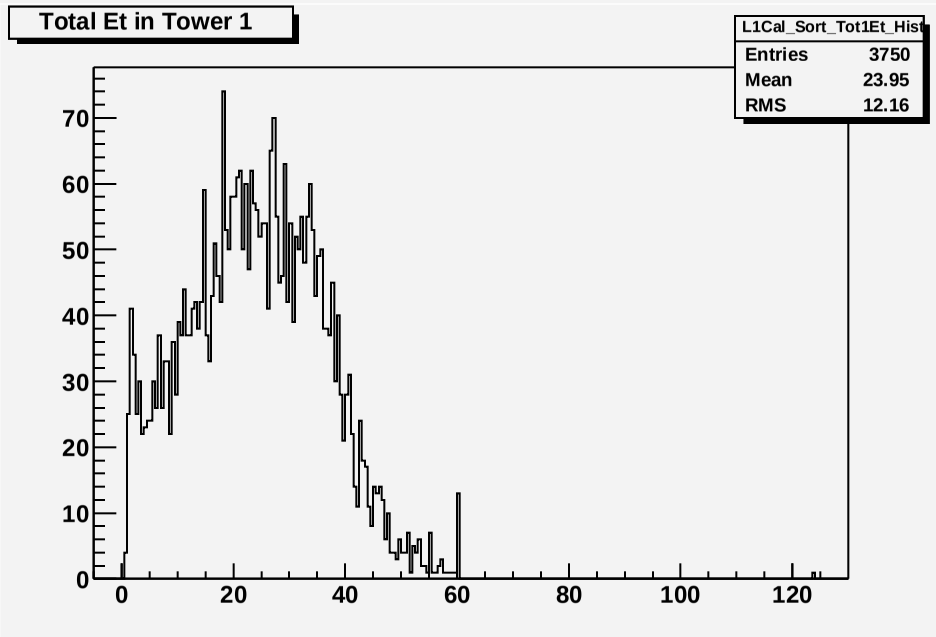
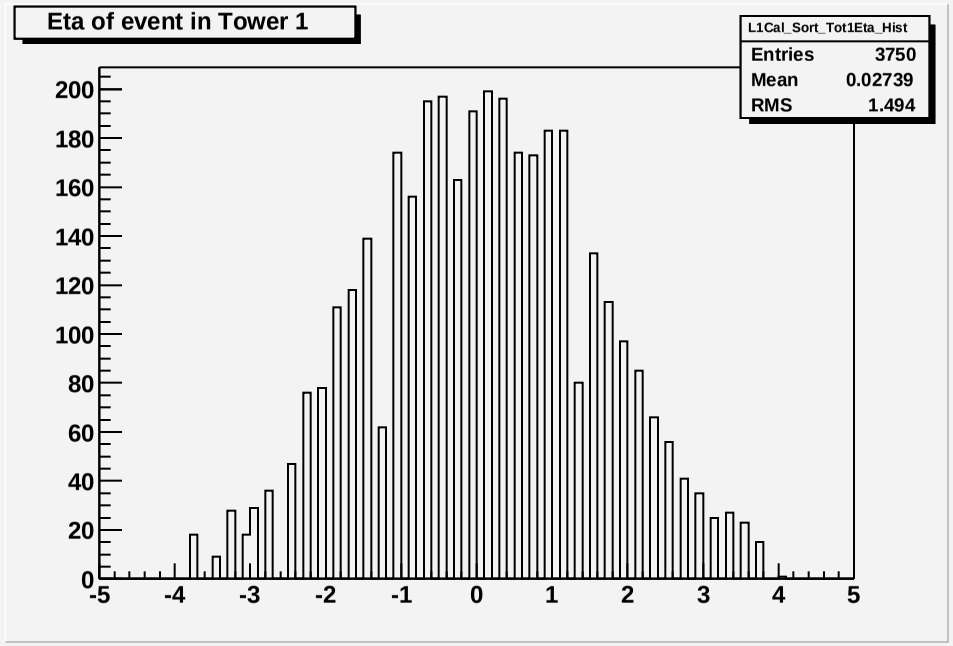
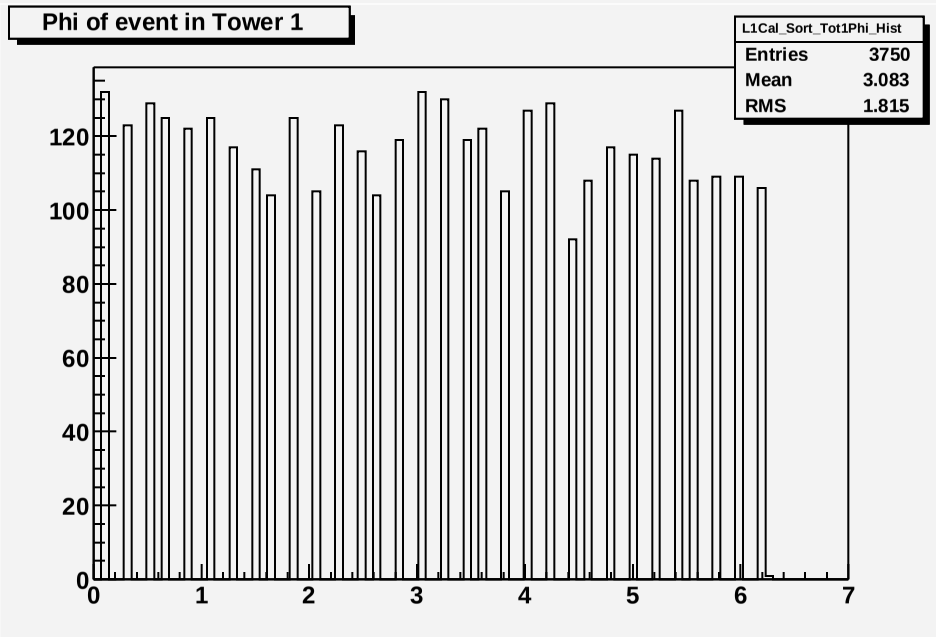
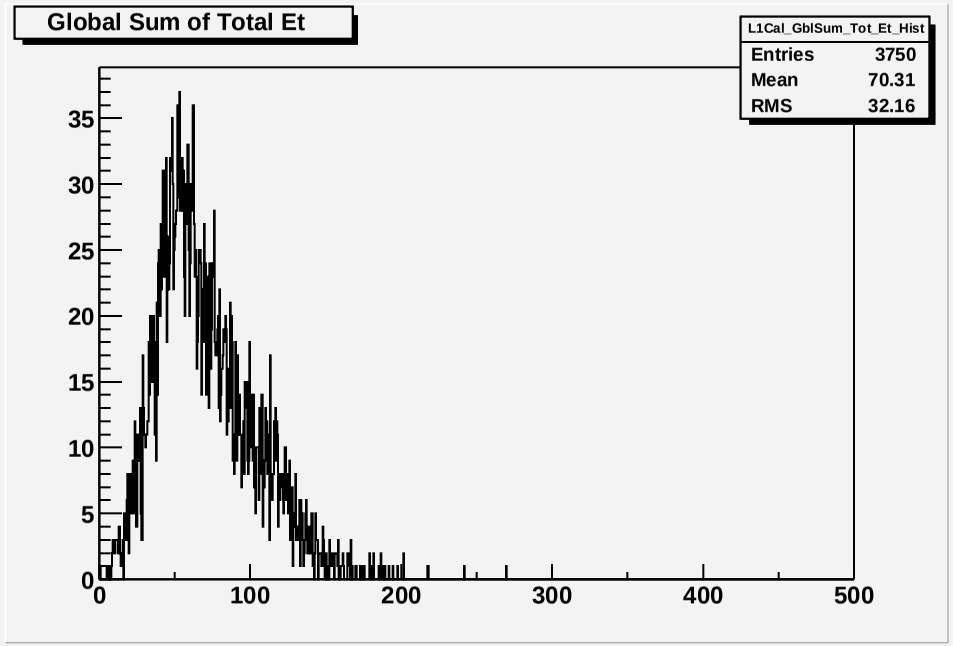
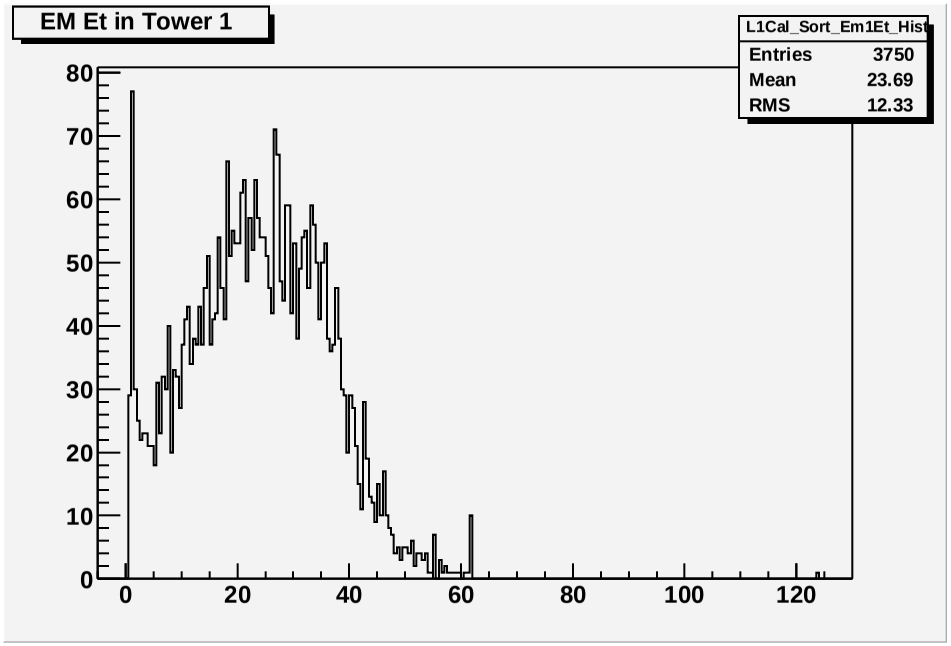
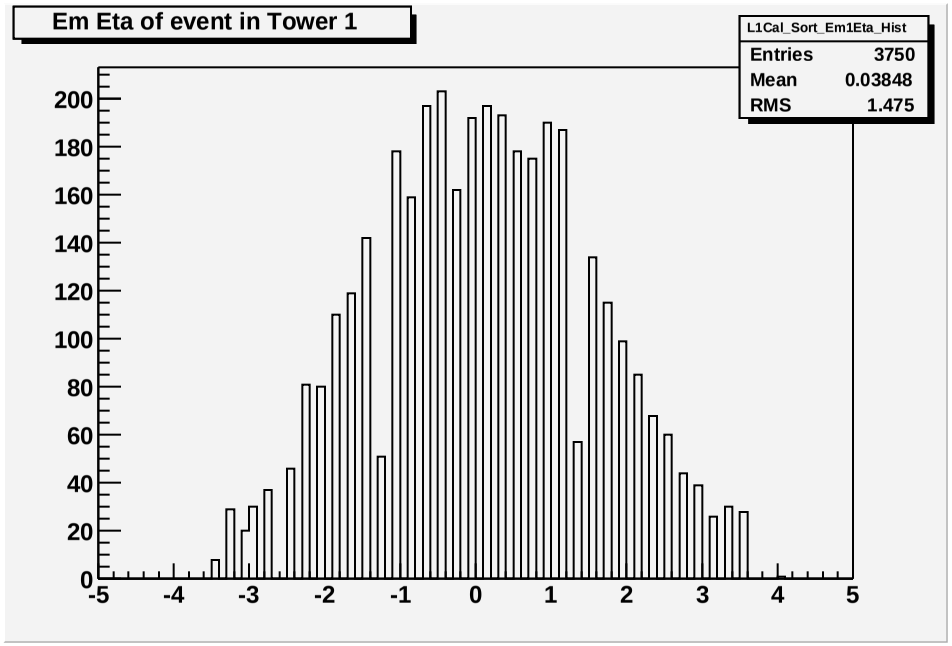

Total Et in Tower 1
L1Cal_Sort_Tot1Et_Hist
Entries 3750
Mean 23.95
RMS 12.16
0 10 20 30 40 50 60 70
0 20 40 60 80 100 120

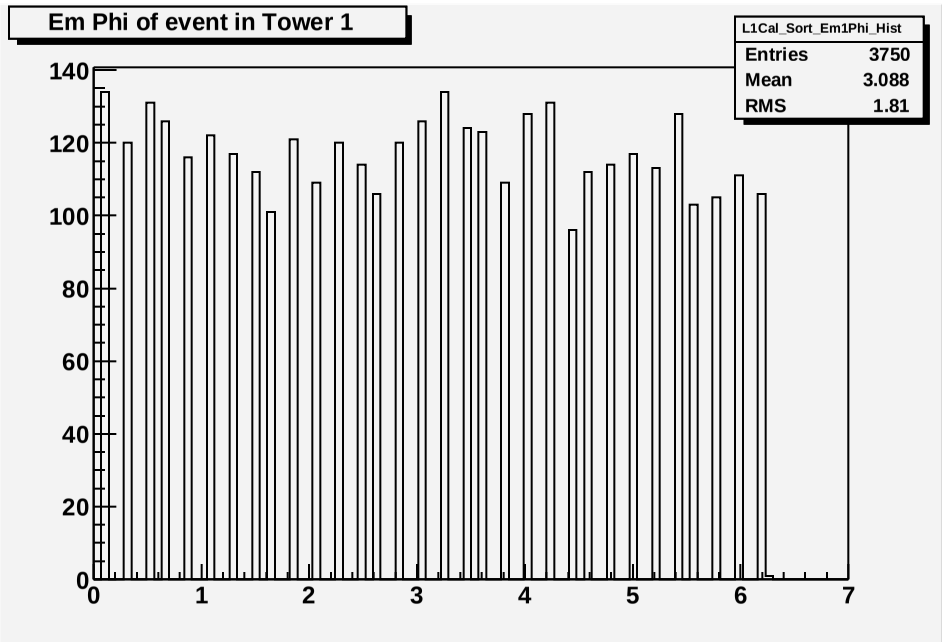

Eta of event in Tower 1
L1Cal_Sort_Tot1Eta_Hist
Entries 3750
Mean 0.02739
RMS 1.494
0 20 40 60 80 100 120 140 160 180 200
-5 -4 -3 -2 -1 0 1 2 3 4 5

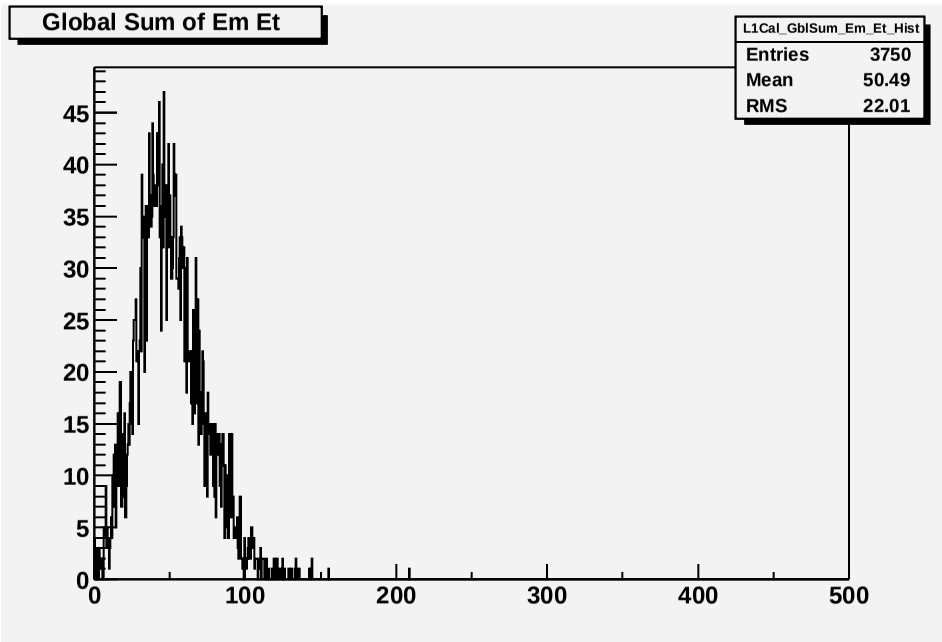

Phi of event in Tower 1
L1Cal_Sort_Tot1Phi_Hist
Entries 3750
Mean 3.083
RMS 1.815
0 20 40 60 80 100 120
0 1 2 3 4 5 6 7

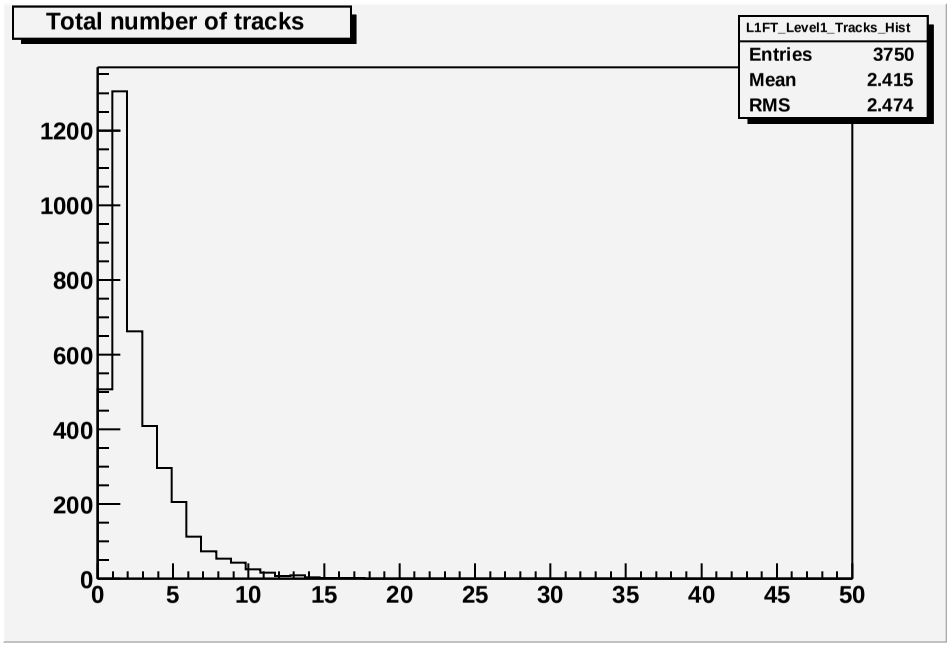

Global Sum of Total Et
L1Cal_GblSum_Tot_Et_Hist
Entries 3750
Mean 70.31
RMS 32.16
0 5 10 15 20 25 30 35
0 100 200 300 400 500

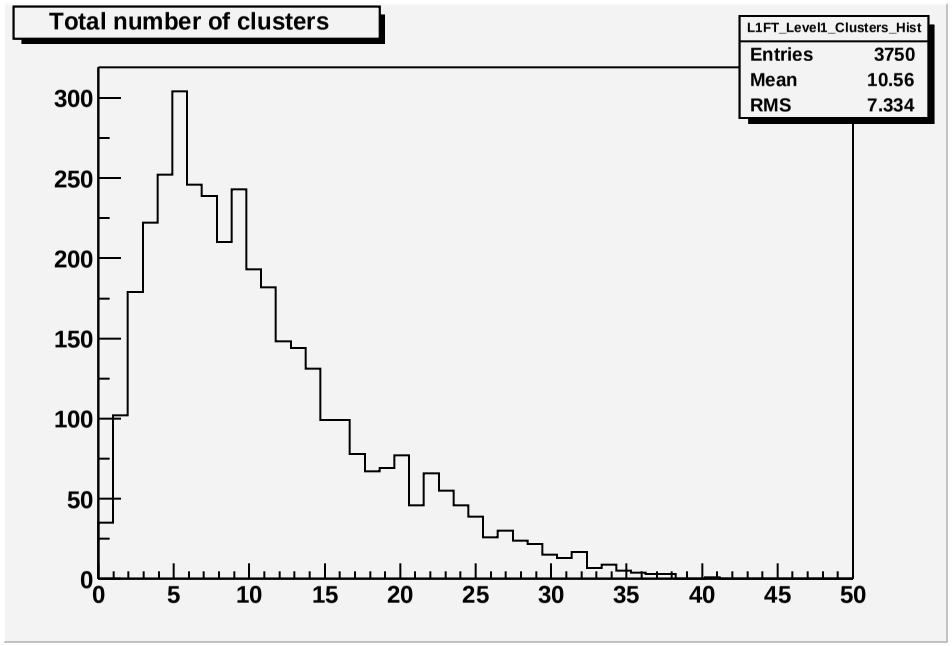

EM Et in Tower 1
L1Cal_Sort_Em1Et_Hist
Entries 3750
Mean 23.69
RMS 12.33

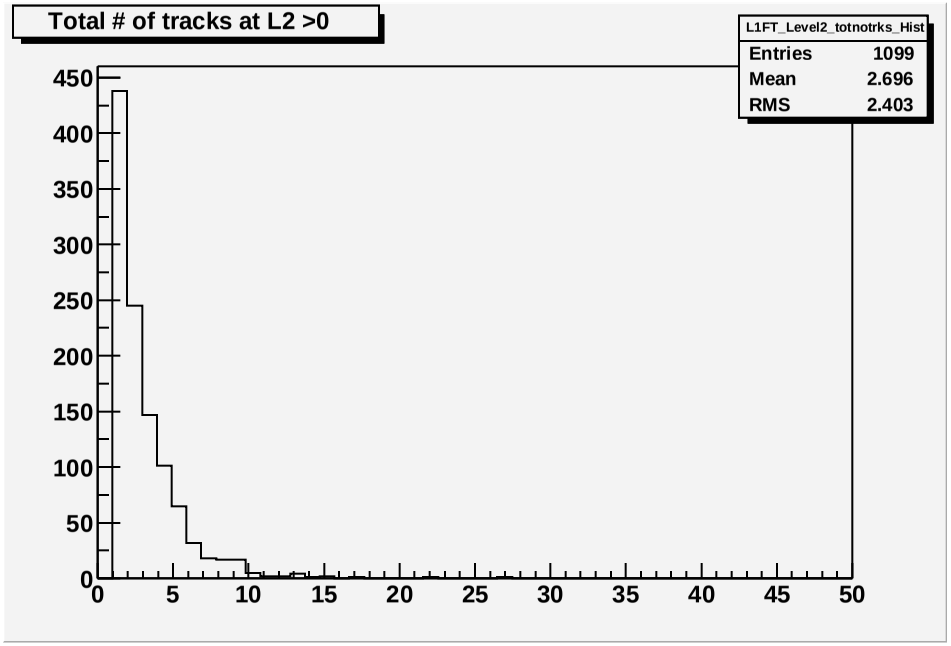

Em Eta of event in Tower 1
L1Cal_Sort_Em1Eta_Hist
Entries 3750
Mean 0.03848
RMS 1.475

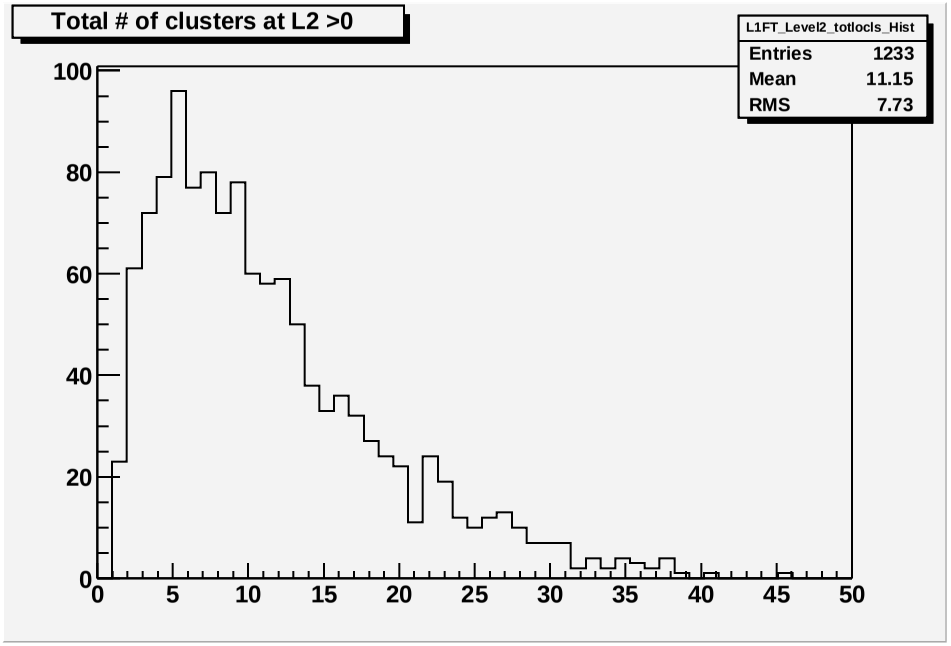

Em Phi of event in Tower 1
L1Cal_Sort_Em1Phi_Hist
Entries 3750
Mean 3.088
RMS 1.81

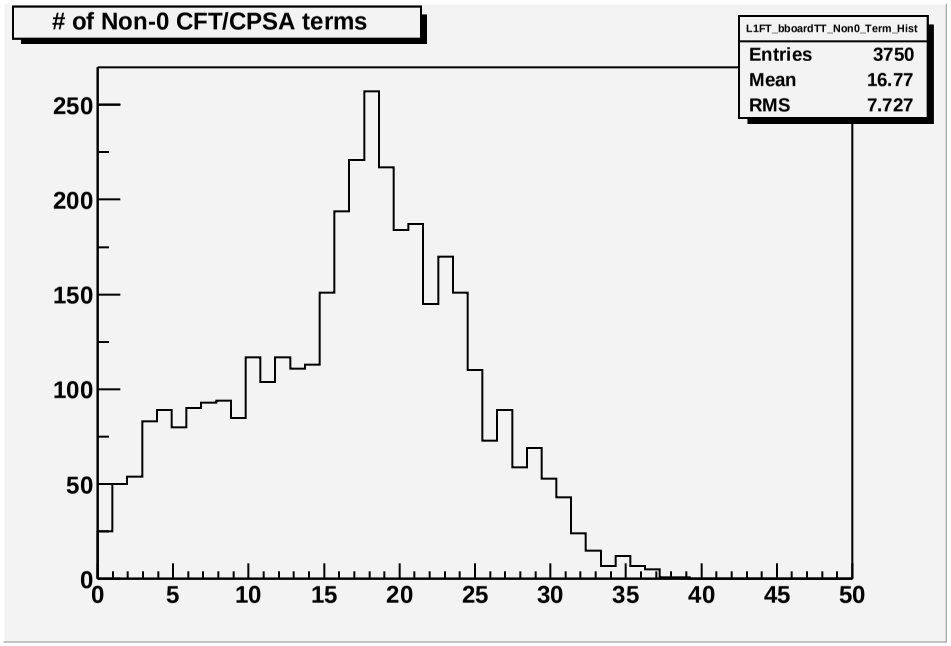

Global Sum of Em Et
L1Cal_GblSum_Em_Et_Hist
Entries 3750
Mean 50.49
RMS 22.01

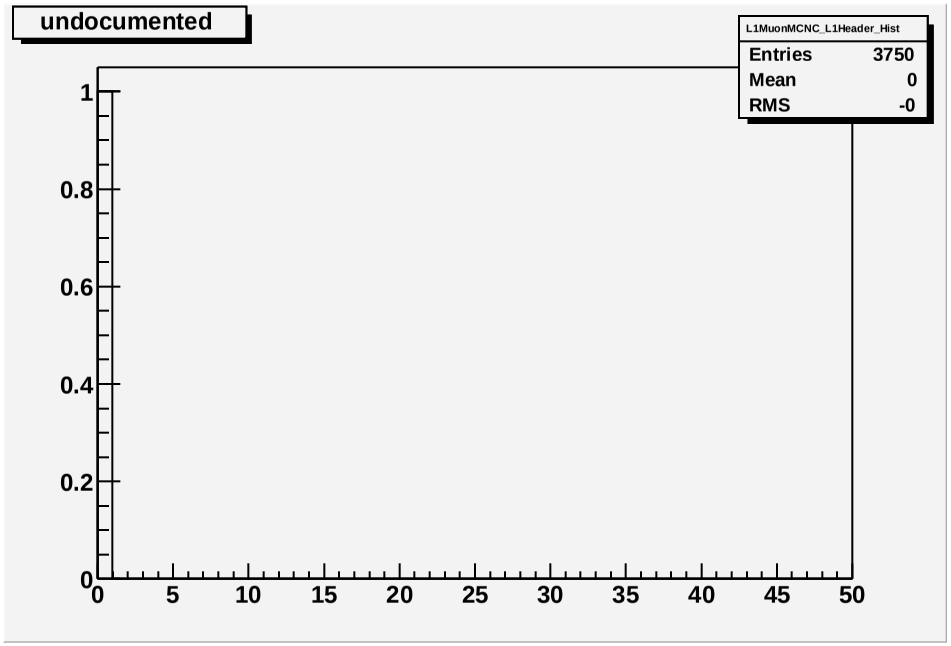

Total number of tracks
L1FT_Level1_Tracks_Hist
Entries 3750
Mean 2.415
RMS 2.474

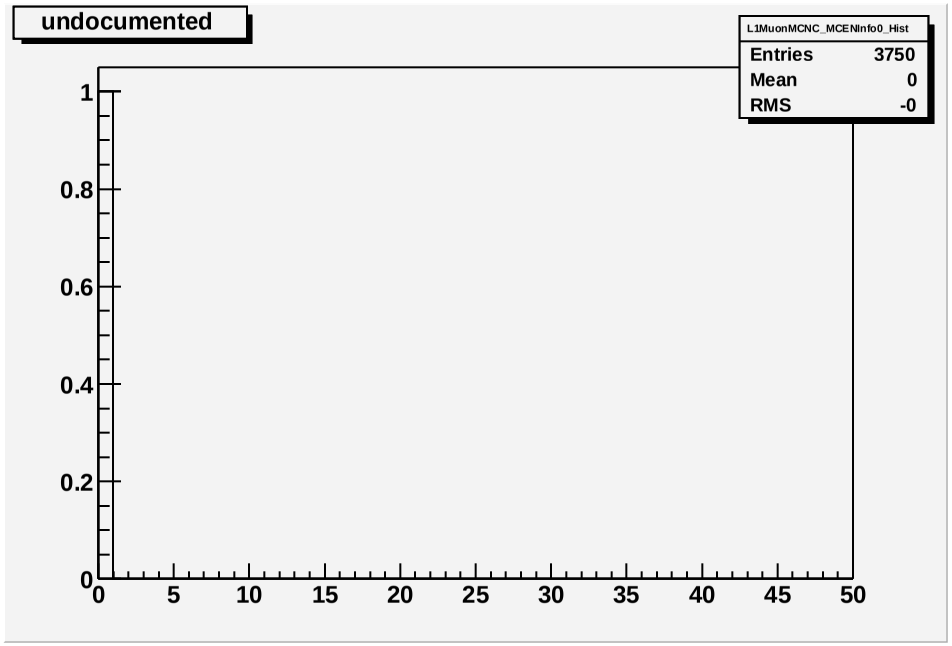

Total number of clusters
L1FT_Level1_Clusters_Hist
Entries 3750
Mean 10.56
RMS 7.334

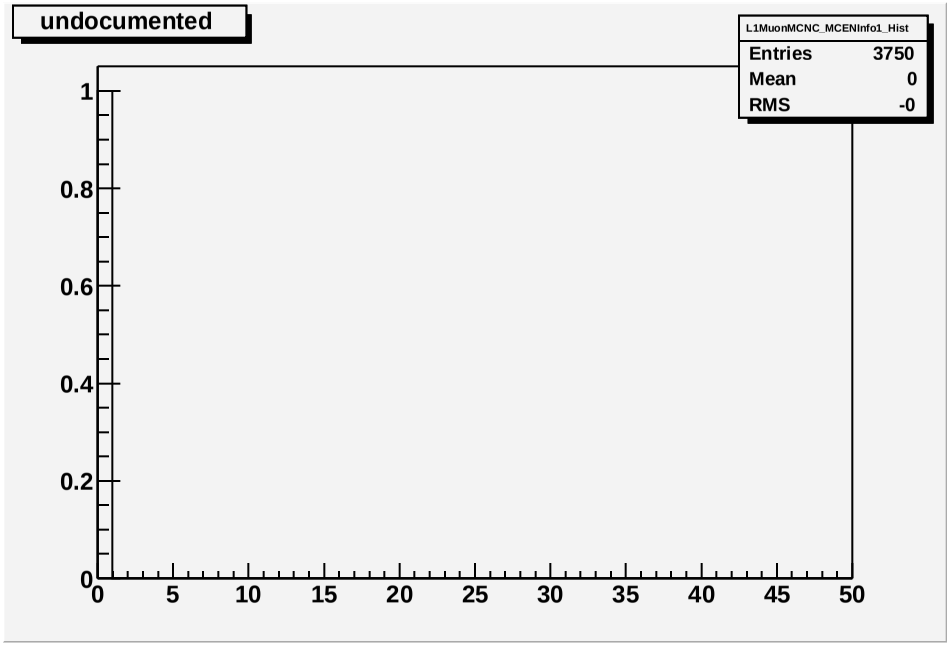

Total # of tracks at L2 >0
L1FT_Level2_totnotrks_Hist
Entries 1099
Mean 2.696
RMS 2.403

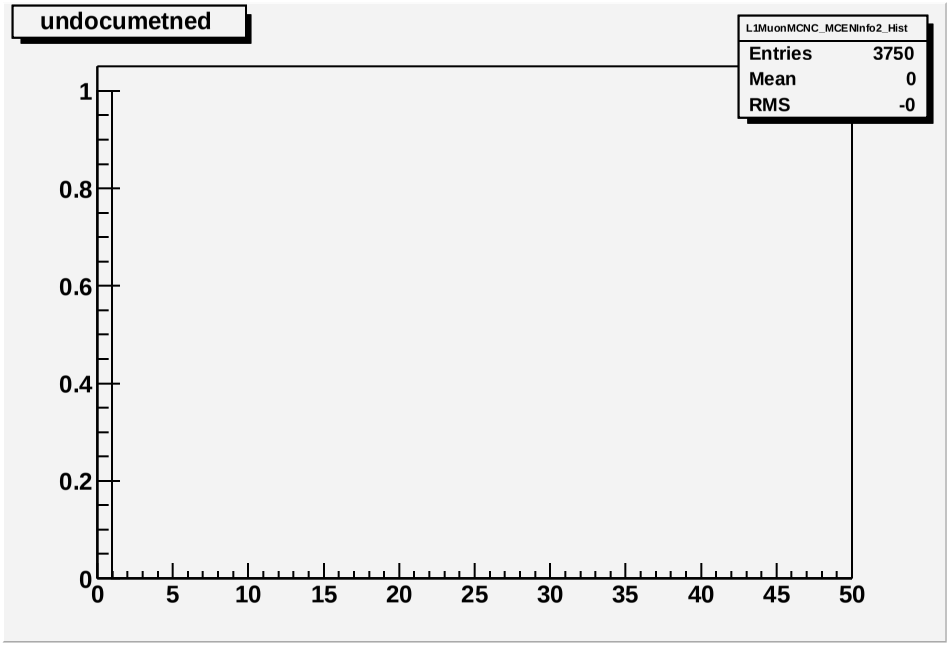

Total # of clusters at L2 >0
L1FT_Level2_totlocls_Hist
Entries 1233
Mean 11.15
RMS 7.73

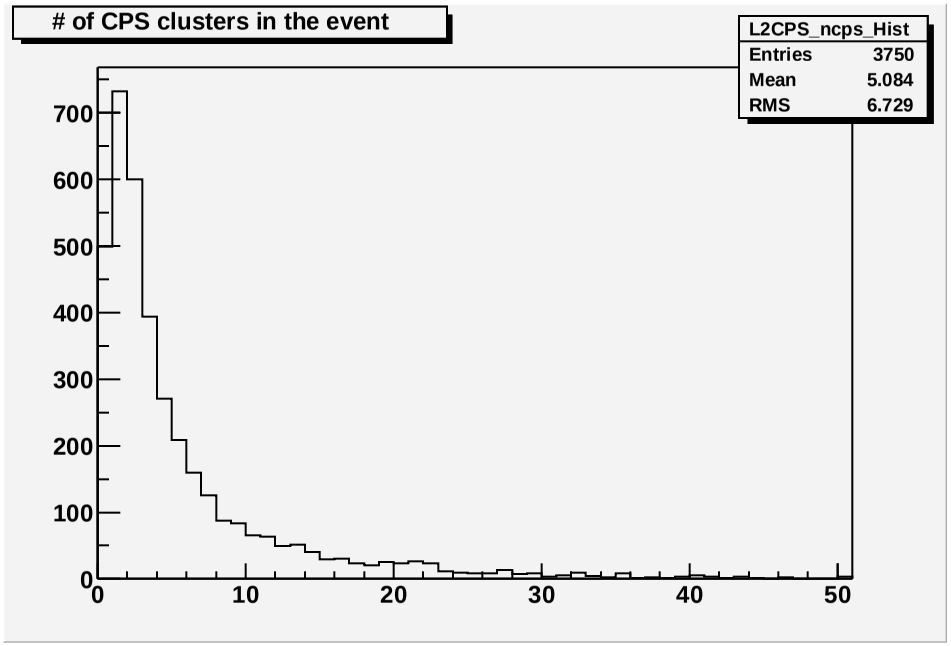

# of Non-0 CFT/CPSA terms
L1FT_bboardTT_Non0_Term_Hist
Entries 3750
Mean 16.77
RMS 7.727
250
200
150
100
50
0
0
5
10
15
20
25
30
35
40
45
50

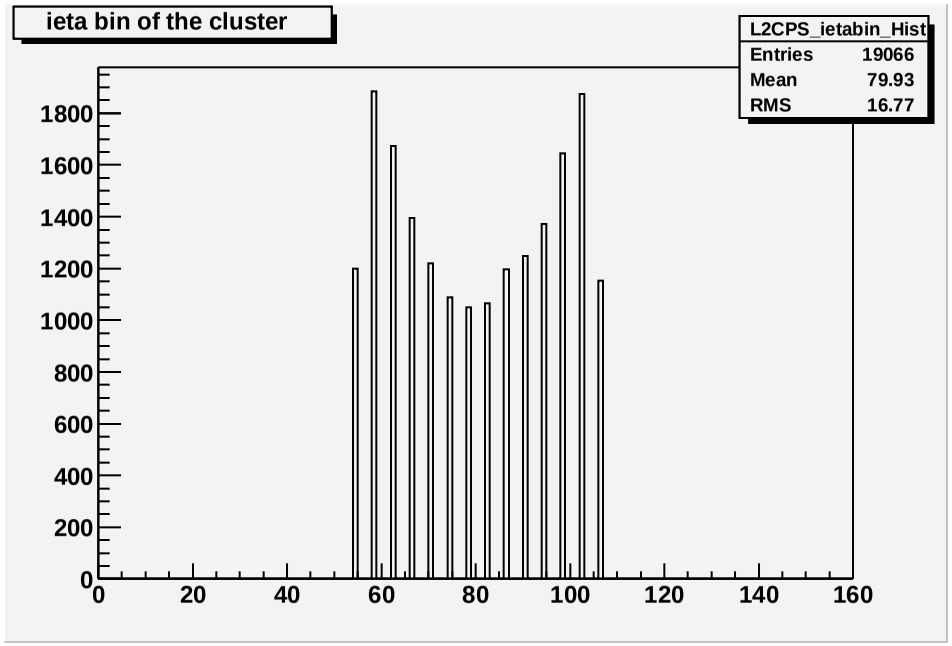

undocumented
L1MuonMCNC_L1Header_Hist
Entries 3750
Mean 0
RMS -0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35 40 45 50

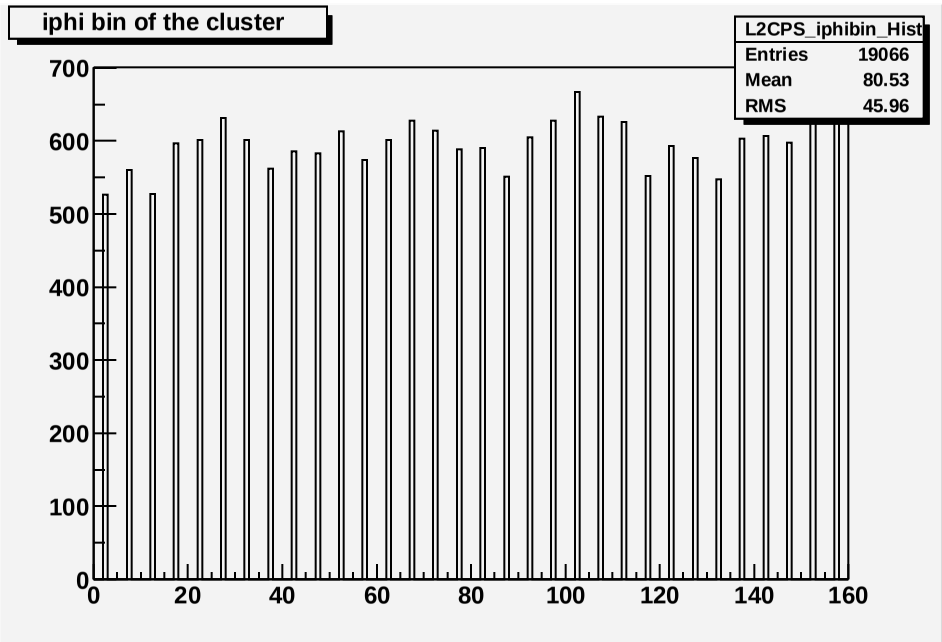

undocumented
L1MuonMCNC_MCENInfo0_Hist
Entries 3750
Mean 0
RMS -0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35 40 45 50

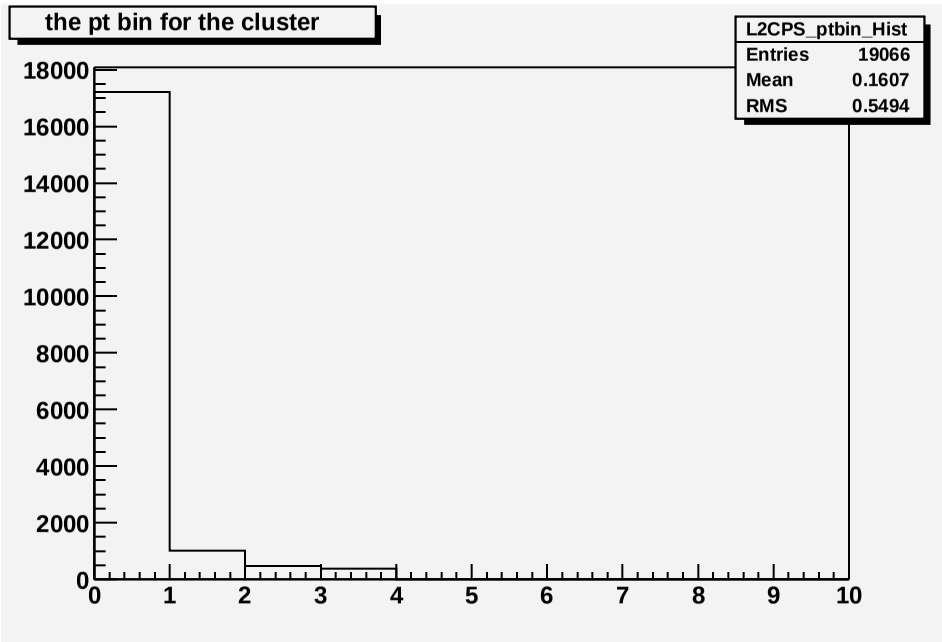

undocumented
L1MuonMCNC_MCENInfo1_Hist
Entries 3750
Mean 0
RMS -0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35 40 45 50

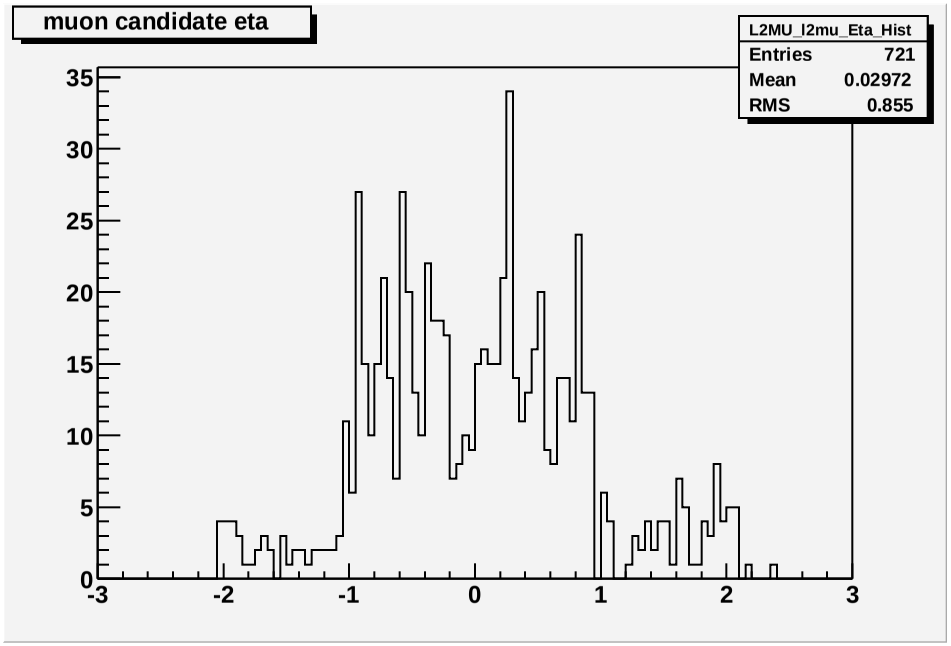

undocumetned
L1MuonMCNC_MCENInfo2_Hist
Entries 3750
Mean 0
RMS -0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35 40 45 50

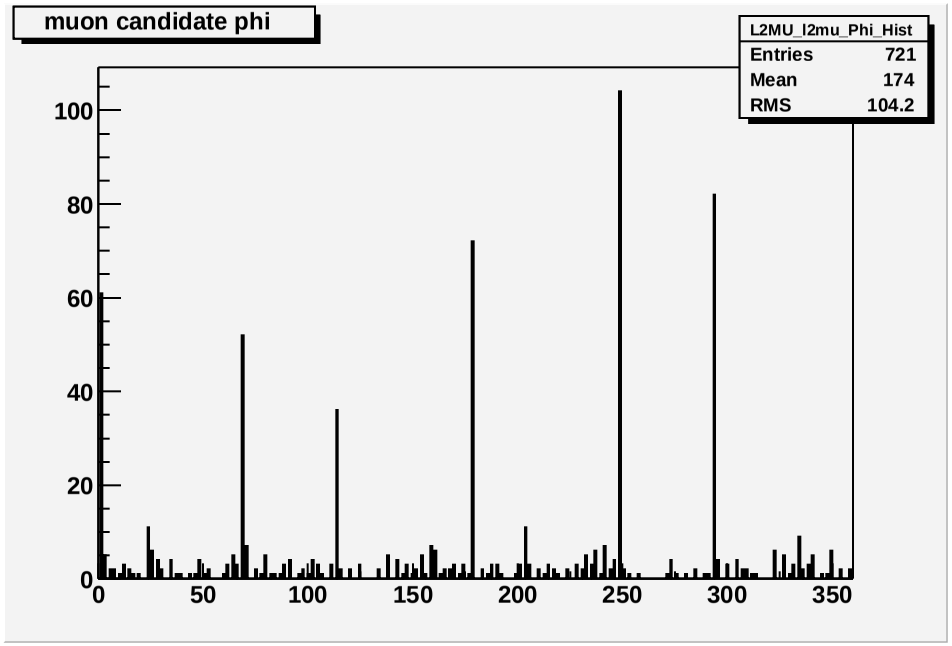

# of CPS clusters in the event
L2CPS_ncps_Hist
Entries 3750
Mean 5.084
RMS 6.729
0
100
200
300
400
500
600
700
0
10
20
30
40
50

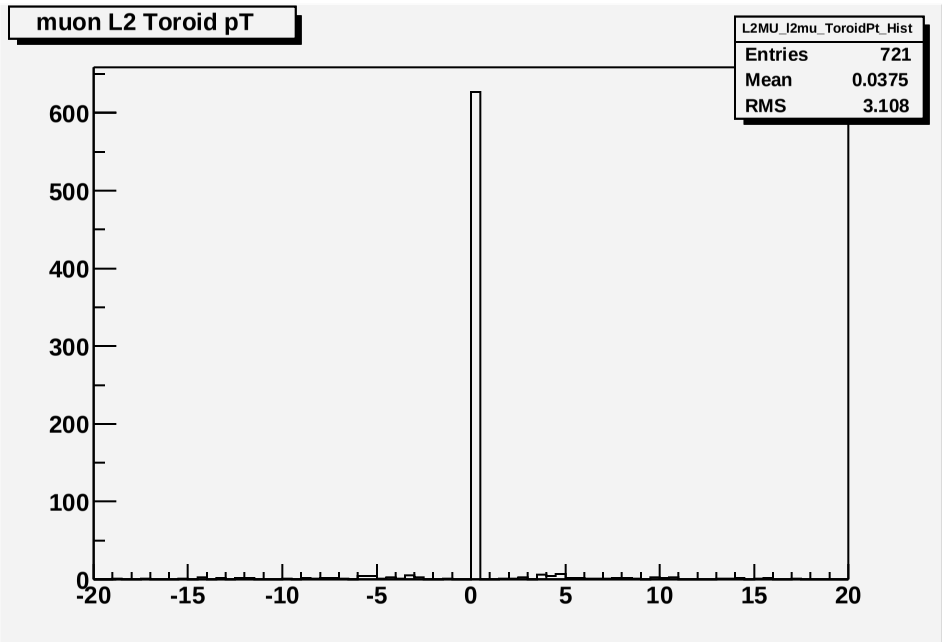

ieta bin of the cluster
L2CPS_ietabin_Hist
Entries 19066
Mean 79.93
RMS 16.77
0
200
400
600
800
1000
1200
1400
1600
1800
0
20
40
60
80
100
120
140
160

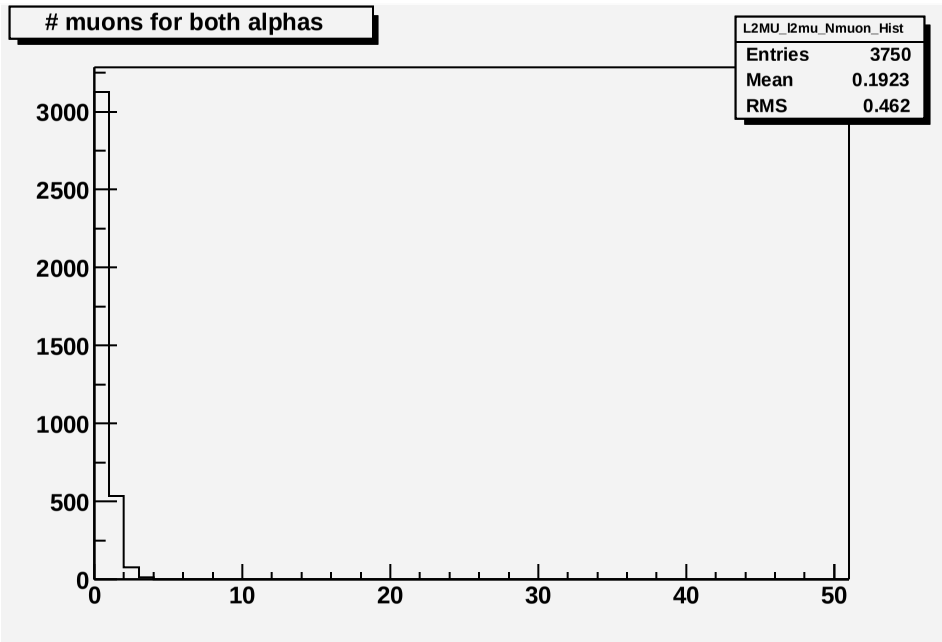

iphi bin of the cluster
L2CPS_iphibin_Hist
Entries 19066
Mean 80.53
RMS 45.96
0
100
200
300
400
500
600
700
0
20
40
60
80
100
120
140
160

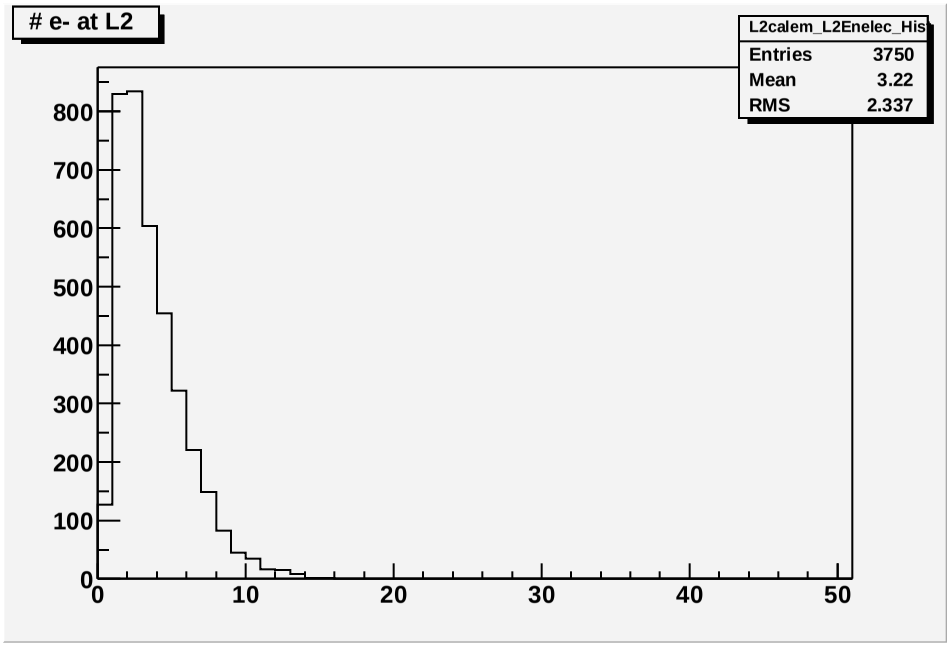

the pt bin for the cluster
L2CPS_ptbin_Hist
Entries 19066
Mean 0.1607
RMS 0.5494
0
2000
4000
6000
8000
10000
12000
14000
16000
18000
0
1
2
3
4
5
6
7
8
9
10

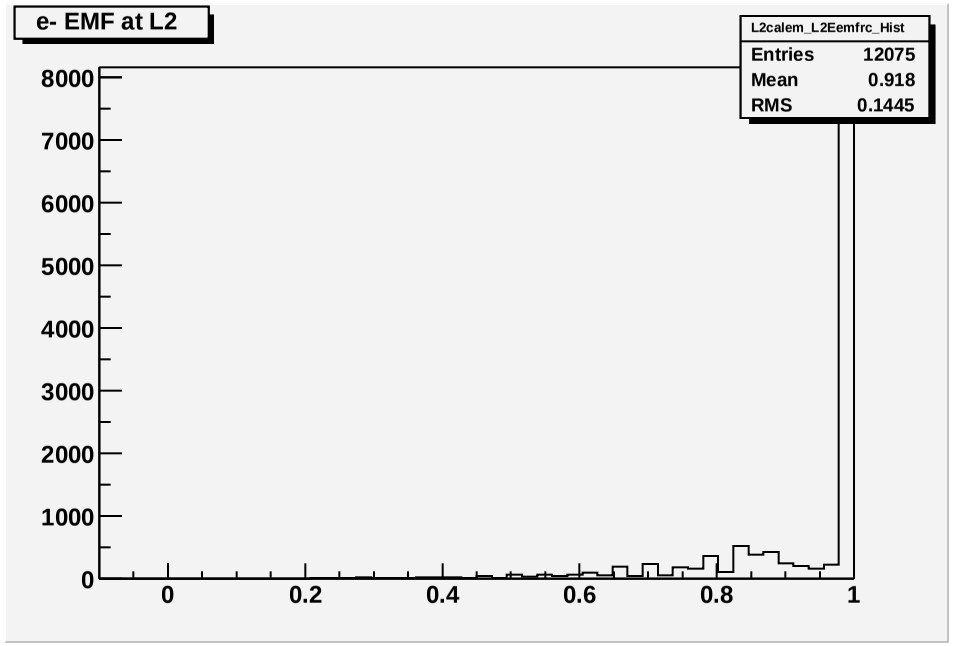

muon candidate eta
L2MU_l2mu_Eta_Hist
Entries 721
Mean 0.02972
RMS 0.855
35
30
25
20
15
10
5
0
-3
-2
-1
0
1
2
3

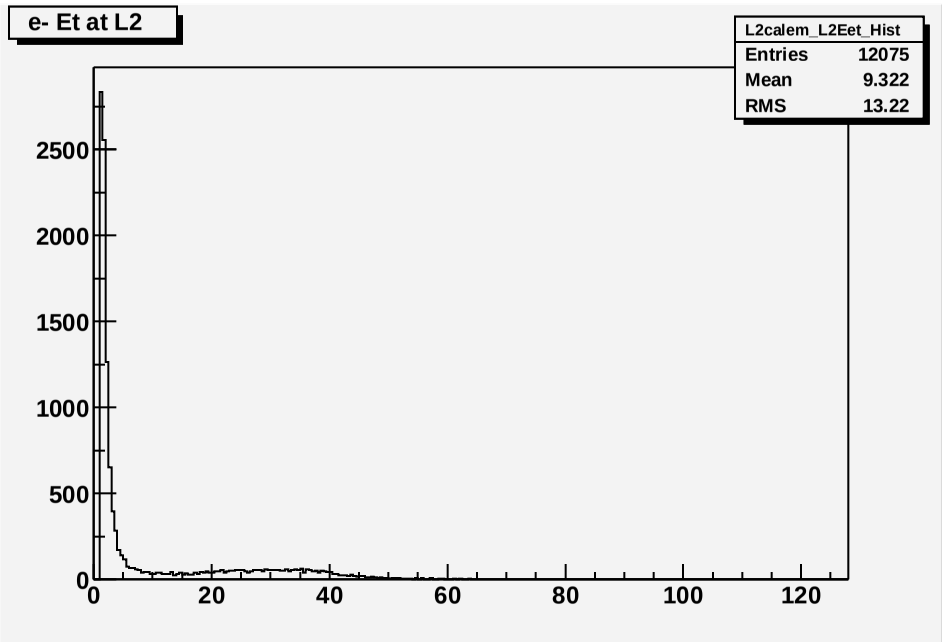

muon candidate phi
L2MU_l2mu_Phi_Hist
Entries 721
Mean 174
RMS 104.2
100
80
60
40
20
0
0
50
100
150
200
250
300
350

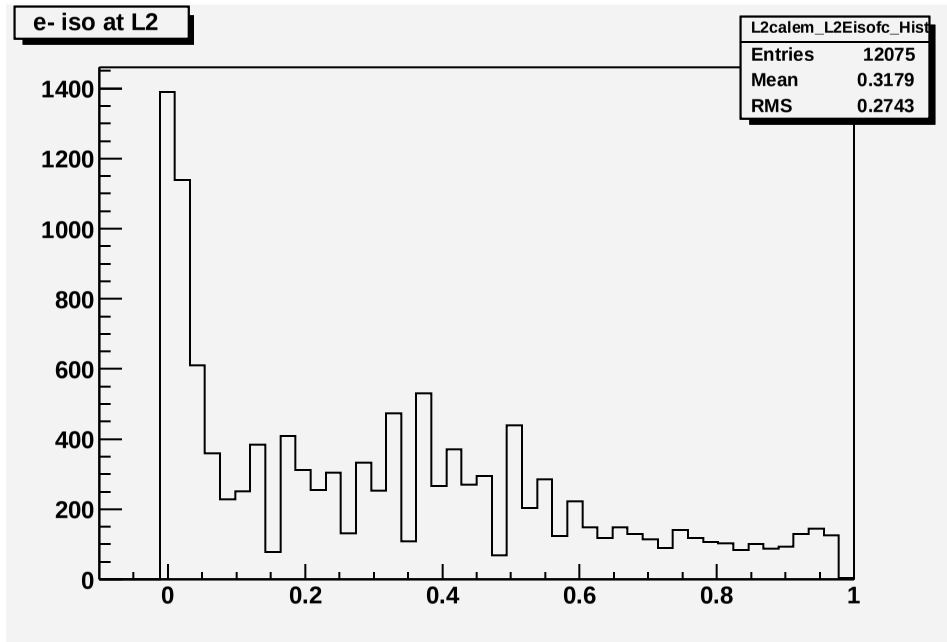

muon L2 Toroid pT
L2MU_l2mu_ToroidPt_Hist
Entries 721
Mean 0.0375
RMS 3.108
600
500
400
300
200
100
0
-20
-15
-10
-5
0
5
10
15
20

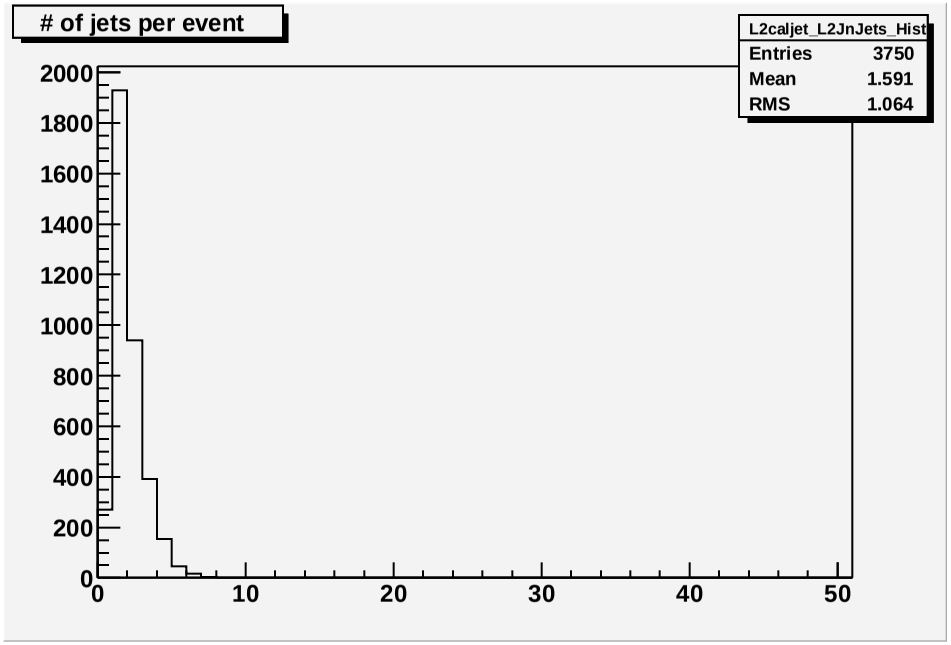

muons for both alphas
L2MU_l2mu_Nmuon_Hist
Entries 3750
Mean 0.1923
RMS 0.462
3000
2500
2000
1500
1000
500
0
0
10
20
30
40
50

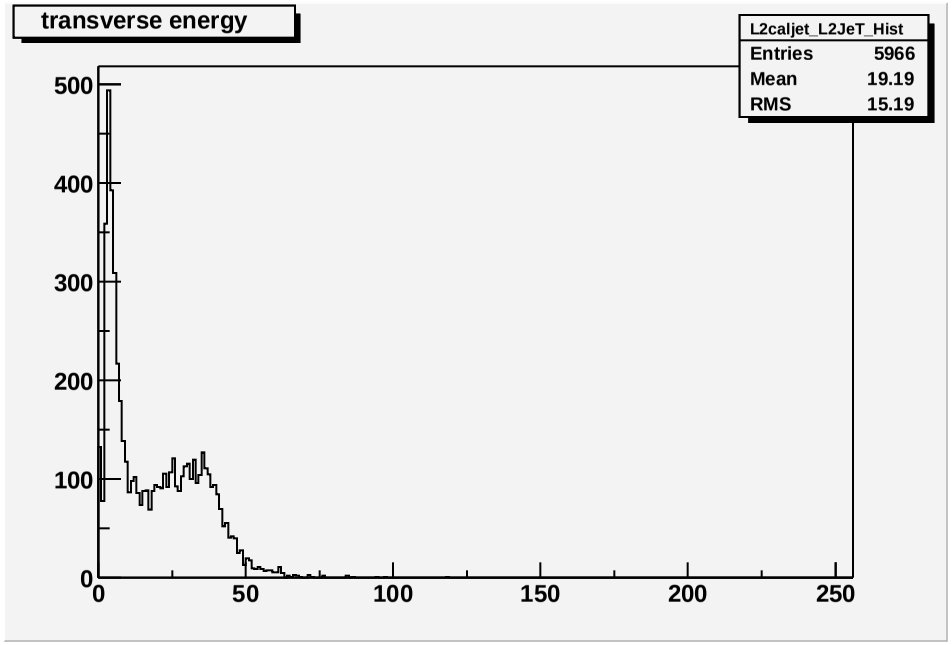

e- at L2
L2calem_L2Enelec_His
Entries 3750
Mean 3.22
RMS 2.337
0
100
200
300
400
500
600
700
800
0
10
20
30
40
50

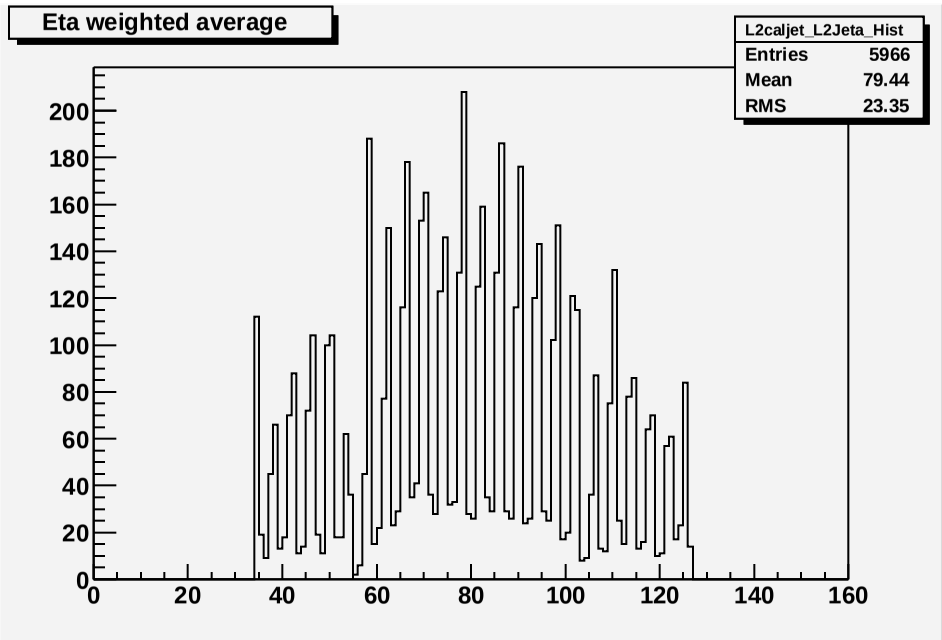

e- EMF at L2
L2calem_L2Eemfrc_Hist
Entries 12075
Mean 0.918
RMS 0.1445
0
1000
2000
3000
4000
5000
6000
7000
8000
0
0.2
0.4
0.6
0.8
1

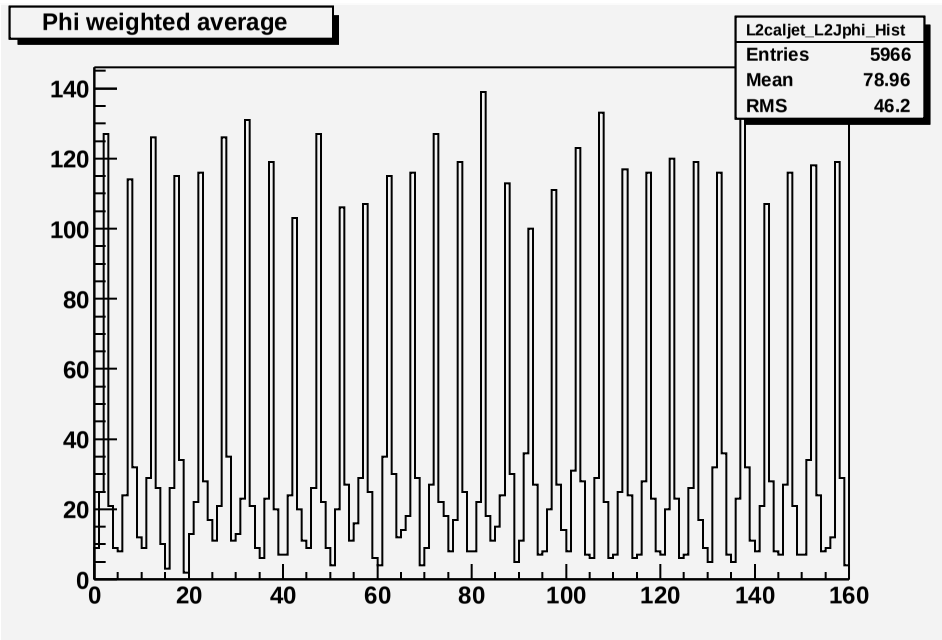

e- Et at L2
L2calem_L2Eet_Hist
Entries 12075
Mean 9.322
RMS 13.22
0
500
1000
1500
2000
2500
0
20
40
60
80
100
120

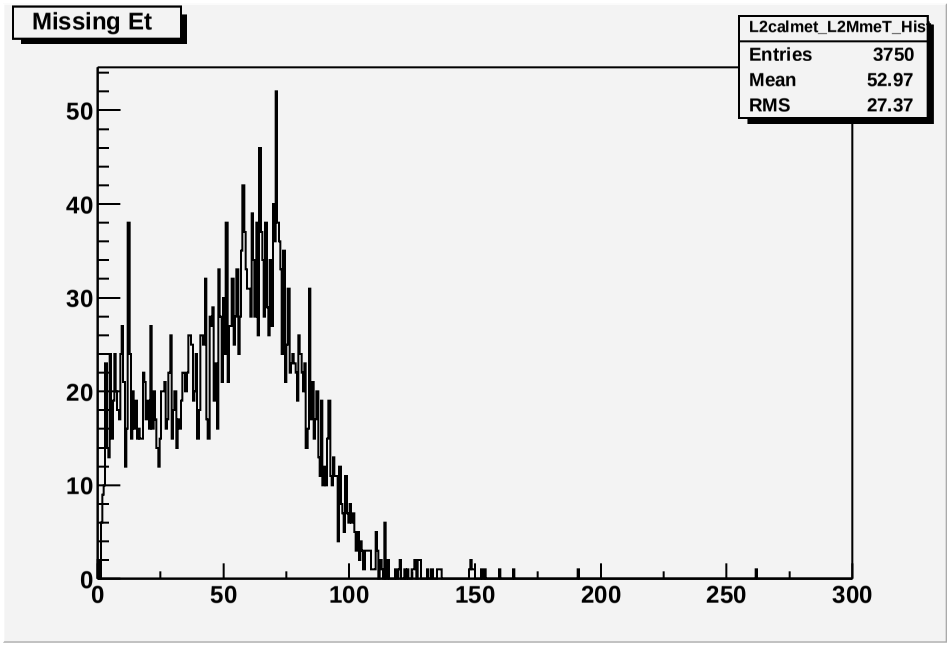

e- iso at L2
L2calem_L2Eisofc_Hist
Entries 12075
Mean 0.3179
RMS 0.2743
0
200
400
600
800
1000
1200
1400
0
0.2
0.4
0.6
0.8
1

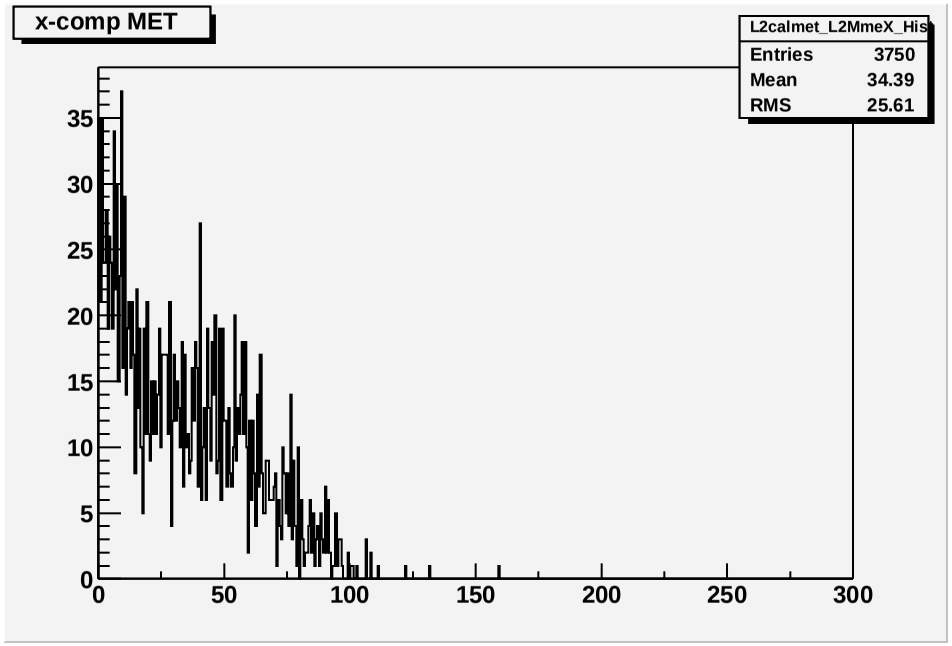

# of jets per event
L2caljet_L2JnJets_Hist
Entries 3750
Mean 1.591
RMS 1.064
0 200 400 600 800 1000 1200 1400 1600 1800 2000
0 10 20 30 40 50

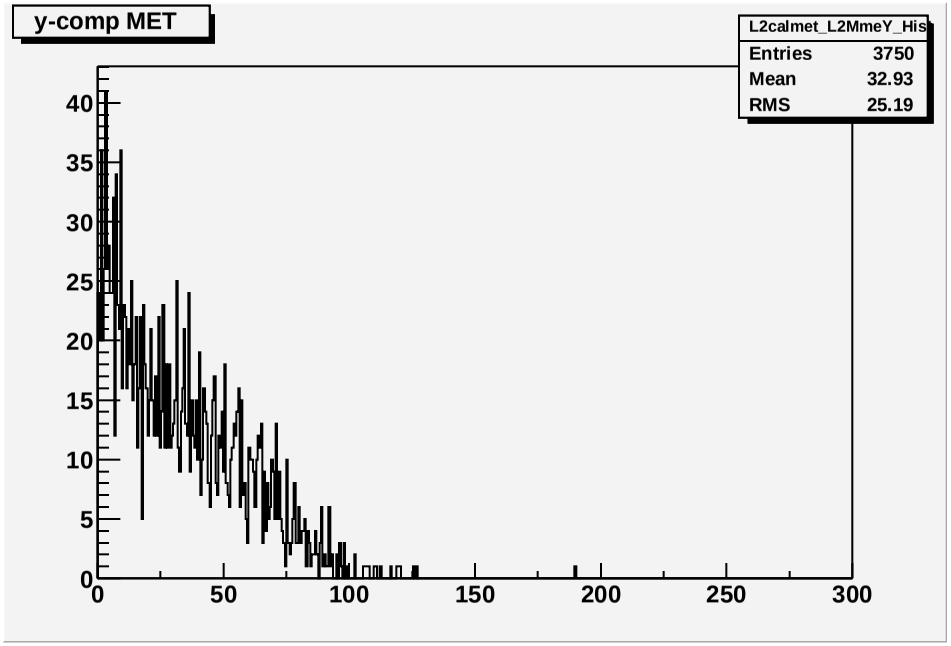

transverse energy
L2caljet_L2JeT_Hist
Entries 5966
Mean 19.19
RMS 15.19
0 100 200 300 400 500
0 50 100 150 200 250

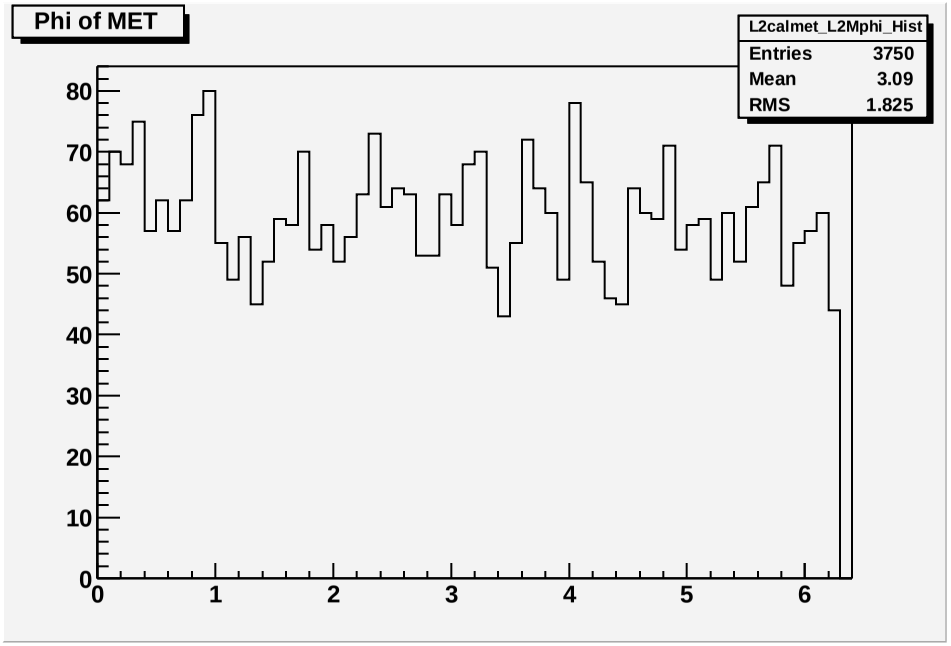

Eta weighted average
L2caljet_L2Jeta_Hist
Entries 5966
Mean 79.44
RMS 23.35
0 20 40 60 80 100 120 140 160 180 200
0 20 40 60 80 100 120 140 160

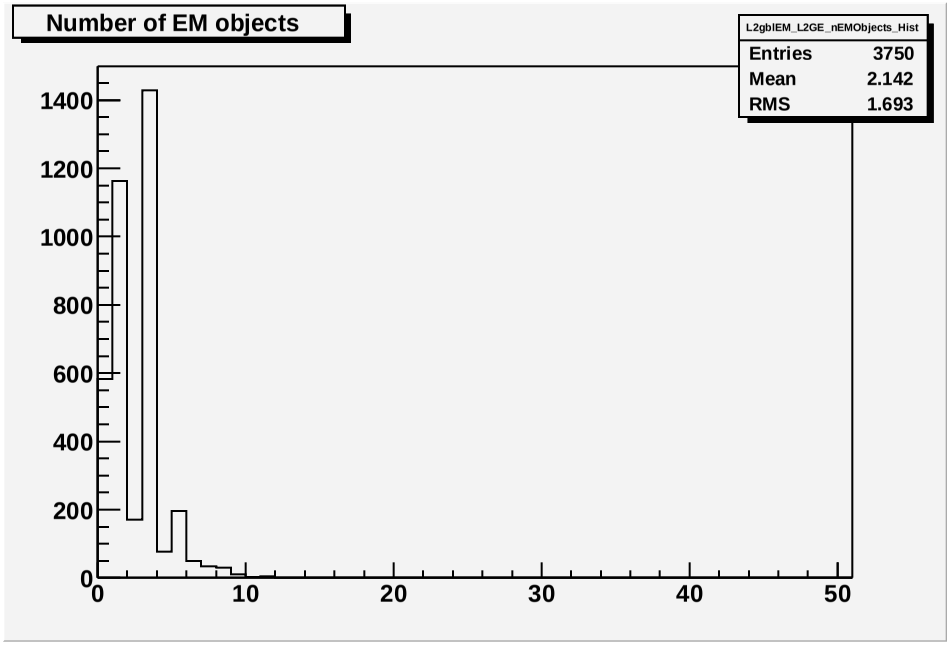

Phi weighted average
L2caljet_L2Jphi_Hist
Entries 5966
Mean 78.96
RMS 46.2
0 20 40 60 80 100 120 140
0 20 40 60 80 100 120 140 160

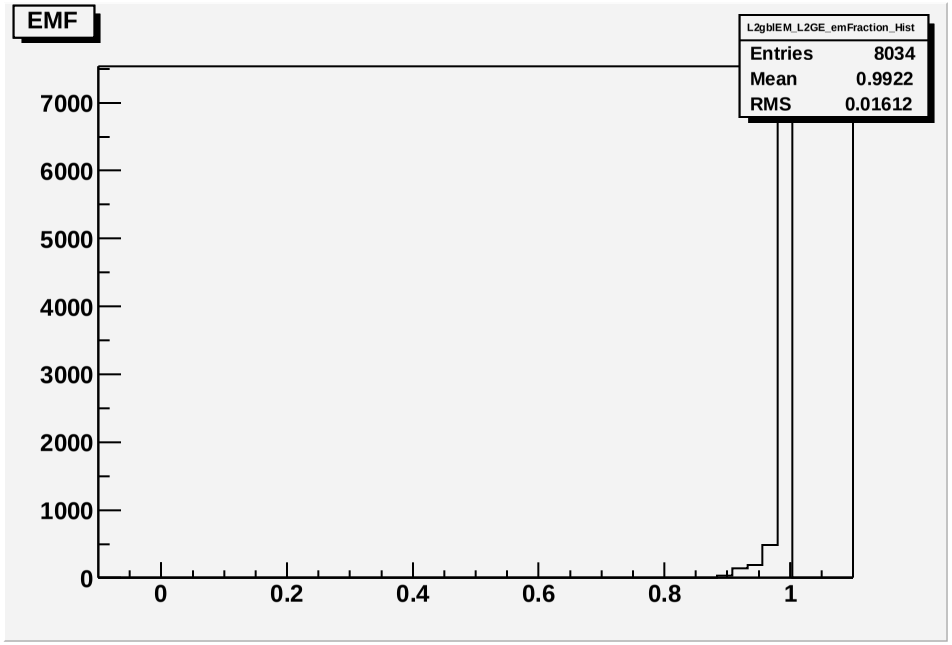

Missing Et
L2calmet_L2MmeT_His
Entries 3750
Mean 52.97
RMS 27.37

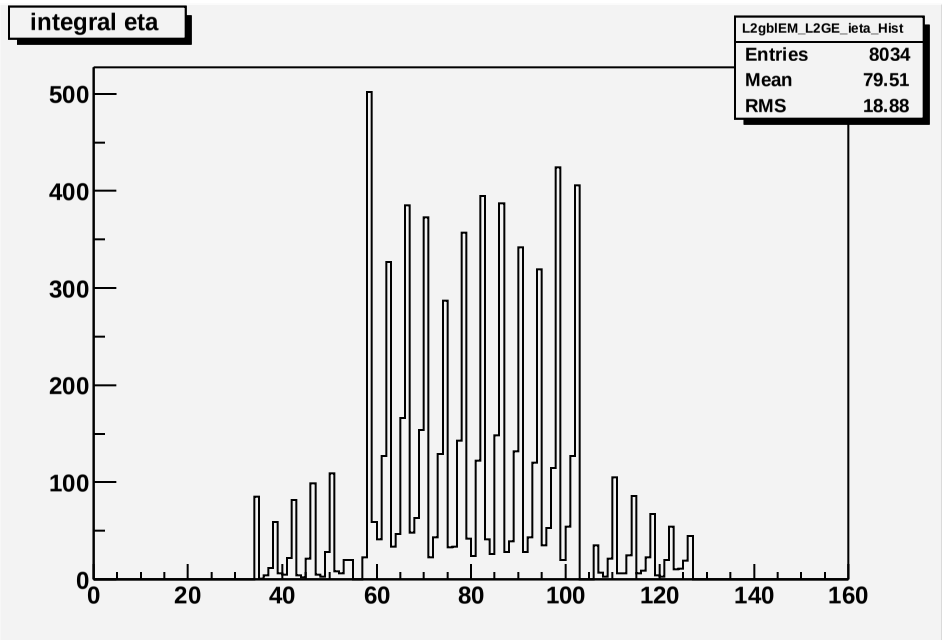

x-comp MET
L2calmet_L2MmeX_His
Entries 3750
Mean 34.39
RMS 25.61

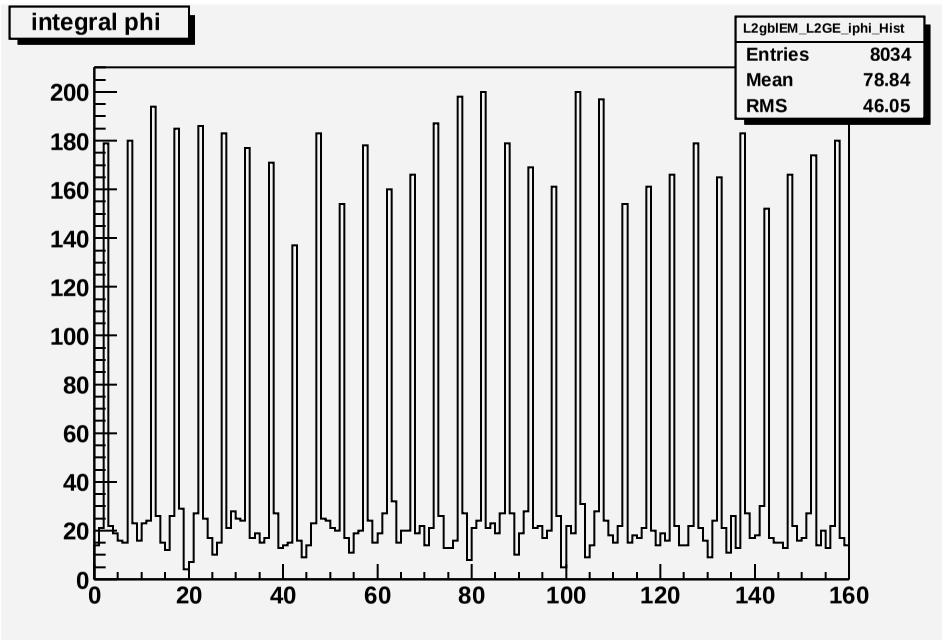

y-comp MET
L2calmet_L2MmeY_His
Entries 3750
Mean 32.93
RMS 25.19


Phi of MET
L2calmet_L2Mphi_Hist
Entries 3750
Mean 3.09
RMS 1.825


Number of EM objects
L2gblEM_L2GE_nEMObjects_Hist
Entries 3750
Mean 2.142
RMS 1.693
0
200
400
600
800
1000
1200
1400
0
10
20
30
40
50


EMF
L2gblEM_L2GE_emFraction_Hist
Entries 8034
Mean 0.9922
RMS 0.01612
0
1000
2000
3000
4000
5000
6000
7000
0
0.2
0.4
0.6
0.8
1


integral eta
L2gblEM_L2GE_ieta_Hist
Entries 8034
Mean 79.51
RMS 18.88
0
100
200
300
400
500
0
20
40
60
80
100
120
140
160


integral phi
L2gblEM_L2GE_iphi_Hist
Entries 8034
Mean 78.84
RMS 46.05
0
20
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80
100
120
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160
180
200
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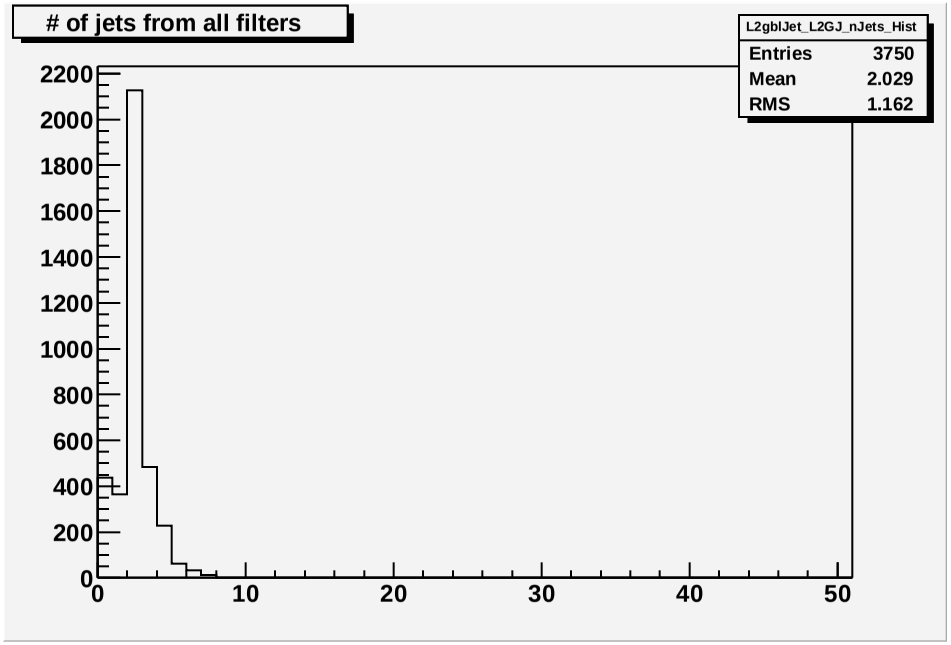
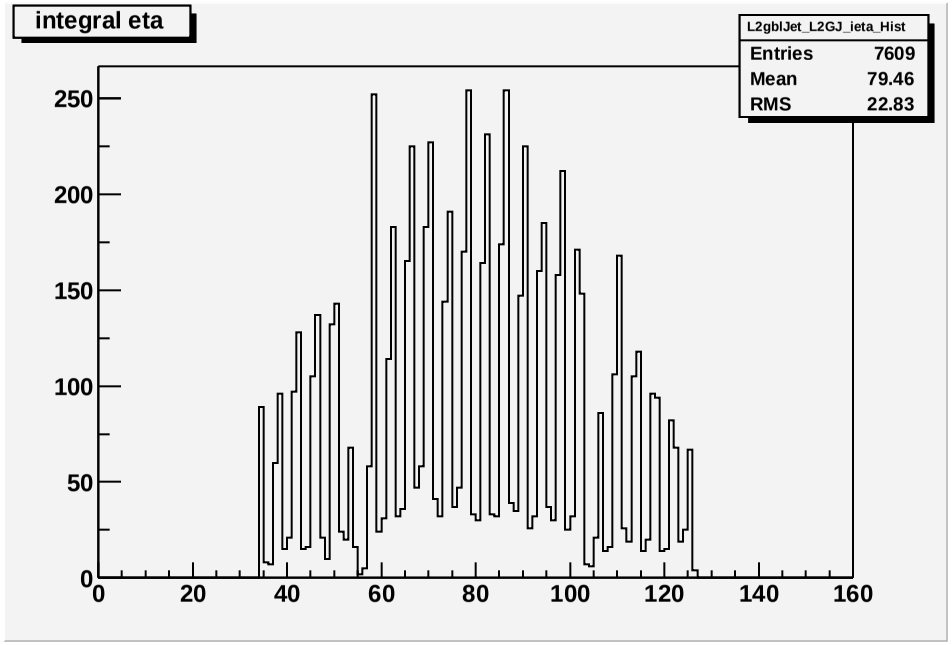
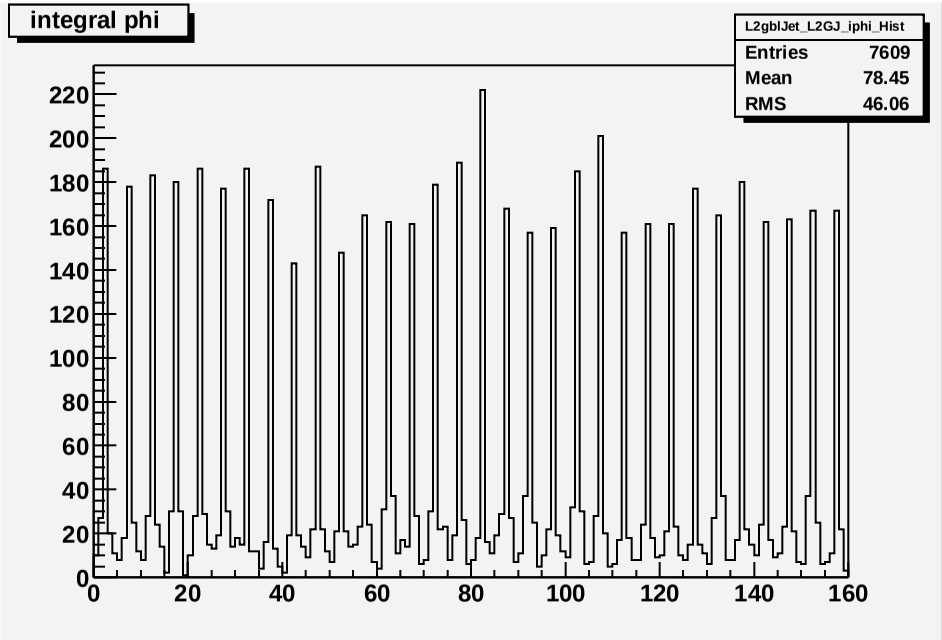
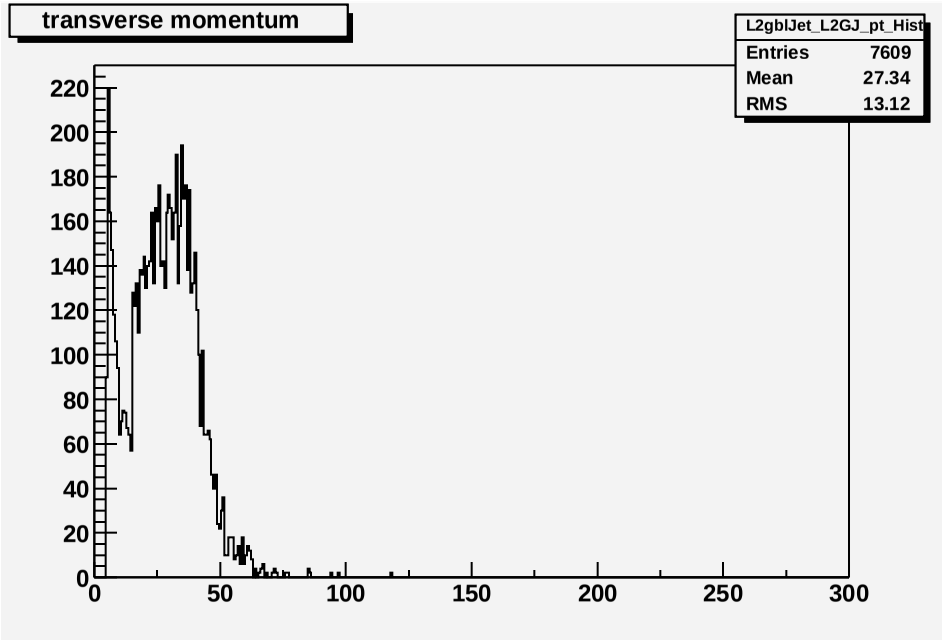
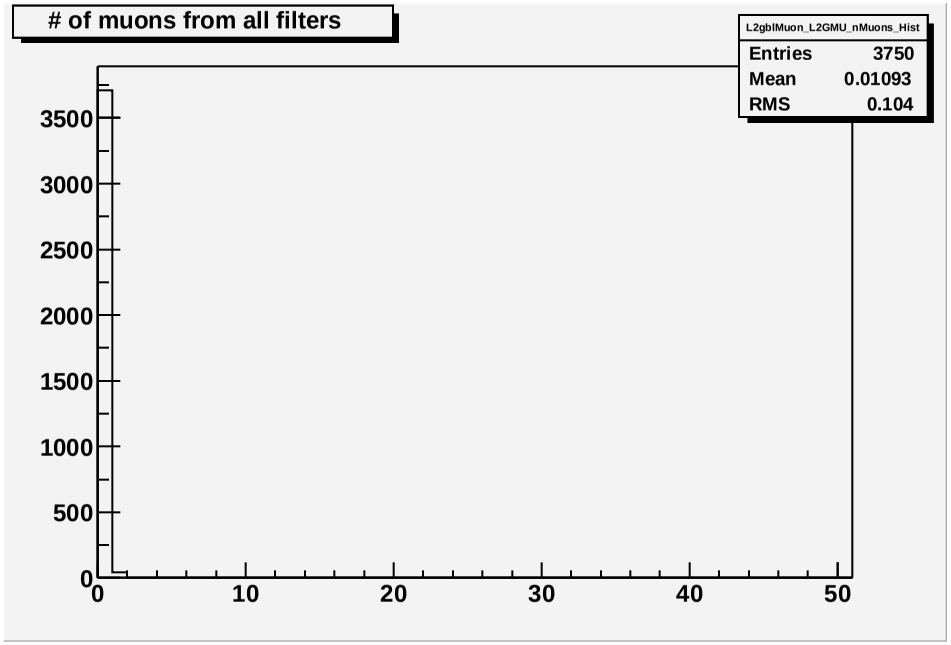
20
40
60
80
100
120
140
160

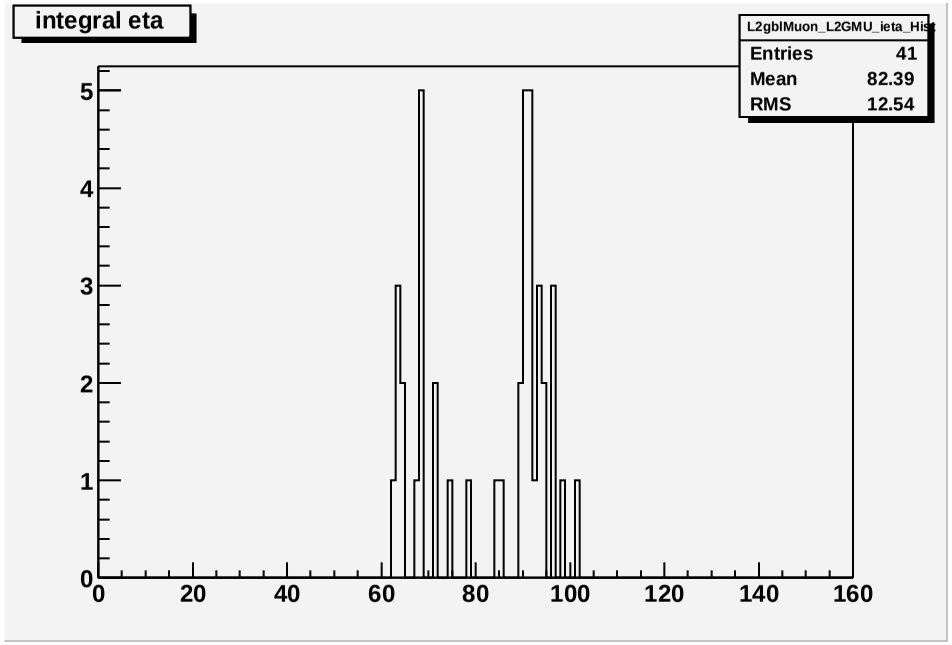

# of jets from all filters
L2gblJet_L2GJ_nJets_Hist
Entries 3750
Mean 2.029
RMS 1.162

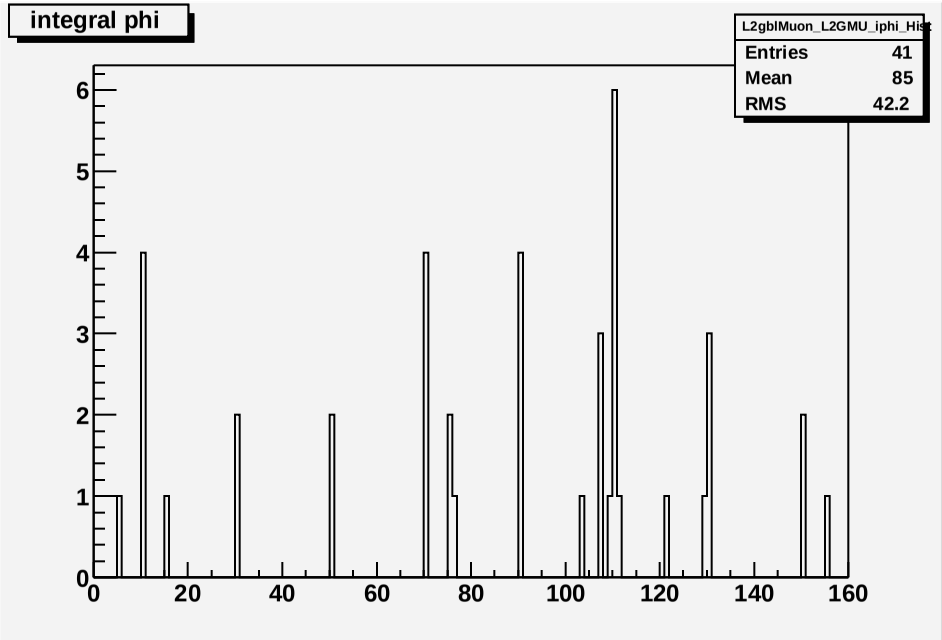

integral eta
L2gblJet_L2GJ_ieta_Hist
Entries 7609
Mean 79.46
RMS 22.83

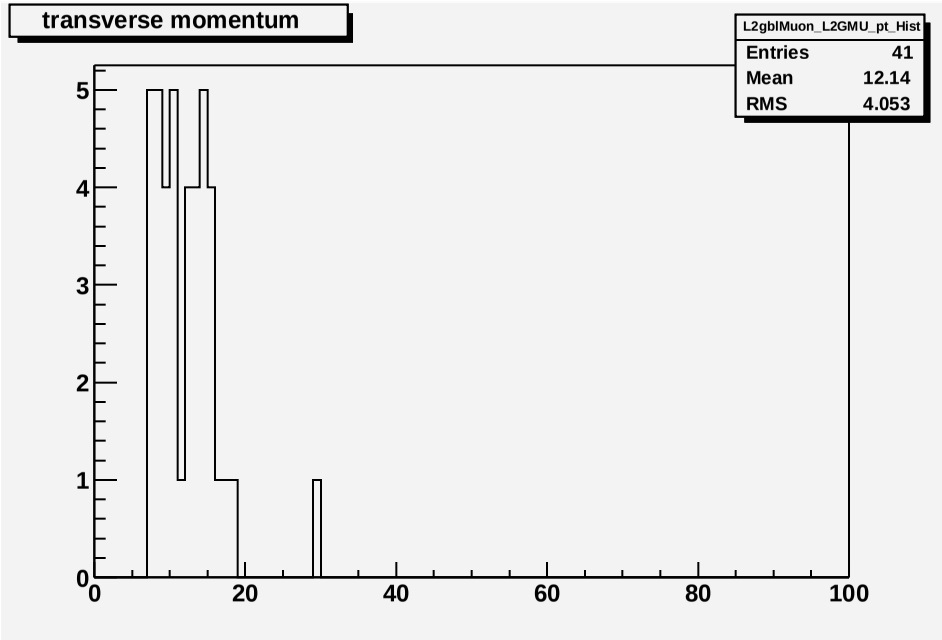

integral phi
L2gblJet_L2GJ_iphi_Hist
Entries 7609
Mean 78.45
RMS 46.06

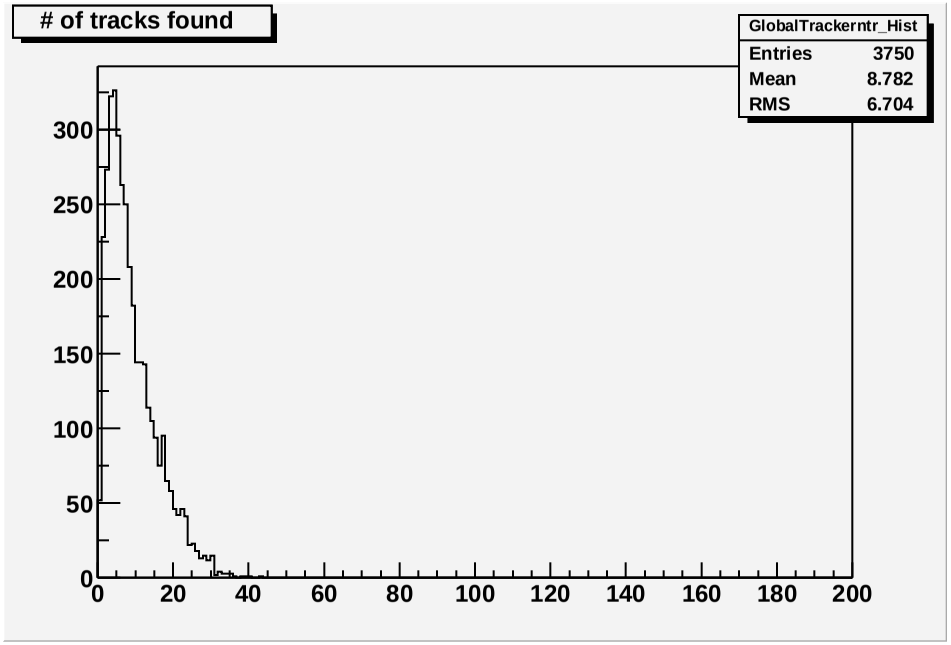

transverse momentum
L2gblJet_L2GJ_pt_Hist
Entries 7609
Mean 27.34
RMS 13.12

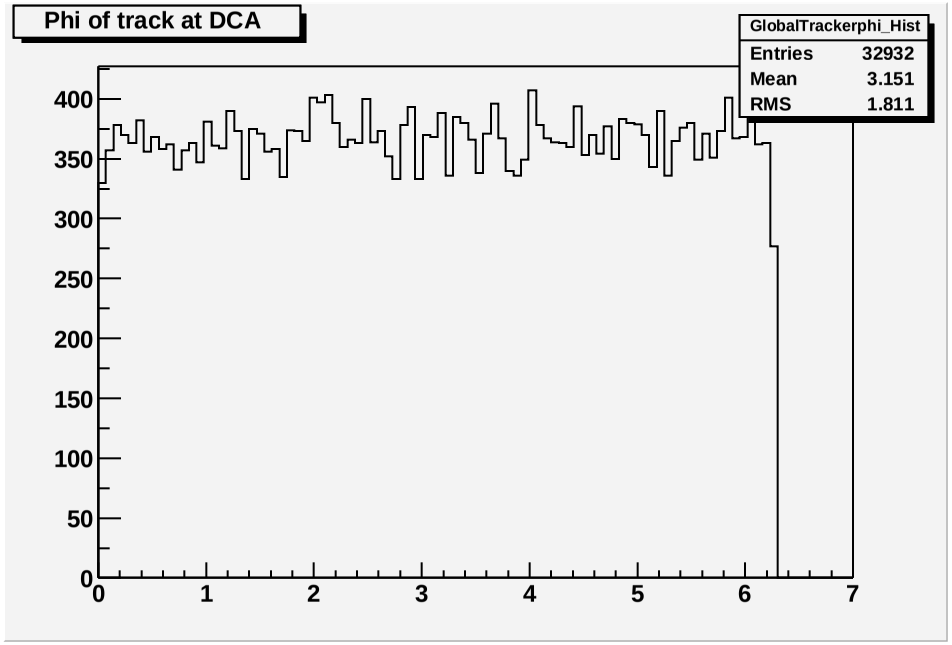

# of muons from all filters
L2gblMuon_L2GMU_nMuons_Hist
Entries 3750
Mean 0.01093
RMS 0.104
0
500
1000
1500
2000
2500
3000
3500
0
10
20
30
40
50

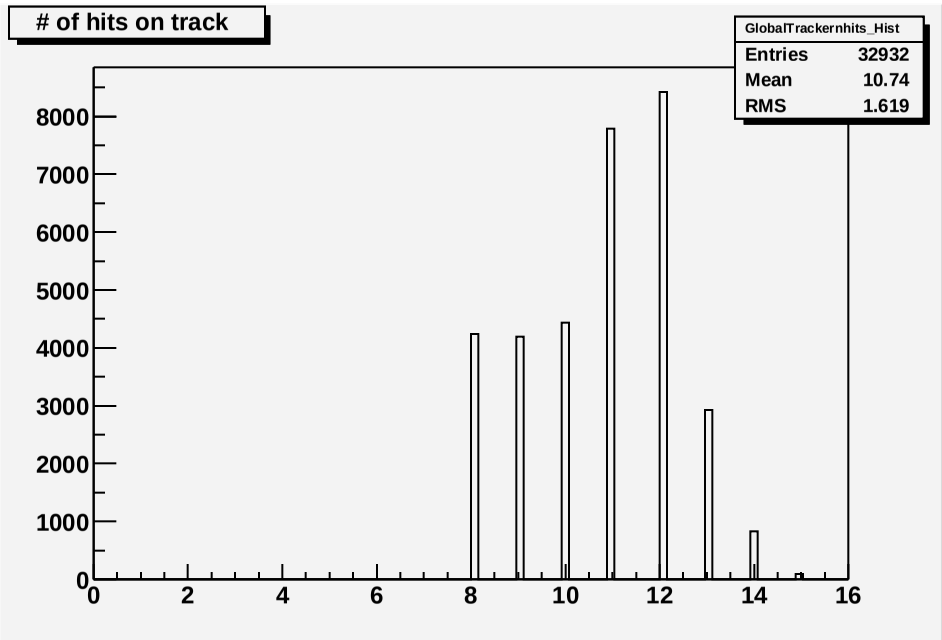

integral eta
L2gblMuon_L2GMU_ieta_Hist
Entries 41
Mean 82.39
RMS 12.54
0
1
2
3
4
5
0
20
40
60
80
100
120
140
160

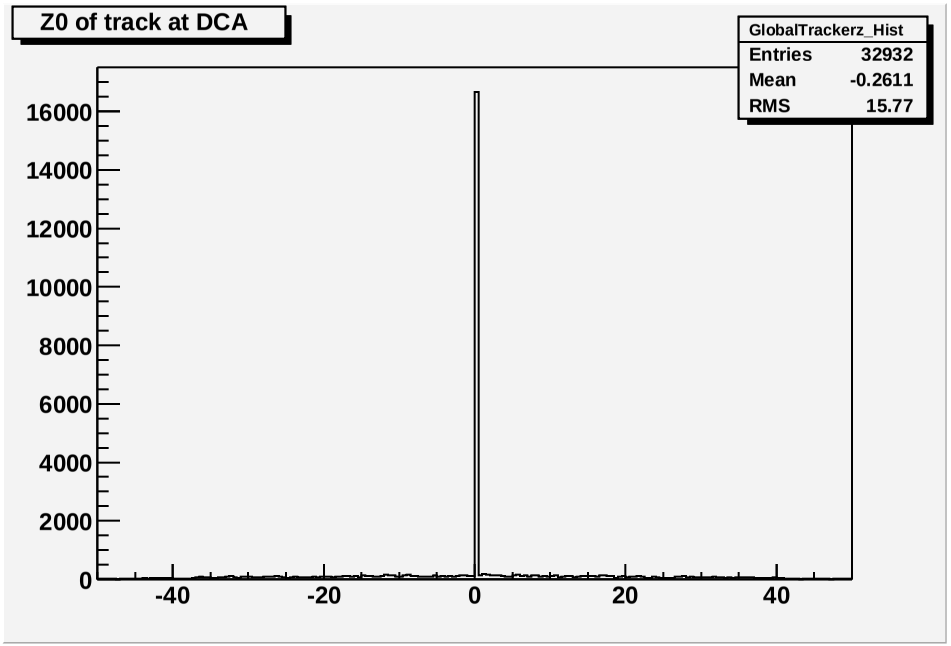

integral phi
L2gblMuon_L2GMU_iphi_Hist
Entries 41
Mean 85
RMS 42.2
0
1
2
3
4
5
6
0
20
40
60
80
100
120
140
160

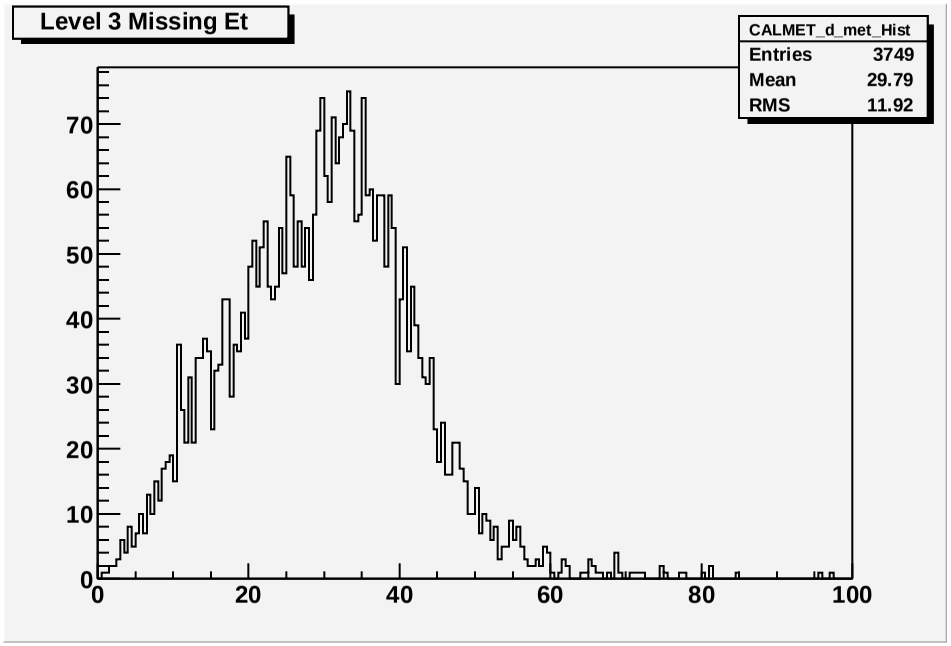

transverse momentum
L2gblMuon_L2GMU_pt_Hist
Entries 41
Mean 12.14
RMS 4.053
0
1
2
3
4
5
0
20
40
60
80
100

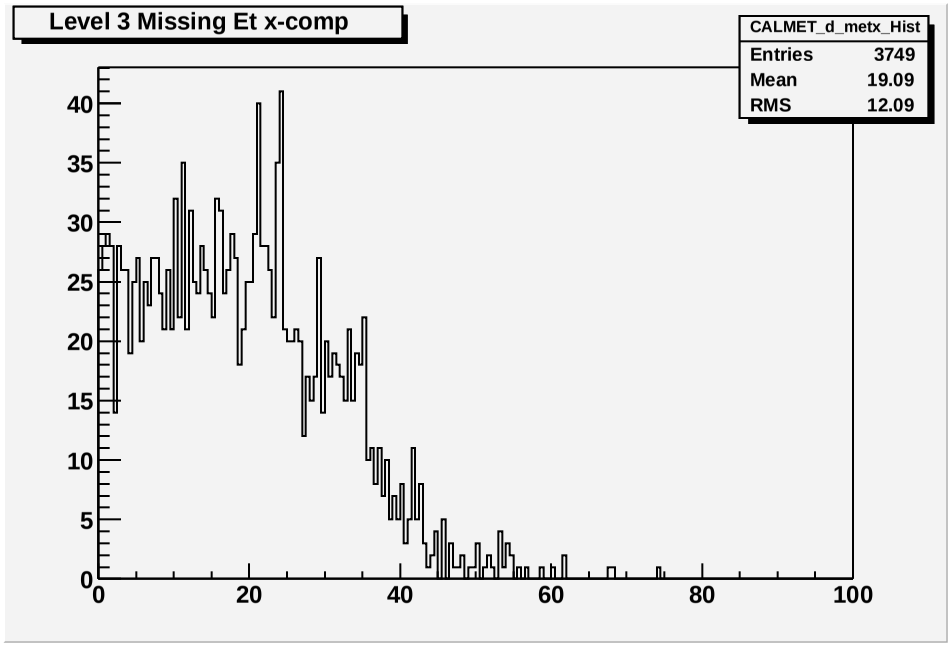

# of tracks found
GlobalTrackerntr_Hist
Entries 3750
Mean 8.782
RMS 6.704
0 50 100 150 200 250 300
0 20 40 60 80 100 120 140 160 180 200

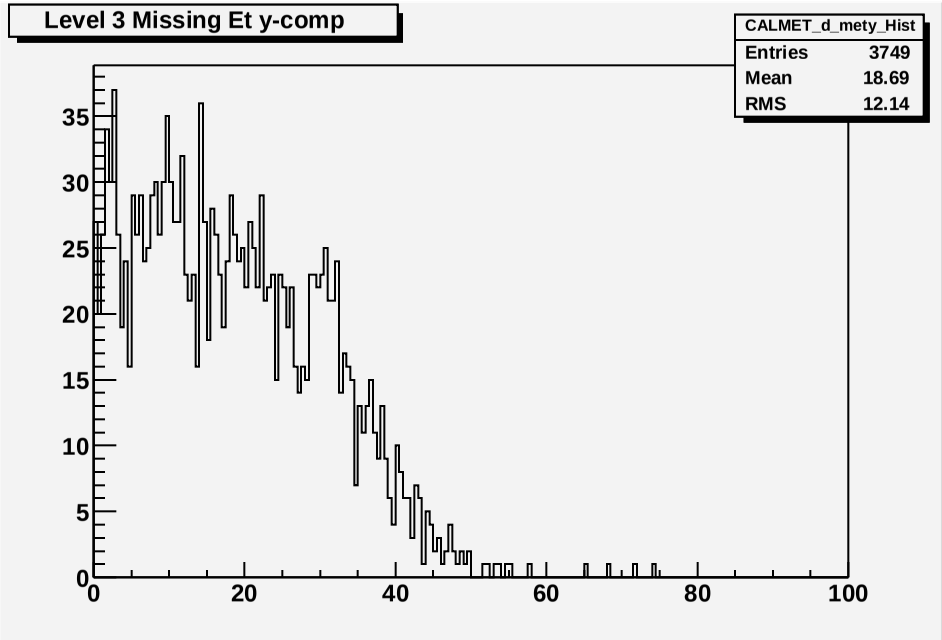

Phi of track at DCA
GlobalTrackerphi_Hist
Entries 32932
Mean 3.151
RMS 1.811
0 50 100 150 200 250 300 350 400
0 1 2 3 4 5 6 7

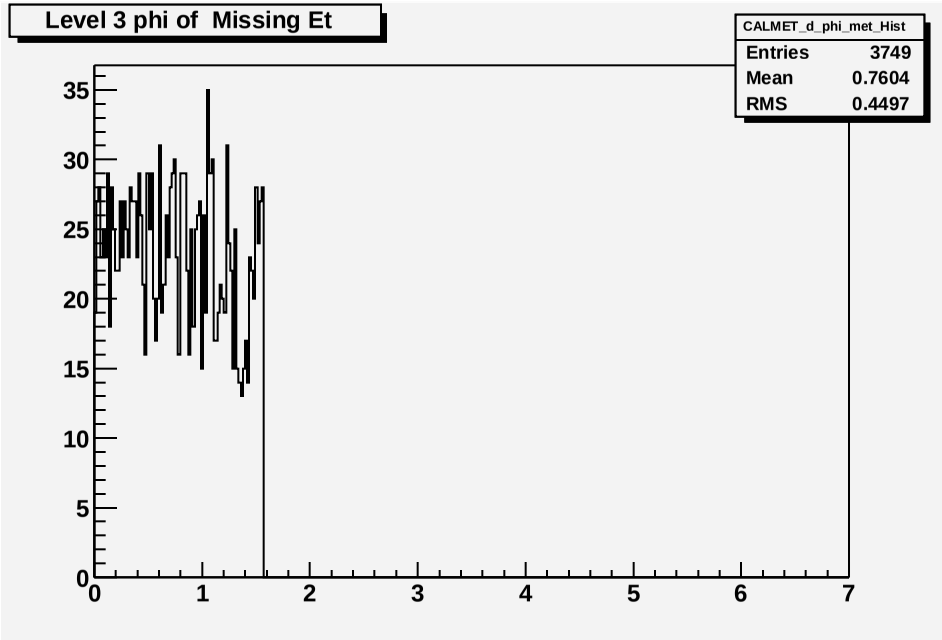

# of hits on track
GlobalTrackernhits_Hist
Entries 32932
Mean 10.74
RMS 1.619
0 1000 2000 3000 4000 5000 6000 7000 8000
0 2 4 6 8 10 12 14 16

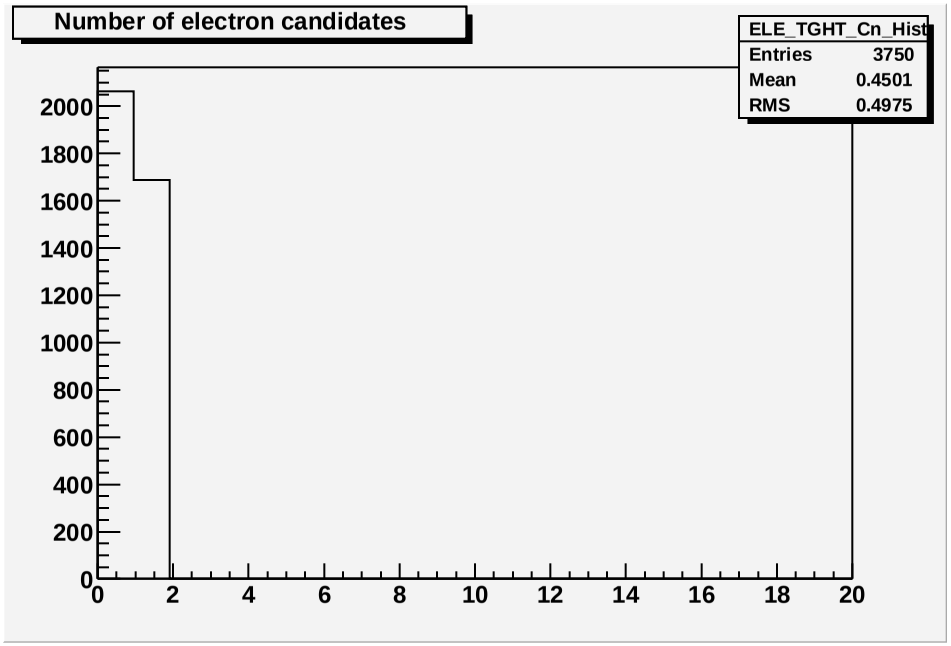

Z0 of track at DCA
GlobalTrackerz_Hist
Entries 32932
Mean -0.2611
RMS 15.77
0 2000 4000 6000 8000 10000 12000 14000 16000
-40 -20 0 20 40

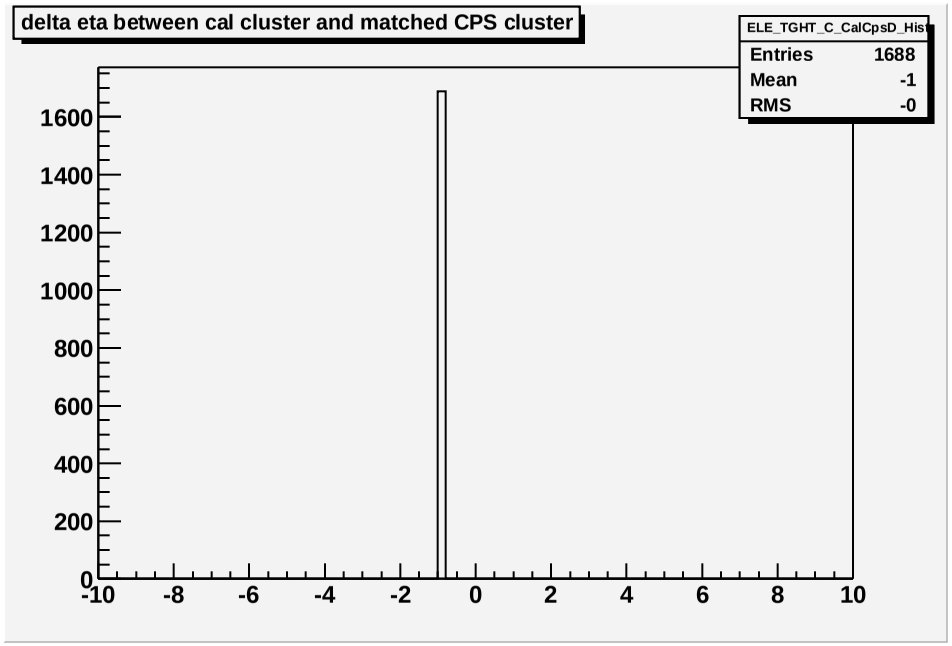

Level 3 Missing Et
CALMET_d_met_Hist
Entries 3749
Mean 29.79
RMS 11.92

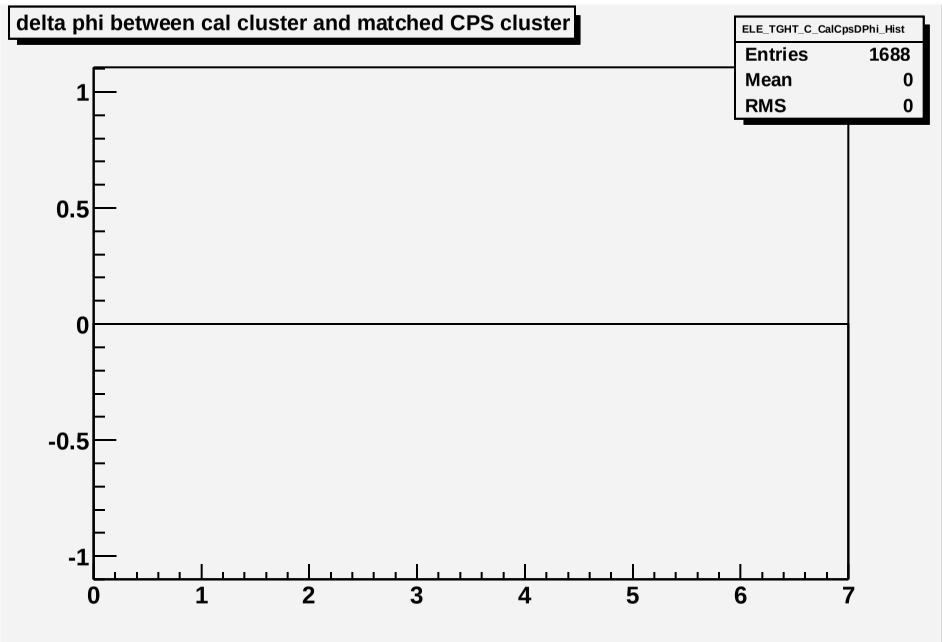

Level 3 Missing Et x-comp
CALMET_d_metx_Hist
Entries 3749
Mean 19.09
RMS 12.09

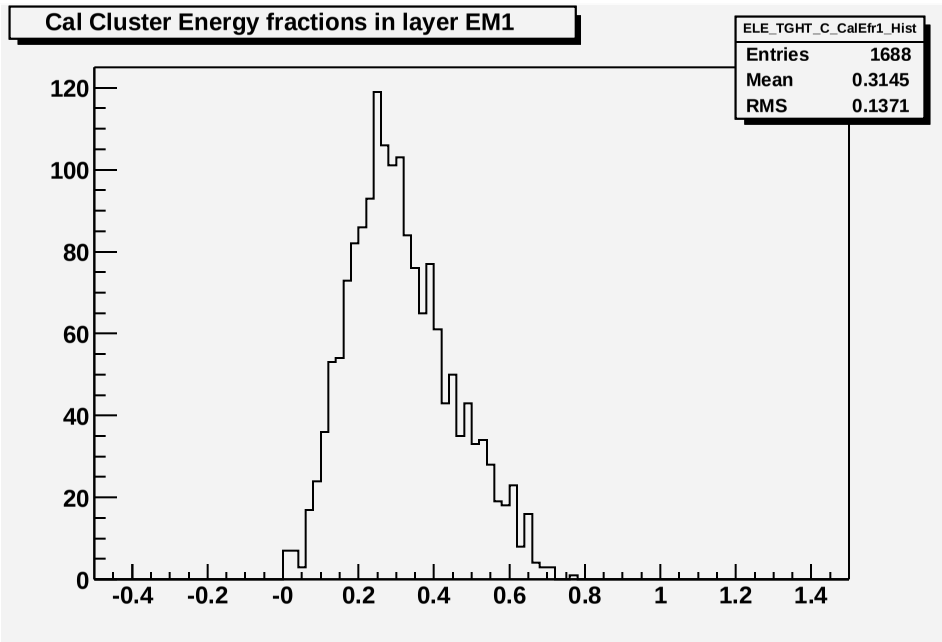

Level 3 Missing Et y-comp
CALMET_d_mety_Hist
Entries 3749
Mean 18.69
RMS 12.14

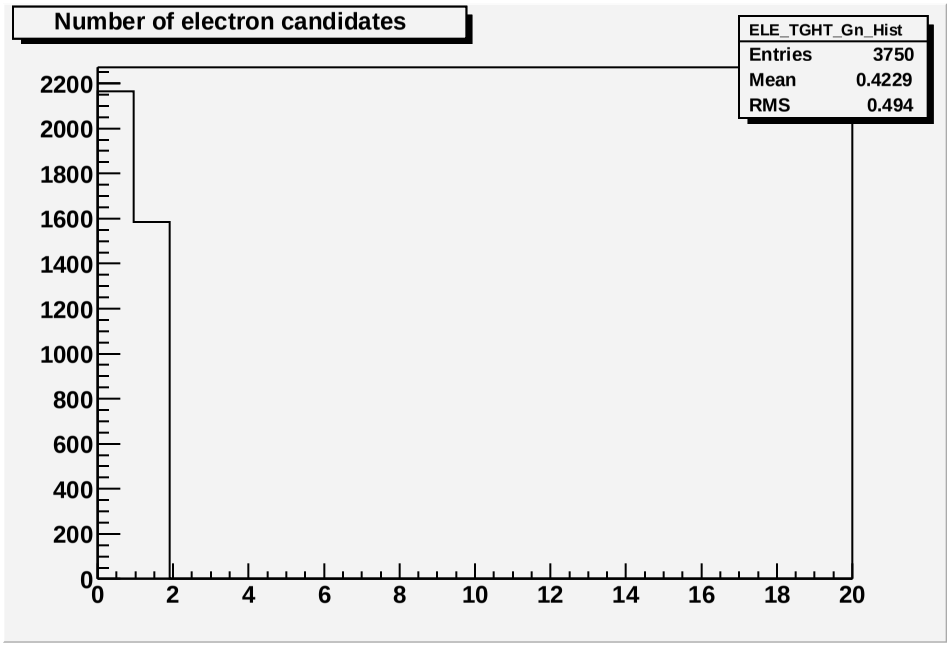

Level 3 phi of Missing Et
CALMET_d_phi_met_Hist
Entries 3749
Mean 0.7604
RMS 0.4497

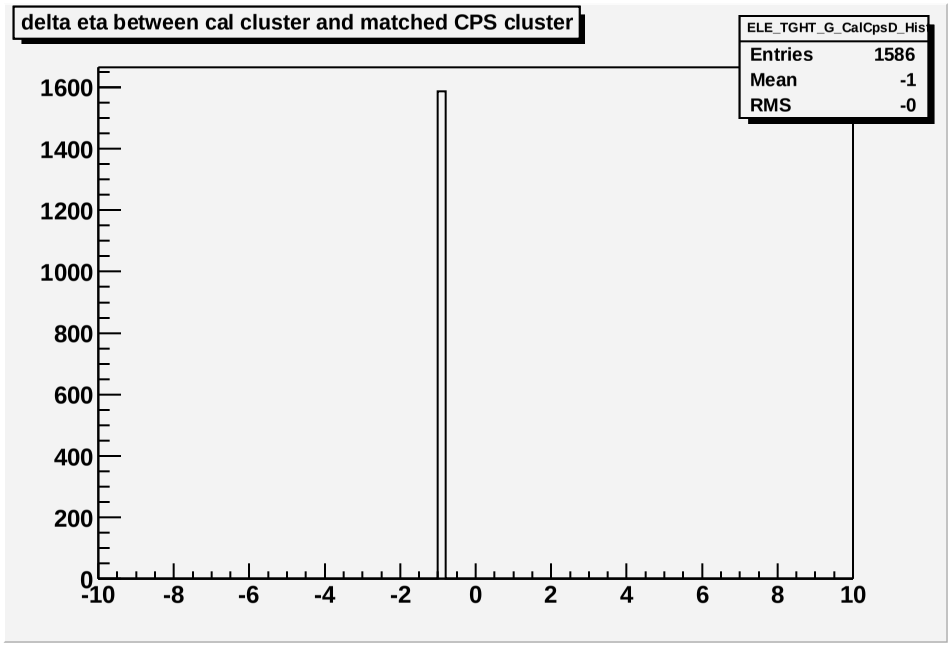

Number of electron candidates
ELE_TGHT_Cn_Hist
Entries 3750
Mean 0.4501
RMS 0.4975
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 2 4 6 8 10 12 14 16 18 20

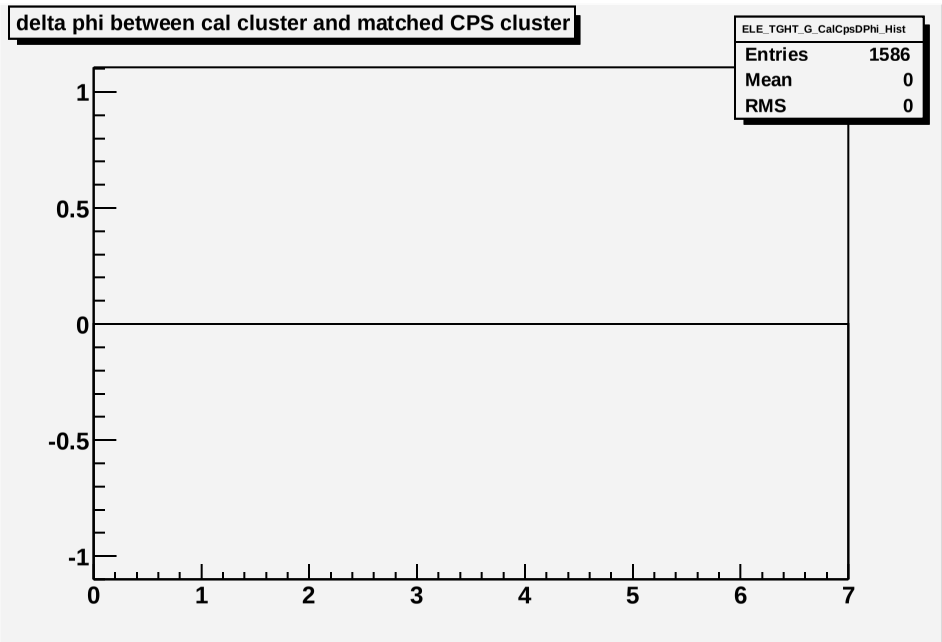

delta eta between cal cluster and matched CPS cluster
ELE_TGHT_C_CalCpsD_Hist
Entries 1688
Mean -1
RMS -0
1600
1400
1200
1000
800
600
400
200
0
-10 -8 -6 -4 -2 0 2 4 6 8 10

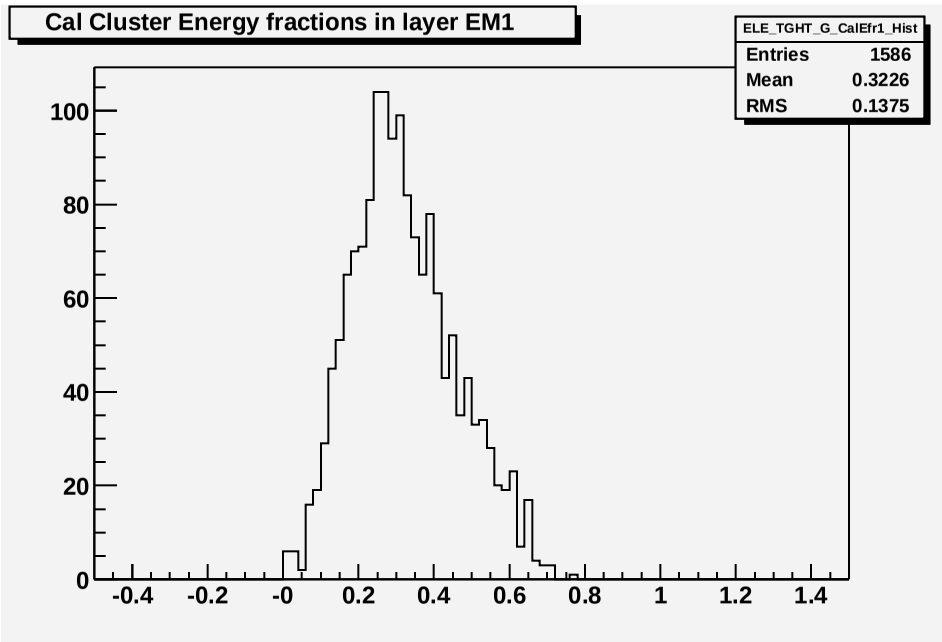

delta phi between cal cluster and matched CPS cluster
ELE_TGHT_C_CalCpsDPhi_Hist
Entries 1688
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0 1 2 3 4 5 6 7

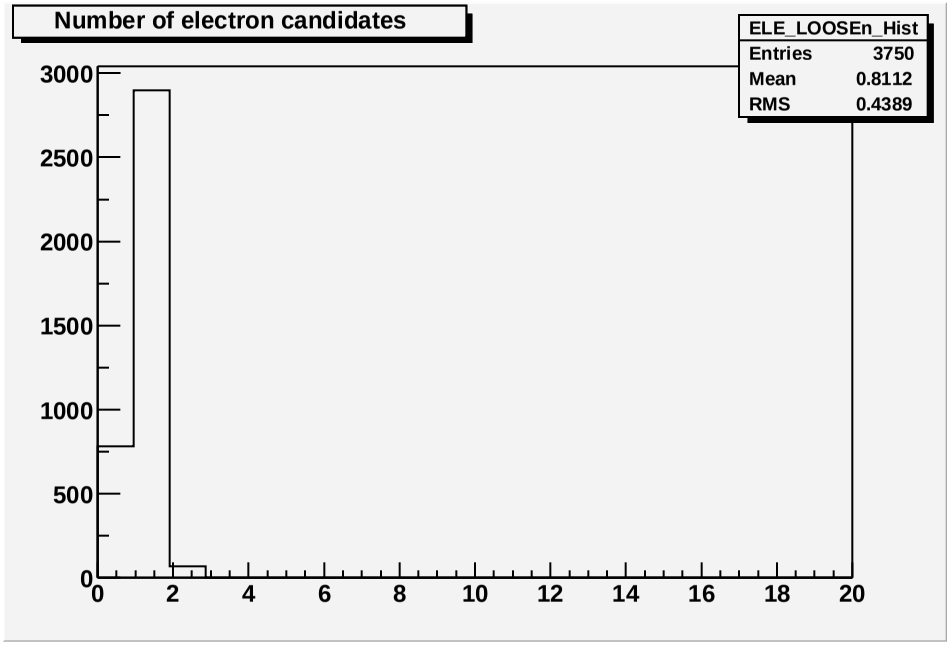

Cal Cluster Energy fractions in layer EM1
ELE_TGHT_C_CalEfr1_Hist
Entries 1688
Mean 0.3145
RMS 0.1371
120
100
80
60
40
20
0
-0.4 -0.2 -0 0.2 0.4 0.6 0.8 1 1.2 1.4

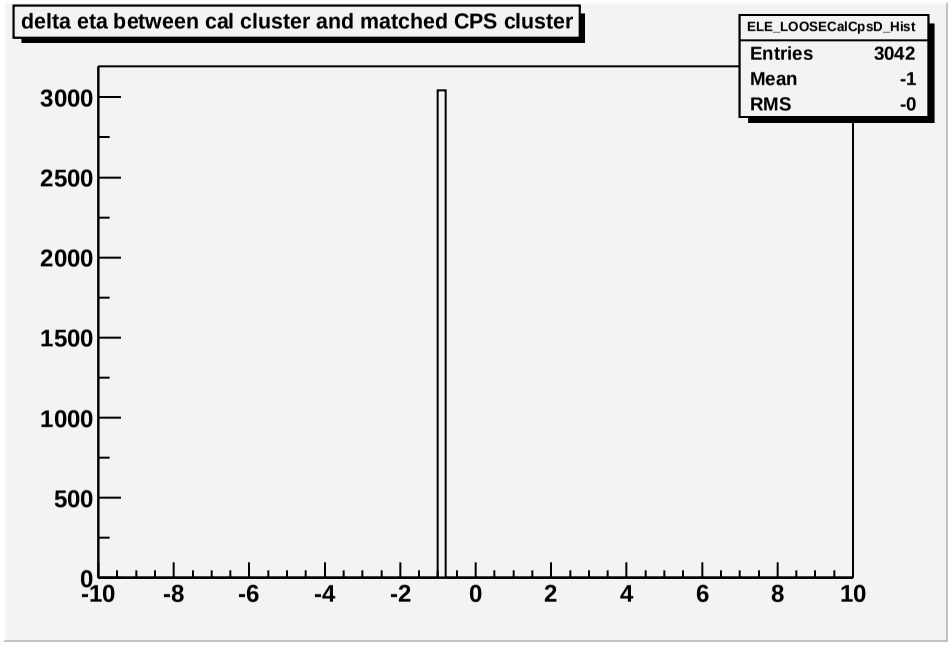

Number of electron candidates
ELE_TGHT_Gn_Hist
Entries 3750
Mean 0.4229
RMS 0.494

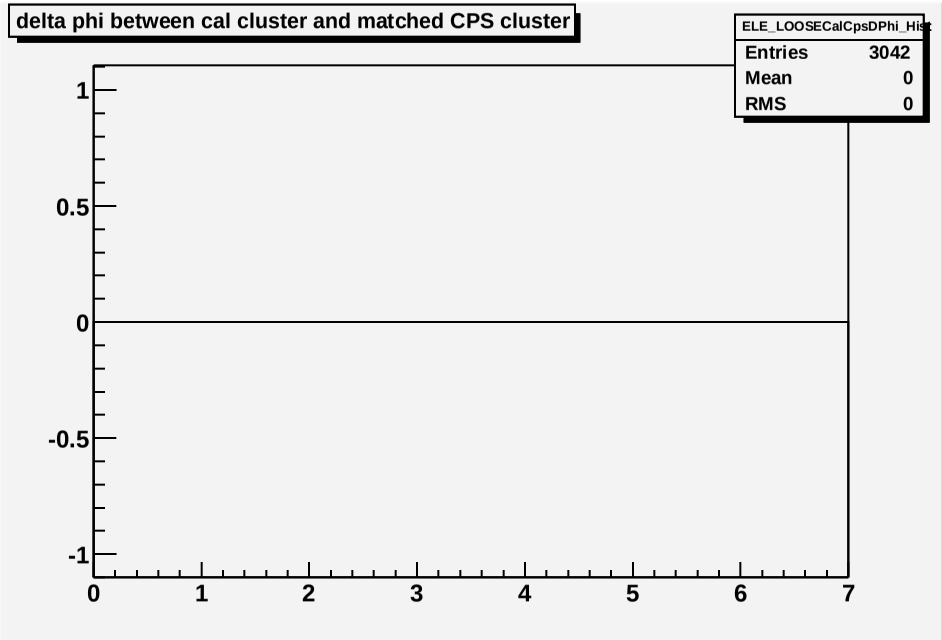

delta eta between cal cluster and matched CPS cluster
ELE_TGHT_G_CalCpsD_His
Entries 1586
Mean -1
RMS -0

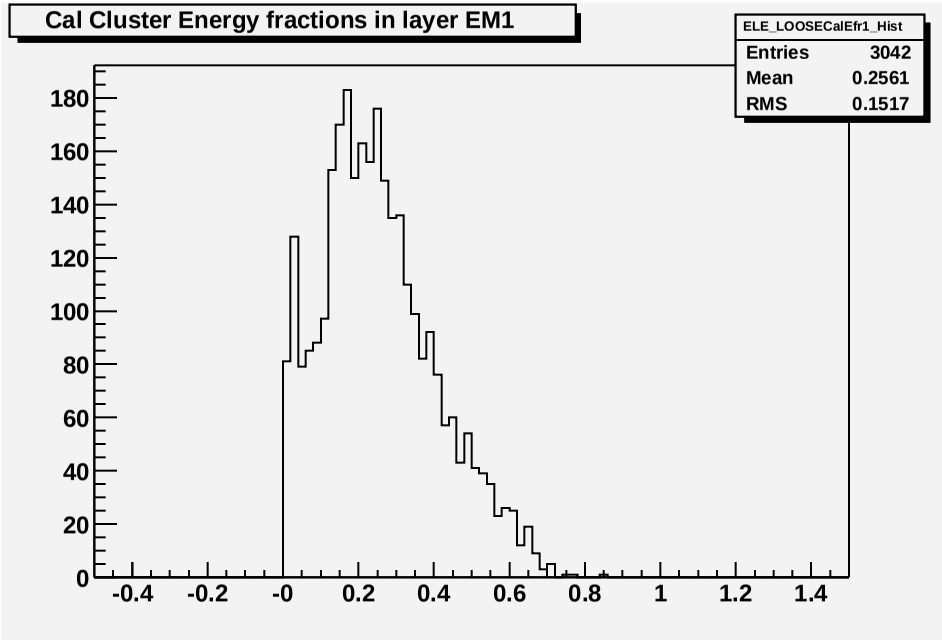

delta phi between cal cluster and matched CPS cluster
ELE_TGHT_G_CalCpsDPhi_Hist
Entries 1586
Mean 0
RMS 0

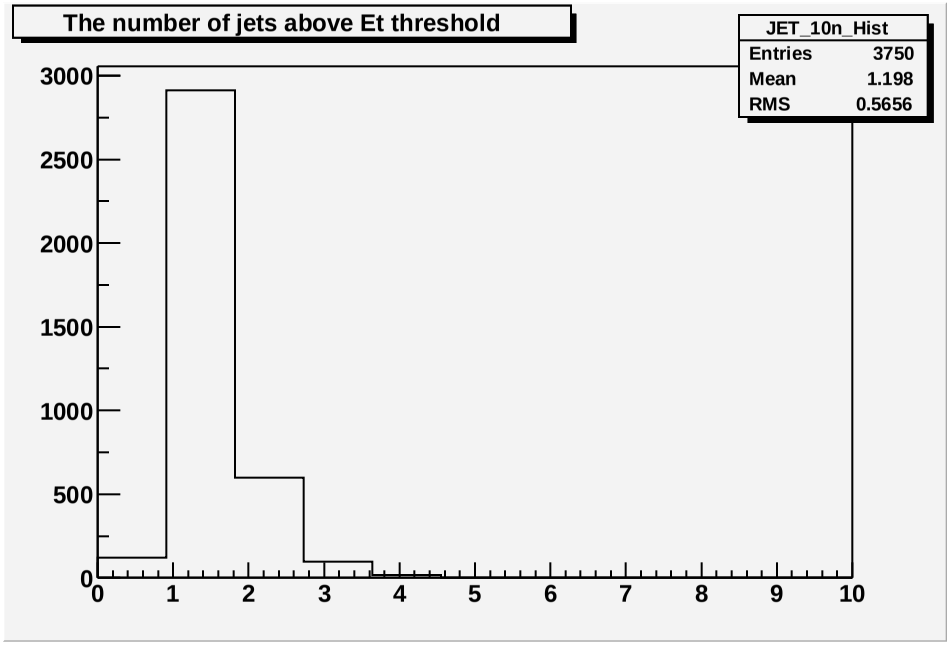

Cal Cluster Energy fractions in layer EM1
ELE_TGHT_G_CalEfr1_Hist
Entries 1586
Mean 0.3226
RMS 0.1375

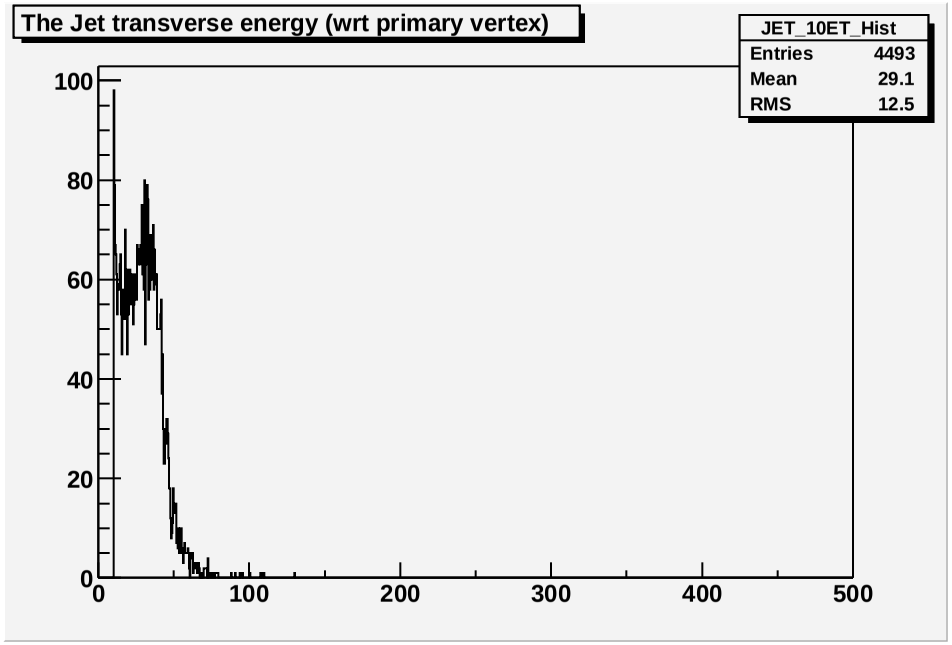

Number of electron candidates
ELE_LOOSEn_Hist
Entries 3750
Mean 0.8112
RMS 0.4389
3000
2500
2000
1500
1000
500
0
0 2 4 6 8 10 12 14 16 18 20

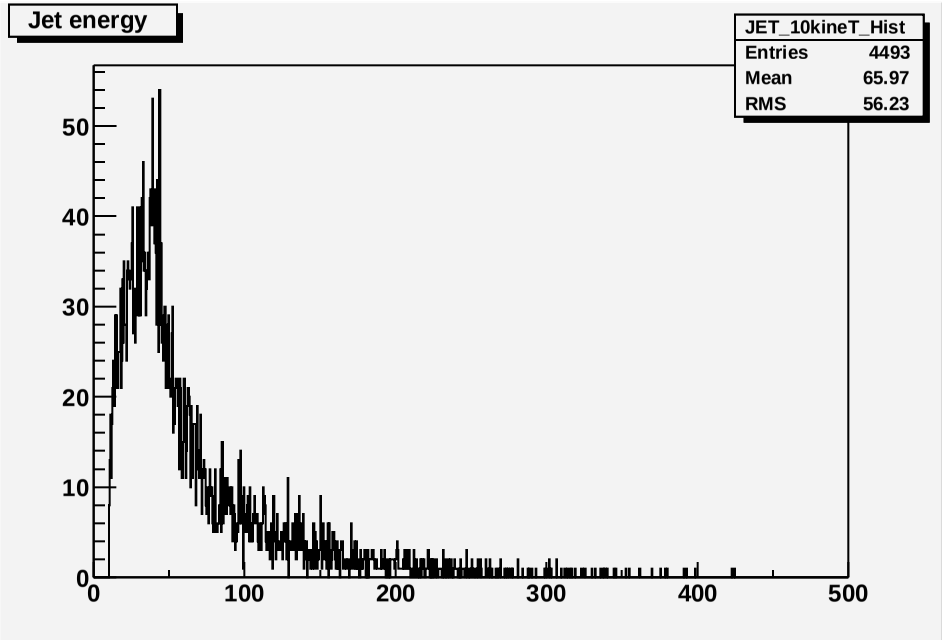

delta eta between cal cluster and matched CPS cluster
ELE_LOOSECalCpsD_Hist
Entries 3042
Mean -1
RMS -0
3000
2500
2000
1500
1000
500
0
-10 -8 -6 -4 -2 0 2 4 6 8 10

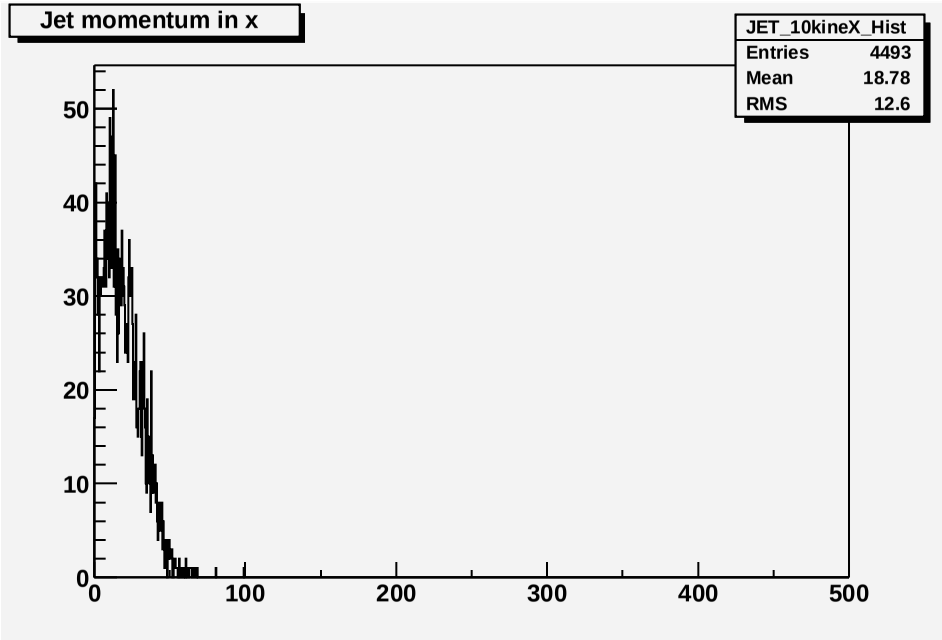

delta phi between cal cluster and matched CPS cluster
ELE_LOOSECalCpsDPhi_Hist
Entries 3042
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0 1 2 3 4 5 6 7

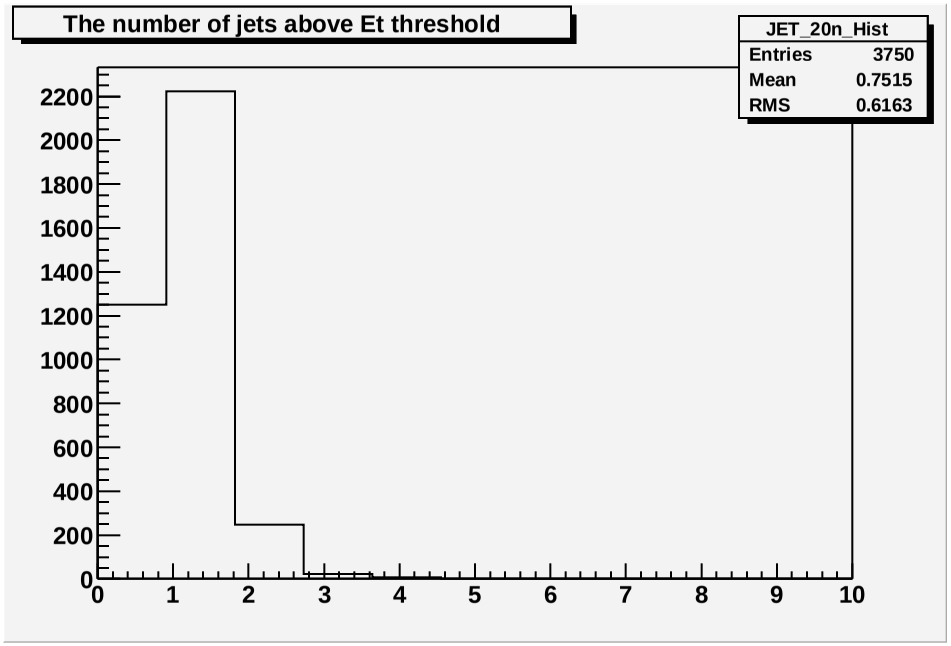

Cal Cluster Energy fractions in layer EM1
ELE_LOOSECalEfr1_Hist
Entries 3042
Mean 0.2561
RMS 0.1517
180
160
140
120
100
80
60
40
20
0
-0.4 -0.2 -0 0.2 0.4 0.6 0.8 1 1.2 1.4

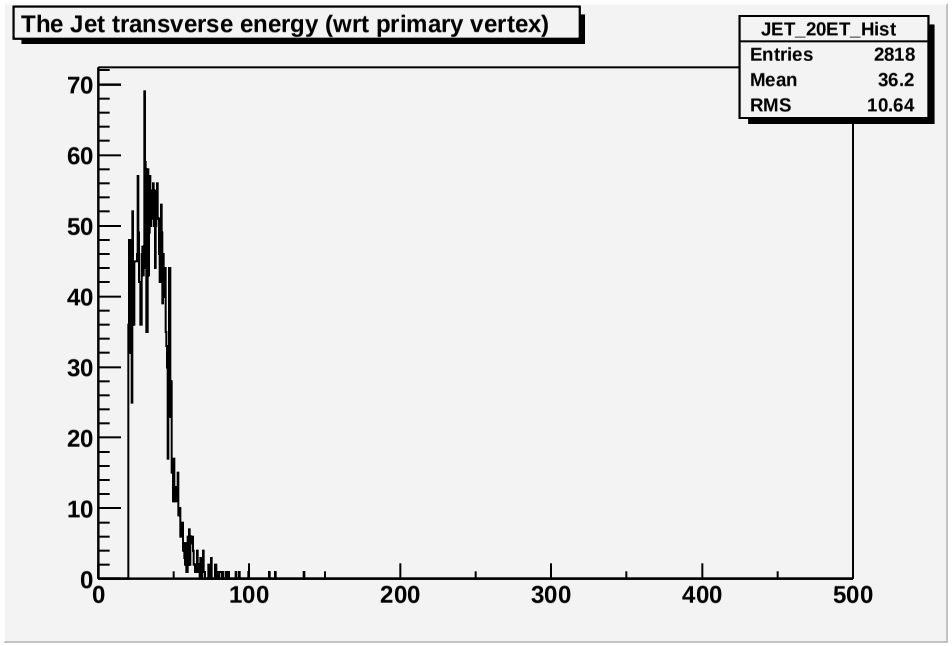

The number of jets above Et threshold
JET_10n_Hist
Entries 3750
Mean 1.198
RMS 0.5656
3000
2500
2000
1500
1000
500
0
0 1 2 3 4 5 6 7 8 9 10

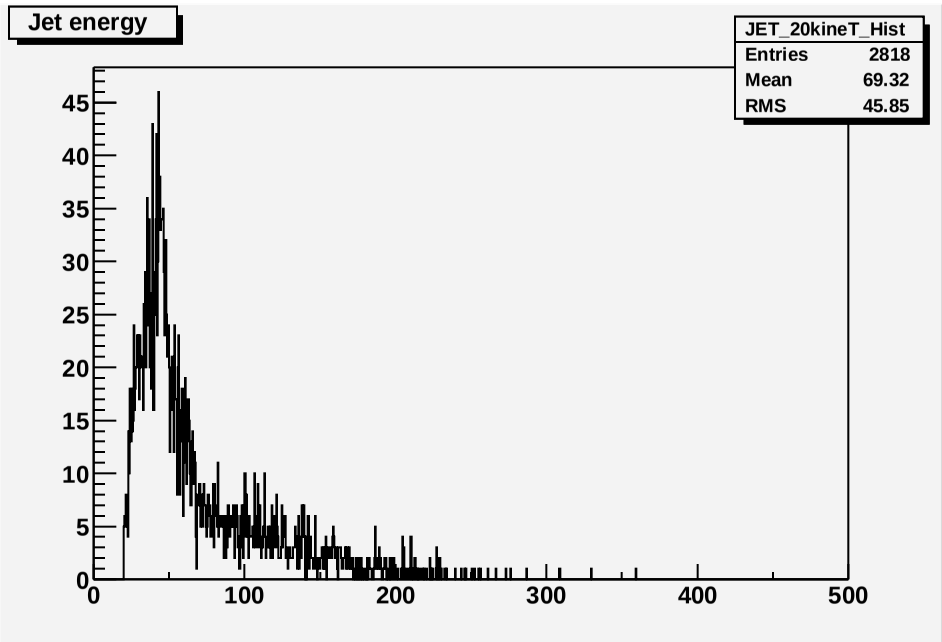

The Jet transverse energy (wrt primary vertex)
JET_10ET_Hist
Entries 4493
Mean 29.1
RMS 12.5
100
80
60
40
20
0
0 100 200 300 400 500

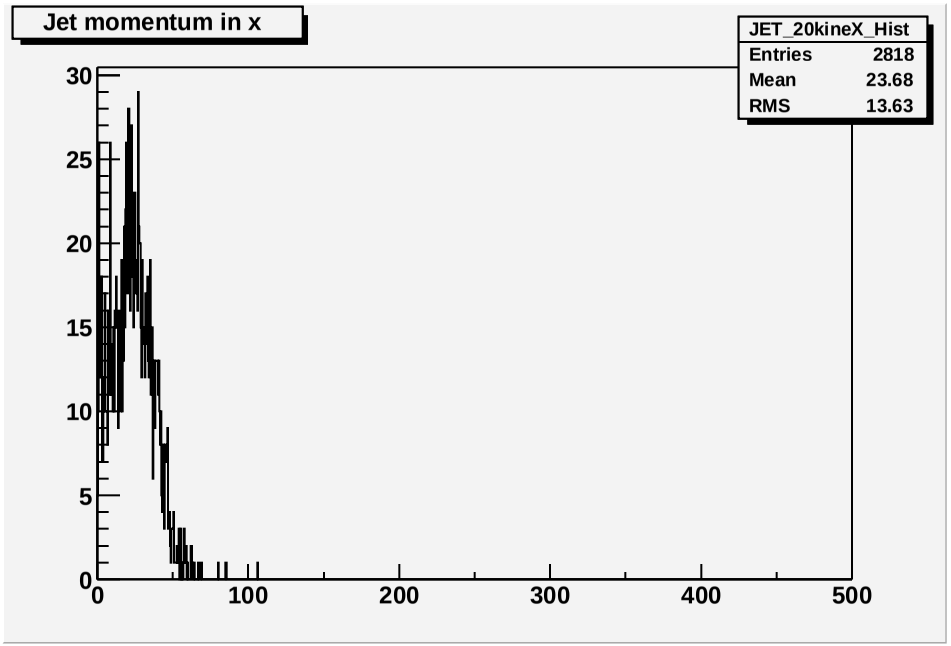

Jet energy
JET_10kineT_Hist
Entries 4493
Mean 65.97
RMS 56.23
50
40
30
20
10
0
0 100 200 300 400 500

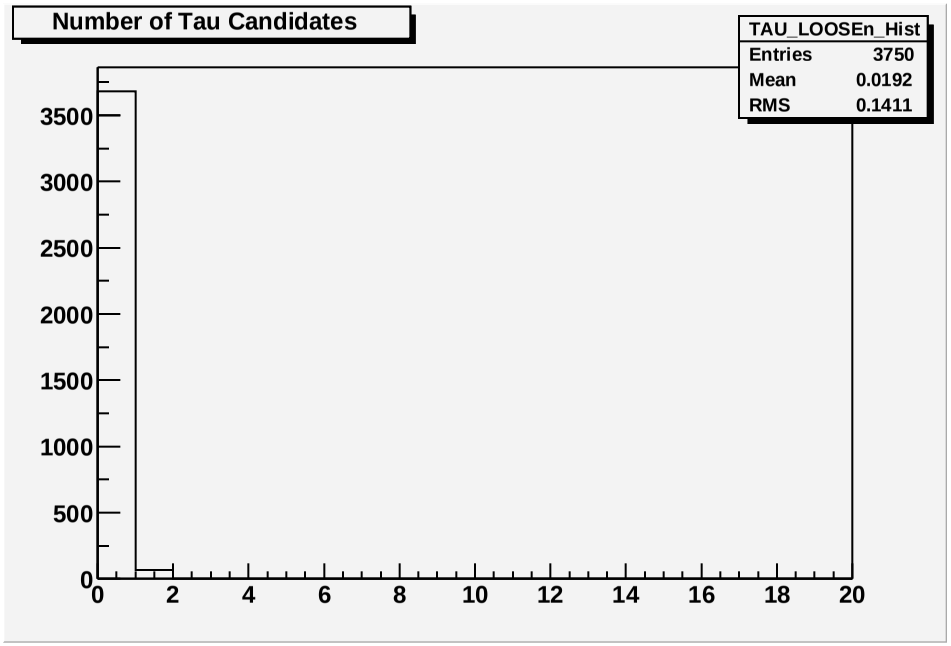

Jet momentum in x
JET_10kineX_Hist
Entries 4493
Mean 18.78
RMS 12.6
50
40
30
20
10
0
0 100 200 300 400 500

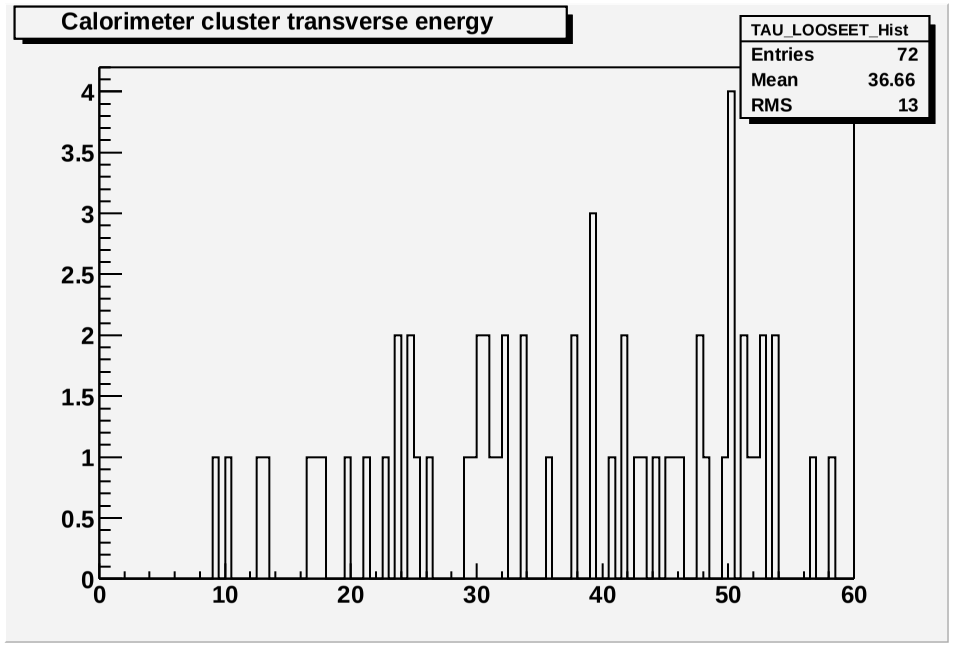

The number of jets above Et threshold
JET_20n_Hist
Entries 3750
Mean 0.7515
RMS 0.6163
0 200 400 600 800 1000 1200 1400 1600 1800 2000 2200
0 1 2 3 4 5 6 7 8 9 10

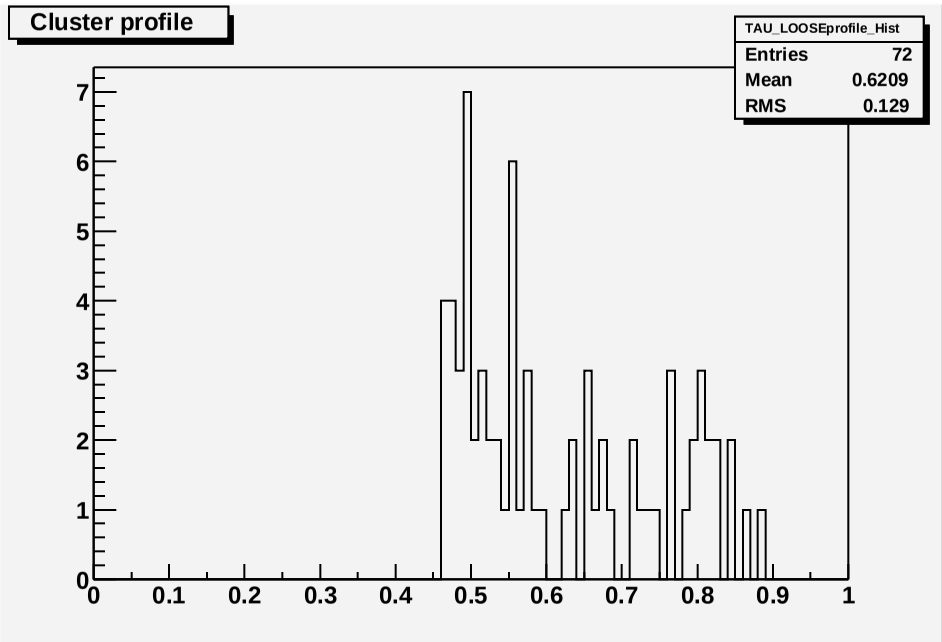

The Jet transverse energy (wrt primary vertex)
JET_20ET_Hist
Entries 2818
Mean 36.2
RMS 10.64
0 10 20 30 40 50 60 70
0 100 200 300 400 500

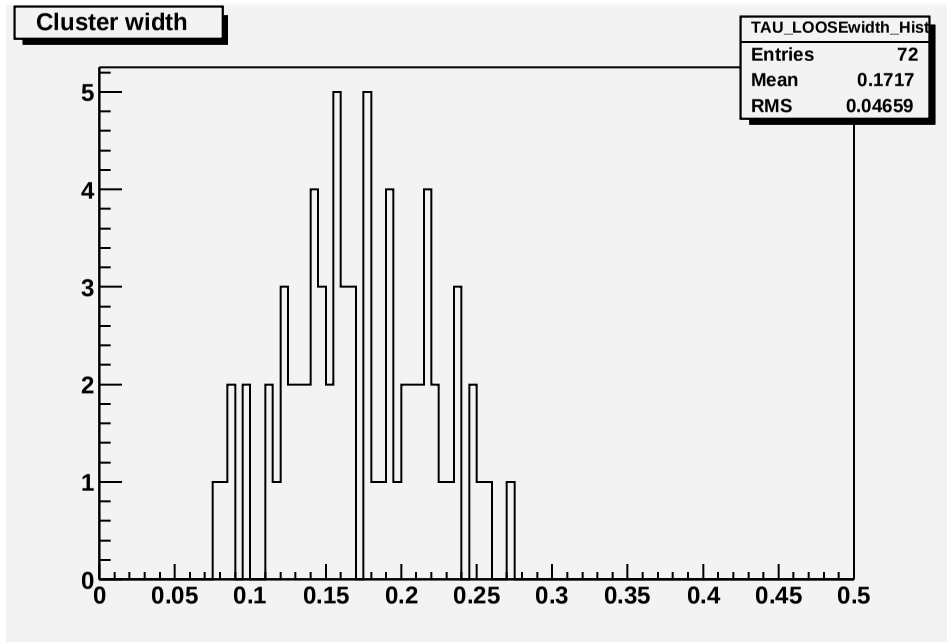

Jet energy
JET_20kineT_Hist
Entries 2818
Mean 69.32
RMS 45.85
0 5 10 15 20 25 30 35 40 45
0 100 200 300 400 500


Jet momentum in x
JET_20kineX_Hist
Entries 2818
Mean 23.68
RMS 13.63
0 5 10 15 20 25 30
0 100 200 300 400 500


Number of Tau Candidates
TAU_LOOSEn_Hist
Entries 3750
Mean 0.0192
RMS 0.1411
0 500 1000 1500 2000 2500 3000 3500
0 2 4 6 8 10 12 14 16 18 20


Calorimeter cluster transverse energy
TAU_LOOSEET_Hist
Entries 72
Mean 36.66
RMS 13
0 0.5 1 1.5 2 2.5 3 3.5 4
0 10 20 30 40 50 60


Cluster profile
TAU_LOOSEprofile_Hist
Entries 72
Mean 0.6209
RMS 0.129
0 1 2 3 4 5 6 7
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1


Cluster width
TAU_LOOSEwidth_Hist
Entries 72
Mean 0.1717
RMS 0.04659
0 1 2 3 4 5
0 0.05 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5