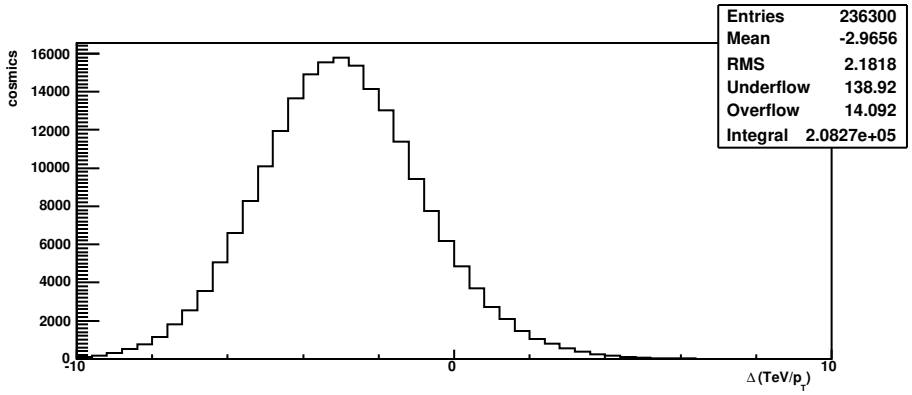
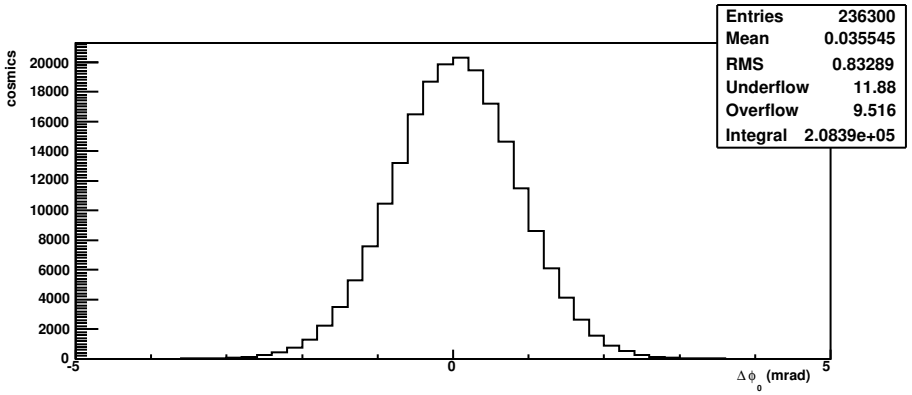
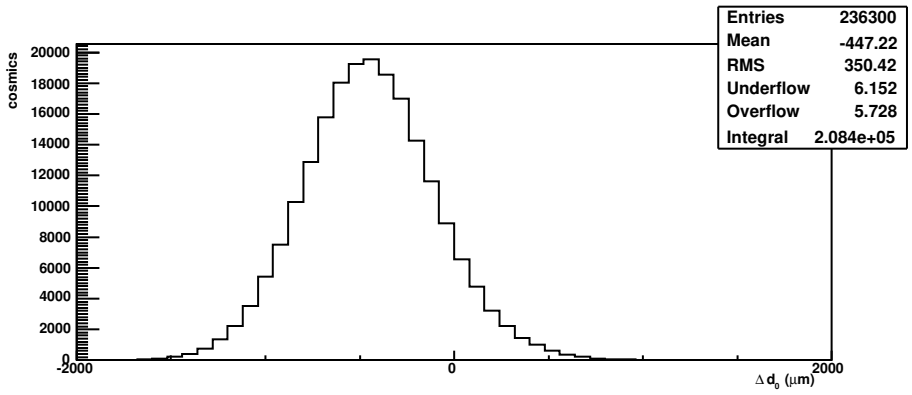
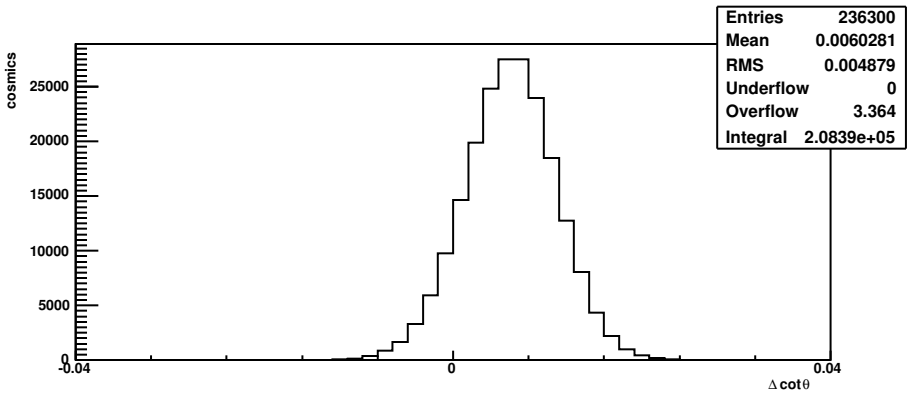
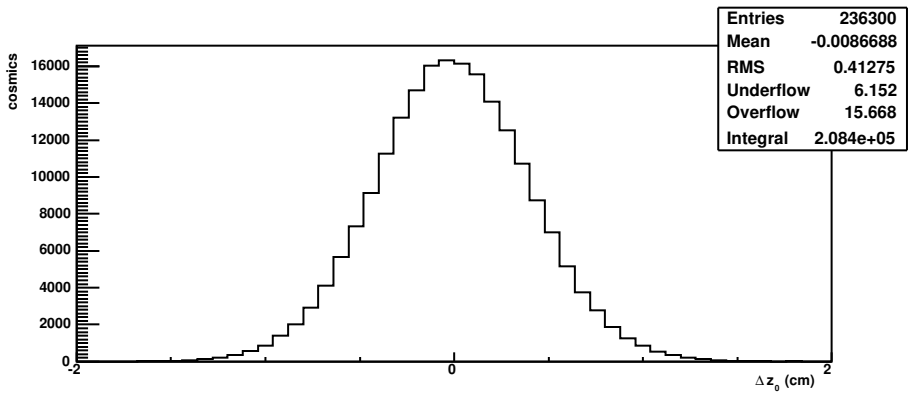
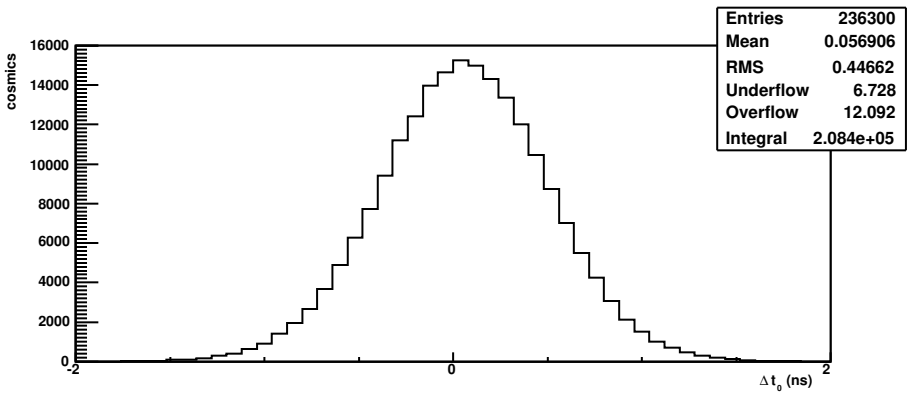

Entries 236300
Mean -2.9656
RMS 2.1818
Underflow 138.92
Overflow 14.092
Integral 2.0827e+05
cosmics
Δ(TeV/p_T)

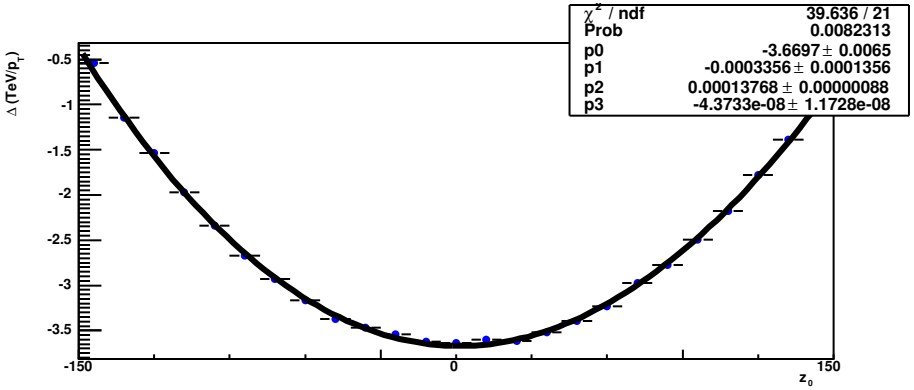

Entries 236300
Mean 0.035545
RMS 0.83289
Underflow 11.88
Overflow 9.516
Integral 2.0839e+05
cosmics
Δφ_0 (mrad)

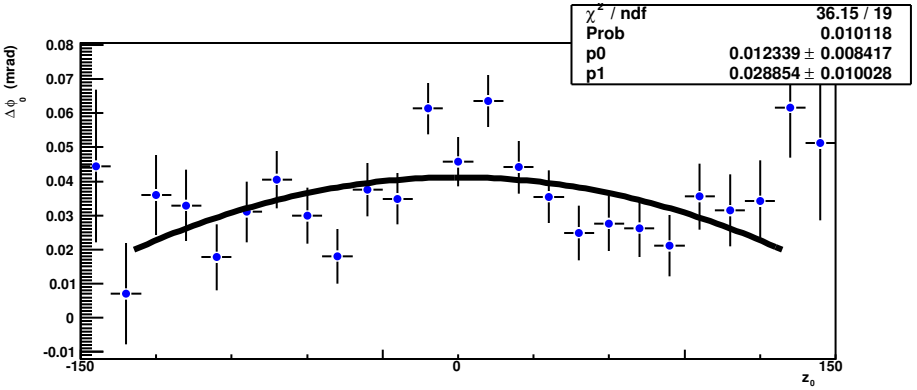

Entries 236300
Mean -447.22
RMS 350.42
Underflow 6.152
Overflow 5.728
Integral 2.084e+05
cosmics
Δd_0 (μm)

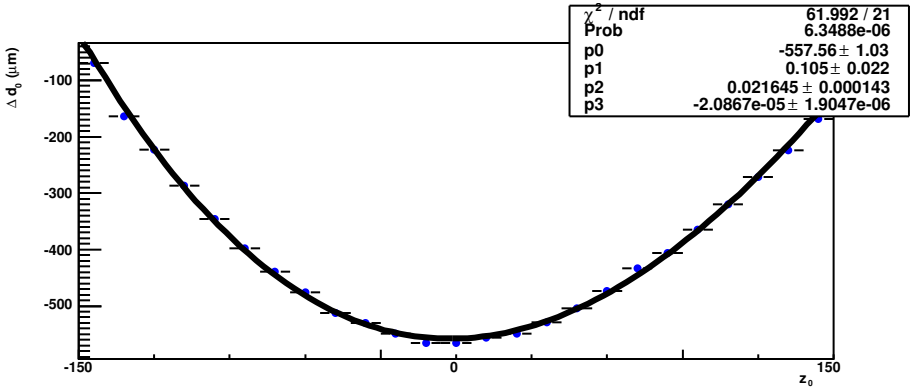

Entries 236300
Mean 0.0060281
RMS 0.004879
Underflow 0
Overflow 3.364
Integral 2.0839e+05
cosmics
Δcotθ

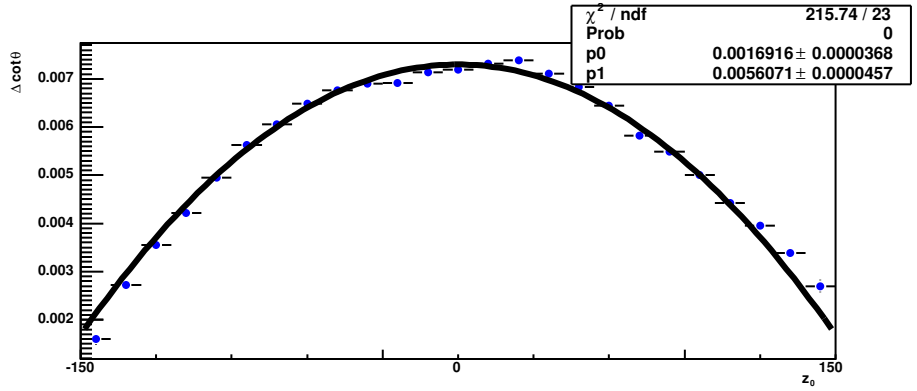

Entries 236300
Mean -0.0086688
RMS 0.41275
Underflow 6.152
Overflow 15.668
Integral 2.084e+05
cosmics
Δz_0 (cm)

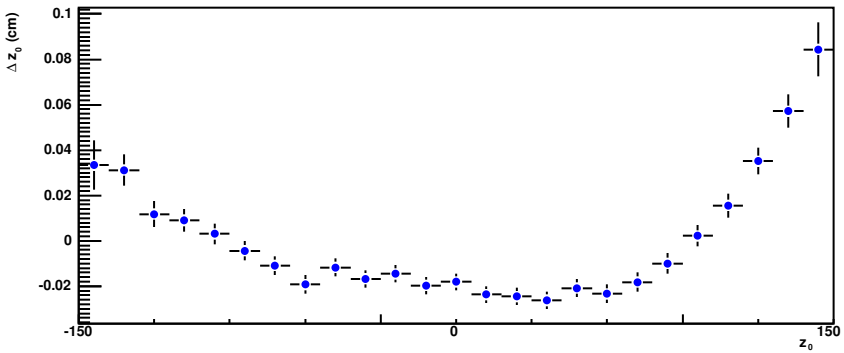

Entries 236300
Mean 0.056906
RMS 0.44662
Underflow 6.728
Overflow 12.092
Integral 2.084e+05
cosmics
Δt_0 (ns)

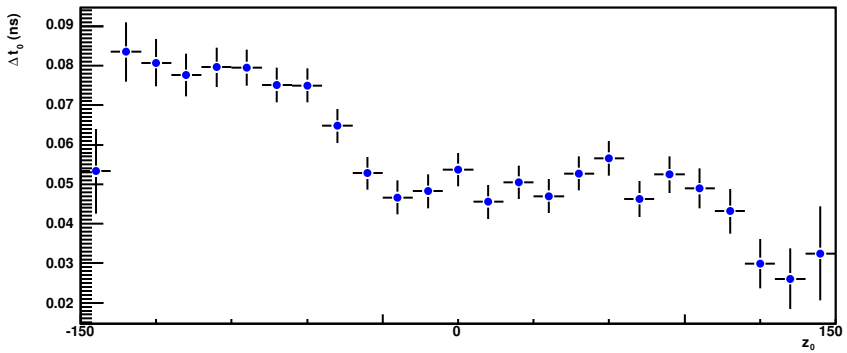

χ^2 / ndf 39.636 / 21
Prob 0.0082313
p0 -3.6697 ± 0.0065
p1 -0.0003356 ± 0.0001356
p2 0.00013768 ± 0.00000088
p3 -4.3733e-08 ± 1.1728e-08
$\Delta(\mathrm{TeV}/p_T)$
z_0

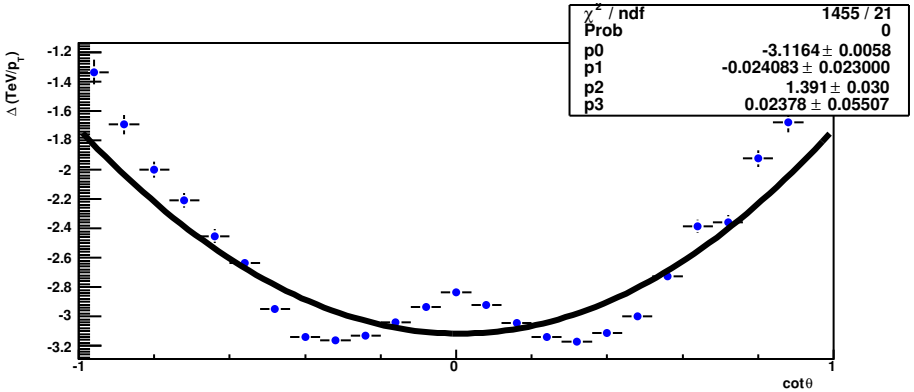

χ^2 / ndf 36.15 / 19
Prob 0.010118
p0 0.012339 ± 0.008417
p1 0.028854 ± 0.010028
$\Delta\phi_0$ (mrad)
z_0

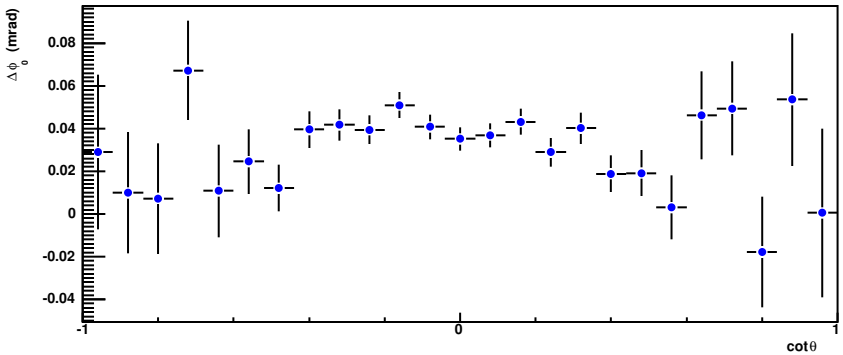

χ^2 / ndf 61.992 / 21
Prob 6.3488e-06
p0 -557.56 ± 1.03
p1 0.105 ± 0.022
p2 0.021645 ± 0.000143
p3 -2.0867e-05 ± 1.9047e-06
Δd_0 (μm)
z_0

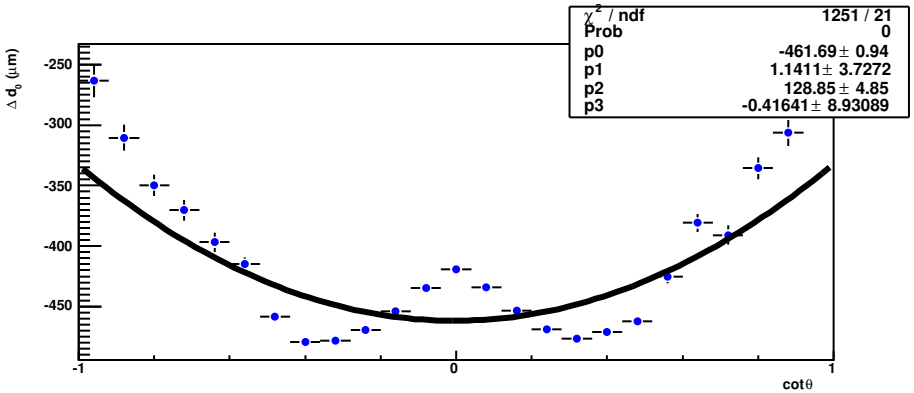

χ^2 / ndf 215.74 / 23
Prob 0
p0 0.0016916 ± 0.0000368
p1 0.0056071 ± 0.0000457
$\Delta\cot\theta$
z_0

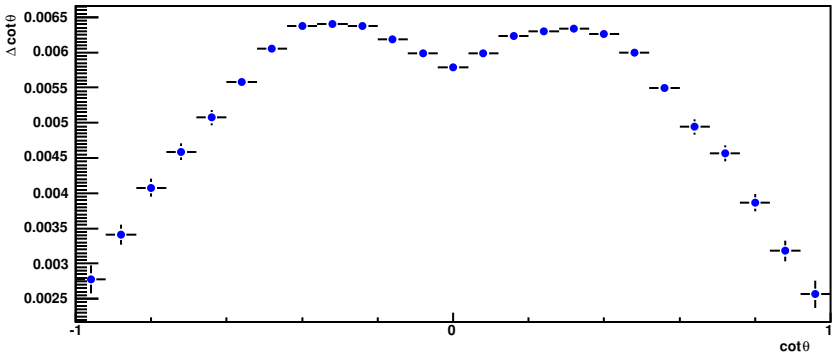

Δz_0 (cm)
z_0

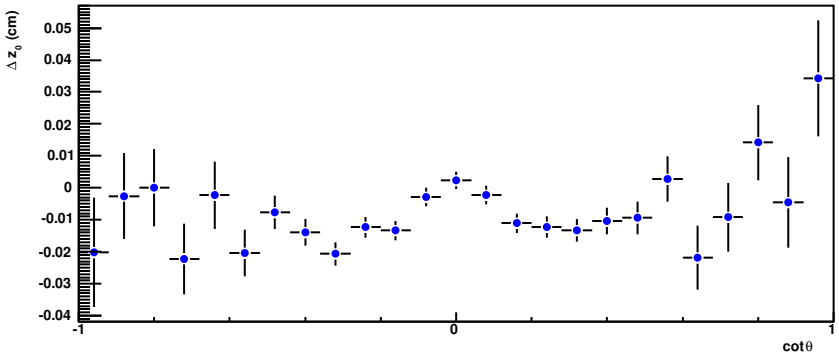

Δt_0 (ns)
z_0

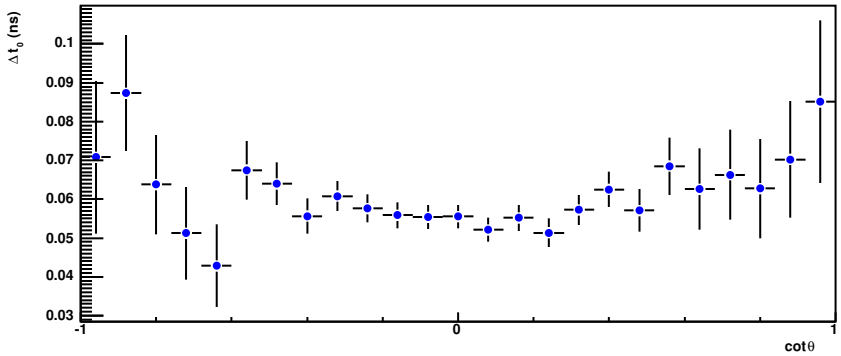

χ^2 / ndf 1455 / 21
Prob 0
p0 -3.1164 ± 0.0058
p1 -0.024083 ± 0.023000
p2 1.391 ± 0.030
p3 0.02378 ± 0.05507
Δ (TeV/p_T)
cotθ

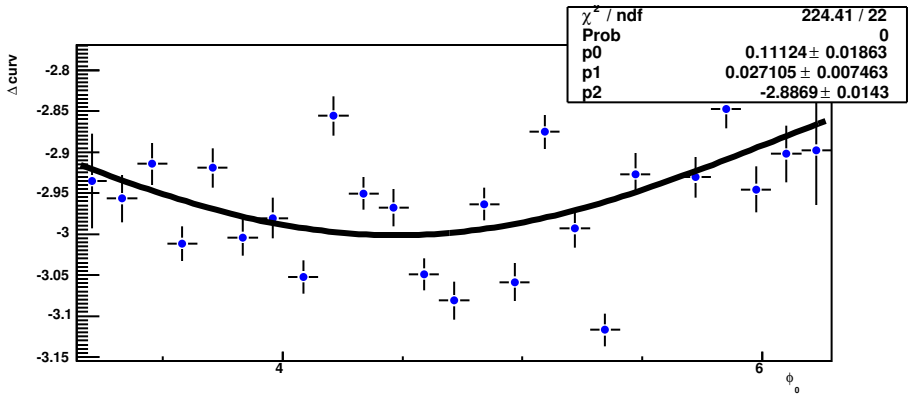

Δ φ_0 (mrad)
cotθ

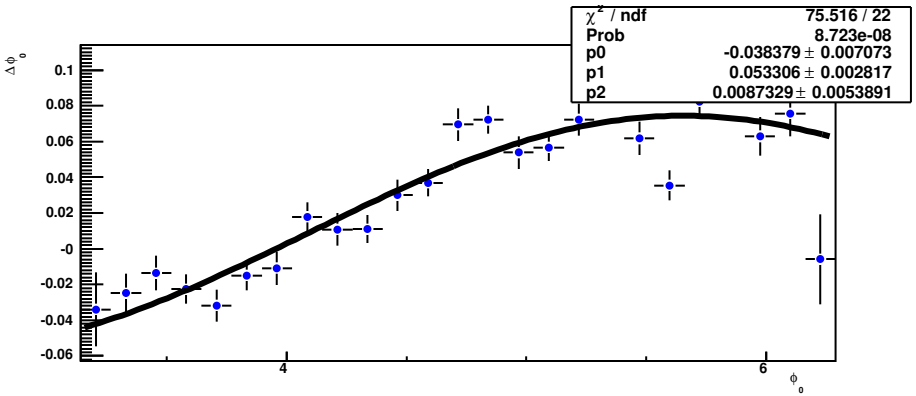

χ^2 / ndf 1251 / 21
Prob 0
p0 -461.69 ± 0.94
p1 1.1411 ± 3.7272
p2 128.85 ± 4.85
p3 -0.41641 ± 8.93089
Δ d_0 (μm)
cotθ

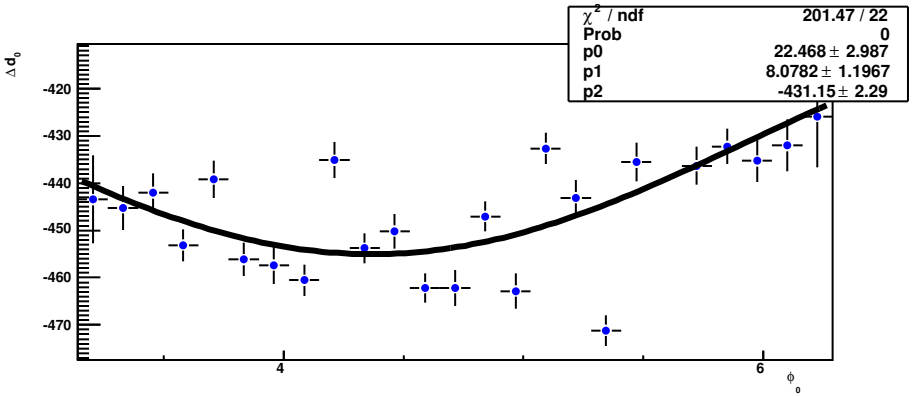

Δ cotθ
cotθ

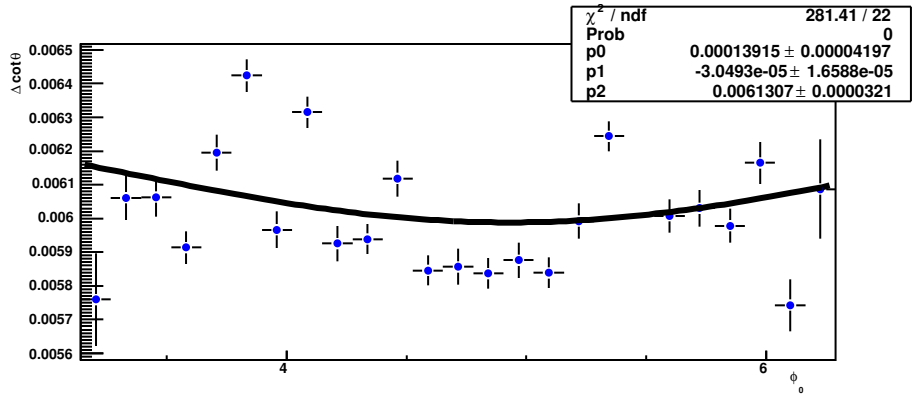

Δ z_0 (cm)
cotθ

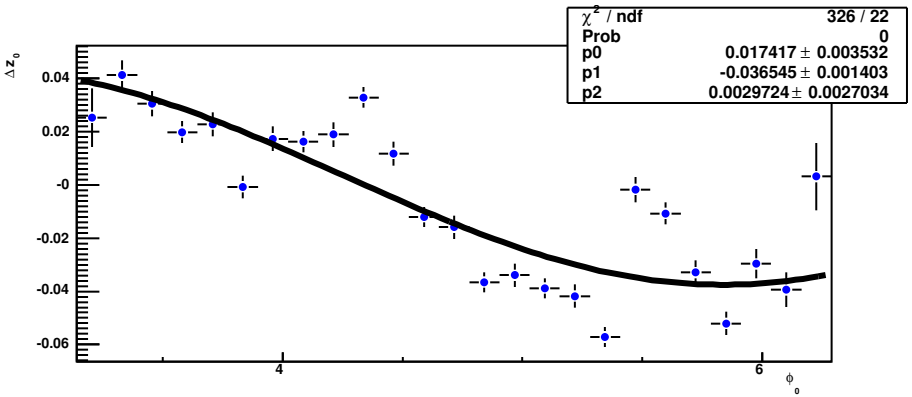

Δ t_0 (ns)
cotθ

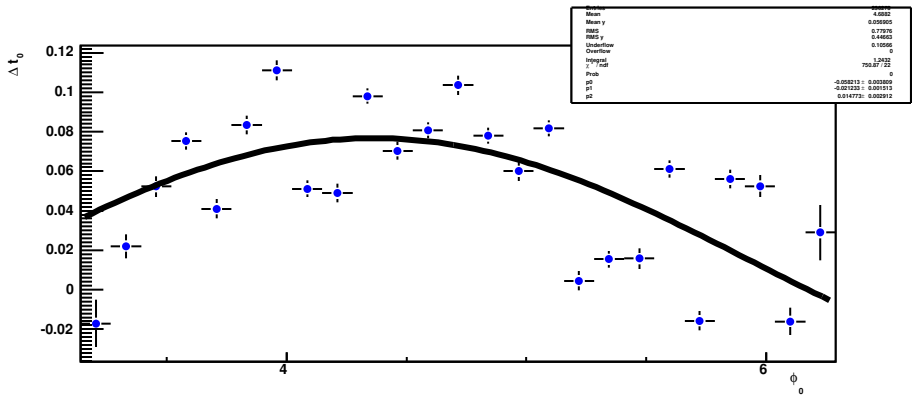

χ^2 / ndf 224.41 / 22
Prob 0
p0 0.11124 ± 0.01863
p1 0.027105 ± 0.007463
p2 -2.8869 ± 0.0143
Δ curv
ϕ_0

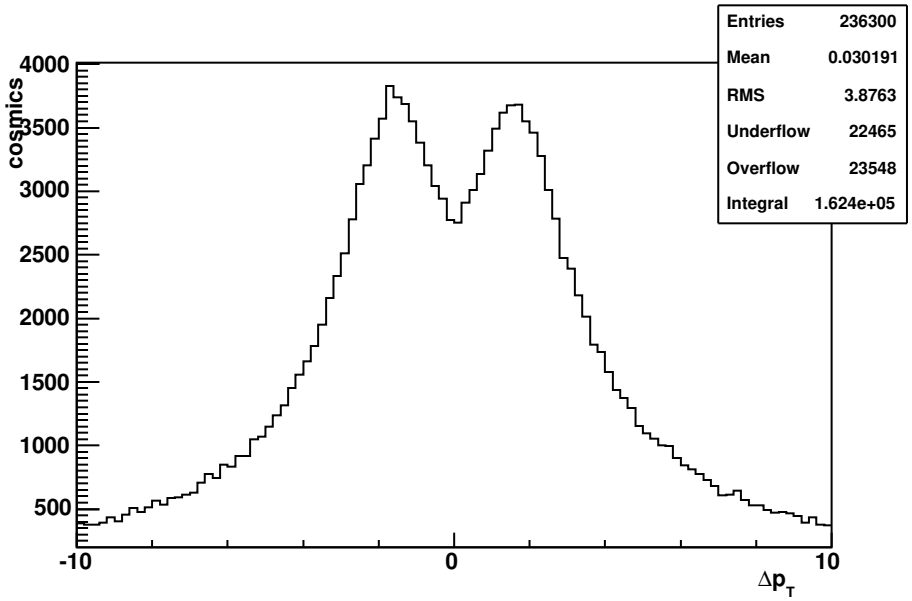

χ^2 / ndf 75.516 / 22
Prob 8.723e-08
p0 -0.038379 ± 0.007073
p1 0.053306 ± 0.002817
p2 0.0087329 ± 0.0053891
$\Delta\phi_0$
ϕ_0

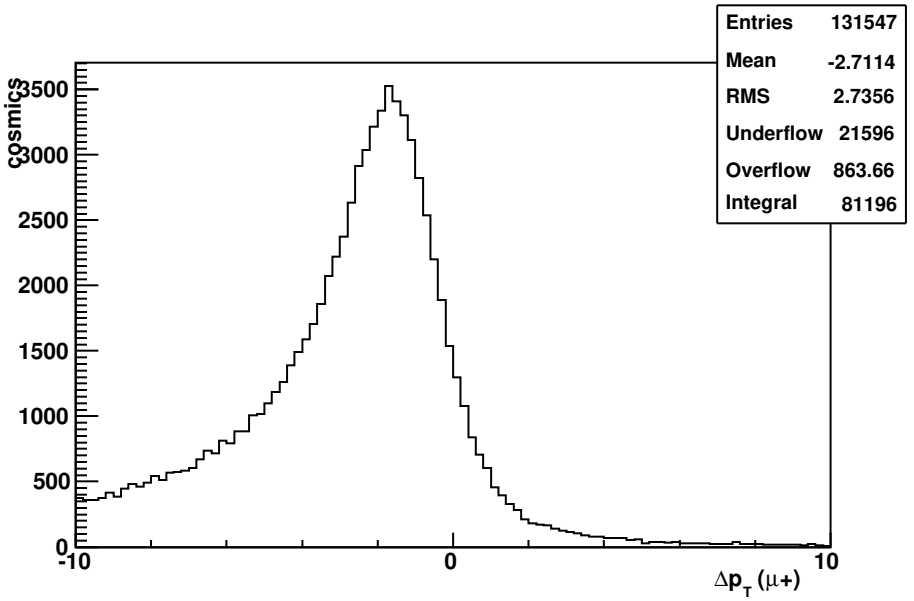

χ^2 / ndf 201.47 / 22
Prob 0
p0 22.468 ± 2.987
p1 8.0782 ± 1.1967
p2 -431.15 ± 2.29
Δd_0
ϕ_0

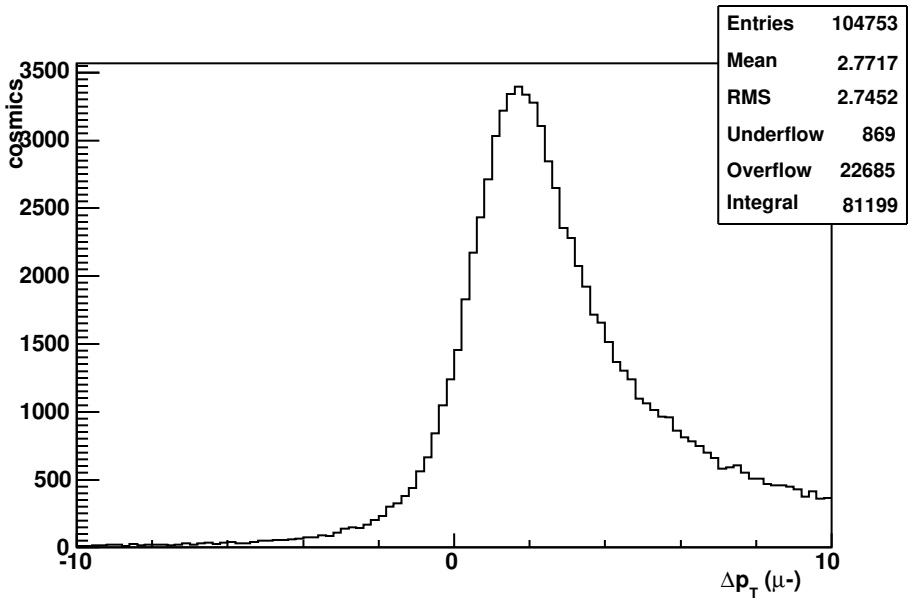

χ^2 / ndf 281.41 / 22
Prob 0
p0 0.00013915 ± 0.00004197
p1 -3.0493e-05 ± 1.6588e-05
p2 0.0061307 ± 0.0000321
$\Delta\cot\theta$
ϕ_0

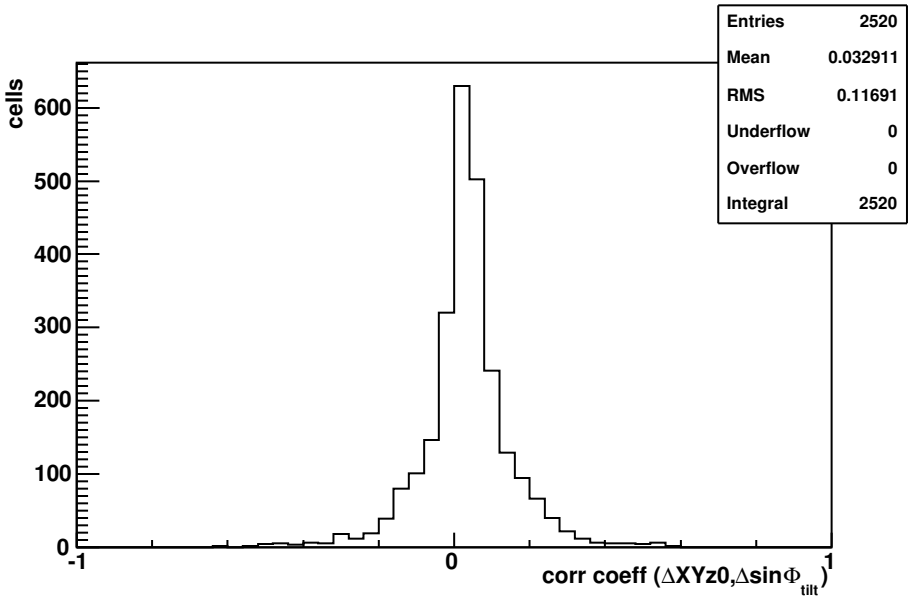

χ^2 / ndf 326 / 22
Prob 0
p0 0.017417 ± 0.003532
p1 -0.036545 ± 0.001403
p2 0.0029724 ± 0.0027034
Δz_0
ϕ_0

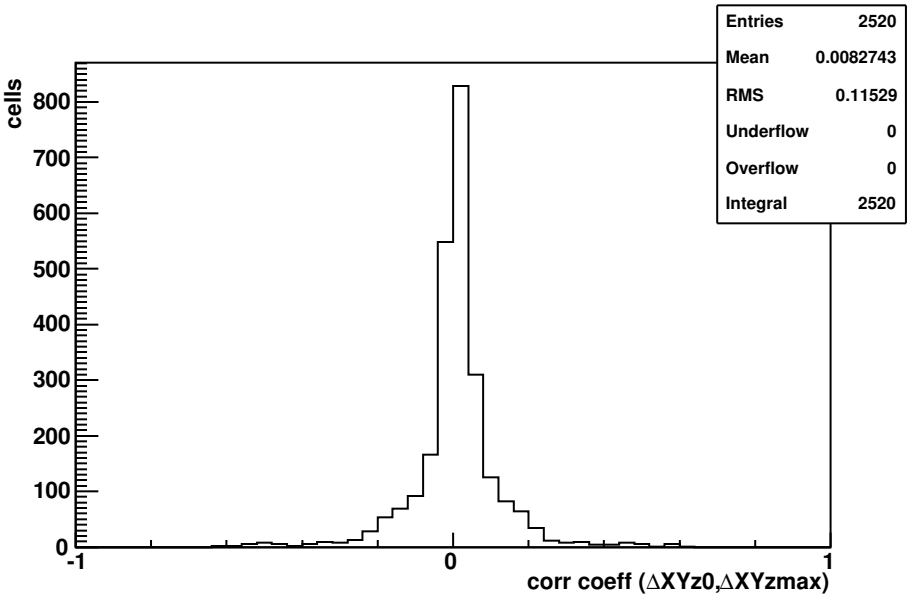

Δt_0
ϕ_0

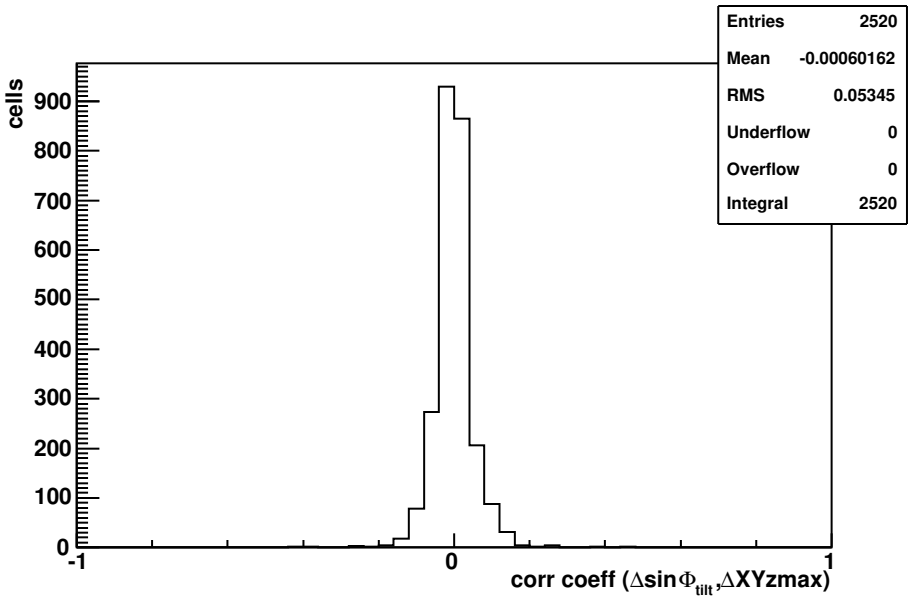

Entries 236300
Mean 0.030191
RMS 3.8763
Underflow 22465
Overflow 23548
Integral 1.624e+05
cosmics
4000
3500
3000
2500
2000
1500
1000
500
-10
0
10
Δp_T

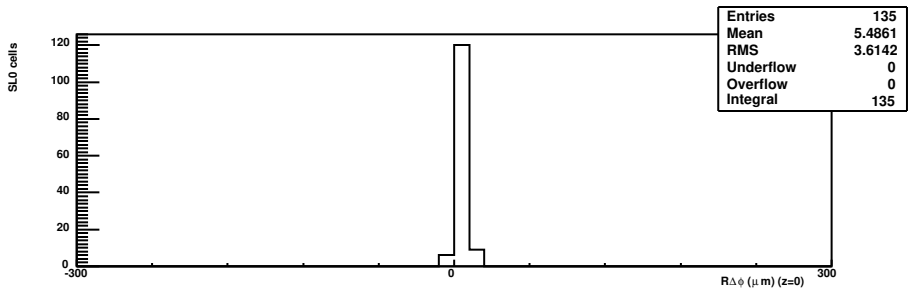

Entries 131547
Mean -2.7114
RMS 2.7356
Underflow 21596
Overflow 863.66
Integral 81196
cosmics
3500
3000
2500
2000
1500
1000
500
0
-10
0
10
Δp_T (μ+)

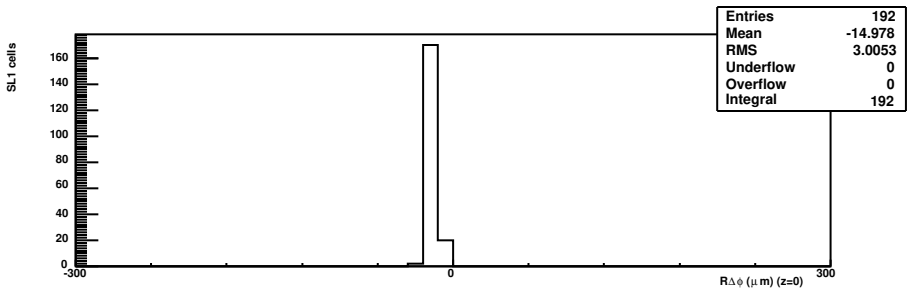

Entries 104753
Mean 2.7717
RMS 2.7452
Underflow 869
Overflow 22685
Integral 81199
cosmics
3500
3000
2500
2000
1500
1000
500
0
-10
0
10
Δp_T (μ-)

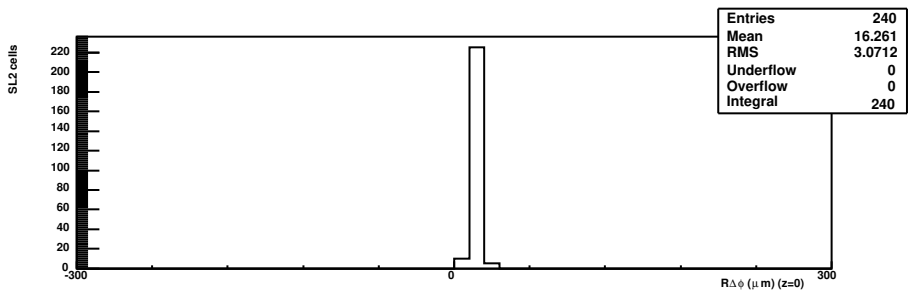

Entries 2520
Mean 0.032911
RMS 0.11691
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔsinΦ_{tilt})

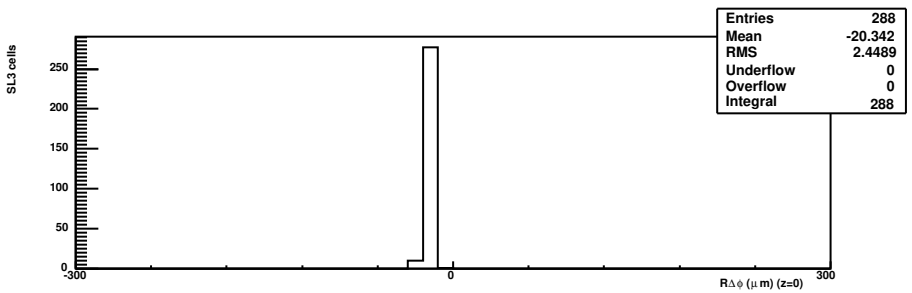

Entries 2520
Mean 0.0082743
RMS 0.11529
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔXYzmax)

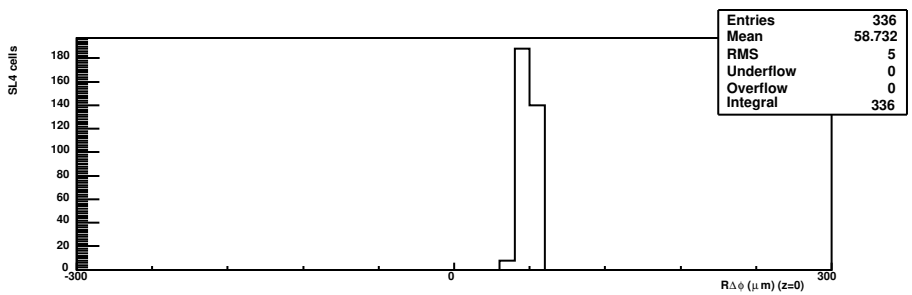

Entries 2520
Mean -0.00060162
RMS 0.05345
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔsinΦ_{tilt},ΔXYzmax)

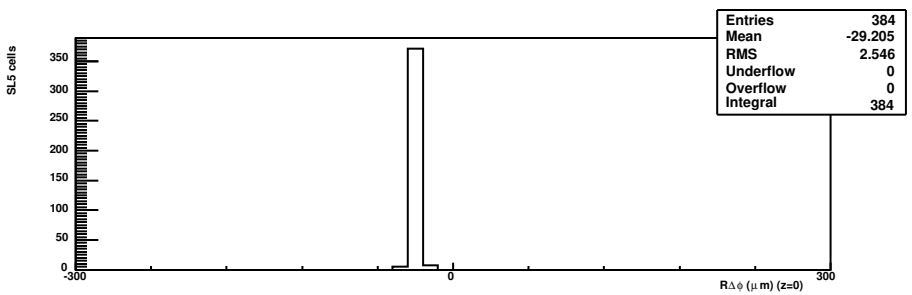

SL0 cells
Entries 135
Mean 5.4861
RMS 3.6142
Underflow 0
Overflow 0
Integral 135
RΔφ (μm) (z=0)

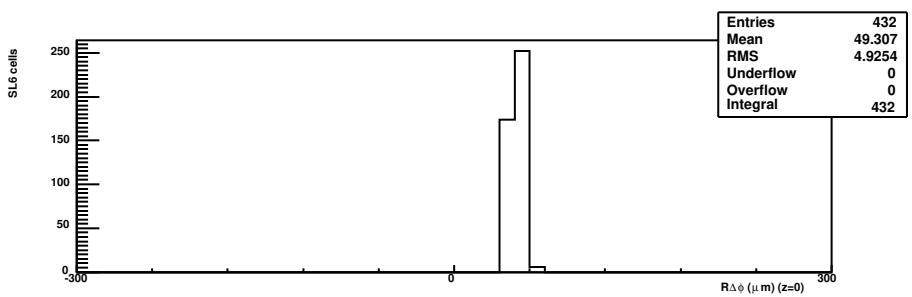

SL1 cells
Entries 192
Mean -14.978
RMS 3.0053
Underflow 0
Overflow 0
Integral 192
RΔφ (μm) (z=0)

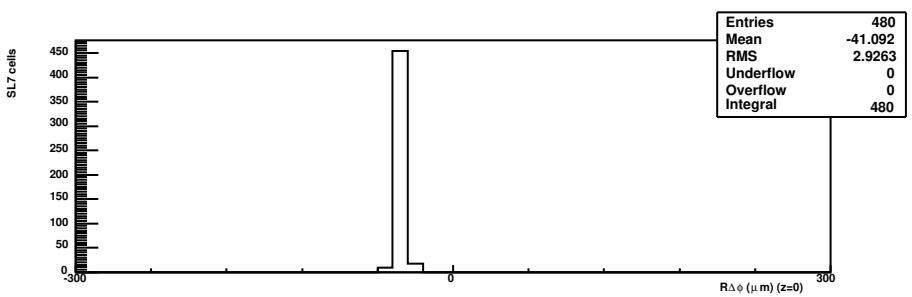

SL2 cells
Entries 240
Mean 16.261
RMS 3.0712
Underflow 0
Overflow 0
Integral 240
RΔφ (μm) (z=0)

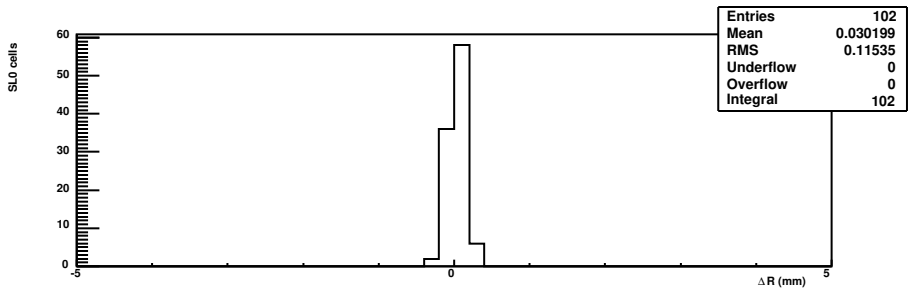

SL3 cells
Entries 288
Mean -20.342
RMS 2.4489
Underflow 0
Overflow 0
Integral 288
RΔφ (μm) (z=0)

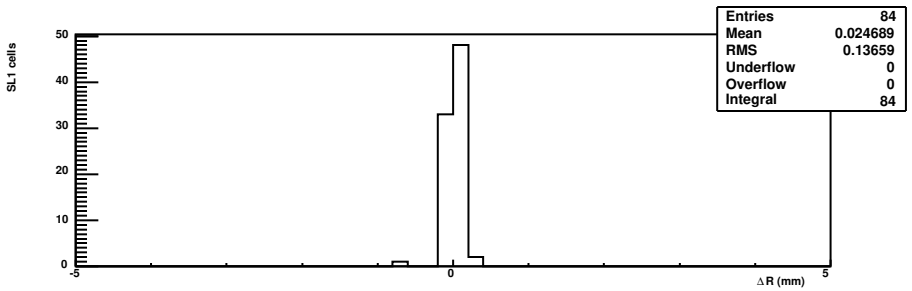

SL4 cells
Entries 336
Mean 58.732
RMS 5
Underflow 0
Overflow 0
Integral 336
RΔφ (μm) (z=0)

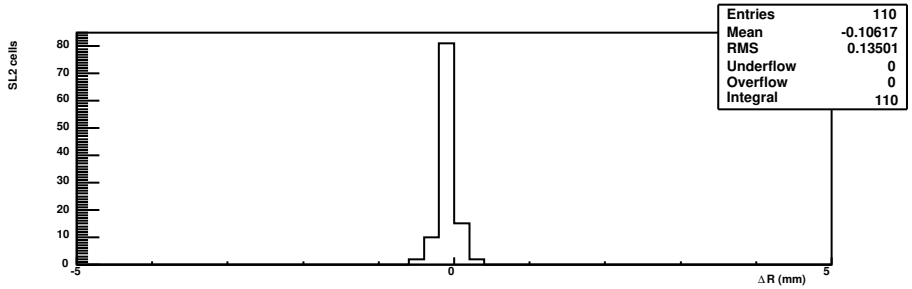

SL5 cells
Entries 384
Mean -29.205
RMS 2.546
Underflow 0
Overflow 0
Integral 384
RΔφ (μm) (z=0)

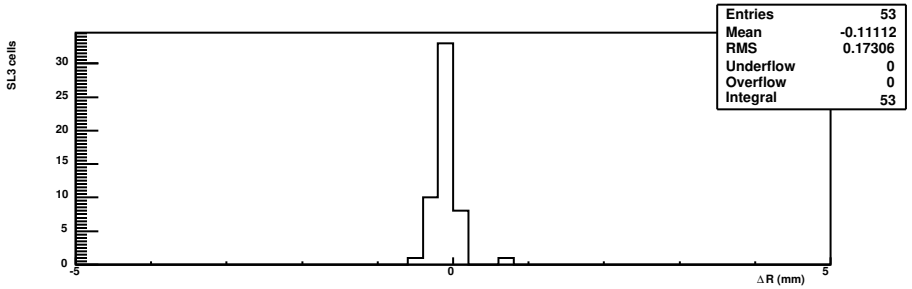

SL6 cells
Entries 432
Mean 49.307
RMS 4.9254
Underflow 0
Overflow 0
Integral 432
RΔφ (μm) (z=0)

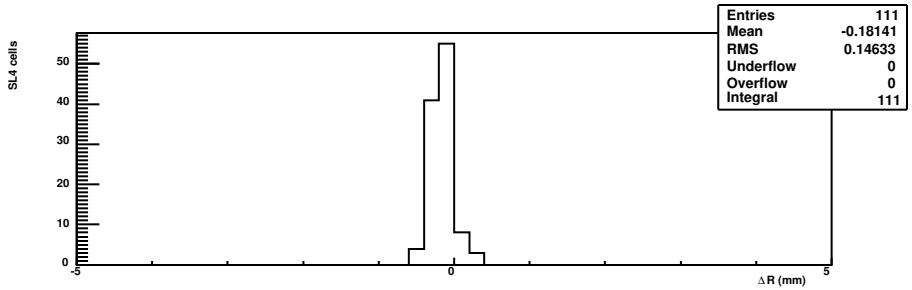

SL7 cells
Entries 480
Mean -41.092
RMS 2.9263
Underflow 0
Overflow 0
Integral 480
RΔφ (μm) (z=0)

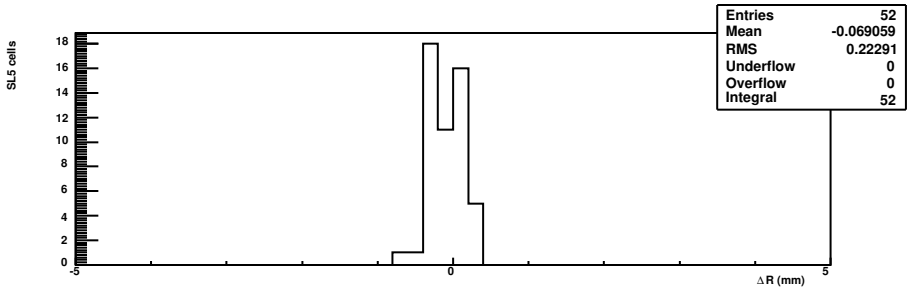

Entries 102
Mean 0.030199
RMS 0.11535
Underflow 0
Overflow 0
Integral 102
SL0 cells
ΔR (mm)

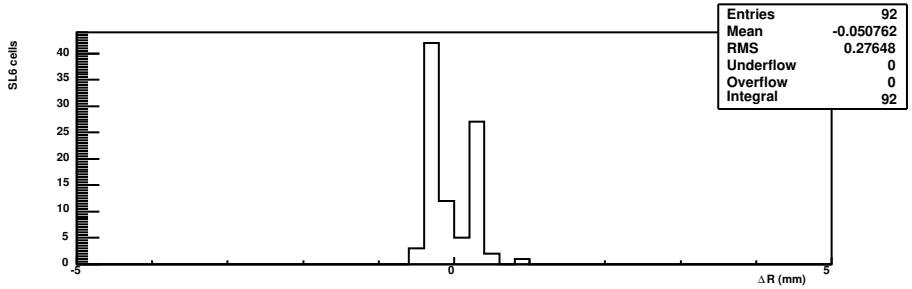

Entries 84
Mean 0.024689
RMS 0.13659
Underflow 0
Overflow 0
Integral 84
SL1 cells
ΔR (mm)

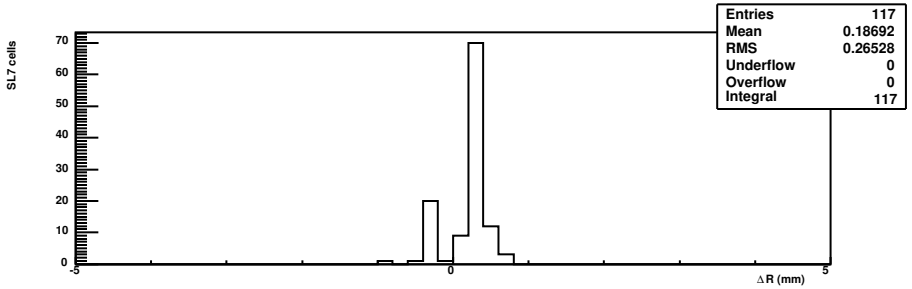

Entries 110
Mean -0.10617
RMS 0.13501
Underflow 0
Overflow 0
Integral 110
SL2 cells
ΔR (mm)

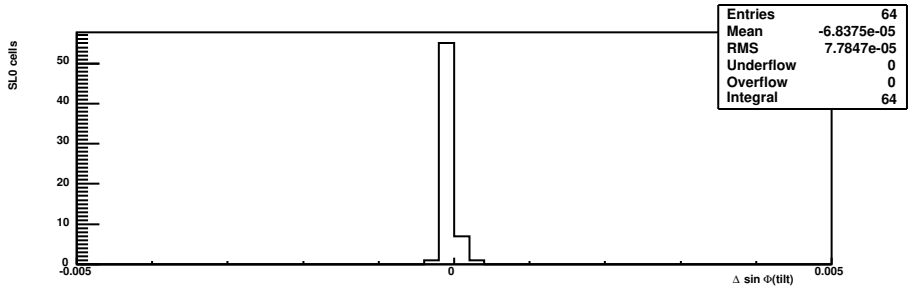

Entries 53
Mean -0.11112
RMS 0.17306
Underflow 0
Overflow 0
Integral 53
SL3 cells
ΔR (mm)

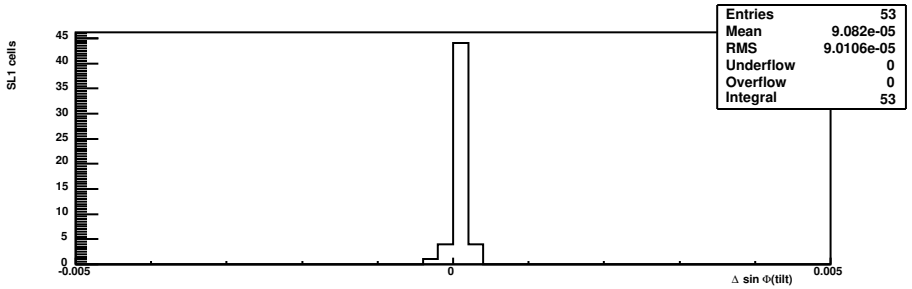

Entries 111
Mean -0.18141
RMS 0.14633
Underflow 0
Overflow 0
Integral 111
SL4 cells
ΔR (mm)

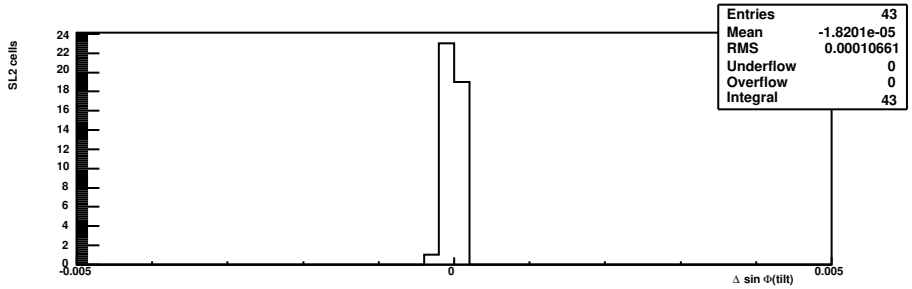

Entries 52
Mean -0.069059
RMS 0.22291
Underflow 0
Overflow 0
Integral 52
SL5 cells
ΔR (mm)

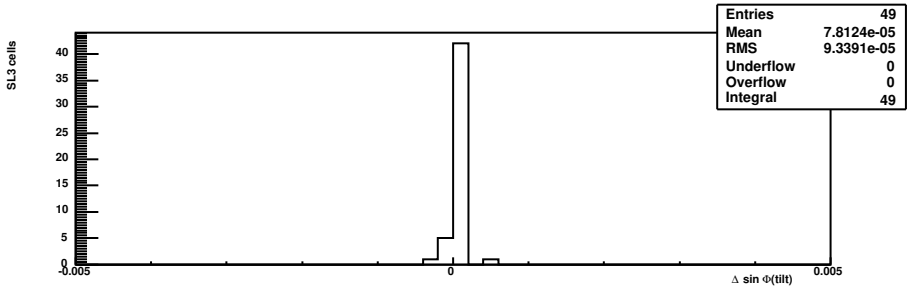

Entries 92
Mean -0.050762
RMS 0.27648
Underflow 0
Overflow 0
Integral 92
SL6 cells
ΔR (mm)

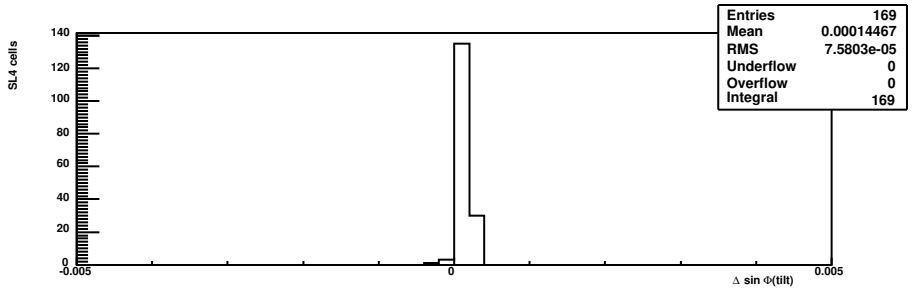

Entries 117
Mean 0.18692
RMS 0.26528
Underflow 0
Overflow 0
Integral 117
SL7 cells
ΔR (mm)

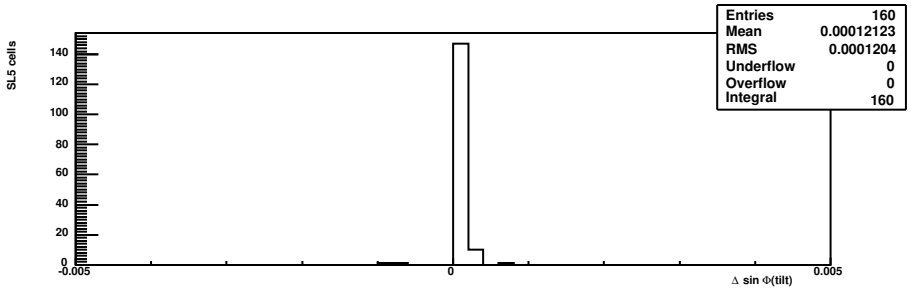

Entries 64
Mean -6.8375e-05
RMS 7.7847e-05
Underflow 0
Overflow 0
Integral 64
SL0 cells
Δ sin Φ(tilt)

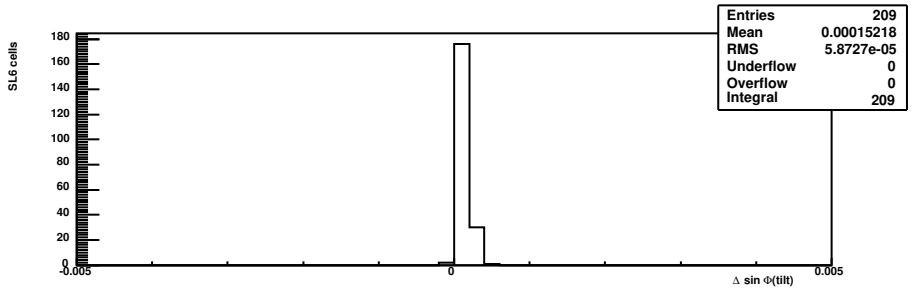

Entries 53
Mean 9.082e-05
RMS 9.0106e-05
Underflow 0
Overflow 0
Integral 53
SL1 cells
Δ sin Φ(tilt)

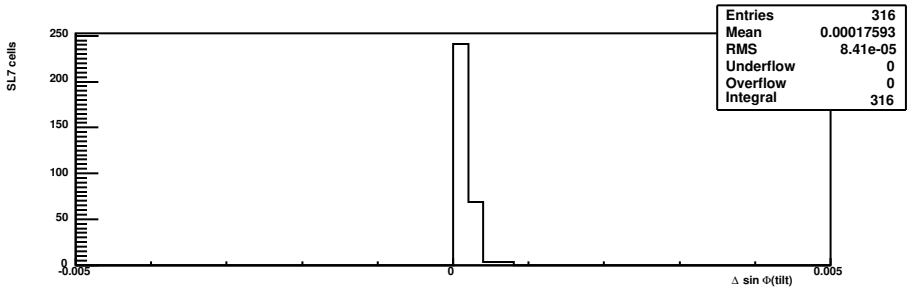

Entries 43
Mean -1.8201e-05
RMS 0.00010661
Underflow 0
Overflow 0
Integral 43
SL2 cells
Δ sin Φ(tilt)

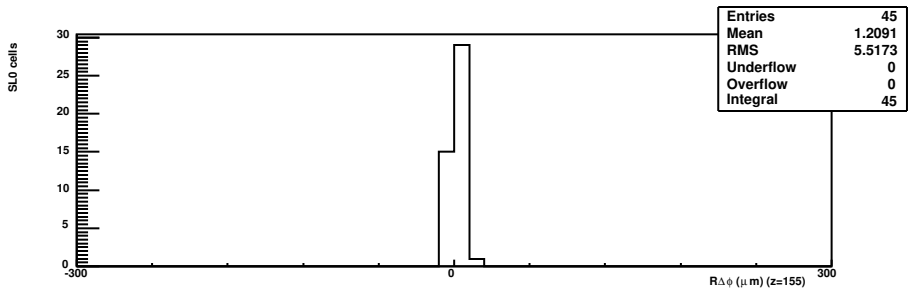

Entries 49
Mean 7.8124e-05
RMS 9.3391e-05
Underflow 0
Overflow 0
Integral 49
SL3 cells
Δ sin Φ(tilt)

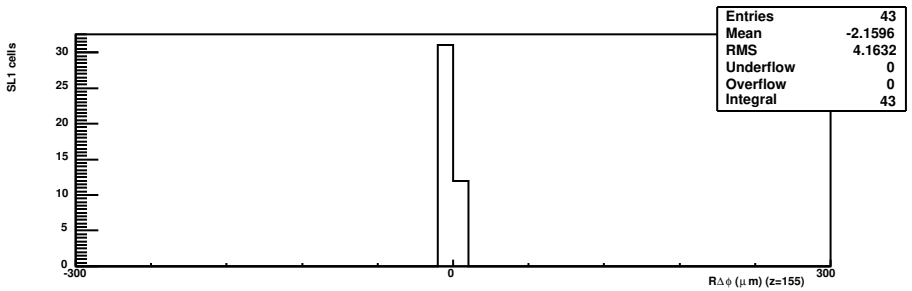

Entries 169
Mean 0.00014467
RMS 7.5803e-05
Underflow 0
Overflow 0
Integral 169
SL4 cells
Δ sin Φ(tilt)

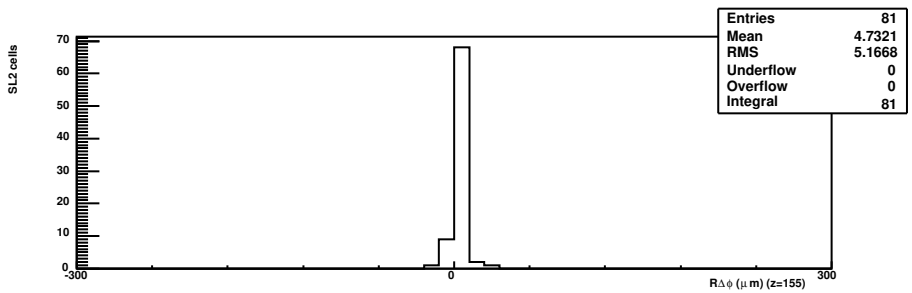

Entries 160
Mean 0.00012123
RMS 0.0001204
Underflow 0
Overflow 0
Integral 160
SL5 cells
Δ sin Φ(tilt)

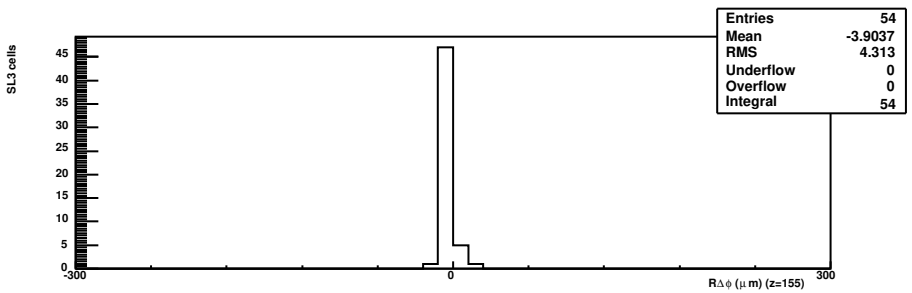

Entries 209
Mean 0.00015218
RMS 5.8727e-05
Underflow 0
Overflow 0
Integral 209
SL6 cells
Δ sin Φ(tilt)

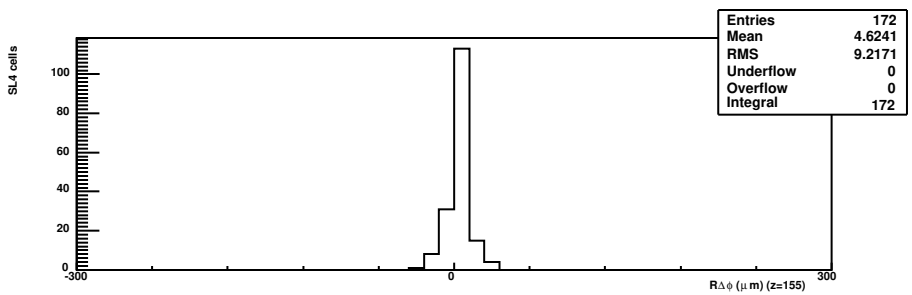

Entries 316
Mean 0.00017593
RMS 8.41e-05
Underflow 0
Overflow 0
Integral 316
SL7 cells
Δ sin Φ(tilt)

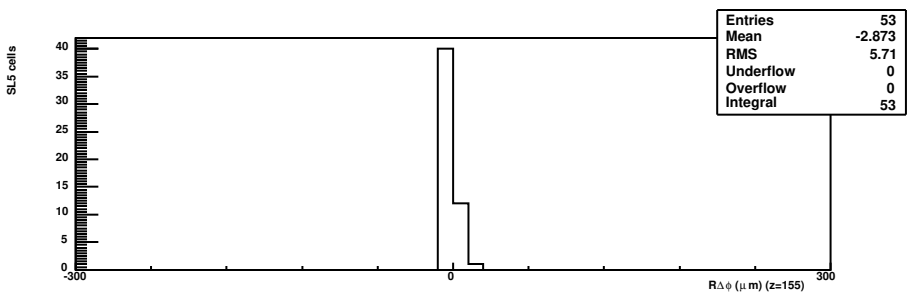

SL0 cells
Entries 45
Mean 1.2091
RMS 5.5173
Underflow 0
Overflow 0
Integral 45
RΔφ (μm) (z=155)

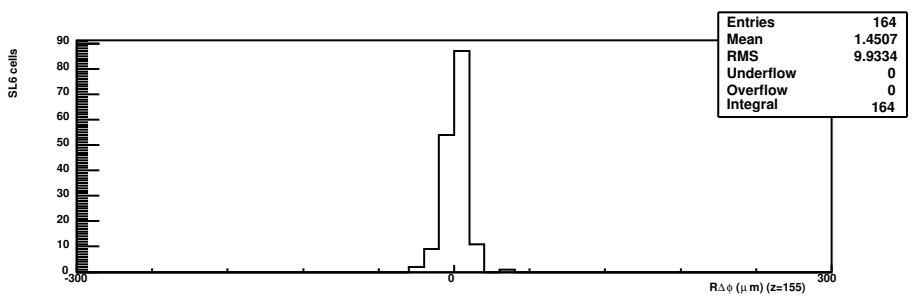

SL1 cells
Entries 43
Mean -2.1596
RMS 4.1632
Underflow 0
Overflow 0
Integral 43
RΔφ (μm) (z=155)

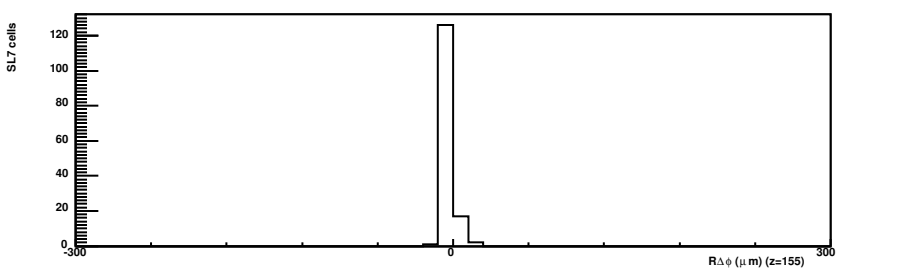

SL2 cells
Entries 81
Mean 4.7321
RMS 5.1668
Underflow 0
Overflow 0
Integral 81
RΔφ (μm) (z=155)

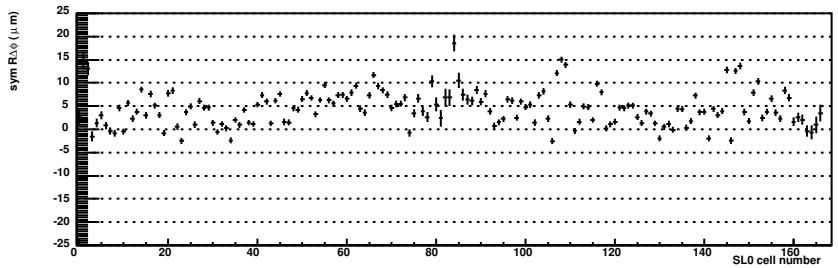

SL3 cells
Entries 54
Mean -3.9037
RMS 4.313
Underflow 0
Overflow 0
Integral 54
RΔφ (μm) (z=155)

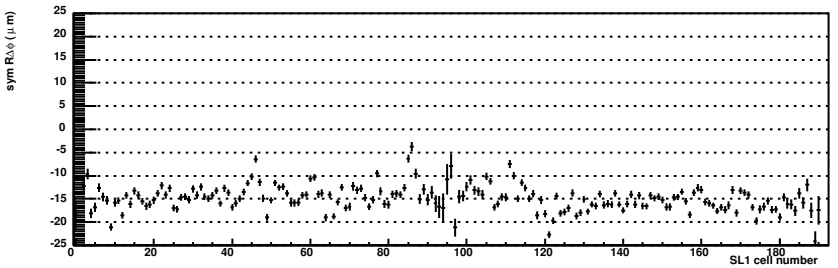

SL4 cells
Entries 172
Mean 4.6241
RMS 9.2171
Underflow 0
Overflow 0
Integral 172
RΔφ (μm) (z=155)

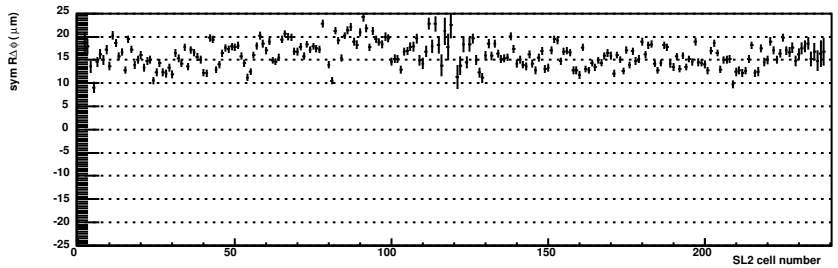

SL5 cells
Entries 53
Mean -2.873
RMS 5.71
Underflow 0
Overflow 0
Integral 53
RΔφ (μm) (z=155)

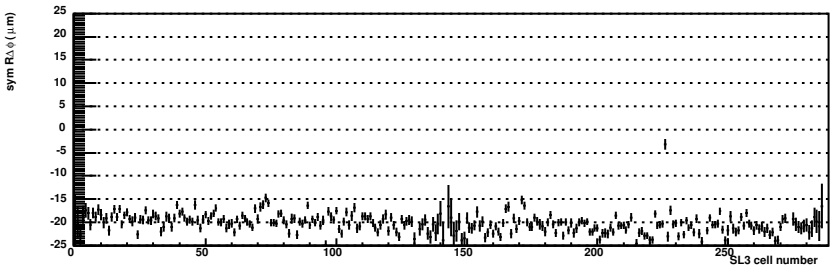

SL6 cells
Entries 164
Mean 1.4507
RMS 9.9334
Underflow 0
Overflow 0
Integral 164
RΔφ (μm) (z=155)

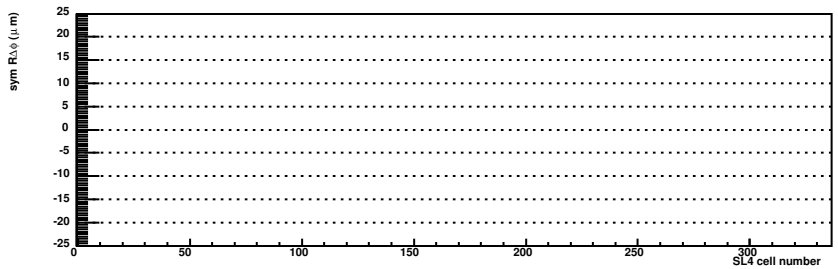

SL7 cells
RΔφ (μm) (z=155)

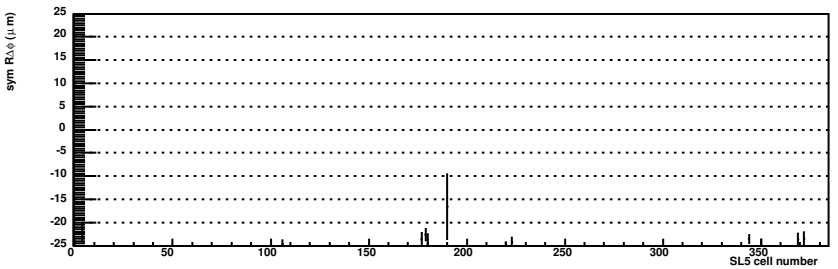

sym RΔφ (μm)
SL0 cell number

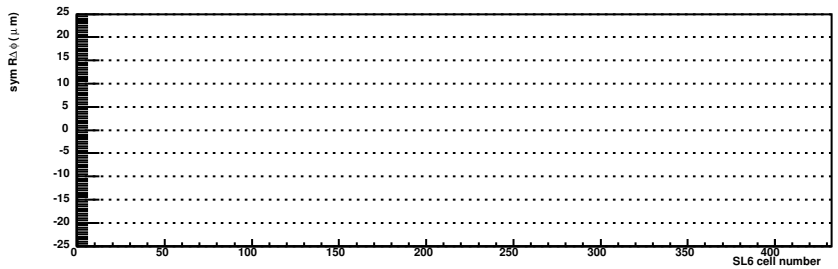

sym RΔφ (μm)
SL1 cell number

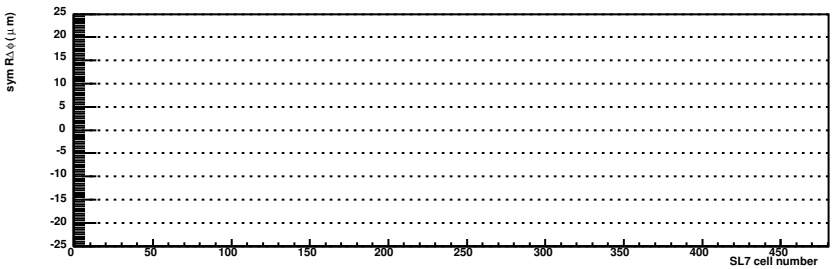

sym RΔφ (μm)
SL2 cell number

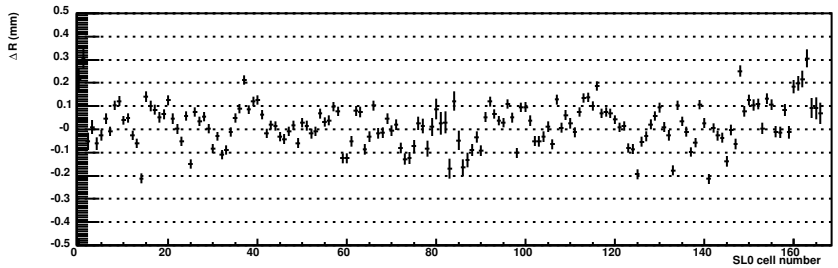

sym RΔφ (μm)
SL3 cell number

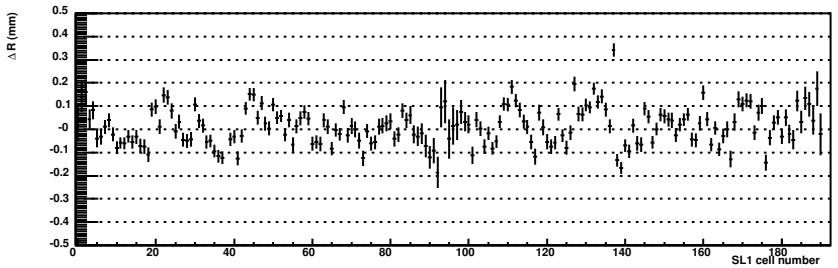

sym RΔφ (μm)
SL4 cell number

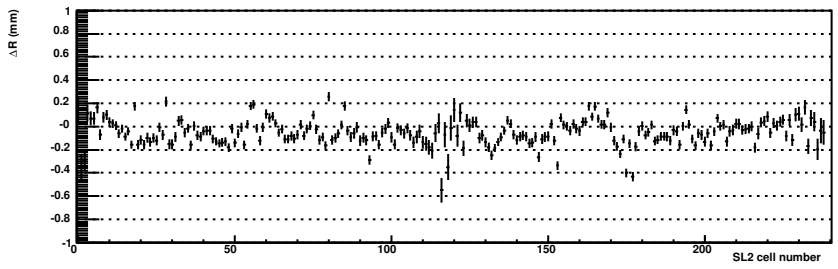

sym RΔφ (μm)
SL5 cell number

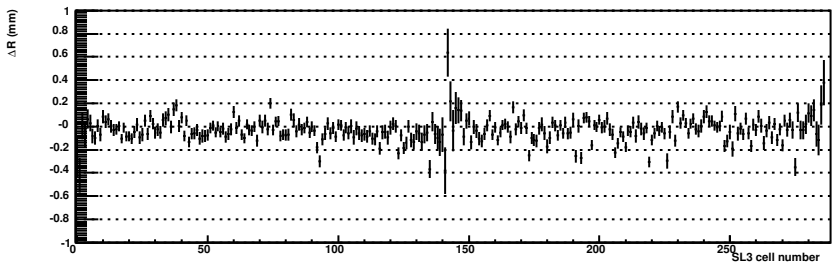

sym RΔφ (μm)
SL6 cell number

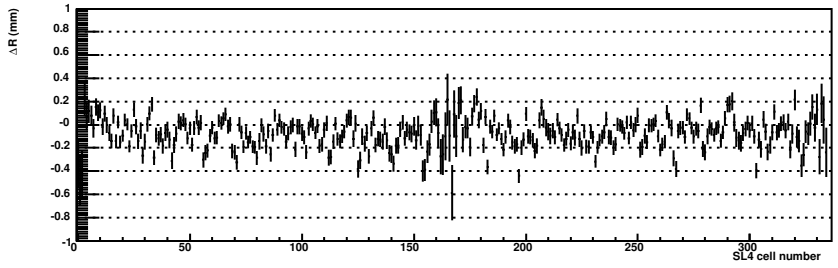

sym RΔφ (μm)
SL7 cell number

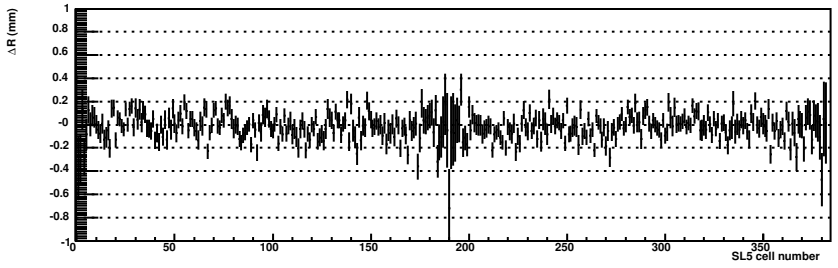

ΔR (mm)
SL0 cell number

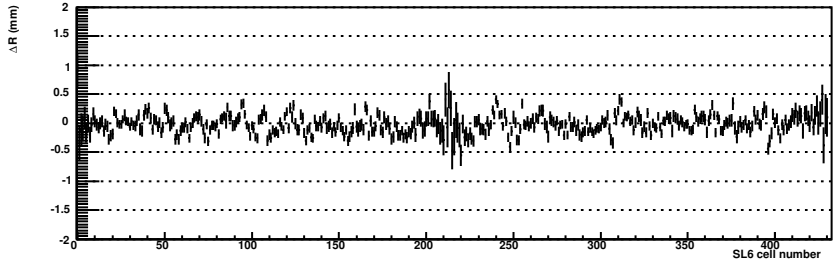

ΔR (mm)
SL1 cell number

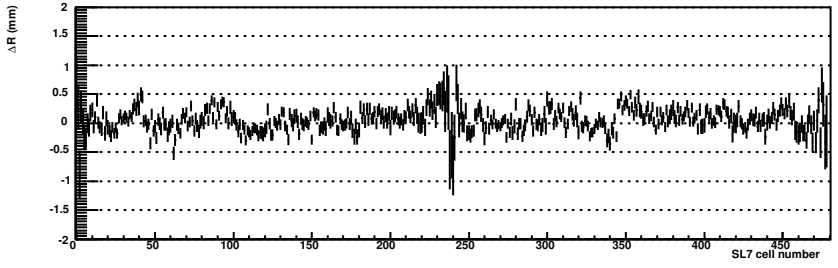

ΔR (mm)
SL2 cell number

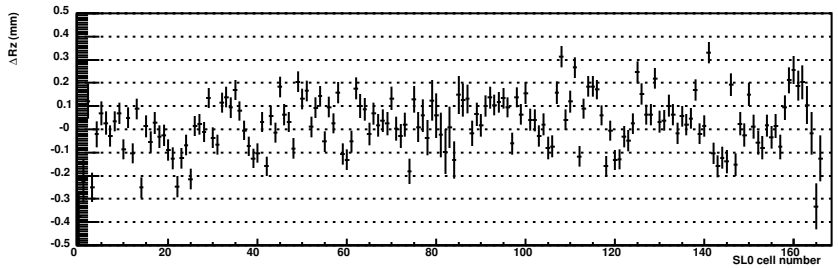

ΔR (mm)
SL3 cell number

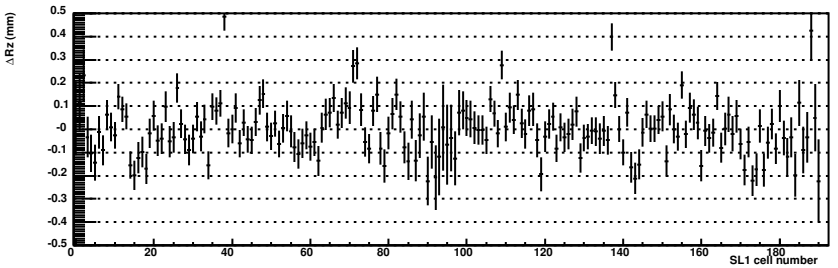

ΔR (mm)
SL4 cell number

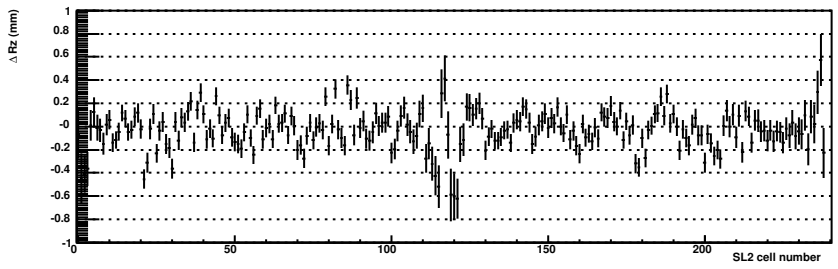

ΔR (mm)
SL5 cell number

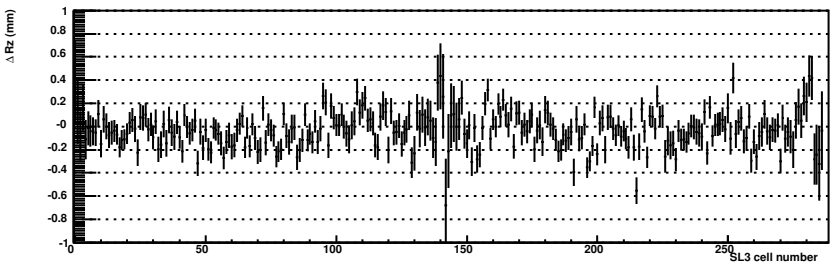

ΔR (mm)
SL6 cell number

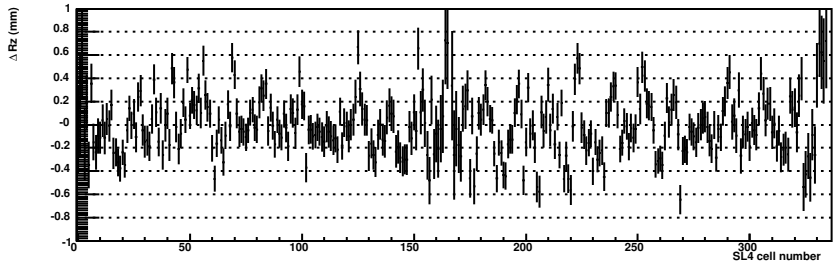

ΔR (mm)
SL7 cell number

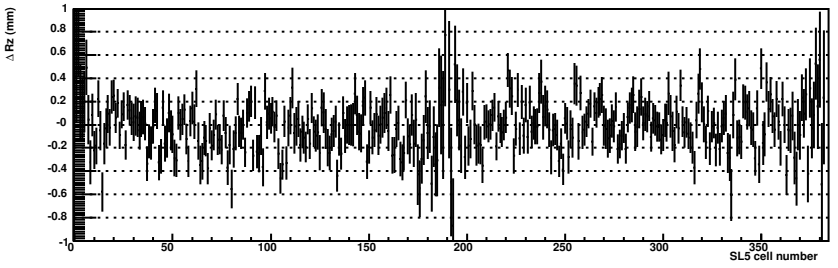

ΔRz (mm)
SL0 cell number

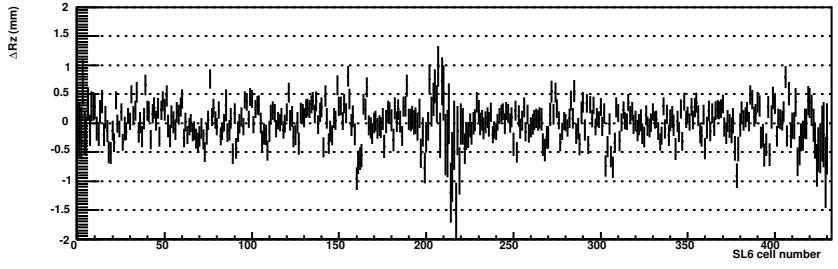

ΔRz (mm)
SL1 cell number

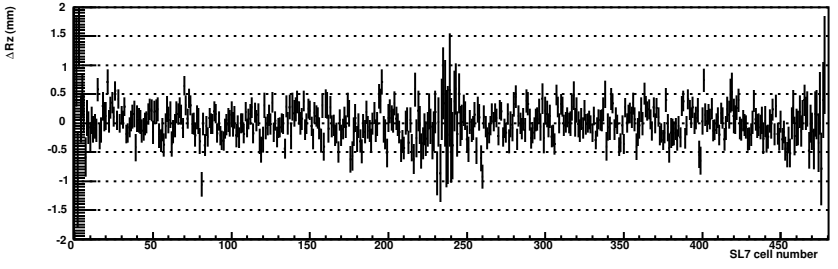

Δ Rz (mm)
SL2 cell number

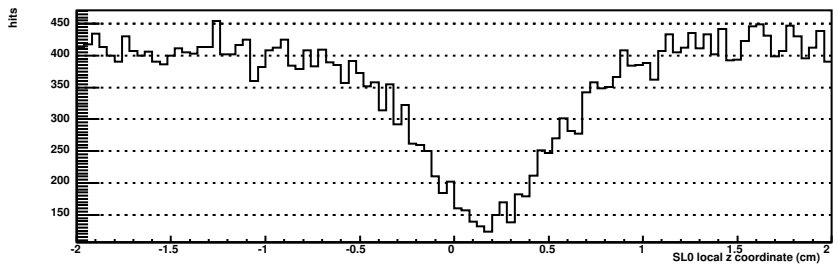

Δ Rz (mm)
SL3 cell number

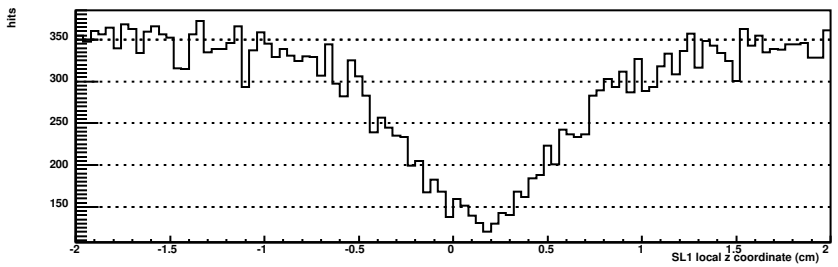

Δ Rz (mm)
SL4 cell number

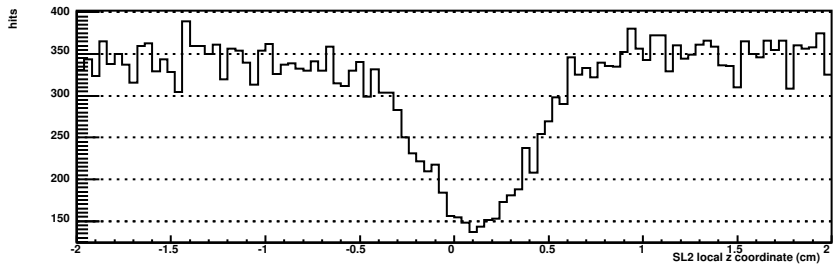

Δ Rz (mm)
SL5 cell number

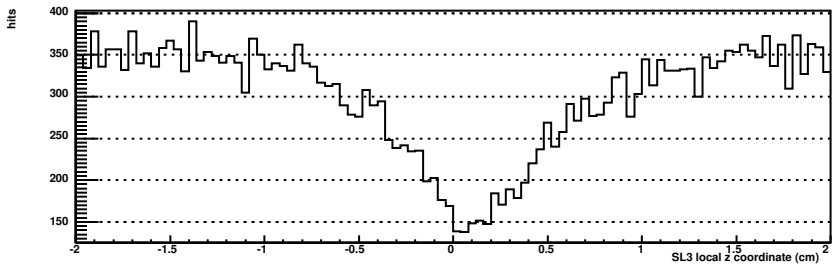

ΔRz (mm)
SL6 cell number

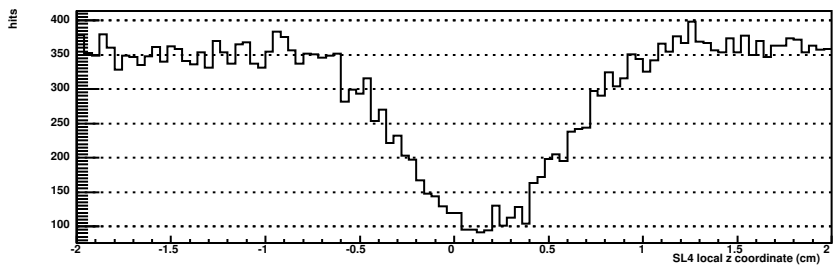

ΔRz (mm)
SL7 cell number

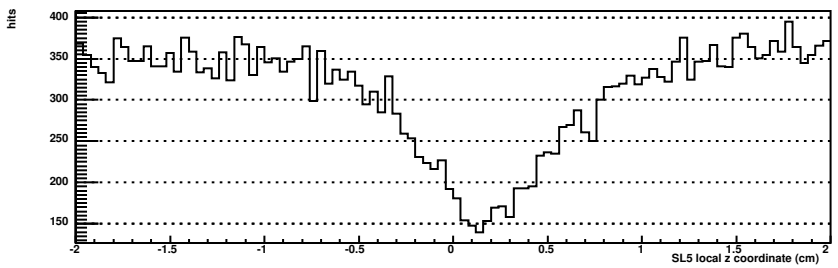

hits
SL0 local z coordinate (cm)

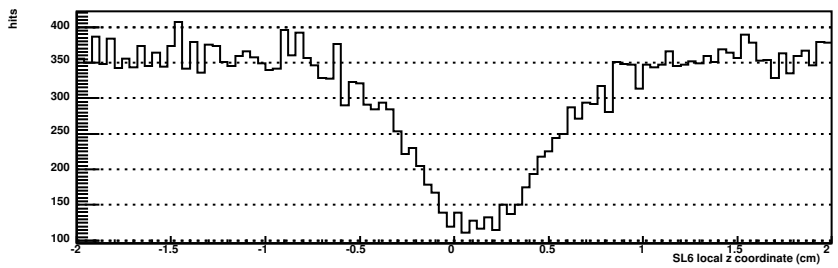

hits
SL1 local z coordinate (cm)

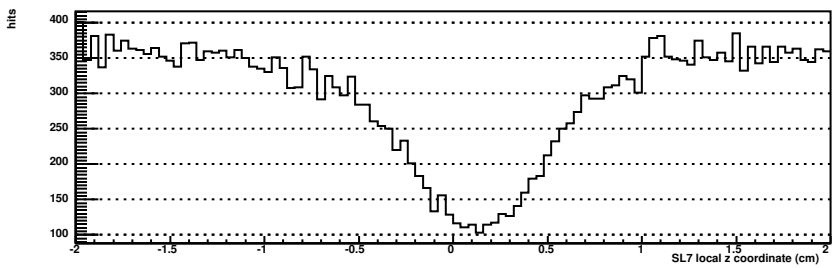

hits
SL2 local z coordinate (cm)

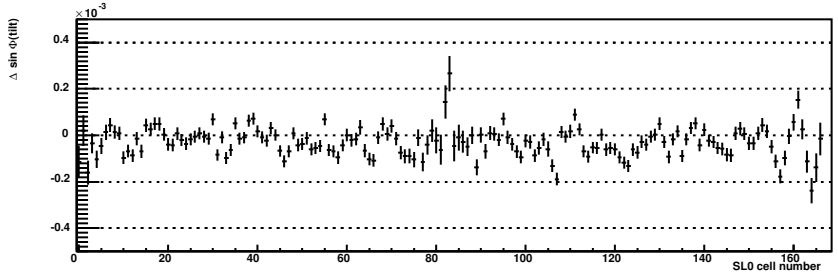

hits
SL3 local z coordinate (cm)

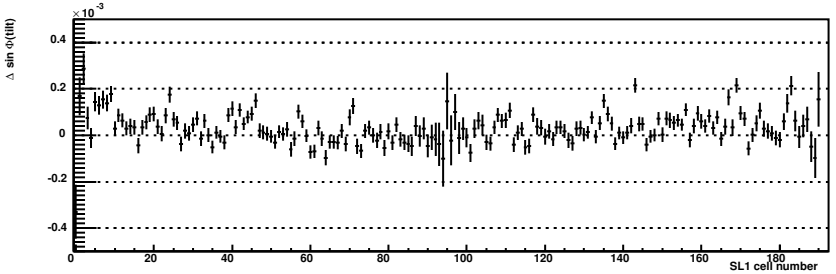

hits
SL4 local z coordinate (cm)

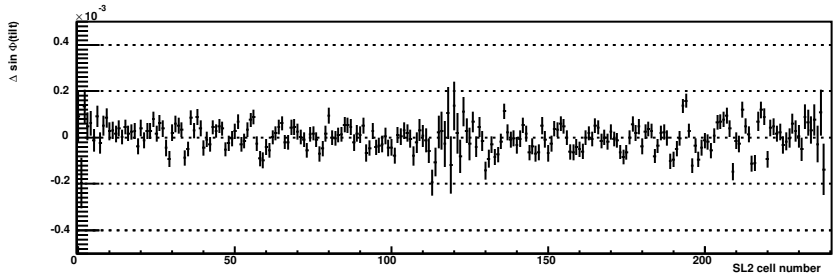

hits
SL5 local z coordinate (cm)

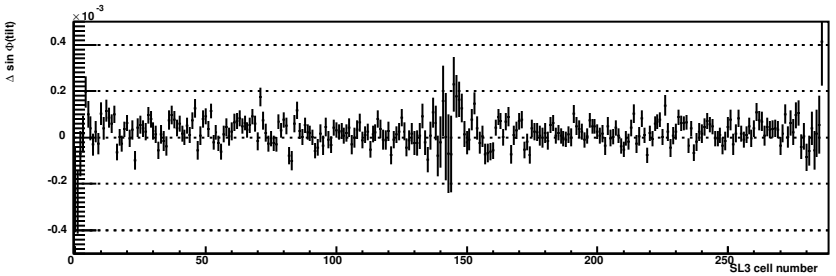

hits
SL6 local z coordinate (cm)

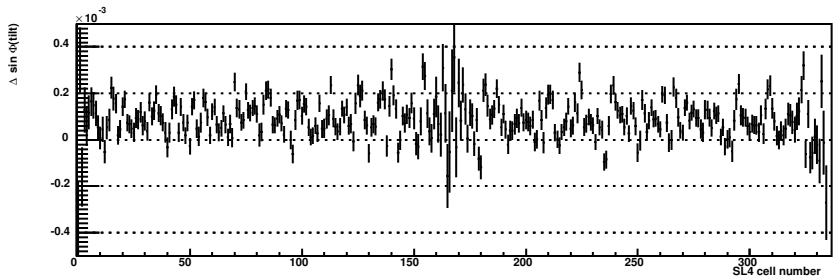

hits
SL7 local z coordinate (cm)

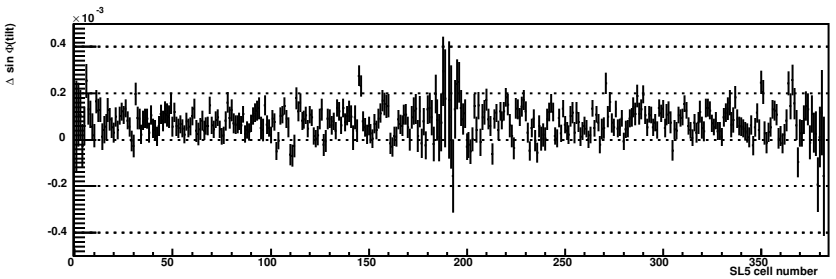

×10^-3
Δ sin Φ(tilt)
SL0 cell number

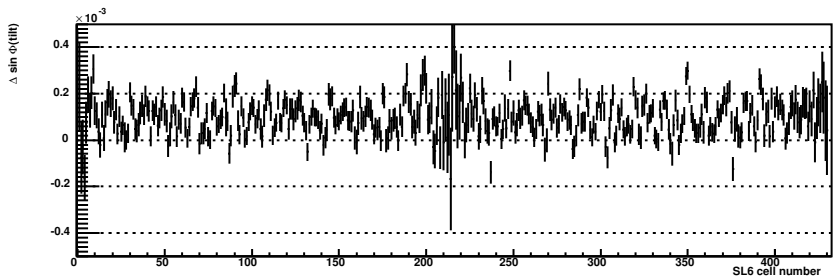

×10^-3
Δ sin Φ(tilt)
SL1 cell number

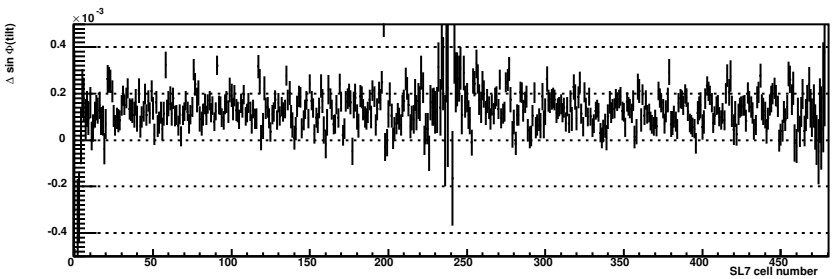

×10^-3
Δ sin Φ(tilt)
SL2 cell number

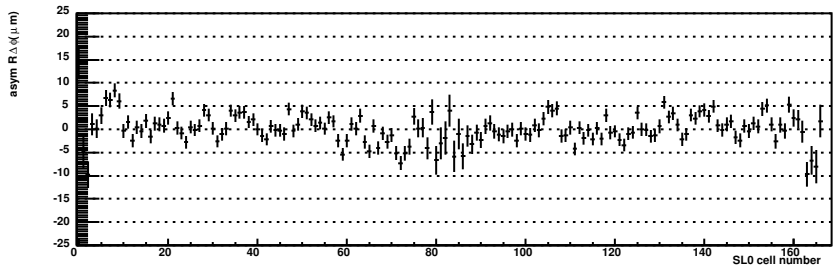

×10^-3
Δ sin Φ(tilt)
SL3 cell number

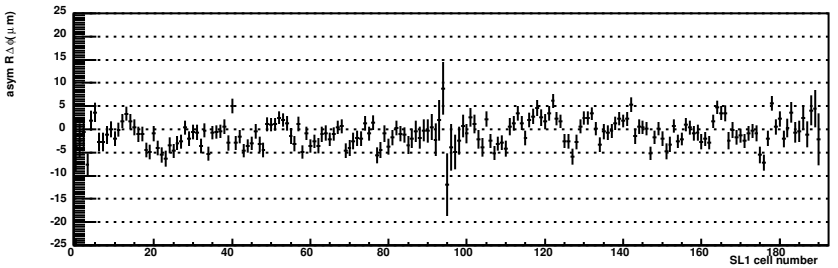

×10^-3
Δ sin Φ(tilt)
SL4 cell number

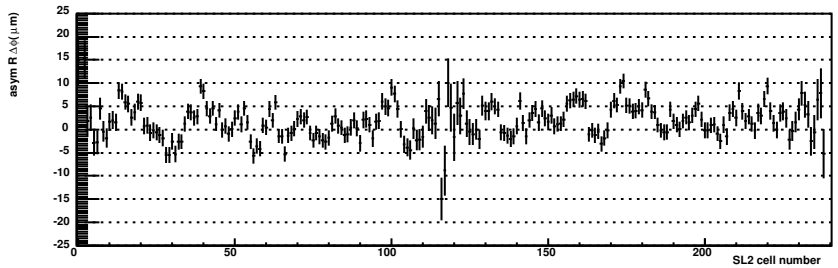

×10^-3
Δ sin Φ(tilt)
SL5 cell number

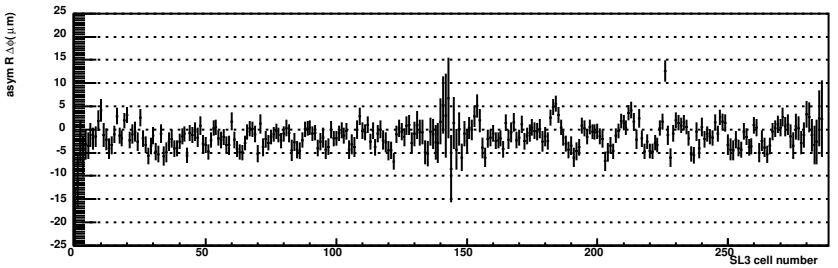

×10^-3
Δ sin Φ(tilt)
SL6 cell number

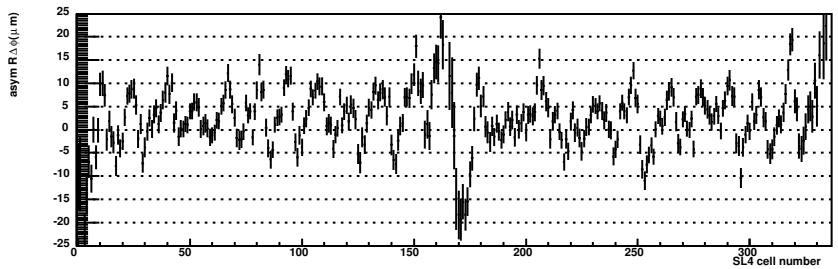

×10^-3
Δ sin Φ(tilt)
SL7 cell number

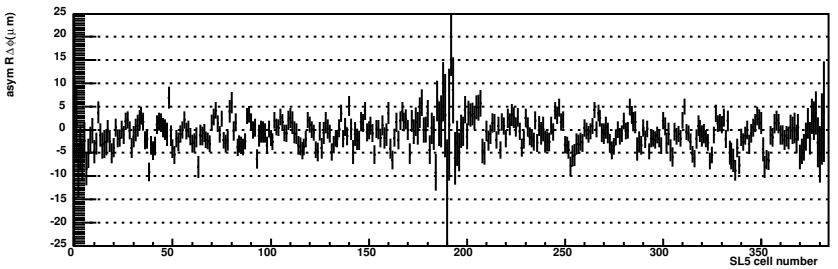

asym R Δφ(μm)
SL0 cell number

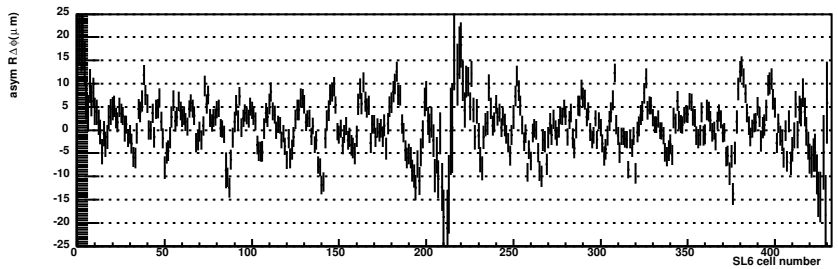

asym R Δφ(μm)
SL1 cell number

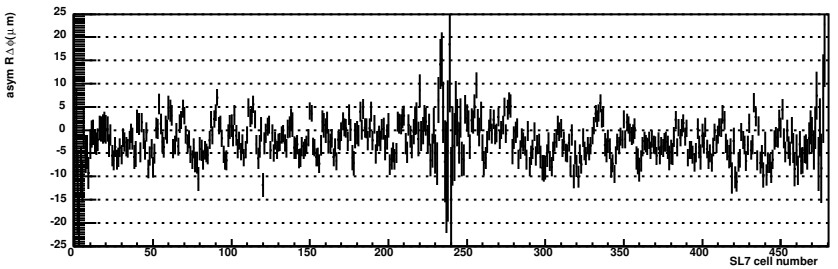

asym R Δφ(μm)
SL2 cell number

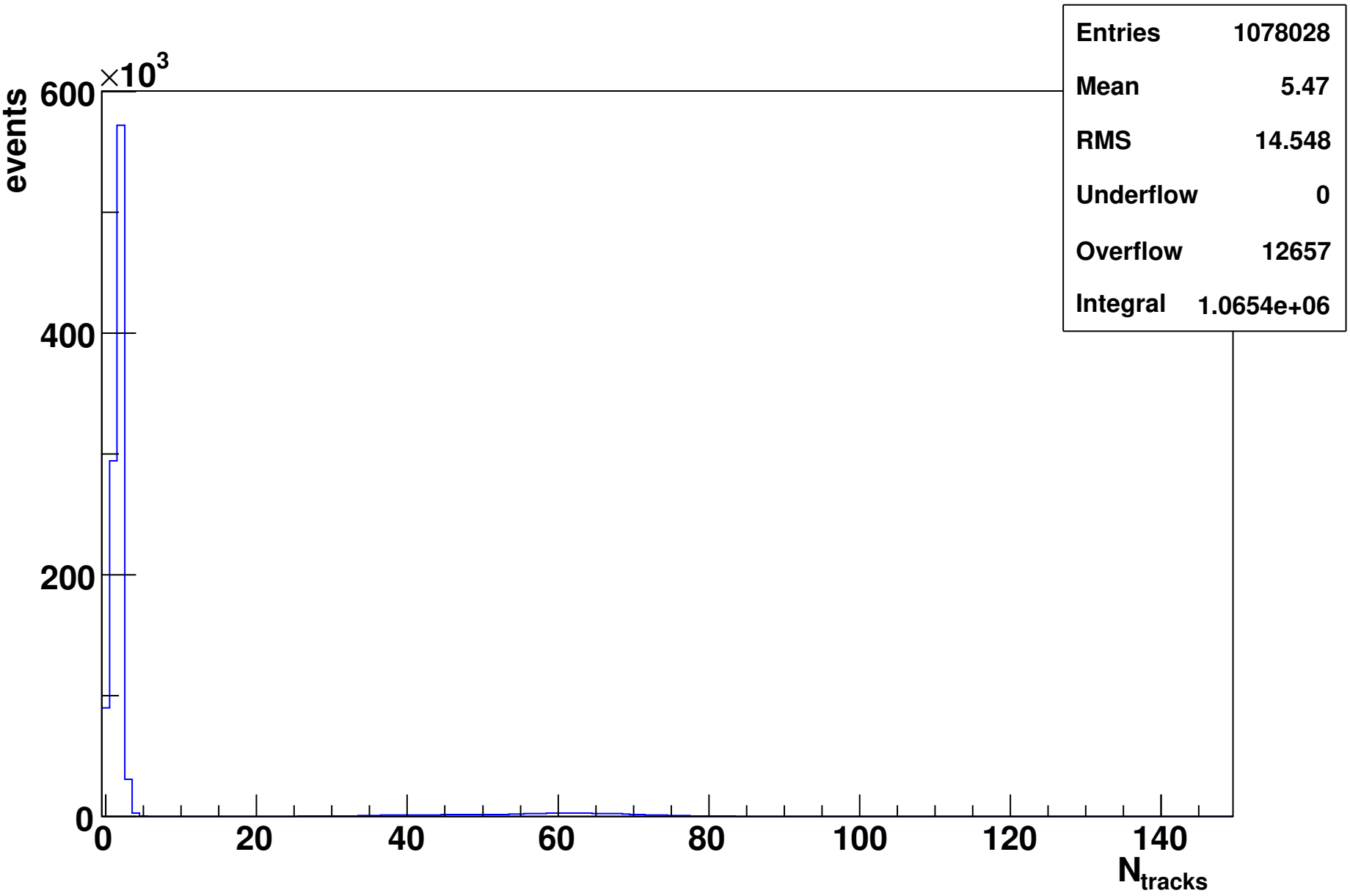

asym R Δφ(μm)
SL3 cell number

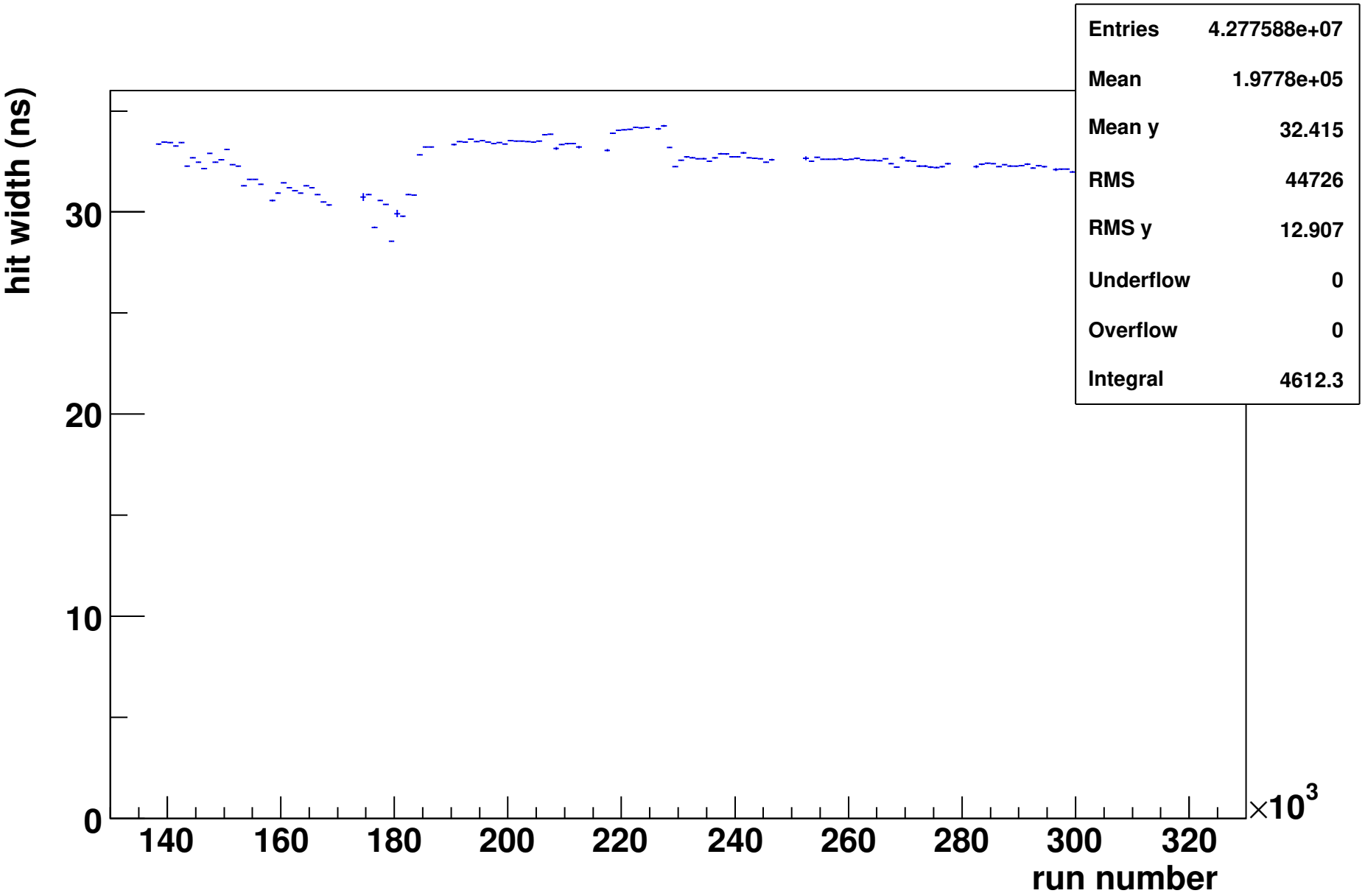

asym R Δφ(μm)
SL4 cell number

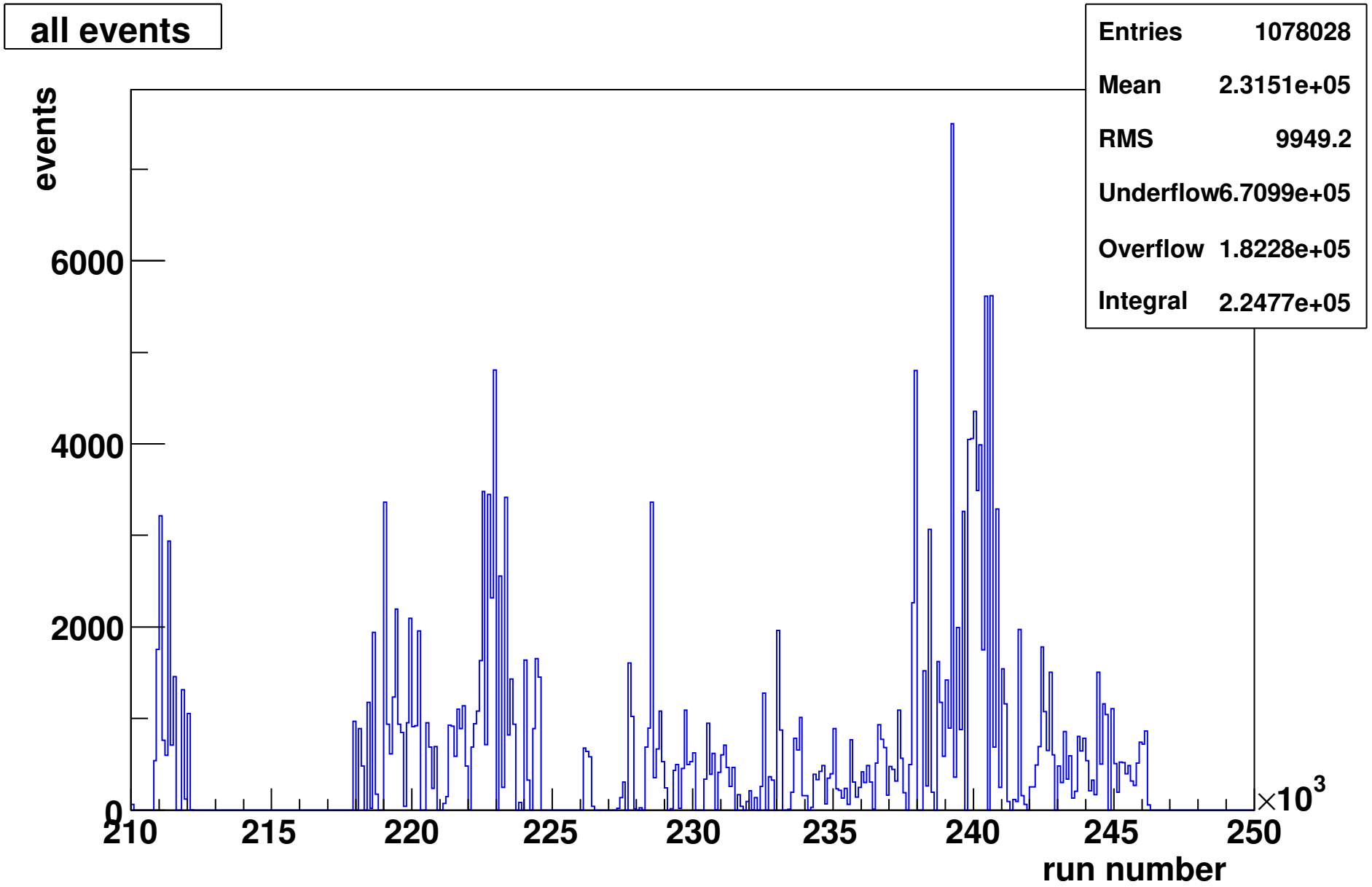

asym R Δφ(μm)
SL5 cell number

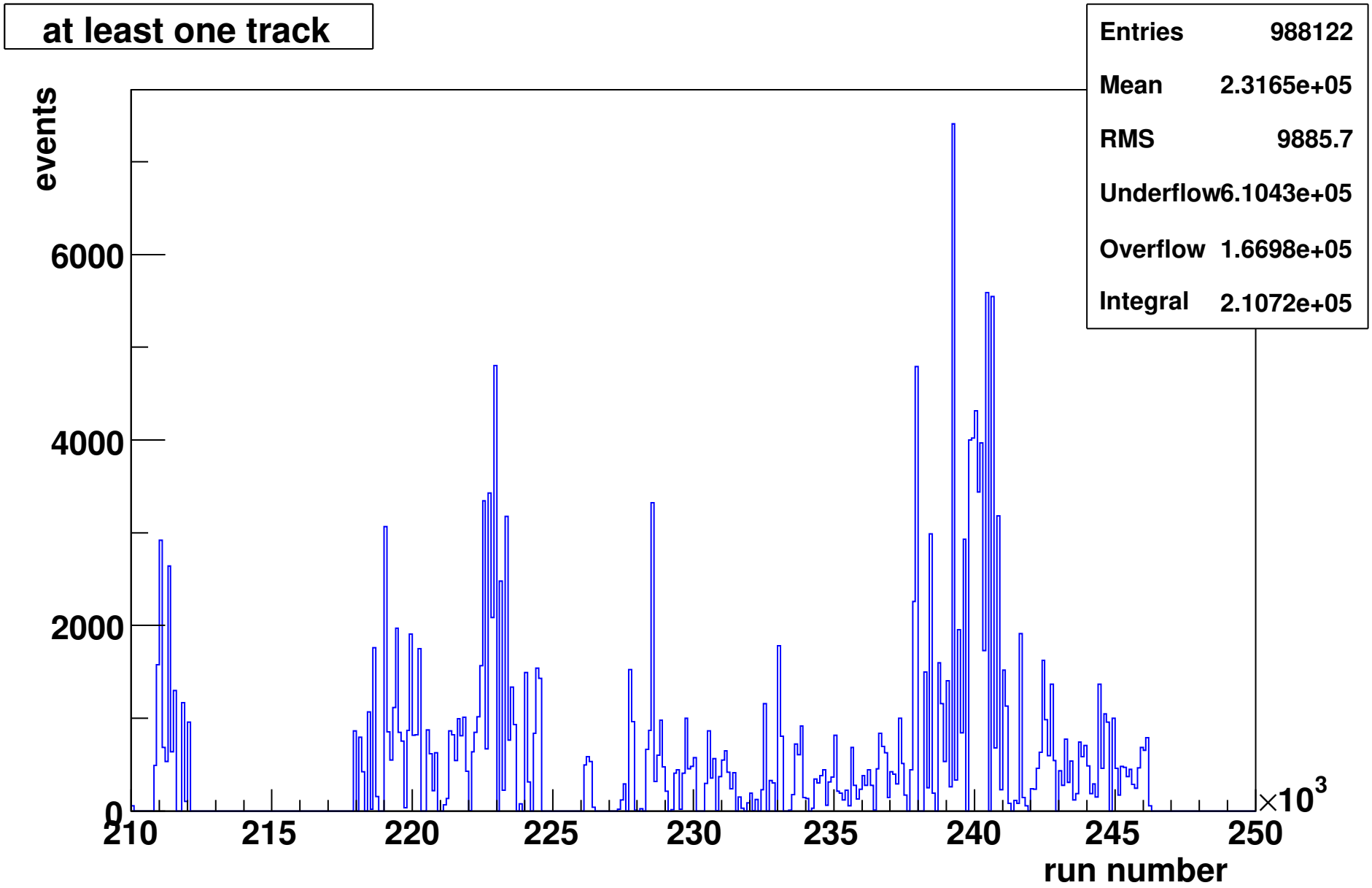

asym R Δφ(μm)
SL6 cell number

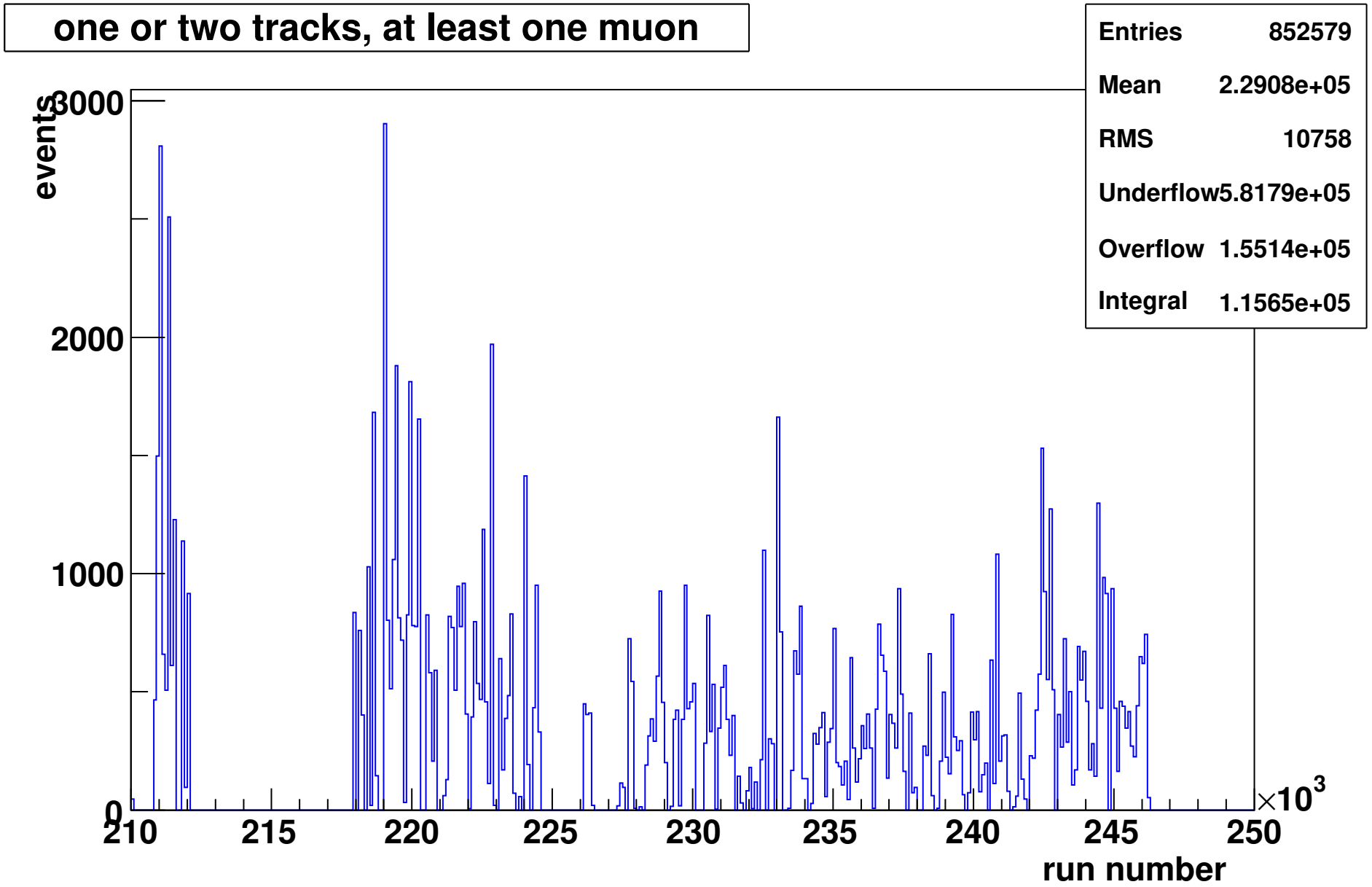

asym R Δφ(μm)
SL7 cell number

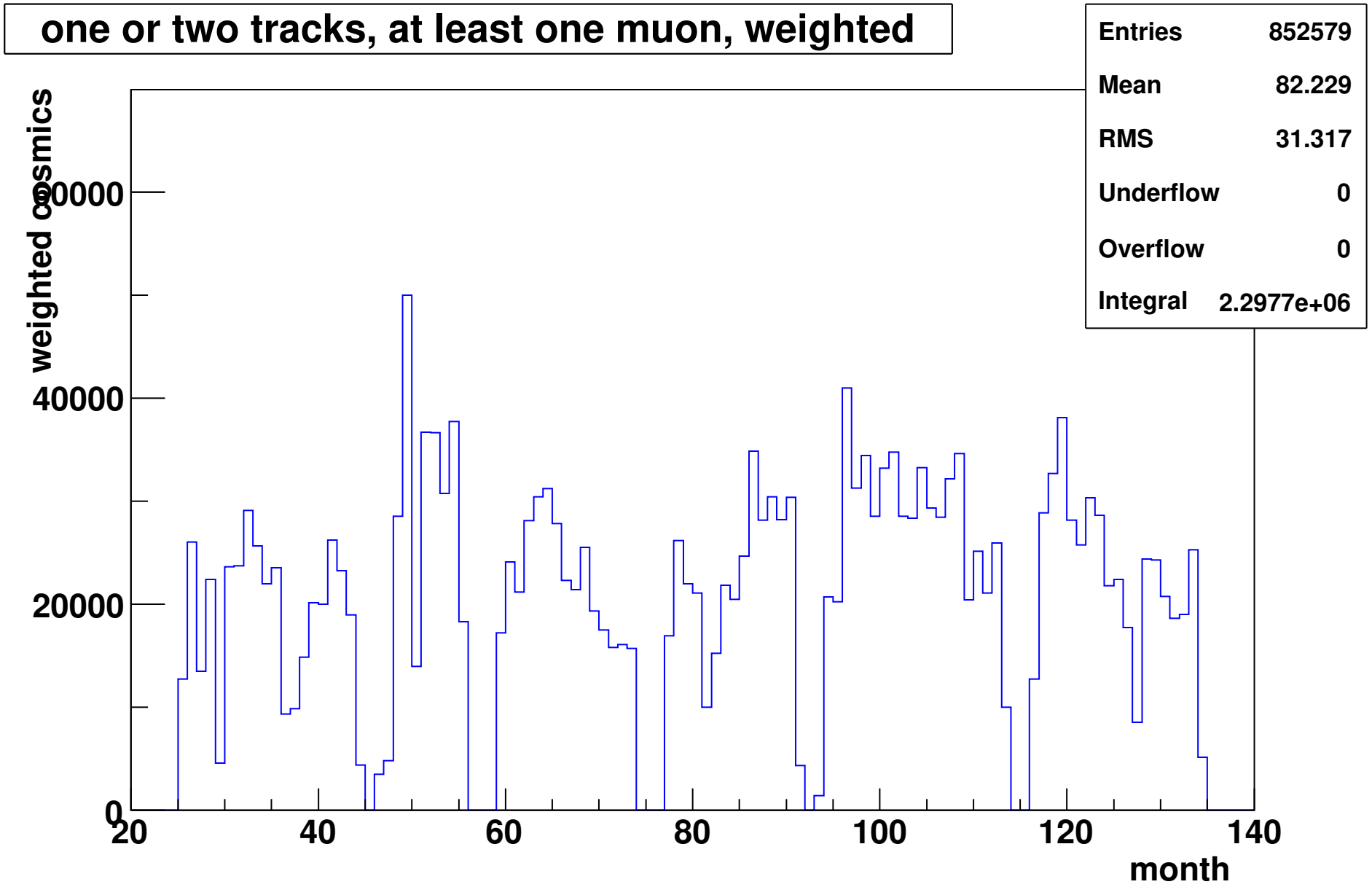

Entries 1078028
Mean 5.47
RMS 14.548
Underflow 0
Overflow 12657
Integral 1.0654e+06
events
×10^3
600
400
200
0
0
20
40
60
80
100
120
140
N_tracks

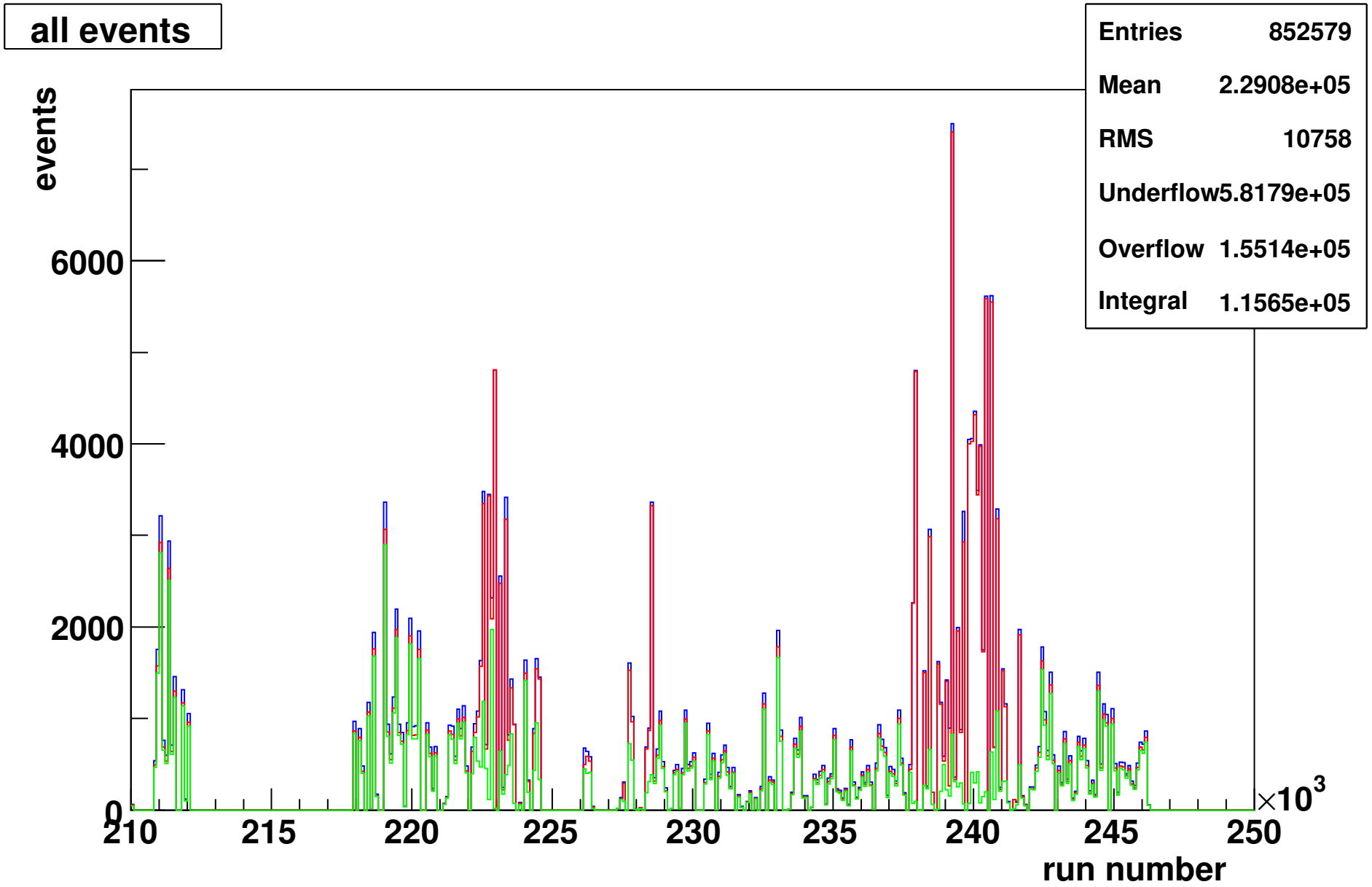

hit width (ns)
0
10
20
30
140
160
180
200
220
240
260
280
300
320
×10^3
run number
Entries 4.277588e+07
Mean 1.9778e+05
Mean y 32.415
RMS 44726
RMS y 12.907
Underflow 0
Overflow 0
Integral 4612.3

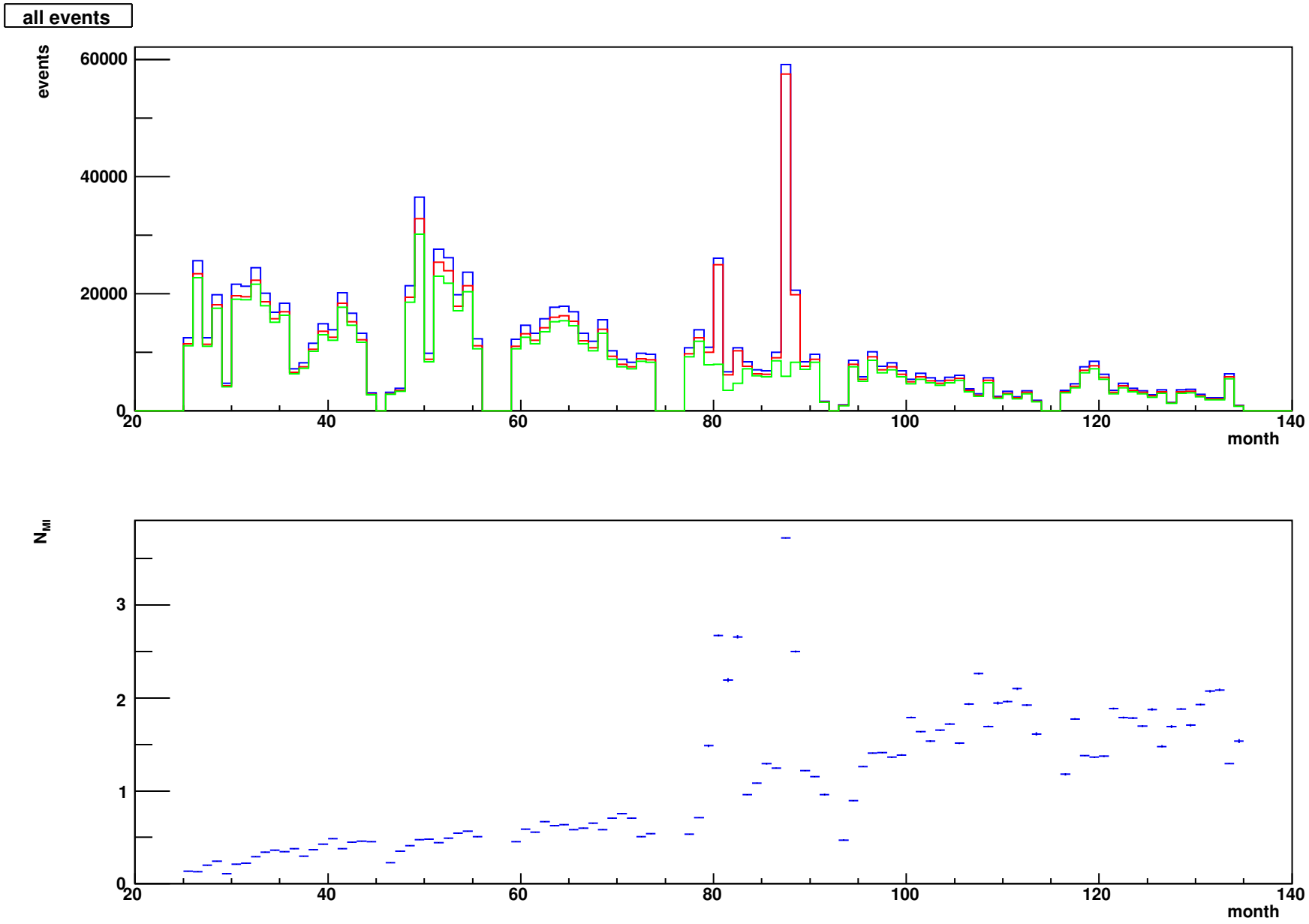

all events
Entries 1078028
Mean 2.3151e+05
RMS 9949.2
Underflow 6.7099e+05
Overflow 1.8228e+05
Integral 2.2477e+05
events
6000
4000
2000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

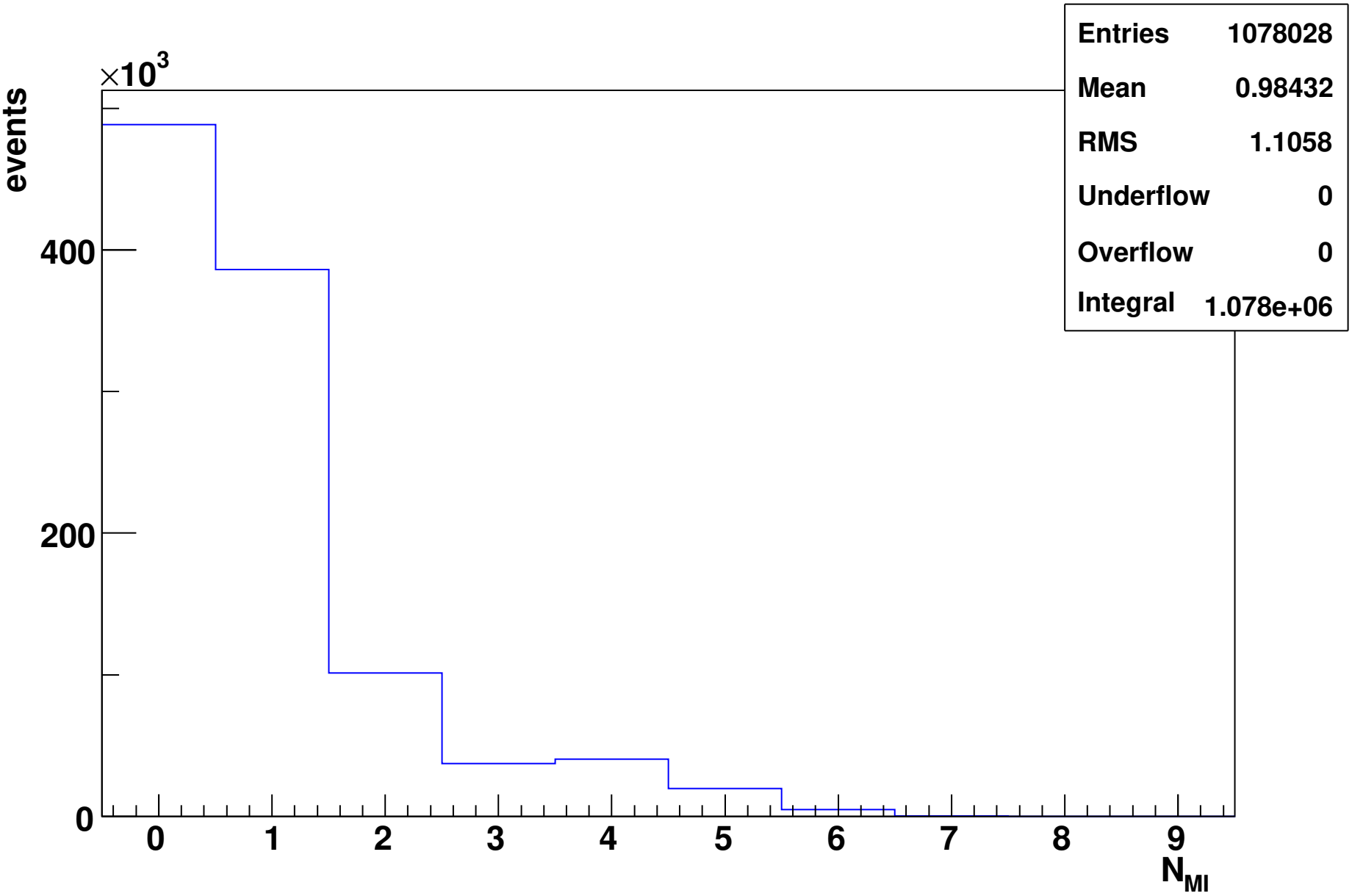

at least one track
Entries 988122
Mean 2.3165e+05
RMS 9885.7
Underflow 6.1043e+05
Overflow 1.6698e+05
Integral 2.1072e+05
events
6000
4000
2000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

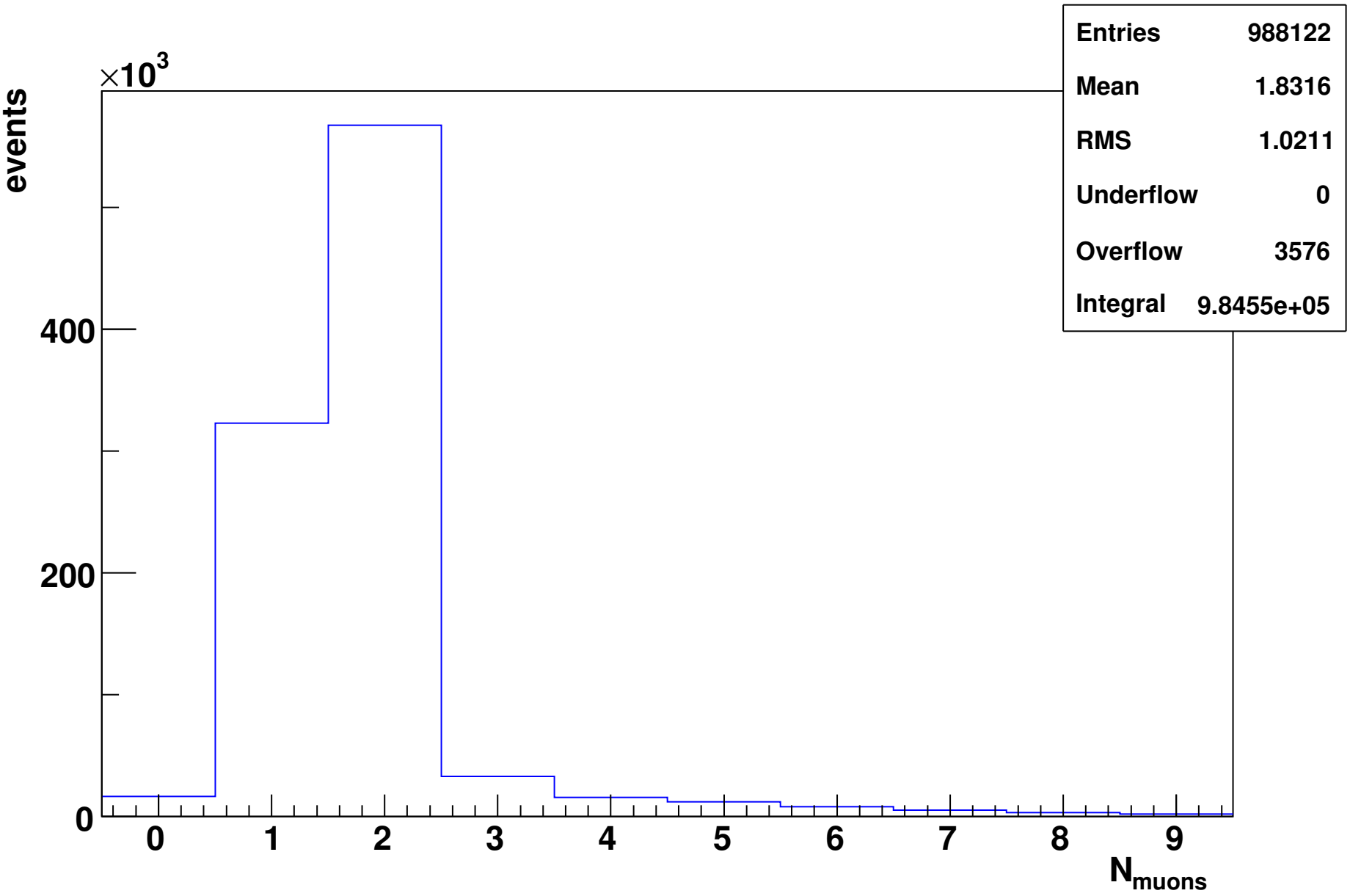

one or two tracks, at least one muon
Entries 852579
Mean 2.2908e+05
RMS 10758
Underflow 5.8179e+05
Overflow 1.5514e+05
Integral 1.1565e+05
events
3000
2000
1000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

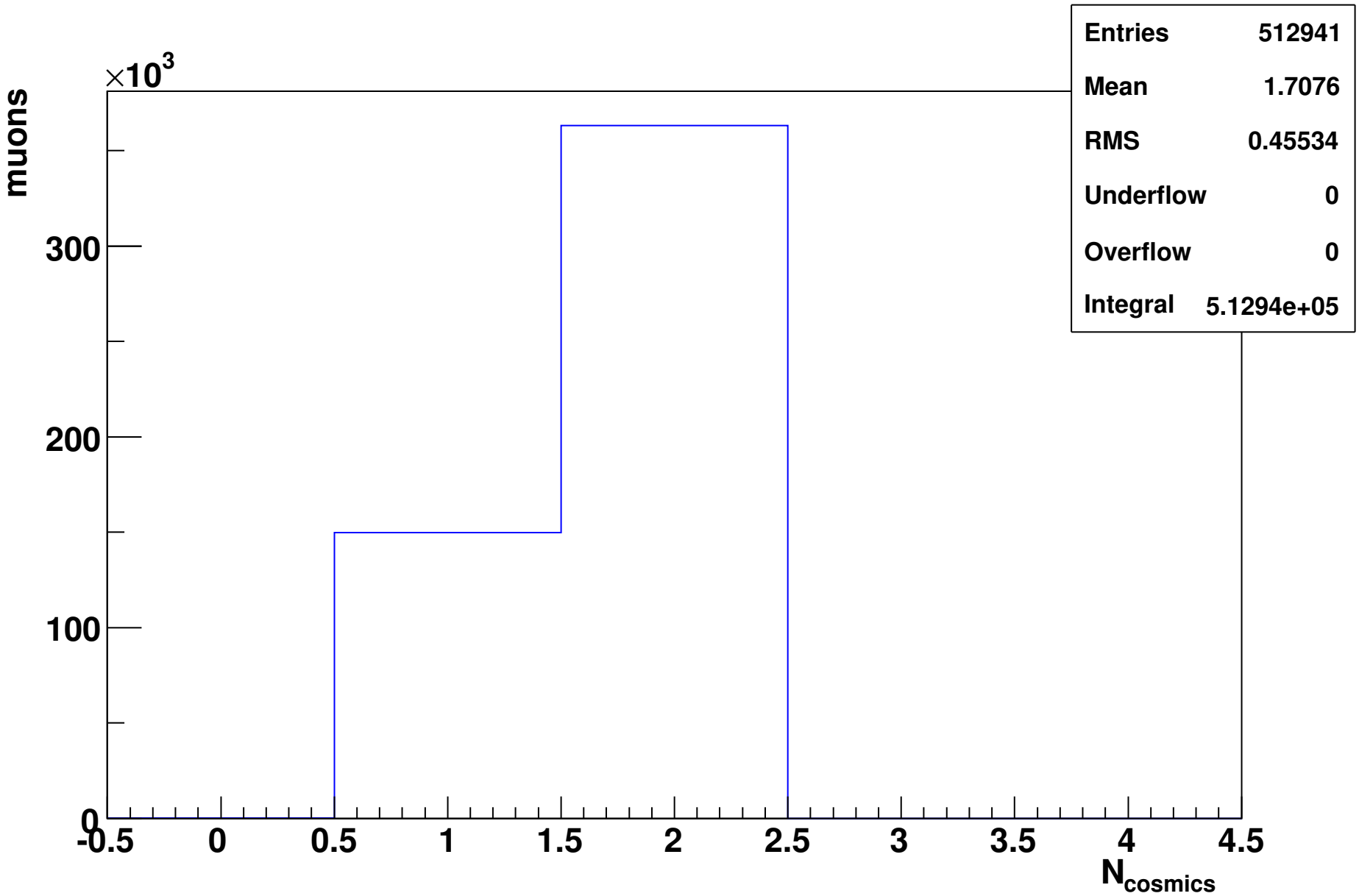

one or two tracks, at least one muon, weighted
Entries 852579
Mean 82.229
RMS 31.317
Underflow 0
Overflow 0
Integral 2.2977e+06
weighted cosmics
60000
40000
20000
0
20
40
60
80
100
120
140
month

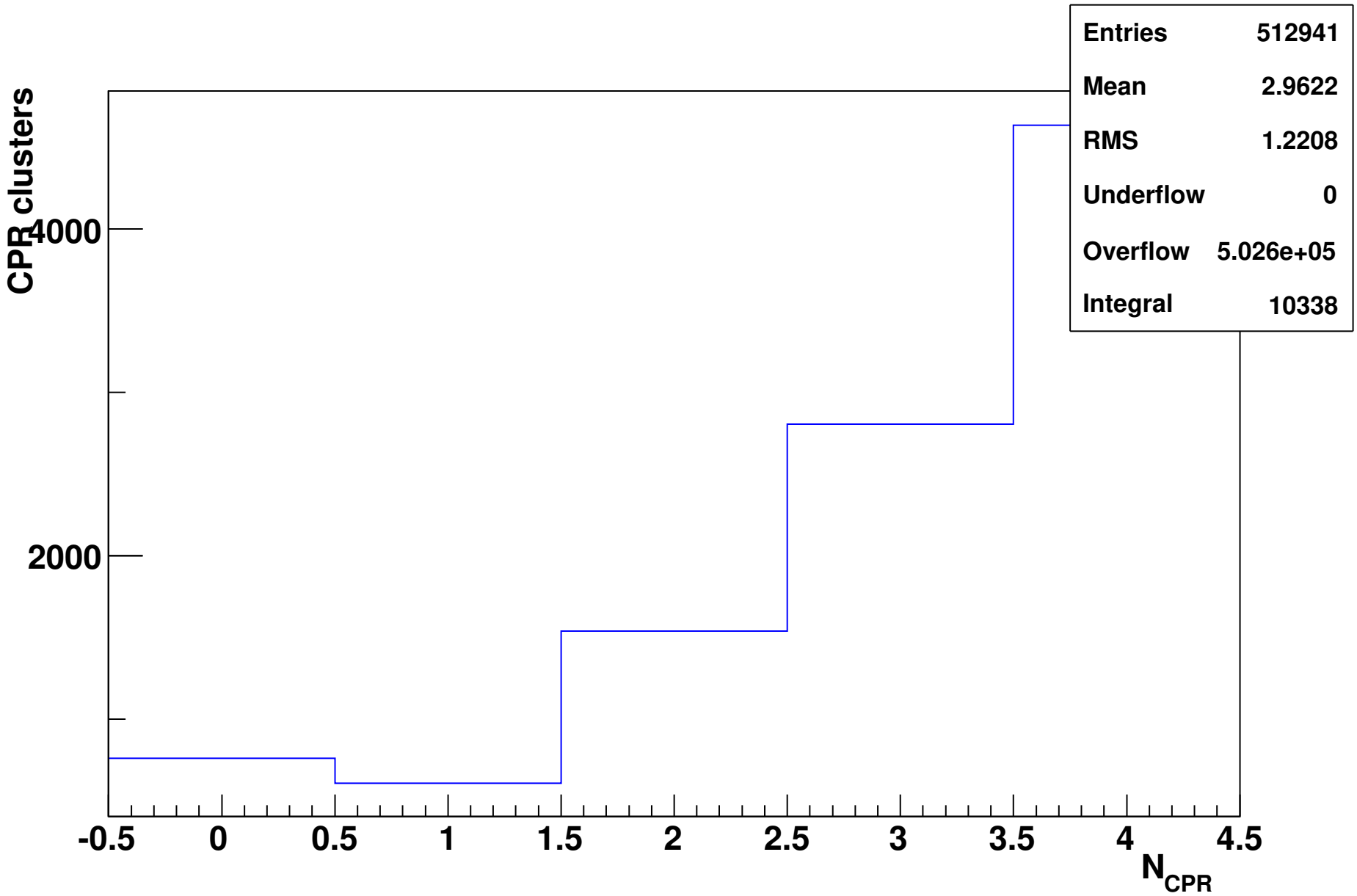

all events
Entries 852579
Mean 2.2908e+05
RMS 10758
Underflow 5.8179e+05
Overflow 1.5514e+05
Integral 1.1565e+05
events
6000
4000
2000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

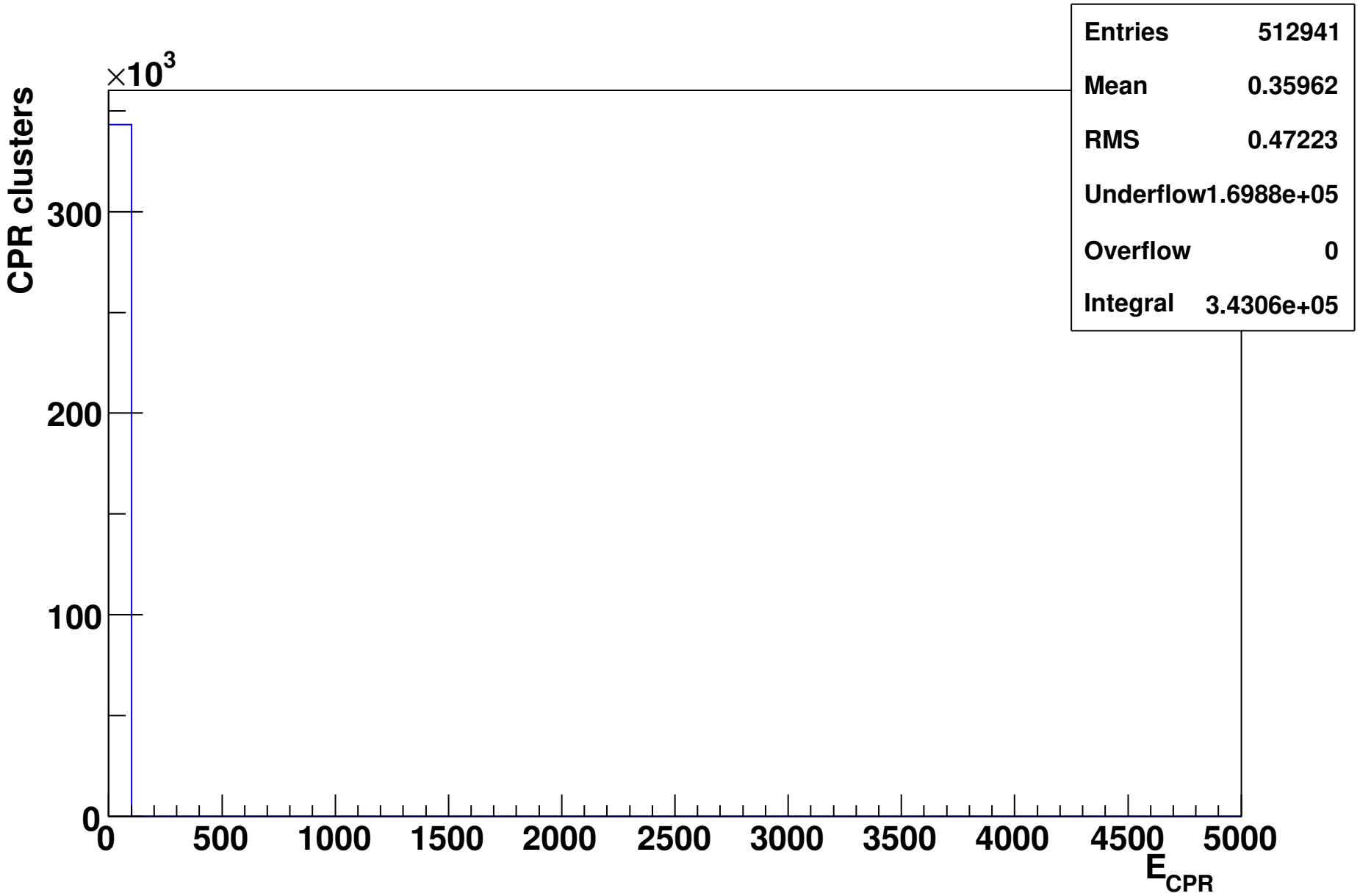

all events
events
60000
40000
20000
0
20
40
60
80
100
120
140
month
N_{MI}
3
2
1
0
20
40
60
80
100
120
140
month

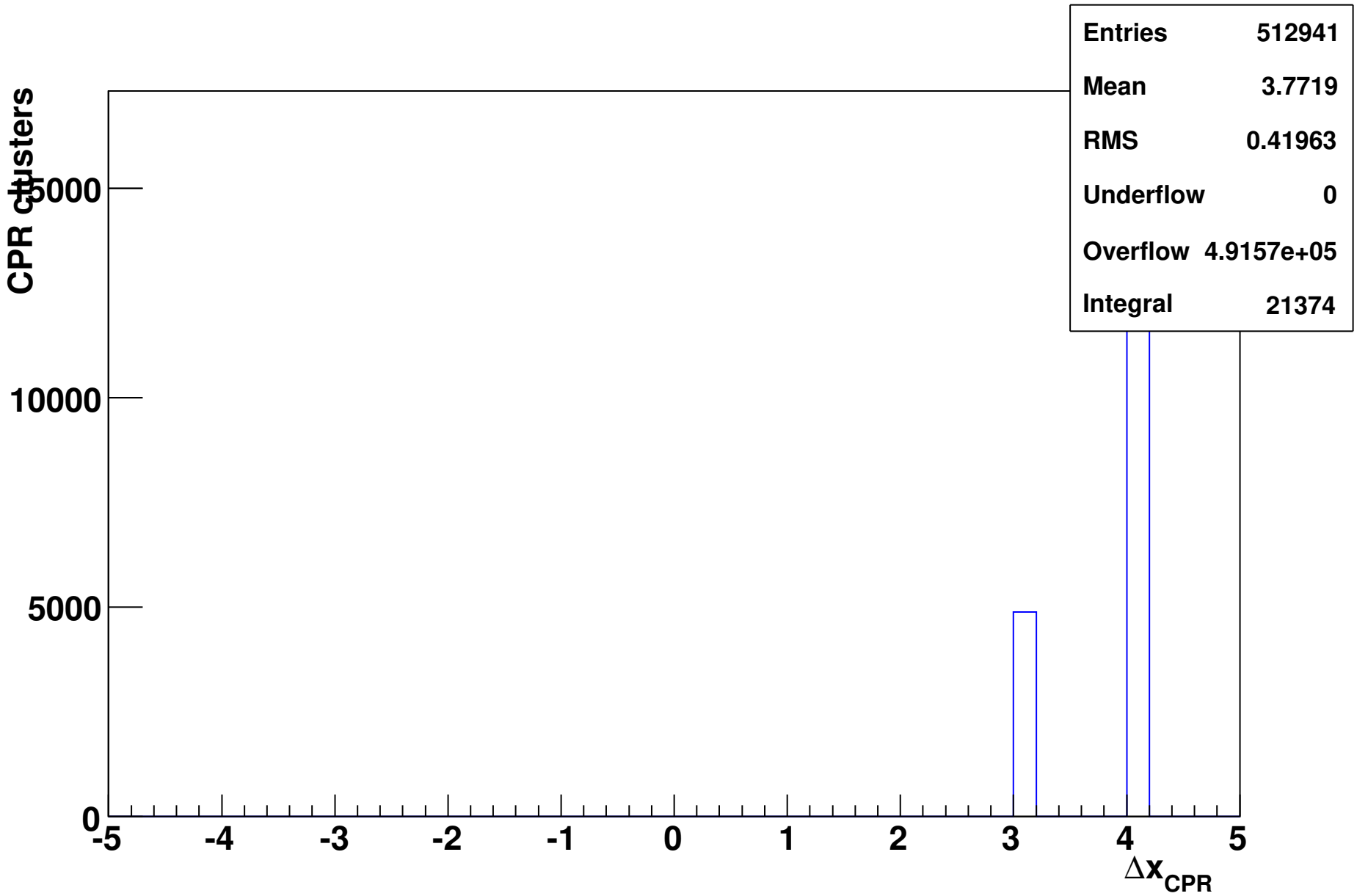

Entries 1078028
Mean 0.98432
RMS 1.1058
Underflow 0
Overflow 0
Integral 1.078e+06
×10^3
events
400
200
0
0
1
2
3
4
5
6
7
8
9
N_MI

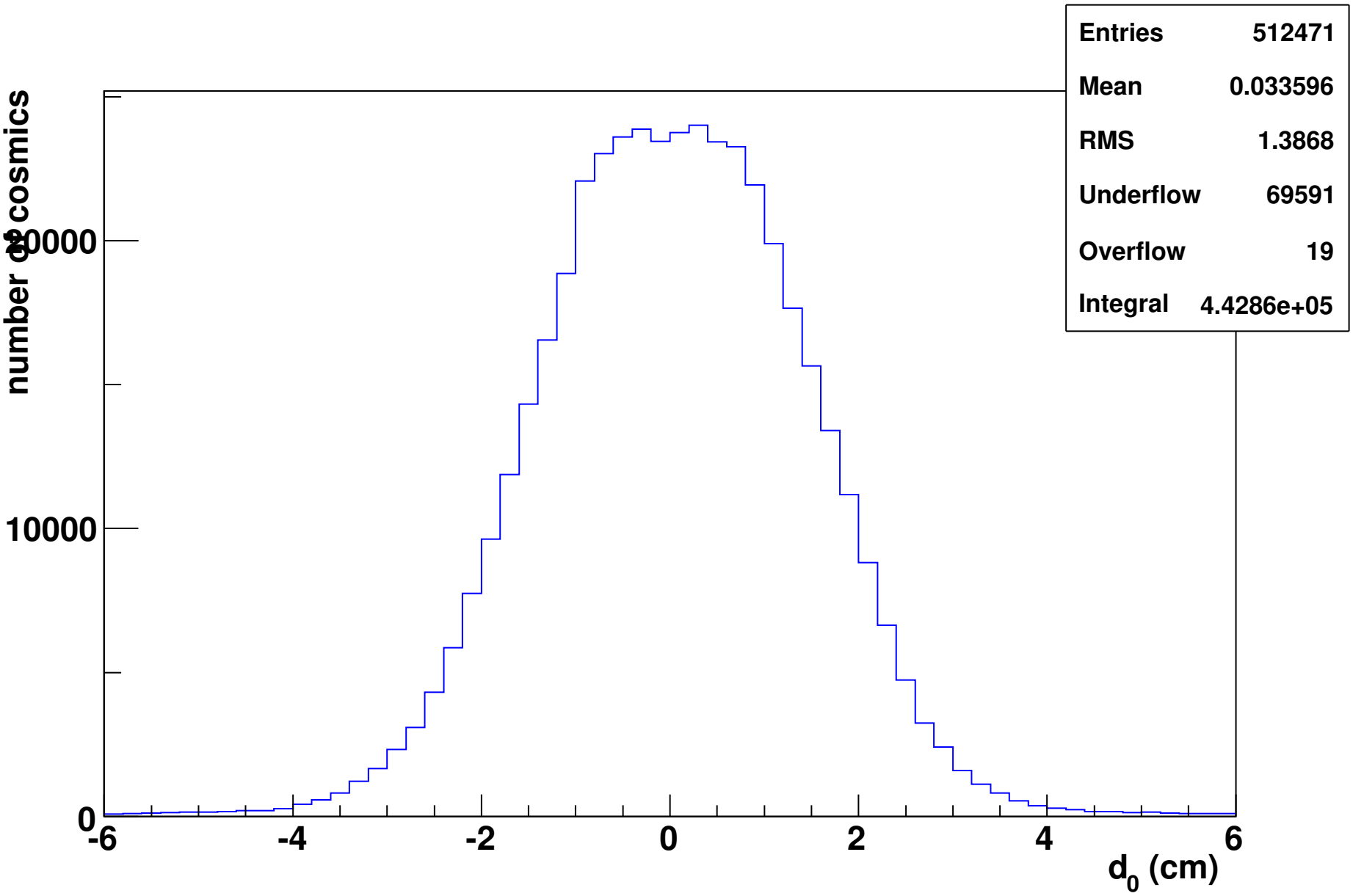

Entries 988122
Mean 1.8316
RMS 1.0211
Underflow 0
Overflow 3576
Integral 9.8455e+05
events
×10^3
400
200
0
0 1 2 3 4 5 6 7 8 9
N_muons

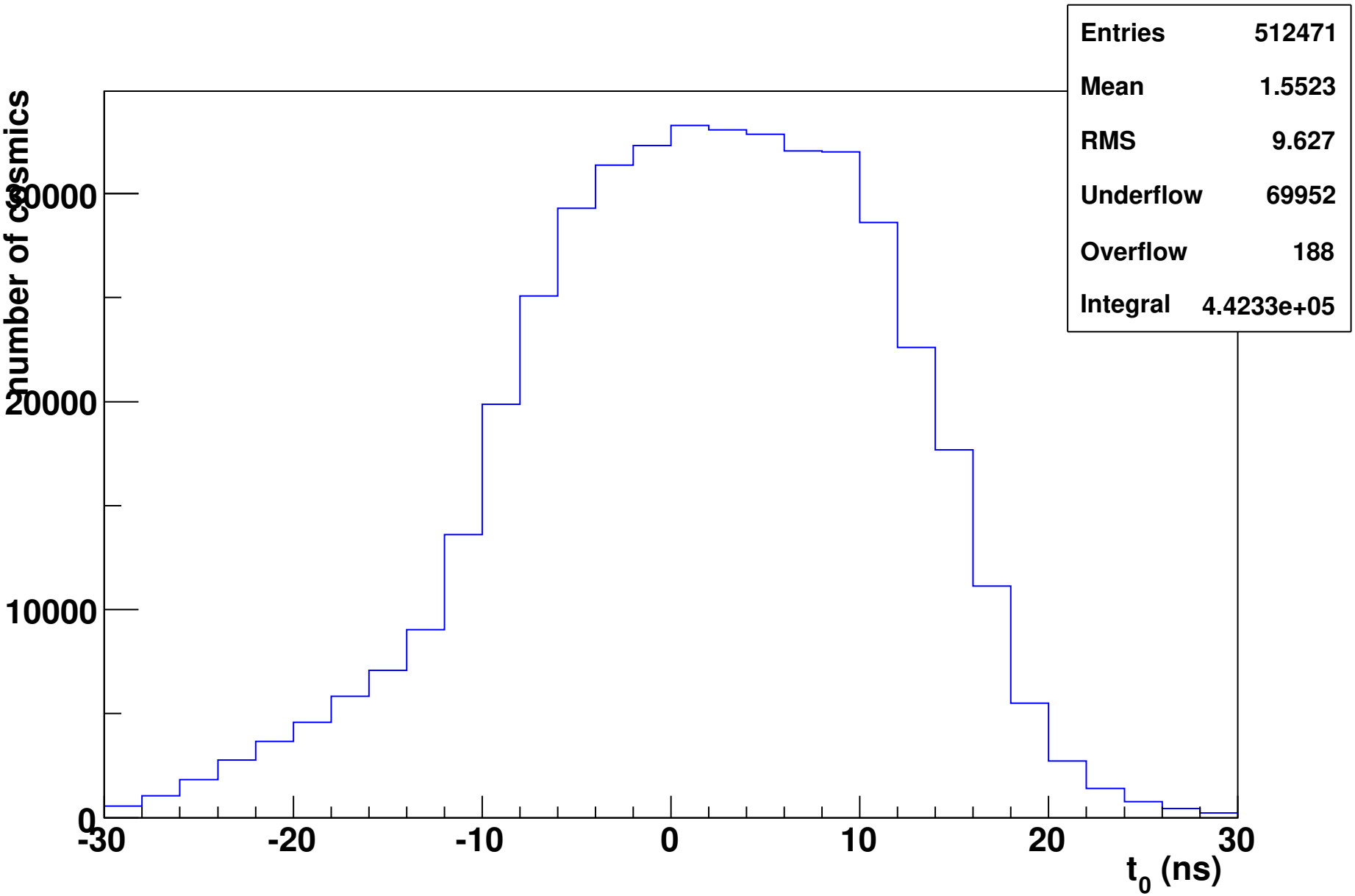

Entries 512941
Mean 1.7076
RMS 0.45534
Underflow 0
Overflow 0
Integral 5.1294e+05
muons
×10^3
300
200
100
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_cosmics

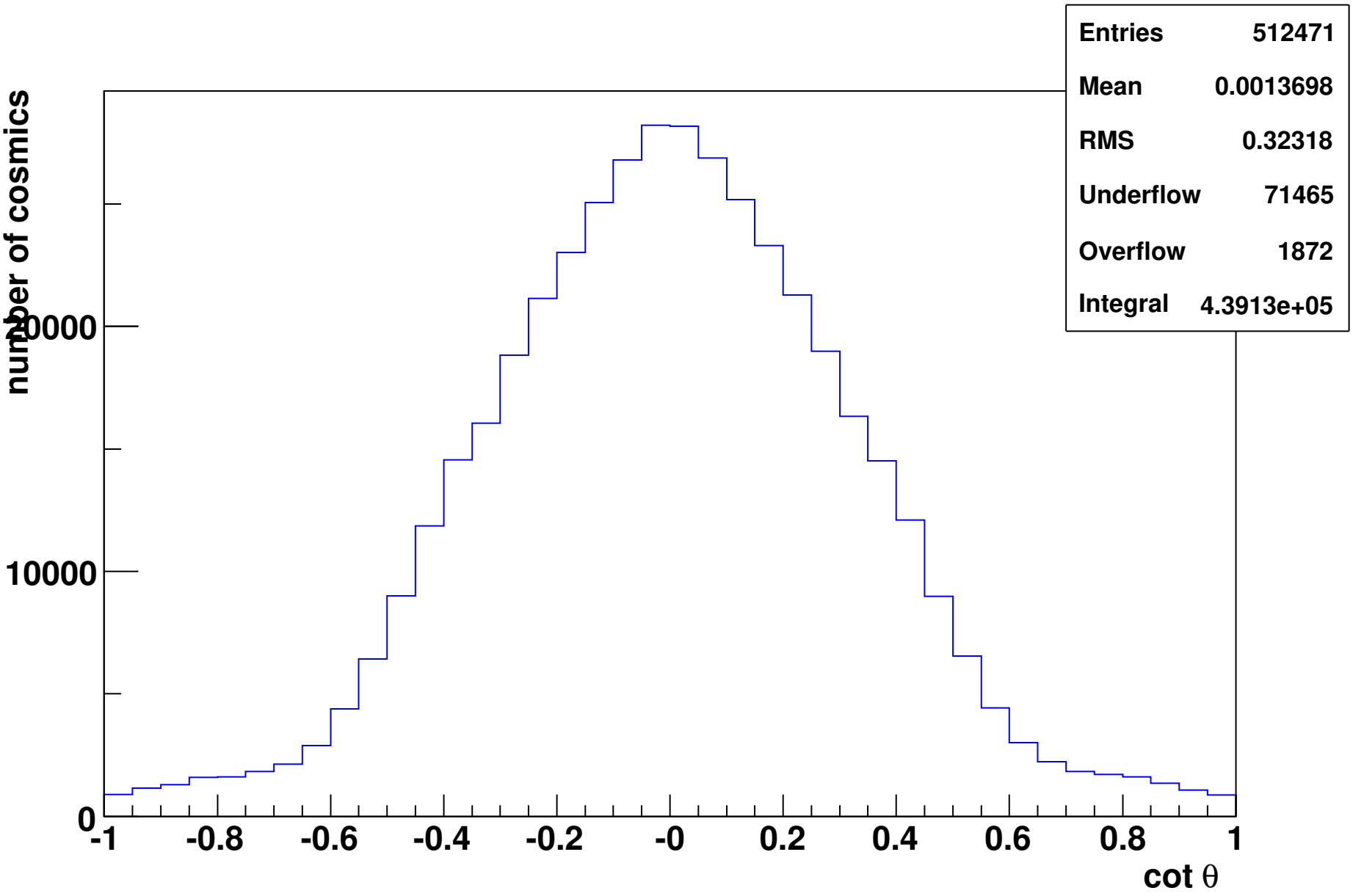

Entries 512941
Mean 2.9622
RMS 1.2208
Underflow 0
Overflow 5.026e+05
Integral 10338
CPR clusters
4000
2000
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_CPR

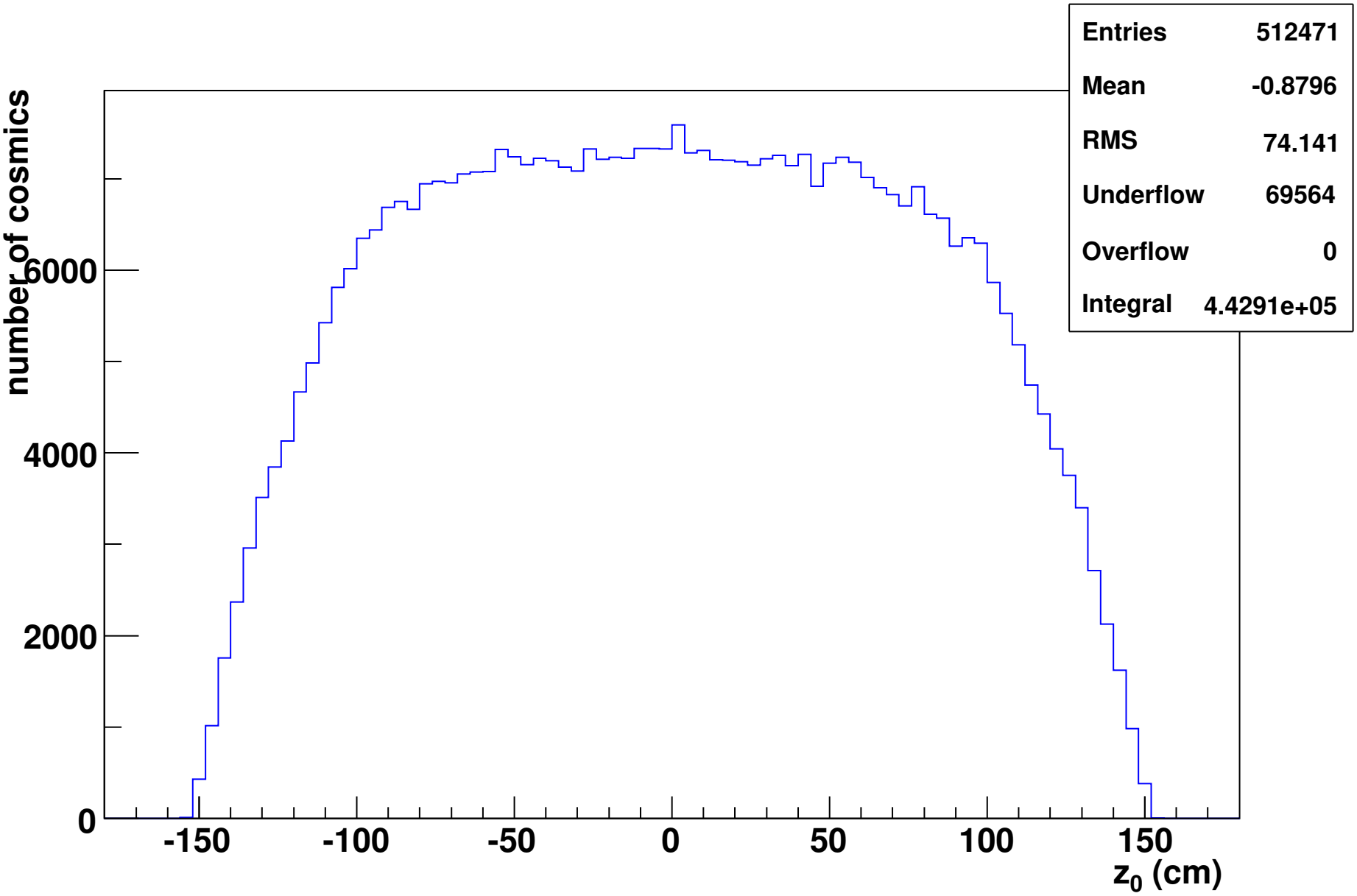

Entries 512941
Mean 0.35962
RMS 0.47223
Underflow 1.6988e+05
Overflow 0
Integral 3.4306e+05
×10^3
CPR clusters
300
200
100
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
E_CPR

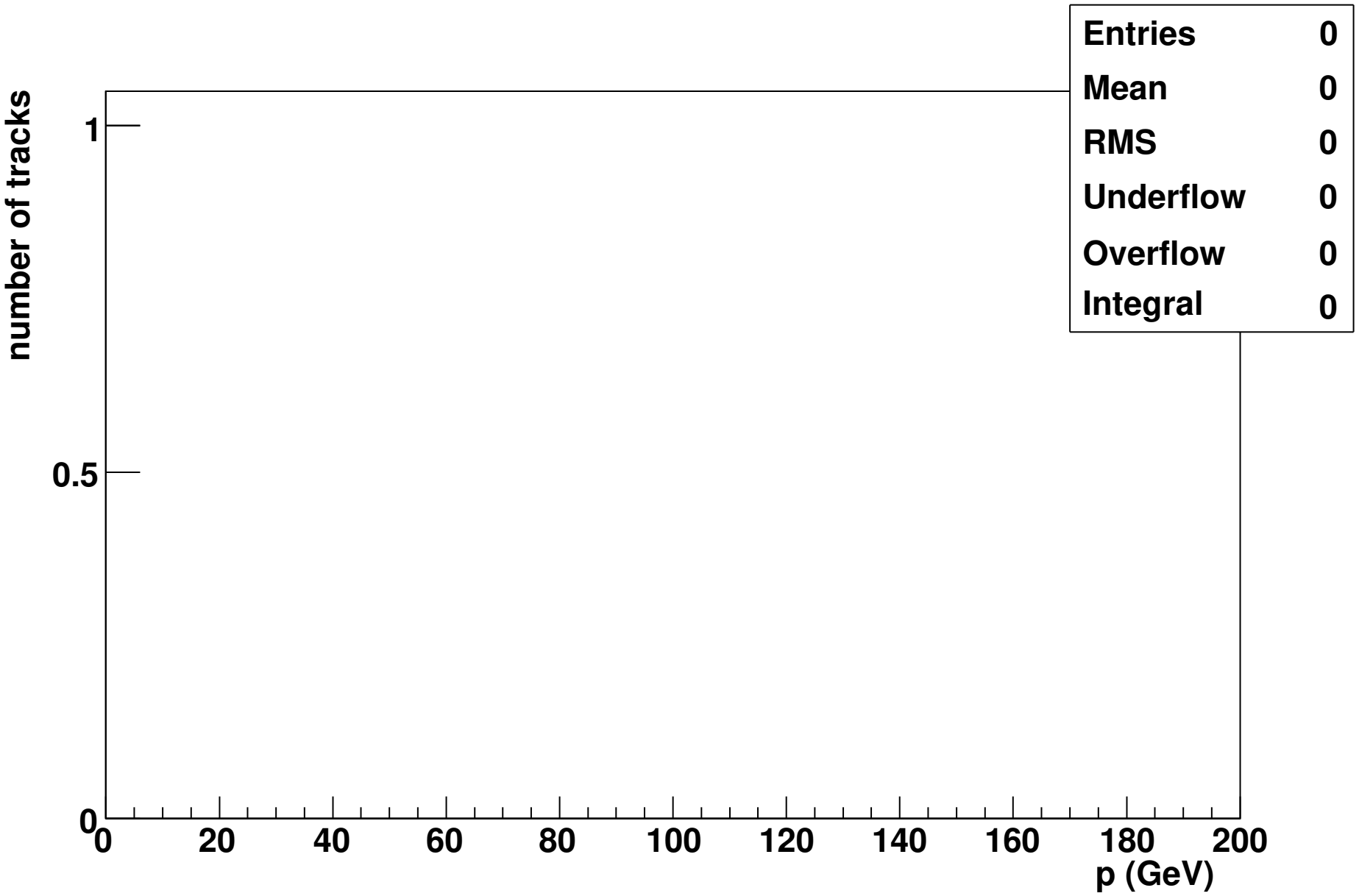

Entries 512941
Mean 3.7719
RMS 0.41963
Underflow 0
Overflow 4.9157e+05
Integral 21374
CPR clusters
10000
5000
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
Δx_{CPR}

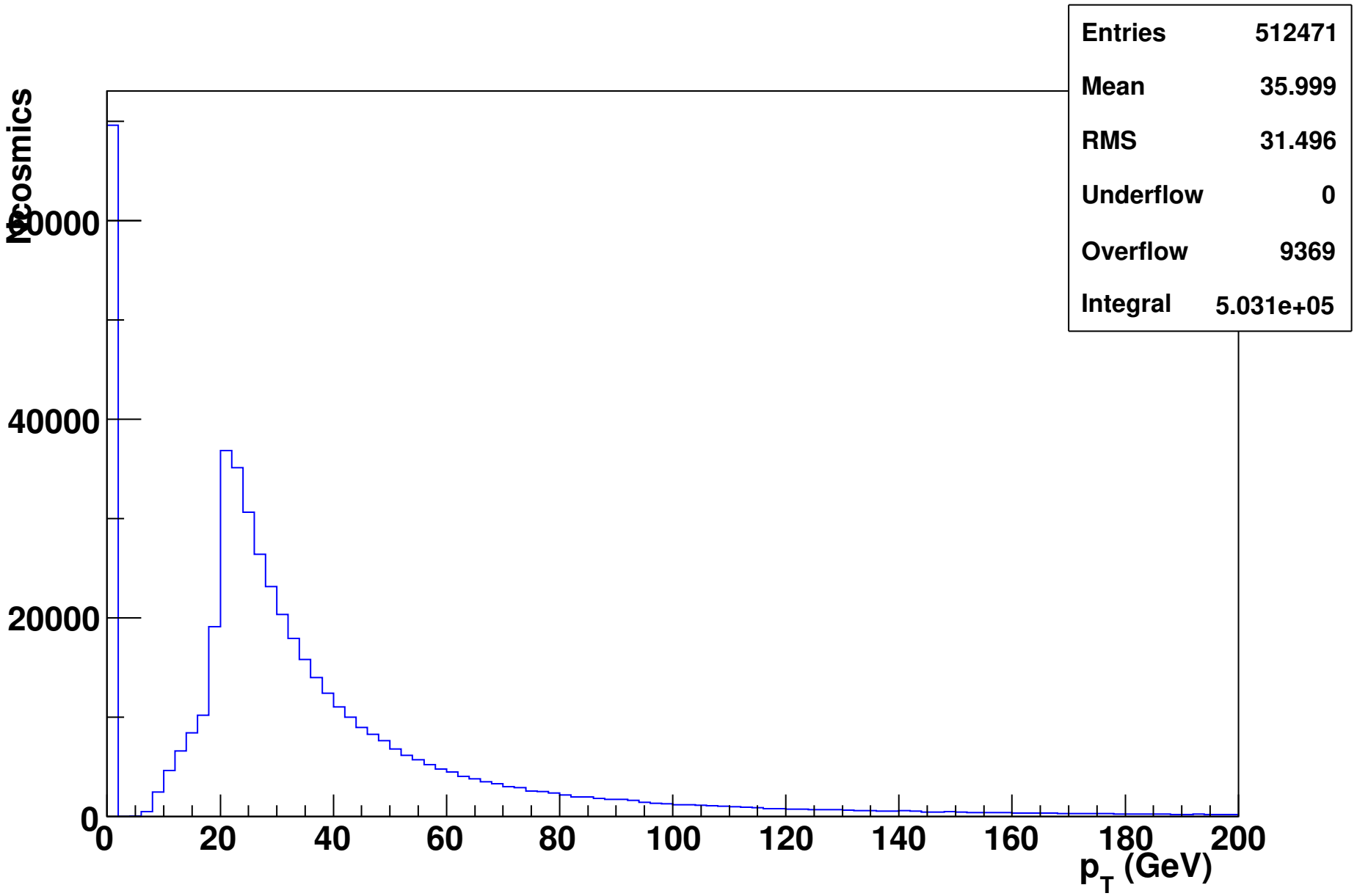

Entries 512471
Mean 0.033596
RMS 1.3868
Underflow 69591
Overflow 19
Integral 4.4286e+05
number of cosmics
20000
10000
0
-6
-4
-2
0
2
4
6
d0 (cm)

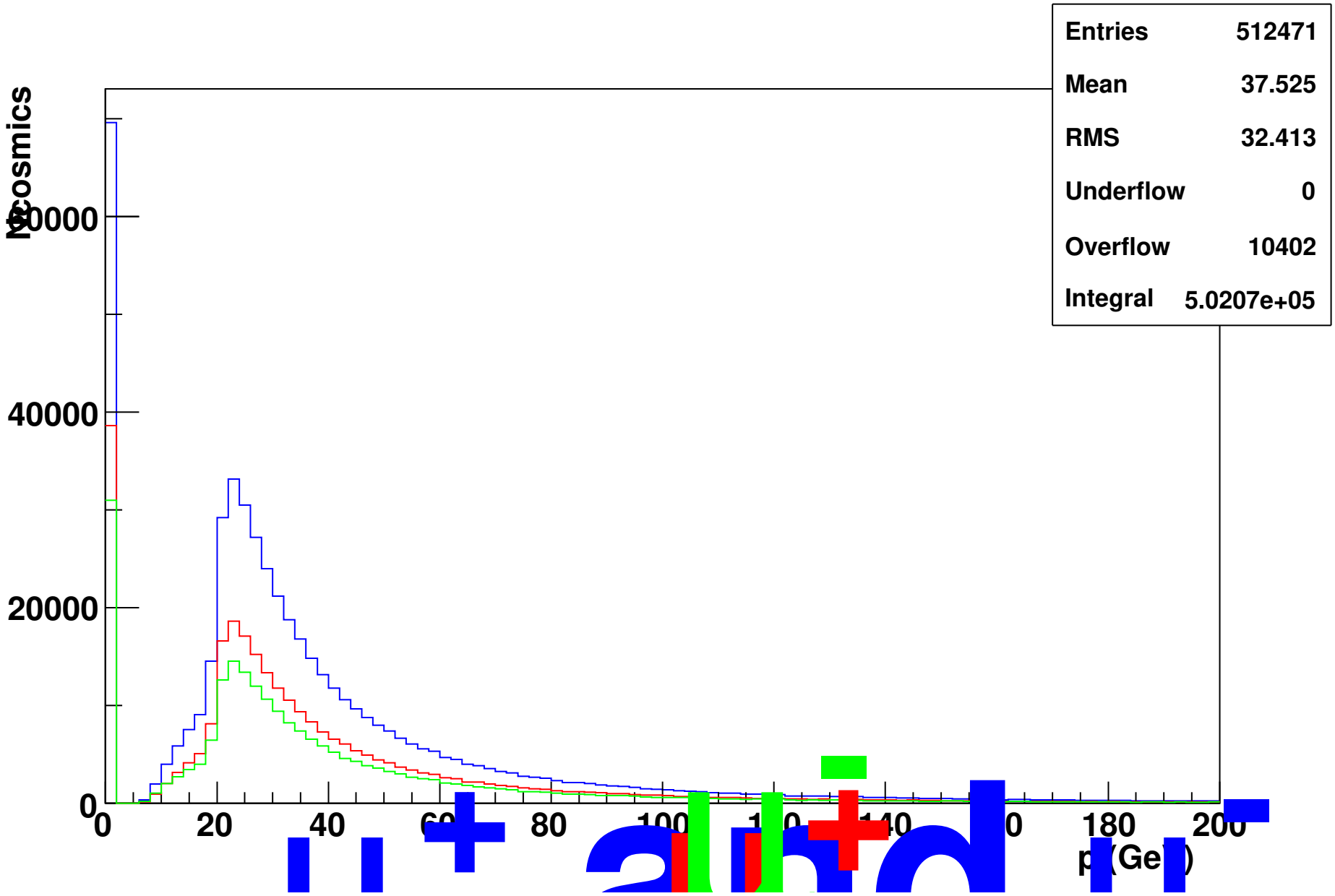

Entries 512471
Mean 1.5523
RMS 9.627
Underflow 69952
Overflow 188
Integral 4.4233e+05
number of cosmics
30000
20000
10000
0
-30
-20
-10
0
10
20
30
t_0 (ns)


Entries 512471
Mean 0.0013698
RMS 0.32318
Underflow 71465
Overflow 1872
Integral 4.3913e+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

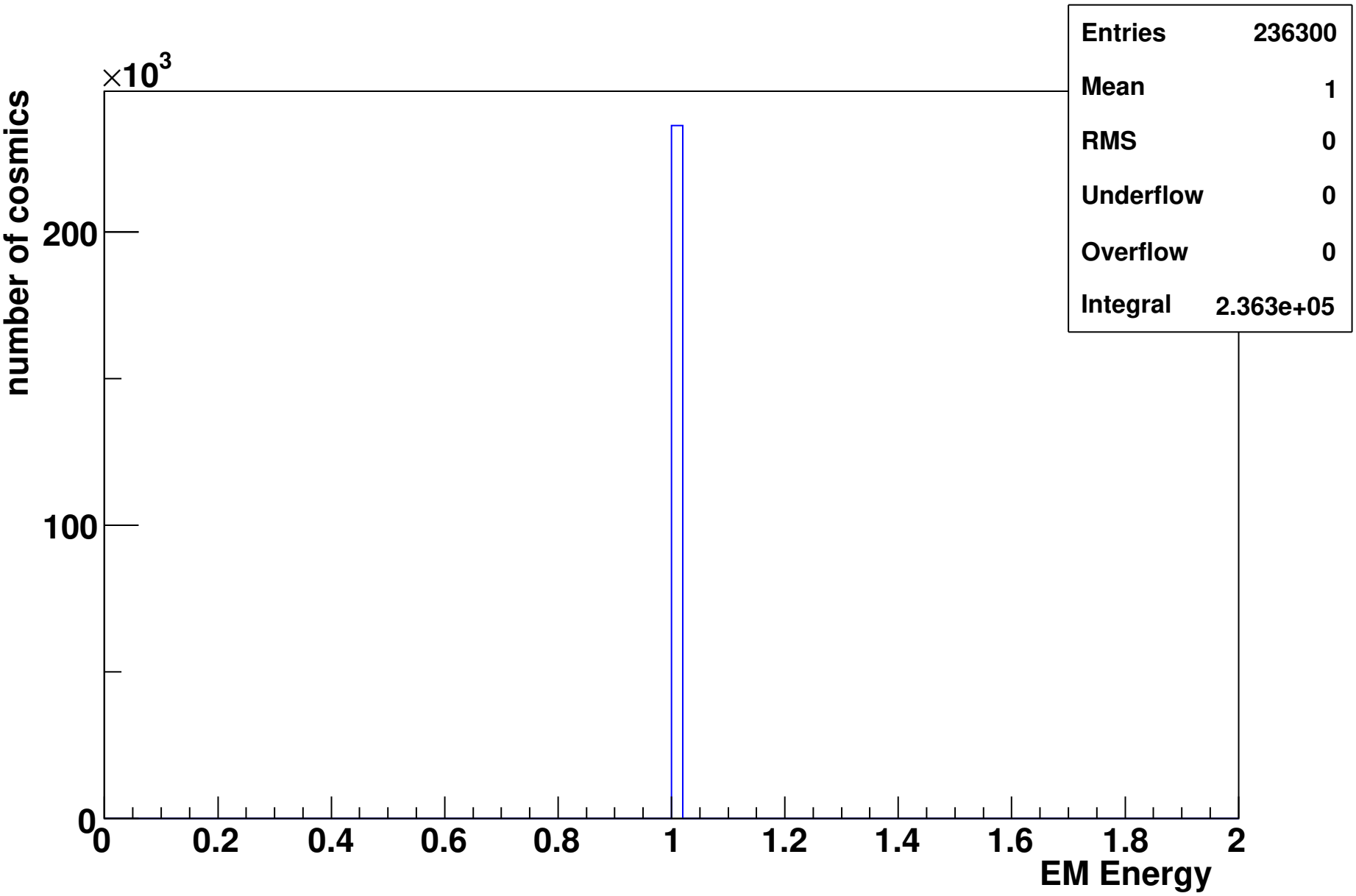

Entries 512471
Mean -0.8796
RMS 74.141
Underflow 69564
Overflow 0
Integral 4.4291e+05
number of cosmics
0
2000
4000
6000
-150
-100
-50
0
50
100
150
z_0 (cm)

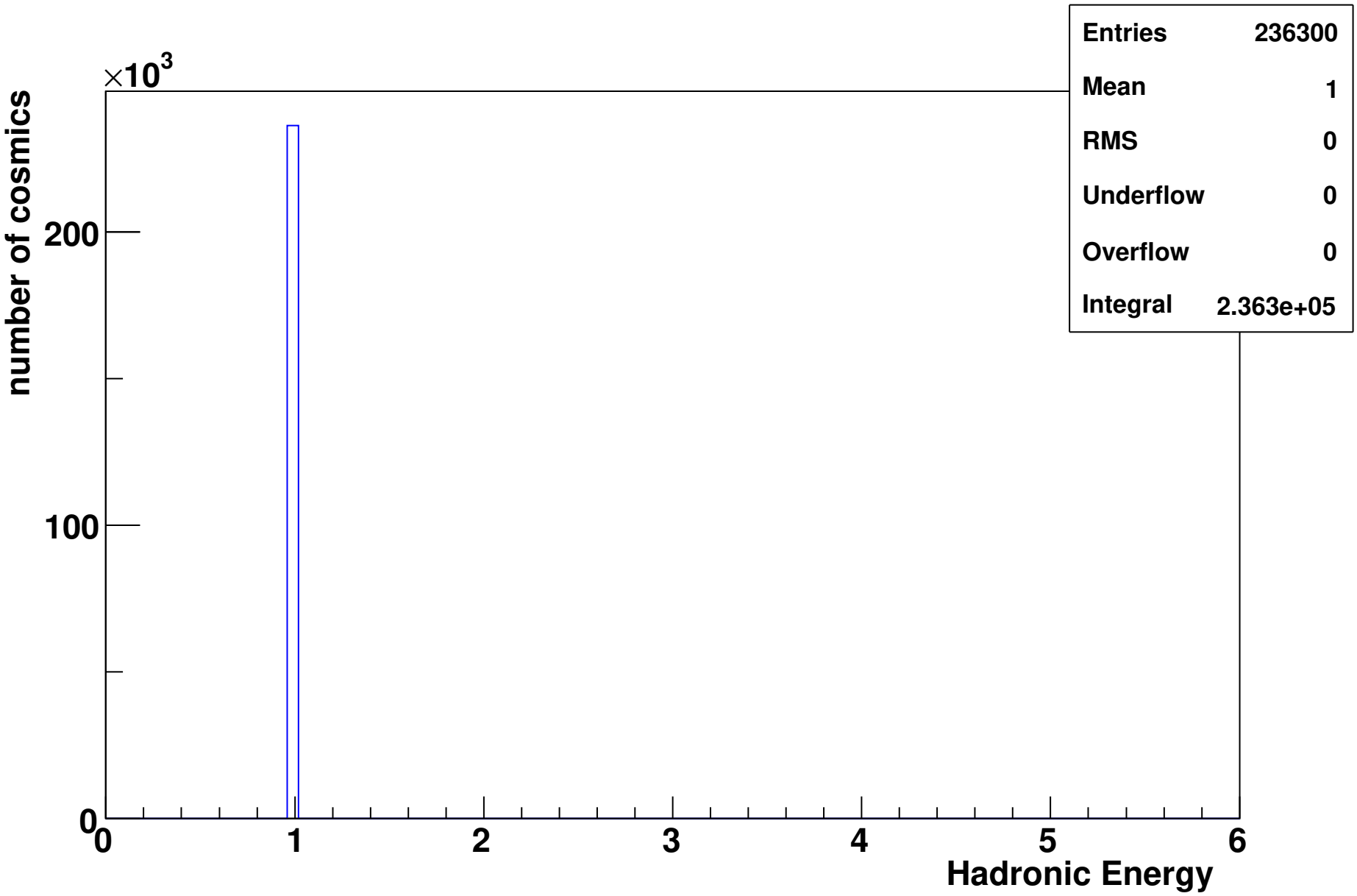

Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Integral 0
number of tracks
1
0.5
0
0
20
40
60
80
100
120
140
160
180
200
p (GeV)

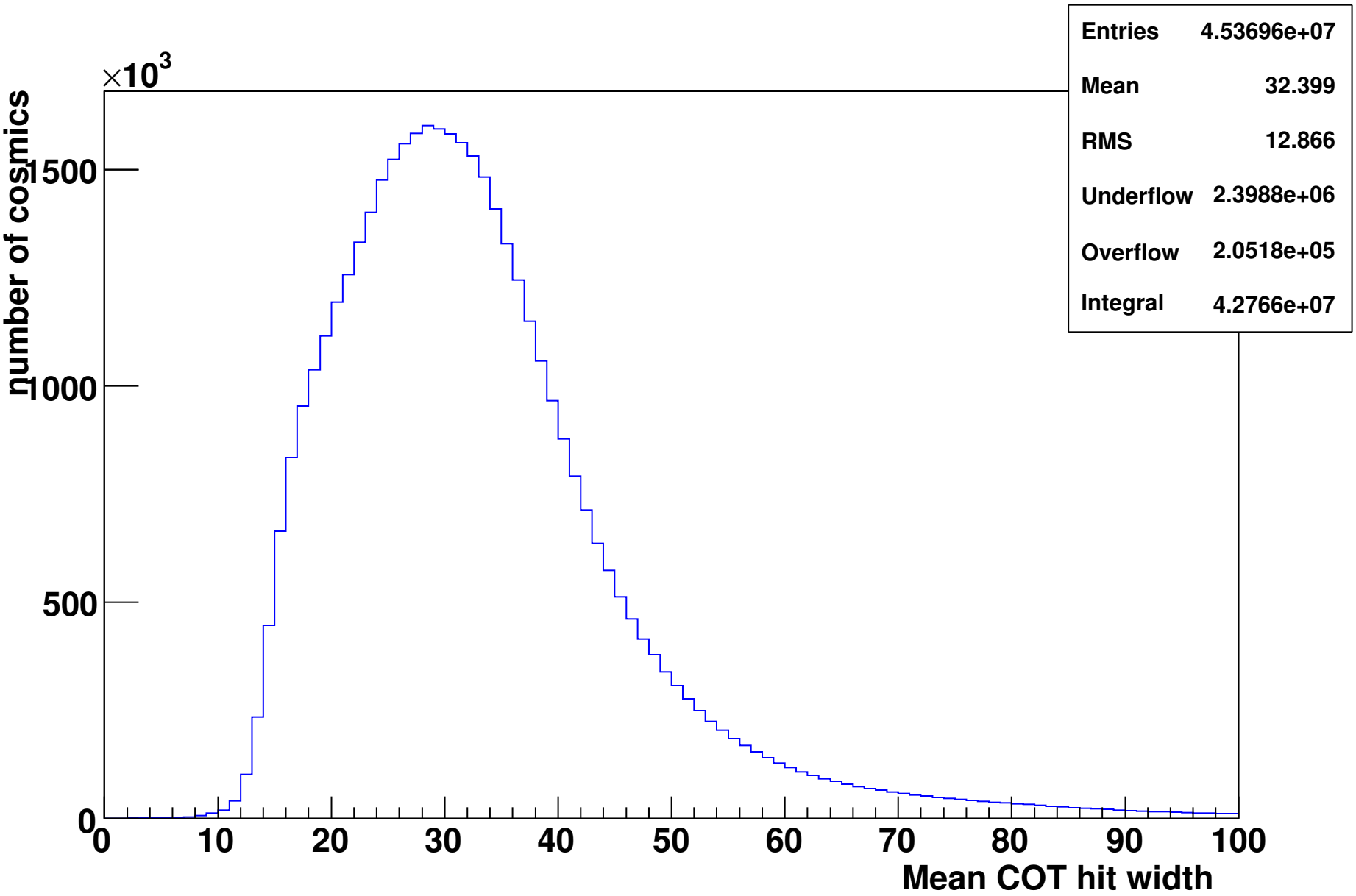

Entries 512471
Mean 35.999
RMS 31.496
Underflow 0
Overflow 9369
Integral 5.031e+05
Cosmics
40000
20000
0
0
20
40
60
80
100
120
140
160
180
200
p_T (GeV)

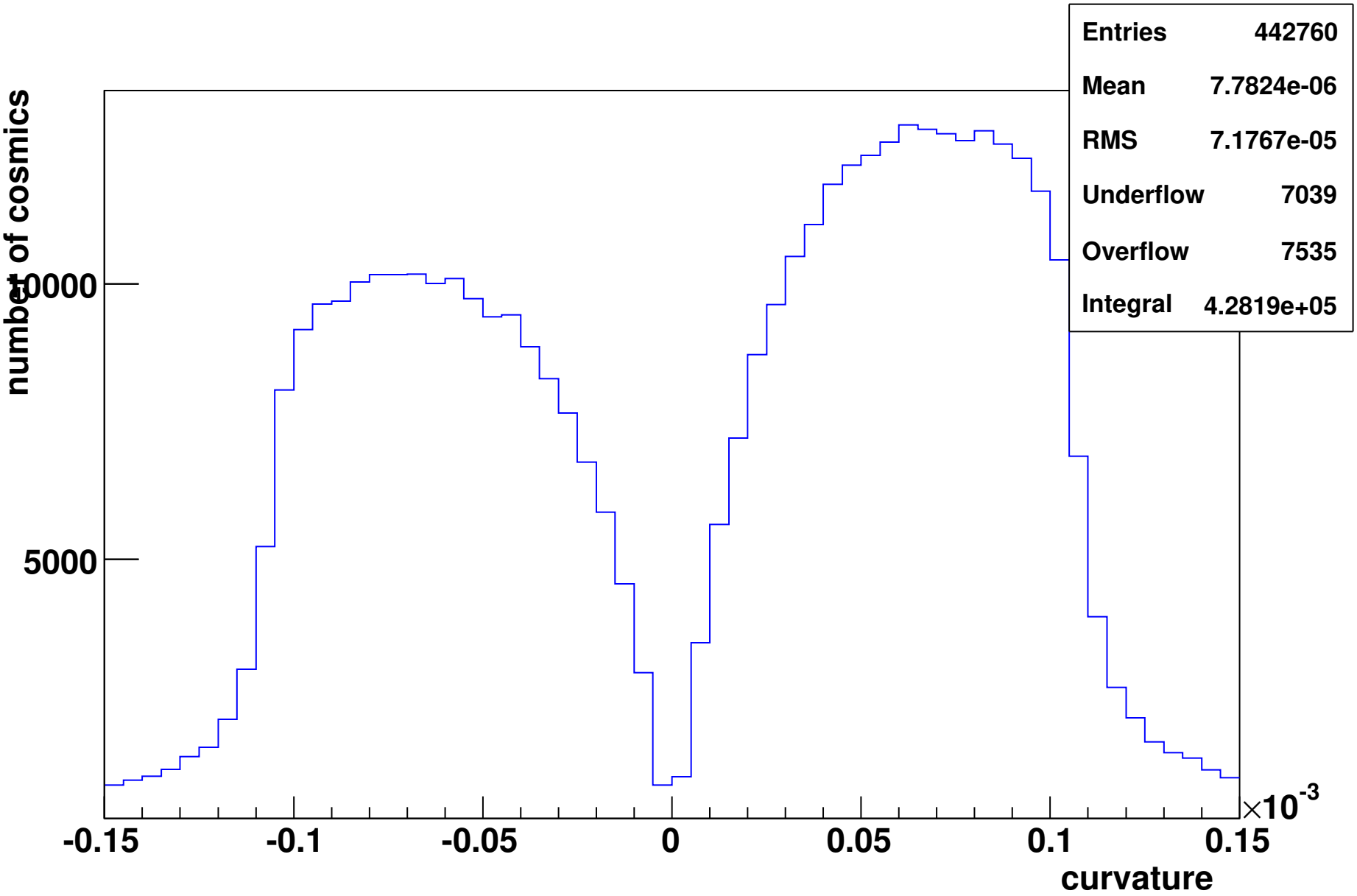


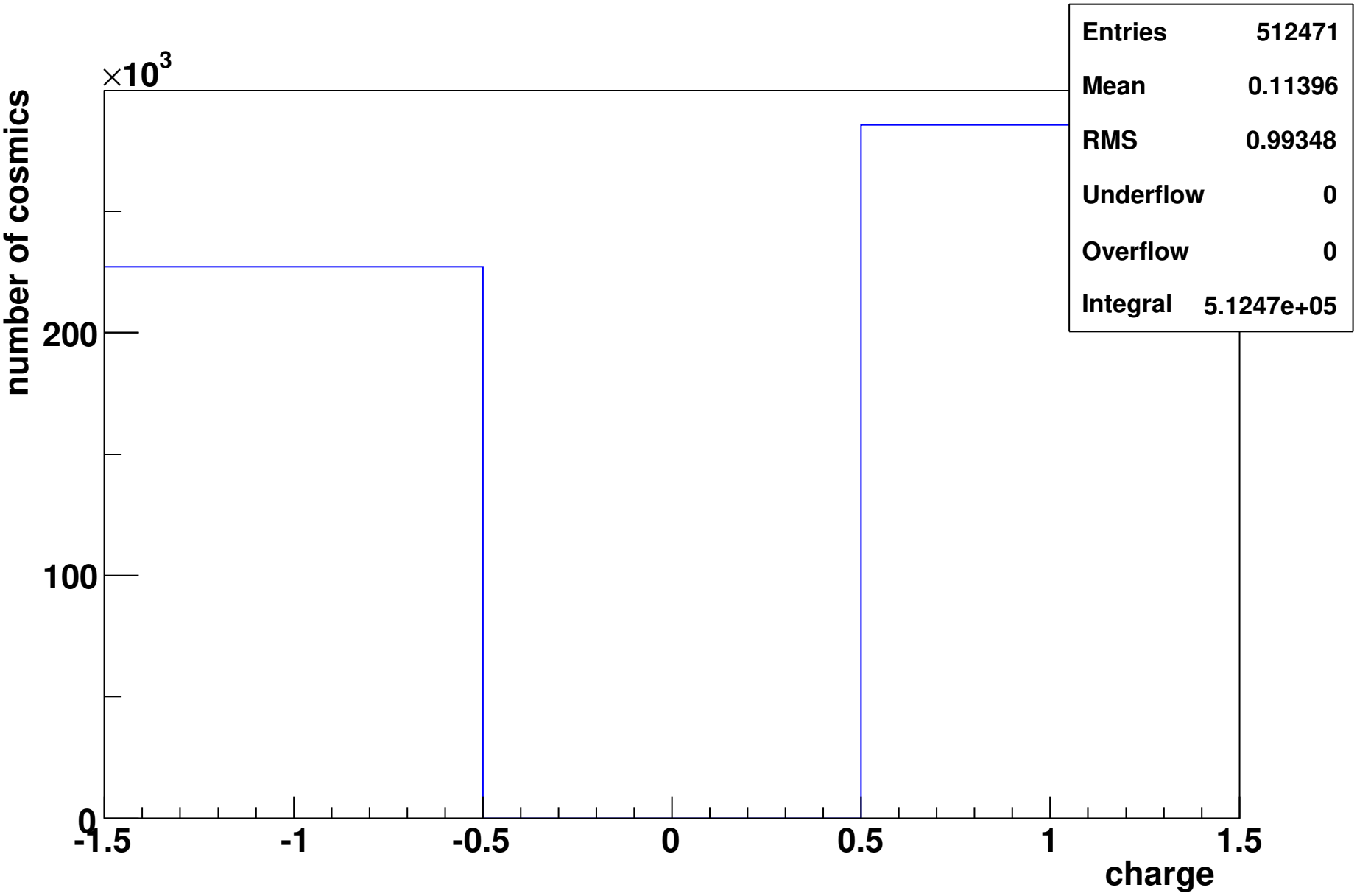
Entries 512471
Mean 37.525
RMS 32.413
Underflow 0
Overflow 10402
Integral 5.0207e+05
Ncosmics
60000
40000
20000
0
0
20
40
60
80
100
120
140
160
180
200
p (GeV)

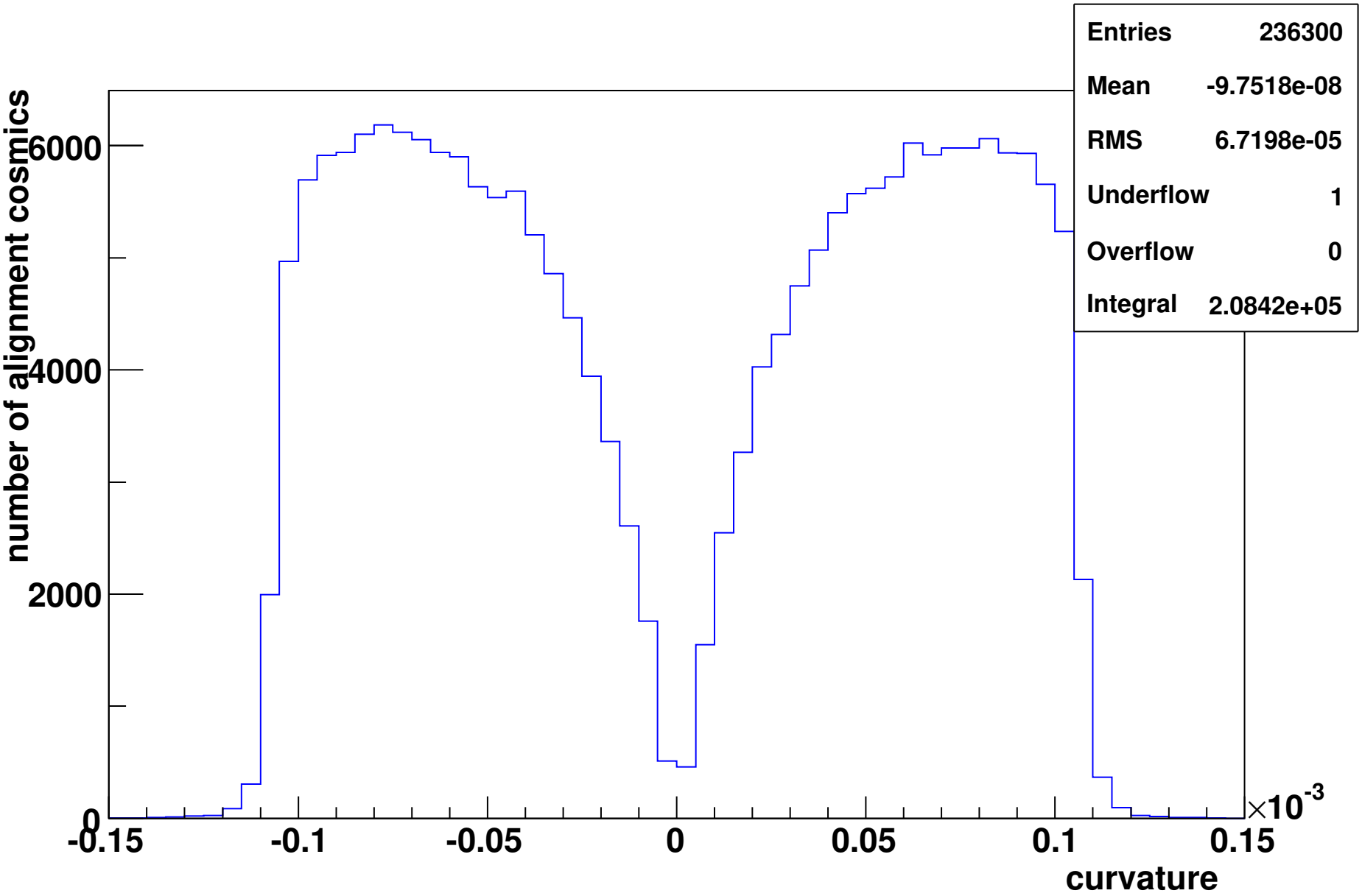

Entries 236300
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.363e+05
×10^3
number of cosmics
200
100
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
EM Energy

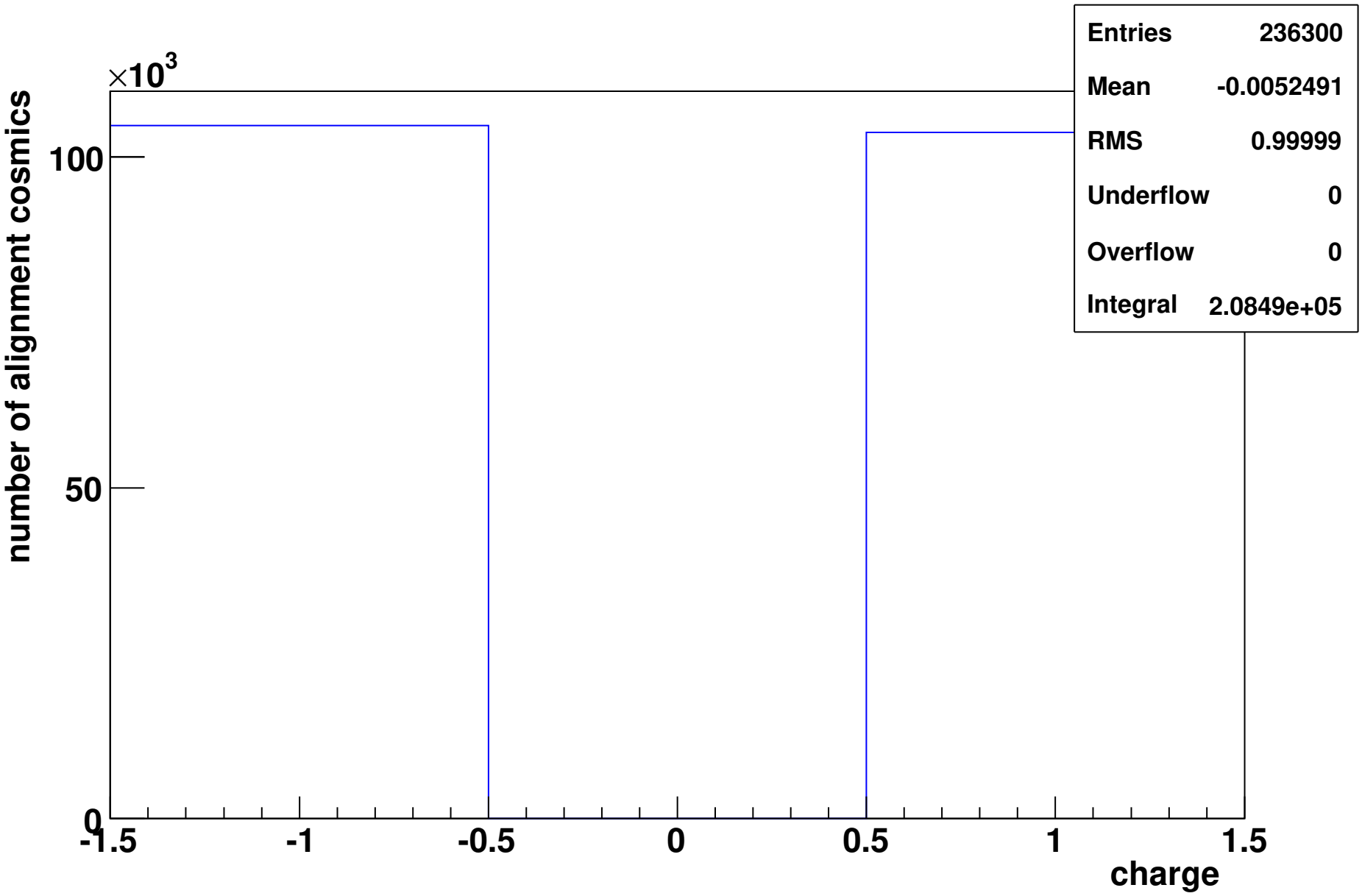

Entries 236300
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.363e+05
×10^3
number of cosmics
200
100
0
0
1
2
3
4
5
6
Hadronic Energy

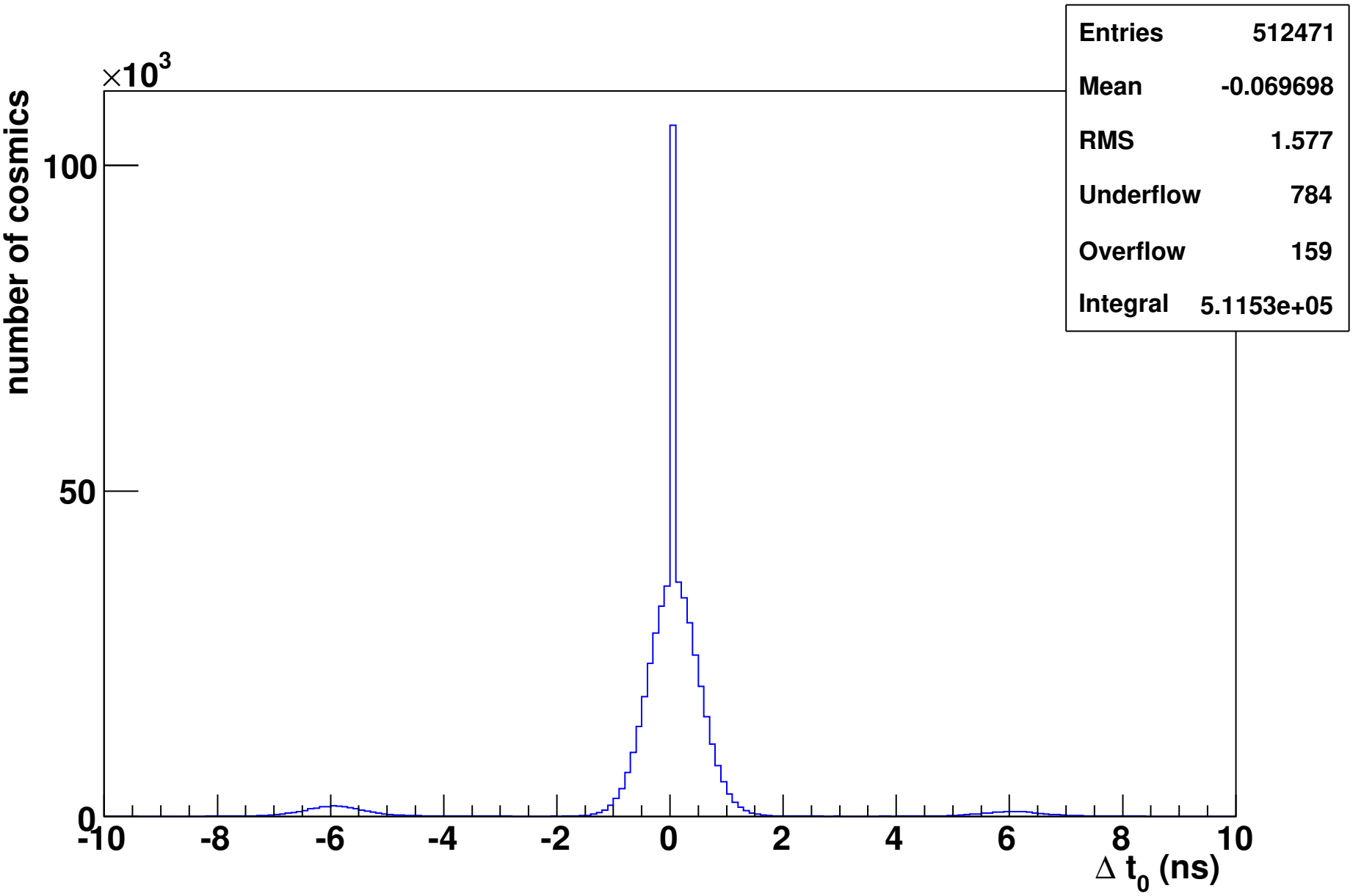

Entries 4.53696e+07
Mean 32.399
RMS 12.866
Underflow 2.3988e+06
Overflow 2.0518e+05
Integral 4.2766e+07
×10^3
number of cosmics
1500
1000
500
0
0
10
20
30
40
50
60
70
80
90
100
Mean COT hit width

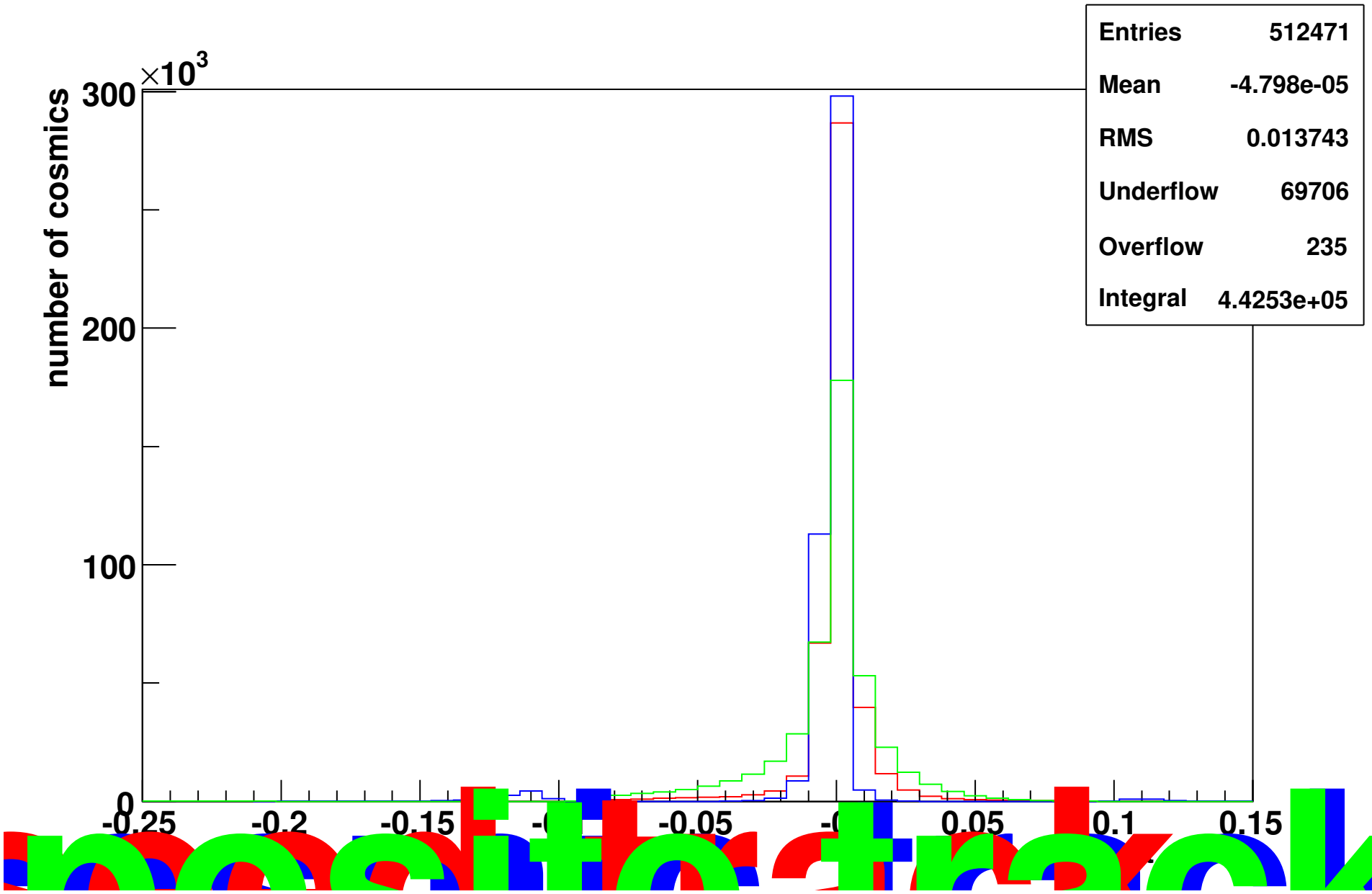

Entries 442760
Mean 7.7824e-06
RMS 7.1767e-05
Underflow 7039
Overflow 7535
Integral 4.2819e+05
number of cosmics
10000
5000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

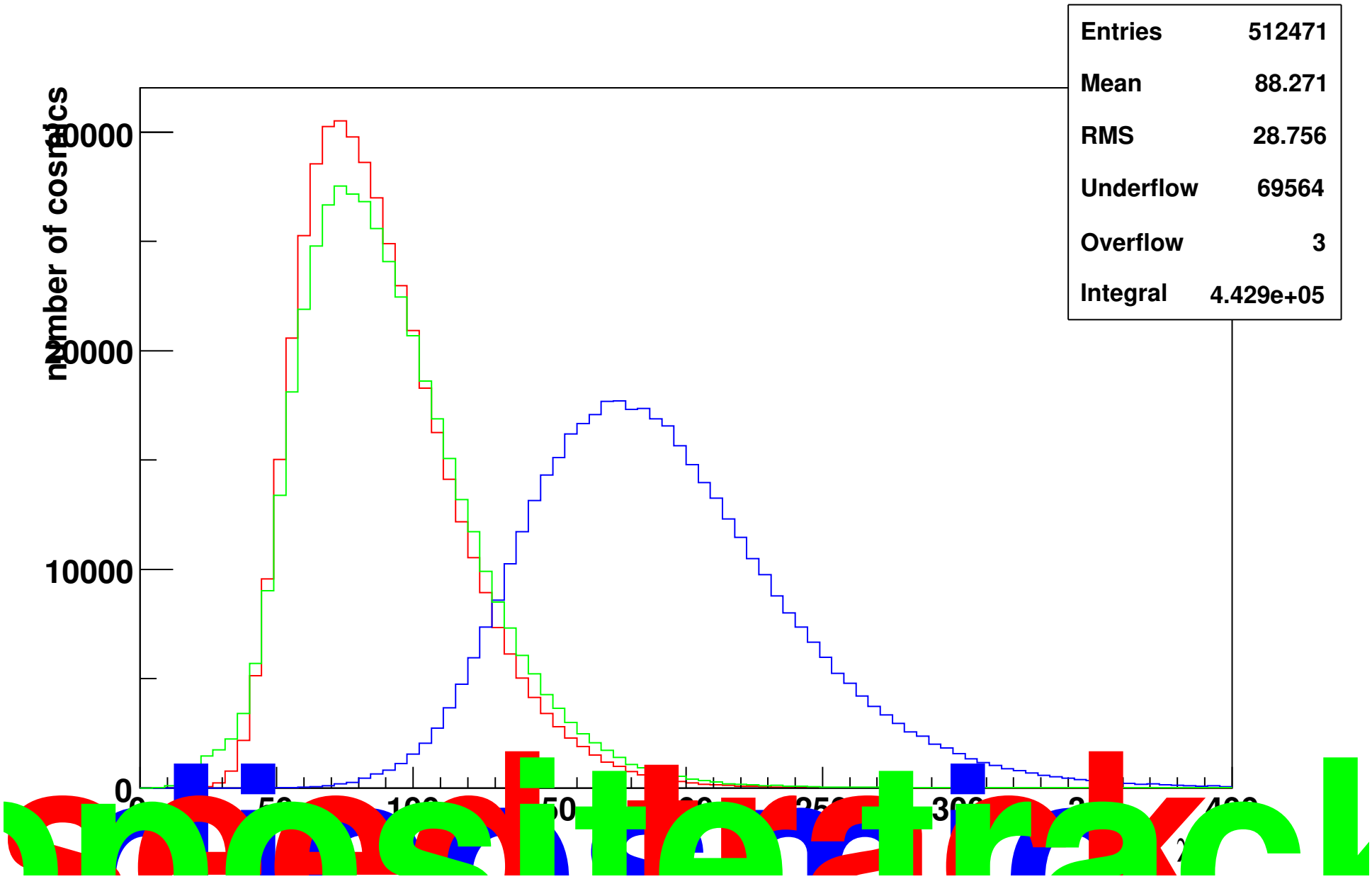

Entries 512471
Mean 0.11396
RMS 0.99348
Underflow 0
Overflow 0
Integral 5.1247e+05
×10^3
number of cosmics
200
100
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge

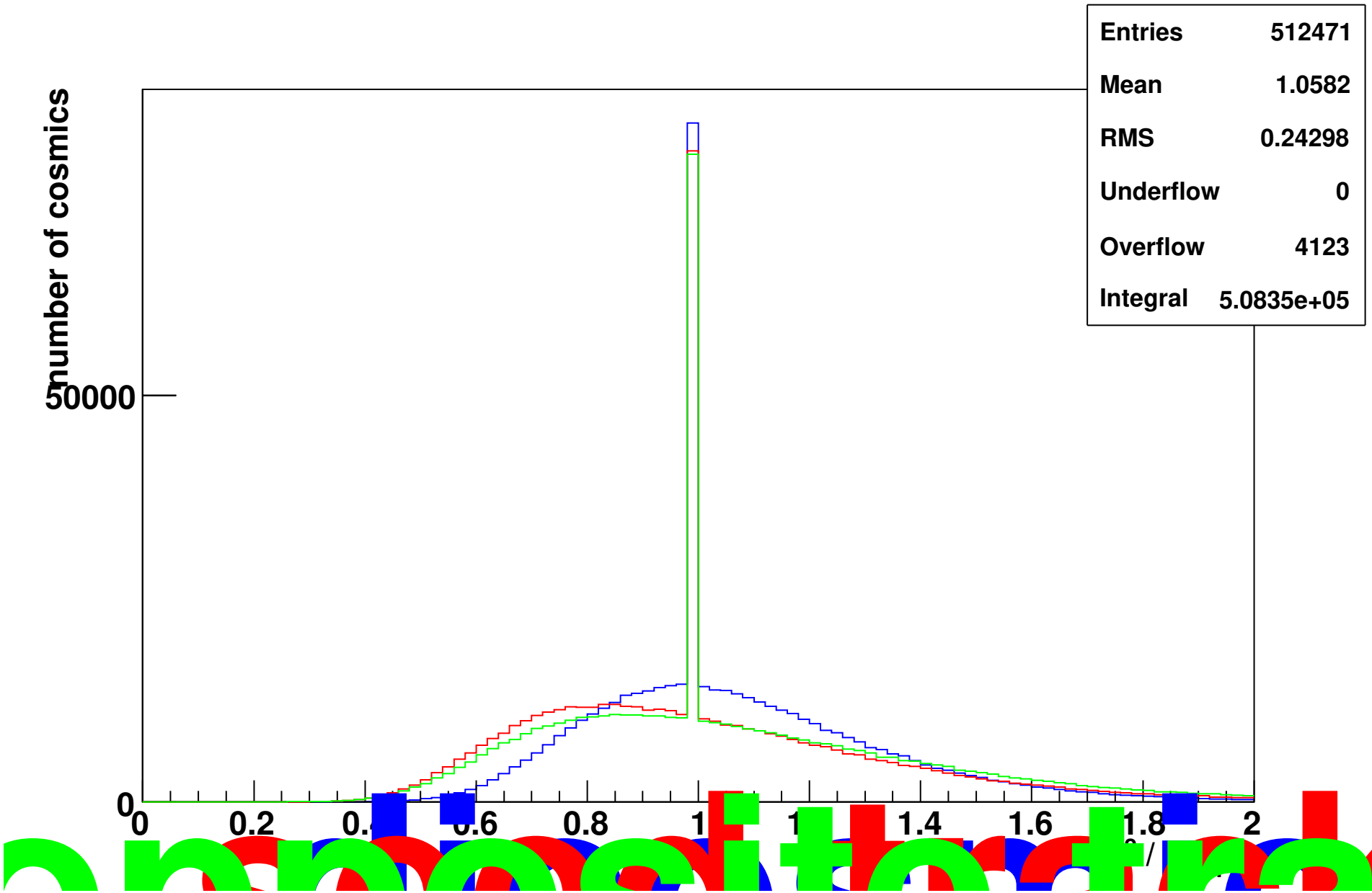

Entries 236300
Mean -9.7518e-08
RMS 6.7198e-05
Underflow 1
Overflow 0
Integral 2.0842e+05
number of alignment cosmics
6000
4000
2000
0
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

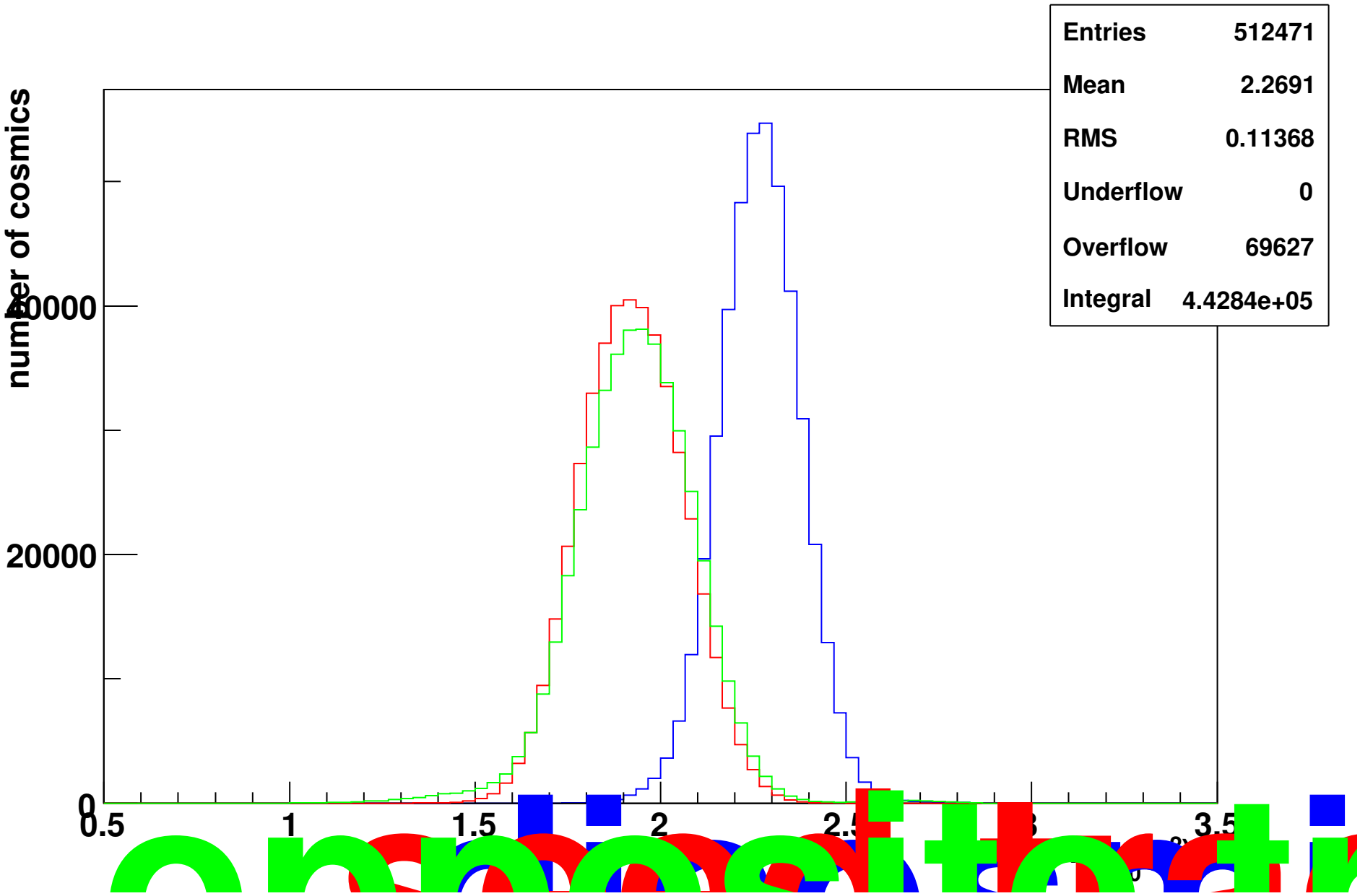

Entries 236300
Mean -0.0052491
RMS 0.99999
Underflow 0
Overflow 0
Integral 2.0849e+05
×10^3
number of alignment cosmics
100
50
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge


Entries 512471
Mean -0.069698
RMS 1.577
Underflow 784
Overflow 159
Integral 5.1153e+05
×10^3
number of cosmics
100
50
0
-10
-8
-6
-4
-2
0
2
4
6
8
10
Δ t0 (ns)

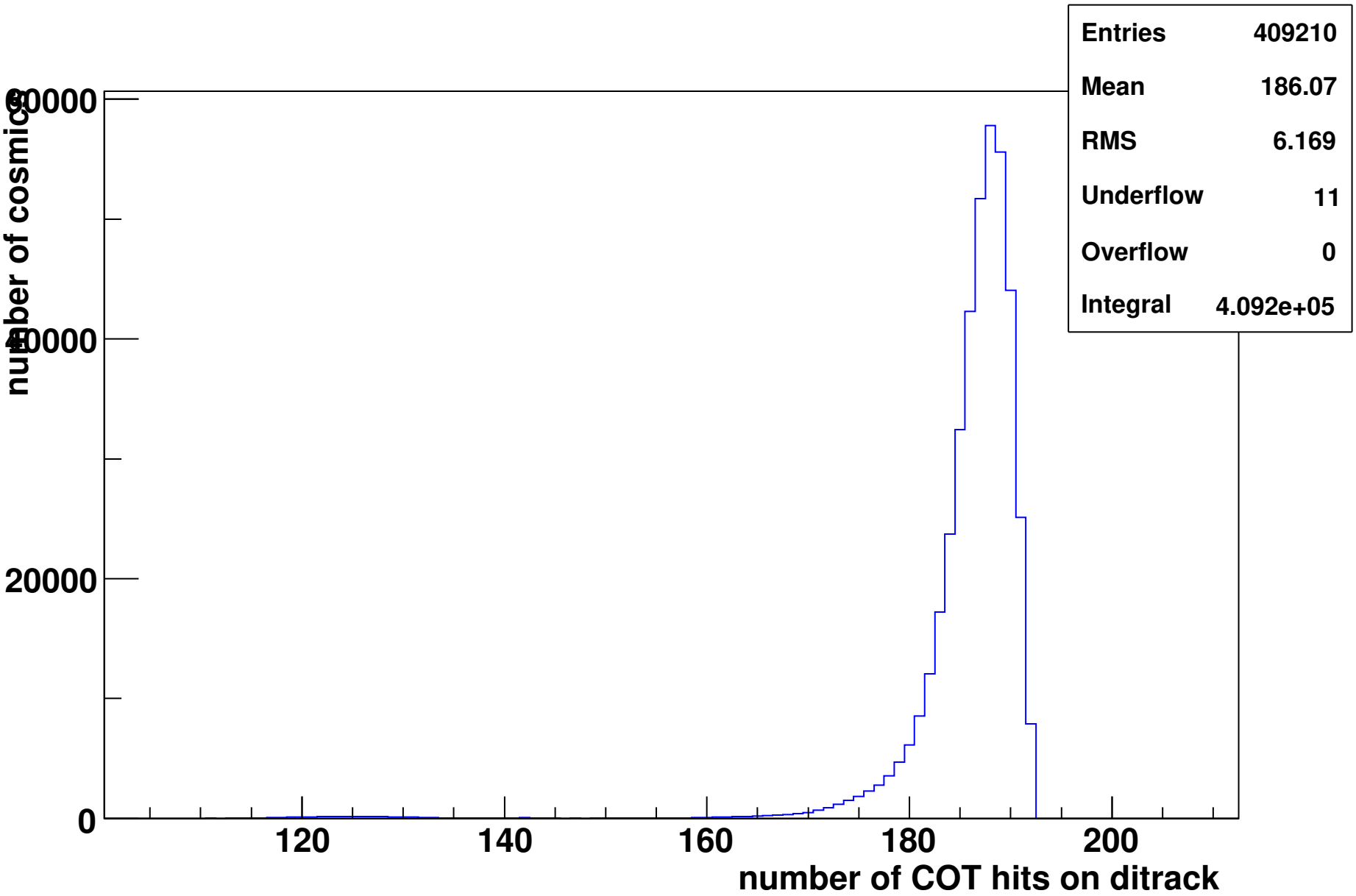

Entries 512471
Mean -4.798e-05
RMS 0.013743
Underflow 69706
Overflow 235
Integral 4.4253e+05
number of cosmics
×10^3
300
200
100
0
-0.25
-0.2
-0.15
-0.05
0.05
0.1
0.15

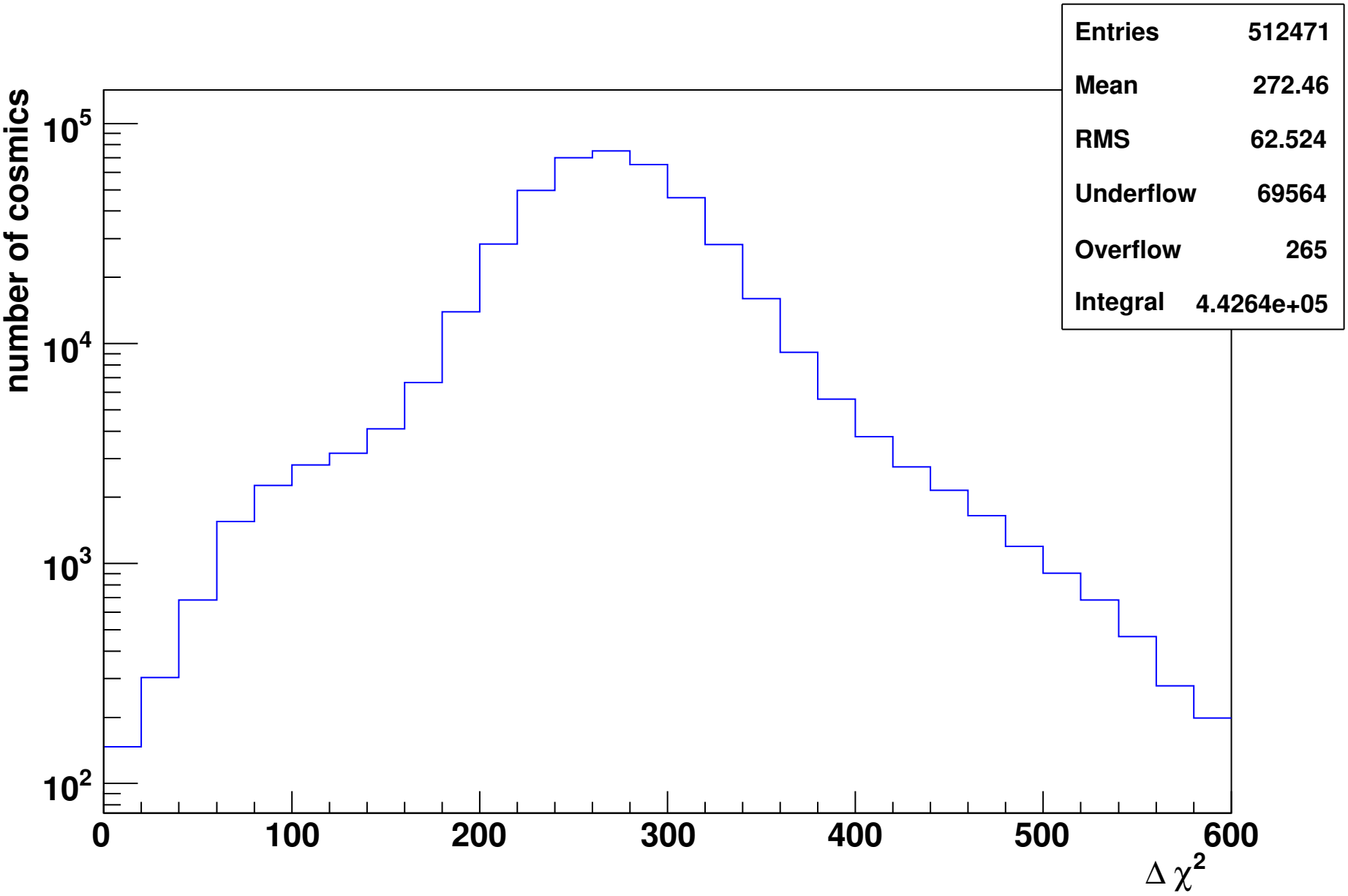

Entries 512471
Mean 88.271
RMS 28.756
Underflow 69564
Overflow 3
Integral 4.429e+05
number of cosmics
20000
10000
0

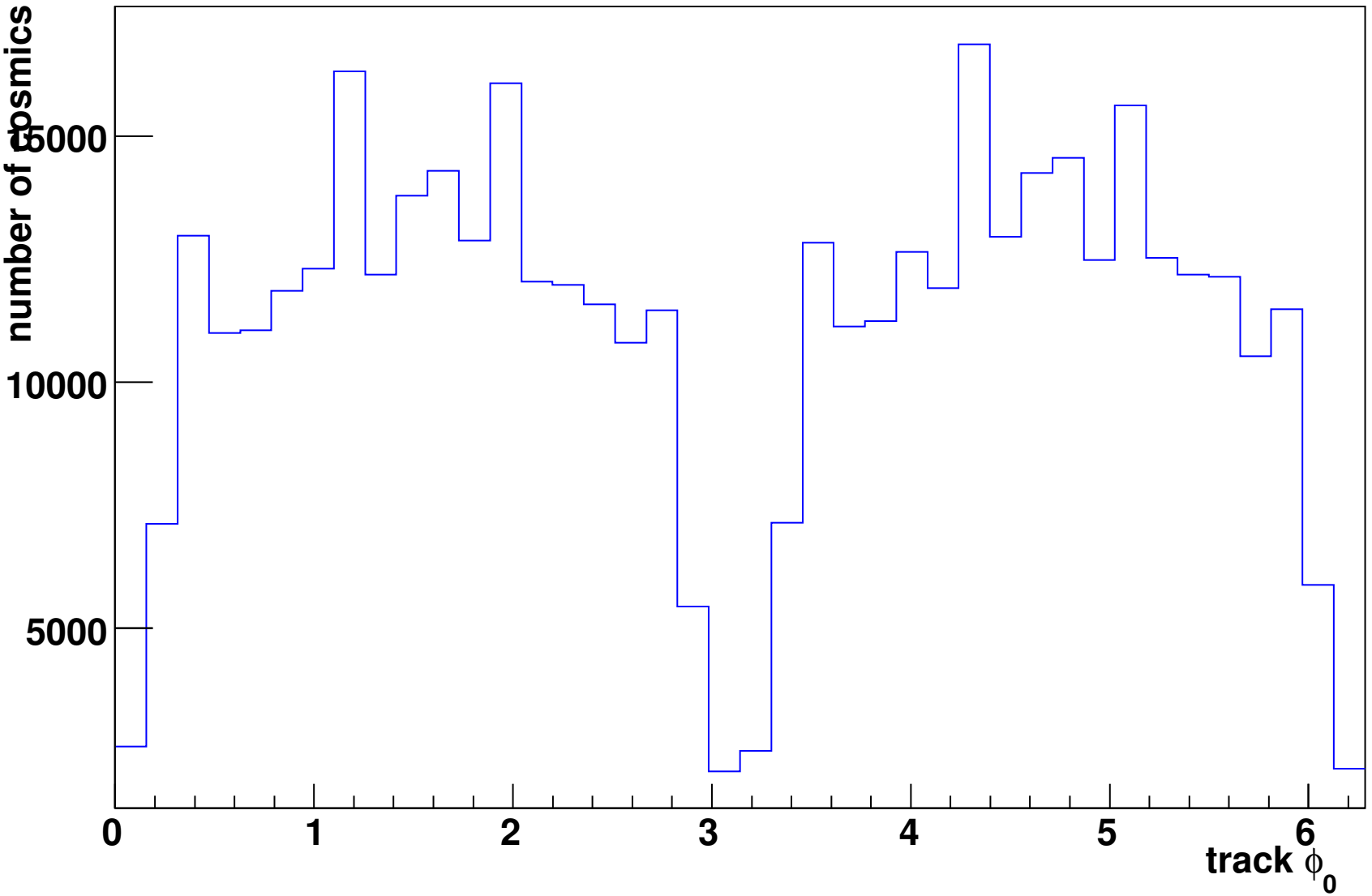

Entries 512471
Mean 1.0582
RMS 0.24298
Underflow 0
Overflow 4123
Integral 5.0835e+05
number of cosmics
50000
0
0
0.2
0.6
0.8
1.4
1.6
1.8
2

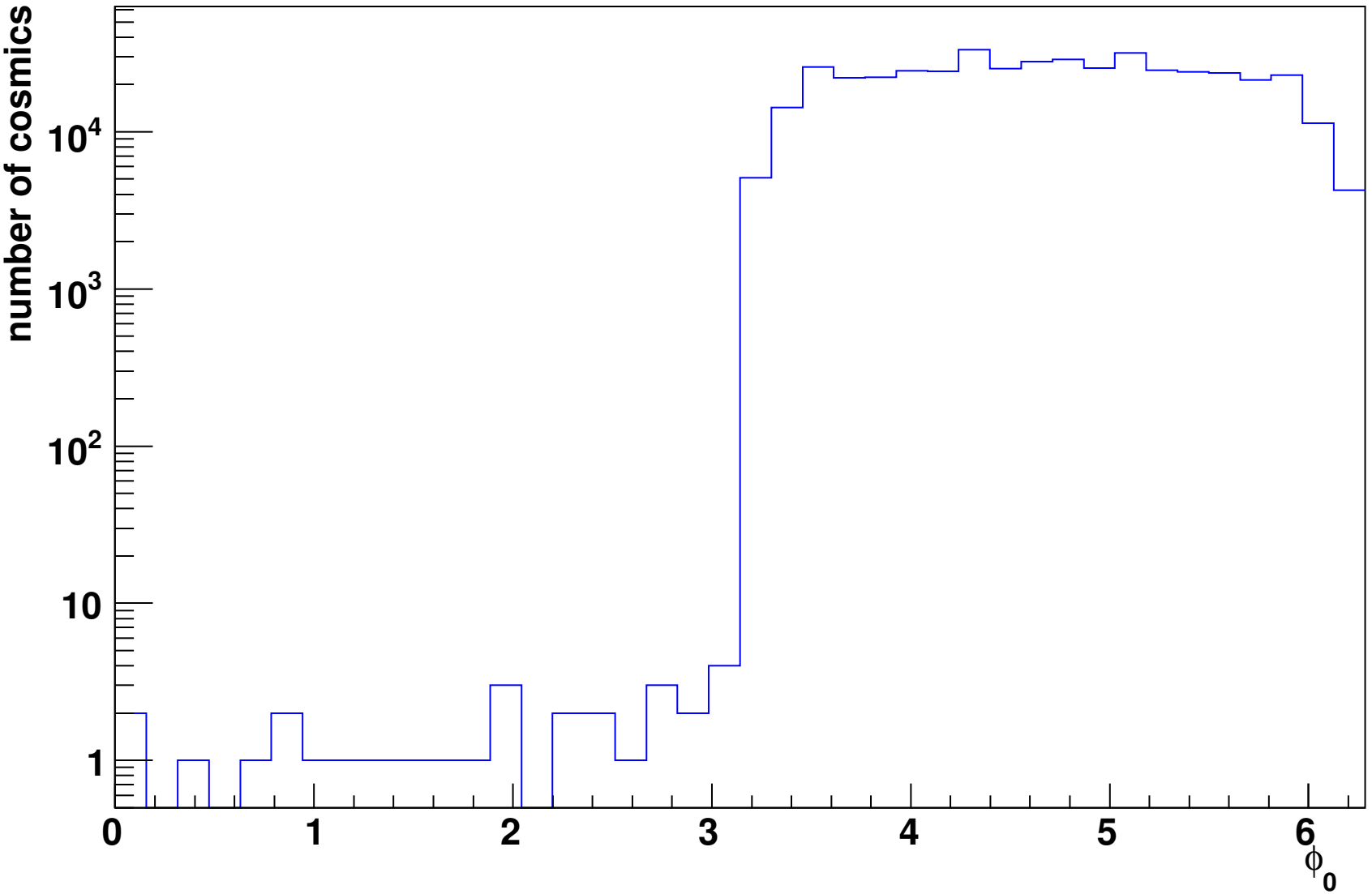

Entries 512471
Mean 2.2691
RMS 0.11368
Underflow 0
Overflow 69627
Integral 4.4284e+05
number of cosmics
40000
20000
0
0.5
1
1.5
2
2.5
3.5

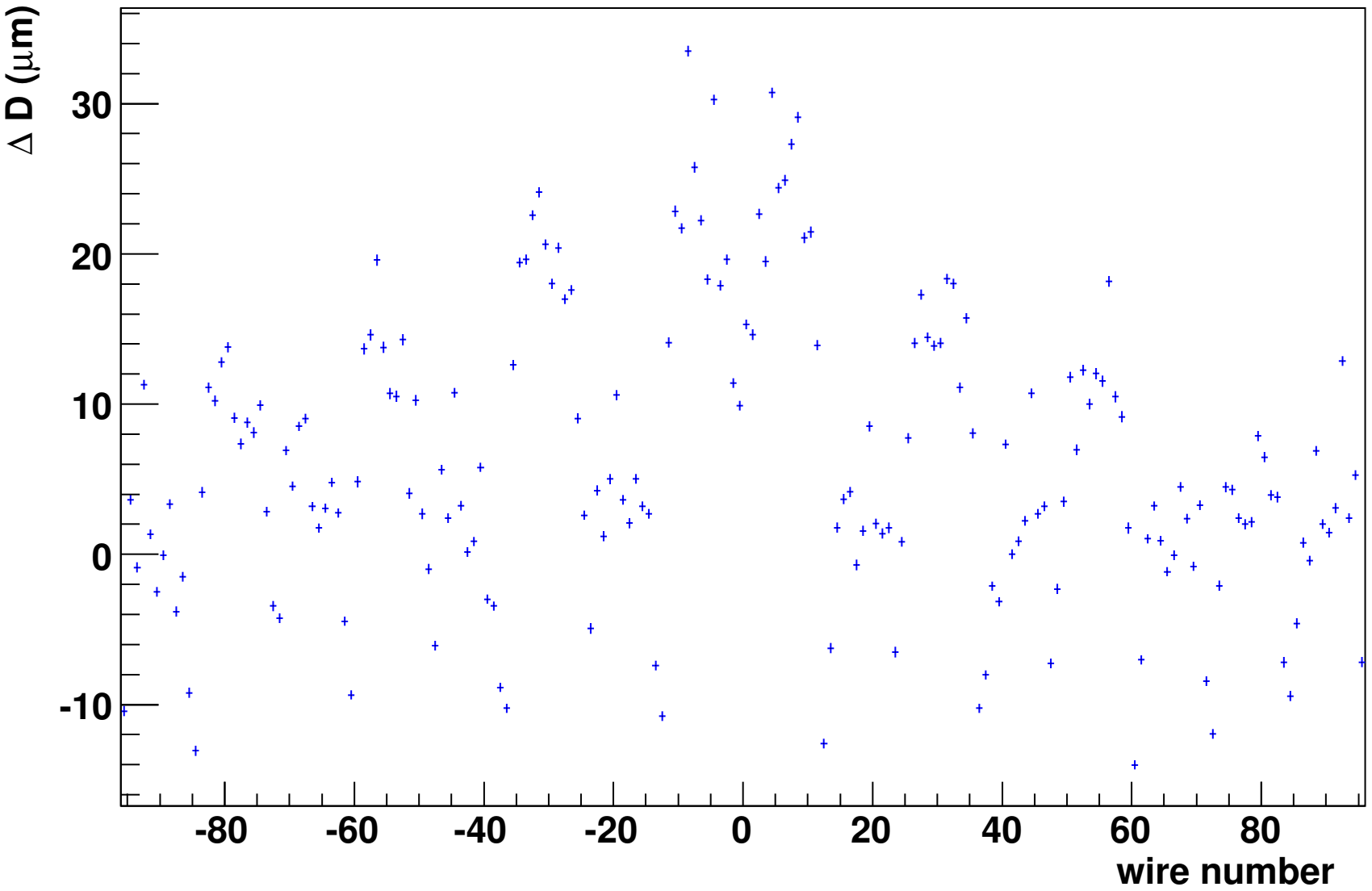
cosmic
cosmic
g pair
g pair
Entries 512471
number of ditracks
10^5
10^4
10^3
10^2
-0.5
0
0.5
1
2
3
4
4.5
ditrack type

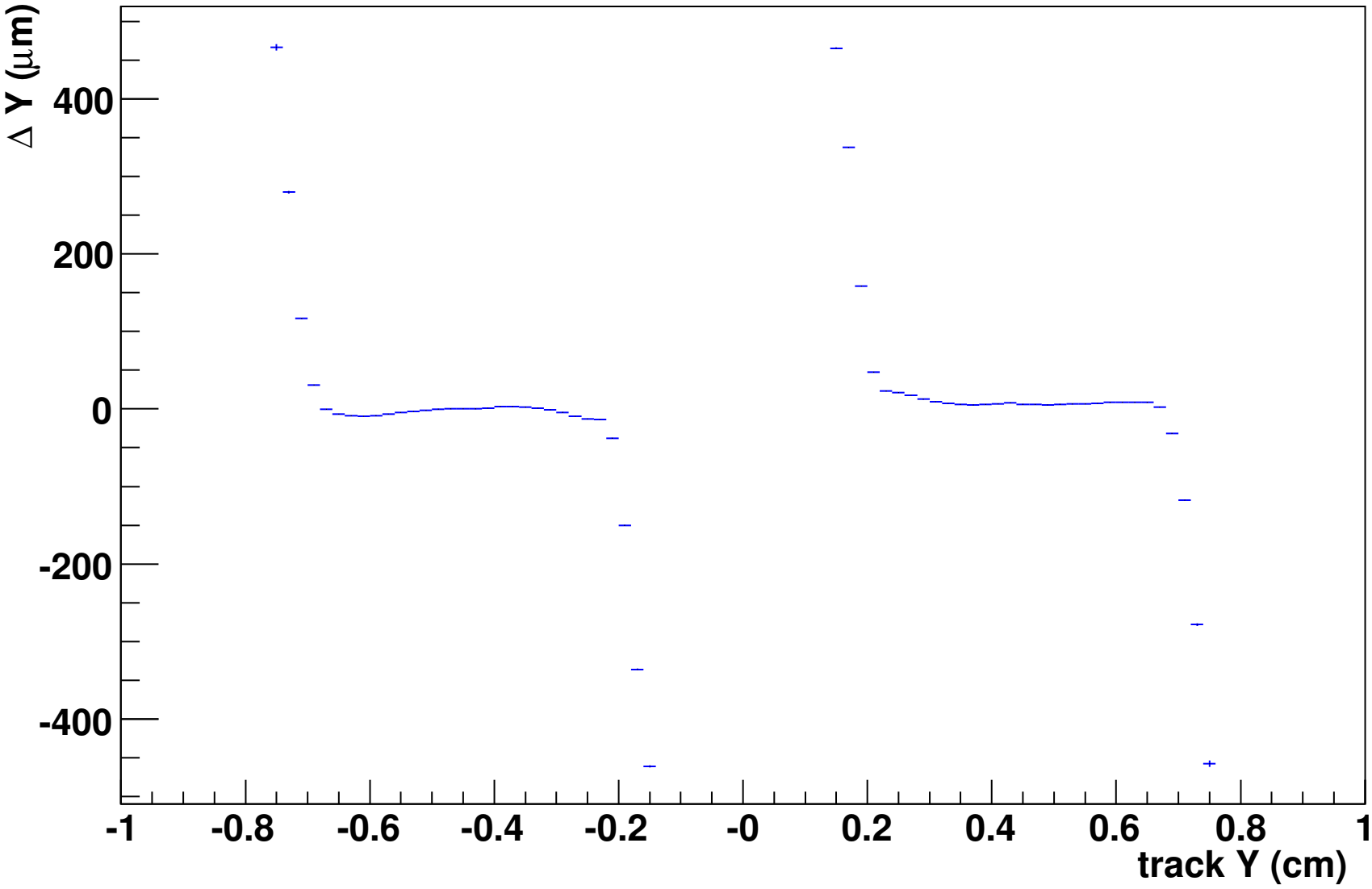

Entries 409210
Mean 186.07
RMS 6.169
Underflow 11
Overflow 0
Integral 4.092e+05
number of cosmics
60000
40000
20000
0
120
140
160
180
200
number of COT hits on ditrack

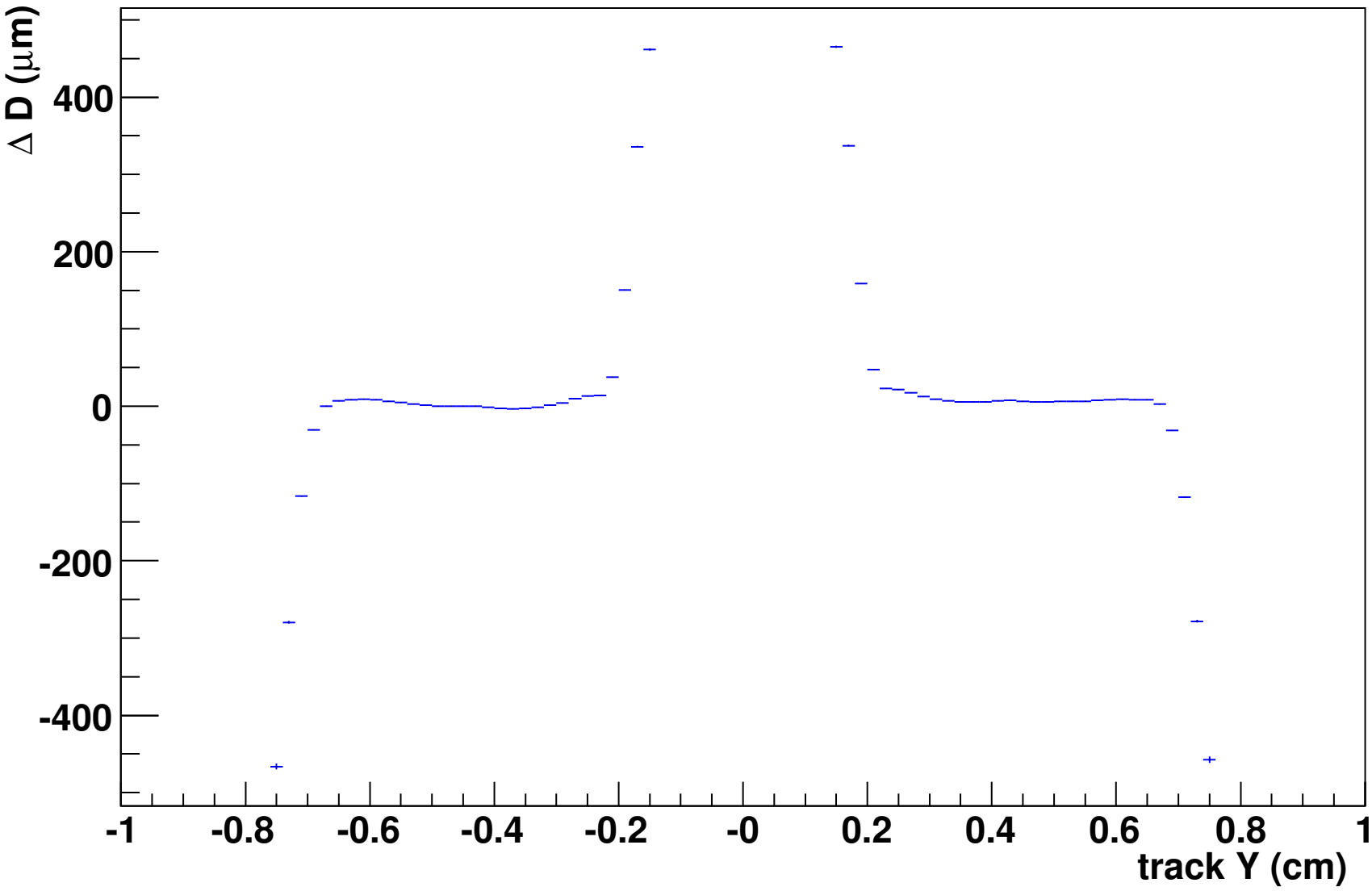

Entries 512471
Mean 272.46
RMS 62.524
Underflow 69564
Overflow 265
Integral 4.4264e+05
number of cosmics
10^5
10^4
10^3
10^2
0
100
200
300
400
500
600
$\Delta\,\chi^2$

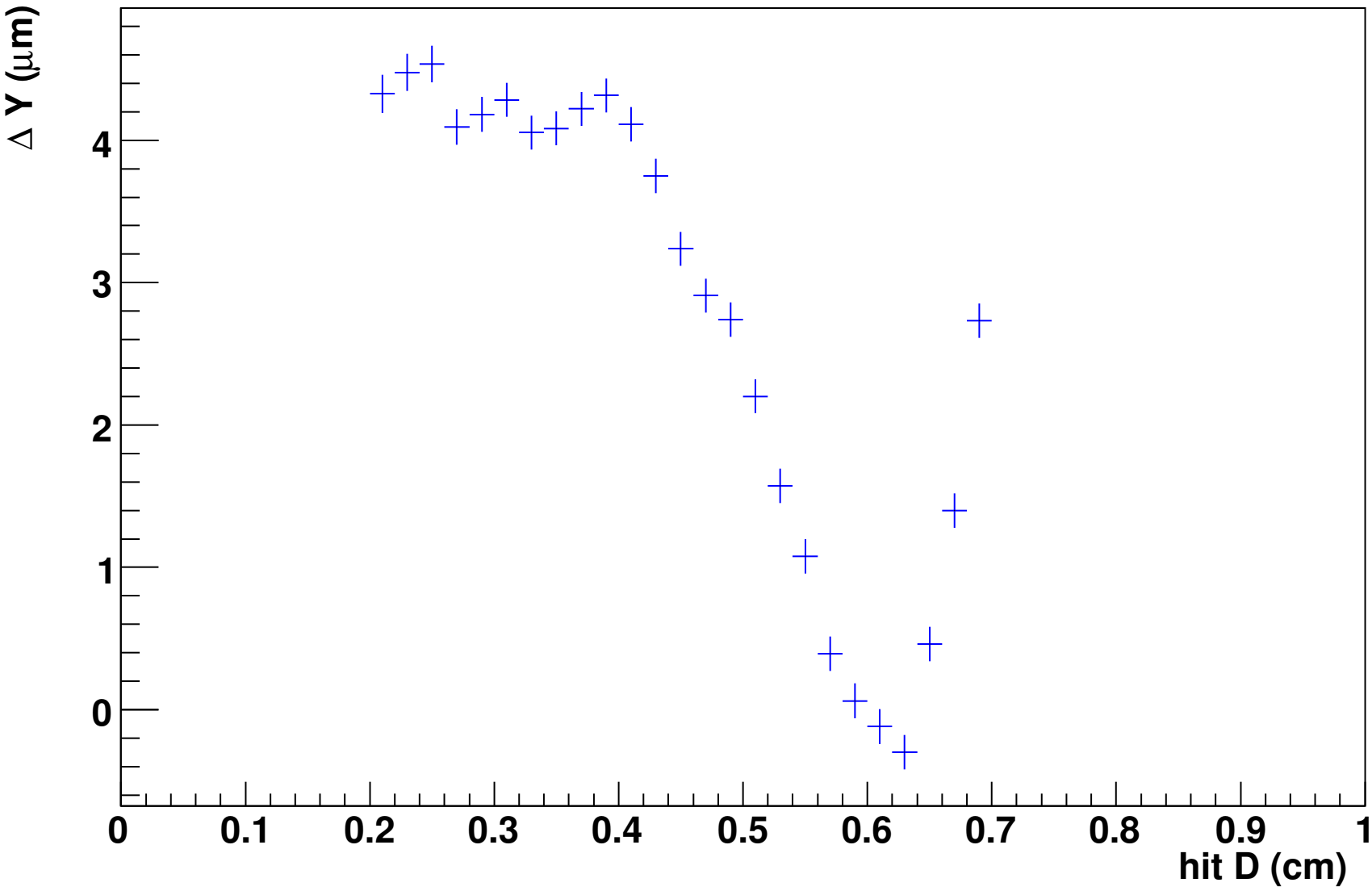

number of cosmics
5000
10000
0
1
2
3
4
5
6
track ϕ_0

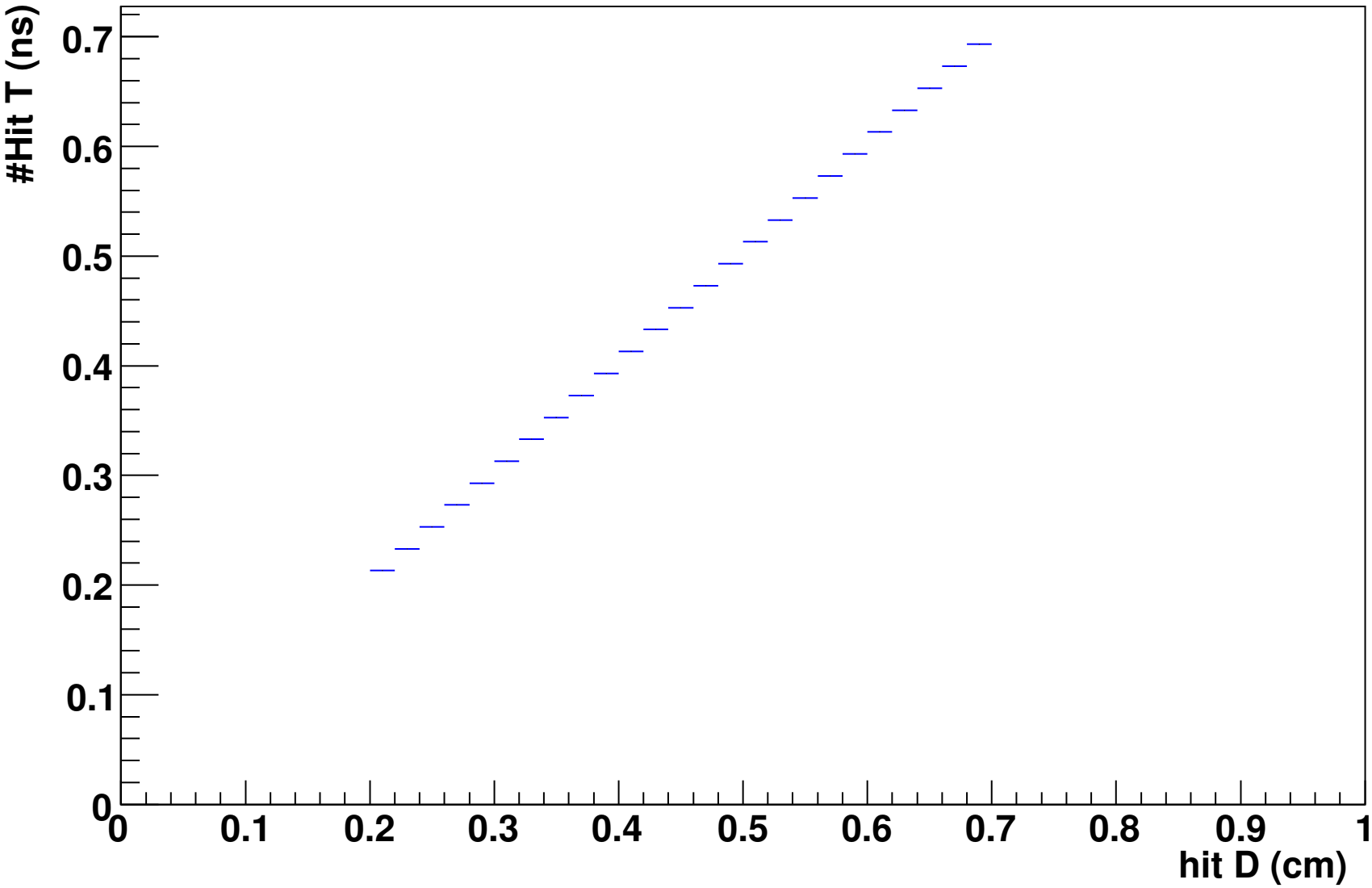

number of cosmics
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
ϕ_0

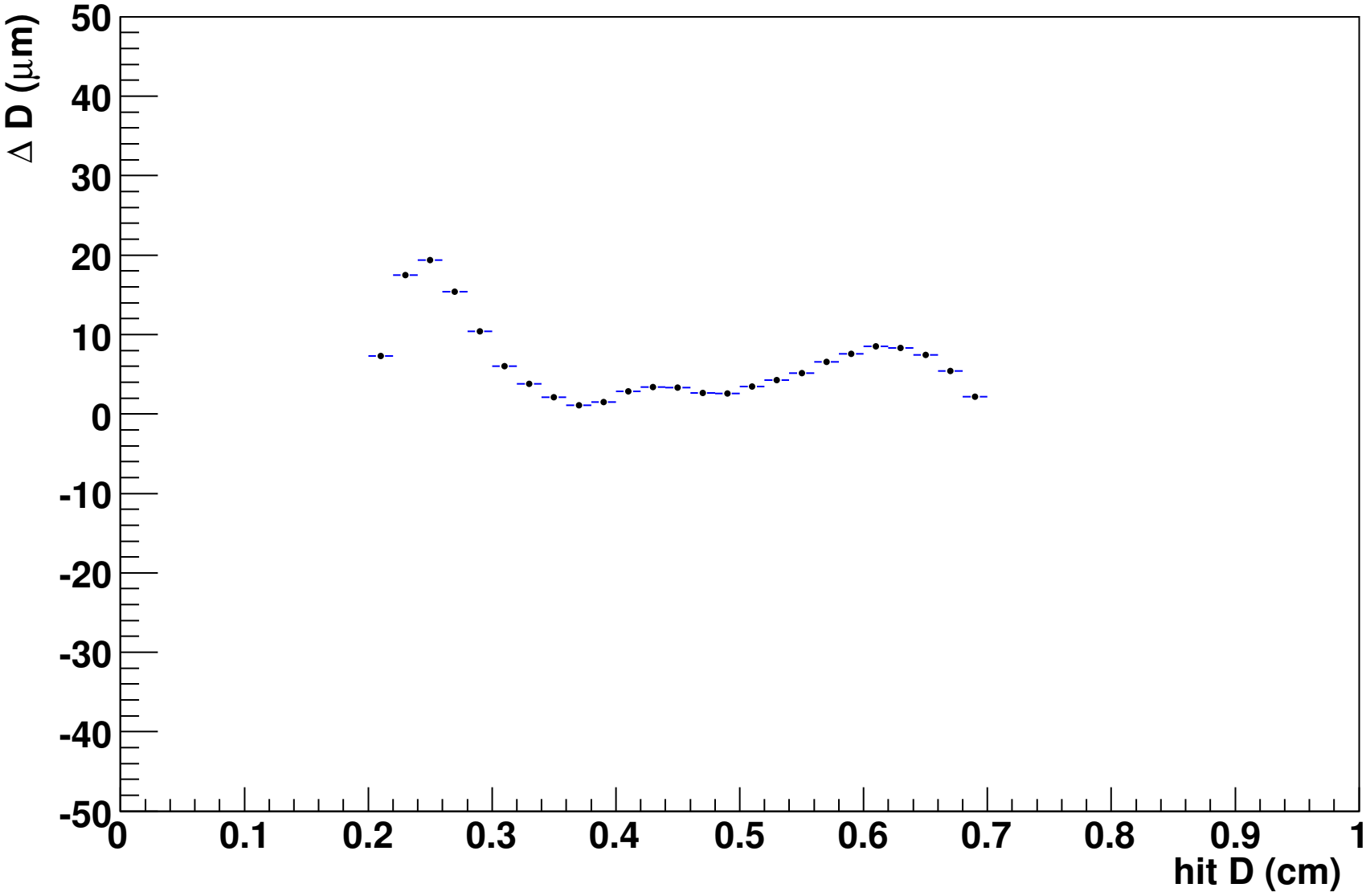

Δ D (μm)
30
20
10
0
-10
-80
-60
-40
-20
0
20
40
60
80
wire number

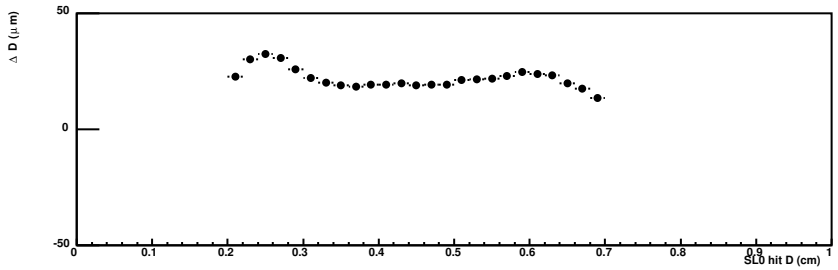

Δ Y (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

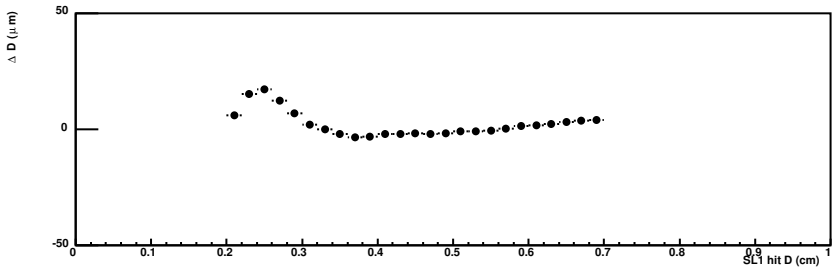

Δ D (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

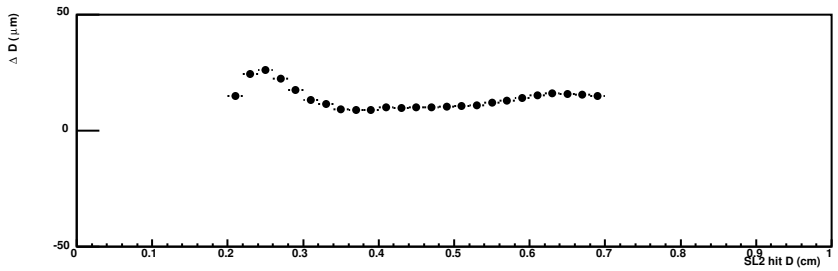

Δ Y (μm)
4
3
2
1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

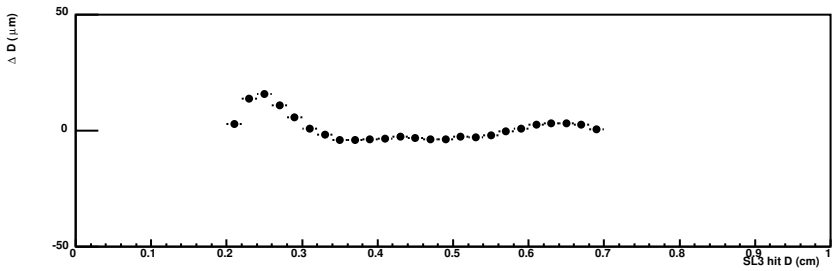

#Hit T (ns)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

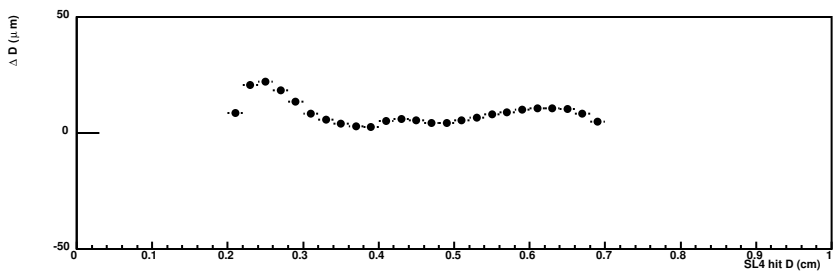

Δ D (μm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

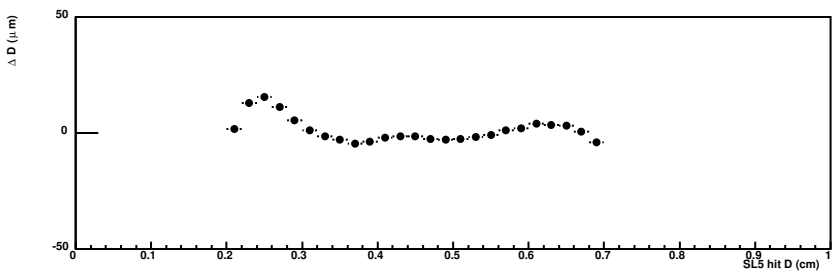

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL0 hit D (cm)

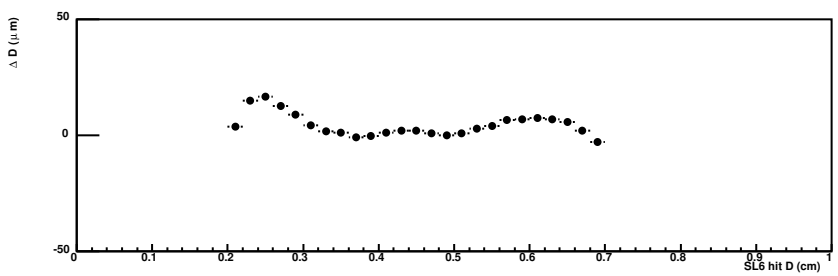

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL1 hit D (cm)

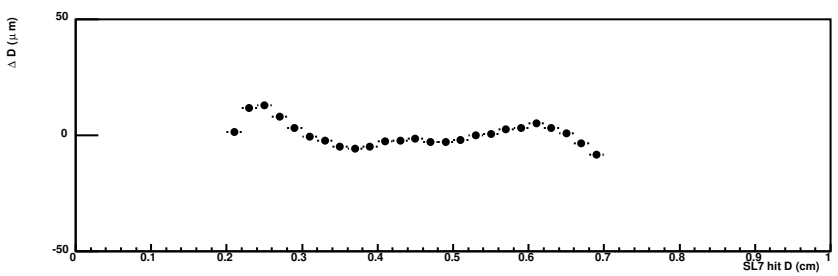

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL2 hit D (cm)

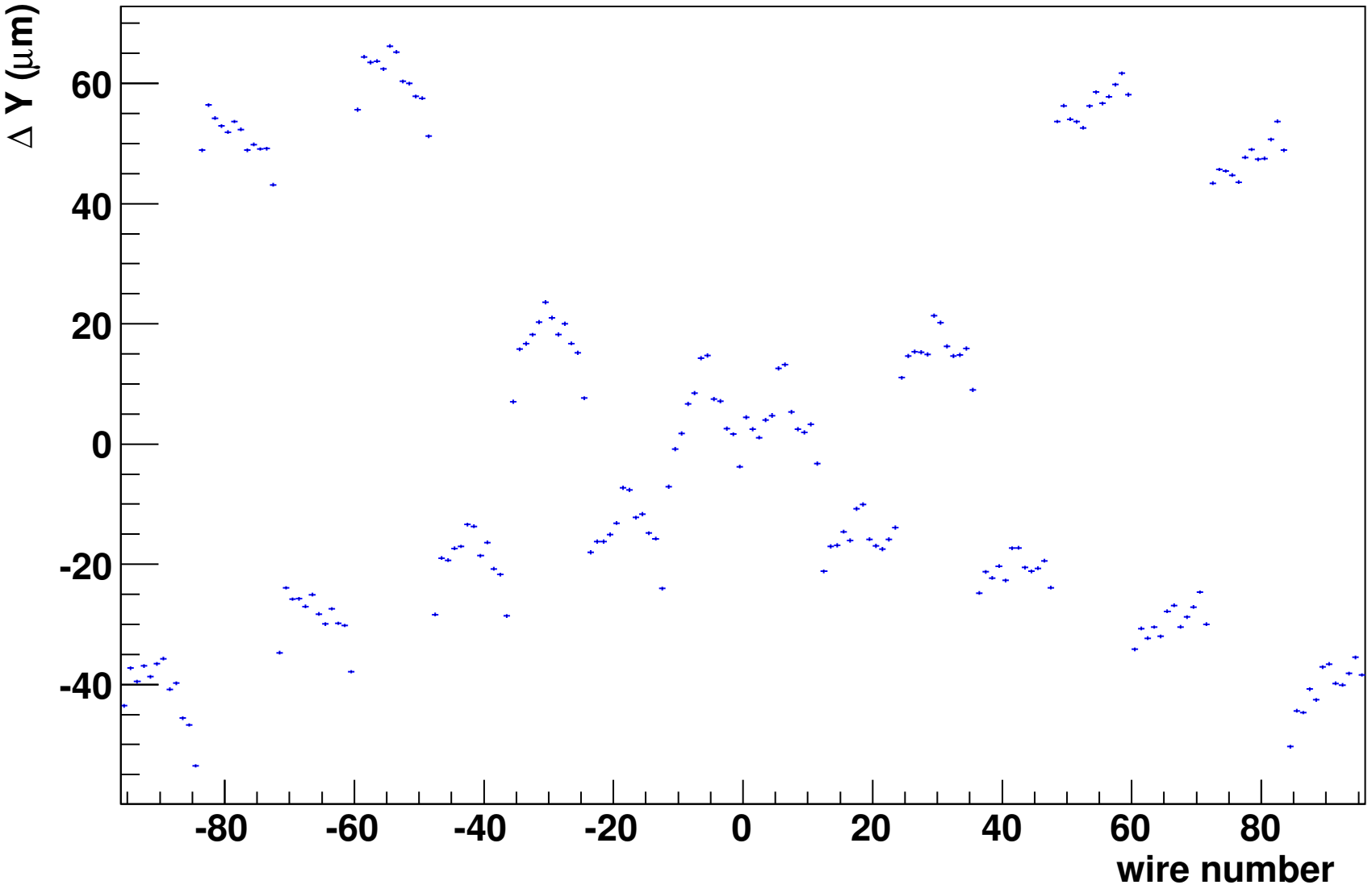

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL3 hit D (cm)

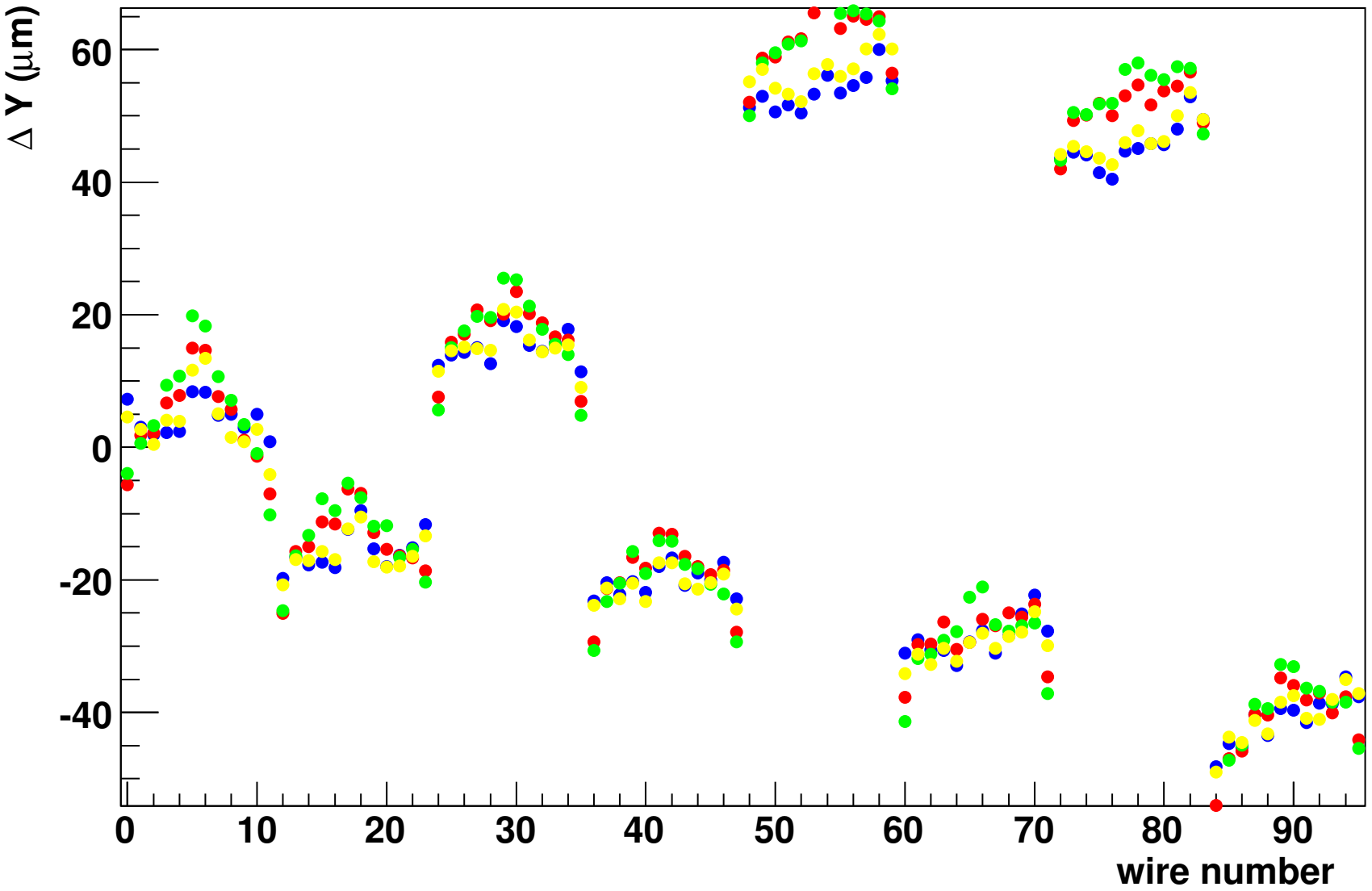

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL4 hit D (cm)

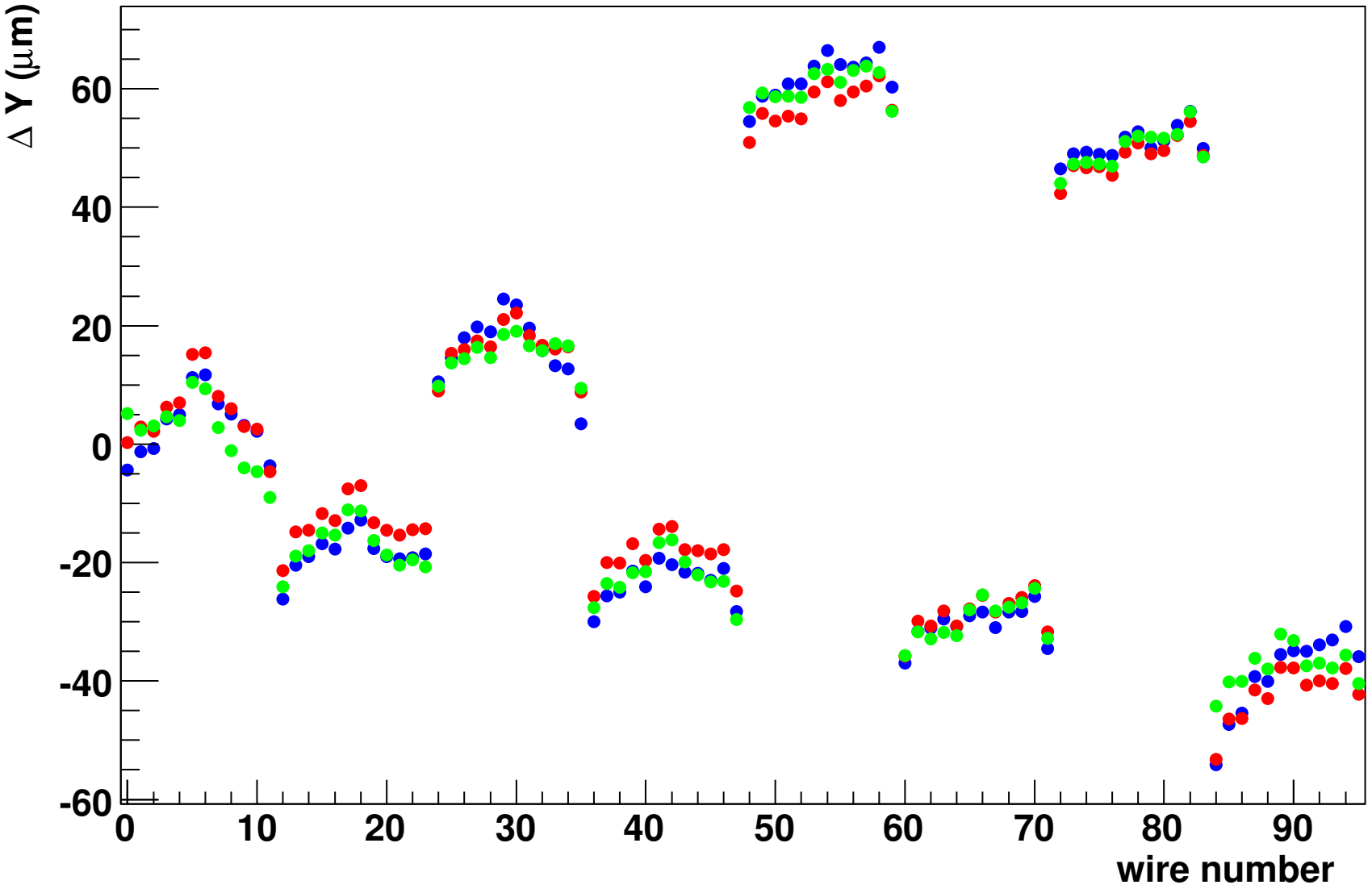

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL5 hit D (cm)

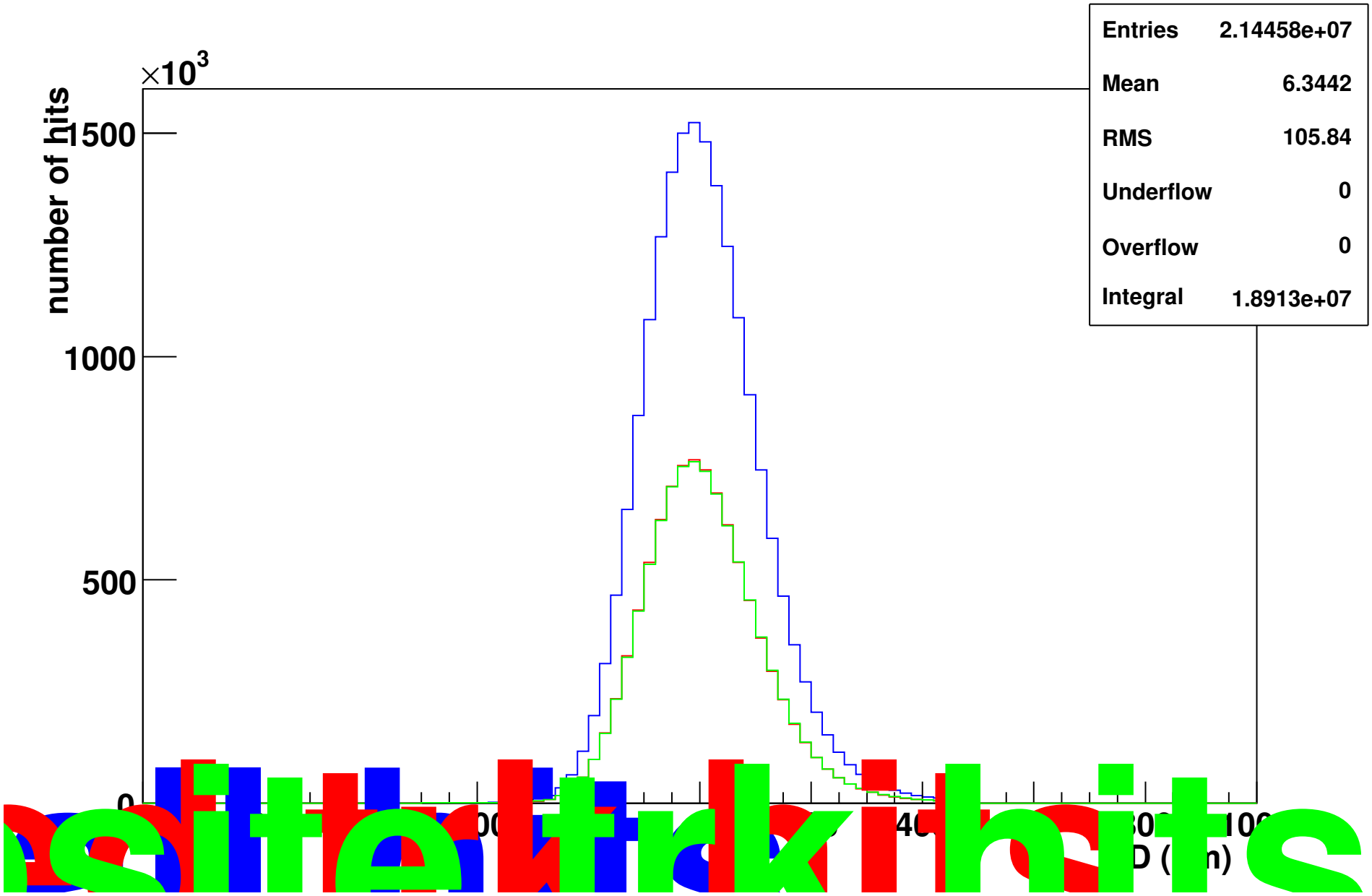

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL6 hit D (cm)

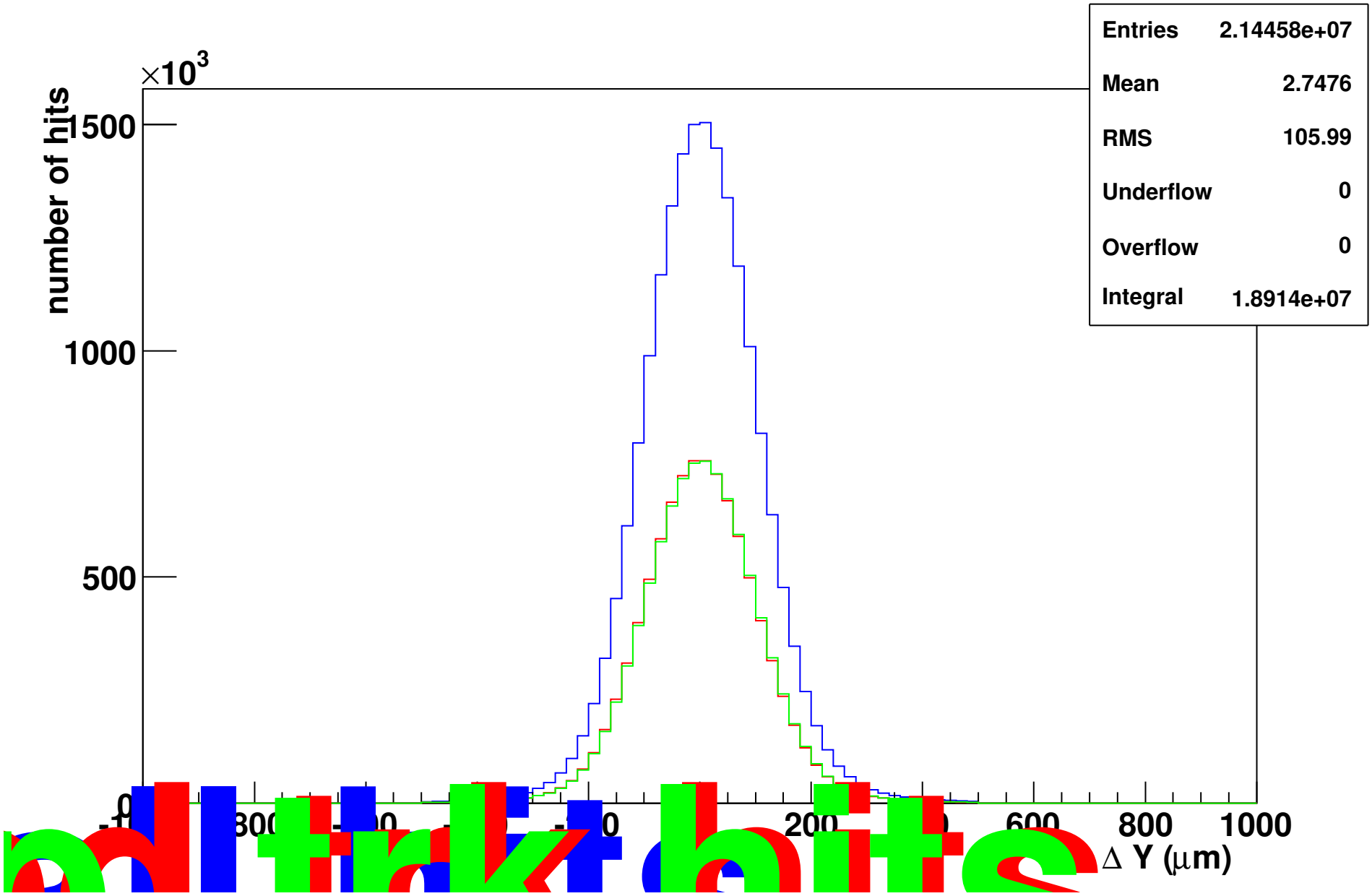

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL7 hit D (cm)

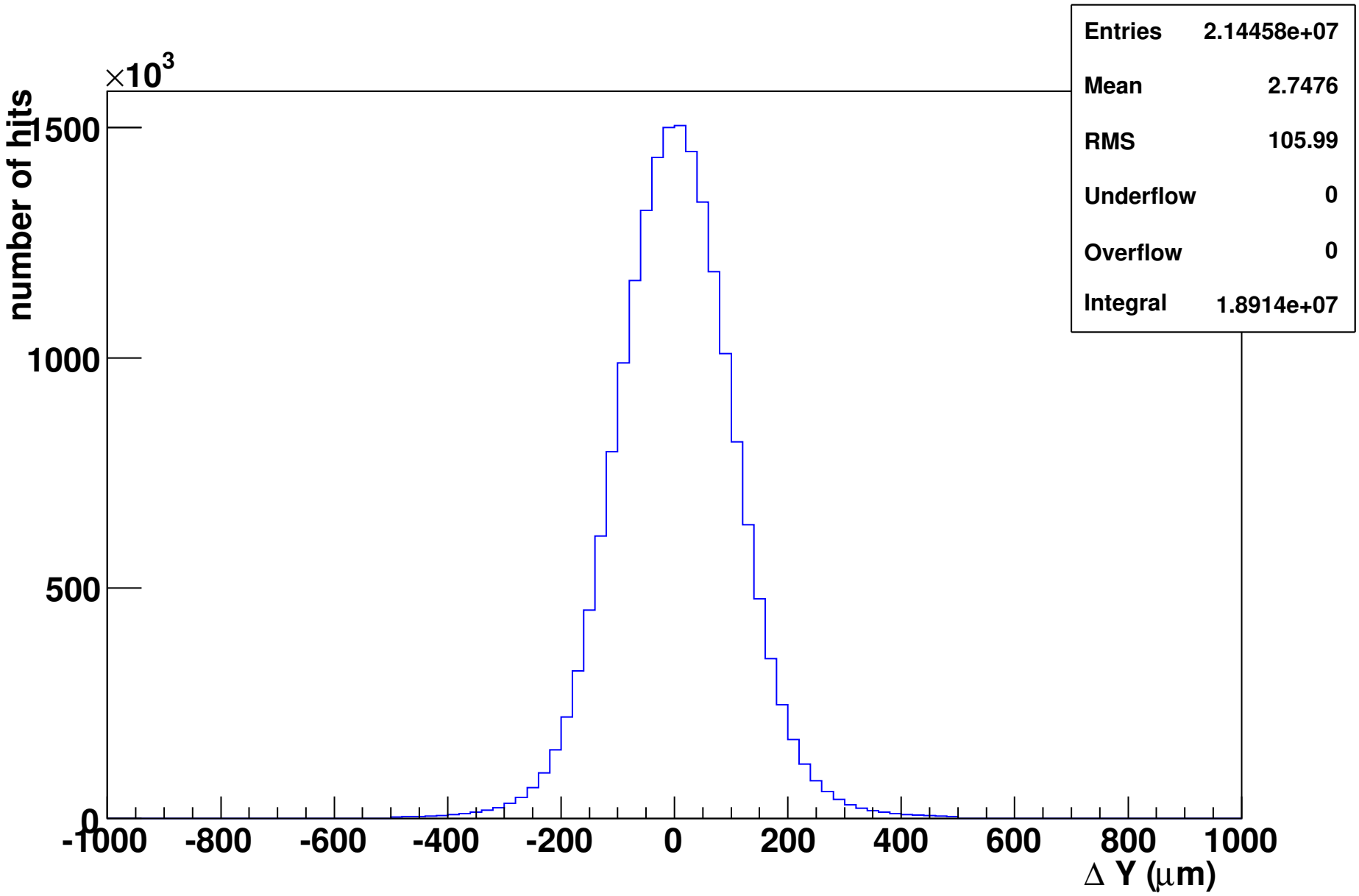

Δ Y (μm)
60
40
20
0
-20
-40
-80
-60
-40
-20
0
20
40
60
80
wire number


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


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


Entries 2.14458e+07
Mean 6.3442
RMS 105.84
Underflow 0
Overflow 0
Integral 1.8913e+07
number of hits
×10^3
1500
1000
500
0
hits


Entries 2.14458e+07
Mean 2.7476
RMS 105.99
Underflow 0
Overflow 0
Integral 1.8914e+07
number of hits
×10^3
1500
1000
500
0
-800
200
600
800
1000
Δ Y (μm)


Entries 2.14458e+07
Mean 2.7476
RMS 105.99
Underflow 0
Overflow 0
Integral 1.8914e+07
×10^3
number of hits
1500
1000
500
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000
Δ Y (μm)