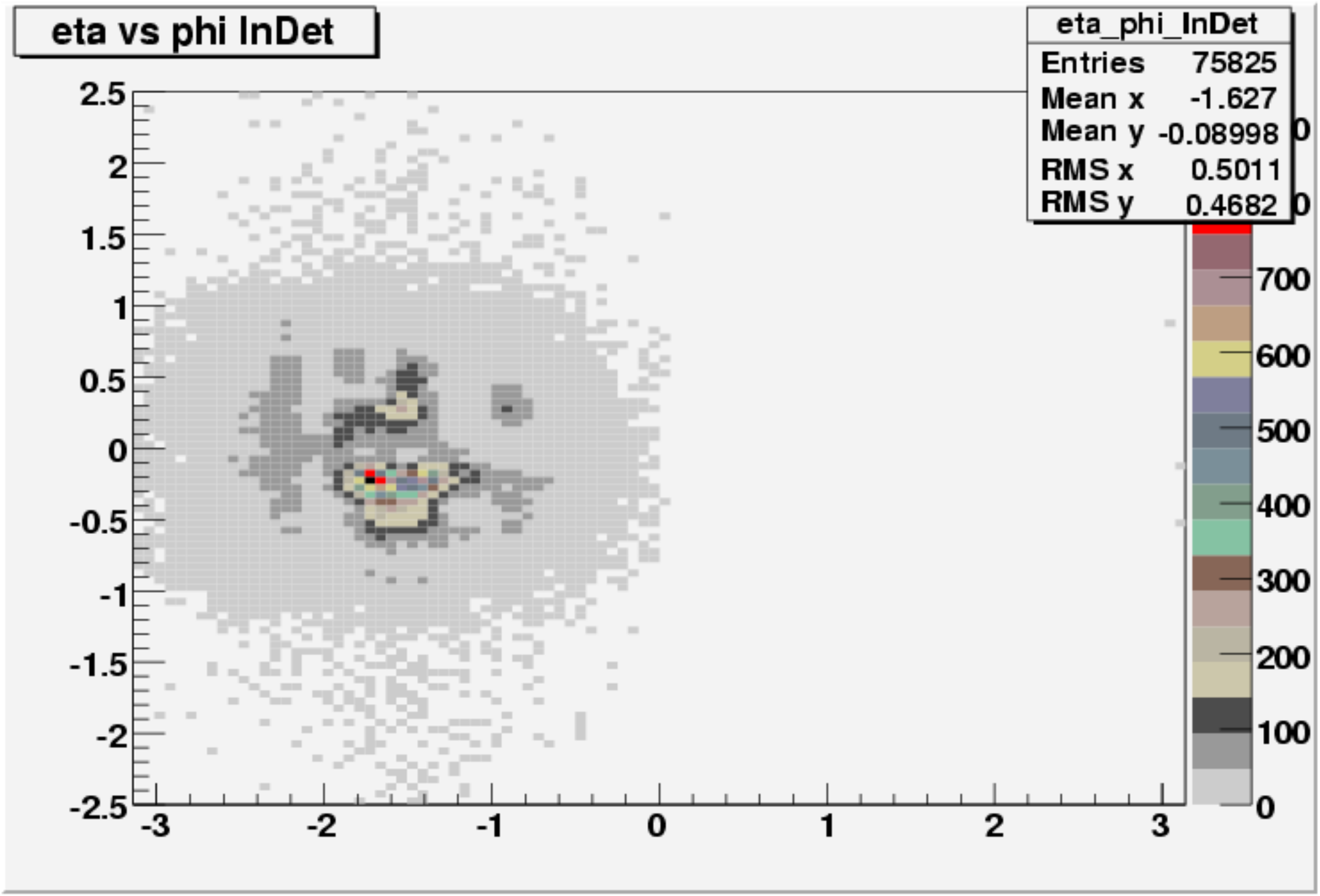
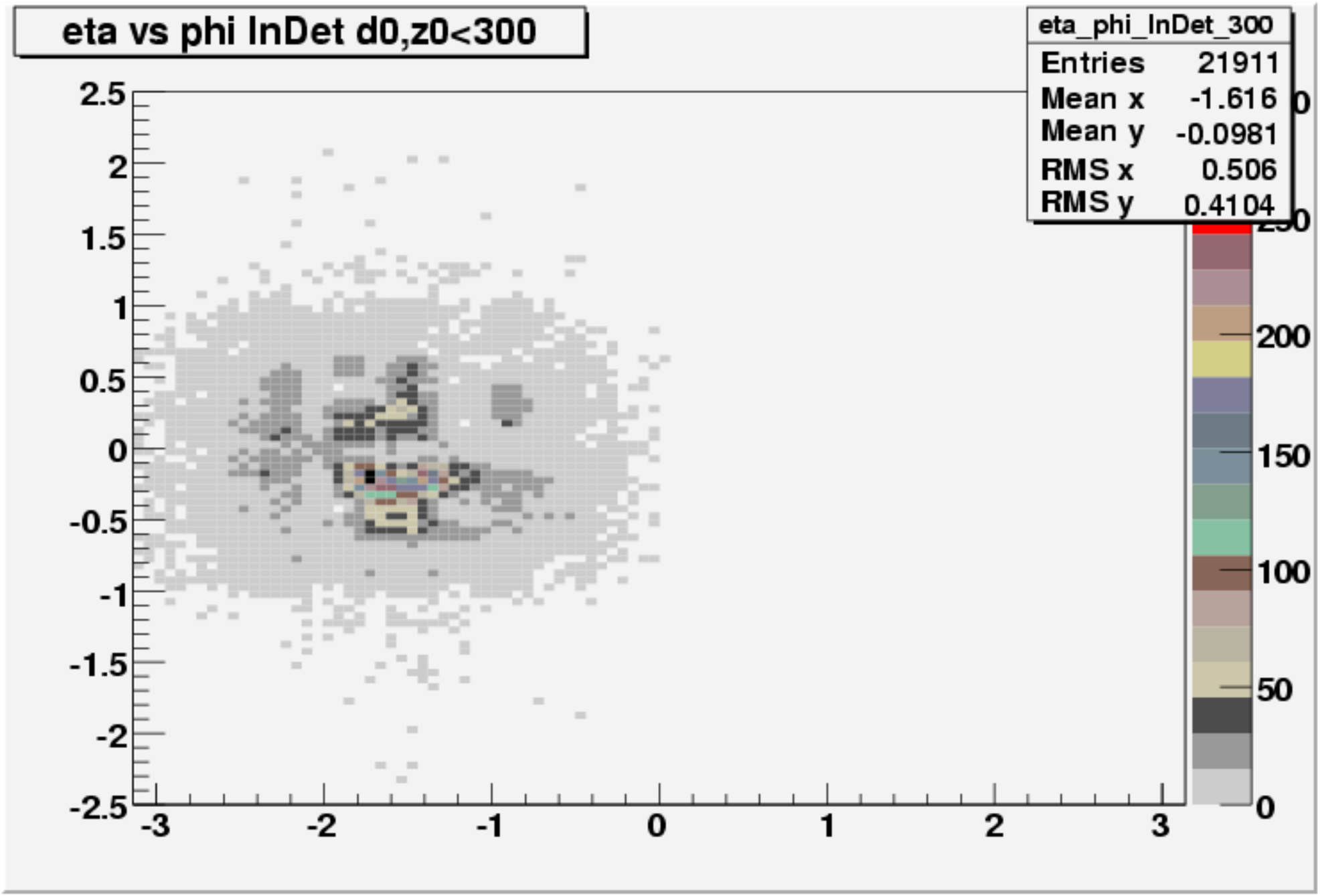
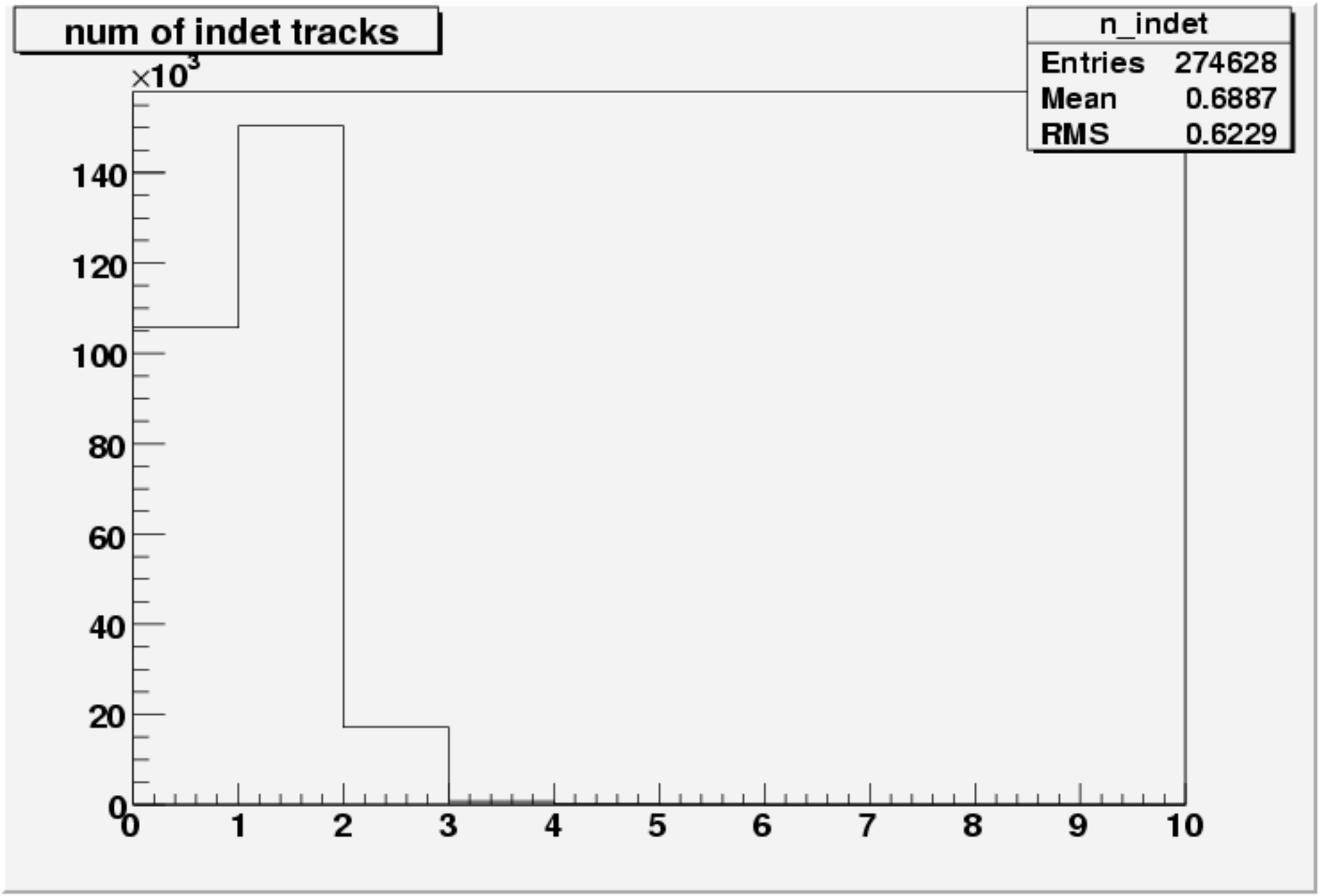
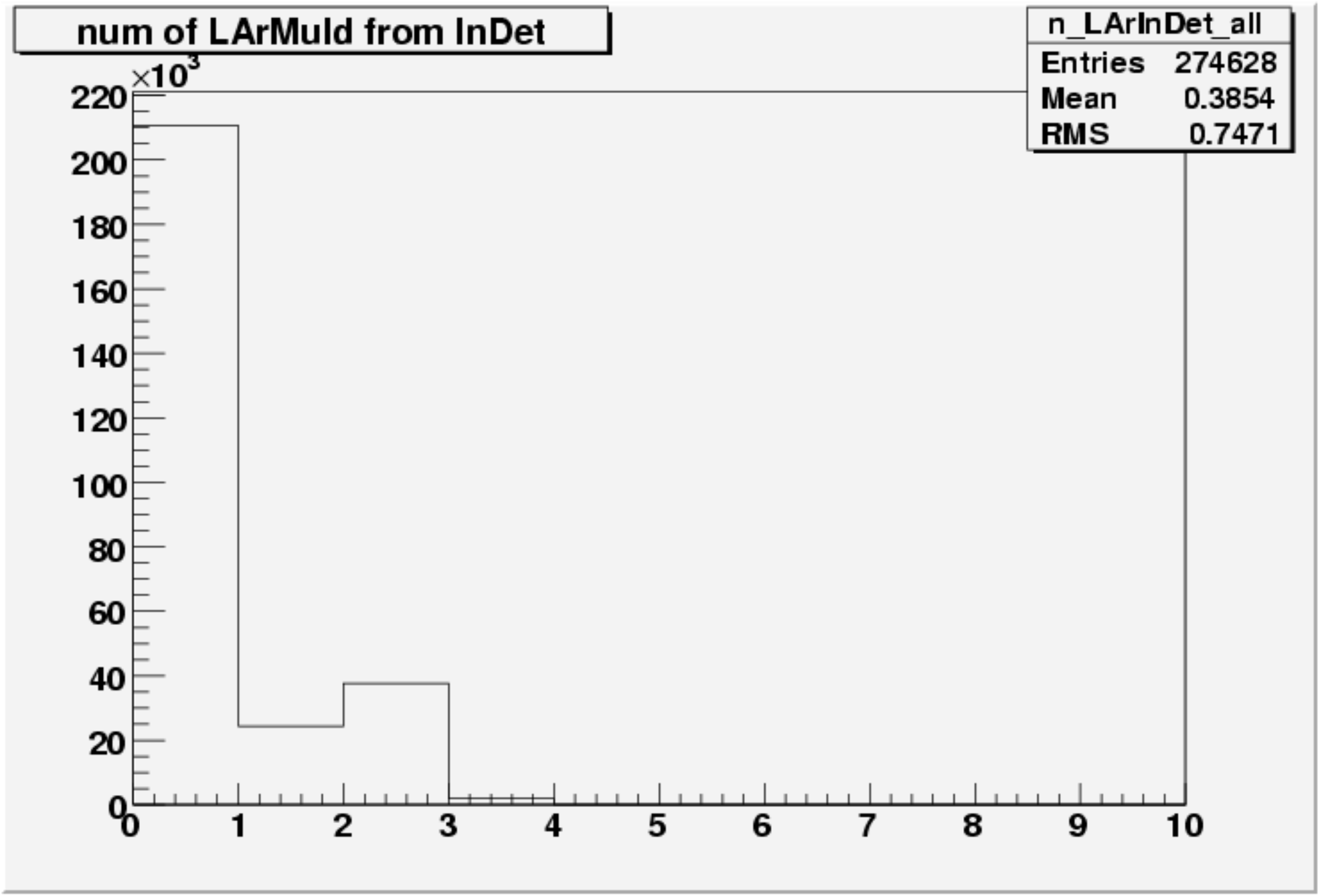
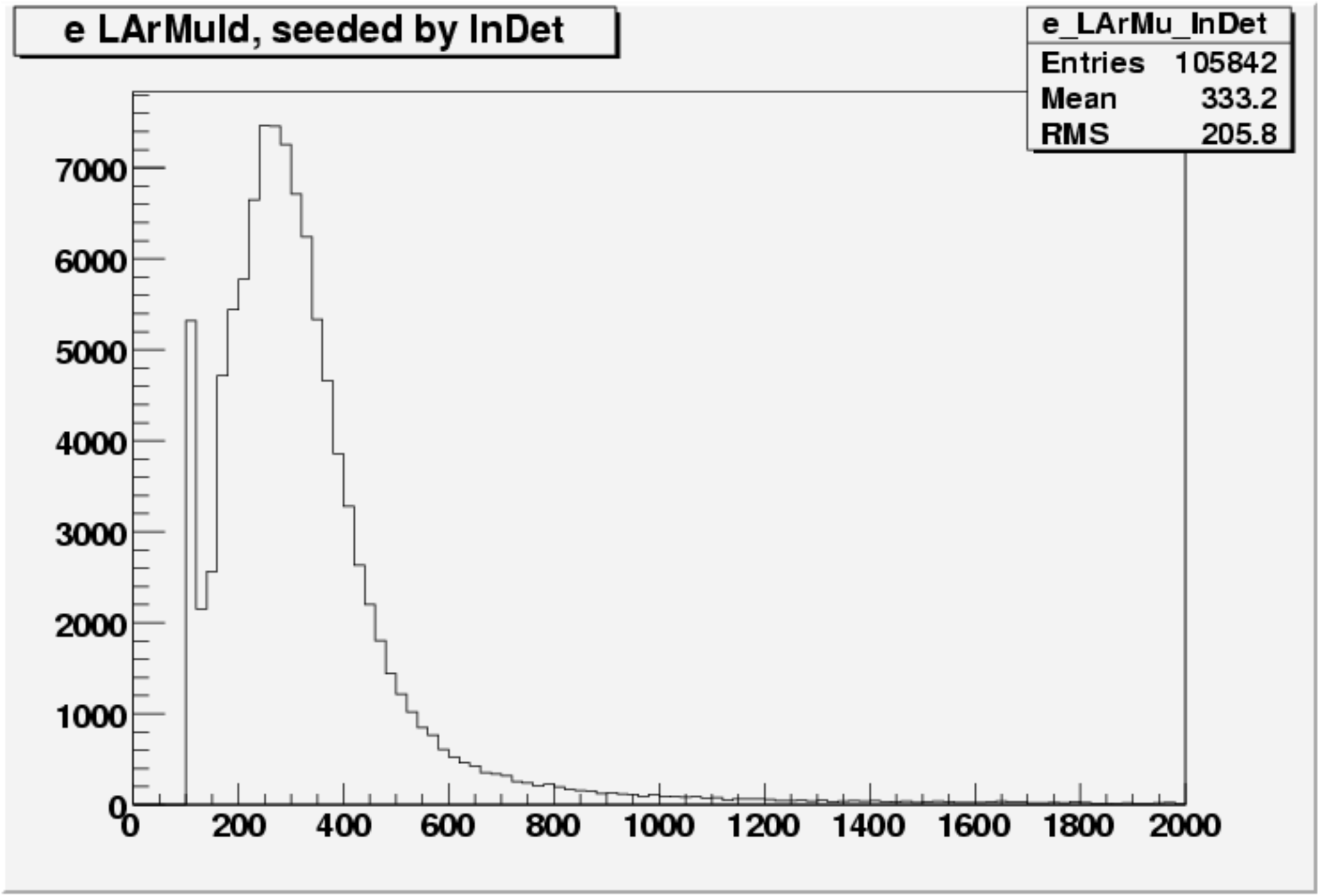
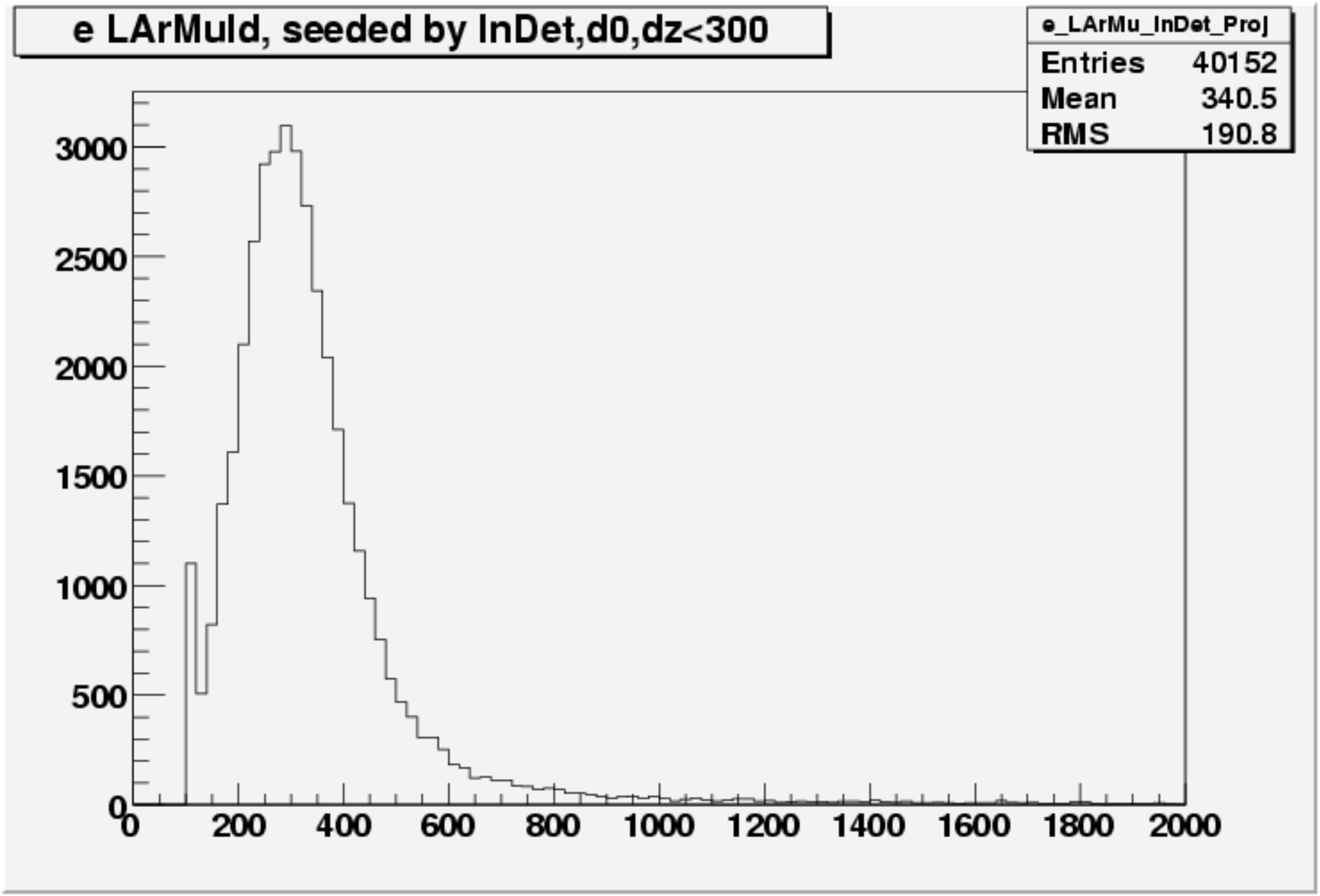

eta vs phi InDet
eta_phi_InDet
Entries 75825
Mean x -1.627
Mean y -0.08998
RMS x 0.5011
RMS y 0.4682
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
700
600
500
400
300
200
100
0

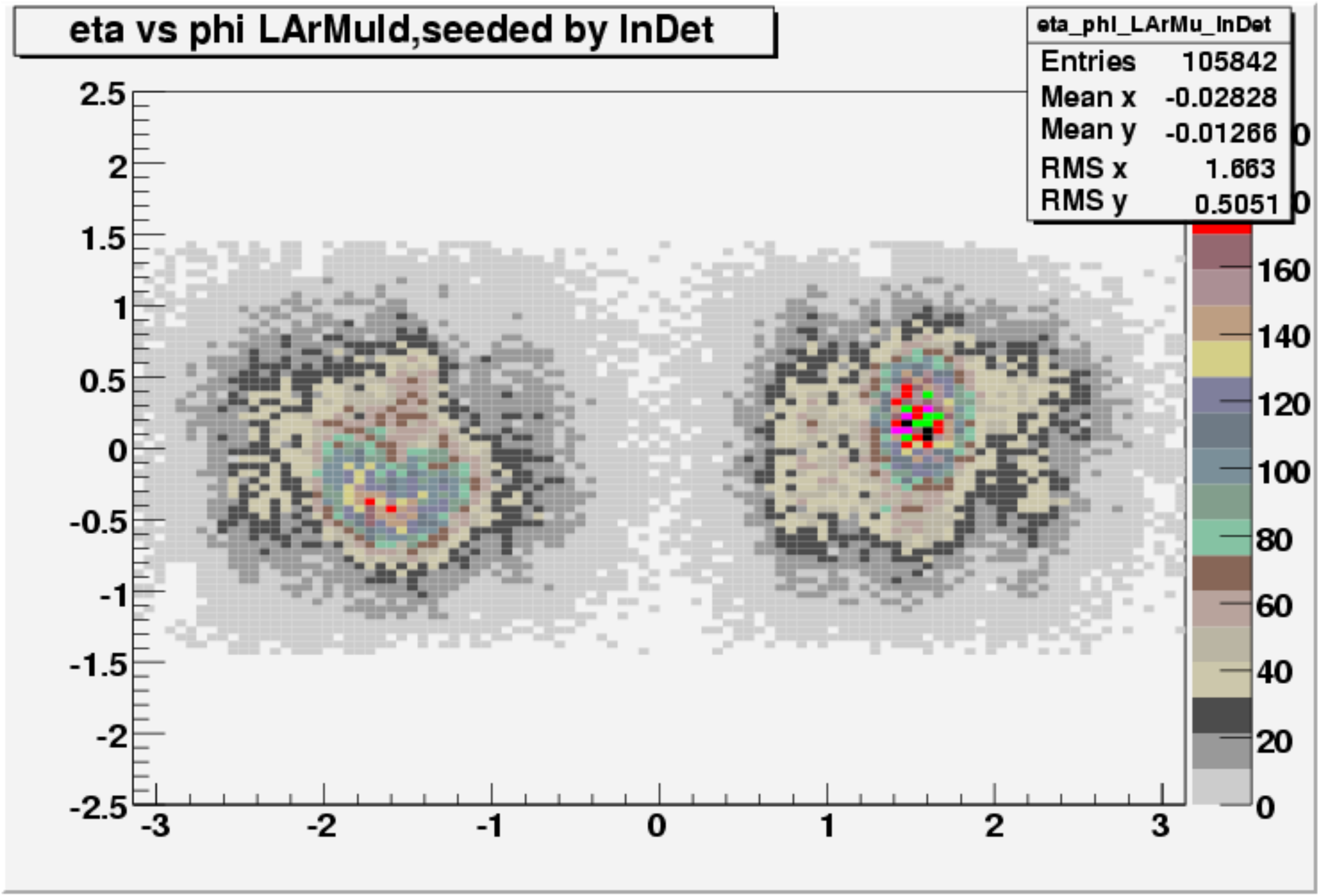

eta vs phi InDet d0,z0<300
eta_phi_InDet_300
Entries 21911
Mean x -1.616
Mean y -0.0981
RMS x 0.506
RMS y 0.4104
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
200
150
100
50
0

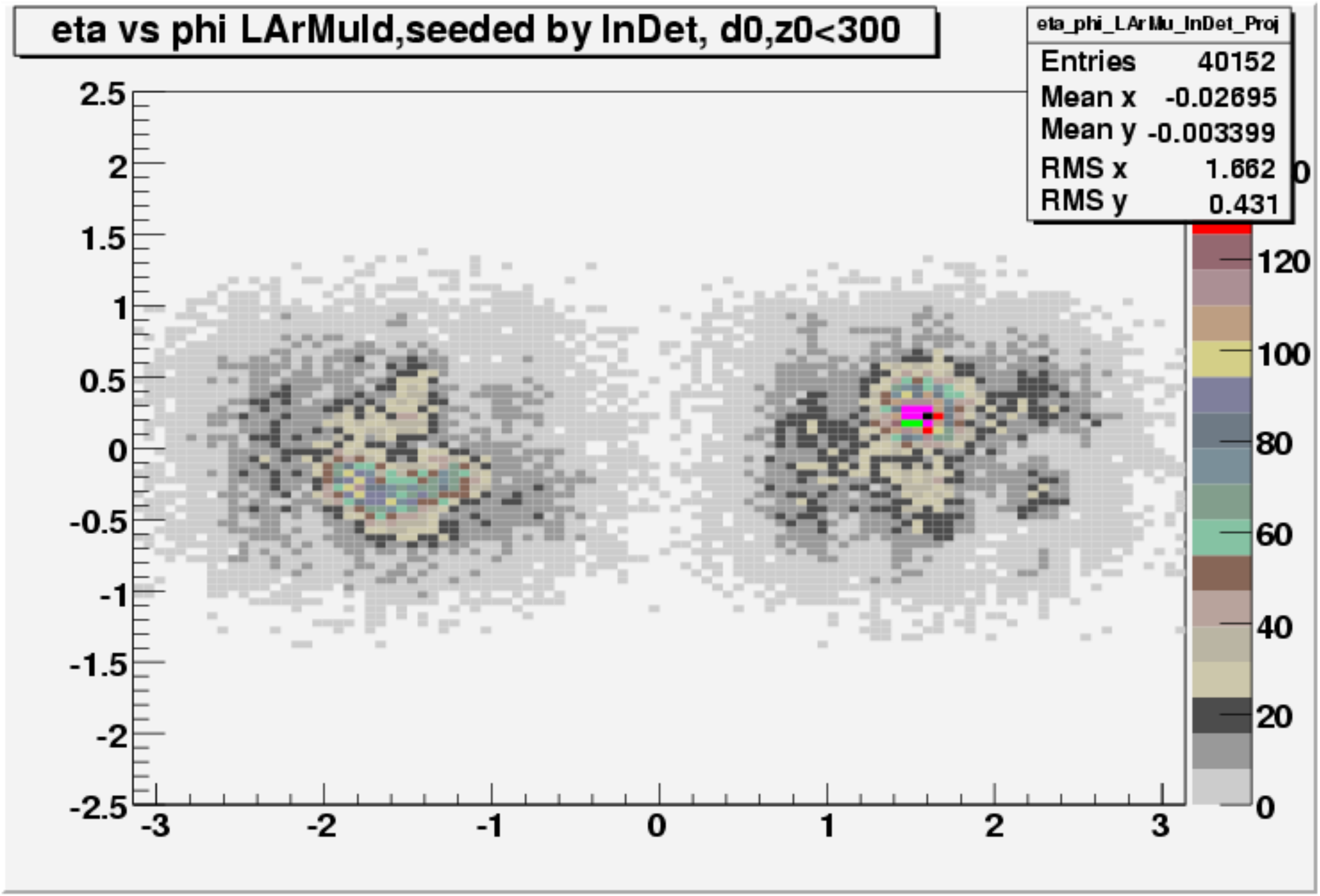

num of indet tracks
n_indet
Entries 274628
Mean 0.6887
RMS 0.6229
×10^3
140
120
100
80
60
40
20
0
0
1
2
3
4
5
6
7
8
9
10

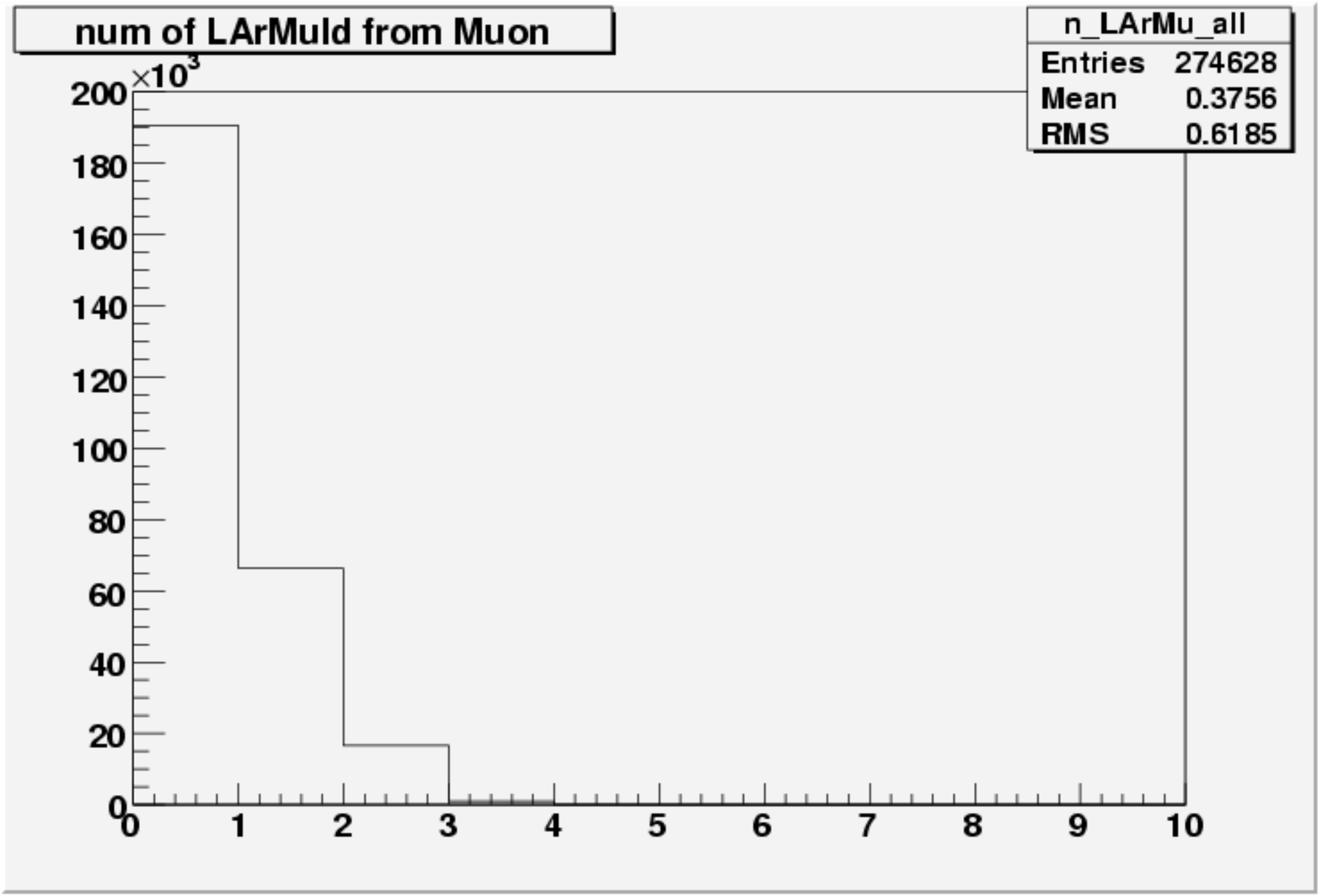

num of LArMuId from InDet
n_LArInDet_all
Entries 274628
Mean 0.3854
RMS 0.7471
×10^3
220
200
180
160
140
120
100
80
60
40
20
0
0
1
2
3
4
5
6
7
8
9
10

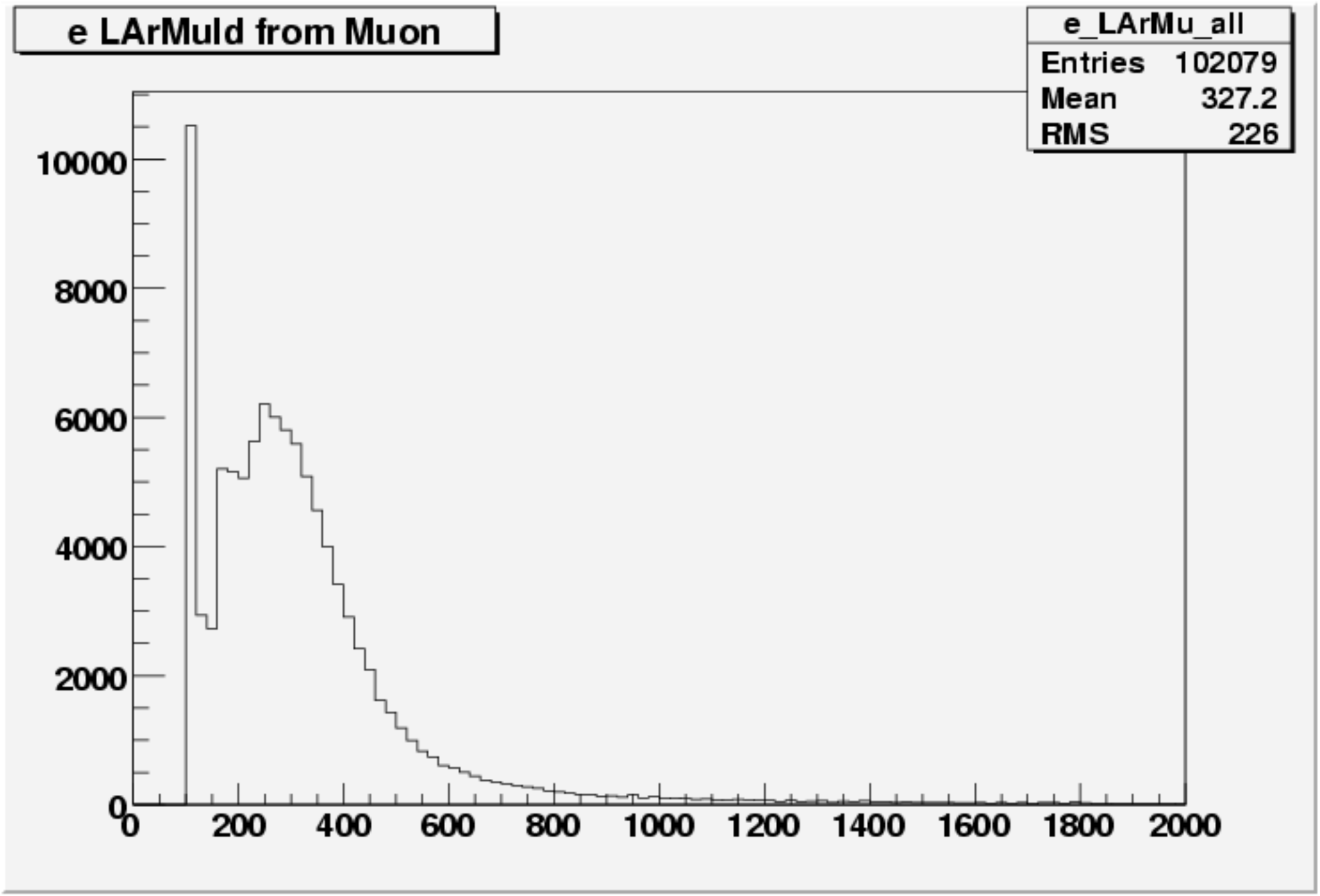

e LArMuId, seeded by InDet
e_LArMu_InDet
Entries 105842
Mean 333.2
RMS 205.8
7000
6000
5000
4000
3000
2000
1000
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

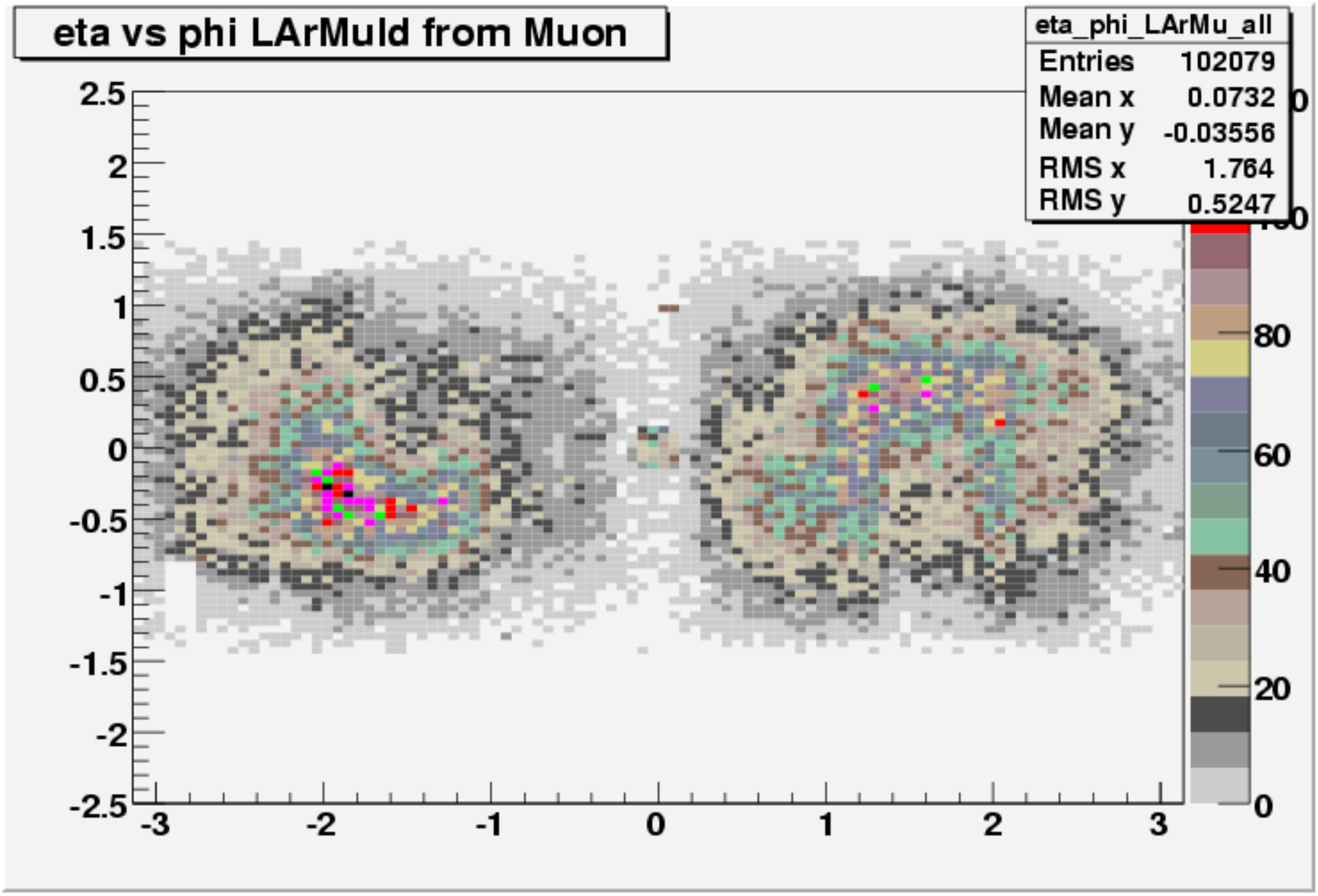

e LArMuId, seeded by InDet,d0,dz<300
e_LArMu_InDet_Proj
Entries 40152
Mean 340.5
RMS 190.8
3000
2500
2000
1500
1000
500
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

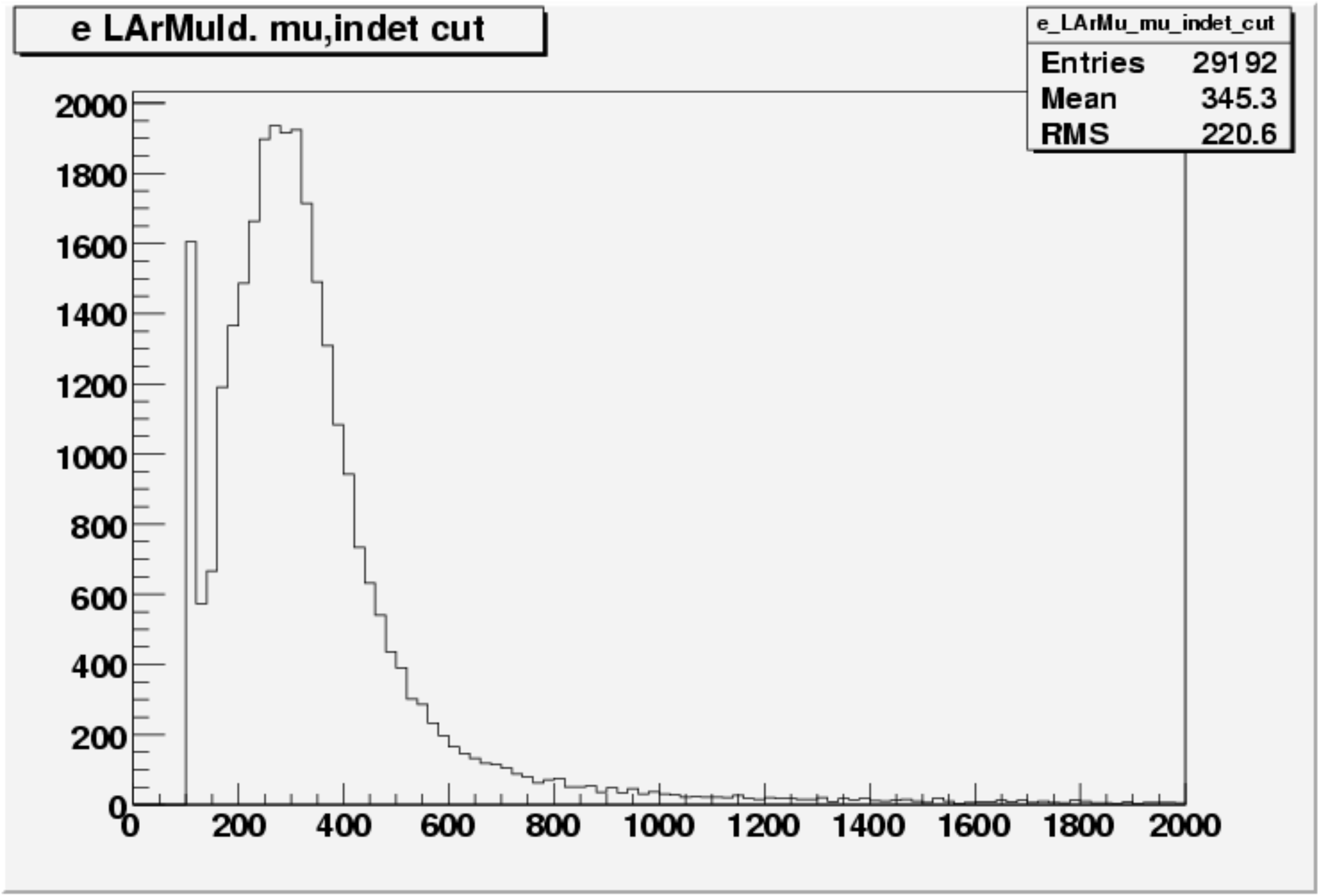

eta vs phi LArMuId,seeded by InDet
eta_phi_LArMu_InDet
Entries 105842
Mean x -0.02828
Mean y -0.01266
RMS x 1.663
RMS y 0.5051
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
160
140
120
100
80
60
40
20
0

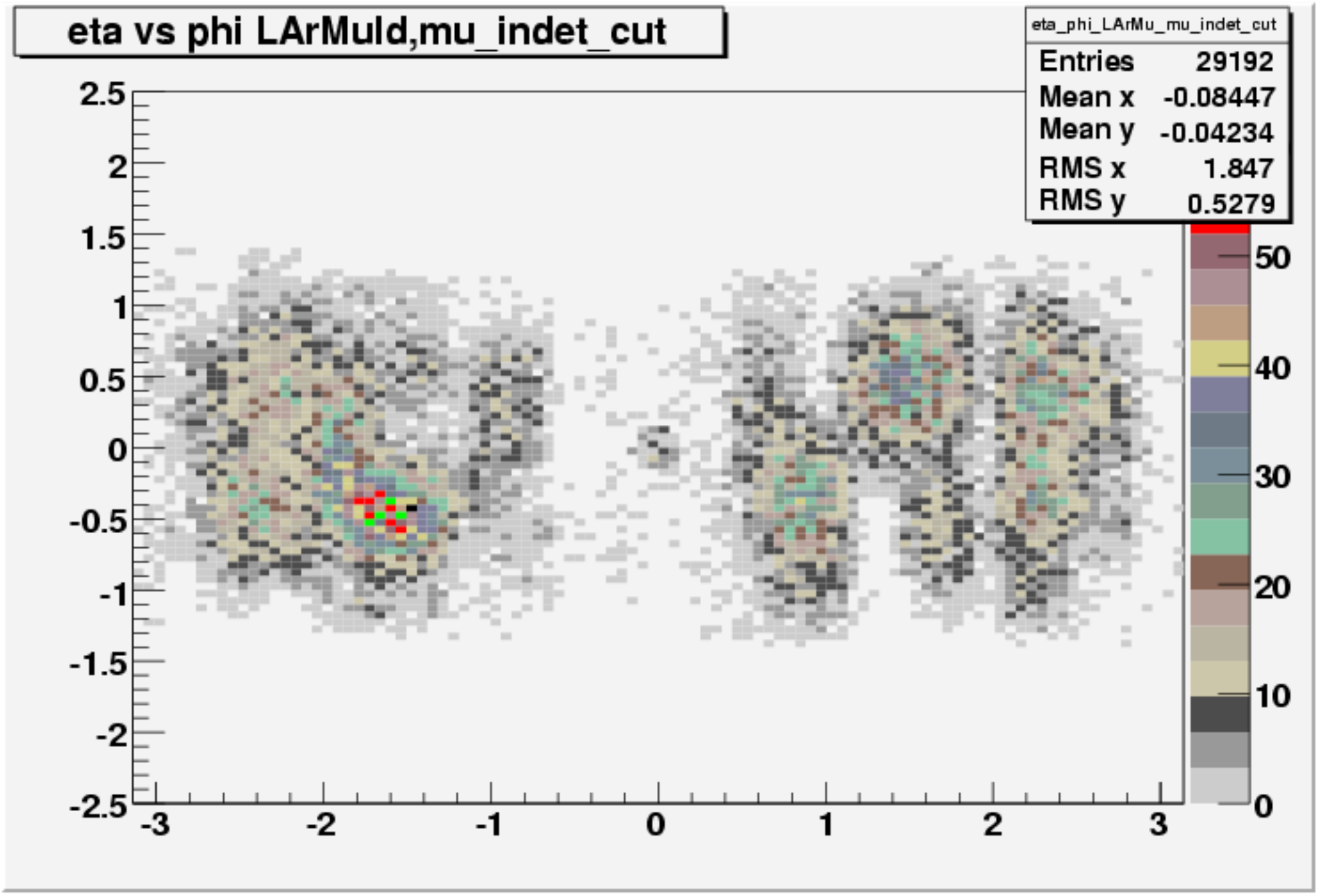

eta vs phi LArMuId,seeded by InDet, d0,z0<300
eta_phi_LArMu_InDet_Proj
Entries 40152
Mean x -0.02695
Mean y -0.003399
RMS x 1.662
RMS y 0.431
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
120
100
80
60
40
20
0

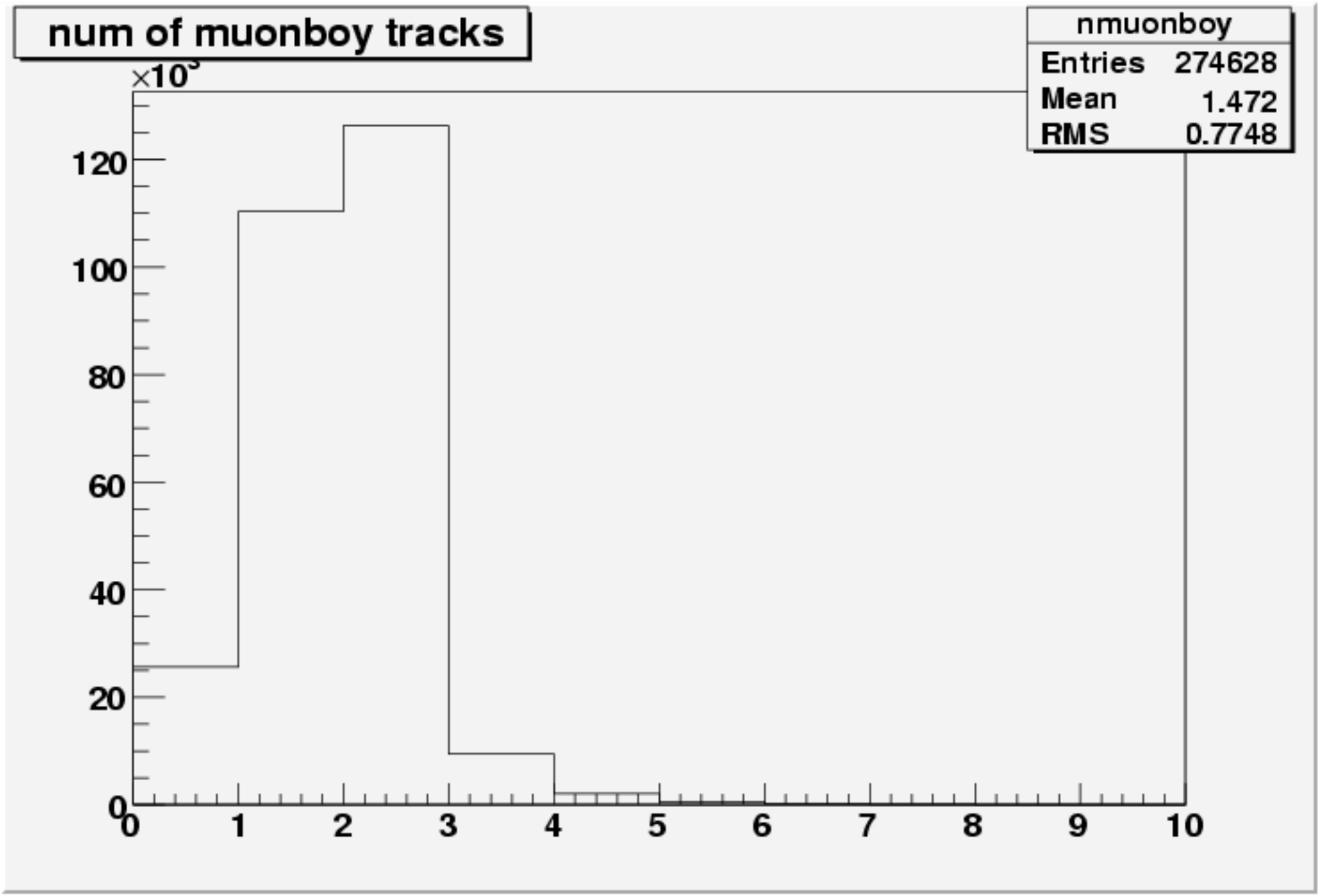

num of LArMuld from Muon
n_LArMu_all
Entries 274628
Mean 0.3756
RMS 0.6185
×10^3
200
180
160
140
120
100
80
60
40
20
0
0
1
2
3
4
5
6
7
8
9
10

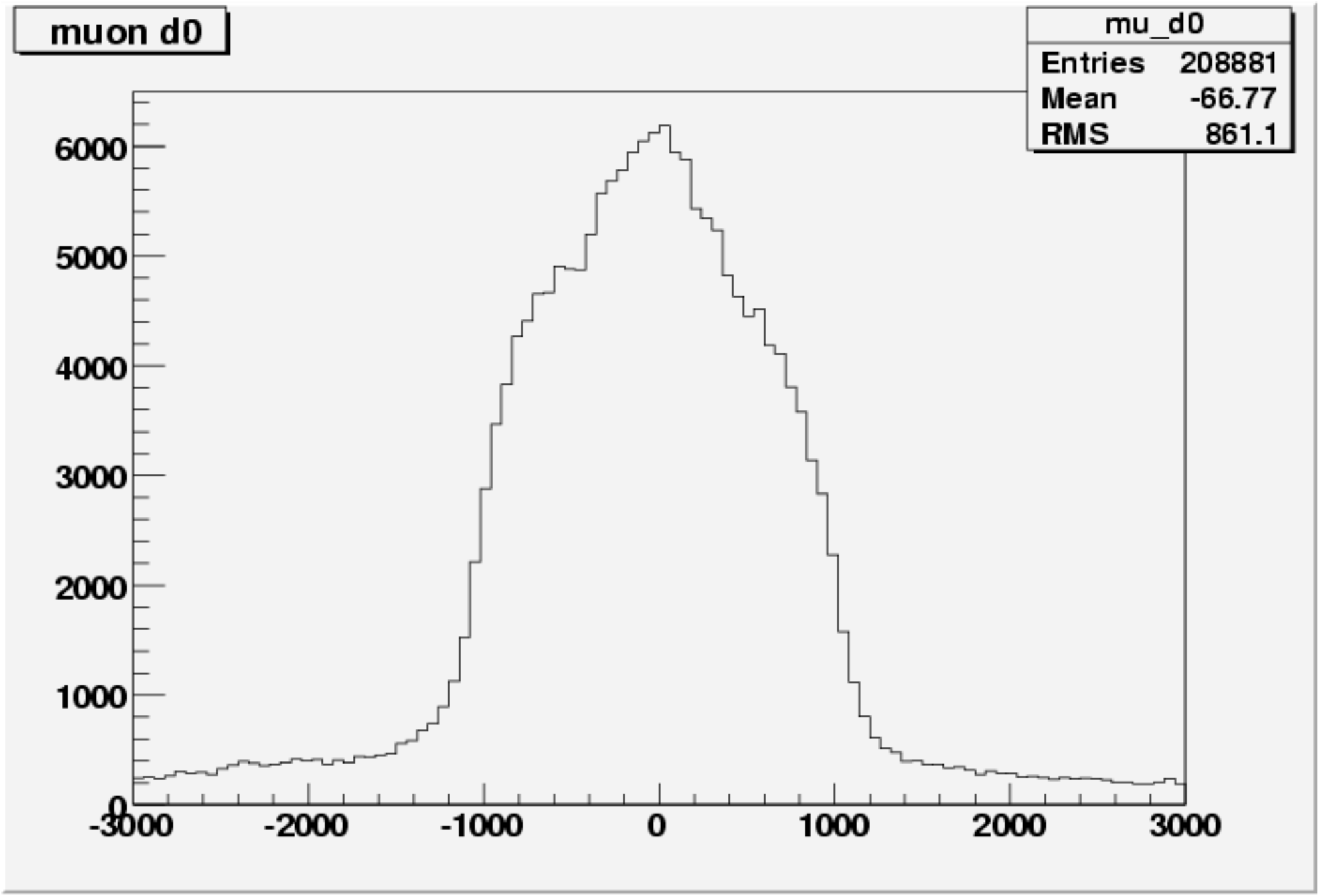

e LArMuld from Muon
e_LArMu_all
Entries 102079
Mean 327.2
RMS 226
10000
8000
6000
4000
2000
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

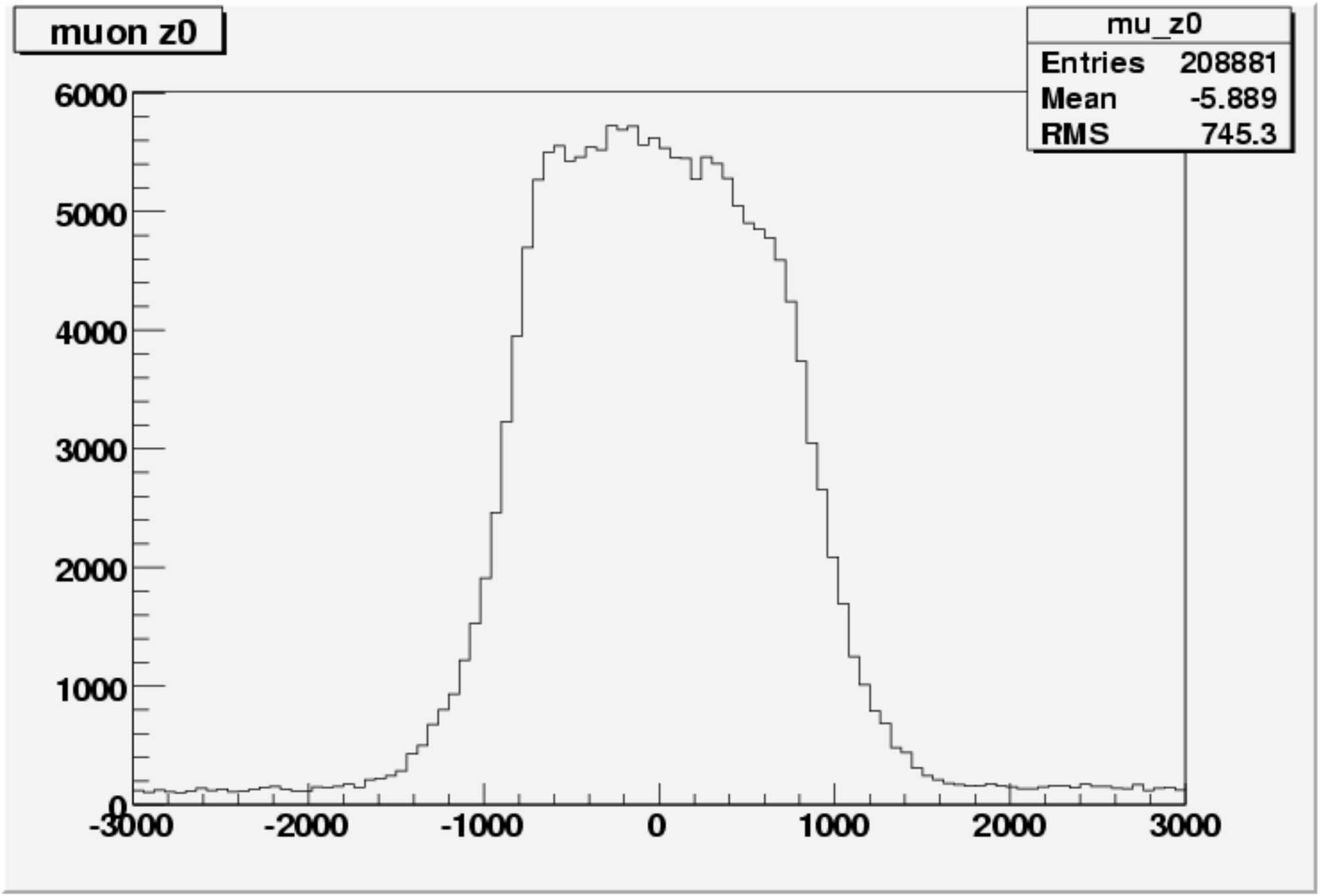

eta vs phi LArMuld from Muon
eta_phi_LArMu_all
Entries 102079
Mean x 0.0732
Mean y -0.03556
RMS x 1.764
RMS y 0.5247
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
80
60
40
20
0

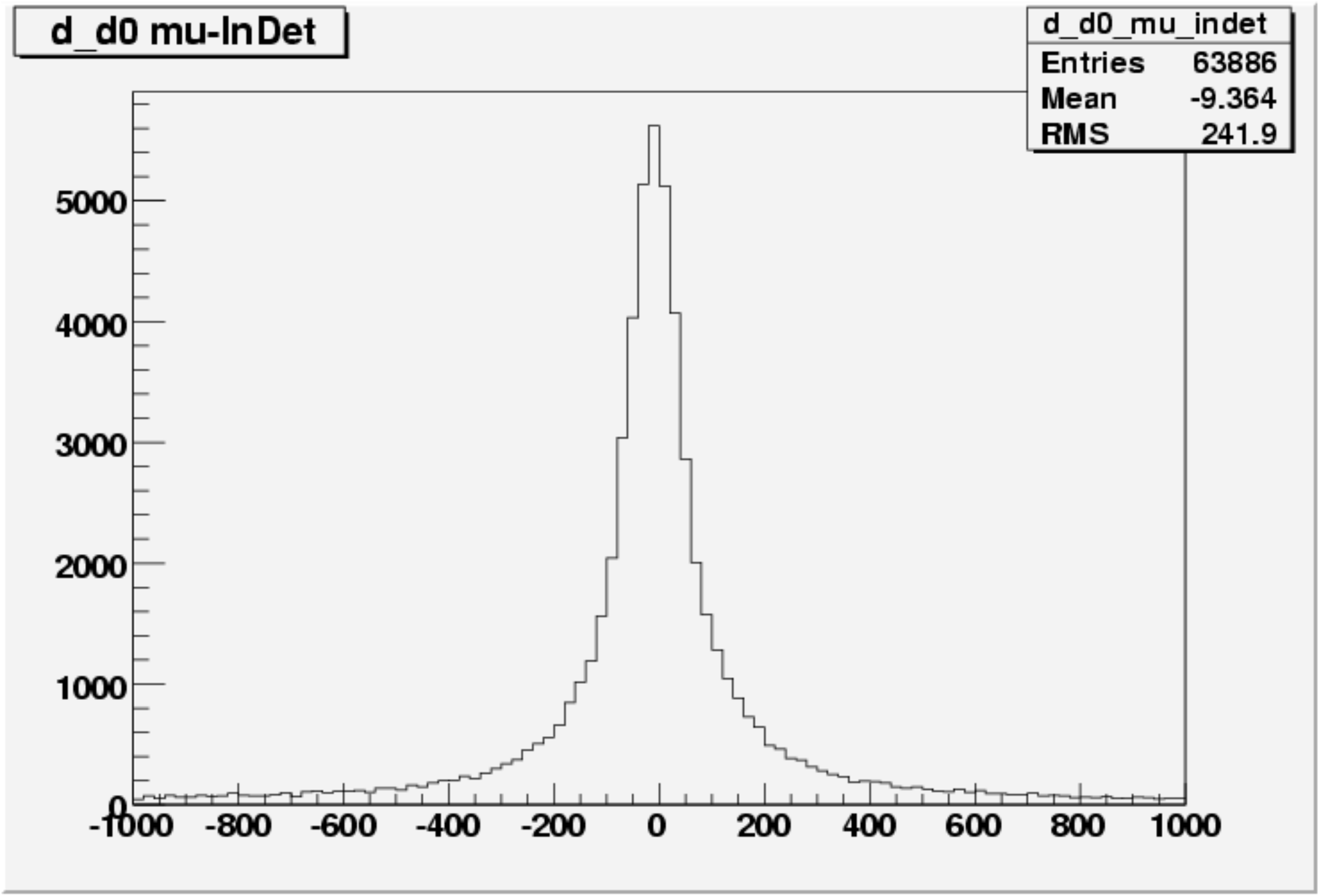

e LArMuld. mu,indet cut
e_LArMu_mu_indet_cut
Entries 29192
Mean 345.3
RMS 220.6
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

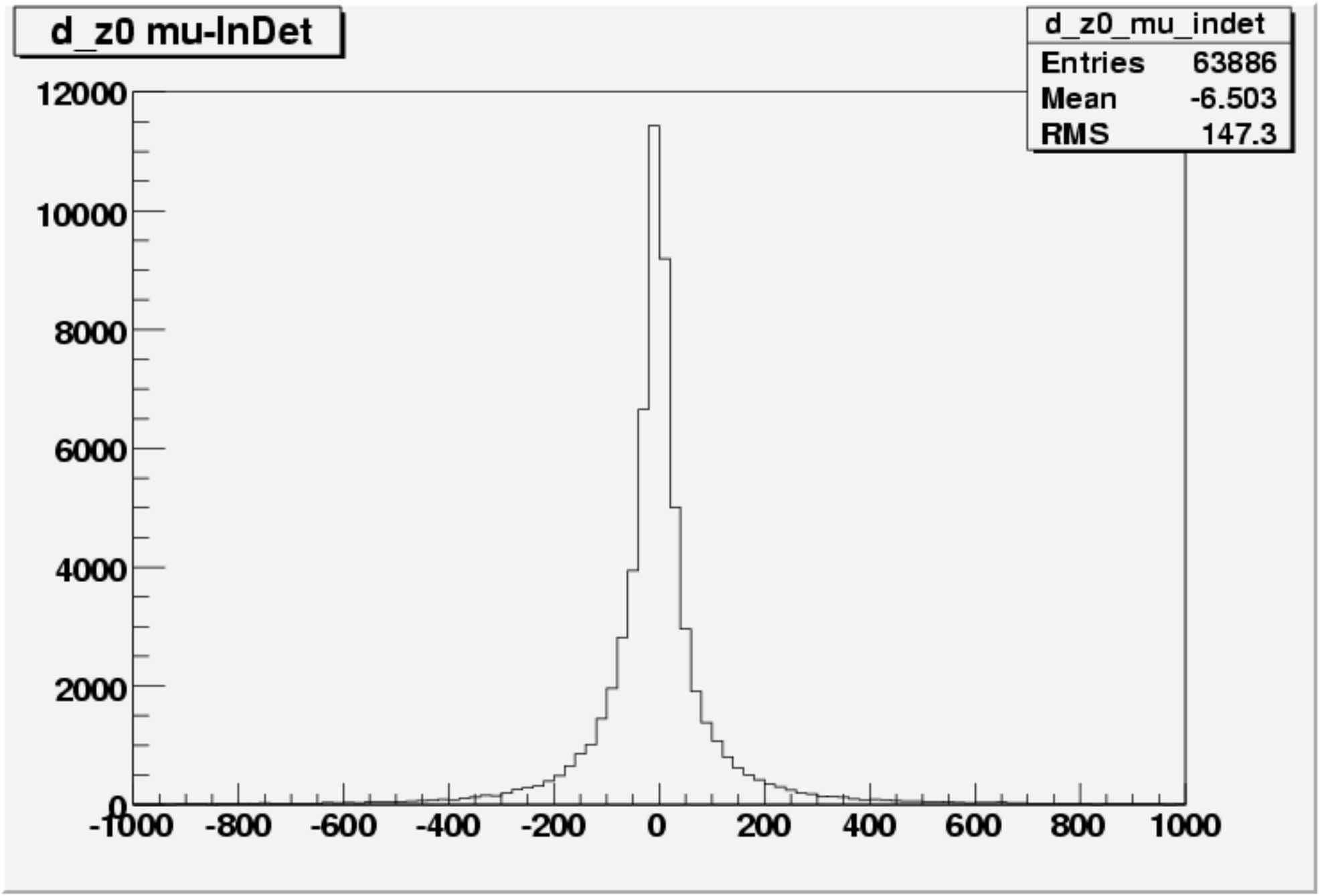

eta vs phi LArMuId,mu_indet_cut
eta_phi_LArMu_mu_indet_cut
Entries 29192
Mean x -0.08447
Mean y -0.04234
RMS x 1.847
RMS y 0.5279
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
-2
-1
0
1
2
3
50
40
30
20
10
0

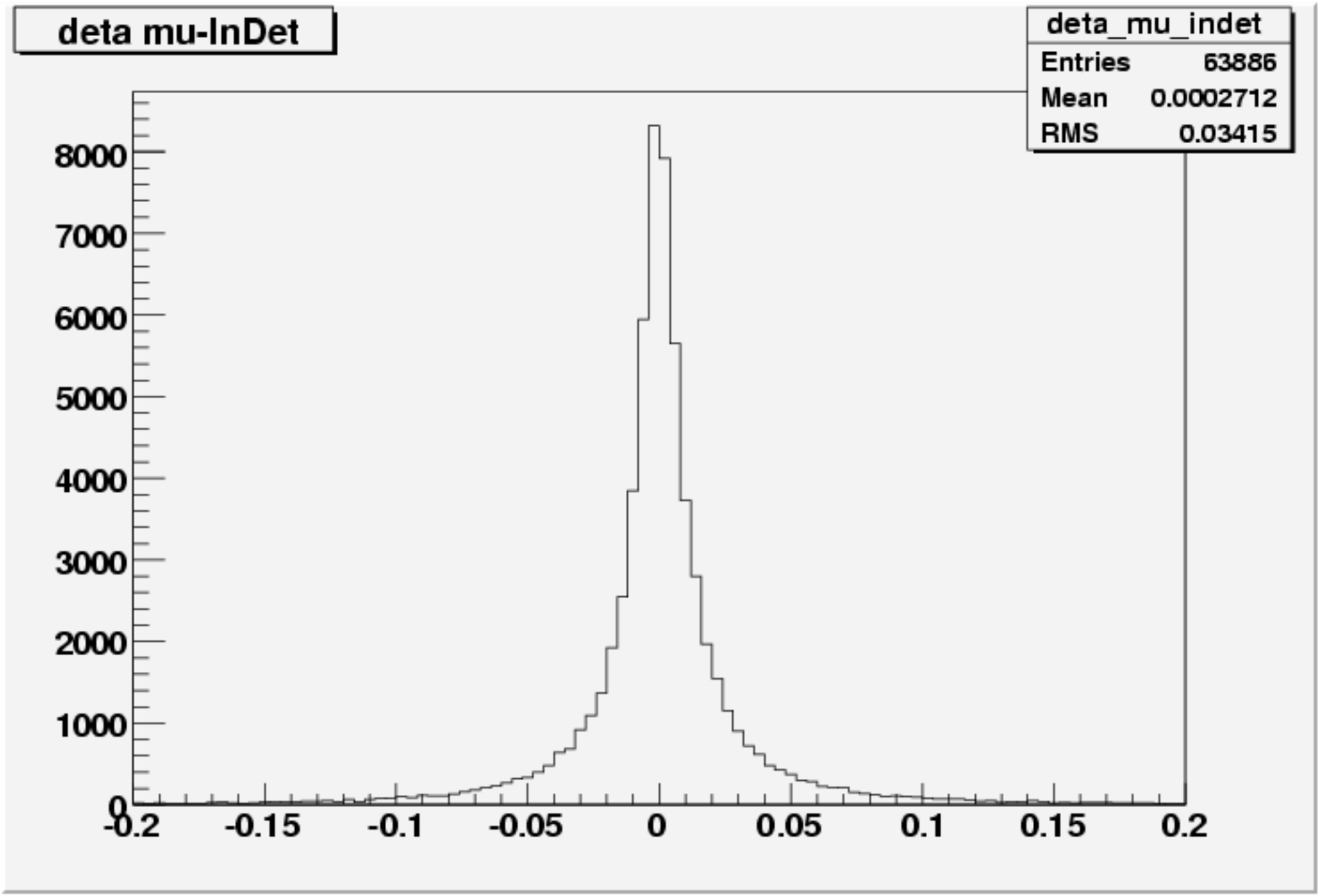

num of muonboy tracks
nmuonboy
Entries 274628
Mean 1.472
RMS 0.7748
×10³
120
100
80
60
40
20
0
0
1
2
3
4
5
6
7
8
9
10

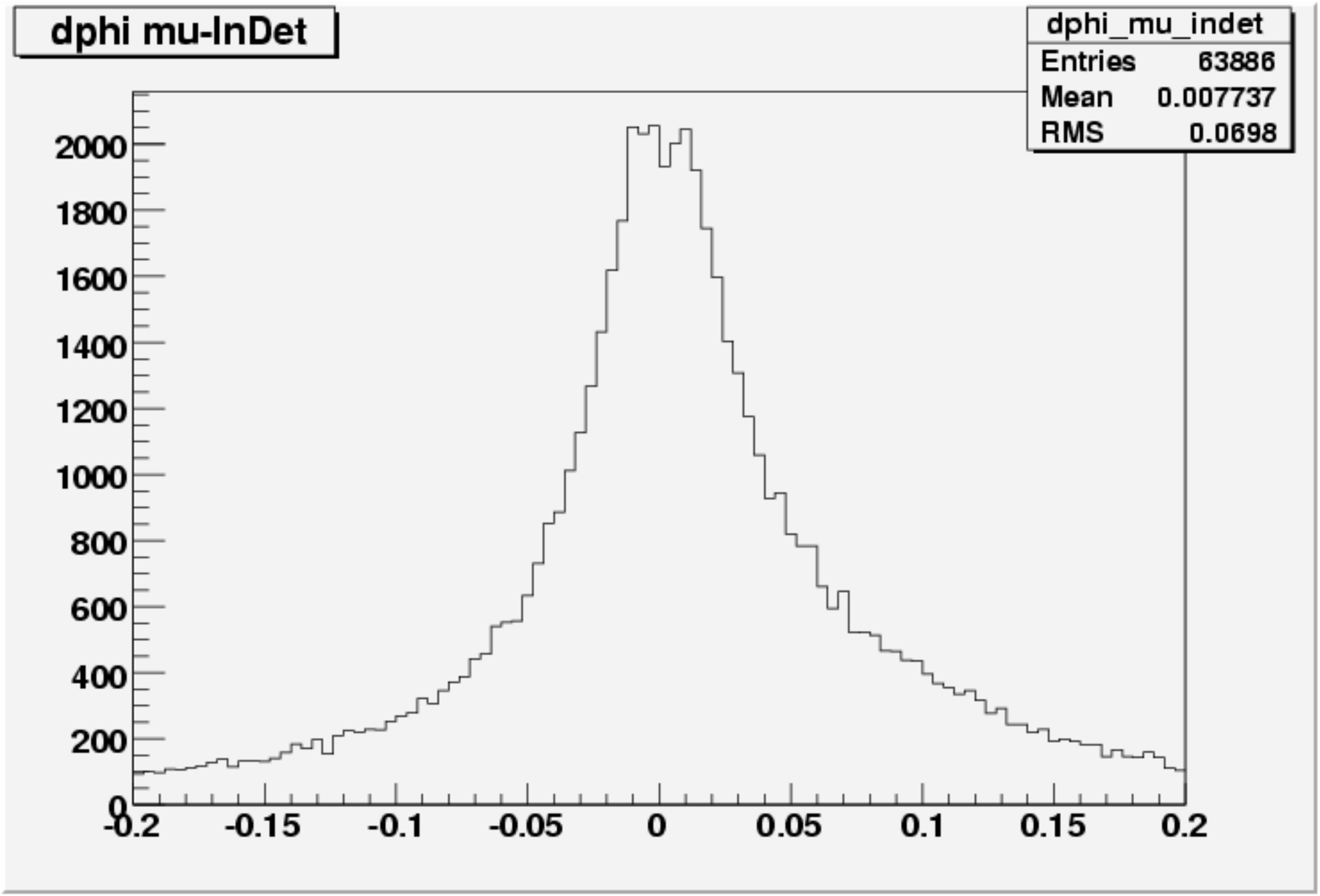

muon d0
mu_d0
Entries 208881
Mean -66.77
RMS 861.1
6000
5000
4000
3000
2000
1000
0
-3000
-2000
-1000
0
1000
2000
3000

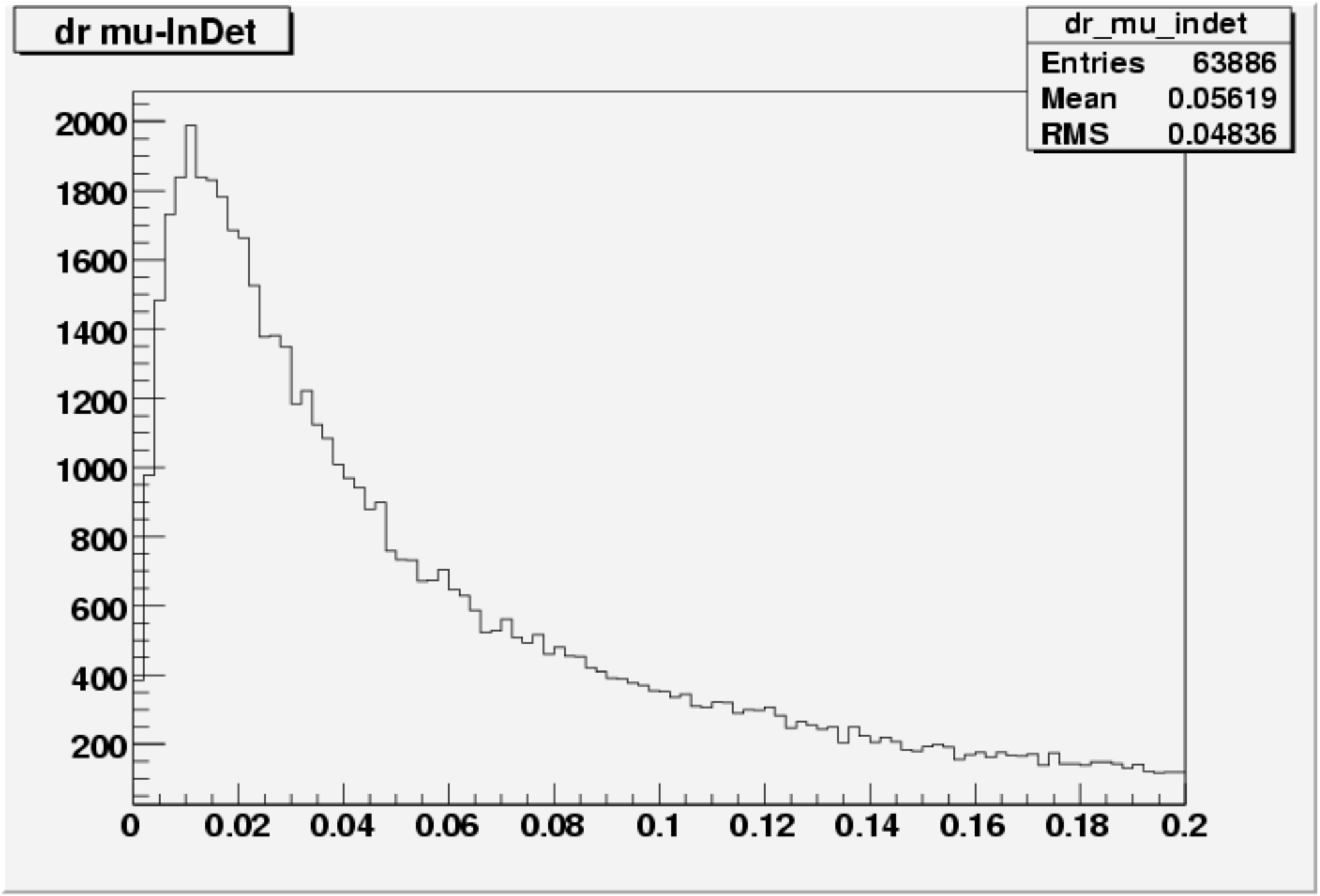

muon z0
mu_z0
Entries 208881
Mean -5.889
RMS 745.3
6000
5000
4000
3000
2000
1000
0
-3000
-2000
-1000
0
1000
2000
3000

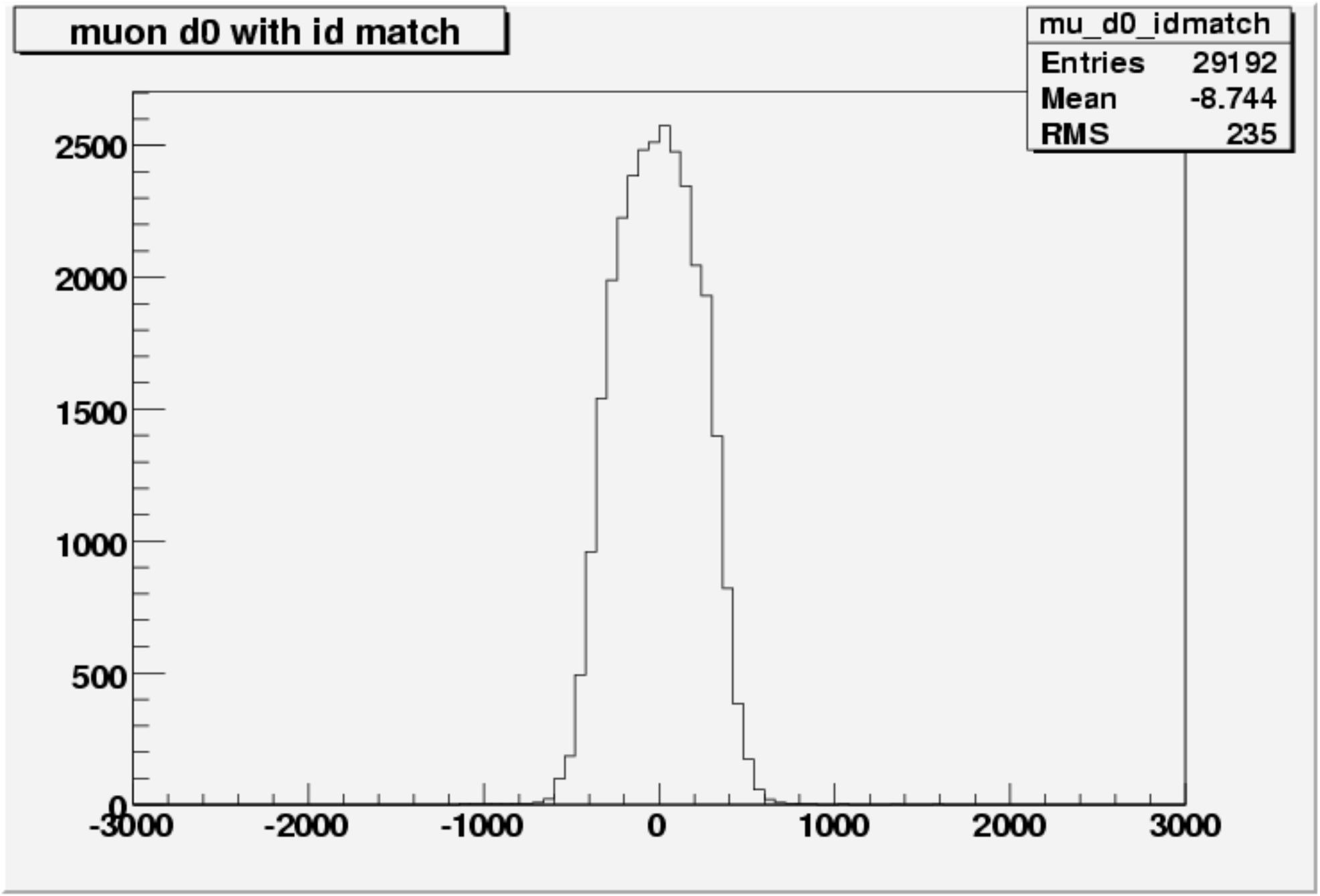

d_d0 mu-InDet
d_d0_mu_indet
Entries 63886
Mean -9.364
RMS 241.9
5000
4000
3000
2000
1000
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000

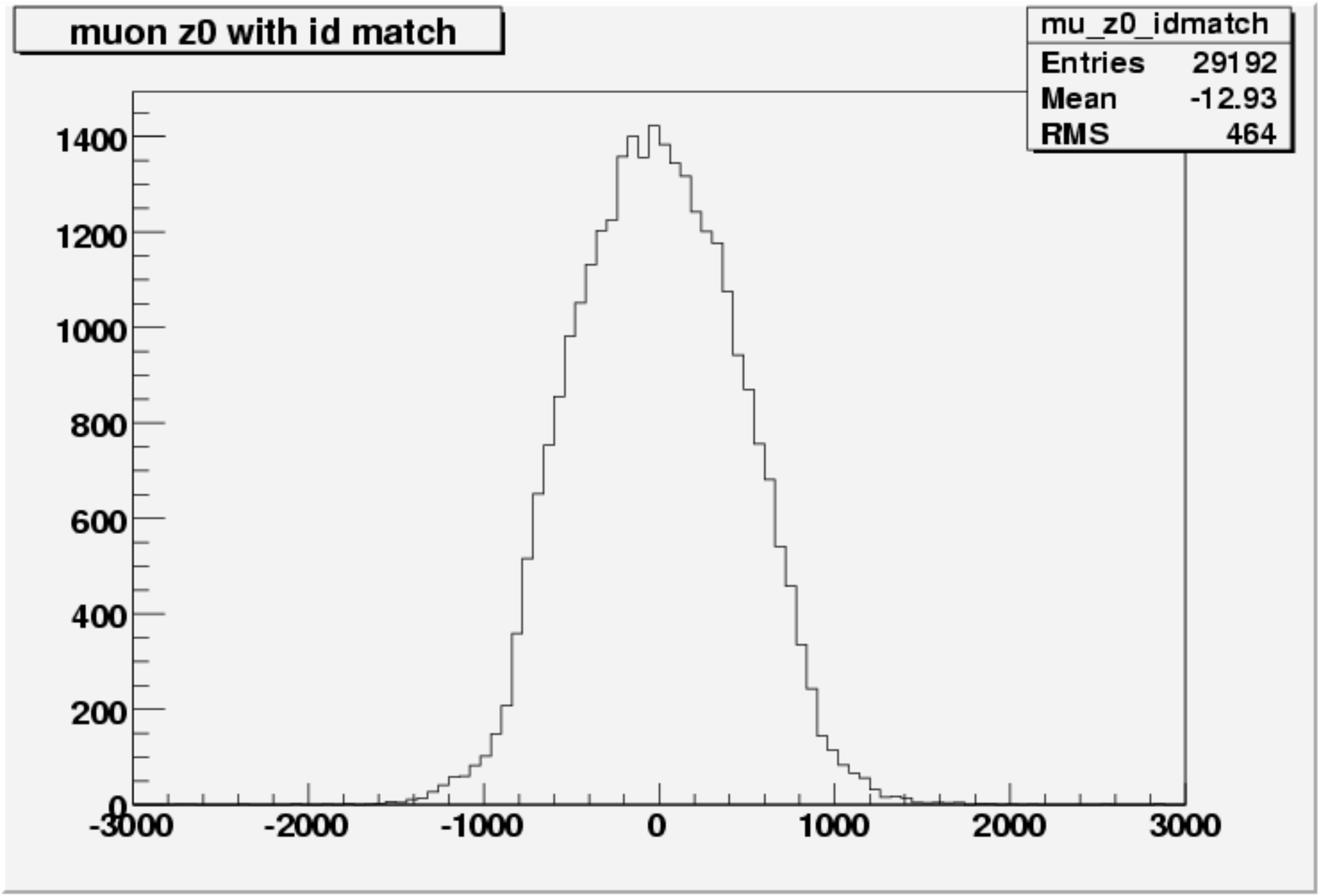

d_z0 mu-InDet
d_z0_mu_indet
Entries 63886
Mean -6.503
RMS 147.3
12000
10000
8000
6000
4000
2000
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000

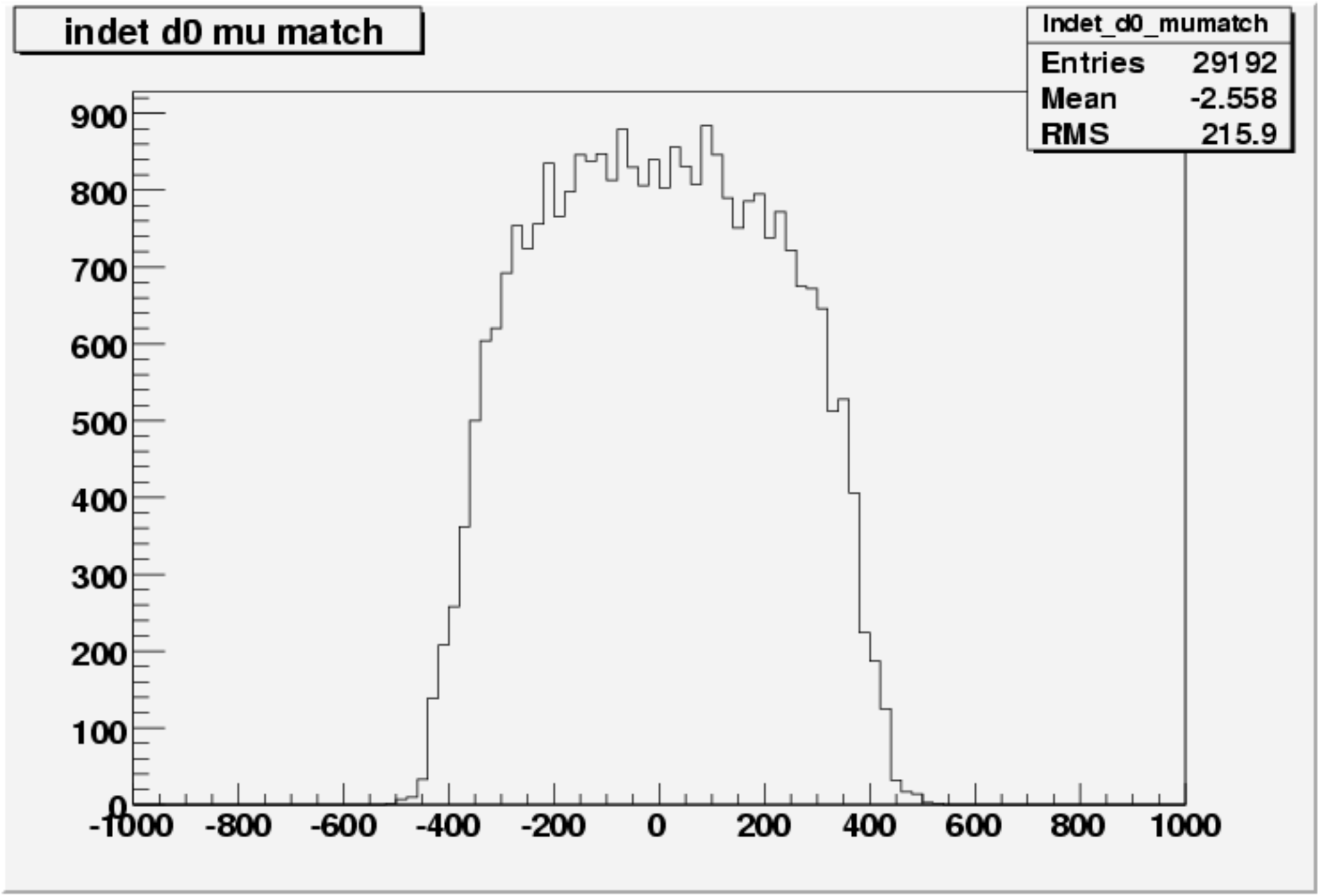

deta mu-InDet
deta_mu_indet
Entries 63886
Mean 0.0002712
RMS 0.03415
8000
7000
6000
5000
4000
3000
2000
1000
0
-0.2
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
0.2

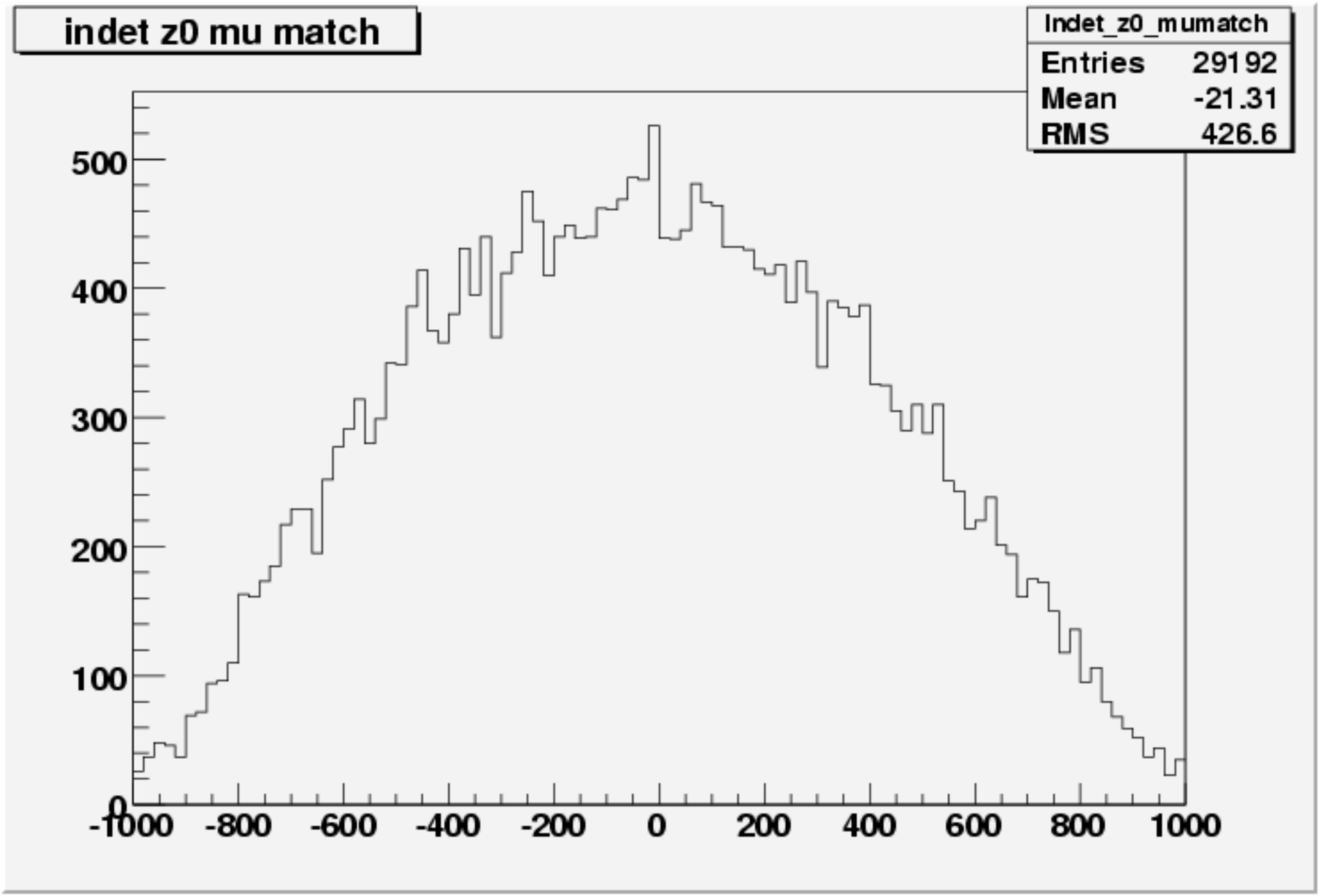

dphi mu-InDet
dphi_mu_indet
Entries 63886
Mean 0.007737
RMS 0.0698
2000
1800
1600
1400
1200
1000
800
600
400
200
0
-0.2
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
0.2

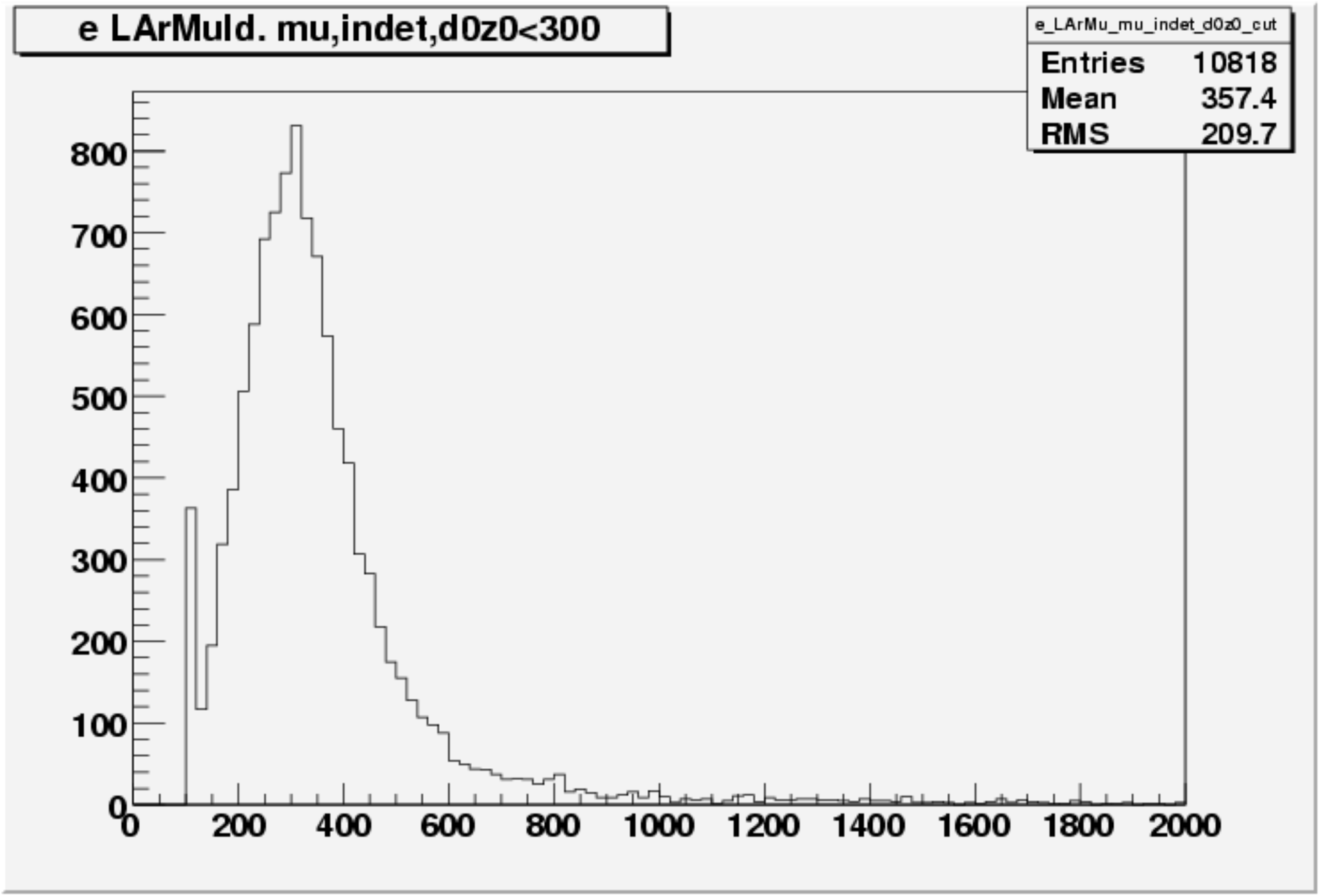

dr mu-InDet
dr_mu_indet
Entries 63886
Mean 0.05619
RMS 0.04836
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2

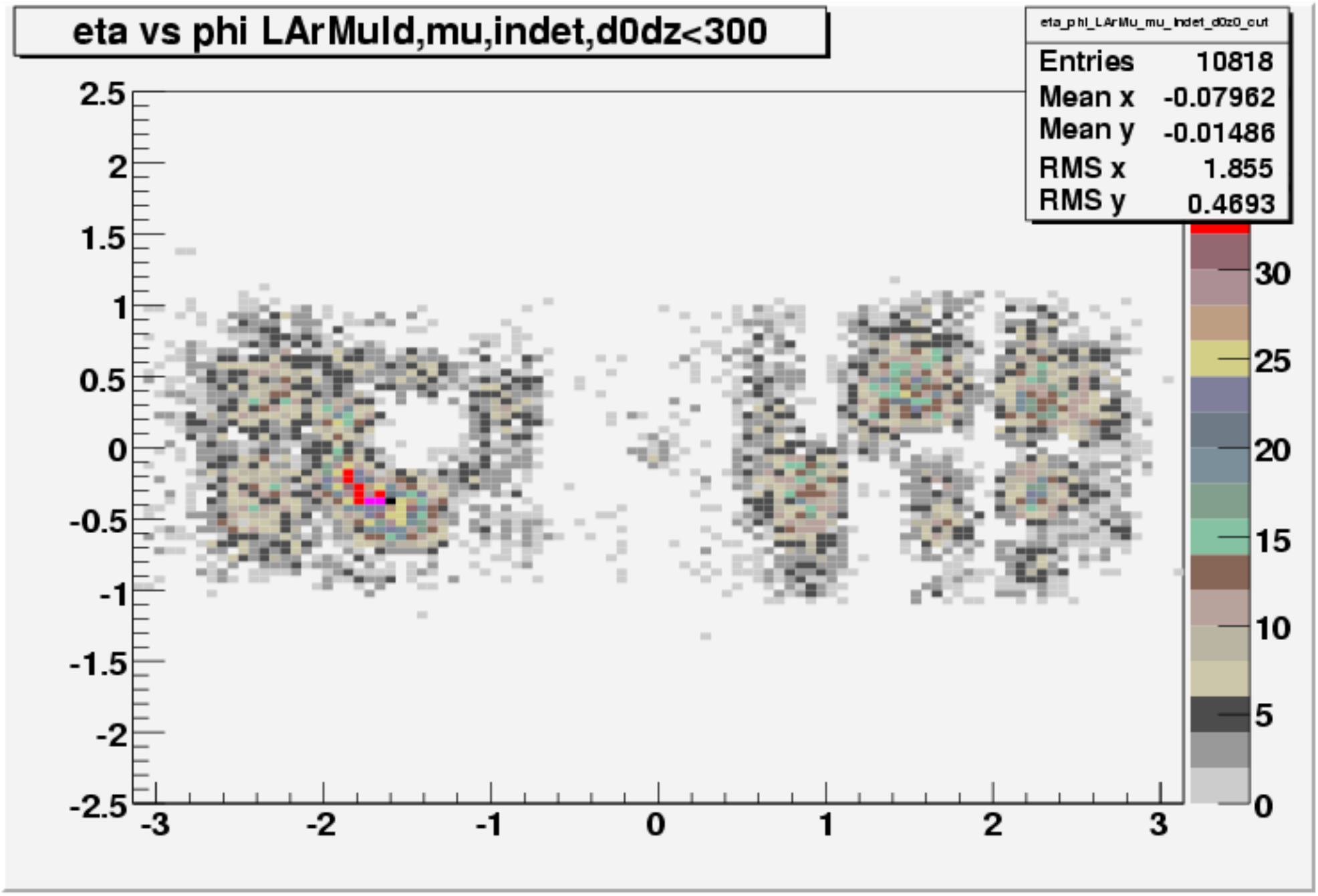

muon d0 with id match
mu_d0_idmatch
Entries 29192
Mean -8.744
RMS 235
2500
2000
1500
1000
500
0
-3000
-2000
-1000
0
1000
2000
3000


muon z0 with id match
mu_z0_idmatch
Entries 29192
Mean -12.93
RMS 464
1400
1200
1000
800
600
400
200
0
-3000
-2000
-1000
0
1000
2000
3000


indet d0 mu match
Indet_d0_mumatch
Entries 29192
Mean -2.558
RMS 215.9
900
800
700
600
500
400
300
200
100
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000


indet z0 mu match
Indet_z0_mumatch
Entries 29192
Mean -21.31
RMS 426.6
500
400
300
200
100
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000


e LArMuld. mu,indet,d0z0<300
e_LArMu_mu_indet_d0z0_cut
Entries 10818
Mean 357.4
RMS 209.7
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,d0dz<300
eta_phi_LArMu_mu_indet_d0z0_cut
Entries 10818
Mean x -0.07962
Mean y -0.01486
RMS x 1.855
RMS y 0.4693
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