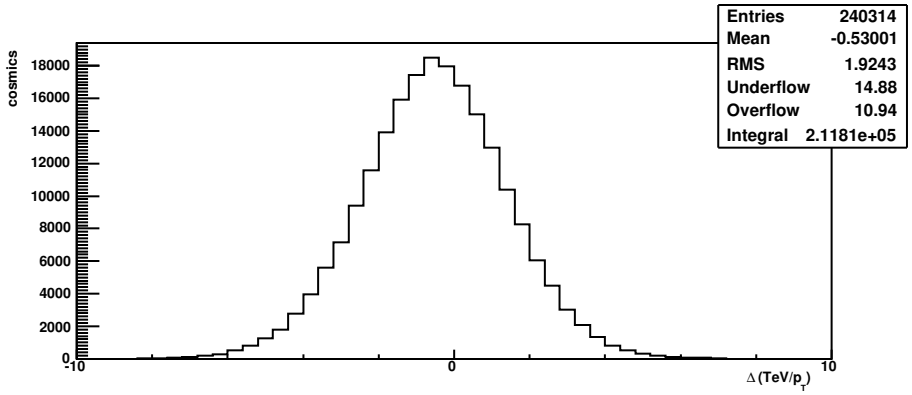
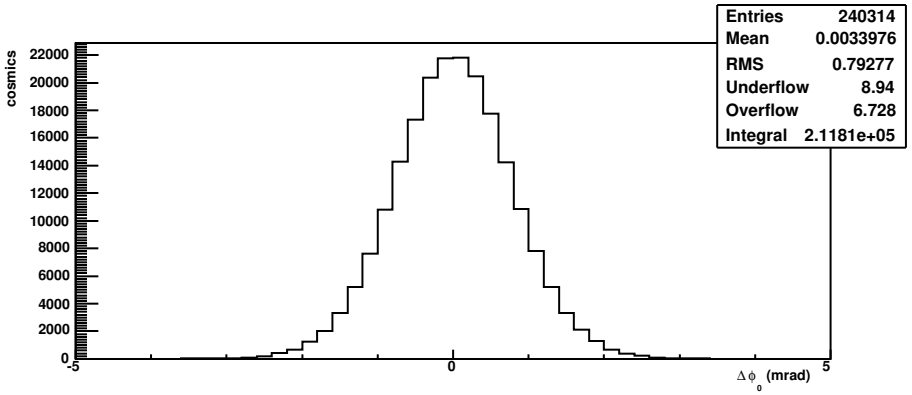
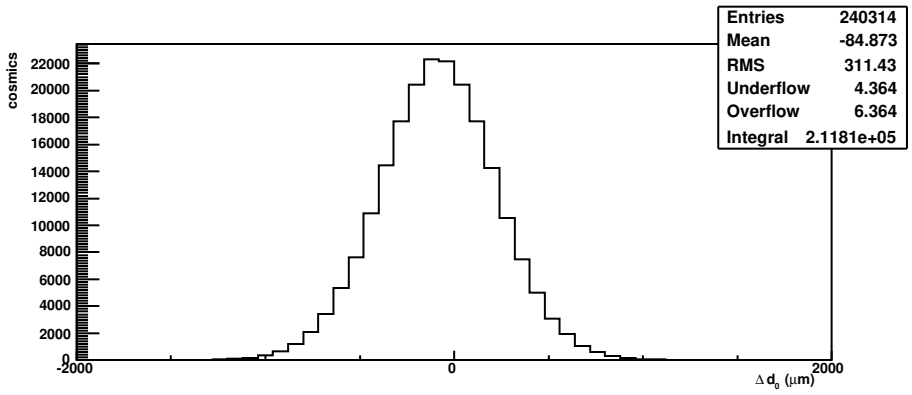
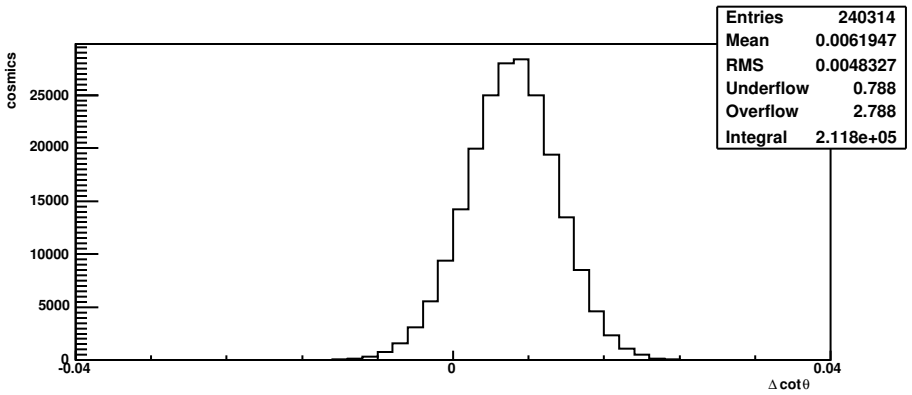
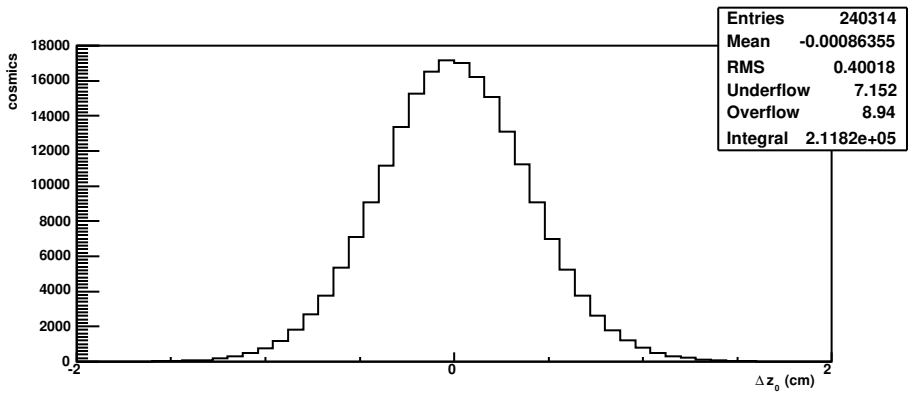
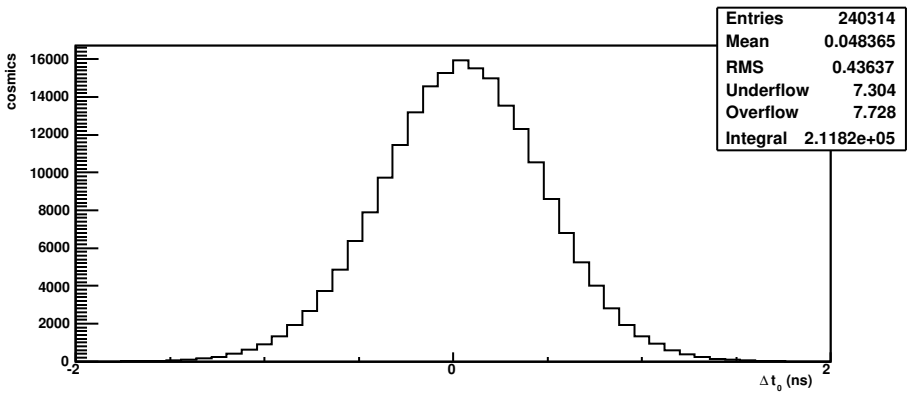

Entries 240314
Mean -0.53001
RMS 1.9243
Underflow 14.88
Overflow 10.94
Integral 2.1181e+05
cosmics
Δ(TeV/p_T)

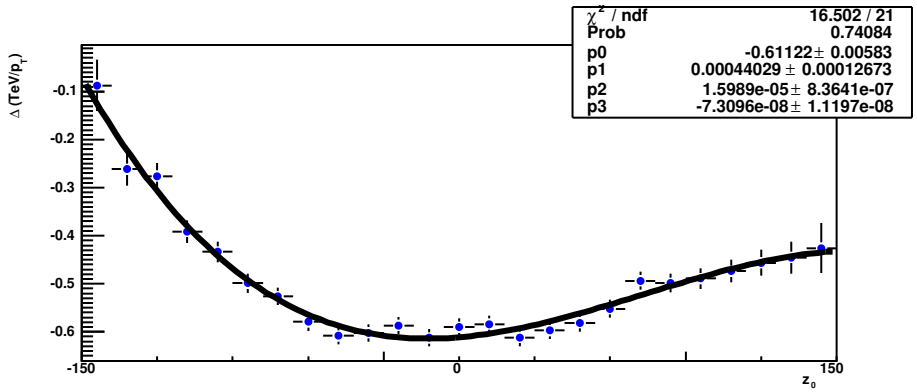

Entries 240314
Mean 0.0033976
RMS 0.79277
Underflow 8.94
Overflow 6.728
Integral 2.1181e+05
cosmics
Δφ_0 (mrad)

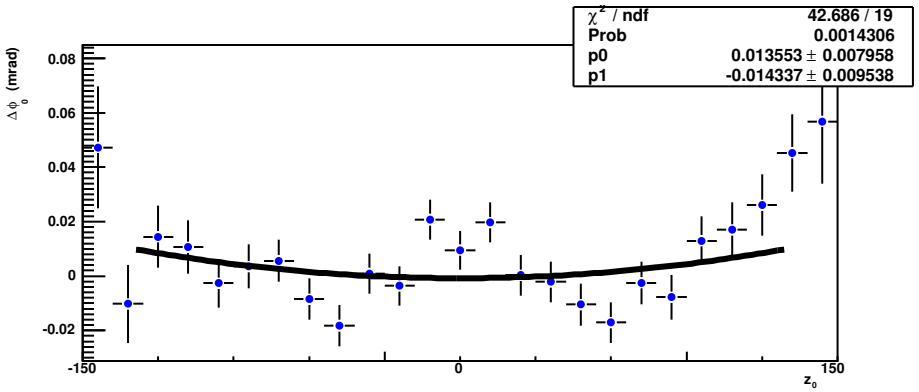

Entries 240314
Mean -84.873
RMS 311.43
Underflow 4.364
Overflow 6.364
Integral 2.1181e+05
cosmics
Δd_0 (μm)

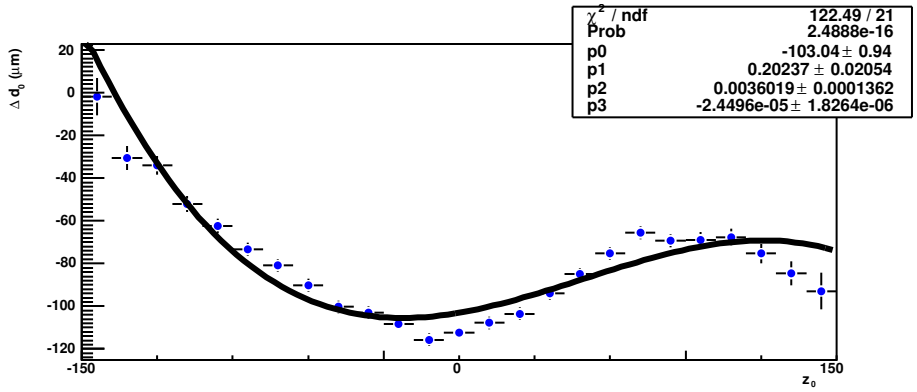

Entries 240314
Mean 0.0061947
RMS 0.0048327
Underflow 0.788
Overflow 2.788
Integral 2.118e+05
cosmics
Δcotθ

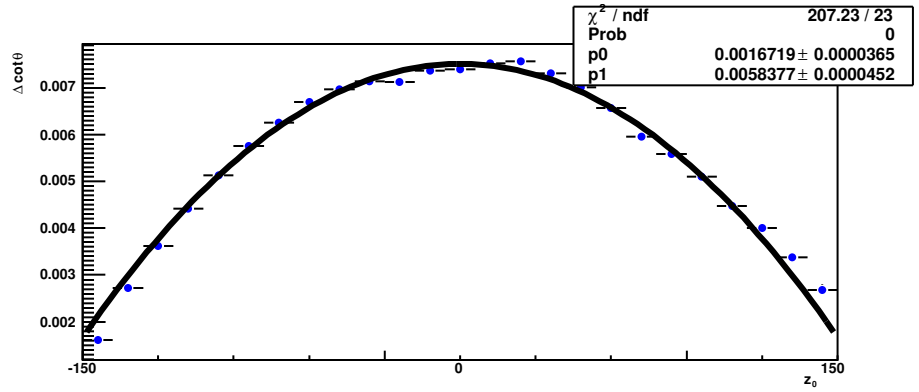

Entries 240314
Mean -0.00086355
RMS 0.40018
Underflow 7.152
Overflow 8.94
Integral 2.1182e+05
cosmics
Δz_0 (cm)

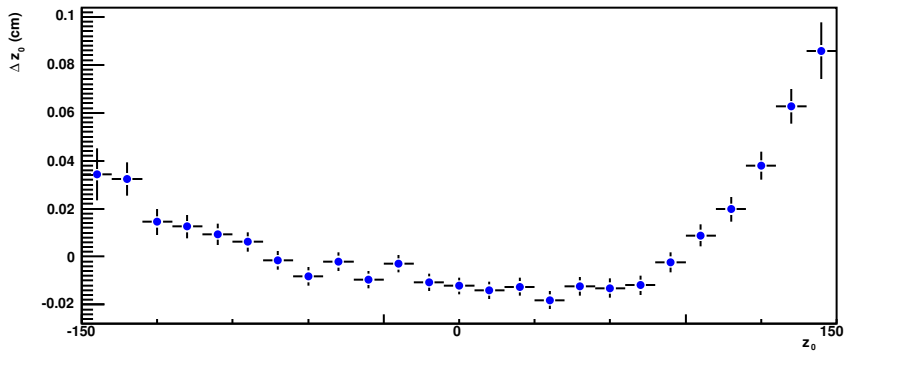

Entries 240314
Mean 0.048365
RMS 0.43637
Underflow 7.304
Overflow 7.728
Integral 2.1182e+05
cosmics
Δt_0 (ns)

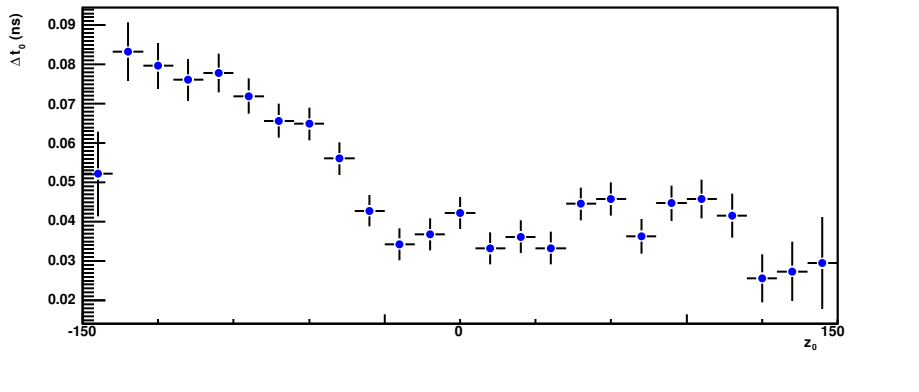

χ² / ndf 16.502 / 21
Prob 0.74084
p0 -0.61122 ± 0.00583
p1 0.00044029 ± 0.00012673
p2 1.5989e-05 ± 8.3641e-07
p3 -7.3096e-08 ± 1.1197e-08
Δ (TeV/p_T)
z_0

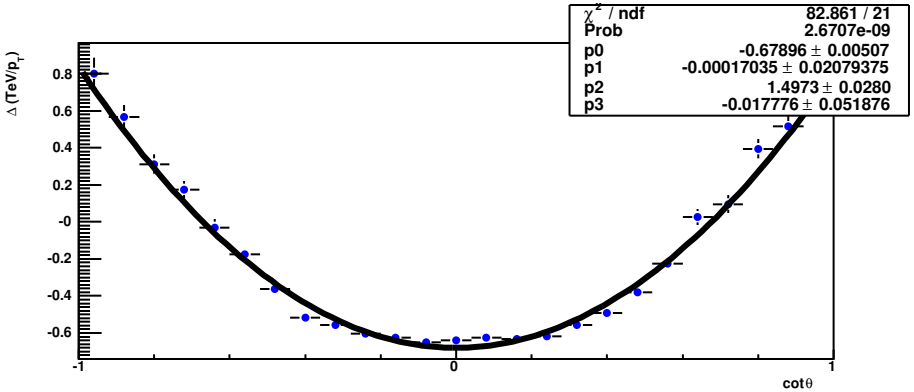

χ² / ndf 42.686 / 19
Prob 0.0014306
p0 0.013553 ± 0.007958
p1 -0.014337 ± 0.009538
Δφ_0 (mrad)
z_0

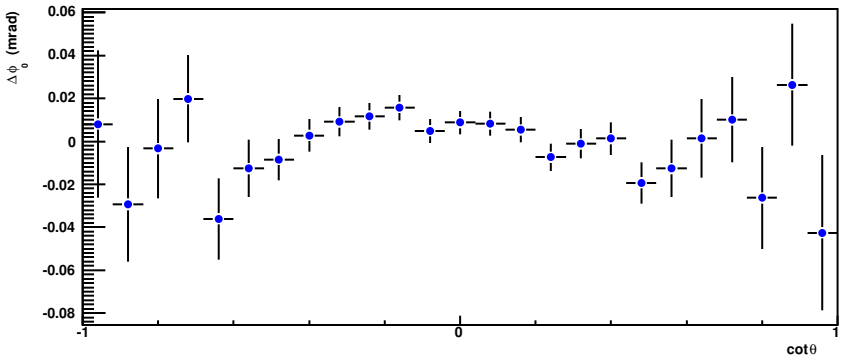

χ² / ndf 122.49 / 21
Prob 2.4888e-16
p0 -103.04 ± 0.94
p1 0.20237 ± 0.02054
p2 0.0036019 ± 0.0001362
p3 -2.4496e-05 ± 1.8264e-06
Δ d_0 (μm)
z_0

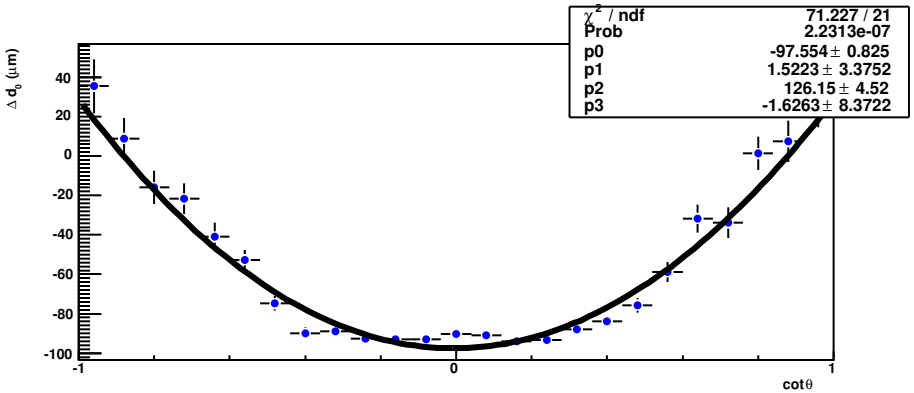

χ² / ndf 207.23 / 23
Prob 0
p0 0.0016719 ± 0.0000365
p1 0.0058377 ± 0.0000452
Δ cotθ
z_0

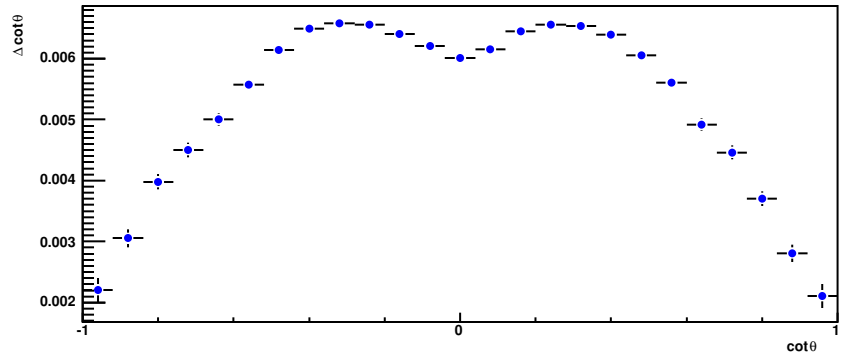

Δ z_0 (cm)
z_0

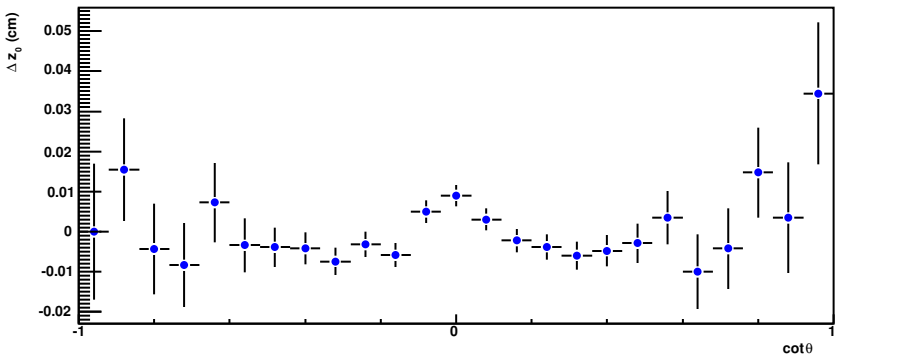

Δ t_0 (ns)
z_0

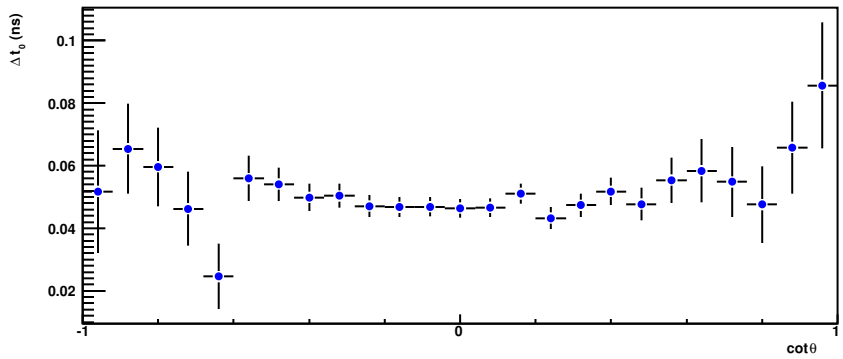

χ^2 / ndf 82.861 / 21
Prob 2.6707e-09
p0 -0.67896 ± 0.00507
p1 -0.00017035 ± 0.02079375
p2 1.4973 ± 0.0280
p3 -0.017776 ± 0.051876
Δ (TeV/p_T)
cotθ

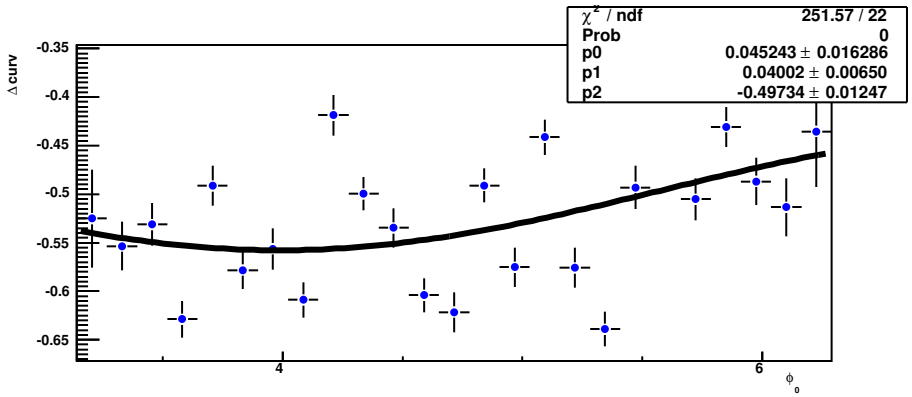

$\Delta\phi_0$ (mrad)
cotθ

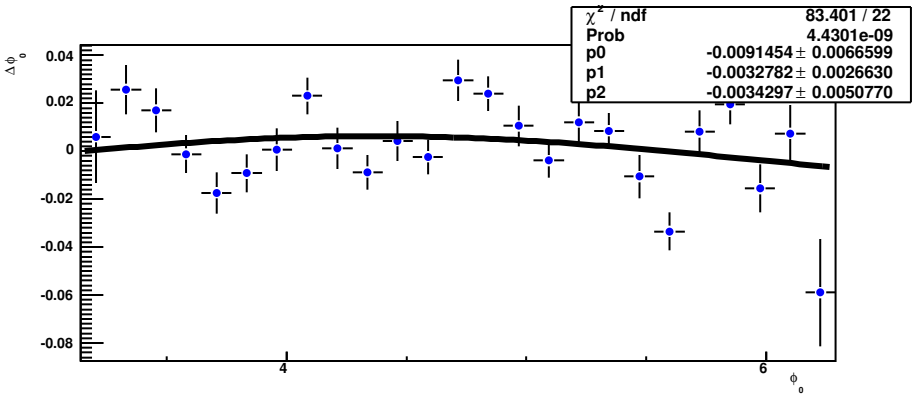

χ^2 / ndf 71.227 / 21
Prob 2.2313e-07
p0 -97.554 ± 0.825
p1 1.5223 ± 3.3752
p2 126.15 ± 4.52
p3 -1.6263 ± 8.3722
Δd_0 (μm)
cotθ

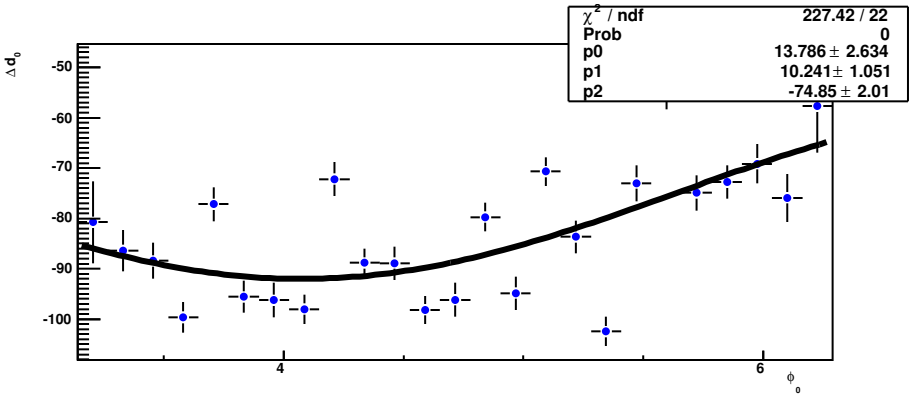

Δ cotθ
cotθ

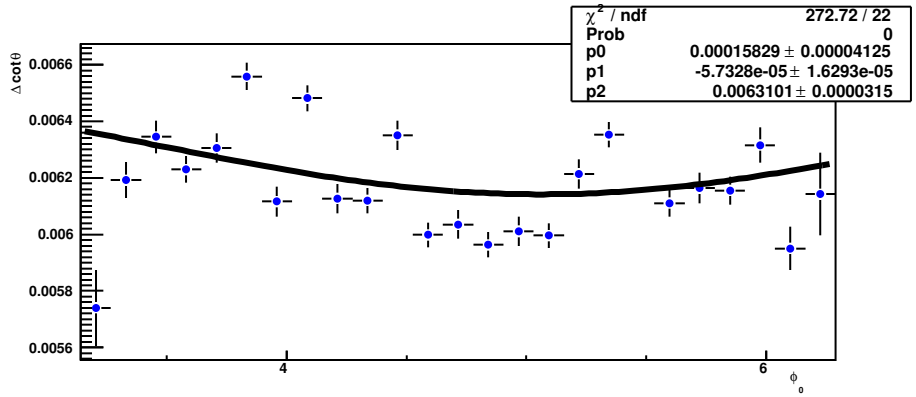

Δz_0 (cm)
cotθ

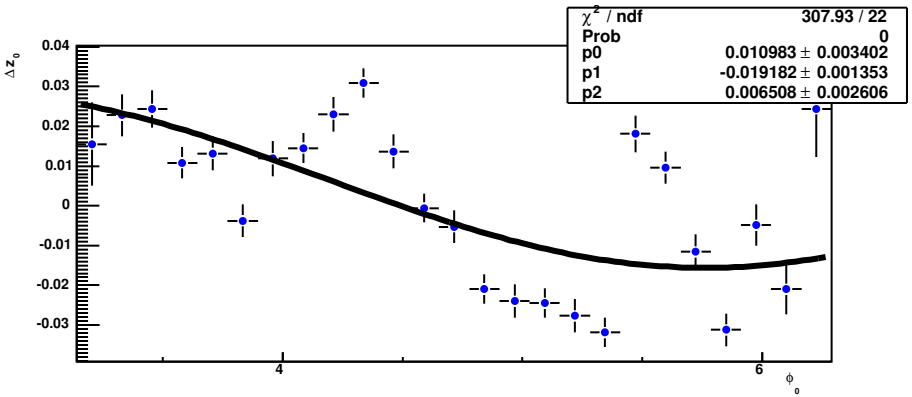

Δt_0 (ns)
cotθ

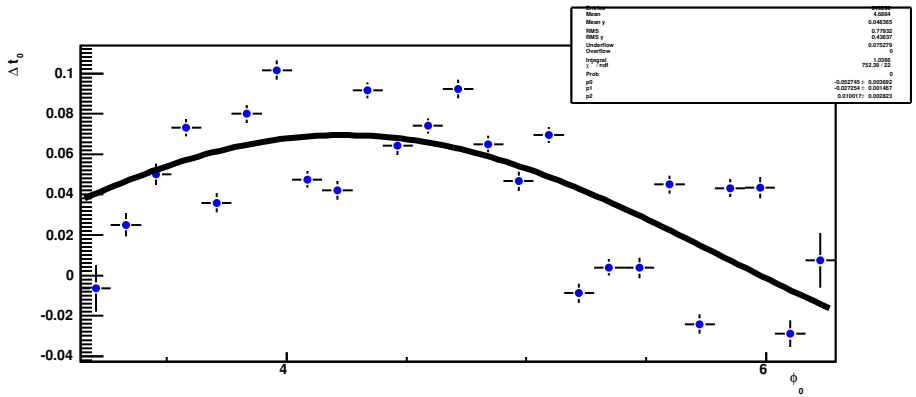

χ² / ndf 251.57 / 22
Prob 0
p0 0.045243 ± 0.016286
p1 0.04002 ± 0.00650
p2 -0.49734 ± 0.01247
Δ curv
φ0

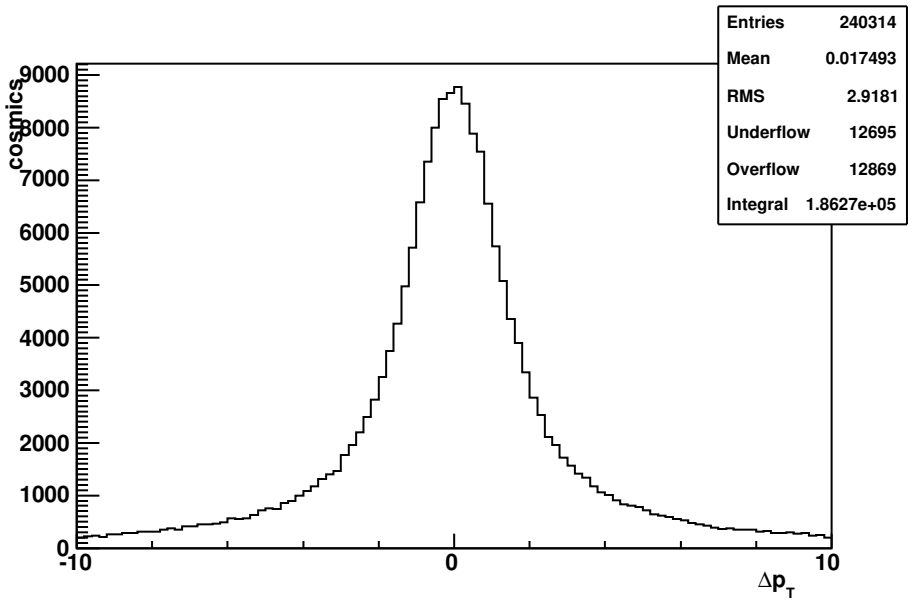

χ² / ndf 83.401 / 22
Prob 4.4301e-09
p0 -0.0091454 ± 0.0066599
p1 -0.0032782 ± 0.0026630
p2 -0.0034297 ± 0.0050770
Δ φ0
φ0

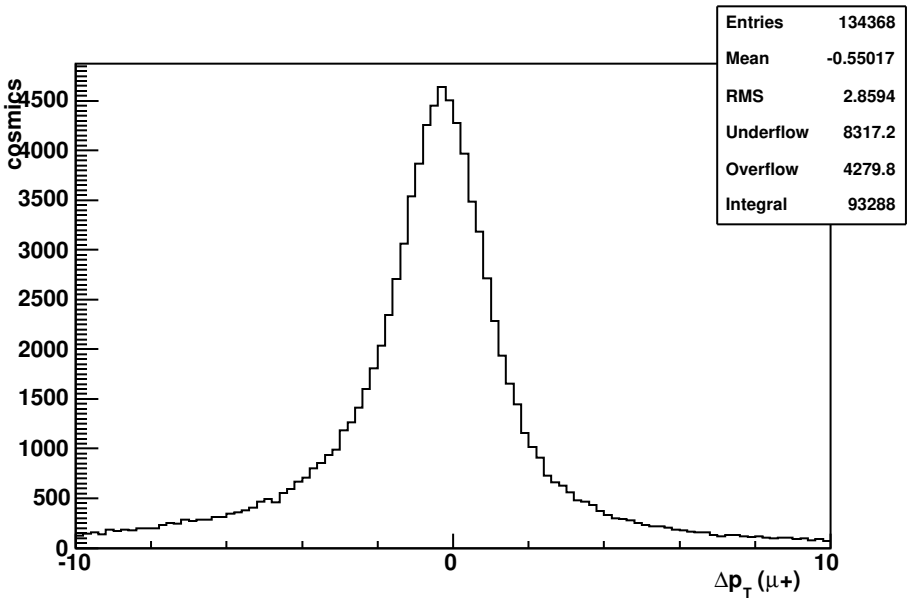

χ² / ndf 227.42 / 22
Prob 0
p0 13.786 ± 2.634
p1 10.241 ± 1.051
p2 -74.85 ± 2.01
Δ d0
φ0

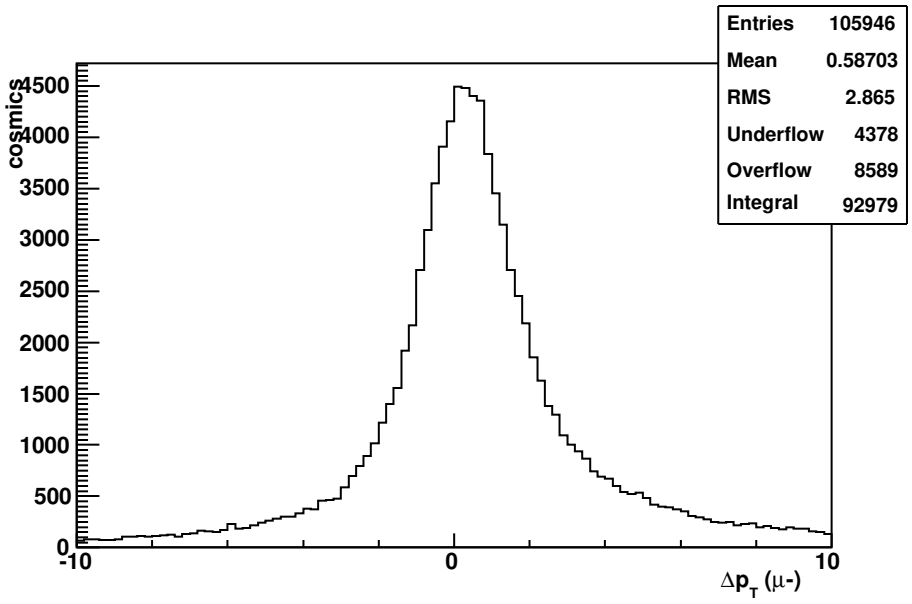

χ² / ndf 272.72 / 22
Prob 0
p0 0.00015829 ± 0.00004125
p1 -5.7328e-05 ± 1.6293e-05
p2 0.0063101 ± 0.0000315
Δ cotθ
φ0

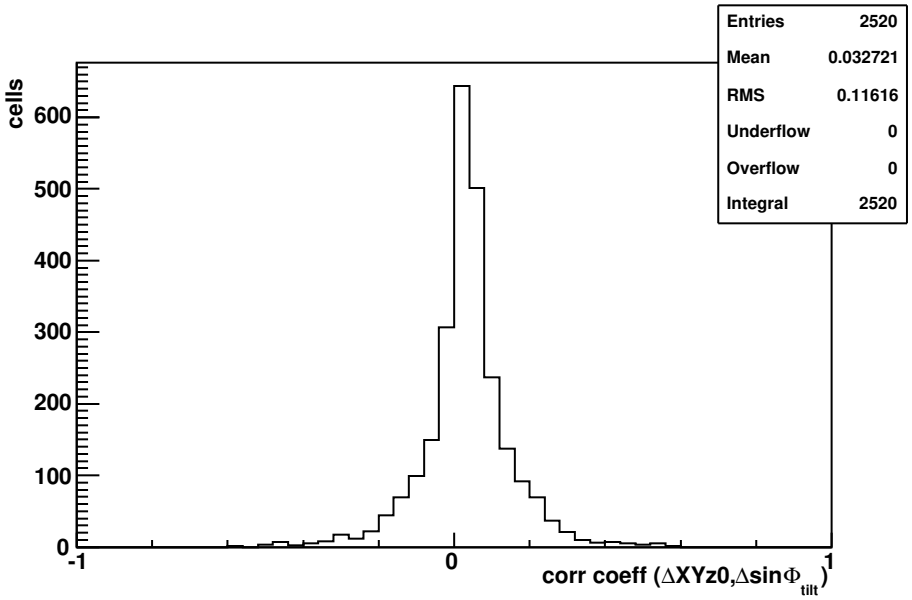

χ² / ndf 307.93 / 22
Prob 0
p0 0.010983 ± 0.003402
p1 -0.019182 ± 0.001353
p2 0.006508 ± 0.002606
Δ z0
φ0

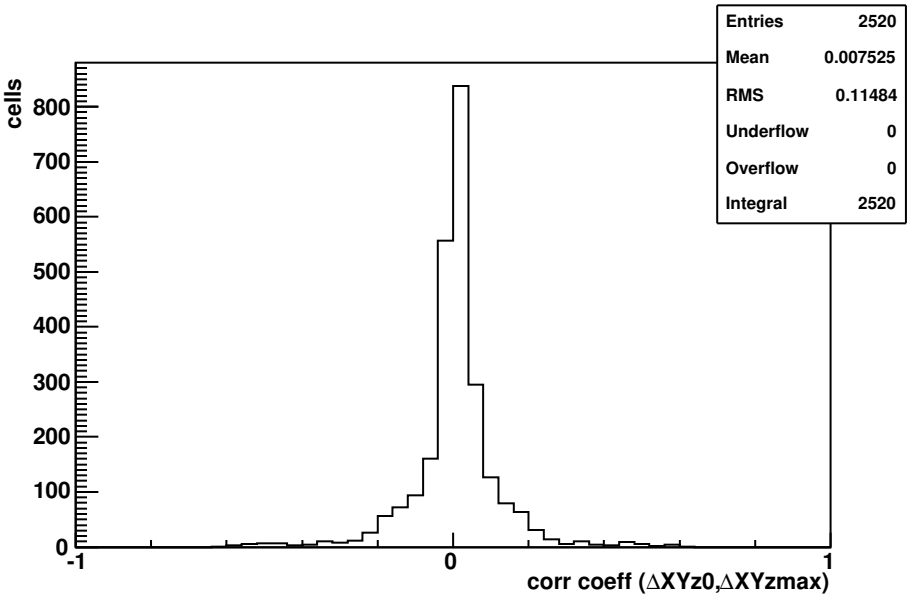

Δ t0
φ0

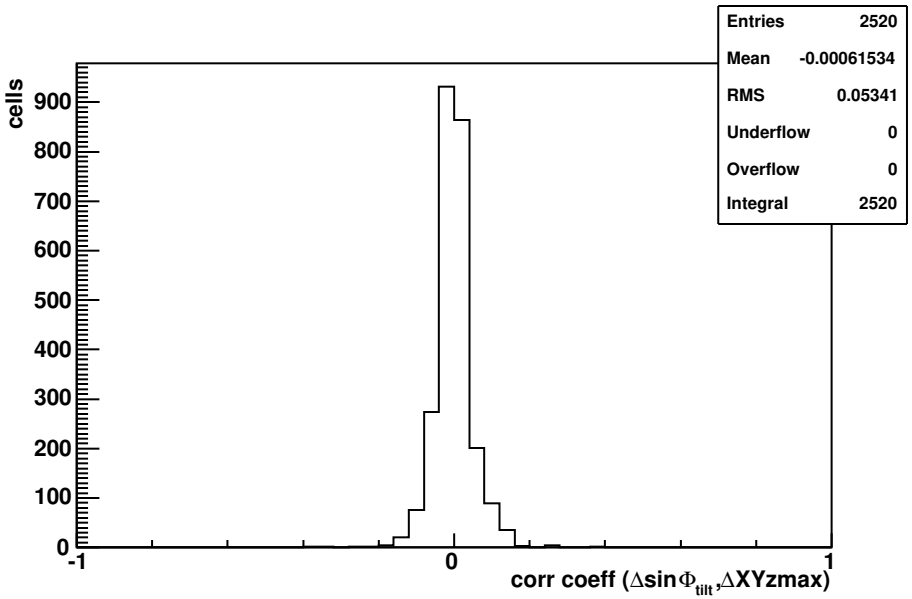

Entries 240314
Mean 0.017493
RMS 2.9181
Underflow 12695
Overflow 12869
Integral 1.8627e+05
cosmics
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
-10
0
10
Δp_T

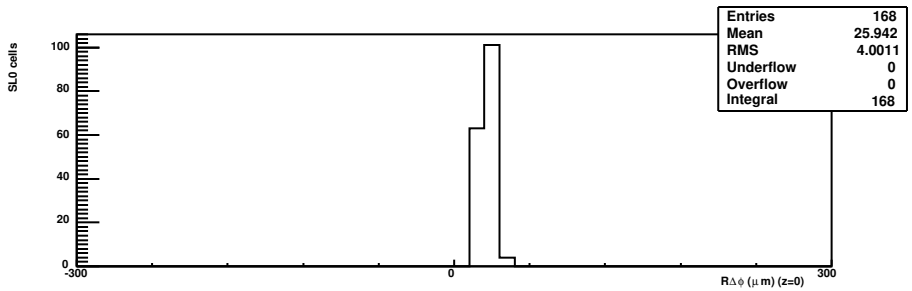

Entries 134368
Mean -0.55017
RMS 2.8594
Underflow 8317.2
Overflow 4279.8
Integral 93288
cosmics
4500
4000
3500
3000
2500
2000
1500
1000
500
0
-10
0
10
Δp_T (μ+)

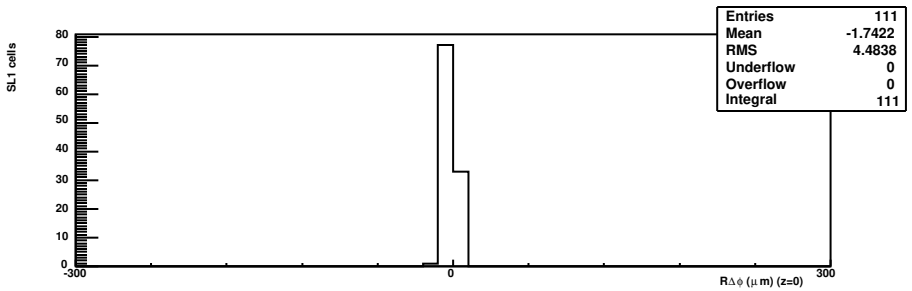

Entries 105946
Mean 0.58703
RMS 2.865
Underflow 4378
Overflow 8589
Integral 92979
cosmics
4500
4000
3500
3000
2500
2000
1500
1000
500
0
-10
0
10
Δp_T (μ-)

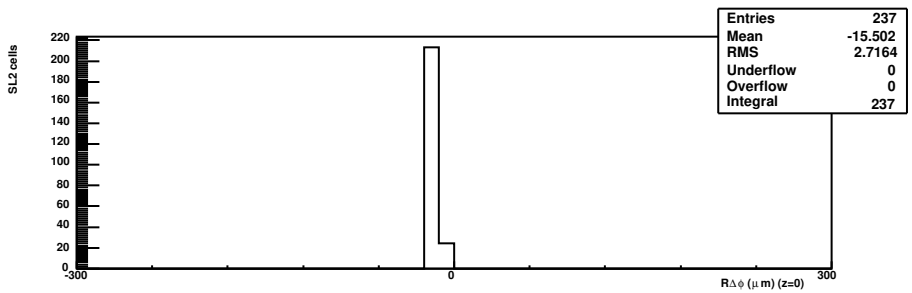

Entries 2520
Mean 0.032721
RMS 0.11616
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔsinΦ_{tilt})

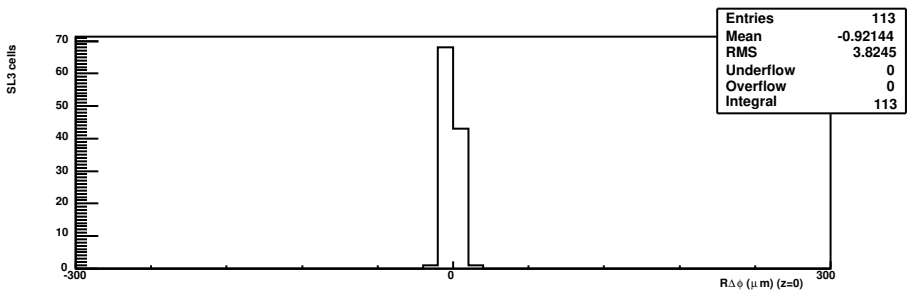

Entries 2520
Mean 0.007525
RMS 0.11484
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔXYzmax)

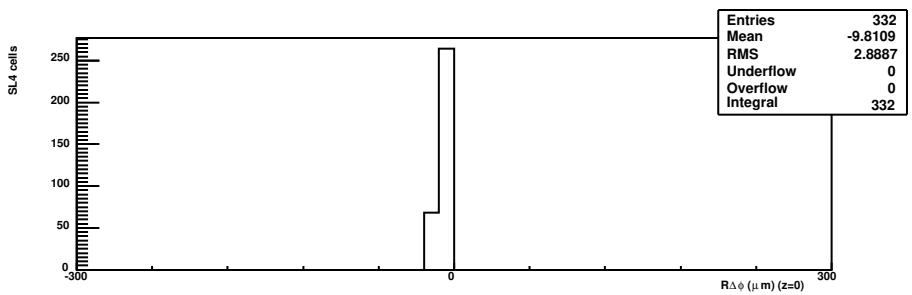

Entries 2520
Mean -0.00061534
RMS 0.05341
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔsinΦ_{tilt},ΔXYzmax)

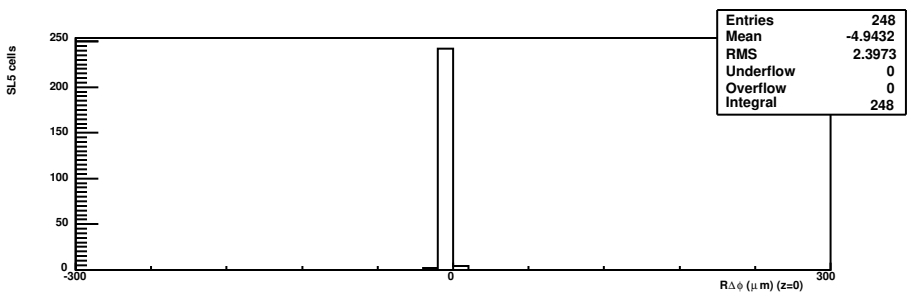

SL0 cells
Entries 168
Mean 25.942
RMS 4.0011
Underflow 0
Overflow 0
Integral 168
RΔφ (μm) (z=0)

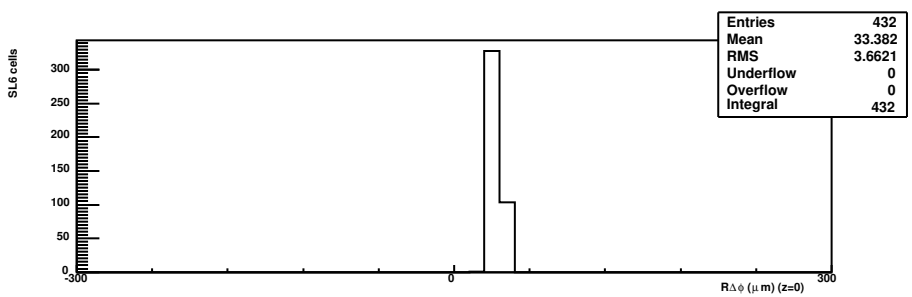

SL1 cells
Entries 111
Mean -1.7422
RMS 4.4838
Underflow 0
Overflow 0
Integral 111
RΔφ (μm) (z=0)

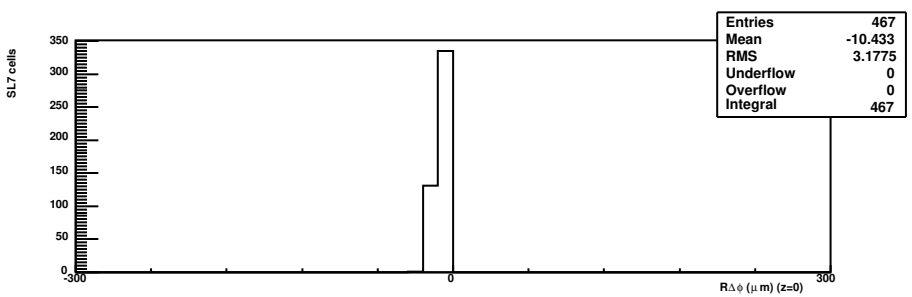

SL2 cells
Entries 237
Mean -15.502
RMS 2.7164
Underflow 0
Overflow 0
Integral 237
RΔφ (μm) (z=0)

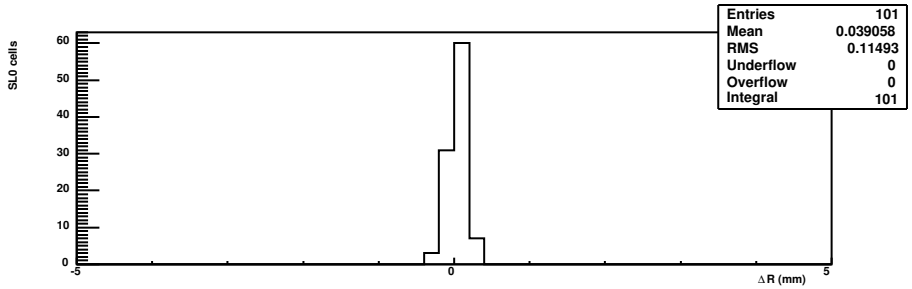

SL3 cells
Entries 113
Mean -0.92144
RMS 3.8245
Underflow 0
Overflow 0
Integral 113
RΔφ (μm) (z=0)

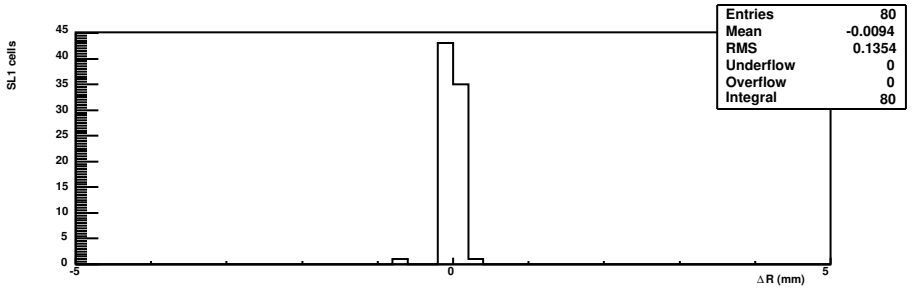

SL4 cells
Entries 332
Mean -9.8109
RMS 2.8887
Underflow 0
Overflow 0
Integral 332
RΔφ (μm) (z=0)

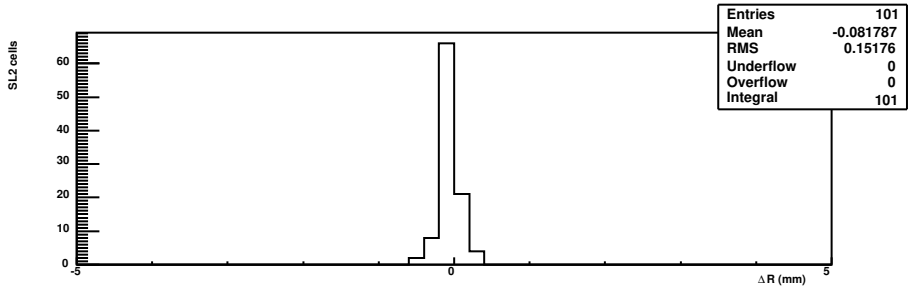

SL5 cells
Entries 248
Mean -4.9432
RMS 2.3973
Underflow 0
Overflow 0
Integral 248
RΔφ (μm) (z=0)

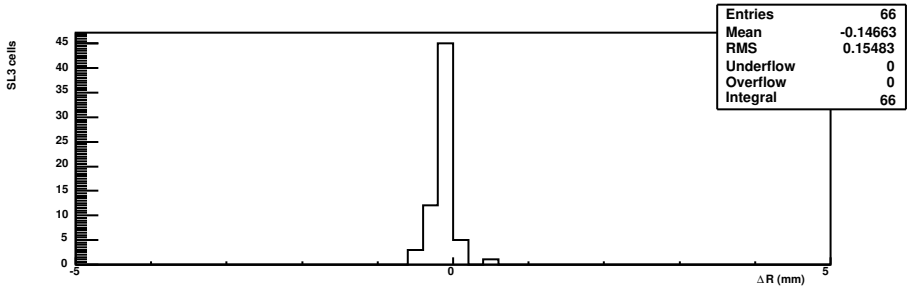

SL6 cells
Entries 432
Mean 33.382
RMS 3.6621
Underflow 0
Overflow 0
Integral 432
RΔφ (μm) (z=0)

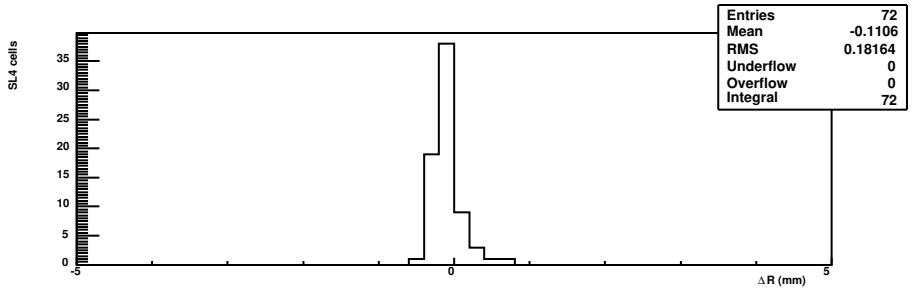

SL7 cells
Entries 467
Mean -10.433
RMS 3.1775
Underflow 0
Overflow 0
Integral 467
RΔφ (μm) (z=0)

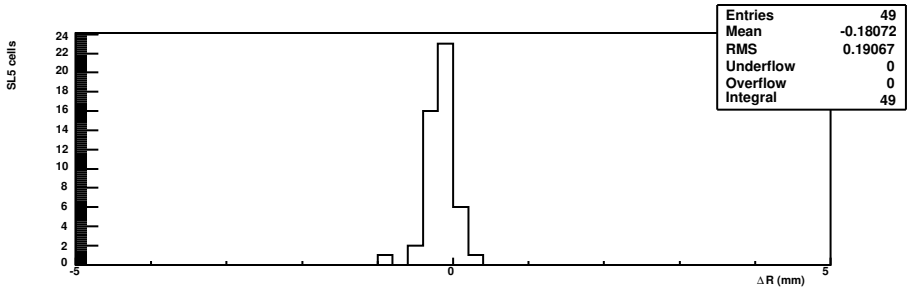

SL0 cells
Entries 101
Mean 0.039058
RMS 0.11493
Underflow 0
Overflow 0
Integral 101
ΔR (mm)

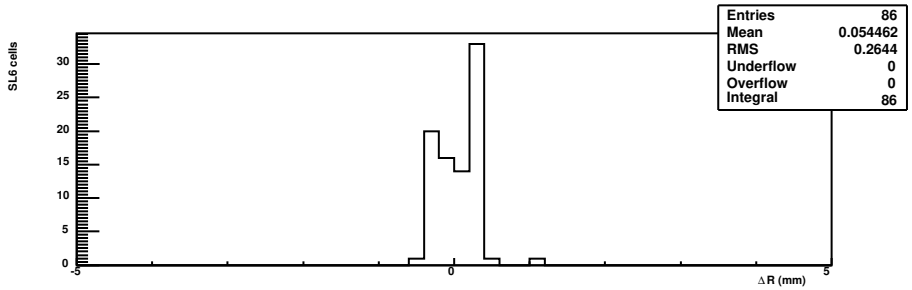

SL1 cells
Entries 80
Mean -0.0094
RMS 0.1354
Underflow 0
Overflow 0
Integral 80
ΔR (mm)

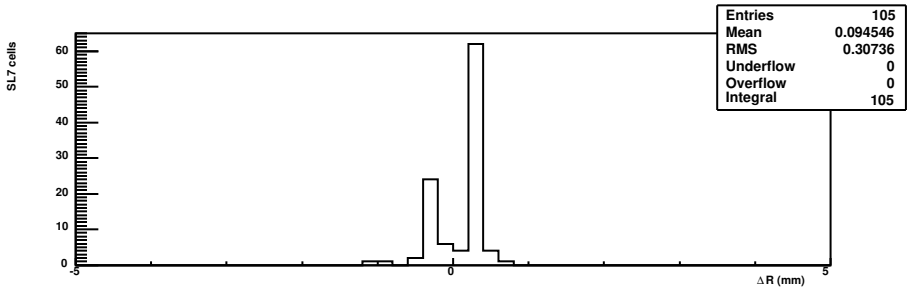

SL2 cells
Entries 101
Mean -0.081787
RMS 0.15176
Underflow 0
Overflow 0
Integral 101
ΔR (mm)

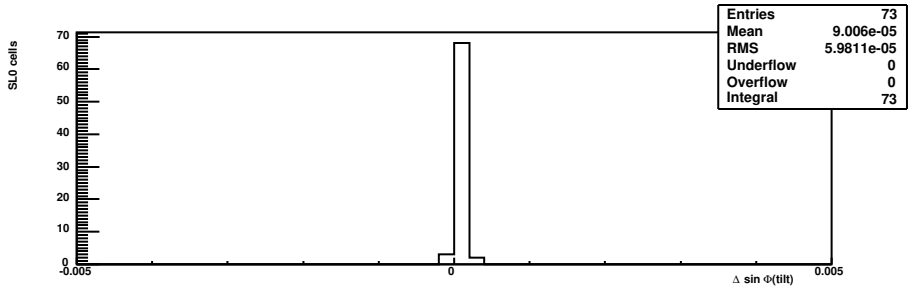

SL3 cells
Entries 66
Mean -0.14663
RMS 0.15483
Underflow 0
Overflow 0
Integral 66
ΔR (mm)

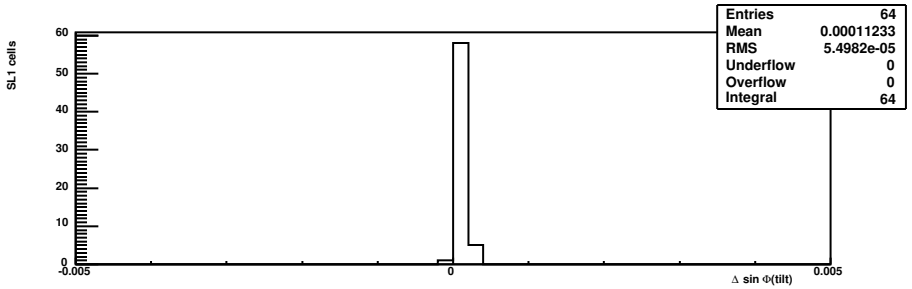

SL4 cells
Entries 72
Mean -0.1106
RMS 0.18164
Underflow 0
Overflow 0
Integral 72
ΔR (mm)

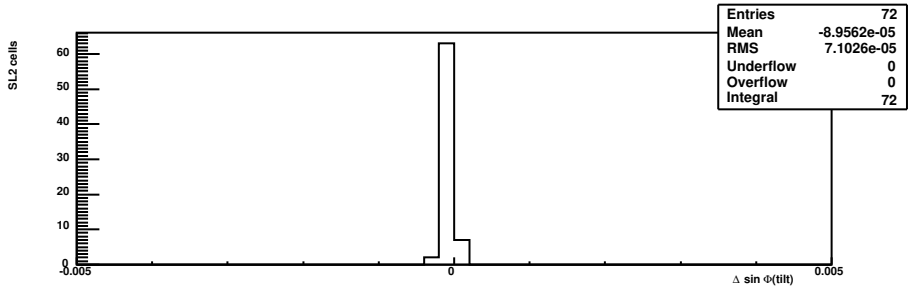

SL5 cells
Entries 49
Mean -0.18072
RMS 0.19067
Underflow 0
Overflow 0
Integral 49
ΔR (mm)

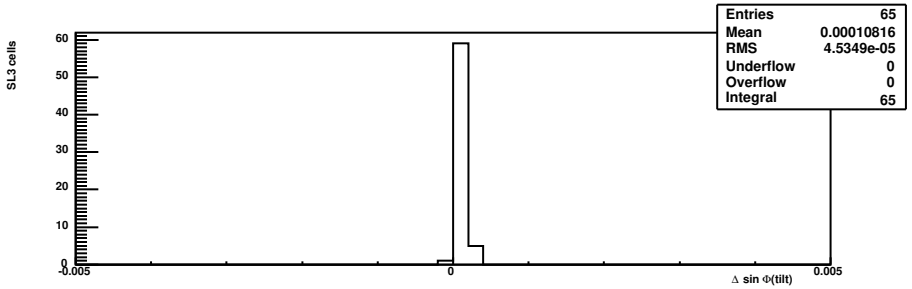

SL6 cells
Entries 86
Mean 0.054462
RMS 0.2644
Underflow 0
Overflow 0
Integral 86
ΔR (mm)

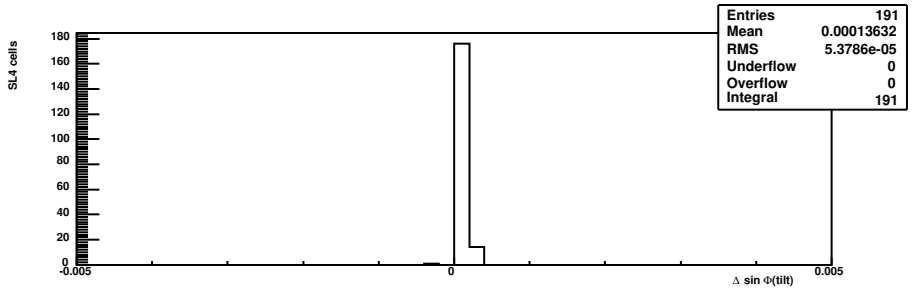

SL7 cells
Entries 105
Mean 0.094546
RMS 0.30736
Underflow 0
Overflow 0
Integral 105
ΔR (mm)

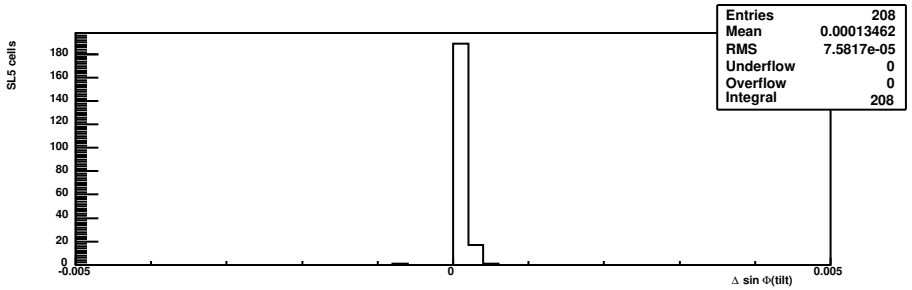

SL0 cells
Entries 73
Mean 9.006e-05
RMS 5.9811e-05
Underflow 0
Overflow 0
Integral 73
Δ sin Φ(tilt)

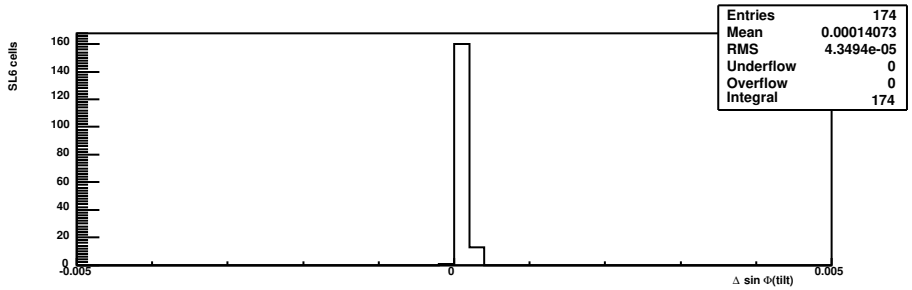

SL1 cells
Entries 64
Mean 0.00011233
RMS 5.4982e-05
Underflow 0
Overflow 0
Integral 64
Δ sin Φ(tilt)

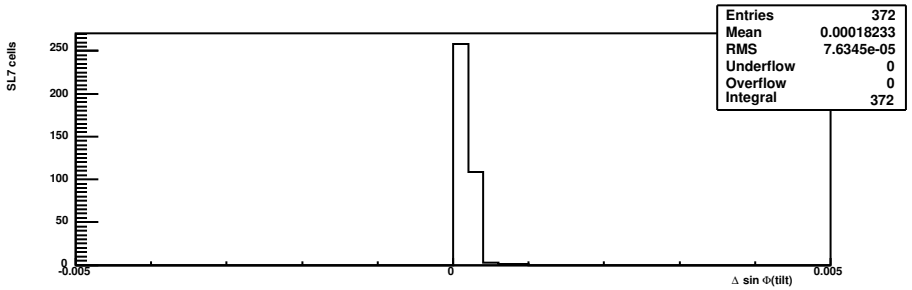

SL2 cells
Entries 72
Mean -8.9562e-05
RMS 7.1026e-05
Underflow 0
Overflow 0
Integral 72
Δ sin Φ(tilt)

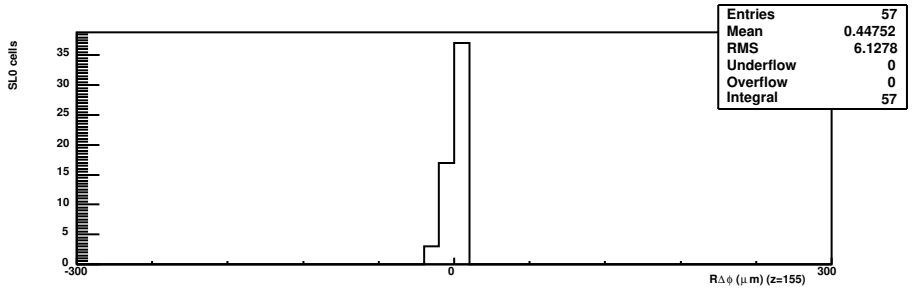

SL3 cells
Entries 65
Mean 0.00010816
RMS 4.5349e-05
Underflow 0
Overflow 0
Integral 65
Δ sin Φ(tilt)

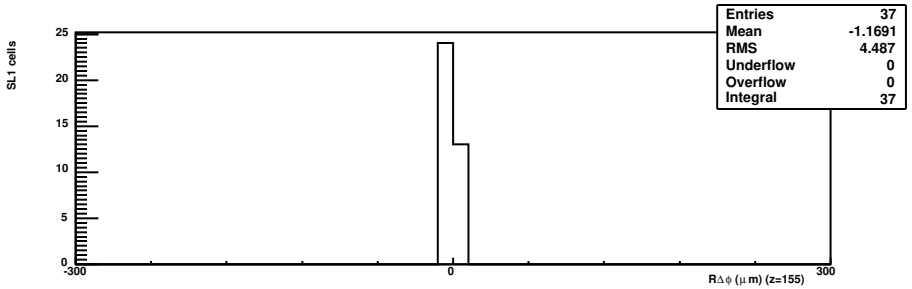

SL4 cells
Entries 191
Mean 0.00013632
RMS 5.3786e-05
Underflow 0
Overflow 0
Integral 191
Δ sin Φ(tilt)

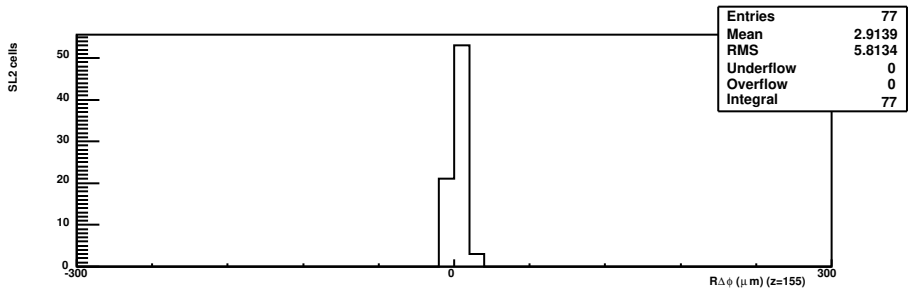

SL5 cells
Entries 208
Mean 0.00013462
RMS 7.5817e-05
Underflow 0
Overflow 0
Integral 208
Δ sin Φ(tilt)

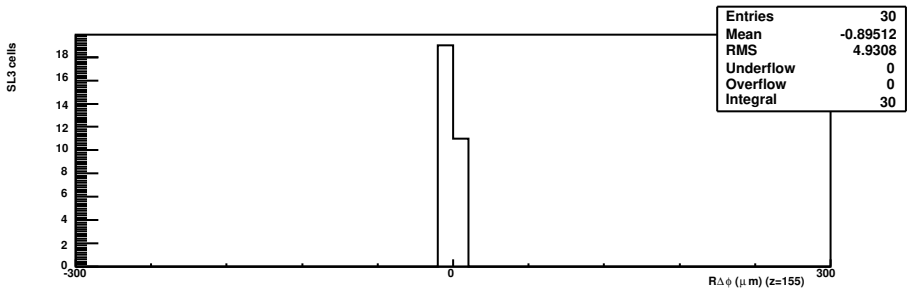

SL6 cells
Entries 174
Mean 0.00014073
RMS 4.3494e-05
Underflow 0
Overflow 0
Integral 174
Δ sin Φ(tilt)

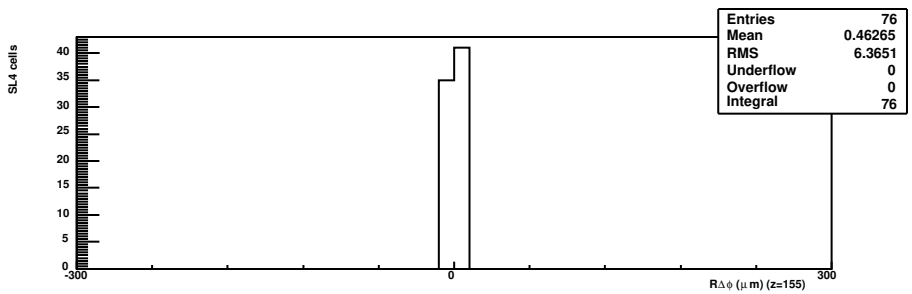

SL7 cells
Entries 372
Mean 0.00018233
RMS 7.6345e-05
Underflow 0
Overflow 0
Integral 372
Δ sin Φ(tilt)

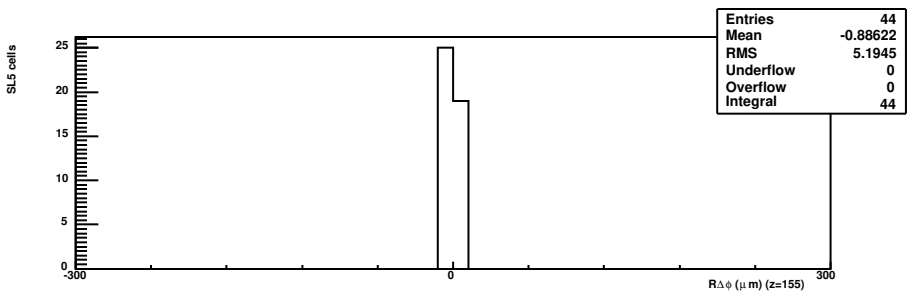

SL0 cells
Entries 57
Mean 0.44752
RMS 6.1278
Underflow 0
Overflow 0
Integral 57
RΔφ (μm) (z=155)

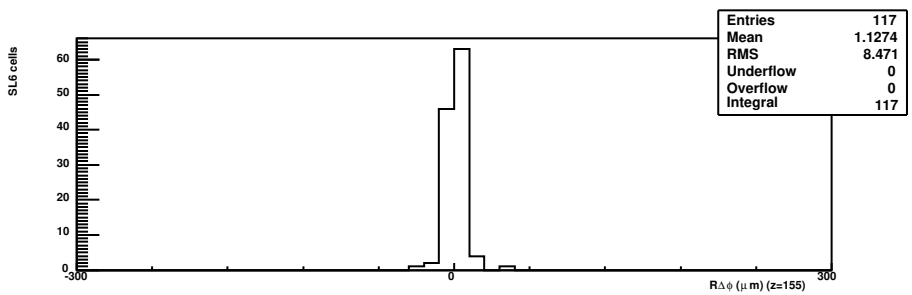

SL1 cells
Entries 37
Mean -1.1691
RMS 4.487
Underflow 0
Overflow 0
Integral 37
RΔφ (μm) (z=155)

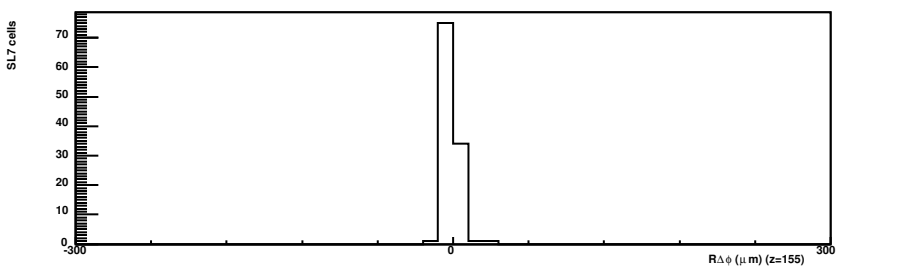

SL2 cells
Entries 77
Mean 2.9139
RMS 5.8134
Underflow 0
Overflow 0
Integral 77
RΔφ (μm) (z=155)

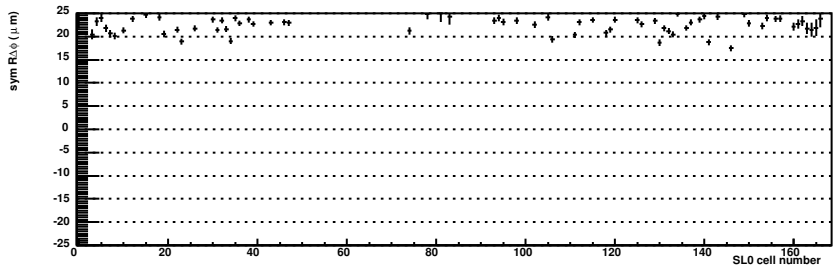

SL3 cells
Entries 30
Mean -0.89512
RMS 4.9308
Underflow 0
Overflow 0
Integral 30
RΔφ (μm) (z=155)

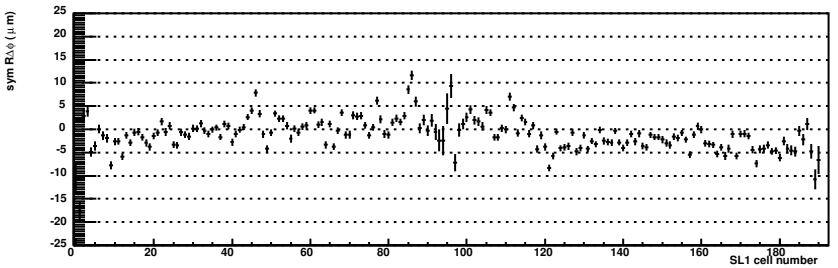

SL4 cells
Entries 76
Mean 0.46265
RMS 6.3651
Underflow 0
Overflow 0
Integral 76
RΔφ (μm) (z=155)

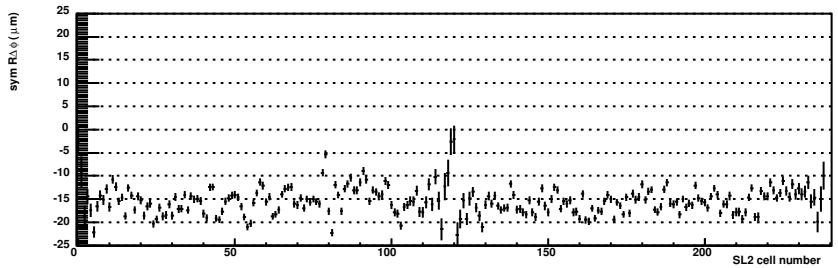

SL5 cells
Entries 44
Mean -0.88622
RMS 5.1945
Underflow 0
Overflow 0
Integral 44
RΔφ (μm) (z=155)

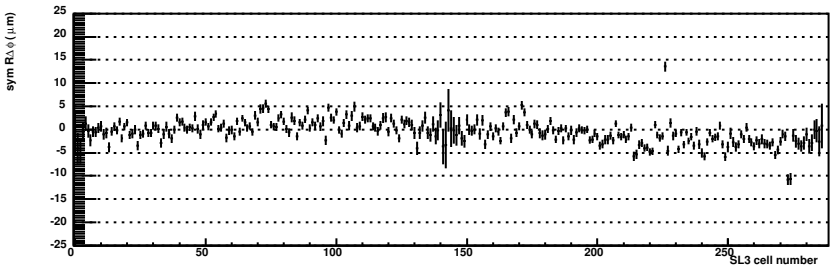

SL6 cells
Entries 117
Mean 1.1274
RMS 8.471
Underflow 0
Overflow 0
Integral 117
RΔφ (μm) (z=155)

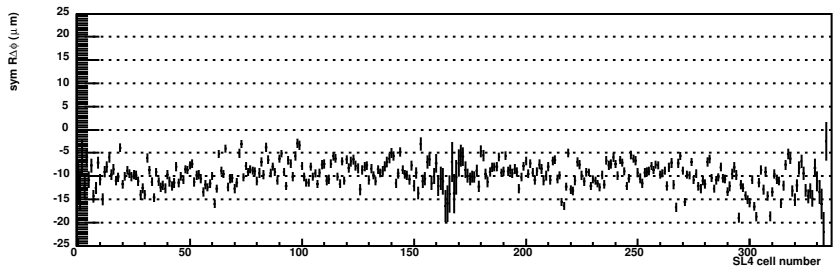

SL7 cells
RΔφ (μm) (z=155)

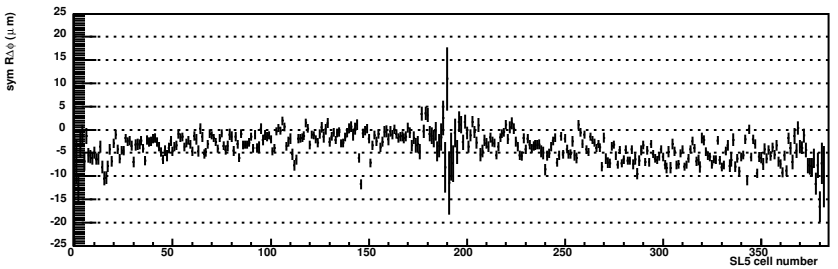

sym RΔφ (μm)
SL0 cell number

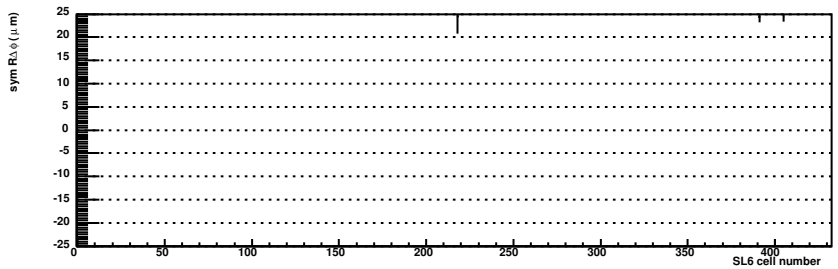

sym RΔφ (μm)
SL1 cell number

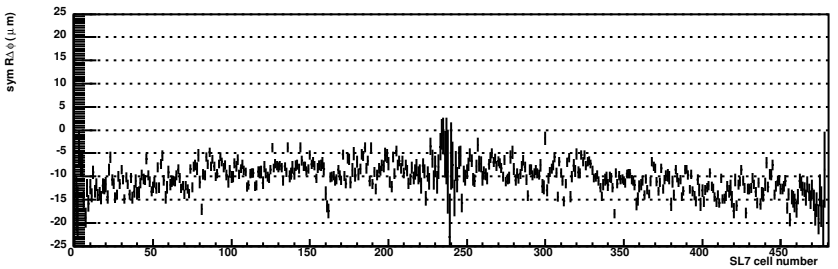

sym RΔφ (μm)
SL2 cell number

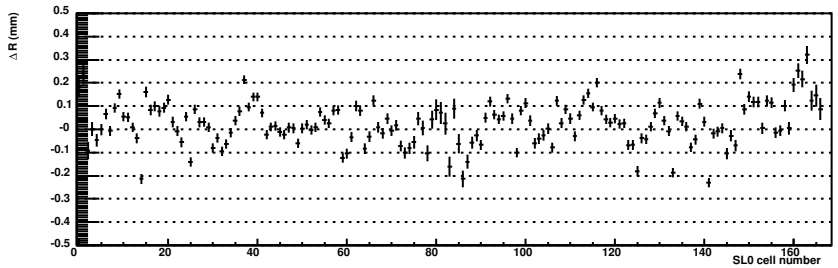

sym RΔφ (μm)
SL3 cell number

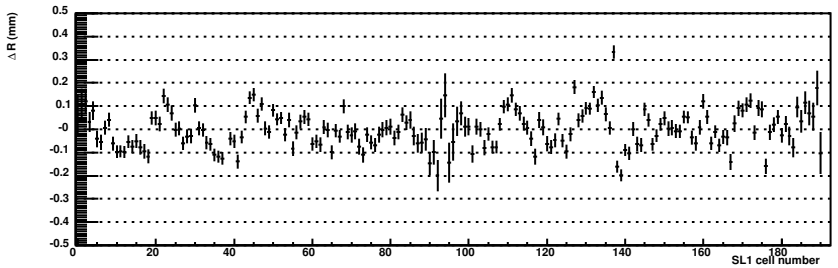

sym RΔφ (μm)
SL4 cell number

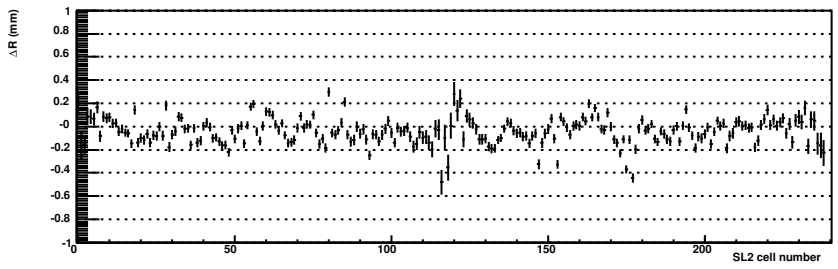

sym RΔφ (μm)
SL5 cell number

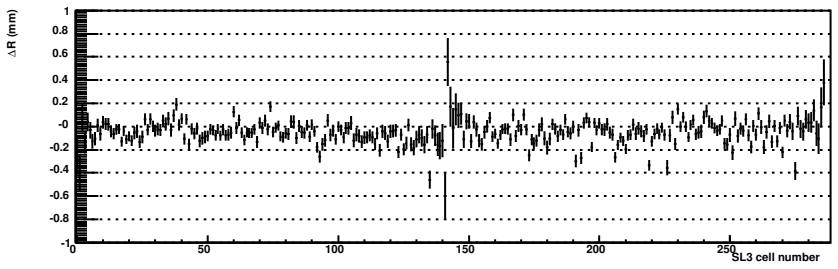

sym RΔφ (μm)
SL6 cell number

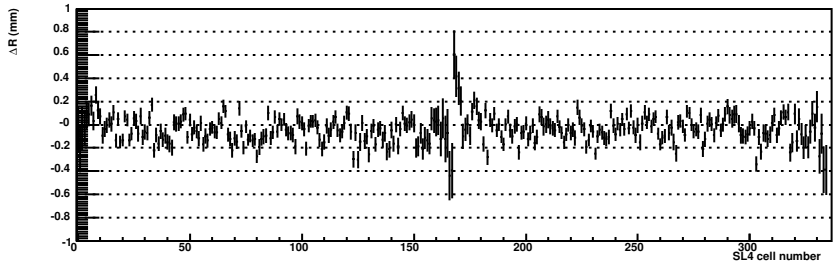

sym RΔφ (μm)
SL7 cell number

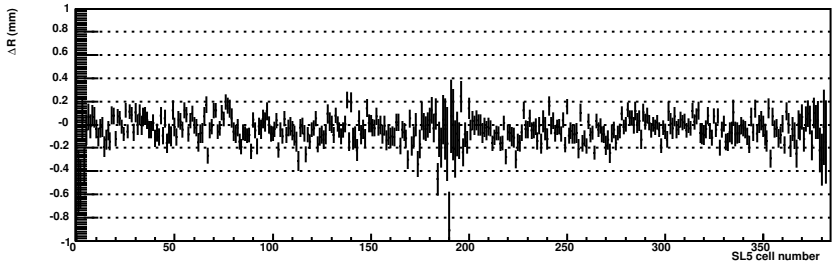

ΔR (mm)
SL0 cell number

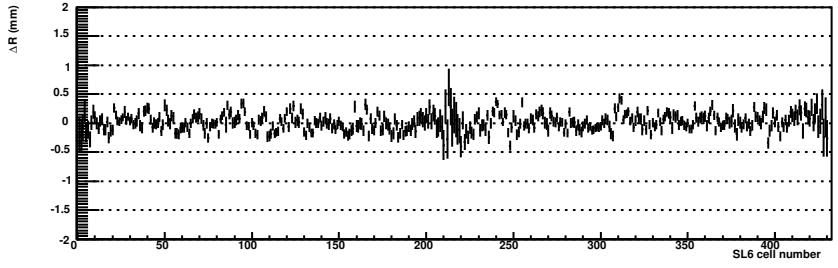

ΔR (mm)
SL1 cell number

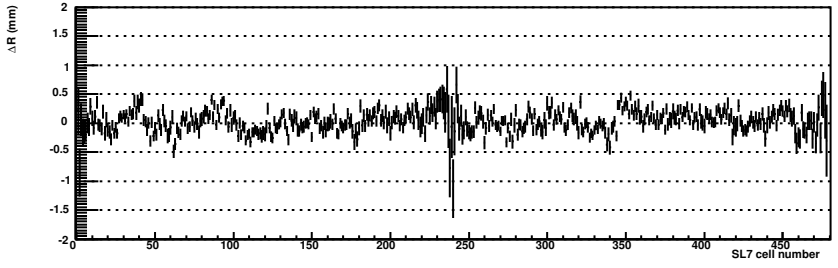

ΔR (mm)
SL2 cell number

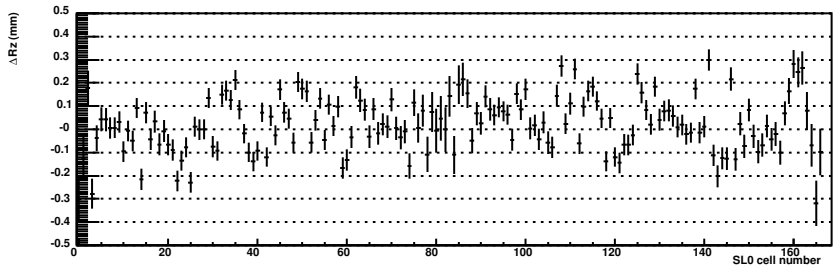

ΔR (mm)
SL3 cell number

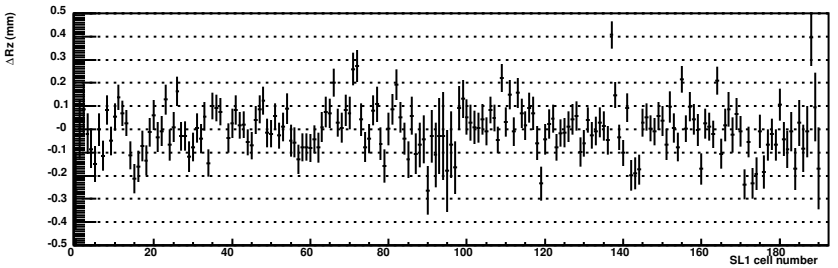

ΔR (mm)
SL4 cell number

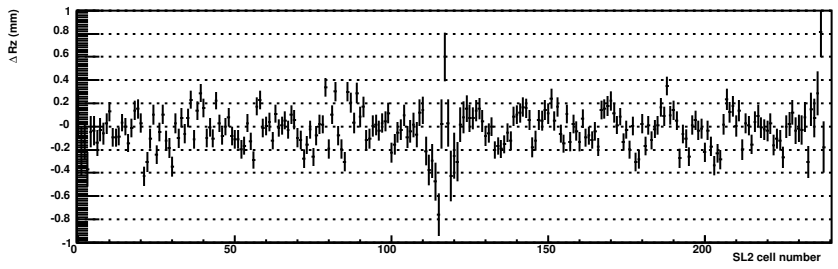

ΔR (mm)
SL5 cell number

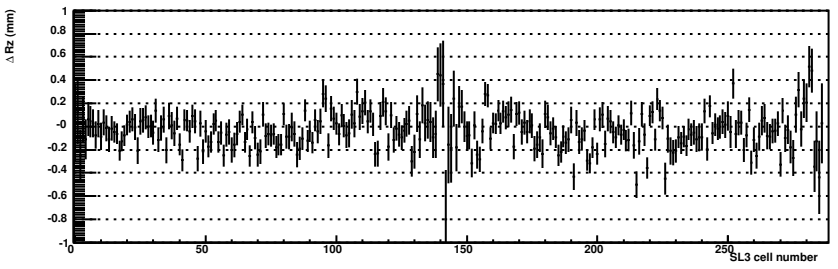

ΔR (mm)
SL6 cell number

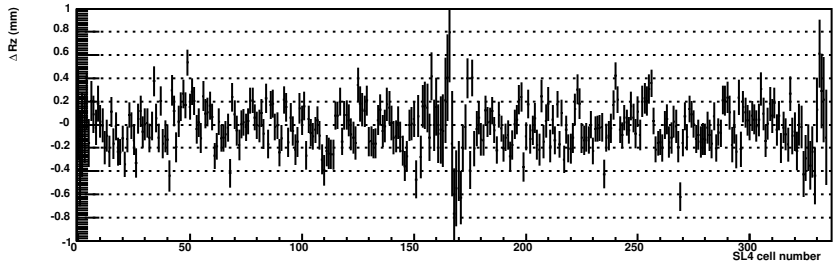

ΔR (mm)
SL7 cell number

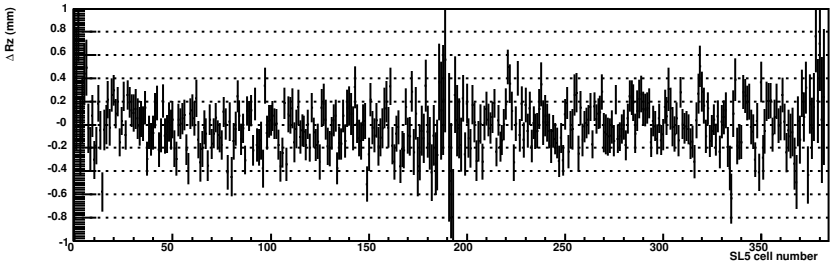

ΔRz (mm)
SL0 cell number

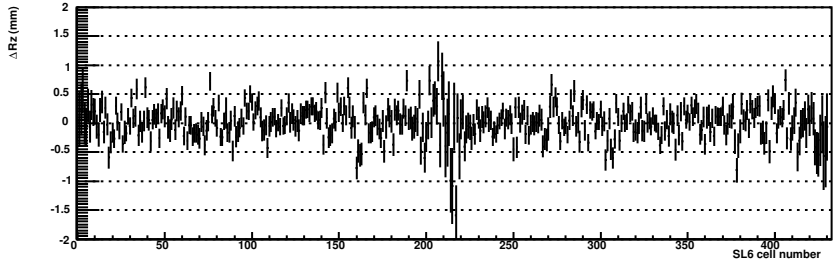

ΔRz (mm)
SL1 cell number

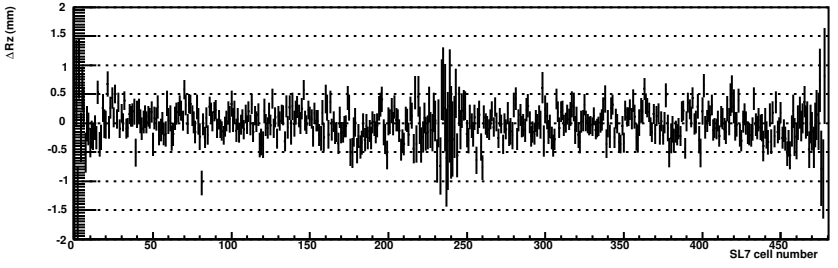

ΔRz (mm)
SL2 cell number

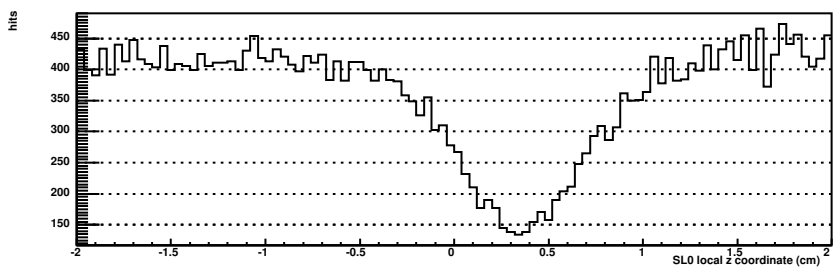

ΔRz (mm)
SL3 cell number

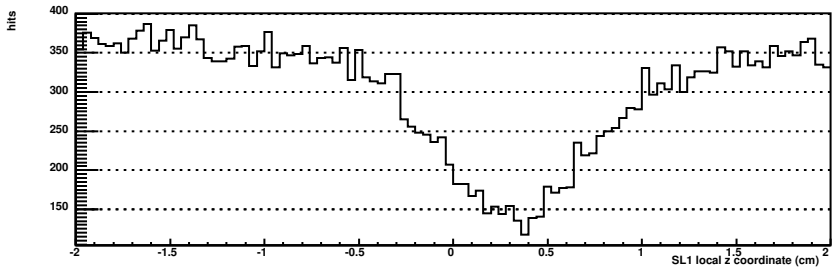

ΔRz (mm)
SL4 cell number

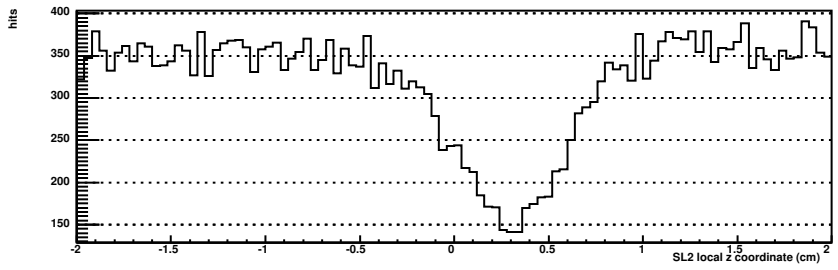

ΔRz (mm)
SL5 cell number

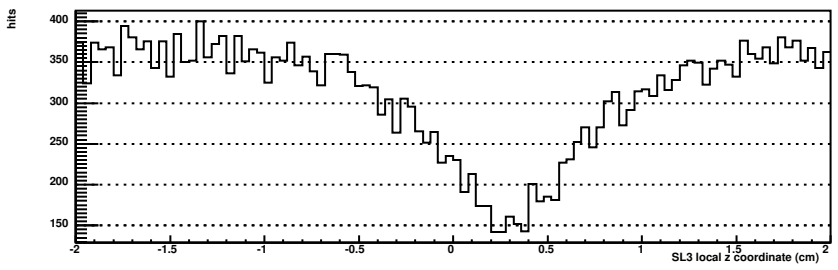

ΔRz (mm)
SL6 cell number

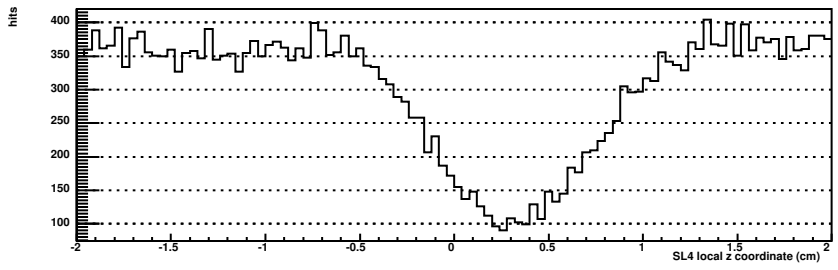

ΔRz (mm)
SL7 cell number

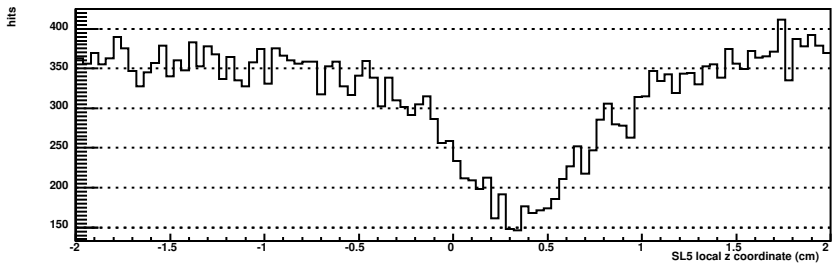

hits
SL0 local z coordinate (cm)

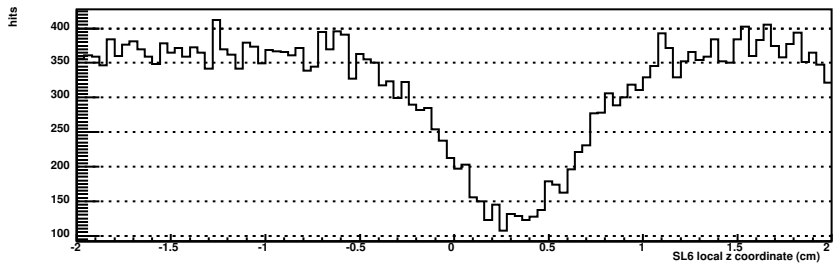

hits
SL1 local z coordinate (cm)

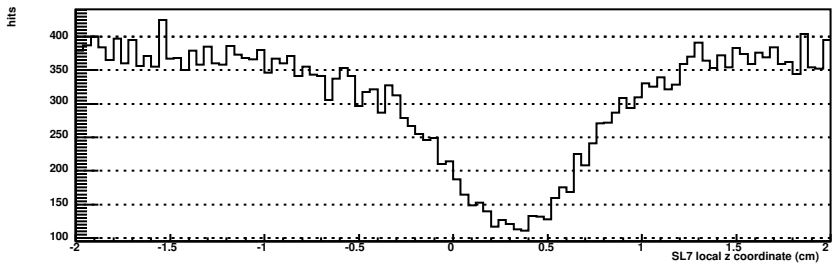

hits
SL2 local z coordinate (cm)

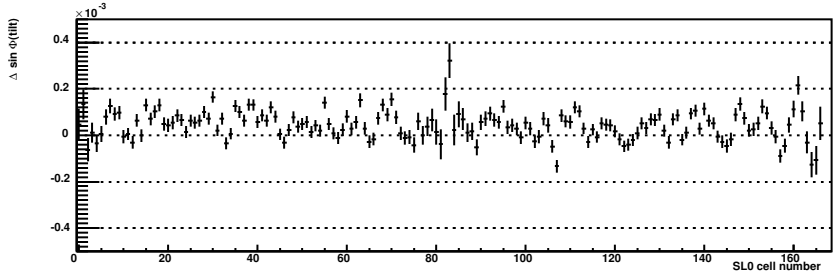

hits
SL3 local z coordinate (cm)

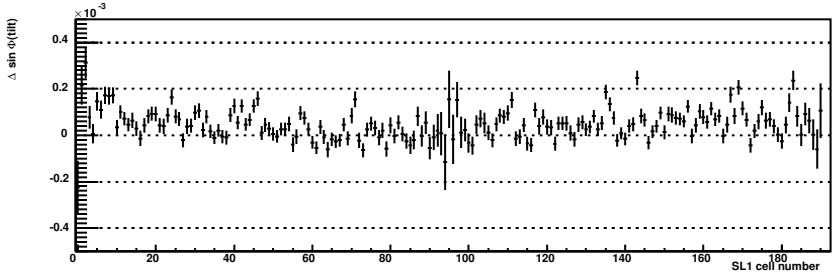

hits
SL4 local z coordinate (cm)

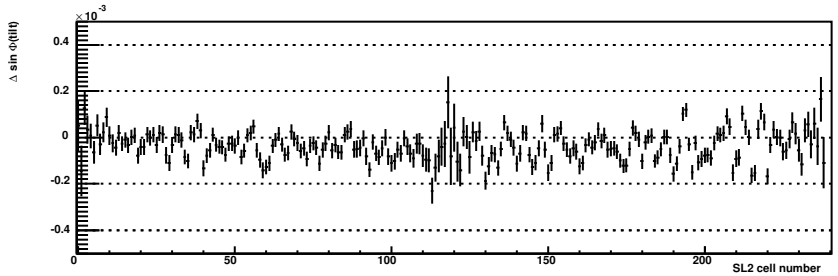

hits
SL5 local z coordinate (cm)

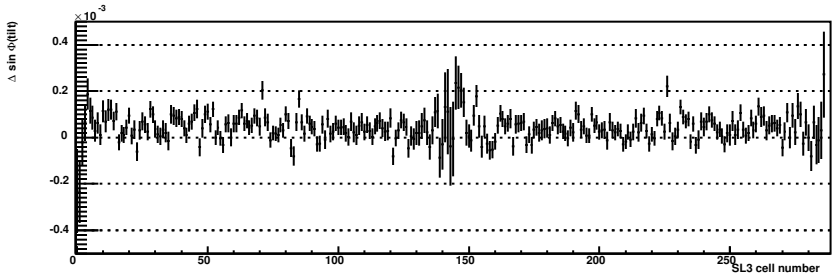

hits
SL6 local z coordinate (cm)

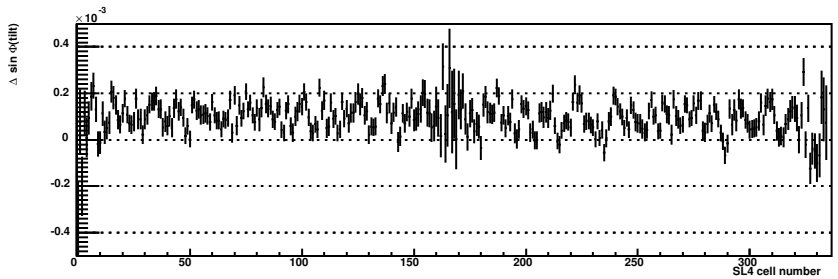

hits
SL7 local z coordinate (cm)

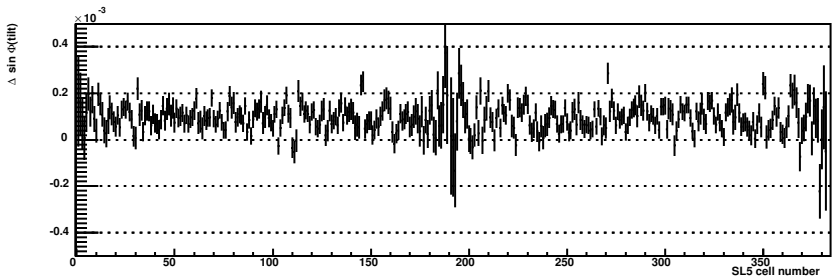

×10^-3
Δ sin Φ(tilt)
SL0 cell number

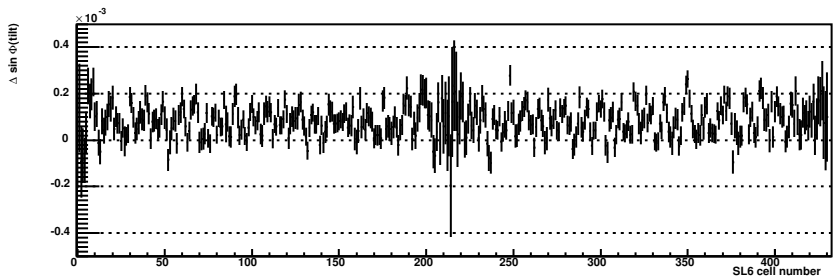

×10^-3
Δ sin Φ(tilt)
SL1 cell number

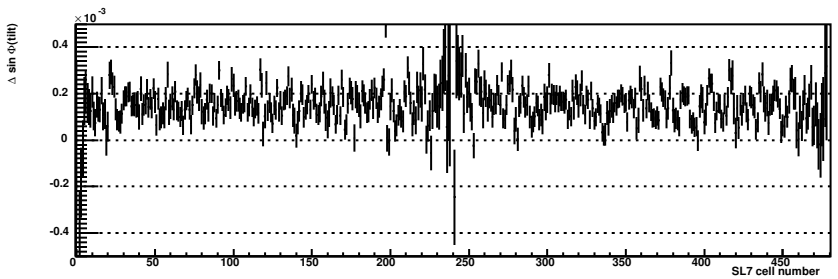

×10^-3
Δ sin Φ(tilt)
SL2 cell number

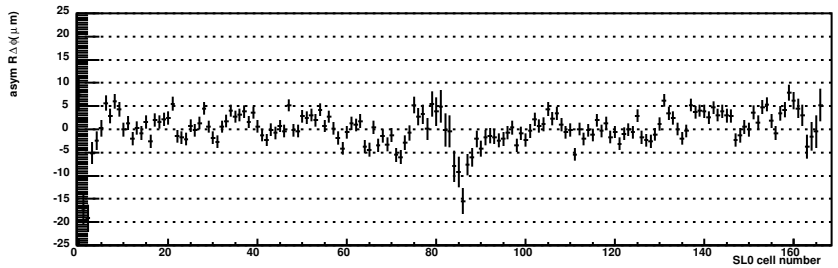

×10^-3
Δ sin Φ(tilt)
SL3 cell number

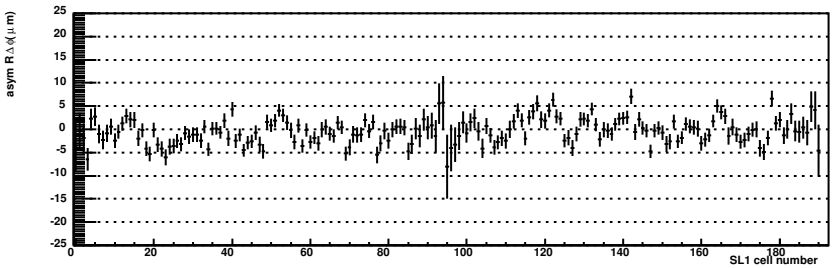

×10^-3
Δ sin Φ(tilt)
SL4 cell number

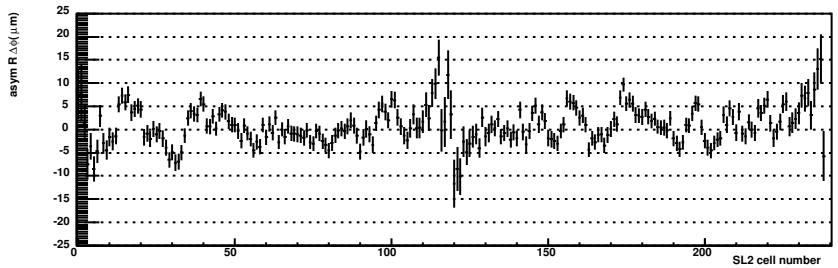

×10^-3
Δ sin Φ(tilt)
SL5 cell number

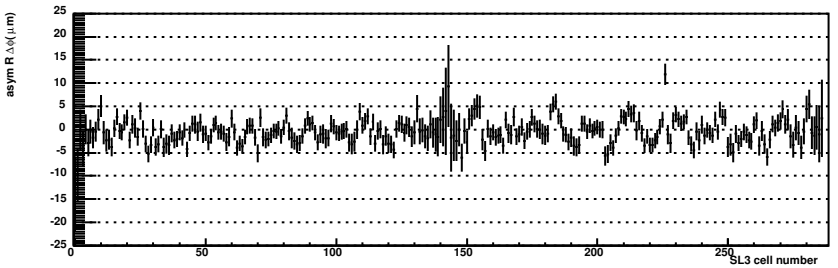

×10^-3
Δ sin Φ(tilt)
SL6 cell number

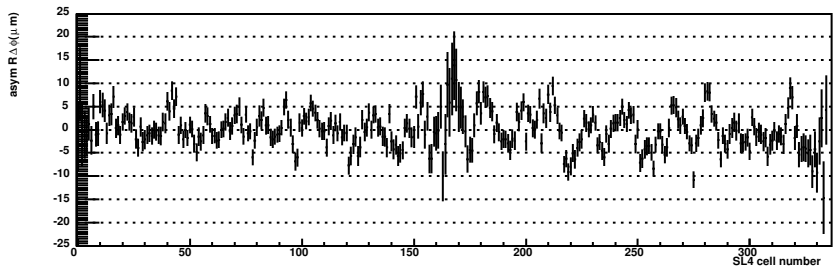

×10^-3
Δ sin Φ(tilt)
SL7 cell number

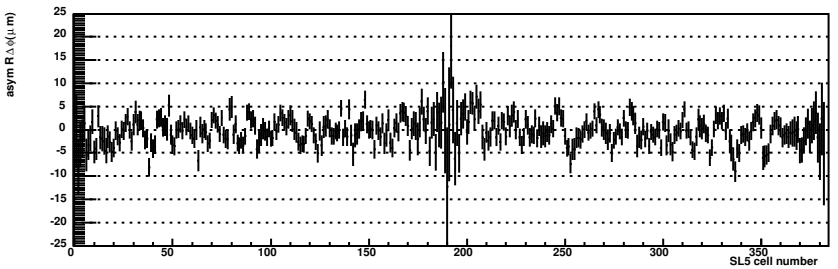

asym R Δφ(μm)
SL0 cell number

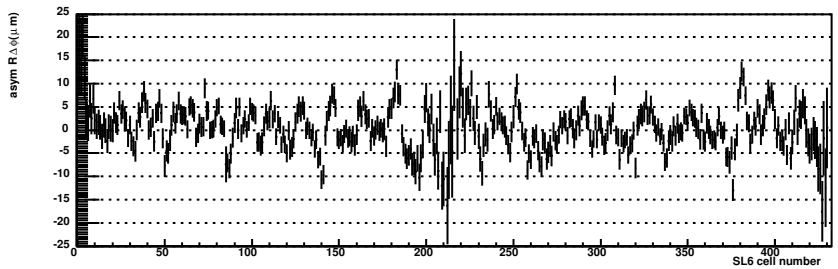

asym R Δφ(μm)
SL1 cell number

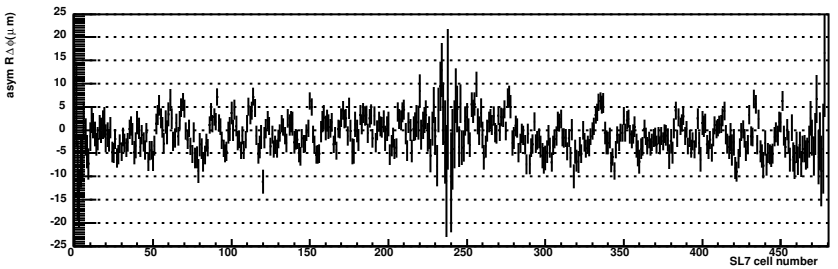

asym R Δφ(μm)
SL2 cell number

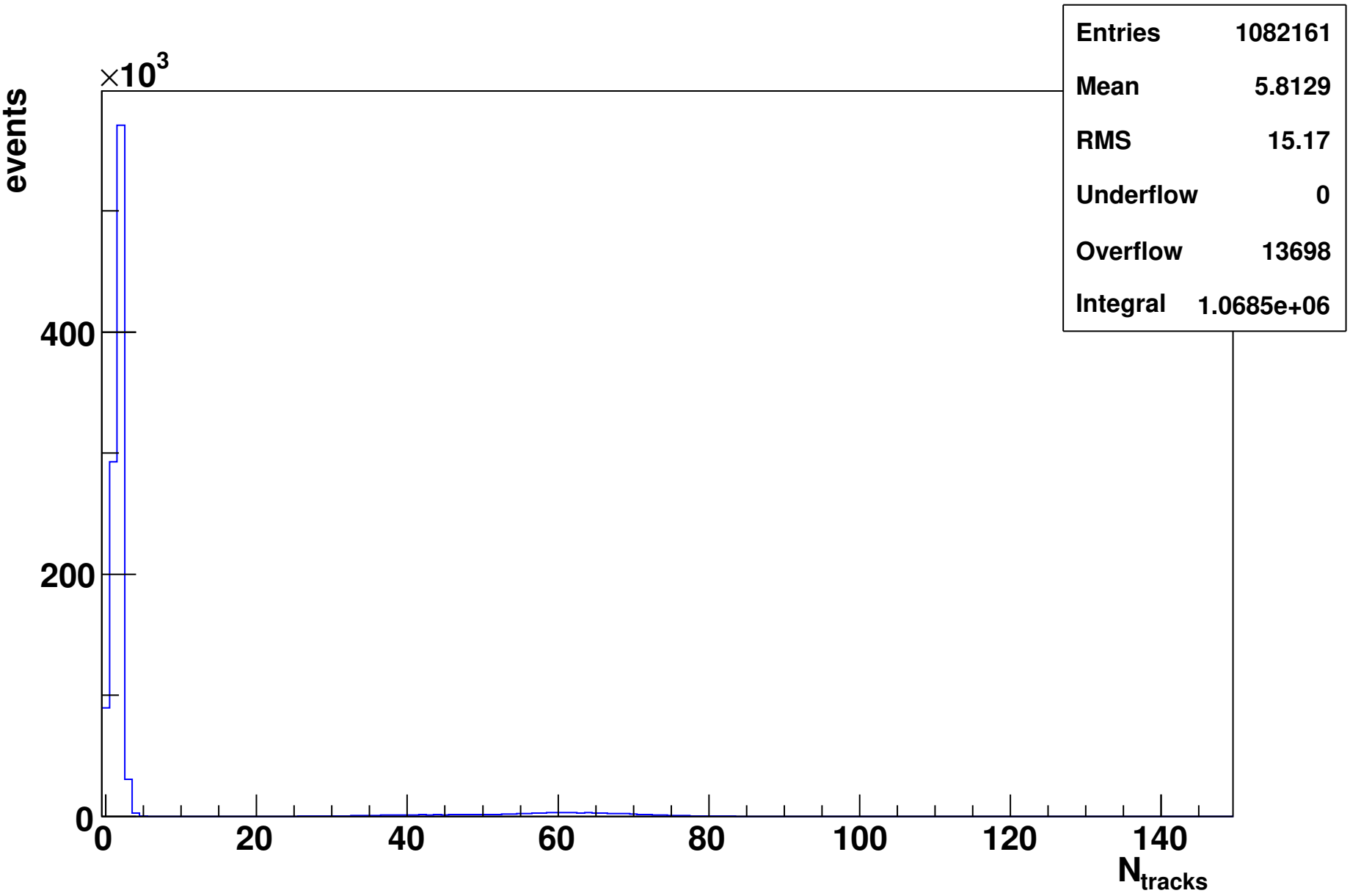

asym R Δφ(μm)
SL3 cell number

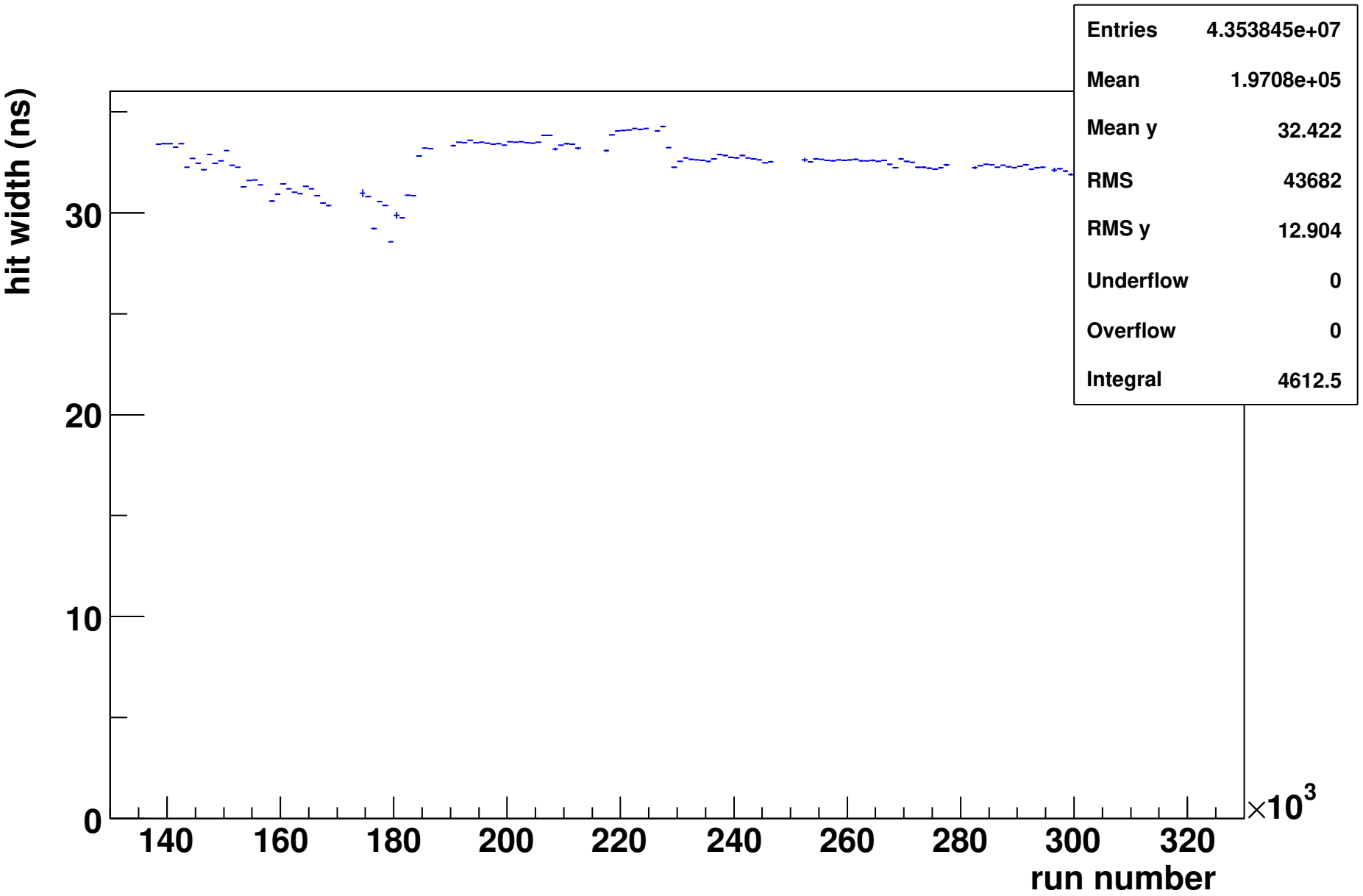

asym R Δφ(μm)
SL4 cell number

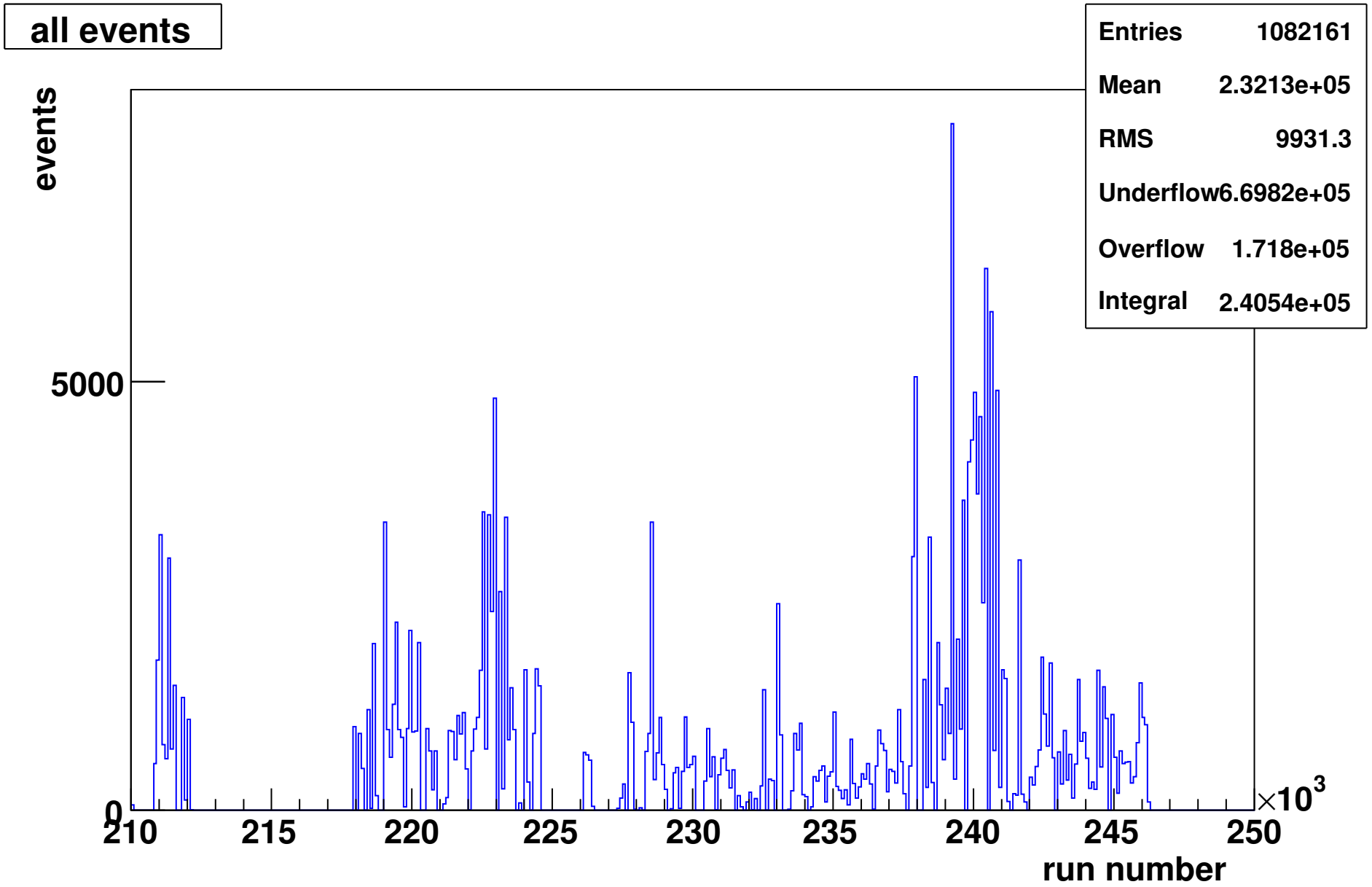

asym R Δφ(μm)
SL5 cell number

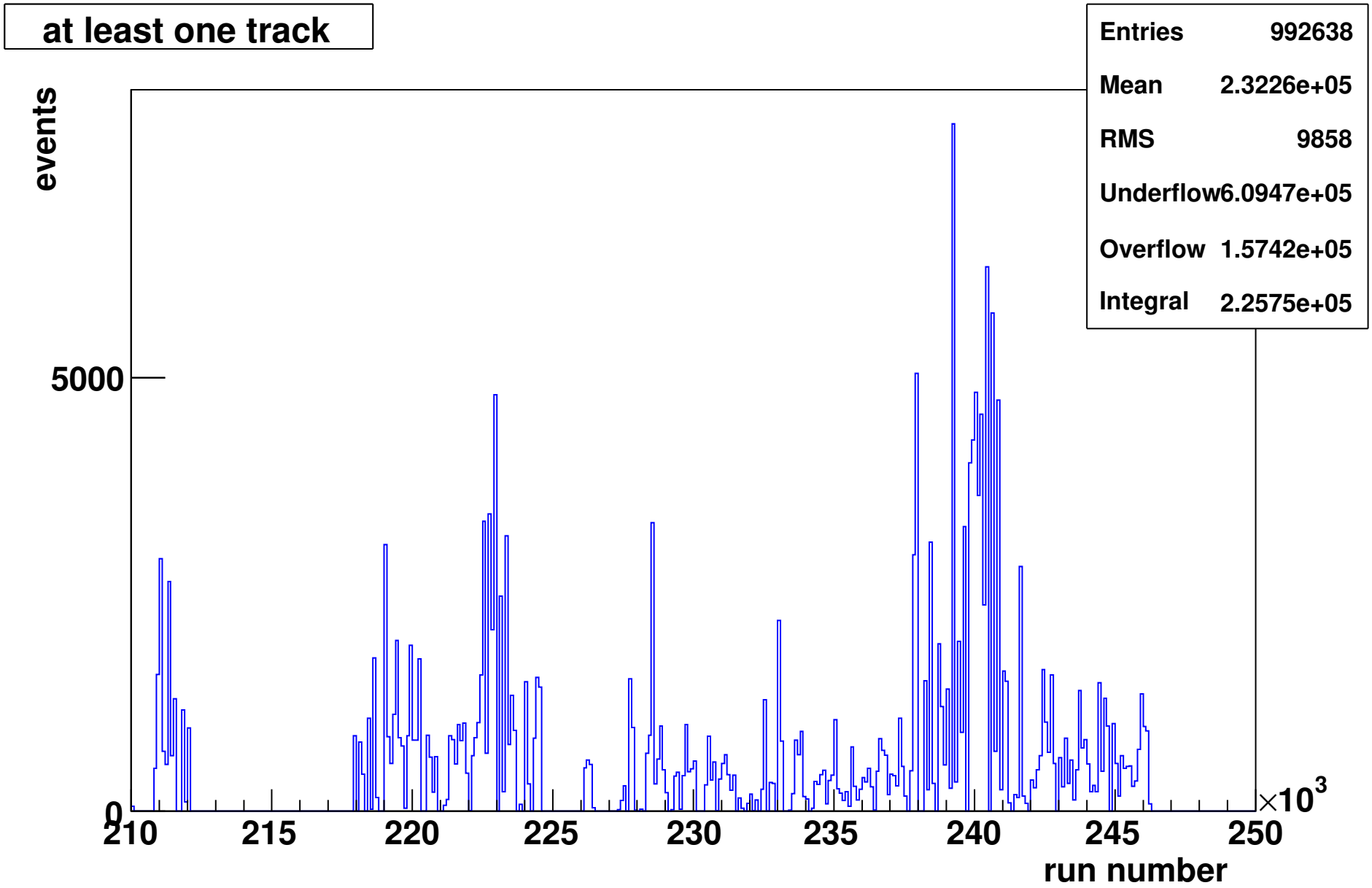

asym R Δφ(μm)
SL6 cell number

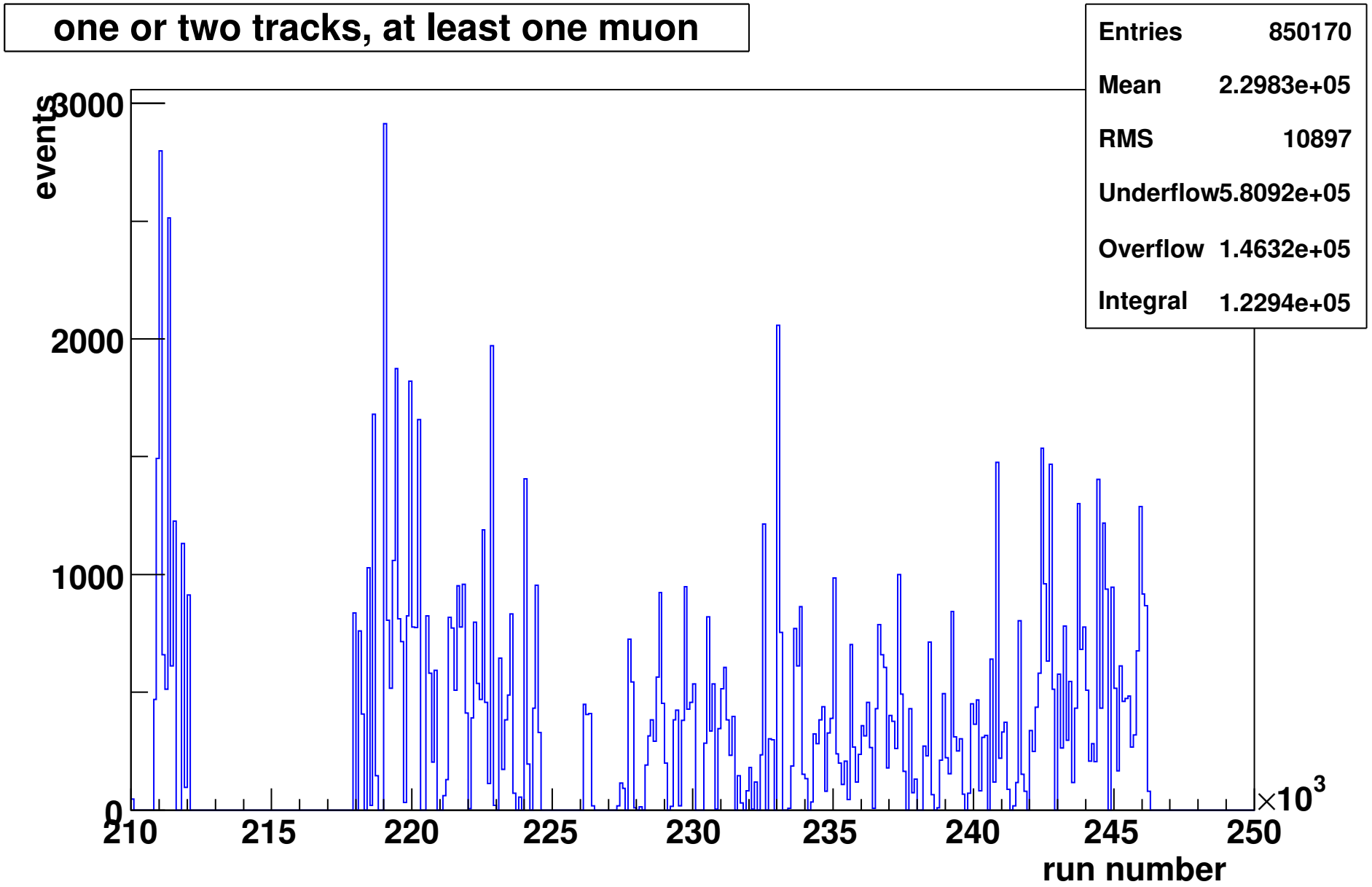

asym R Δφ(μm)
SL7 cell number

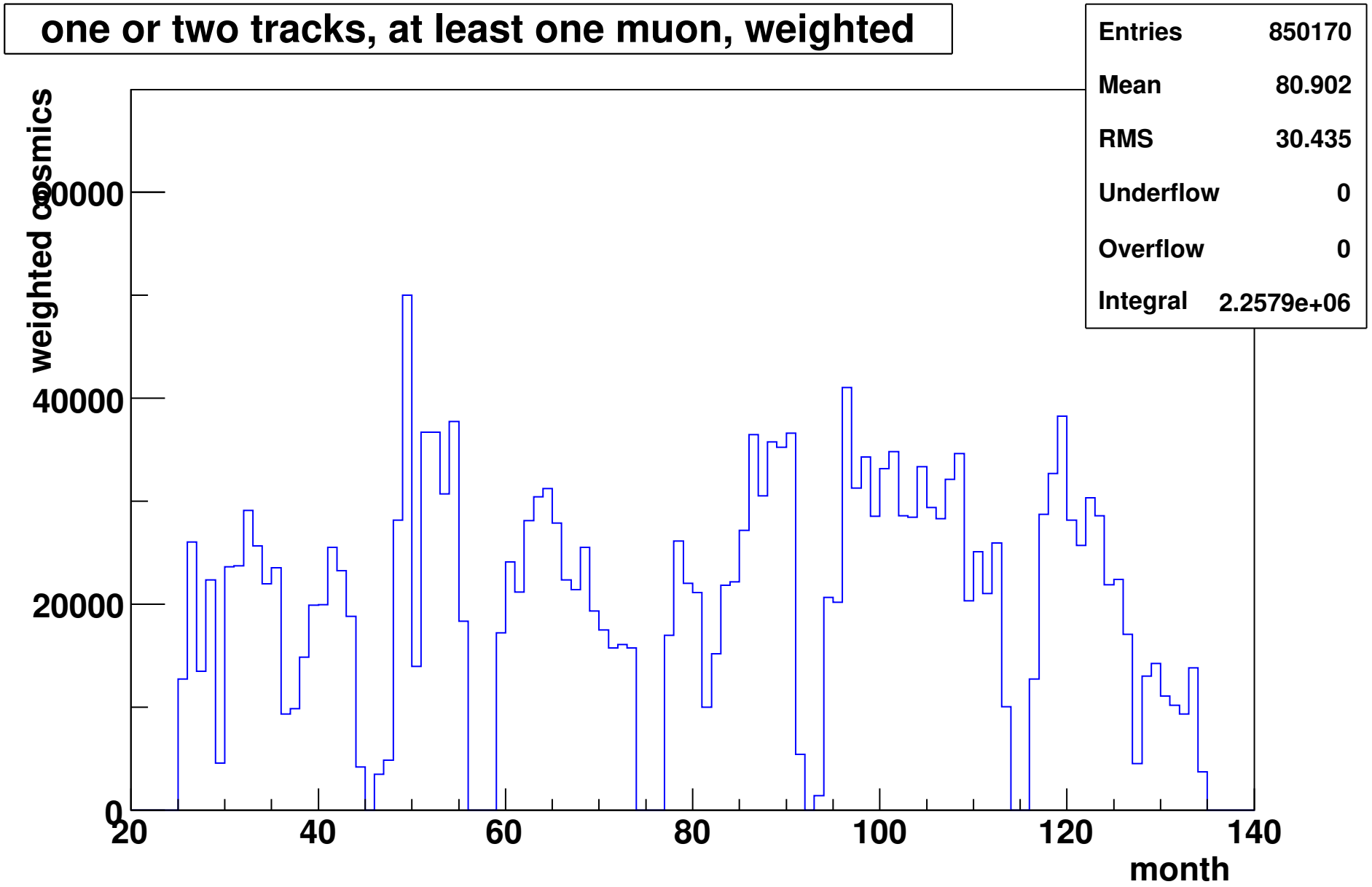

Entries 1082161
Mean 5.8129
RMS 15.17
Underflow 0
Overflow 13698
Integral 1.0685e+06
×10^3
events
400
200
0
0
20
40
60
80
100
120
140
N_tracks

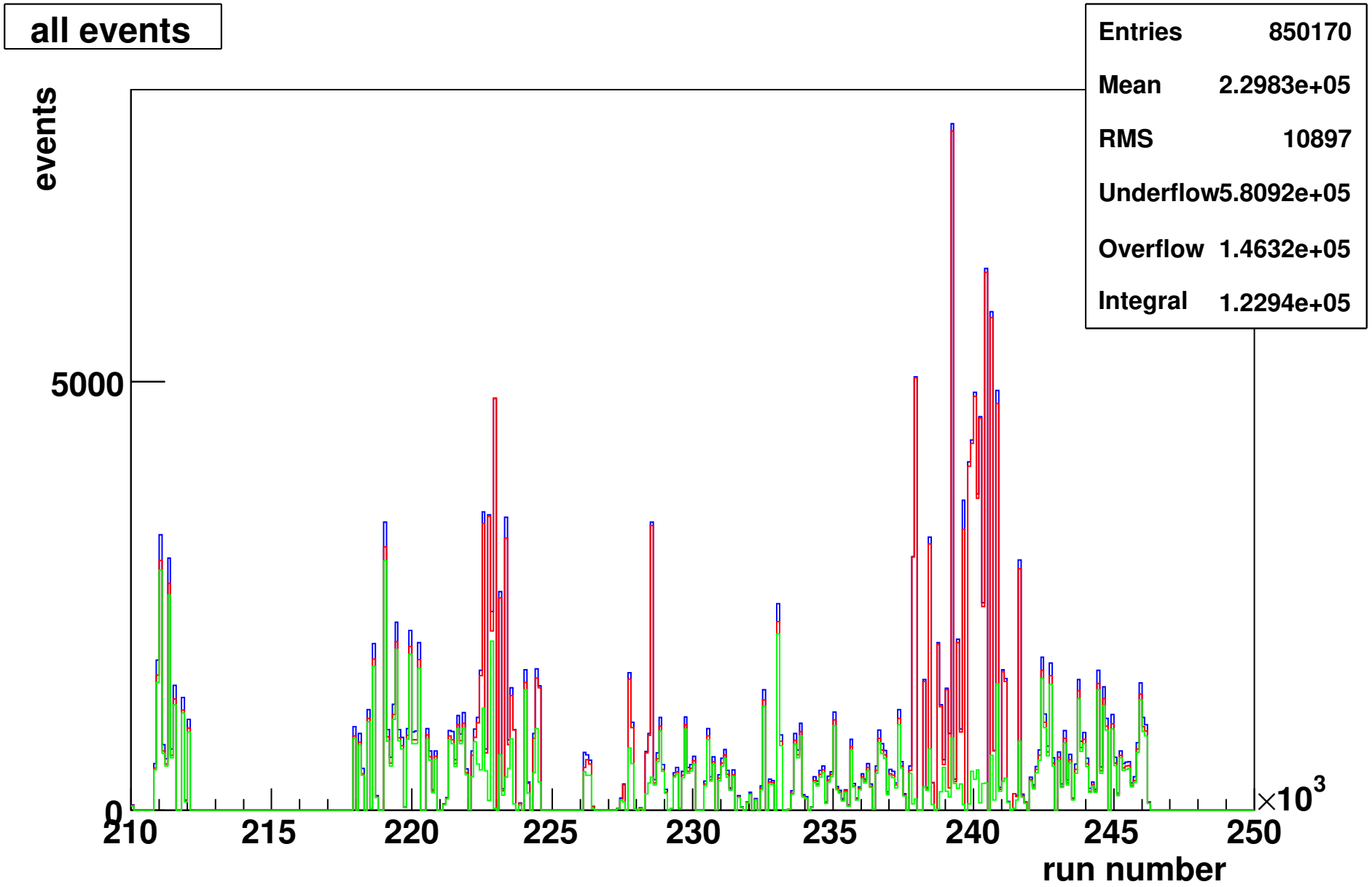

hit width (ns)
30
20
10
0
140
160
180
200
220
240
260
280
300
320
×10^3
run number
Entries 4.353845e+07
Mean 1.9708e+05
Mean y 32.422
RMS 43682
RMS y 12.904
Underflow 0
Overflow 0
Integral 4612.5

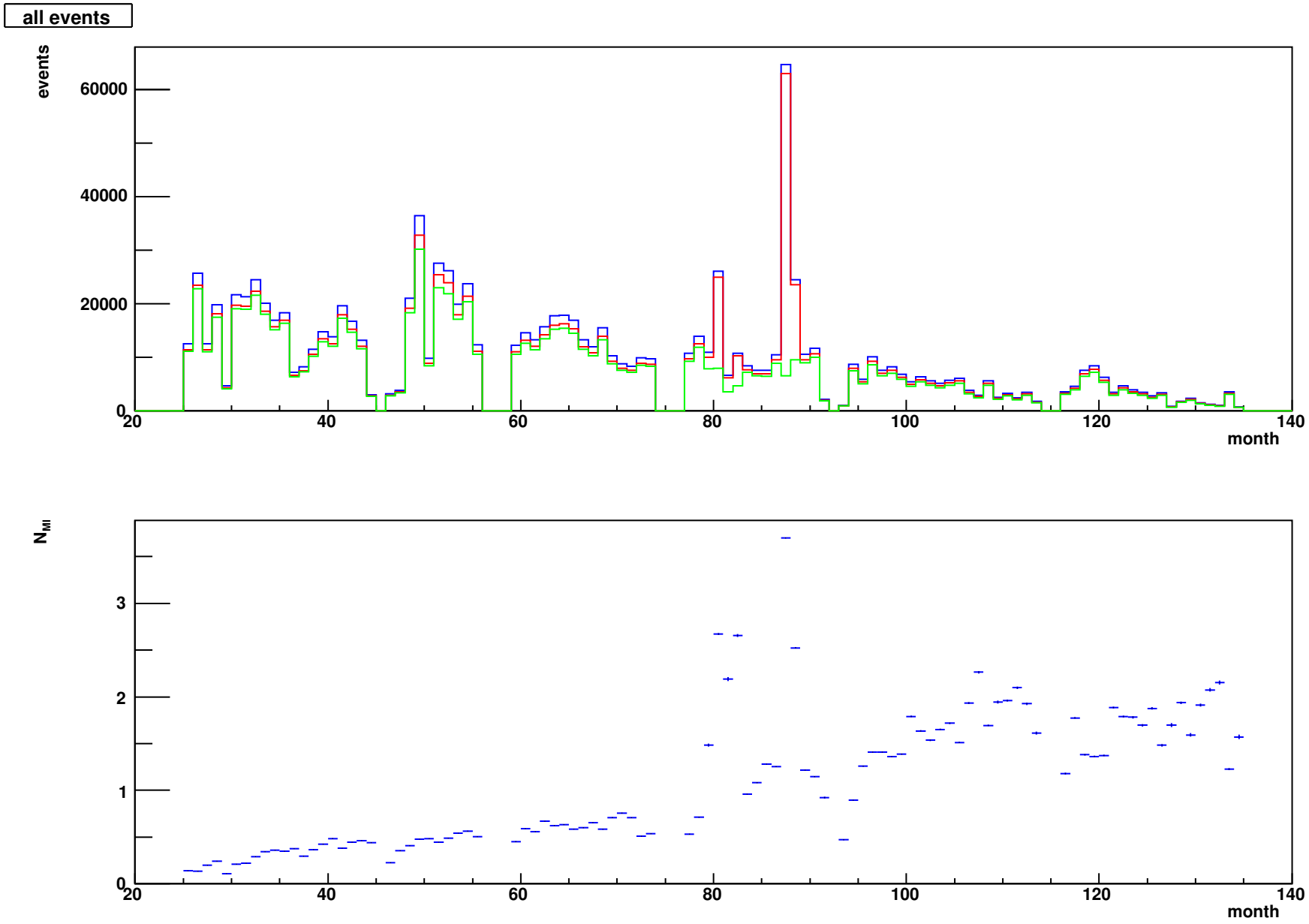

all events
Entries 1082161
Mean 2.3213e+05
RMS 9931.3
Underflow 6.6982e+05
Overflow 1.718e+05
Integral 2.4054e+05
events
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

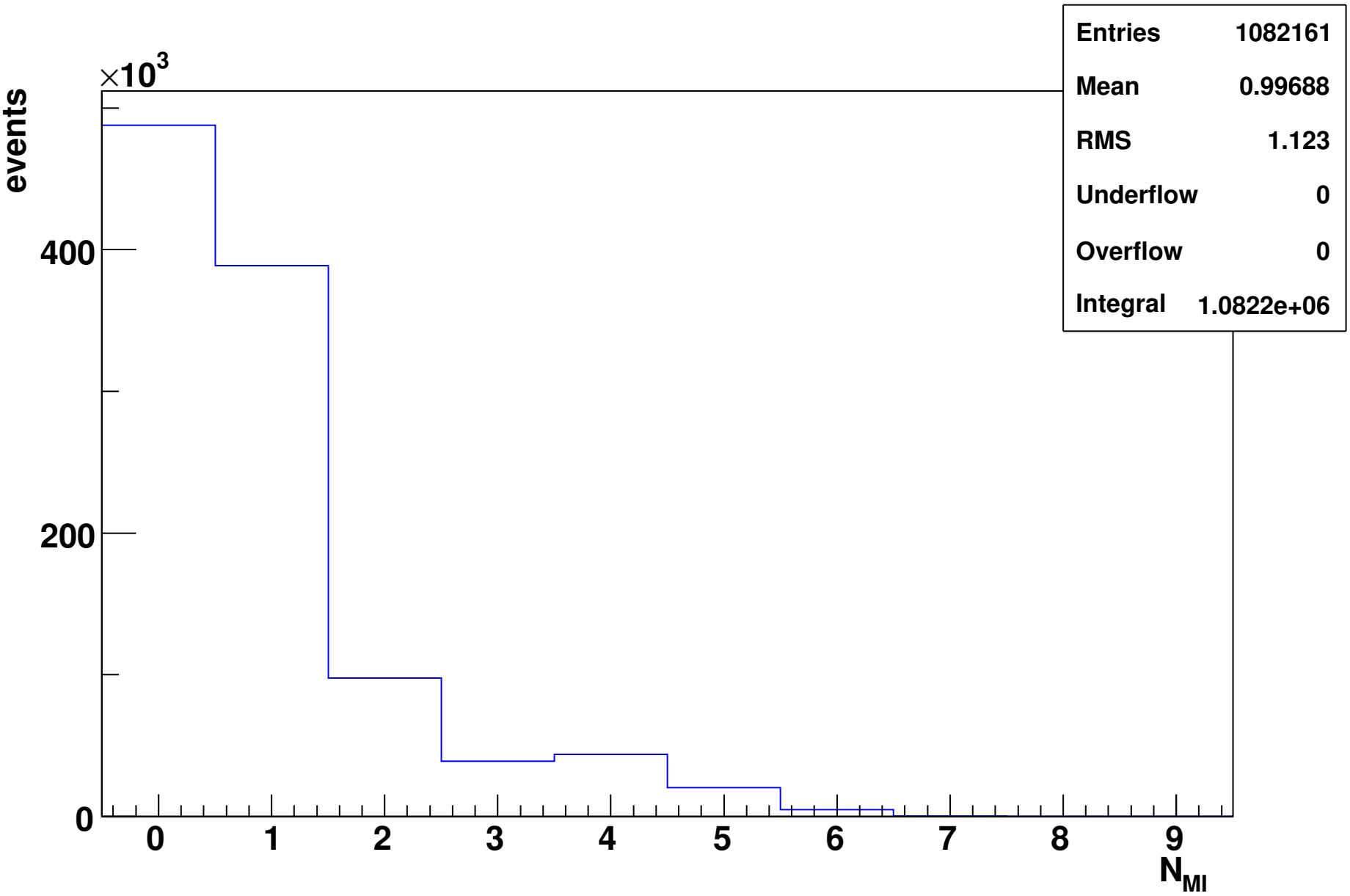

at least one track
Entries 992638
Mean 2.3226e+05
RMS 9858
Underflow 6.0947e+05
Overflow 1.5742e+05
Integral 2.2575e+05
events
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

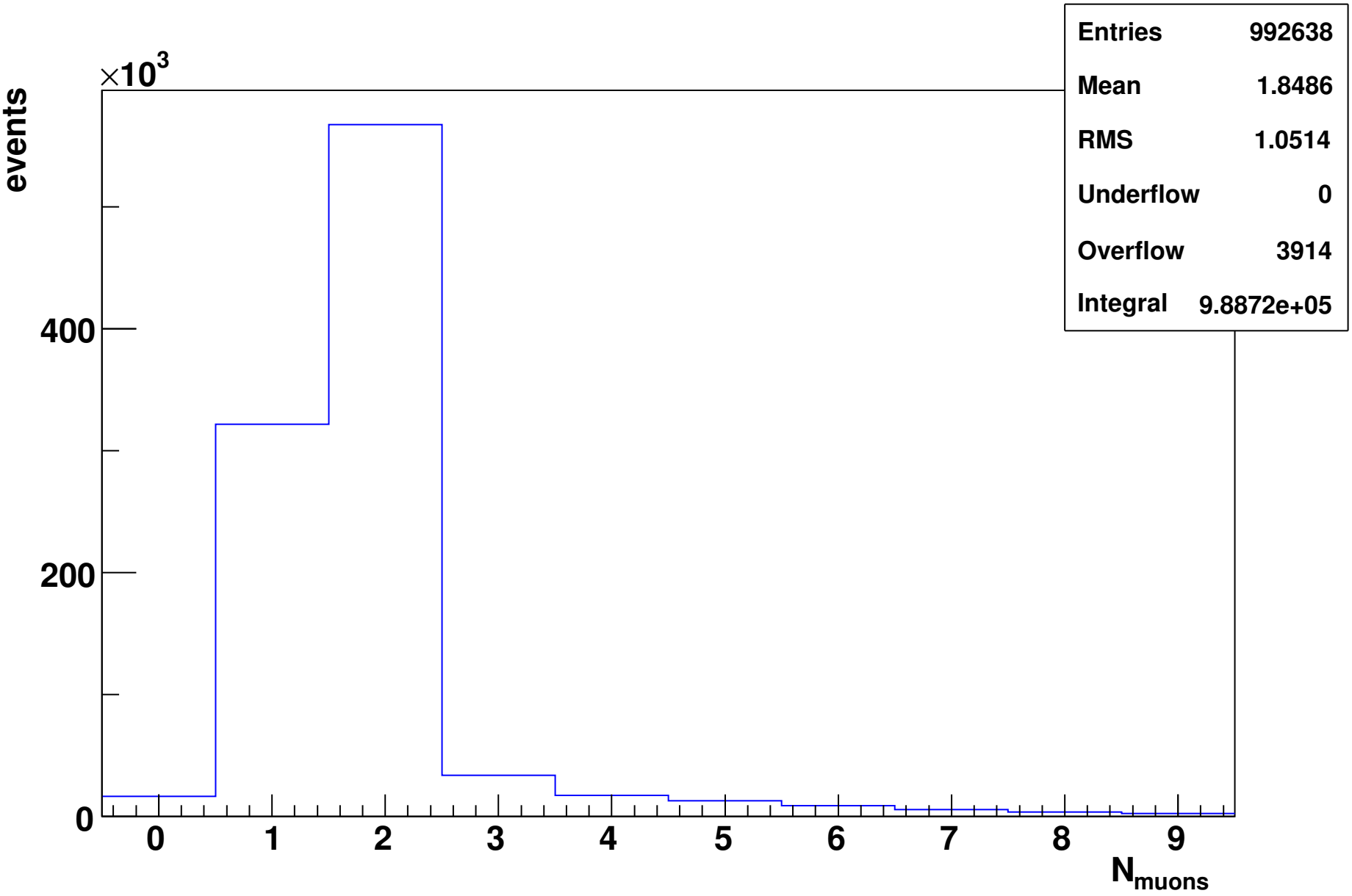

one or two tracks, at least one muon
Entries 850170
Mean 2.2983e+05
RMS 10897
Underflow 5.8092e+05
Overflow 1.4632e+05
Integral 1.2294e+05
events
3000
2000
1000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

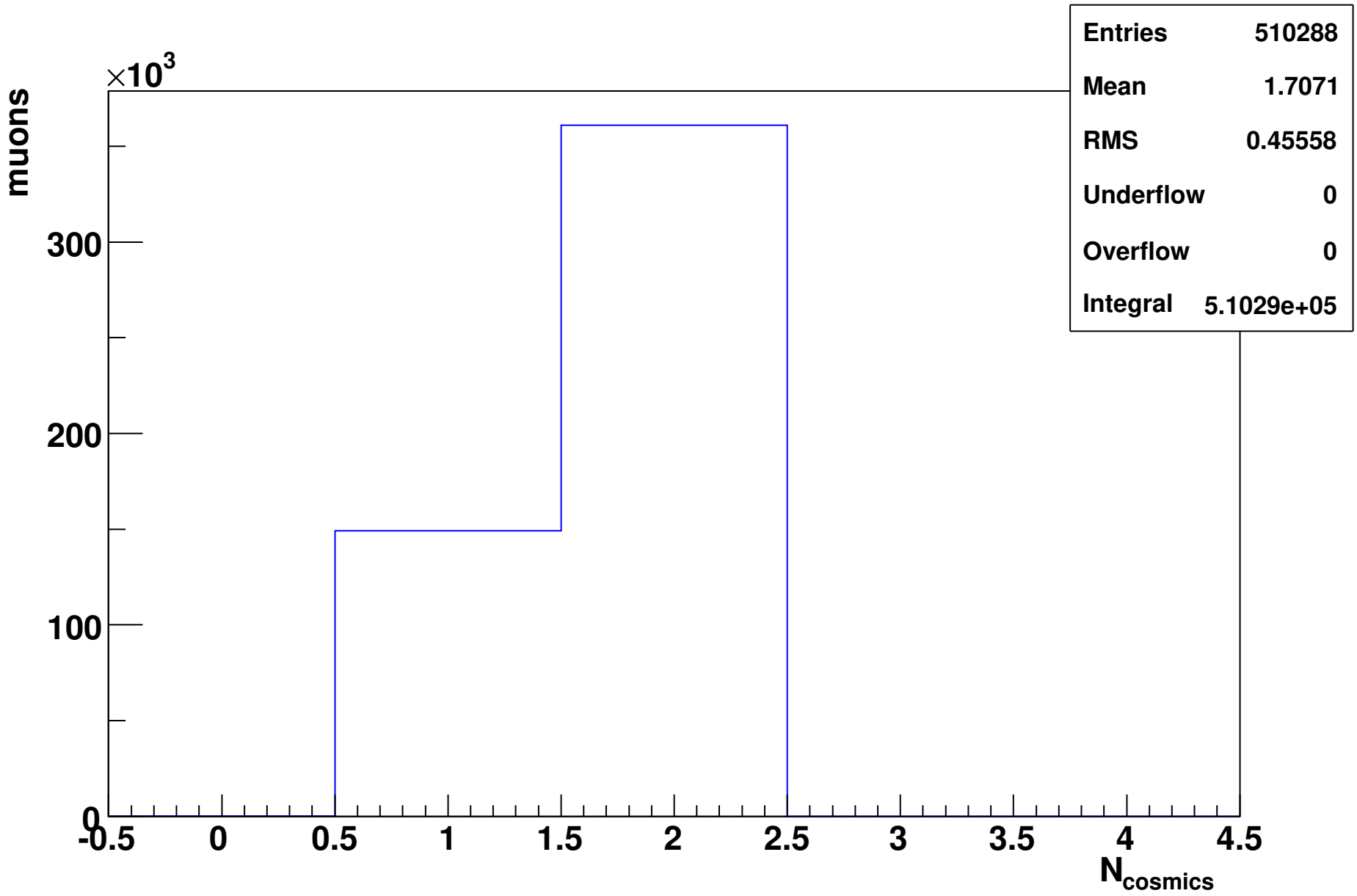

one or two tracks, at least one muon, weighted
Entries 850170
Mean 80.902
RMS 30.435
Underflow 0
Overflow 0
Integral 2.2579e+06
weighted cosmics
60000
40000
20000
0
20
40
60
80
100
120
140
month

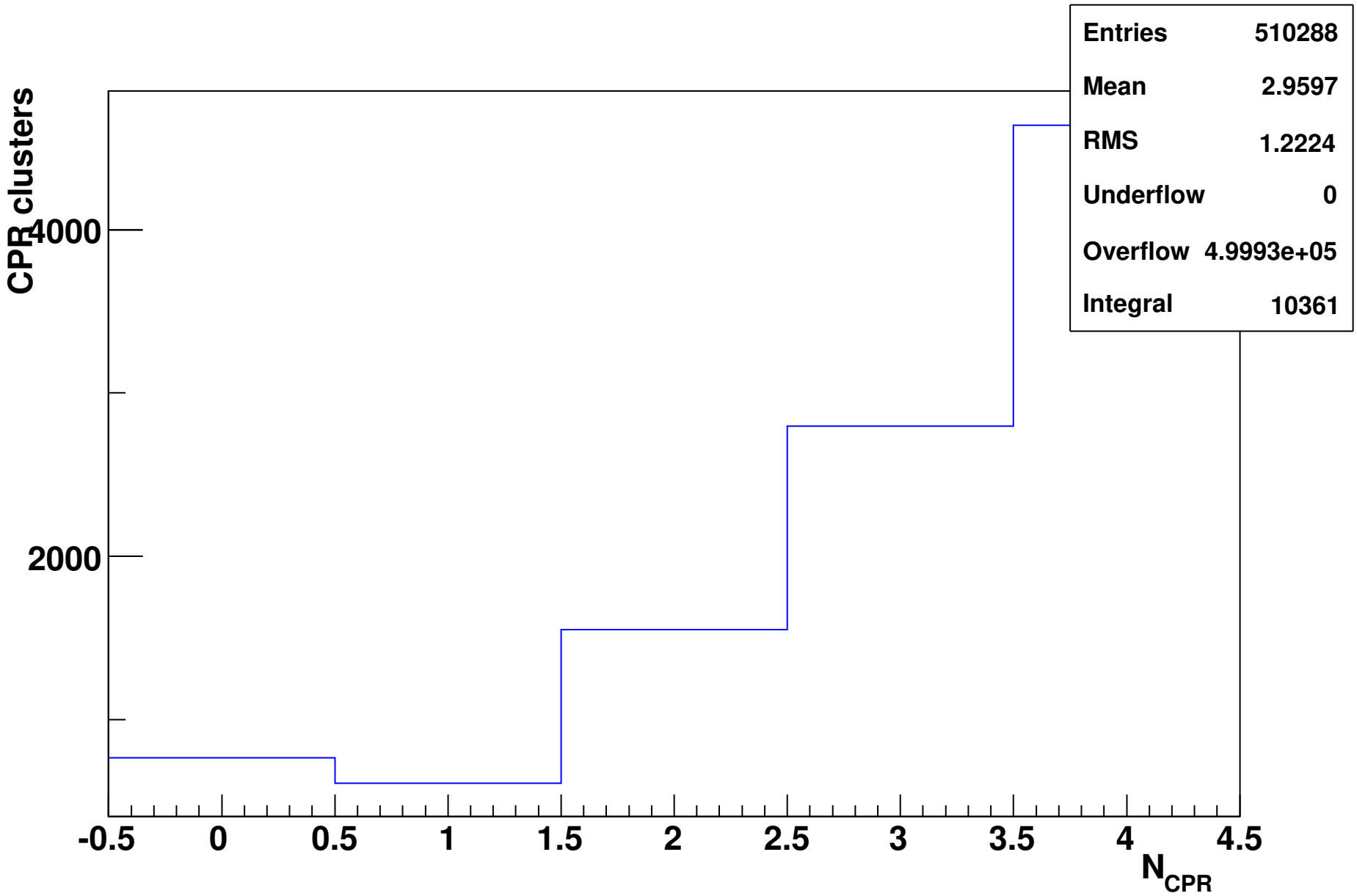

all events
Entries 850170
Mean 2.2983e+05
RMS 10897
Underflow 5.8092e+05
Overflow 1.4632e+05
Integral 1.2294e+05
events
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

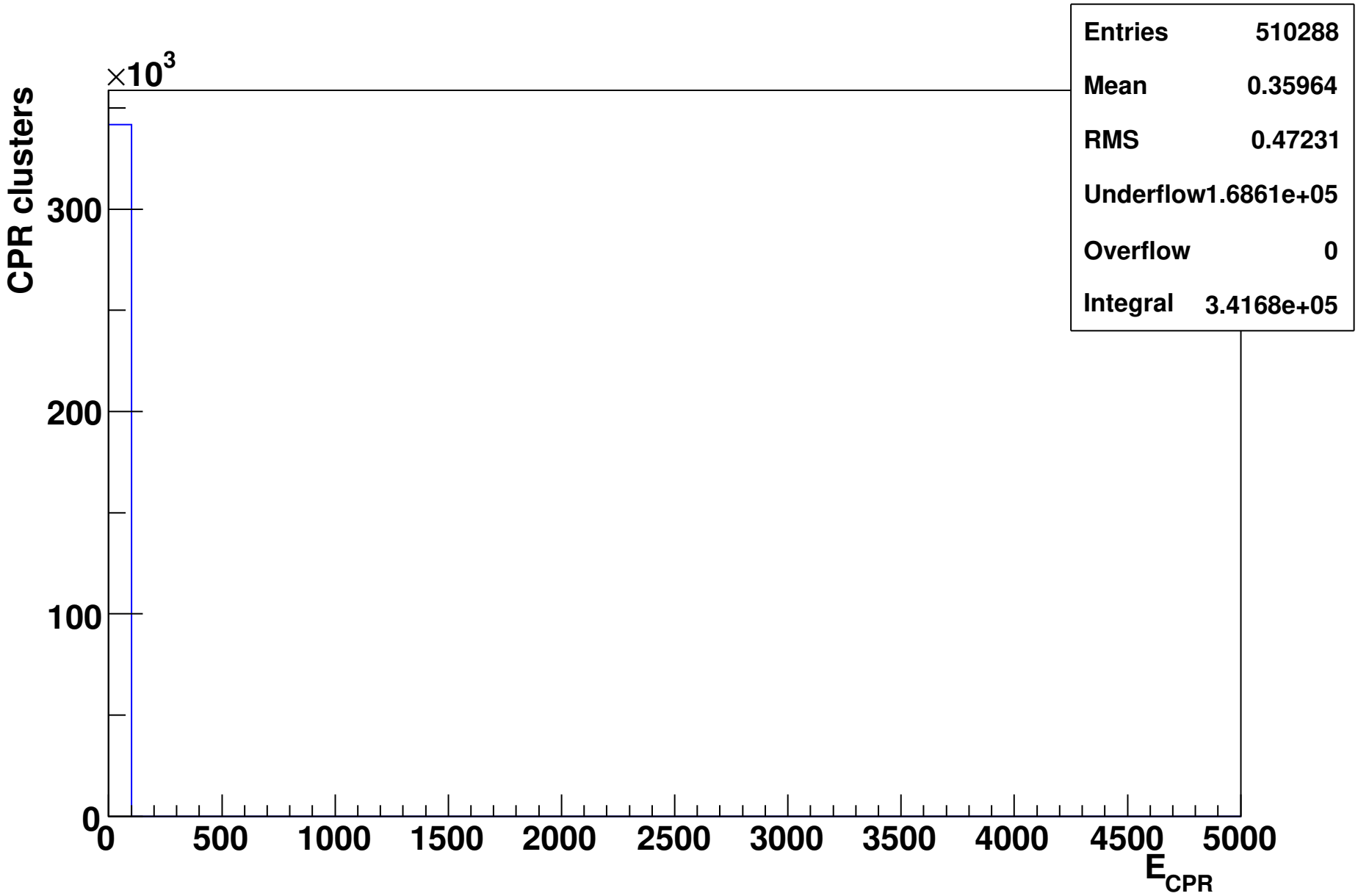

all events
events
60000
40000
20000
0
20
40
60
80
100
120
140
month
N_{MI}
3
2
1
0
20
40
60
80
100
120
140
month

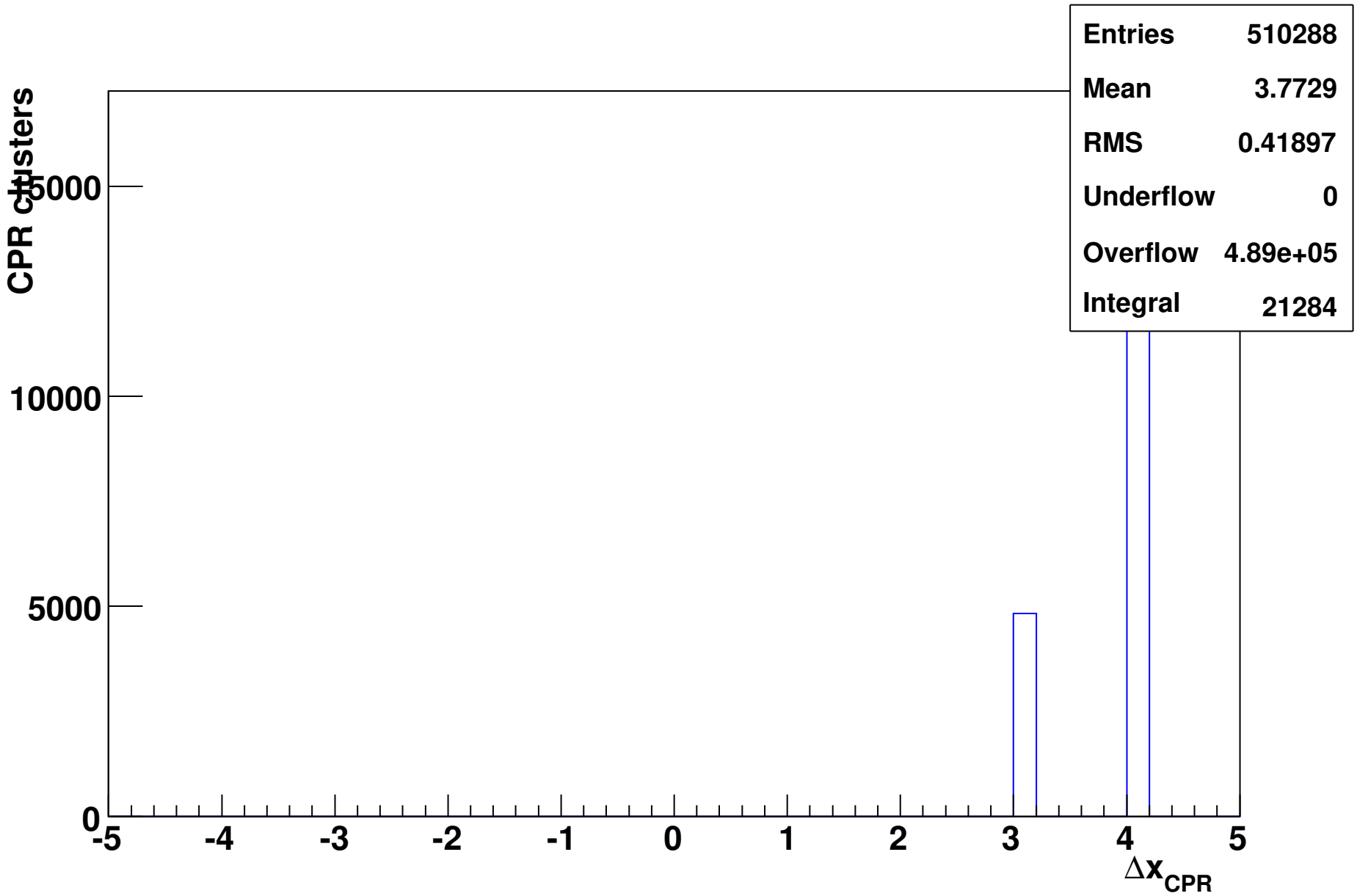

Entries 1082161
Mean 0.99688
RMS 1.123
Underflow 0
Overflow 0
Integral 1.0822e+06
×10^3
events
400
200
0
0 1 2 3 4 5 6 7 8 9
N_MI

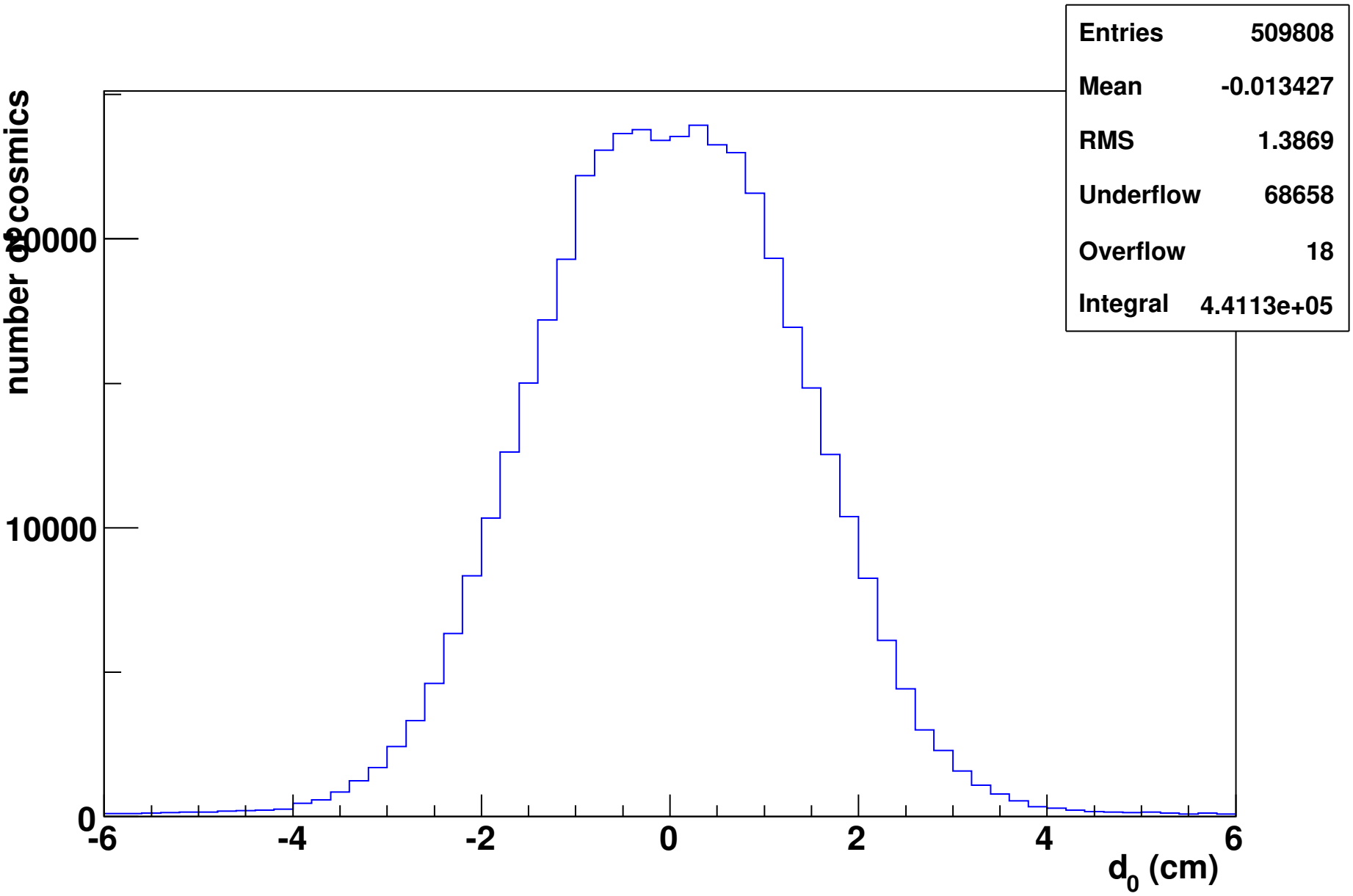

Entries 992638
Mean 1.8486
RMS 1.0514
Underflow 0
Overflow 3914
Integral 9.8872e+05
×10^3
events
400
200
0
0 1 2 3 4 5 6 7 8 9
N_muons

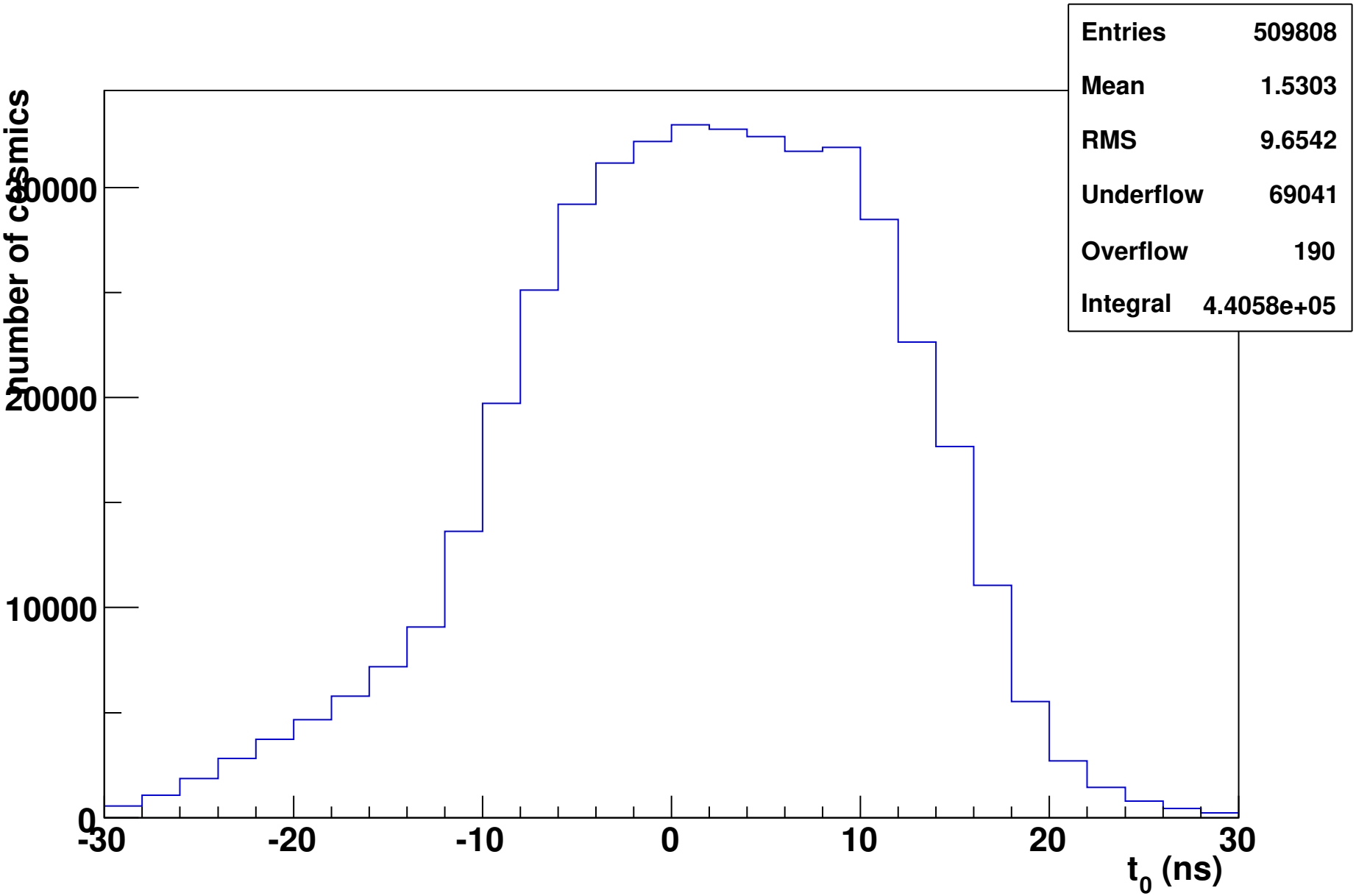

Entries 510288
Mean 1.7071
RMS 0.45558
Underflow 0
Overflow 0
Integral 5.1029e+05
muons
×10^3
300
200
100
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_cosmics

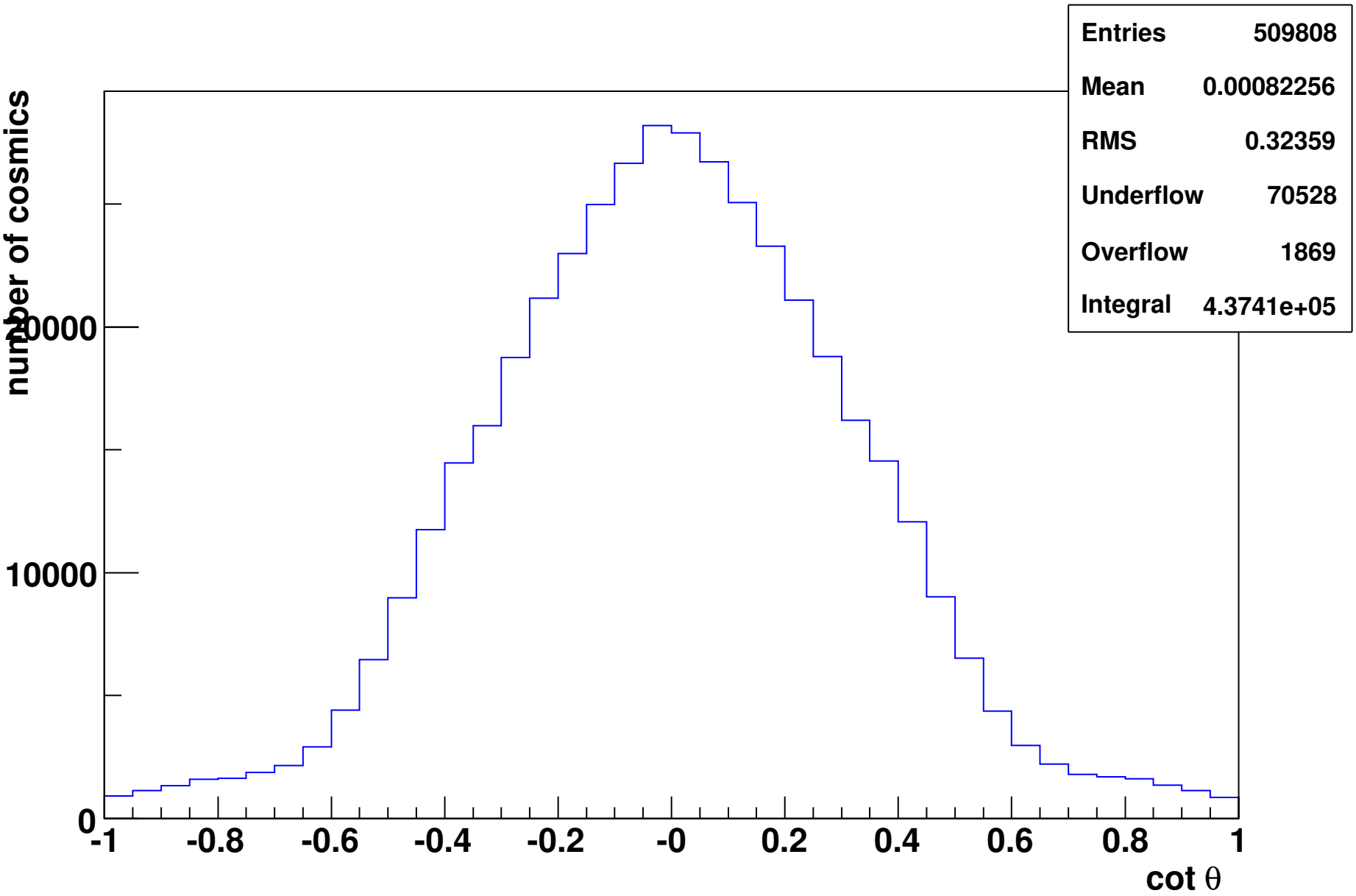

Entries 510288
Mean 2.9597
RMS 1.2224
Underflow 0
Overflow 4.9993e+05
Integral 10361
CPR clusters
4000
2000
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_CPR

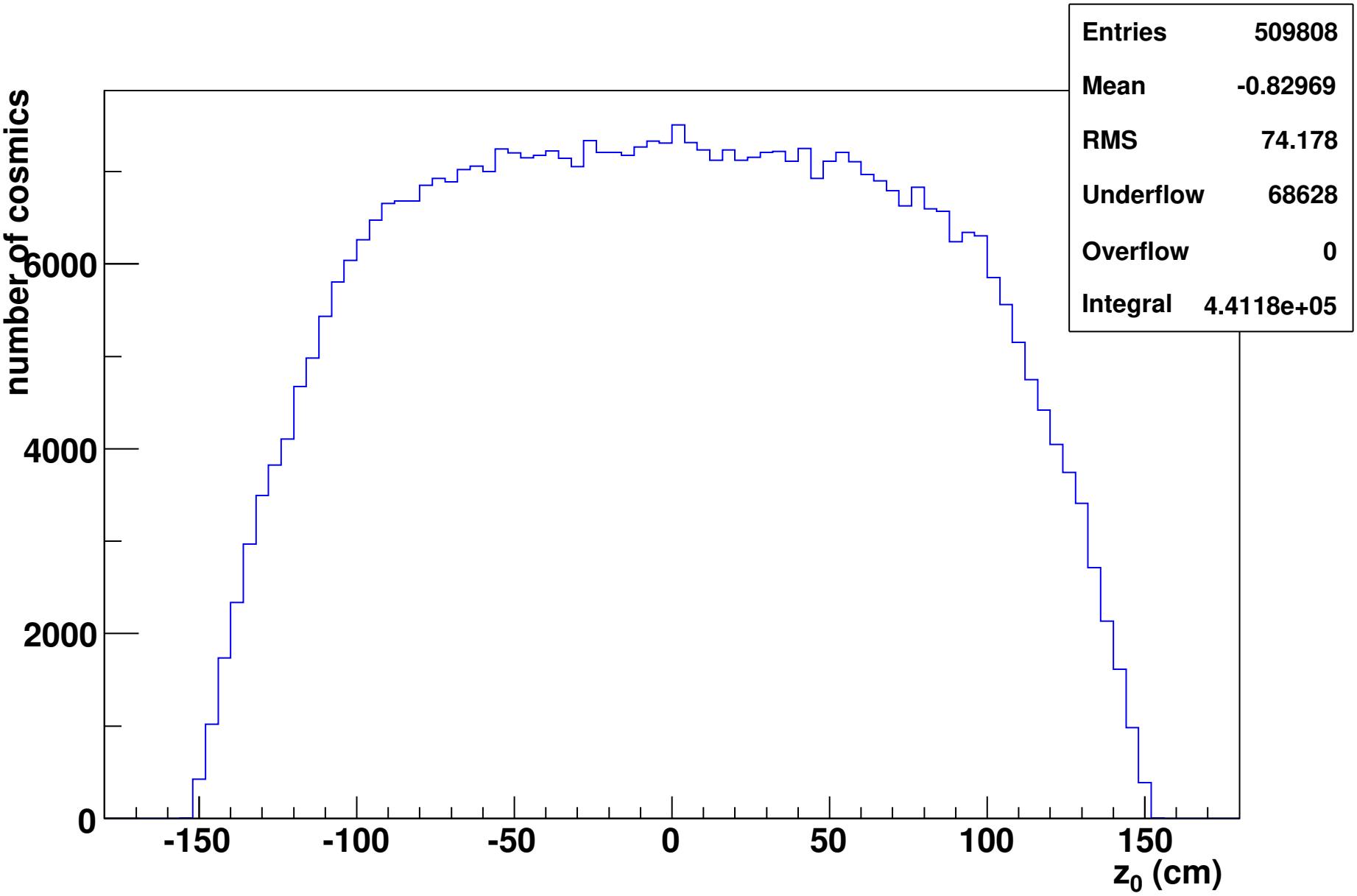

Entries 510288
Mean 0.35964
RMS 0.47231
Underflow 1.6861e+05
Overflow 0
Integral 3.4168e+05
×10^3
CPR clusters
300
200
100
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
E_CPR

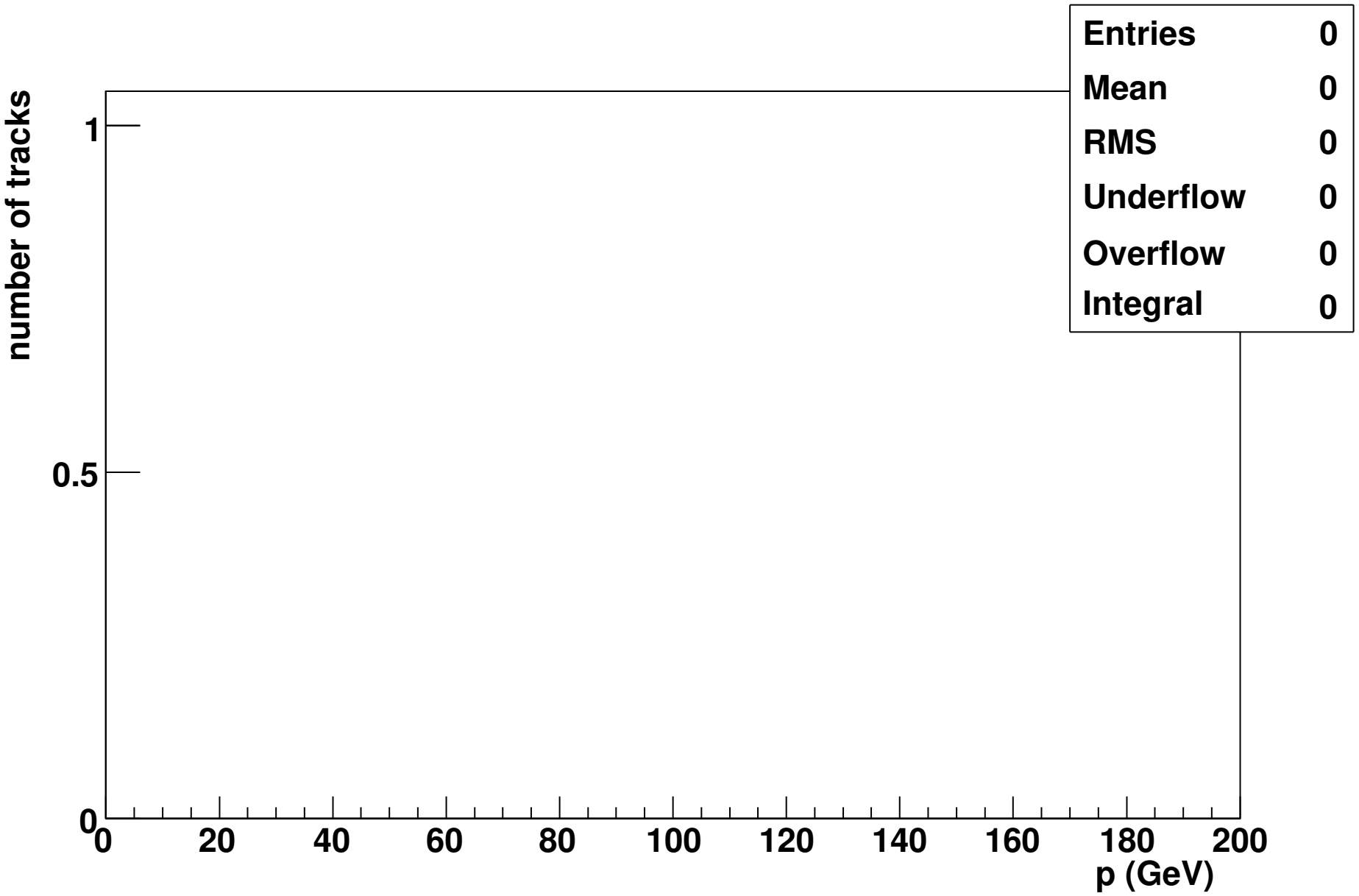

Entries 510288
Mean 3.7729
RMS 0.41897
Underflow 0
Overflow 4.89e+05
Integral 21284
CPR clusters
10000
5000
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
Δx_{CPR}

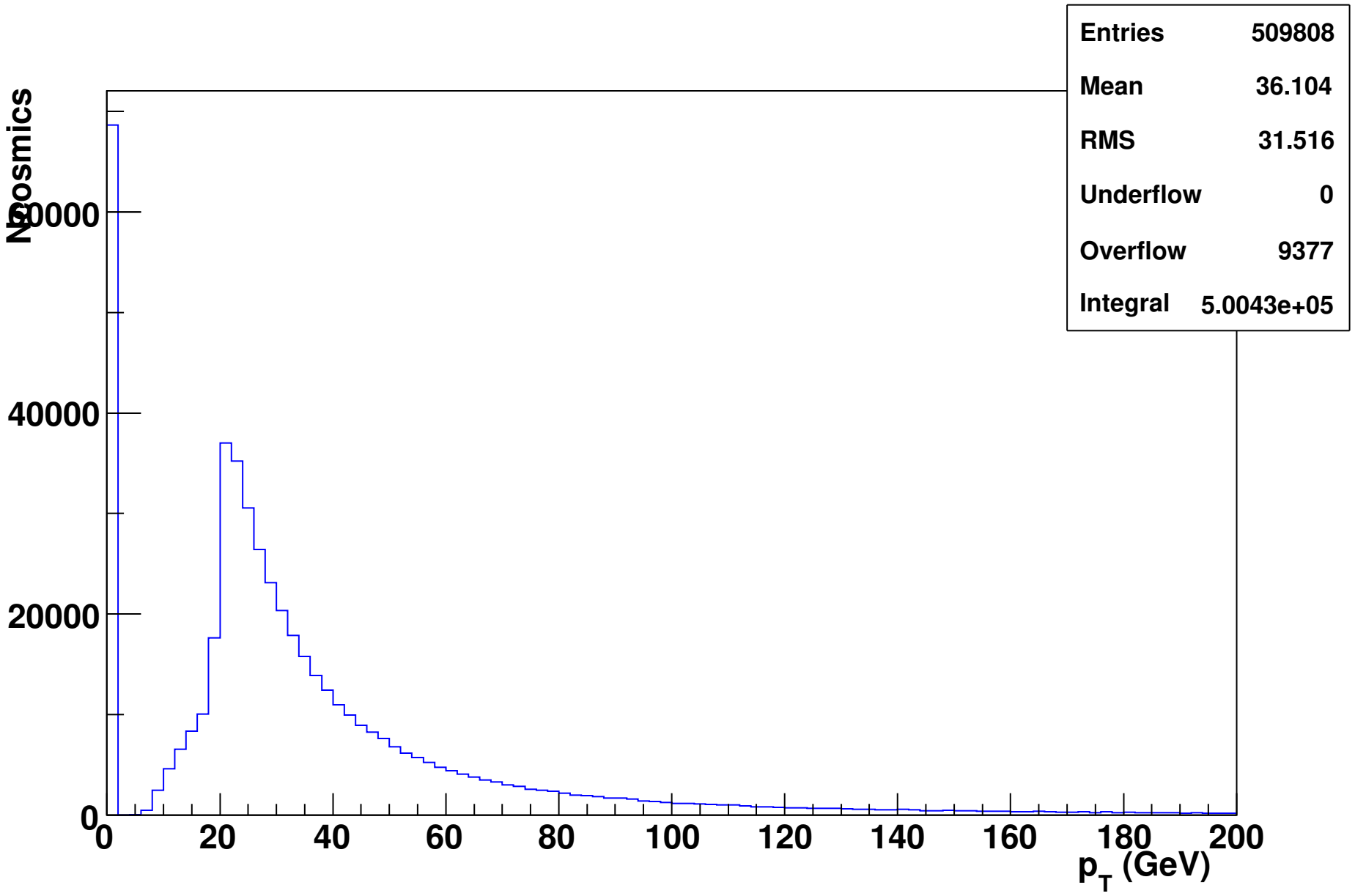

Entries 509808
Mean -0.013427
RMS 1.3869
Underflow 68658
Overflow 18
Integral 4.4113e+05
number of cosmics
20000
10000
0
-6
-4
-2
0
2
4
6
d_0 (cm)

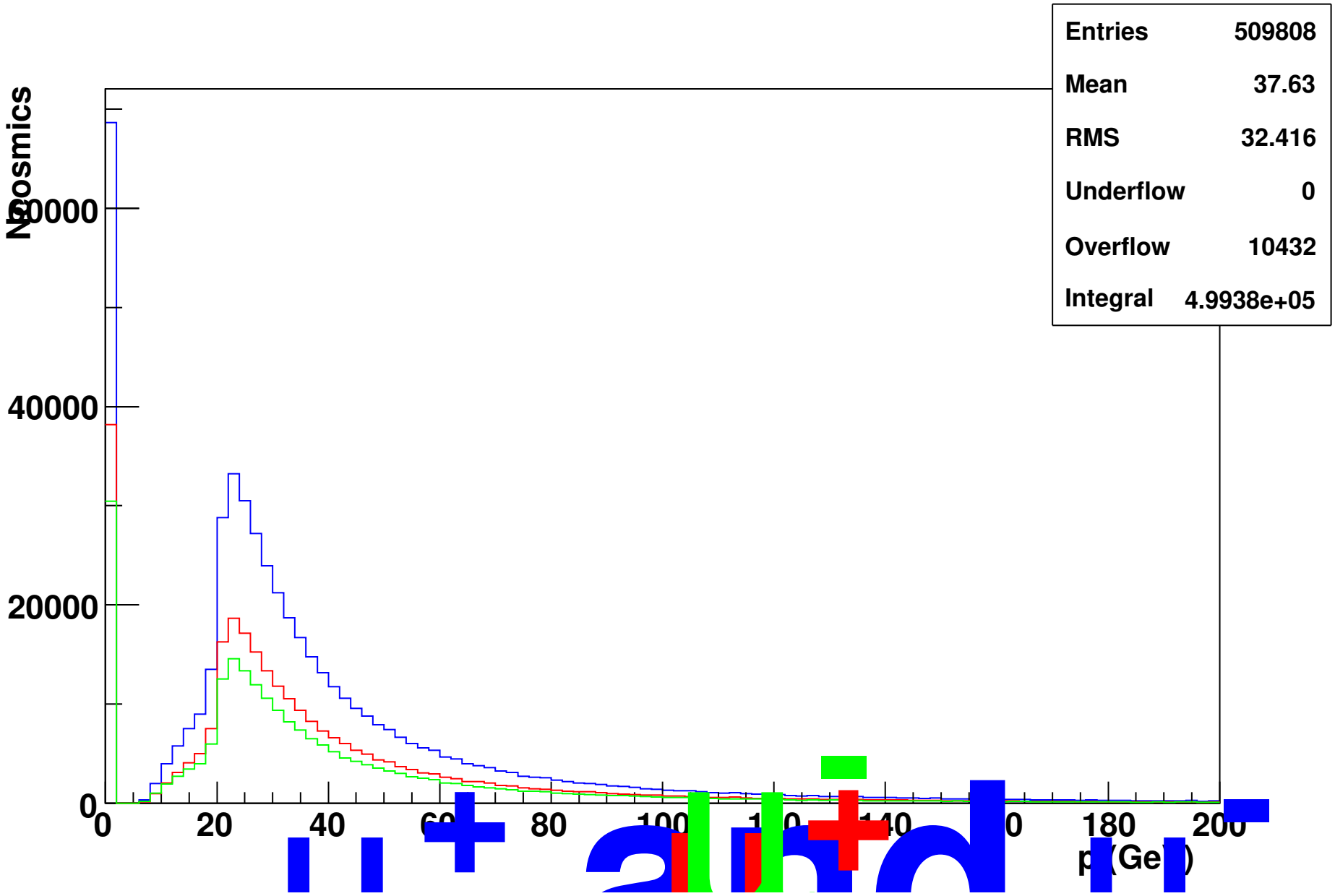

Entries 509808
Mean 1.5303
RMS 9.6542
Underflow 69041
Overflow 190
Integral 4.4058e+05
number of cosmics
30000
20000
10000
0
-30
-20
-10
0
10
20
30
t0 (ns)

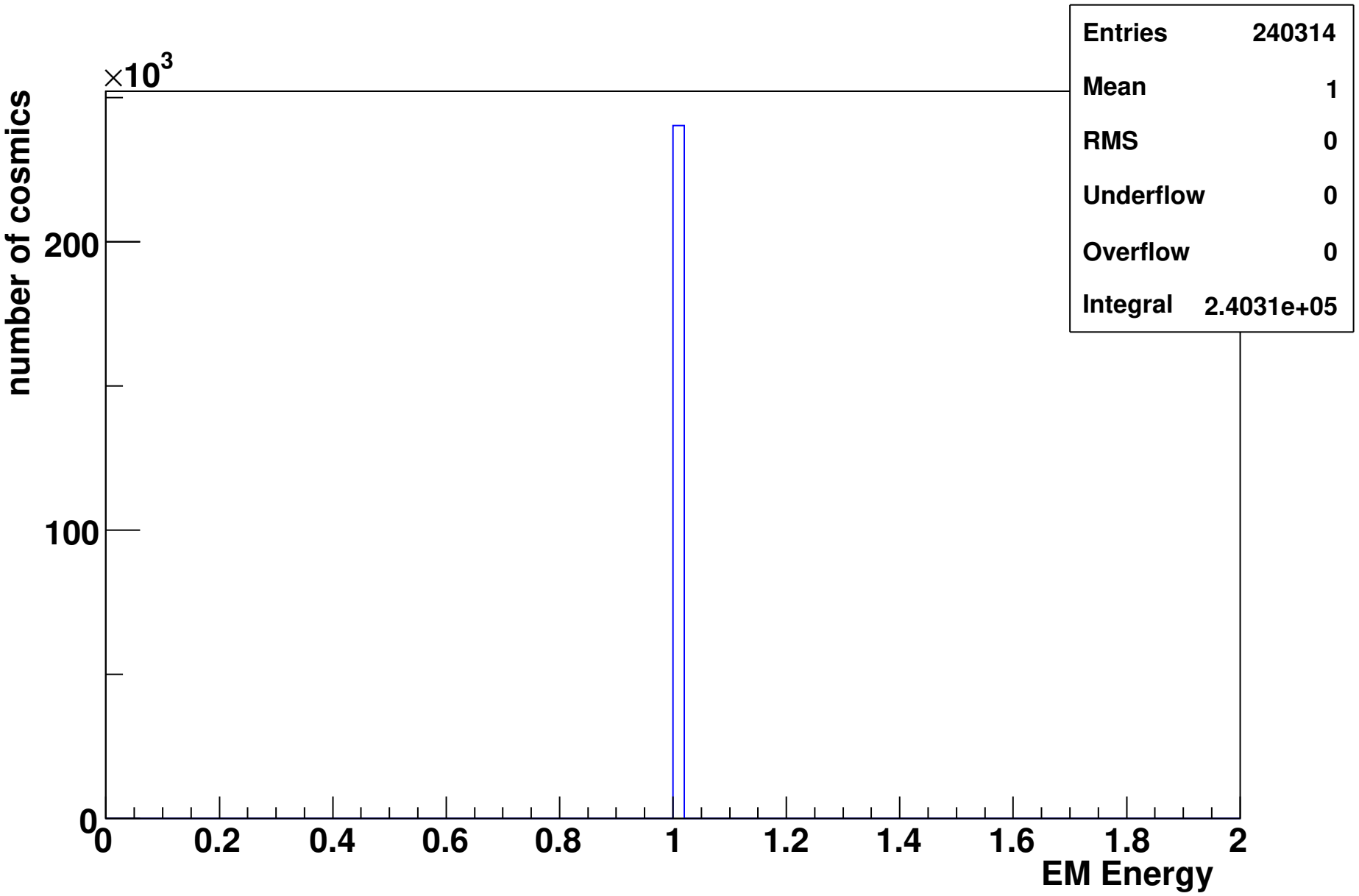

Entries 509808
Mean 0.00082256
RMS 0.32359
Underflow 70528
Overflow 1869
Integral 4.3741e+05
number of cosmics
20000
10000
0
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
cot θ

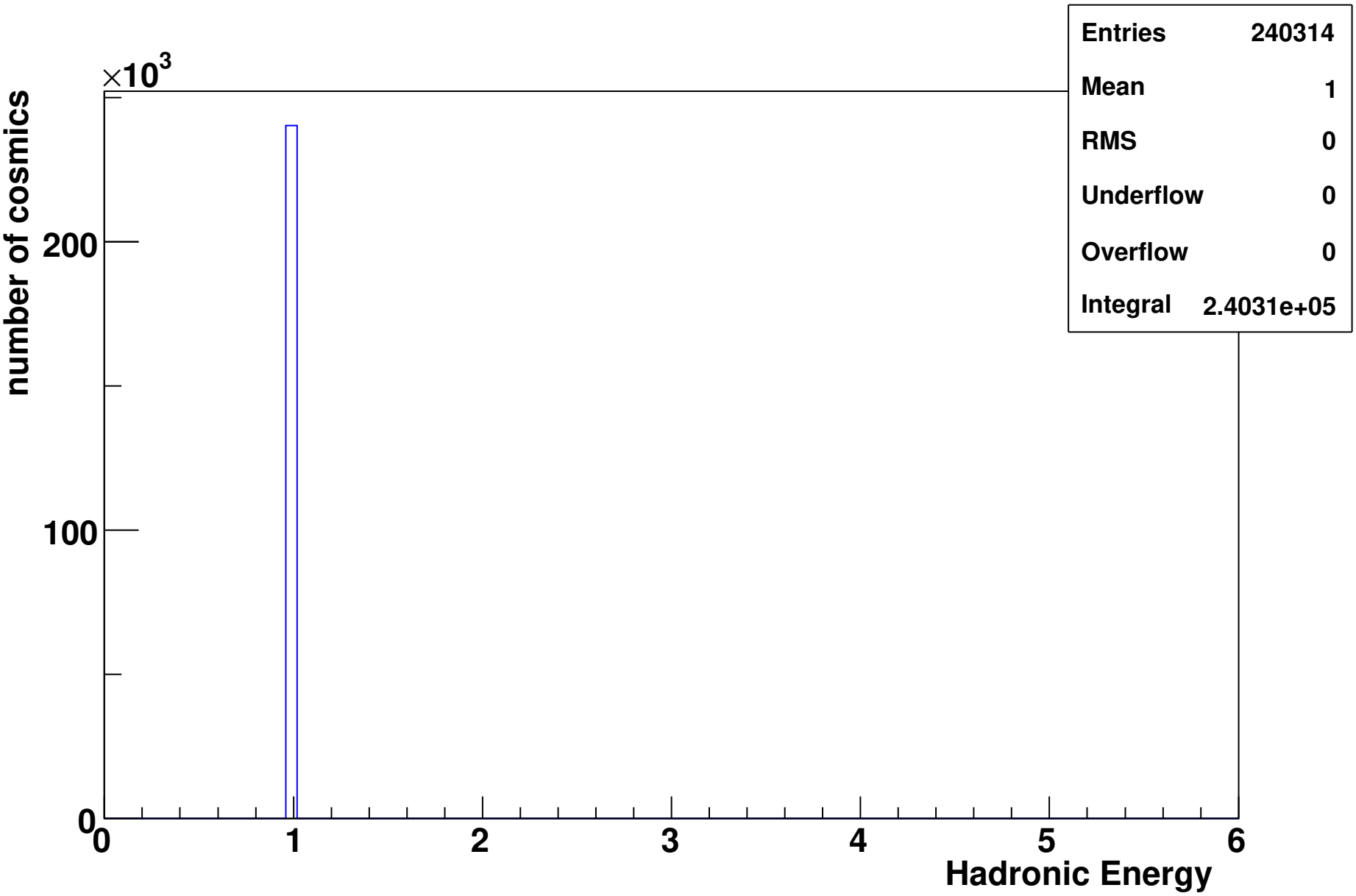

Entries 509808
Mean -0.82969
RMS 74.178
Underflow 68628
Overflow 0
Integral 4.4118e+05
number of cosmics
0
2000
4000
6000
-150
-100
-50
0
50
100
150
z_0 (cm)

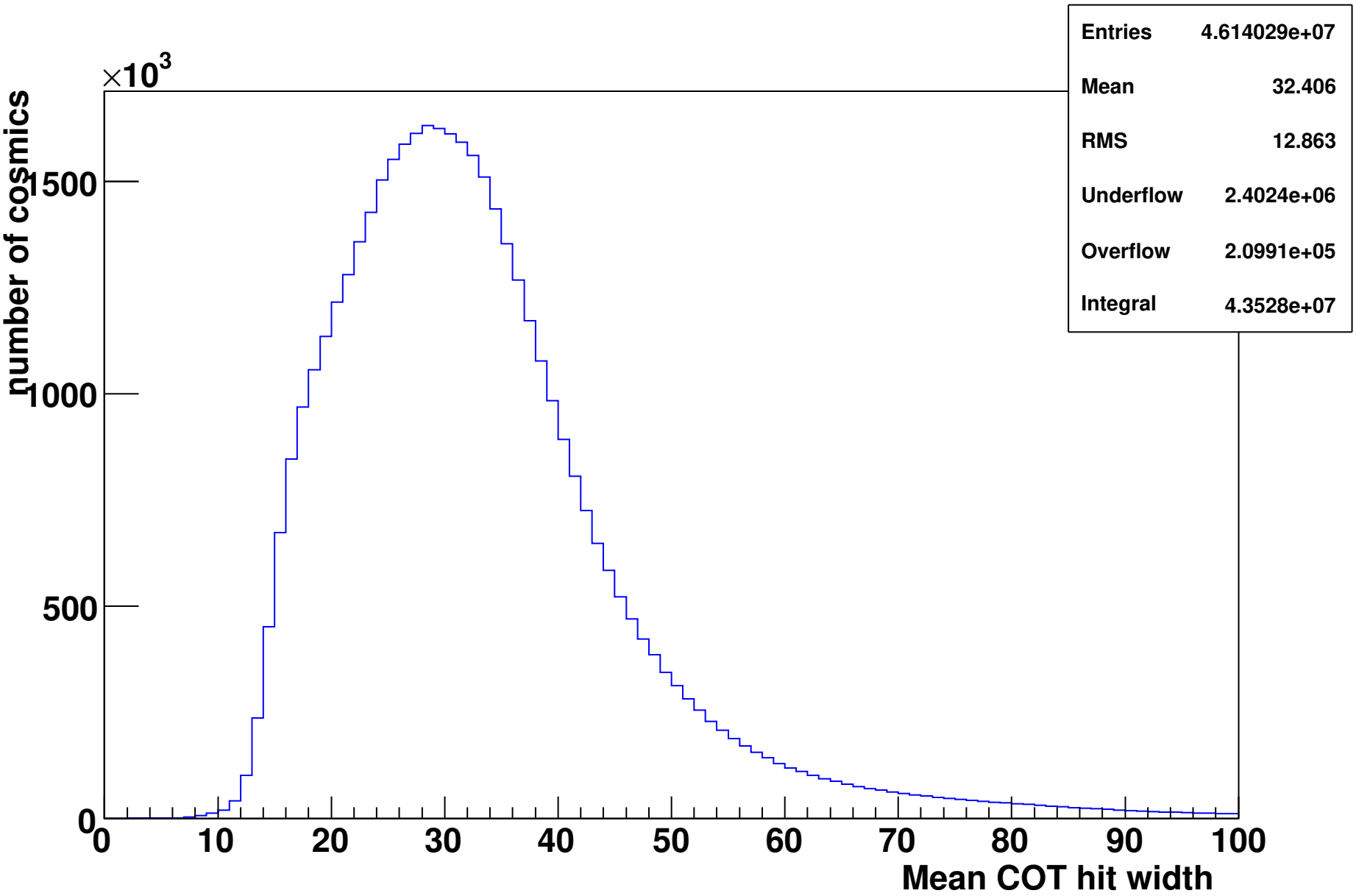

Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Integral 0
number of tracks
1
0.5
0
0
20
40
60
80
100
120
140
160
180
200
p (GeV)

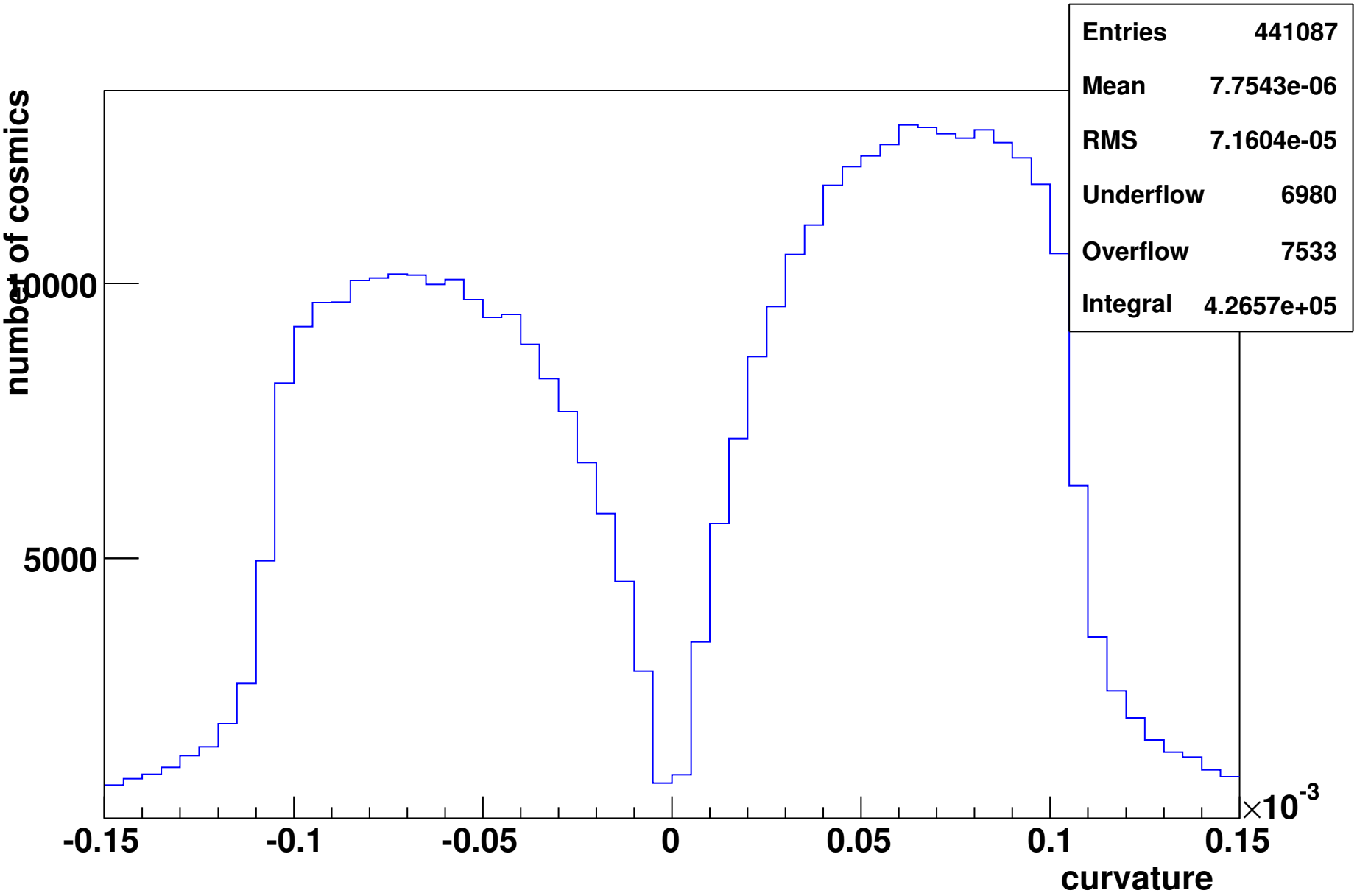

Entries 509808
Mean 36.104
RMS 31.516
Underflow 0
Overflow 9377
Integral 5.0043e+05
Nmosmics
60000
40000
20000
0
0
20
40
60
80
100
120
140
160
180
200
p_T (GeV)

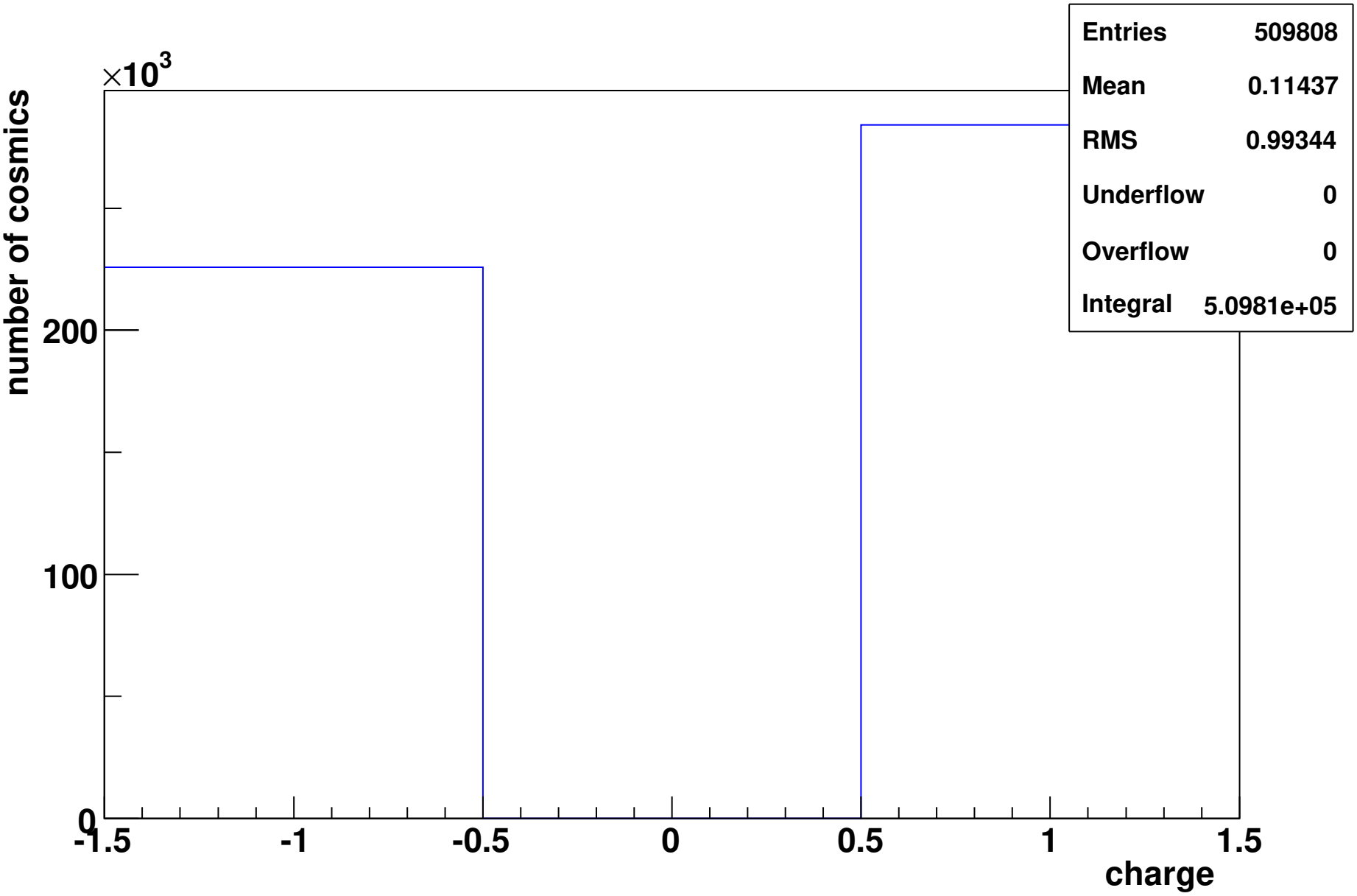

Entries 509808
Mean 37.63
RMS 32.416
Underflow 0
Overflow 10432
Integral 4.9938e+05
Nmosmics
60000
40000
20000
0
0
20
40
80
180
200
p (Ge
π+ and π-

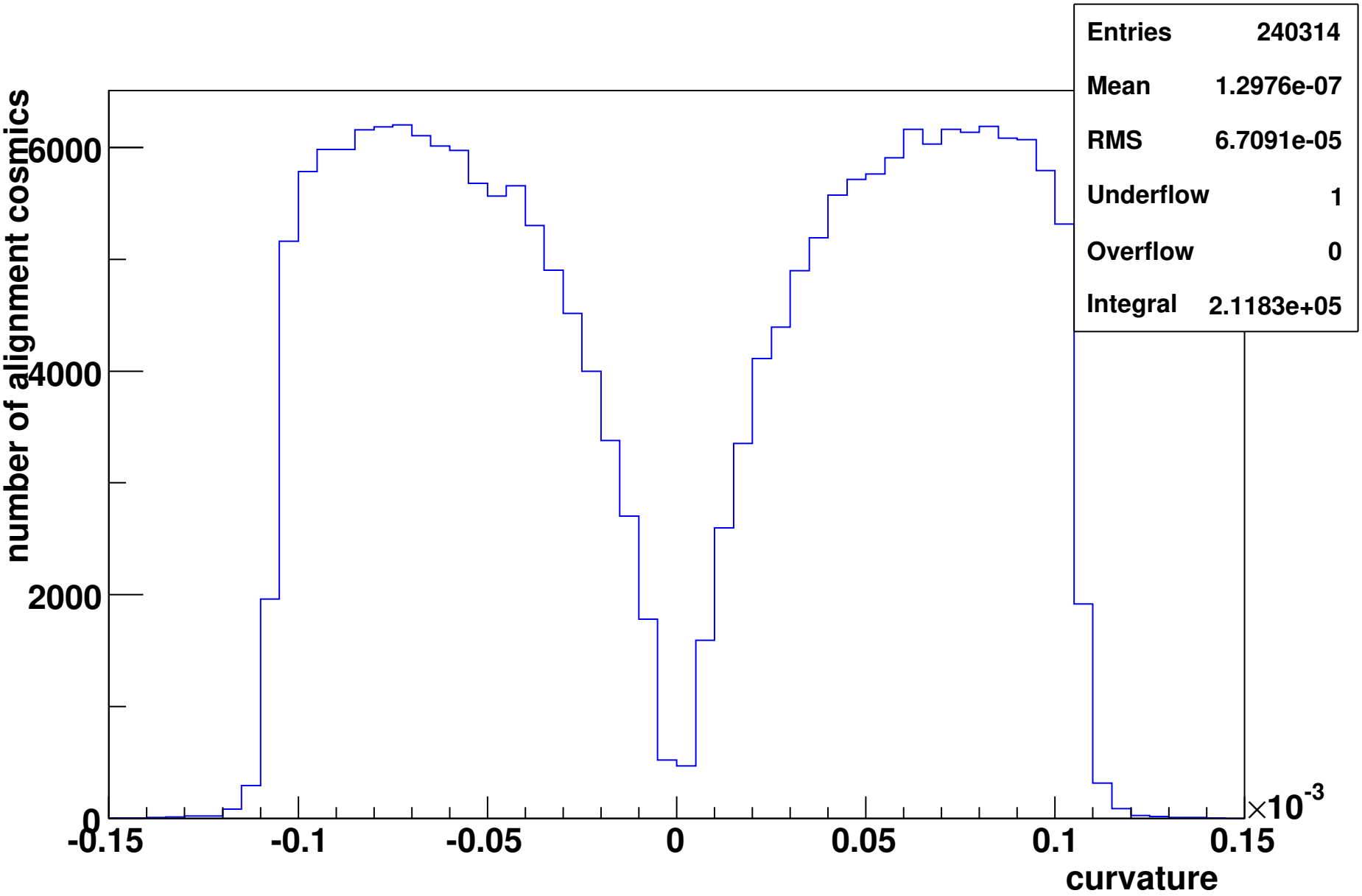

Entries 240314
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.4031e+05
×10^3
number of cosmics
200
100
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
EM Energy

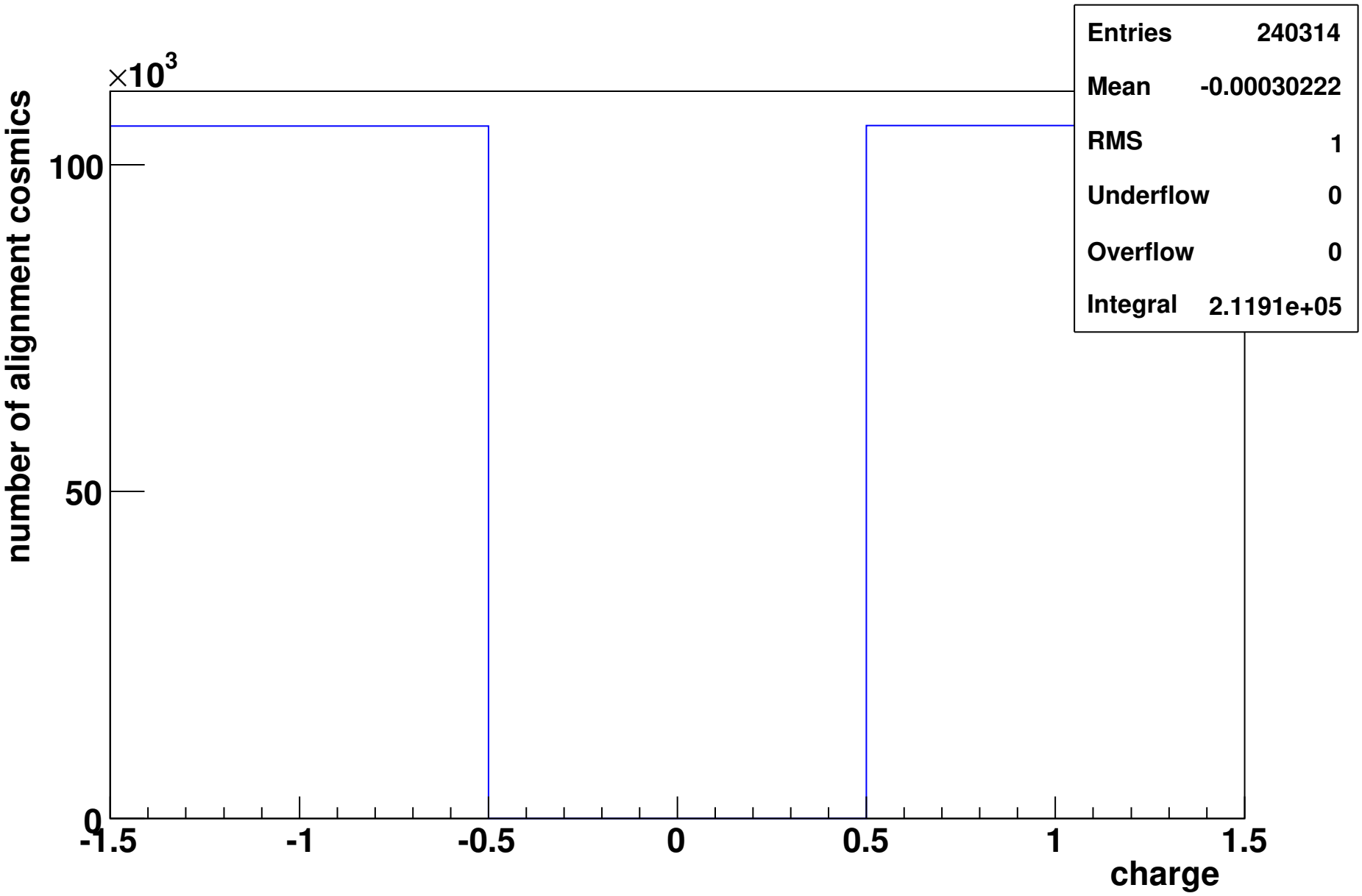

Entries 240314
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.4031e+05
×10^3
number of cosmics
200
100
0
0
1
2
3
4
5
6
Hadronic Energy

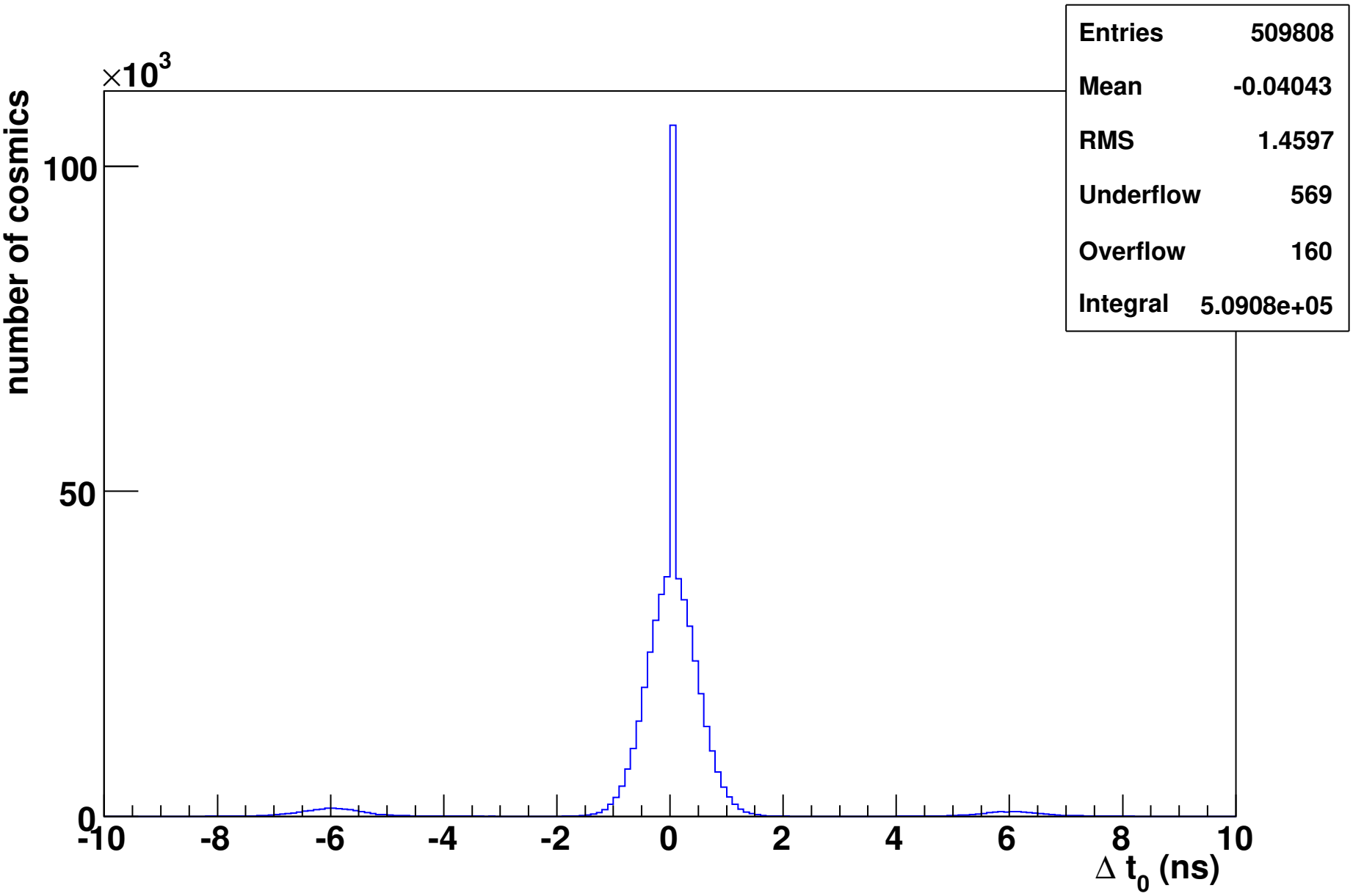

Entries 4.614029e+07
Mean 32.406
RMS 12.863
Underflow 2.4024e+06
Overflow 2.0991e+05
Integral 4.3528e+07
×10^3
number of cosmics
1500
1000
500
0
0
10
20
30
40
50
60
70
80
90
100
Mean COT hit width

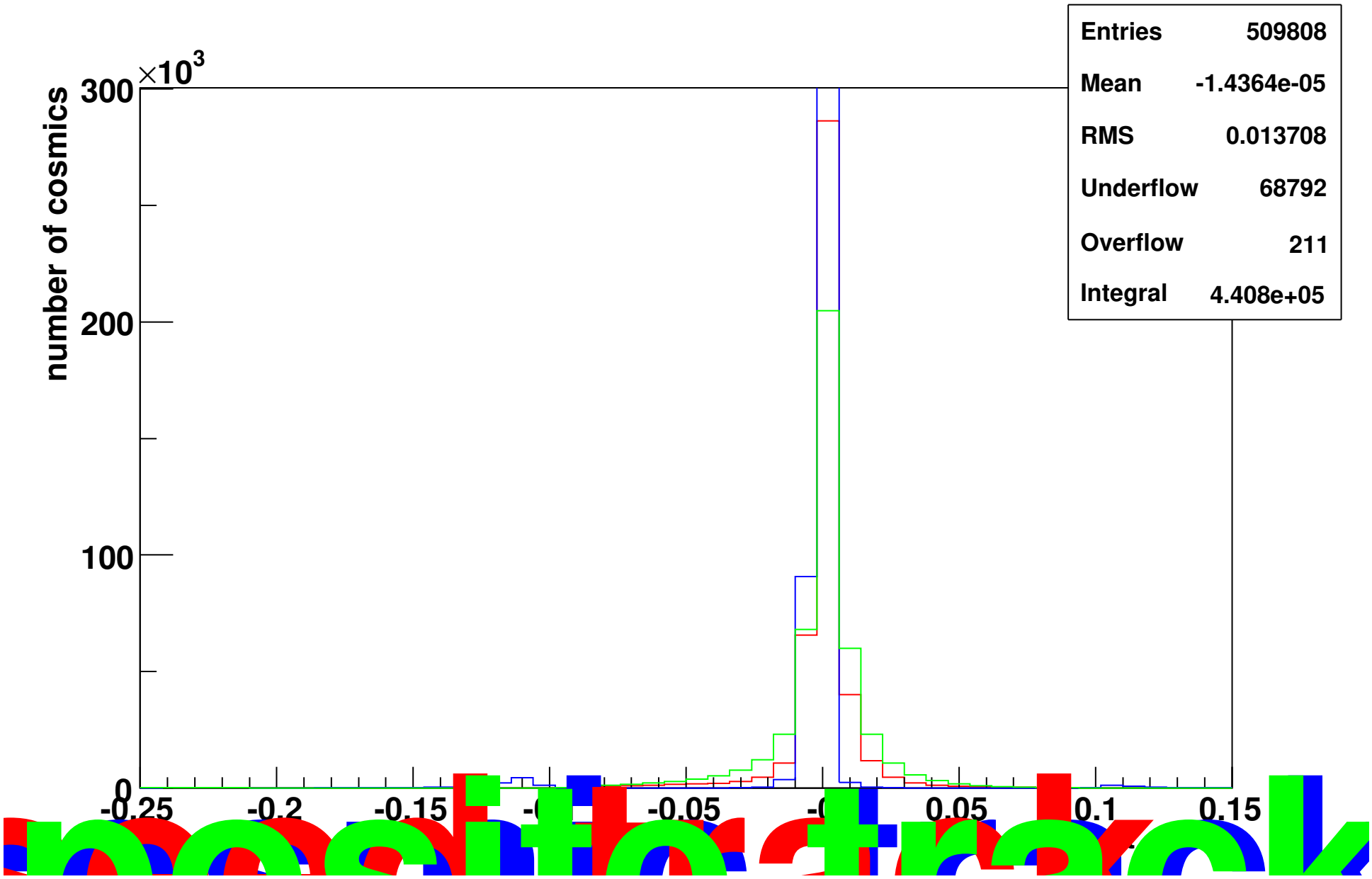

Entries 441087
Mean 7.7543e-06
RMS 7.1604e-05
Underflow 6980
Overflow 7533
Integral 4.2657e+05
number of cosmics
10000
5000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

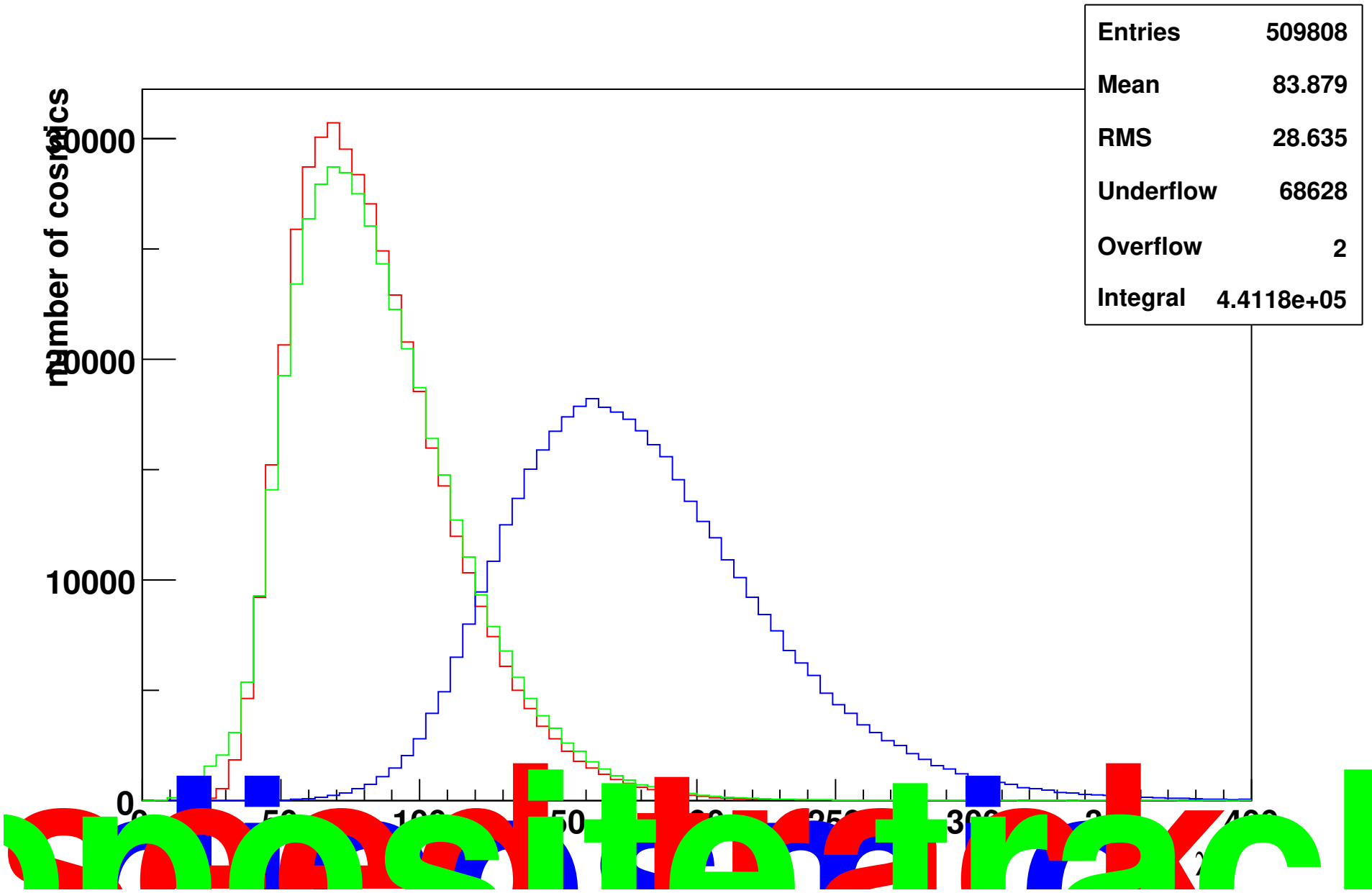

Entries 509808
Mean 0.11437
RMS 0.99344
Underflow 0
Overflow 0
Integral 5.0981e+05
×10^3
number of cosmics
200
100
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge

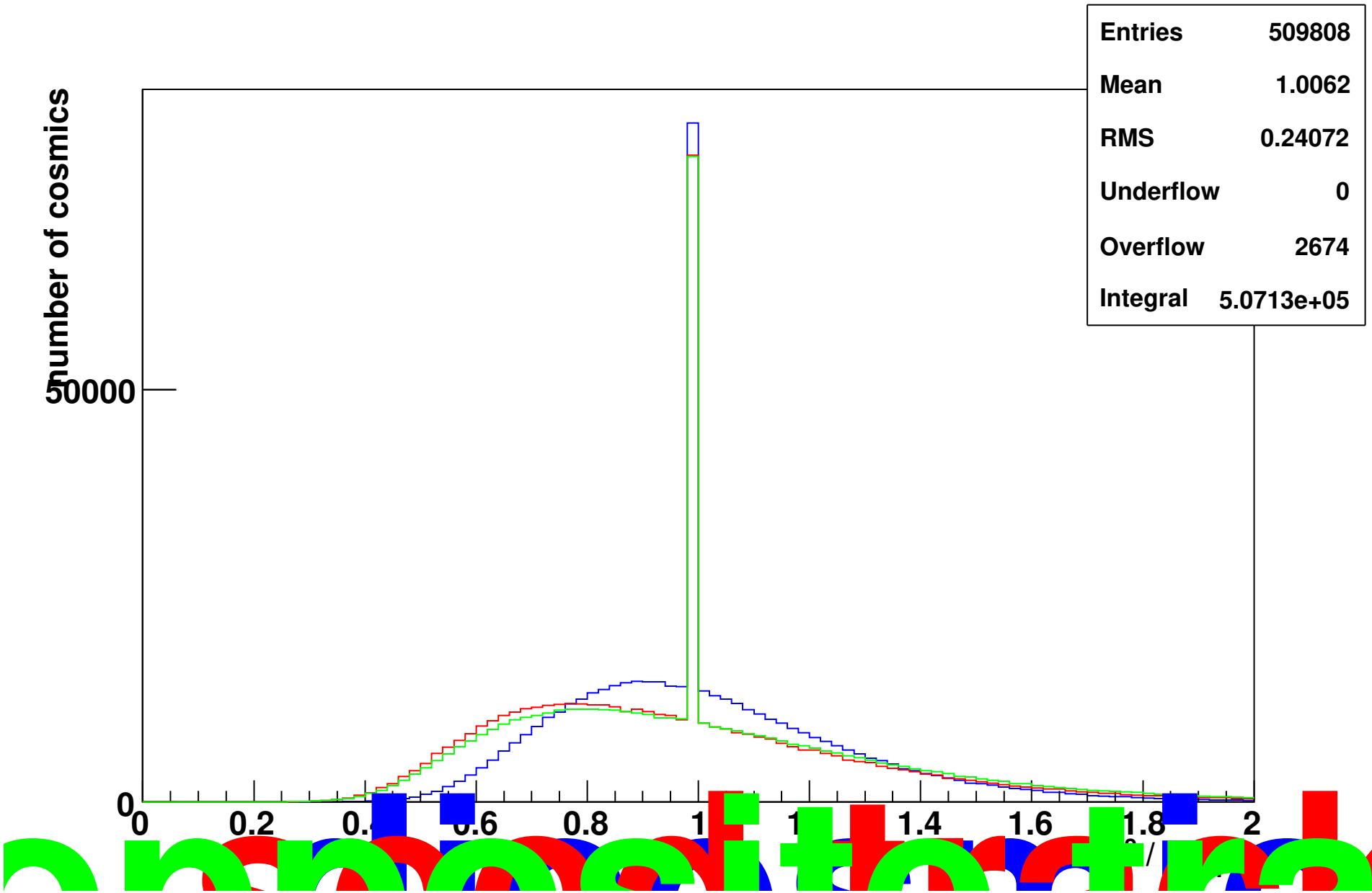

Entries 240314
Mean 1.2976e-07
RMS 6.7091e-05
Underflow 1
Overflow 0
Integral 2.1183e+05
number of alignment cosmics
6000
4000
2000
0
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

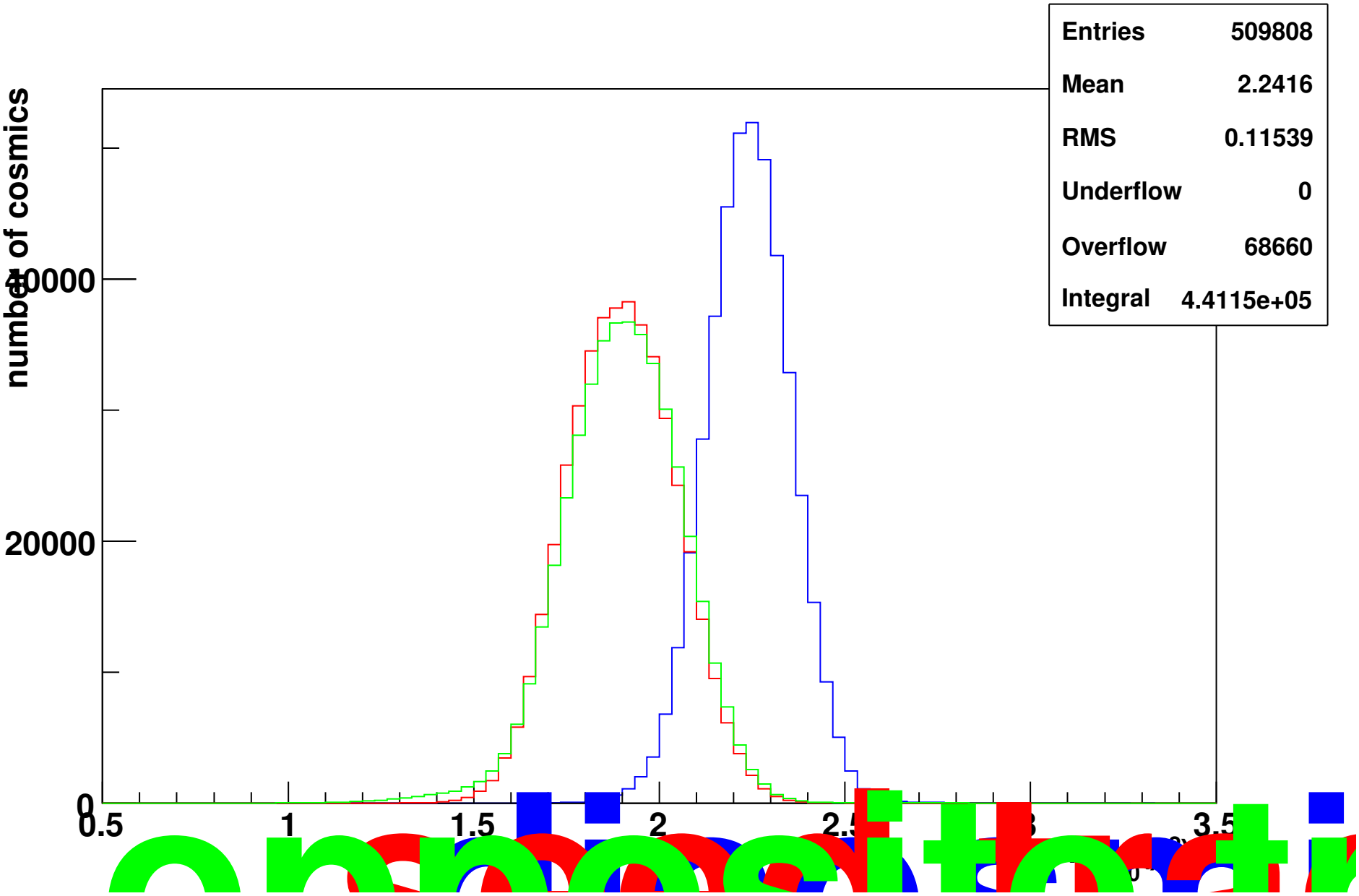

Entries 240314
Mean -0.00030222
RMS 1
Underflow 0
Overflow 0
Integral 2.1191e+05
×10^3
number of alignment cosmics
100
50
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge


Entries 509808
Mean -0.04043
RMS 1.4597
Underflow 569
Overflow 160
Integral 5.0908e+05
×10^3
number of cosmics
100
50
0
-10
-8
-6
-4
-2
0
2
4
6
8
10
Δ t0 (ns)

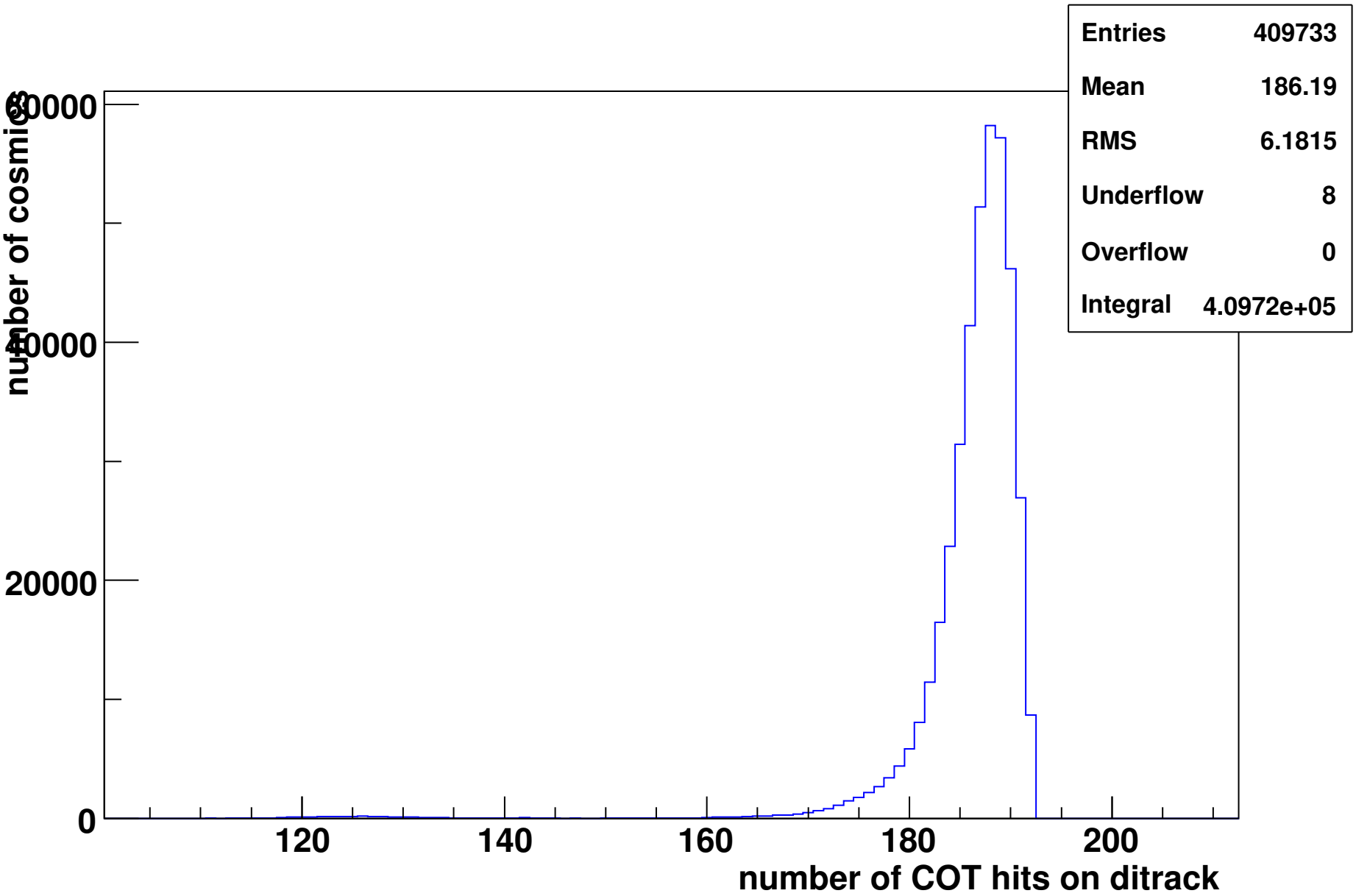

Entries 509808
Mean -1.4364e-05
RMS 0.013708
Underflow 68792
Overflow 211
Integral 4.408e+05
number of cosmics
×10^3
300
200
100
0
-0.25
-0.2
-0.15
-0.05
0.05
0.1
0.15

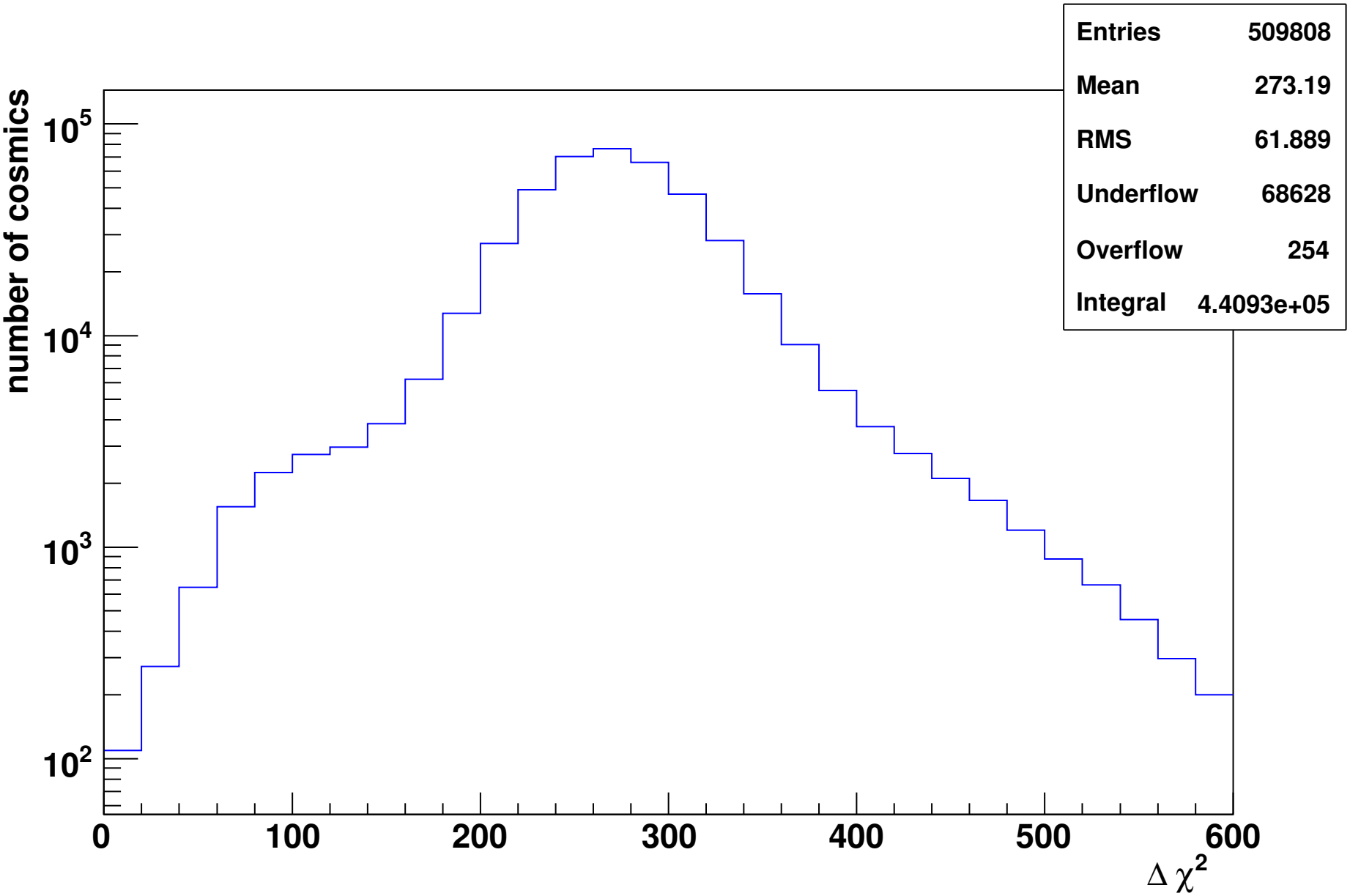

Entries 509808
Mean 83.879
RMS 28.635
Underflow 68628
Overflow 2
Integral 4.4118e+05
number of cosmics
20000
10000
0

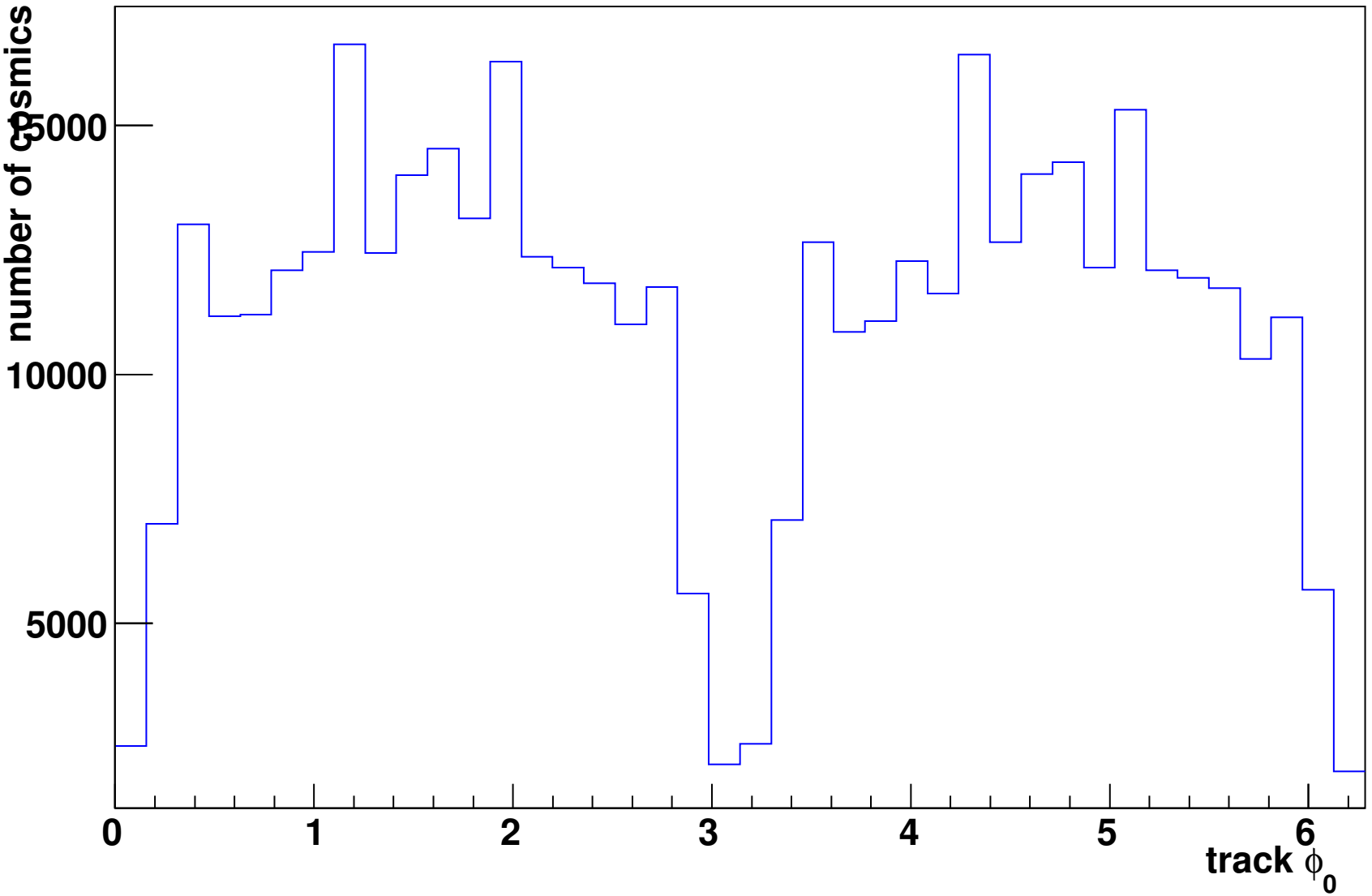

Entries 509808
Mean 1.0062
RMS 0.24072
Underflow 0
Overflow 2674
Integral 5.0713e+05
number of cosmics
50000
0
0
0.2
0.6
0.8
1.4
1.6
1.8
2

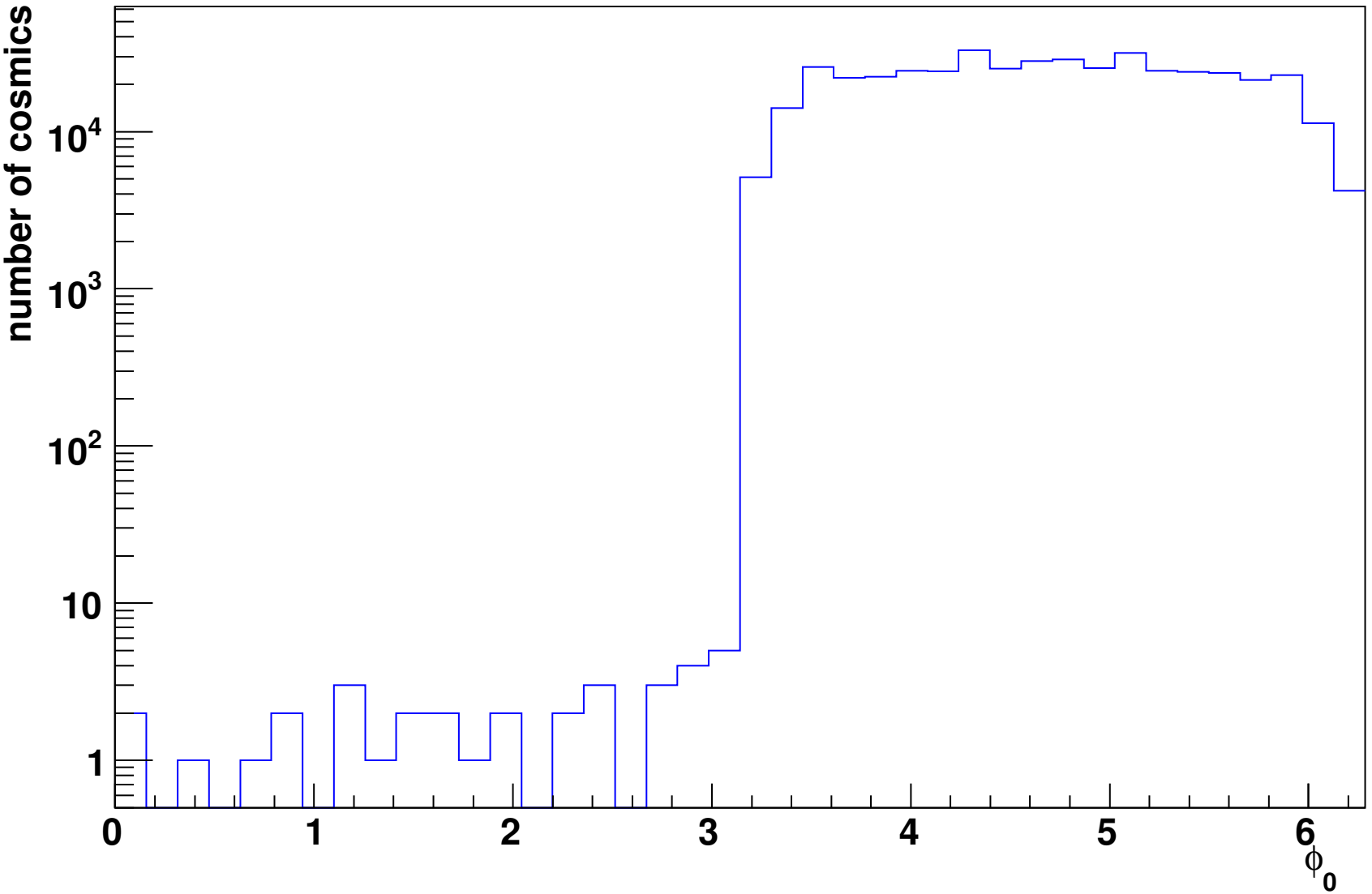

Entries 509808
Mean 2.2416
RMS 0.11539
Underflow 0
Overflow 68660
Integral 4.4115e+05
number of cosmics
40000
20000
0
0.5
1
1.5
2
2.5
3.5

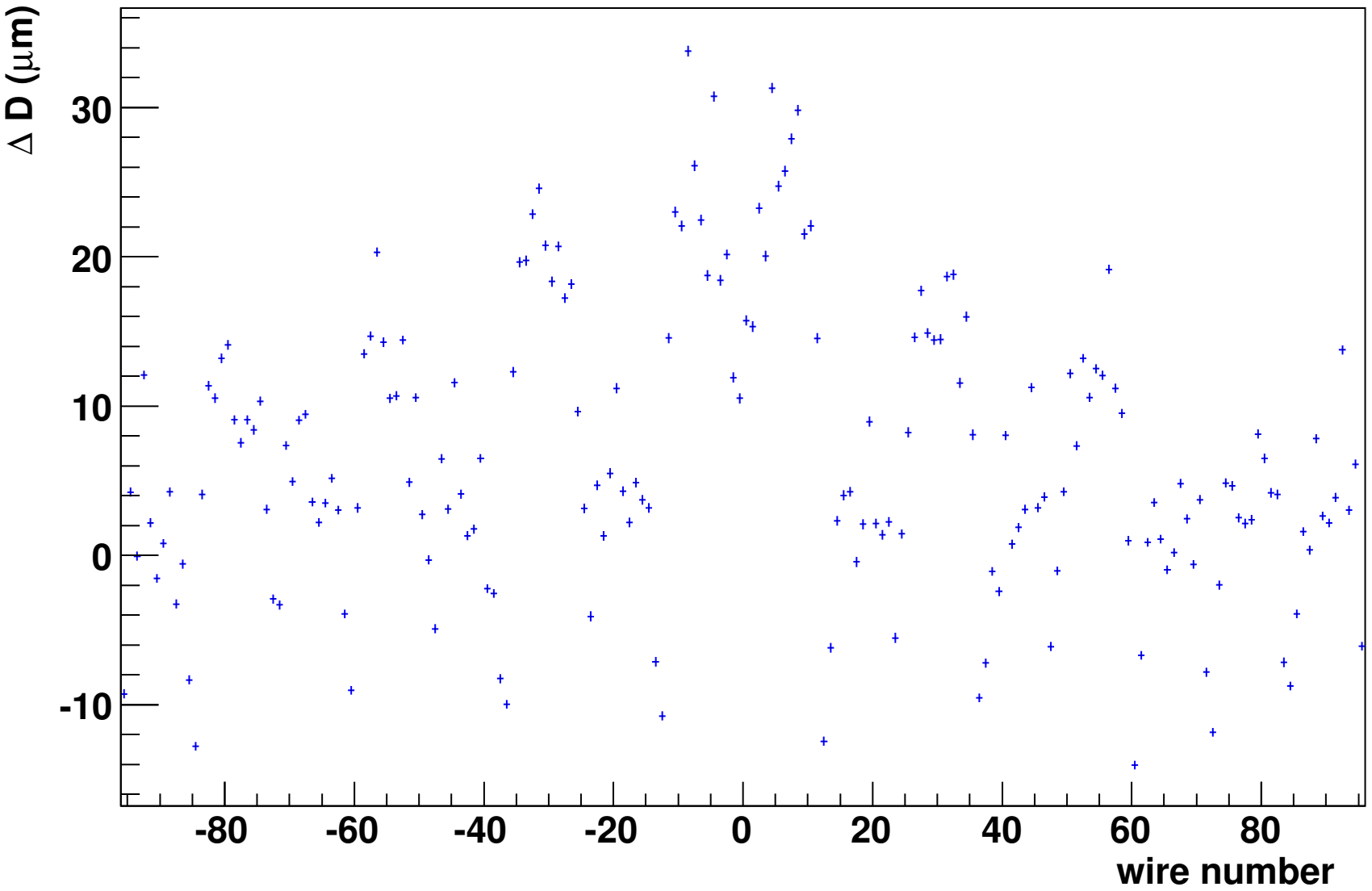
Entries 509808
number of ditracks
10^5
10^4
10^3
10^2
-0.5
0
0.5
1
1.5
2
2.5
3
4
4.5
ditrack type
cosmic
cosmic
gg pair
gg pair

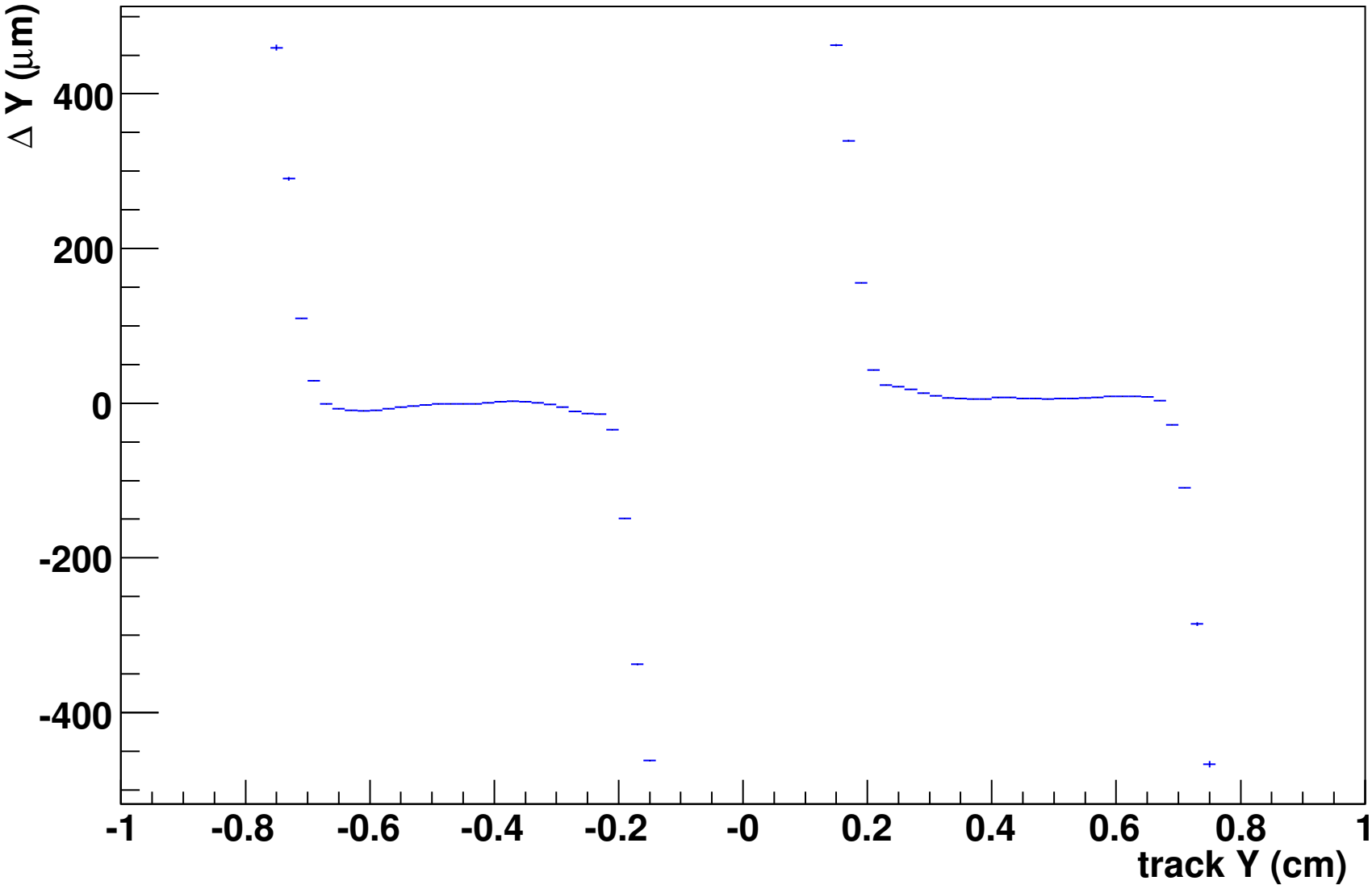

Entries 409733
Mean 186.19
RMS 6.1815
Underflow 8
Overflow 0
Integral 4.0972e+05
number of cosmics
40000
20000
0
120
140
160
180
200
number of COT hits on ditrack

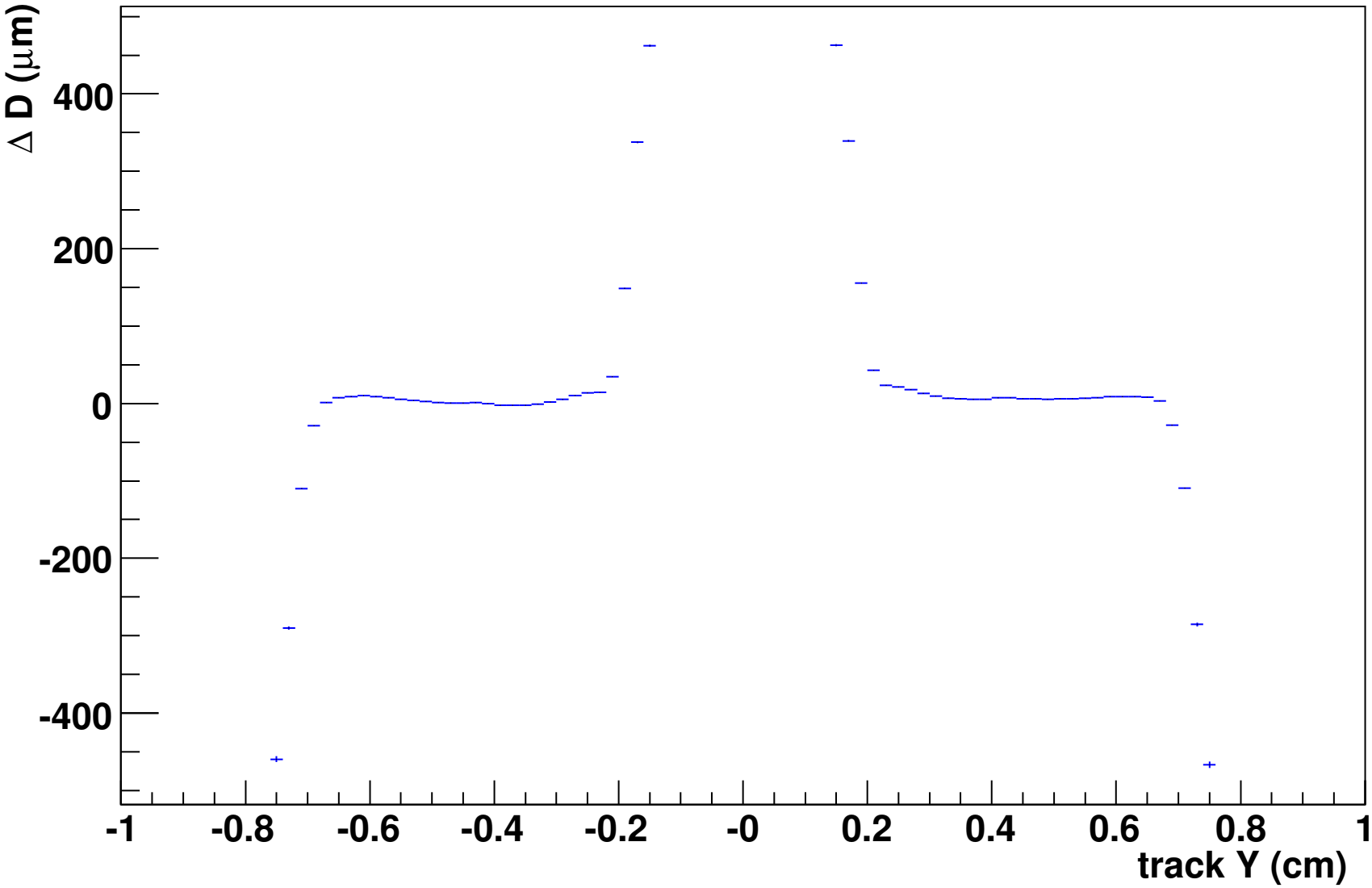

Entries 509808
Mean 273.19
RMS 61.889
Underflow 68628
Overflow 254
Integral 4.4093e+05
number of cosmics
10^5
10^4
10^3
10^2
0
100
200
300
400
500
600
$\Delta\,\chi^2$

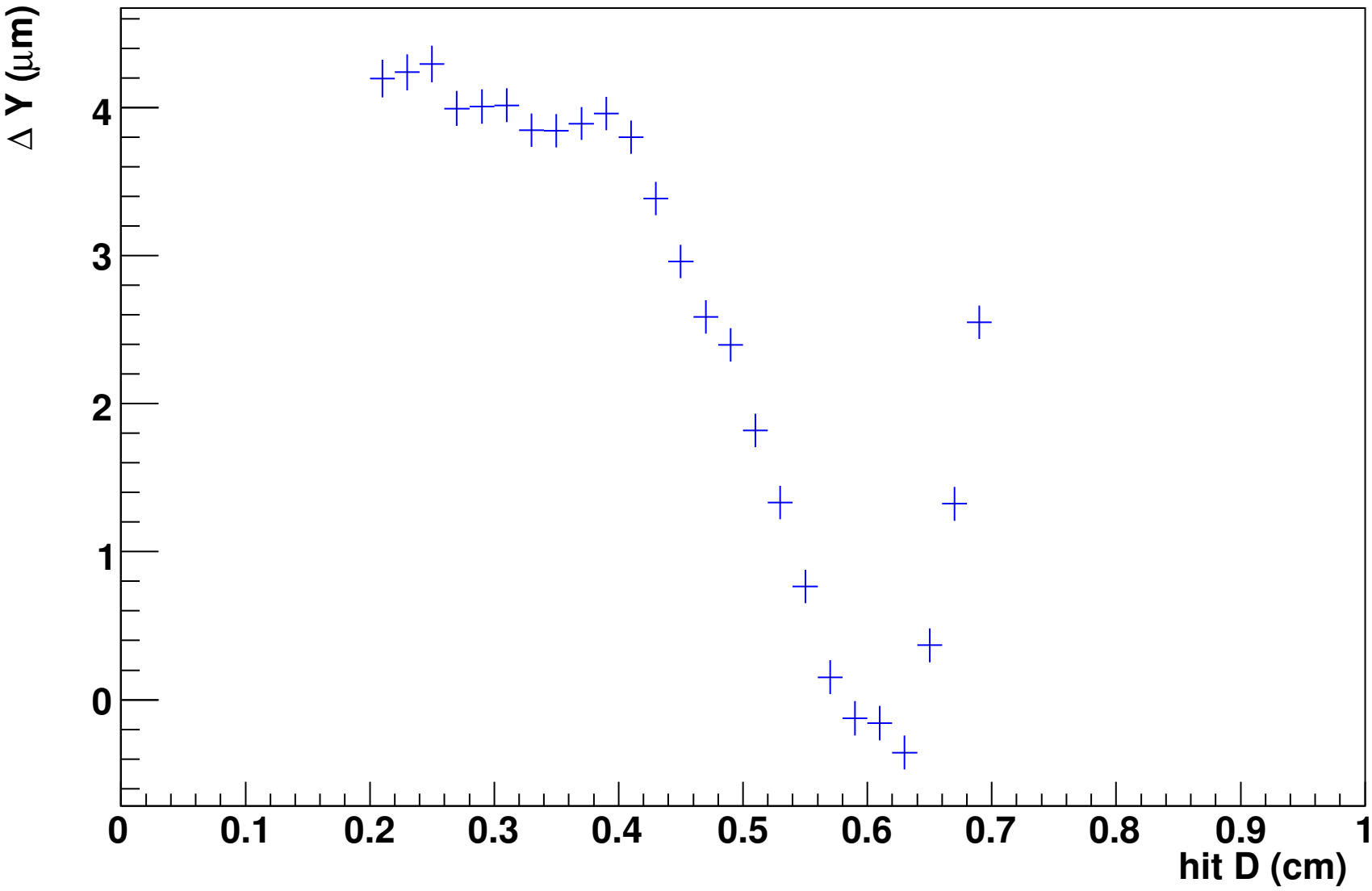

number of cosmics
15000
10000
5000
0
1
2
3
4
5
6
track ϕ_0

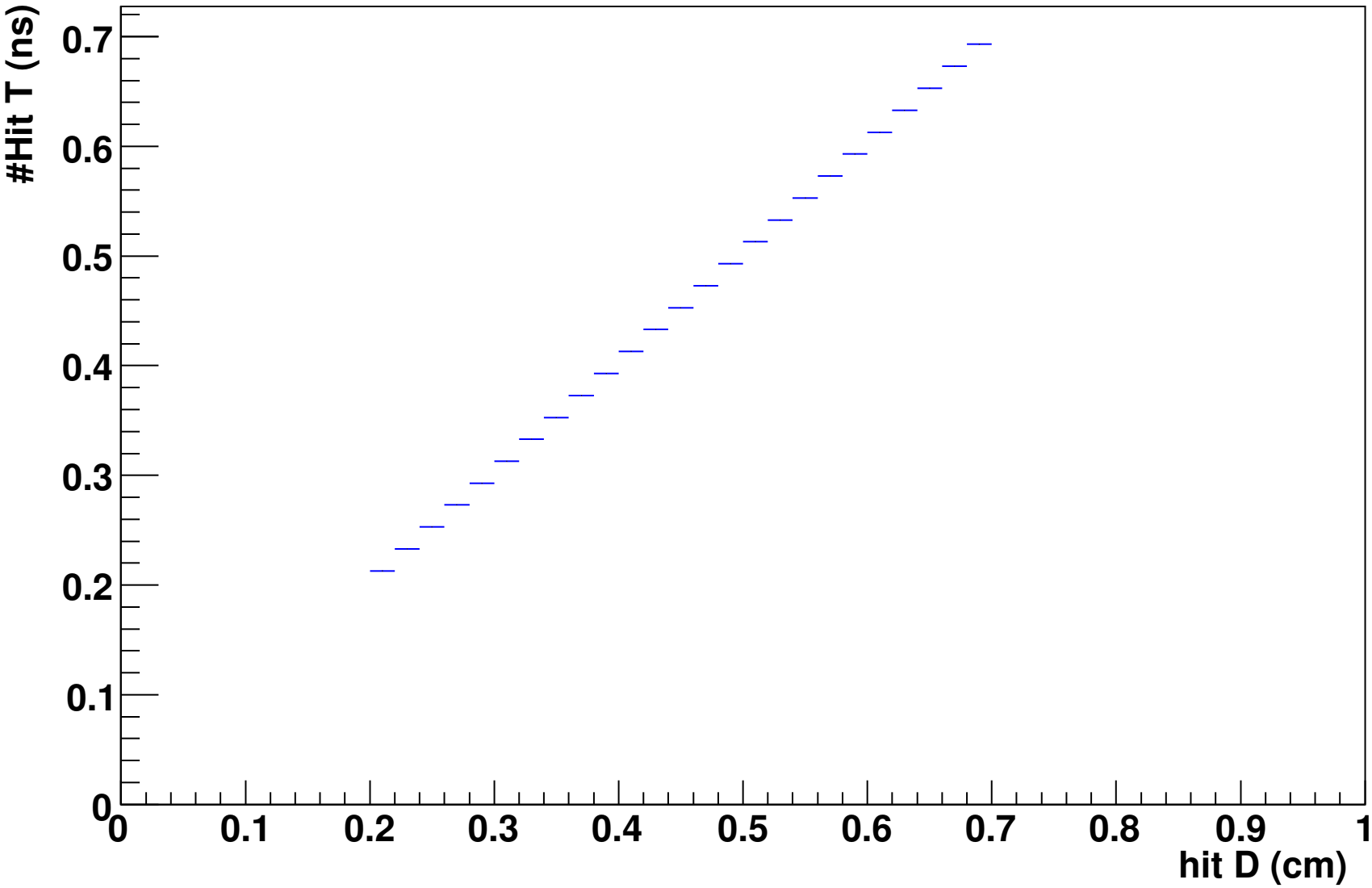

number of cosmics
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
ϕ_0

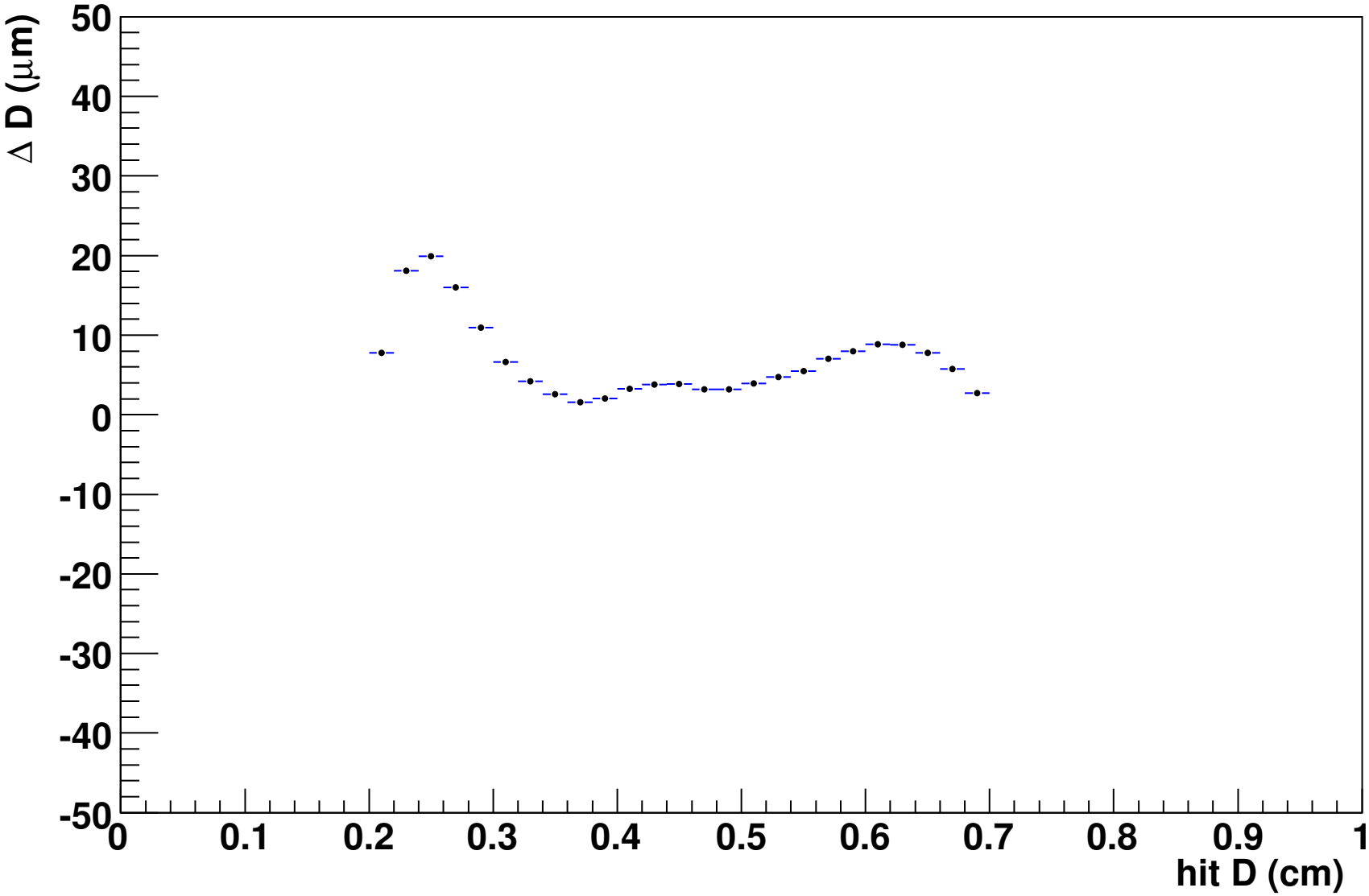

Δ D (μm)
30
20
10
0
-10
-80
-60
-40
-20
0
20
40
60
80
wire number

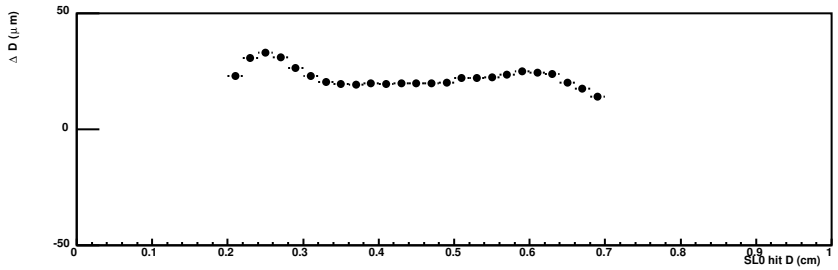

Δ Y (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

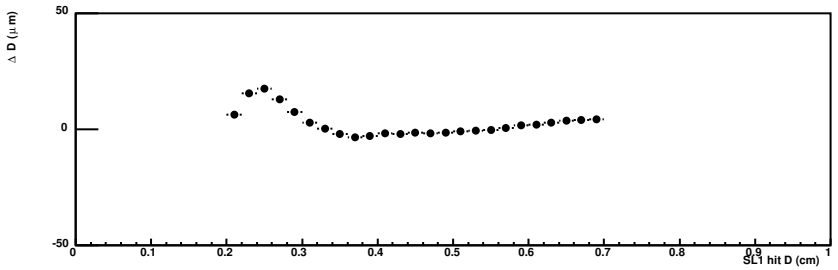

Δ D (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

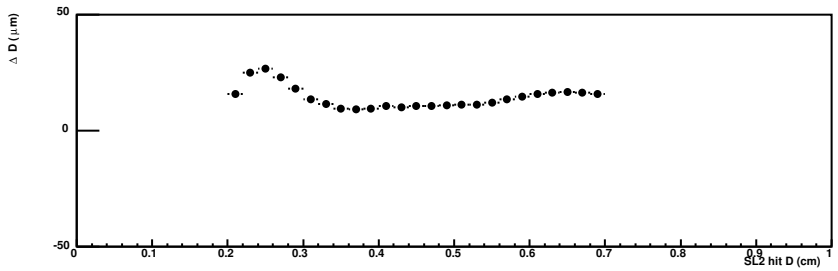

Δ Y (μm)
4
3
2
1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

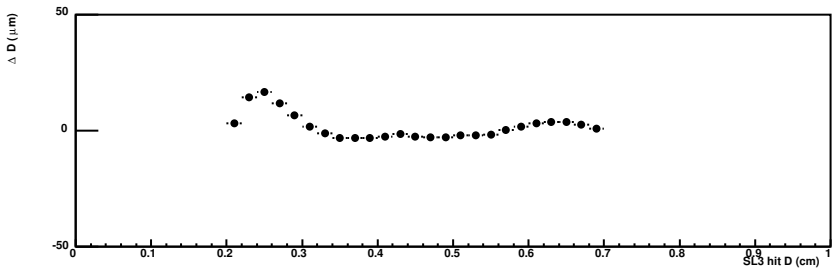

#Hit T (ns)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

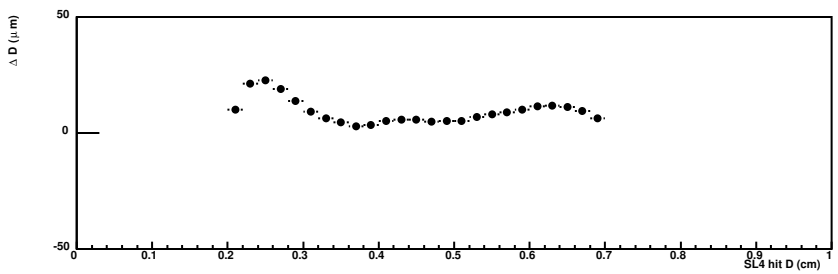

Δ D (μm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

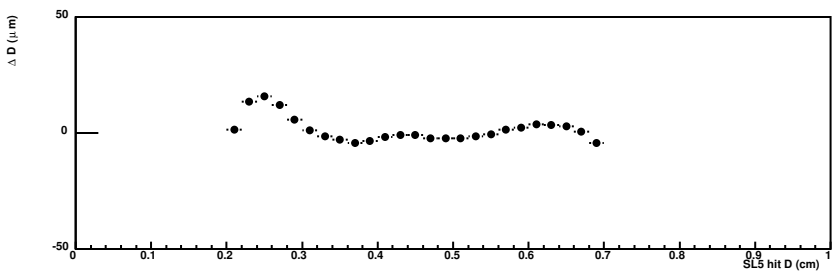

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL0 hit D (cm)

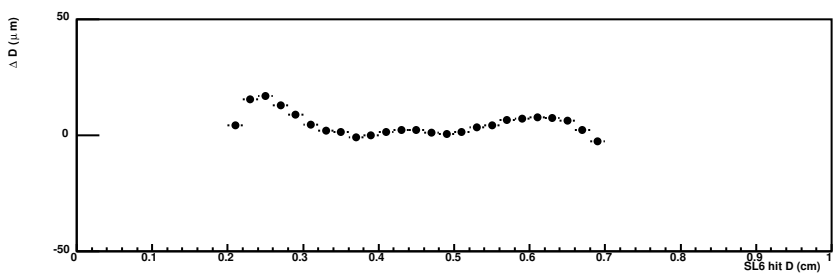

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL1 hit D (cm)

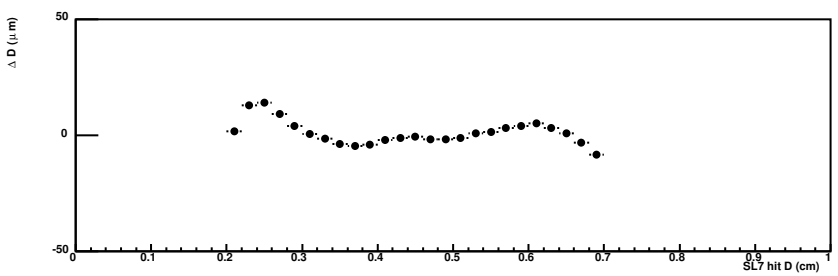

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL2 hit D (cm)

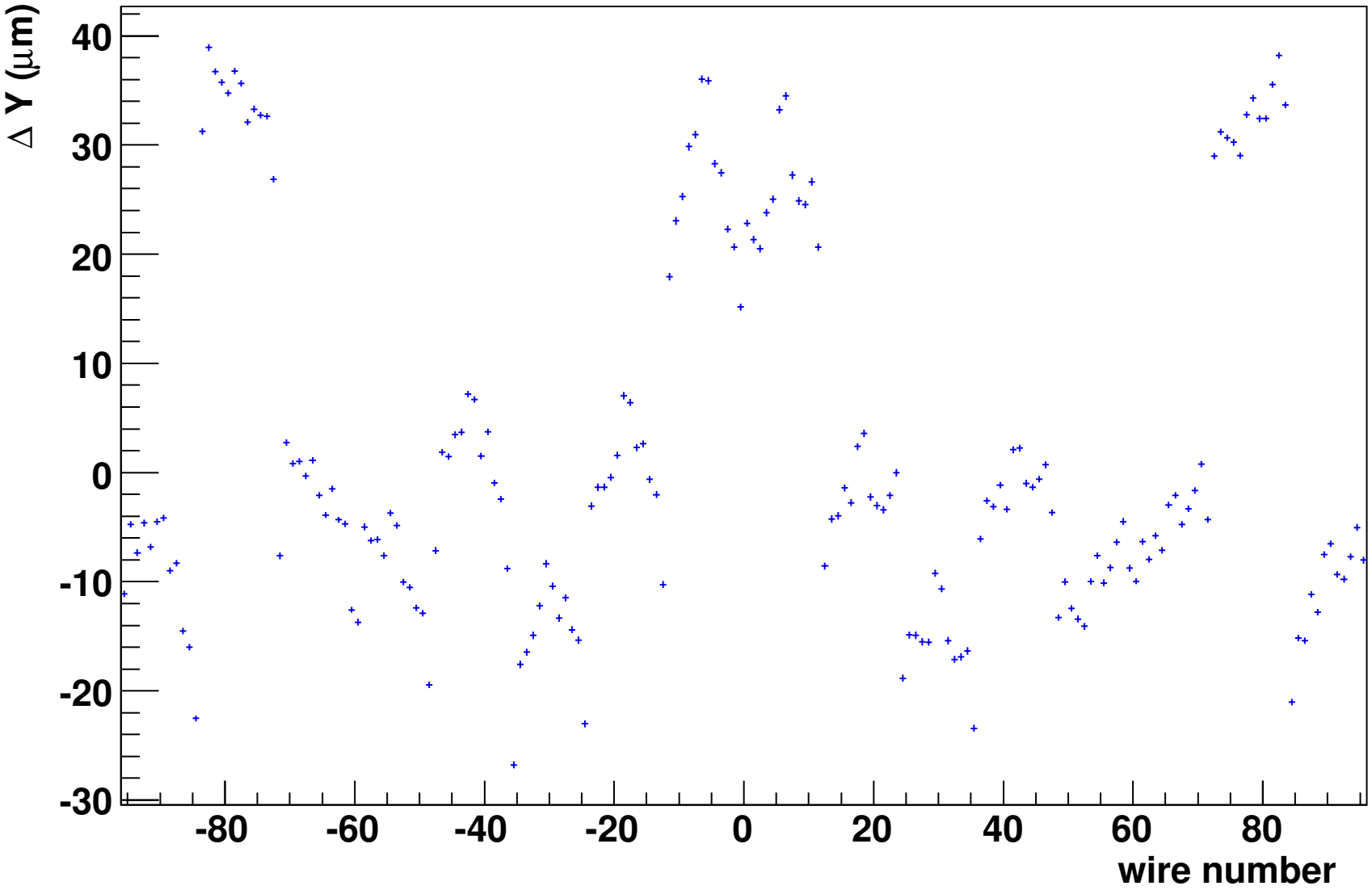

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL3 hit D (cm)

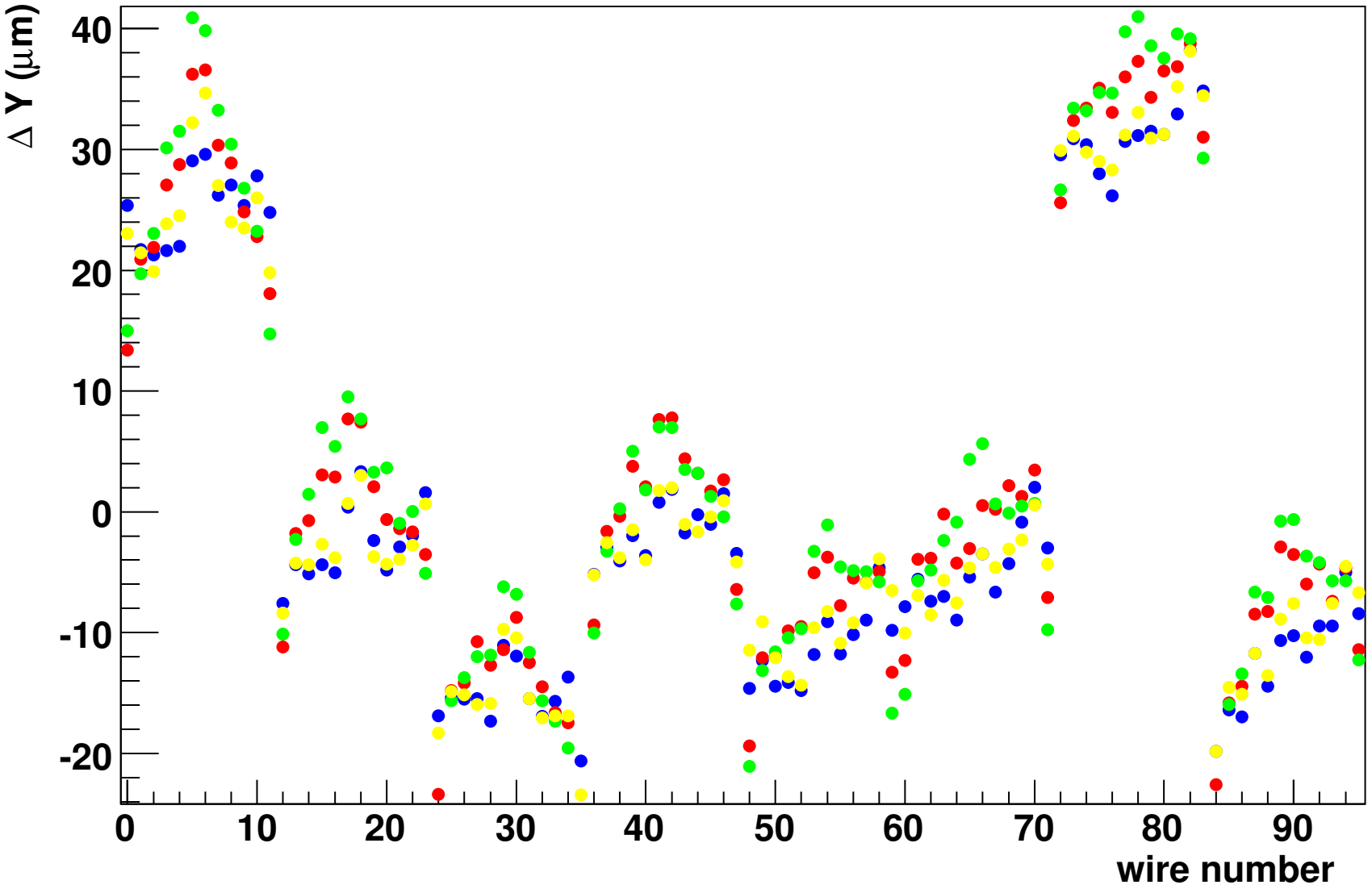

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL4 hit D (cm)

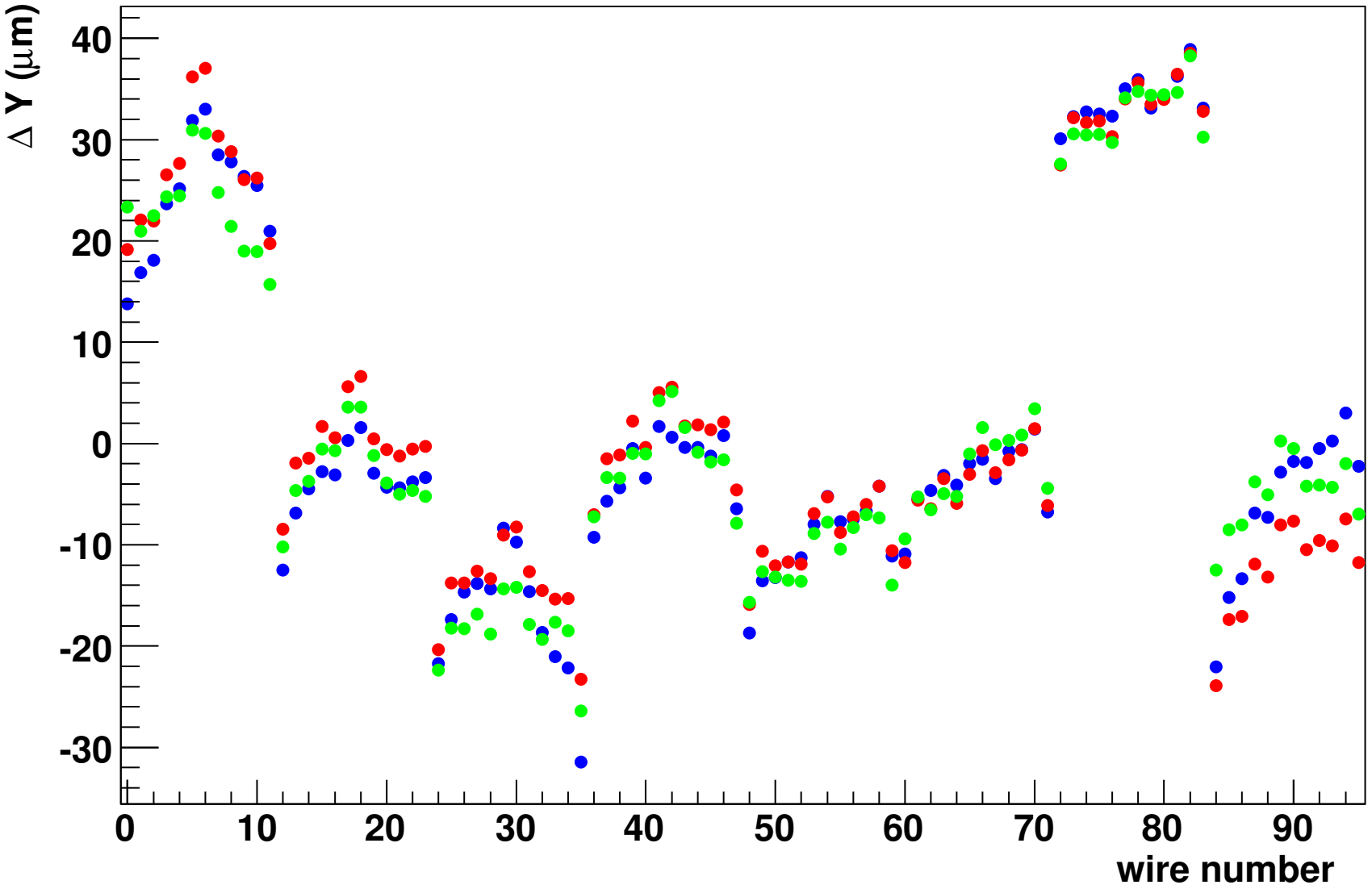

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL5 hit D (cm)

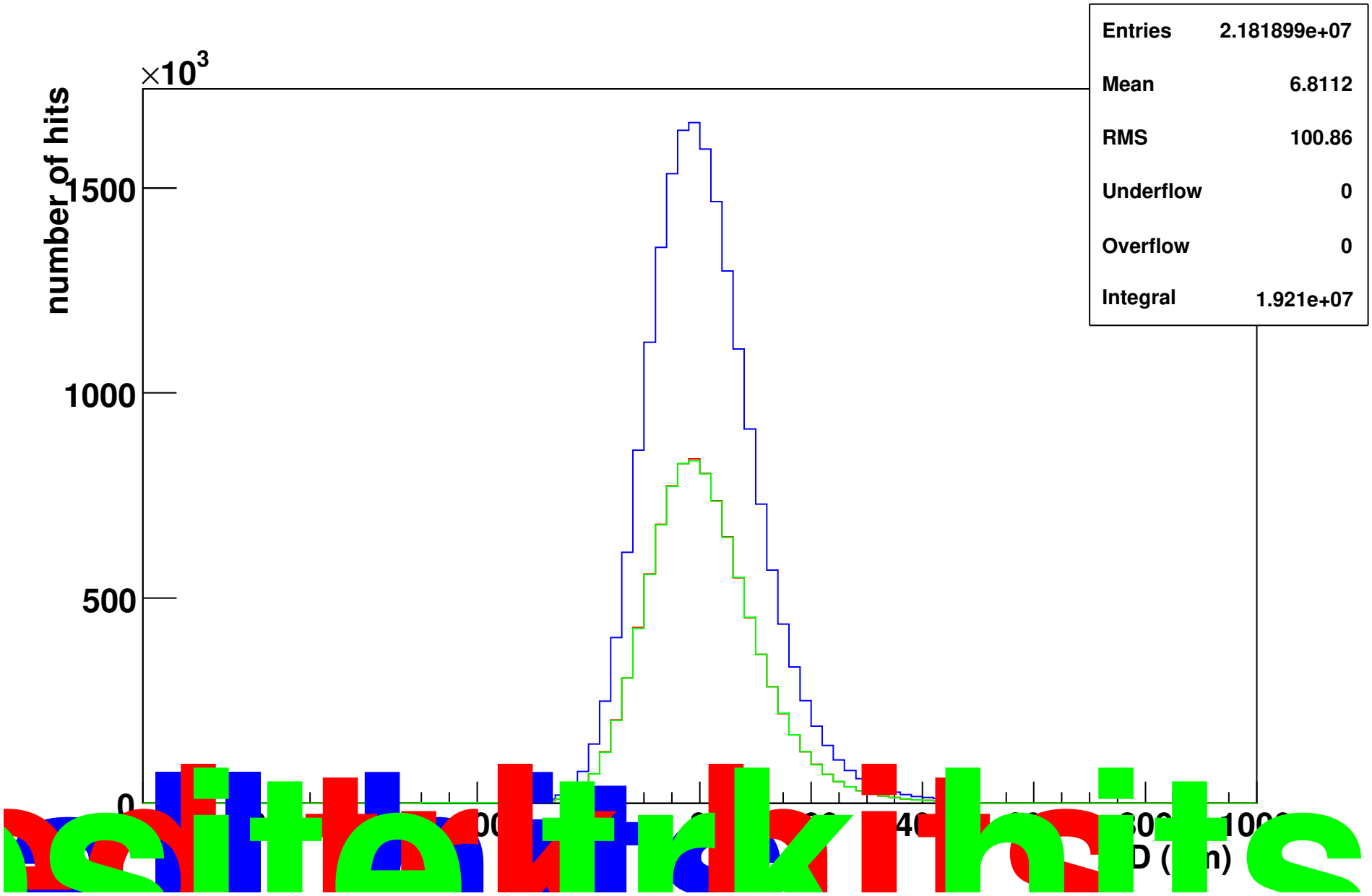

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL6 hit D (cm)

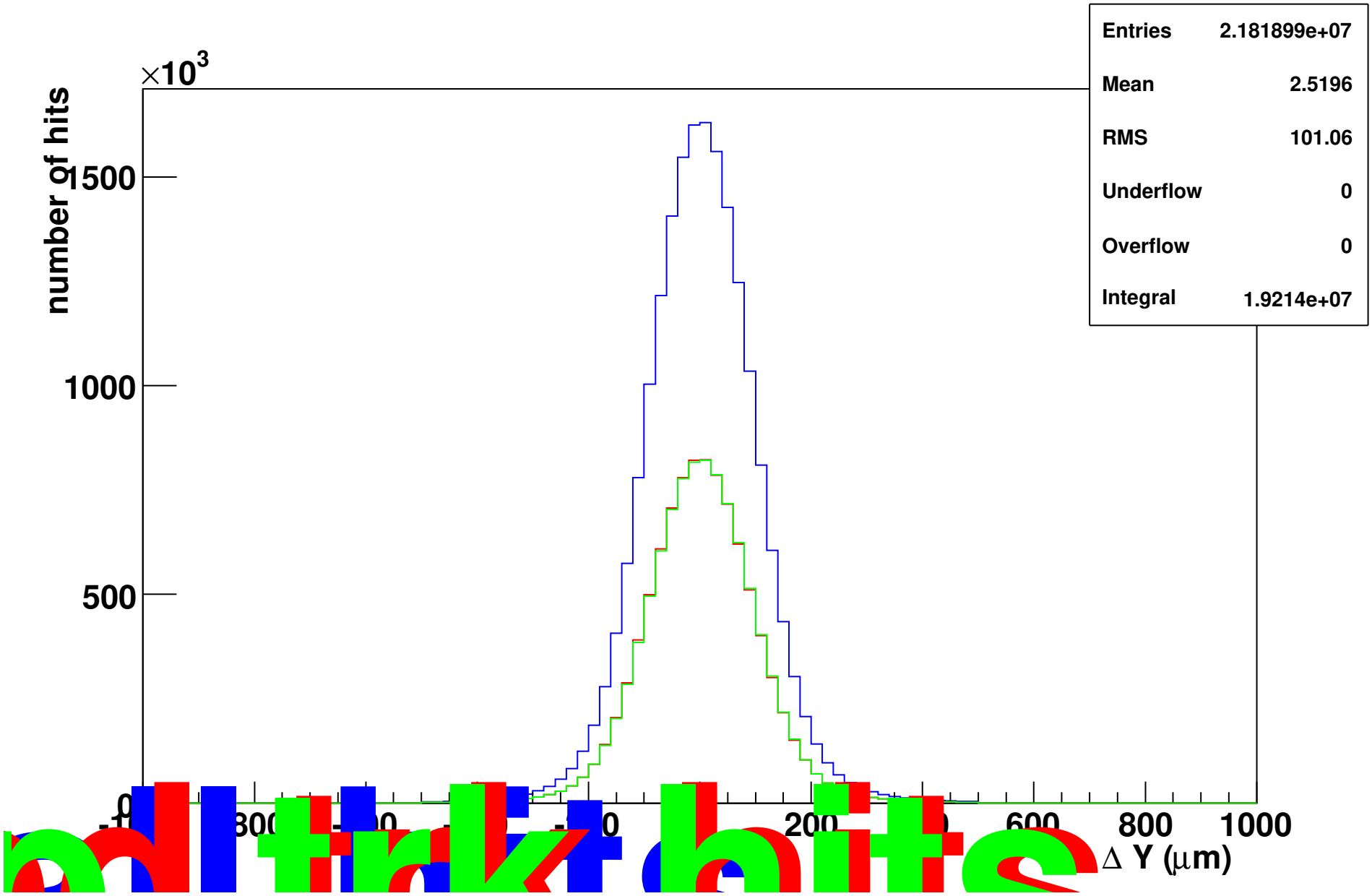

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL7 hit D (cm)


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

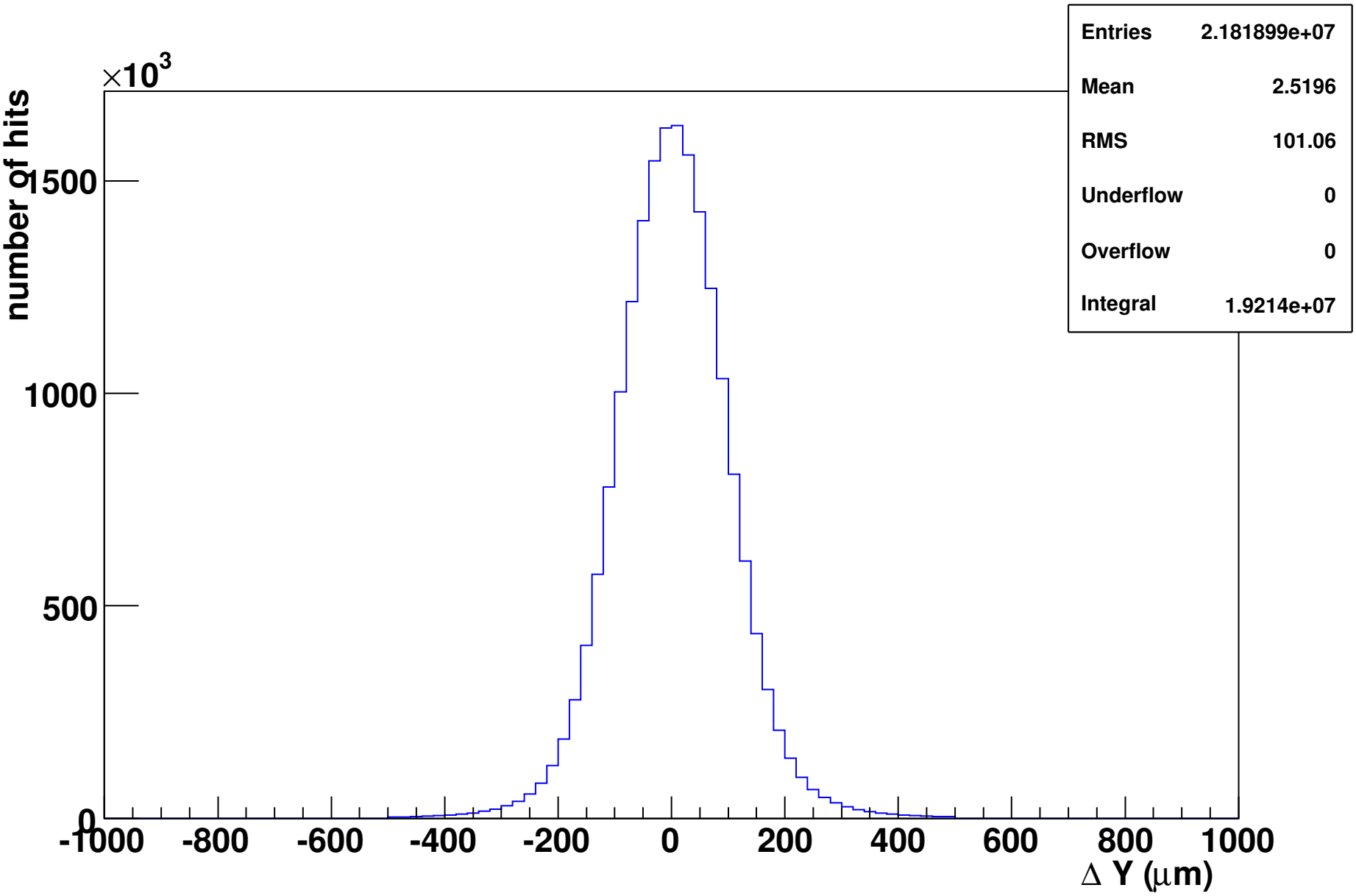

Δ Y (μm)
40
30
20
10
0
-10
-20
0
10
20
30
40
50
60
70
80
90
wire number


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


Entries 2.181899e+07
Mean 6.8112
RMS 100.86
Underflow 0
Overflow 0
Integral 1.921e+07
number of hits
×10^3
1500
1000
500
0
total hits



Entries 2.181899e+07
Mean 2.5196
RMS 101.06
Underflow 0
Overflow 0
Integral 1.9214e+07
number of hits
×10^3
1500
1000
500
0
200
600
800
1000
Δ Y (μm)
all trk hits


Entries 2.181899e+07
Mean 2.5196
RMS 101.06
Underflow 0
Overflow 0
Integral 1.9214e+07
×10^3
number of hits
1500
1000
500
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000
Δ Y (μm)