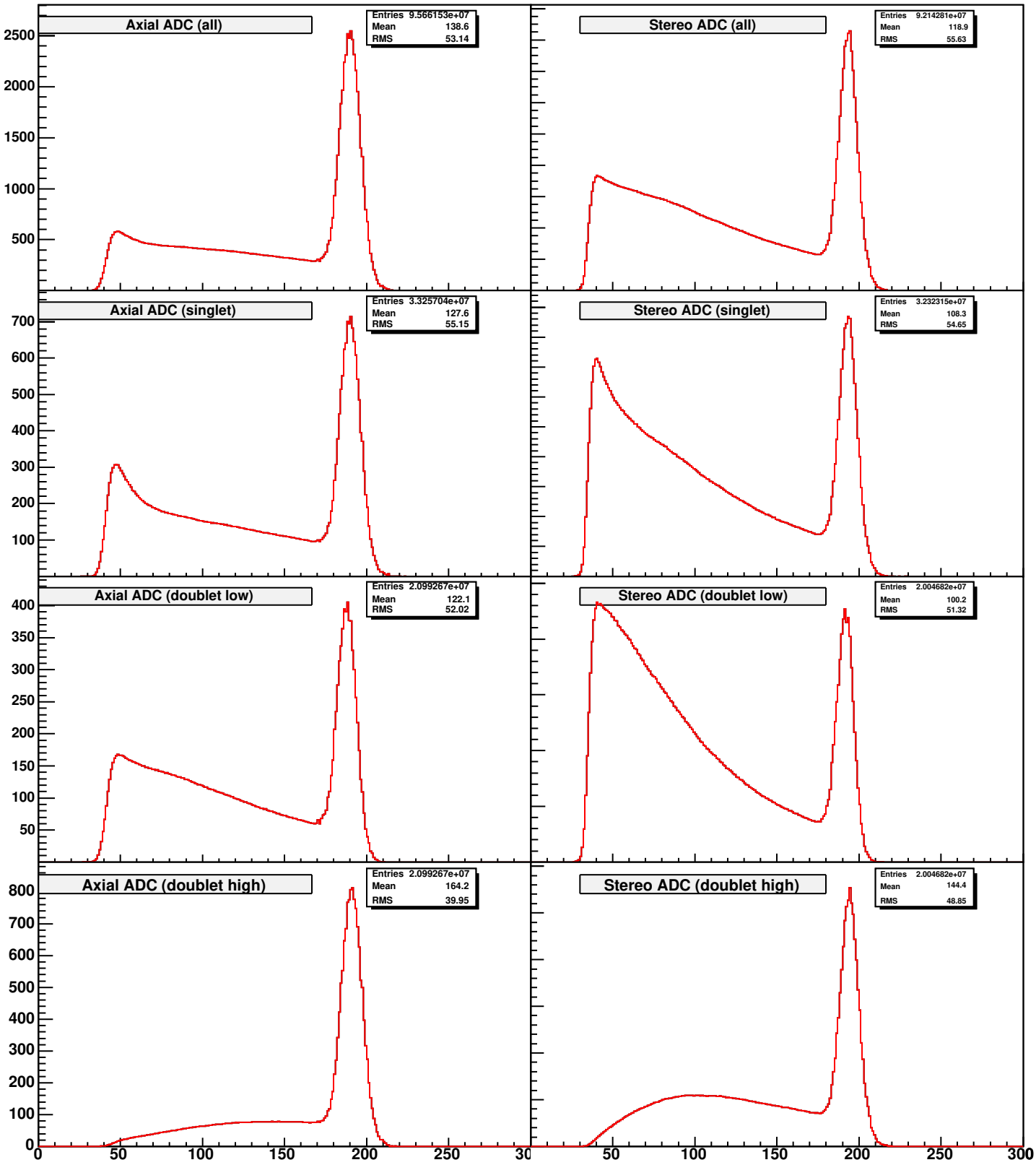

PHI HDisk1
Entries 249641
Mean 3.723
RMS 1.881
PHI HDisk2
Entries 403847
Mean 3.376
RMS 1.787
PHI HDisk3
Entries 453383
Mean 3.214
RMS 1.785
PHI HDisk4
Entries 339937
Mean 2.846
RMS 1.955
0
0
1
2
3
4
5
6
1
2
3
4
5
6
SmtClusters (HDiskClusters)



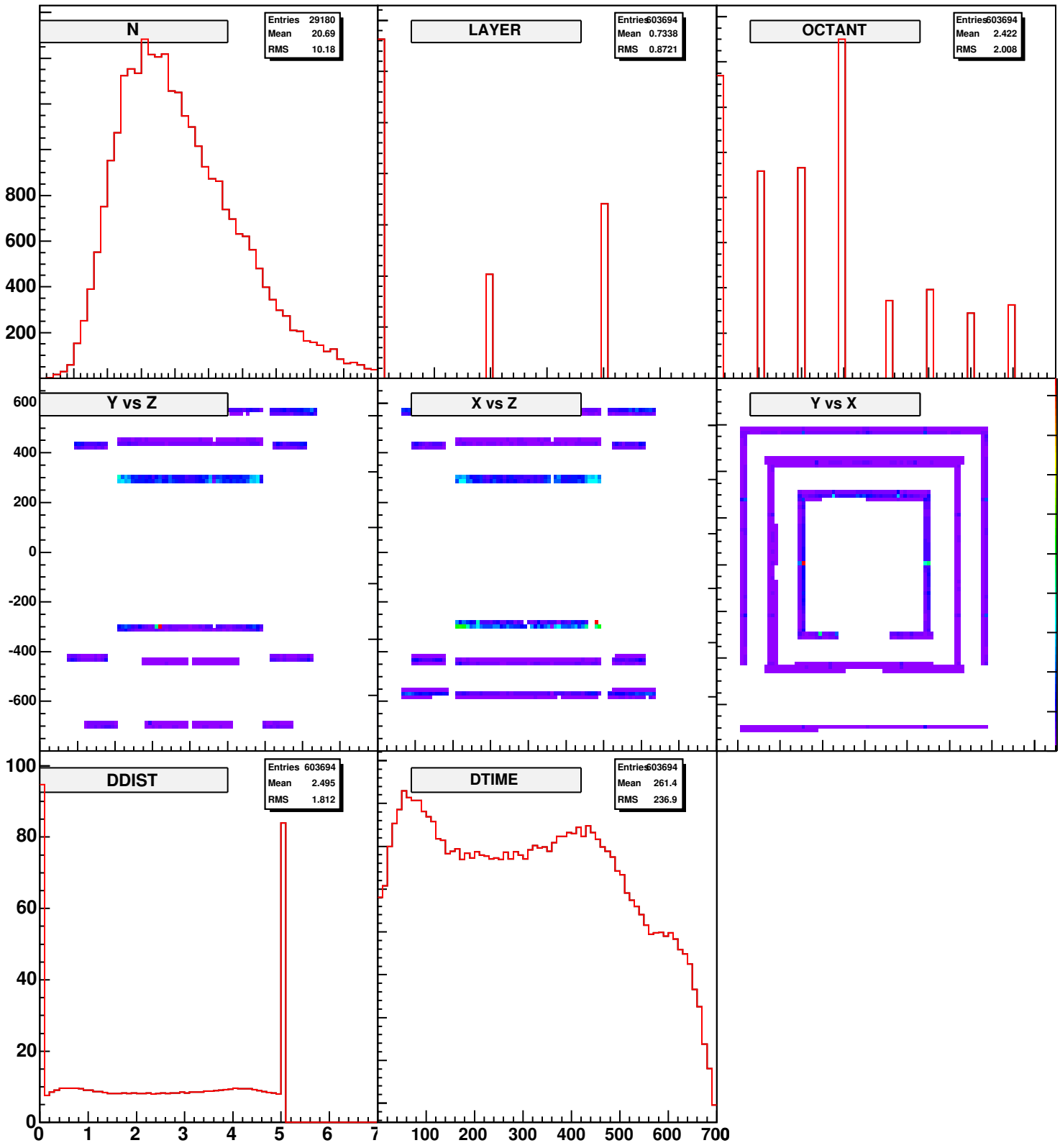
CFT Summary (All Clusters)



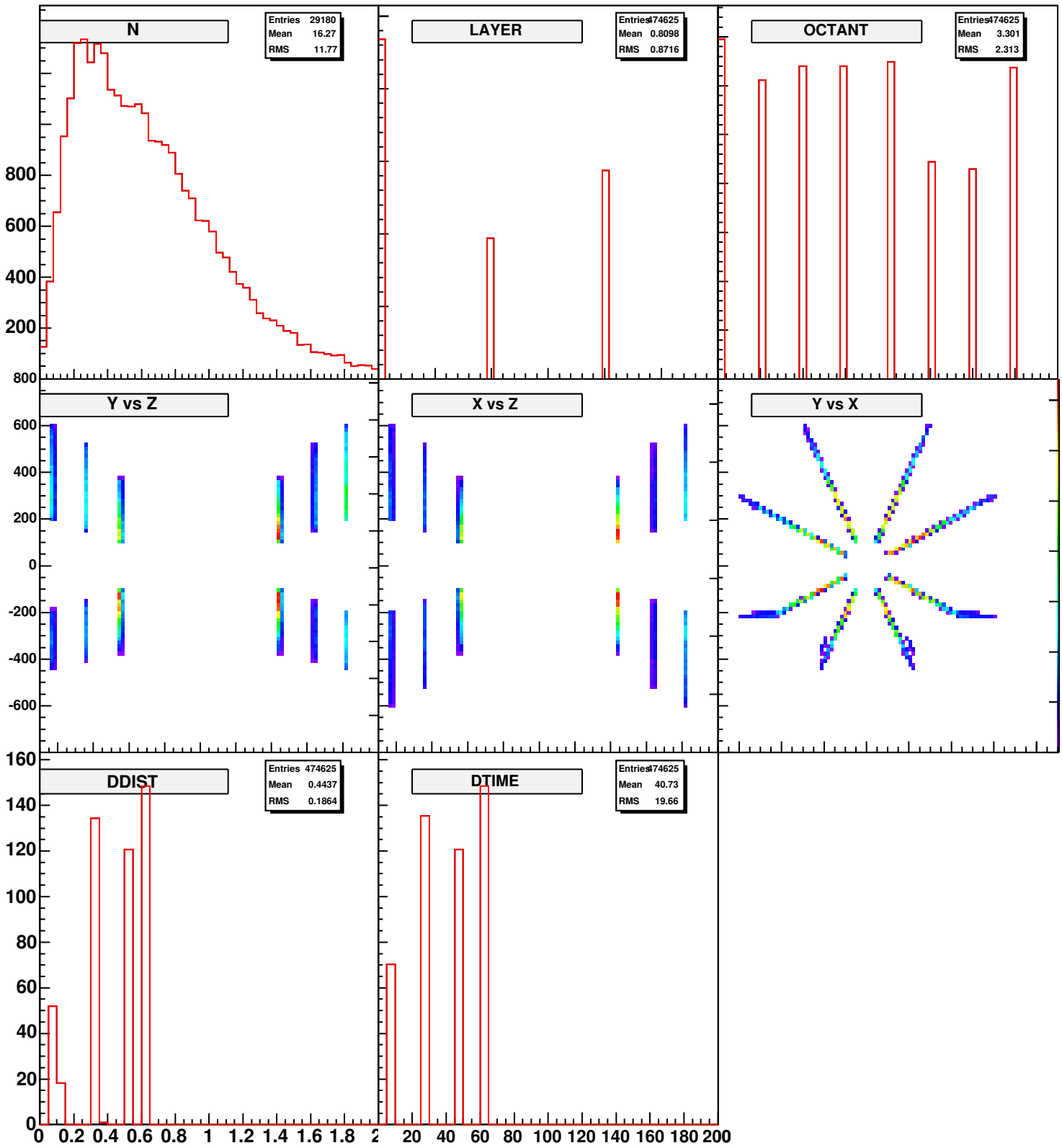
CFT Occupancy (All Clusters)



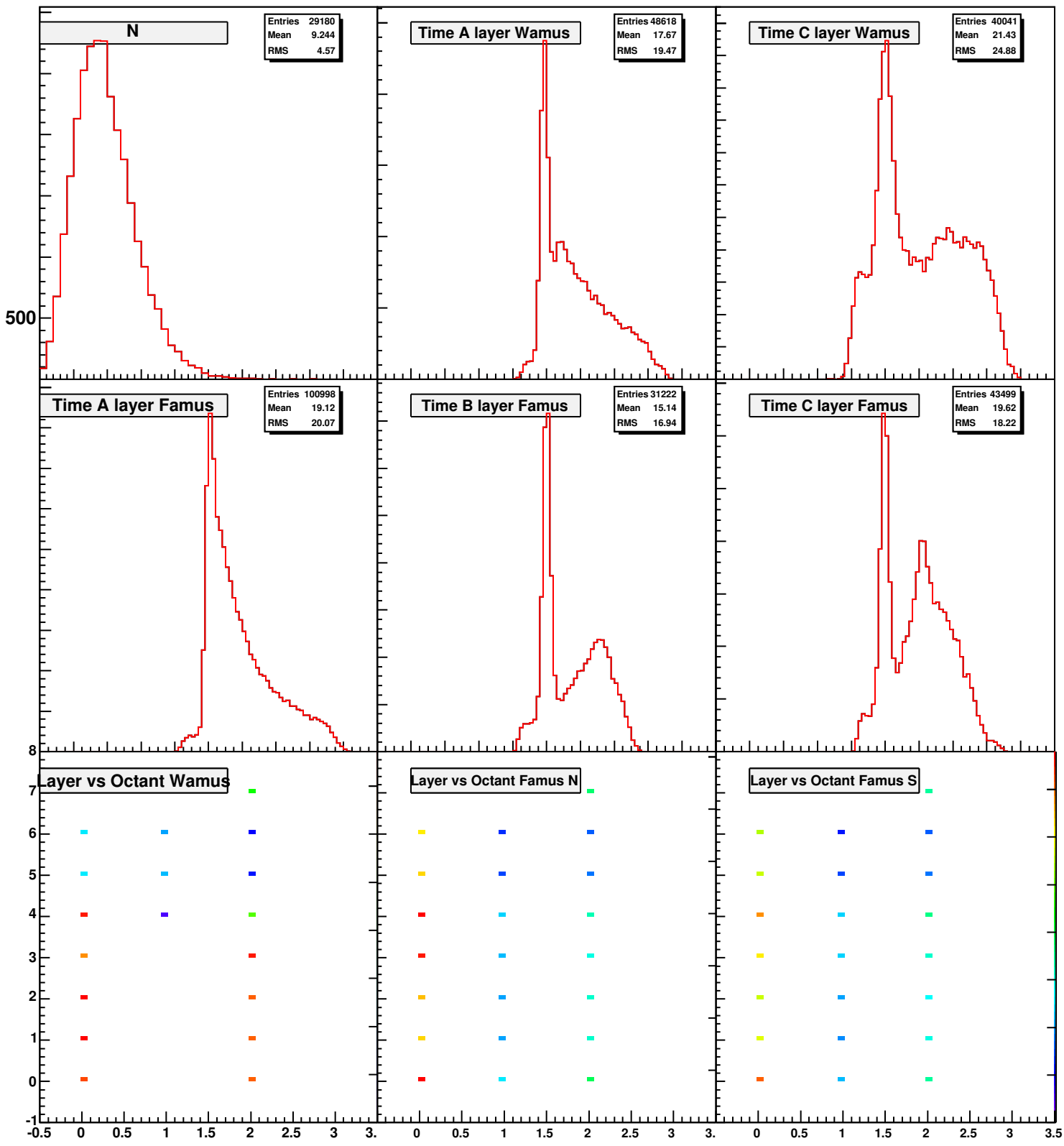
CFT ADC Summary (All Clusters)


N
Entries 29180
Mean 20.69
RMS 10.18
LAYER
Entries 603694
Mean 0.7338
RMS 0.8721
OCTANT
Entries 603694
Mean 2.422
RMS 2.008
Y vs Z
X vs Z
Y vs X
DDIST
Entries 603694
Mean 2.495
RMS 1.812
DTIME
Entries 603694
Mean 261.4
RMS 236.9

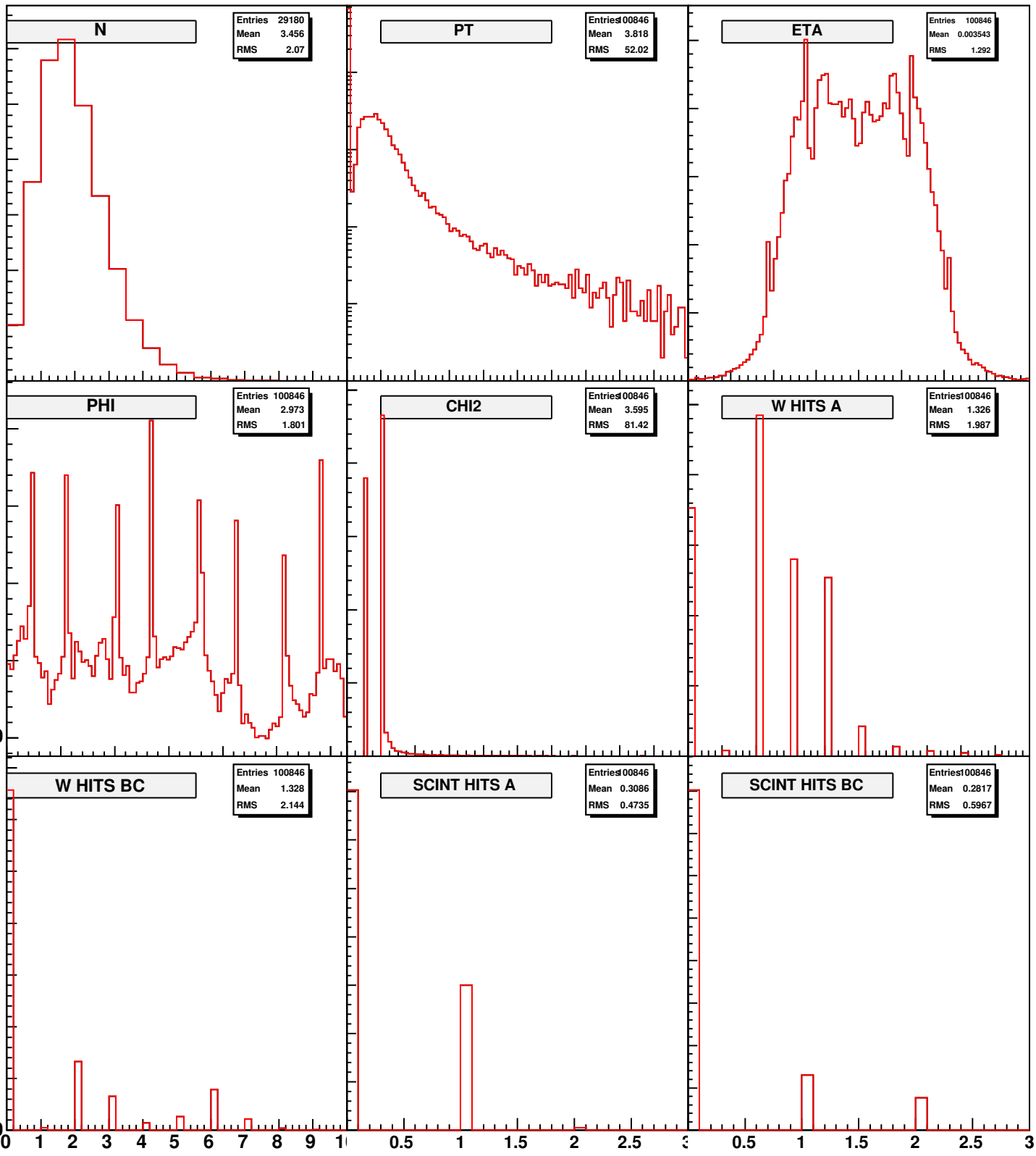
MuonPDT (All)


N
Entries 29180
Mean 16.27
RMS 11.77
LAYER
Entries 474625
Mean 0.8098
RMS 0.8716
OCTANT
Entries 474625
Mean 3.301
RMS 2.313
Y vs Z
X vs Z
Y vs X
DDIST
Entries 474625
Mean 0.4437
RMS 0.1864
DTIME
Entries 474625
Mean 40.73
RMS 19.66

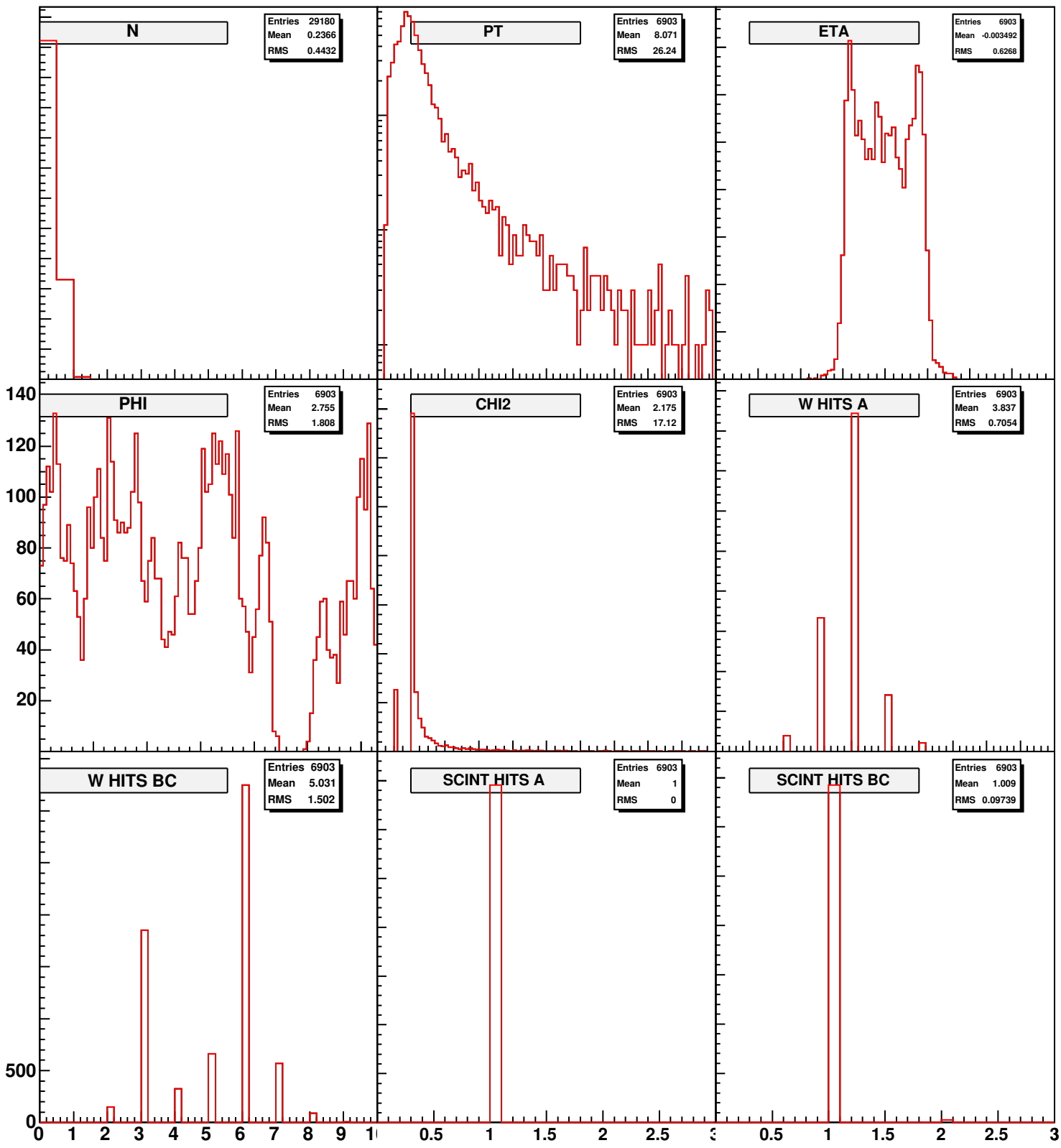
MuonMDT (All)


N
Entries 29180
Mean 9.244
RMS 4.57
Time A layer Wamus
Entries 48618
Mean 17.67
RMS 19.47
Time C layer Wamus
Entries 40041
Mean 21.43
RMS 24.88
Time A layer Famus
Entries 100998
Mean 19.12
RMS 20.07
Time B layer Famus
Entries 31222
Mean 15.14
RMS 16.94
Time C layer Famus
Entries 43499
Mean 19.62
RMS 18.22
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

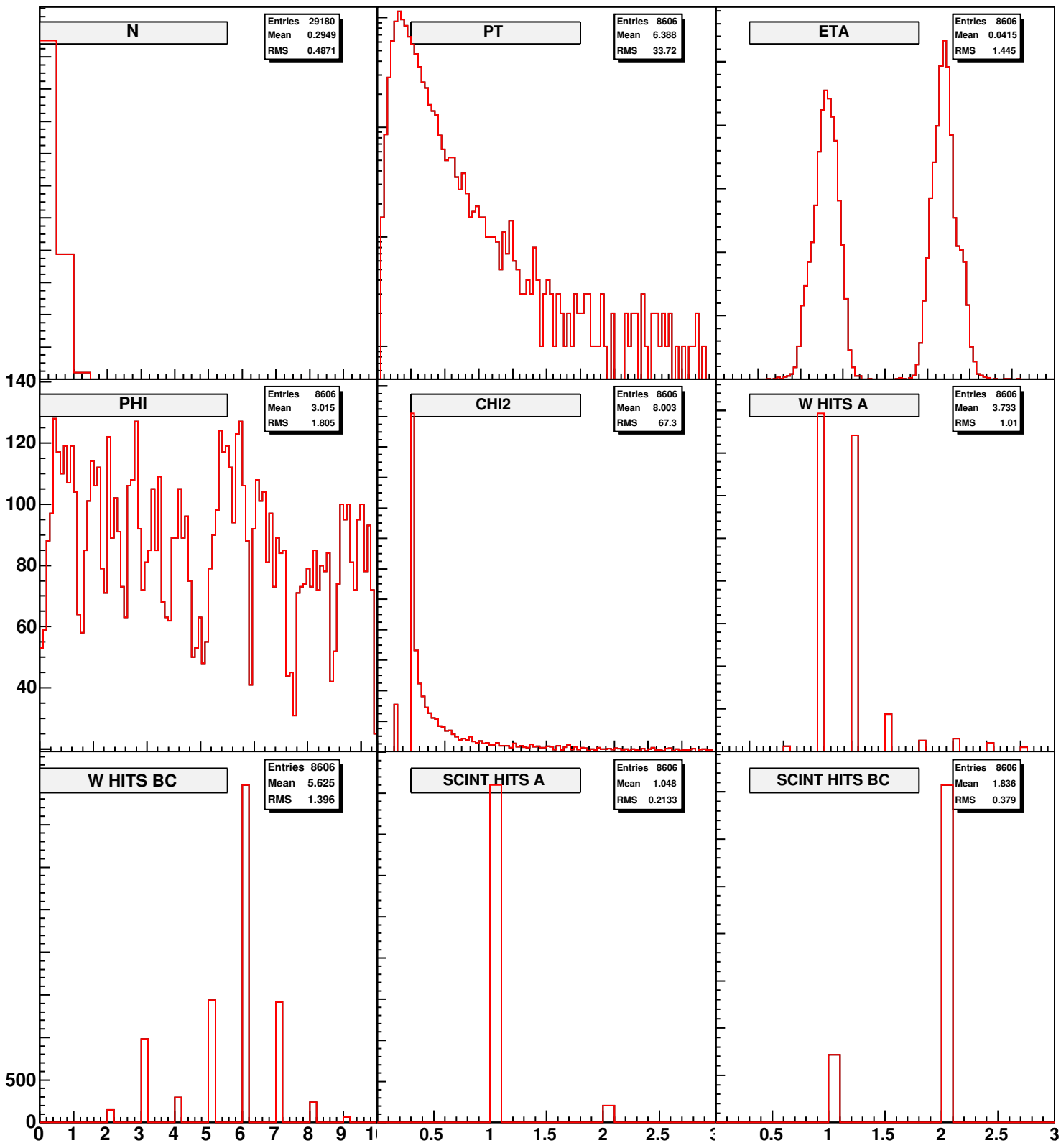
MuonMSC (All)



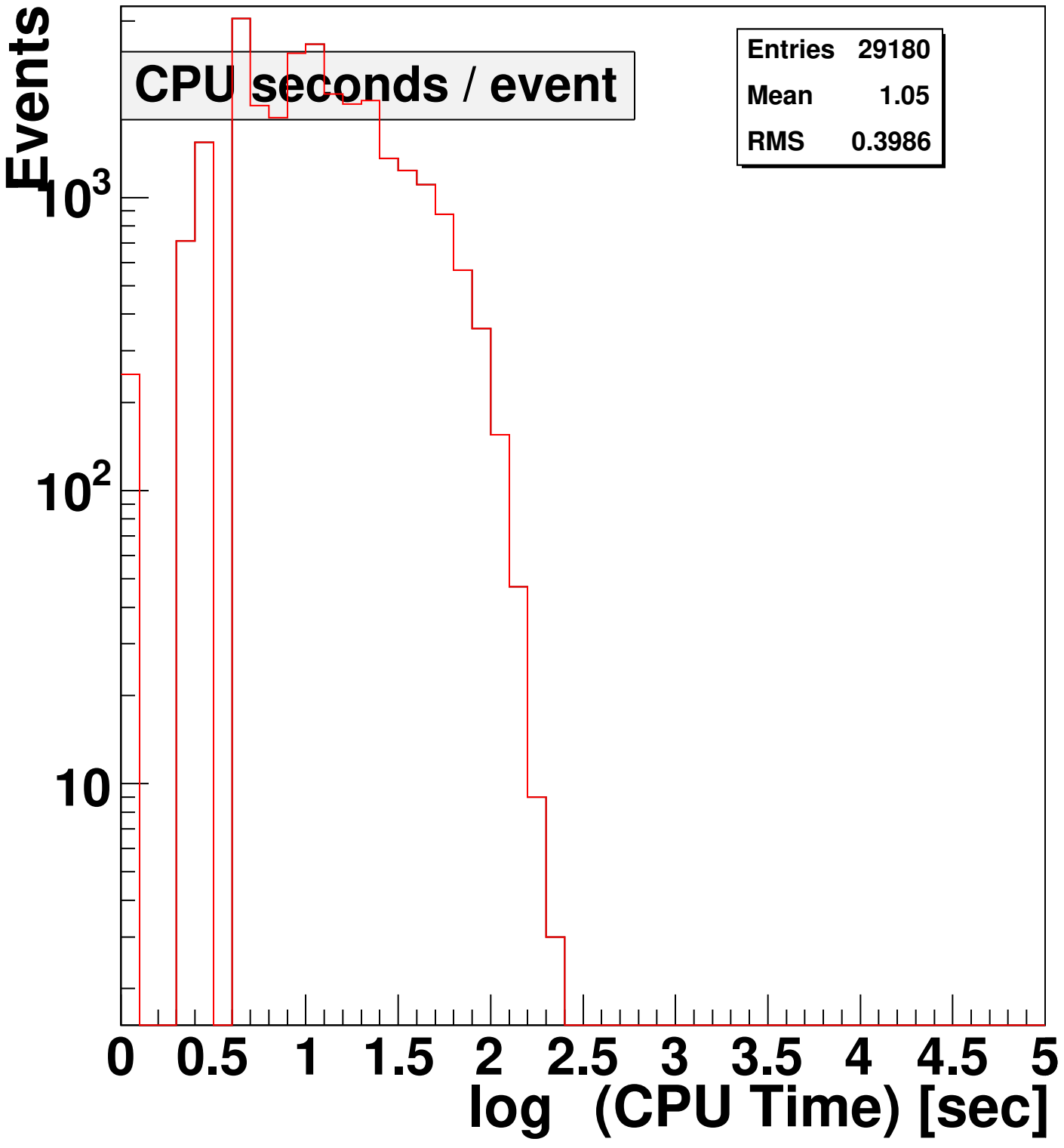
Muon Local Tracks (All)



Muon Local Tracks (MediumWamus)



Muon Local Tracks (MediumFamus)



RECO Performance (Timing)