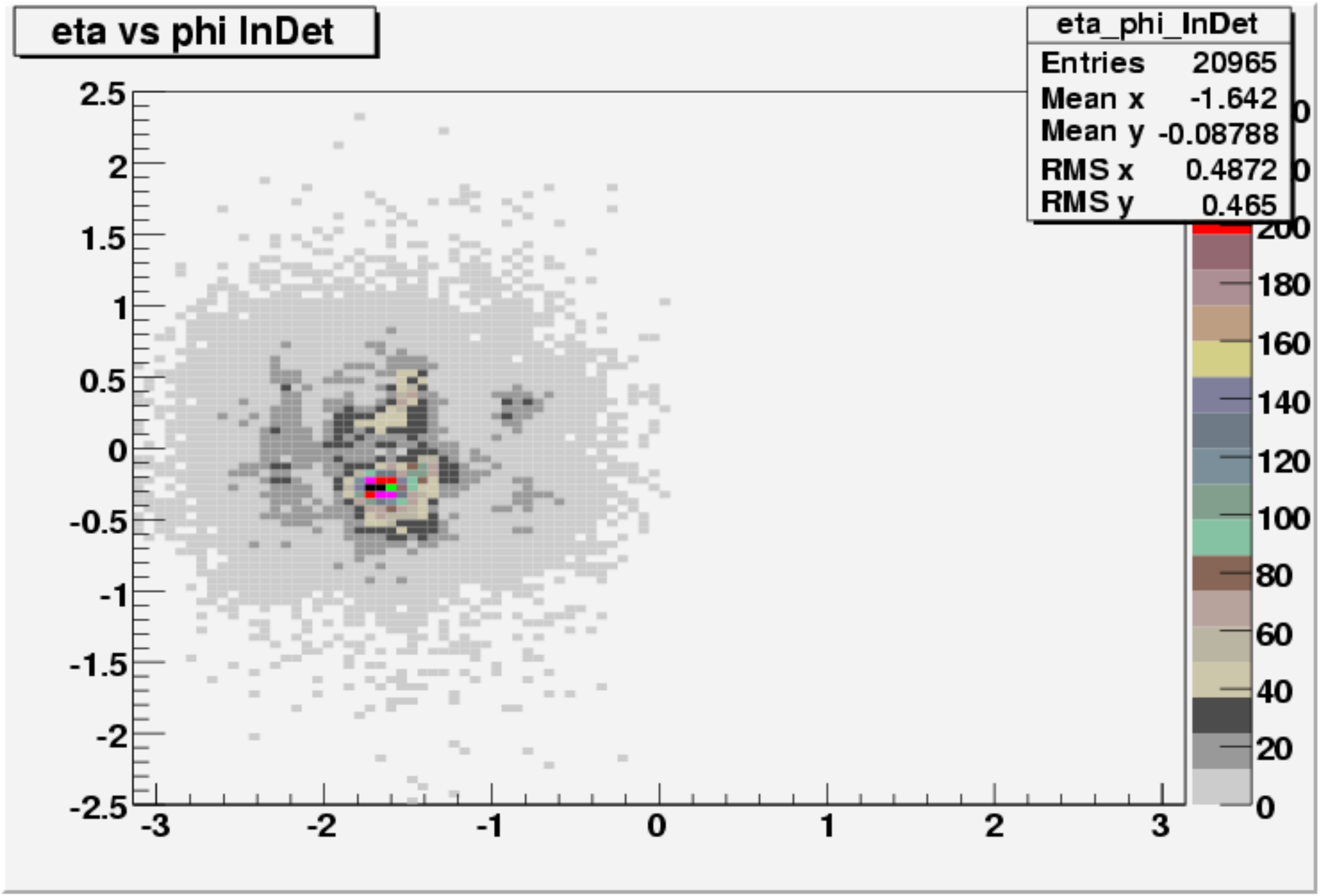
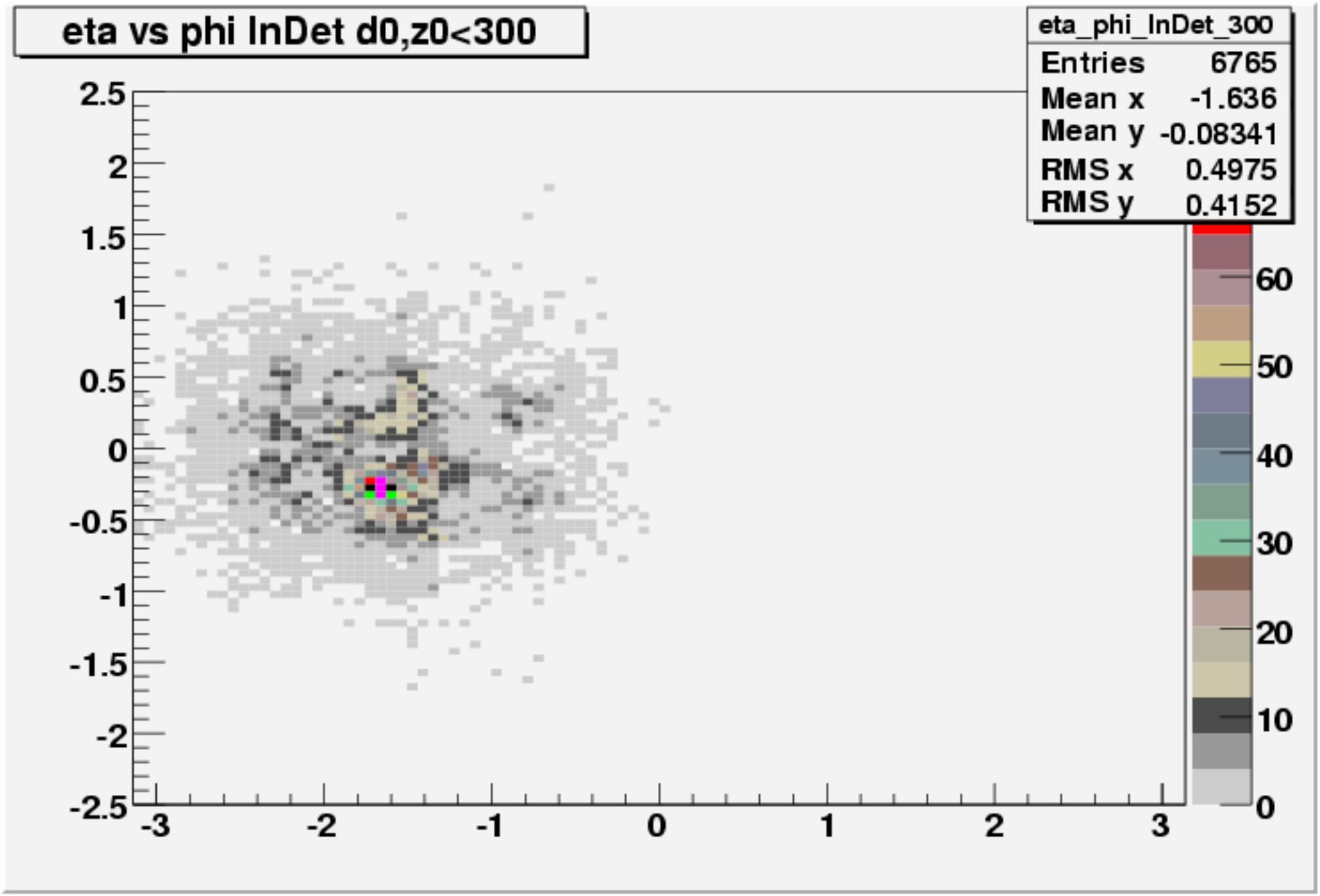
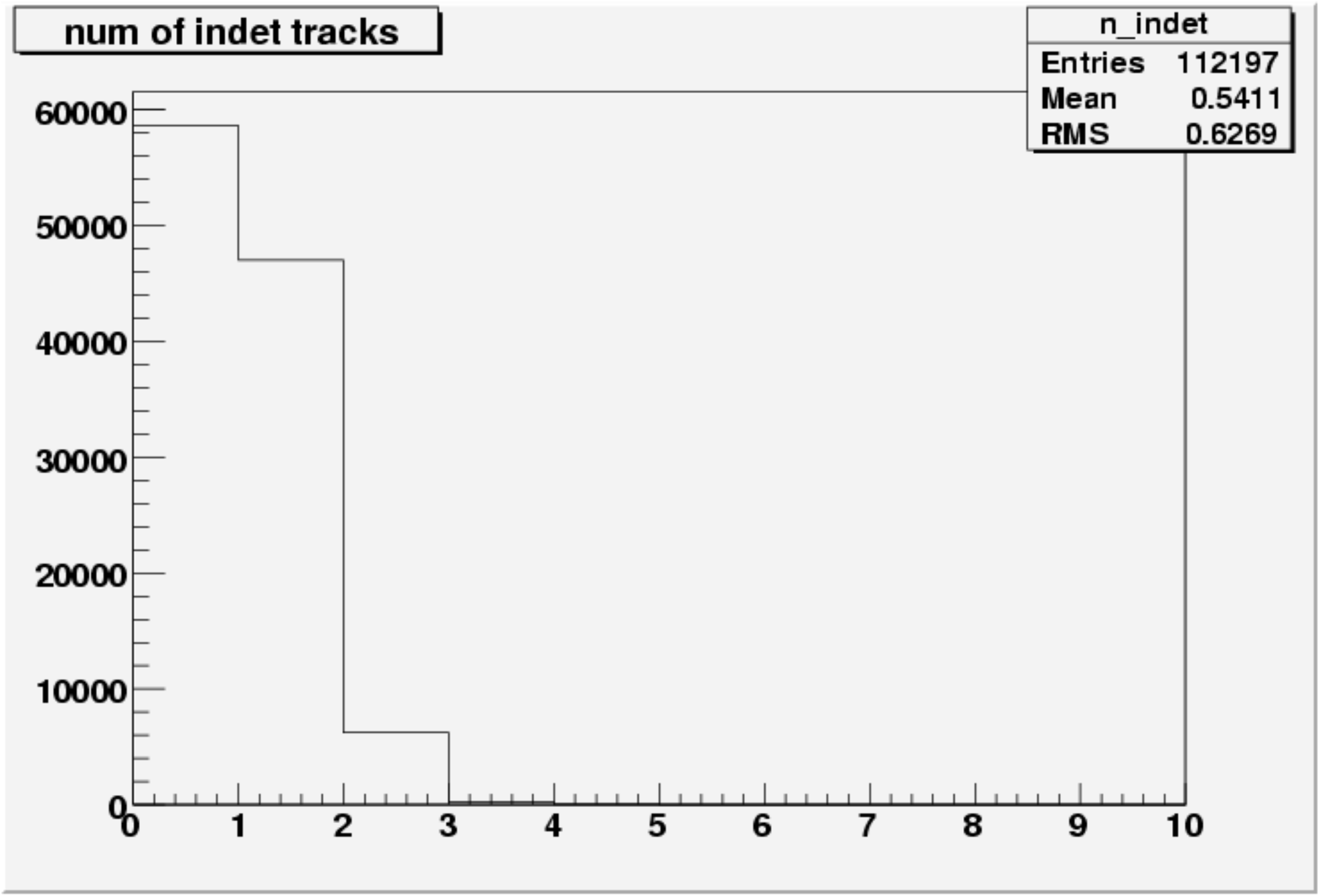
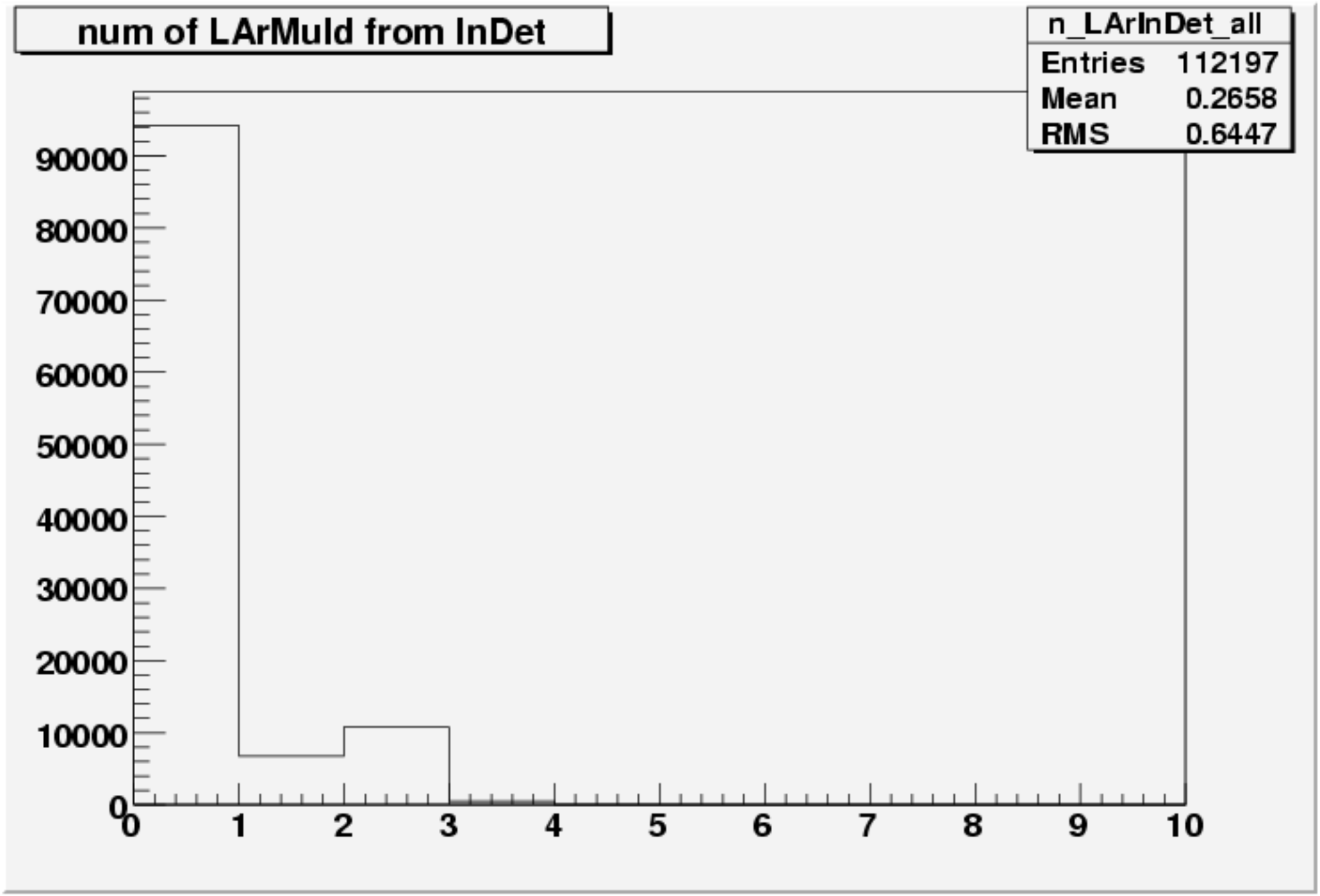
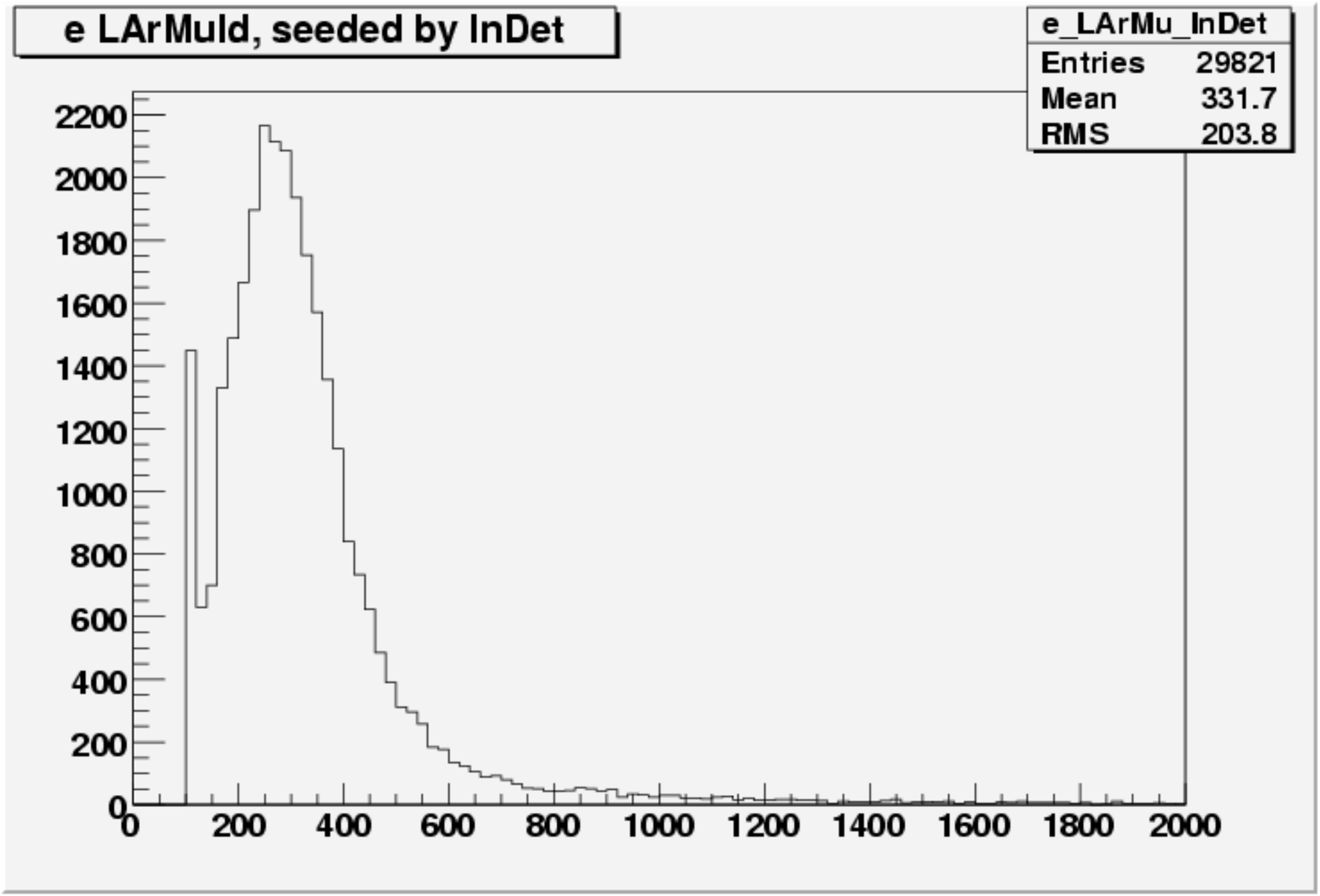
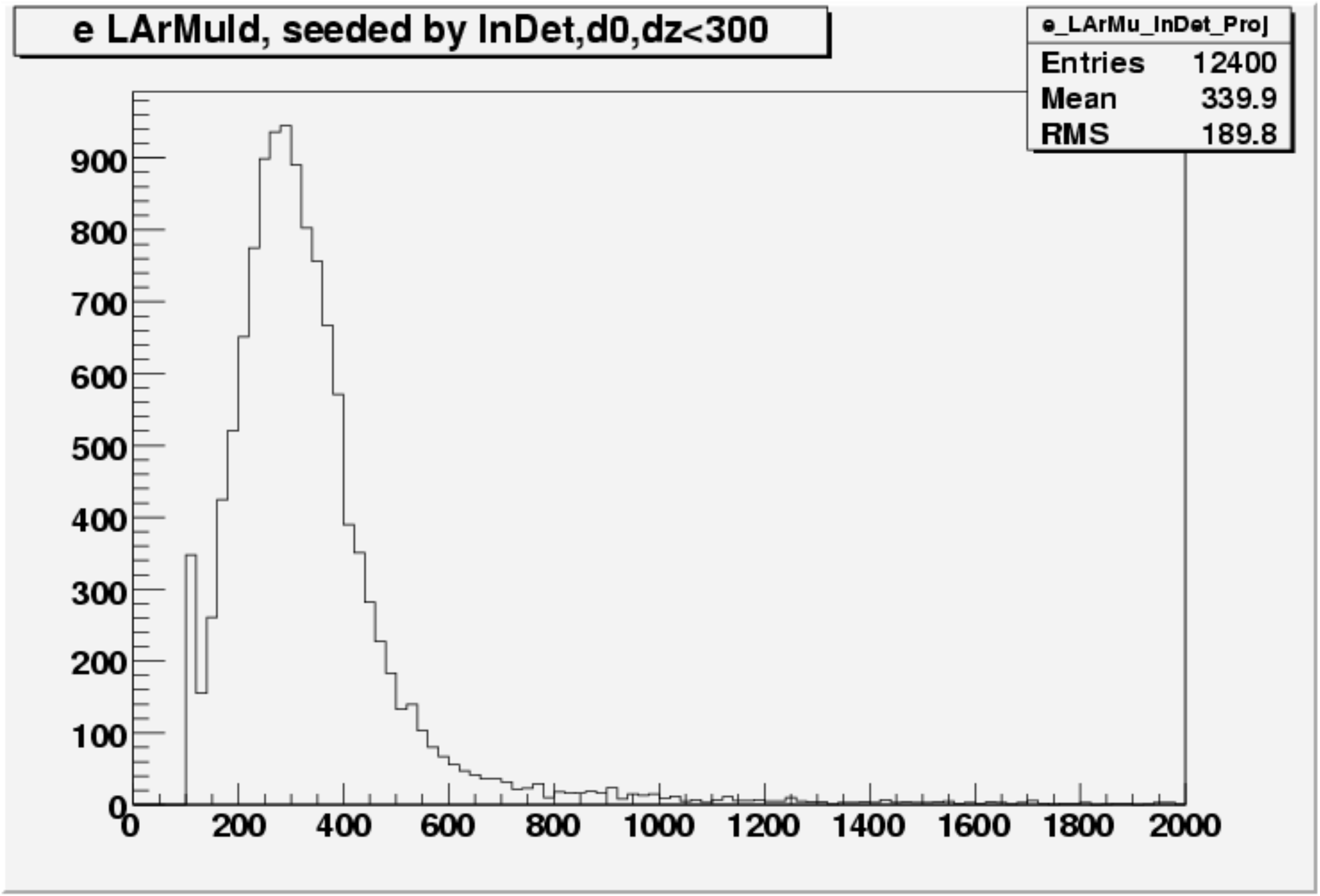

eta vs phi InDet
eta_phi_InDet
Entries 20965
Mean x -1.642
Mean y -0.08788
RMS x 0.4872
RMS y 0.465
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
200
180
160
140
120
100
80
60
40
20
0

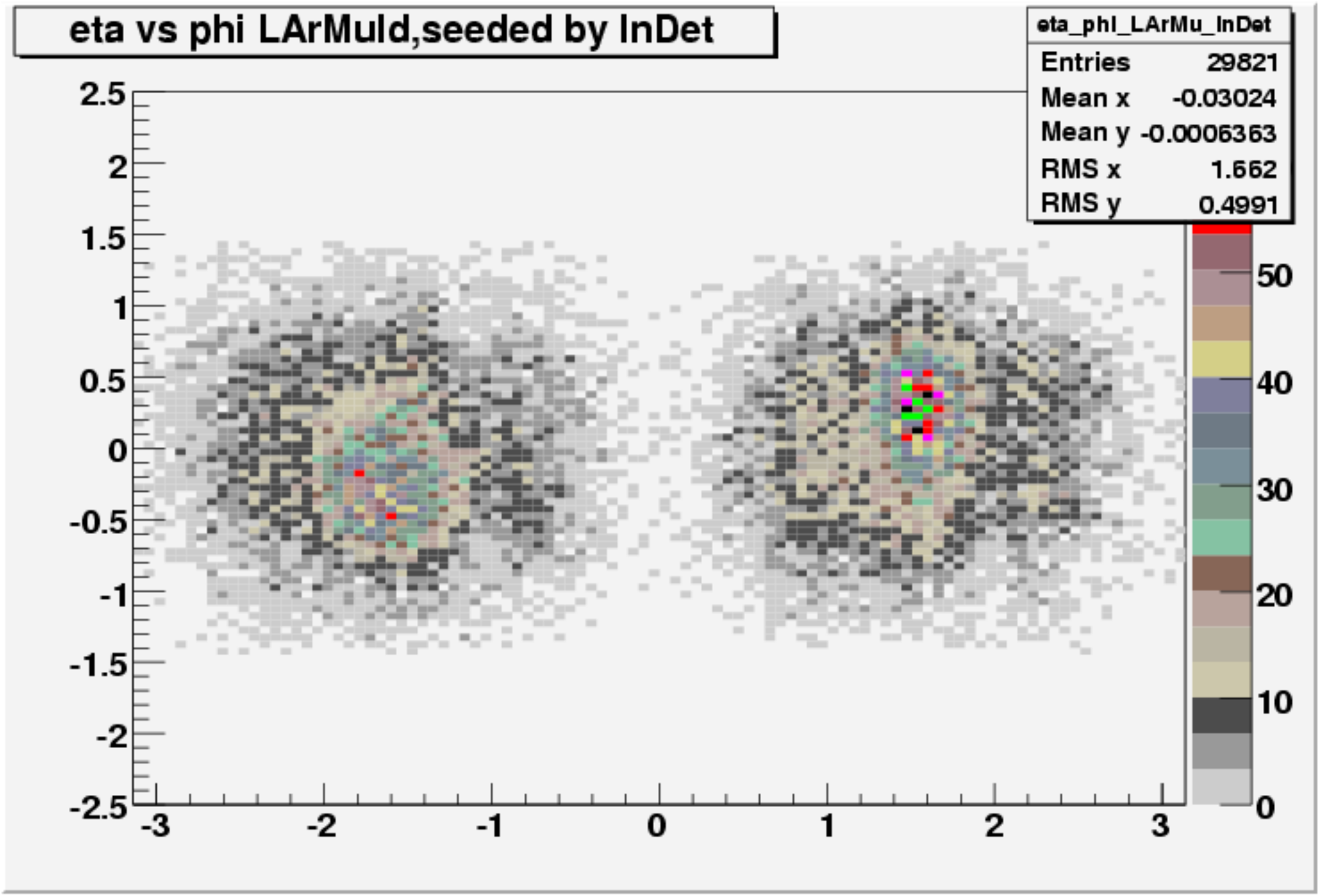

eta vs phi InDet d0,z0<300
eta_phi_InDet_300
Entries 6765
Mean x -1.636
Mean y -0.08341
RMS x 0.4975
RMS y 0.4152
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
60
50
40
30
20
10
0

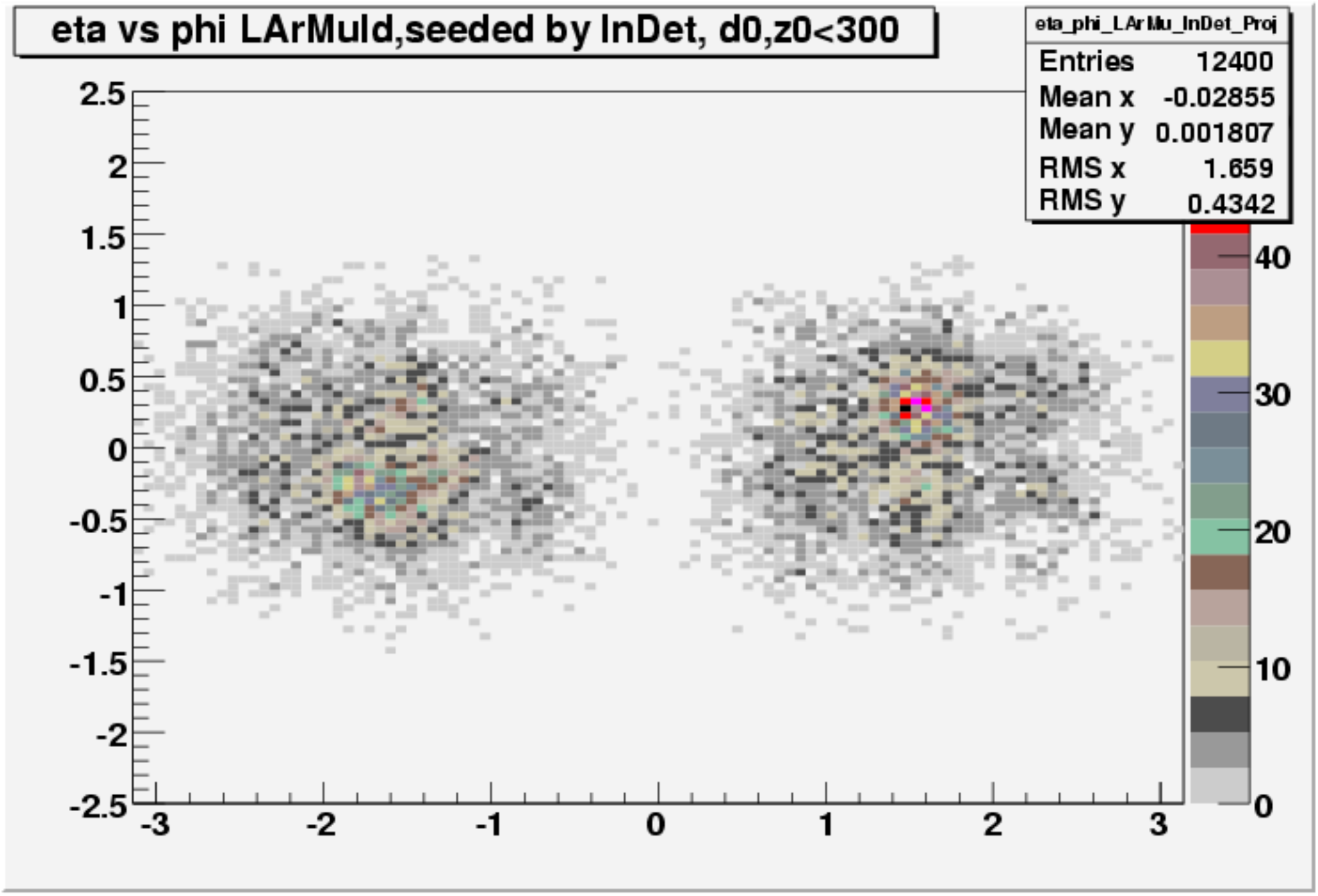

num of indet tracks
n_indet
Entries 112197
Mean 0.5411
RMS 0.6269
60000
50000
40000
30000
20000
10000
0
0
1
2
3
4
5
6
7
8
9
10

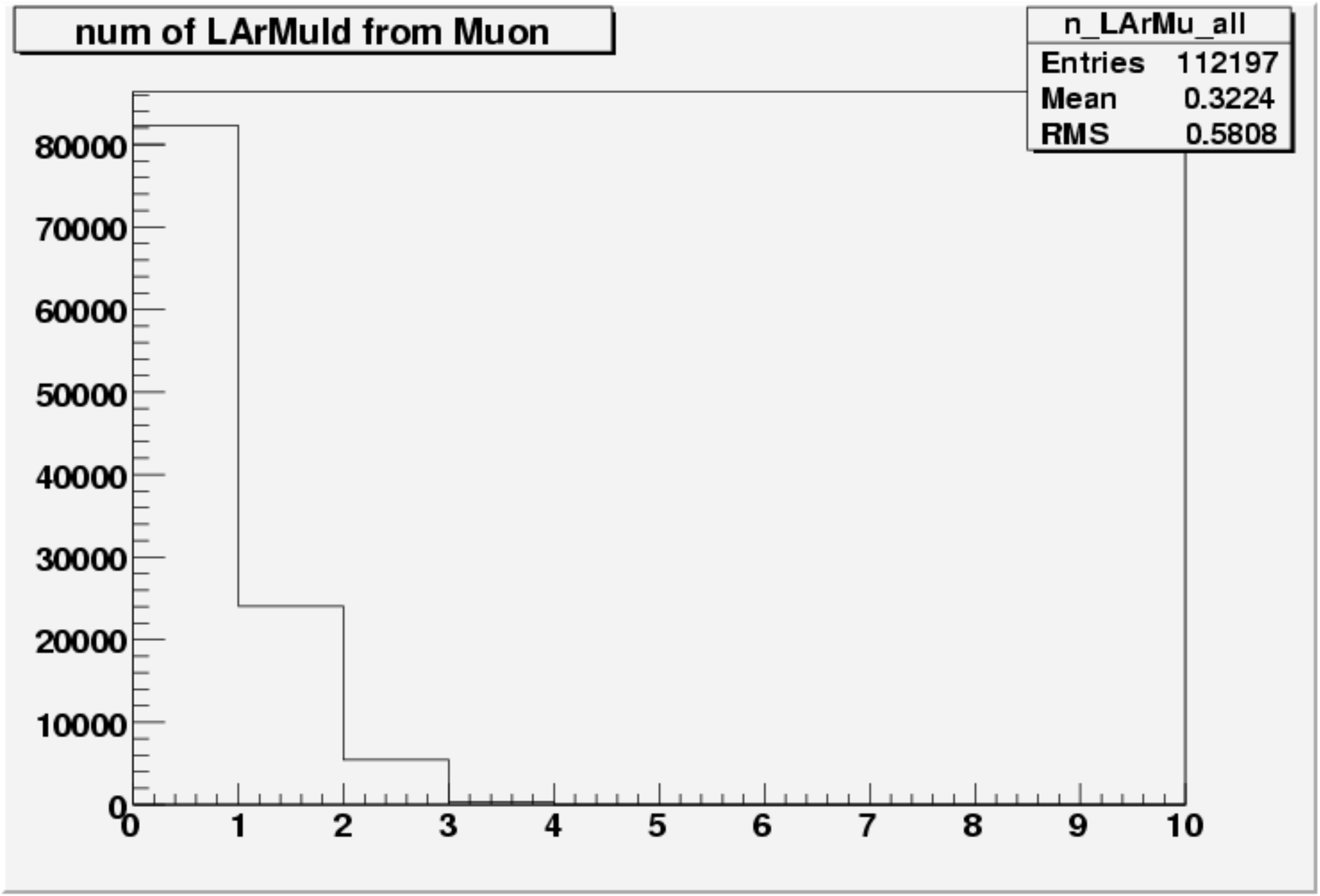

num of LArMuId from InDet
n_LArInDet_all
Entries 112197
Mean 0.2658
RMS 0.6447
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
0
1
2
3
4
5
6
7
8
9
10

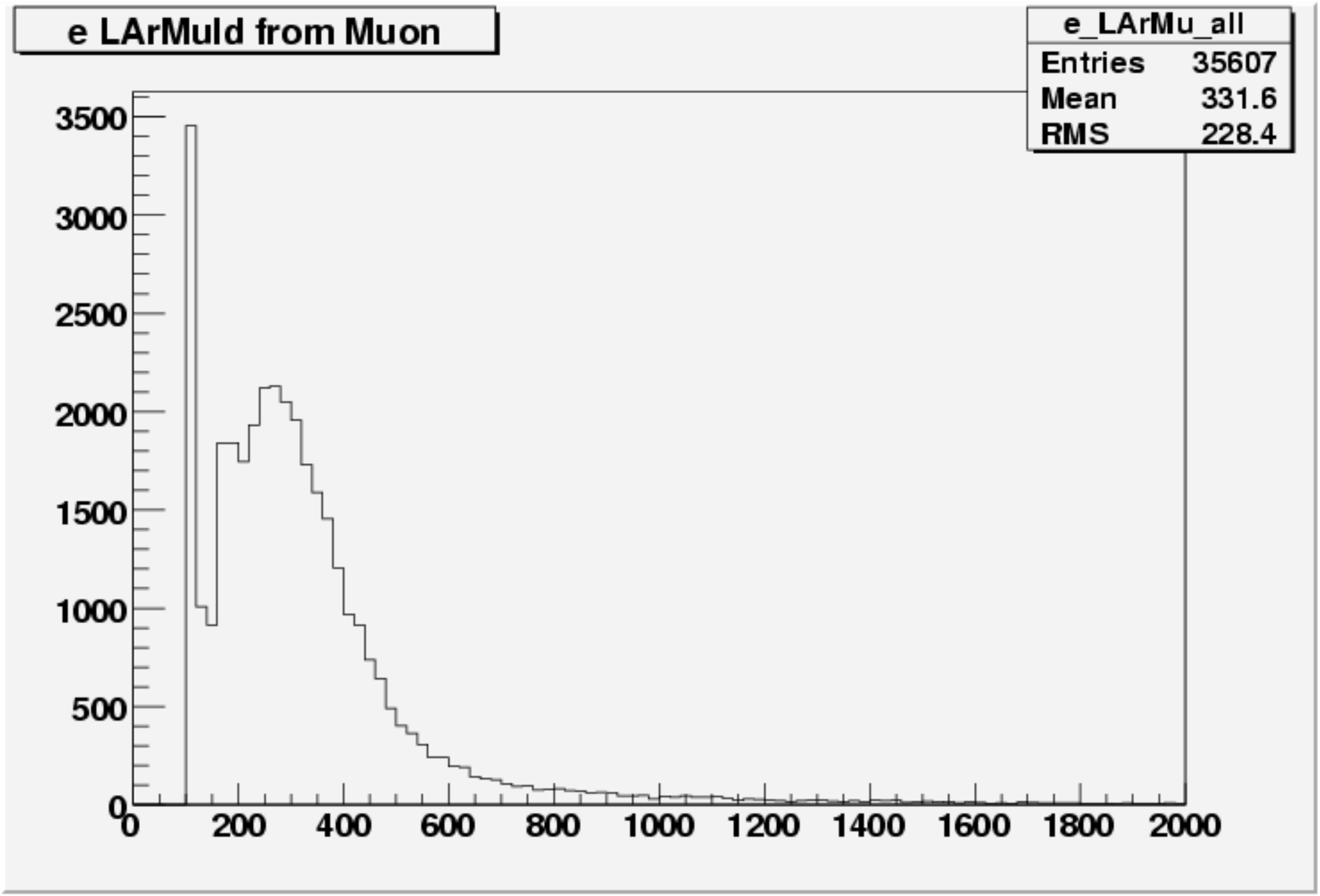

e LArMuId, seeded by InDet
e_LArMu_InDet
Entries 29821
Mean 331.7
RMS 203.8
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

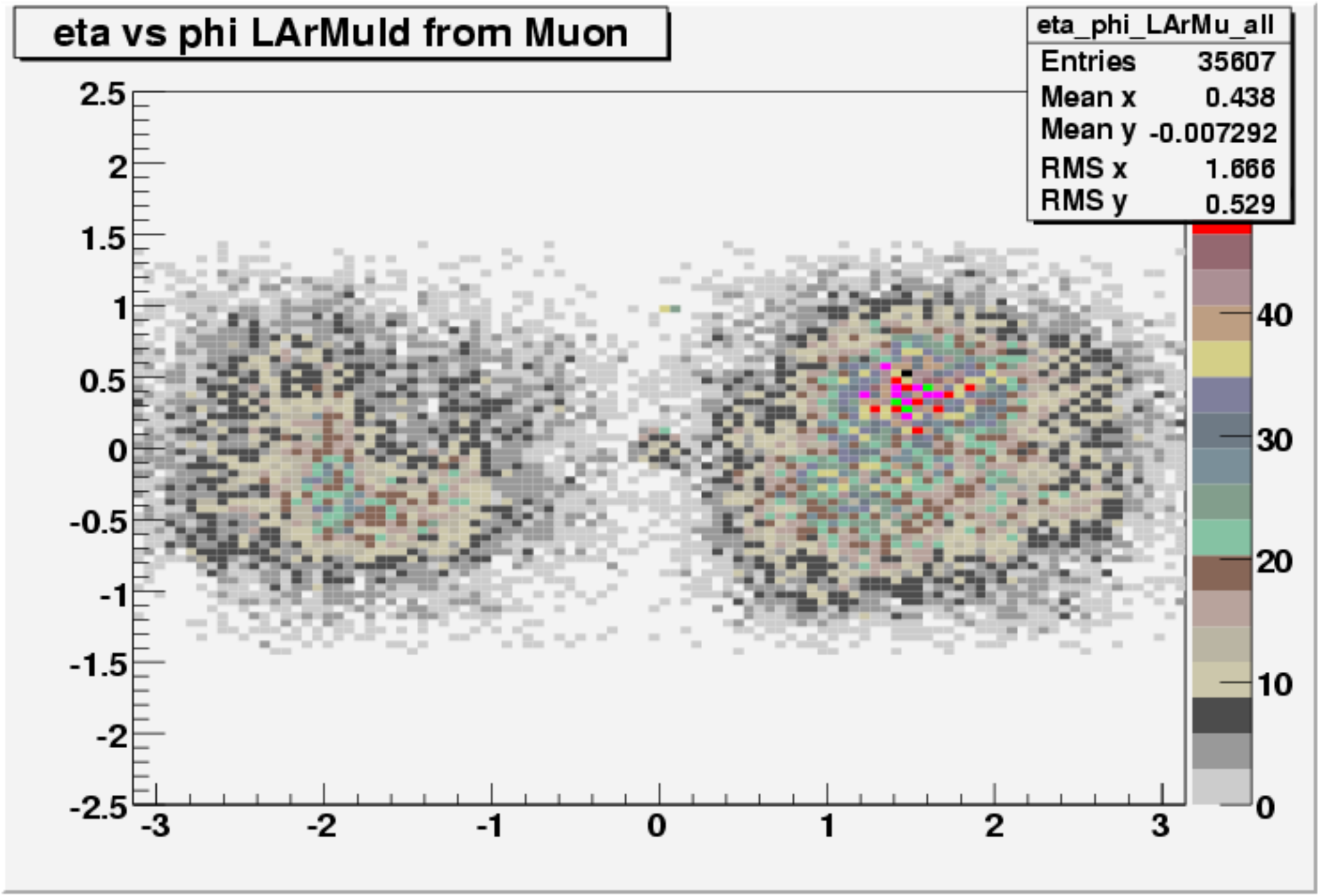

e LArMuId, seeded by InDet,d0,dz<300
e_LArMu_InDet_Proj
Entries 12400
Mean 339.9
RMS 189.8
900
800
700
600
500
400
300
200
100
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

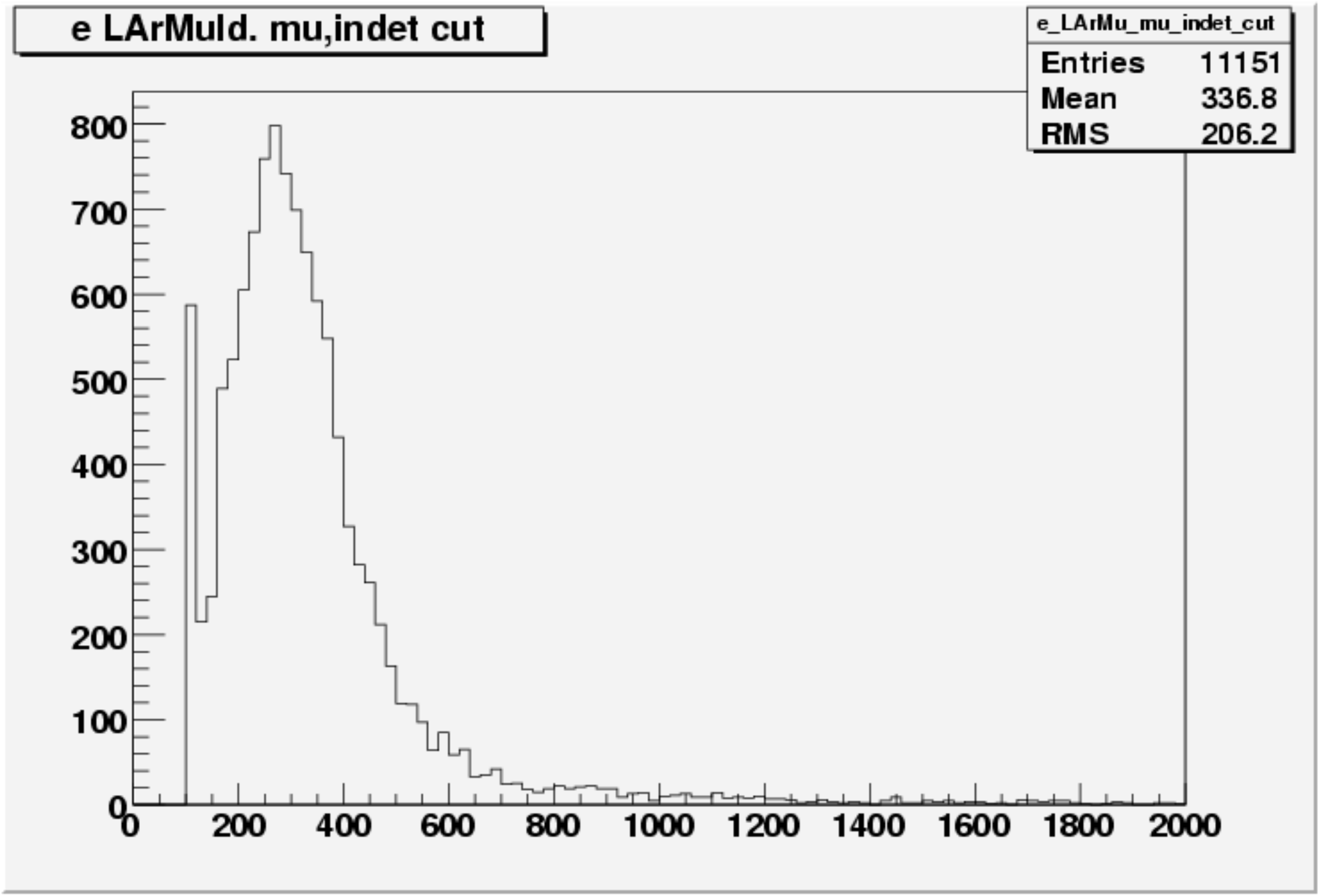

eta vs phi LArMuId,seeded by InDet
eta_phi_LArMu_InDet
Entries 29821
Mean x -0.03024
Mean y -0.0006363
RMS x 1.662
RMS y 0.4991
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
50
40
30
20
10
0

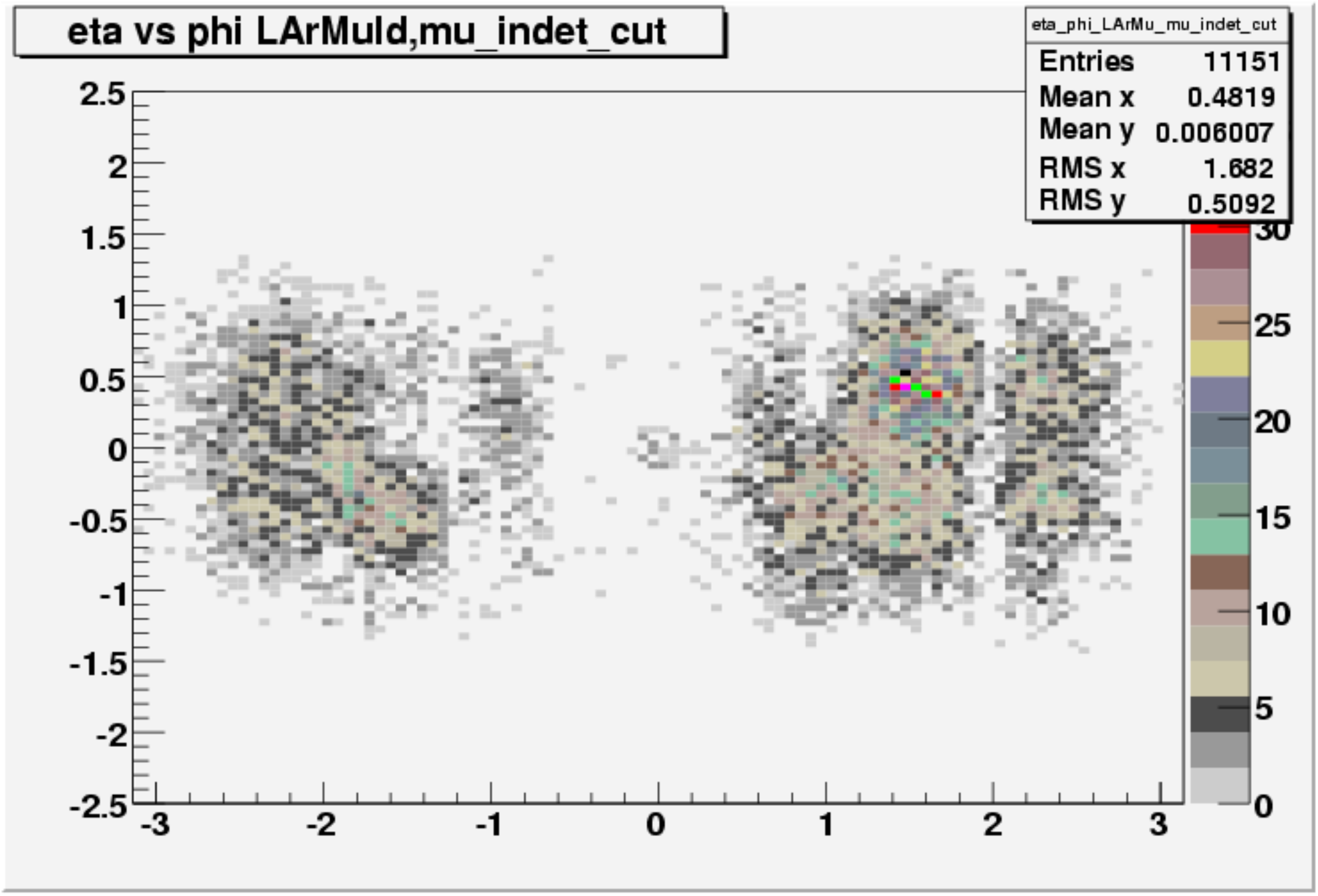

eta vs phi LArMuId,seeded by InDet, d0,z0<300
eta_phi_LArMu_InDet_Proj
Entries 12400
Mean x -0.02855
Mean y 0.001807
RMS x 1.659
RMS y 0.4342
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
40
30
20
10
0

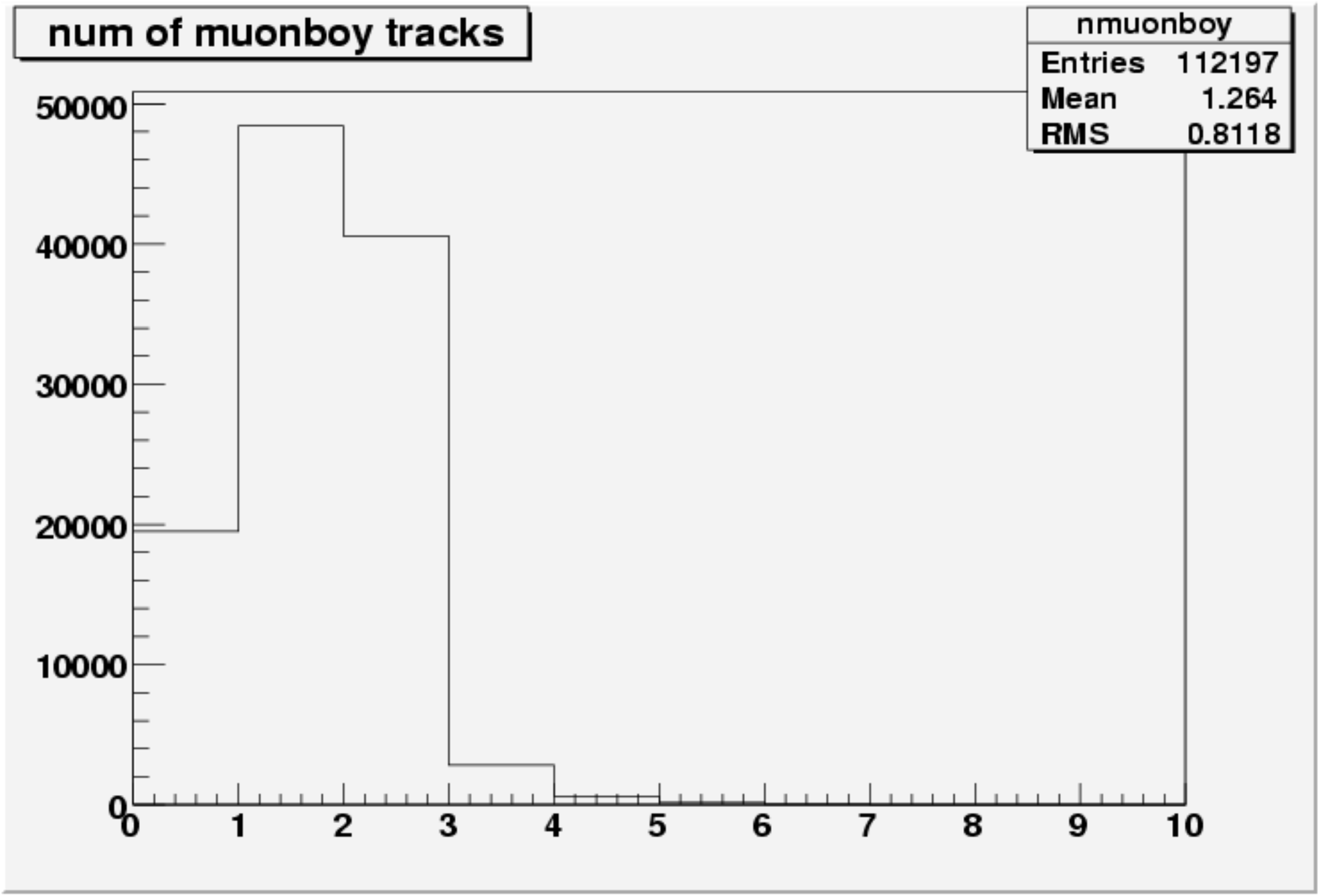

num of LArMuId from Muon
n_LArMu_all
Entries 112197
Mean 0.3224
RMS 0.5808
80000
70000
60000
50000
40000
30000
20000
10000
0
0
1
2
3
4
5
6
7
8
9
10

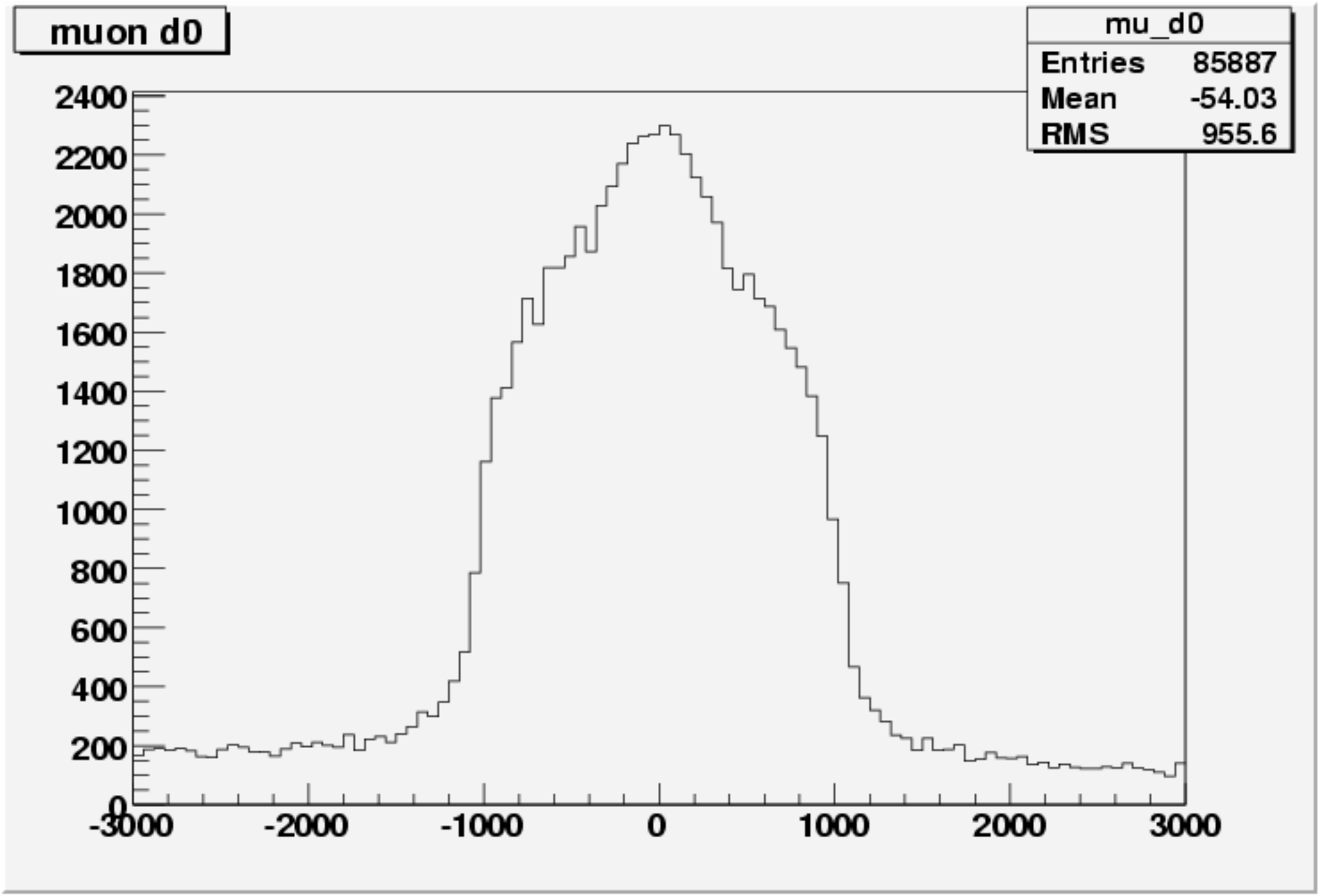

e LArMuld from Muon
e_LArMu_all
Entries 35607
Mean 331.6
RMS 228.4
3500
3000
2500
2000
1500
1000
500
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

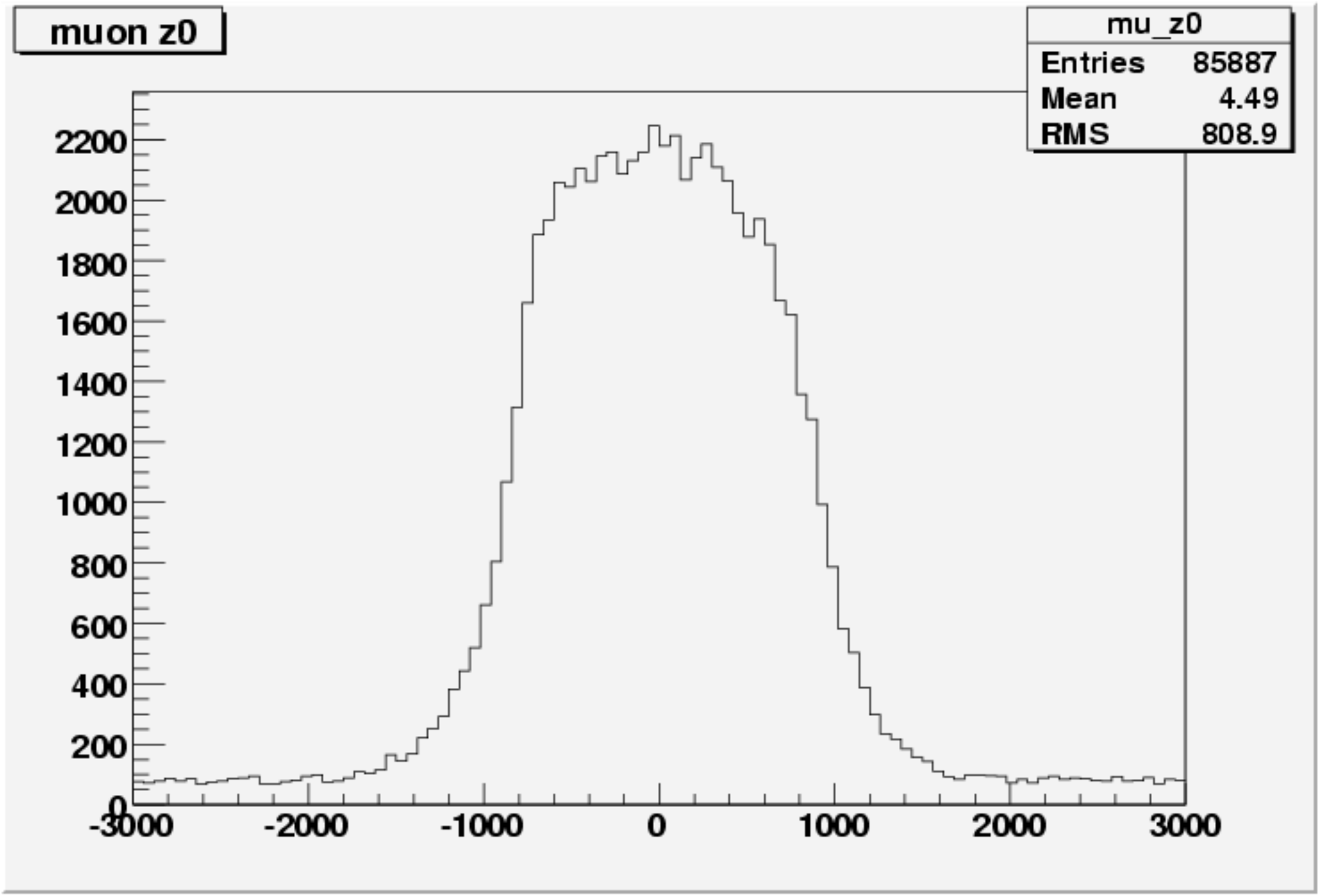

eta vs phi LArMuld from Muon
eta_phi_LArMu_all
Entries 35607
Mean x 0.438
Mean y -0.007292
RMS x 1.666
RMS y 0.529
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
40
30
20
10
0

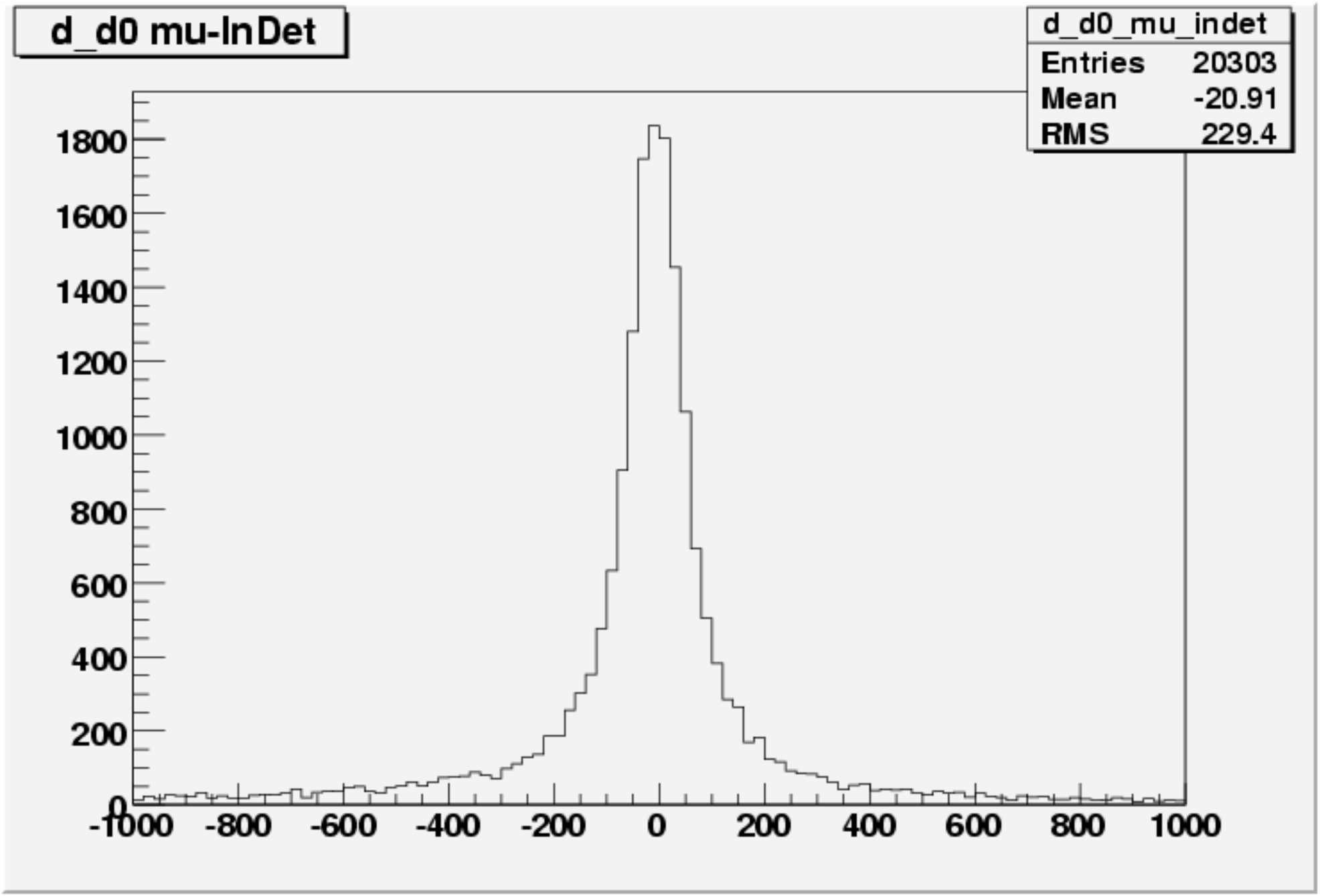

e LArMuld. mu,indet cut
e_LArMu_mu_indet_cut
Entries 11151
Mean 336.8
RMS 206.2
800
700
600
500
400
300
200
100
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

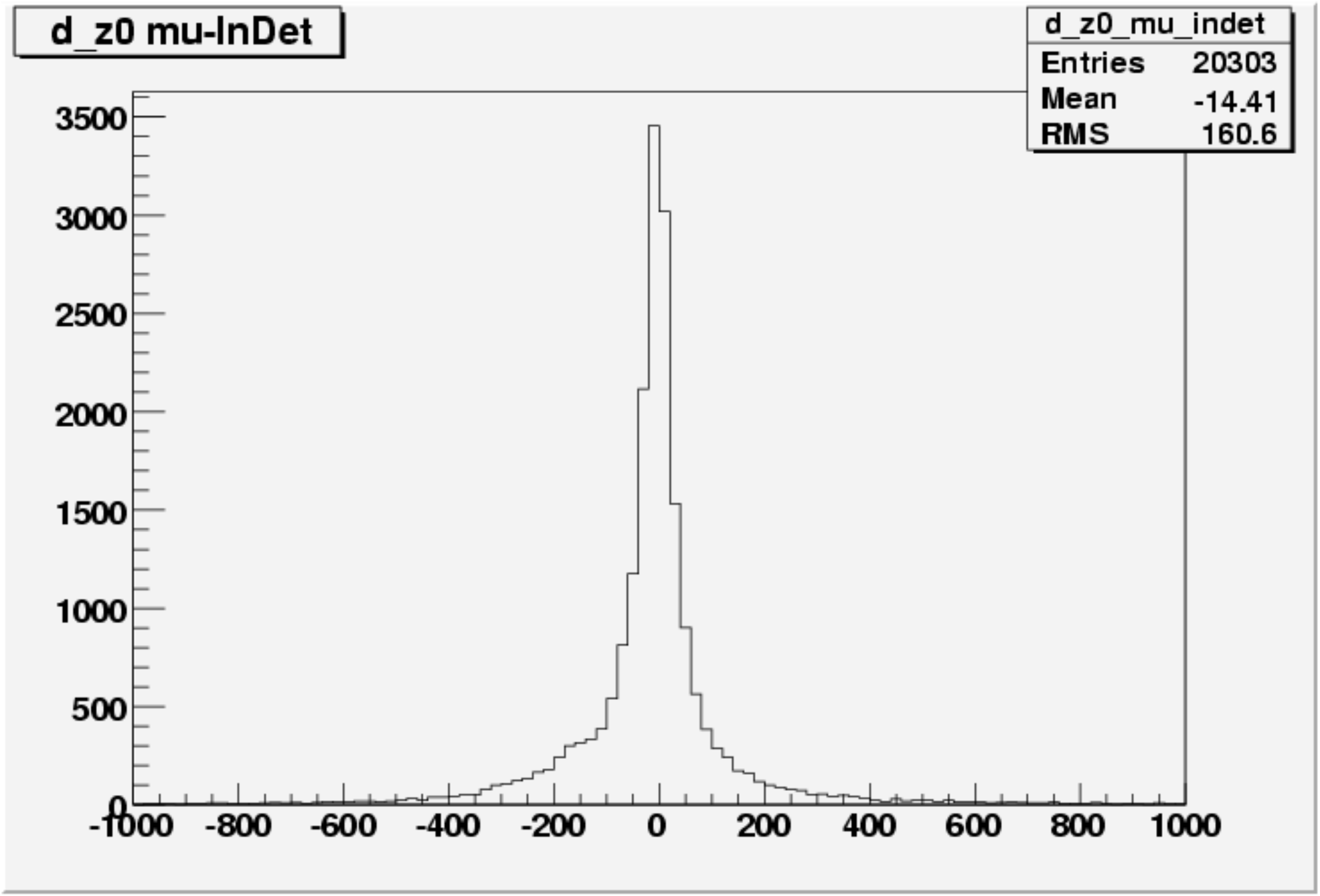

eta vs phi LArMuId,mu_indet_cut
eta_phi_LArMu_mu_indet_cut
Entries 11151
Mean x 0.4819
Mean y 0.006007
RMS x 1.682
RMS y 0.5092
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
30
25
20
15
10
5
0

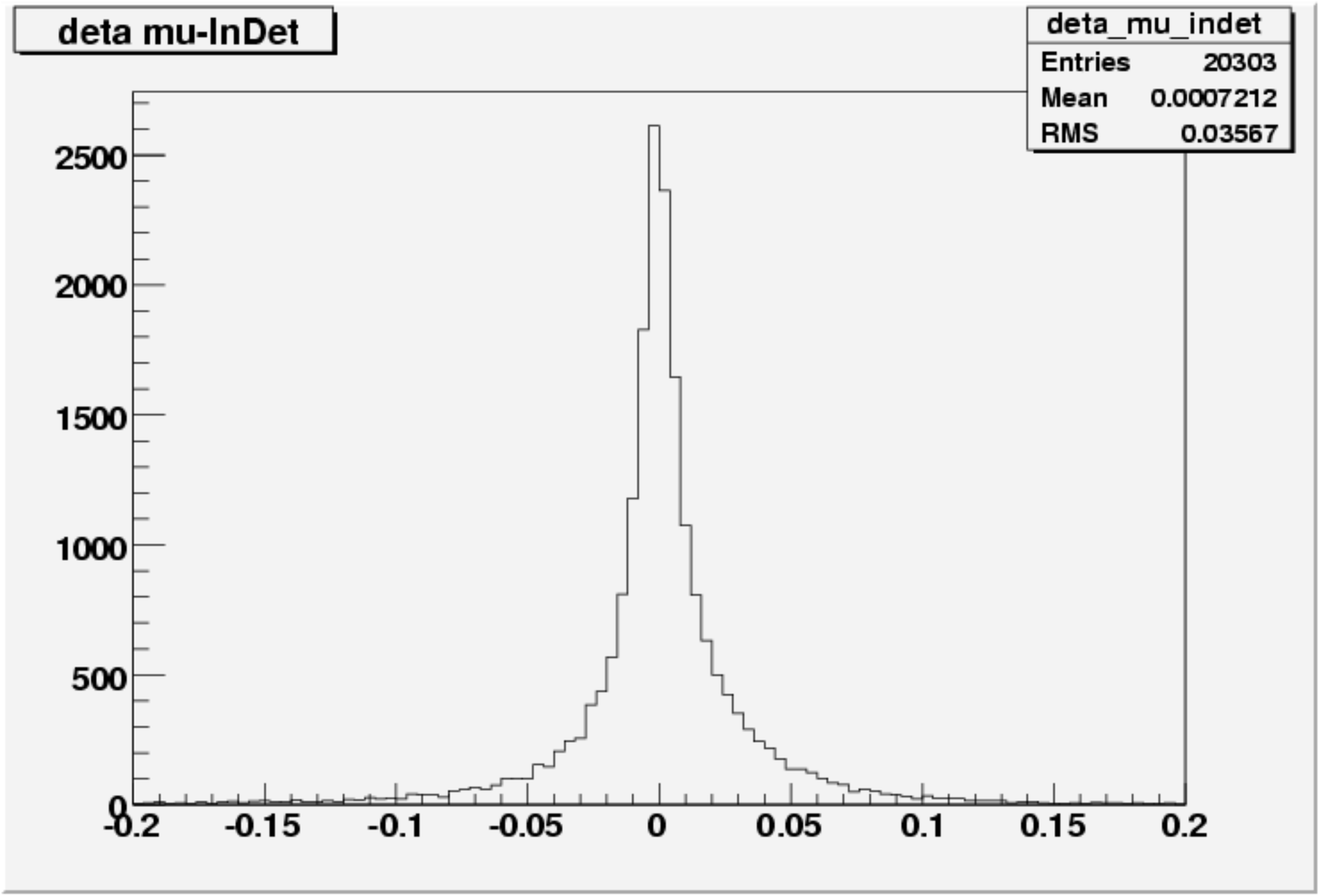

num of muonboy tracks
nmuonboy
Entries 112197
Mean 1.264
RMS 0.8118
50000
40000
30000
20000
10000
0
0
1
2
3
4
5
6
7
8
9
10

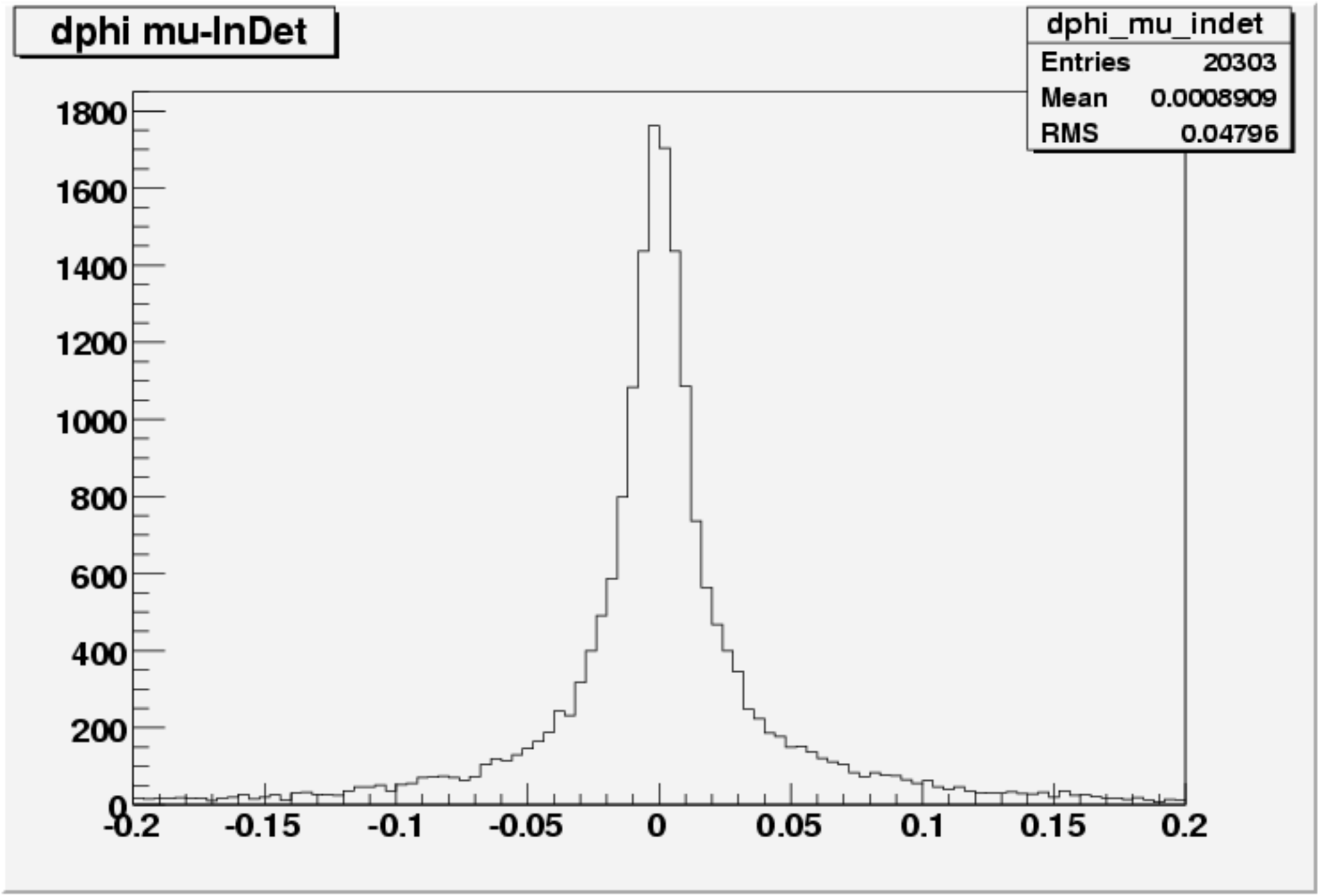

muon d0
mu_d0
Entries 85887
Mean -54.03
RMS 955.6
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
-3000
-2000
-1000
0
1000
2000
3000

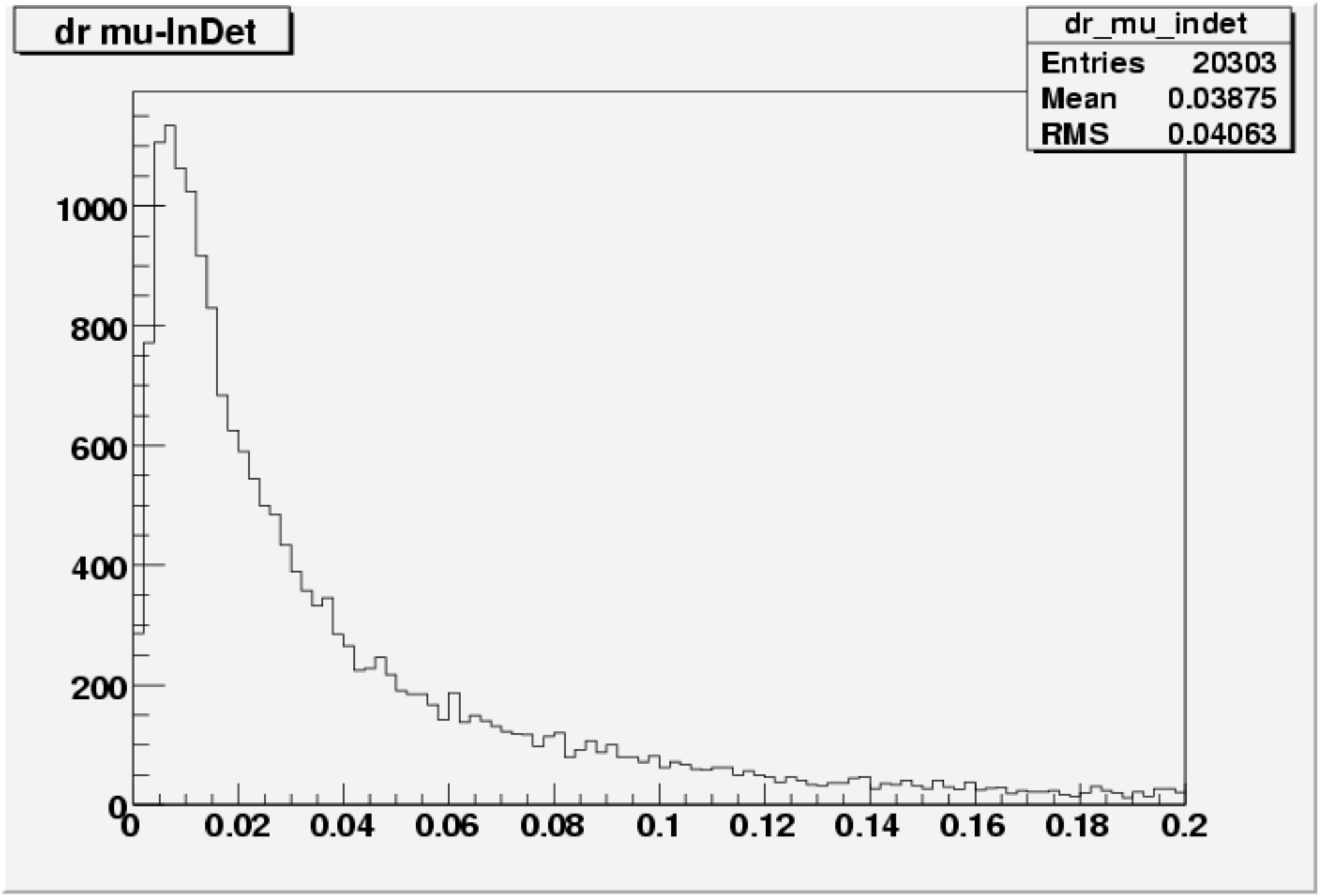

muon z0
mu_z0
Entries 85887
Mean 4.49
RMS 808.9
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
-3000
-2000
-1000
0
1000
2000
3000

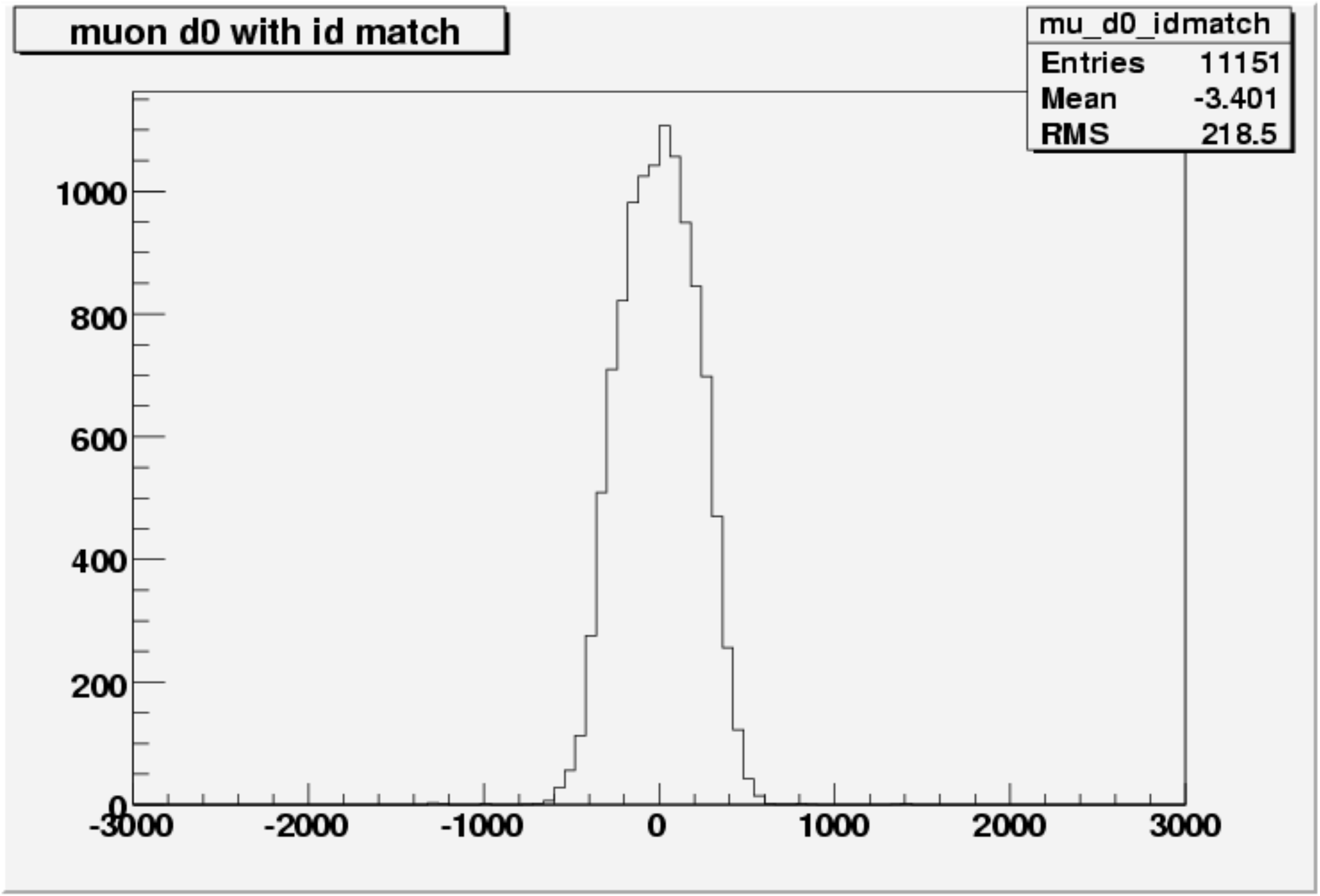

d_d0 mu-InDet
d_d0_mu_indet
Entries 20303
Mean -20.91
RMS 229.4
1800
1600
1400
1200
1000
800
600
400
200
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000

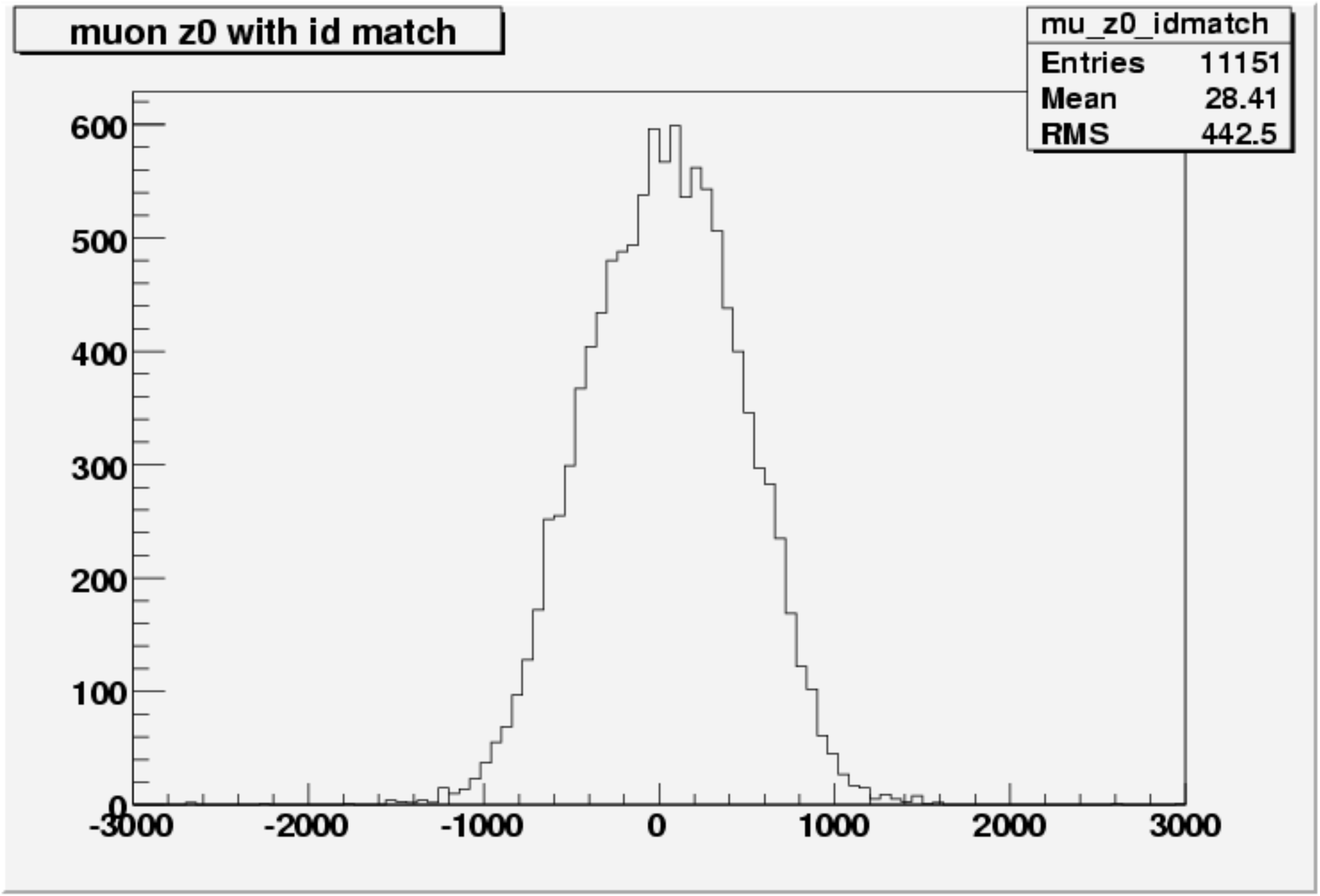

d_z0 mu-InDet
d_z0_mu_indet
Entries 20303
Mean -14.41
RMS 160.6
3500
3000
2500
2000
1500
1000
500
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000

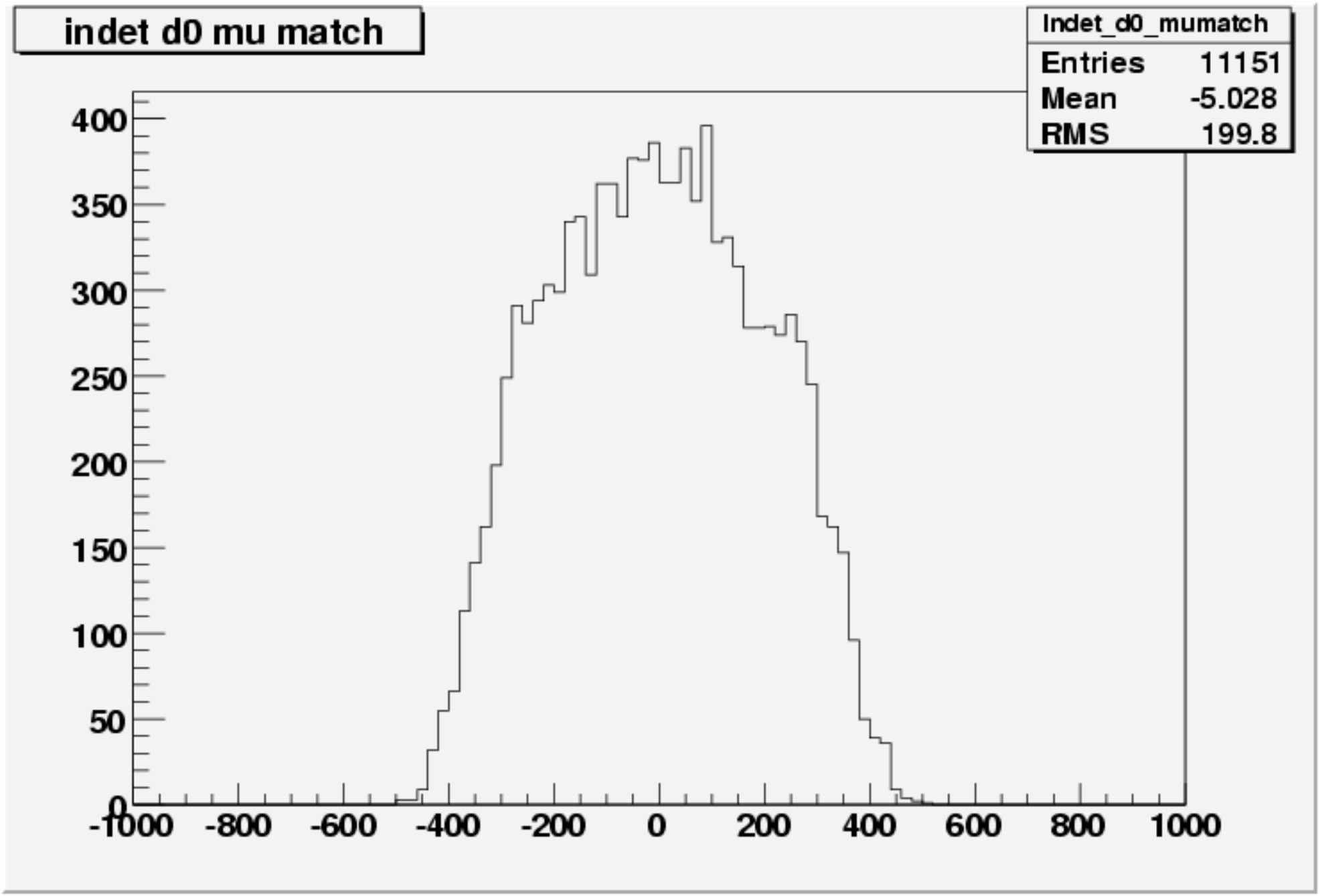

deta mu-InDet
deta_mu_indet
Entries 20303
Mean 0.0007212
RMS 0.03567
2500
2000
1500
1000
500
0
-0.2
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
0.2

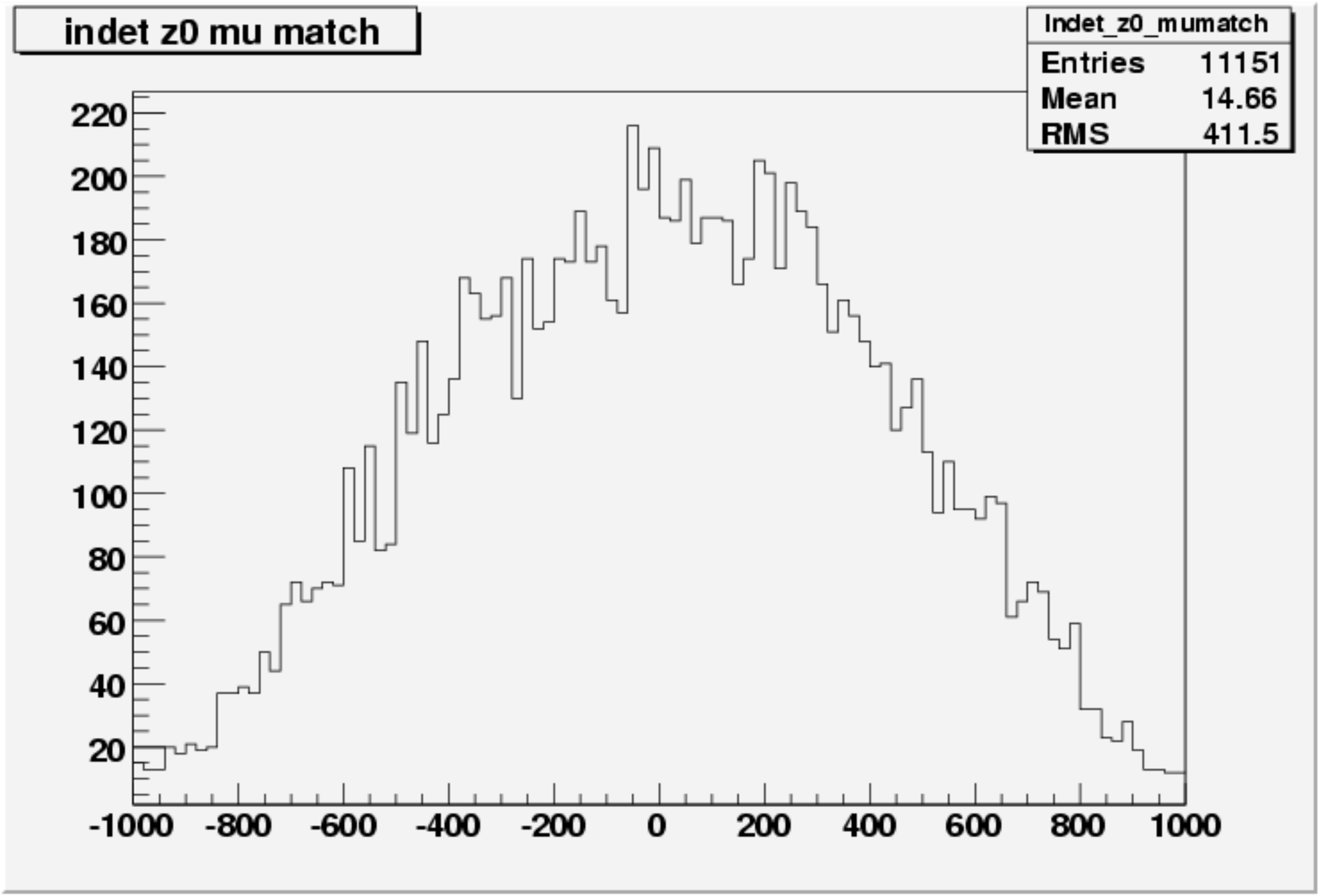

dphi mu-InDet
dphi_mu_indet
Entries 20303
Mean 0.0008909
RMS 0.04796
1800
1600
1400
1200
1000
800
600
400
200
0
-0.2
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
0.2

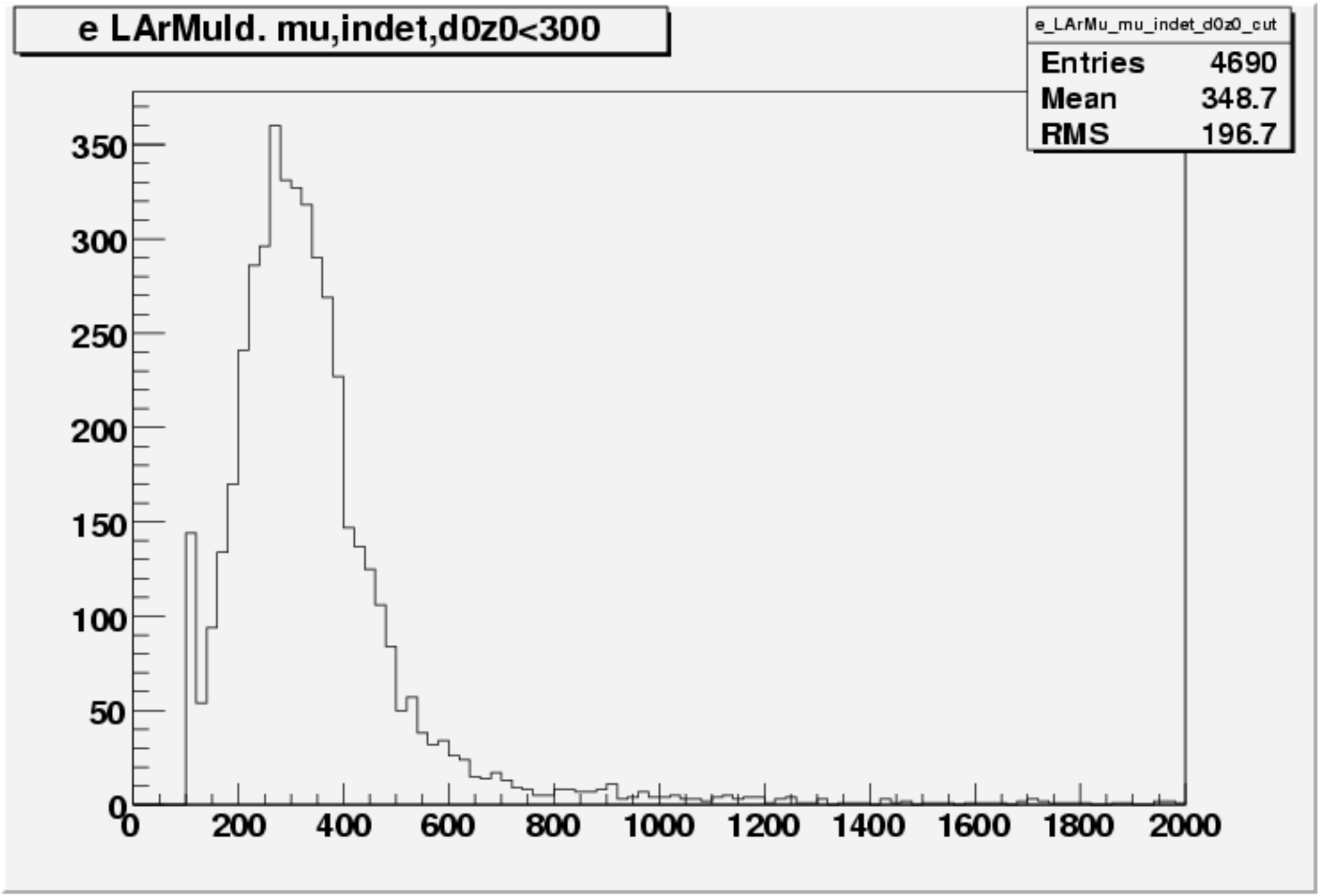

dr mu-InDet
dr_mu_indet
Entries 20303
Mean 0.03875
RMS 0.04063
1000
800
600
400
200
0
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2

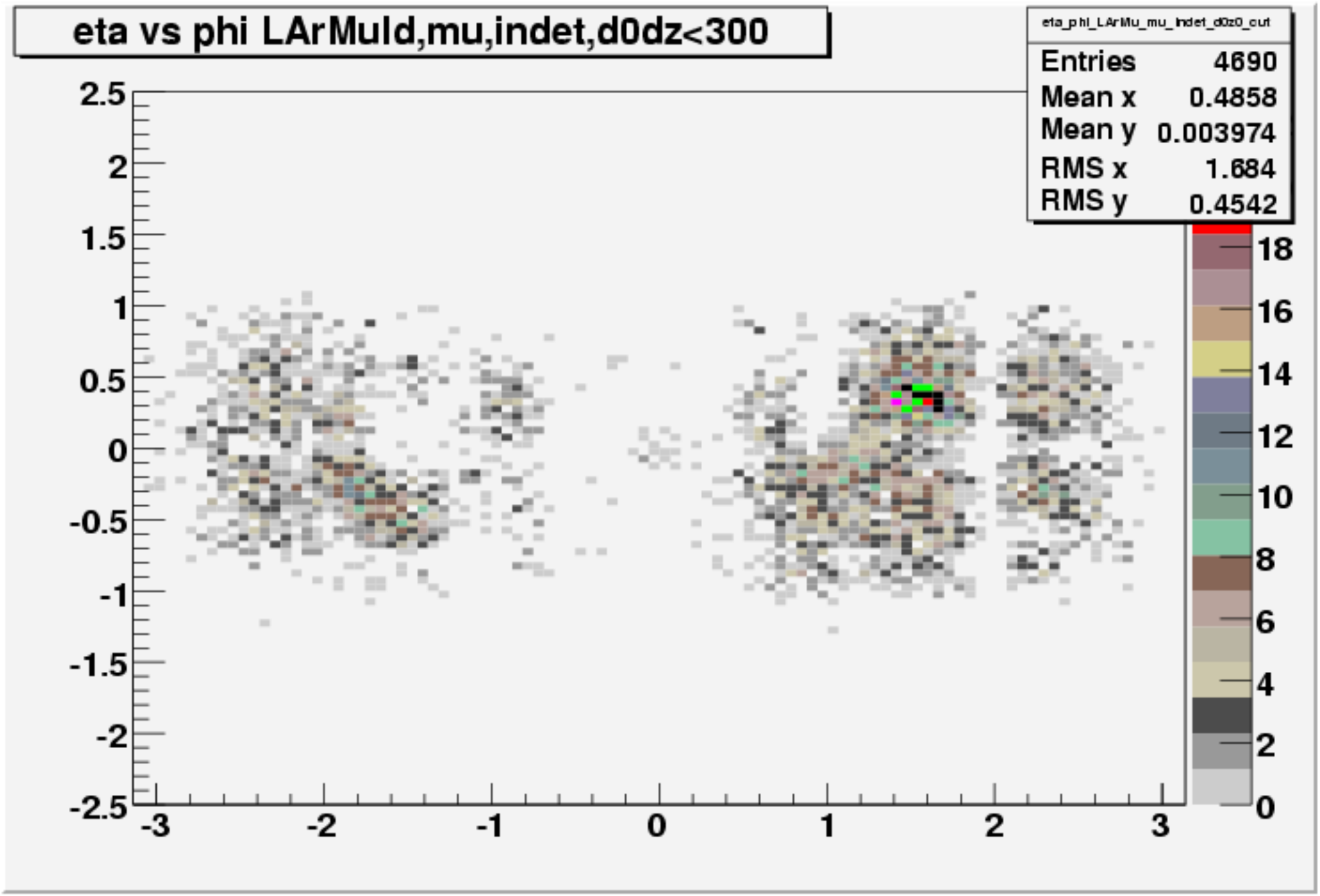

muon d0 with id match
mu_d0_idmatch
Entries 11151
Mean -3.401
RMS 218.5
1000
800
600
400
200
0
-3000
-2000
-1000
0
1000
2000
3000


muon z0 with id match
mu_z0_idmatch
Entries 11151
Mean 28.41
RMS 442.5
600
500
400
300
200
100
0
-3000
-2000
-1000
0
1000
2000
3000


indet d0 mu match
Indet_d0_mumatch
Entries 11151
Mean -5.028
RMS 199.8
400
350
300
250
200
150
100
50
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000


indet z0 mu match
Indet_z0_mumatch
Entries 11151
Mean 14.66
RMS 411.5
220
200
180
160
140
120
100
80
60
40
20
-1000
-800
-600
-400
-200
0
200
400
600
800
1000


e LArMuld. mu,indet,d0z0<300
e_LArMu_mu_indet_d0z0_cut
Entries 4690
Mean 348.7
RMS 196.7
350
300
250
200
150
100
50
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000


eta vs phi LArMuId,mu,indet,d0dz<300
eta_phi_LArMu_mu_indet_d0z0_cut
Entries 4690
Mean x 0.4858
Mean y 0.003974
RMS x 1.684
RMS y 0.4542
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
18
16
14
12
10
8
6
4
2
0