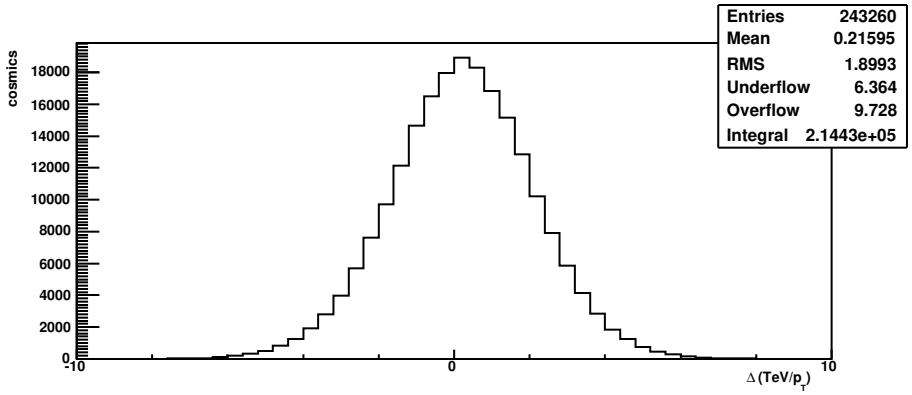
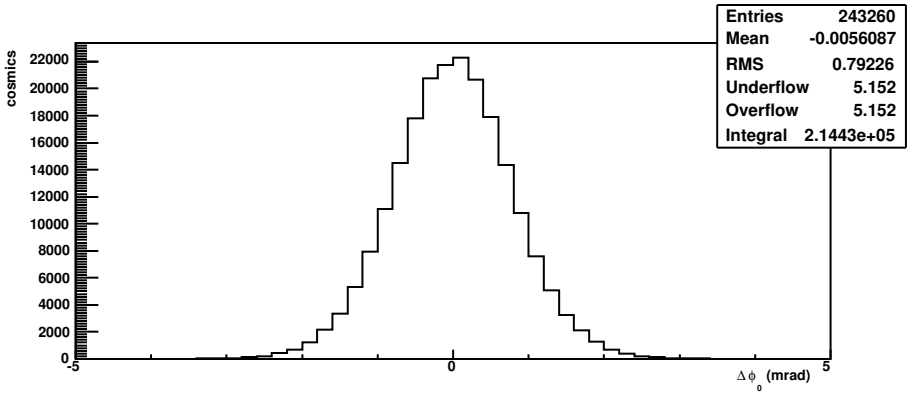
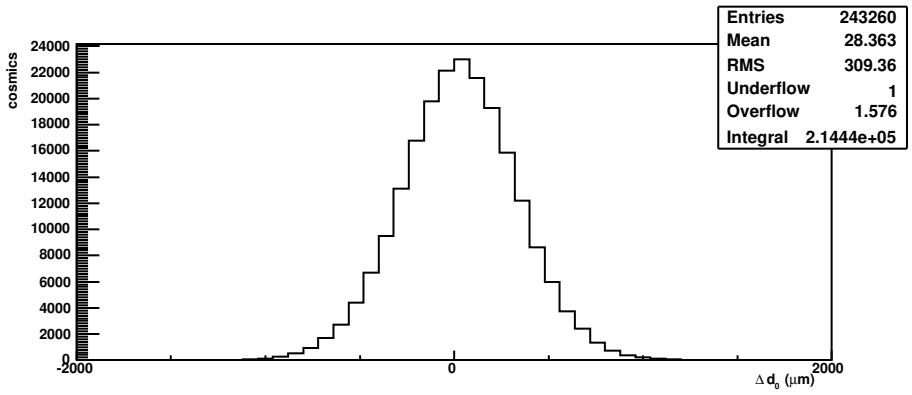
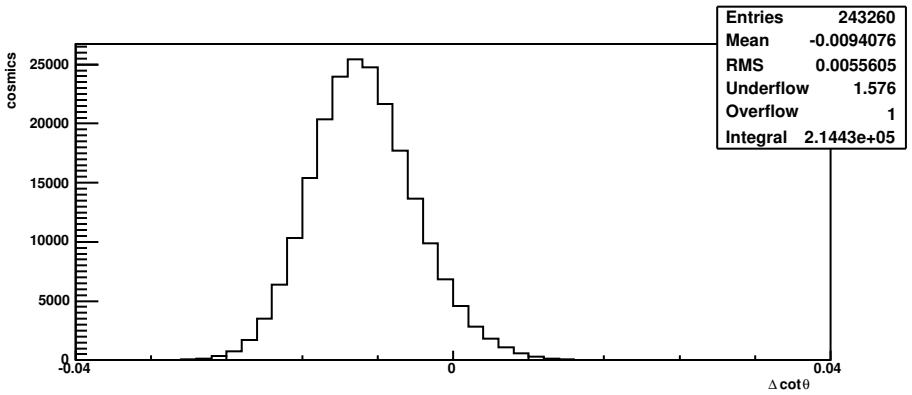
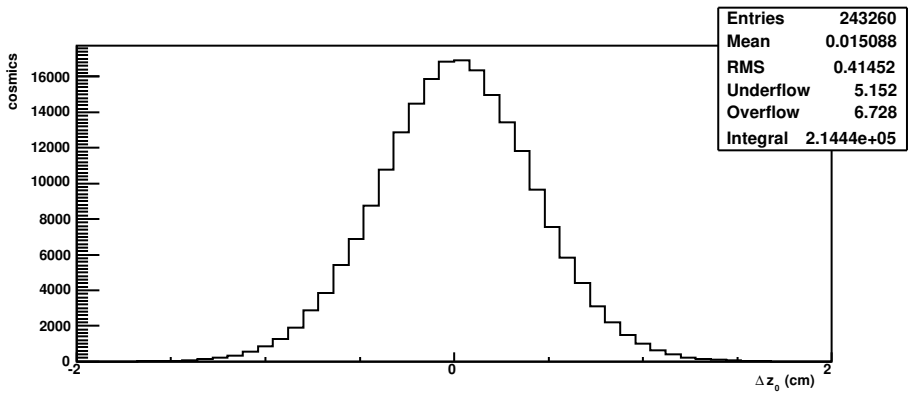
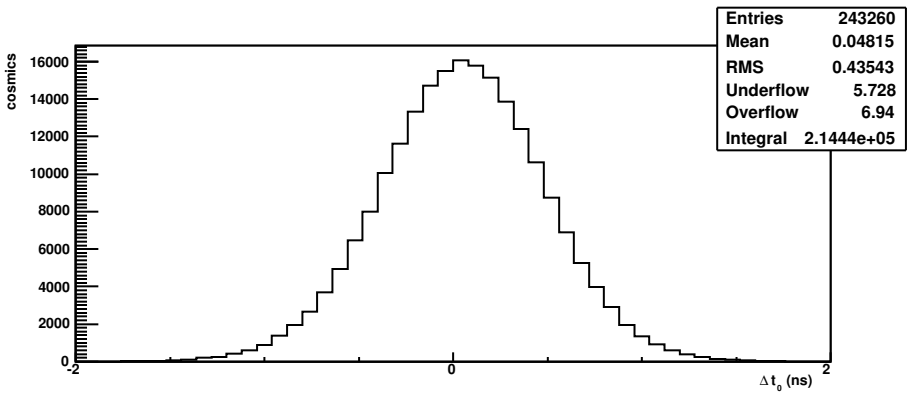

cosmics
Entries 243260
Mean 0.21595
RMS 1.8993
Underflow 6.364
Overflow 9.728
Integral 2.1443e+05
Δ(TeV/p_T)

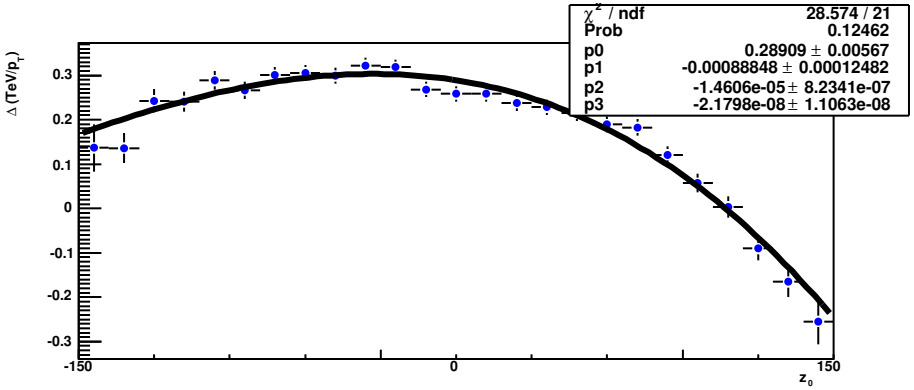

cosmics
Entries 243260
Mean -0.0056087
RMS 0.79226
Underflow 5.152
Overflow 5.152
Integral 2.1443e+05
Δφ_0 (mrad)

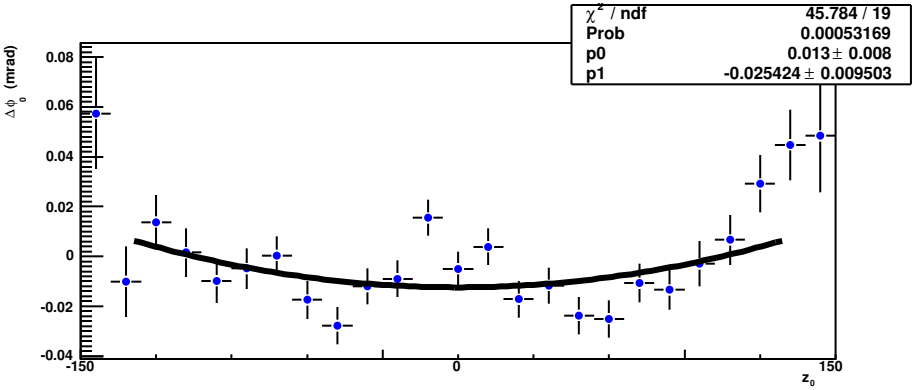

cosmics
Entries 243260
Mean 28.363
RMS 309.36
Underflow 1
Overflow 1.576
Integral 2.1444e+05
Δd_0 (μm)

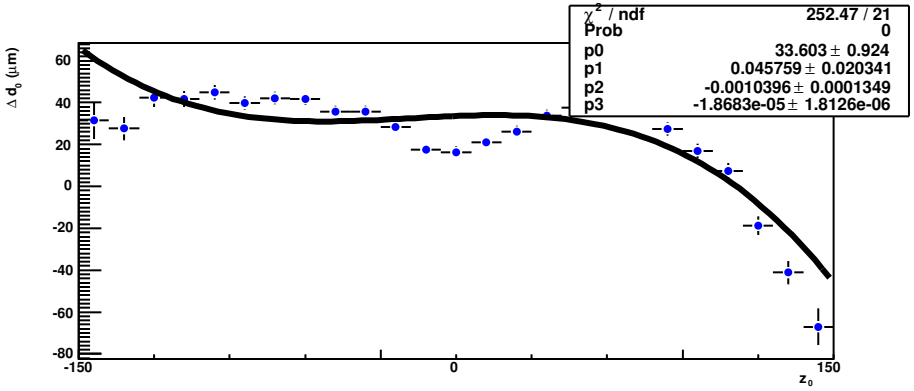

cosmics
Entries 243260
Mean -0.0094076
RMS 0.0055605
Underflow 1.576
Overflow 1
Integral 2.1443e+05
Δcotθ

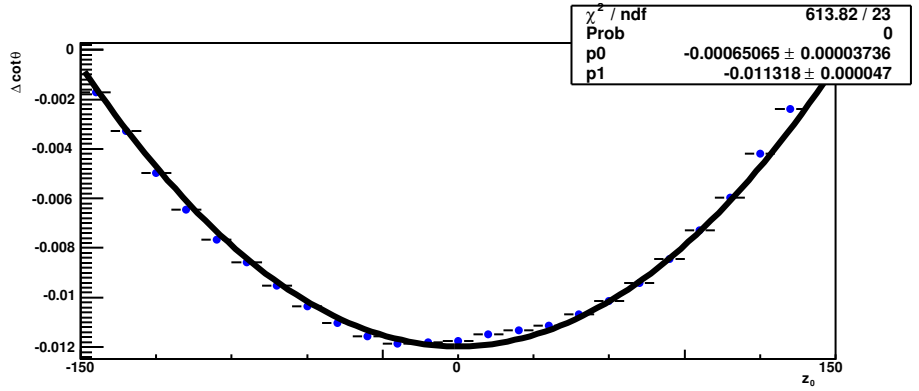

cosmics
Entries 243260
Mean 0.015088
RMS 0.41452
Underflow 5.152
Overflow 6.728
Integral 2.1444e+05
Δz_0 (cm)

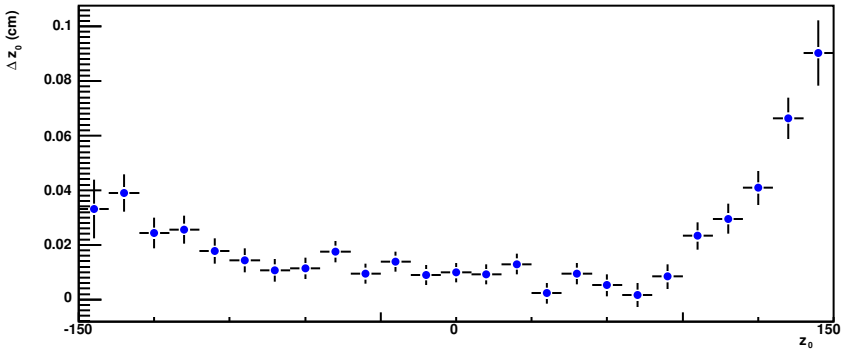

cosmics
Entries 243260
Mean 0.04815
RMS 0.43543
Underflow 5.728
Overflow 6.94
Integral 2.1444e+05
Δt_0 (ns)

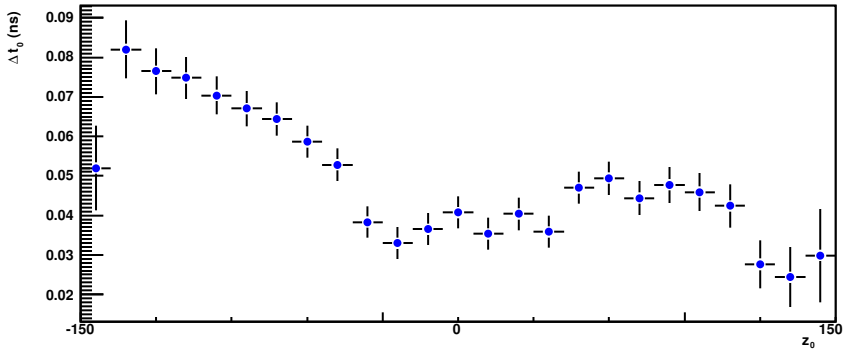

χ^2 / ndf 28.574 / 21
Prob 0.12462
p0 0.28909 ± 0.00567
p1 -0.00088848 ± 0.00012482
p2 -1.4606e-05 ± 8.2341e-07
p3 -2.1798e-08 ± 1.1063e-08
$\Delta(\mathrm{TeV}/p_T)$
z_0

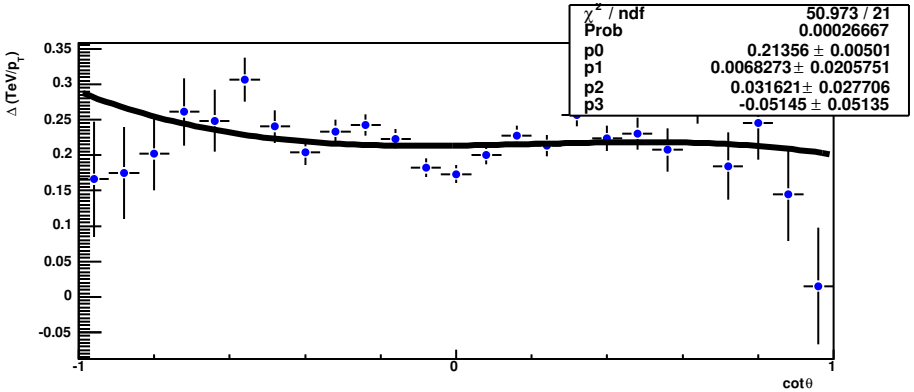

χ^2 / ndf 45.784 / 19
Prob 0.00053169
p0 0.013 ± 0.008
p1 -0.025424 ± 0.009503
$\Delta\phi_0$ (mrad)
z_0

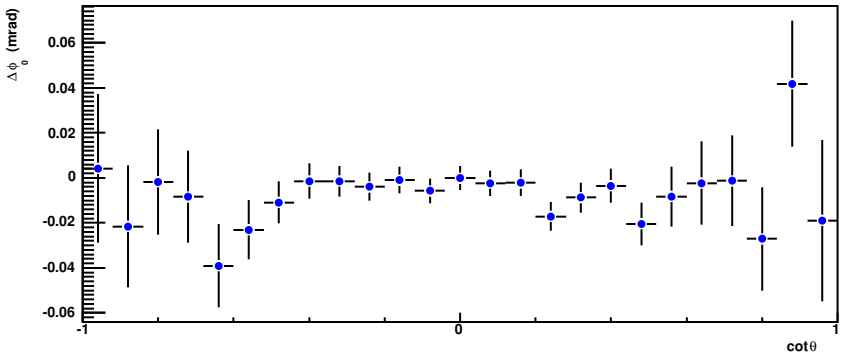

χ^2 / ndf 252.47 / 21
Prob 0
p0 33.603 ± 0.924
p1 0.045759 ± 0.020341
p2 -0.0010396 ± 0.0001349
p3 -1.8683e-05 ± 1.8126e-06
Δd_0 (μm)
z_0

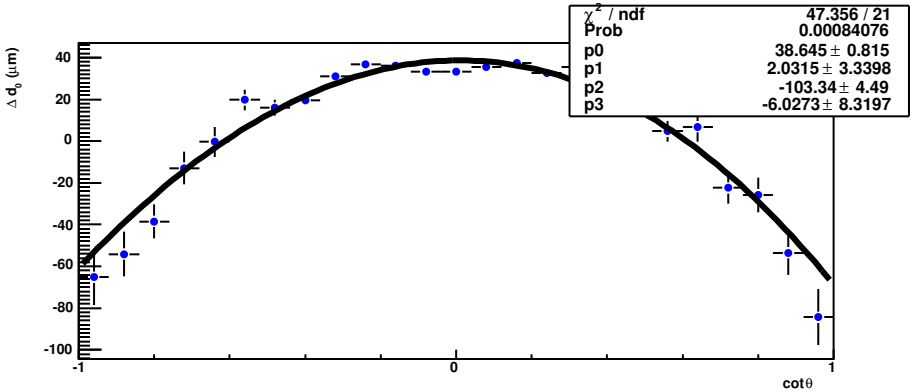

χ^2 / ndf 613.82 / 23
Prob 0
p0 -0.00065065 ± 0.00003736
p1 -0.011318 ± 0.000047
$\Delta\cot\theta$
z_0

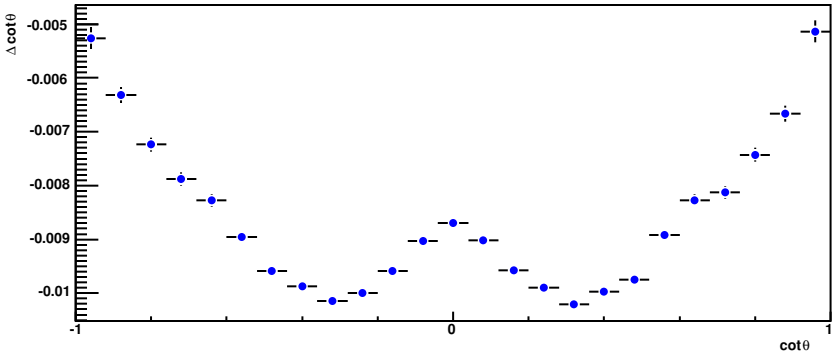

Δz_0 (cm)
z_0

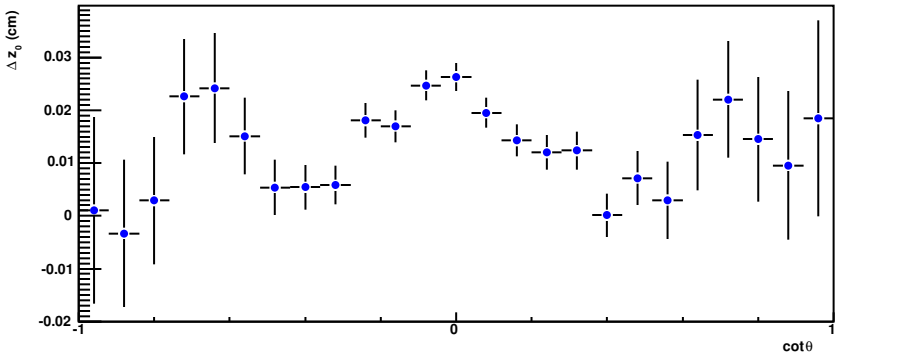

Δt_0 (ns)
z_0

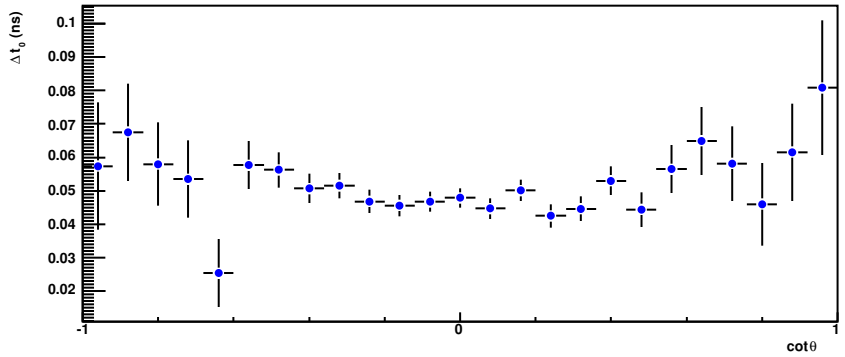

χ^2 / ndf 50.973 / 21
Prob 0.00026667
p0 0.21356 ± 0.00501
p1 0.0068273 ± 0.0205751
p2 0.031621 ± 0.027706
p3 -0.05145 ± 0.05135
Δ (TeV/p_T)
cotθ

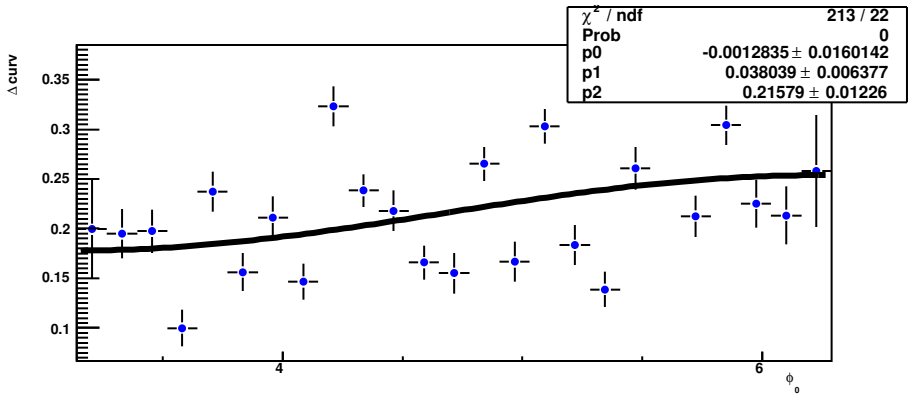

Δ φ_0 (mrad)
cotθ

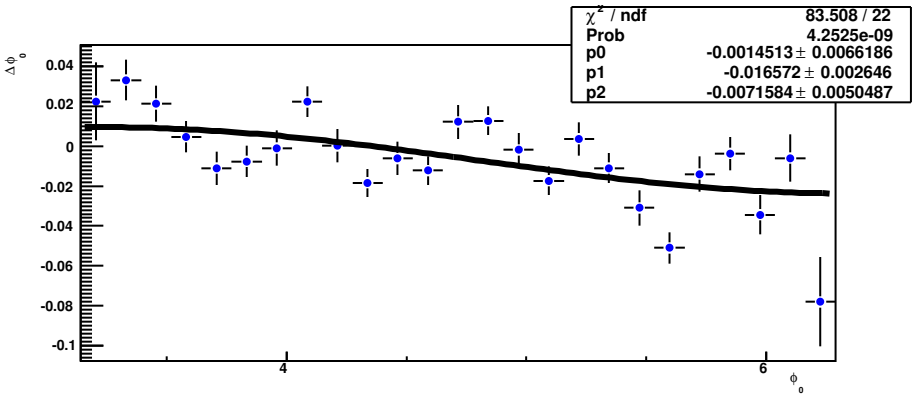

χ^2 / ndf 47.356 / 21
Prob 0.00084076
p0 38.645 ± 0.815
p1 2.0315 ± 3.3398
p2 -103.34 ± 4.49
p3 -6.0273 ± 8.3197
Δ d_0 (μm)
cotθ

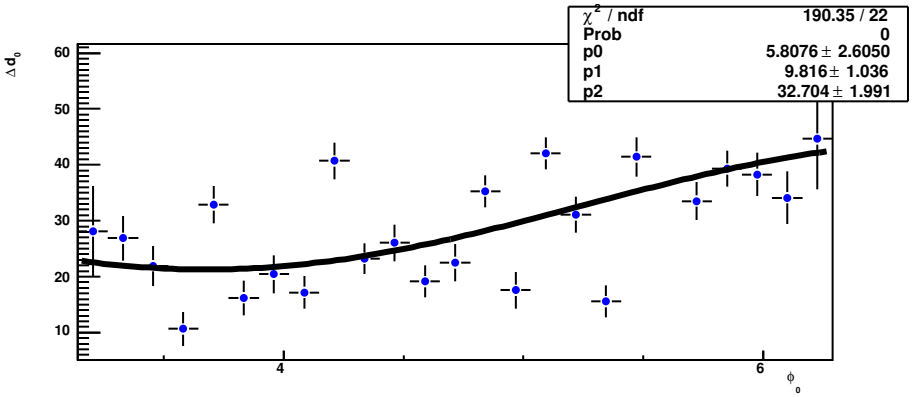

Δ cotθ
cotθ

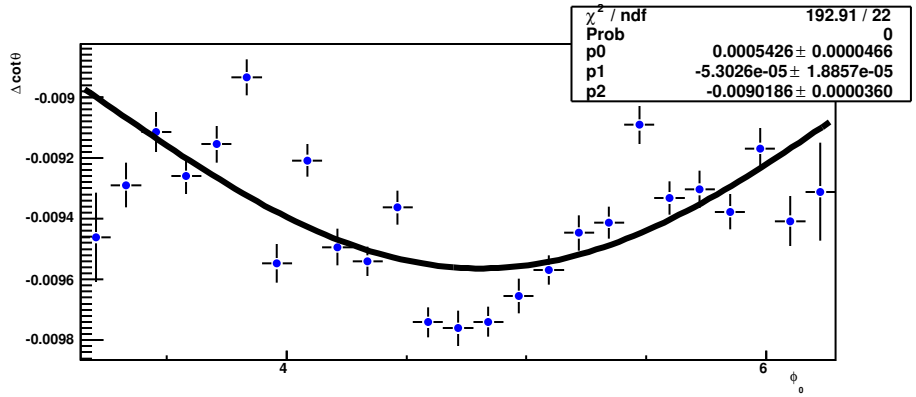

Δ z_0 (cm)
cotθ

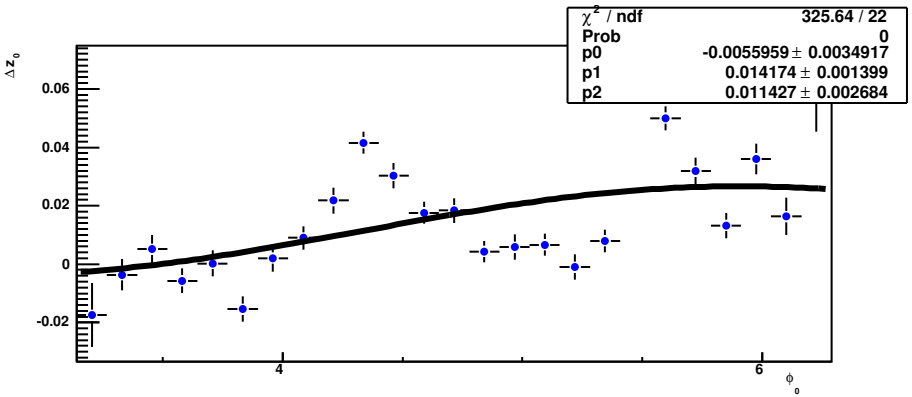

Δ t_0 (ns)
cotθ

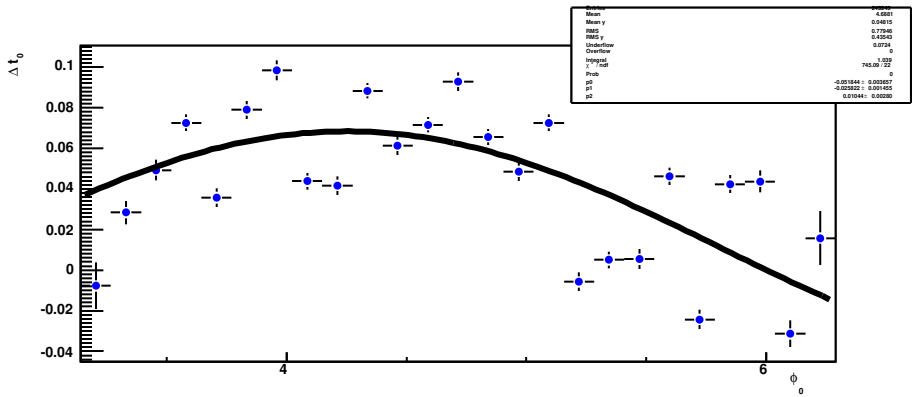

χ² / ndf 213 / 22
Prob 0
p0 -0.0012835 ± 0.0160142
p1 0.038039 ± 0.006377
p2 0.21579 ± 0.01226
Δ curv
φ0

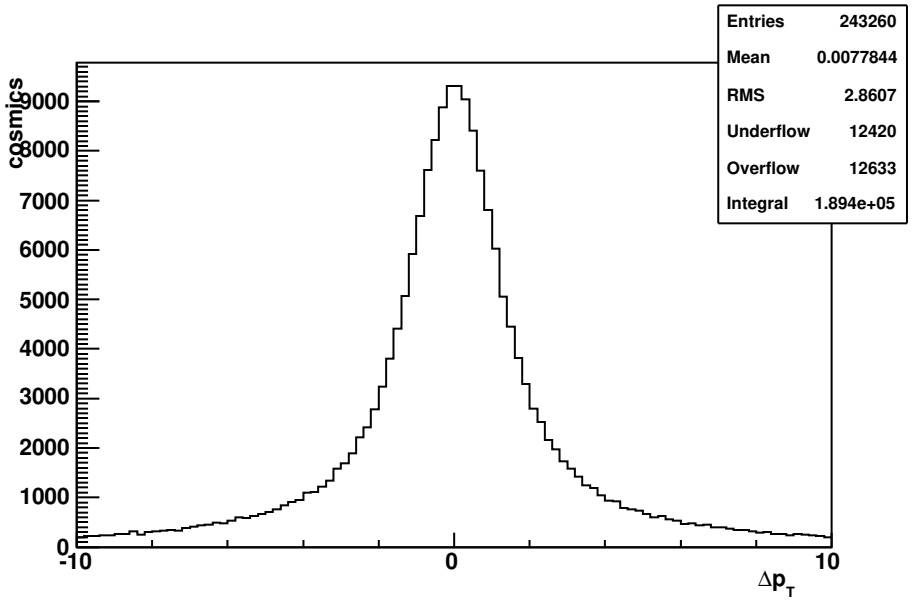

χ² / ndf 83.508 / 22
Prob 4.2525e-09
p0 -0.0014513 ± 0.0066186
p1 -0.016572 ± 0.002646
p2 -0.0071584 ± 0.0050487
Δ φ0
φ0

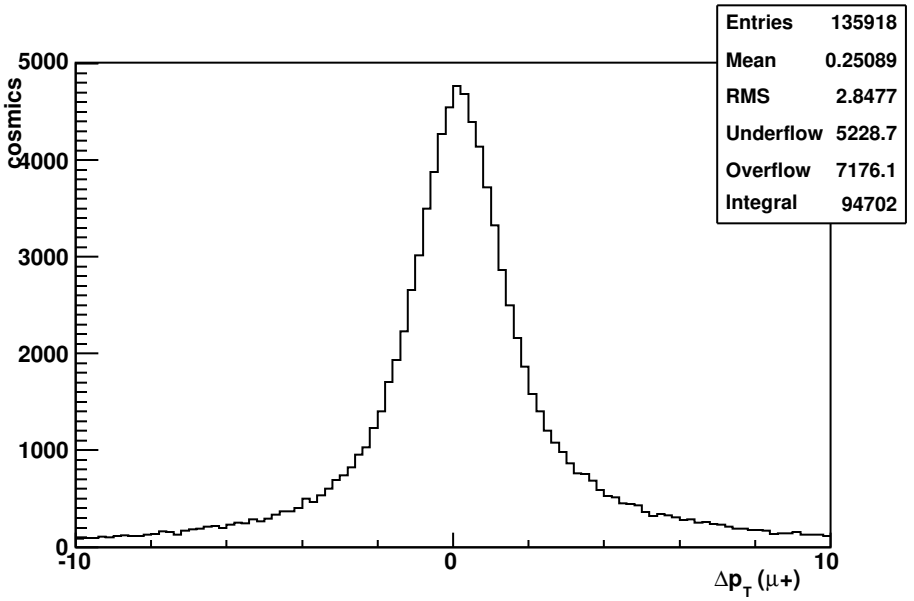

χ² / ndf 190.35 / 22
Prob 0
p0 5.8076 ± 2.6050
p1 9.816 ± 1.036
p2 32.704 ± 1.991
Δ d0
φ0

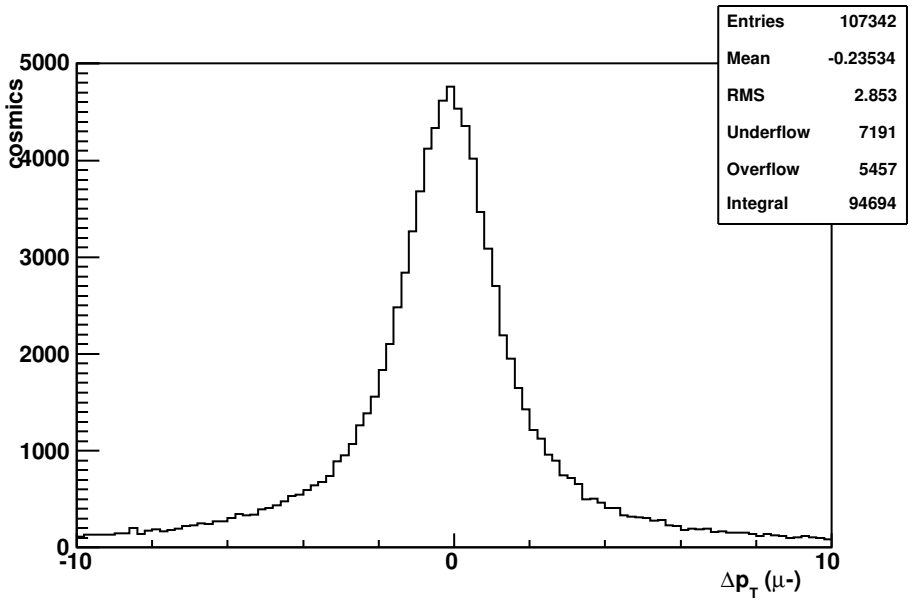

χ² / ndf 192.91 / 22
Prob 0
p0 0.0005426 ± 0.0000466
p1 -5.3026e-05 ± 1.8857e-05
p2 -0.0090186 ± 0.0000360
Δ cotθ
φ0

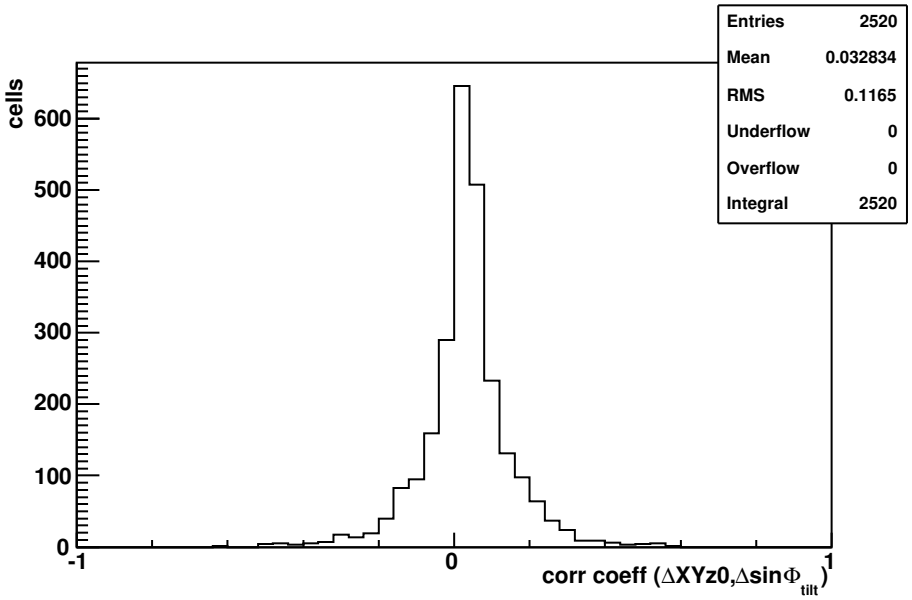

χ² / ndf 325.64 / 22
Prob 0
p0 -0.0055959 ± 0.0034917
p1 0.014174 ± 0.001399
p2 0.011427 ± 0.002684
Δ z0
φ0

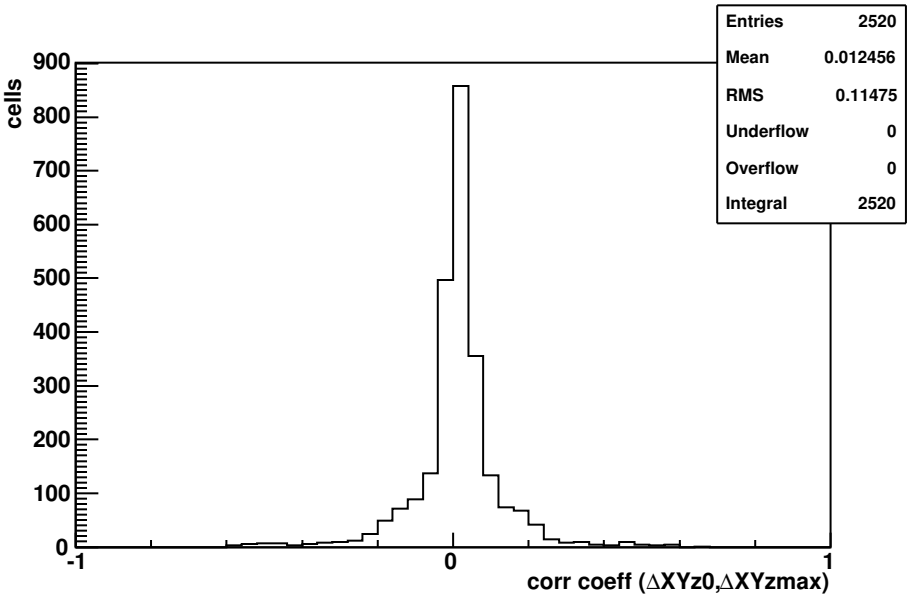

Δ t0
φ0

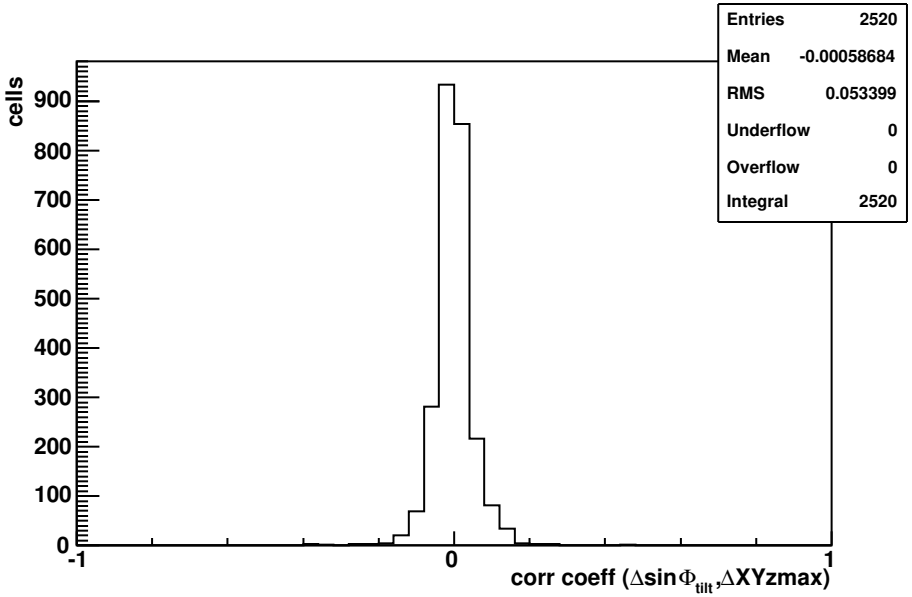

Entries 243260
Mean 0.0077844
RMS 2.8607
Underflow 12420
Overflow 12633
Integral 1.894e+05
cosmics
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
-10
0
10
Δp_T

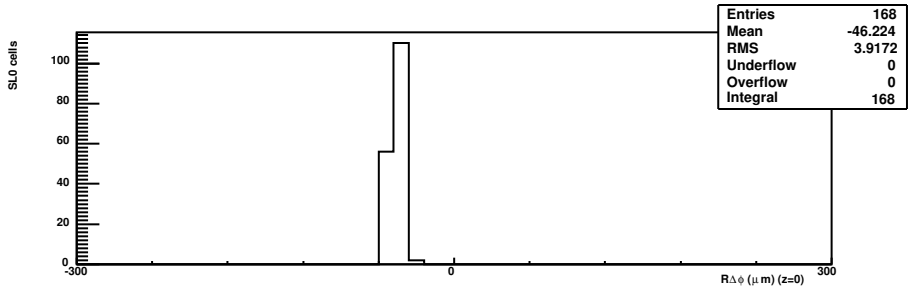

Entries 135918
Mean 0.25089
RMS 2.8477
Underflow 5228.7
Overflow 7176.1
Integral 94702
cosmics
5000
4000
3000
2000
1000
0
-10
0
10
Δp_T (μ+)

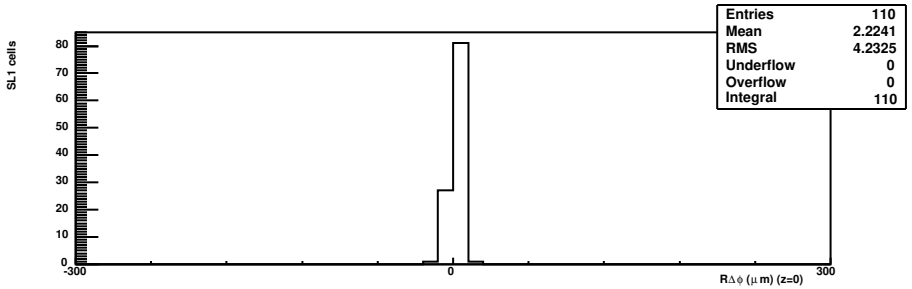

Entries 107342
Mean -0.23534
RMS 2.853
Underflow 7191
Overflow 5457
Integral 94694
cosmics
5000
4000
3000
2000
1000
0
-10
0
10
Δp_T (μ-)

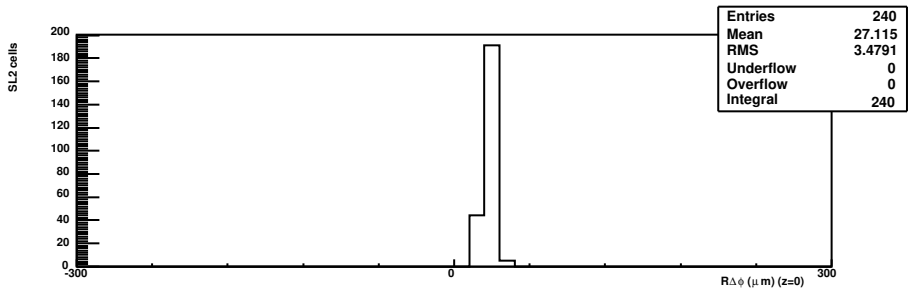

Entries 2520
Mean 0.032834
RMS 0.1165
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔsinΦ_{tilt})

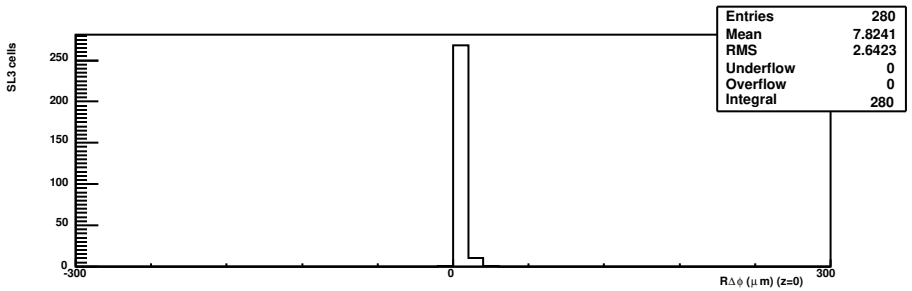

Entries 2520
Mean 0.012456
RMS 0.11475
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔXYzmax)

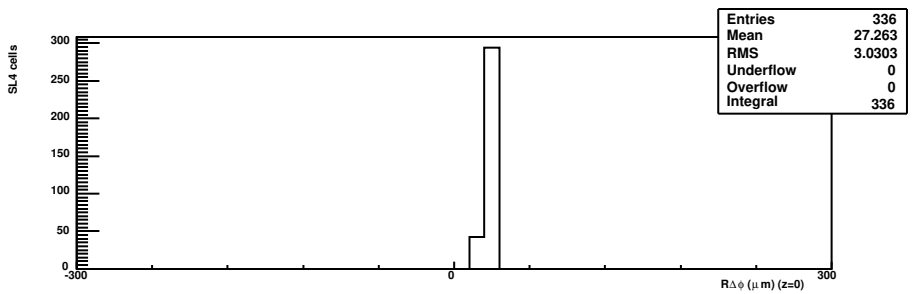

Entries 2520
Mean -0.00058684
RMS 0.053399
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔsinΦ_{tilt},ΔXYzmax)

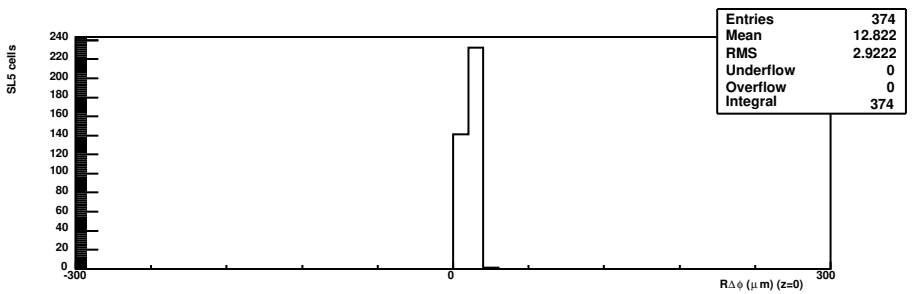

SL0 cells
Entries 168
Mean -46.224
RMS 3.9172
Underflow 0
Overflow 0
Integral 168
RΔφ (μm) (z=0)

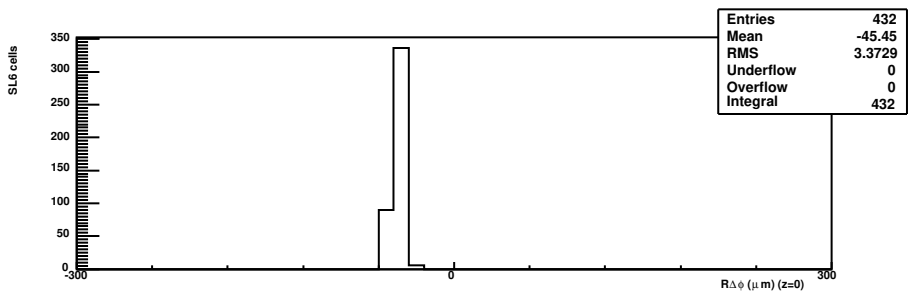

SL1 cells
Entries 110
Mean 2.2241
RMS 4.2325
Underflow 0
Overflow 0
Integral 110
RΔφ (μm) (z=0)

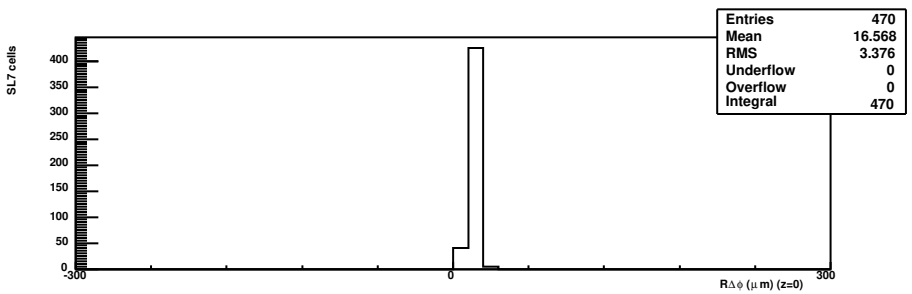

SL2 cells
Entries 240
Mean 27.115
RMS 3.4791
Underflow 0
Overflow 0
Integral 240
RΔφ (μm) (z=0)

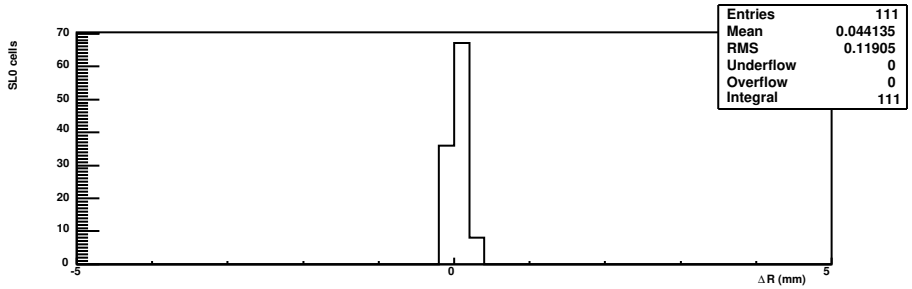

SL3 cells
Entries 280
Mean 7.8241
RMS 2.6423
Underflow 0
Overflow 0
Integral 280
RΔφ (μm) (z=0)

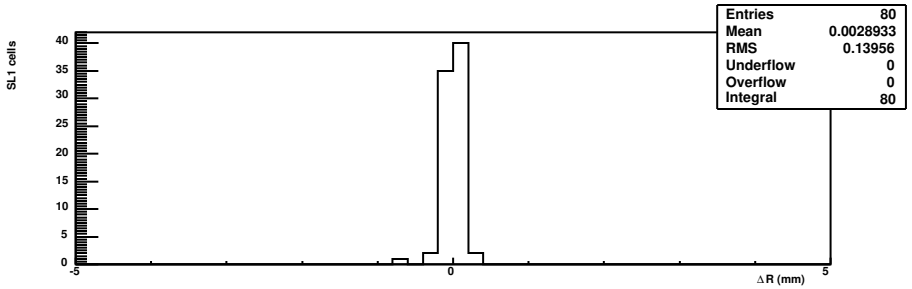

SL4 cells
Entries 336
Mean 27.263
RMS 3.0303
Underflow 0
Overflow 0
Integral 336
RΔφ (μm) (z=0)

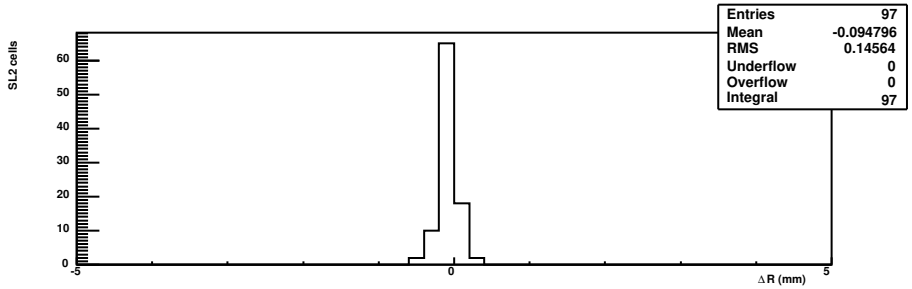

SL5 cells
Entries 374
Mean 12.822
RMS 2.9222
Underflow 0
Overflow 0
Integral 374
RΔφ (μm) (z=0)

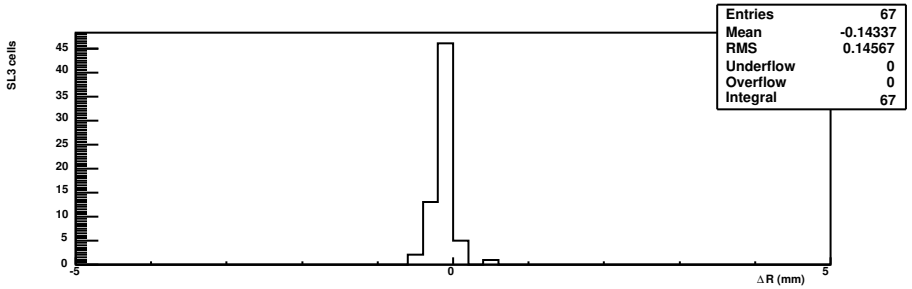

SL6 cells
Entries 432
Mean -45.45
RMS 3.3729
Underflow 0
Overflow 0
Integral 432
RΔφ (μm) (z=0)

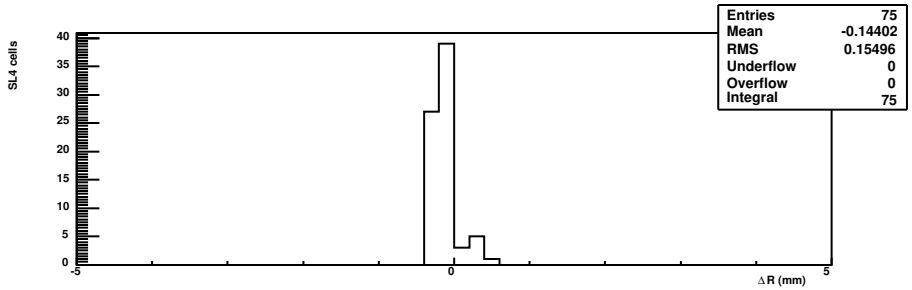

SL7 cells
Entries 470
Mean 16.568
RMS 3.376
Underflow 0
Overflow 0
Integral 470
RΔφ (μm) (z=0)

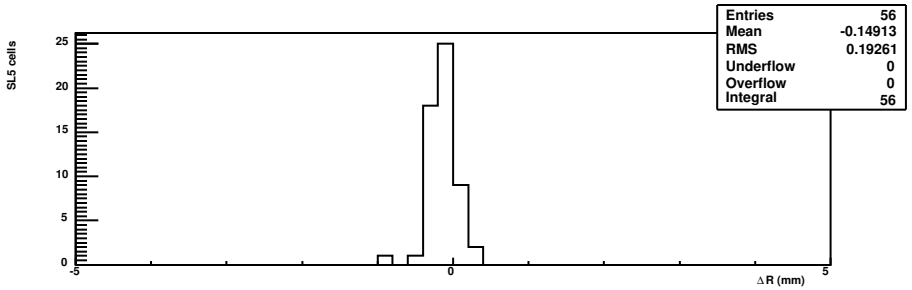

SL0 cells
Entries 111
Mean 0.044135
RMS 0.11905
Underflow 0
Overflow 0
Integral 111
ΔR (mm)

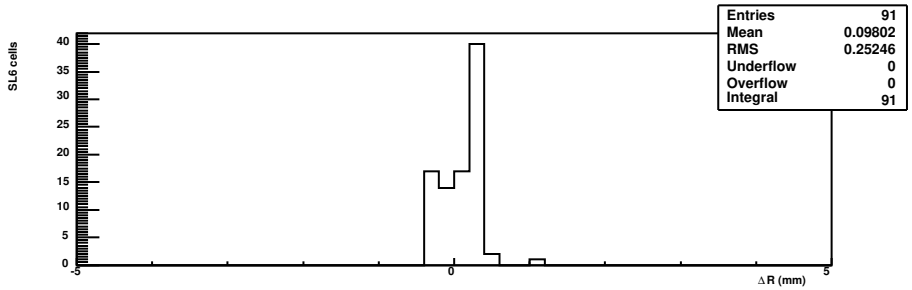

SL1 cells
Entries 80
Mean 0.0028933
RMS 0.13956
Underflow 0
Overflow 0
Integral 80
ΔR (mm)

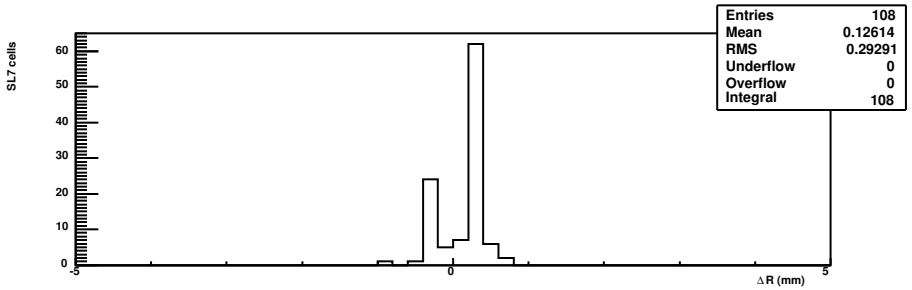

SL2 cells
Entries 97
Mean -0.094796
RMS 0.14564
Underflow 0
Overflow 0
Integral 97
ΔR (mm)

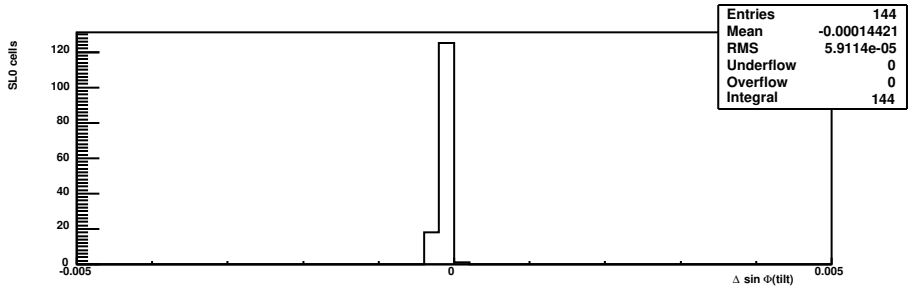

SL3 cells
Entries 67
Mean -0.14337
RMS 0.14567
Underflow 0
Overflow 0
Integral 67
ΔR (mm)

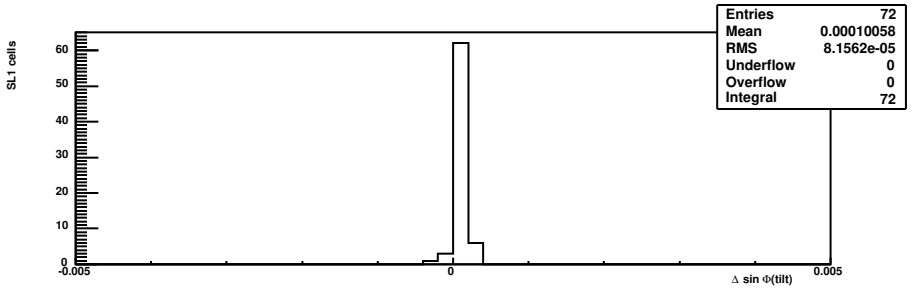

SL4 cells
Entries 75
Mean -0.14402
RMS 0.15496
Underflow 0
Overflow 0
Integral 75
ΔR (mm)

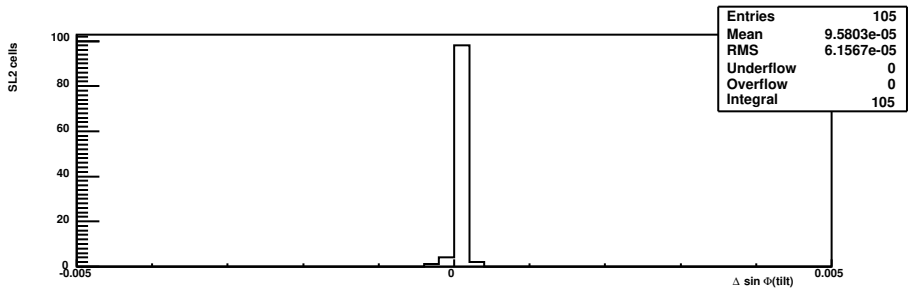

SL5 cells
Entries 56
Mean -0.14913
RMS 0.19261
Underflow 0
Overflow 0
Integral 56
ΔR (mm)

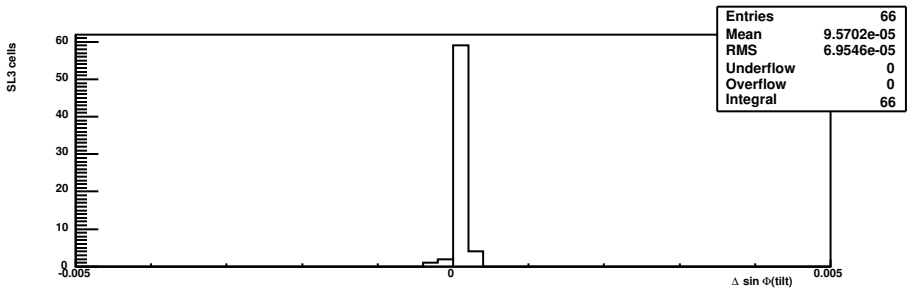

SL6 cells
Entries 91
Mean 0.09802
RMS 0.25246
Underflow 0
Overflow 0
Integral 91
ΔR (mm)

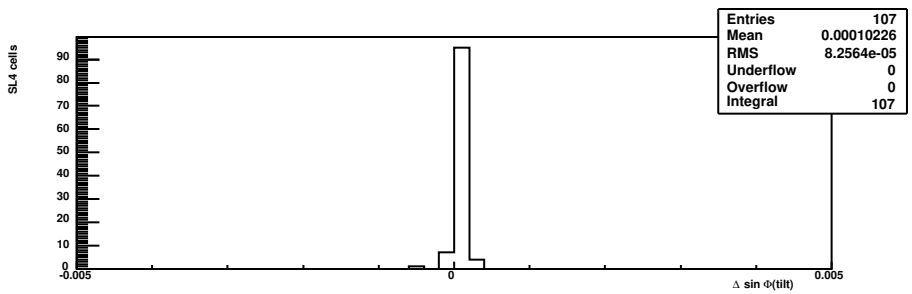

SL7 cells
Entries 108
Mean 0.12614
RMS 0.29291
Underflow 0
Overflow 0
Integral 108
ΔR (mm)

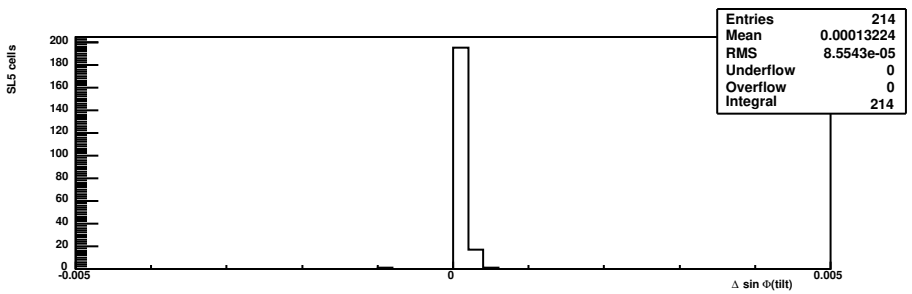

Entries 144
Mean -0.00014421
RMS 5.9114e-05
Underflow 0
Overflow 0
Integral 144
SL0 cells
Δ sin Φ(tilt)

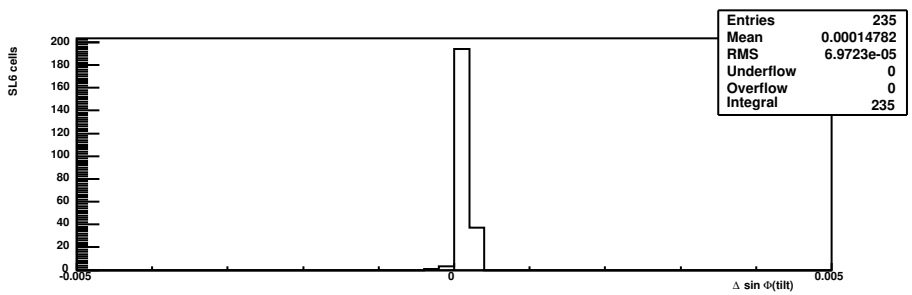

Entries 72
Mean 0.00010058
RMS 8.1562e-05
Underflow 0
Overflow 0
Integral 72
SL1 cells
Δ sin Φ(tilt)

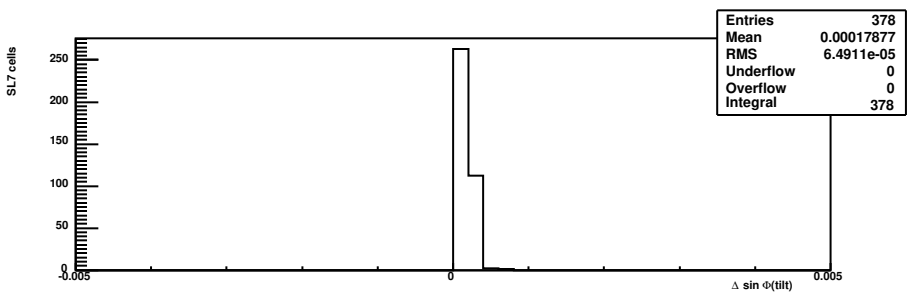

Entries 105
Mean 9.5803e-05
RMS 6.1567e-05
Underflow 0
Overflow 0
Integral 105
SL2 cells
Δ sin Φ(tilt)

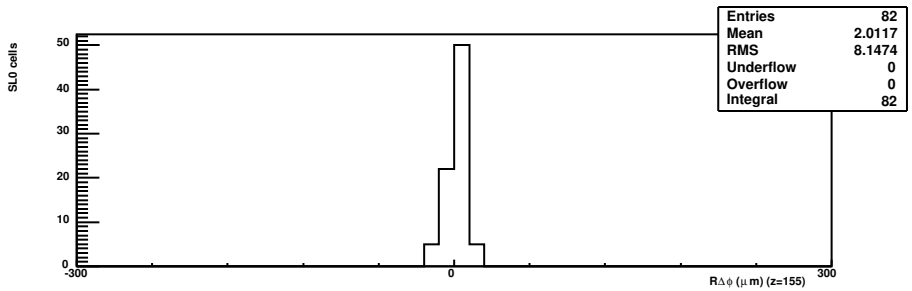

Entries 66
Mean 9.5702e-05
RMS 6.9546e-05
Underflow 0
Overflow 0
Integral 66
SL3 cells
Δ sin Φ(tilt)

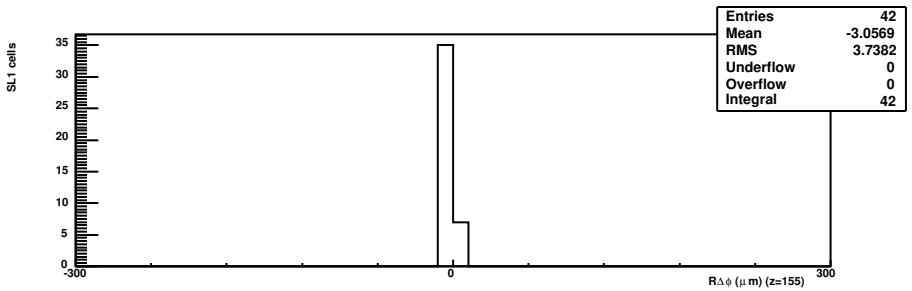

Entries 107
Mean 0.00010226
RMS 8.2564e-05
Underflow 0
Overflow 0
Integral 107
SL4 cells
Δ sin Φ(tilt)

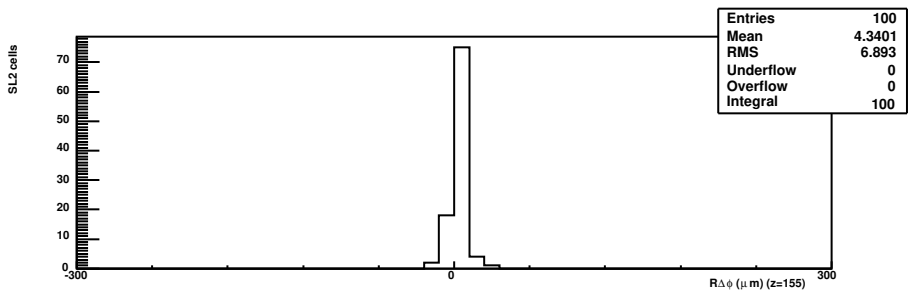

Entries 214
Mean 0.00013224
RMS 8.5543e-05
Underflow 0
Overflow 0
Integral 214
SL5 cells
Δ sin Φ(tilt)

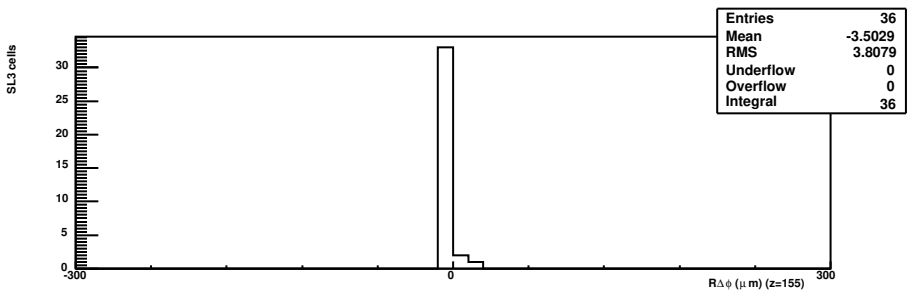

Entries 235
Mean 0.00014782
RMS 6.9723e-05
Underflow 0
Overflow 0
Integral 235
SL6 cells
Δ sin Φ(tilt)

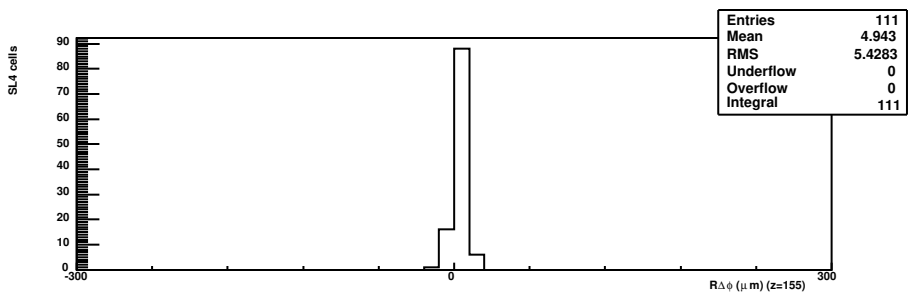

Entries 378
Mean 0.00017877
RMS 6.4911e-05
Underflow 0
Overflow 0
Integral 378
SL7 cells
Δ sin Φ(tilt)

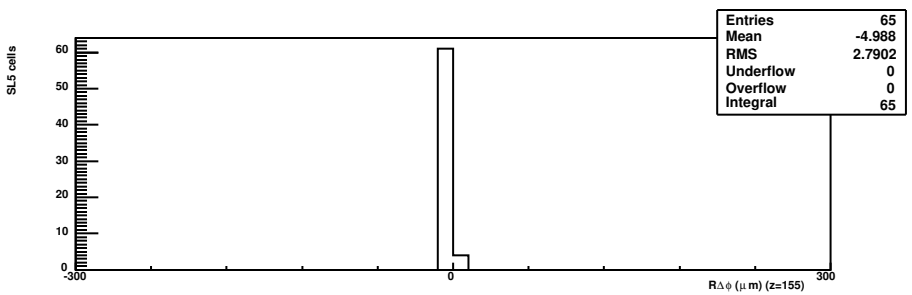

Entries 82
Mean 2.0117
RMS 8.1474
Underflow 0
Overflow 0
Integral 82
SL0 cells
RΔφ (μm) (z=155)

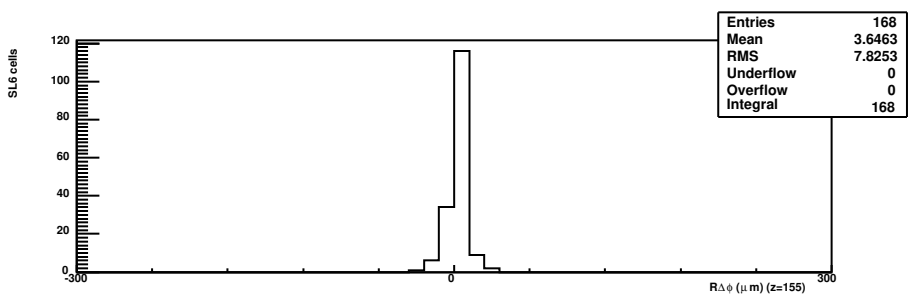

Entries 42
Mean -3.0569
RMS 3.7382
Underflow 0
Overflow 0
Integral 42
SL1 cells
RΔφ (μm) (z=155)

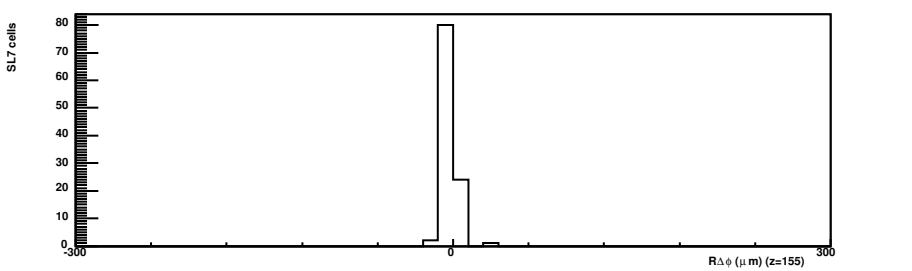

Entries 100
Mean 4.3401
RMS 6.893
Underflow 0
Overflow 0
Integral 100
SL2 cells
RΔφ (μm) (z=155)

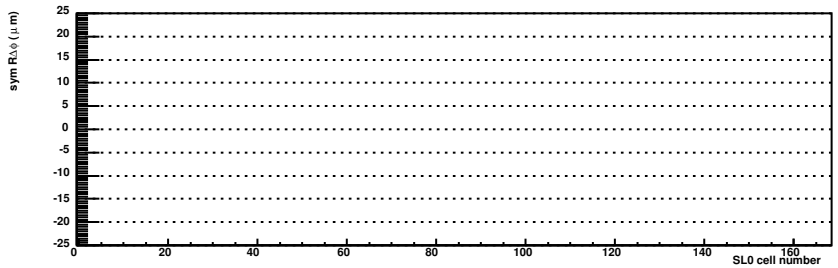

Entries 36
Mean -3.5029
RMS 3.8079
Underflow 0
Overflow 0
Integral 36
SL3 cells
RΔφ (μm) (z=155)

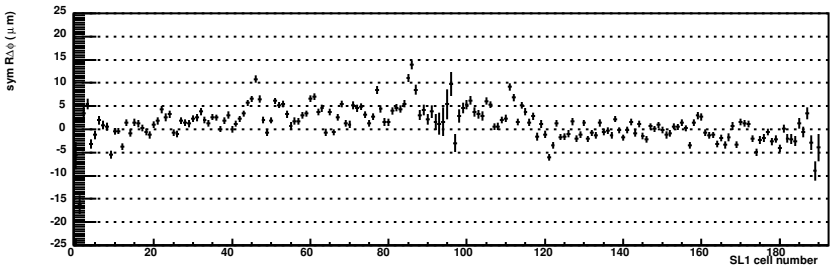

Entries 111
Mean 4.943
RMS 5.4283
Underflow 0
Overflow 0
Integral 111
SL4 cells
RΔφ (μm) (z=155)

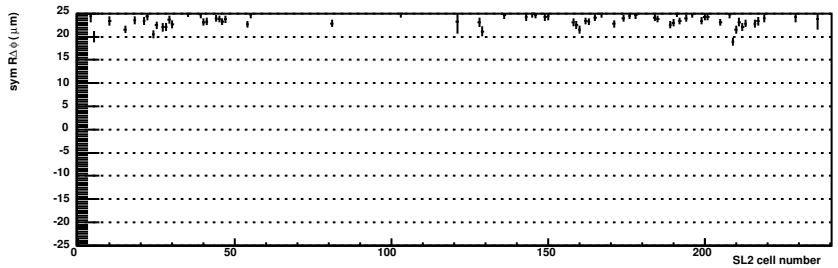

Entries 65
Mean -4.988
RMS 2.7902
Underflow 0
Overflow 0
Integral 65
SL5 cells
RΔφ (μm) (z=155)

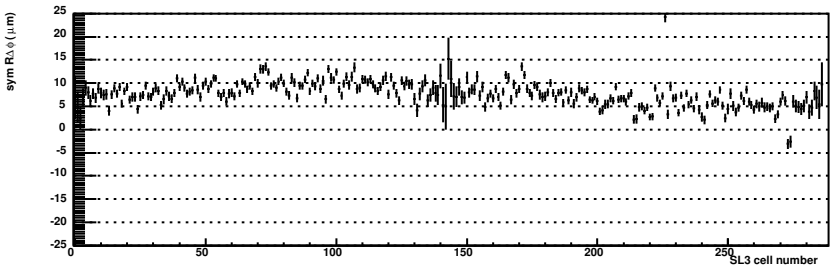

Entries 168
Mean 3.6463
RMS 7.8253
Underflow 0
Overflow 0
Integral 168
SL6 cells
RΔφ (μm) (z=155)

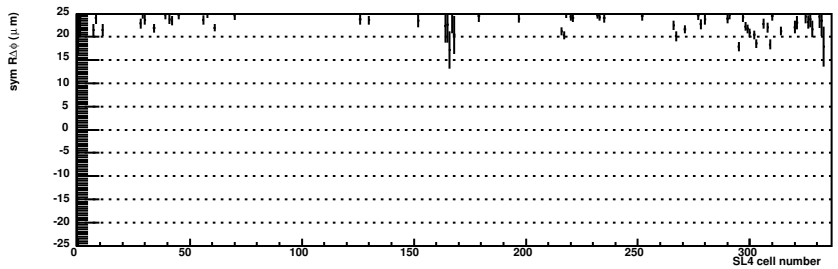

SL7 cells
RΔφ (μm) (z=155)

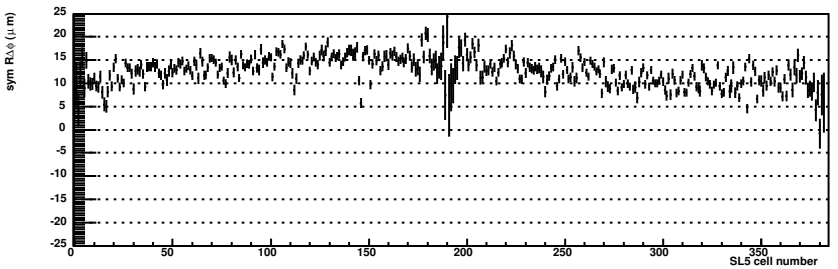

sym RΔφ (μm)
SL0 cell number

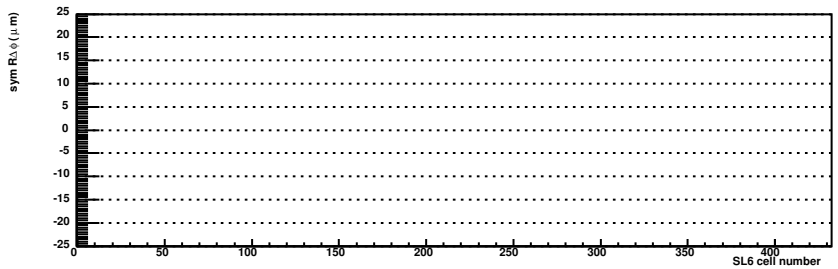

sym RΔφ (μm)
SL1 cell number

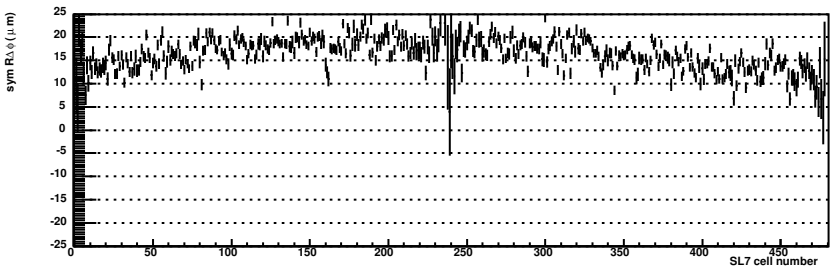

sym RΔφ (μm)
SL2 cell number

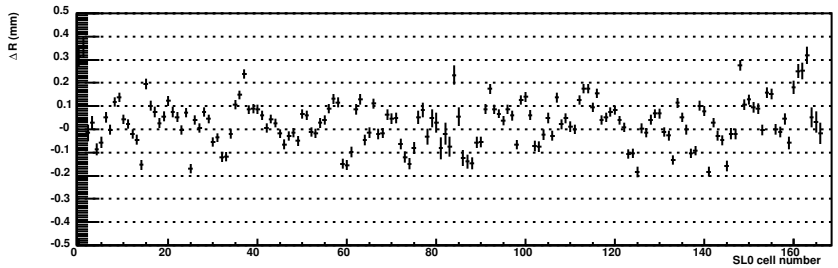

sym RΔφ (μm)
SL3 cell number

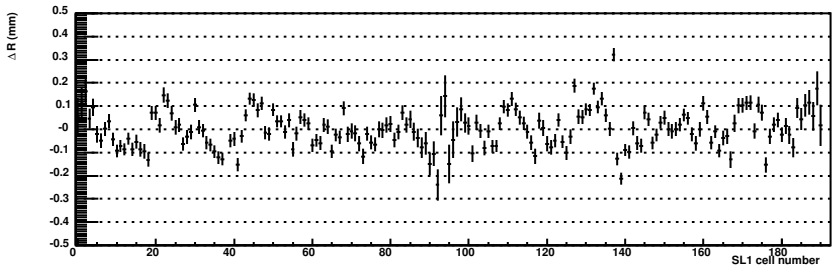

sym RΔφ (μm)
SL4 cell number

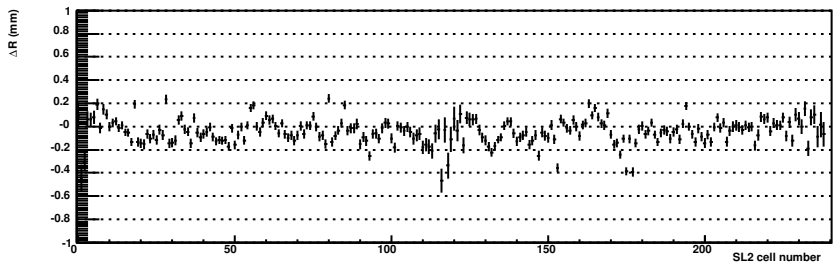

sym RΔφ (μm)
SL5 cell number

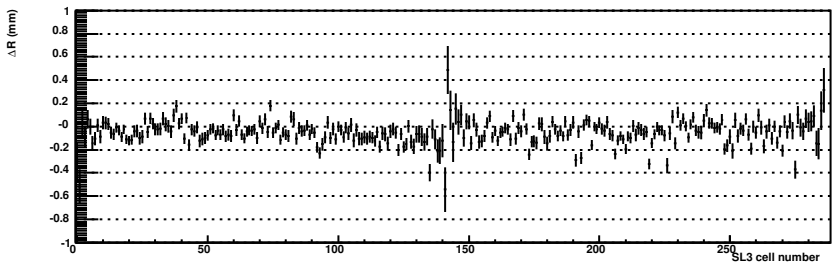

sym RΔφ (μm)
SL6 cell number

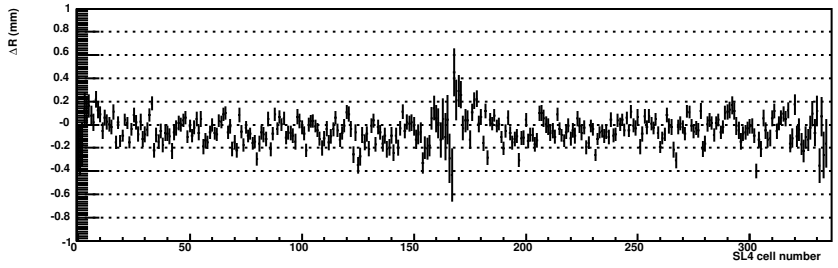

sym RΔφ (μm)
SL7 cell number

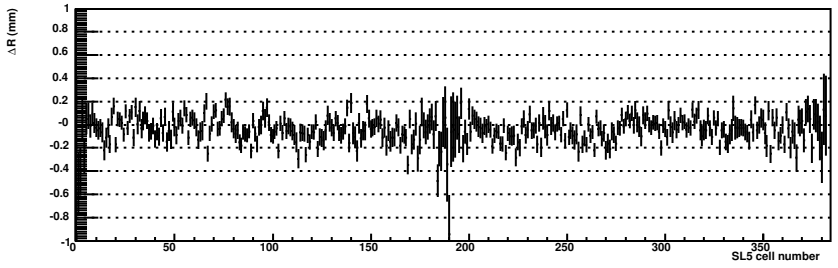

ΔR (mm)
SL0 cell number

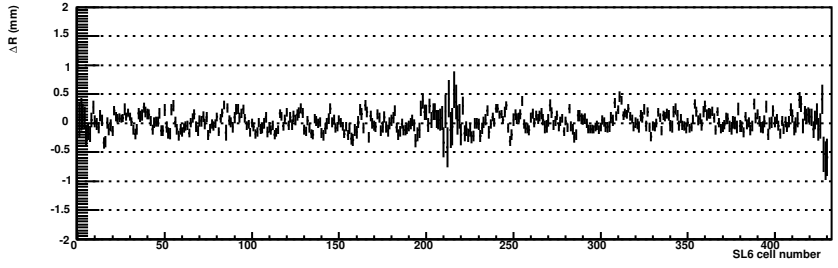

ΔR (mm)
SL1 cell number

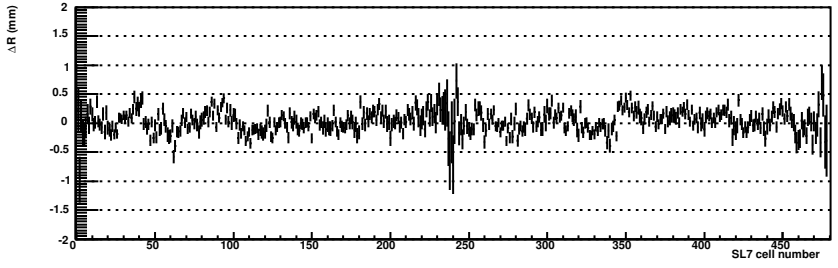

ΔR (mm)
SL2 cell number

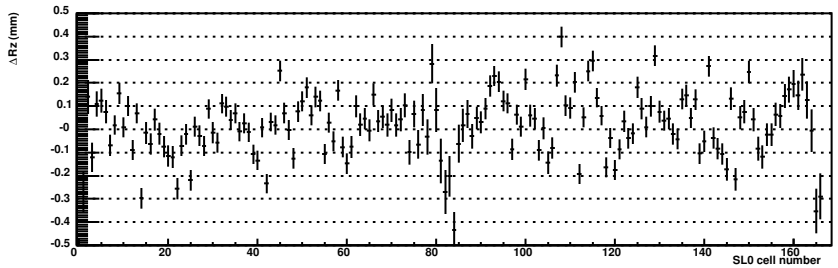

ΔR (mm)
SL3 cell number

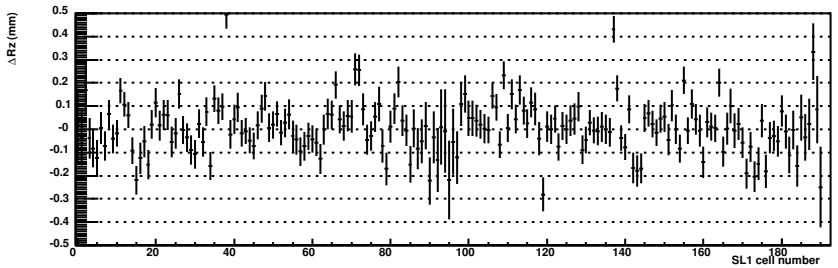

ΔR (mm)
SL4 cell number

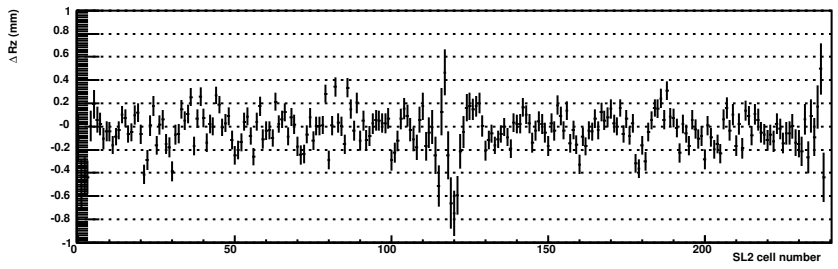

ΔR (mm)
SL5 cell number

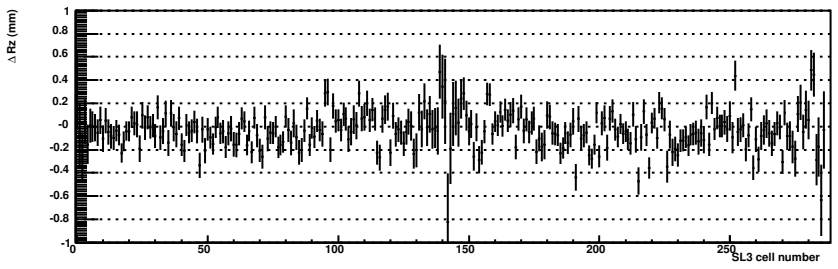

ΔR (mm)
SL6 cell number

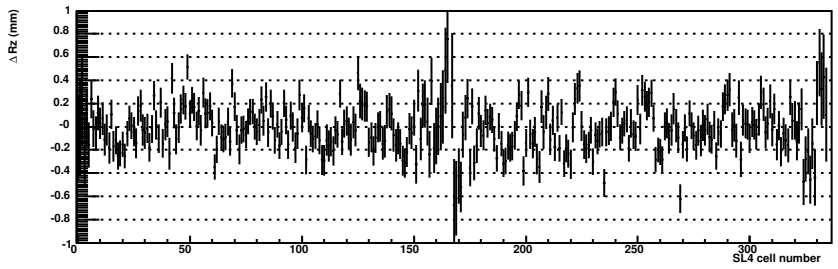

ΔR (mm)
SL7 cell number

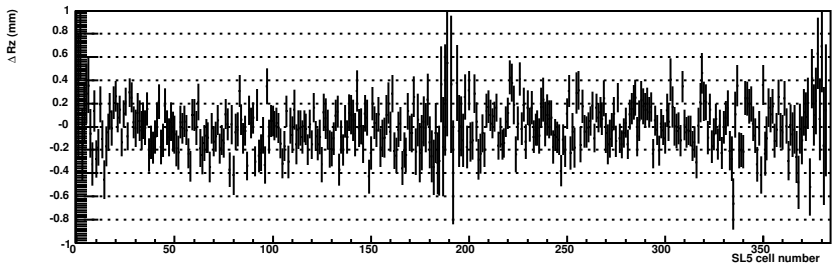

ΔRz (mm)
SL0 cell number

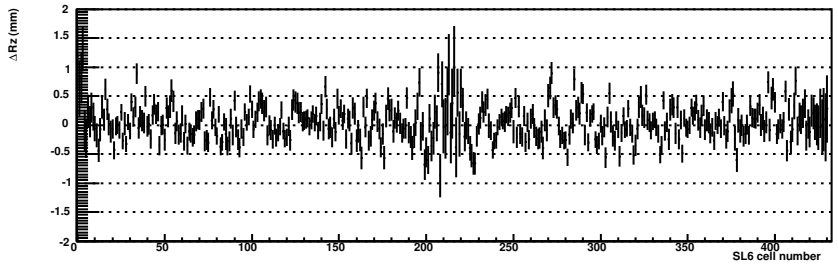

ΔRz (mm)
SL1 cell number

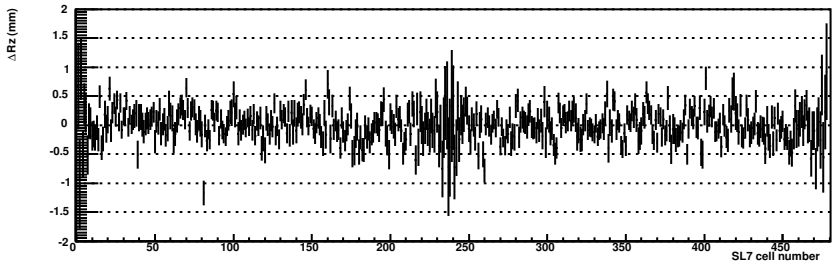

ΔRz (mm)
SL2 cell number

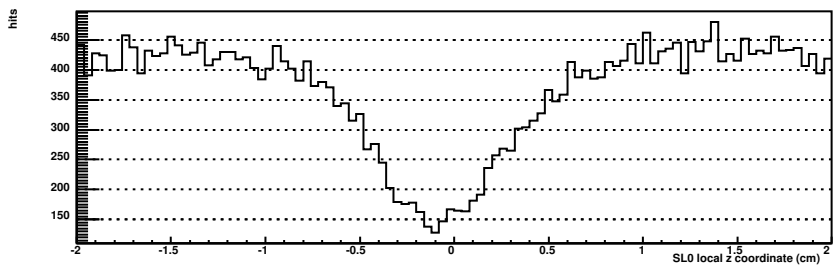

ΔRz (mm)
SL3 cell number

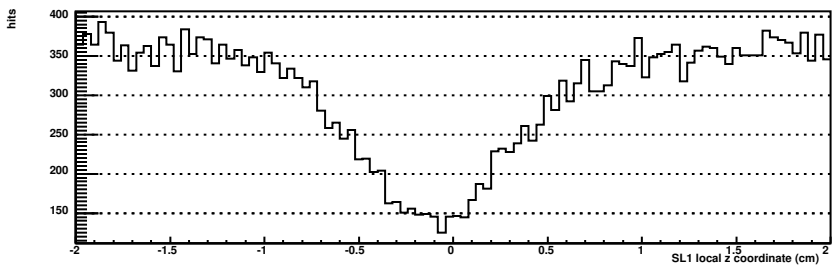

ΔRz (mm)
SL4 cell number

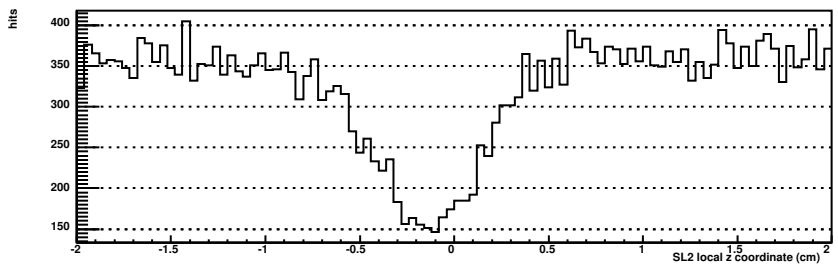

ΔRz (mm)
SL5 cell number

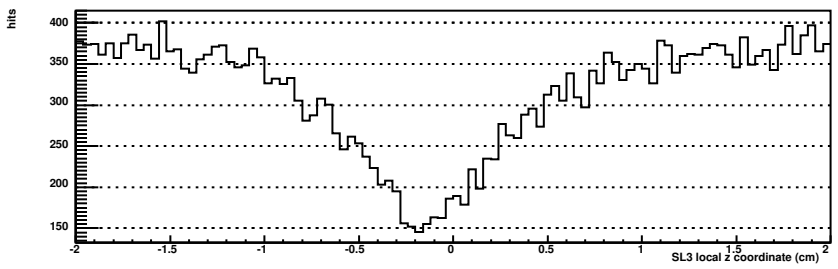

ΔRz (mm)
SL6 cell number

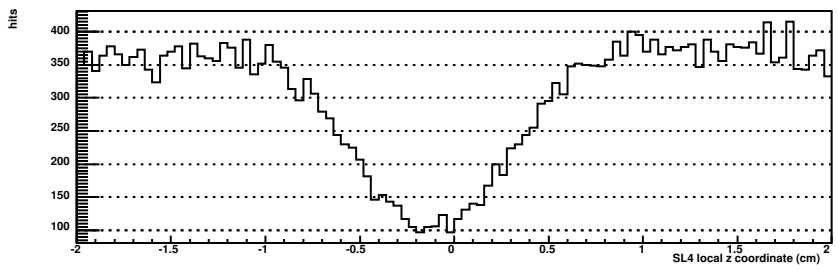

ΔRz (mm)
SL7 cell number

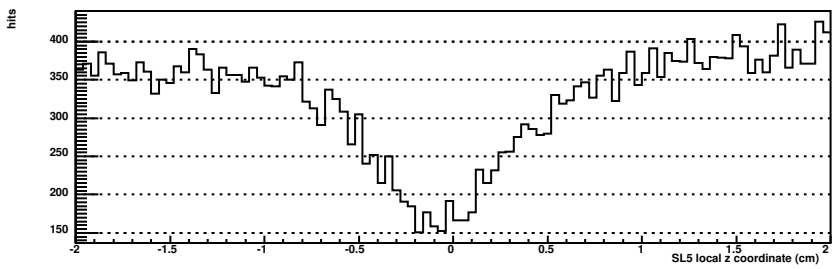

hits
SL0 local z coordinate (cm)

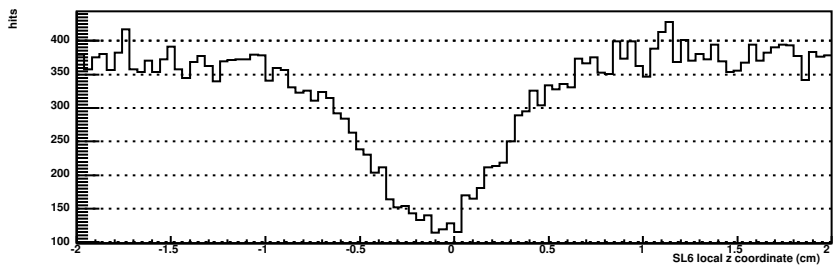

hits
SL1 local z coordinate (cm)

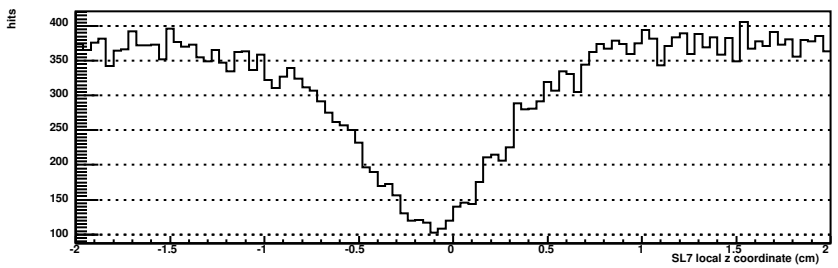

hits
SL2 local z coordinate (cm)

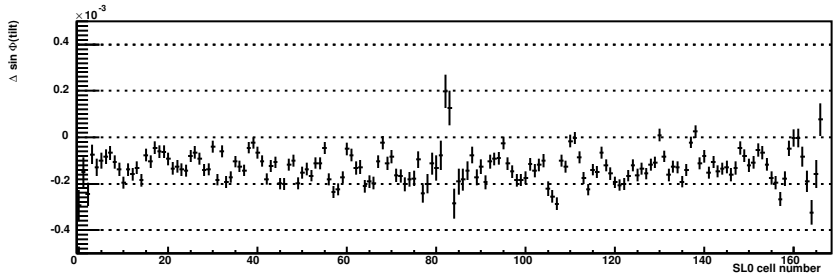

hits
SL3 local z coordinate (cm)

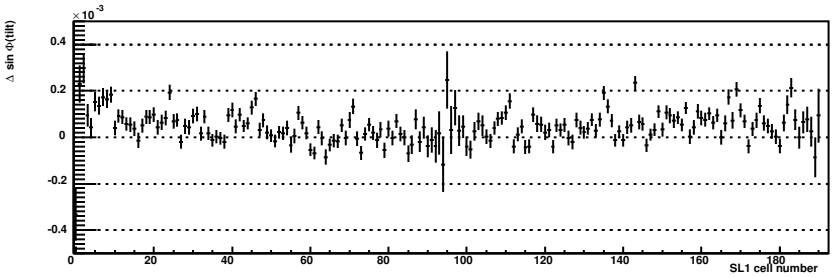

hits
SL4 local z coordinate (cm)

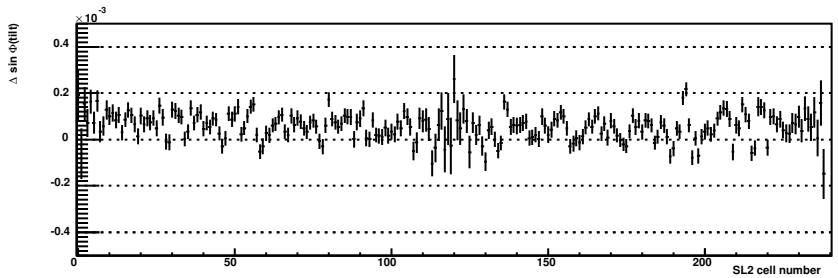

hits
SL5 local z coordinate (cm)

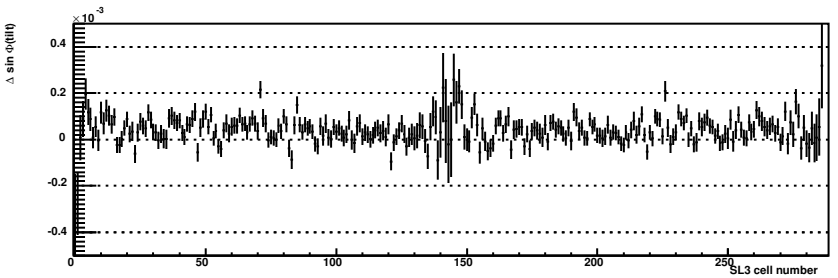

hits
SL6 local z coordinate (cm)

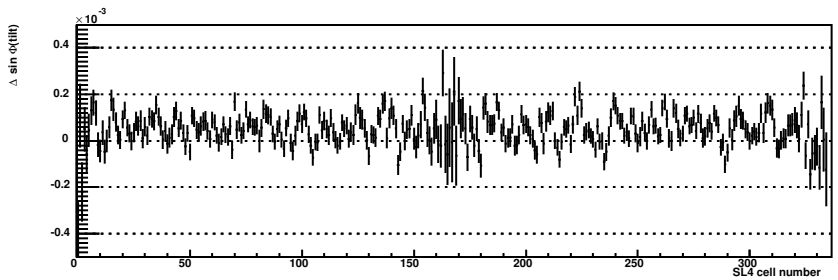

hits
SL7 local z coordinate (cm)

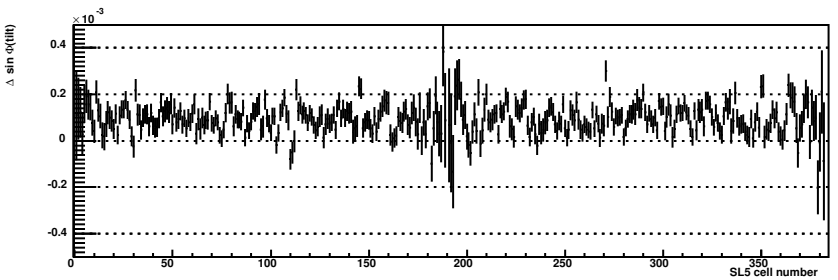

×10^-3
Δ sin Φ(tilt)
SL0 cell number

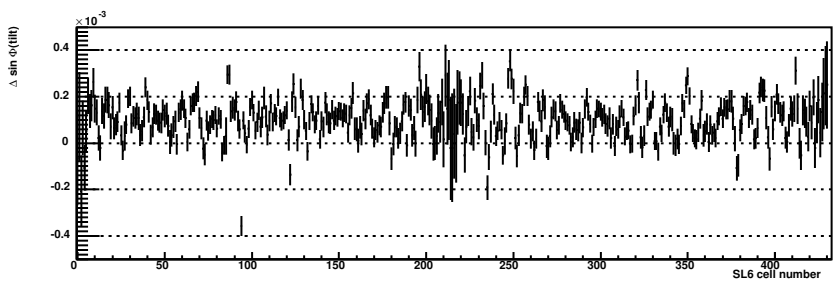

×10^-3
Δ sin Φ(tilt)
SL1 cell number

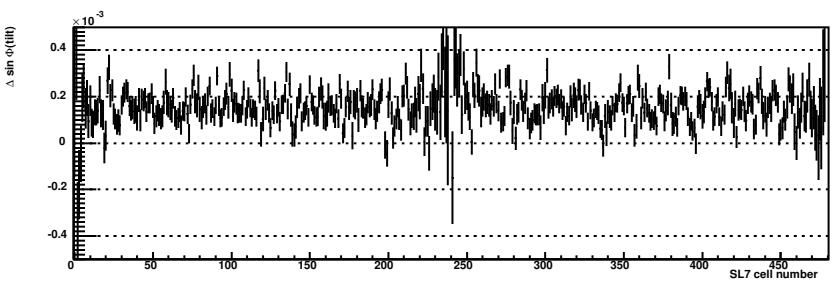

×10^-3
Δ sin Φ(tilt)
SL2 cell number

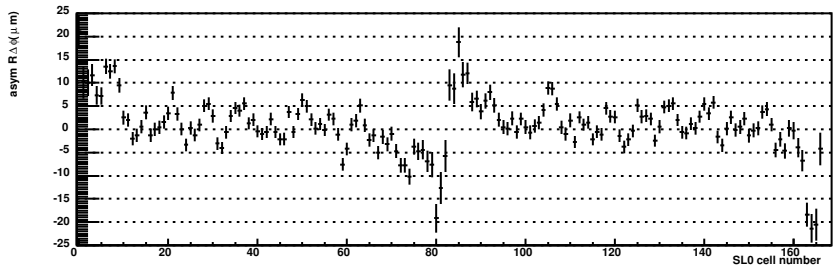

×10^-3
Δ sin Φ(tilt)
SL3 cell number

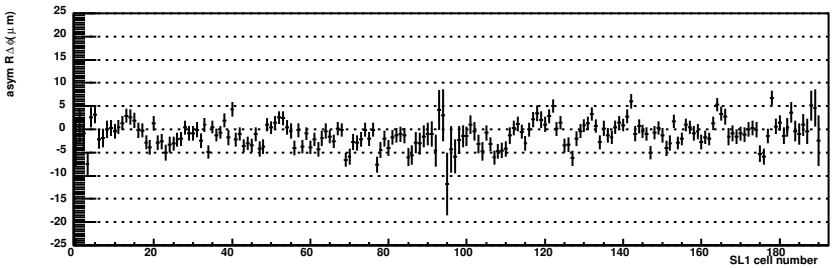

×10^-3
Δ sin Φ(tilt)
SL4 cell number

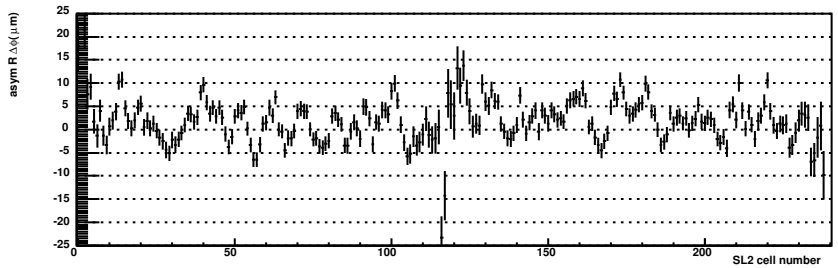

×10^-3
Δ sin Φ(tilt)
SL5 cell number

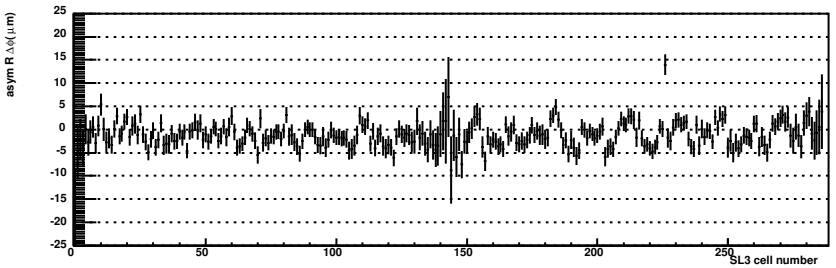

×10^-3
Δ sin Φ(tilt)
SL6 cell number

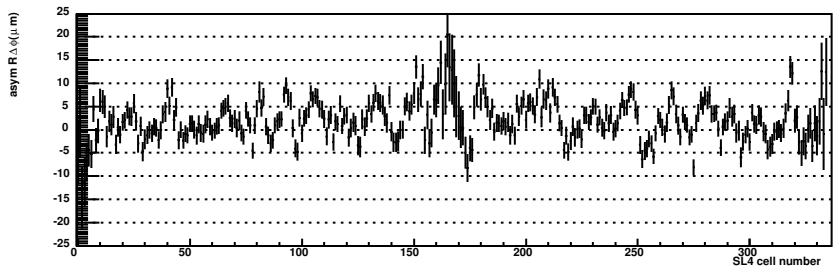

×10^-3
Δ sin Φ(tilt)
SL7 cell number

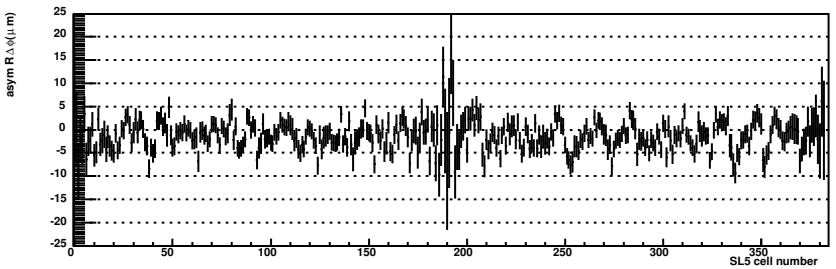

asym R Δφ(μm)
SL0 cell number

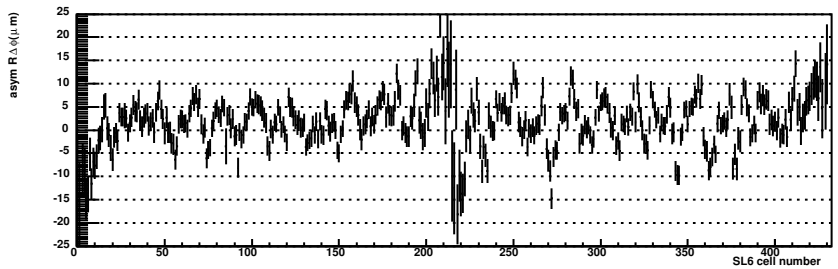

asym R Δφ(μm)
SL1 cell number

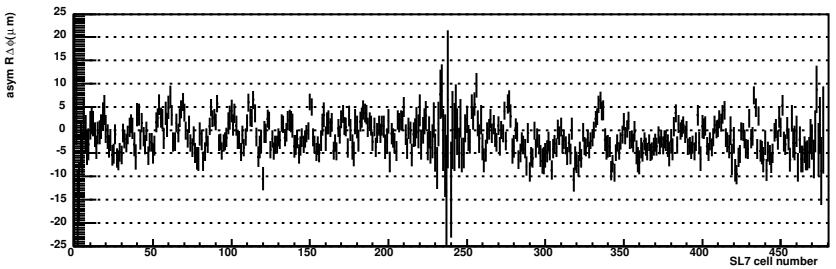

asym R Δφ(μm)
SL2 cell number

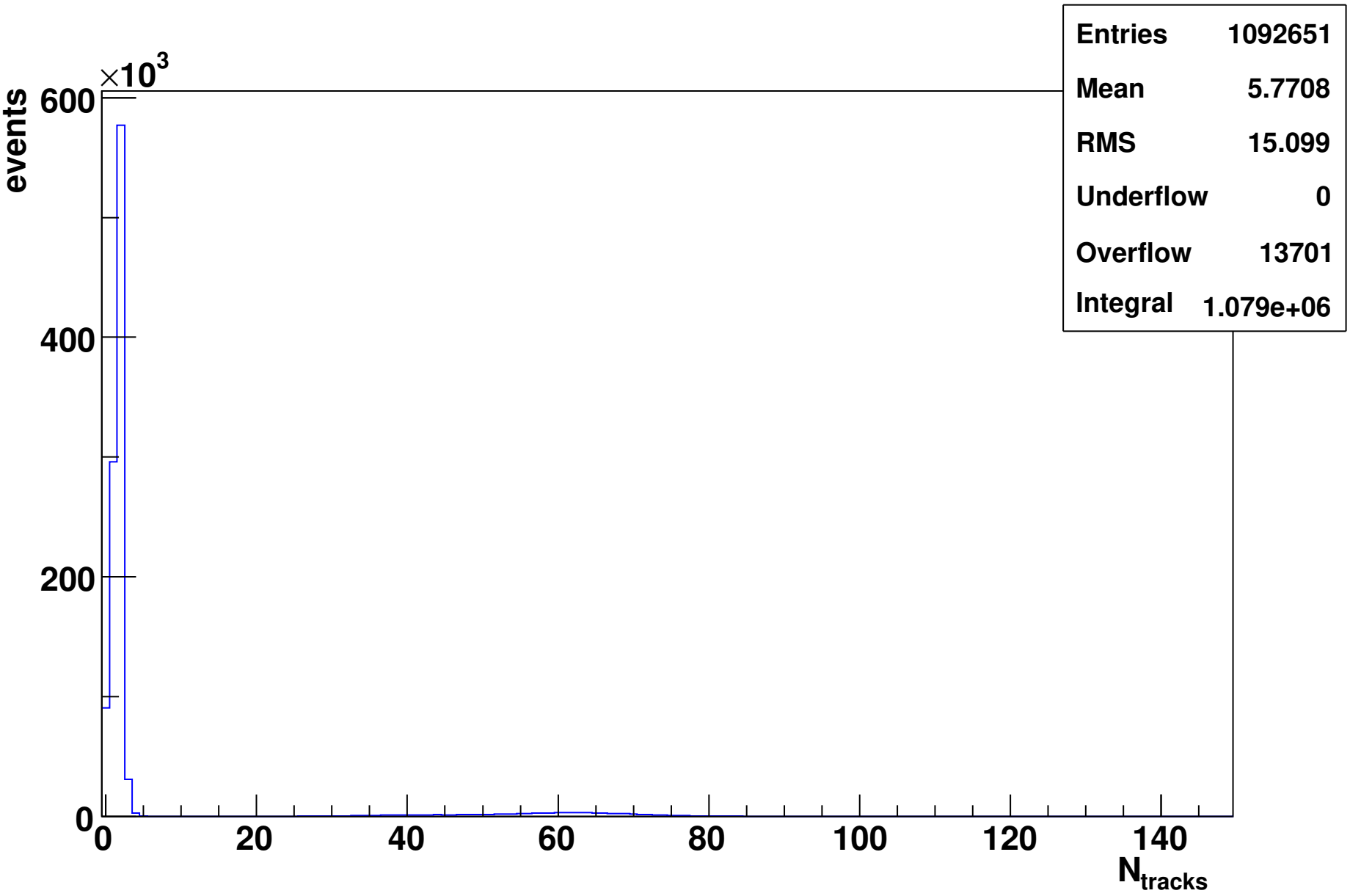

asym R Δφ(μm)
SL3 cell number

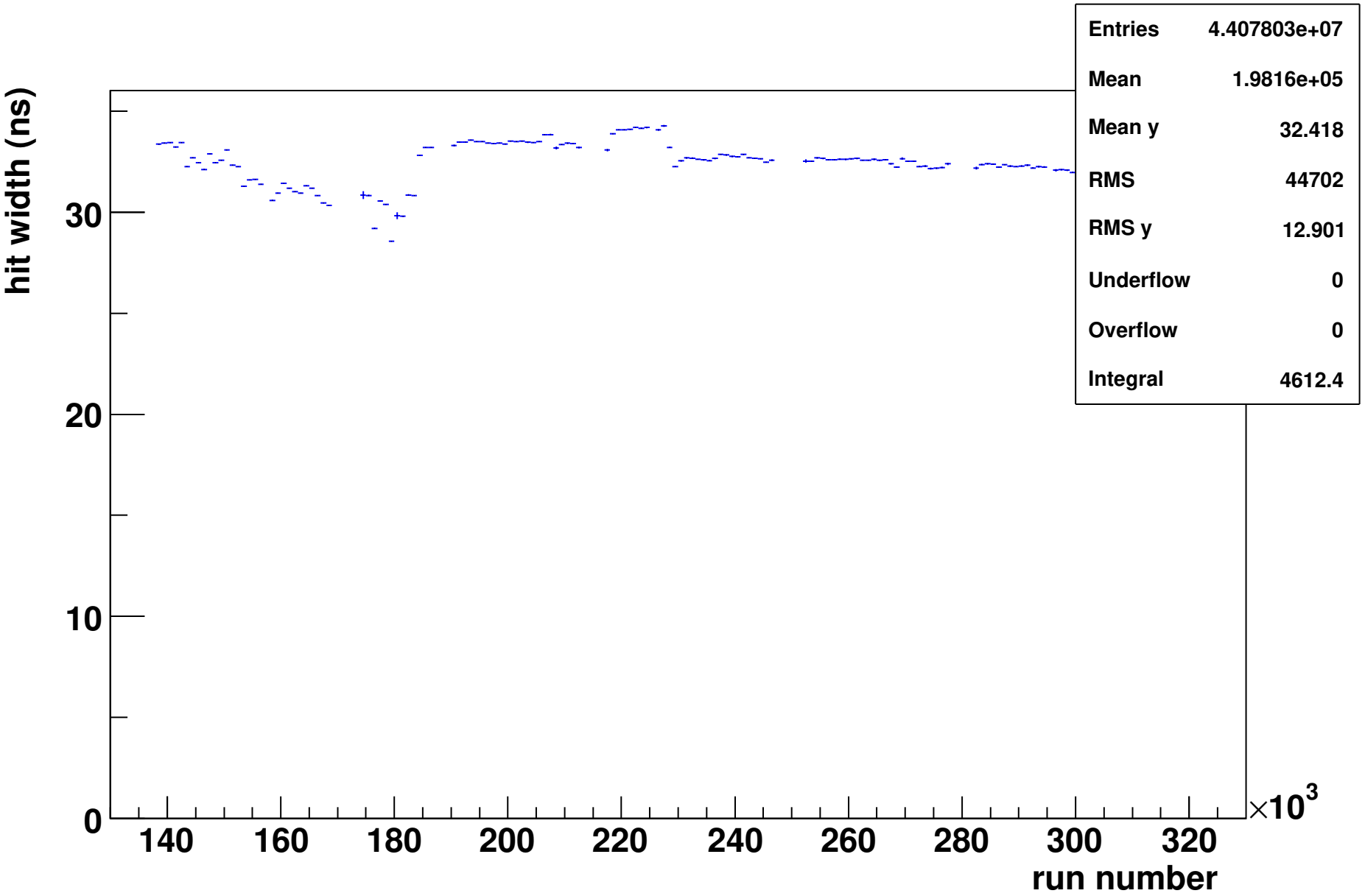

asym R Δφ(μm)
SL4 cell number

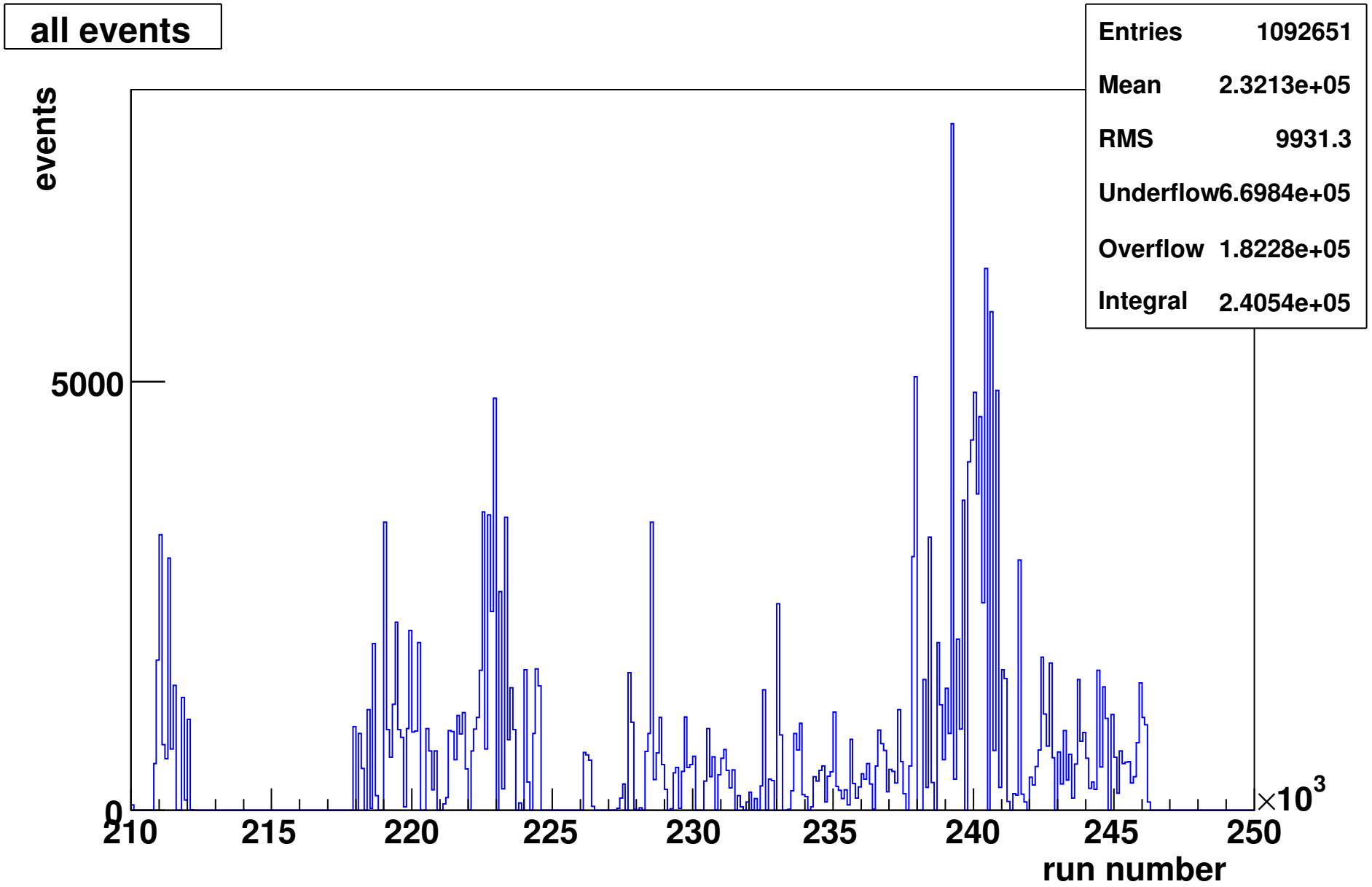

asym R Δφ(μm)
SL5 cell number

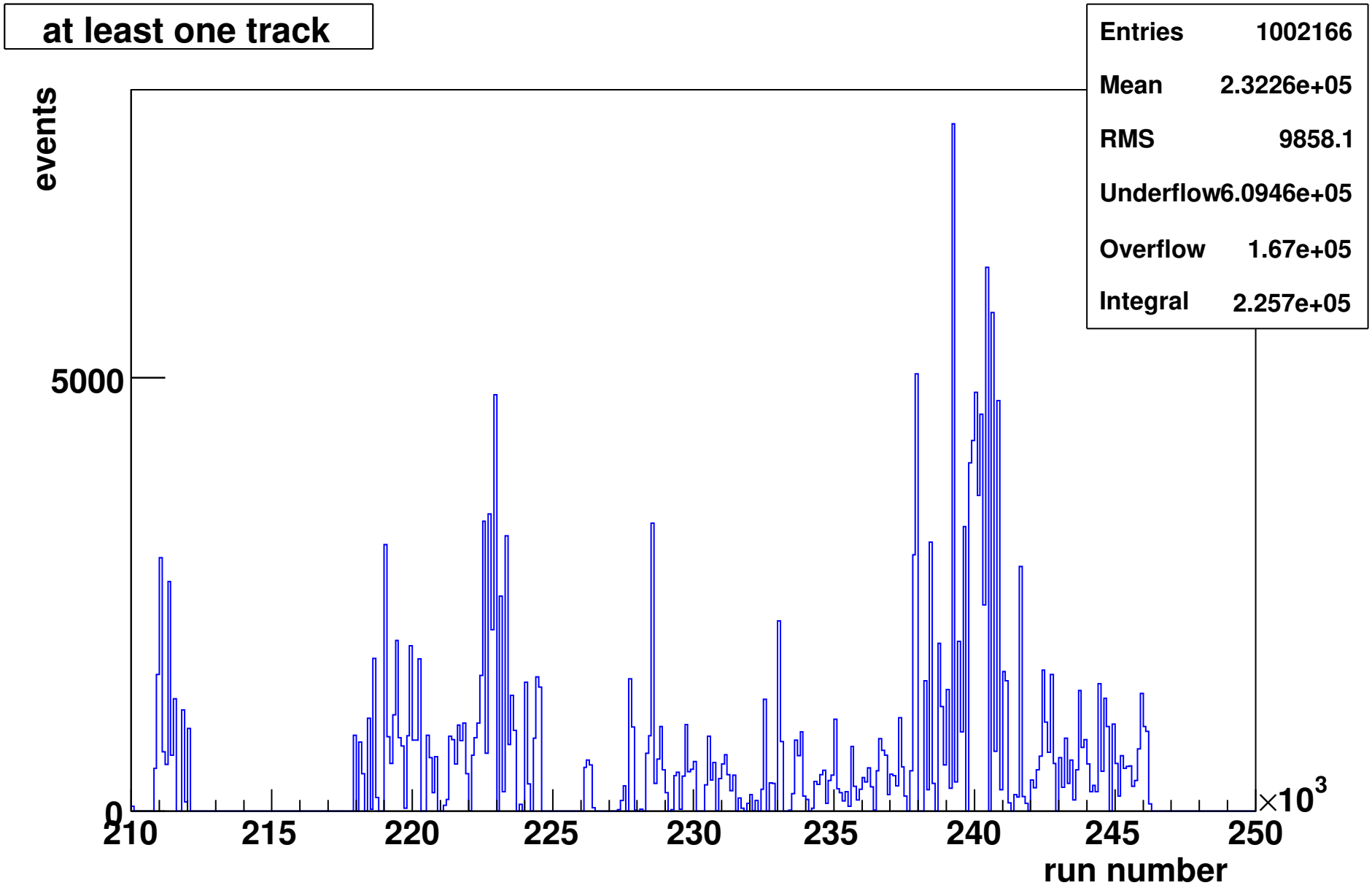

asym R Δφ(μm)
SL6 cell number

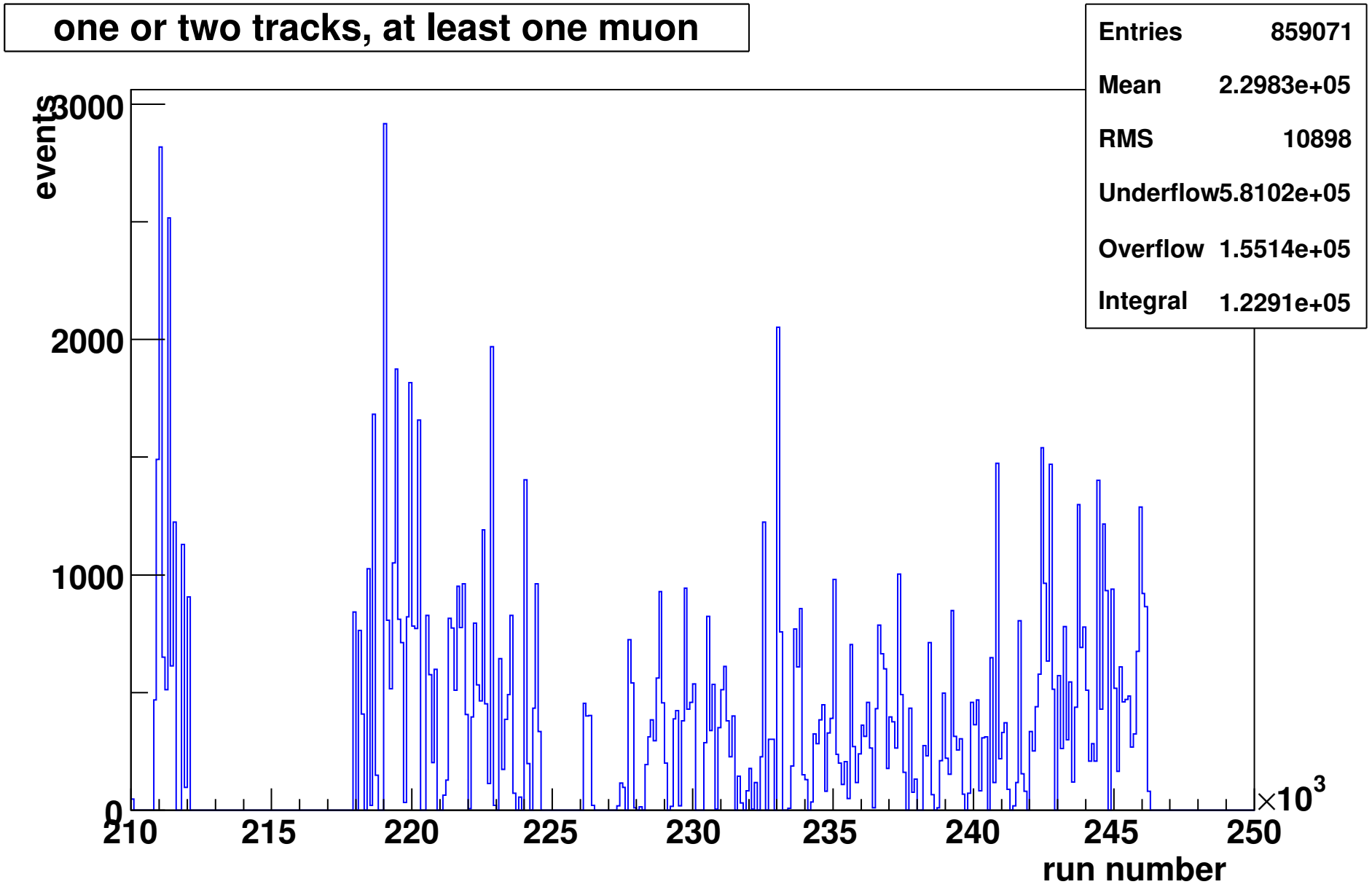

asym R Δφ(μm)
SL7 cell number

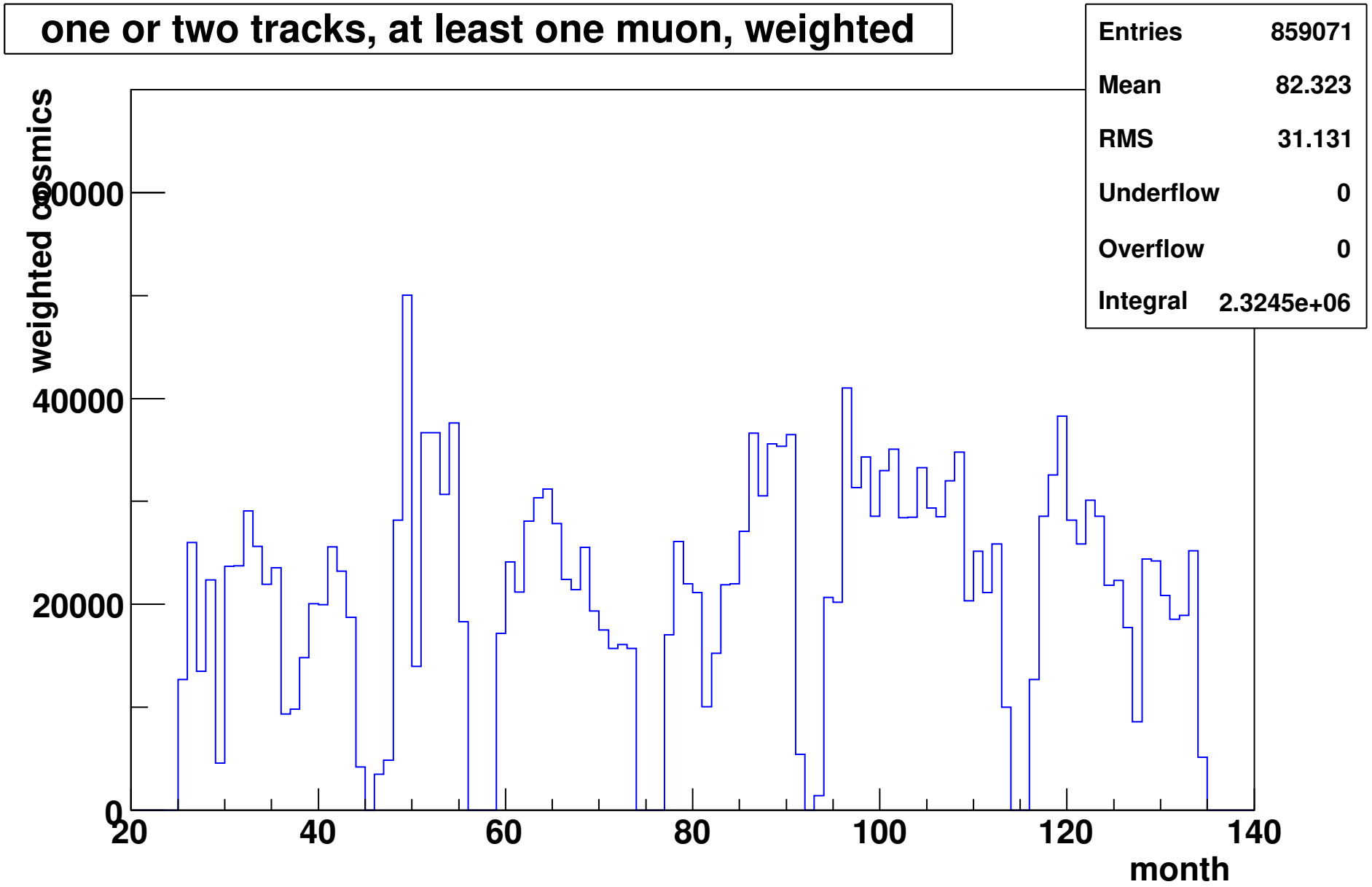

Entries 1092651
Mean 5.7708
RMS 15.099
Underflow 0
Overflow 13701
Integral 1.079e+06
events
×10^3
600
400
200
0
0
20
40
60
80
100
120
140
N_tracks

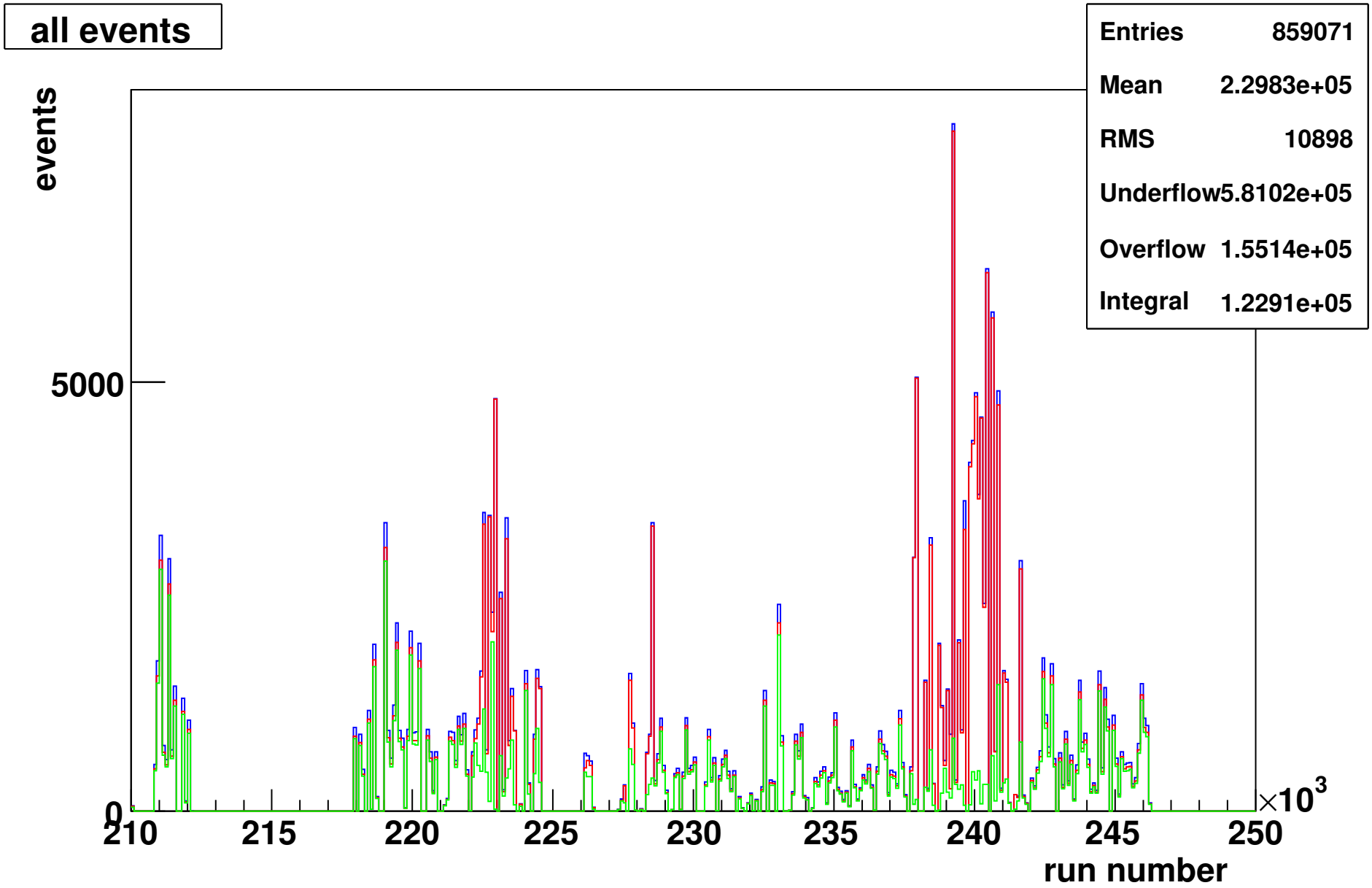

hit width (ns)
0
10
20
30
140
160
180
200
220
240
260
280
300
320
×10^3
run number
Entries 4.407803e+07
Mean 1.9816e+05
Mean y 32.418
RMS 44702
RMS y 12.901
Underflow 0
Overflow 0
Integral 4612.4

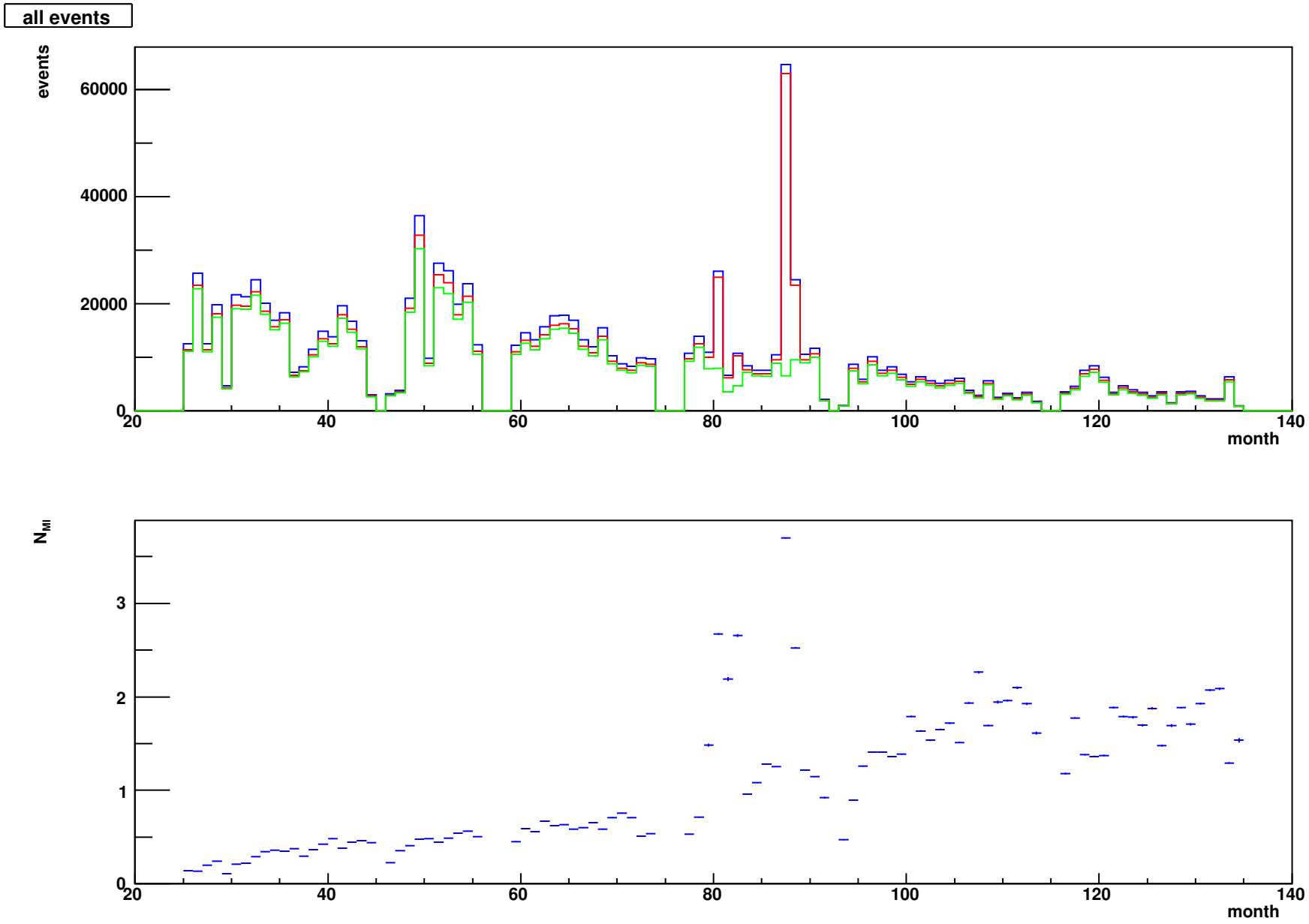

all events
Entries 1092651
Mean 2.3213e+05
RMS 9931.3
Underflow 6.6984e+05
Overflow 1.8228e+05
Integral 2.4054e+05
events
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

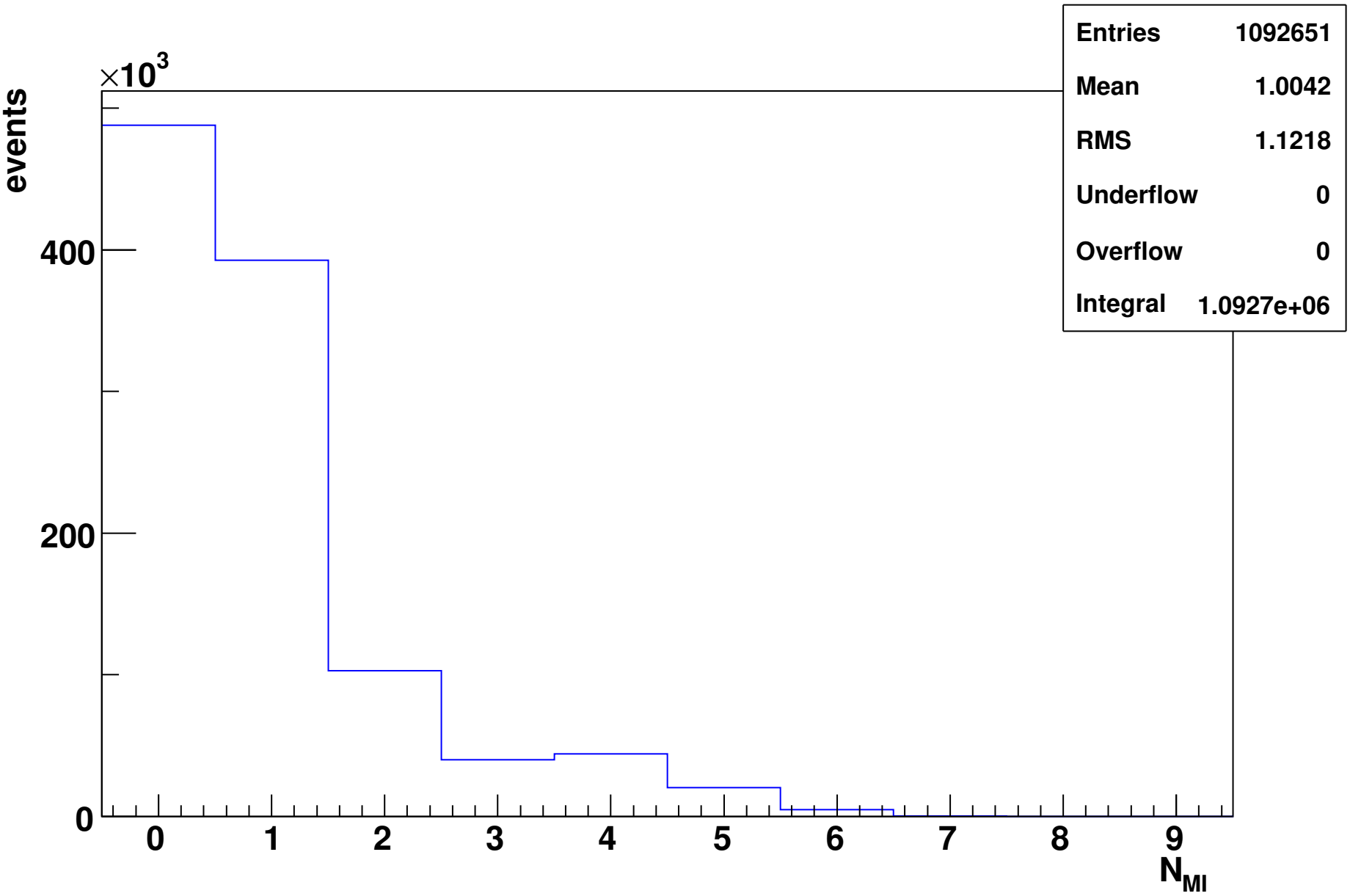

at least one track
Entries 1002166
Mean 2.3226e+05
RMS 9858.1
Underflow 6.0946e+05
Overflow 1.67e+05
Integral 2.257e+05
events
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

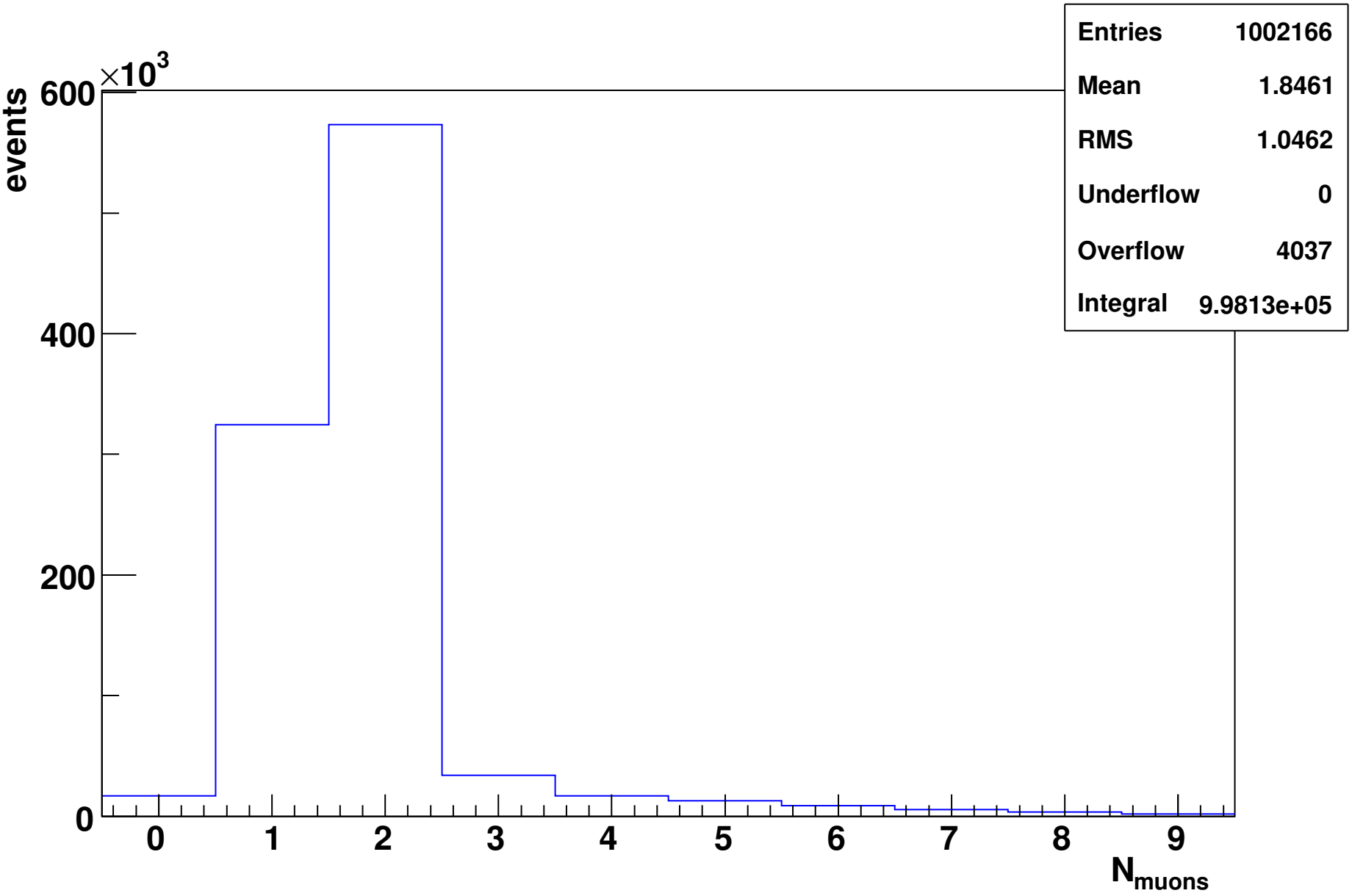

one or two tracks, at least one muon
Entries 859071
Mean 2.2983e+05
RMS 10898
Underflow 5.8102e+05
Overflow 1.5514e+05
Integral 1.2291e+05
events
3000
2000
1000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

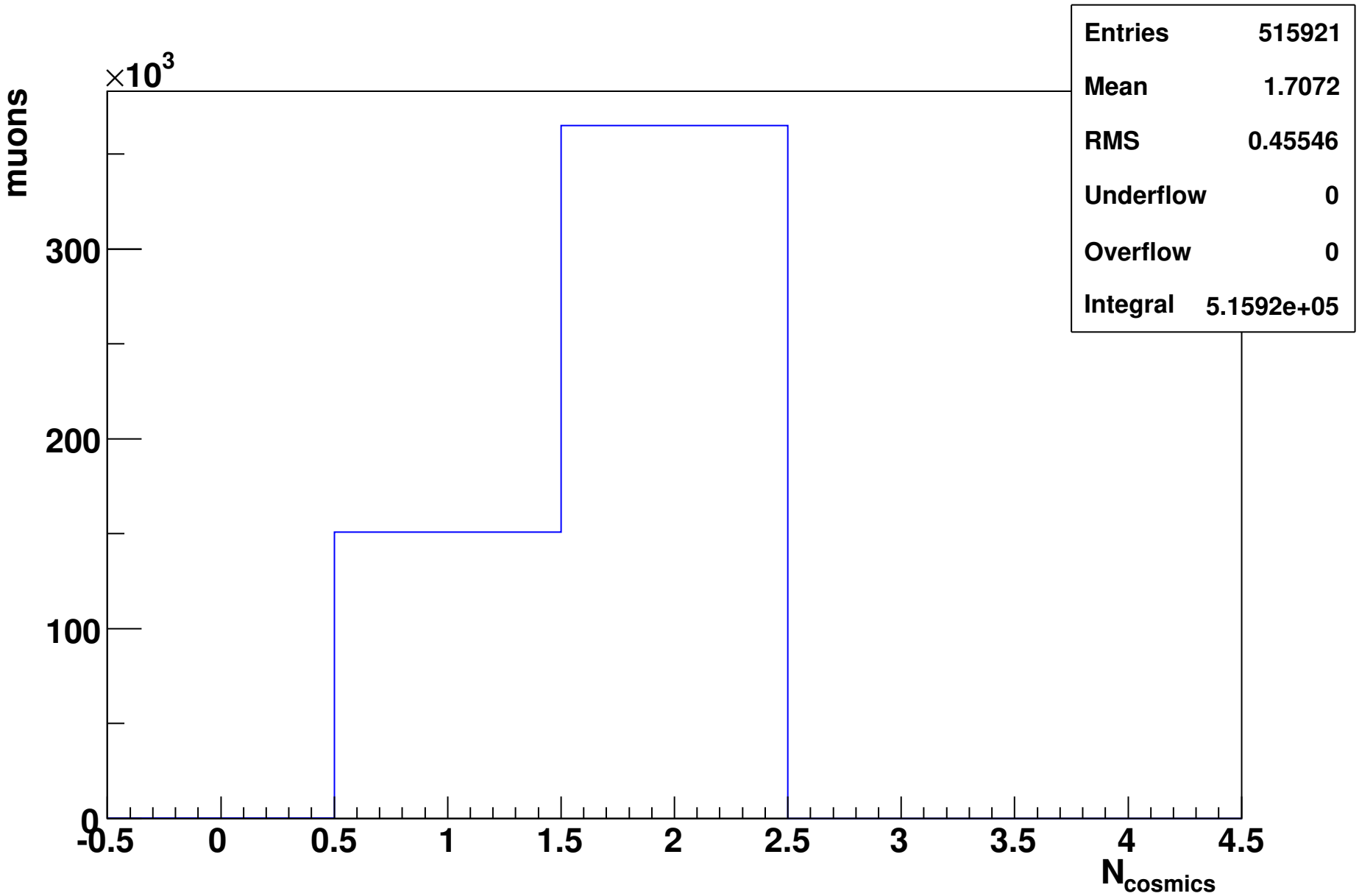

one or two tracks, at least one muon, weighted
Entries 859071
Mean 82.323
RMS 31.131
Underflow 0
Overflow 0
Integral 2.3245e+06
weighted cosmics
60000
40000
20000
0
20
40
60
80
100
120
140
month

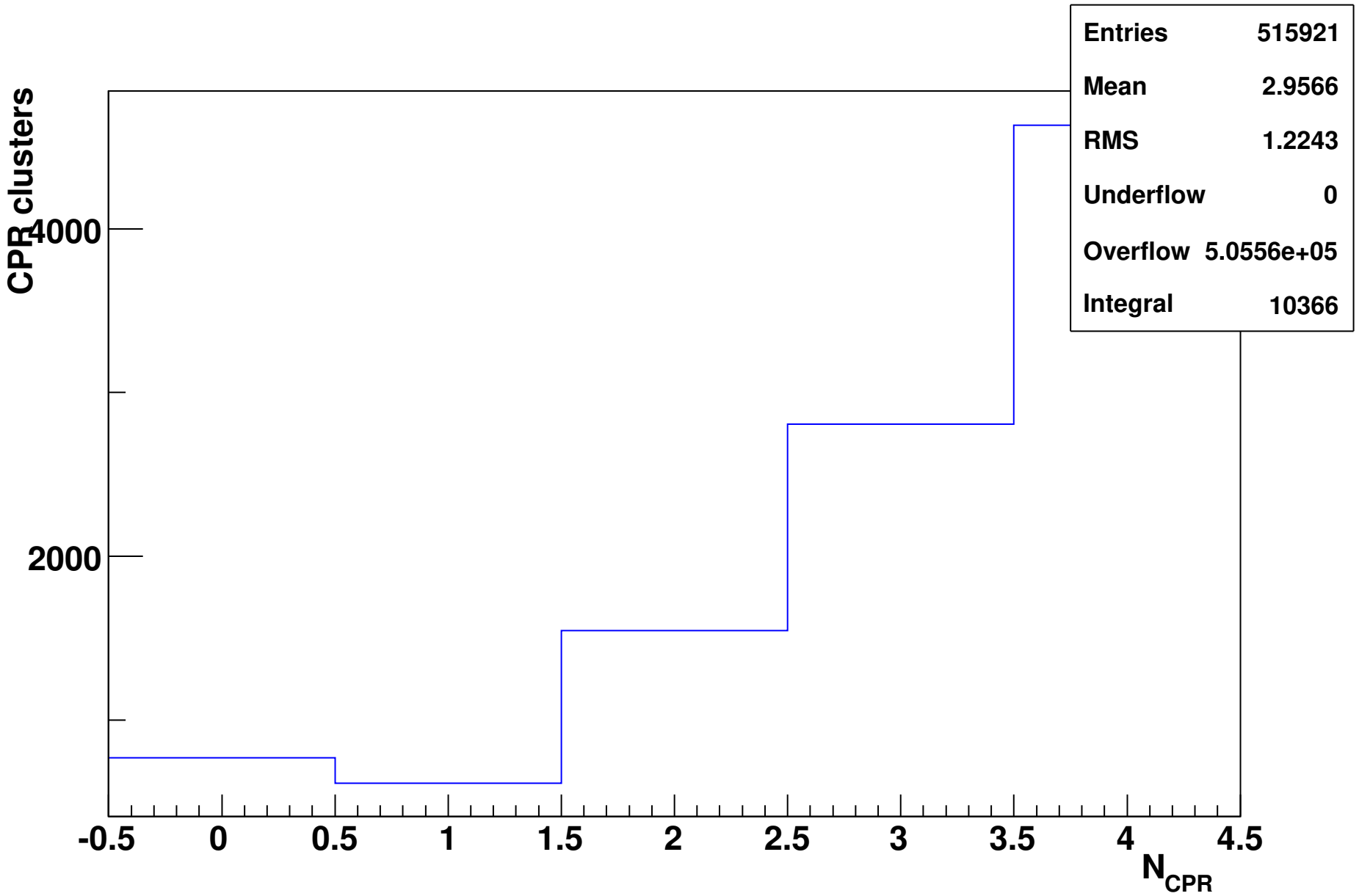

all events
Entries 859071
Mean 2.2983e+05
RMS 10898
Underflow 5.8102e+05
Overflow 1.5514e+05
Integral 1.2291e+05
events
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

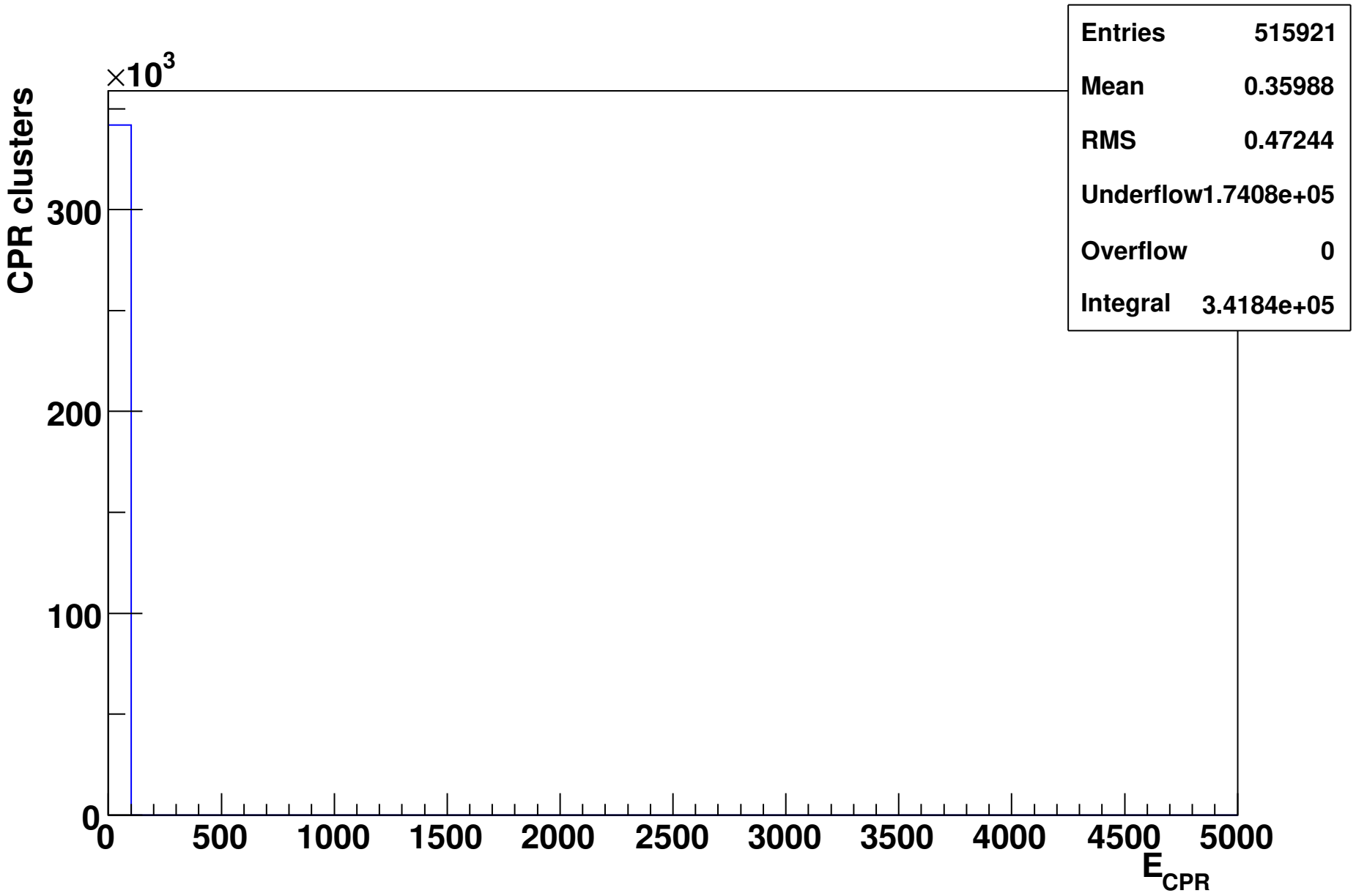

all events
events
60000
40000
20000
0
20
40
60
80
100
120
140
month
N_{MI}
3
2
1
0
20
40
60
80
100
120
140
month

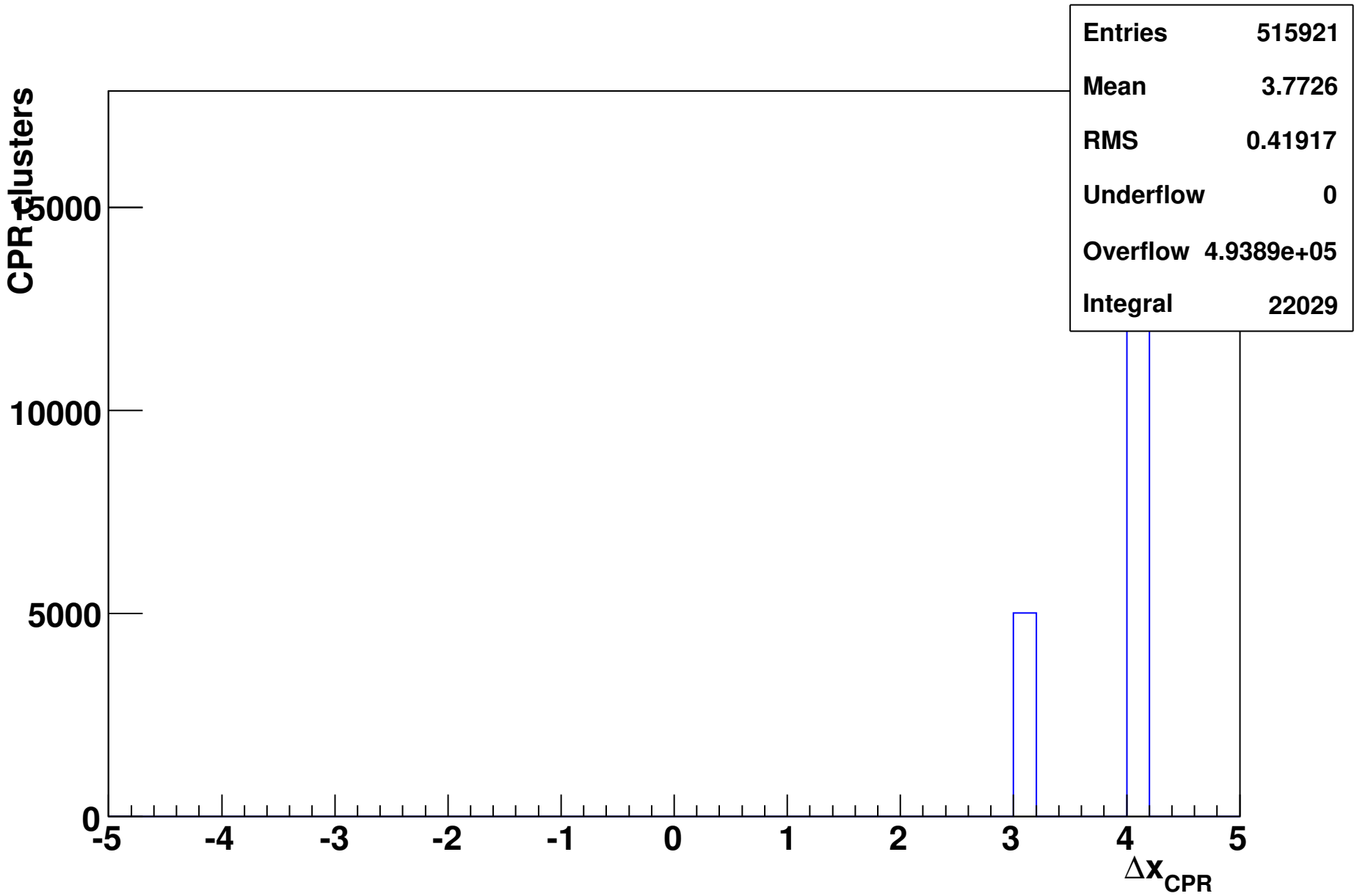

Entries 1092651
Mean 1.0042
RMS 1.1218
Underflow 0
Overflow 0
Integral 1.0927e+06
events
×10^3
400
200
0
0 1 2 3 4 5 6 7 8 9
N_MI

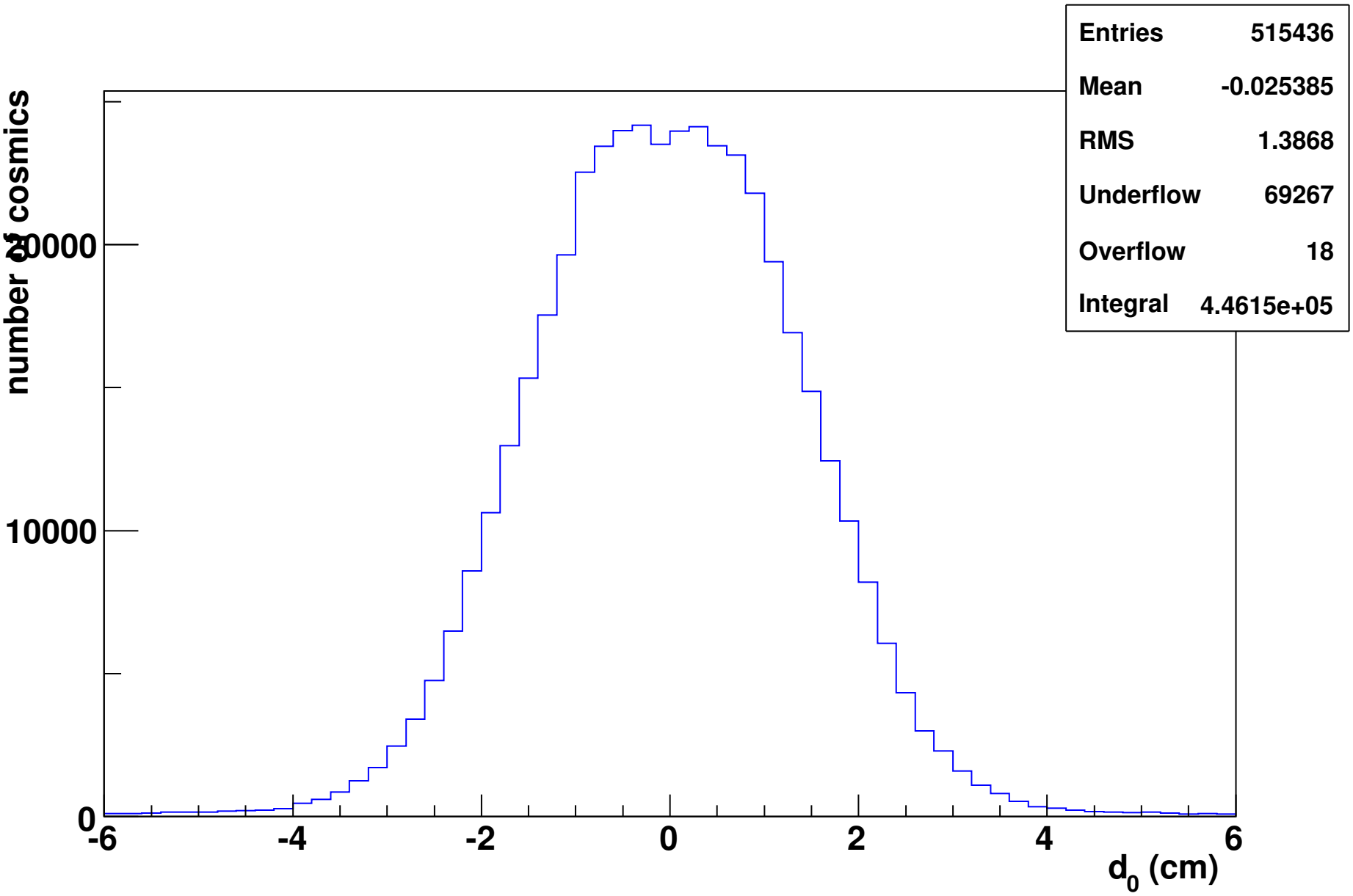

Entries 1002166
Mean 1.8461
RMS 1.0462
Underflow 0
Overflow 4037
Integral 9.9813e+05
events
×10^3
600
400
200
0
0
1
2
3
4
5
6
7
8
9
N_muons

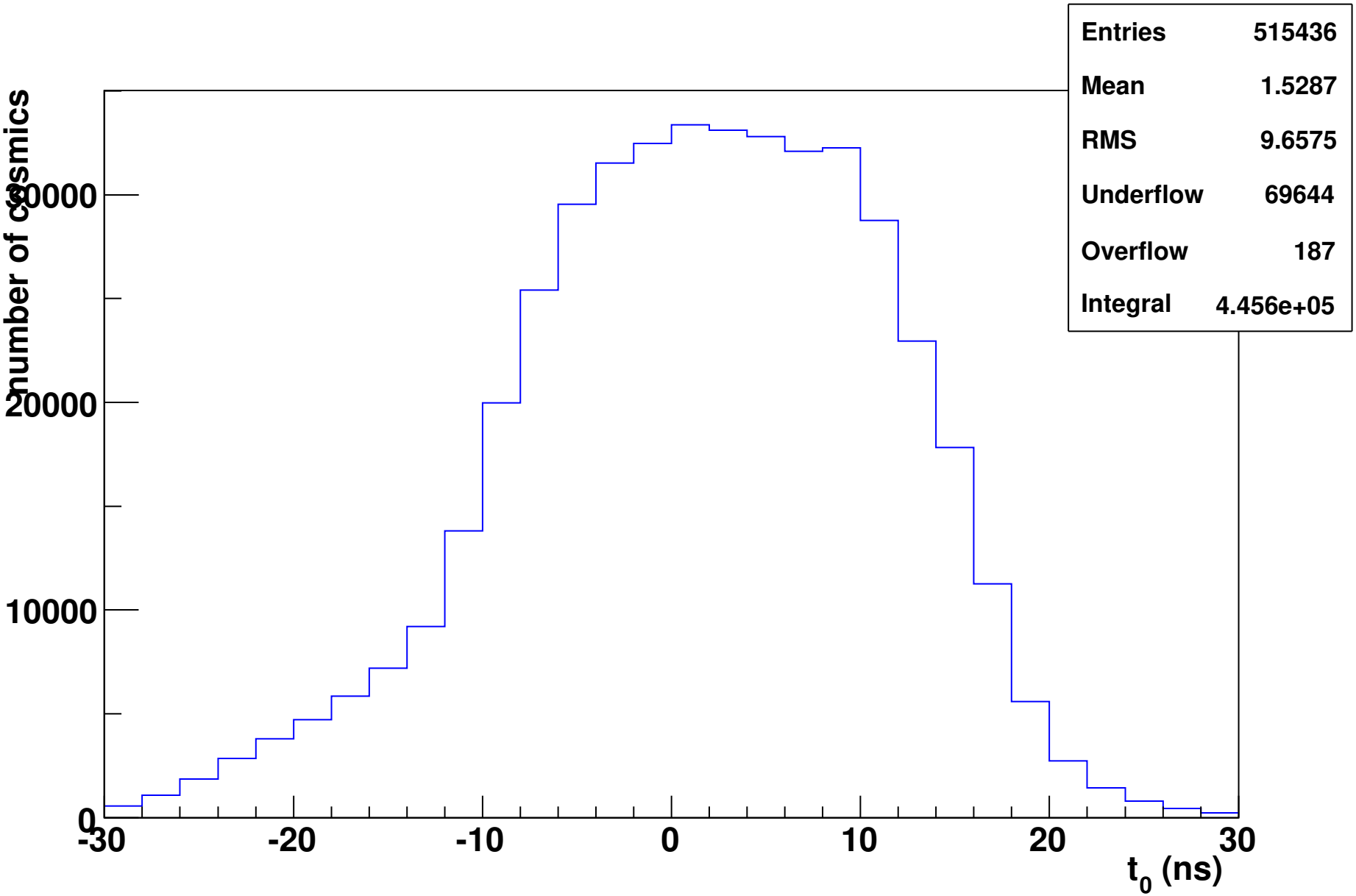

Entries 515921
Mean 1.7072
RMS 0.45546
Underflow 0
Overflow 0
Integral 5.1592e+05
muons
×10^3
300
200
100
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_cosmics

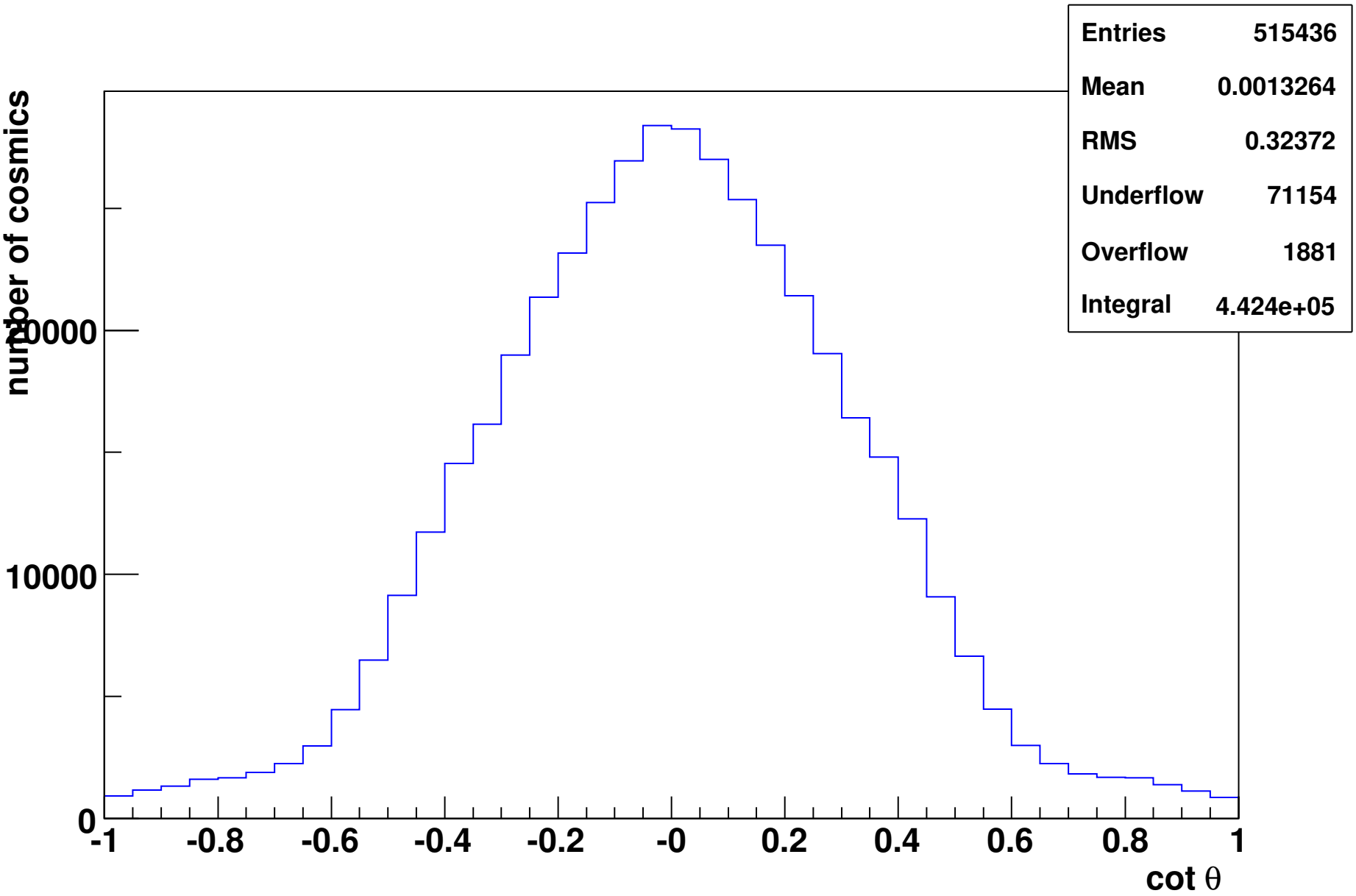

Entries 515921
Mean 2.9566
RMS 1.2243
Underflow 0
Overflow 5.0556e+05
Integral 10366
CPR clusters
4000
2000
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_CPR

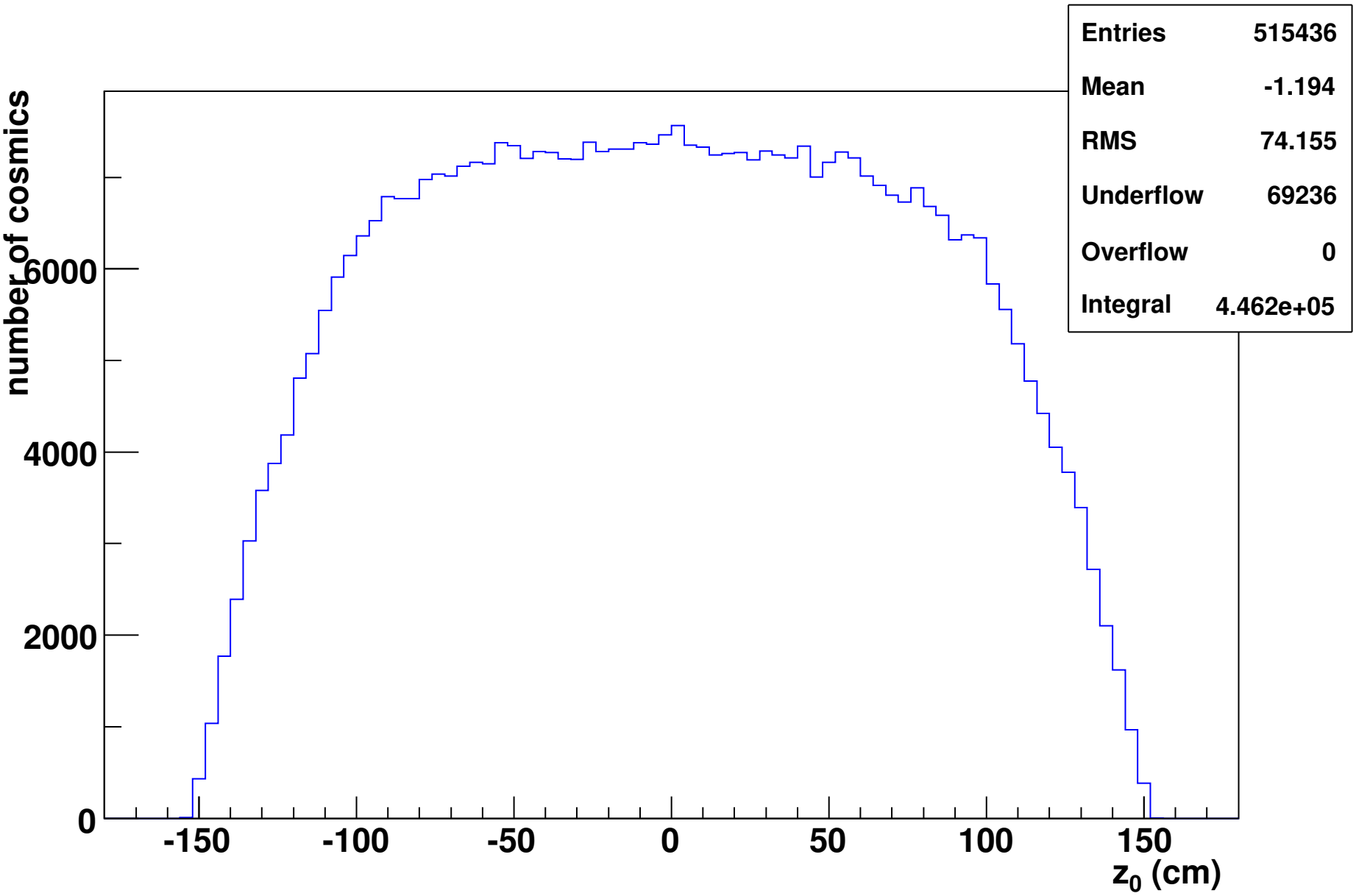

Entries 515921
Mean 0.35988
RMS 0.47244
Underflow 1.7408e+05
Overflow 0
Integral 3.4184e+05
×10^3
CPR clusters
300
200
100
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
E_CPR

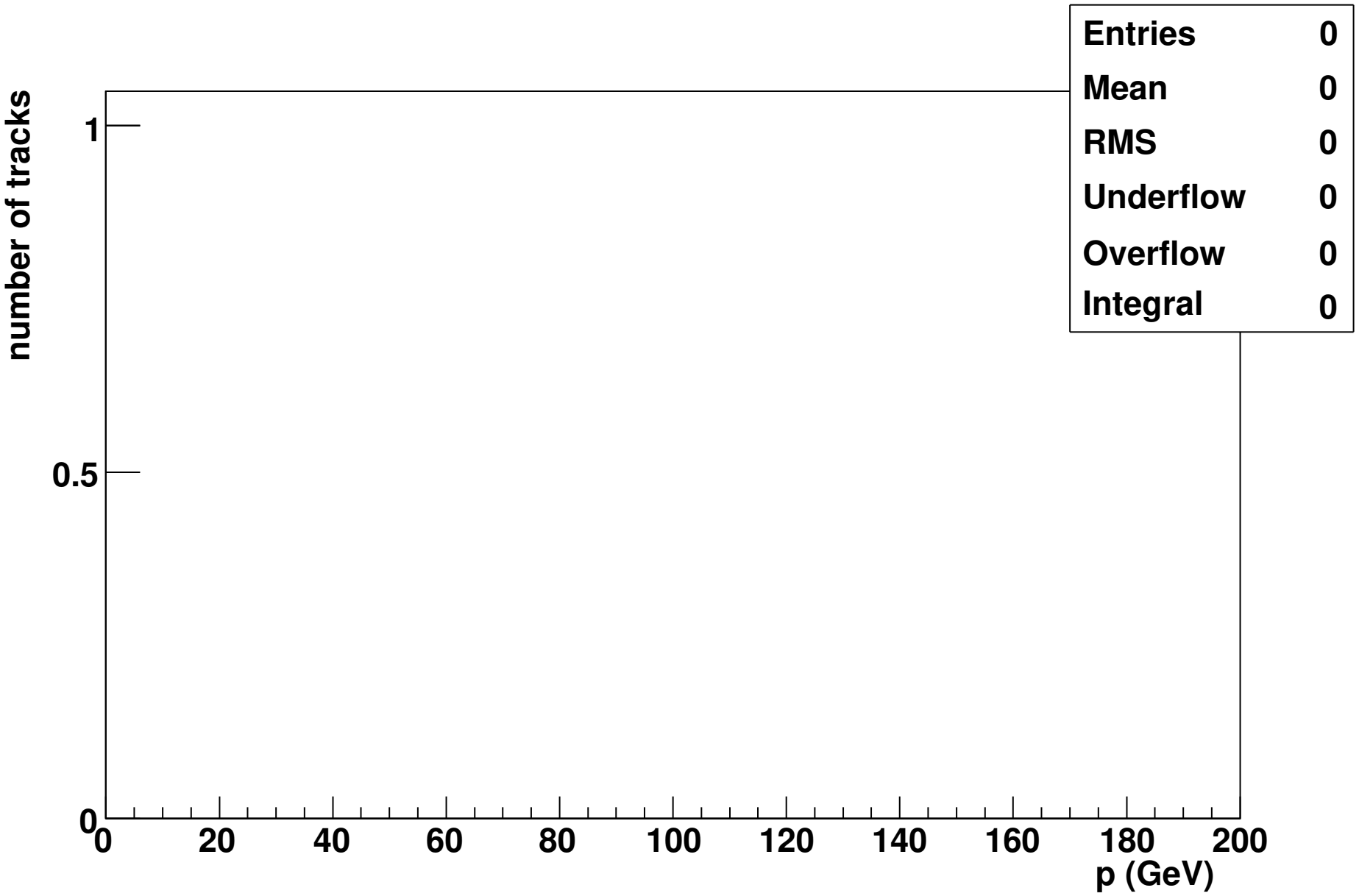

Entries 515921
Mean 3.7726
RMS 0.41917
Underflow 0
Overflow 4.9389e+05
Integral 22029
CPR clusters
10000
5000
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
Δx_{CPR}

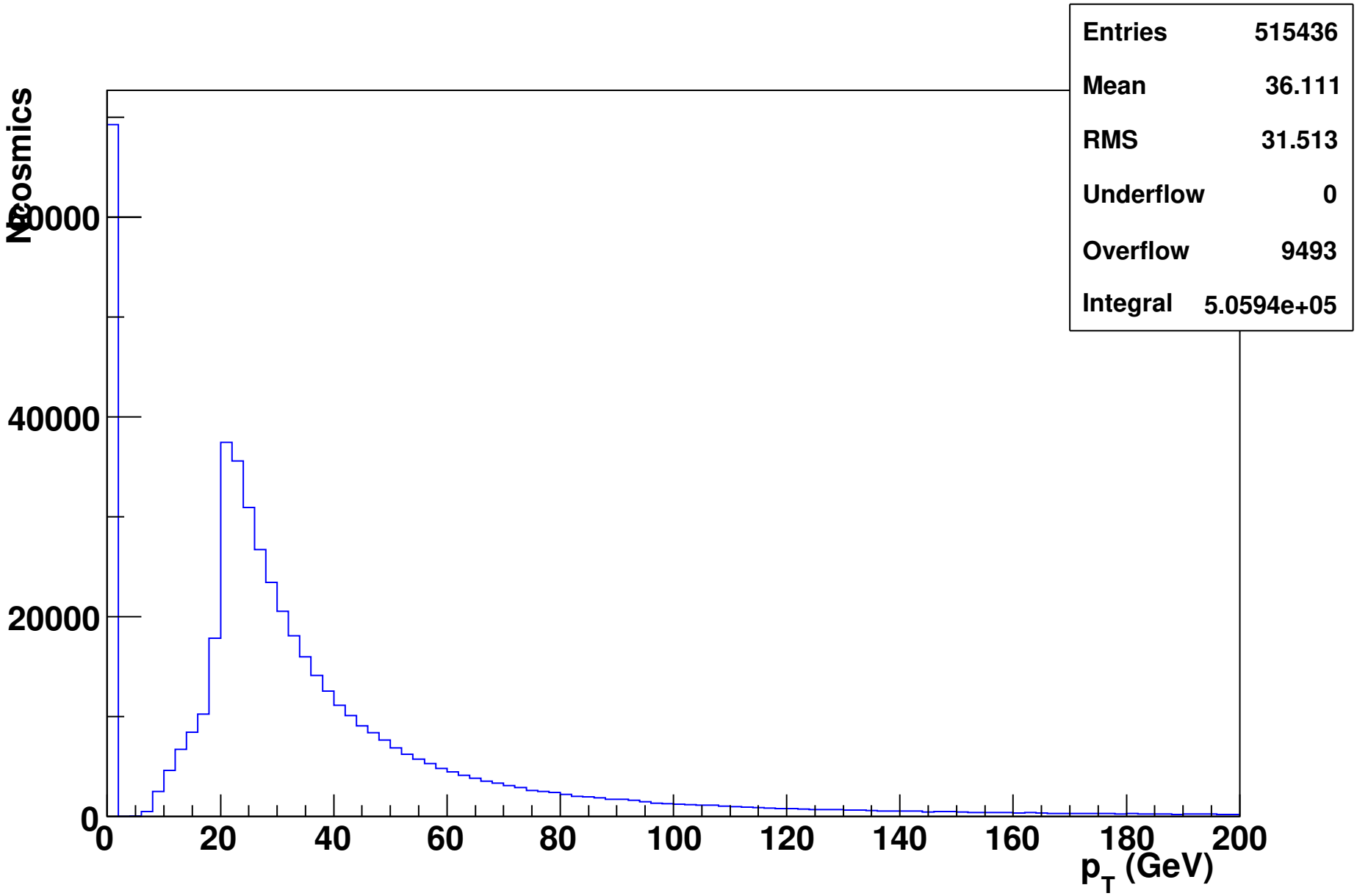

Entries 515436
Mean -0.025385
RMS 1.3868
Underflow 69267
Overflow 18
Integral 4.4615e+05
number of cosmics
20000
10000
0
-6
-4
-2
0
2
4
6
d_0 (cm)

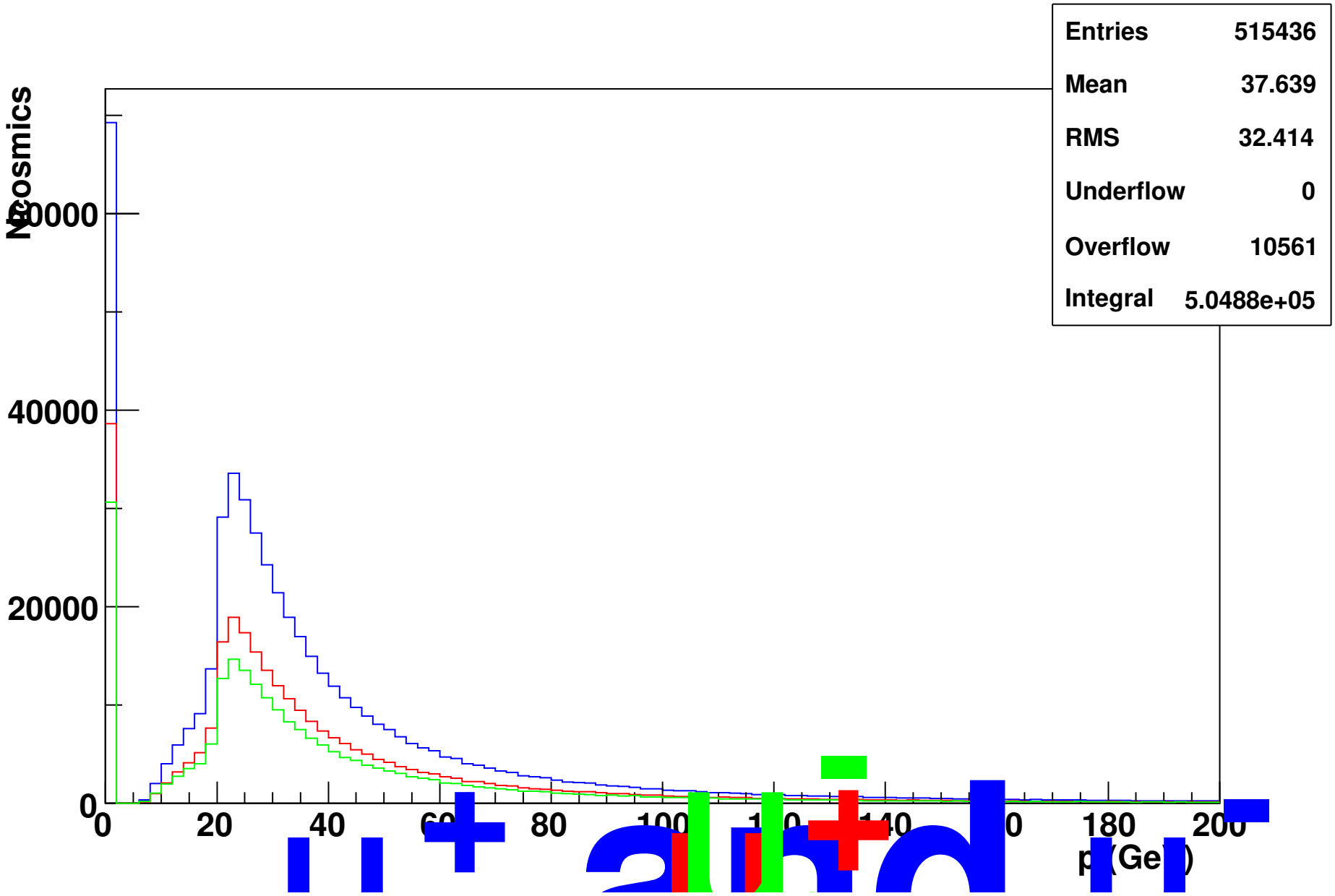

Entries 515436
Mean 1.5287
RMS 9.6575
Underflow 69644
Overflow 187
Integral 4.456e+05
number of cosmics
30000
20000
10000
0
-30
-20
-10
0
10
20
30
t_0 (ns)

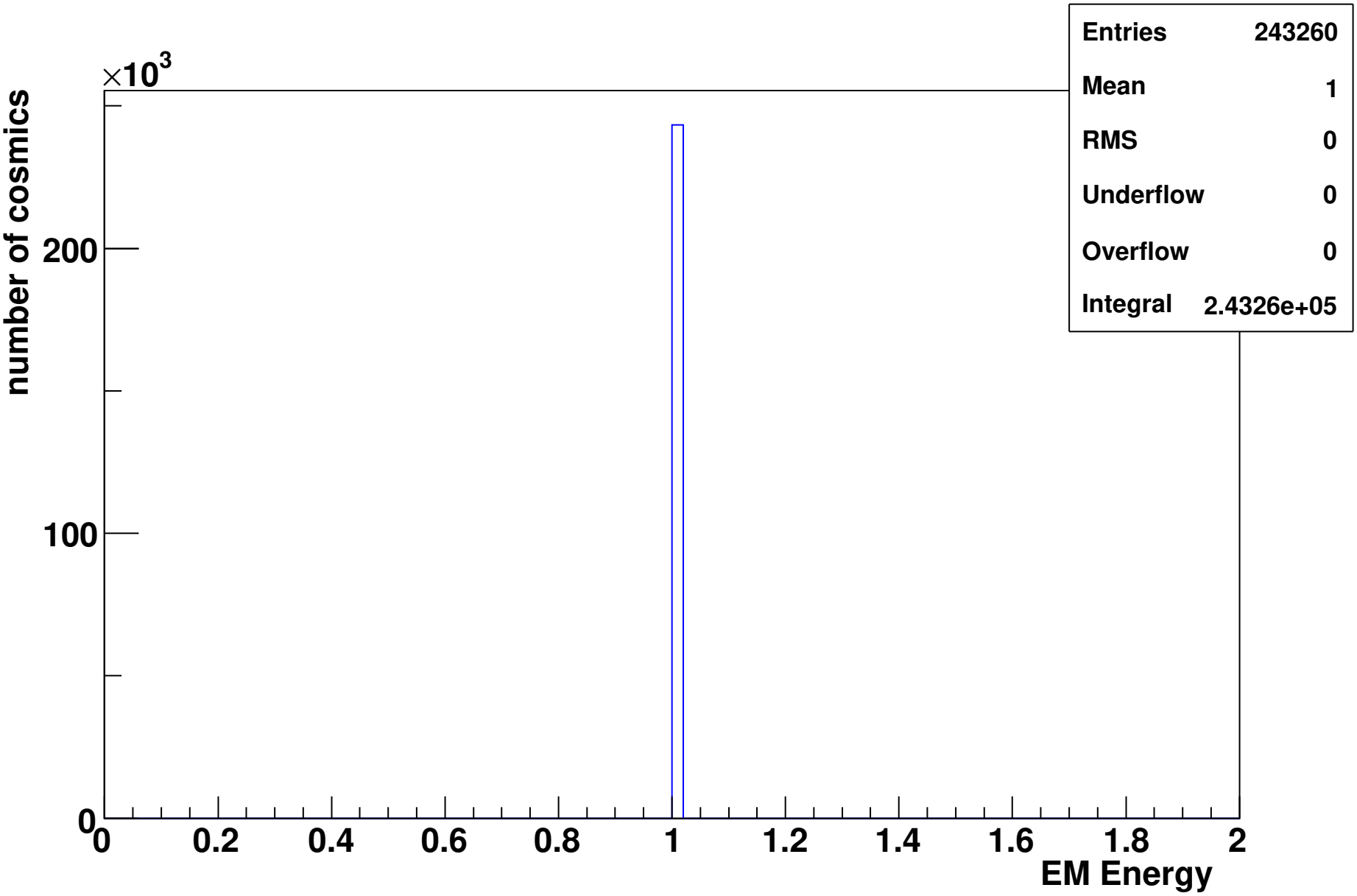

Entries 515436
Mean 0.0013264
RMS 0.32372
Underflow 71154
Overflow 1881
Integral 4.424e+05
number of cosmics
20000
10000
0
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
cot θ

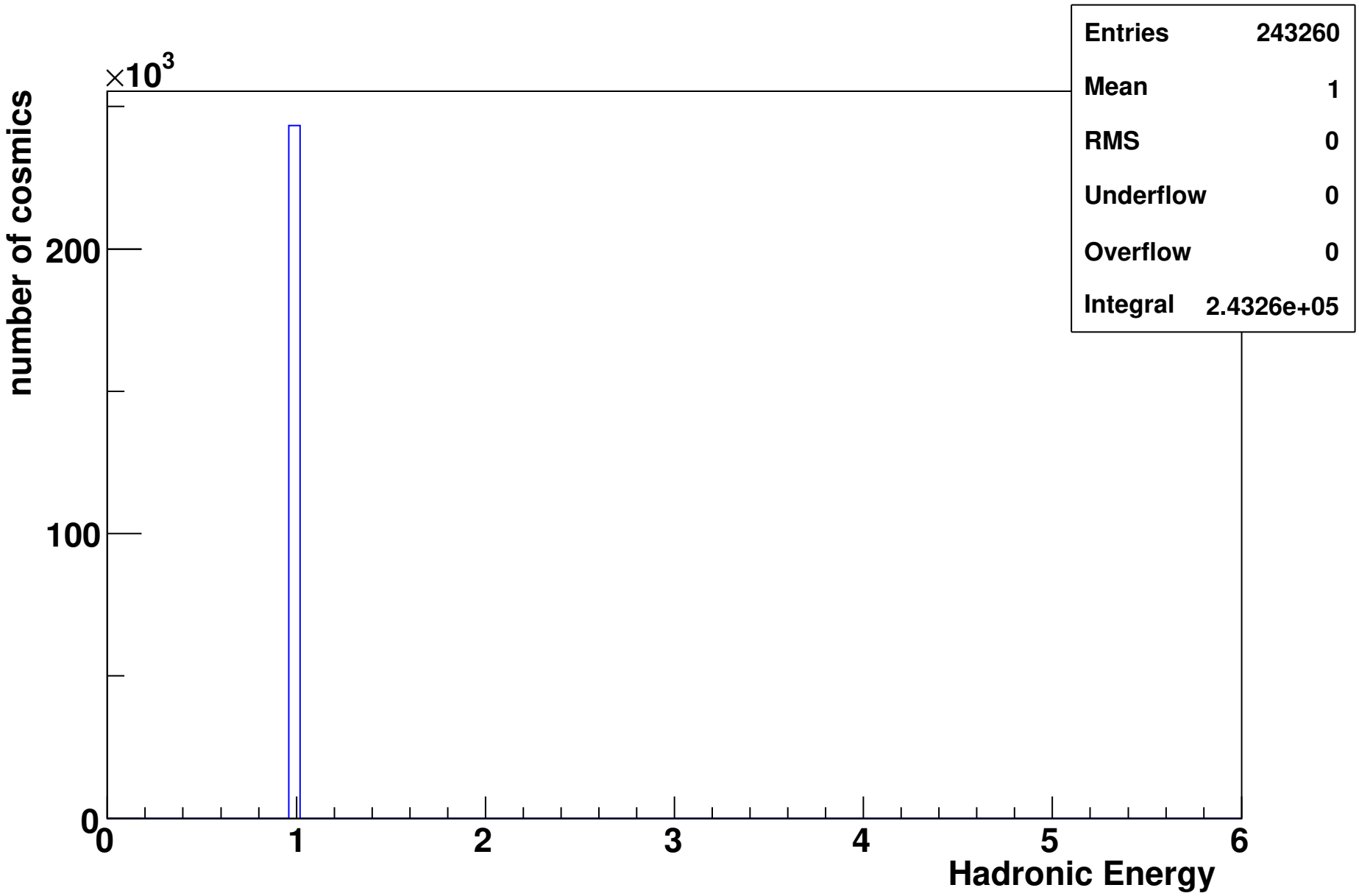

Entries 515436
Mean -1.194
RMS 74.155
Underflow 69236
Overflow 0
Integral 4.462e+05
number of cosmics
0
2000
4000
6000
-150
-100
-50
0
50
100
150
z_0 (cm)

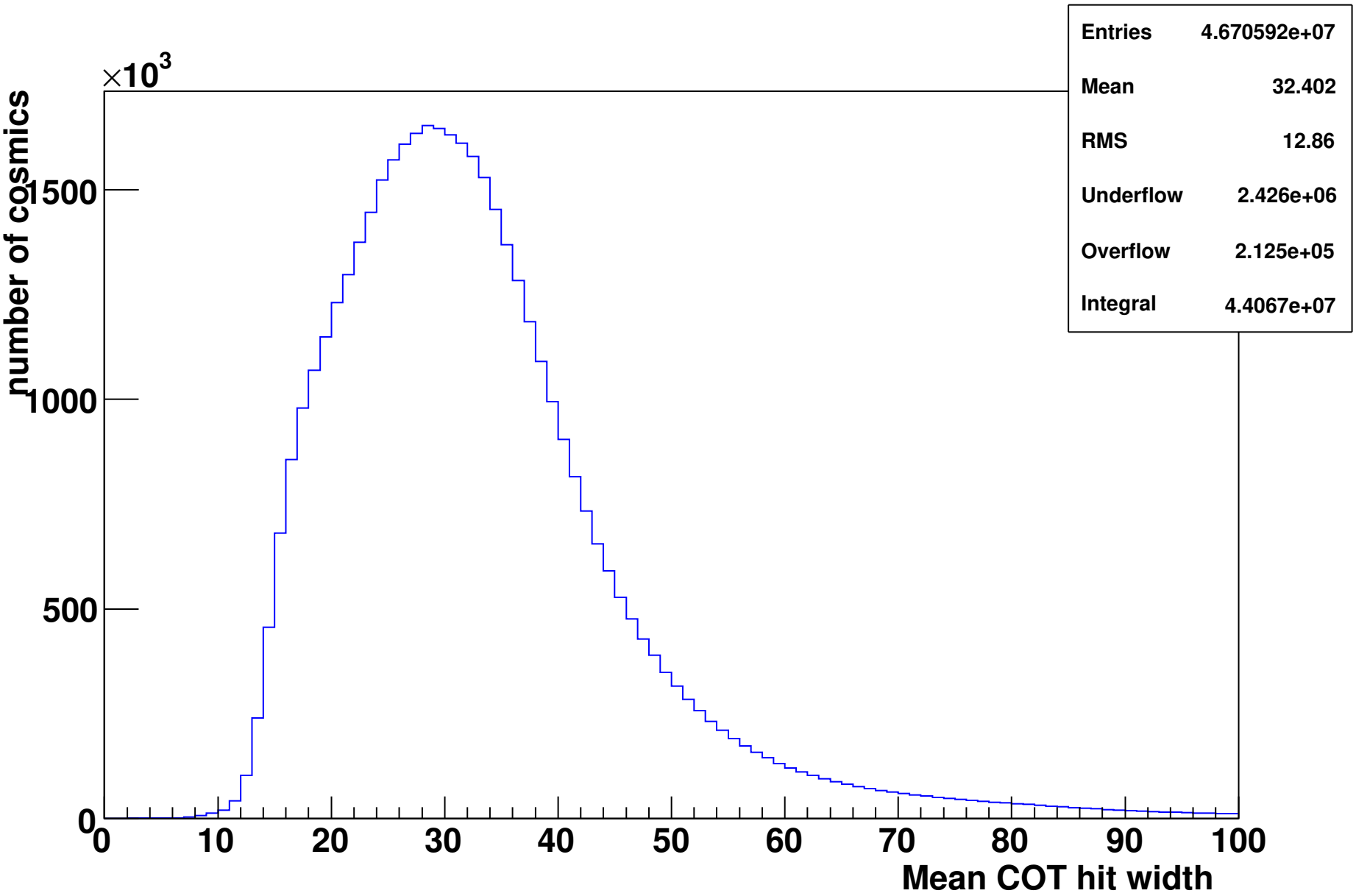

Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Integral 0
number of tracks
1
0.5
0
0
20
40
60
80
100
120
140
160
180
200
p (GeV)

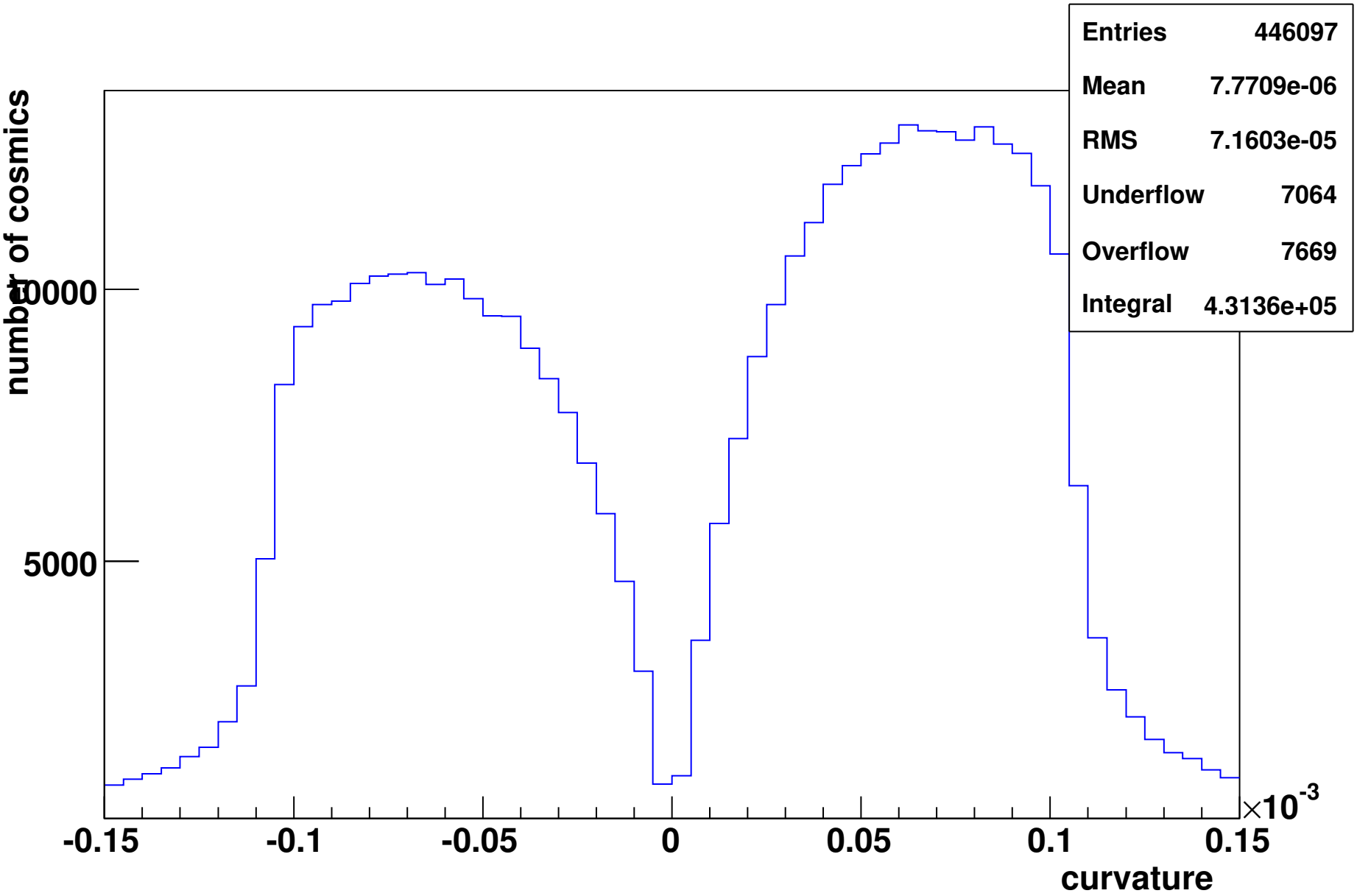

Entries 515436
Mean 36.111
RMS 31.513
Underflow 0
Overflow 9493
Integral 5.0594e+05
N cosmics
60000
40000
20000
0
0
20
40
60
80
100
120
140
160
180
200
p_T (GeV)

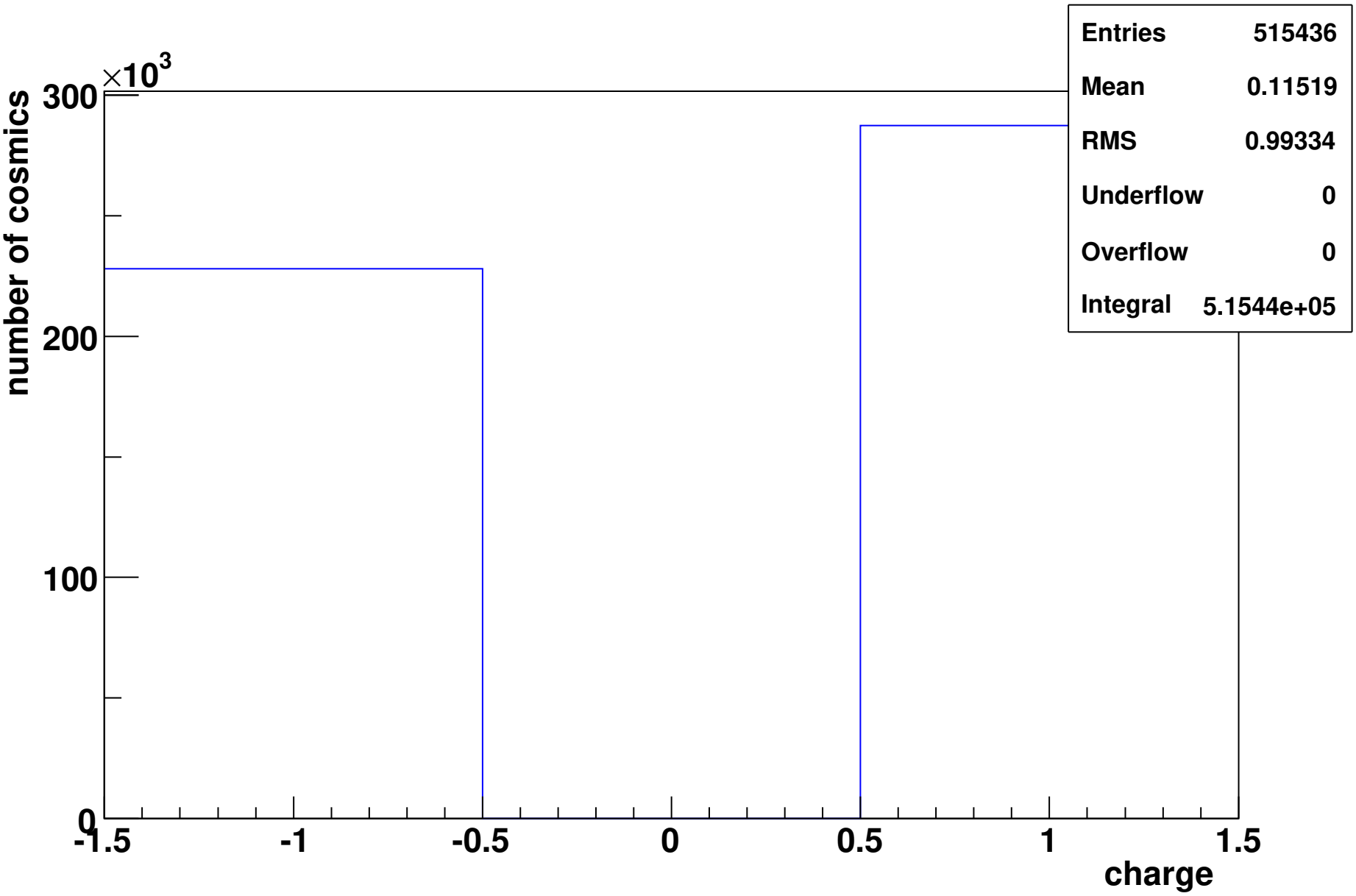

Entries 515436
Mean 37.639
RMS 32.414
Underflow 0
Overflow 10561
Integral 5.0488e+05
Nmuons
Ncosmics
60000
40000
20000
0
0
20
40
60
80
100
120
140
160
180
200
p (GeV)

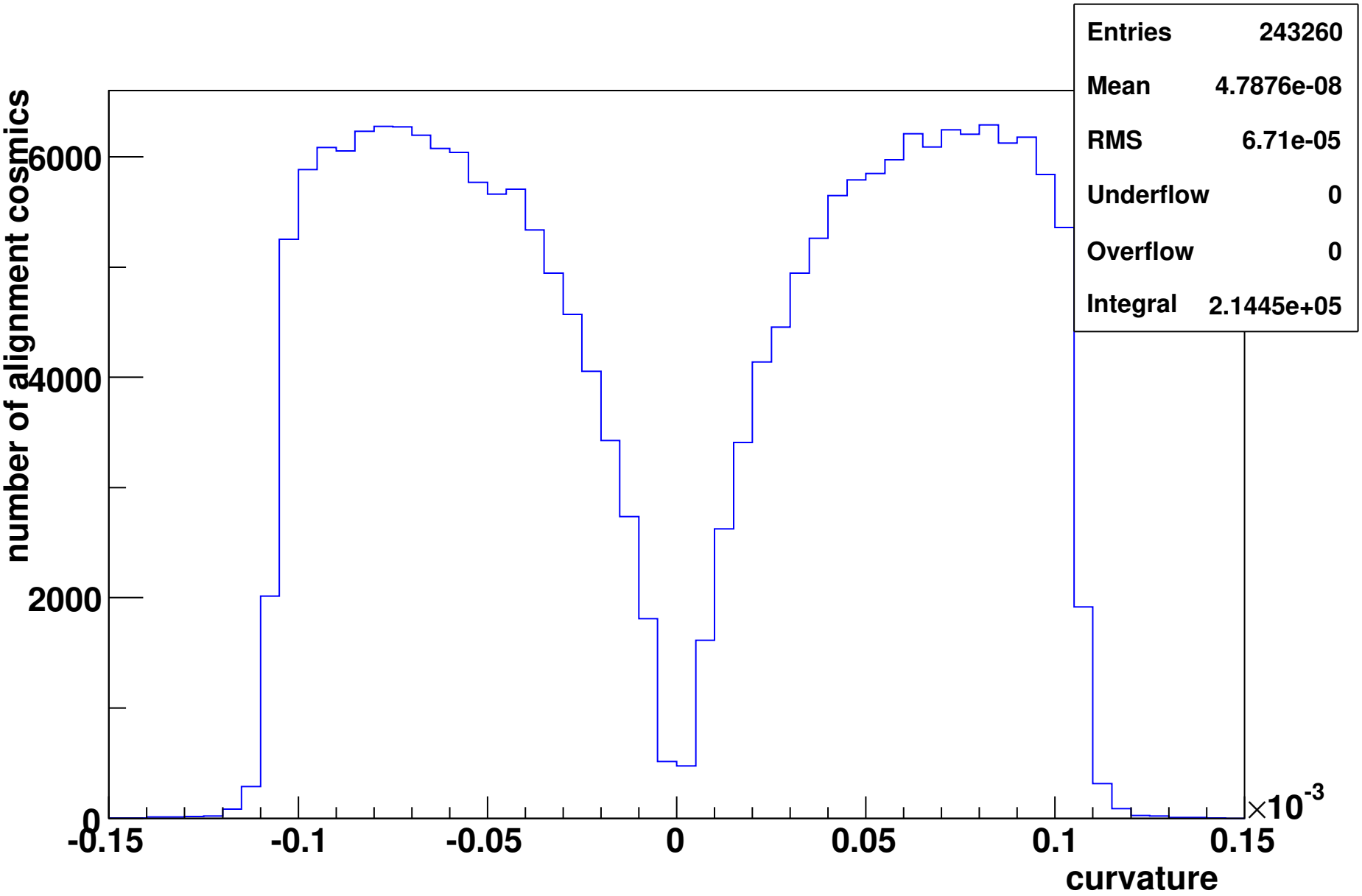

Entries 243260
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.4326e+05
×10^3
number of cosmics
200
100
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
EM Energy

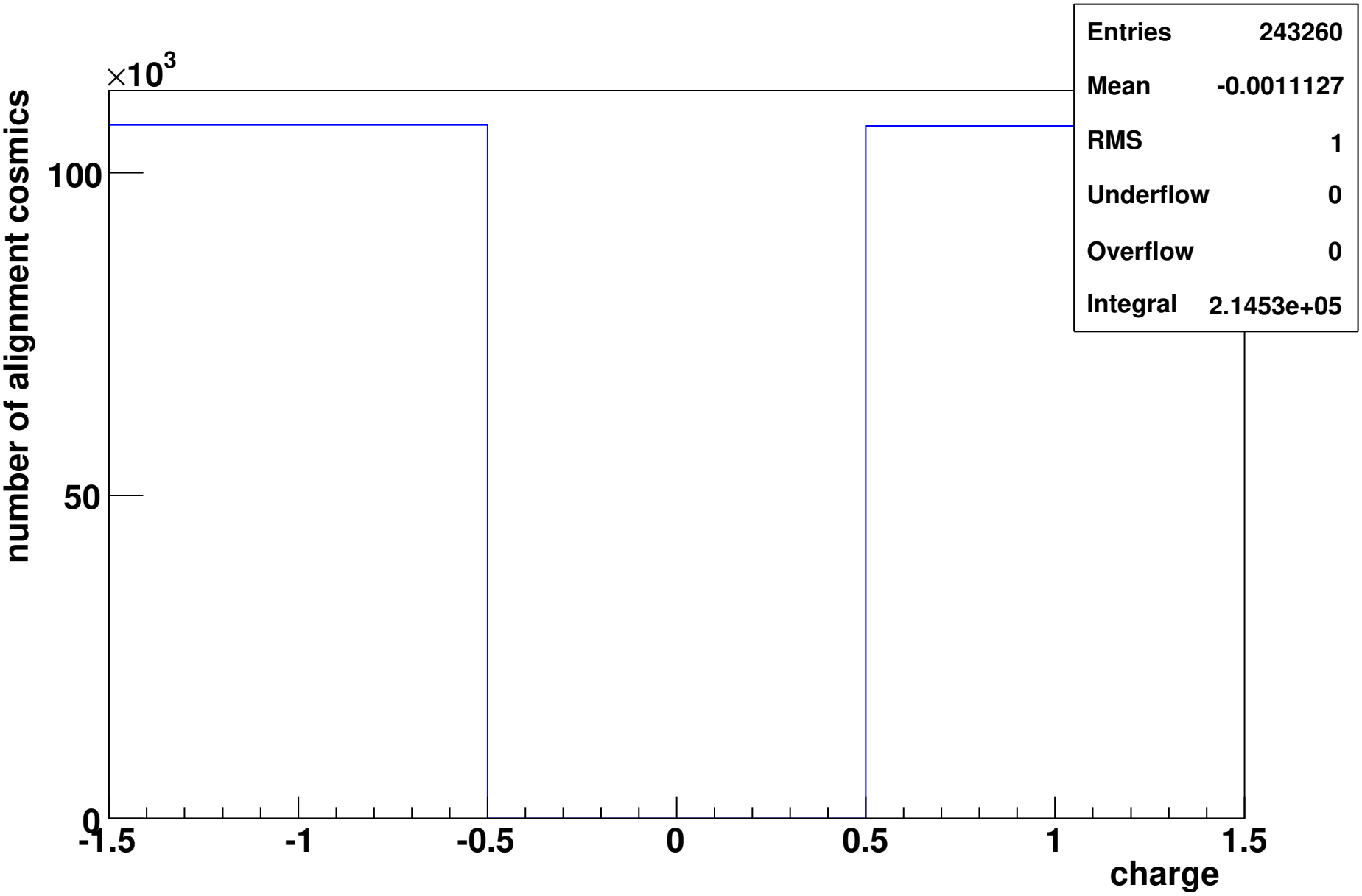

Entries 243260
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.4326e+05
×10^3
number of cosmics
200
100
0
0
1
2
3
4
5
6
Hadronic Energy

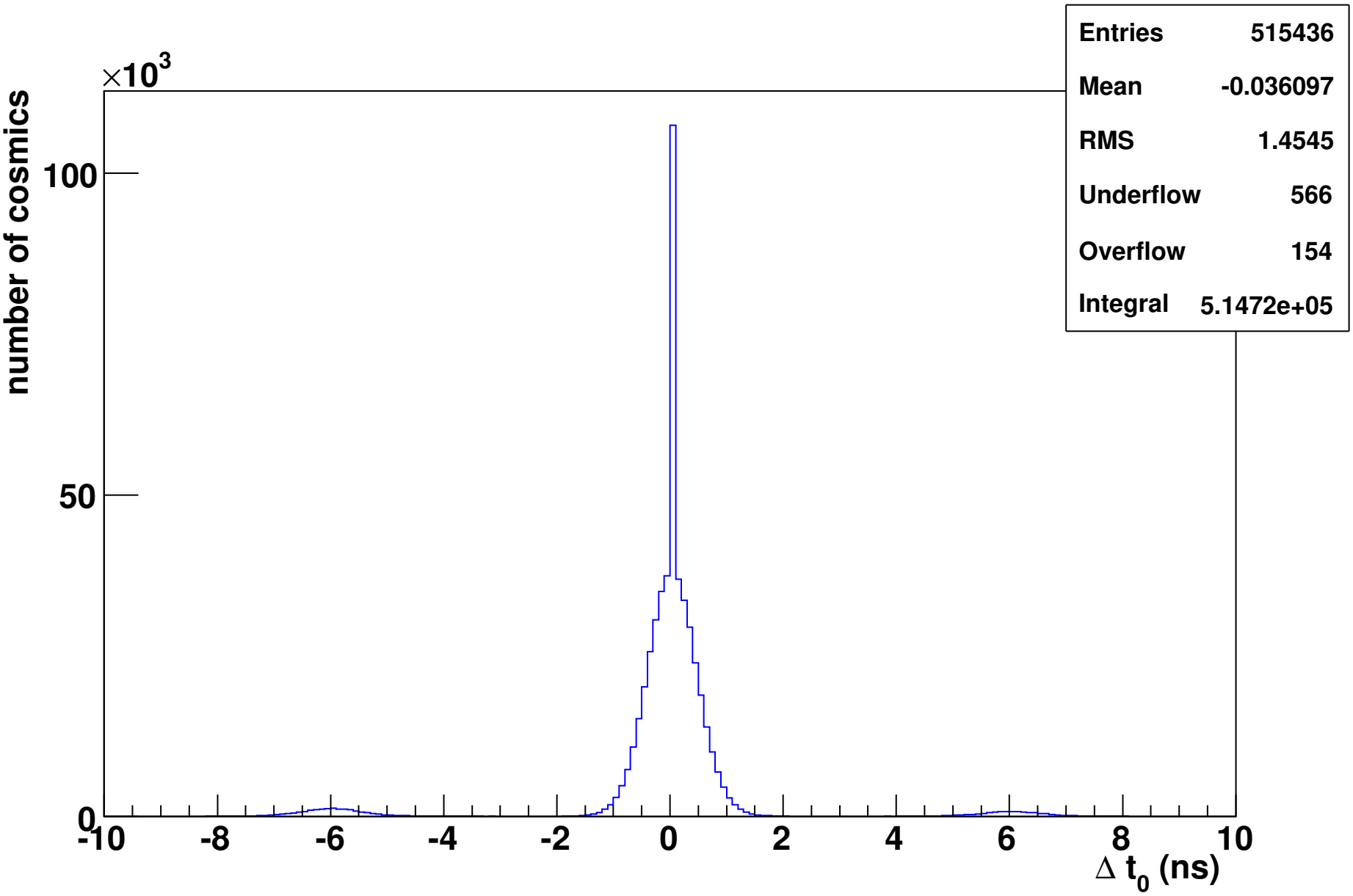

Entries 4.670592e+07
Mean 32.402
RMS 12.86
Underflow 2.426e+06
Overflow 2.125e+05
Integral 4.4067e+07
×10^3
number of cosmics
1500
1000
500
0
0
10
20
30
40
50
60
70
80
90
100
Mean COT hit width

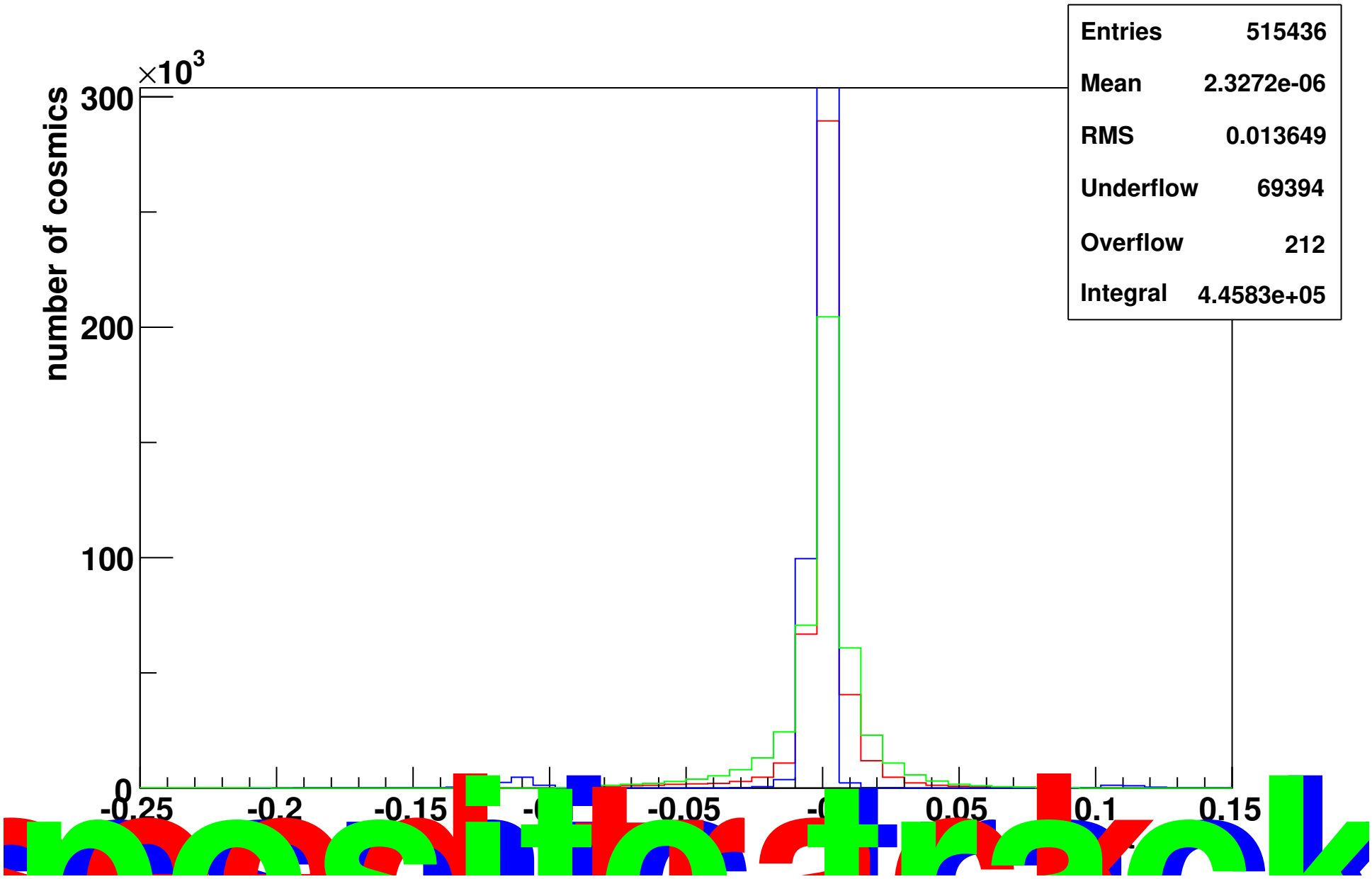

Entries 446097
Mean 7.7709e-06
RMS 7.1603e-05
Underflow 7064
Overflow 7669
Integral 4.3136e+05
number of cosmics
10000
5000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

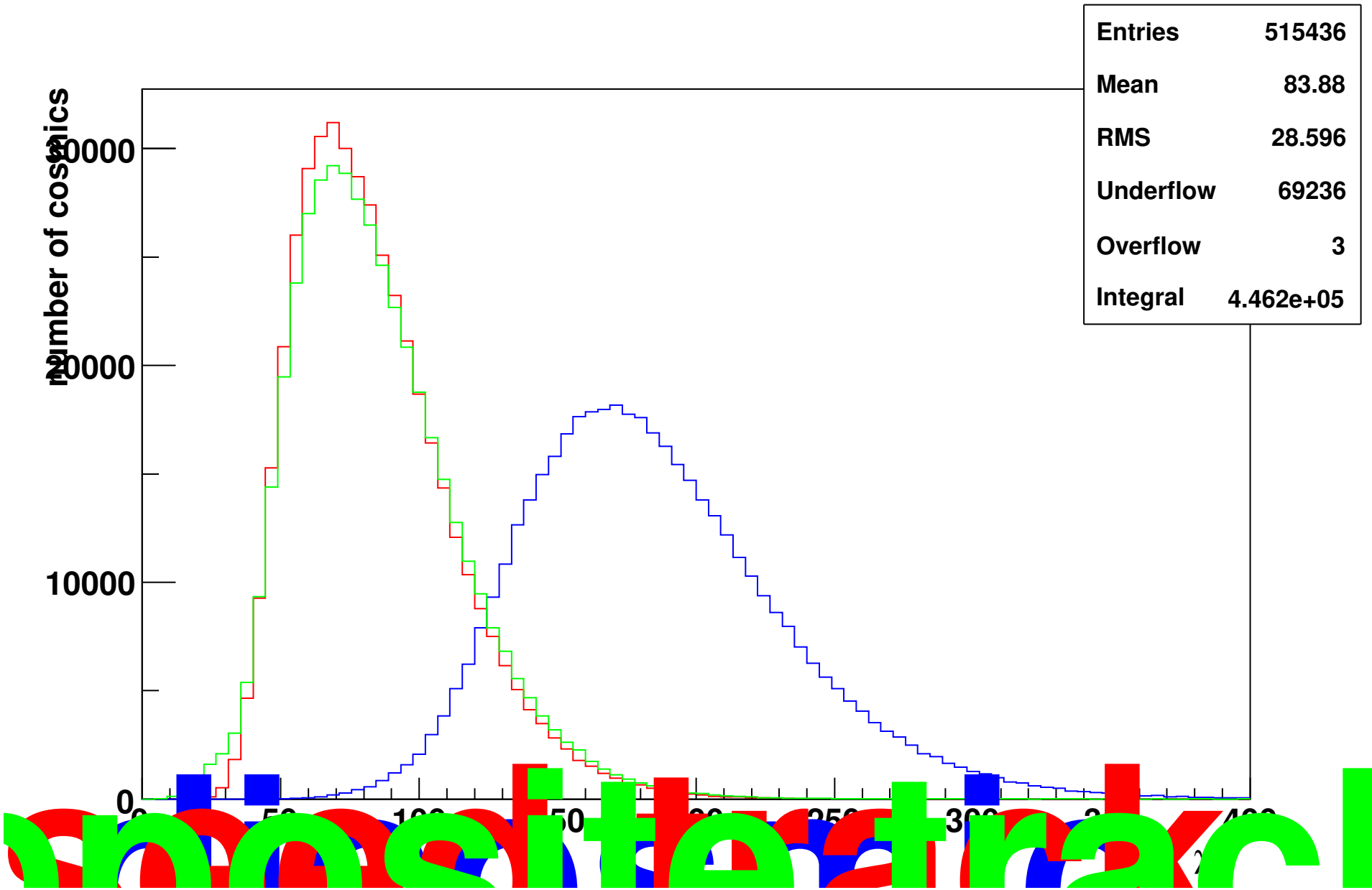

Entries 515436
Mean 0.11519
RMS 0.99334
Underflow 0
Overflow 0
Integral 5.1544e+05
×10^3
300
200
100
0
number of cosmics
-1.5
-1
-0.5
0
0.5
1
1.5
charge

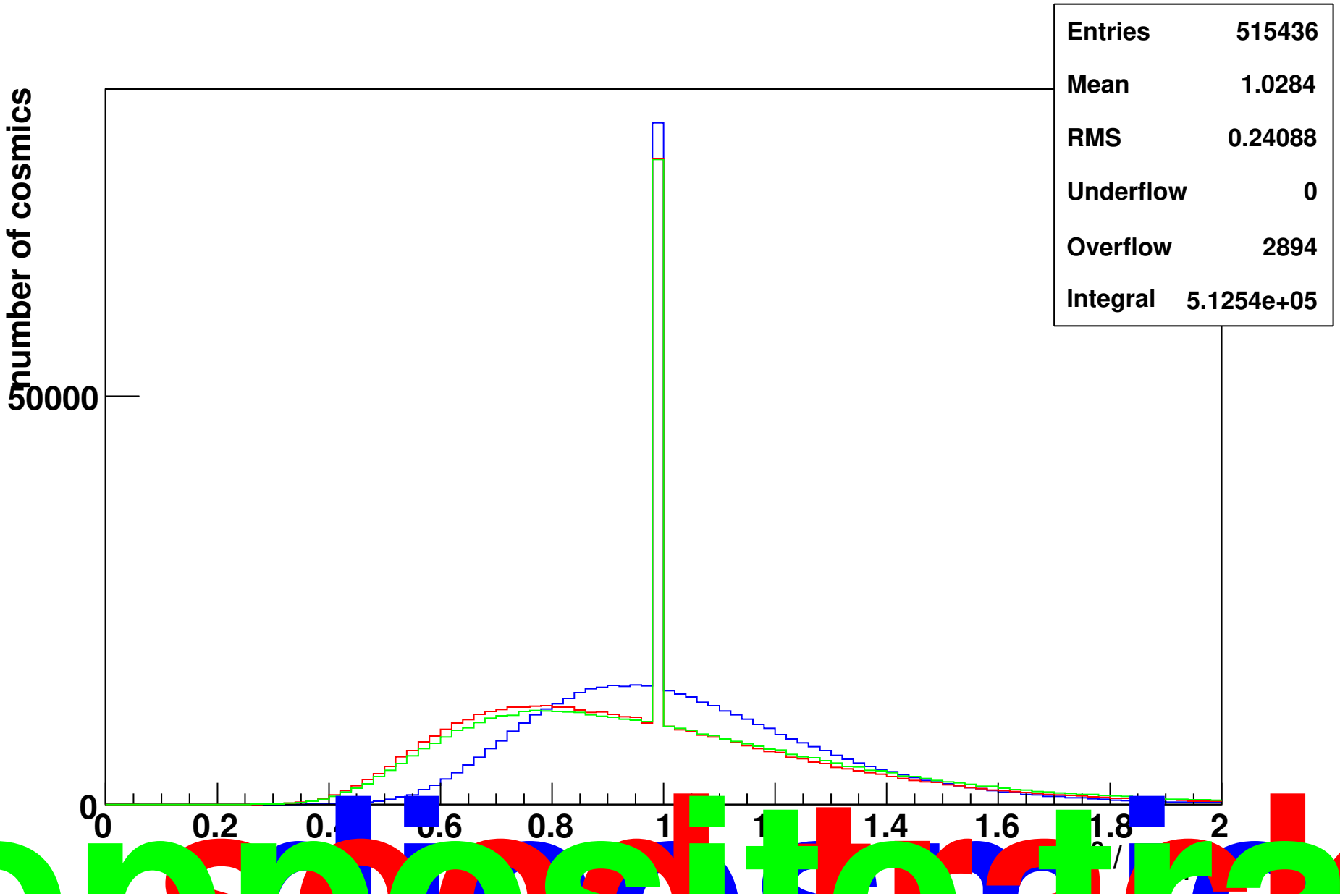

Entries 243260
Mean 4.7876e-08
RMS 6.71e-05
Underflow 0
Overflow 0
Integral 2.1445e+05
number of alignment cosmics
6000
4000
2000
0
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

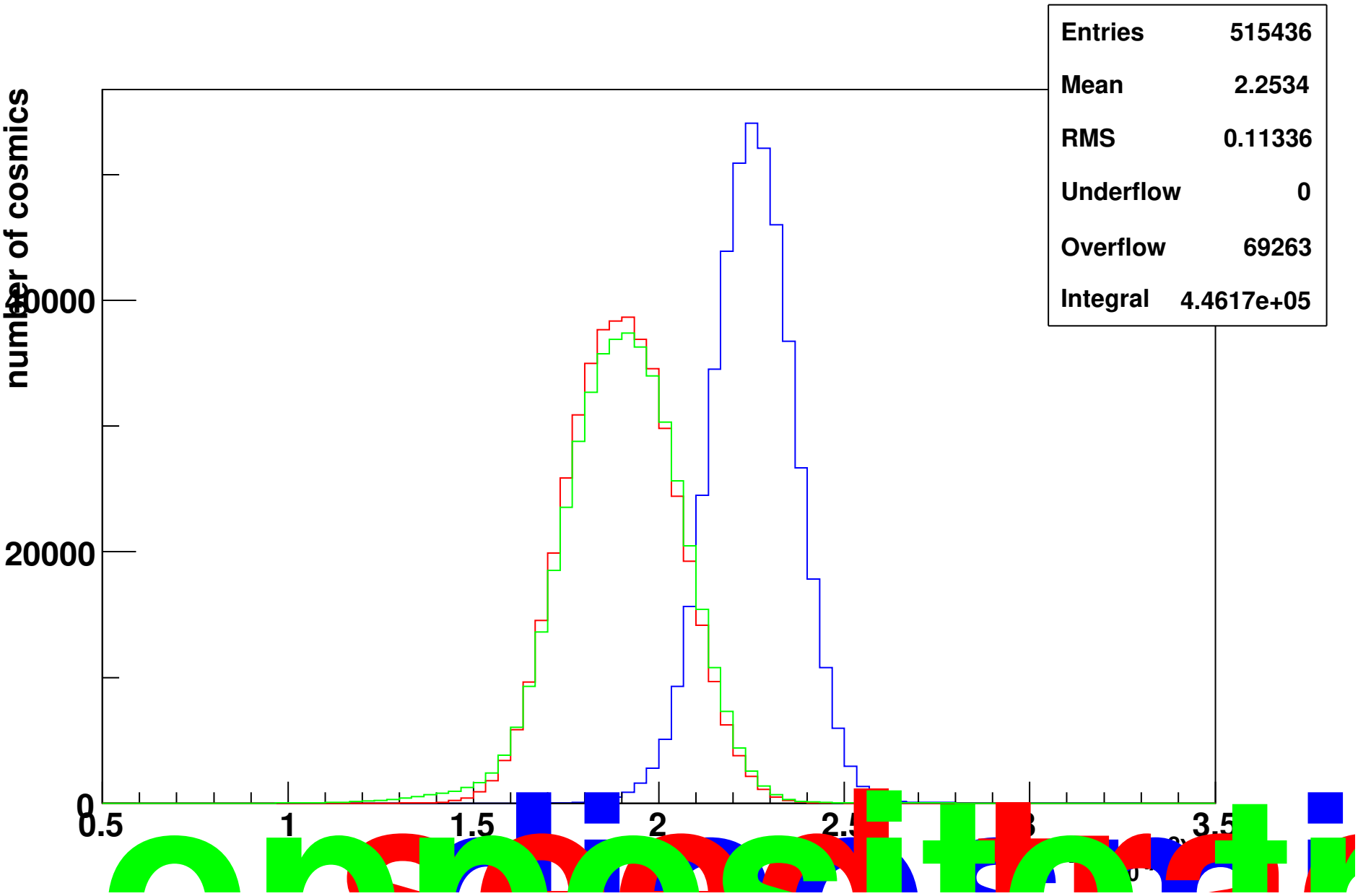

Entries 243260
Mean -0.0011127
RMS 1
Underflow 0
Overflow 0
Integral 2.1453e+05
×10^3
number of alignment cosmics
100
50
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge


Entries 515436
Mean -0.036097
RMS 1.4545
Underflow 566
Overflow 154
Integral 5.1472e+05
×10^3
number of cosmics
100
50
0
-10
-8
-6
-4
-2
0
2
4
6
8
10
Δ t0 (ns)

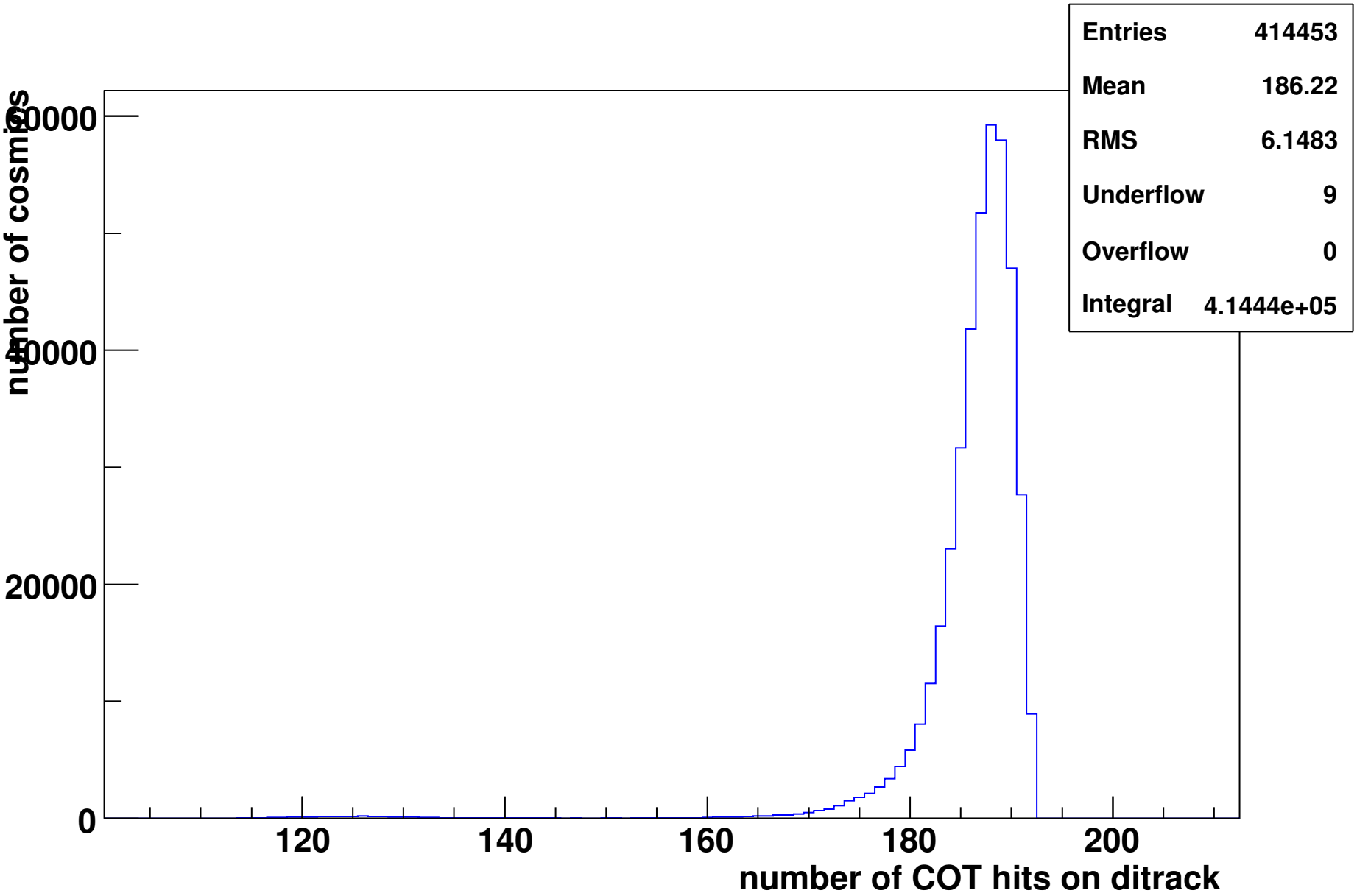

Entries 515436
Mean 2.3272e-06
RMS 0.013649
Underflow 69394
Overflow 212
Integral 4.4583e+05
number of cosmics
×10^3
300
200
100
0
-0.25
-0.2
-0.15
-0.05
0.05
0.1
0.15

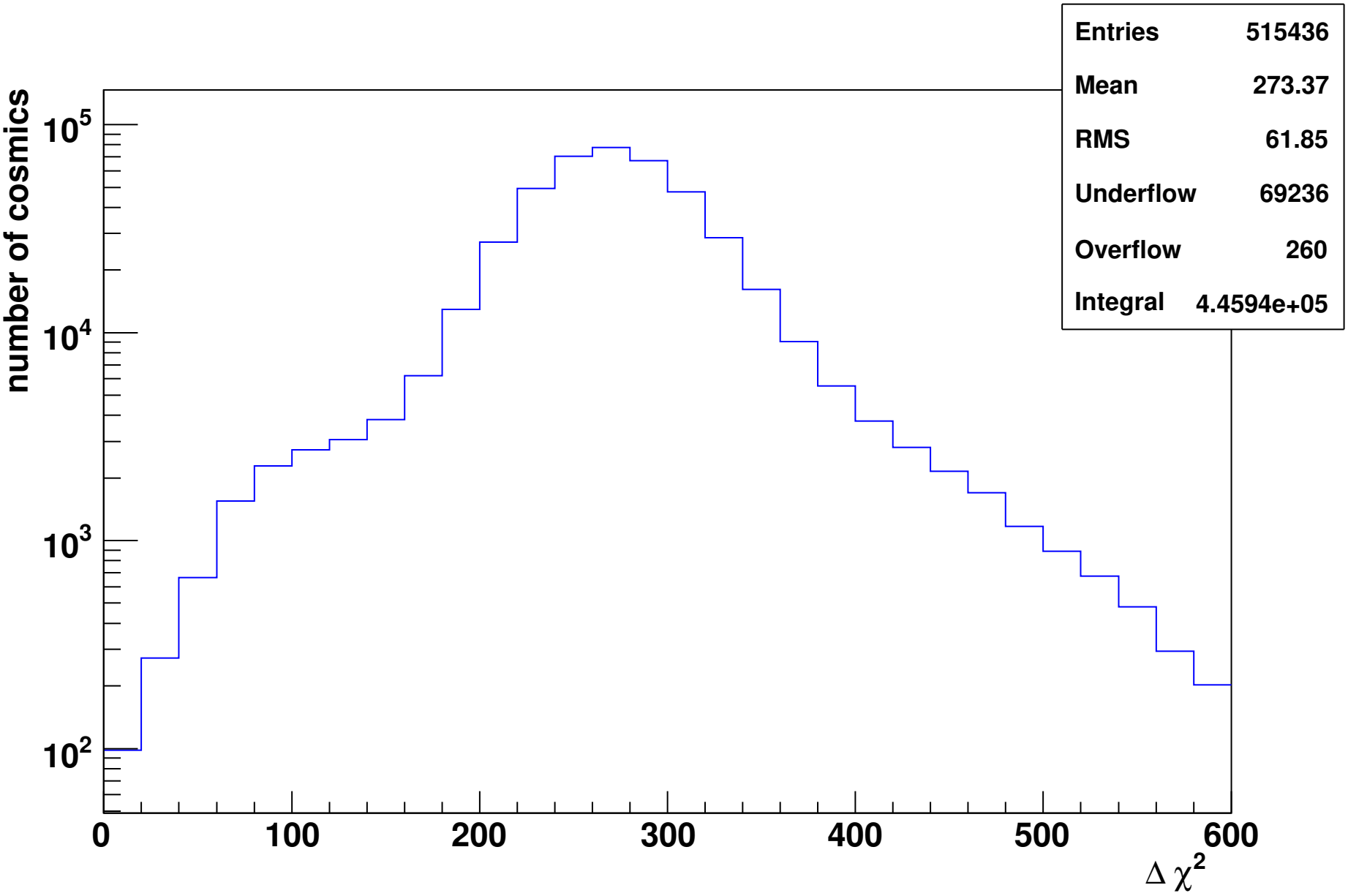

Entries 515436
Mean 83.88
RMS 28.596
Underflow 69236
Overflow 3
Integral 4.462e+05
Number of cosmics
20000
10000
0

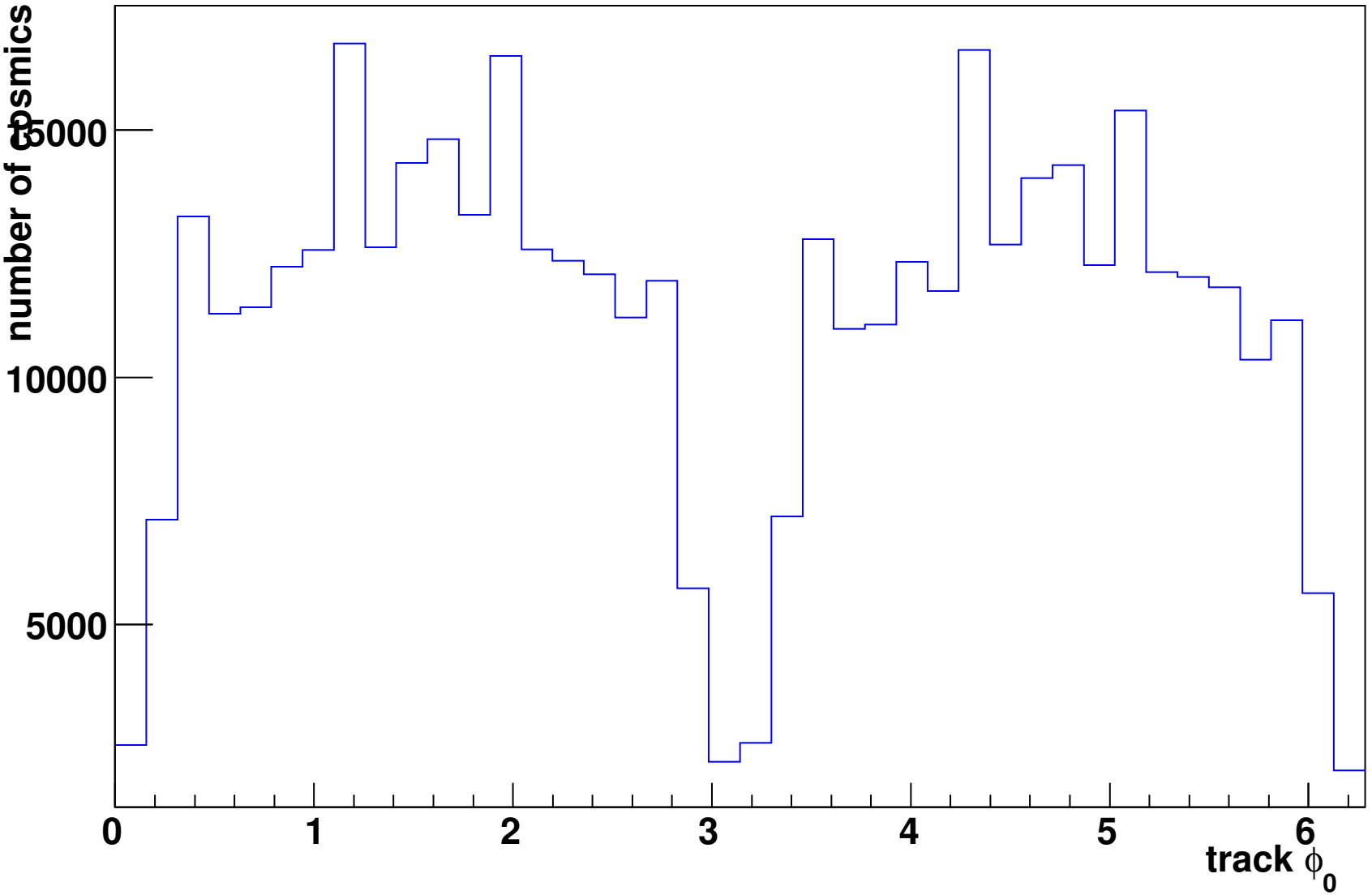

Entries 515436
Mean 1.0284
RMS 0.24088
Underflow 0
Overflow 2894
Integral 5.1254e+05
number of cosmics
50000
0
0
0.2
0.6
0.8
1.4
1.6
1.8
2

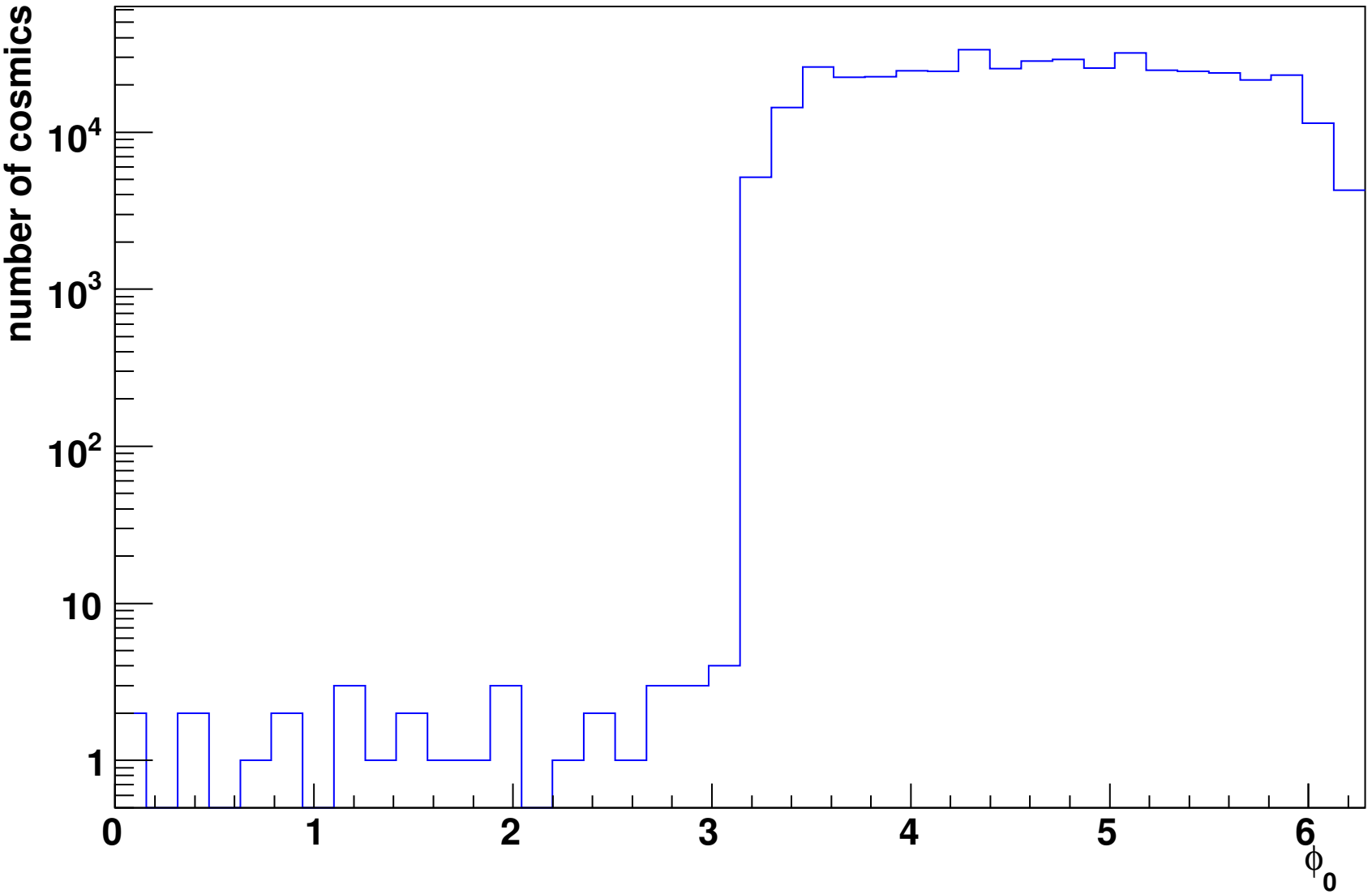

Entries 515436
Mean 2.2534
RMS 0.11336
Underflow 0
Overflow 69263
Integral 4.4617e+05
number of cosmics
40000
20000
0
0.5
1
1.5
2
2.5
3.5

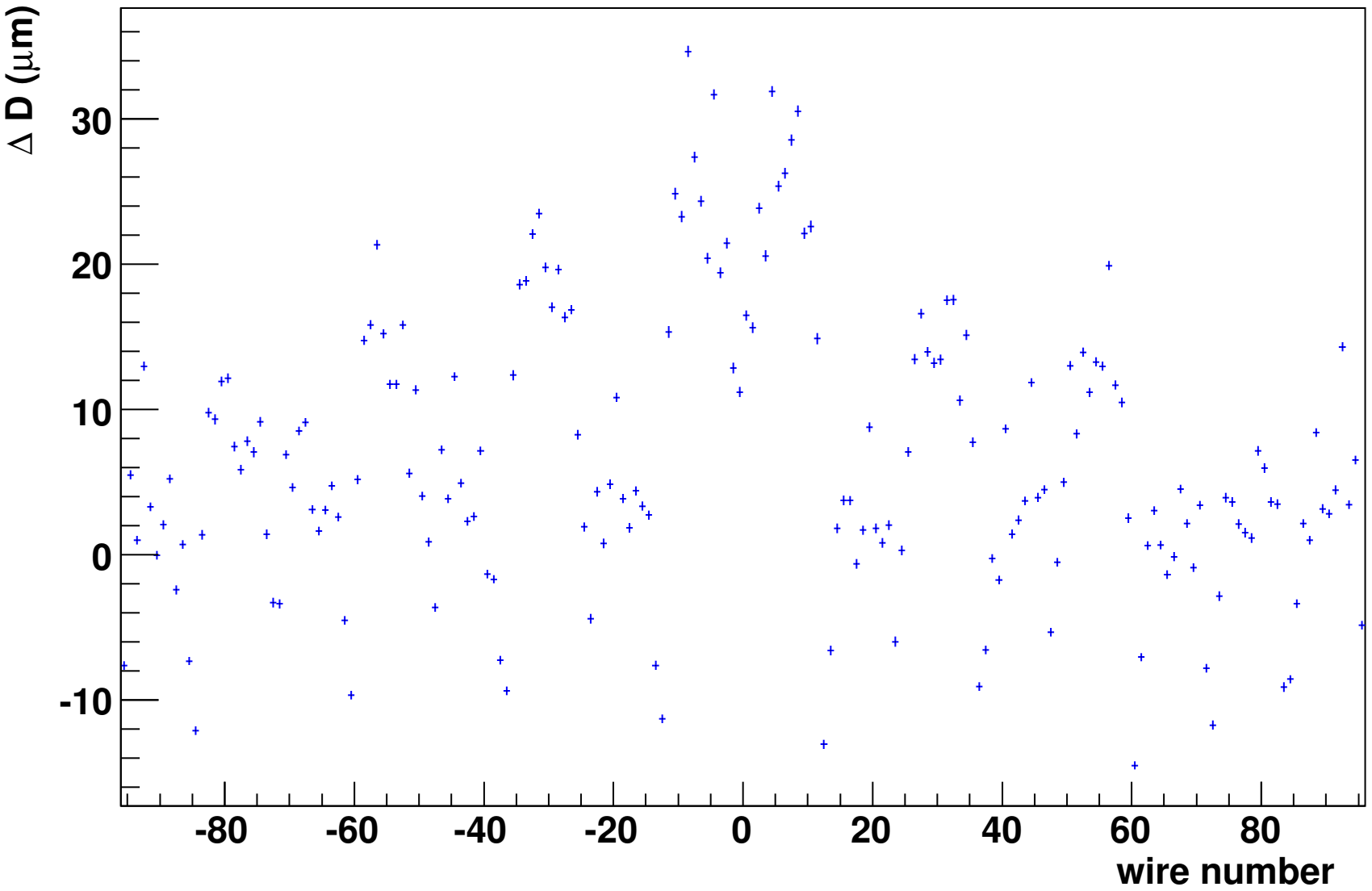
Entries 515436
number of ditracks
10^5
10^4
10^3
10^2
-0.5
0
0.5
1
1.5
2
2.5
3
4
4.5
ditrack type

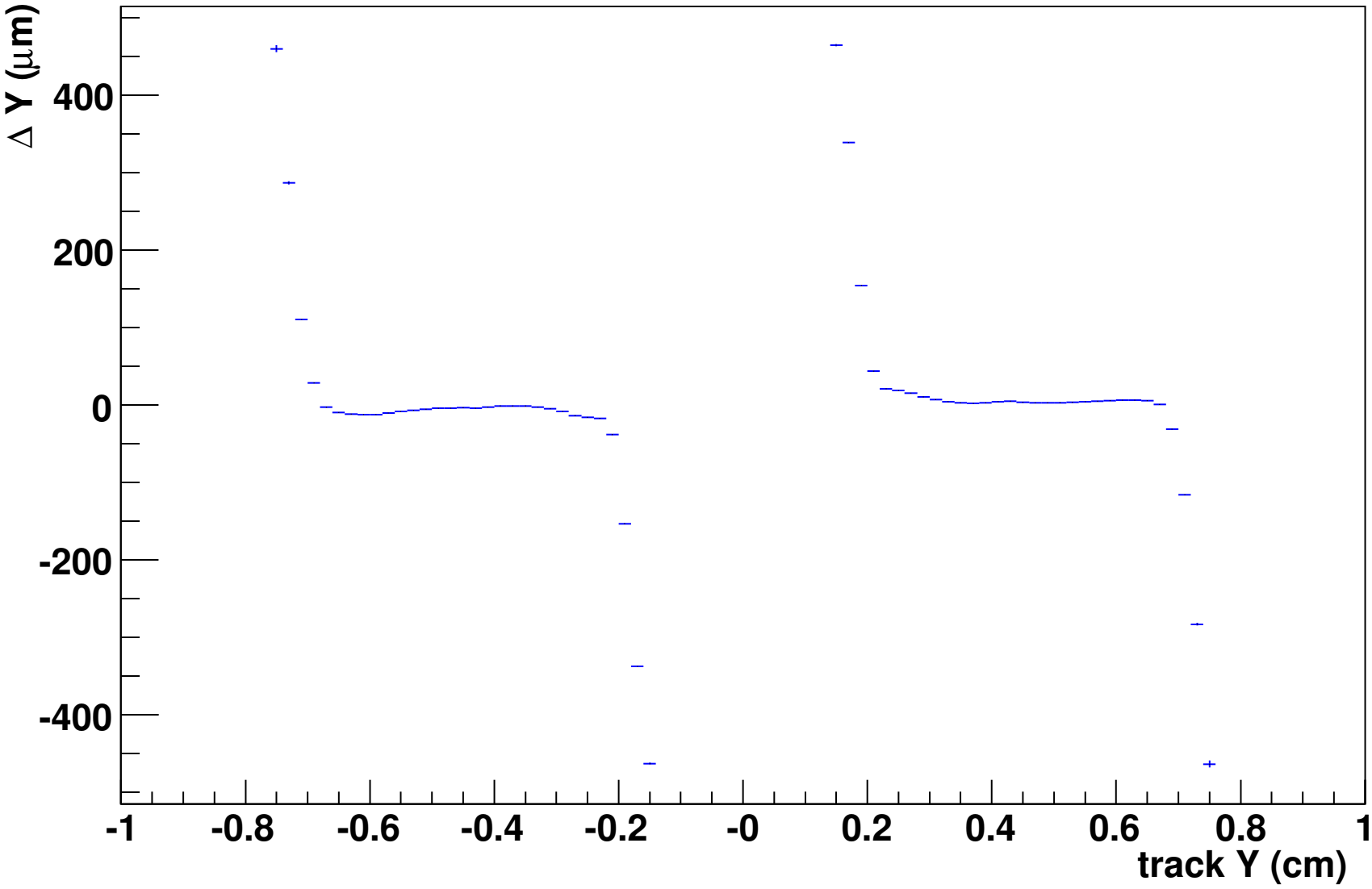

Entries 414453
Mean 186.22
RMS 6.1483
Underflow 9
Overflow 0
Integral 4.1444e+05
number of cosmics
40000
20000
0
120
140
160
180
200
number of COT hits on ditrack

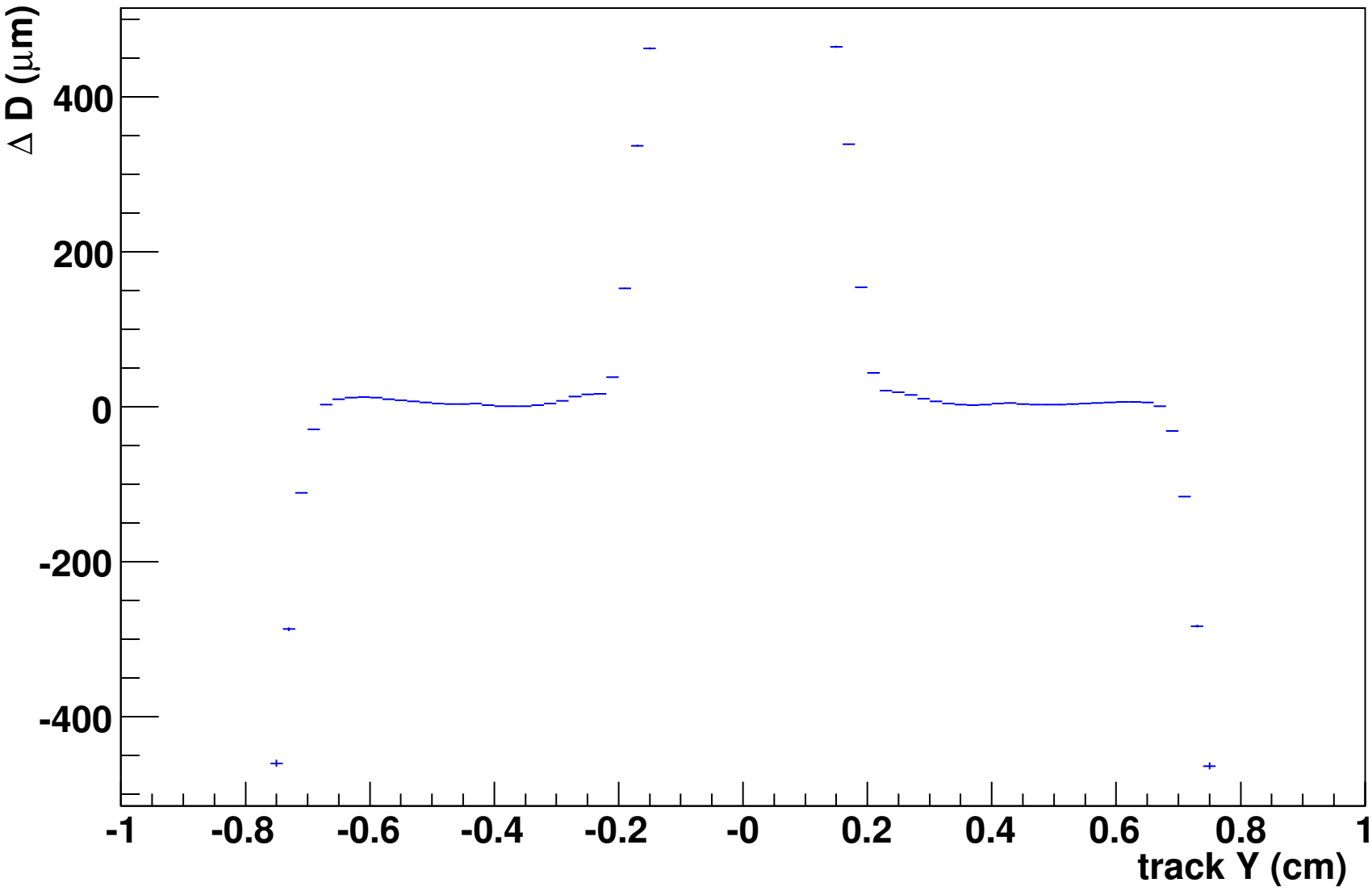

Entries 515436
Mean 273.37
RMS 61.85
Underflow 69236
Overflow 260
Integral 4.4594e+05
number of cosmics
10^5
10^4
10^3
10^2
0
100
200
300
400
500
600
$\Delta\,\chi^2$

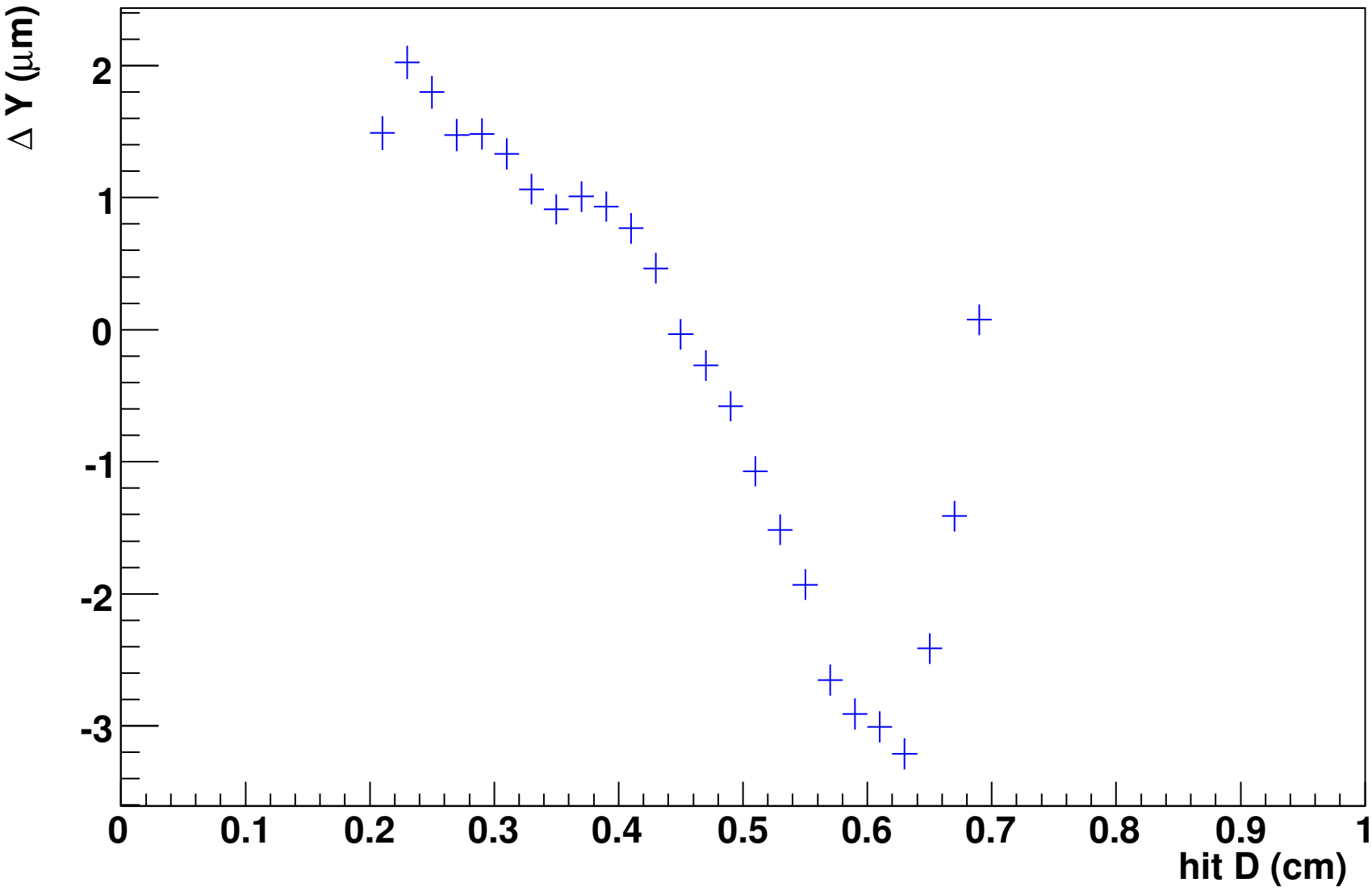

number of cosmics
15000
10000
5000
0
1
2
3
4
5
6
track ϕ_0

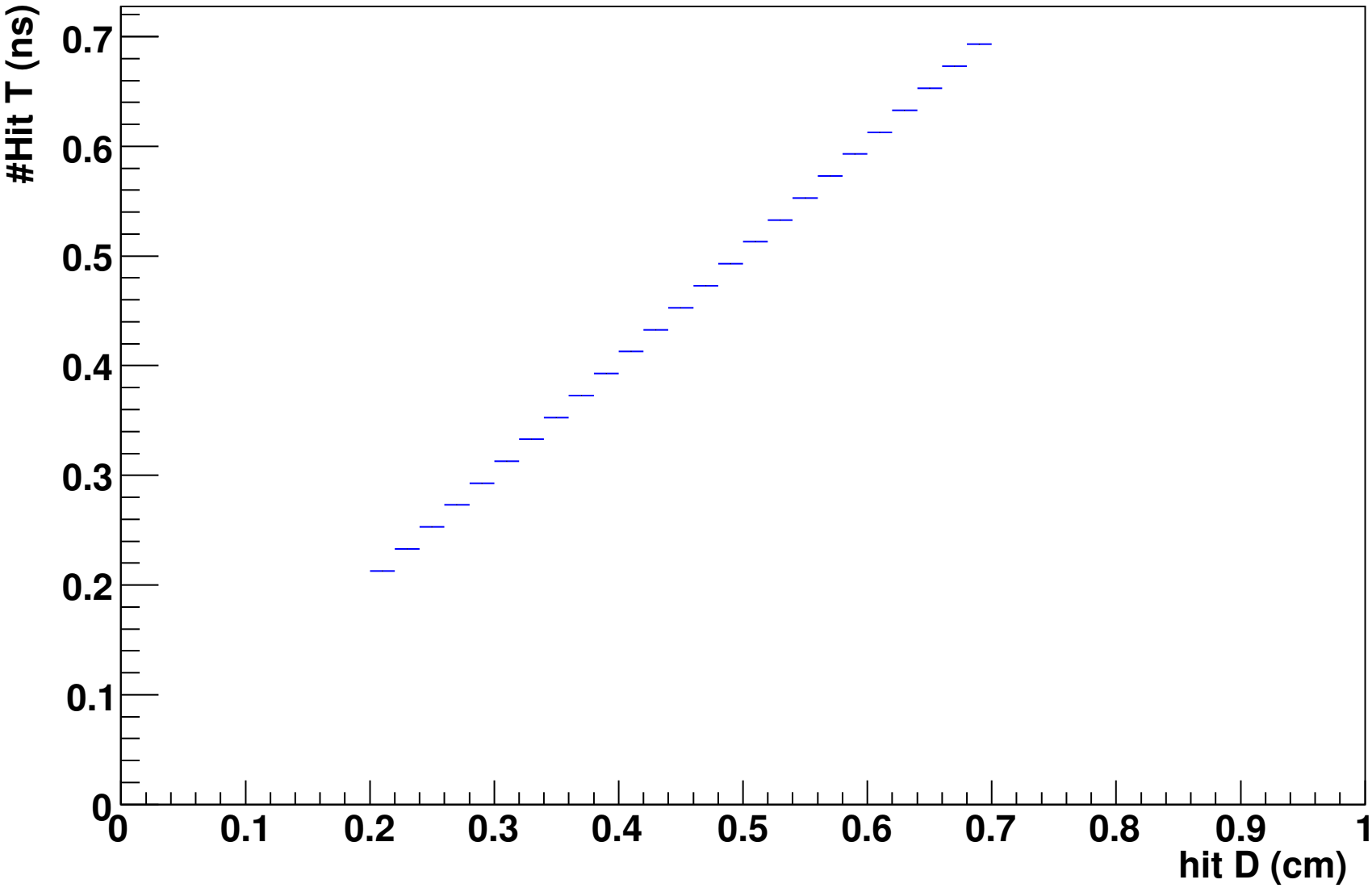

number of cosmics
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
ϕ_0

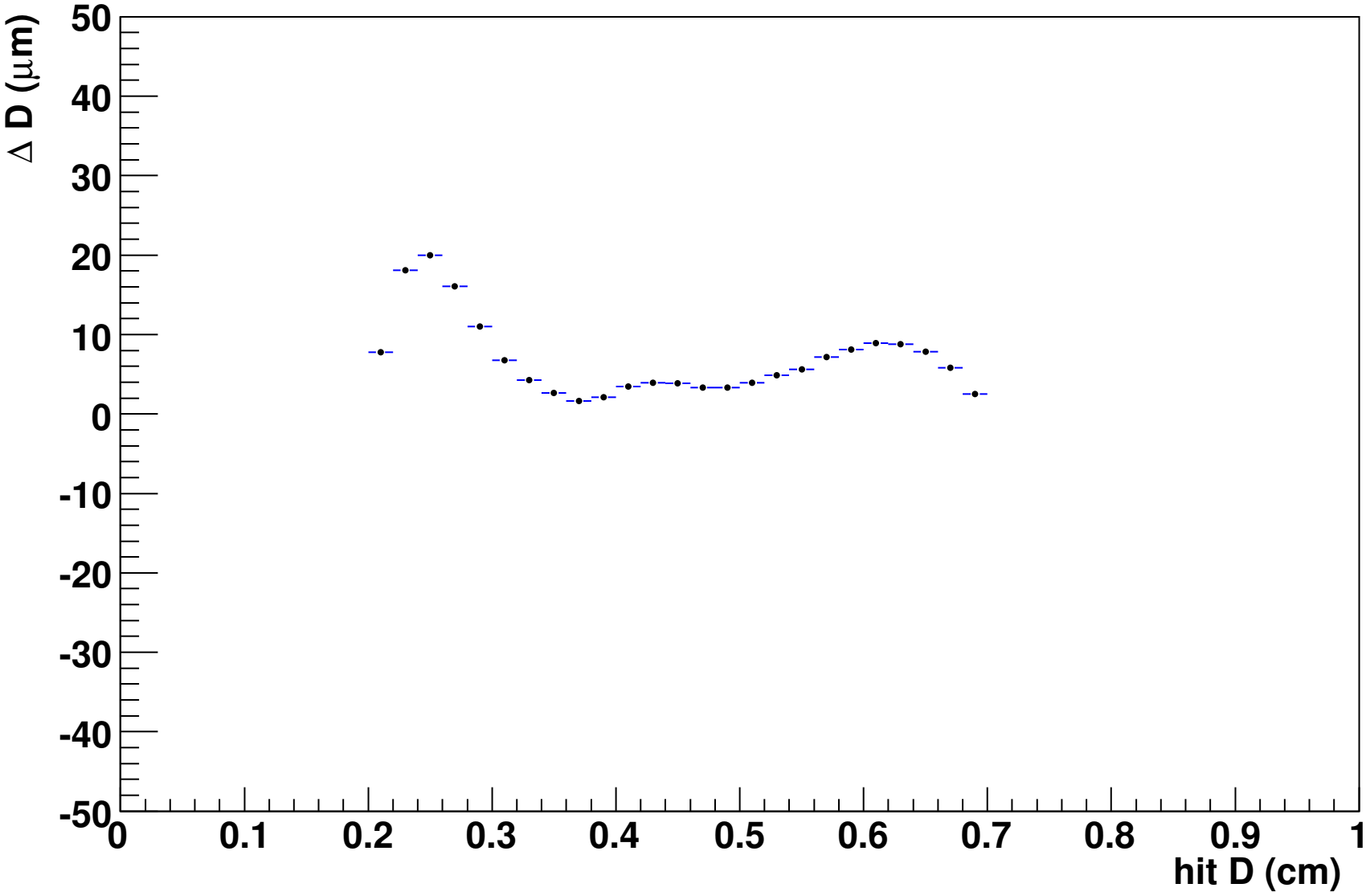

Δ D (μm)
30
20
10
0
-10
-80
-60
-40
-20
0
20
40
60
80
wire number

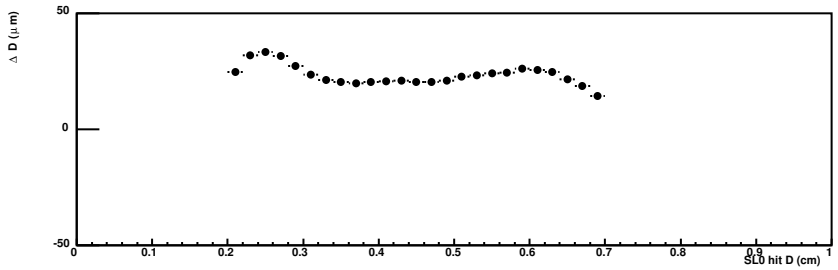

Δ Y (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

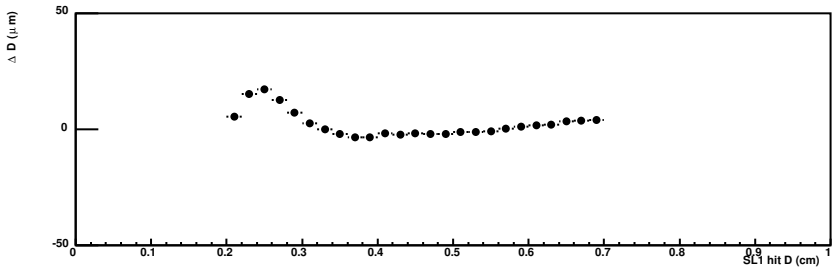

Δ D (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

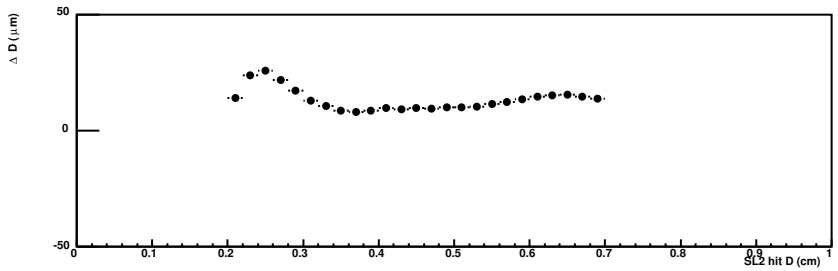

Δ Y (μm)
2
1
0
-1
-2
-3
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

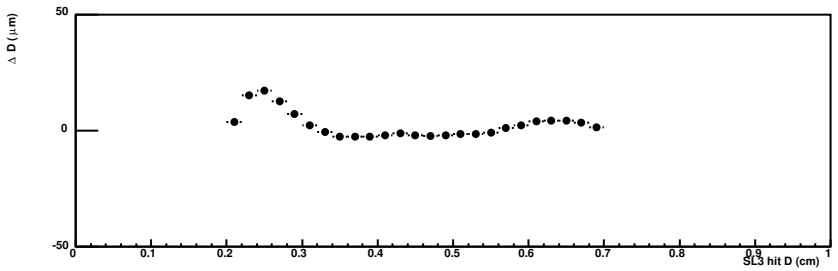

#Hit T (ns)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

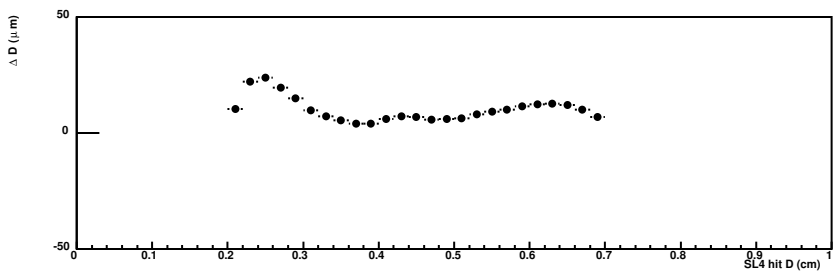

Δ D (μm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

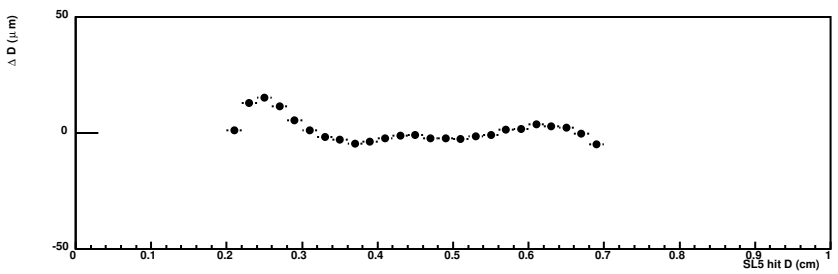

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL0 hit D (cm)

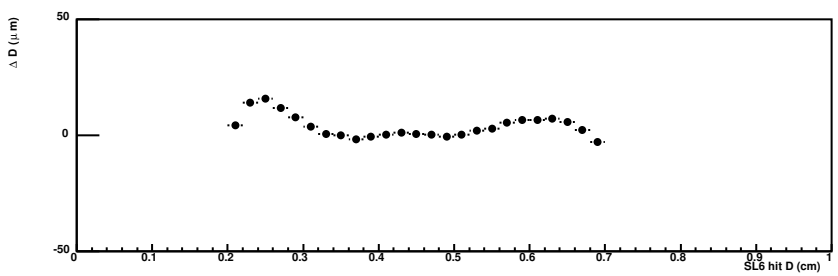

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL1 hit D (cm)

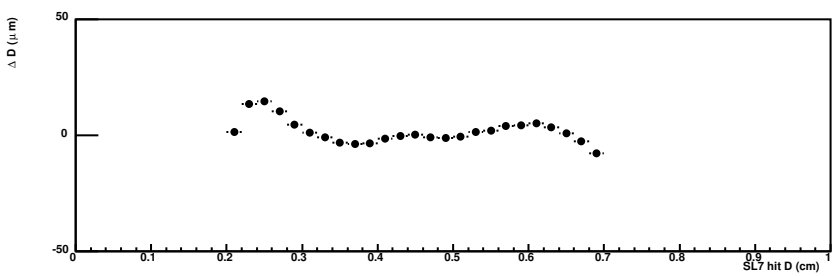

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL2 hit D (cm)

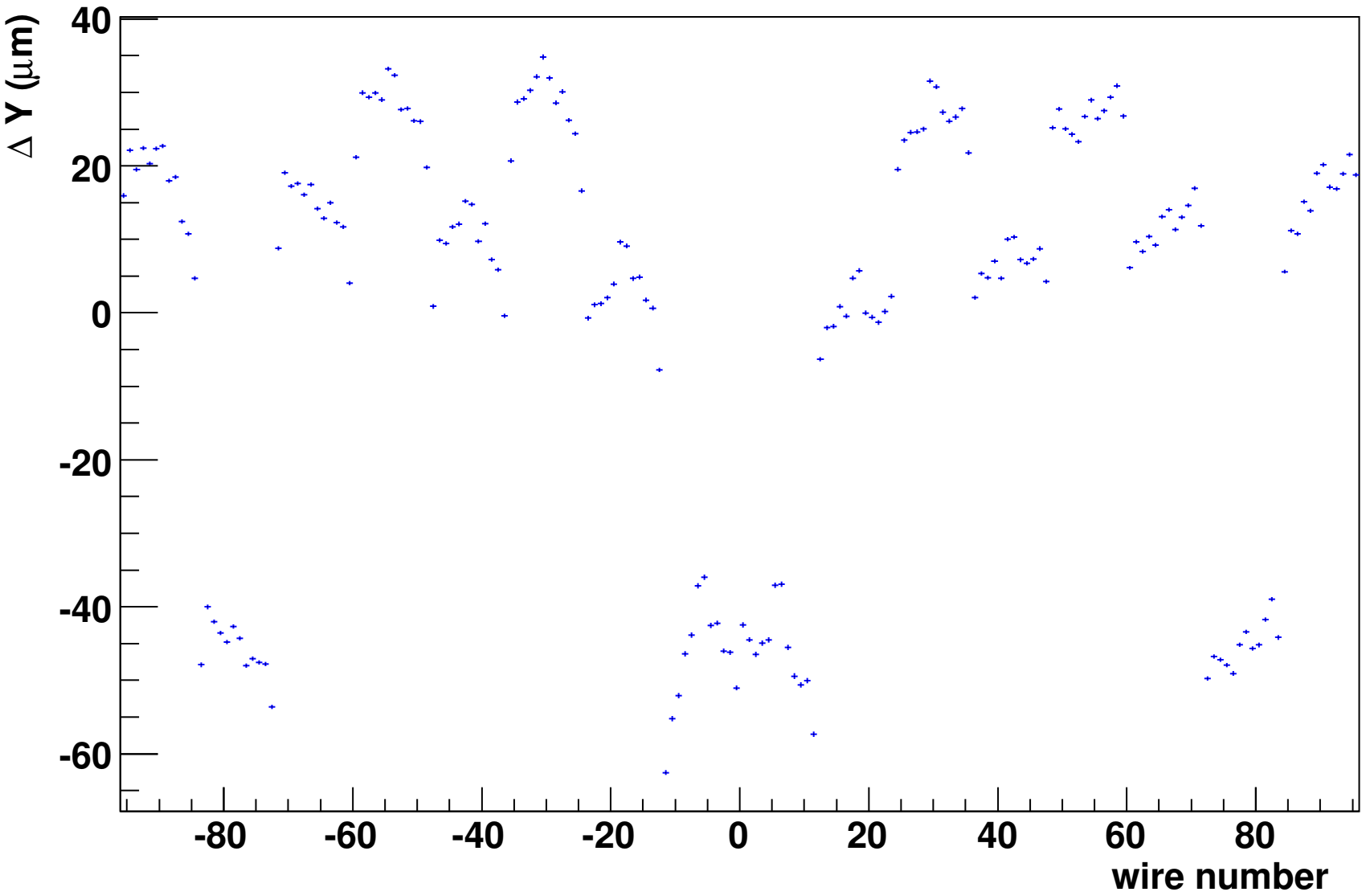

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL3 hit D (cm)

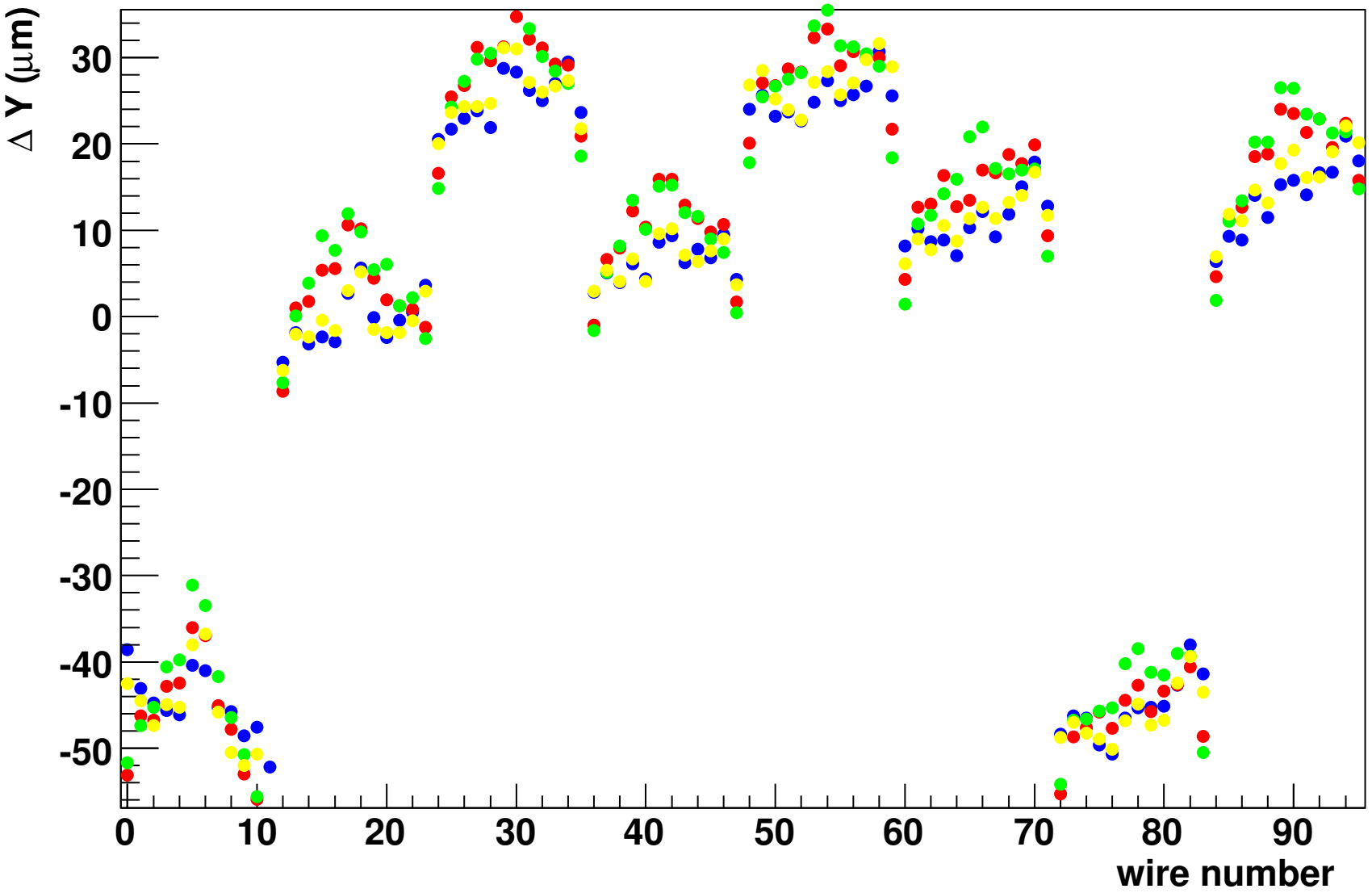

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL4 hit D (cm)

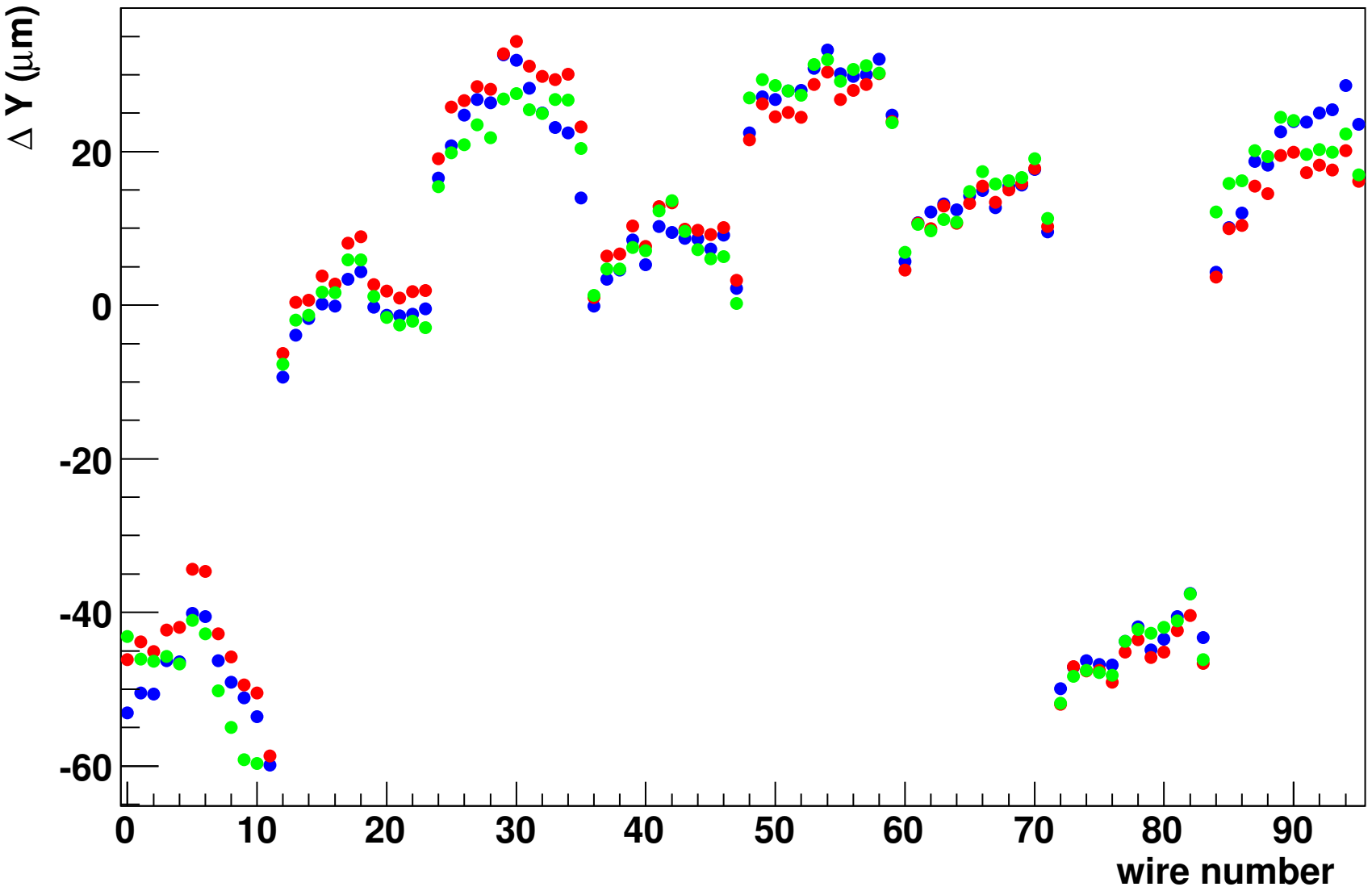

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL5 hit D (cm)

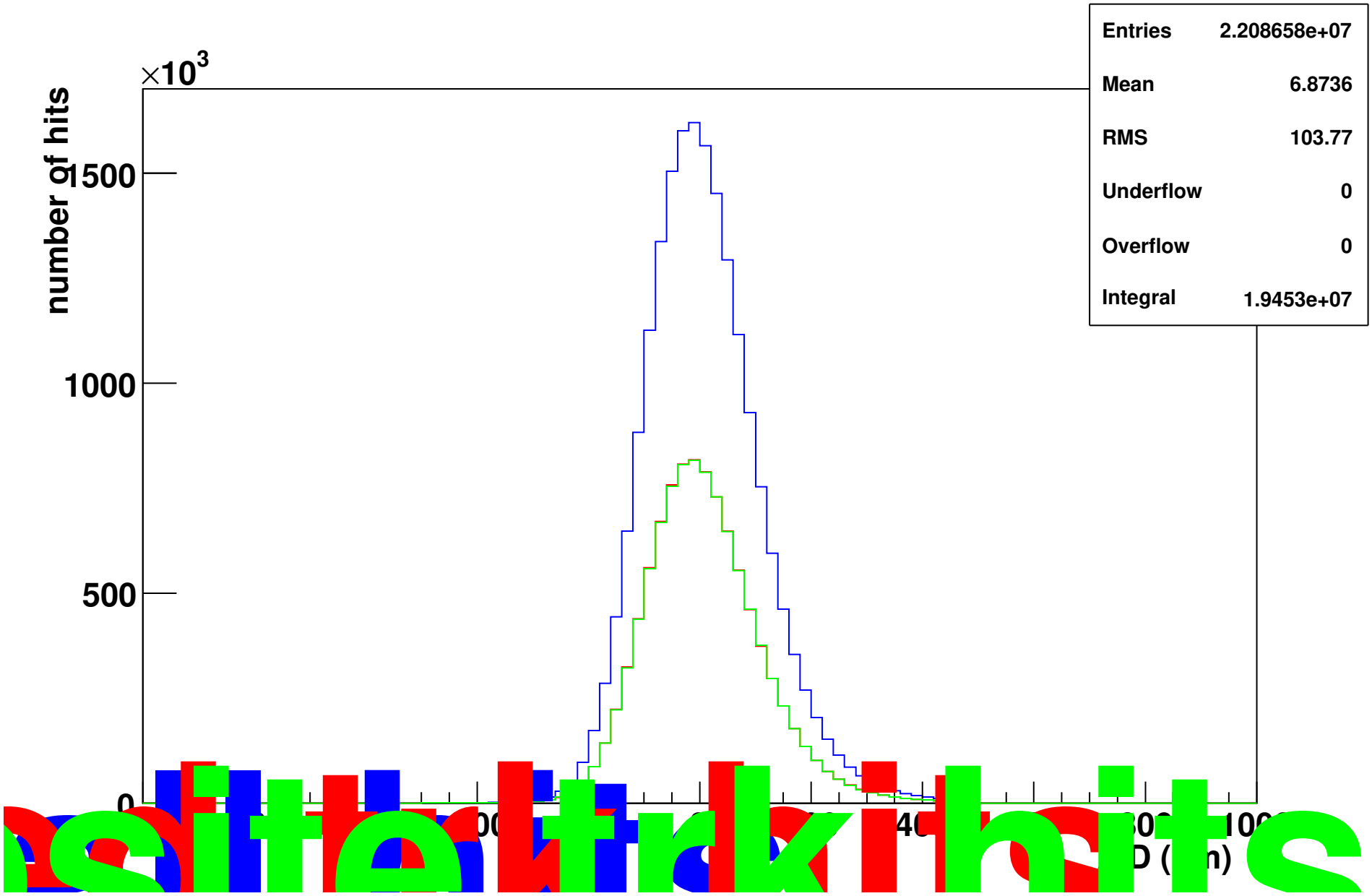

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL6 hit D (cm)


Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL7 hit D (cm)

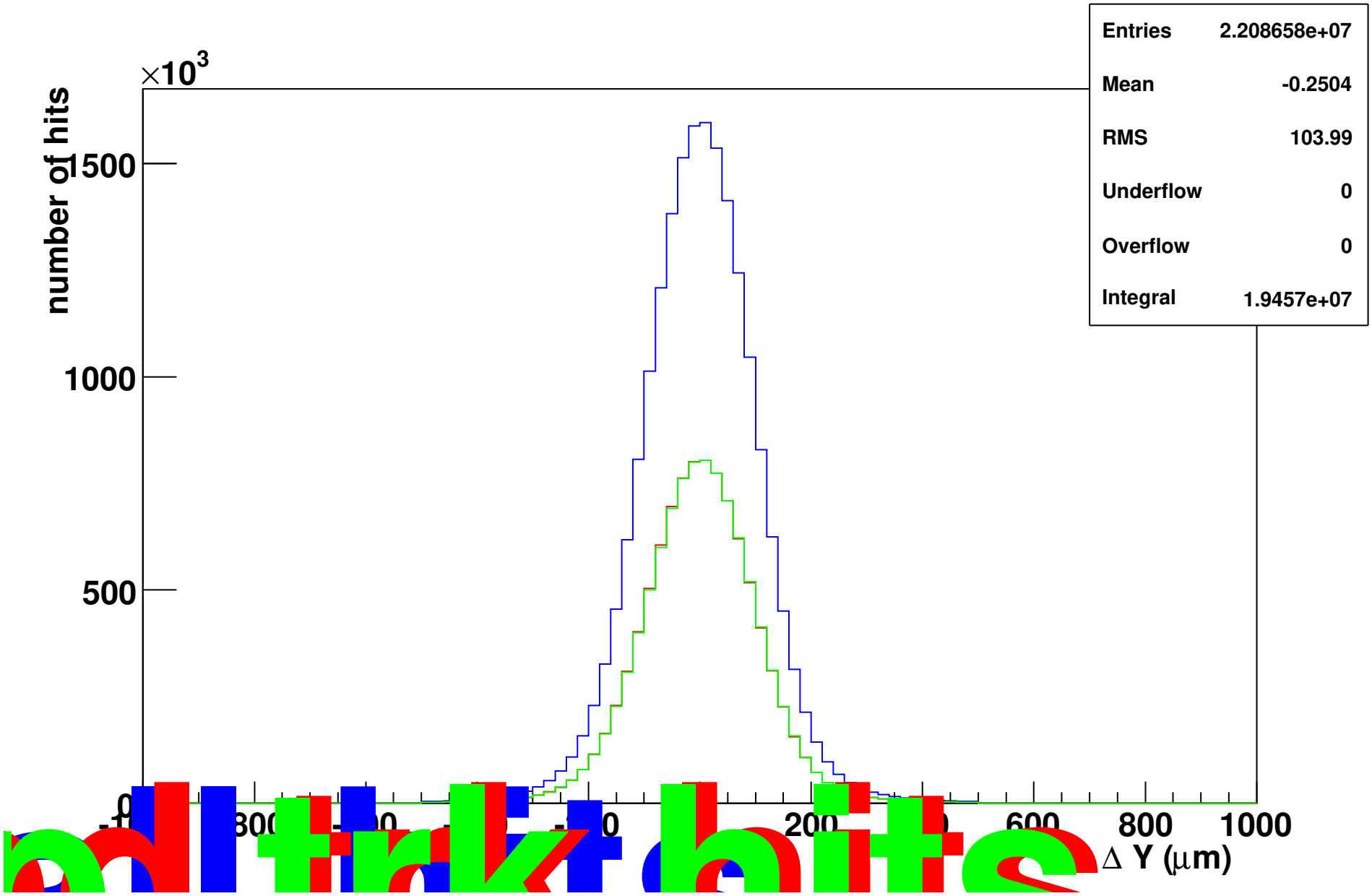

Δ Y (μm)
40
20
0
-20
-40
-60
-80
-60
-40
-20
0
20
40
60
80
wire number

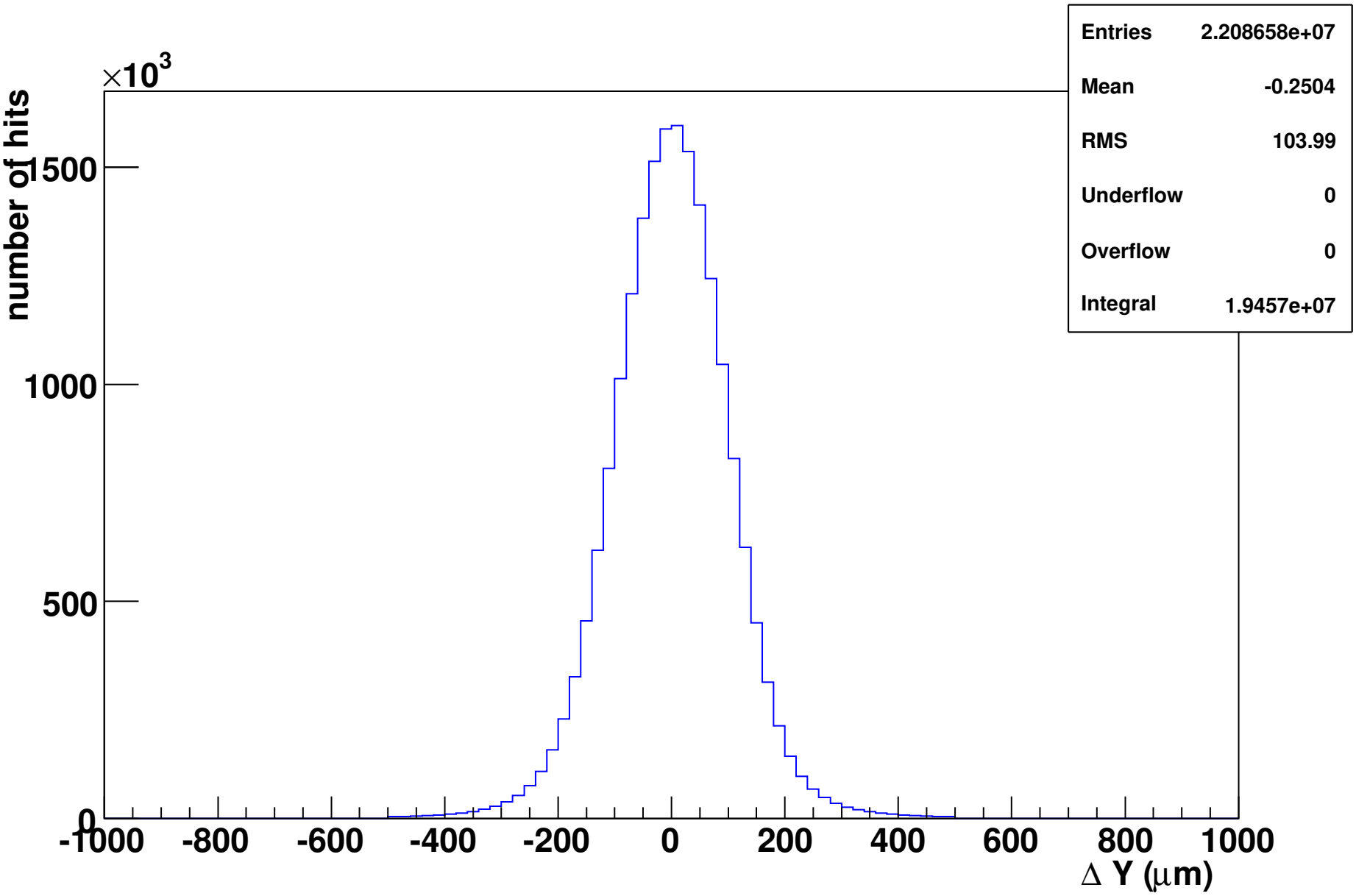

Δ Y (μm)
30
20
10
0
-10
-20
-30
-40
-50
0
10
20
30
40
50
60
70
80
90
wire number


Δ Y (μm)
20
0
-20
-40
-60
0
10
20
30
40
50
60
70
80
90
wire number



Entries 2.208658e+07
Mean 6.8736
RMS 103.77
Underflow 0
Overflow 0
Integral 1.9453e+07
number of hits
×10^3
1500
1000
500
0


Entries 2.208658e+07
Mean -0.2504
RMS 103.99
Underflow 0
Overflow 0
Integral 1.9457e+07
number of hits
×10^3
1500
1000
500
0
-800
200
600
800
1000
Δ Y (μm)


Entries 2.208658e+07
Mean -0.2504
RMS 103.99
Underflow 0
Overflow 0
Integral 1.9457e+07
×10^3
number of hits
1500
1000
500
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000
Δ Y (μm)