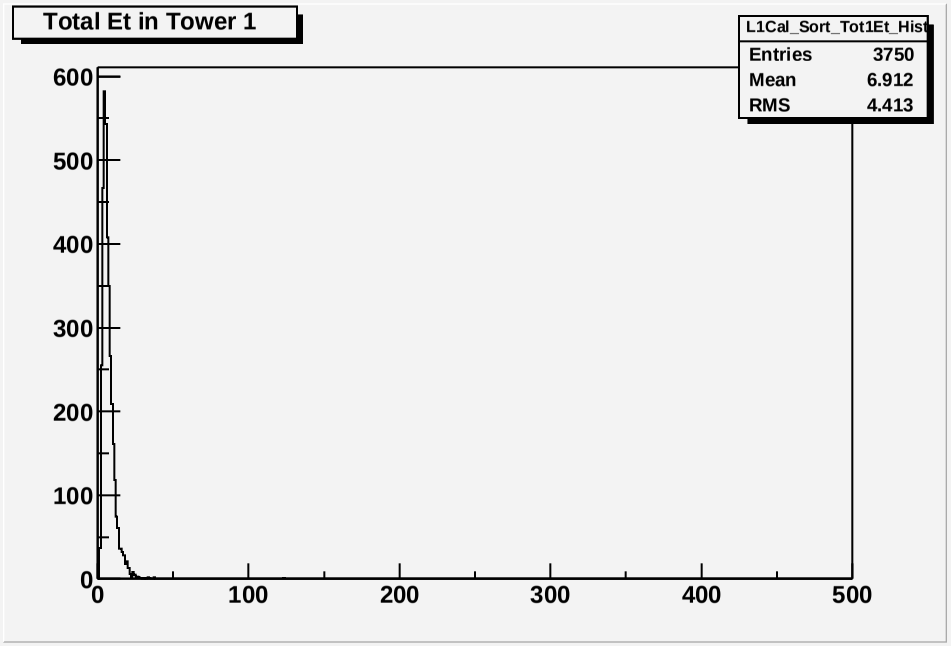
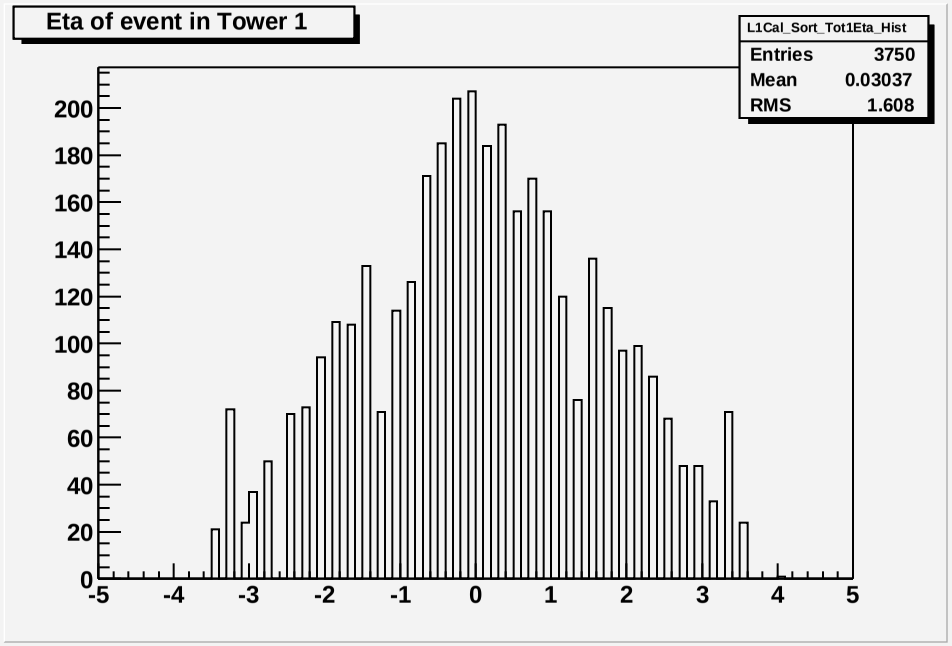
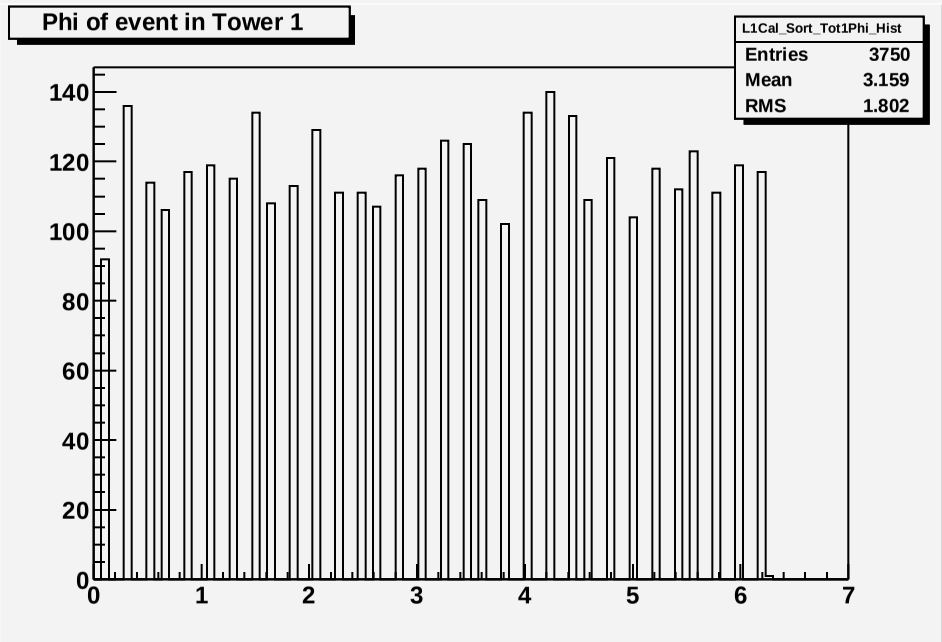
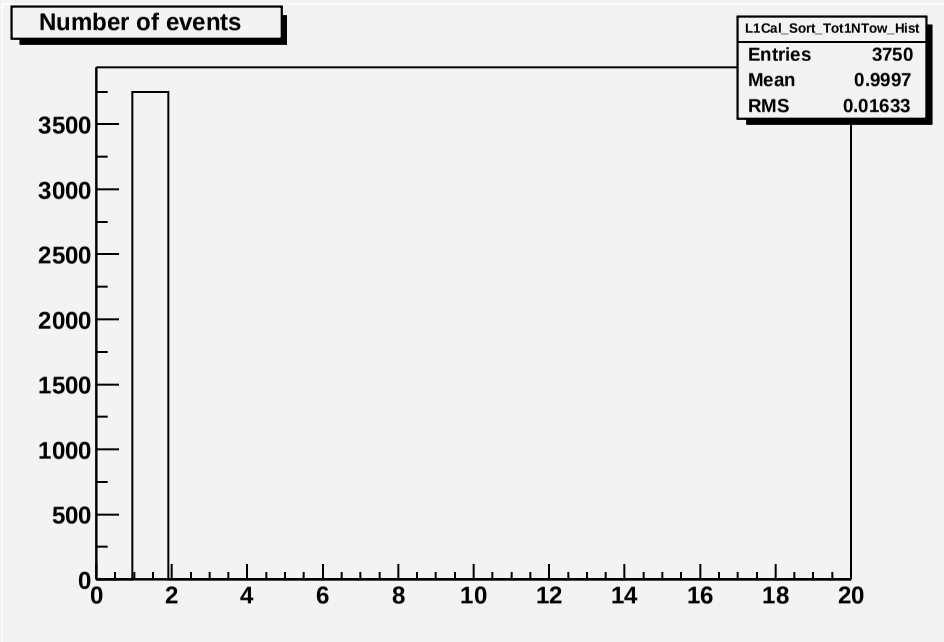
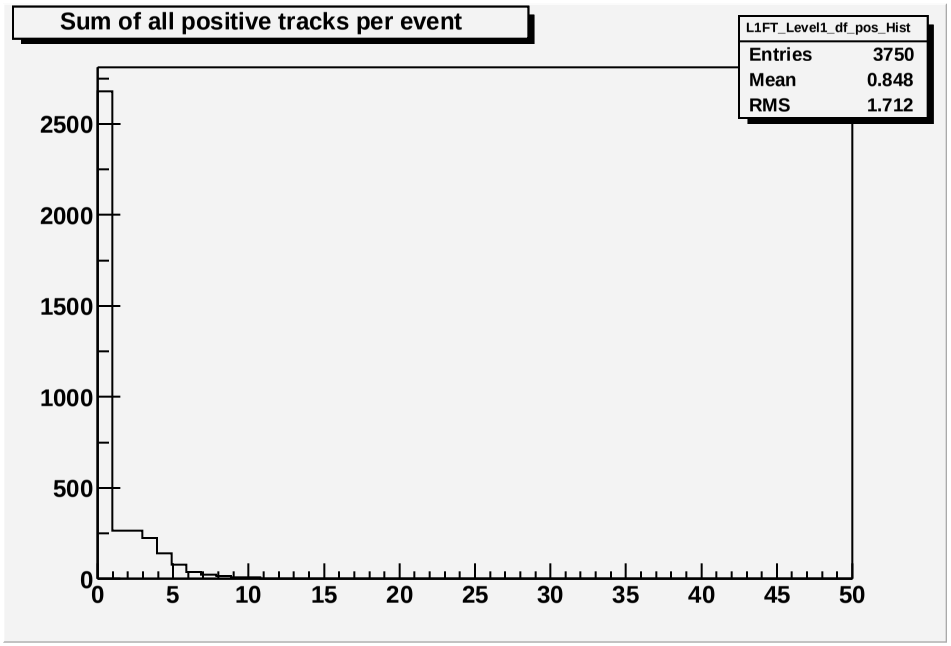
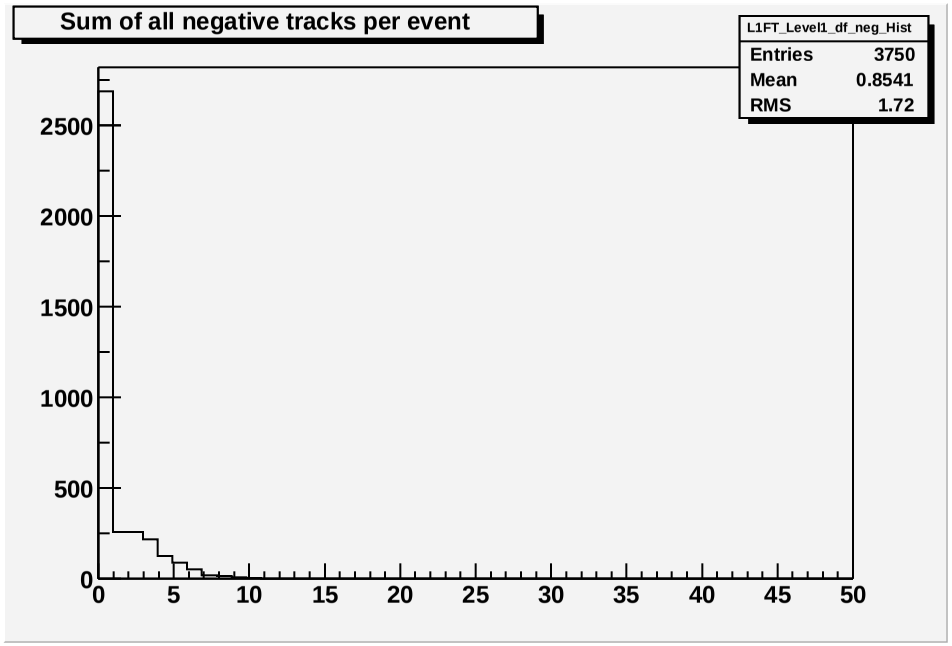

Total Et in Tower 1
L1Cal_Sort_Tot1Et_Hist
Entries 3750
Mean 6.912
RMS 4.413
600
500
400
300
200
100
0
0
100
200
300
400
500

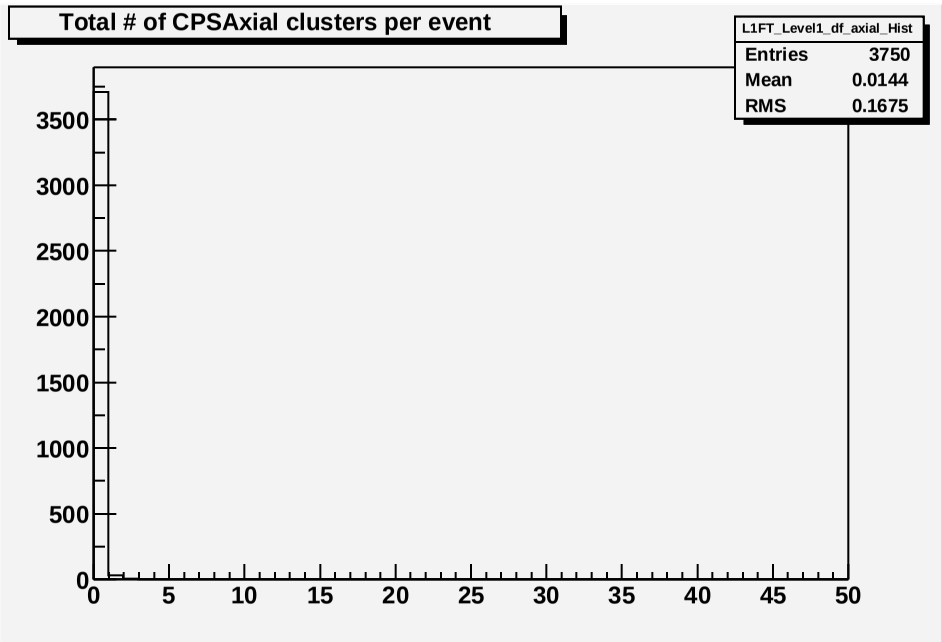

Eta of event in Tower 1
L1Cal_Sort_Tot1Eta_Hist
Entries 3750
Mean 0.03037
RMS 1.608
200
180
160
140
120
100
80
60
40
20
0
-5
-4
-3
-2
-1
0
1
2
3
4
5

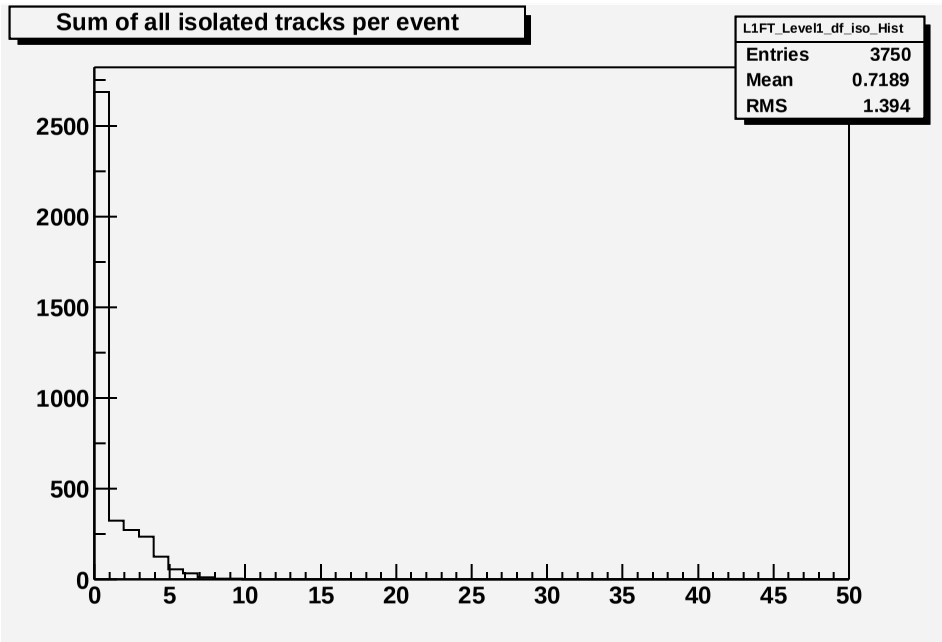

Phi of event in Tower 1
L1Cal_Sort_Tot1Phi_Hist
Entries 3750
Mean 3.159
RMS 1.802
140
120
100
80
60
40
20
0
0
1
2
3
4
5
6
7

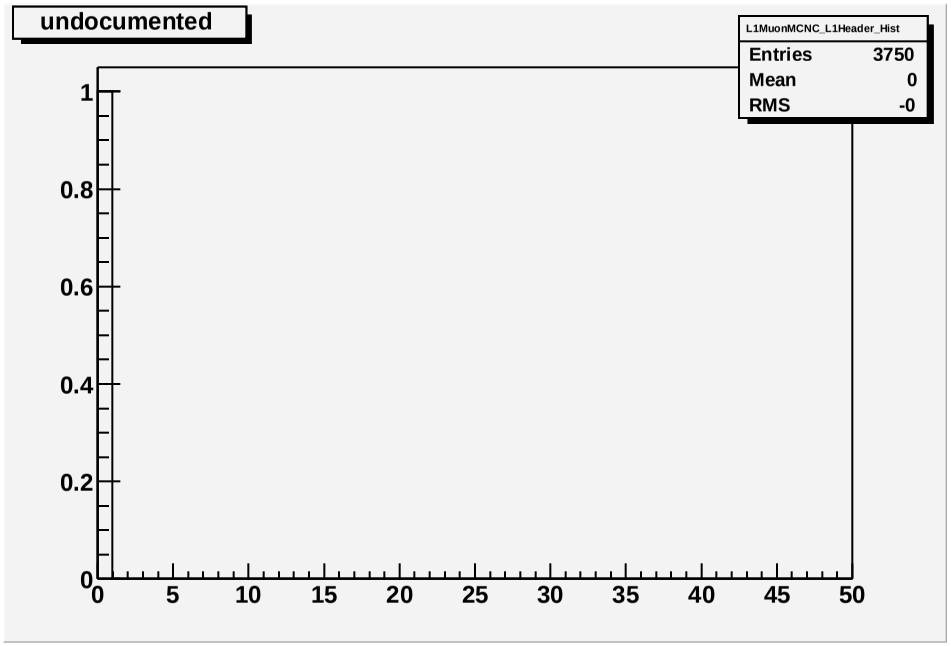

Number of events
L1Cal_Sort_Tot1NTow_Hist
Entries 3750
Mean 0.9997
RMS 0.01633
3500
3000
2500
2000
1500
1000
500
0
0
2
4
6
8
10
12
14
16
18
20

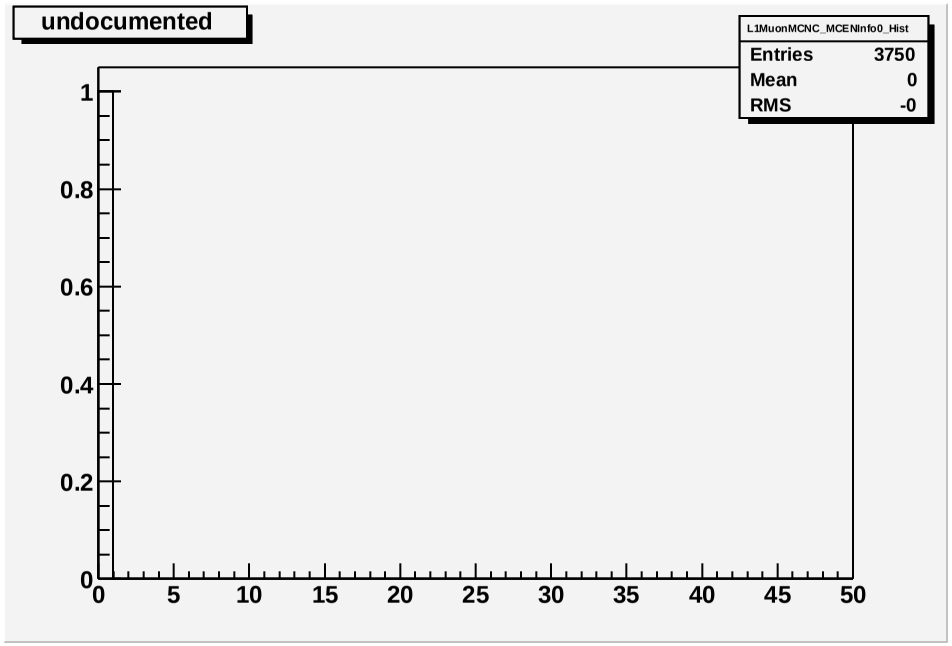

Sum of all positive tracks per event
L1FT_Level1_df_pos_Hist
Entries 3750
Mean 0.848
RMS 1.712
0
500
1000
1500
2000
2500
0 5 10 15 20 25 30 35 40 45 50

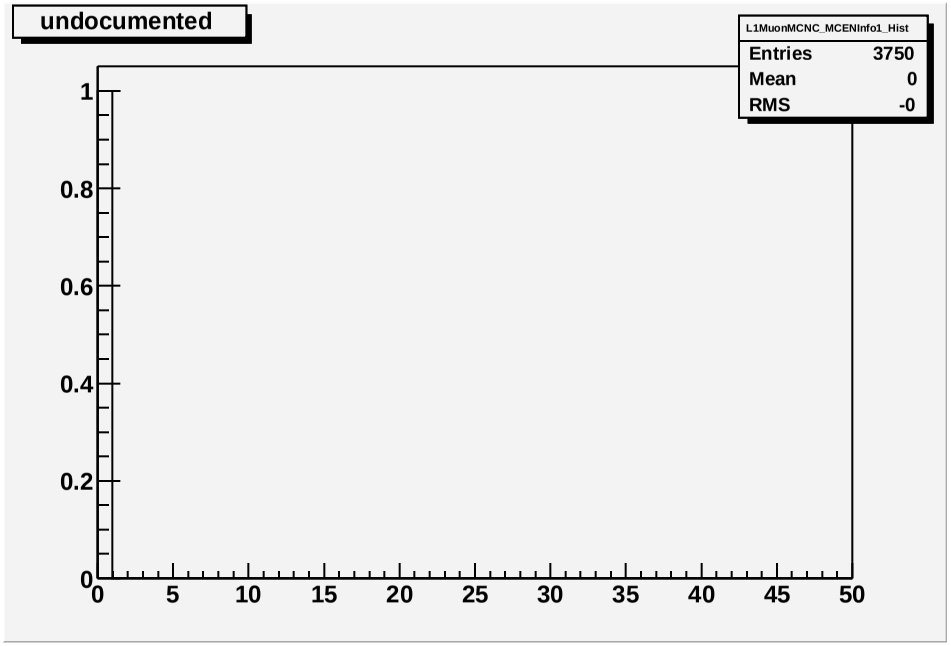

Sum of all negative tracks per event
L1FT_Level1_df_neg_Hist
Entries 3750
Mean 0.8541
RMS 1.72
0
500
1000
1500
2000
2500
0 5 10 15 20 25 30 35 40 45 50

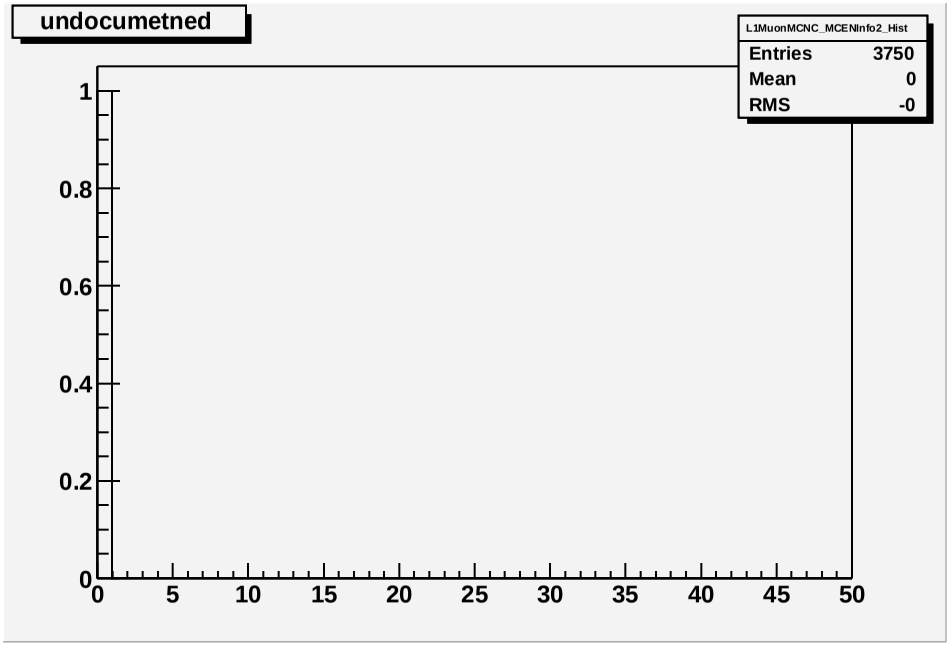

Total # of CPSAxial clusters per event
L1FT_Level1_df_axial_Hist
Entries 3750
Mean 0.0144
RMS 0.1675
0
500
1000
1500
2000
2500
3000
3500
0 5 10 15 20 25 30 35 40 45 50

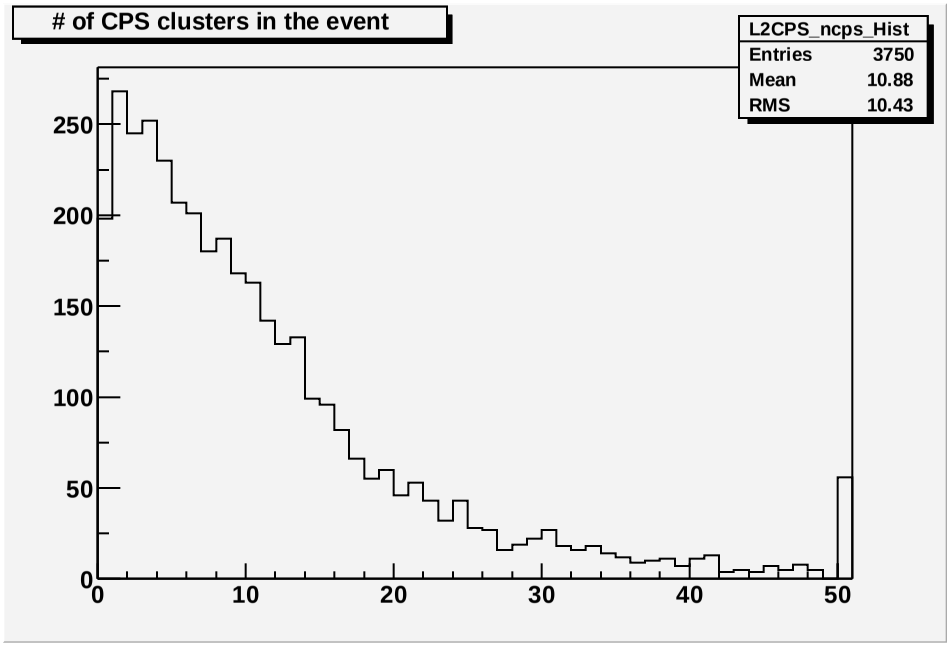

Sum of all isolated tracks per event
L1FT_Level1_df_iso_Hist
Entries 3750
Mean 0.7189
RMS 1.394
0
500
1000
1500
2000
2500
0 5 10 15 20 25 30 35 40 45 50

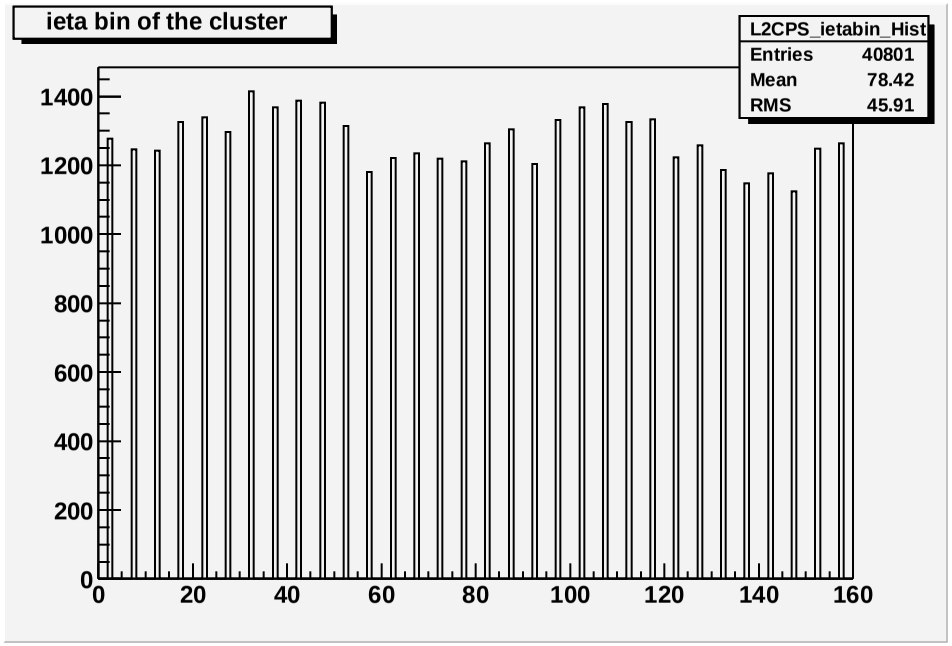

undocumented
L1MuonMCNC_L1Header_Hist
Entries 3750
Mean 0
RMS -0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35 40 45 50

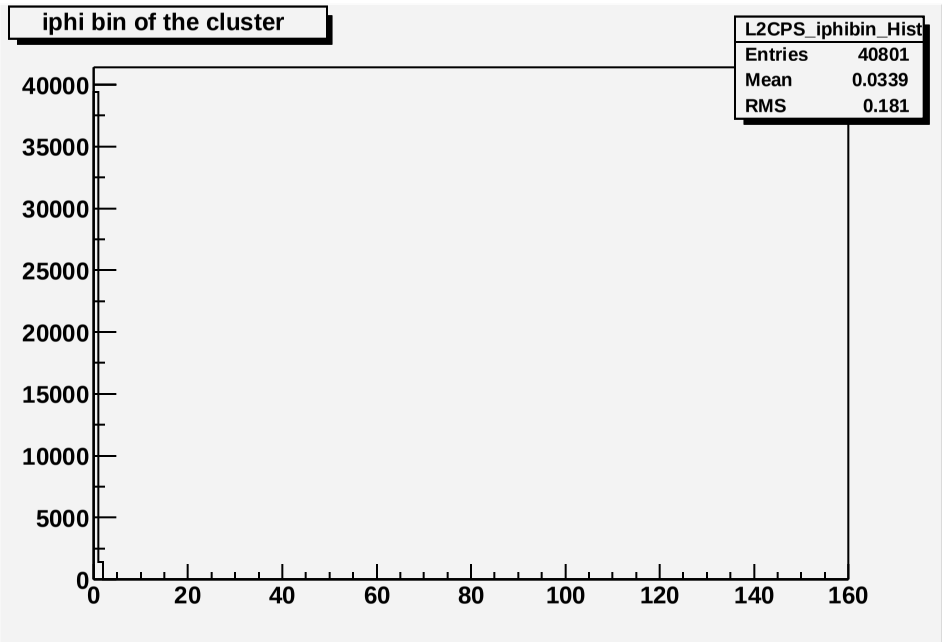

undocumented
L1MuonMCNC_MCENInfo0_Hist
Entries 3750
Mean 0
RMS -0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35 40 45 50

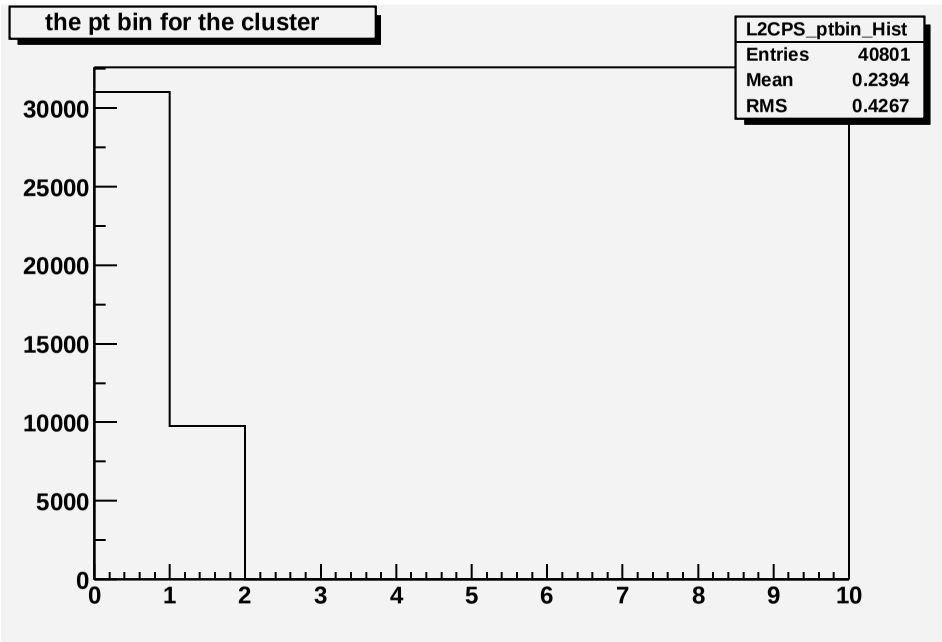

undocumented
L1MuonMCNC_MCENInfo1_Hist
Entries 3750
Mean 0
RMS -0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35 40 45 50

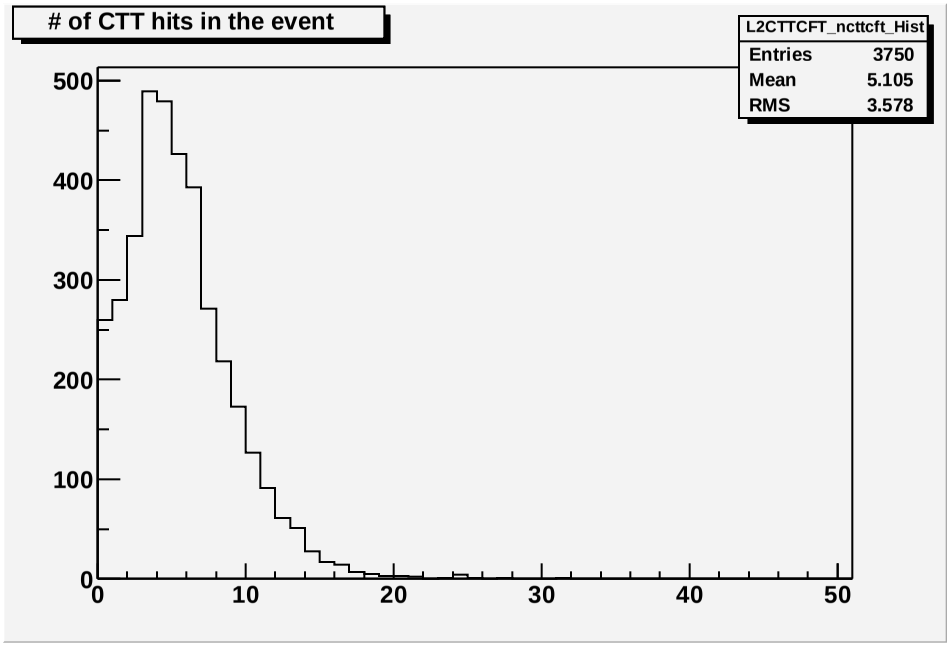

undocumetned
L1MuonMCNC_MCENInfo2_Hist
Entries 3750
Mean 0
RMS -0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35 40 45 50

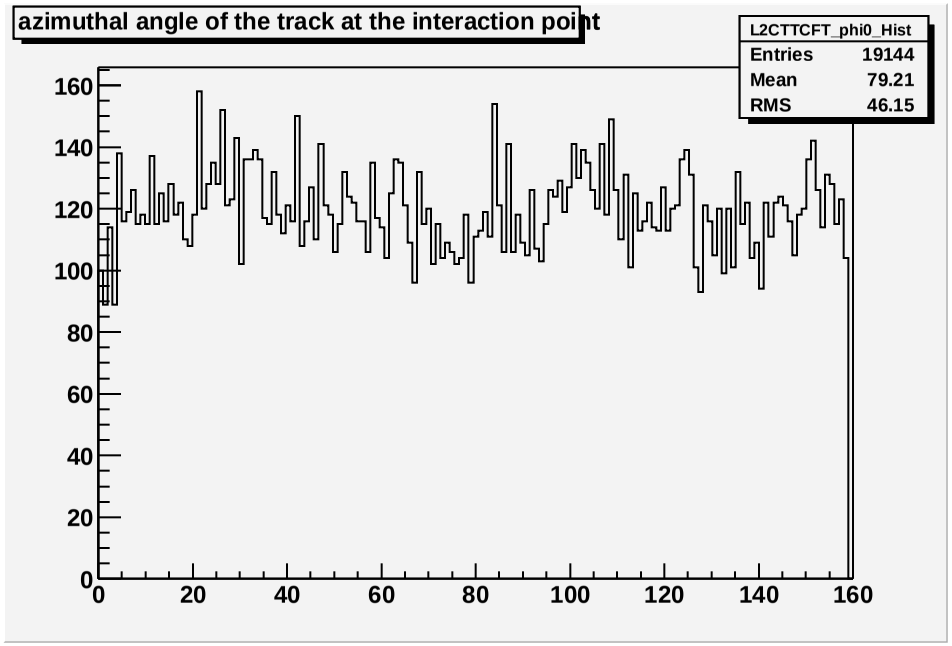

# of CPS clusters in the event
L2CPS_ncps_Hist
Entries 3750
Mean 10.88
RMS 10.43
0
50
100
150
200
250
0
10
20
30
40
50

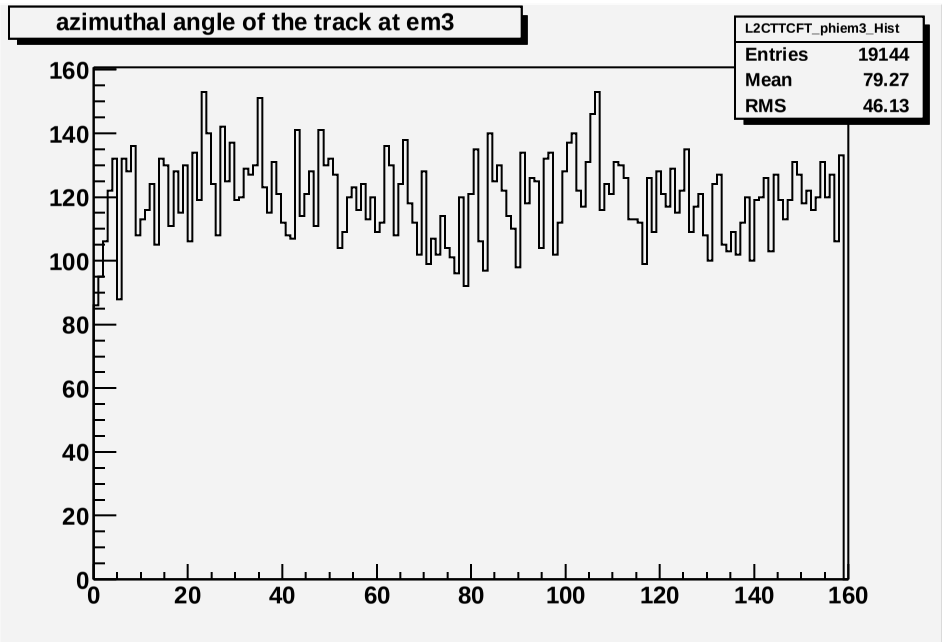

ieta bin of the cluster
L2CPS_ietabin_Hist
Entries 40801
Mean 78.42
RMS 45.91
0
200
400
600
800
1000
1200
1400
0
20
40
60
80
100
120
140
160

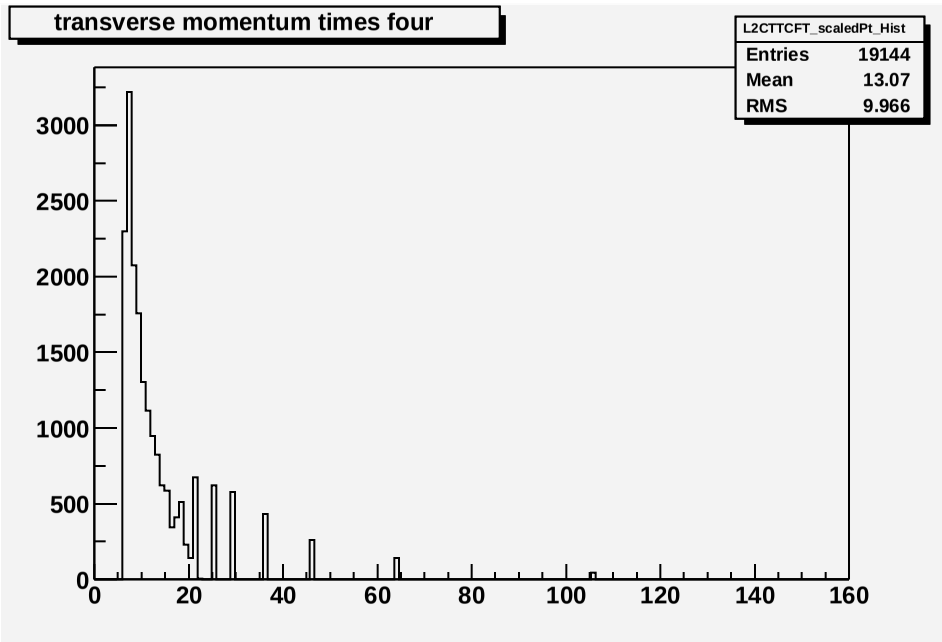

iphi bin of the cluster
L2CPS_iphibin_Hist
Entries 40801
Mean 0.0339
RMS 0.181
0
5000
10000
15000
20000
25000
30000
35000
40000
0
20
40
60
80
100
120
140
160

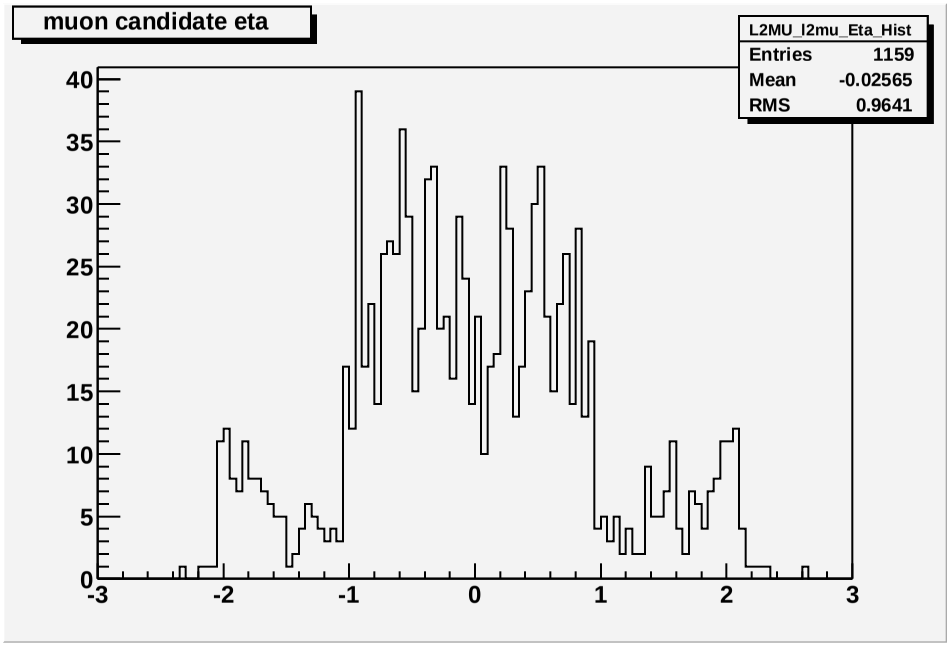

the pt bin for the cluster
L2CPS_ptbin_Hist
Entries 40801
Mean 0.2394
RMS 0.4267
0
5000
10000
15000
20000
25000
30000
0
1
2
3
4
5
6
7
8
9
10

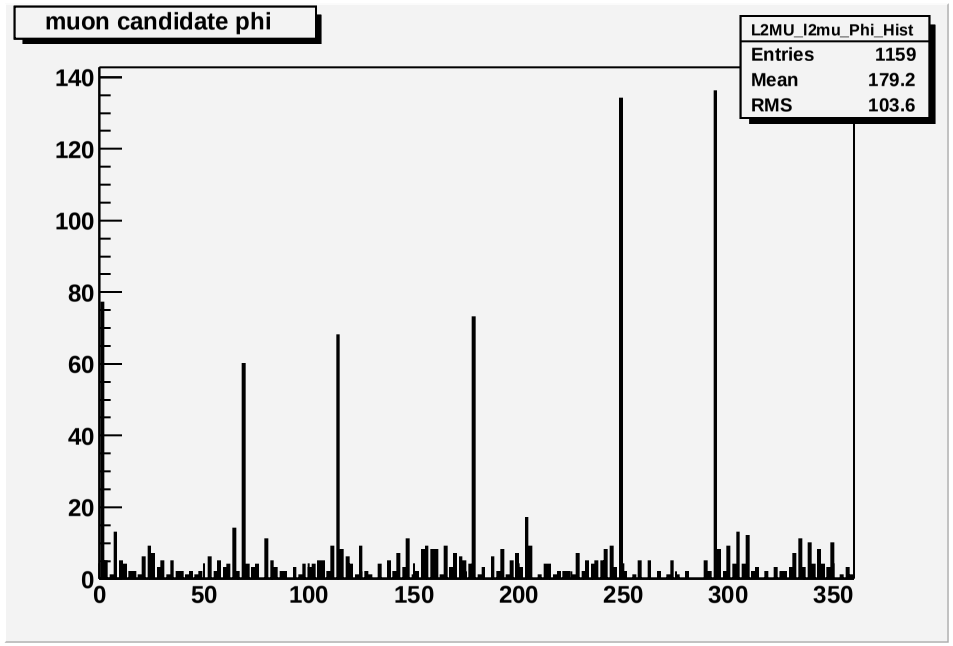

# of CTT hits in the event
L2CTTCFT_ncttcft_Hist
Entries 3750
Mean 5.105
RMS 3.578

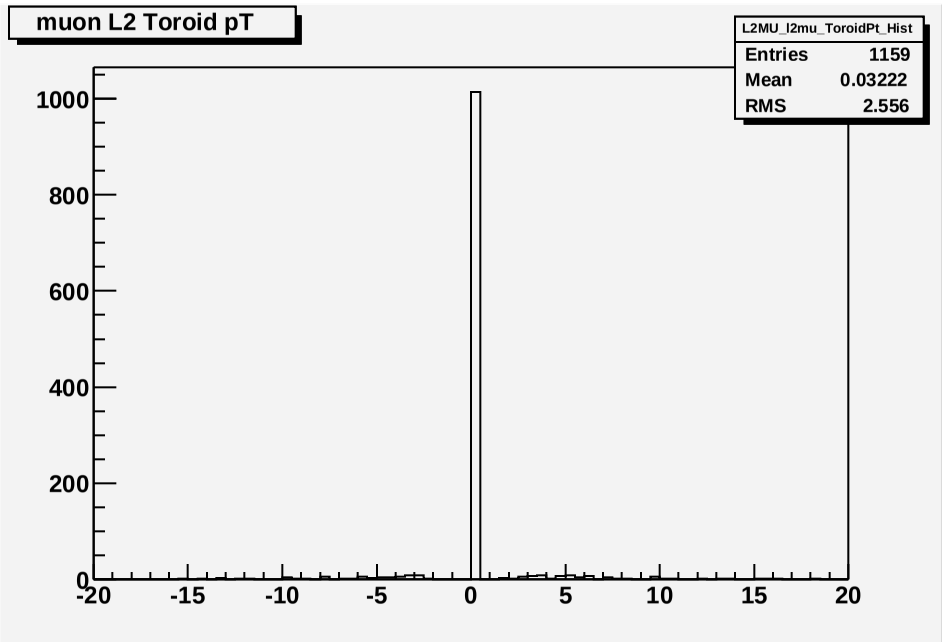

azimuthal angle of the track at the interaction point
L2CTTCFT_phi0_Hist
Entries 19144
Mean 79.21
RMS 46.15

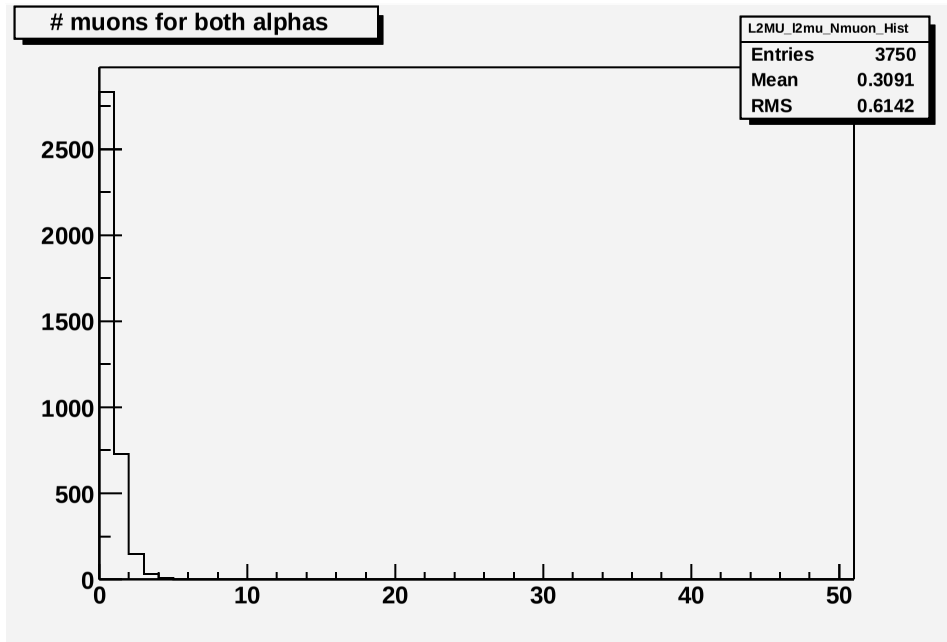

azimuthal angle of the track at em3
L2CTTCFT_phiem3_Hist
Entries 19144
Mean 79.27
RMS 46.13

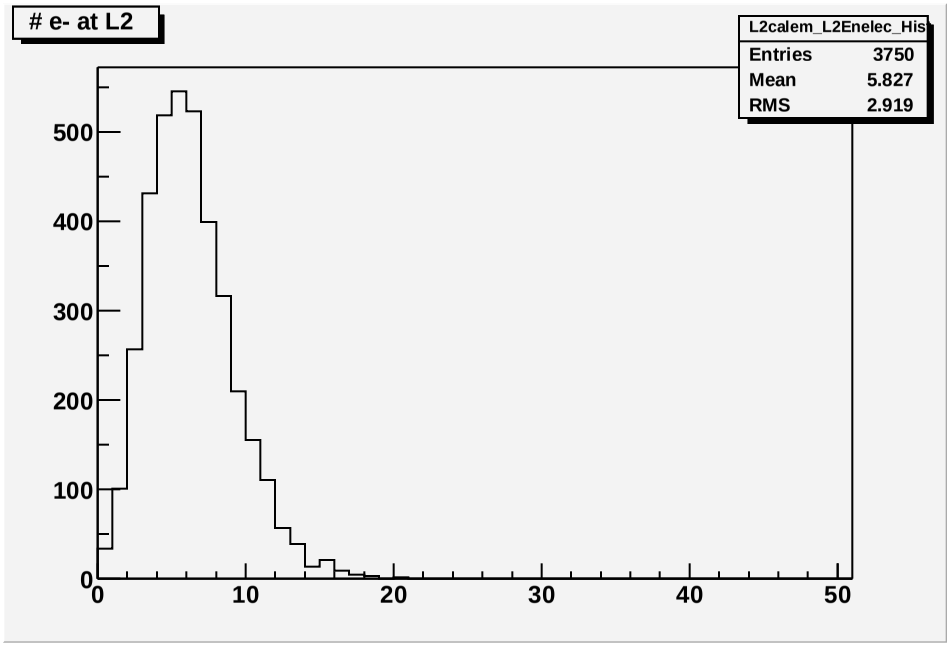

transverse momentum times four
L2CTTCFT_scaledPt_Hist
Entries 19144
Mean 13.07
RMS 9.966

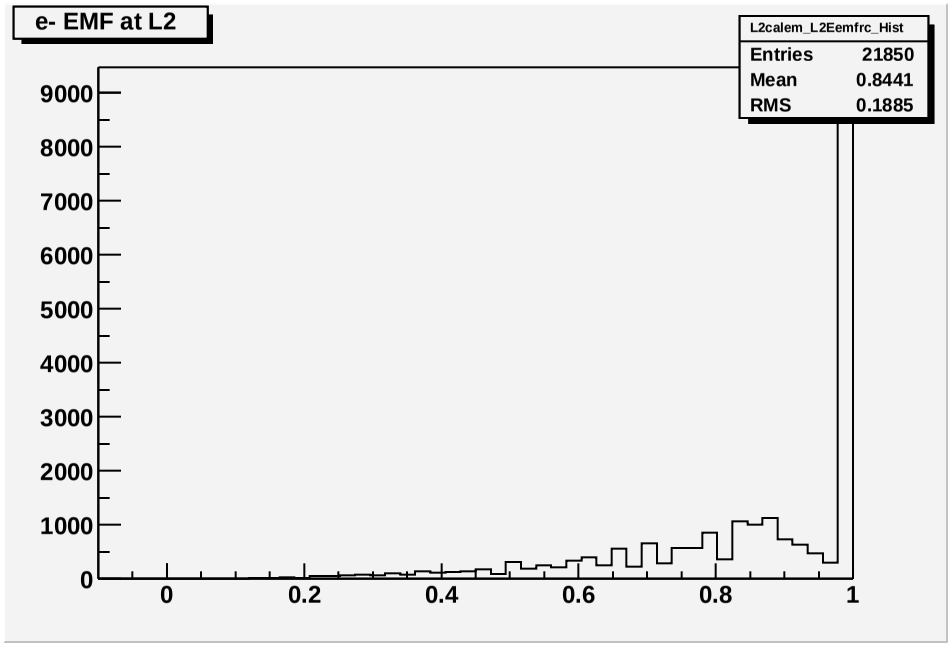

muon candidate eta
L2MU_l2mu_Eta_Hist
Entries 1159
Mean -0.02565
RMS 0.9641
40
35
30
25
20
15
10
5
0
-3
-2
-1
0
1
2
3

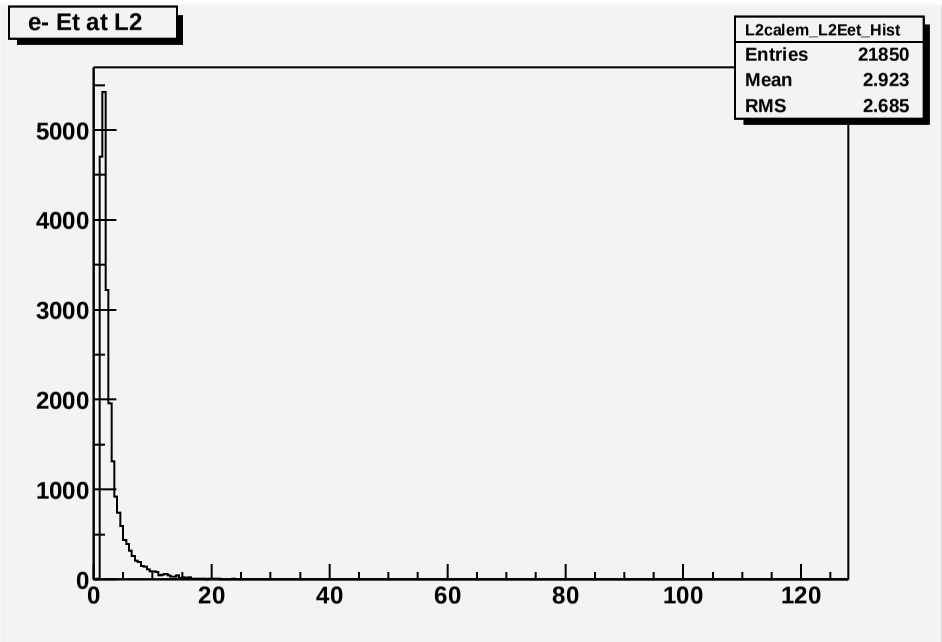

muon candidate phi
L2MU_l2mu_Phi_Hist
Entries 1159
Mean 179.2
RMS 103.6
140
120
100
80
60
40
20
0
0
50
100
150
200
250
300
350

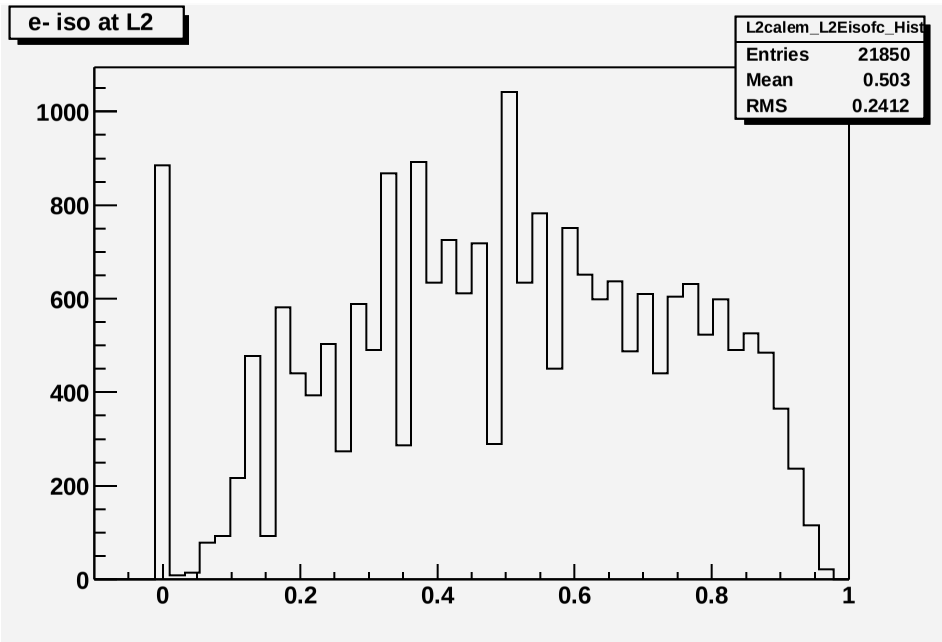

muon L2 Toroid pT
L2MU_l2mu_ToroidPt_Hist
Entries 1159
Mean 0.03222
RMS 2.556
1000
800
600
400
200
0
-20
-15
-10
-5
0
5
10
15
20

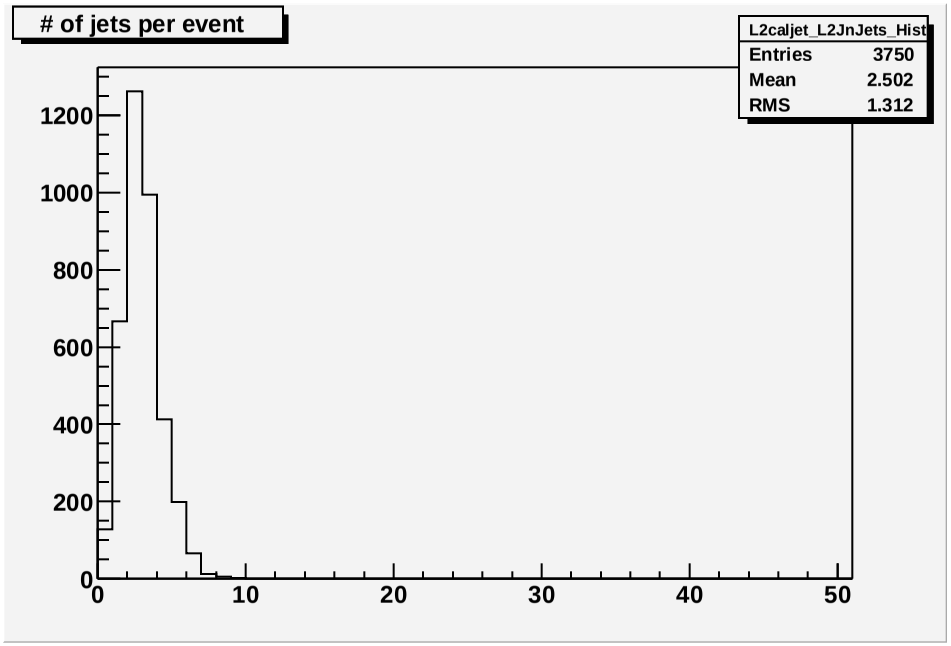

muons for both alphas
L2MU_l2mu_Nmuon_Hist
Entries 3750
Mean 0.3091
RMS 0.6142
2500
2000
1500
1000
500
0
0
10
20
30
40
50

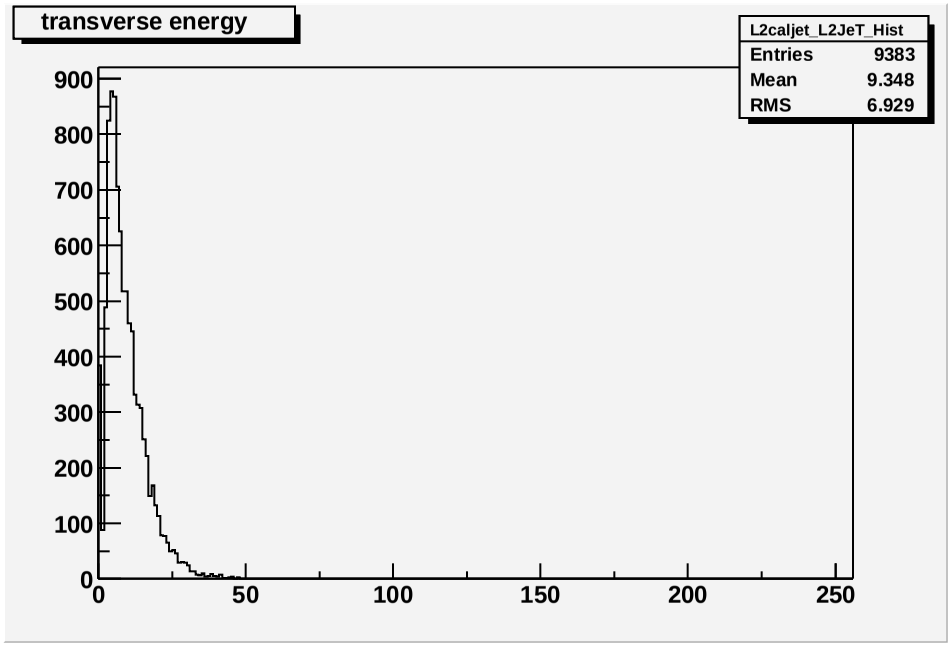

e- at L2
L2calem_L2Enelec_His
Entries 3750
Mean 5.827
RMS 2.919
0
100
200
300
400
500
0
10
20
30
40
50

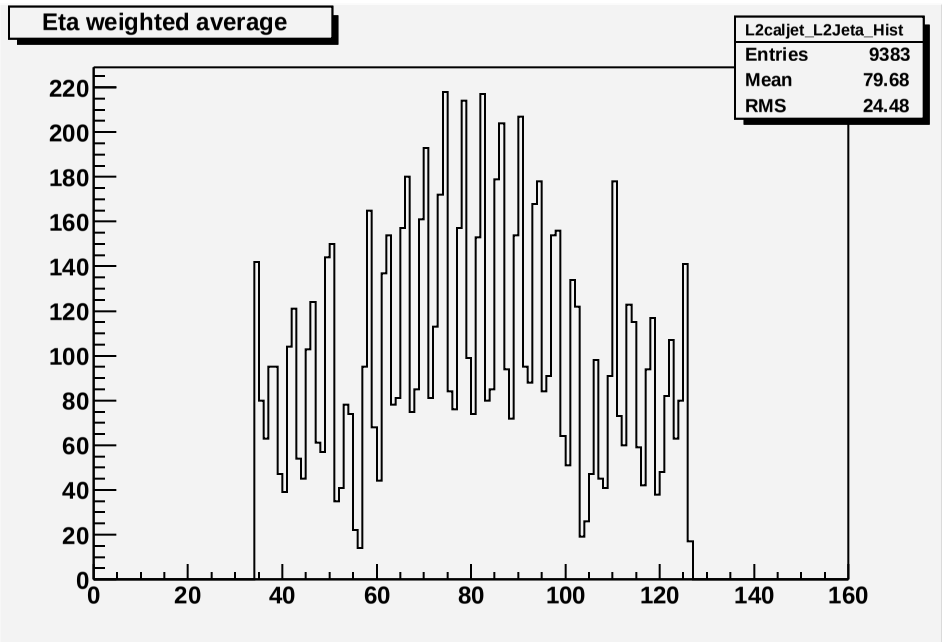

e- EMF at L2
L2calem_L2Eemfrc_Hist
Entries 21850
Mean 0.8441
RMS 0.1885
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
0
0.2
0.4
0.6
0.8
1

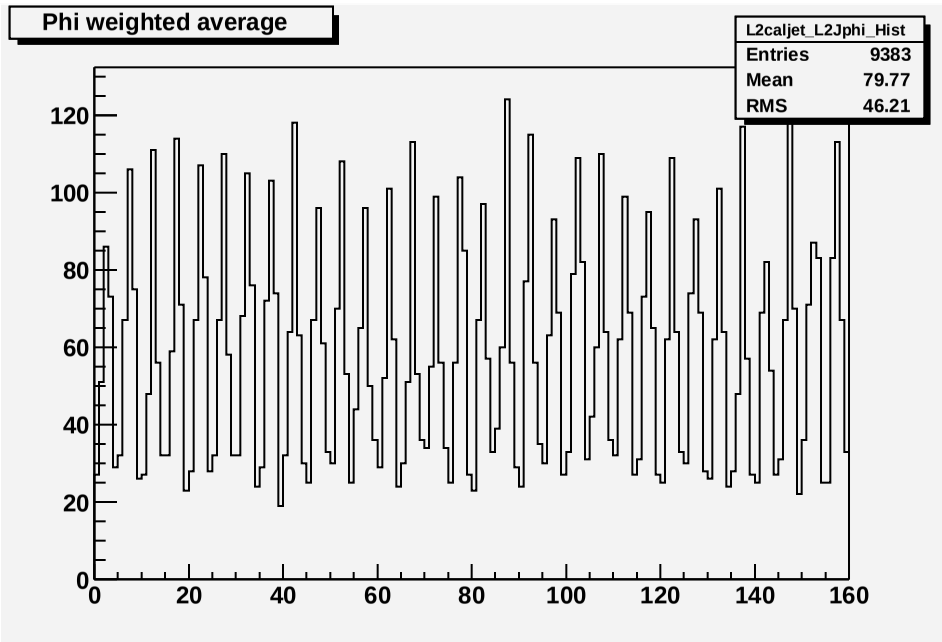

e- Et at L2
L2calem_L2Eet_Hist
Entries 21850
Mean 2.923
RMS 2.685
0
1000
2000
3000
4000
5000
0
20
40
60
80
100
120

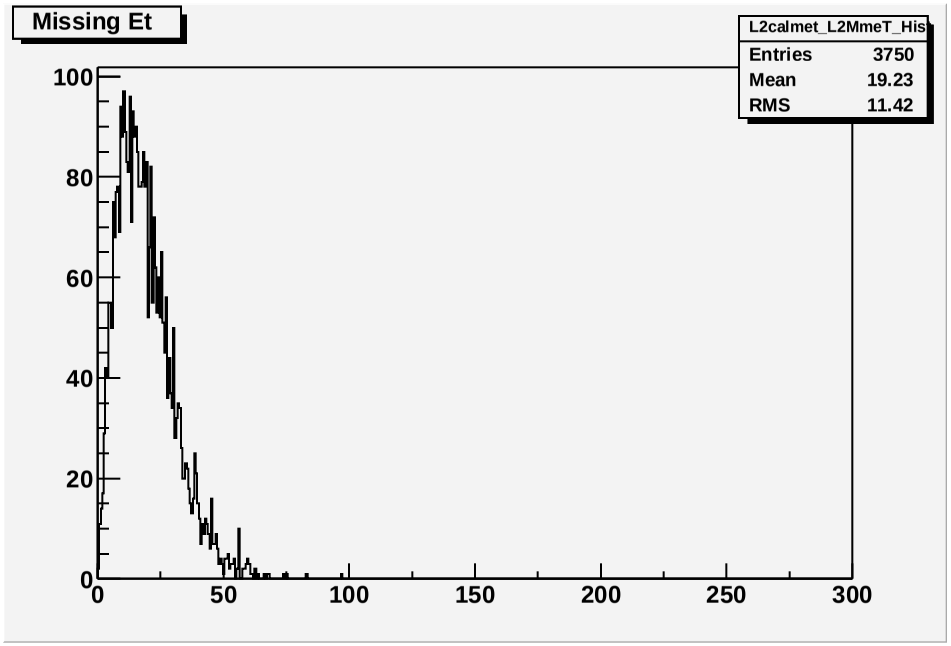

e- iso at L2
L2calem_L2Eisofc_Hist
Entries 21850
Mean 0.503
RMS 0.2412
0
200
400
600
800
1000
0
0.2
0.4
0.6
0.8
1

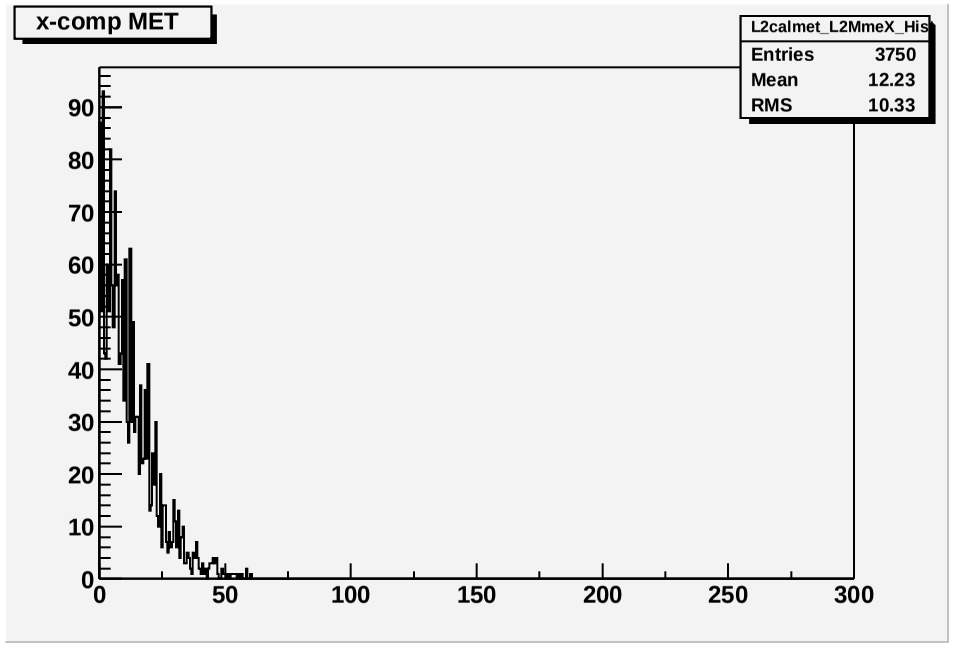

# of jets per event
L2caljet_L2JnJets_Hist
Entries 3750
Mean 2.502
RMS 1.312
0
200
400
600
800
1000
1200
0
10
20
30
40
50

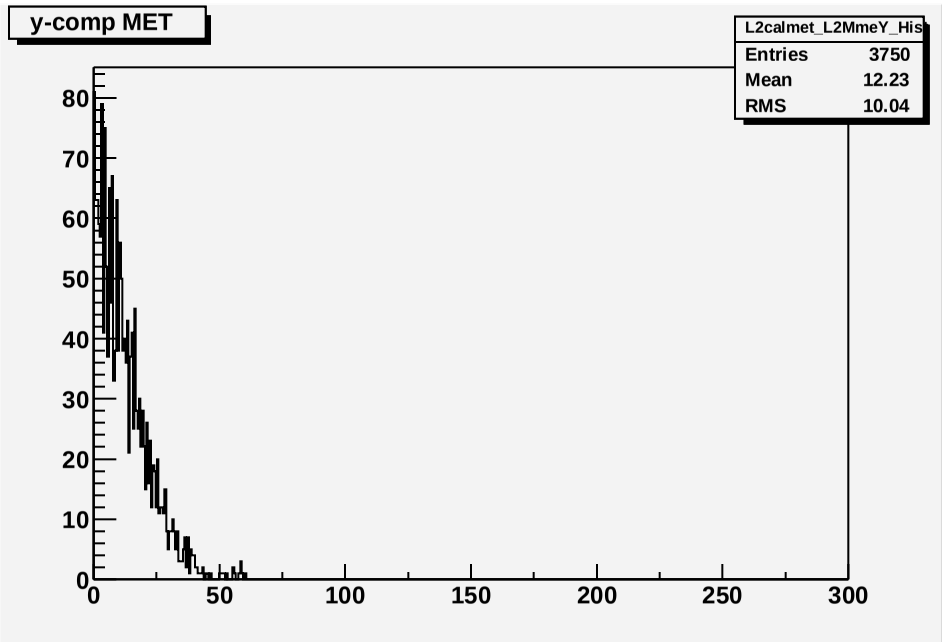

transverse energy
L2caljet_L2JeT_Hist
Entries 9383
Mean 9.348
RMS 6.929
0
100
200
300
400
500
600
700
800
900
0
50
100
150
200
250

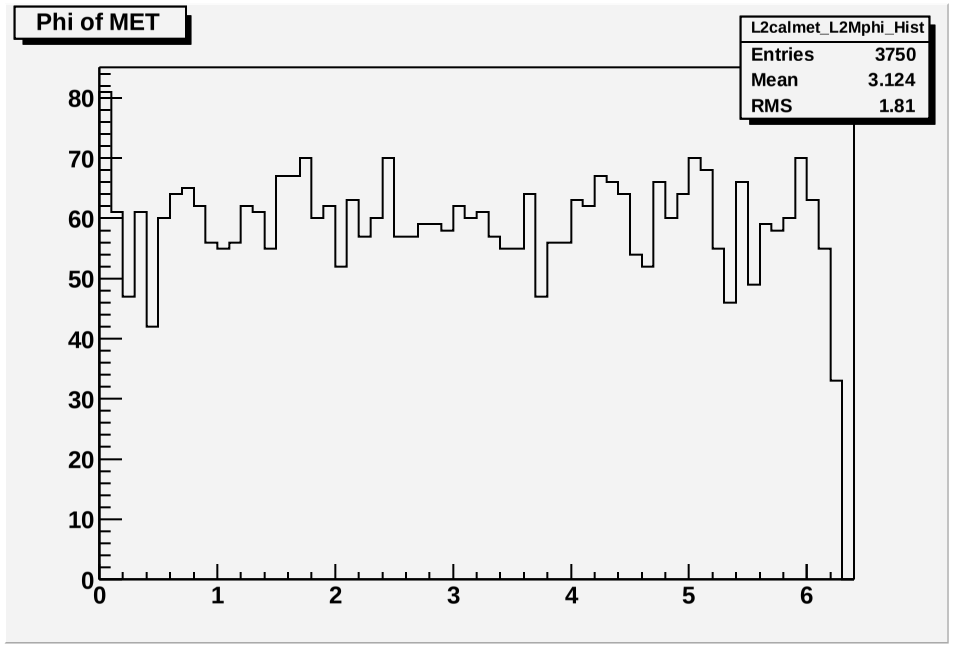

Eta weighted average
L2caljet_L2Jeta_Hist
Entries 9383
Mean 79.68
RMS 24.48
0
20
40
60
80
100
120
140
160
180
200
220
0
20
40
60
80
100
120
140
160

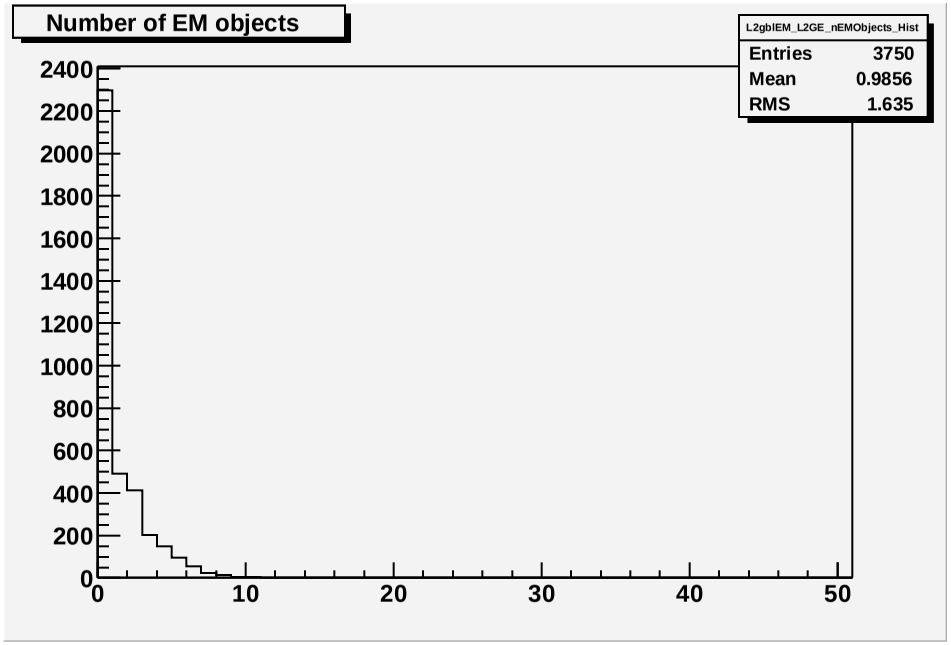

Phi weighted average
L2caljet_L2Jphi_Hist
Entries 9383
Mean 79.77
RMS 46.21
0
20
40
60
80
100
120
0
20
40
60
80
100
120
140
160

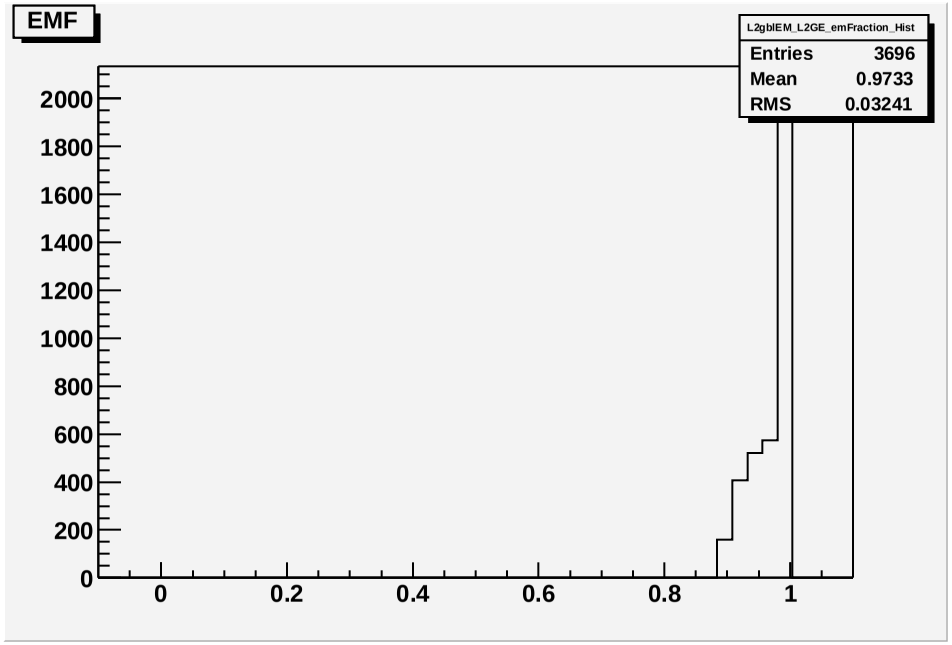

Missing Et
L2calmet_L2MmeT_His
Entries 3750
Mean 19.23
RMS 11.42
0
20
40
60
80
100
0
50
100
150
200
250
300

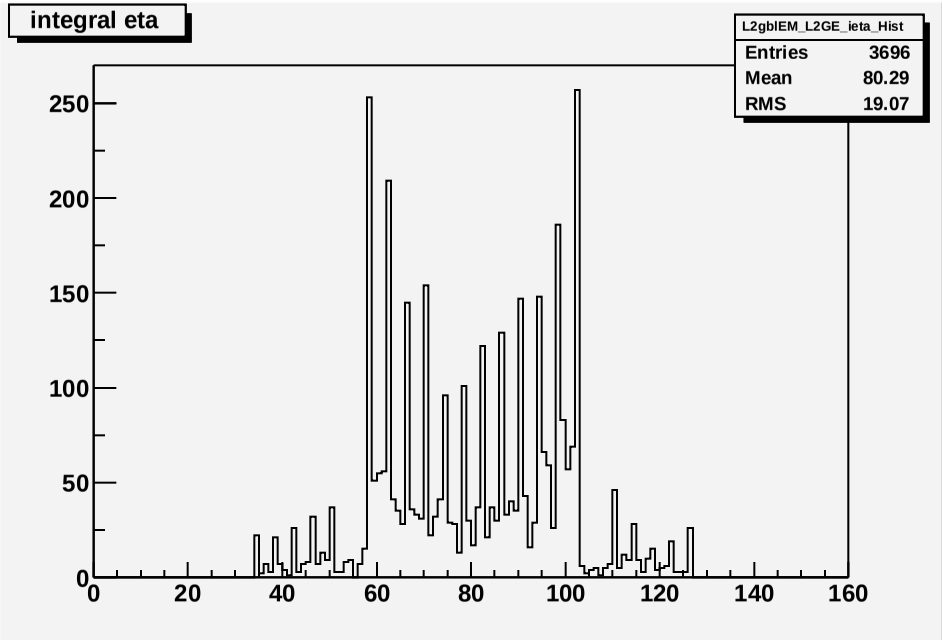

x-comp MET
L2calmet_L2MmeX_His
Entries 3750
Mean 12.23
RMS 10.33
0
10
20
30
40
50
60
70
80
90
0
50
100
150
200
250
300

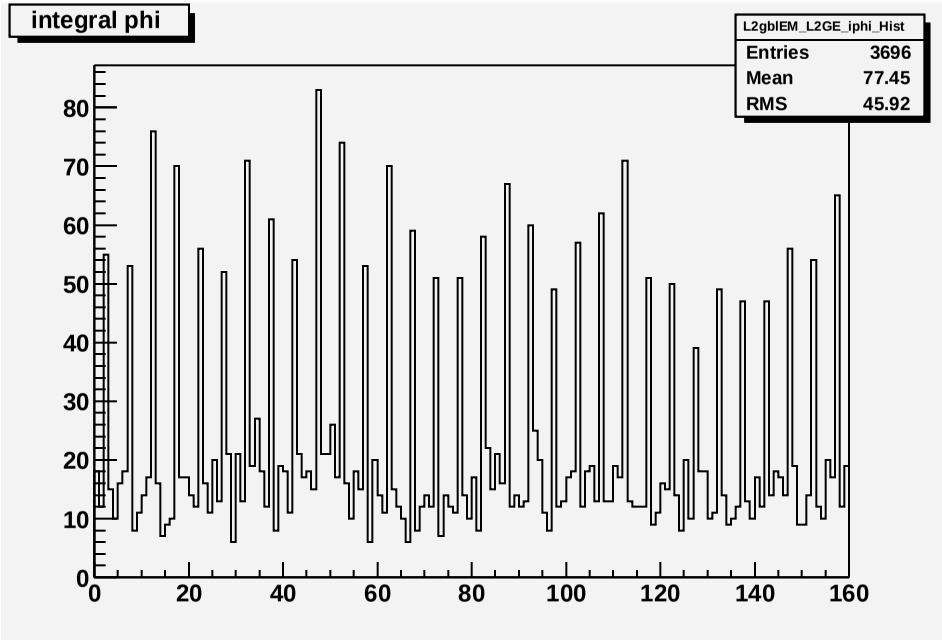

y-comp MET
L2calmet_L2MmeY_His
Entries 3750
Mean 12.23
RMS 10.04
0
10
20
30
40
50
60
70
80
0
50
100
150
200
250
300

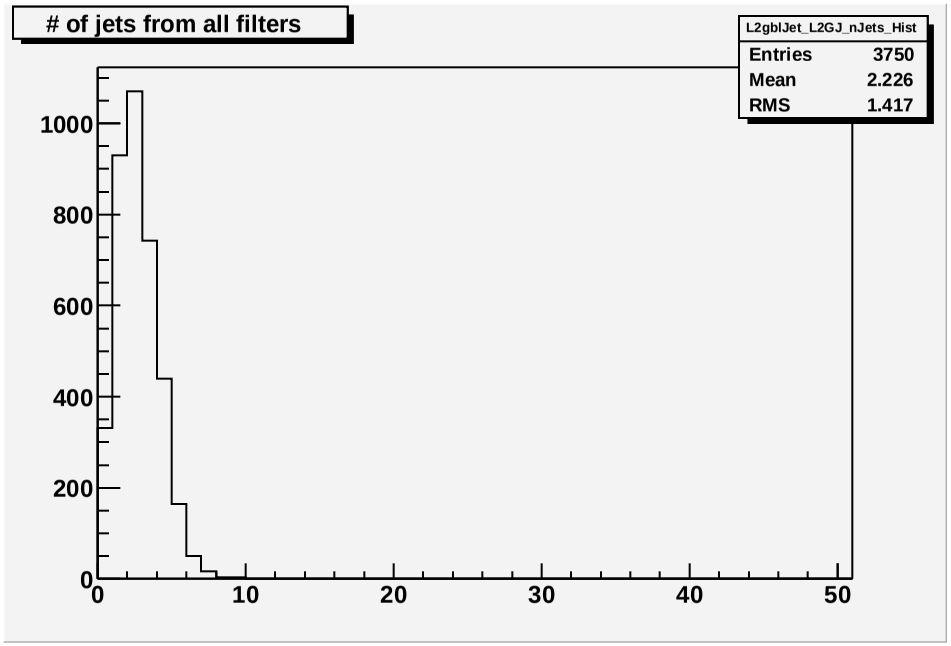

Phi of MET
L2calmet_L2Mphi_Hist
Entries 3750
Mean 3.124
RMS 1.81
0
10
20
30
40
50
60
70
80
0
1
2
3
4
5
6

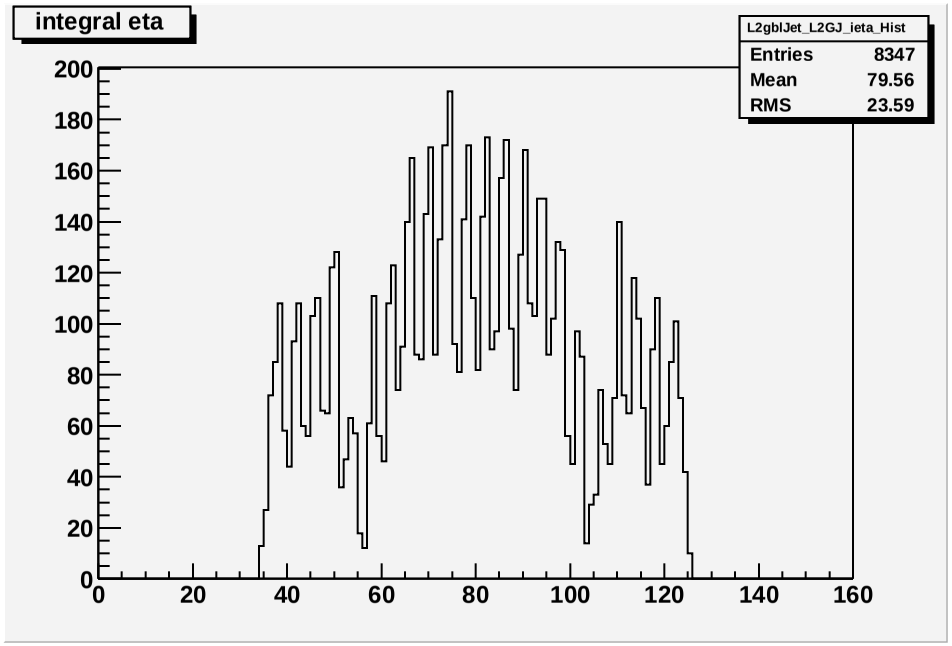

Number of EM objects
L2gbIEM_L2GE_nEMObjects_Hist
Entries 3750
Mean 0.9856
RMS 1.635

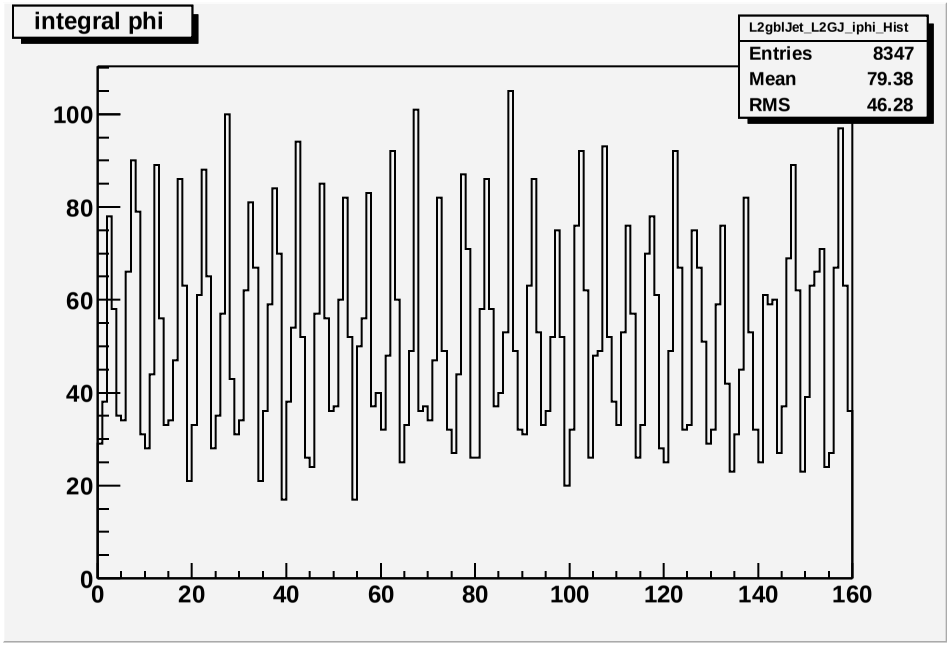

EMF
L2gbIEM_L2GE_emFraction_Hist
Entries 3696
Mean 0.9733
RMS 0.03241

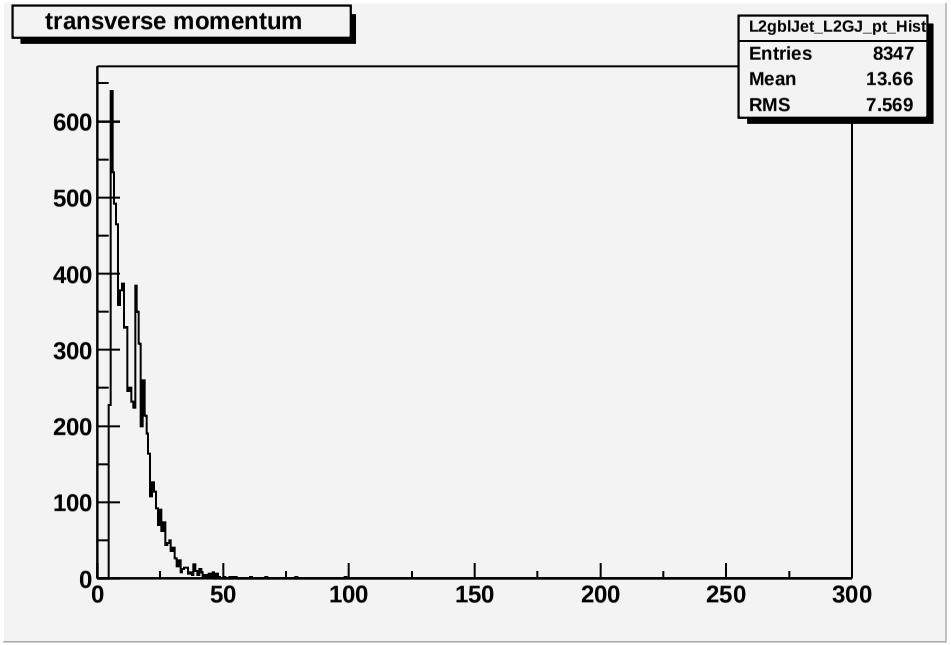

integral eta
L2gbIEM_L2GE_ieta_Hist
Entries 3696
Mean 80.29
RMS 19.07

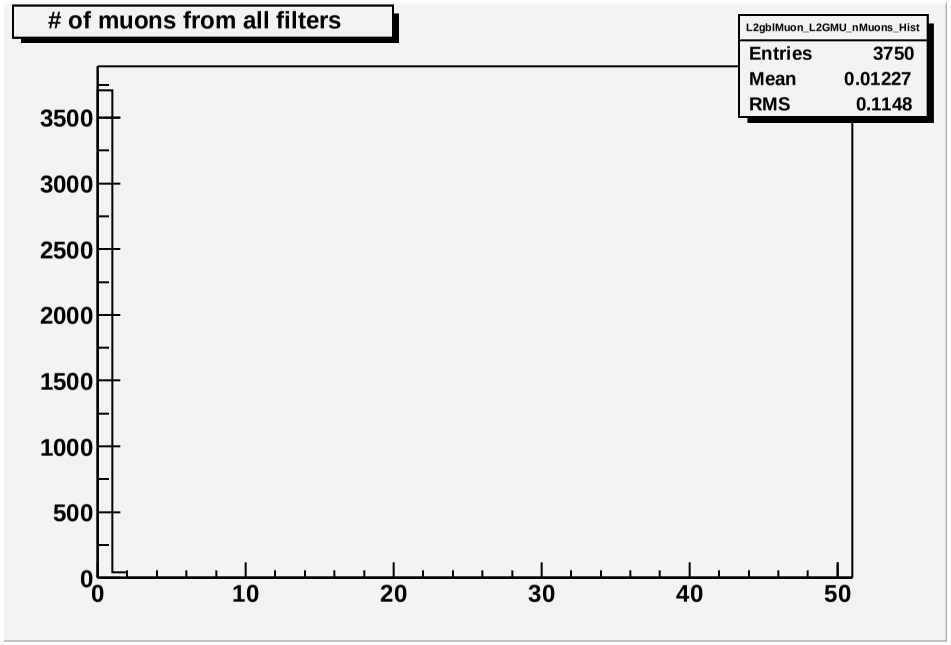

integral phi
L2gbIEM_L2GE_iphi_Hist
Entries 3696
Mean 77.45
RMS 45.92

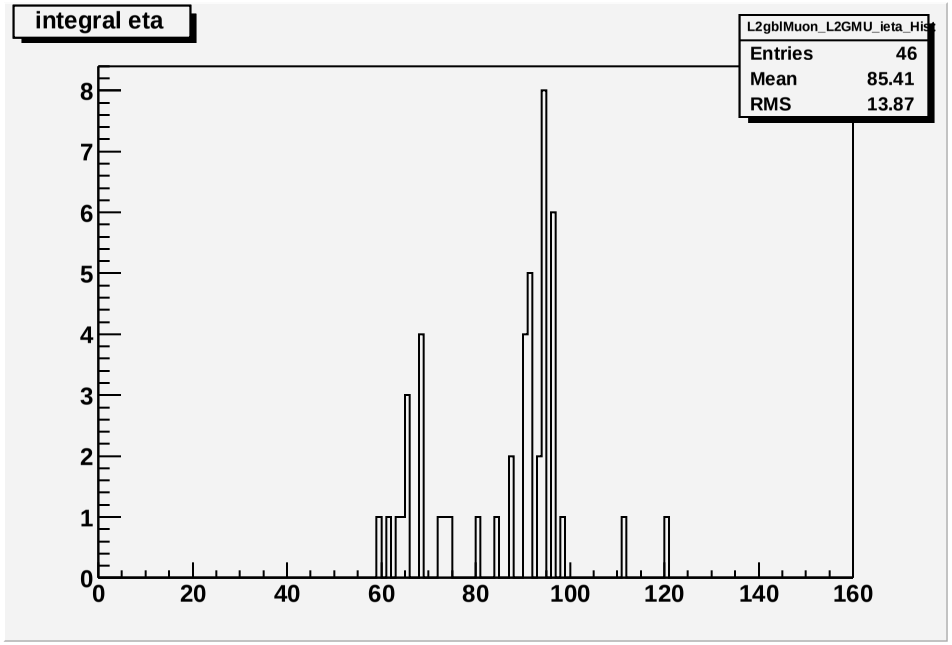

# of jets from all filters
L2gblJet_L2GJ_nJets_Hist
Entries 3750
Mean 2.226
RMS 1.417


integral eta
L2gblJet_L2GJ_ieta_Hist
Entries 8347
Mean 79.56
RMS 23.59


integral phi
L2gblJet_L2GJ_iphi_Hist
Entries 8347
Mean 79.38
RMS 46.28


transverse momentum
L2gblJet_L2GJ_pt_Hist
Entries 8347
Mean 13.66
RMS 7.569


# of muons from all filters
L2gblMuon_L2GMU_nMuons_Hist
Entries 3750
Mean 0.01227
RMS 0.1148
0
500
1000
1500
2000
2500
3000
3500
0
10
20
30
40
50


integral eta
L2gblMuon_L2GMU_ieta_Hist
Entries 46
Mean 85.41
RMS 13.87
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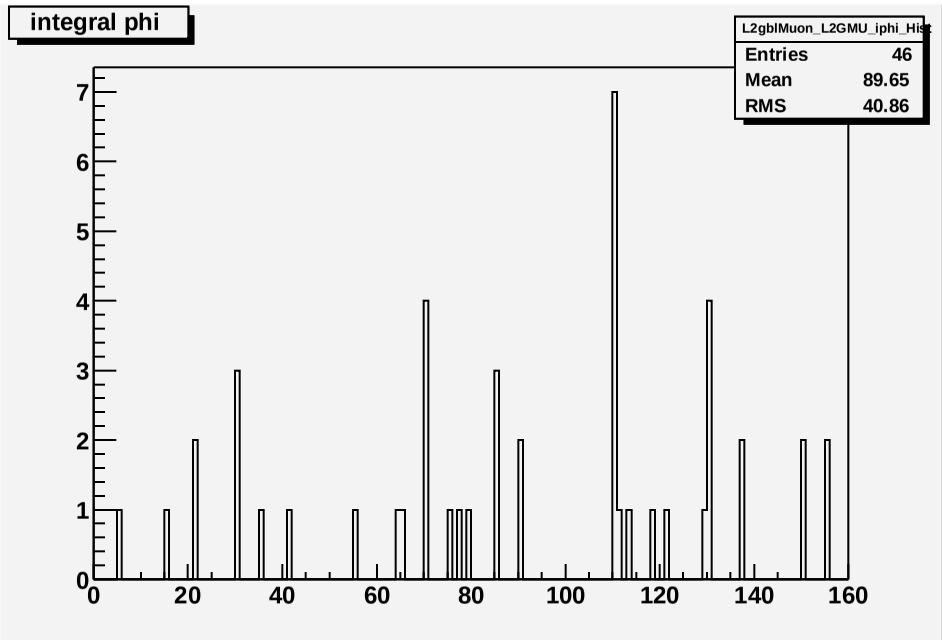
1
2
3
4
5
6
7
8
0
20
40
60
80
100
120
140
160


integral phi
L2gblMuon_L2GMU_iphi_Hist
Entries 46
Mean 89.65
RMS 40.86
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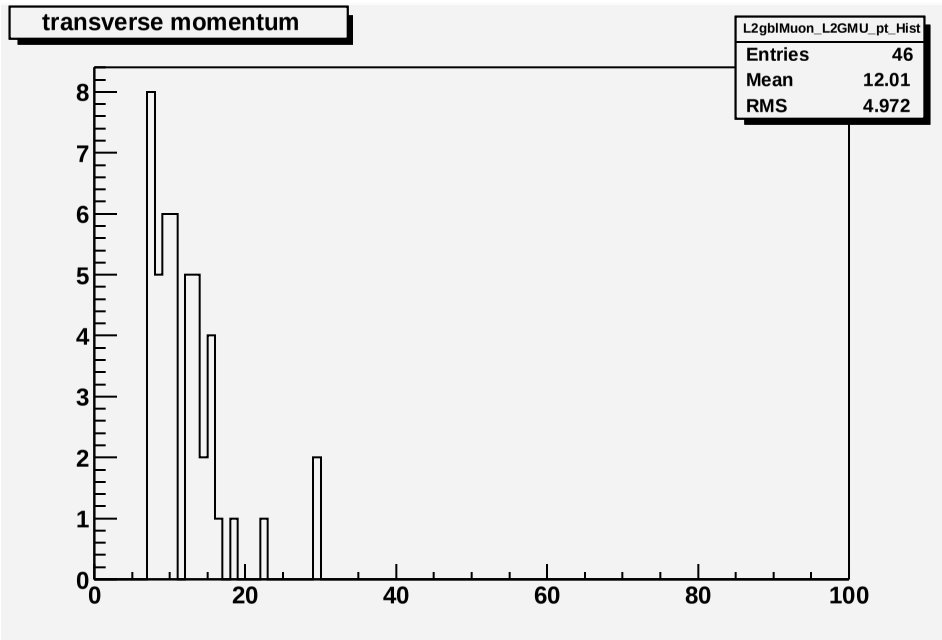
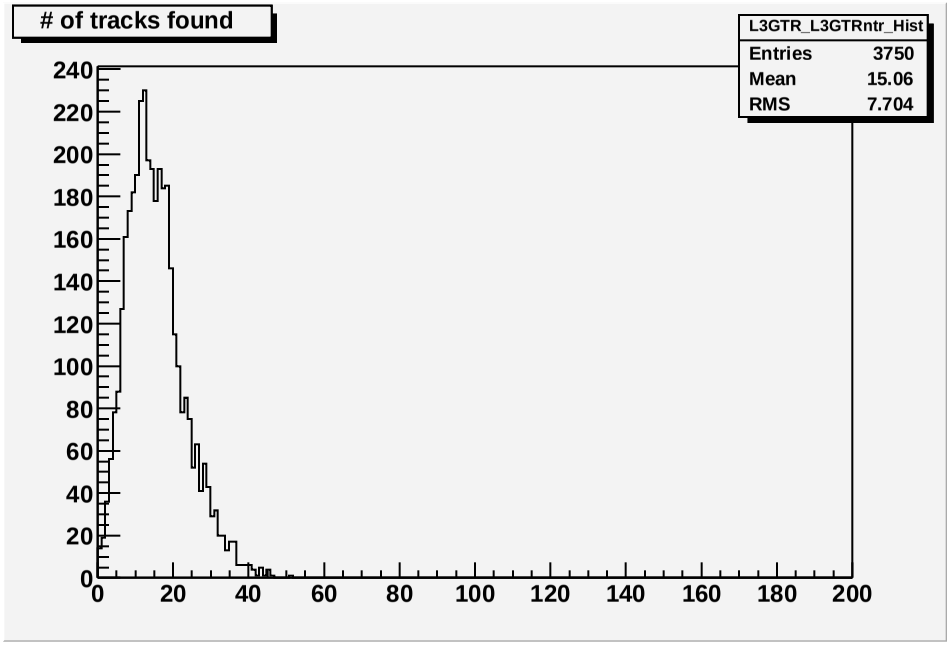
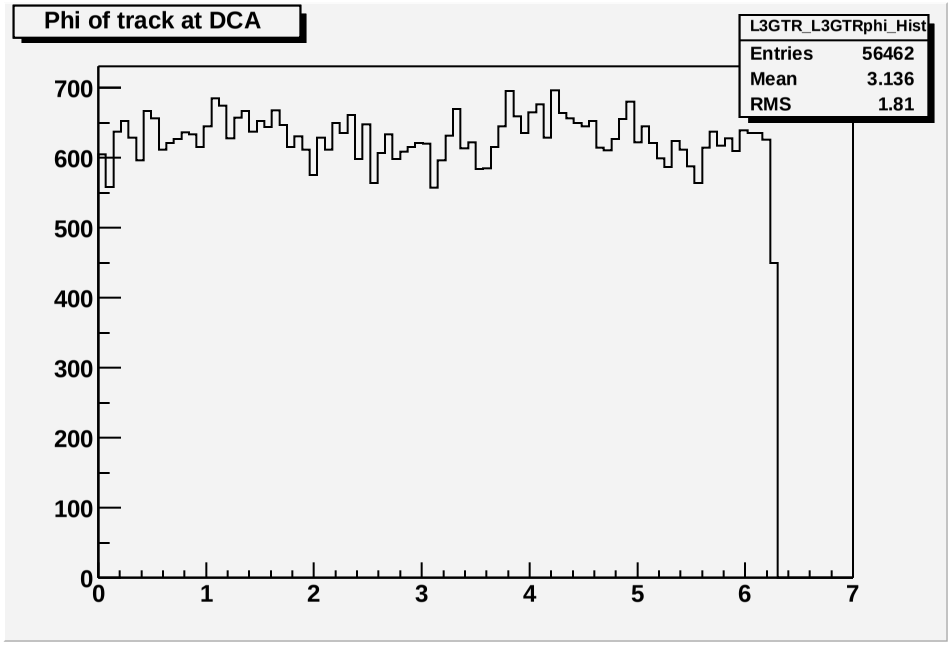
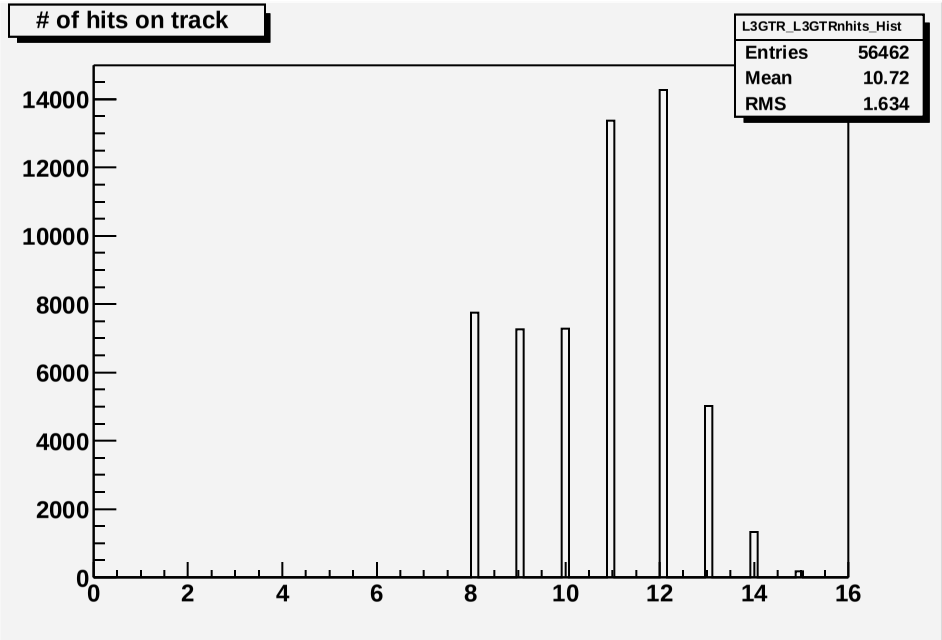
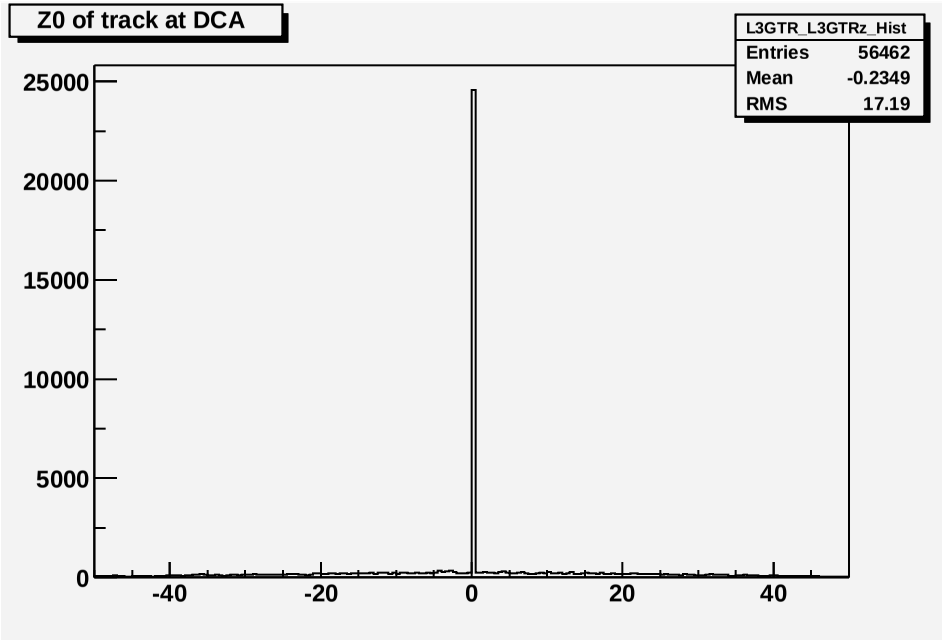
1
2
3
4
5
6
7
0
20
40
60
80
100
120
140
160

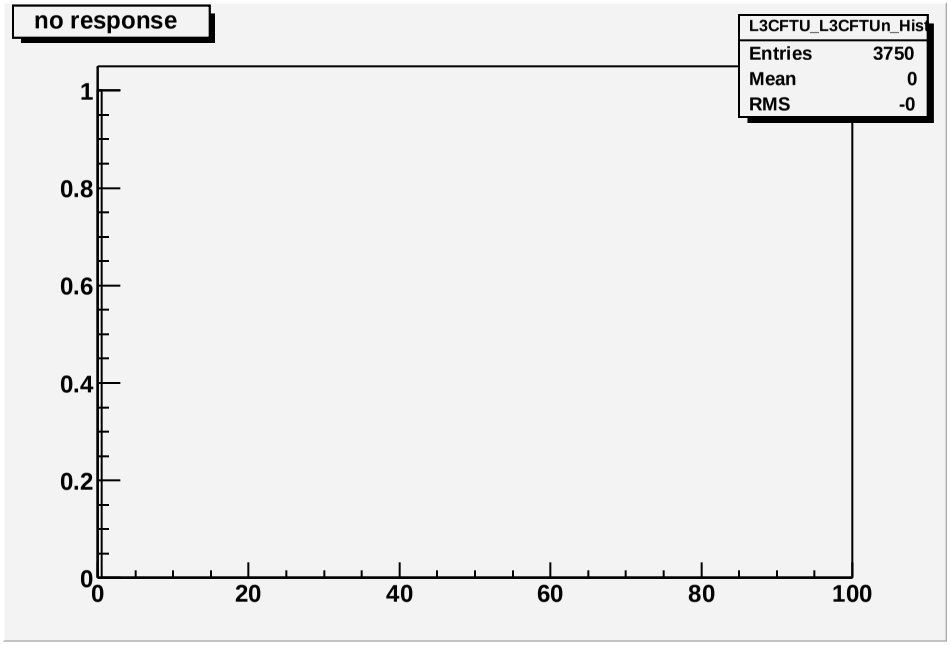

transverse momentum
L2gblMuon_L2GMU_pt_Hist
Entries 46
Mean 12.01
RMS 4.972
0
1
2
3
4
5
6
7
8
0
20
40
60
80
100

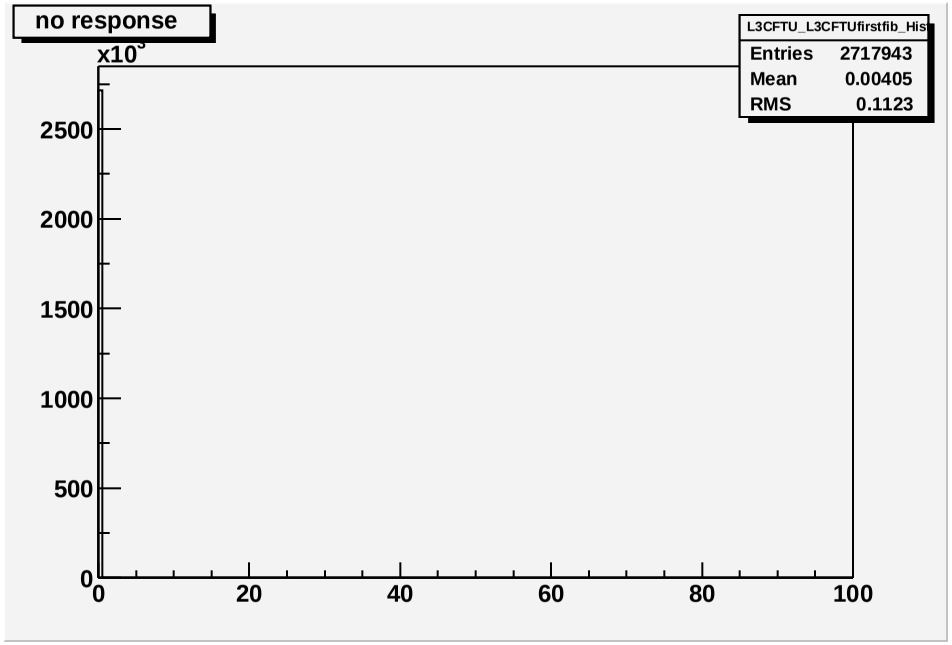

# of tracks found
L3GTR_L3GTRntr_Hist
Entries 3750
Mean 15.06
RMS 7.704
0 20 40 60 80 100 120 140 160 180 200
0 20 40 60 80 100 120 140 160 180 200 220 240

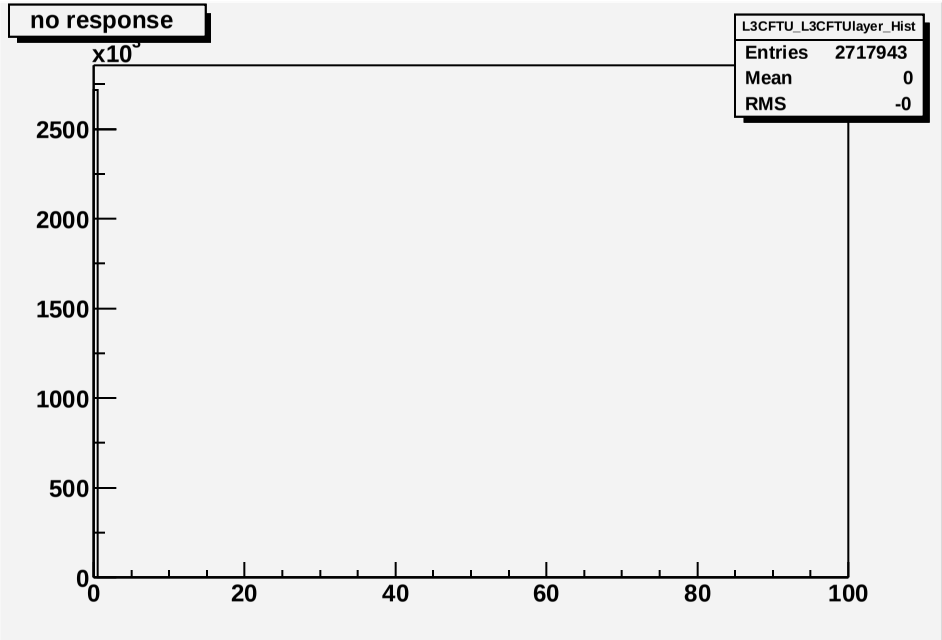

Phi of track at DCA
L3GTR_L3GTRphi_Hist
Entries 56462
Mean 3.136
RMS 1.81
0 1 2 3 4 5 6 7
0 100 200 300 400 500 600 700

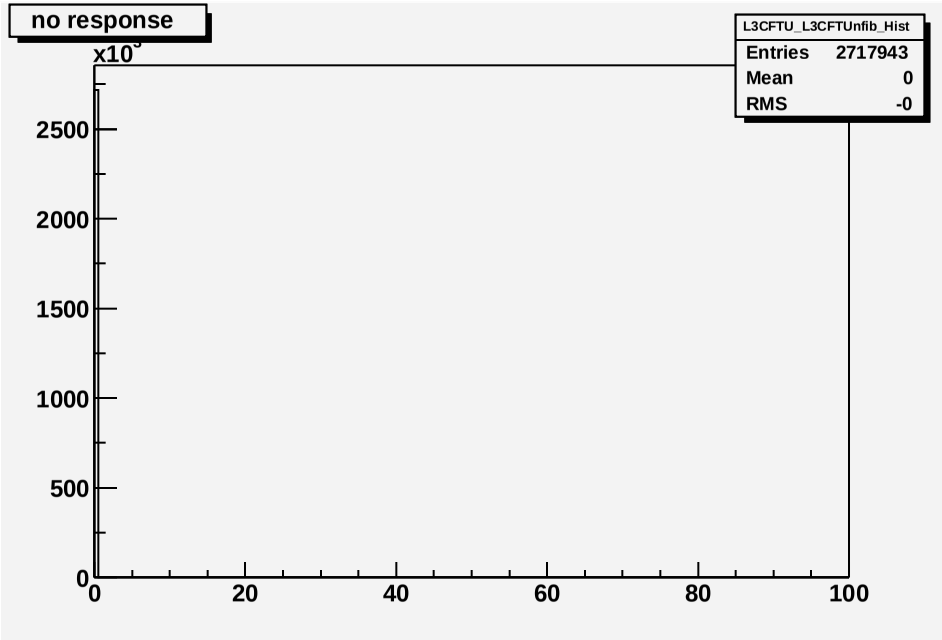

# of hits on track
L3GTR_L3GTRnhits_Hist
Entries 56462
Mean 10.72
RMS 1.634
0 2 4 6 8 10 12 14 16
0 2000 4000 6000 8000 10000 12000 14000

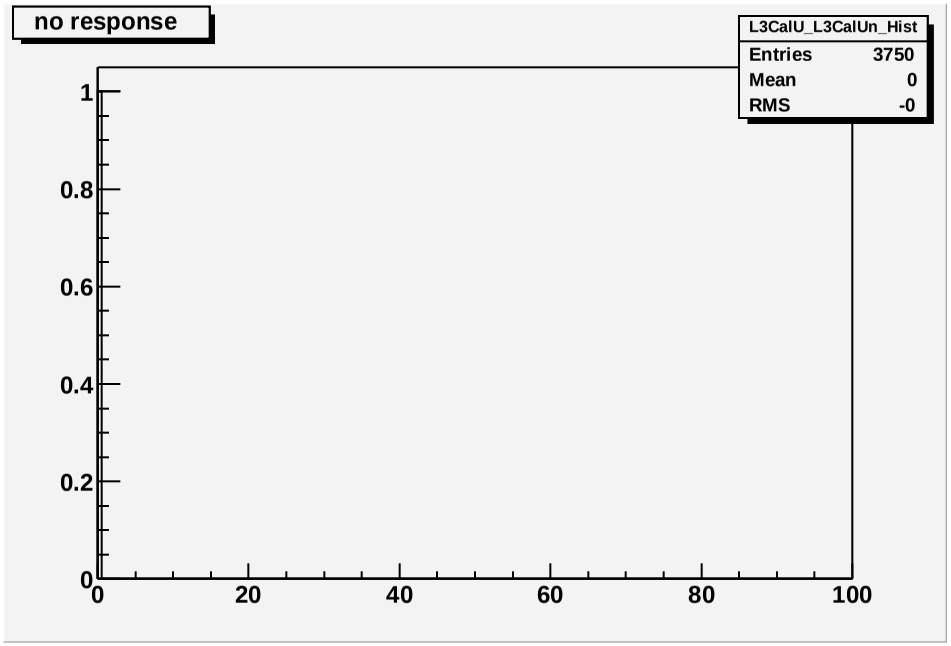

Z0 of track at DCA
L3GTR_L3GTRz_Hist
Entries 56462
Mean -0.2349
RMS 17.19
-40 -20 0 20 40
0 5000 10000 15000 20000 25000

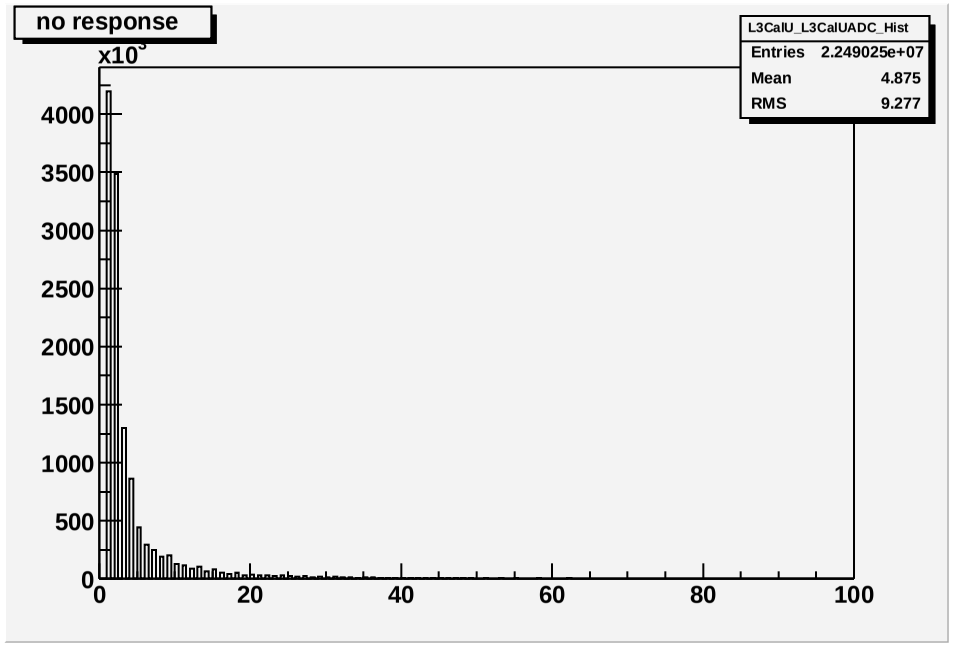

no response
L3CFTU_L3CFTUn_Hist
Entries 3750
Mean 0
RMS -0
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100

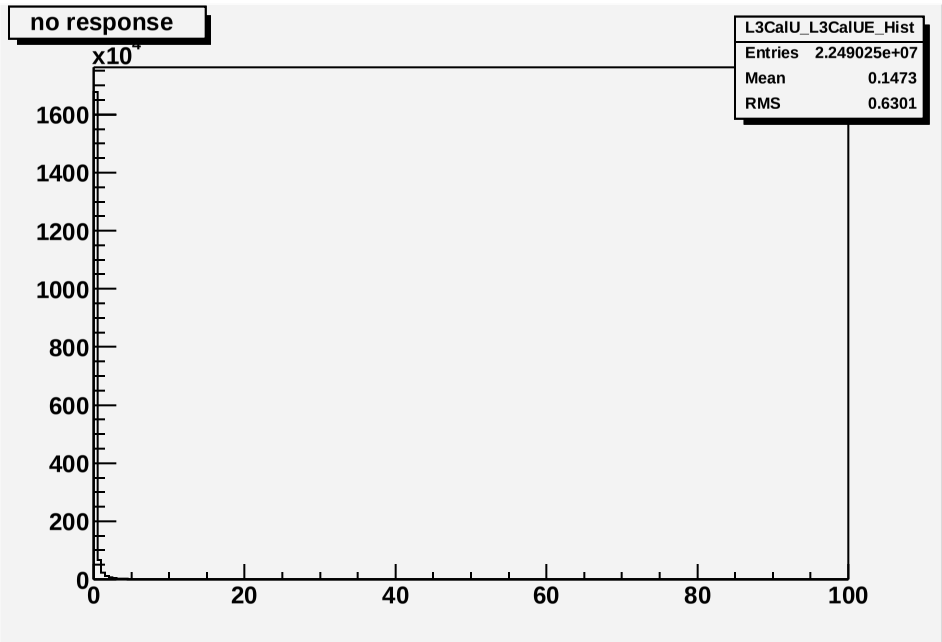

no response
L3CFTU_L3CFTUfirstfib_Hist
Entries 2717943
Mean 0.00405
RMS 0.1123
2500
2000
1500
1000
500
0
0
20
40
60
80
100

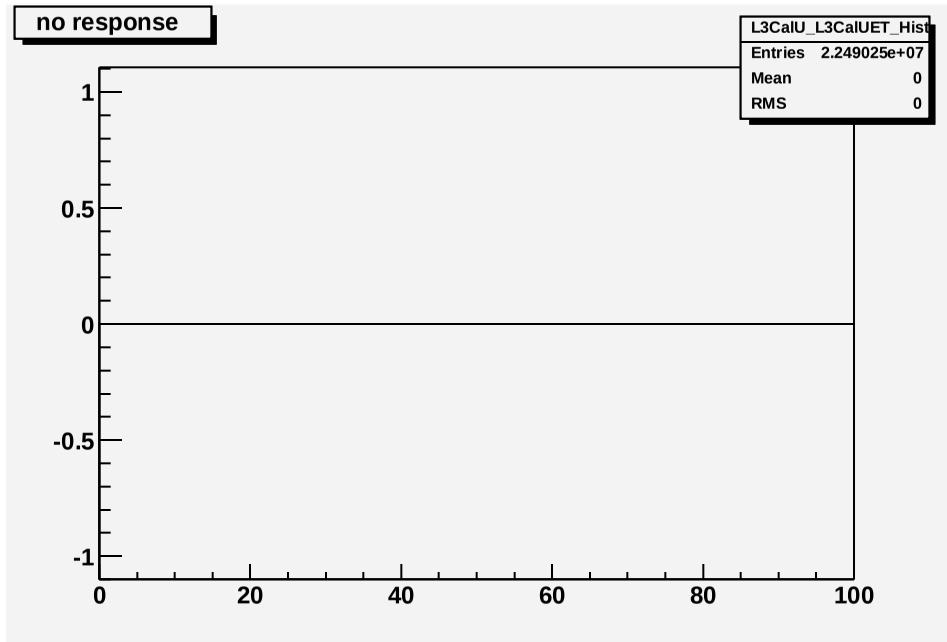

no response
L3CFTU_L3CFTUlayer_Hist
Entries 2717943
Mean 0
RMS -0
2500
2000
1500
1000
500
0
0
20
40
60
80
100

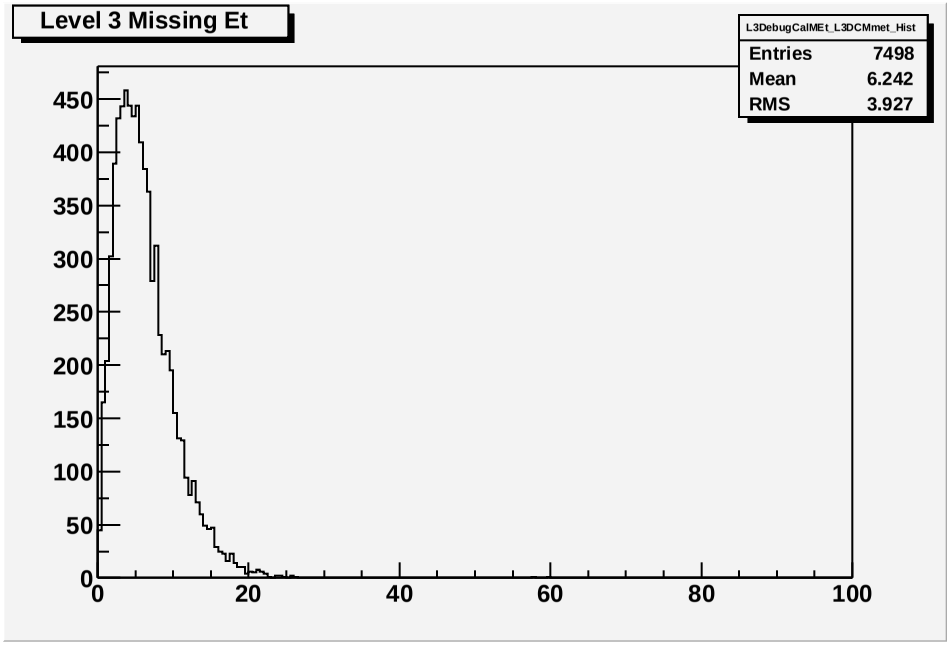

no response
L3CFTU_L3CFTUnfib_Hist
Entries 2717943
Mean 0
RMS -0
2500
2000
1500
1000
500
0
0
20
40
60
80
100

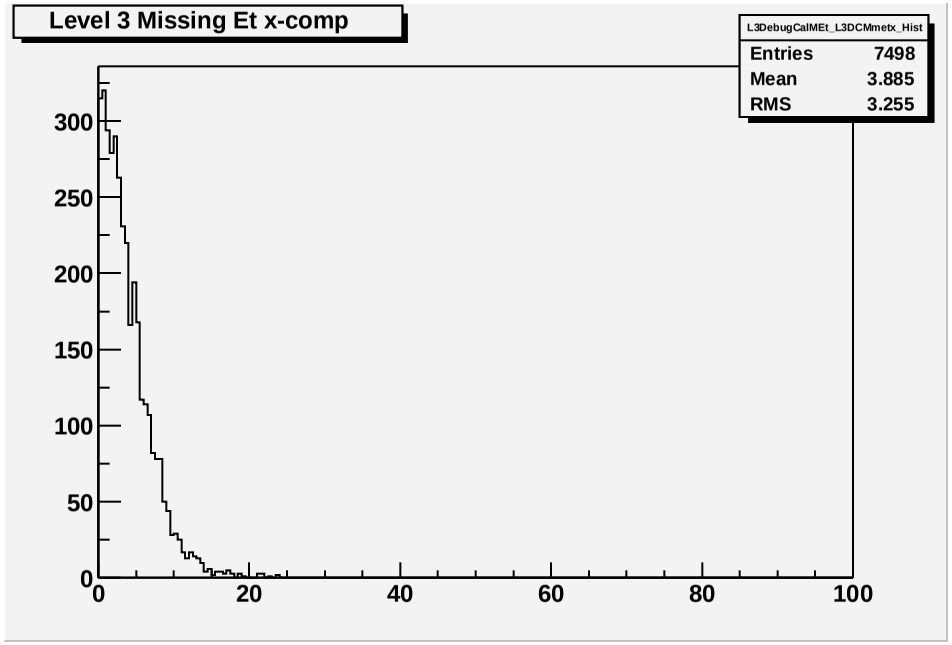

no response
L3CalU_L3CalUn_Hist
Entries 3750
Mean 0
RMS -0
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100

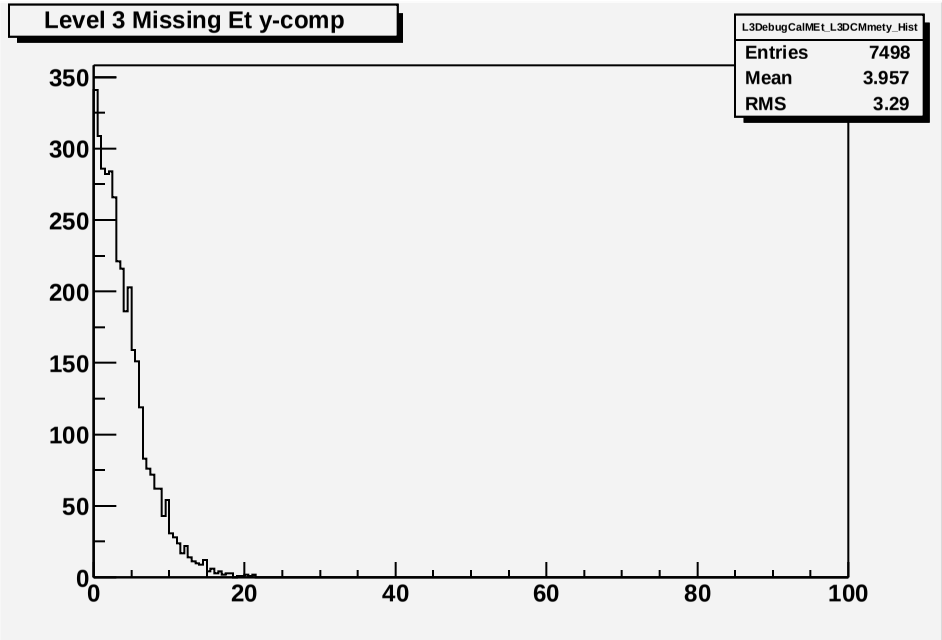

no response
L3CalU_L3CalUADC_Hist
Entries 2.249025e+07
Mean 4.875
RMS 9.277
x10
4000
3500
3000
2500
2000
1500
1000
500
0
0
20
40
60
80
100

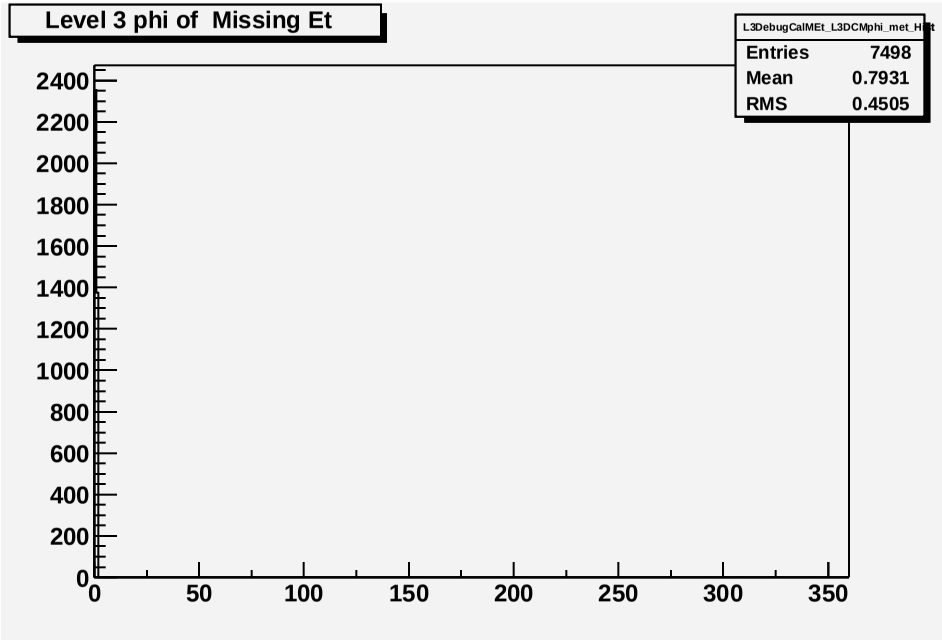

no response
L3CalU_L3CalUE_Hist
Entries 2.249025e+07
Mean 0.1473
RMS 0.6301
x10
1600
1400
1200
1000
800
600
400
200
0
0
20
40
60
80
100

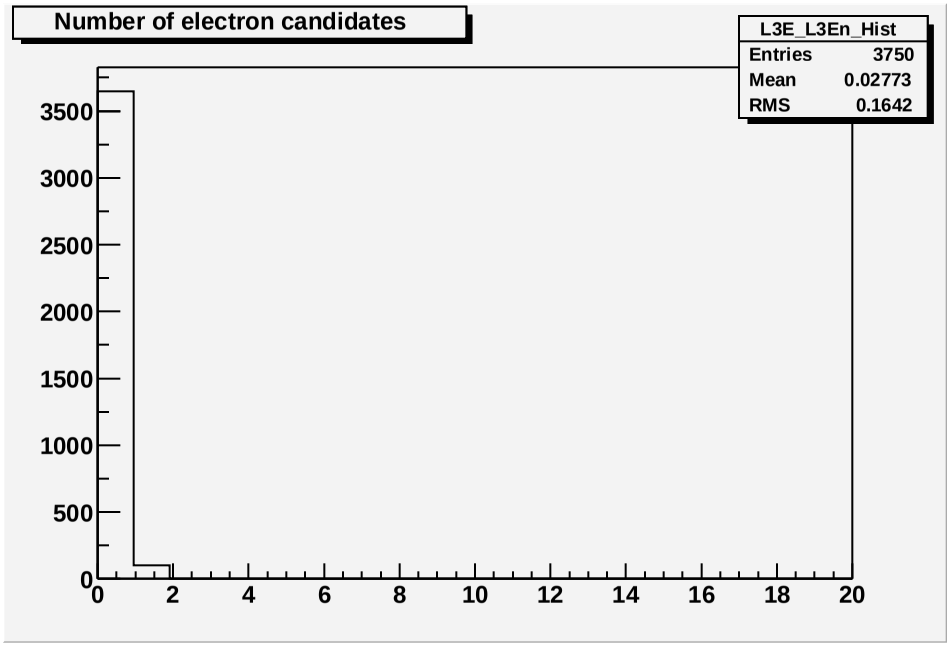

no response
L3CalU_L3CalUET_Hist
Entries 2.249025e+07
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0
20
40
60
80
100

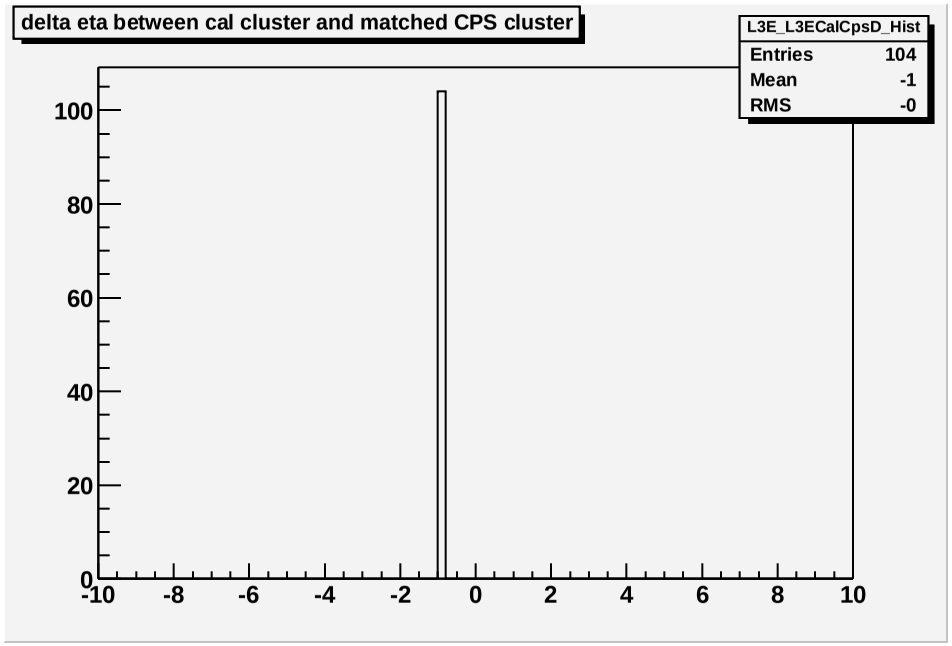

Level 3 Missing Et
L3DebugCalMEt_L3DCMmet_Hist
Entries 7498
Mean 6.242
RMS 3.927

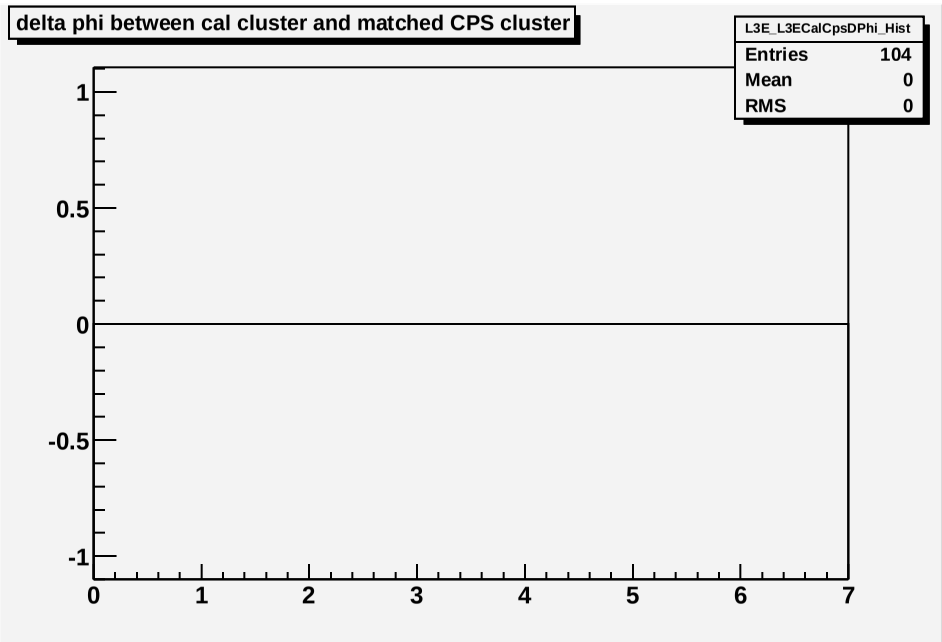

Level 3 Missing Et x-comp
L3DebugCalMEt_L3DCMmetx_Hist
Entries 7498
Mean 3.885
RMS 3.255

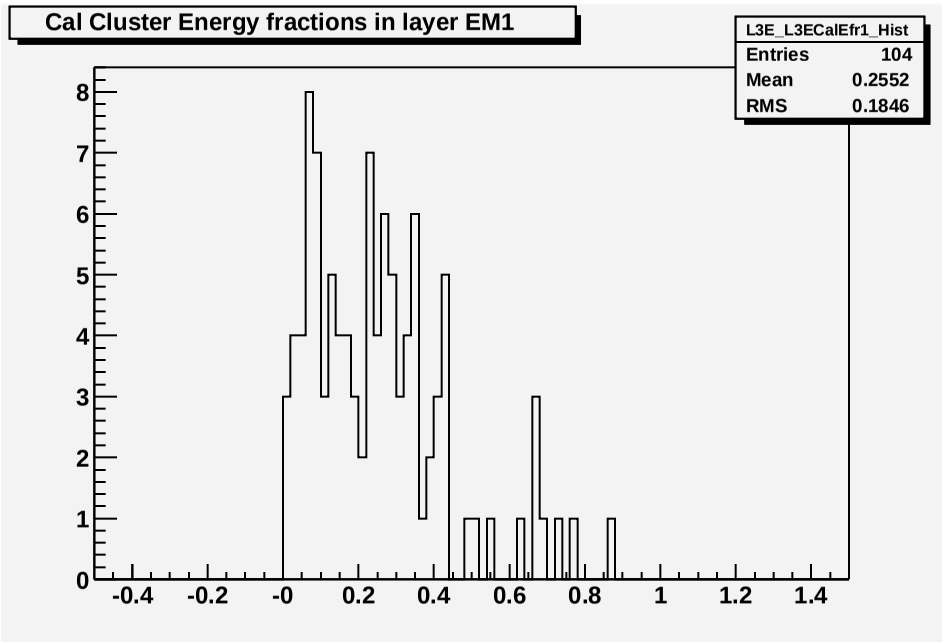

Level 3 Missing Et y-comp
L3DebugCalMEt_L3DCMmety_Hist
Entries 7498
Mean 3.957
RMS 3.29

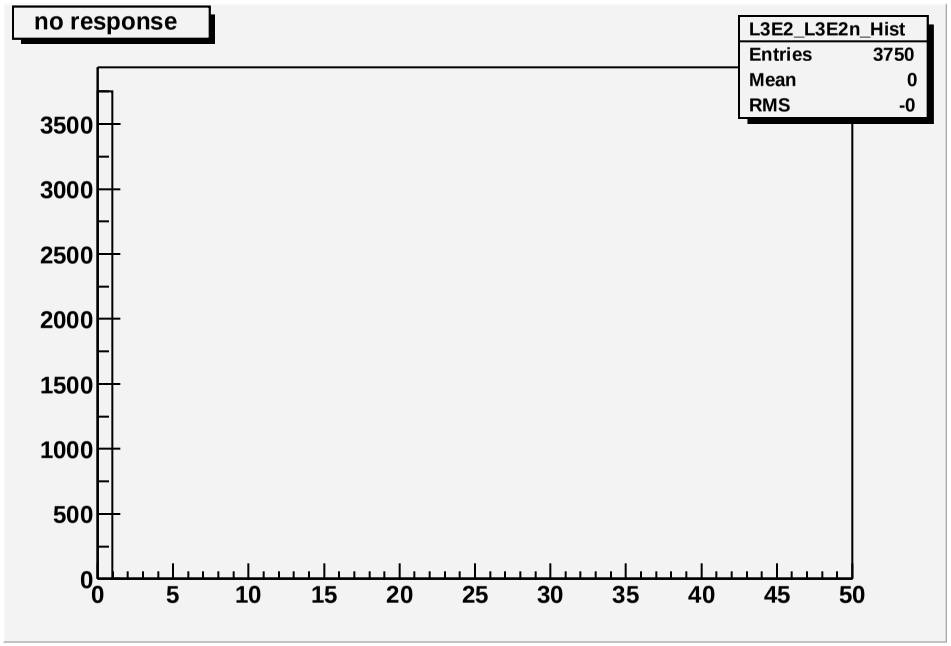

Level 3 phi of Missing Et
L3DebugCalMEt_L3DCMphi_met_Hist
Entries 7498
Mean 0.7931
RMS 0.4505

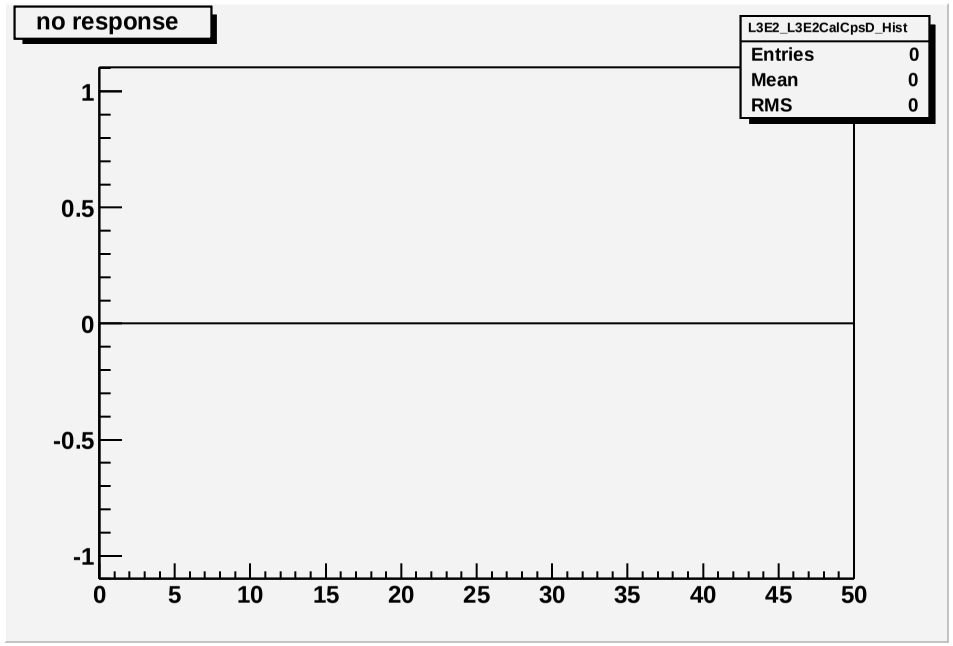

Number of electron candidates
L3E_L3En_Hist
Entries 3750
Mean 0.02773
RMS 0.1642
3500
3000
2500
2000
1500
1000
500
0
0 2 4 6 8 10 12 14 16 18 20


delta eta between cal cluster and matched CPS cluster
L3E_L3ECalCpsD_Hist
Entries 104
Mean -1
RMS -0
100
80
60
40
20
0
-10 -8 -6 -4 -2 0 2 4 6 8 10


delta phi between cal cluster and matched CPS cluster
L3E_L3ECalCpsDPhi_Hist
Entries 104
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
L3E_L3ECalEfr1_Hist
Entries 104
Mean 0.2552
RMS 0.1846
8
7
6
5
4
3
2
1
0
-0.4 -0.2 -0 0.2 0.4 0.6 0.8 1 1.2 1.4


no response
L3E2_L3E2n_Hist
Entries 3750
Mean 0
RMS -0
3500
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35 40 45 50


no response
L3E2_L3E2CalCpsD_Hist
Entries 0
Mean 0
RMS 0
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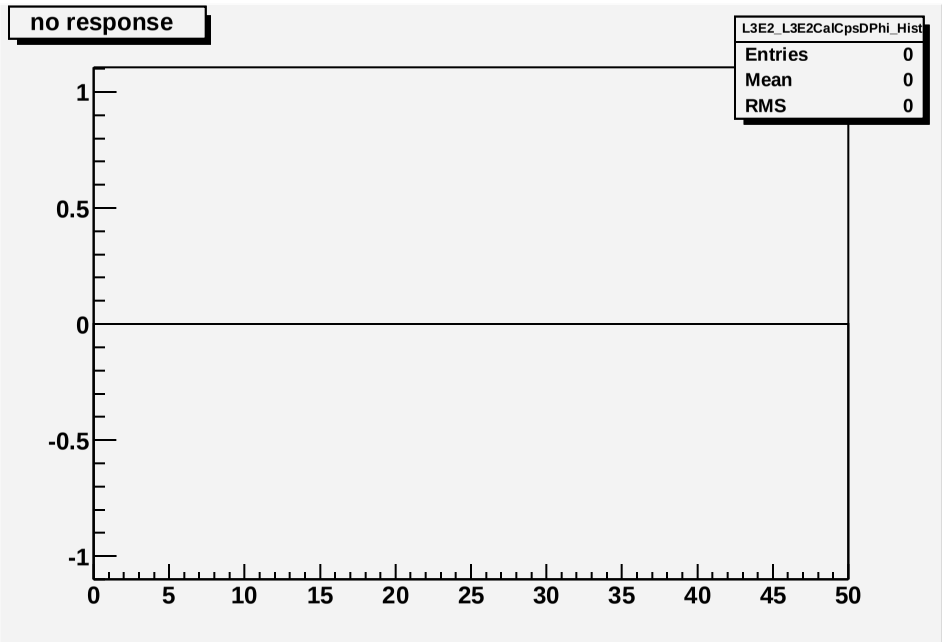
0.5
0
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50


no response
L3E2_L3E2CalCpsDPhi_Hist
Entries 0
Mean 0
RMS 0
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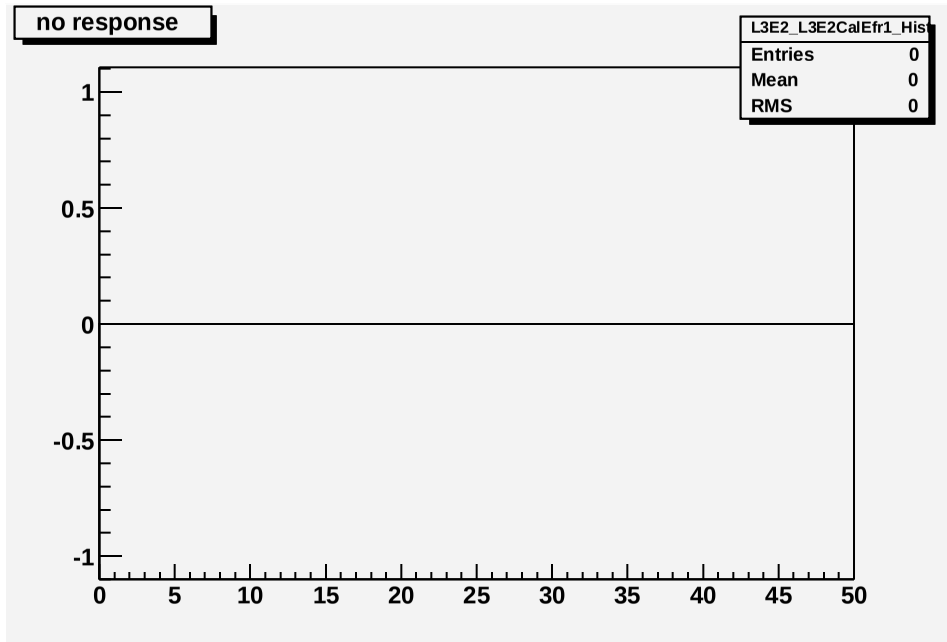
0.5
0
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50


no response
L3E2_L3E2CalEfr1_Hist
Entries 0
Mean 0
RMS 0
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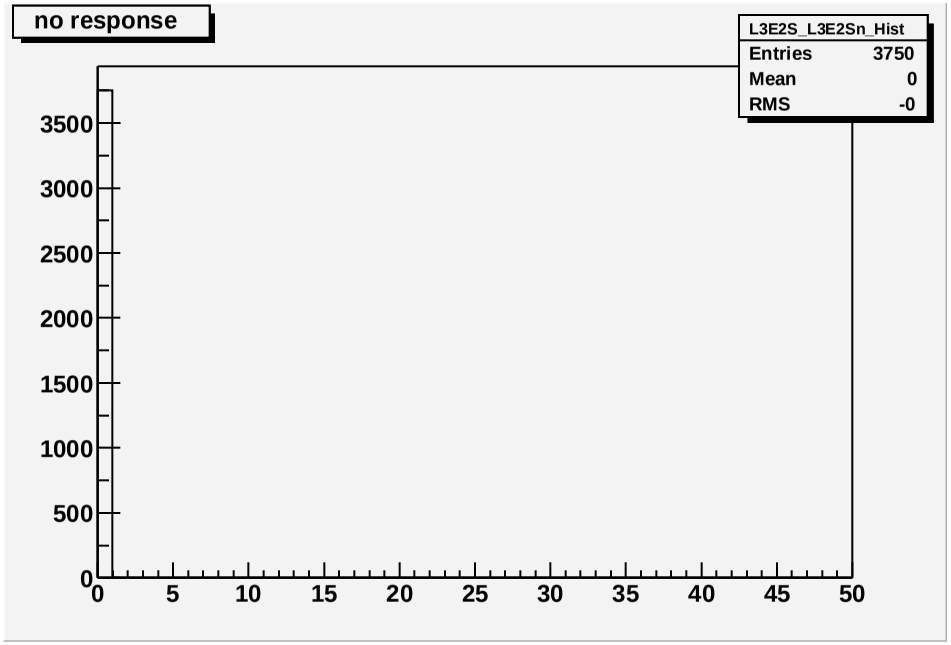
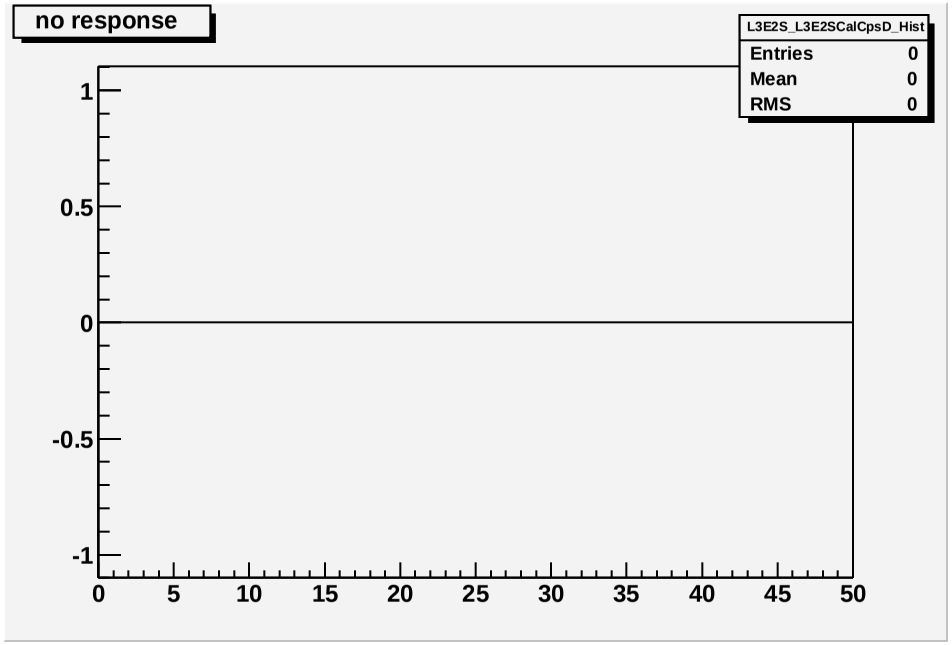
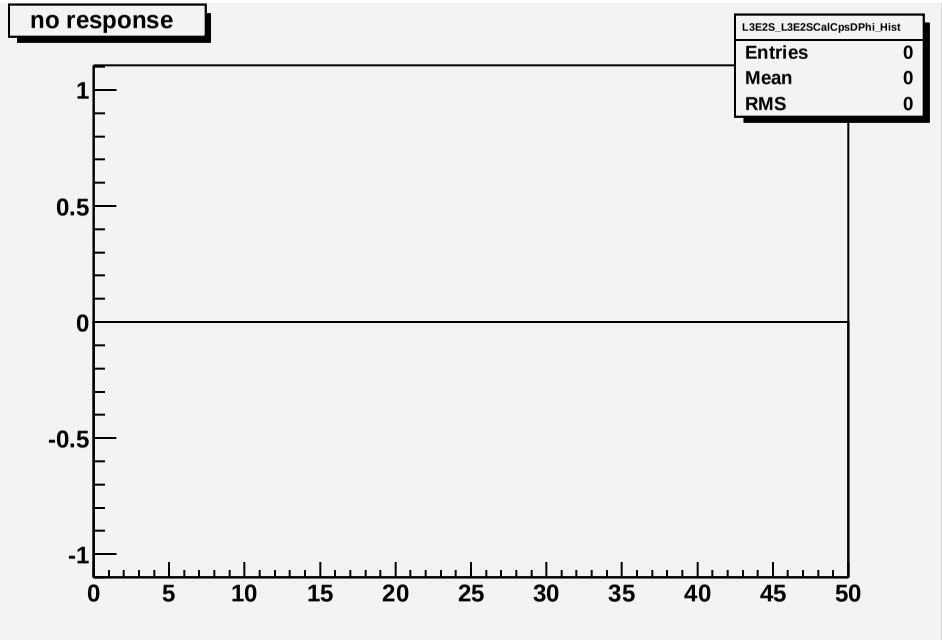
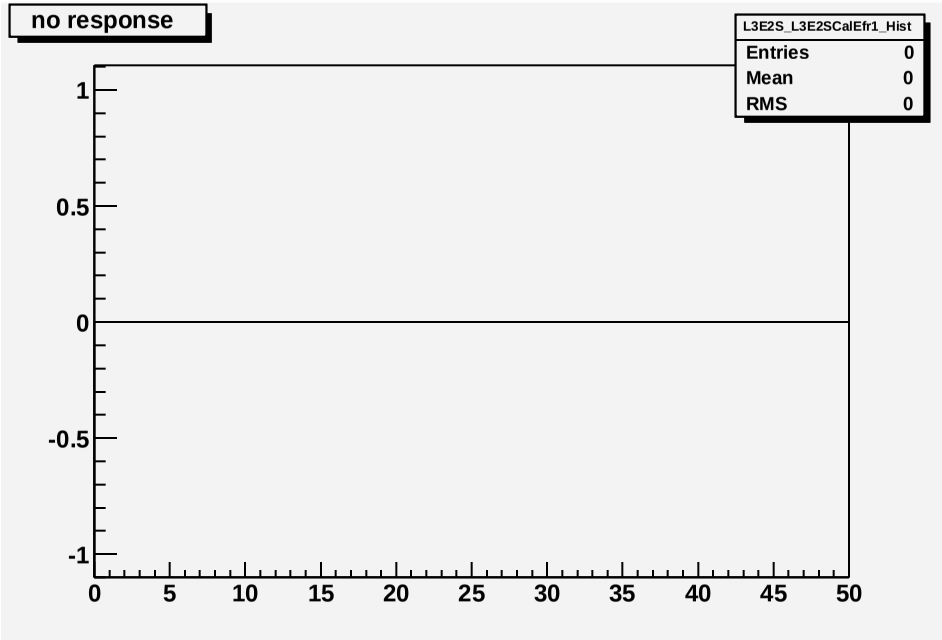
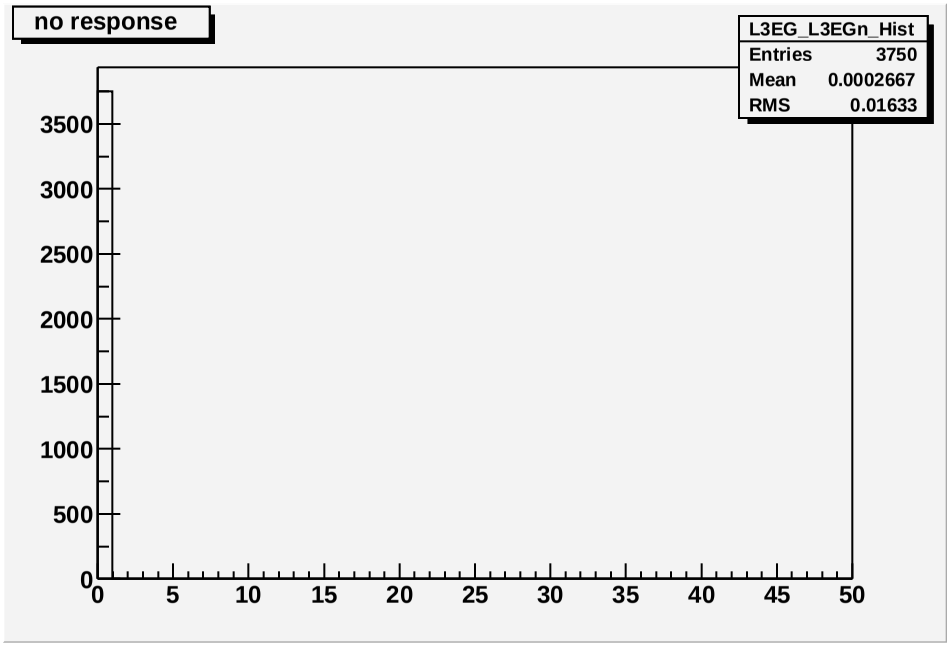
0.5
0
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50

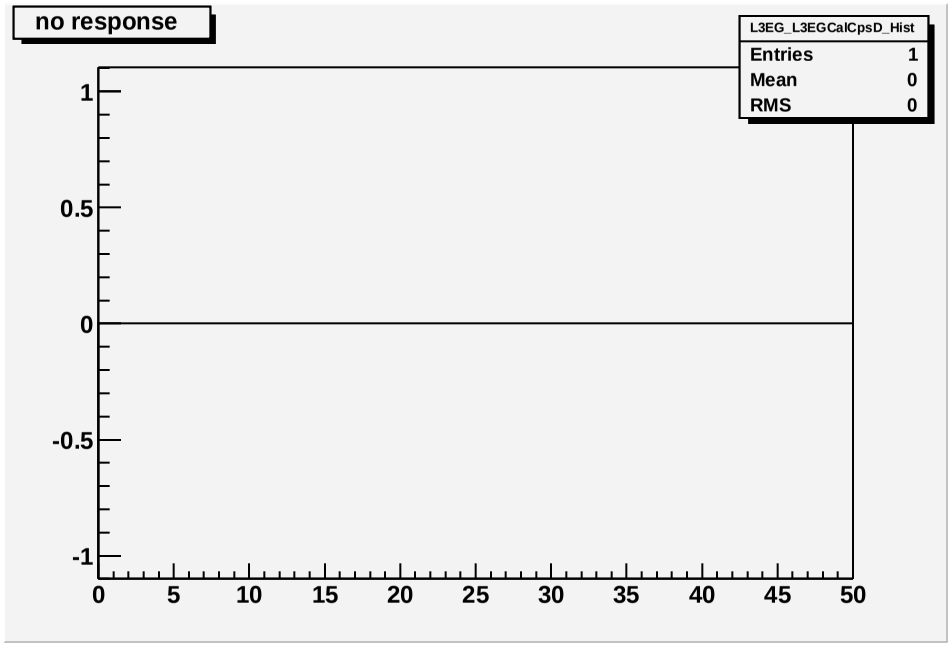

no response
L3E2S_L3E2Sn_Hist
Entries 3750
Mean 0
RMS -0
3500
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35 40 45 50

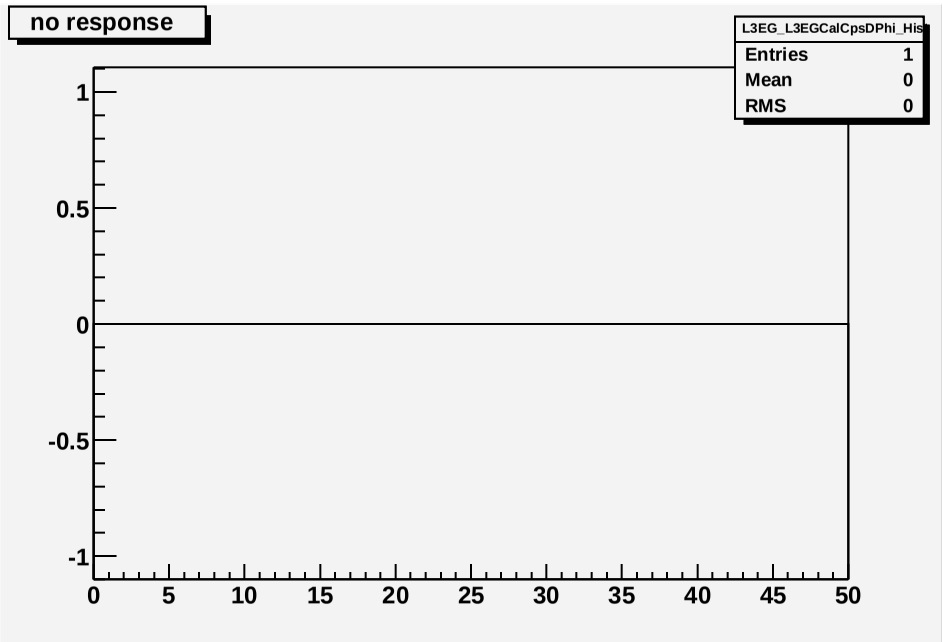

no response
L3E2S_L3E2SCalCpsD_Hist
Entries 0
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50

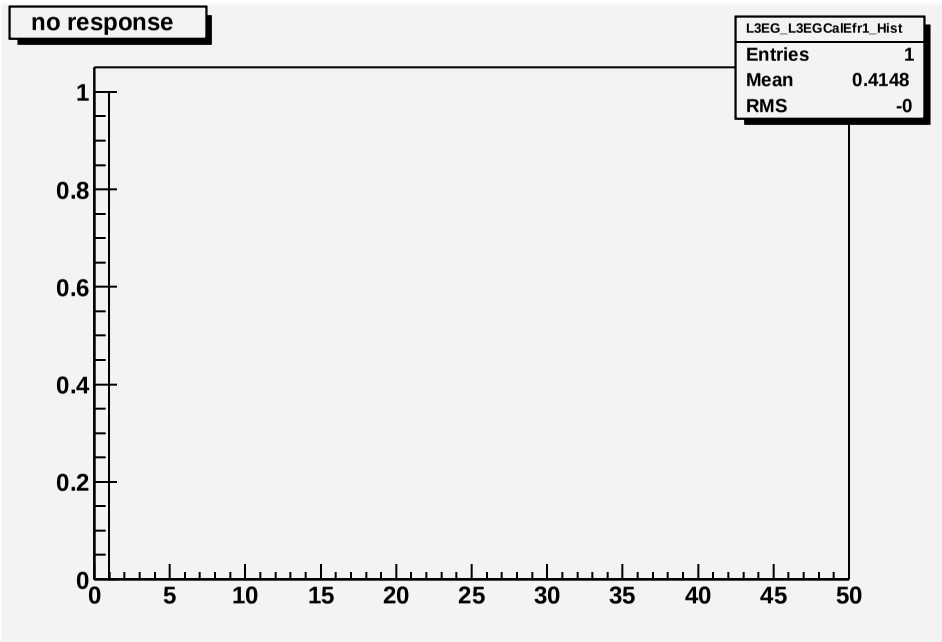

no response
L3E2S_L3E2SCalCpsDPhi_Hist
Entries 0
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50

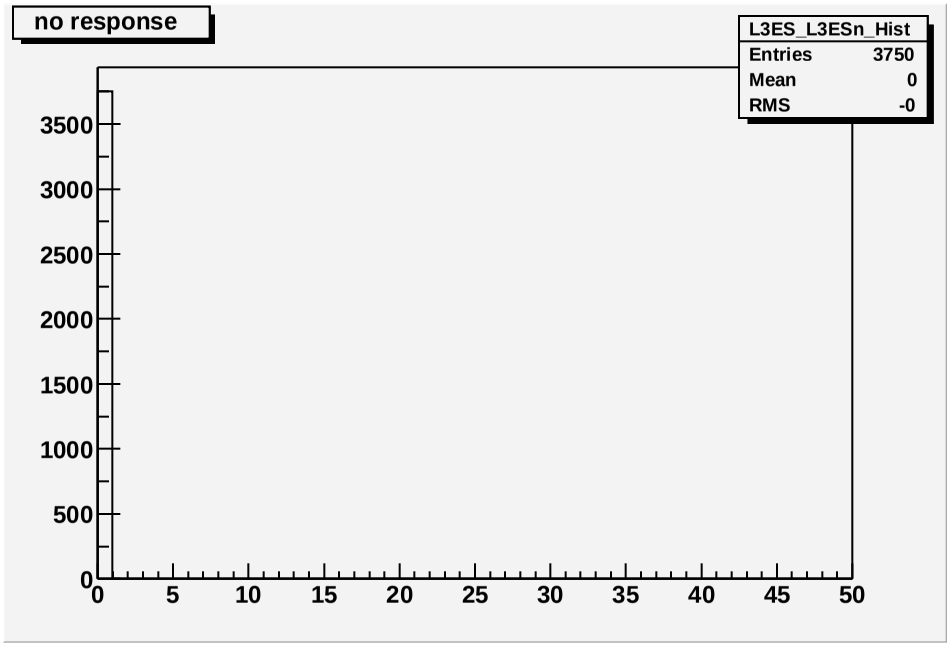

no response
L3E2S_L3E2SCalEfr1_Hist
Entries 0
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50

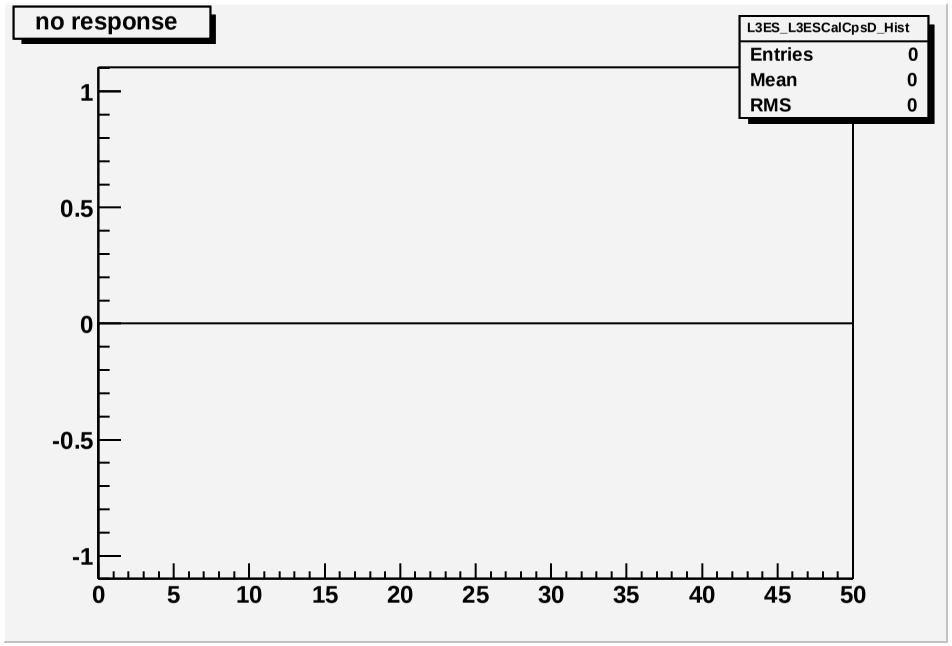

no response
L3EG_L3EGn_Hist
Entries 3750
Mean 0.0002667
RMS 0.01633
3500
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35 40 45 50


no response
L3EG_L3EGCalCpsD_Hist
Entries 1
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50


no response
L3EG_L3EGCalCpsDPhi_His
Entries 1
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50


no response
L3EG_L3EGCalEfr1_Hist
Entries 1
Mean 0.4148
RMS -0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35 40 45 50


no response
L3ES_L3ESn_Hist
Entries 3750
Mean 0
RMS -0
3500
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35 40 45 50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L3ES_L3ESCalCpsD_Hist
Entries 0
Mean 0
RMS 0
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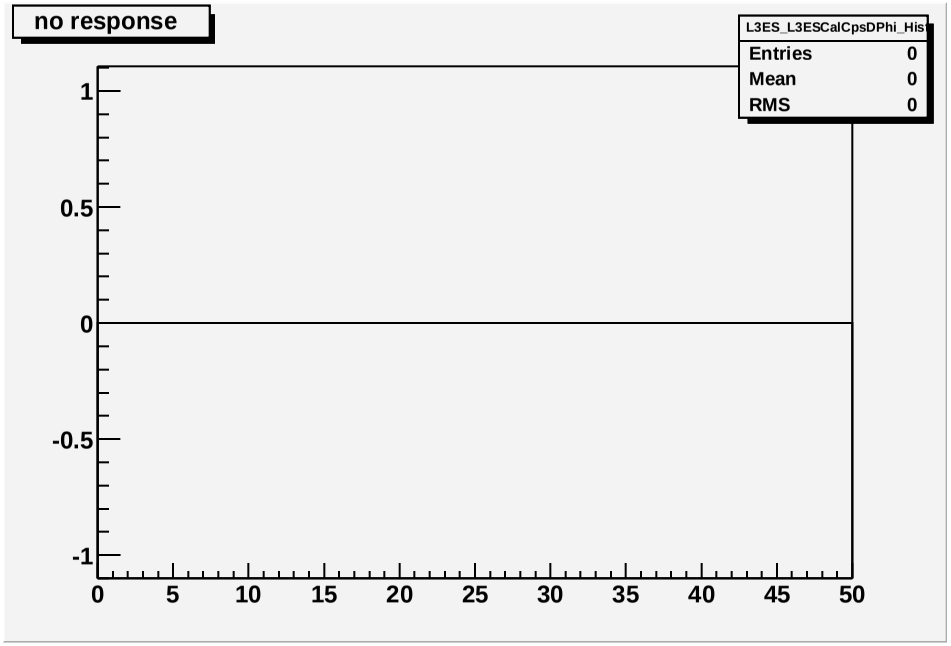
0
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50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L3ES_L3ESCalCpsDPhi_Hist
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Mean 0
RMS 0
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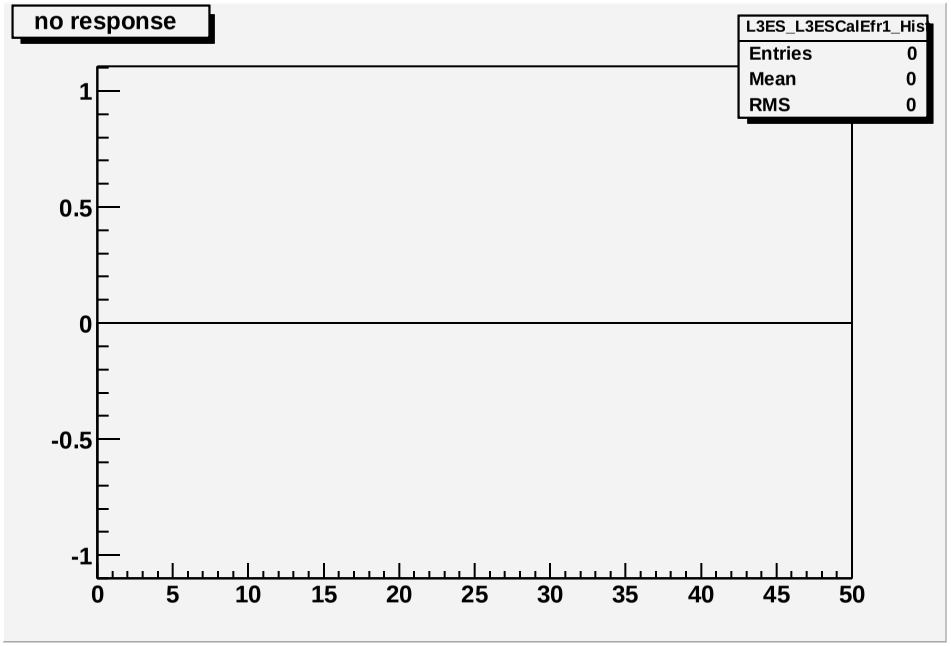
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L3ES_L3ESCalEfr1_His
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Mean 0
RMS 0
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0.5
0
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-1
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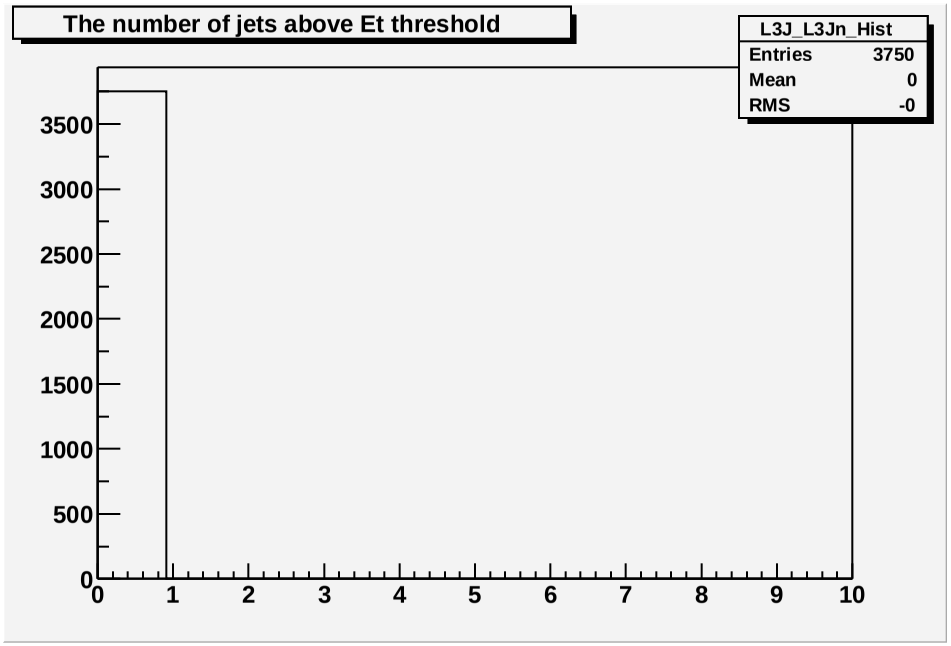
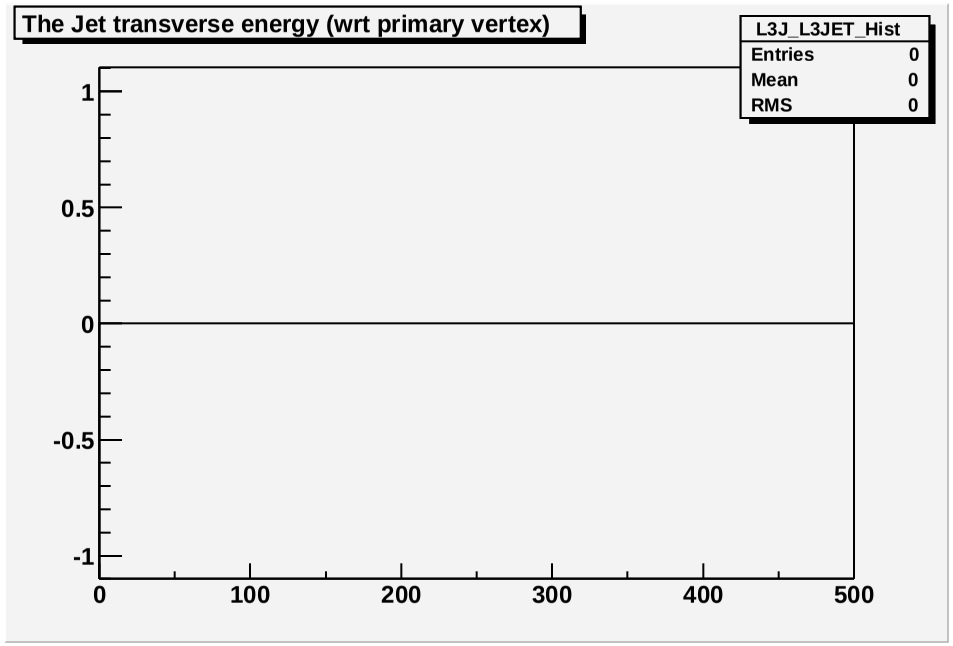
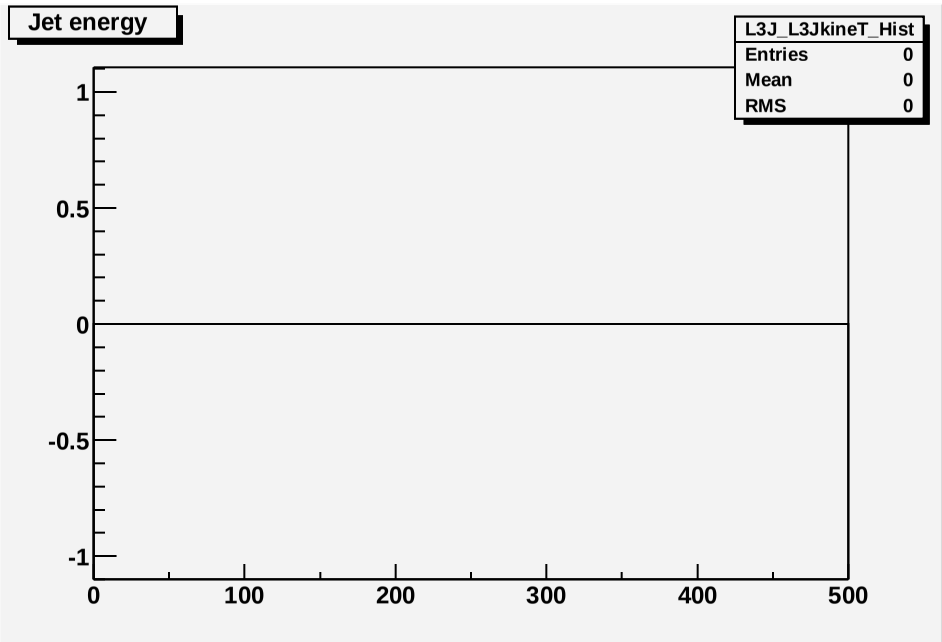

The number of jets above Et threshold
L3J_L3Jn_Hist
Entries 3750
Mean 0
RMS -0
3500
3000
2500
2000
1500
1000
500
0
0 1 2 3 4 5 6 7 8 9 10


The Jet transverse energy (wrt primary vertex)
L3J_L3JET_Hist
Entries 0
Mean 0
RMS 0
1
0.5
0
-0.5
-1
0 100 200 300 400 500


Jet energy
L3J_L3JkineT_Hist
Entries 0
Mean 0
RMS 0
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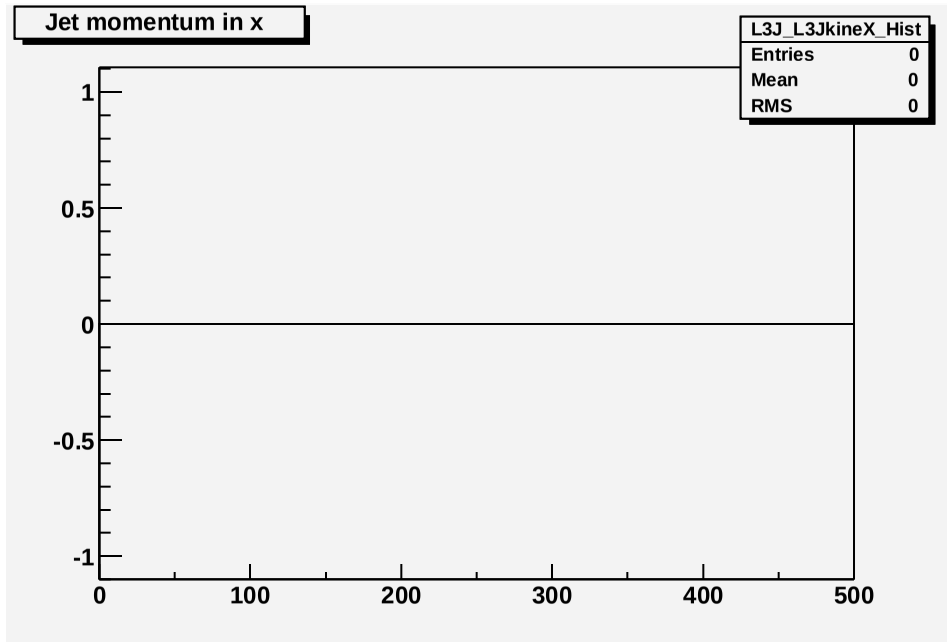
Jet momentum in x
L3J_L3JkineX_Hist
Entries 0
Mean 0
RMS 0
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0.5
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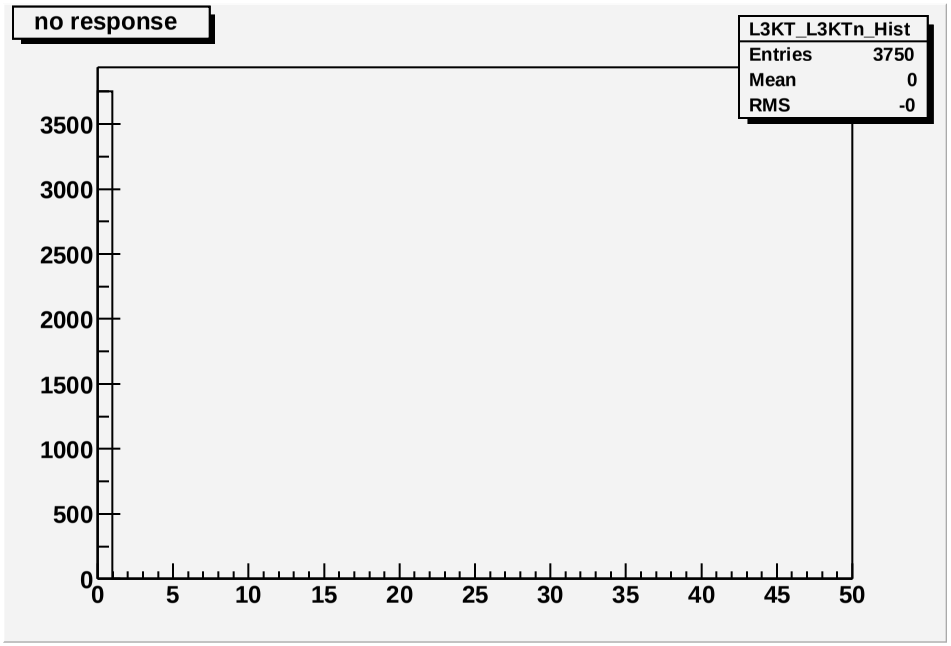
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L3KT_L3KTn_Hist
Entries 3750
Mean 0
RMS -0
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1500
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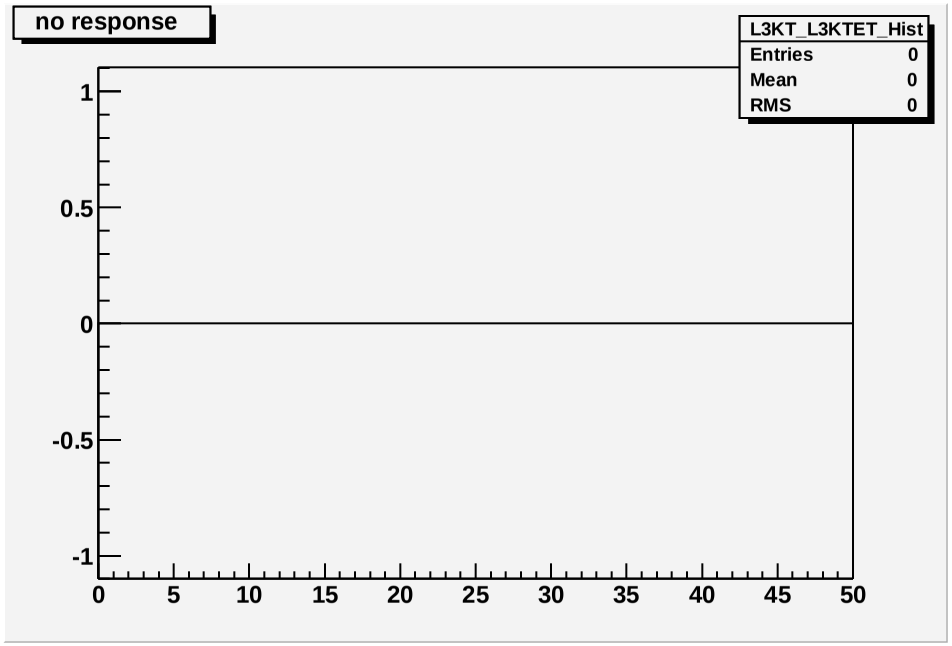
0 5 10 15 20 25 30 35 40 45 50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Entries 0
Mean 0
RMS 0
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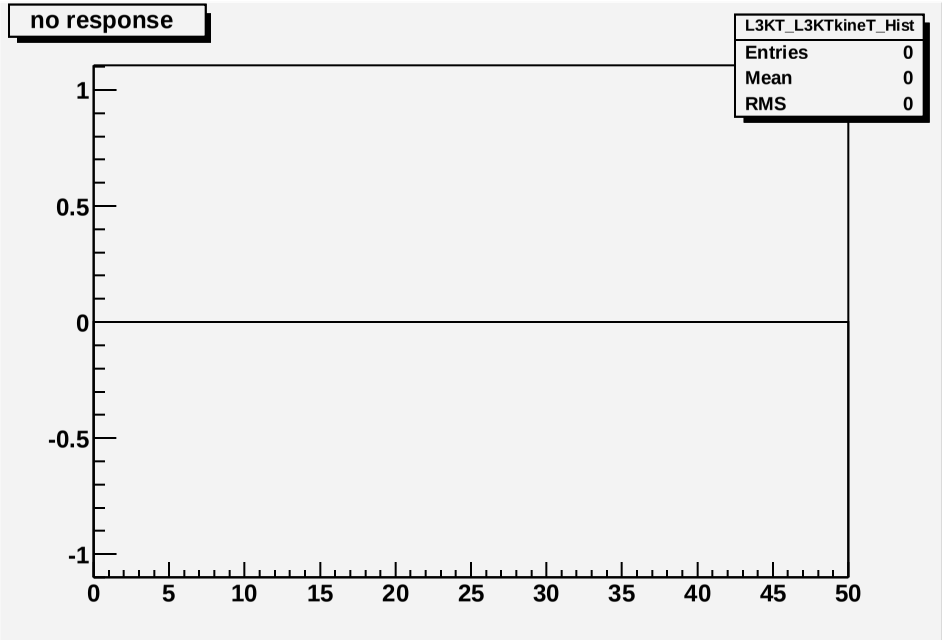
0 5 10 15 20 25 30 35 40 45 50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RMS 0
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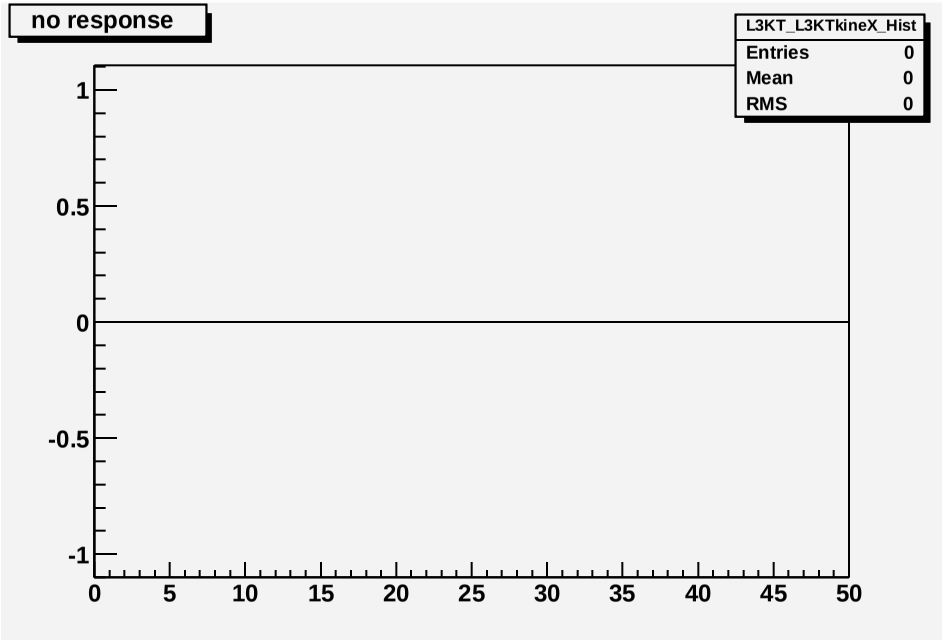
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Entries 0
Mean 0
RMS 0
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-0.5
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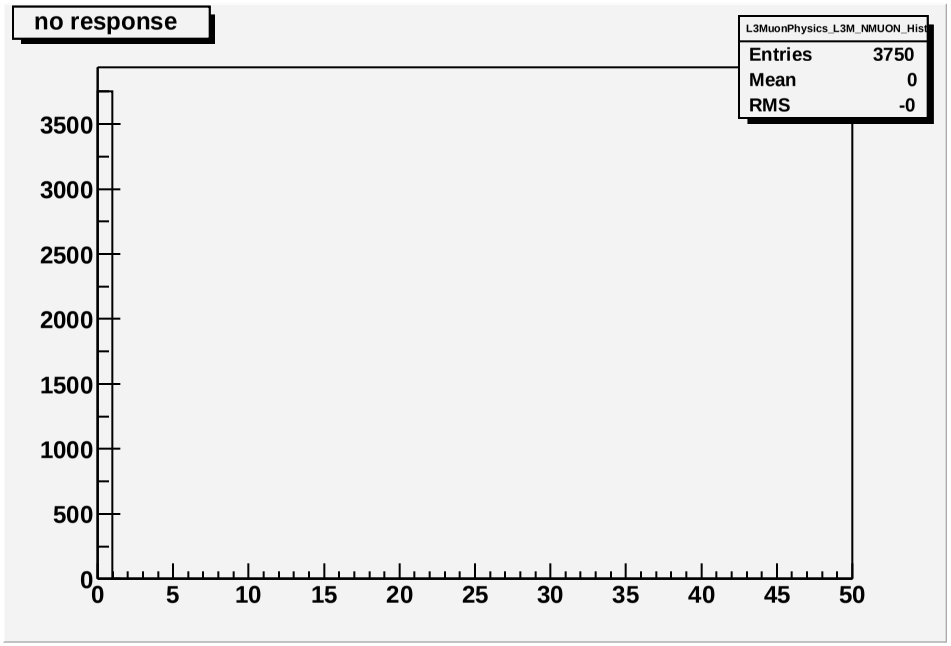
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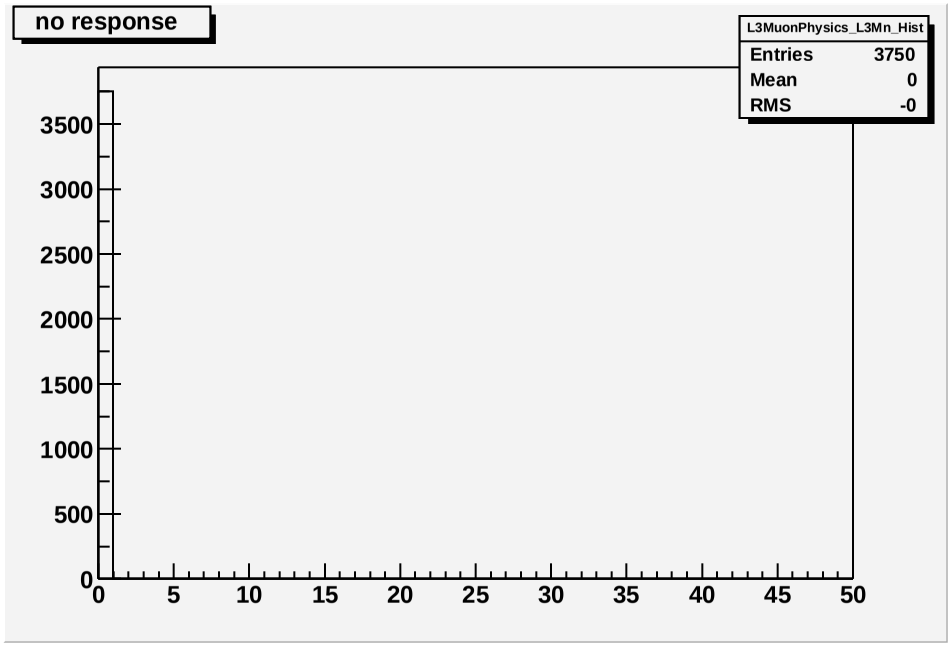
L3MuonPhysics_L3M_NMUON_Hist
Entries 3750
Mean 0
RMS -0
3500
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35 40 45 50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L3MuonPhysics_L3Mn_Hist
Entries 3750
Mean 0
RMS -0
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3000
2500
2000
1500
1000
500
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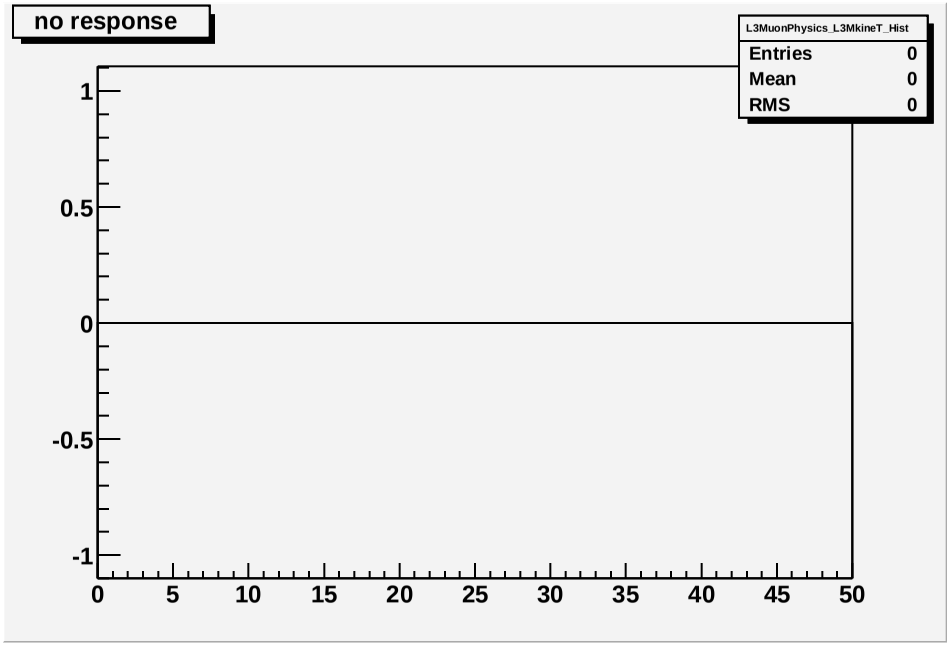
0 5 10 15 20 25 30 35 40 45 50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L3MuonPhysics_L3MkineT_Hist
Entries 0
Mean 0
RMS 0
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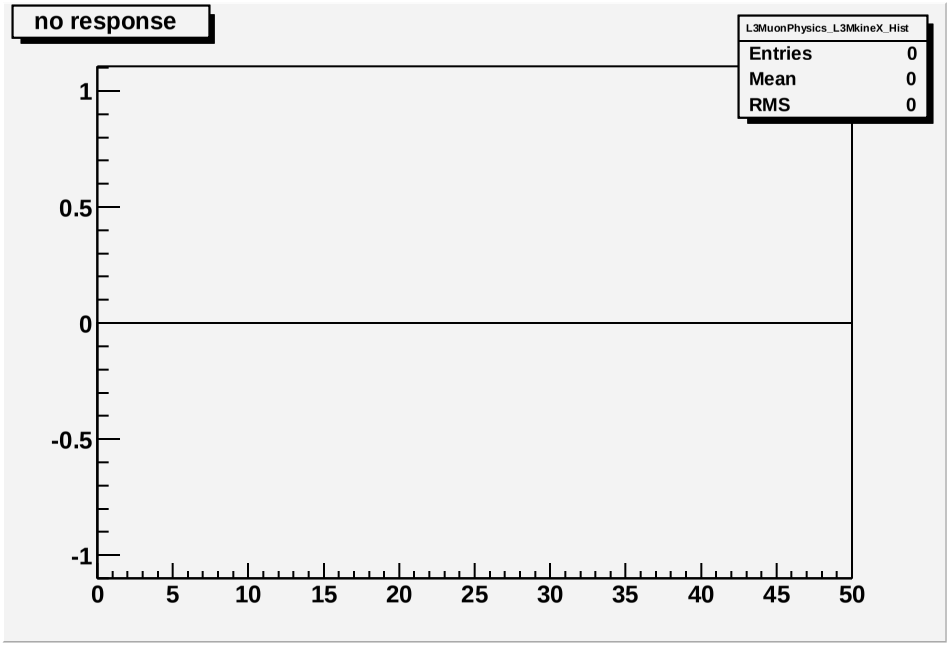
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50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L3MuonPhysics_L3MkineX_Hist
Entries 0
Mean 0
RMS 0
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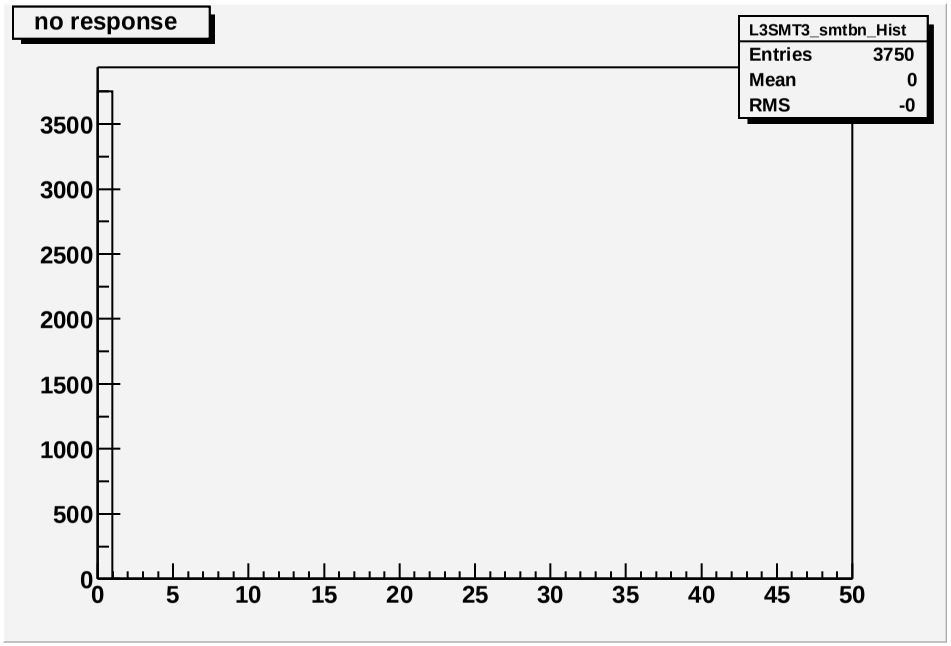
-1
0 5 10 15 20 25 30 35 40 45 50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L3SMT3_smtbn_Hist
Entries 3750
Mean 0
RMS -0
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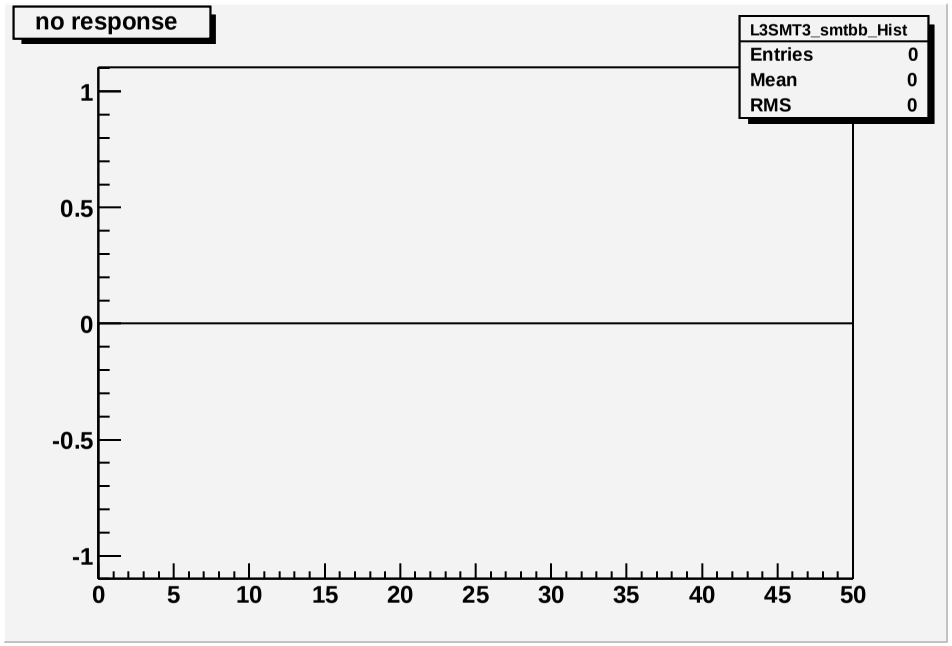
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35 40 45 50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L3SMT3_smtbb_Hist
Entries 0
Mean 0
RMS 0
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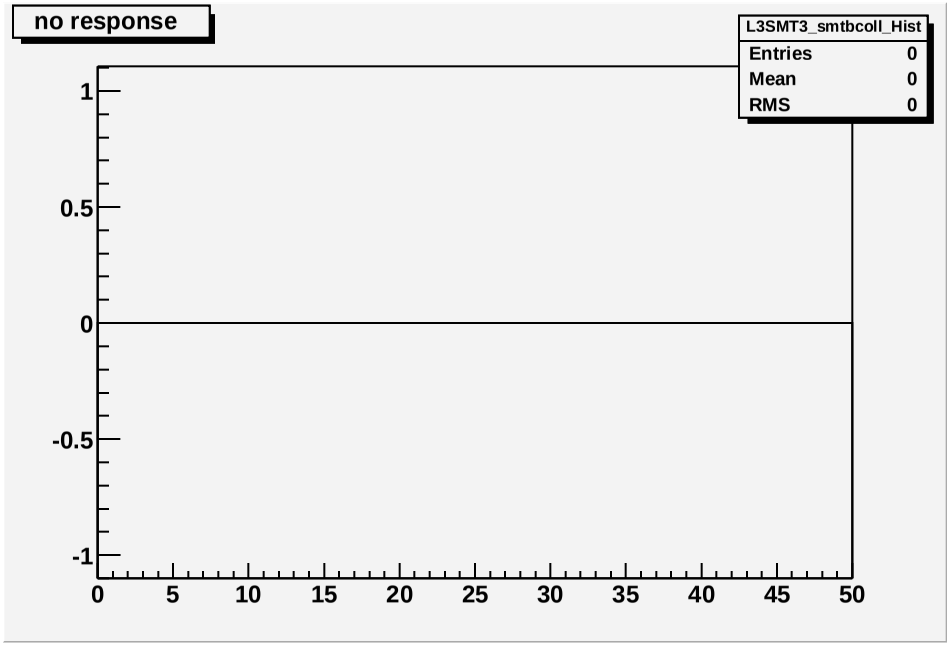
0
-0.5
-1
0 5 10 15 20 25 30 35 40 45 50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L3SMT3_smtbcoll_Hist
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Mean 0
RMS 0
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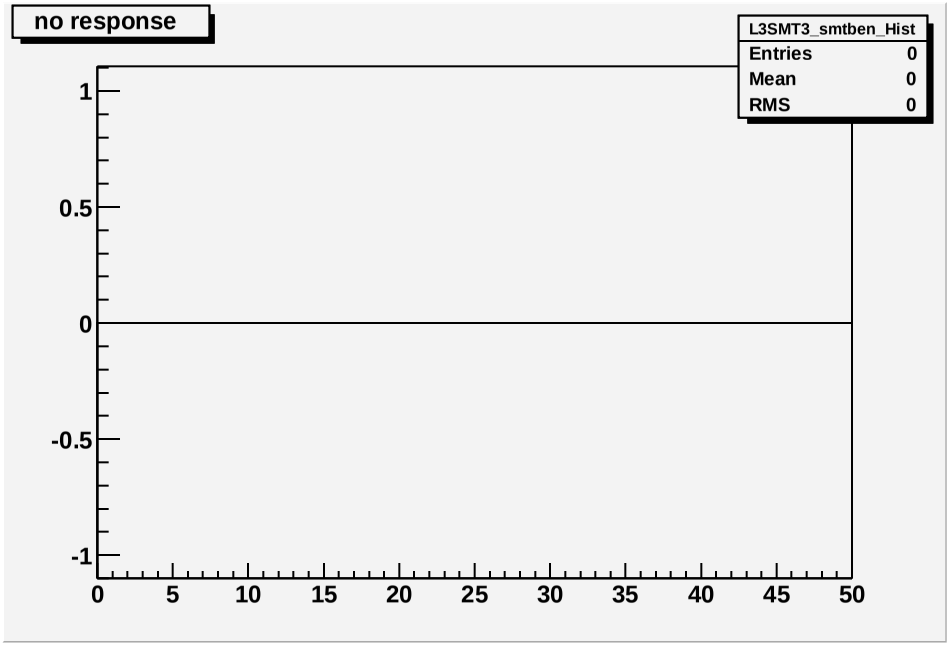
0 5 10 15 20 25 30 35 40 45 50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Mean 0
RMS 0
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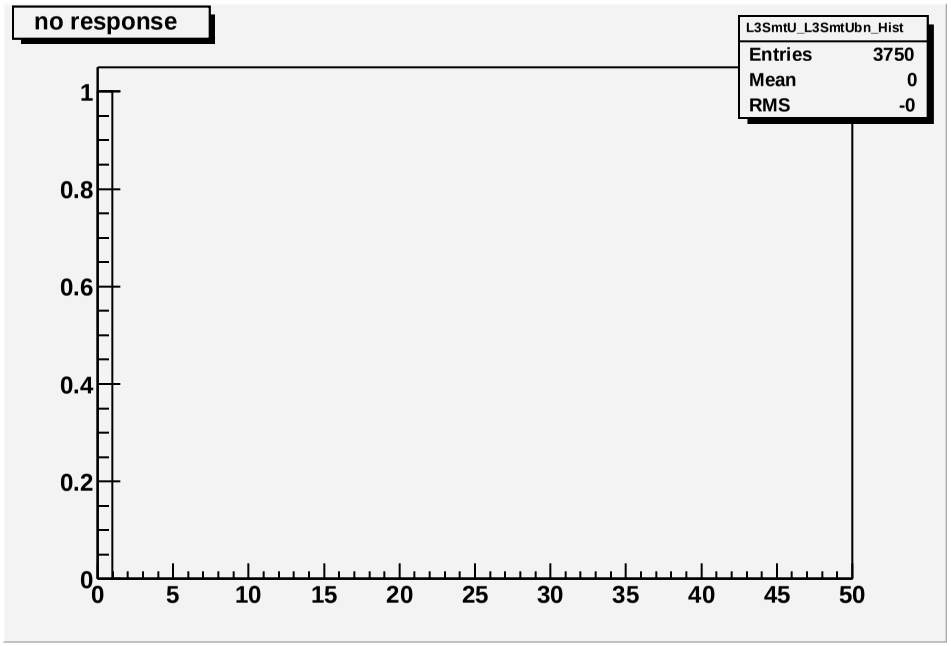
0 5 10 15 20 25 30 35 40 45 50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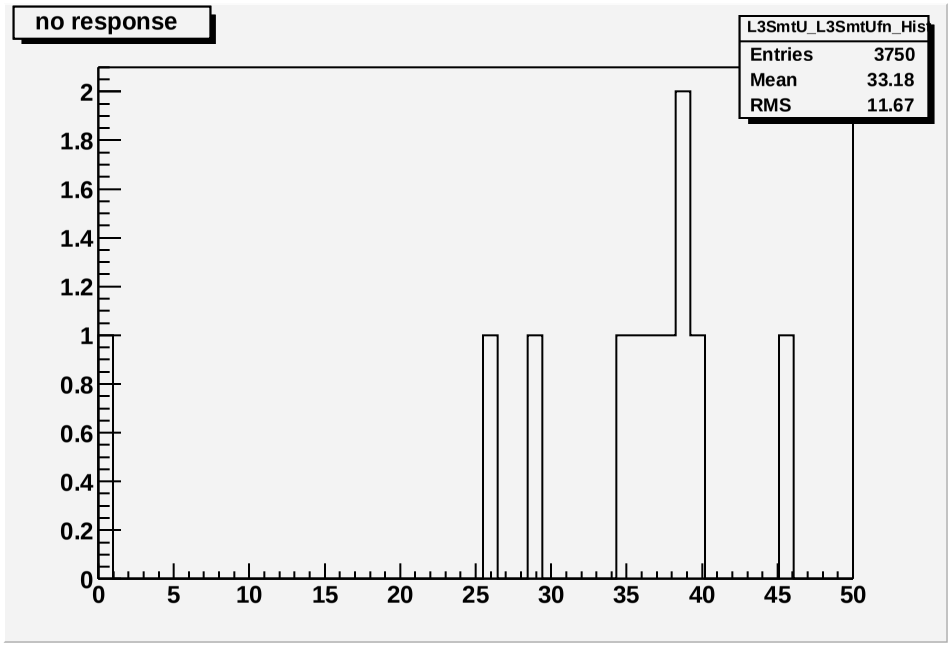
L3SmtU_L3SmtUbn_Hist
Entries 3750
Mean 0
RMS -0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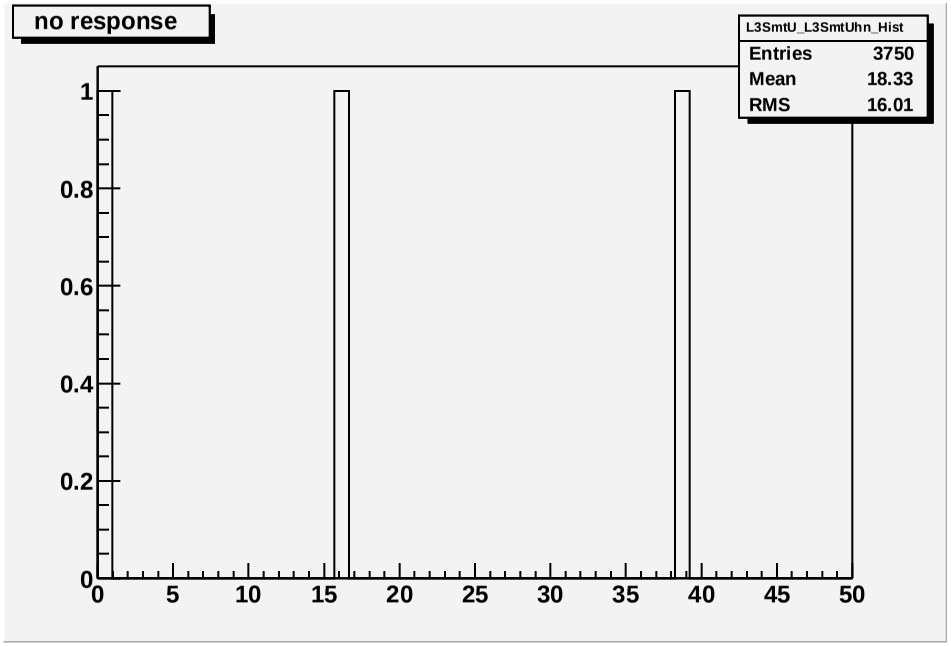
L3SmtU_L3SmtUfn_Hist
Entries 3750
Mean 33.18
RMS 11.67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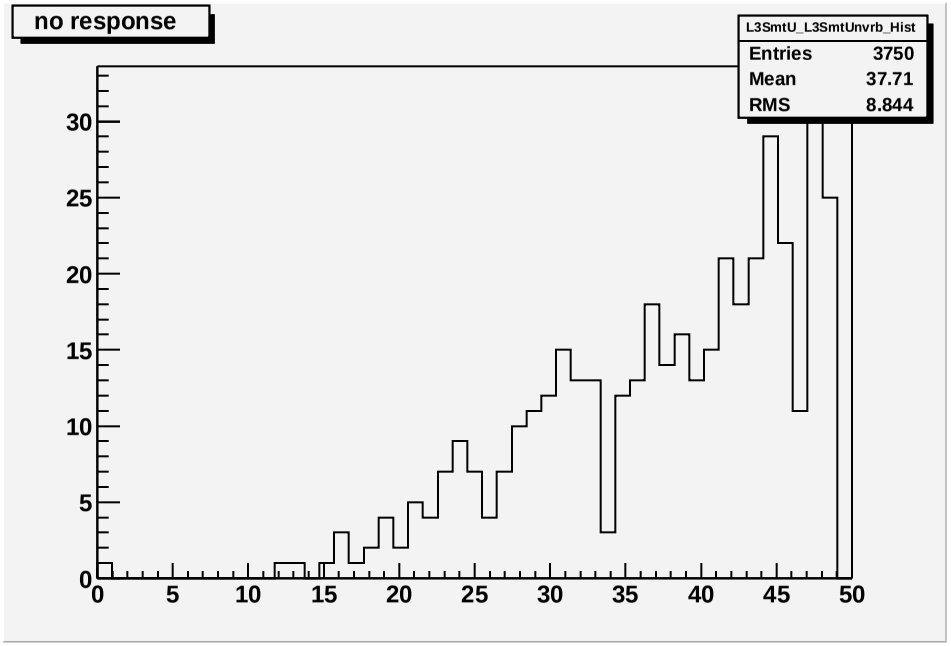
L3SmtU_L3SmtUhn_Hist
Entries 3750
Mean 18.33
RMS 16.01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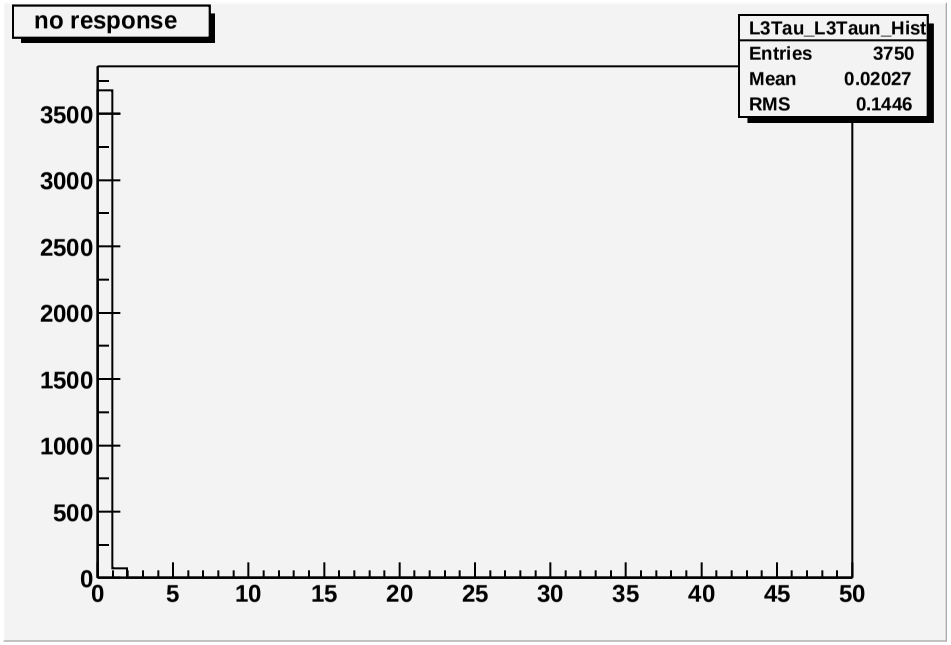
L3SmtU_L3SmtUnvrb_Hist
Entries 3750
Mean 37.71
RMS 8.844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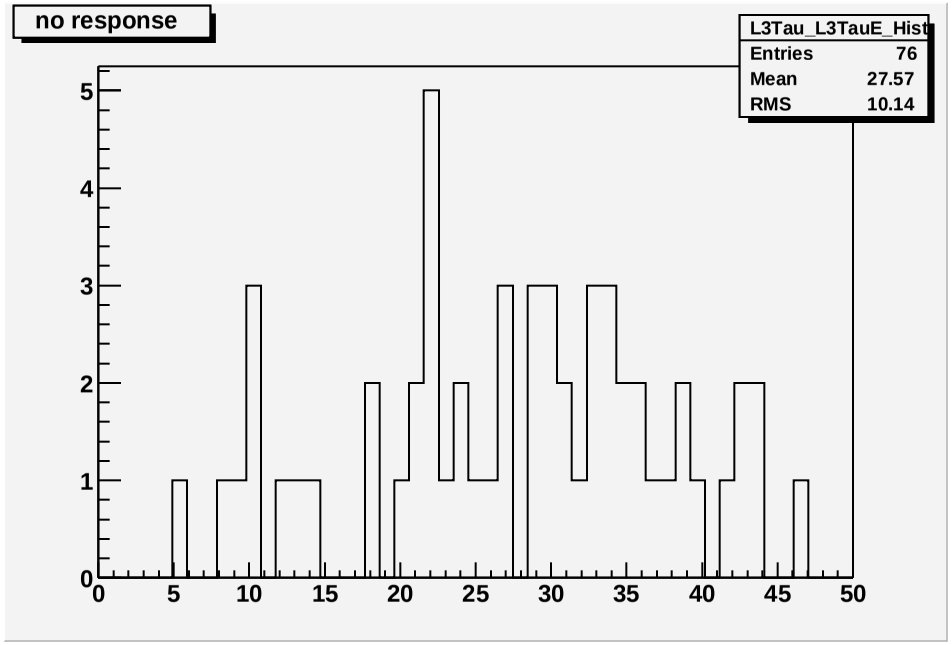
L3Tau_L3Taun_Hist
Entries 3750
Mean 0.02027
RMS 0.1446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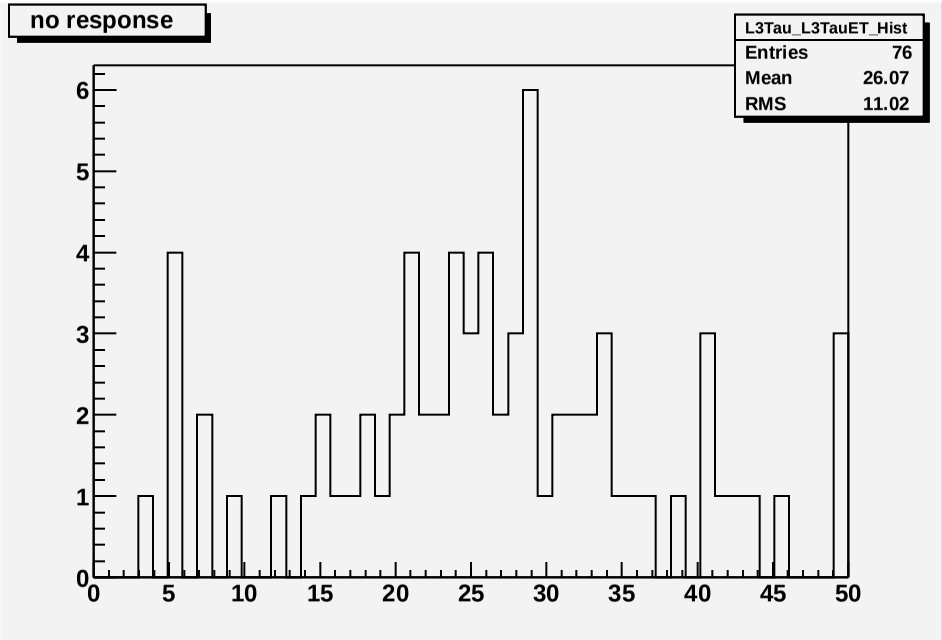
L3Tau_L3TauE_Hist
Entries 76
Mean 27.57
RMS 10.14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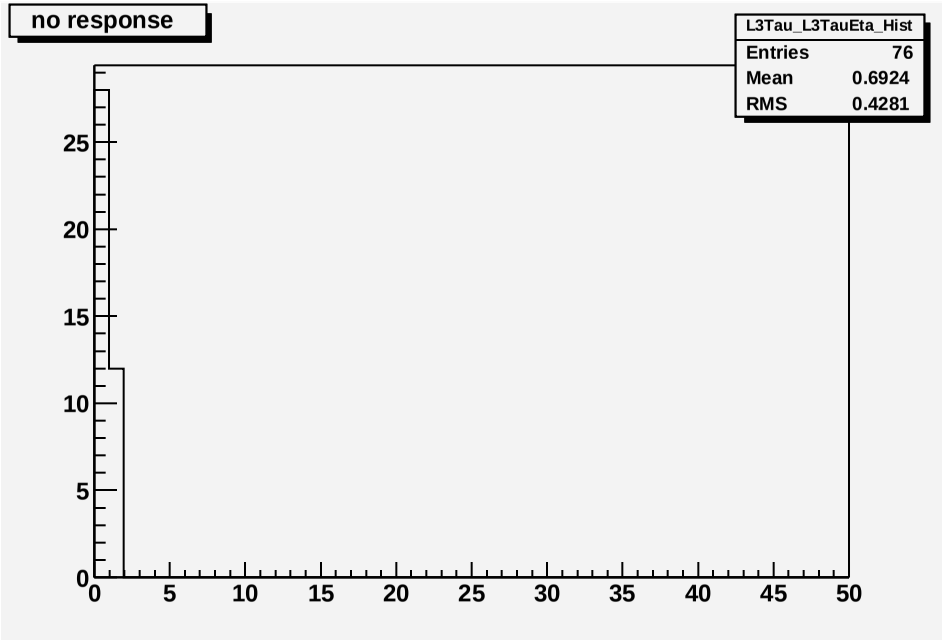
L3Tau_L3TauET_Hist
Entries 76
Mean 26.07
RMS 11.02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L3Tau_L3TauEta_Hist
Entries 76
Mean 0.6924
RMS 0.4281