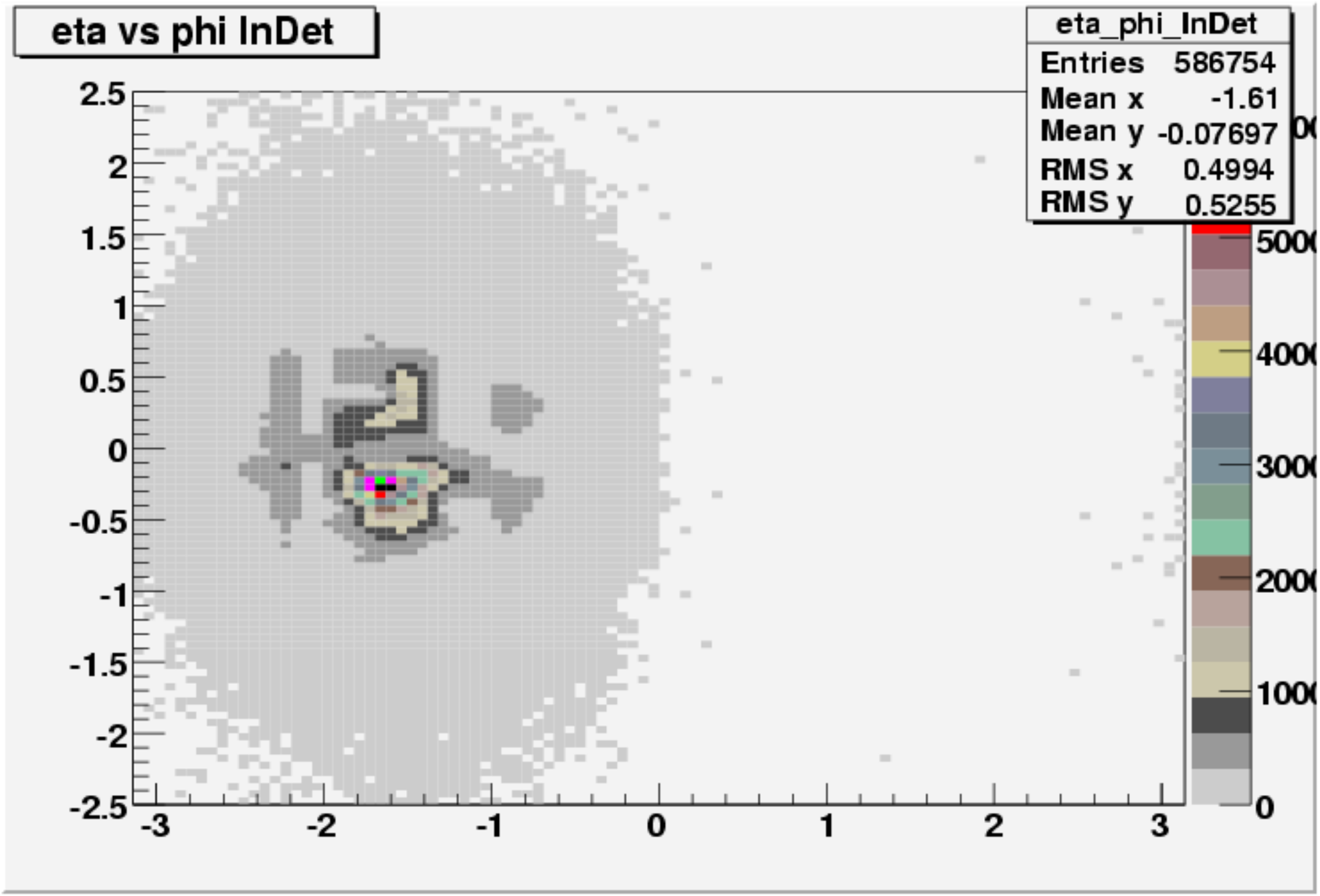
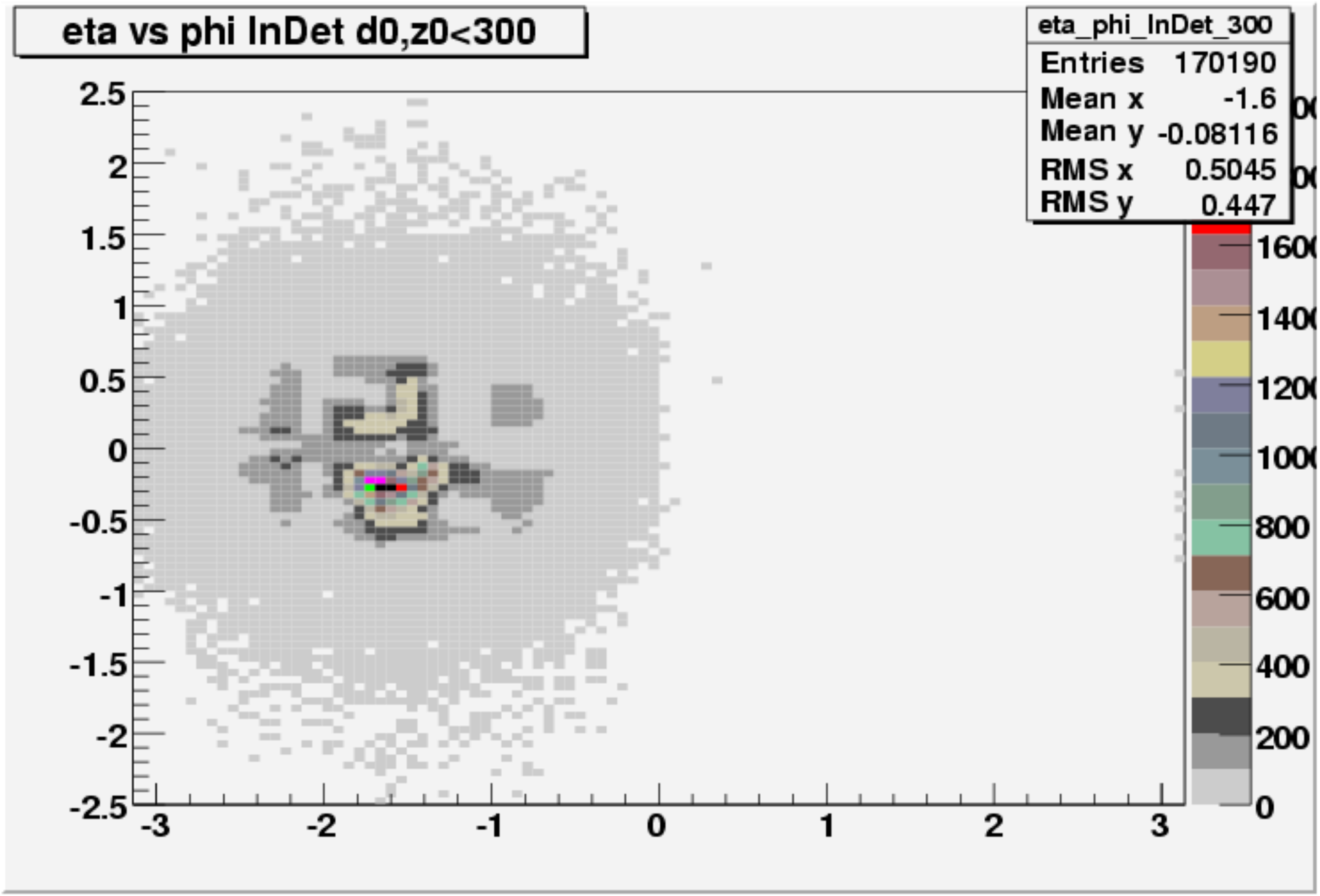
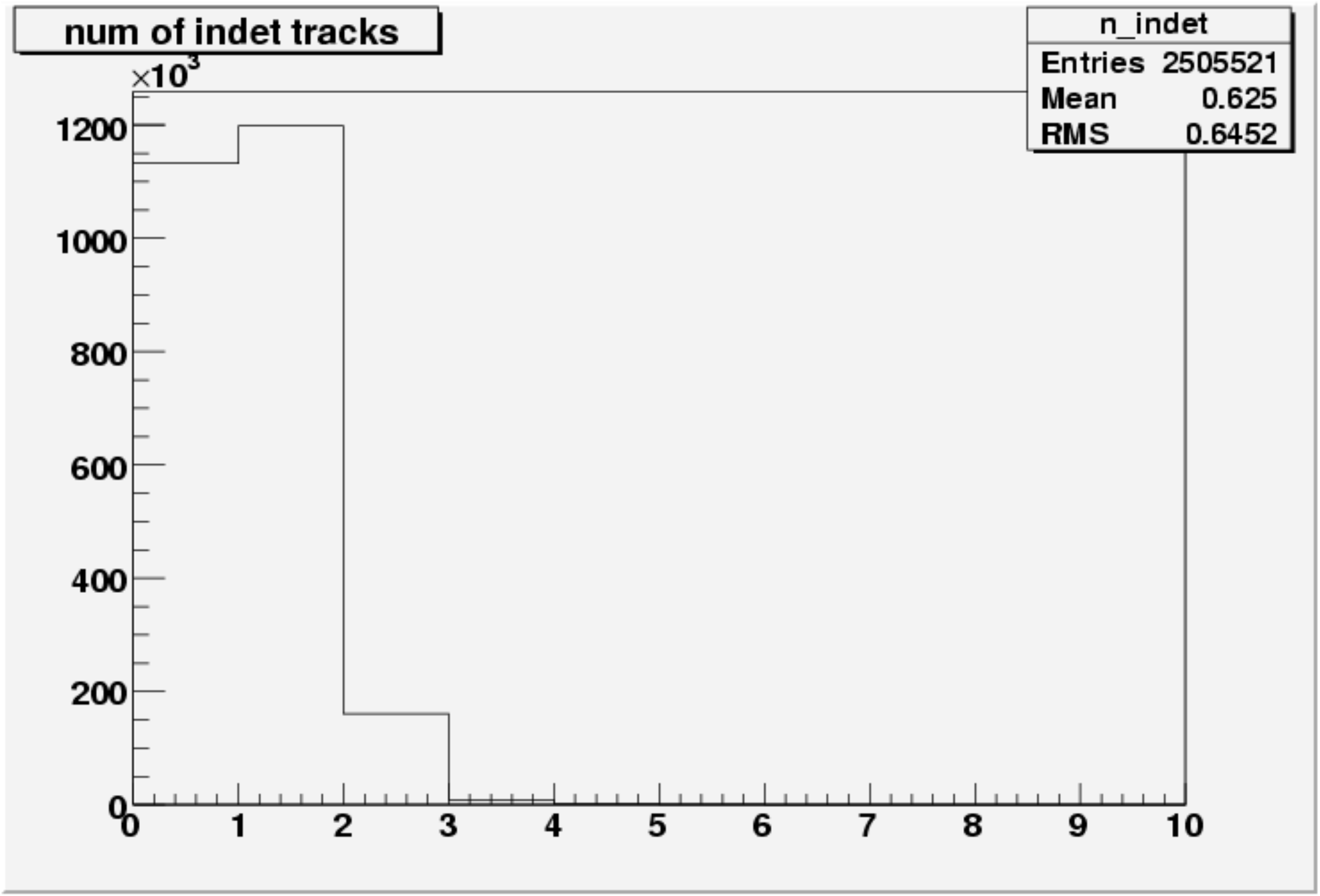
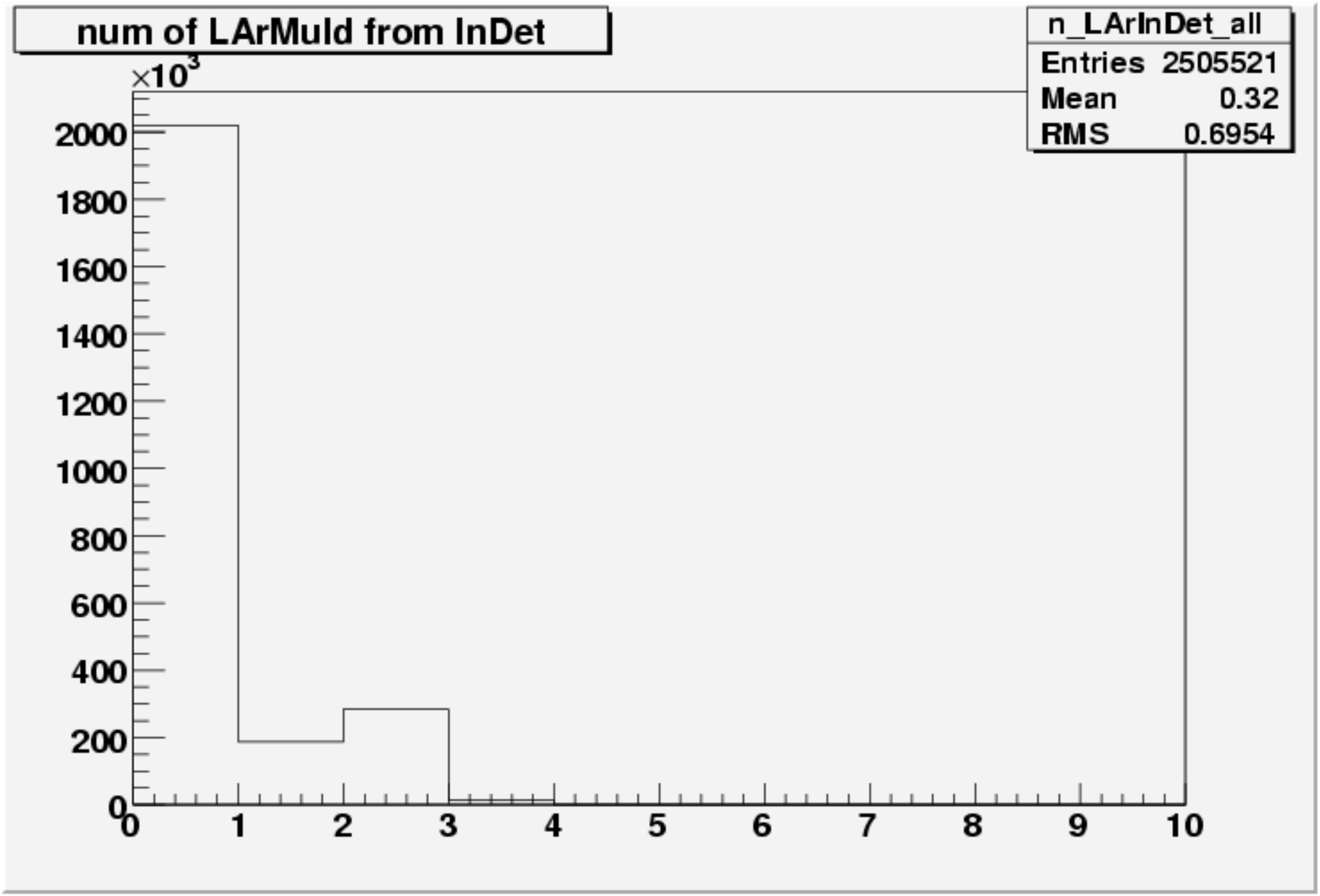
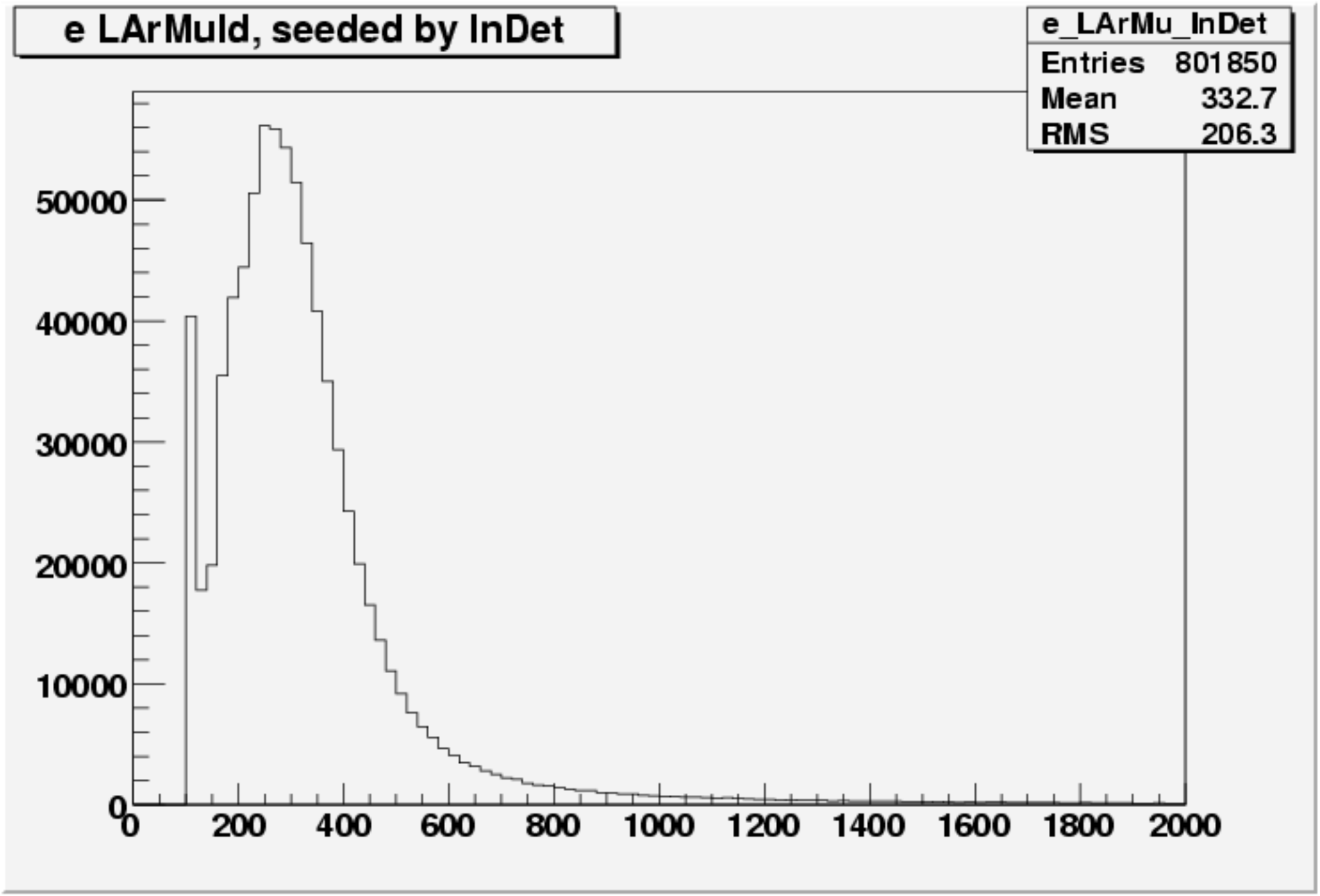
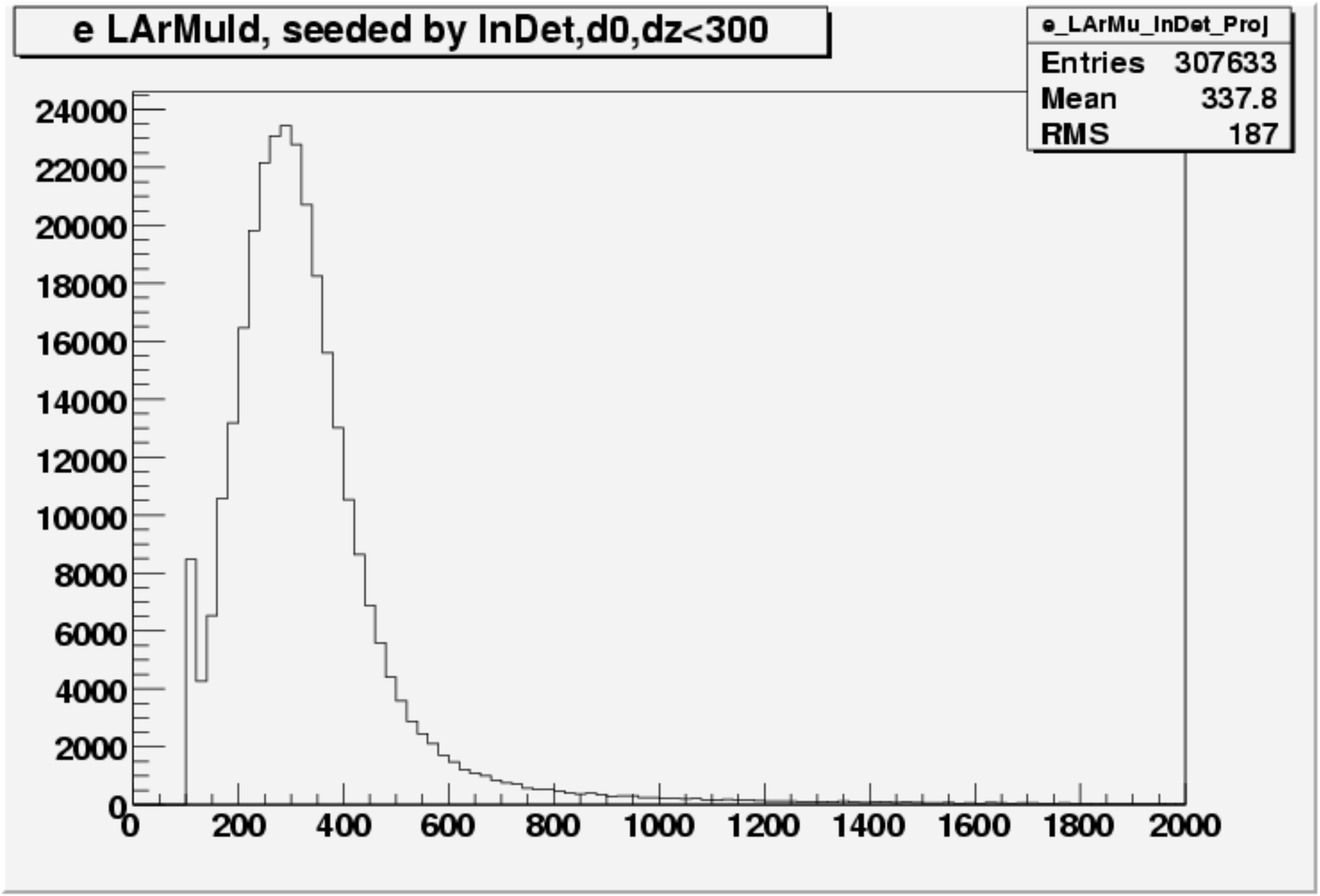

eta vs phi InDet
eta_phi_InDet
Entries 586754
Mean x -1.61
Mean y -0.07697
RMS x 0.4994
RMS y 0.5255
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
5000
4000
3000
2000
1000
0

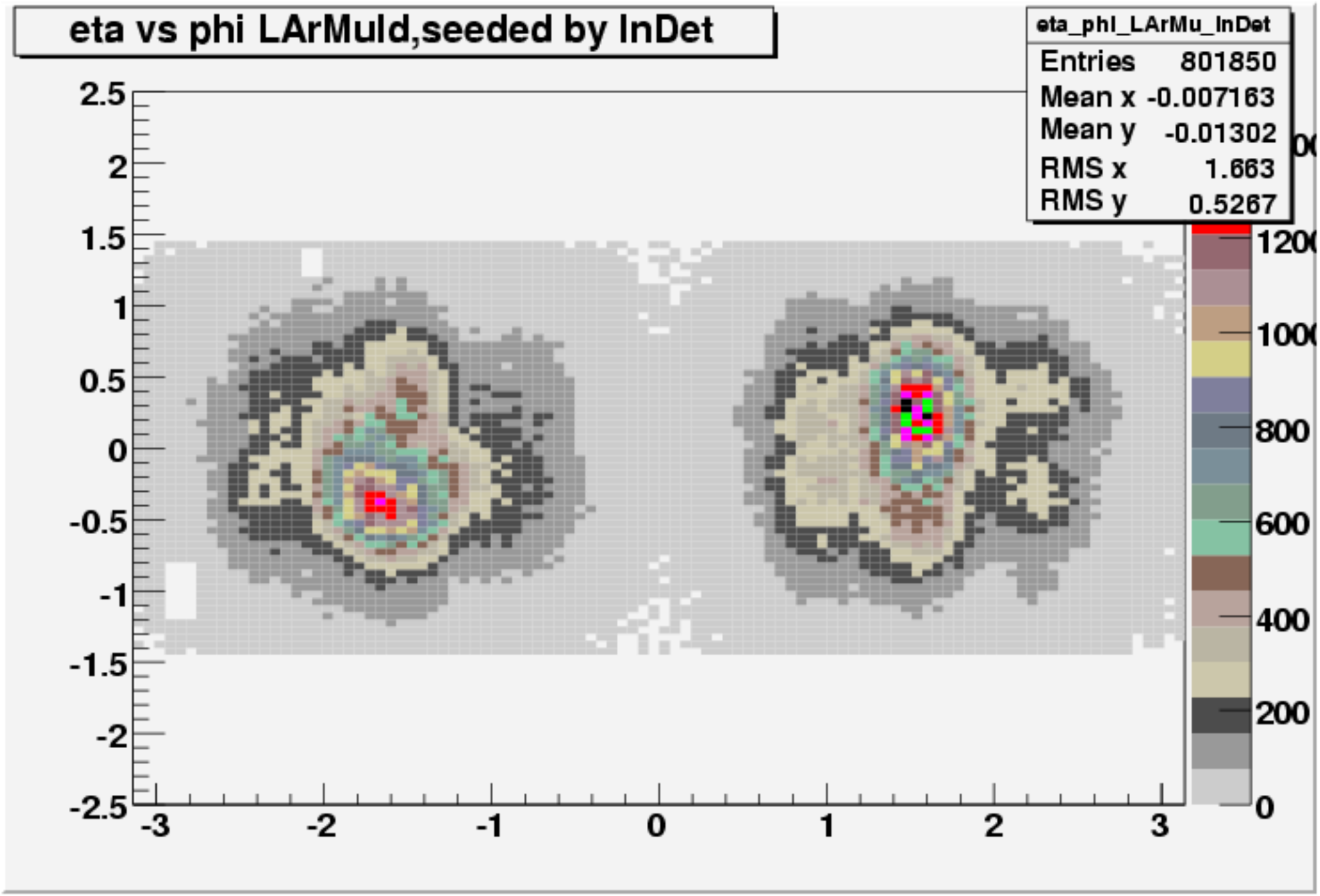

eta vs phi InDet d0,z0<300
eta_phi_InDet_300
Entries 170190
Mean x -1.6
Mean y -0.08116
RMS x 0.5045
RMS y 0.447
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
1600
1400
1200
1000
800
600
400
200
0

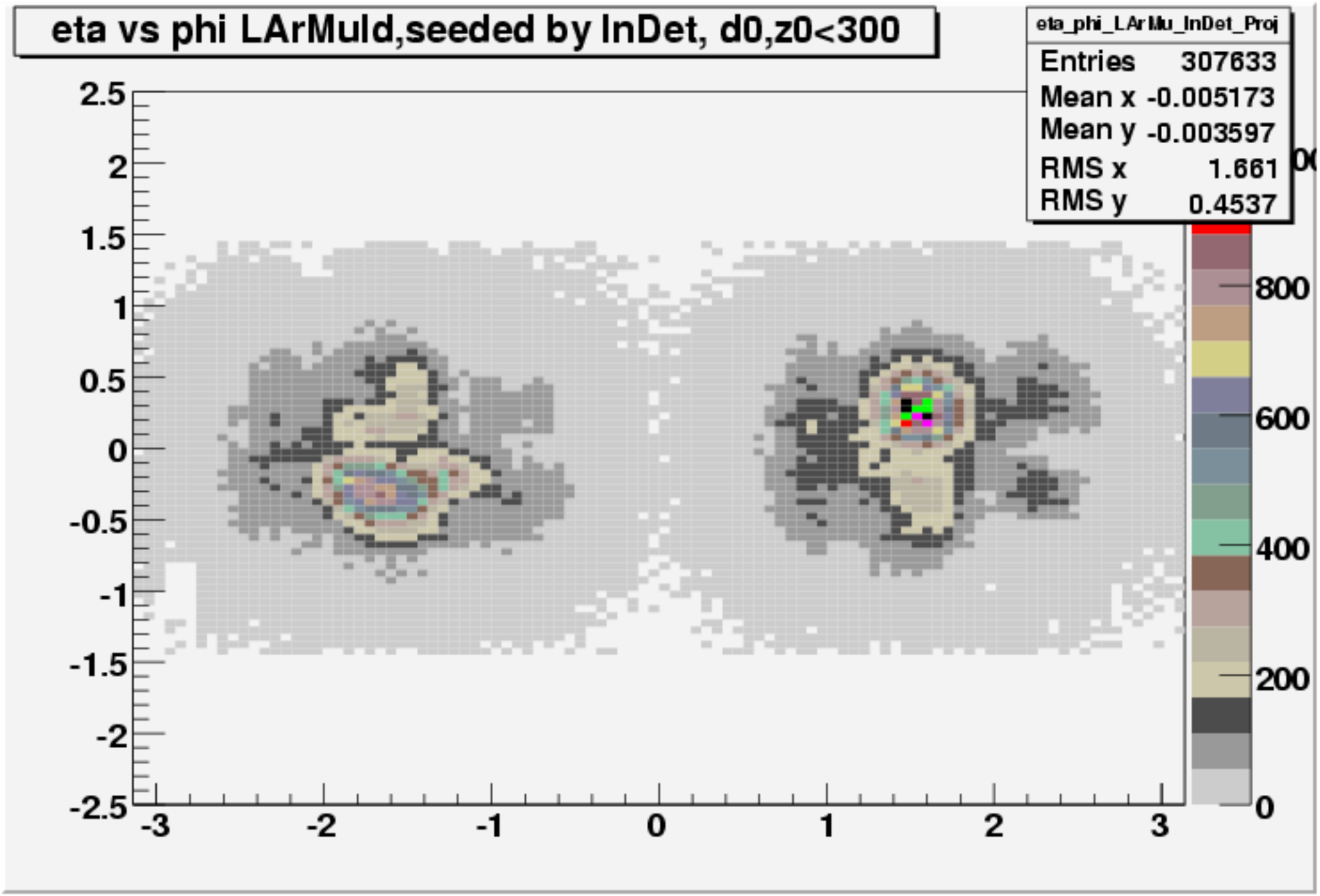

num of indet tracks
n_indet
Entries 2505521
Mean 0.625
RMS 0.6452
×10^3
1200
1000
800
600
400
200
0
0
1
2
3
4
5
6
7
8
9
10

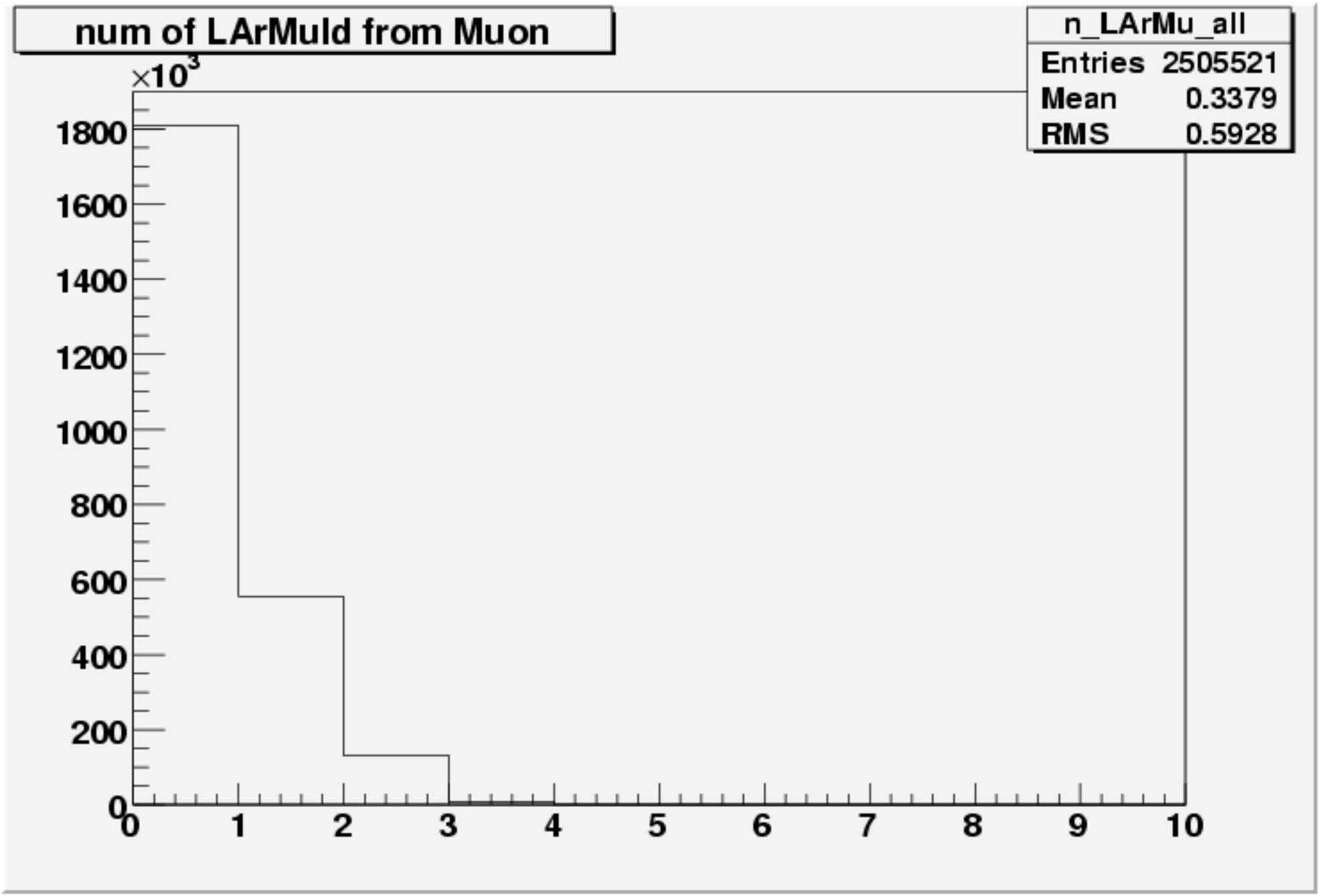

num of LArMuId from InDet
n_LArInDet_all
Entries 2505521
Mean 0.32
RMS 0.6954
×10^3
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
1
2
3
4
5
6
7
8
9
10

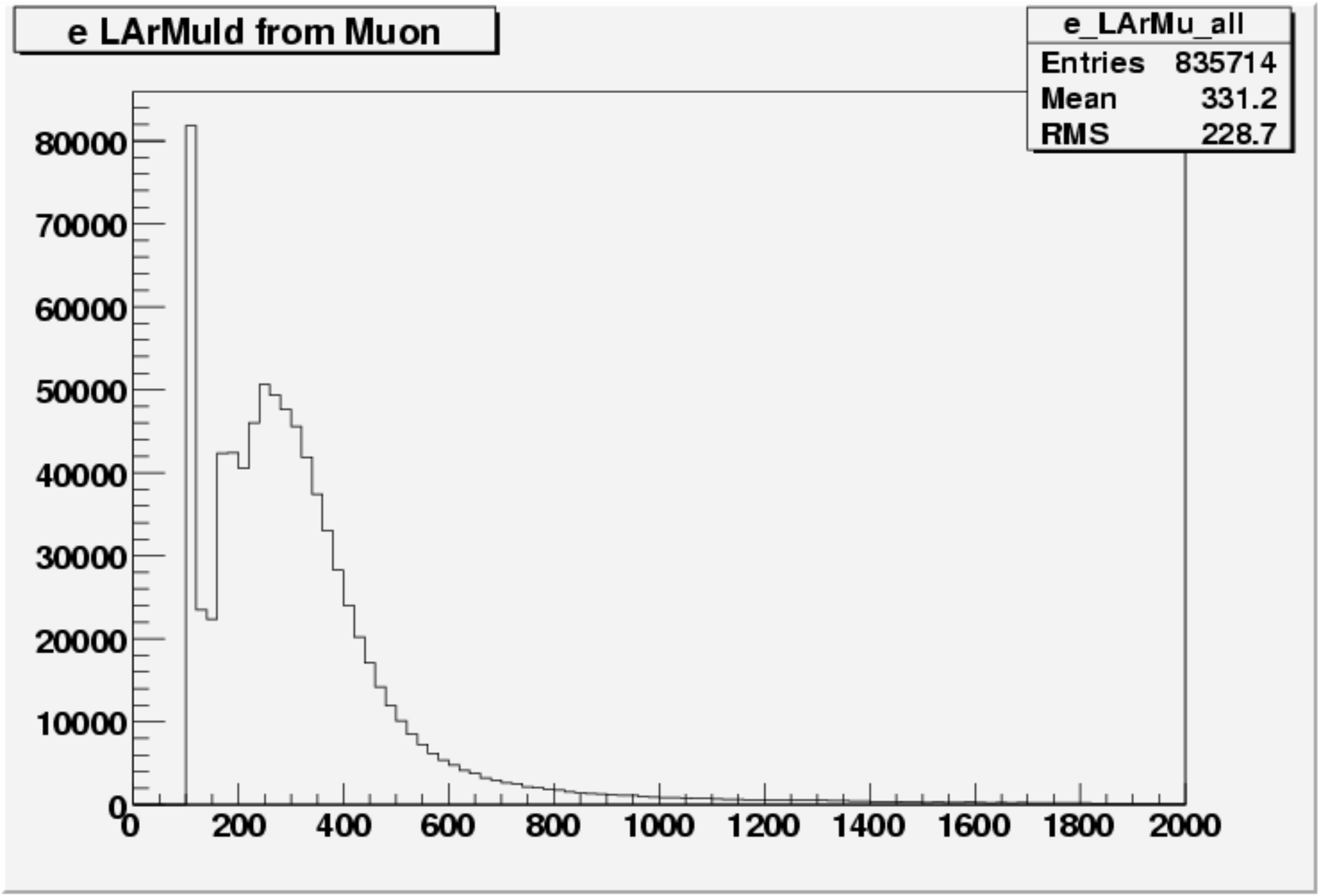

e LArMuId, seeded by InDet
e_LArMu_InDet
Entries 801850
Mean 332.7
RMS 206.3
50000
40000
30000
20000
10000
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

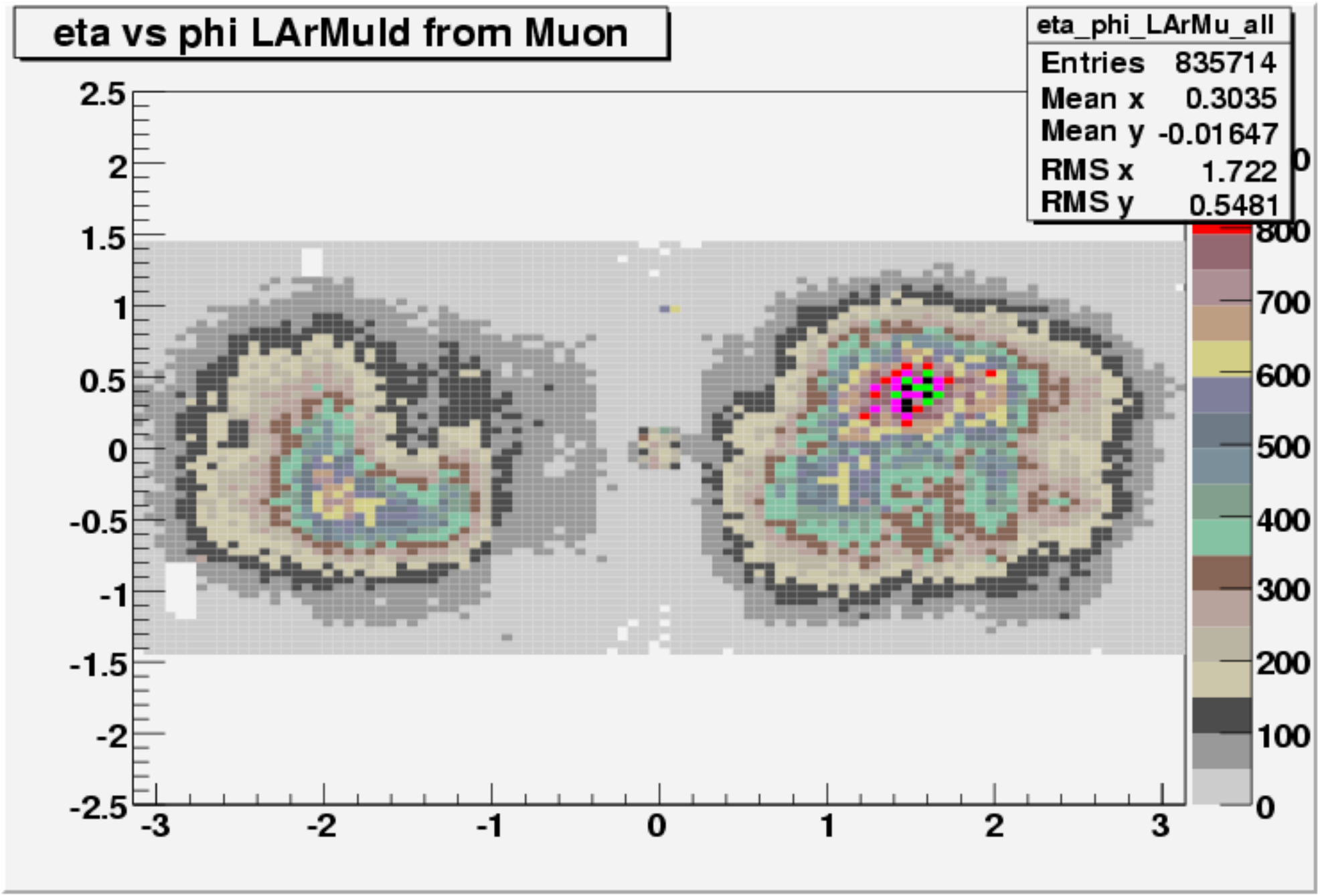

e LArMuId, seeded by InDet,d0,dz<300
e_LArMu_InDet_Proj
Entries 307633
Mean 337.8
RMS 187
24000
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

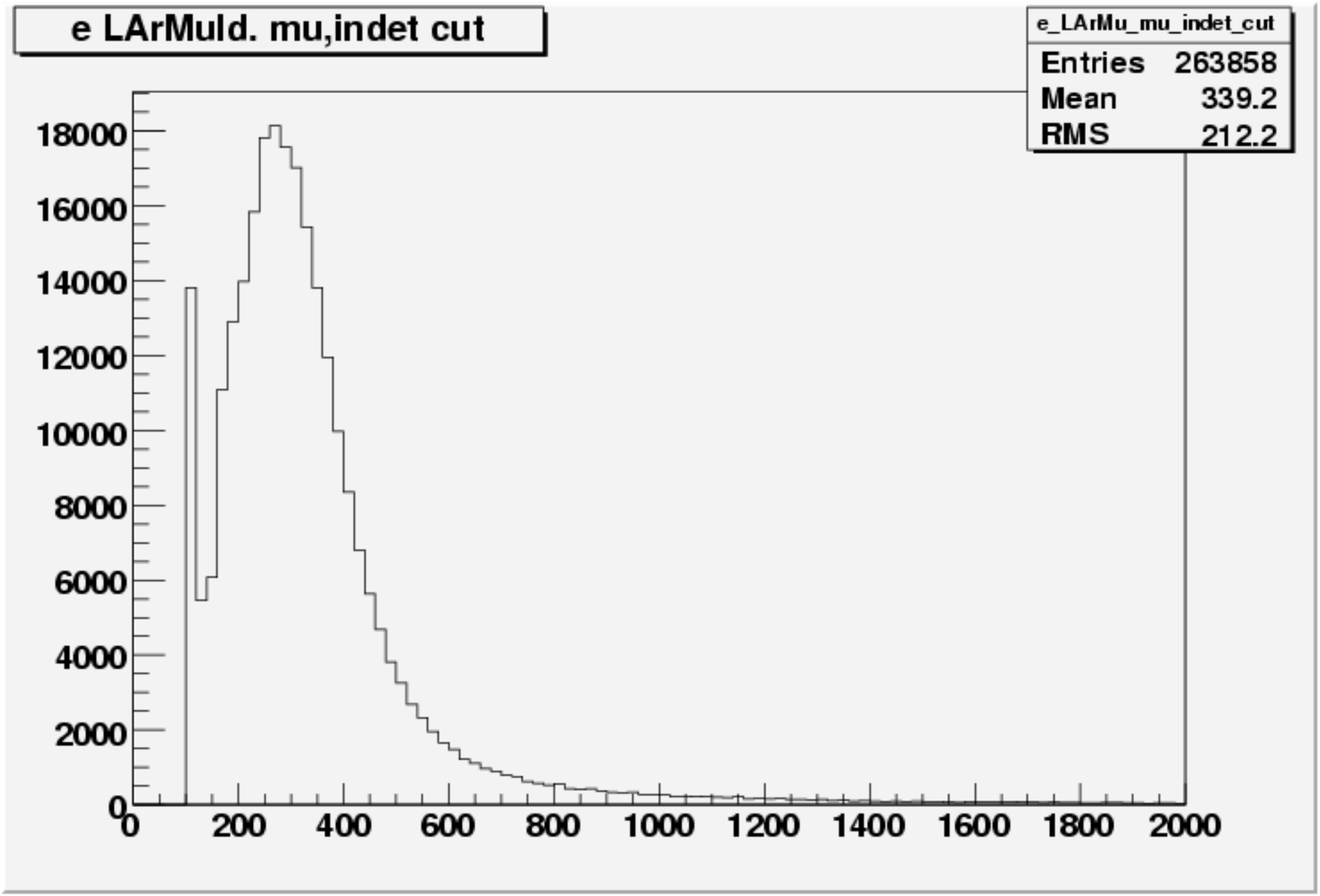

eta vs phi LArMuId,seeded by InDet
eta_phi_LArMu_InDet
Entries 801850
Mean x -0.007163
Mean y -0.01302
RMS x 1.663
RMS y 0.5267
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
1200
1000
800
600
400
200
0

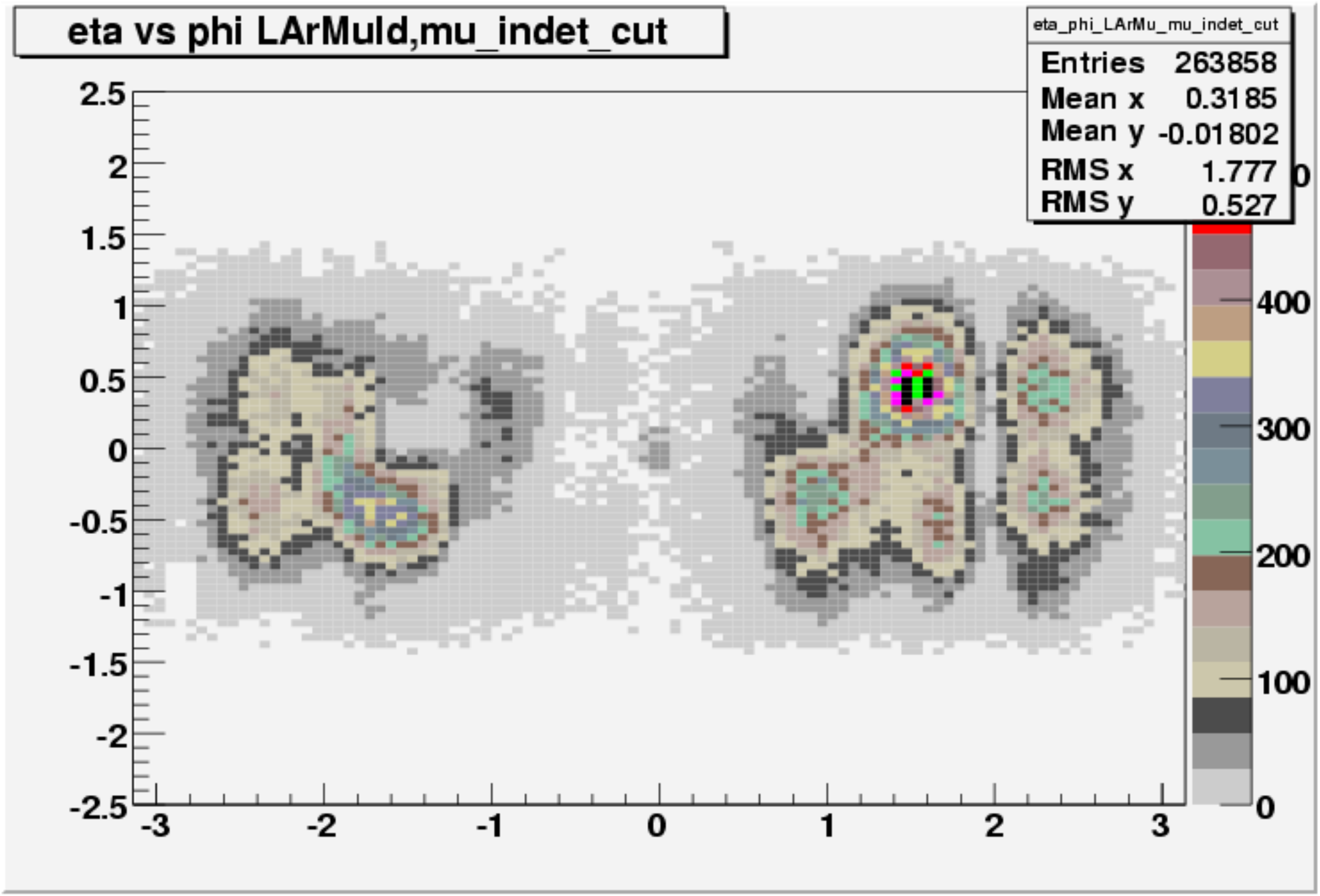

eta vs phi LArMuId,seeded by InDet, d0,z0<300
eta_phi_LArMu_InDet_Proj
Entries 307633
Mean x -0.005173
Mean y -0.003597
RMS x 1.661
RMS y 0.4537
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
800
600
400
200
0

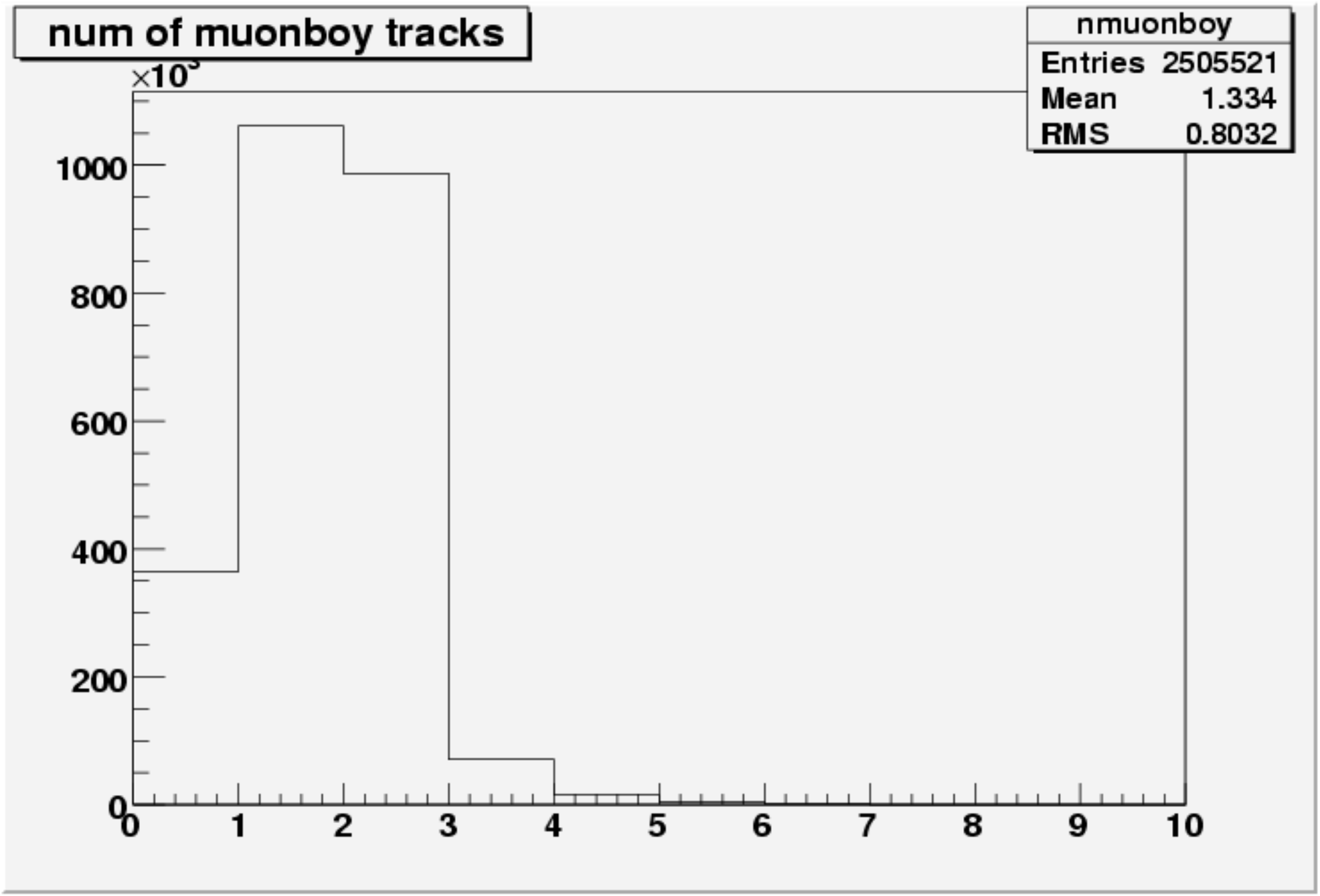

num of LArMuld from Muon
n_LArMu_all
Entries 2505521
Mean 0.3379
RMS 0.5928
×10^3
1800
1600
1400
1200
1000
800
600
400
200
0
0
1
2
3
4
5
6
7
8
9
10

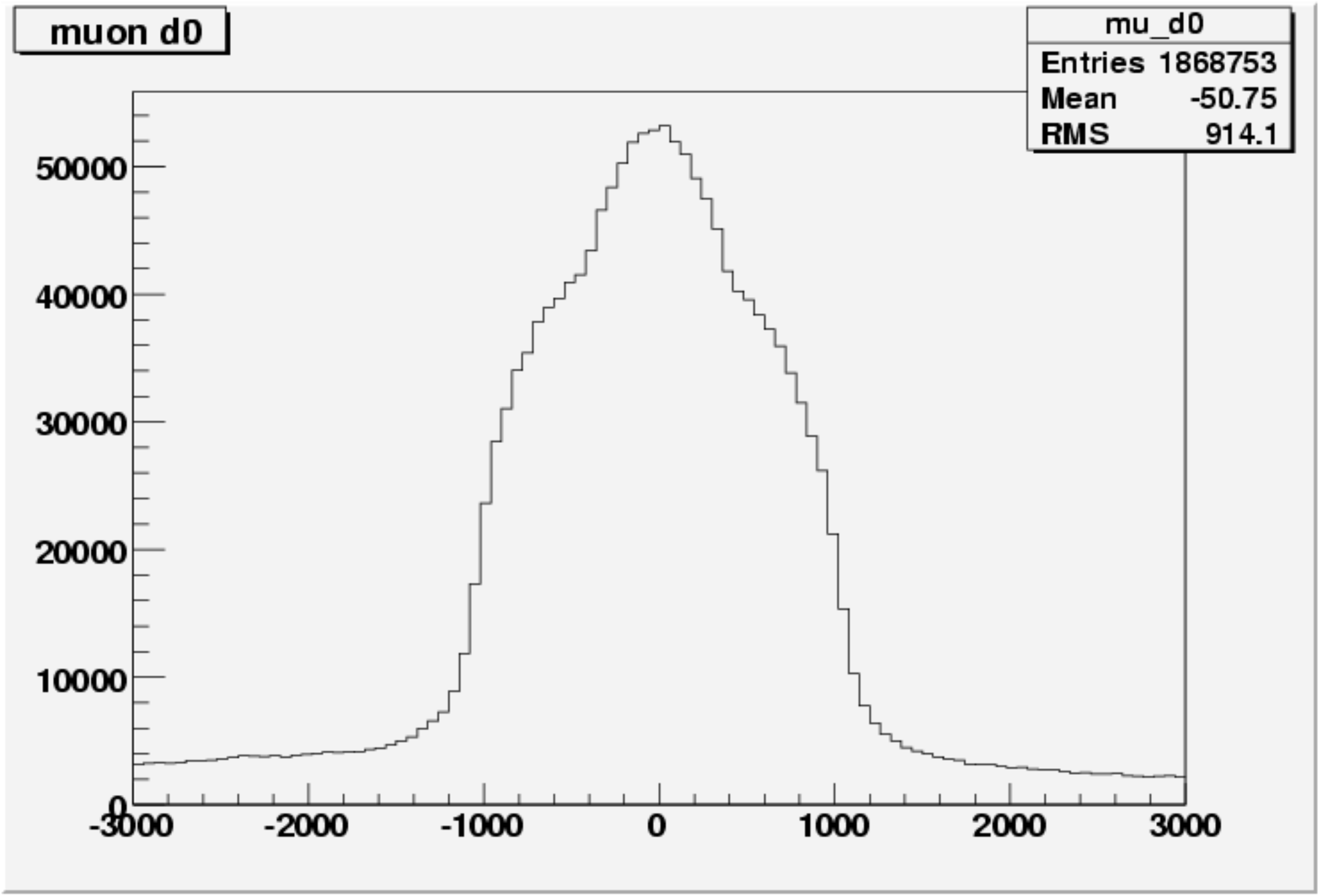

e LArMuld from Muon
e_LArMu_all
Entries 835714
Mean 331.2
RMS 228.7
80000
70000
60000
50000
40000
30000
20000
10000
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

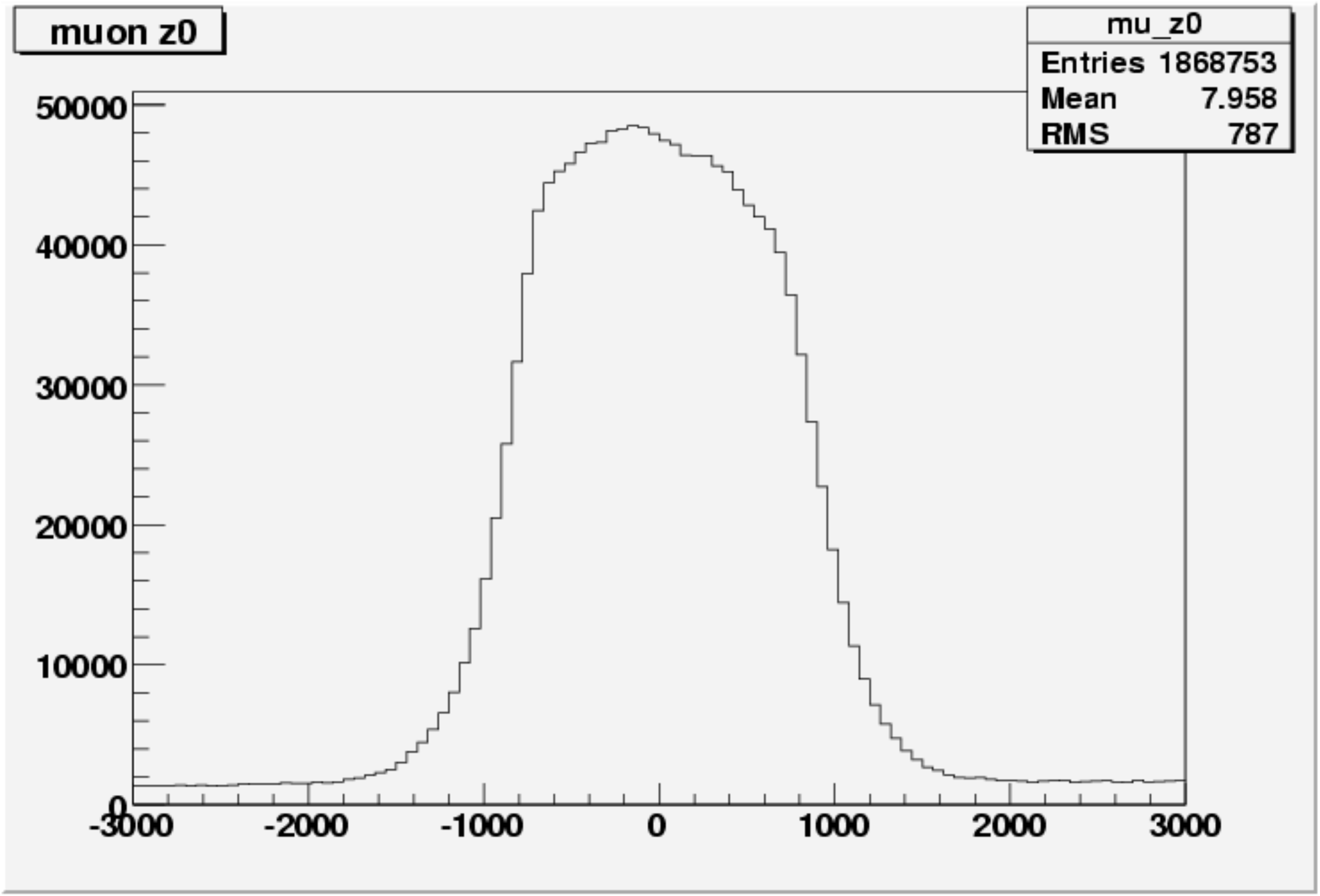

eta vs phi LArMuld from Muon
eta_phi_LArMu_all
Entries 835714
Mean x 0.3035
Mean y -0.01647
RMS x 1.722
RMS y 0.5481
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
800
700
600
500
400
300
200
100
0

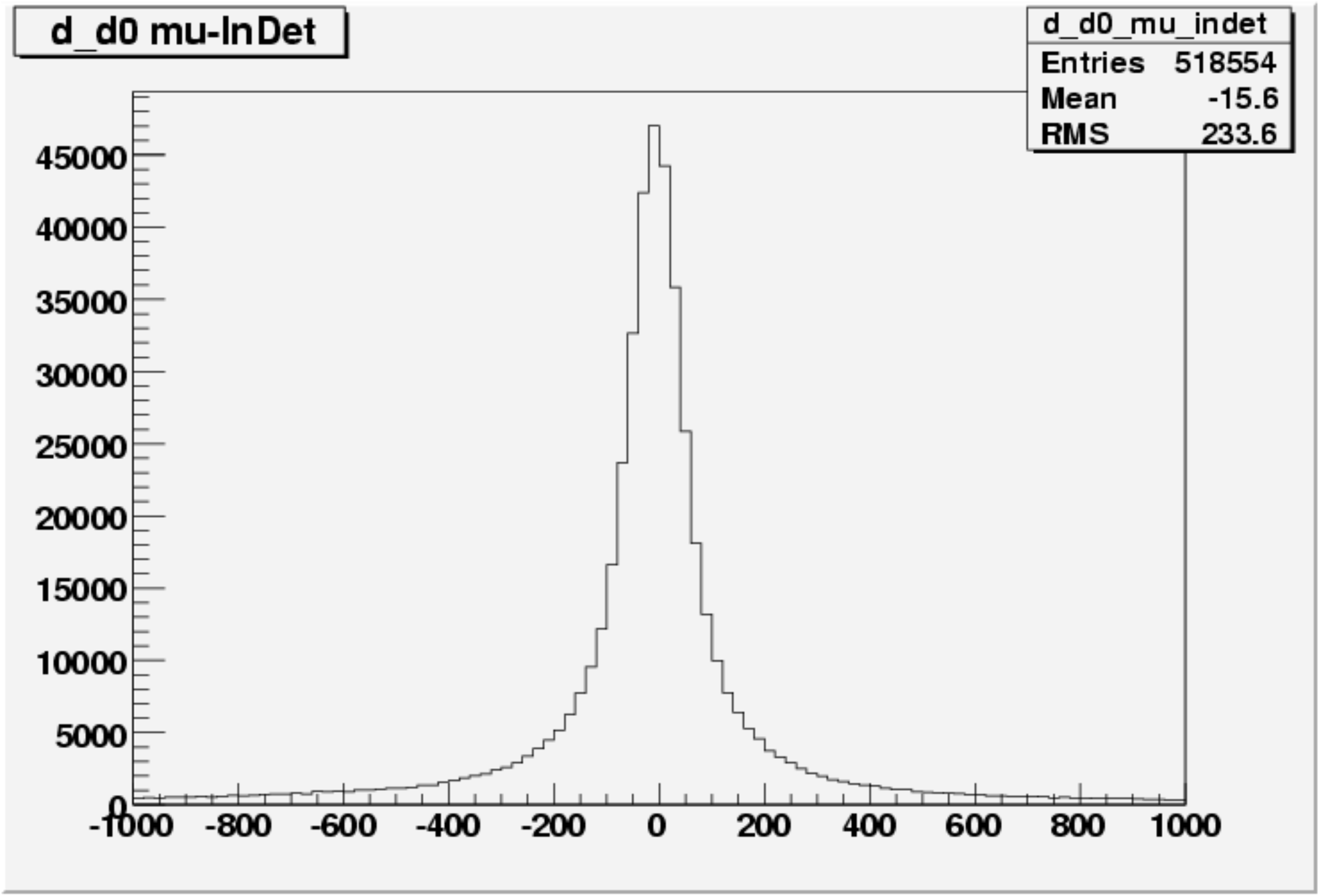

e LArMuld. mu,indet cut
e_LArMu_mu_indet_cut
Entries 263858
Mean 339.2
RMS 212.2
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

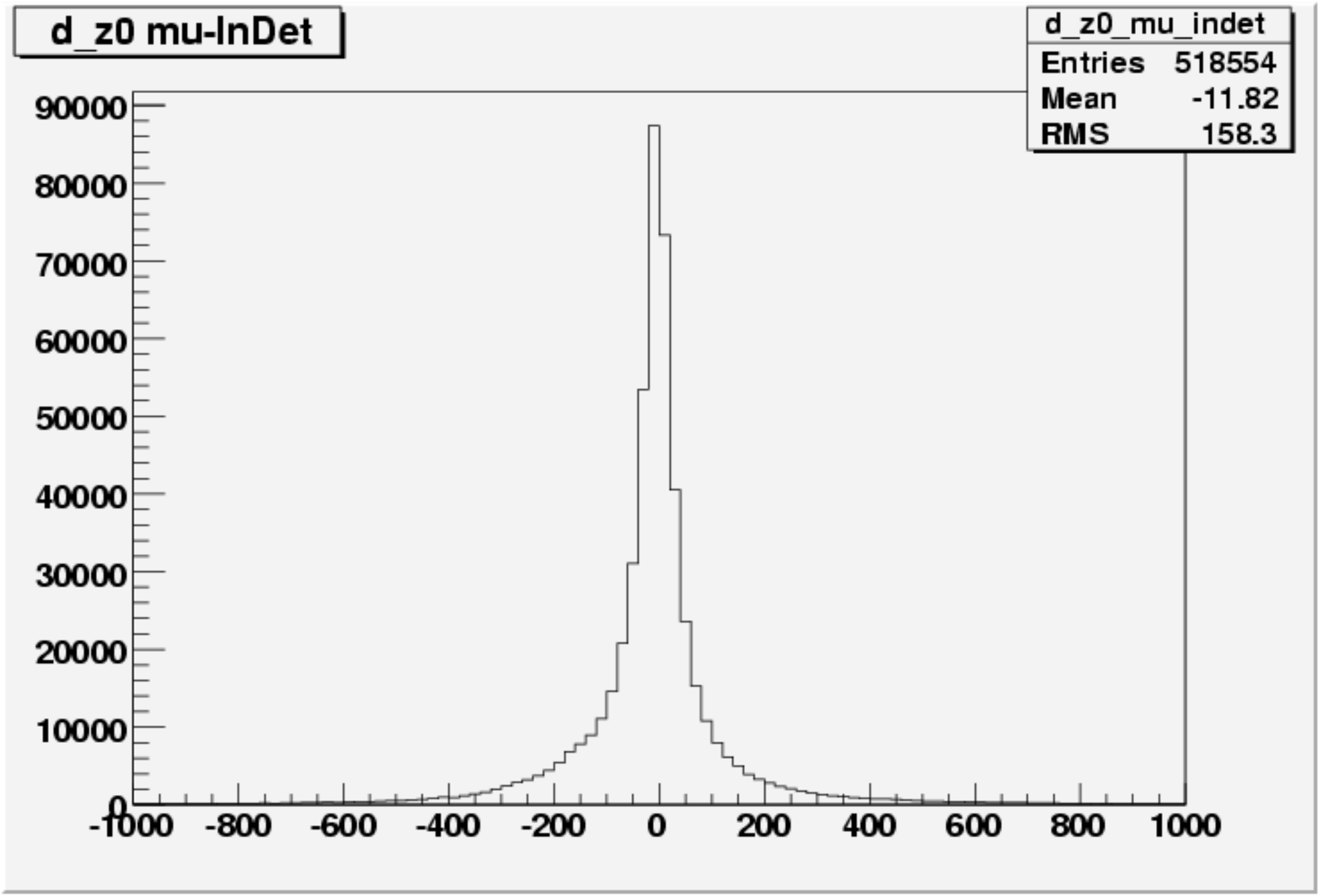

eta vs phi LArMuId,mu_indet_cut
eta_phi_LArMu_mu_indet_cut
Entries 263858
Mean x 0.3185
Mean y -0.01802
RMS x 1.777
RMS y 0.527
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
400
300
200
100
0

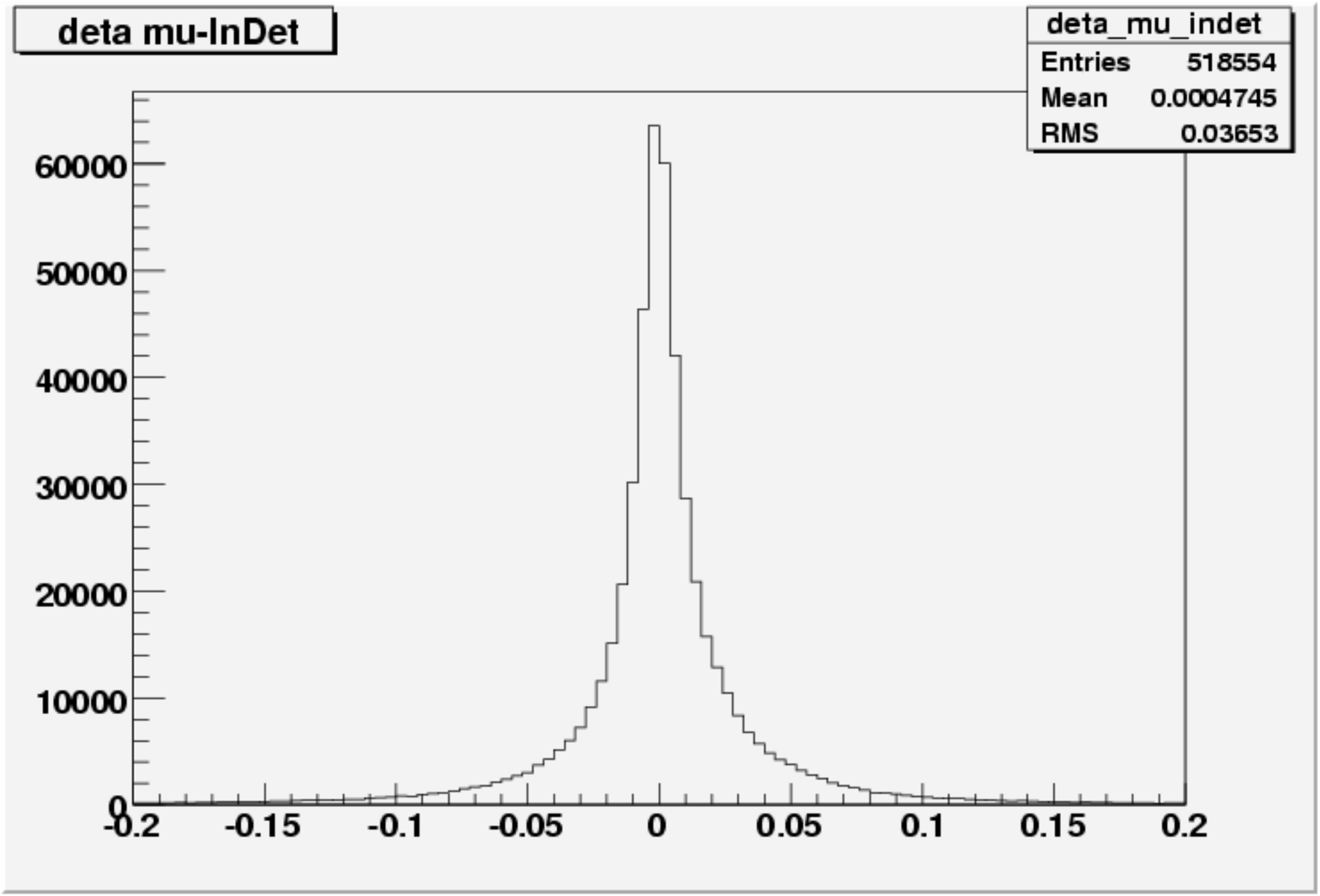

num of muonboy tracks
nmuonboy
Entries 2505521
Mean 1.334
RMS 0.8032
×10³
1000
800
600
400
200
0
0
1
2
3
4
5
6
7
8
9
10

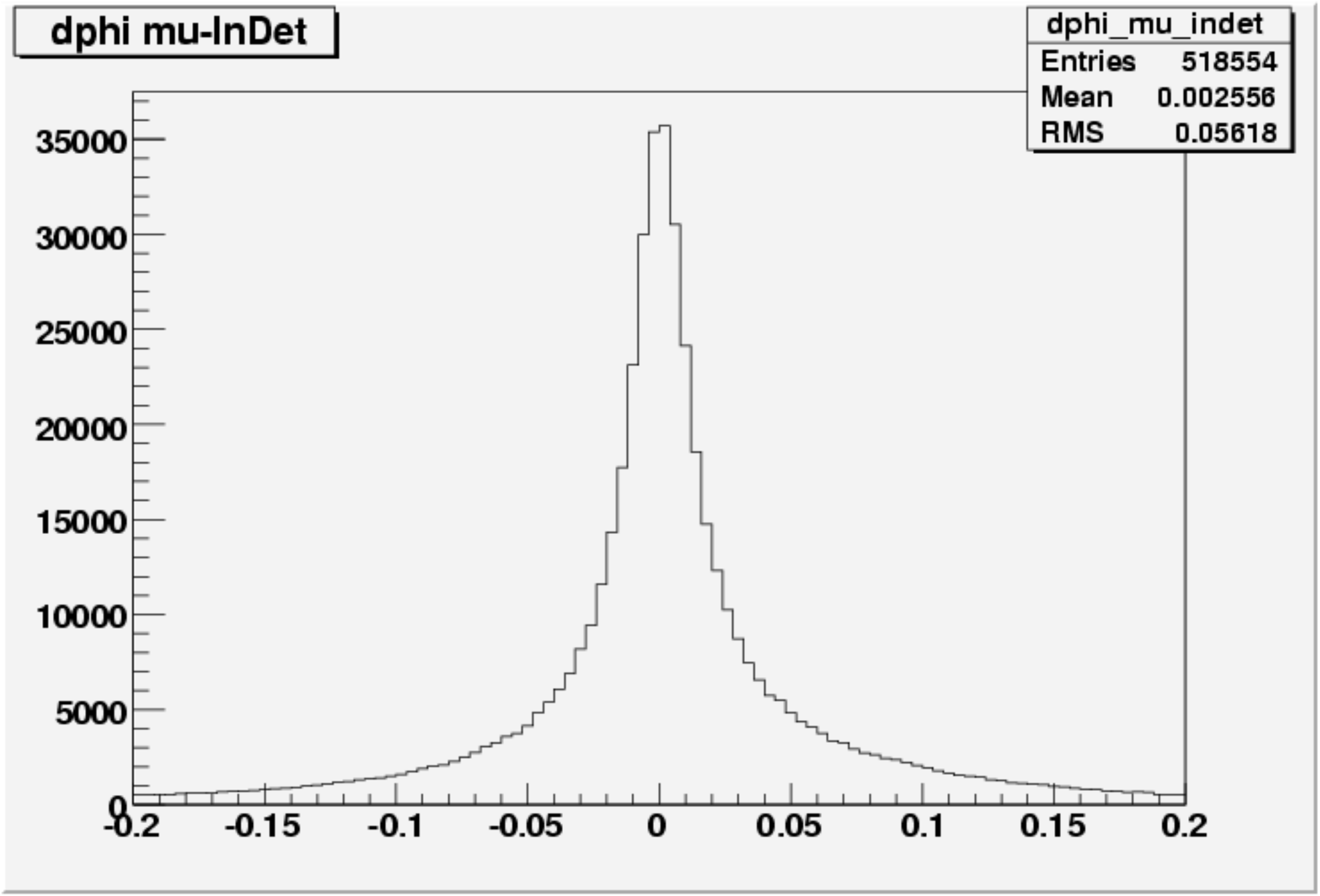

muon d0
mu_d0
Entries 1868753
Mean -50.75
RMS 914.1
50000
40000
30000
20000
10000
0
-3000
-2000
-1000
0
1000
2000
3000

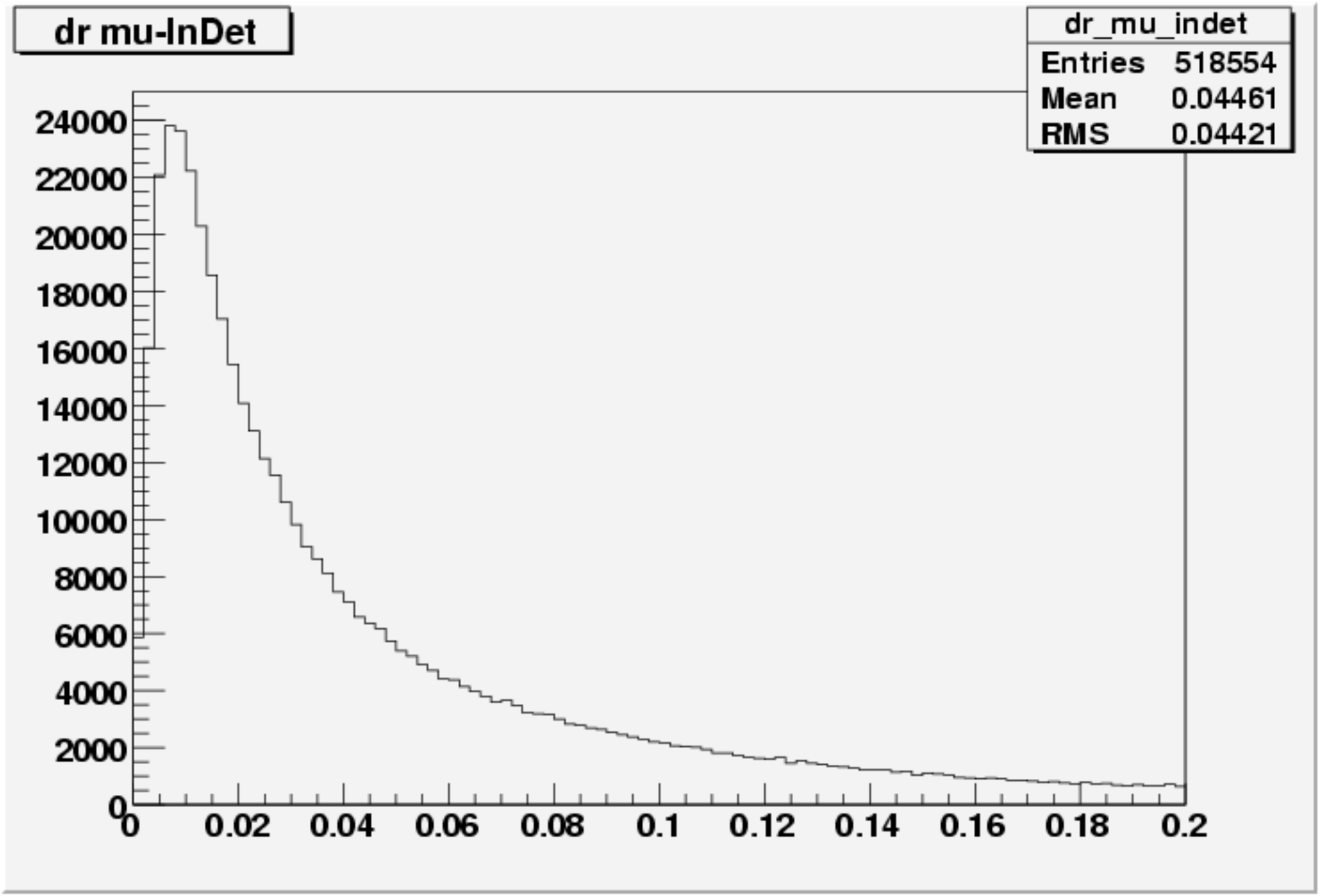

muon z0
mu_z0
Entries 1868753
Mean 7.958
RMS 787
50000
40000
30000
20000
10000
0
-3000
-2000
-1000
0
1000
2000
3000

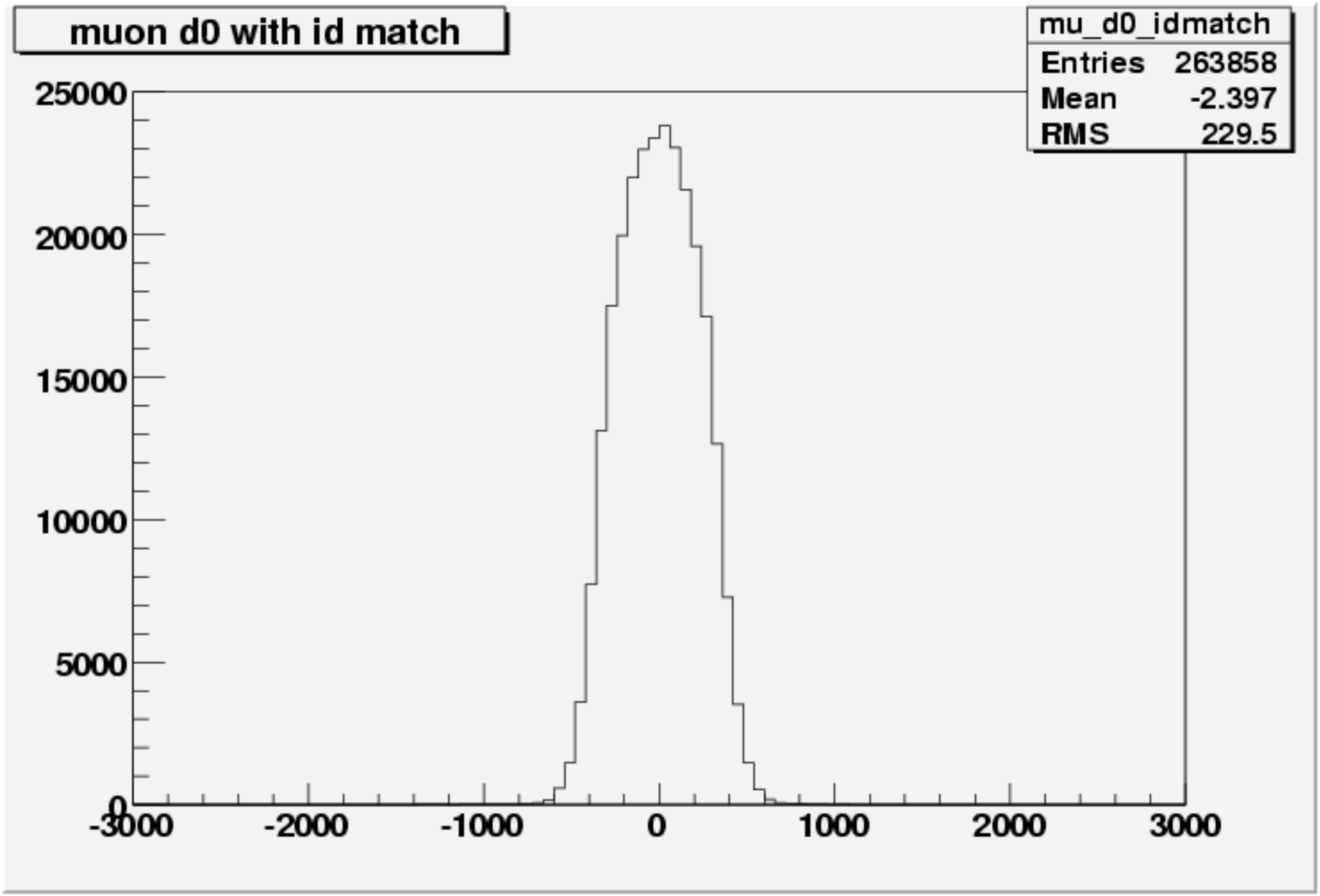

d_d0 mu-InDet
d_d0_mu_indet
Entries 518554
Mean -15.6
RMS 233.6
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000

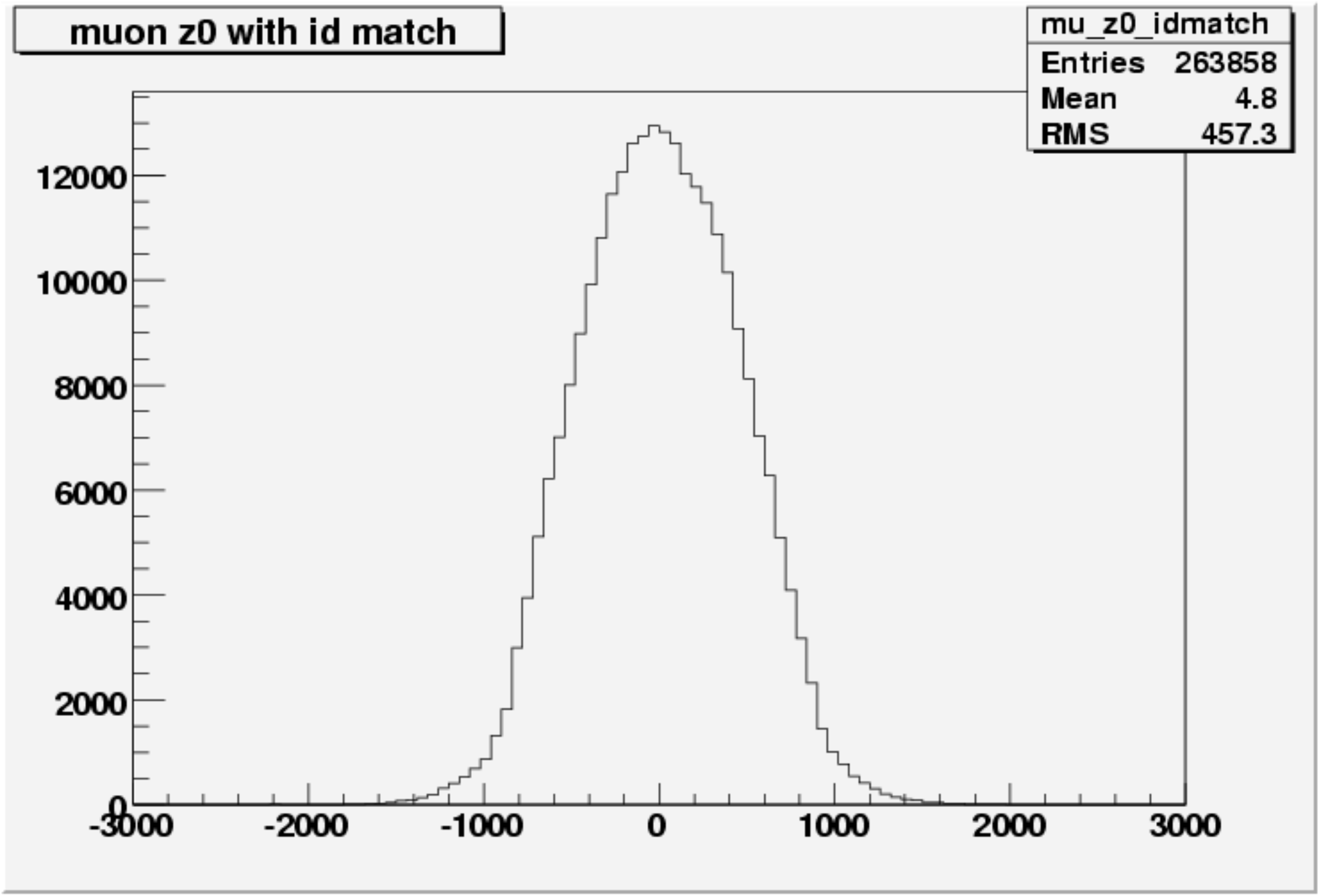

d_z0 mu-InDet
d_z0_mu_indet
Entries 518554
Mean -11.82
RMS 158.3
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000

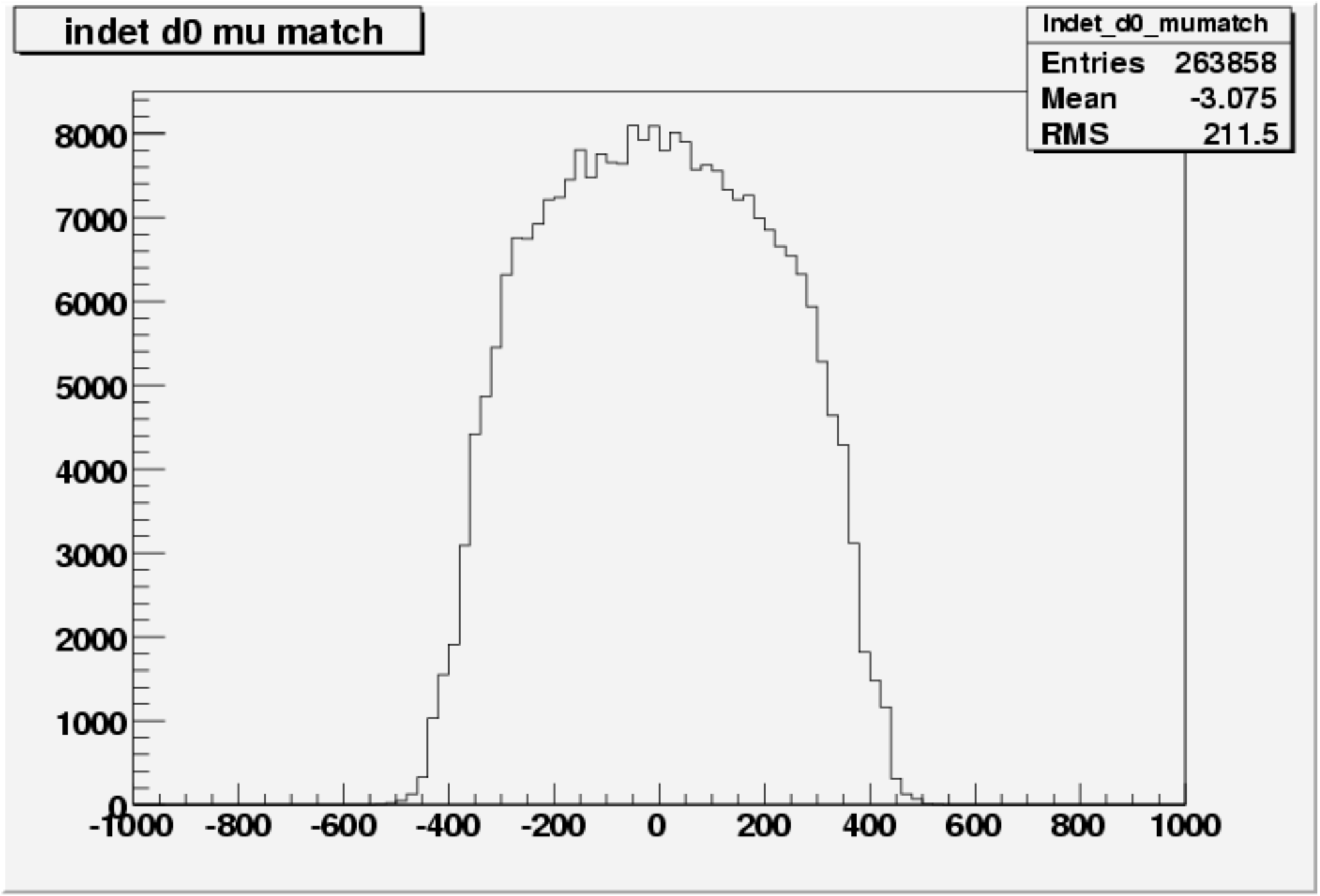

deta mu-InDet
deta_mu_indet
Entries 518554
Mean 0.0004745
RMS 0.03653
60000
50000
40000
30000
20000
10000
0
-0.2
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
0.2

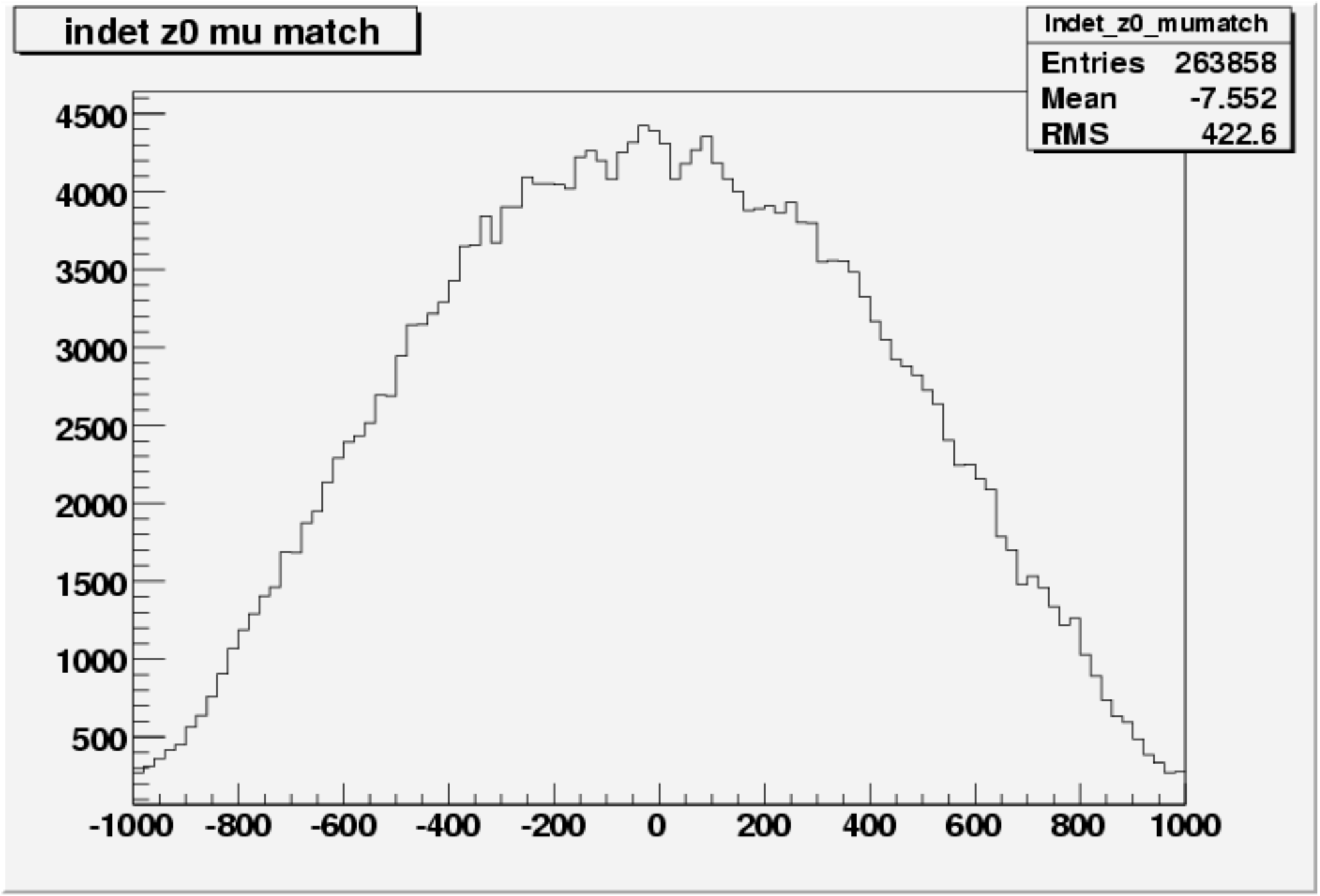

dphi mu-InDet
dphi_mu_indet
Entries 518554
Mean 0.002556
RMS 0.05618
35000
30000
25000
20000
15000
10000
5000
0
-0.2
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
0.2

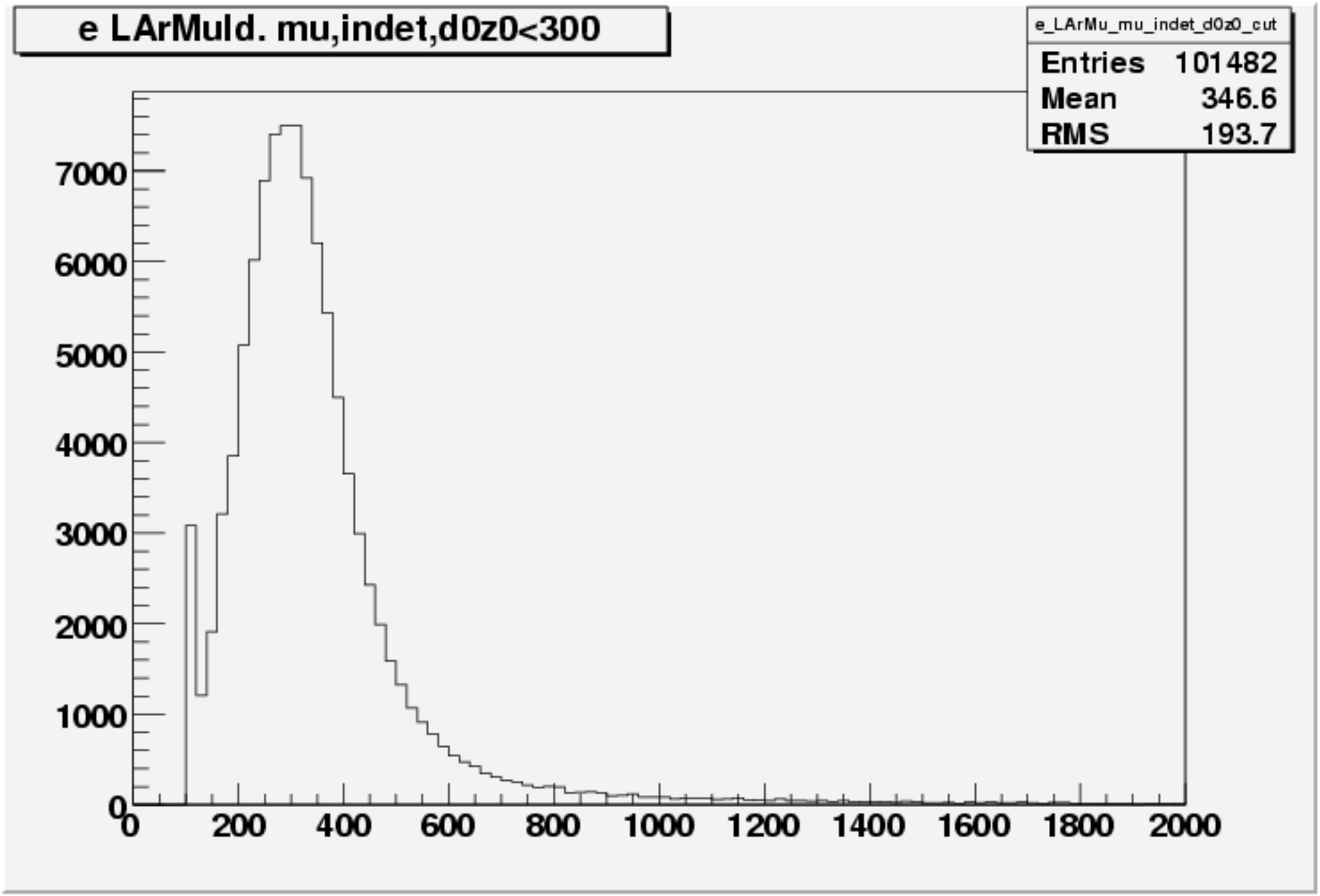

dr mu-InDet
dr_mu_indet
Entries 518554
Mean 0.04461
RMS 0.04421
24000
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2

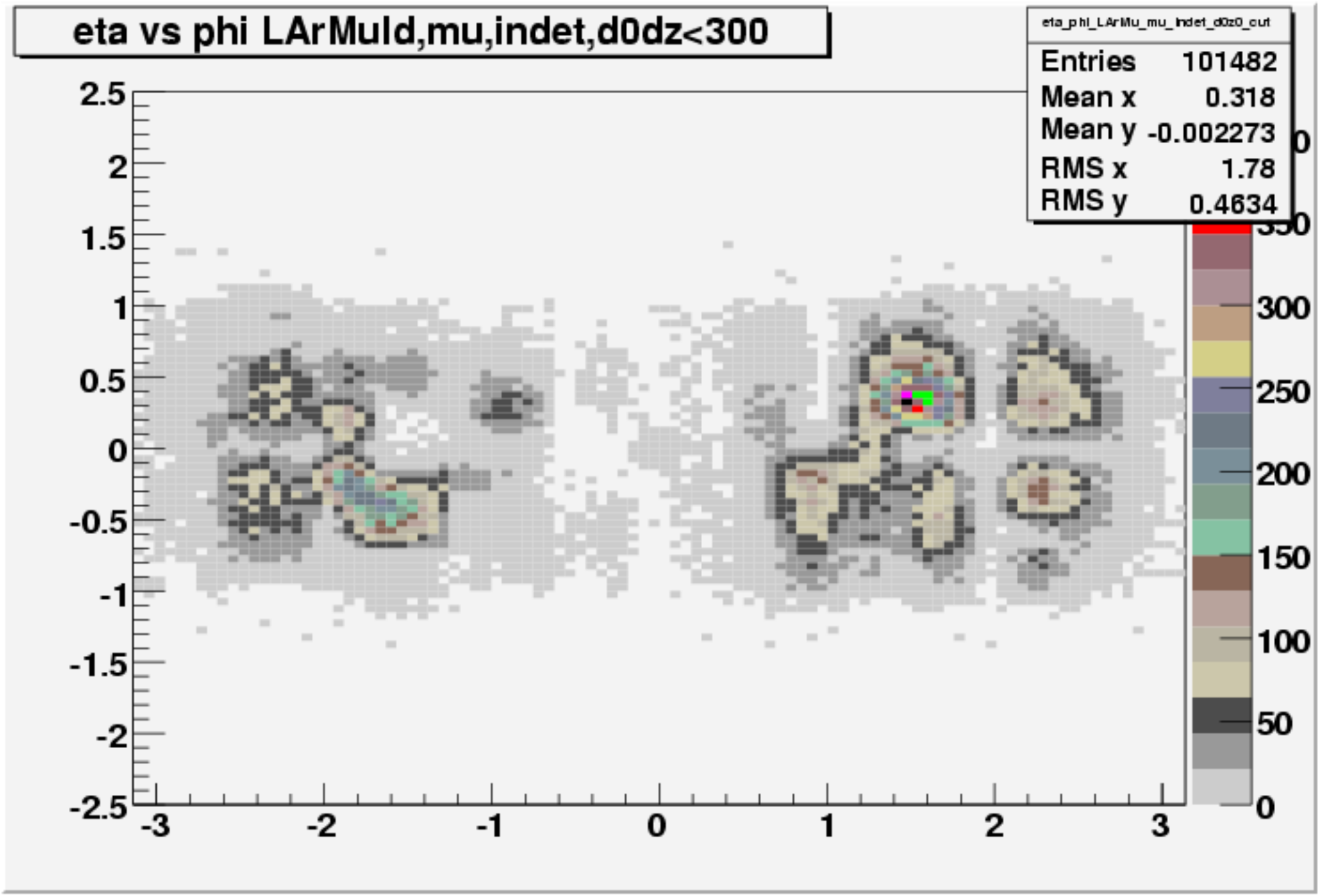

muon d0 with id match
mu_d0_idmatch
Entries 263858
Mean -2.397
RMS 229.5
25000
20000
15000
10000
5000
0
-3000
-2000
-1000
0
1000
2000
3000


muon z0 with id match
mu_z0_idmatch
Entries 263858
Mean 4.8
RMS 457.3
12000
10000
8000
6000
4000
2000
0
-3000
-2000
-1000
0
1000
2000
3000


indet d0 mu match
Indet_d0_mumatch
Entries 263858
Mean -3.075
RMS 211.5
8000
7000
6000
5000
4000
3000
2000
1000
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000


indet z0 mu match
Indet_z0_mumatch
Entries 263858
Mean -7.552
RMS 422.6
4500
4000
3500
3000
2500
2000
1500
1000
500
-1000
-800
-600
-400
-200
0
200
400
600
800
1000


e LArMuld. mu,indet,d0z0<300
e_LArMu_mu_indet_d0z0_cut
Entries 101482
Mean 346.6
RMS 193.7
7000
6000
5000
4000
3000
2000
1000
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 101482
Mean x 0.318
Mean y -0.002273
RMS x 1.78
RMS y 0.4634
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
350
300
250
200
150
100
50
0