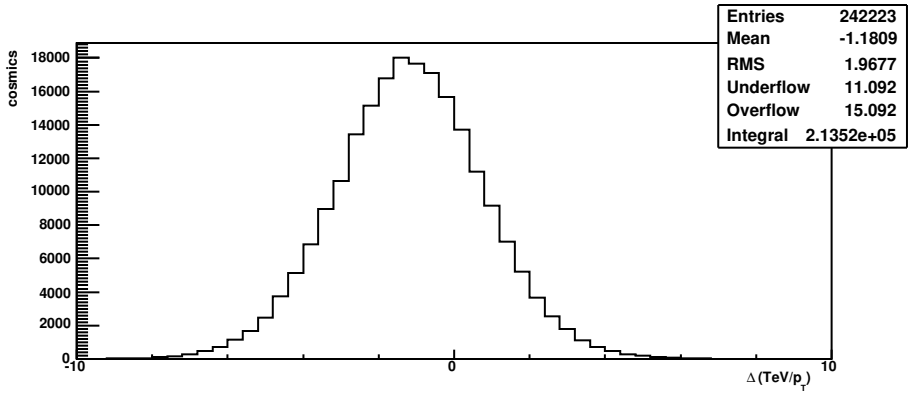
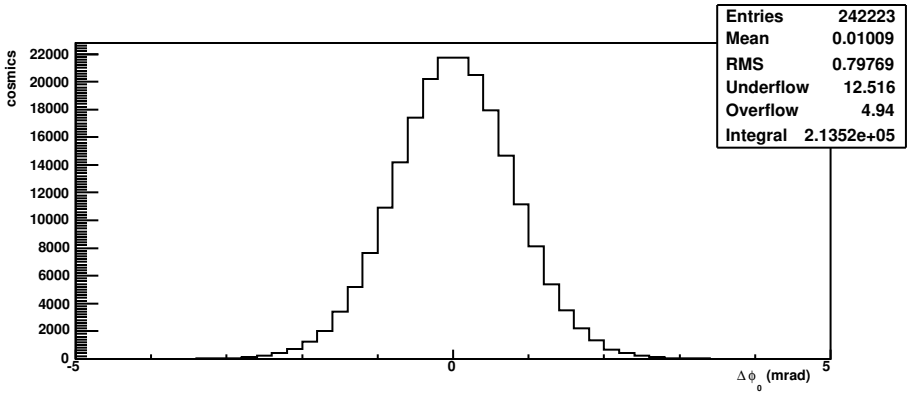
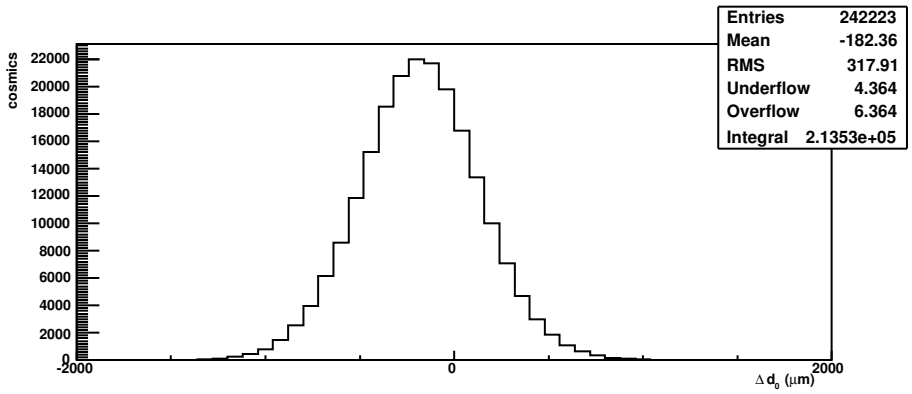
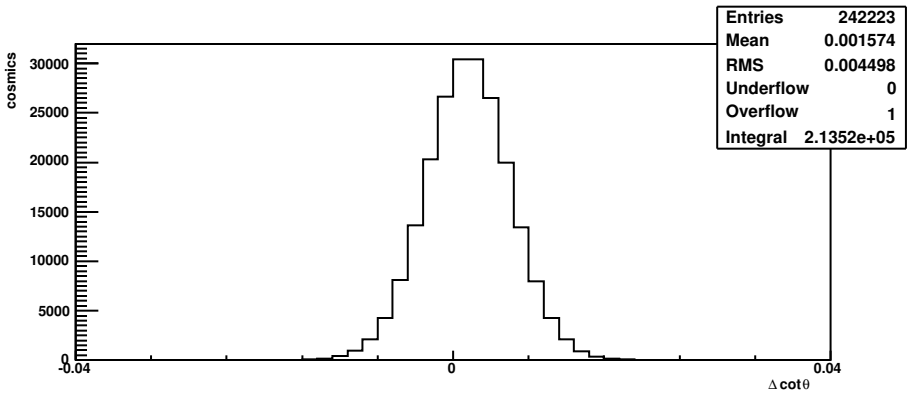
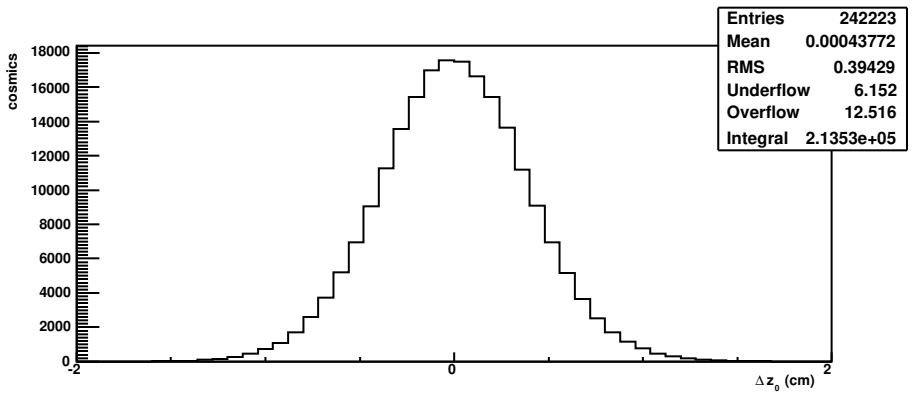
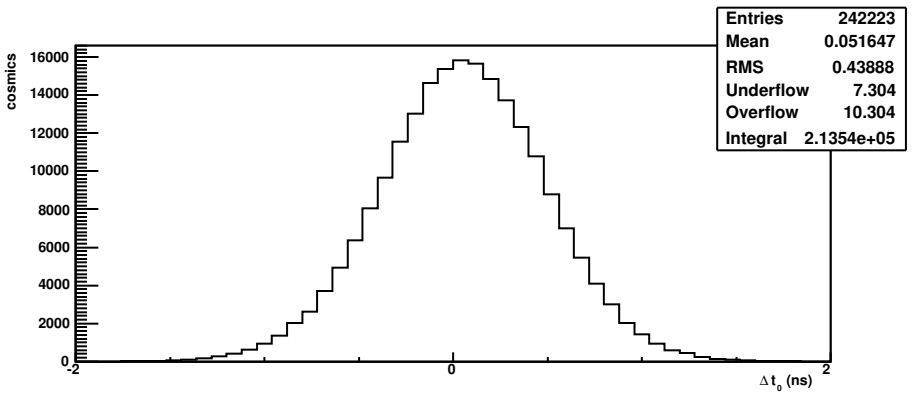

Entries 242223
Mean -1.1809
RMS 1.9677
Underflow 11.092
Overflow 15.092
Integral 2.1352e+05
cosmics
Δ(TeV/p_T)

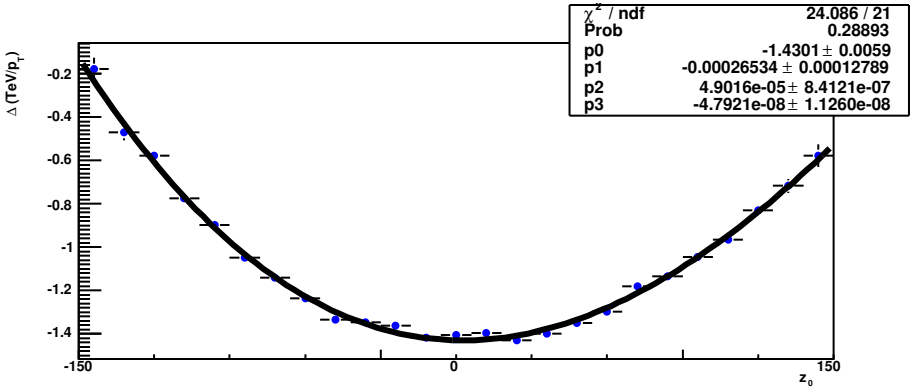

Entries 242223
Mean 0.01009
RMS 0.79769
Underflow 12.516
Overflow 4.94
Integral 2.1352e+05
cosmics
Δφ_0 (mrad)

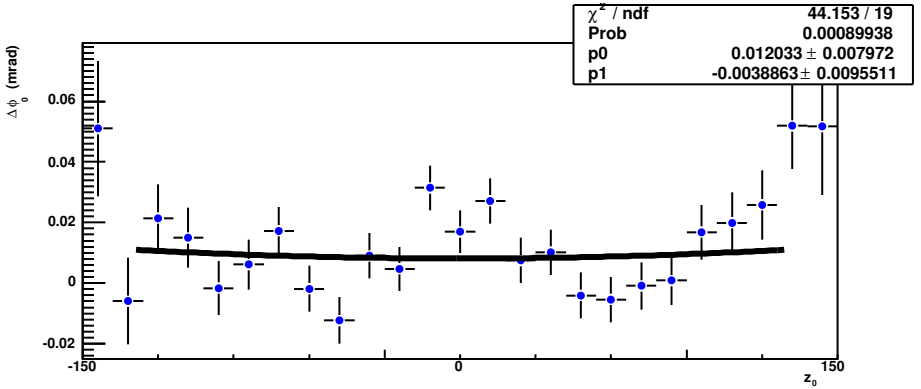

Entries 242223
Mean -182.36
RMS 317.91
Underflow 4.364
Overflow 6.364
Integral 2.1353e+05
cosmics
Δd_0 (μm)

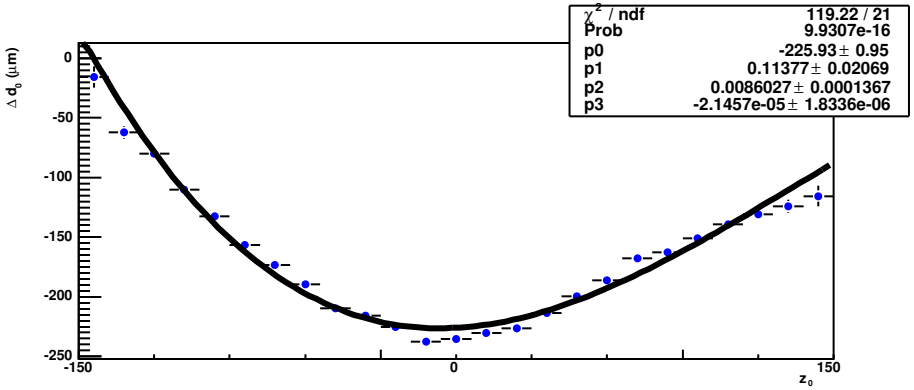

Entries 242223
Mean 0.001574
RMS 0.004498
Underflow 0
Overflow 1
Integral 2.1352e+05
cosmics
Δcotθ

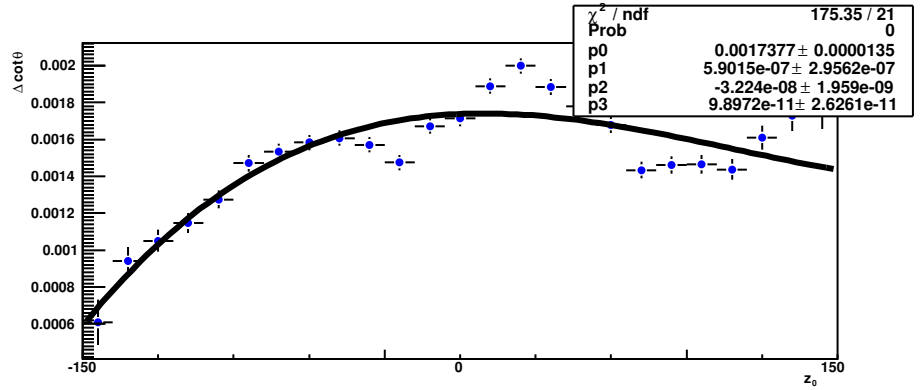

Entries 242223
Mean 0.00043772
RMS 0.39429
Underflow 6.152
Overflow 12.516
Integral 2.1353e+05
cosmics
Δz_0 (cm)

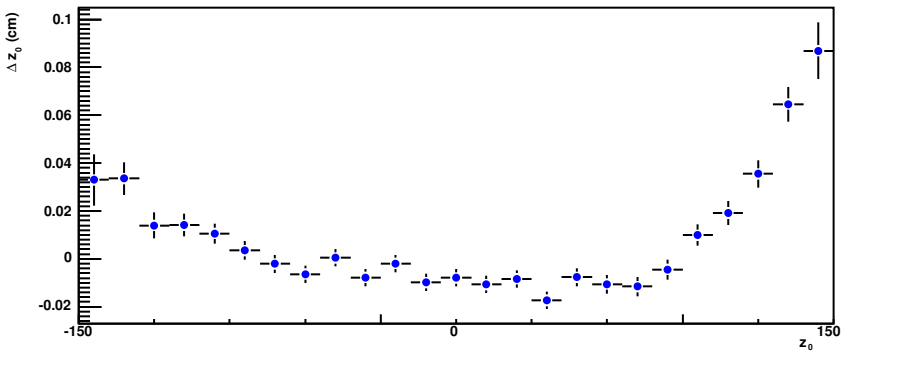

Entries 242223
Mean 0.051647
RMS 0.43888
Underflow 7.304
Overflow 10.304
Integral 2.1354e+05
cosmics
Δt_0 (ns)

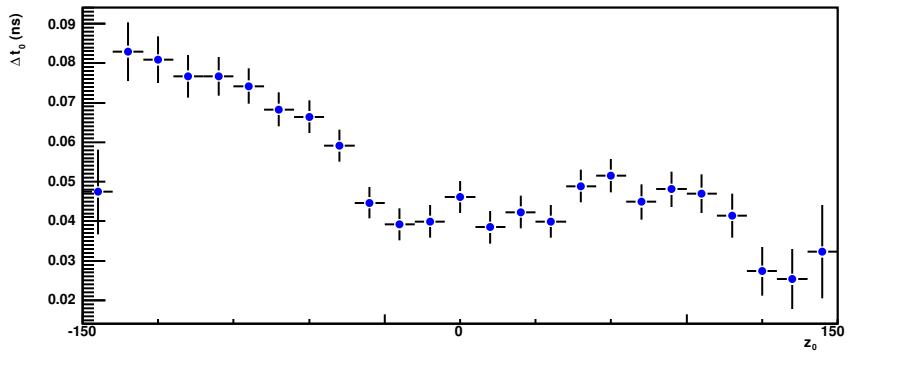

χ² / ndf 24.086 / 21
Prob 0.28893
p0 -1.4301 ± 0.0059
p1 -0.00026534 ± 0.00012789
p2 4.9016e-05 ± 8.4121e-07
p3 -4.7921e-08 ± 1.1260e-08
Δ (TeV/p_T)
z_0

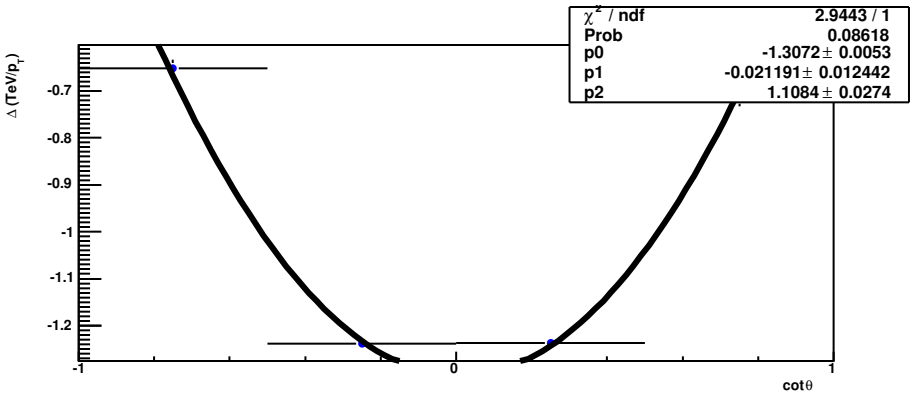

χ² / ndf 44.153 / 19
Prob 0.00089938
p0 0.012033 ± 0.007972
p1 -0.0038863 ± 0.0095511
Δφ_0 (mrad)
z_0

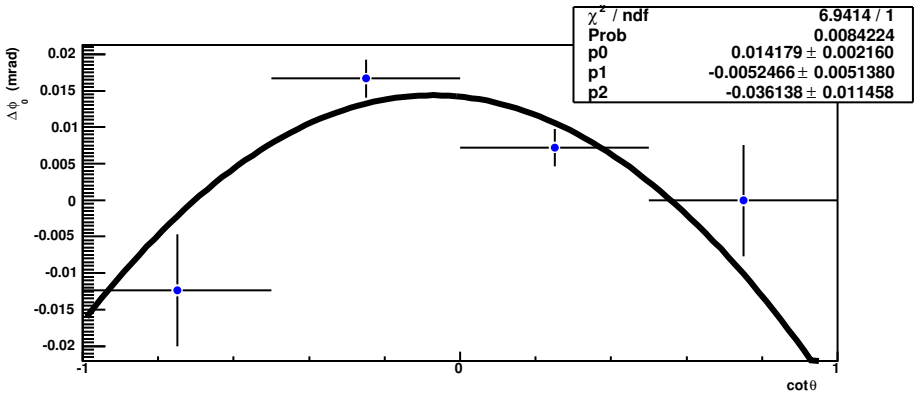

χ² / ndf 119.22 / 21
Prob 9.9307e-16
p0 -225.93 ± 0.95
p1 0.11377 ± 0.02069
p2 0.0086027 ± 0.0001367
p3 -2.1457e-05 ± 1.8336e-06
Δ d_0 (μm)
z_0

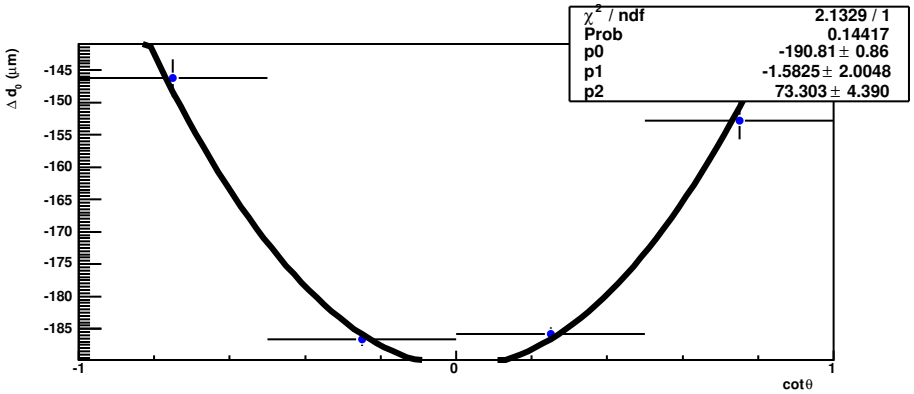

χ² / ndf 175.35 / 21
Prob 0
p0 0.0017377 ± 0.0000135
p1 5.9015e-07 ± 2.9562e-07
p2 -3.224e-08 ± 1.959e-09
p3 9.8972e-11 ± 2.6261e-11
Δ cotθ
z_0

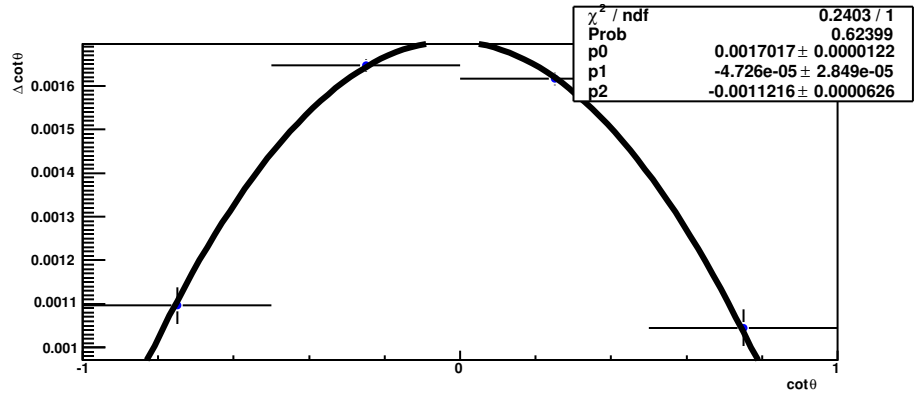

Δ z_0 (cm)
z_0

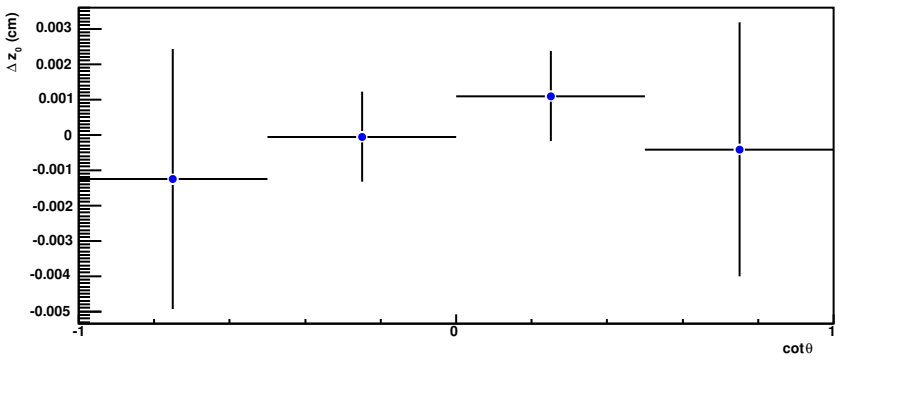

Δ t_0 (ns)
z_0

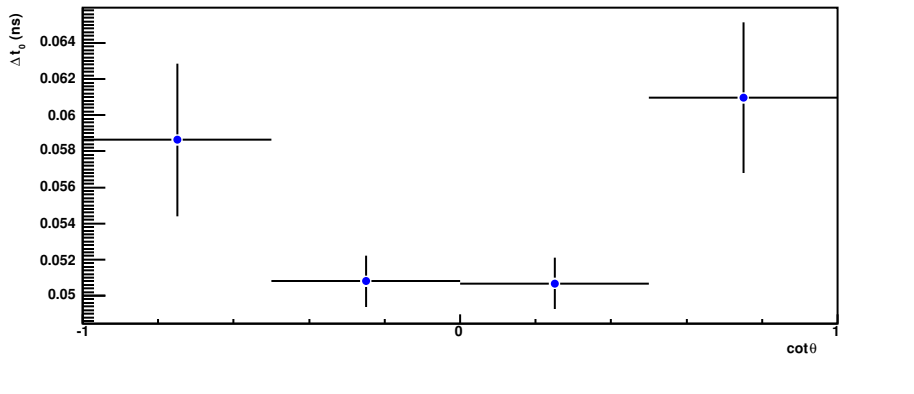

χ² / ndf 2.9443 / 1
Prob 0.08618
p0 -1.3072 ± 0.0053
p1 -0.021191 ± 0.012442
p2 1.1084 ± 0.0274
Δ (TeV/p_T)
cotθ

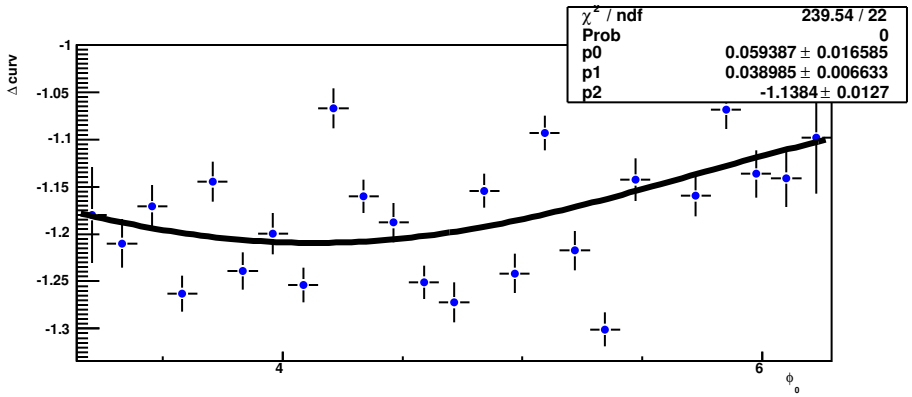

χ² / ndf 6.9414 / 1
Prob 0.0084224
p0 0.014179 ± 0.002160
p1 -0.0052466 ± 0.0051380
p2 -0.036138 ± 0.011458
Δφ_0 (mrad)
cotθ

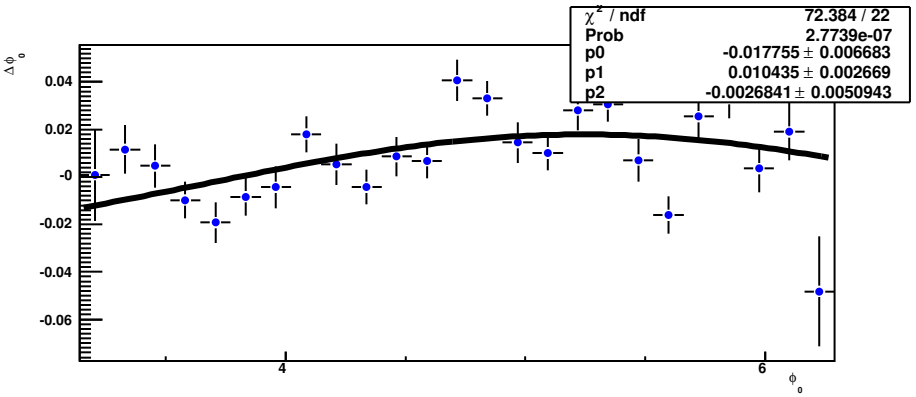

χ² / ndf 2.1329 / 1
Prob 0.14417
p0 -190.81 ± 0.86
p1 -1.5825 ± 2.0048
p2 73.303 ± 4.390
Δd_0 (μm)
cotθ

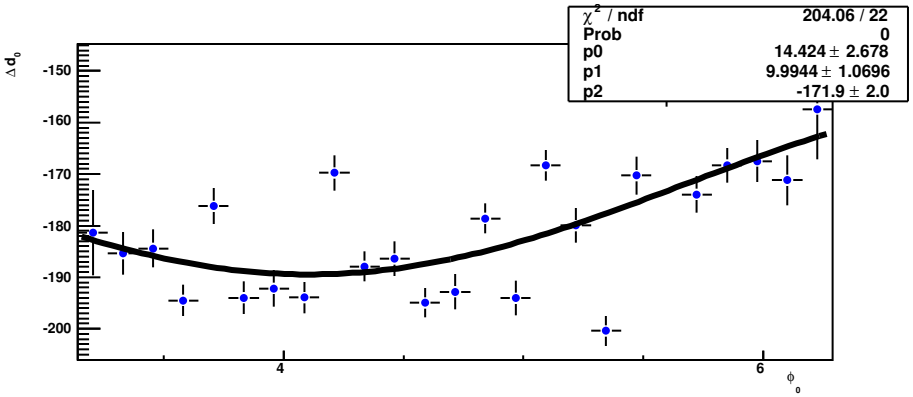

χ² / ndf 0.2403 / 1
Prob 0.62399
p0 0.0017017 ± 0.0000122
p1 -4.726e-05 ± 2.849e-05
p2 -0.0011216 ± 0.0000626
Δcotθ
cotθ

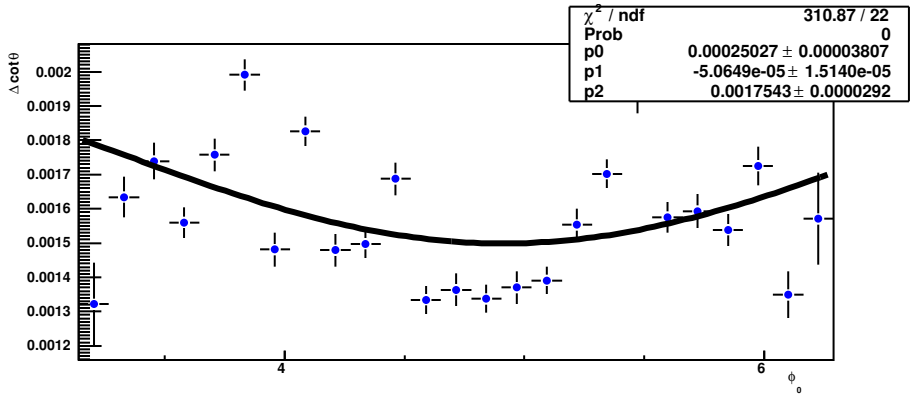

Δz_0 (cm)
cotθ

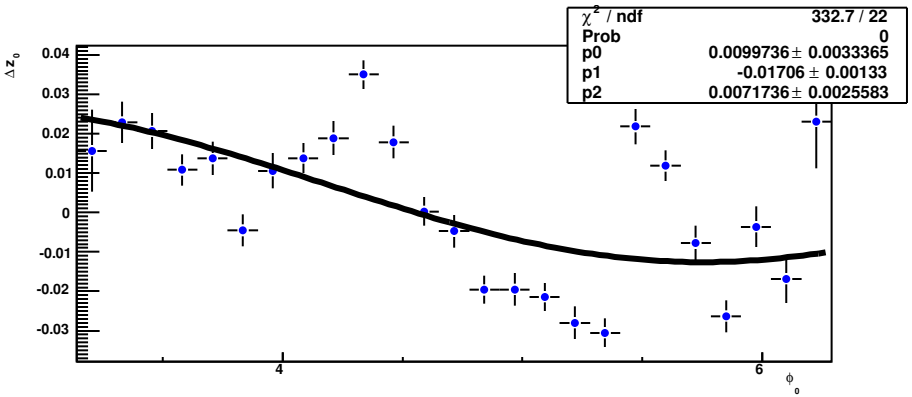

Δt_0 (ns)
cotθ

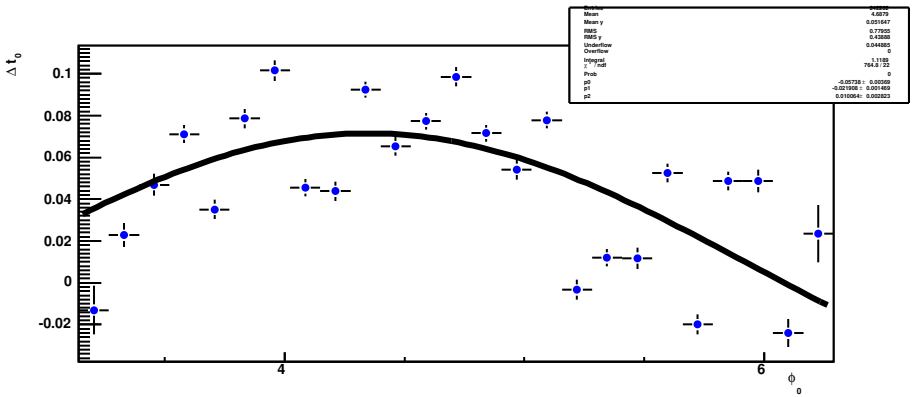

χ² / ndf 239.54 / 22
Prob 0
p0 0.059387 ± 0.016585
p1 0.038985 ± 0.006633
p2 -1.1384 ± 0.0127
Δ curv
φ0

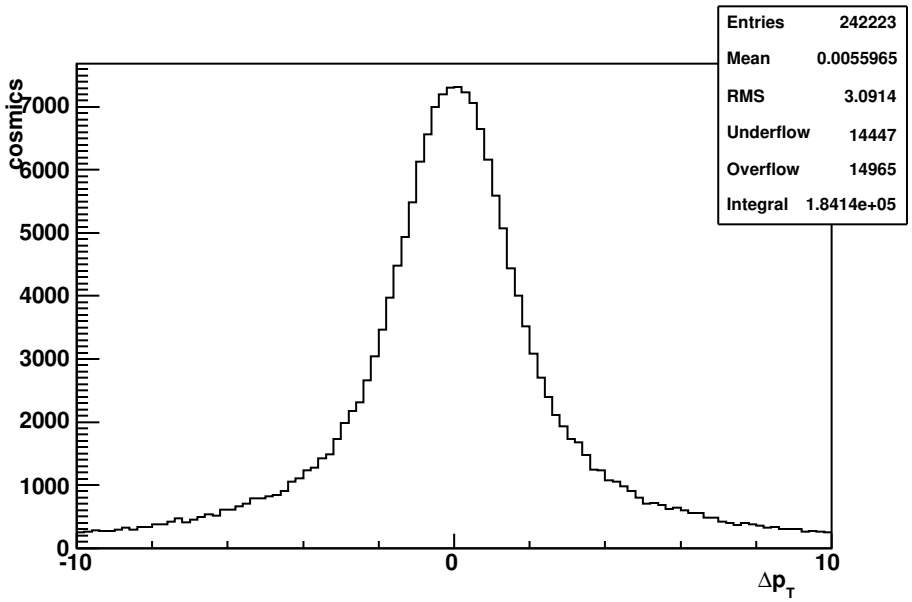

χ² / ndf 72.384 / 22
Prob 2.7739e-07
p0 -0.017755 ± 0.006683
p1 0.010435 ± 0.002669
p2 -0.0026841 ± 0.0050943
Δ φ0
φ0

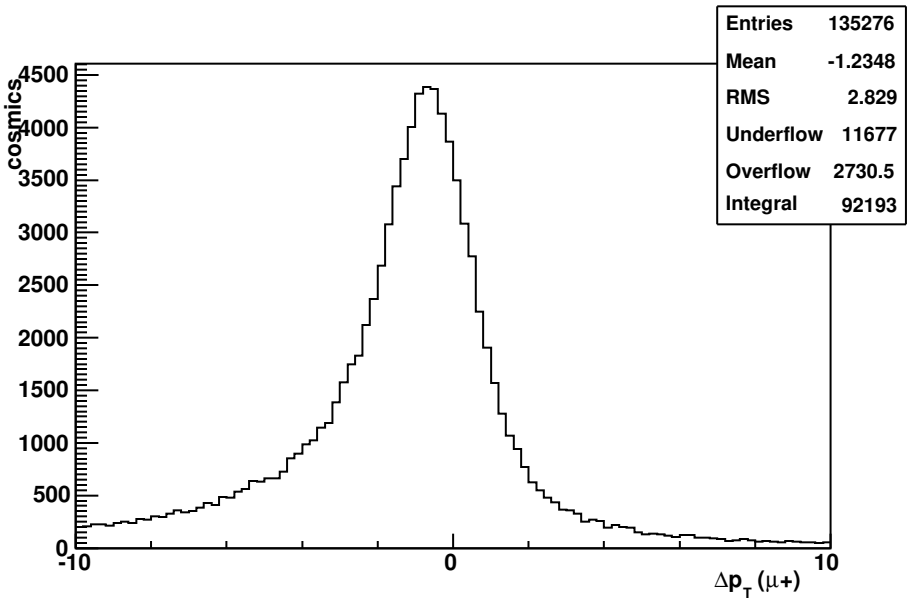

χ² / ndf 204.06 / 22
Prob 0
p0 14.424 ± 2.678
p1 9.9944 ± 1.0696
p2 -171.9 ± 2.0
Δ d0
φ0

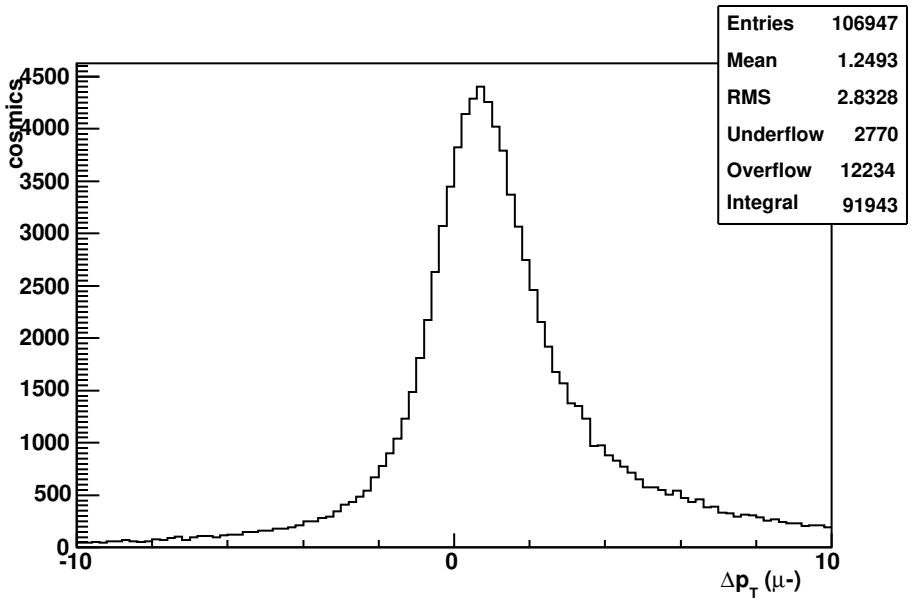

χ² / ndf 310.87 / 22
Prob 0
p0 0.00025027 ± 0.00003807
p1 -5.0649e-05 ± 1.5140e-05
p2 0.0017543 ± 0.0000292
Δ cotθ
φ0

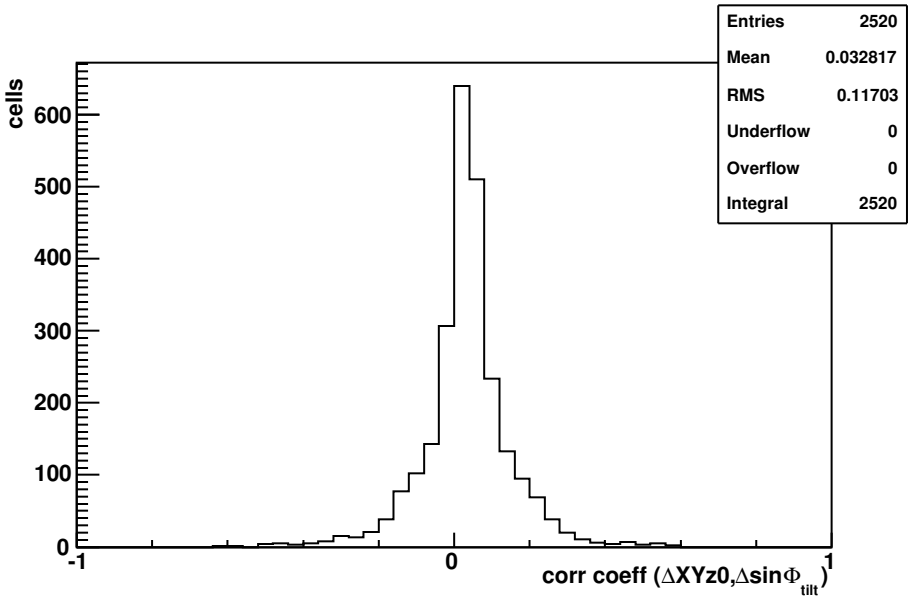

χ² / ndf 332.7 / 22
Prob 0
p0 0.0099736 ± 0.0033365
p1 -0.01706 ± 0.00133
p2 0.0071736 ± 0.0025583
Δ z0
φ0

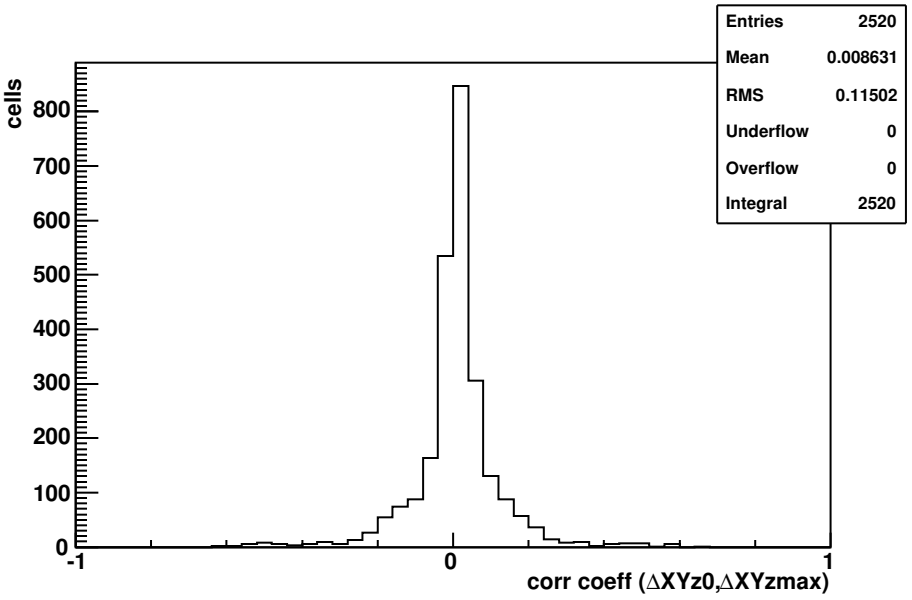

Δ t0
φ0

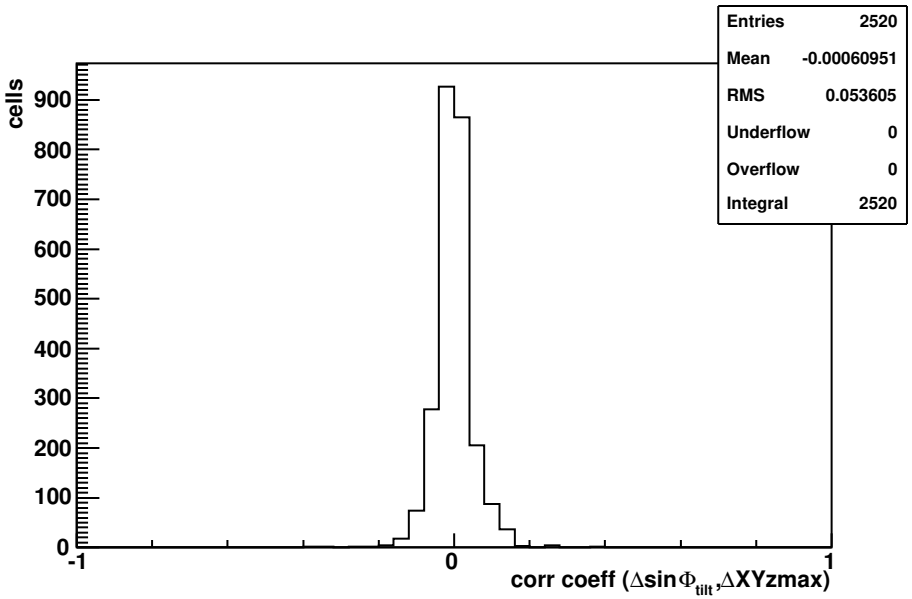

Entries 242223
Mean 0.0055965
RMS 3.0914
Underflow 14447
Overflow 14965
Integral 1.8414e+05
cosmics
Δp_T

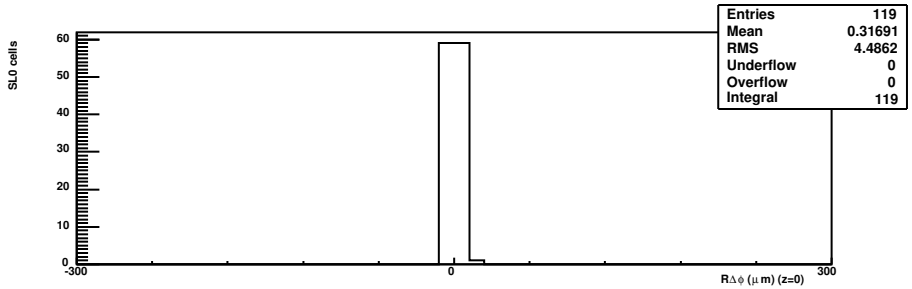

Entries 135276
Mean -1.2348
RMS 2.829
Underflow 11677
Overflow 2730.5
Integral 92193
cosmics
Δp_T (μ+)

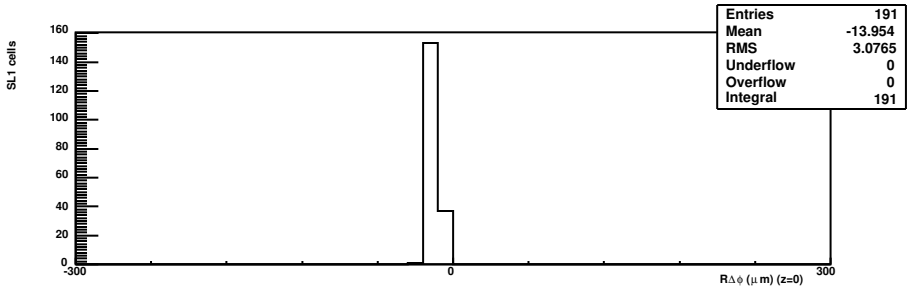

Entries 106947
Mean 1.2493
RMS 2.8328
Underflow 2770
Overflow 12234
Integral 91943
cosmics
Δp_T (μ-)

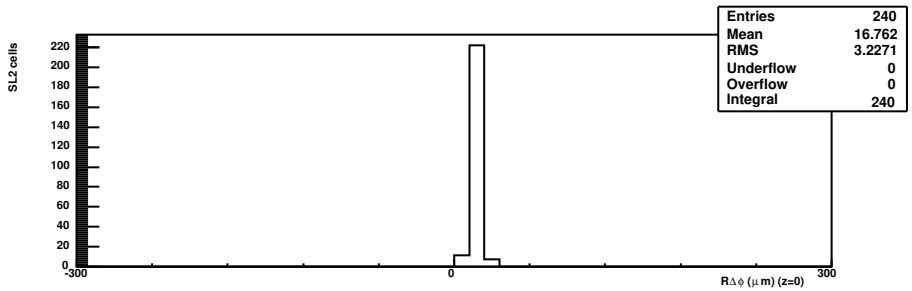

Entries 2520
Mean 0.032817
RMS 0.11703
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔsinΦ_{tilt})

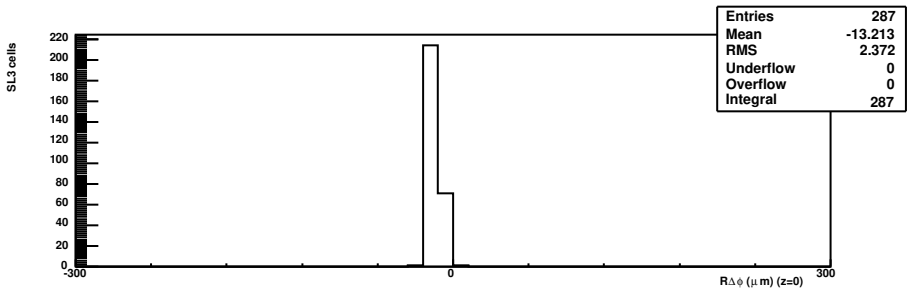

Entries 2520
Mean 0.008631
RMS 0.11502
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔXYzmax)

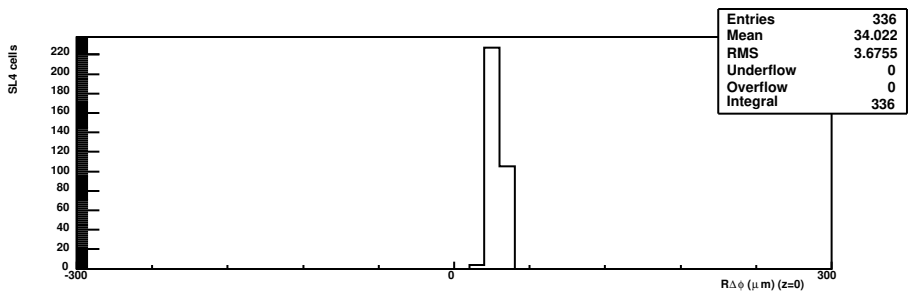

Entries 2520
Mean -0.00060951
RMS 0.053605
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔsinΦ_{tilt},ΔXYzmax)

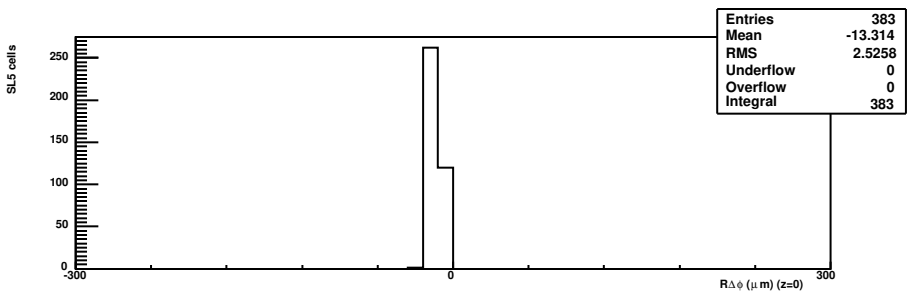

SL0 cells
Entries 119
Mean 0.31691
RMS 4.4862
Underflow 0
Overflow 0
Integral 119
RΔφ (μm) (z=0)

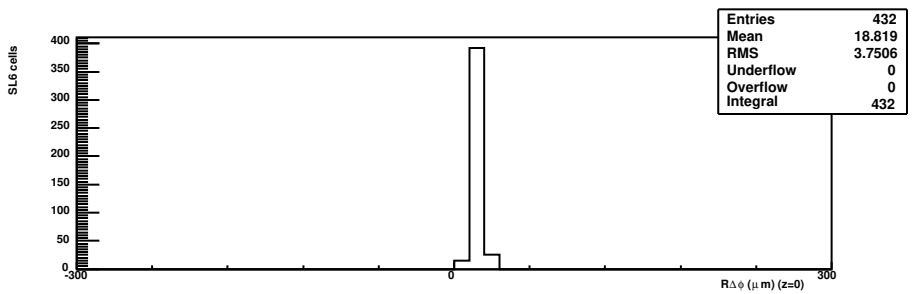

SL1 cells
Entries 191
Mean -13.954
RMS 3.0765
Underflow 0
Overflow 0
Integral 191
RΔφ (μm) (z=0)

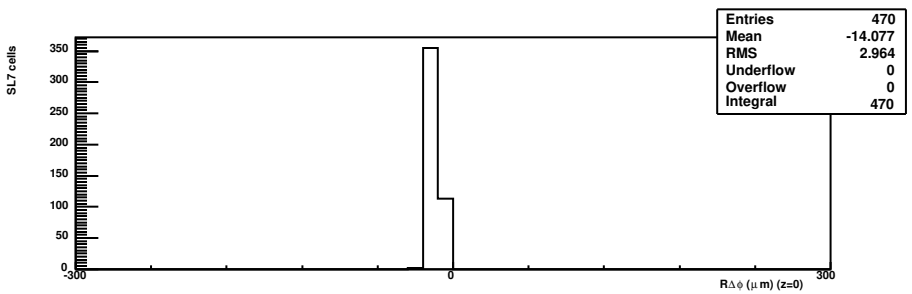

SL2 cells
Entries 240
Mean 16.762
RMS 3.2271
Underflow 0
Overflow 0
Integral 240
RΔφ (μm) (z=0)

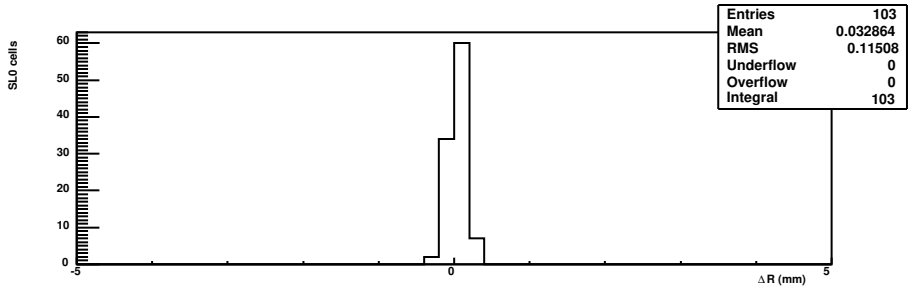

SL3 cells
Entries 287
Mean -13.213
RMS 2.372
Underflow 0
Overflow 0
Integral 287
RΔφ (μm) (z=0)

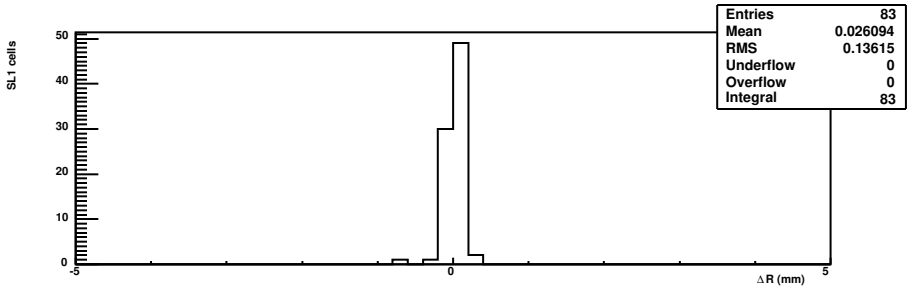

SL4 cells
Entries 336
Mean 34.022
RMS 3.6755
Underflow 0
Overflow 0
Integral 336
RΔφ (μm) (z=0)

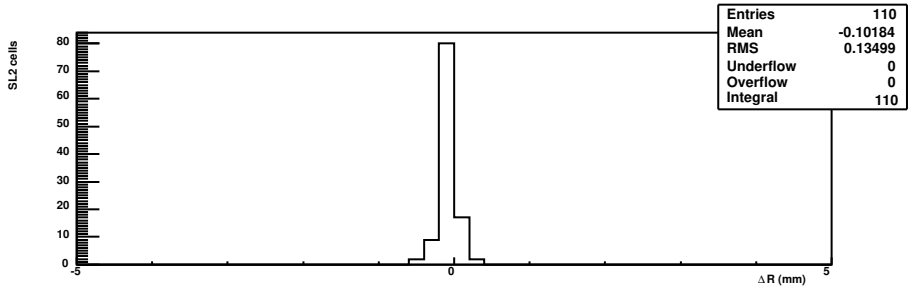

SL5 cells
Entries 383
Mean -13.314
RMS 2.5258
Underflow 0
Overflow 0
Integral 383
RΔφ (μm) (z=0)

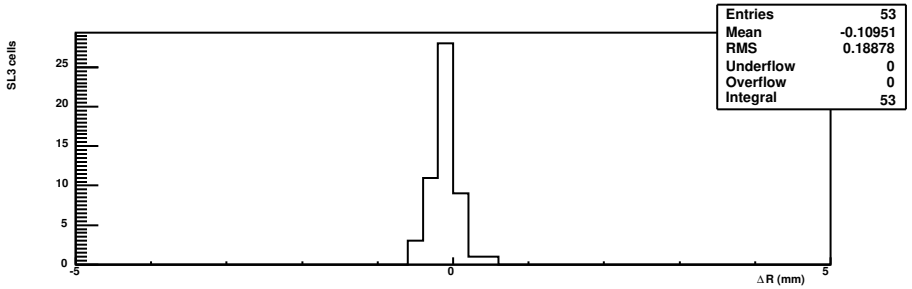

SL6 cells
Entries 432
Mean 18.819
RMS 3.7506
Underflow 0
Overflow 0
Integral 432
RΔφ (μm) (z=0)

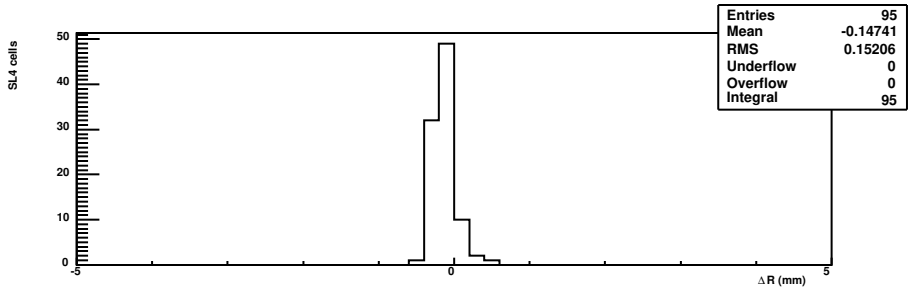

SL7 cells
Entries 470
Mean -14.077
RMS 2.964
Underflow 0
Overflow 0
Integral 470
RΔφ (μm) (z=0)

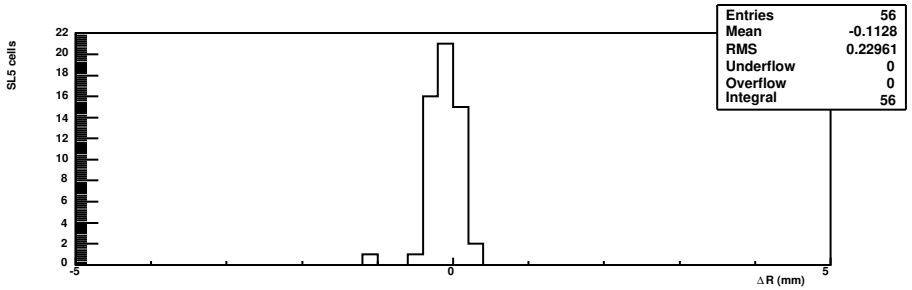

SL0 cells
Entries 103
Mean 0.032864
RMS 0.11508
Underflow 0
Overflow 0
Integral 103
ΔR (mm)

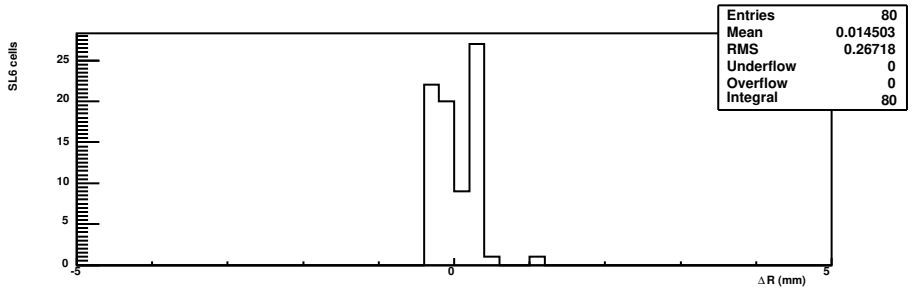

SL1 cells
Entries 83
Mean 0.026094
RMS 0.13615
Underflow 0
Overflow 0
Integral 83
ΔR (mm)

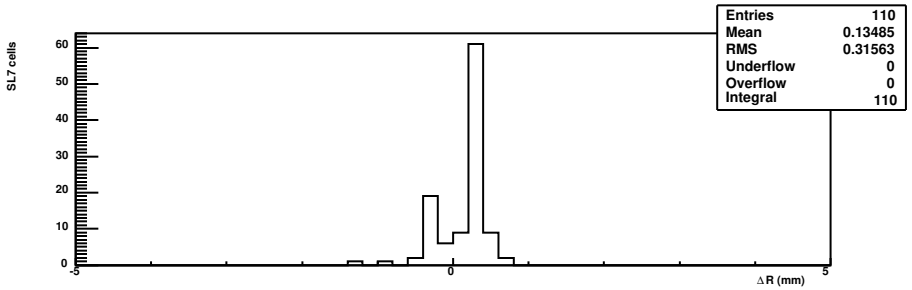

SL2 cells
Entries 110
Mean -0.10184
RMS 0.13499
Underflow 0
Overflow 0
Integral 110
ΔR (mm)

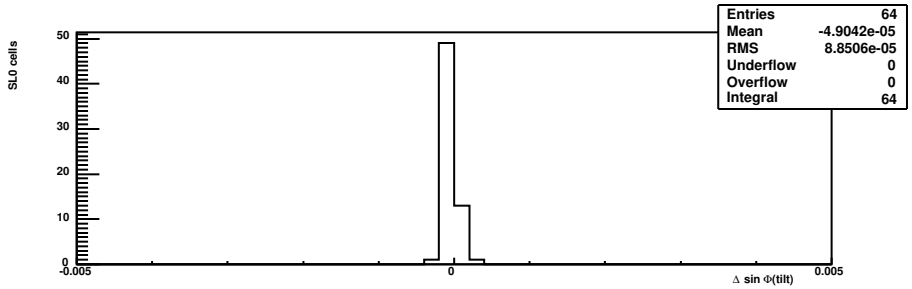

SL3 cells
Entries 53
Mean -0.10951
RMS 0.18878
Underflow 0
Overflow 0
Integral 53
ΔR (mm)

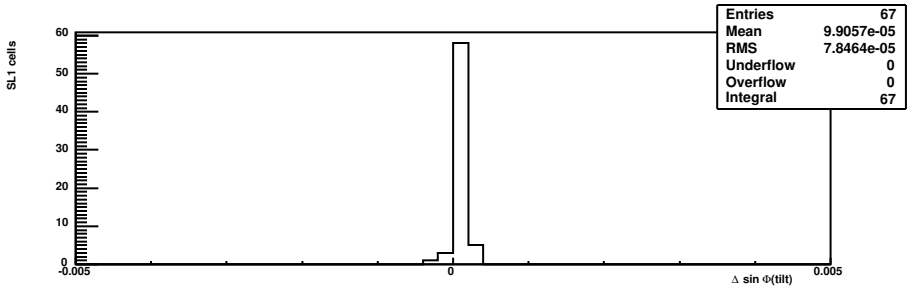

SL4 cells
Entries 95
Mean -0.14741
RMS 0.15206
Underflow 0
Overflow 0
Integral 95
ΔR (mm)

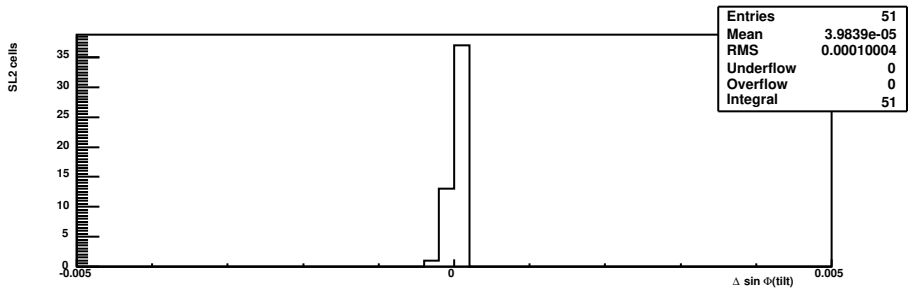

SL5 cells
Entries 56
Mean -0.1128
RMS 0.22961
Underflow 0
Overflow 0
Integral 56
ΔR (mm)

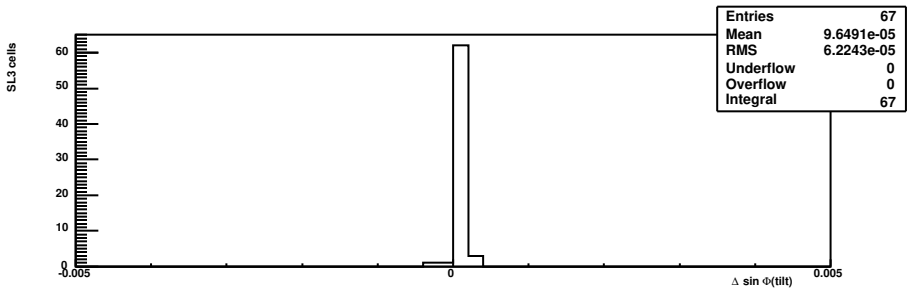

SL6 cells
Entries 80
Mean 0.014503
RMS 0.26718
Underflow 0
Overflow 0
Integral 80
ΔR (mm)

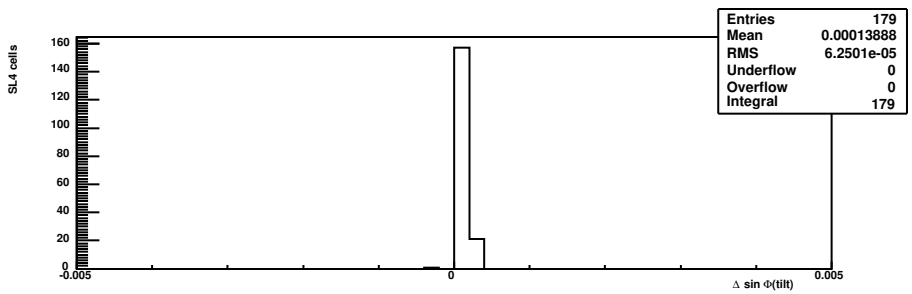

SL7 cells
Entries 110
Mean 0.13485
RMS 0.31563
Underflow 0
Overflow 0
Integral 110
ΔR (mm)

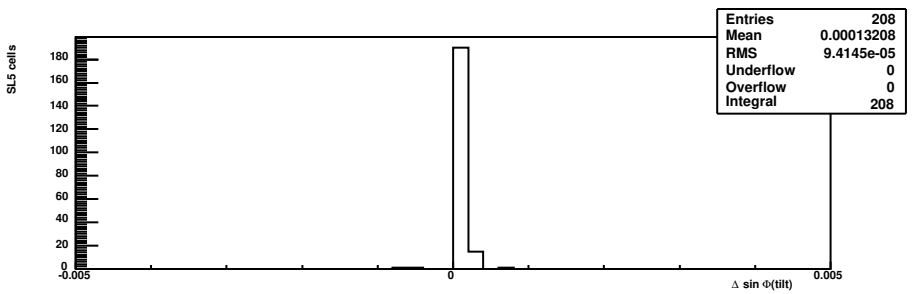

Entries 64
Mean -4.9042e-05
RMS 8.8506e-05
Underflow 0
Overflow 0
Integral 64
SL0 cells
Δ sin Φ(tilt)

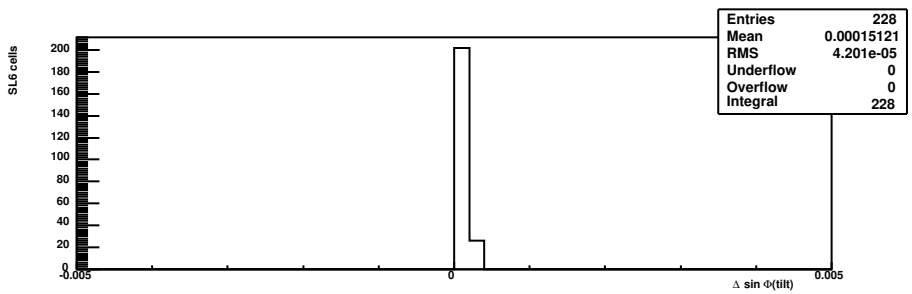

Entries 67
Mean 9.9057e-05
RMS 7.8464e-05
Underflow 0
Overflow 0
Integral 67
SL1 cells
Δ sin Φ(tilt)

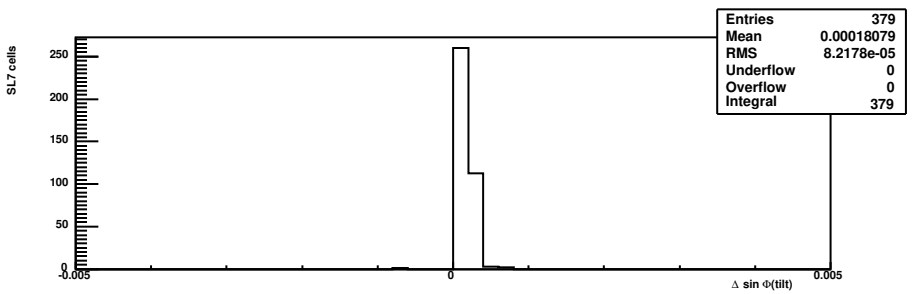

Entries 51
Mean 3.9839e-05
RMS 0.00010004
Underflow 0
Overflow 0
Integral 51
SL2 cells
Δ sin Φ(tilt)

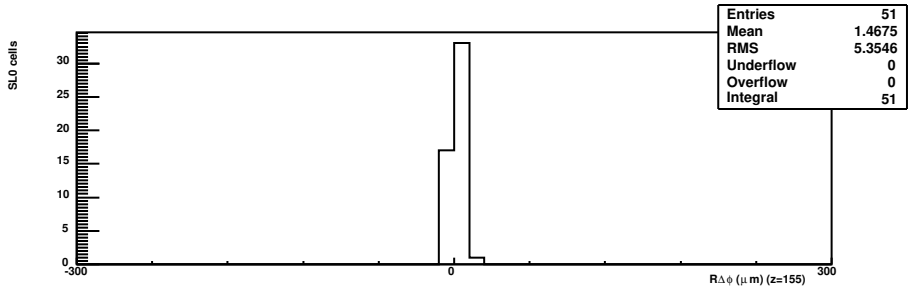

Entries 67
Mean 9.6491e-05
RMS 6.2243e-05
Underflow 0
Overflow 0
Integral 67
SL3 cells
Δ sin Φ(tilt)

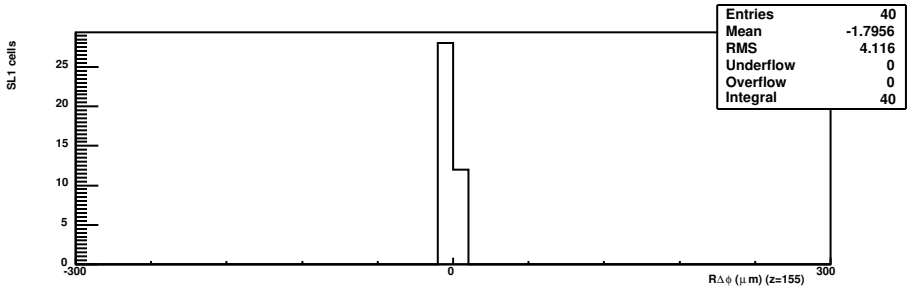

Entries 179
Mean 0.00013888
RMS 6.2501e-05
Underflow 0
Overflow 0
Integral 179
SL4 cells
Δ sin Φ(tilt)

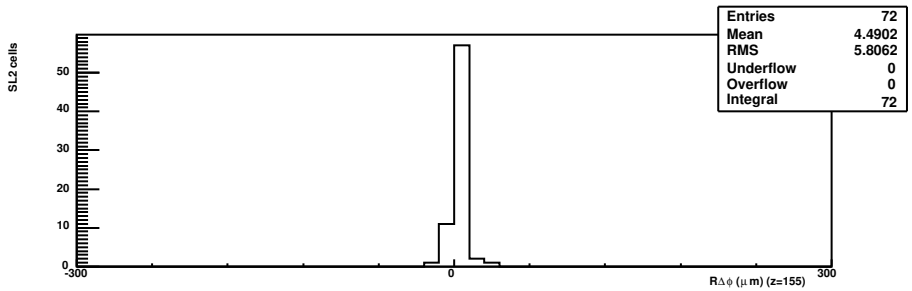

Entries 208
Mean 0.00013208
RMS 9.4145e-05
Underflow 0
Overflow 0
Integral 208
SL5 cells
Δ sin Φ(tilt)

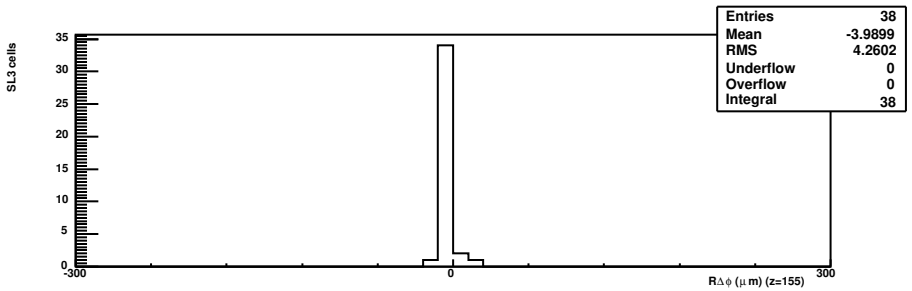

Entries 228
Mean 0.00015121
RMS 4.201e-05
Underflow 0
Overflow 0
Integral 228
SL6 cells
Δ sin Φ(tilt)

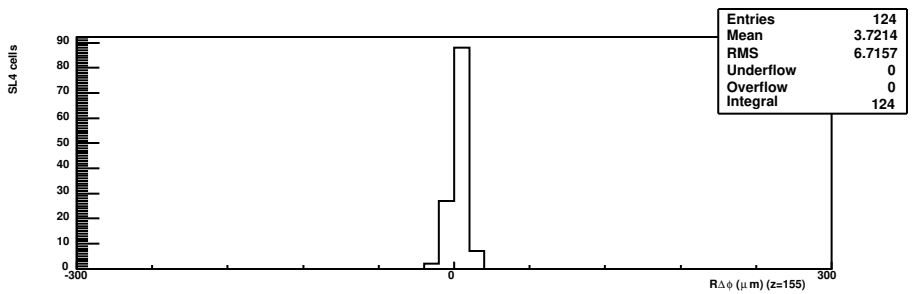

Entries 379
Mean 0.00018079
RMS 8.2178e-05
Underflow 0
Overflow 0
Integral 379
SL7 cells
Δ sin Φ(tilt)

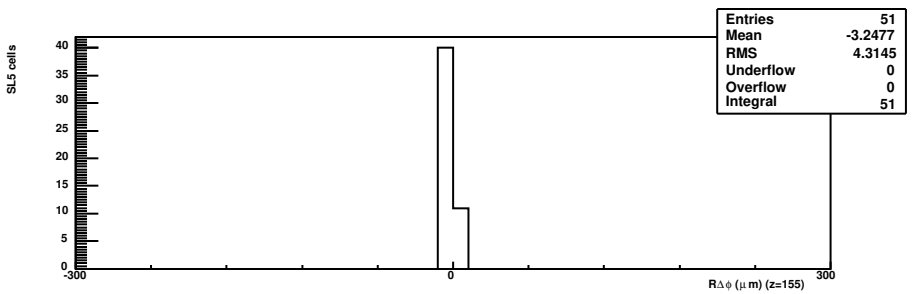

Entries 51
Mean 1.4675
RMS 5.3546
Underflow 0
Overflow 0
Integral 51
SL0 cells
RΔφ (μm) (z=155)

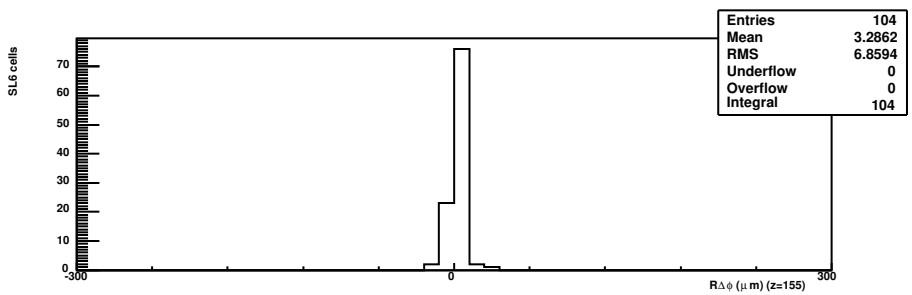

Entries 40
Mean -1.7956
RMS 4.116
Underflow 0
Overflow 0
Integral 40
SL1 cells
RΔφ (μm) (z=155)

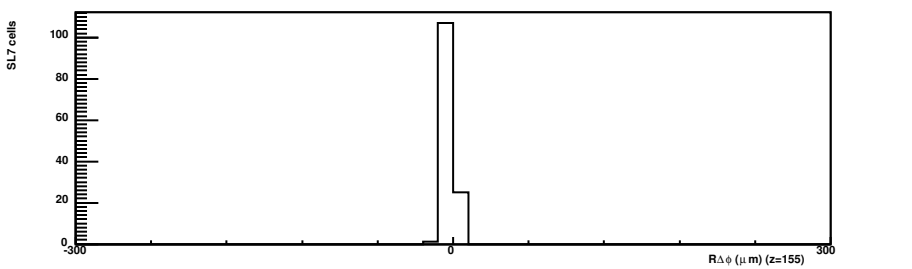

Entries 72
Mean 4.4902
RMS 5.8062
Underflow 0
Overflow 0
Integral 72
SL2 cells
RΔφ (μm) (z=155)

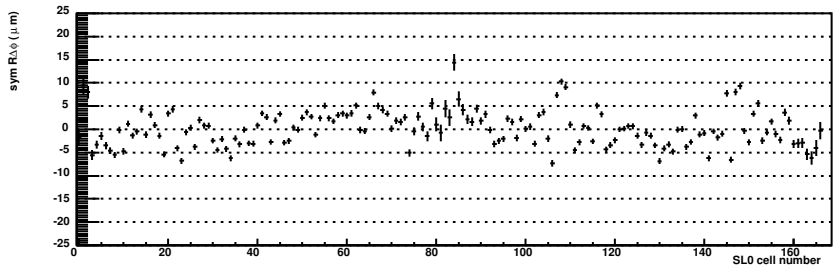

Entries 38
Mean -3.9899
RMS 4.2602
Underflow 0
Overflow 0
Integral 38
SL3 cells
RΔφ (μm) (z=155)

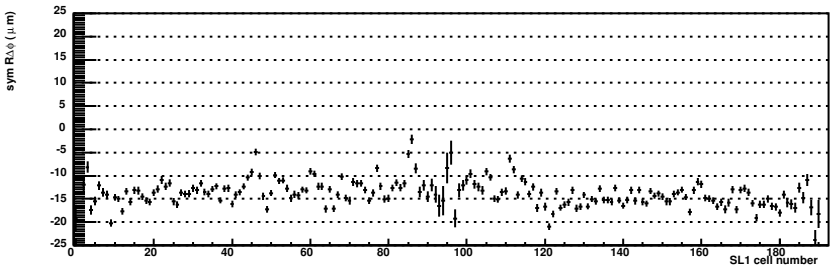

Entries 124
Mean 3.7214
RMS 6.7157
Underflow 0
Overflow 0
Integral 124
SL4 cells
RΔφ (μm) (z=155)

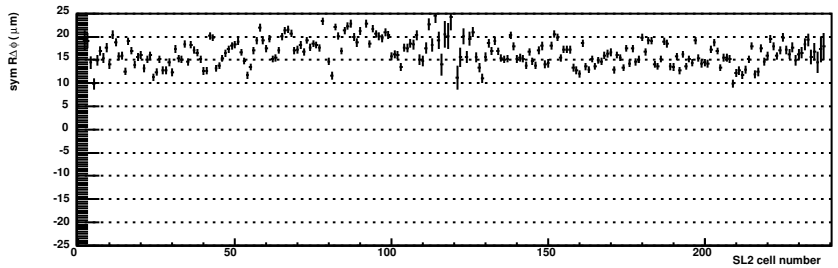

Entries 51
Mean -3.2477
RMS 4.3145
Underflow 0
Overflow 0
Integral 51
SL5 cells
RΔφ (μm) (z=155)

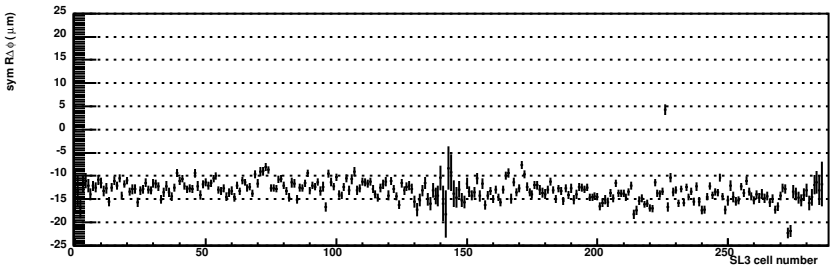

Entries 104
Mean 3.2862
RMS 6.8594
Underflow 0
Overflow 0
Integral 104
SL6 cells
RΔφ (μm) (z=155)

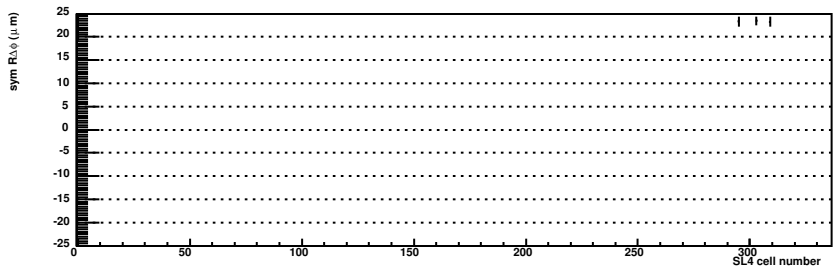

SL7 cells
RΔφ (μm) (z=155)

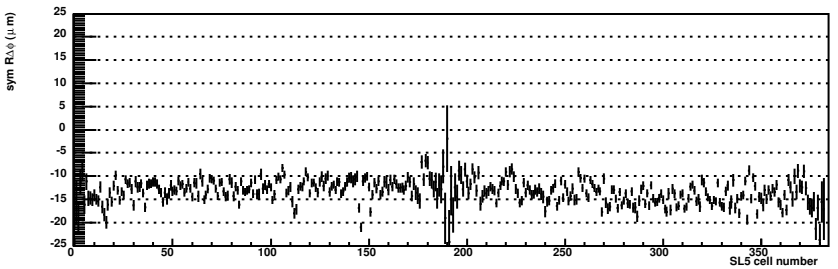

sym RΔφ (μm)
SL0 cell number

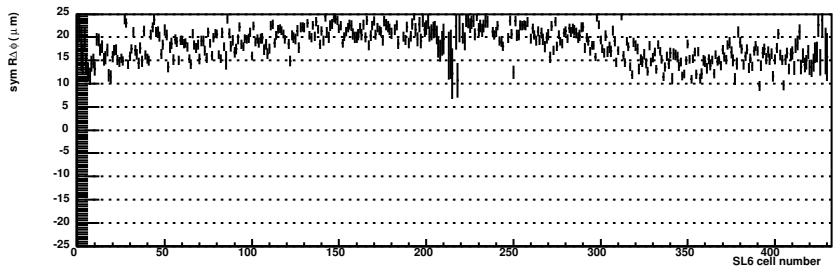

sym RΔφ (μm)
SL1 cell number

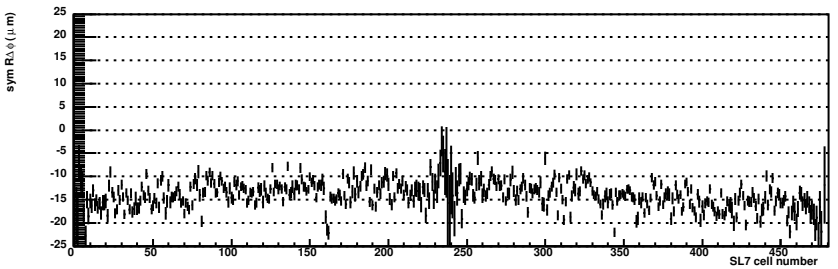

sym RΔφ (μm)
SL2 cell number

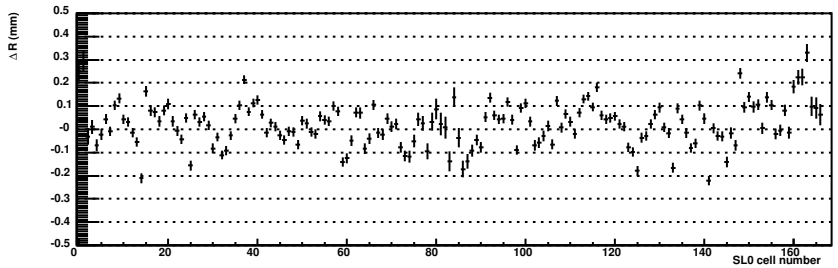

sym RΔφ (μm)
SL3 cell number

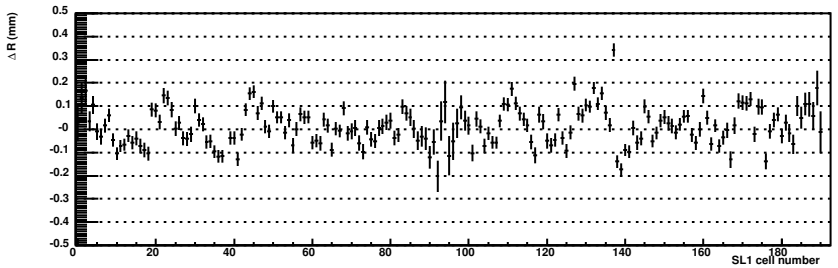

sym RΔφ (μm)
SL4 cell number

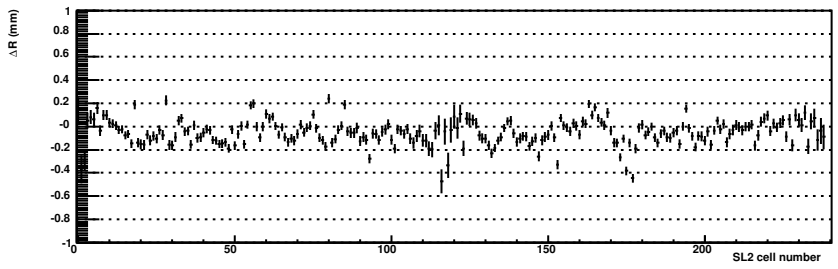

sym RΔφ (μm)
SL5 cell number

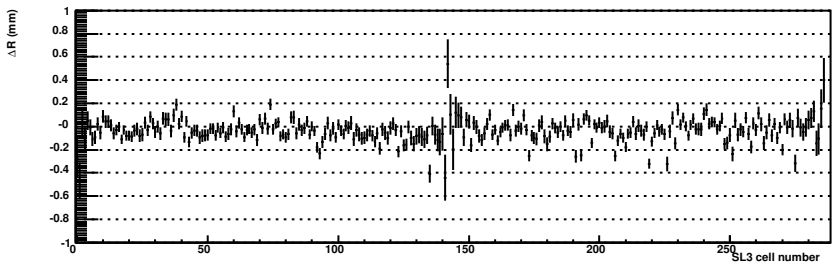

sym RΔφ (μm)
SL6 cell number

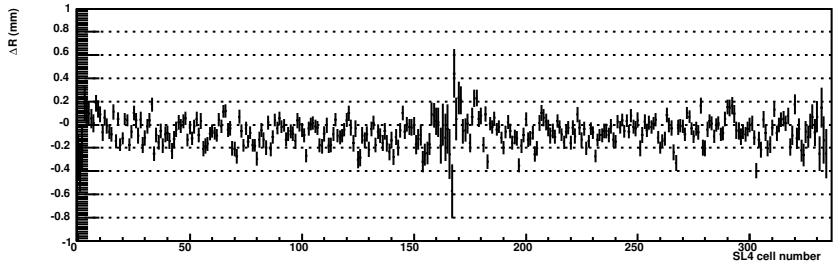

sym RΔφ (μm)
SL7 cell number

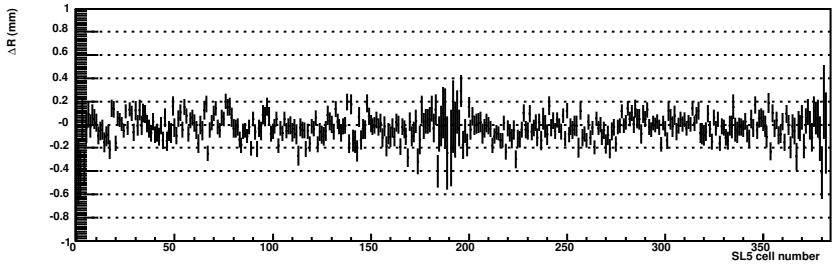

ΔR (mm)
SL0 cell number

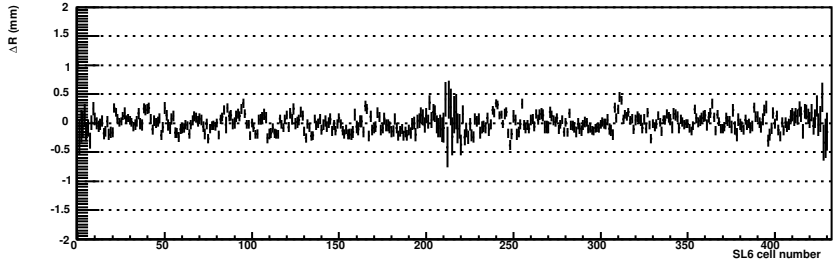

ΔR (mm)
SL1 cell number

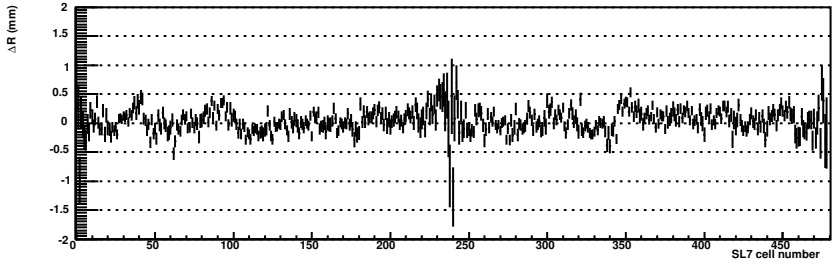

ΔR (mm)
SL2 cell number

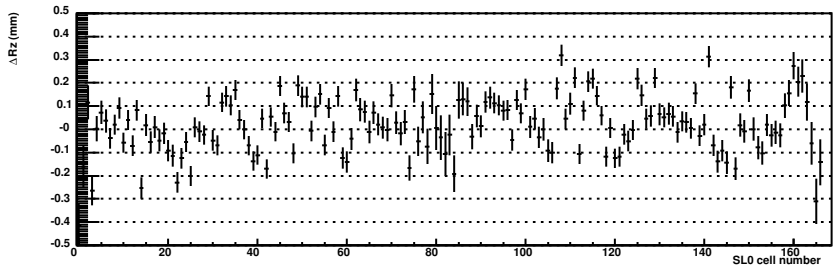

ΔR (mm)
SL3 cell number

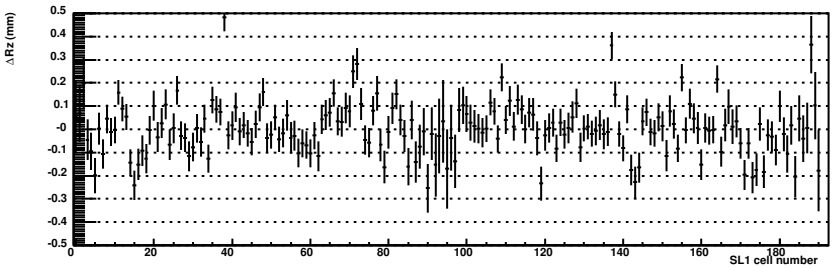

ΔR (mm)
SL4 cell number

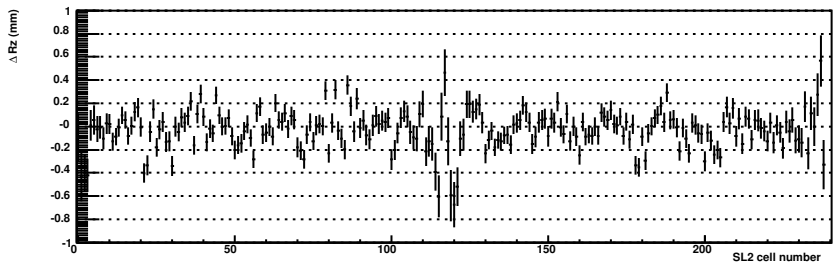

ΔR (mm)
SL5 cell number

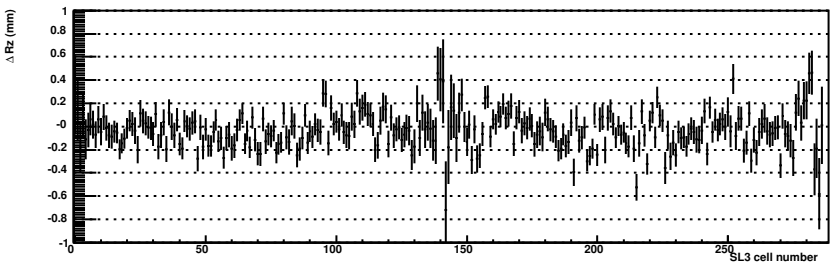

ΔR (mm)
SL6 cell number

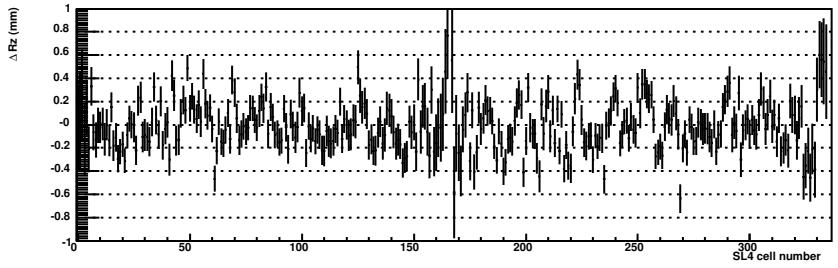

ΔR (mm)
SL7 cell number

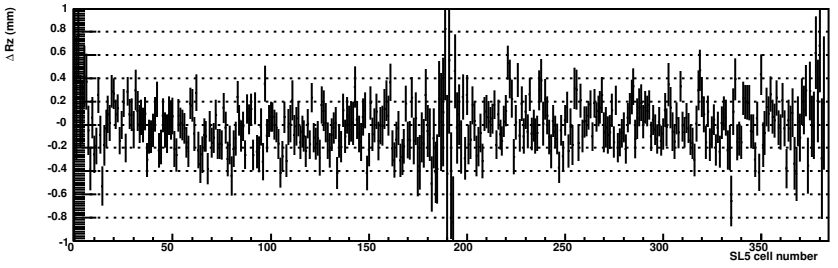

ΔRz (mm)
SL0 cell number

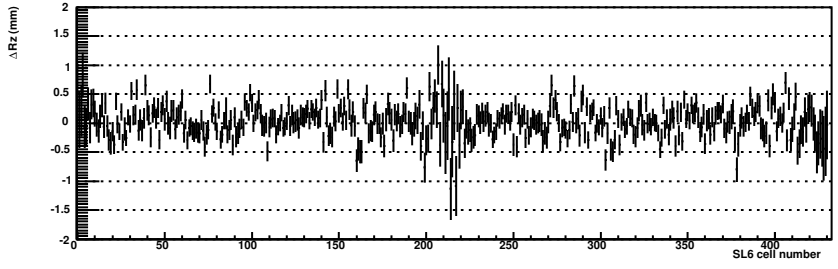

ΔRz (mm)
SL1 cell number

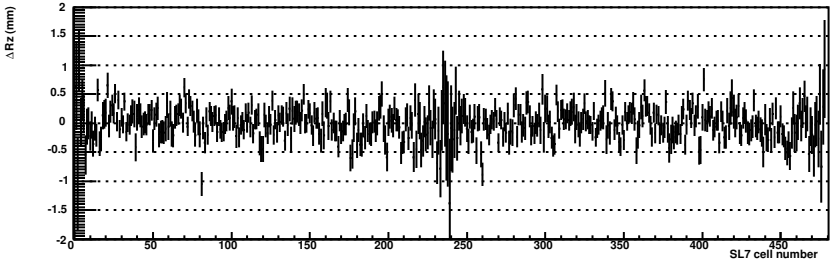

Δ Rz (mm)
SL2 cell number

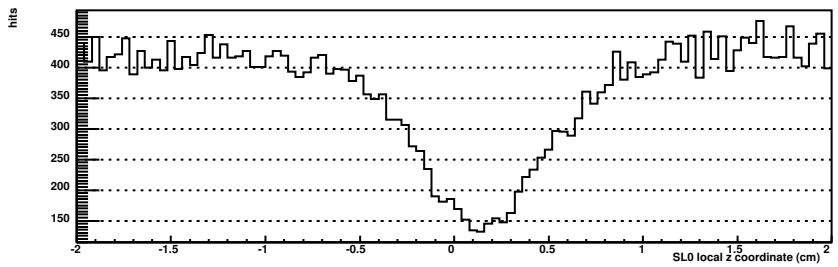

Δ Rz (mm)
SL3 cell number

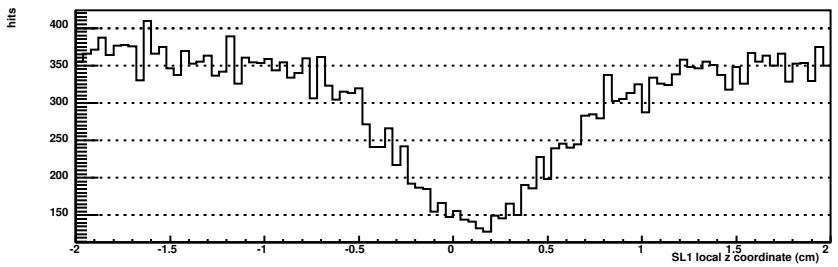

Δ Rz (mm)
SL4 cell number

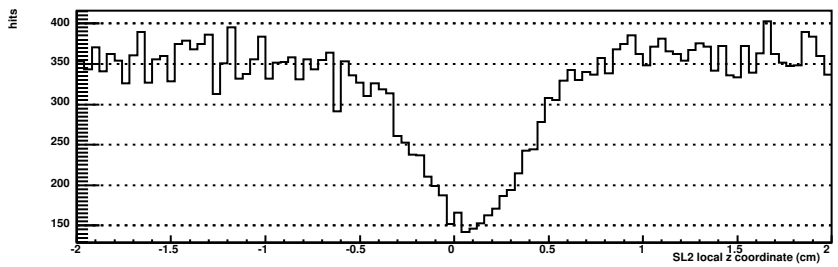

Δ Rz (mm)
SL5 cell number

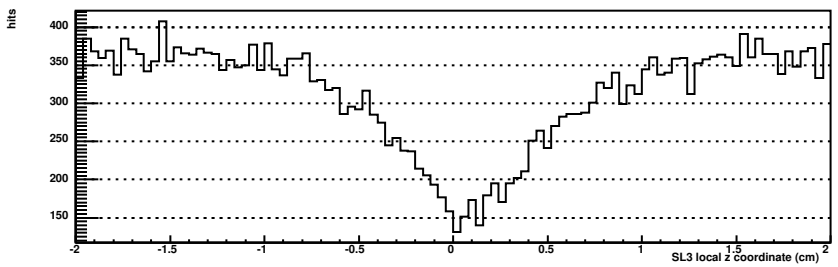

Δ Rz (mm)
SL6 cell number

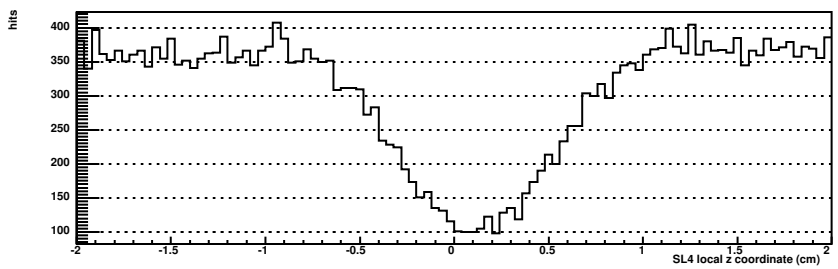

Δ Rz (mm)
SL7 cell number

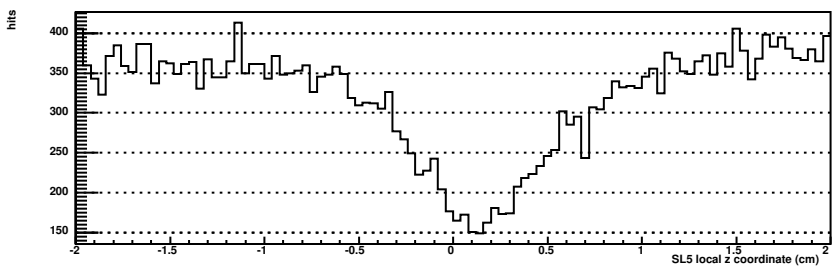

hits
SL0 local z coordinate (cm)

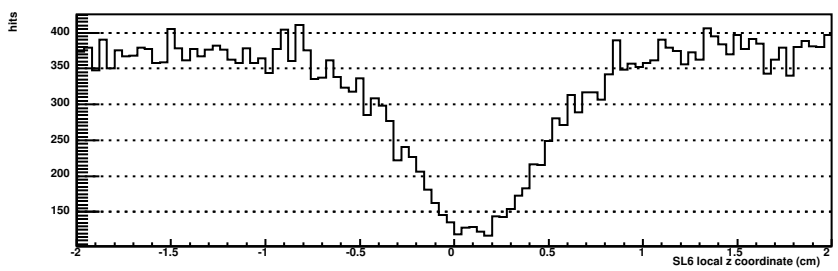

hits
SL1 local z coordinate (cm)

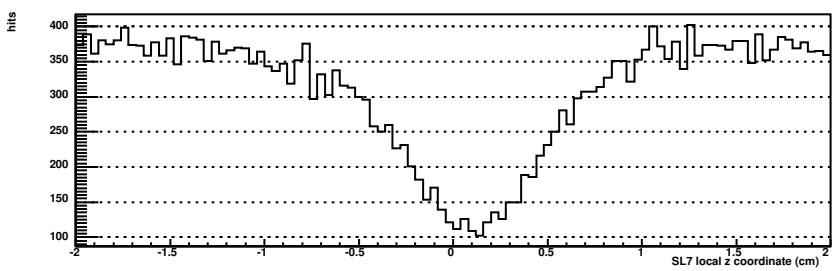

hits
SL2 local z coordinate (cm)

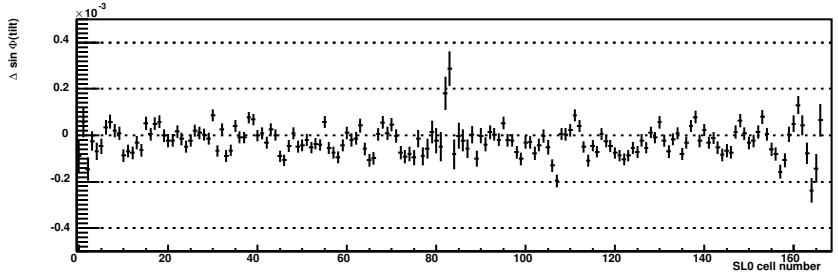

hits
SL3 local z coordinate (cm)

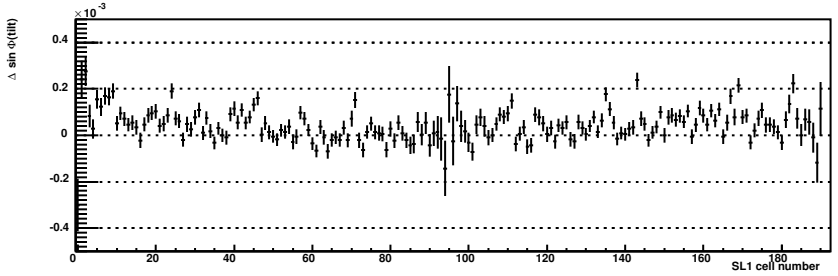

hits
SL4 local z coordinate (cm)

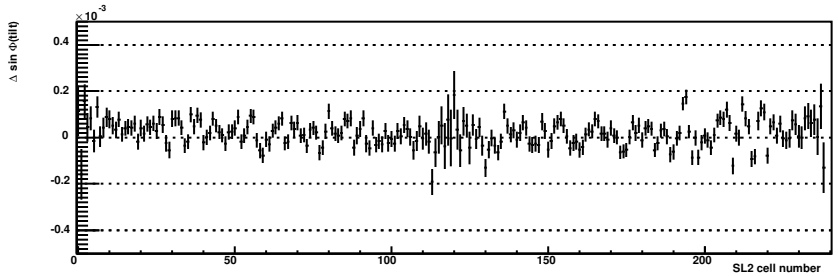

hits
SL5 local z coordinate (cm)

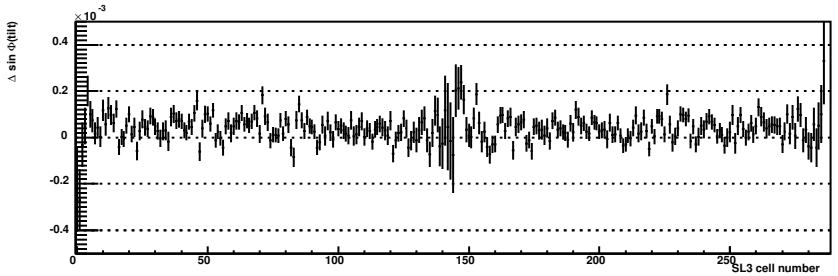

hits
SL6 local z coordinate (cm)

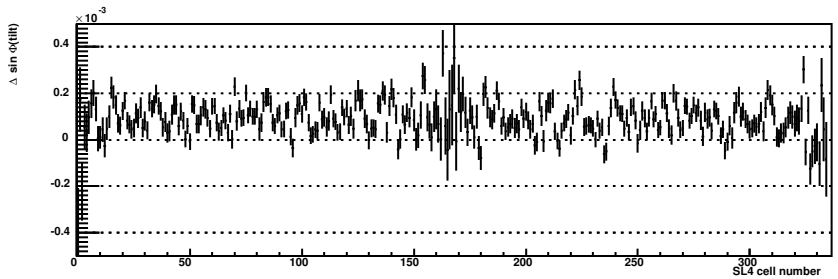

hits
SL7 local z coordinate (cm)

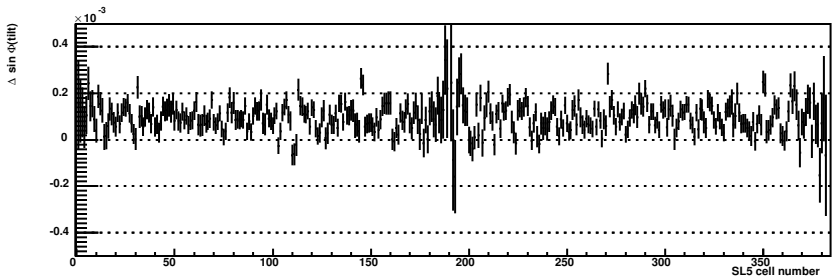

×10^-3
Δ sin Φ(tilt)
SL0 cell number

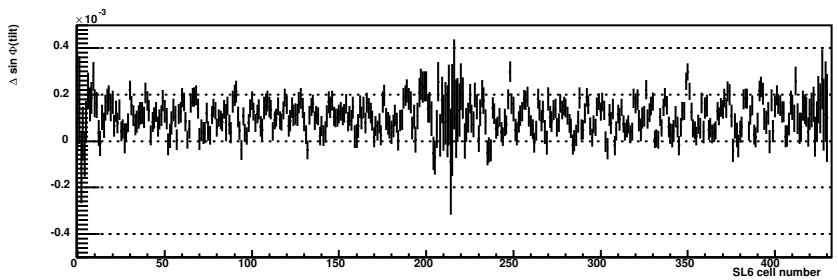

×10^-3
Δ sin Φ(tilt)
SL1 cell number

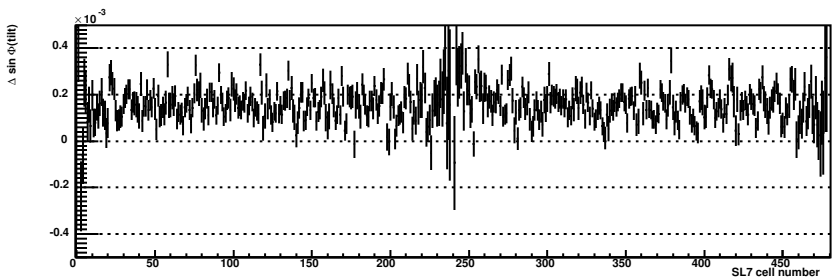

×10^-3
Δ sin Φ(tilt)
SL2 cell number

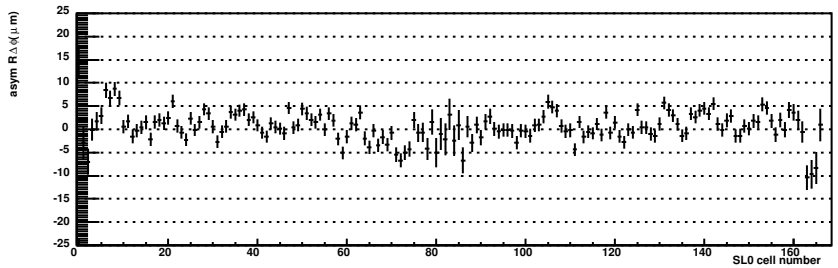

×10^-3
Δ sin Φ(tilt)
SL3 cell number

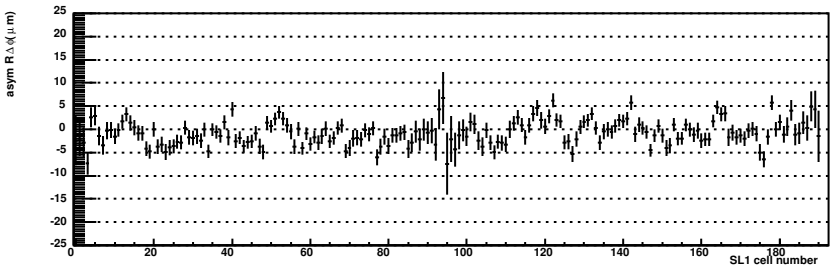

×10^-3
Δ sin Φ(tilt)
SL4 cell number

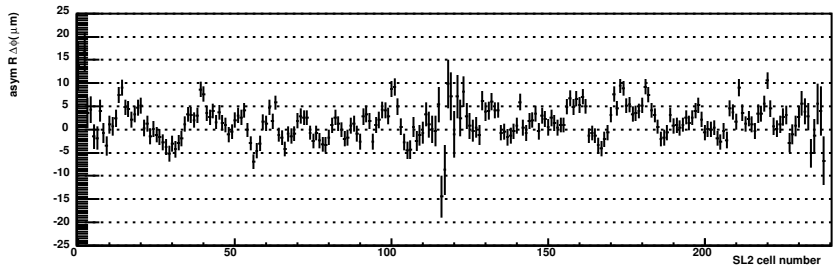

×10^-3
Δ sin Φ(tilt)
SL5 cell number

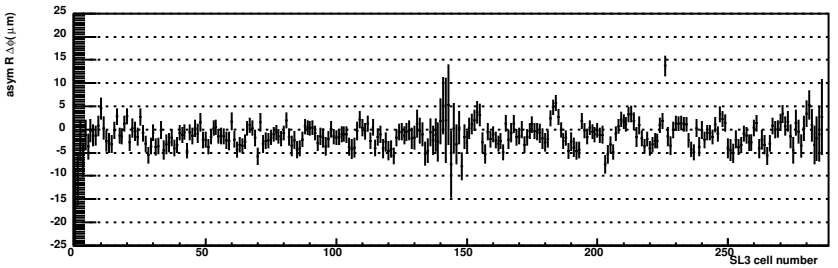

×10^-3
Δ sin Φ(tilt)
SL6 cell number

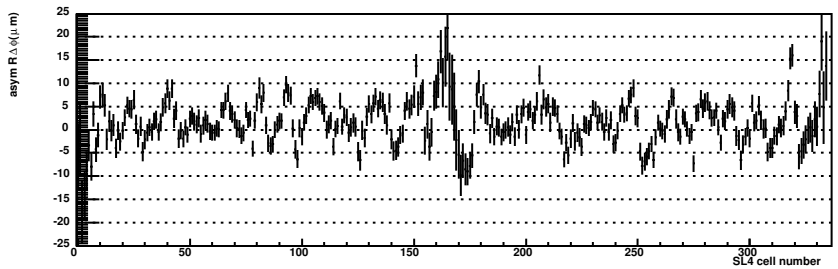

×10^-3
Δ sin Φ(tilt)
SL7 cell number

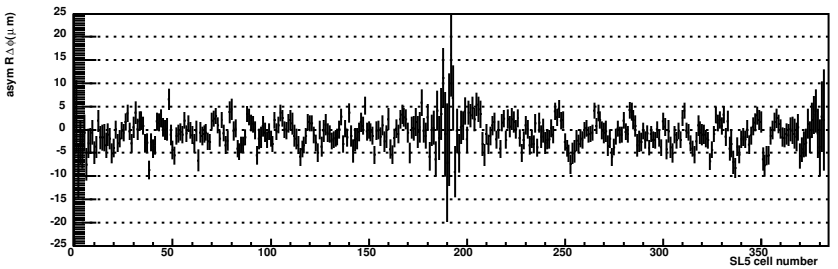

asym R Δφ(μm)
SL0 cell number

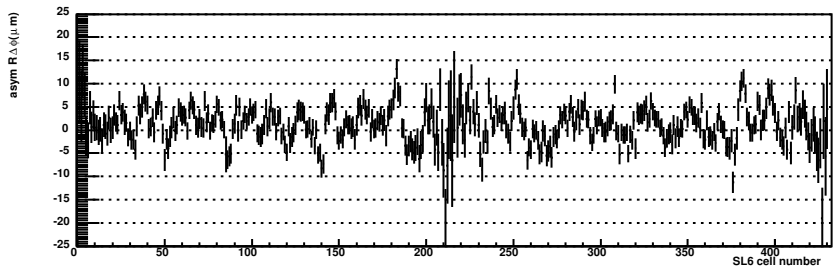

asym R Δφ(μm)
SL1 cell number

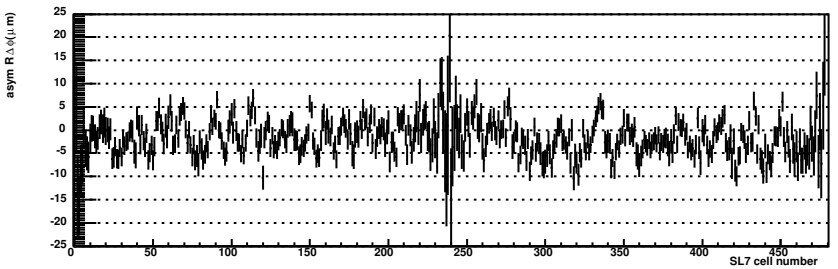

asym R Δφ(μm)
SL2 cell number

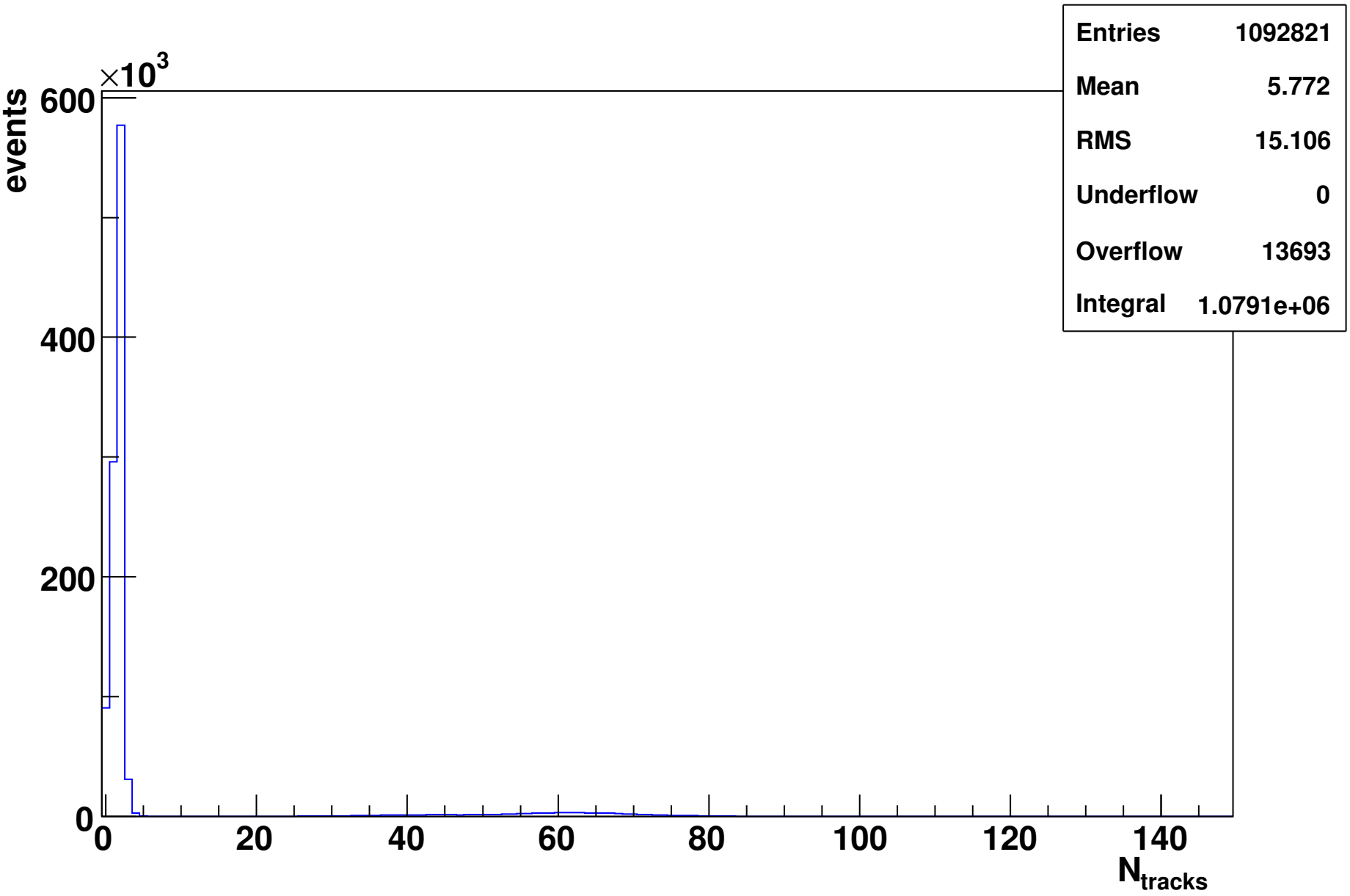

asym R Δφ(μm)
SL3 cell number

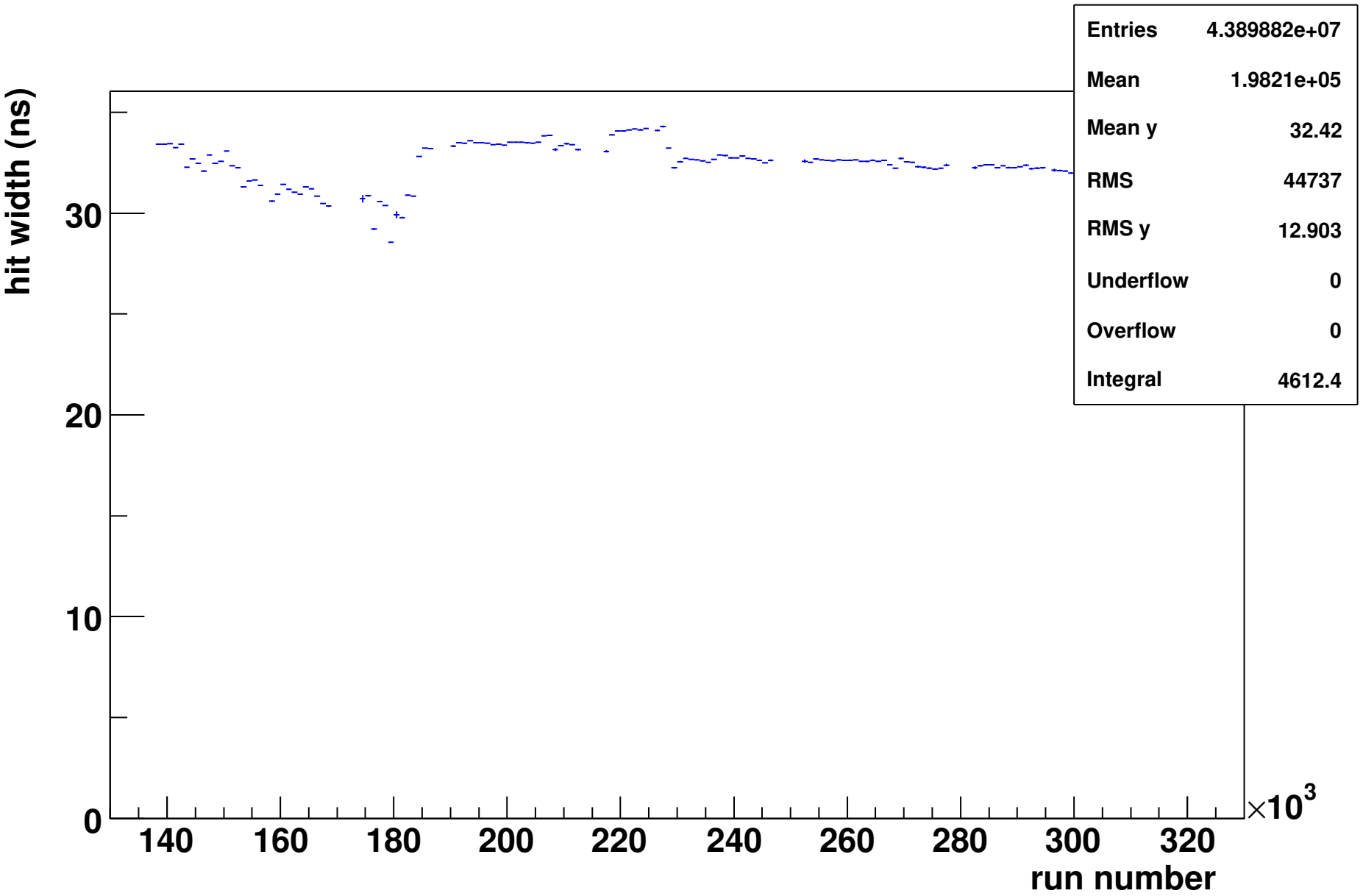

asym R Δφ(μm)
SL4 cell number

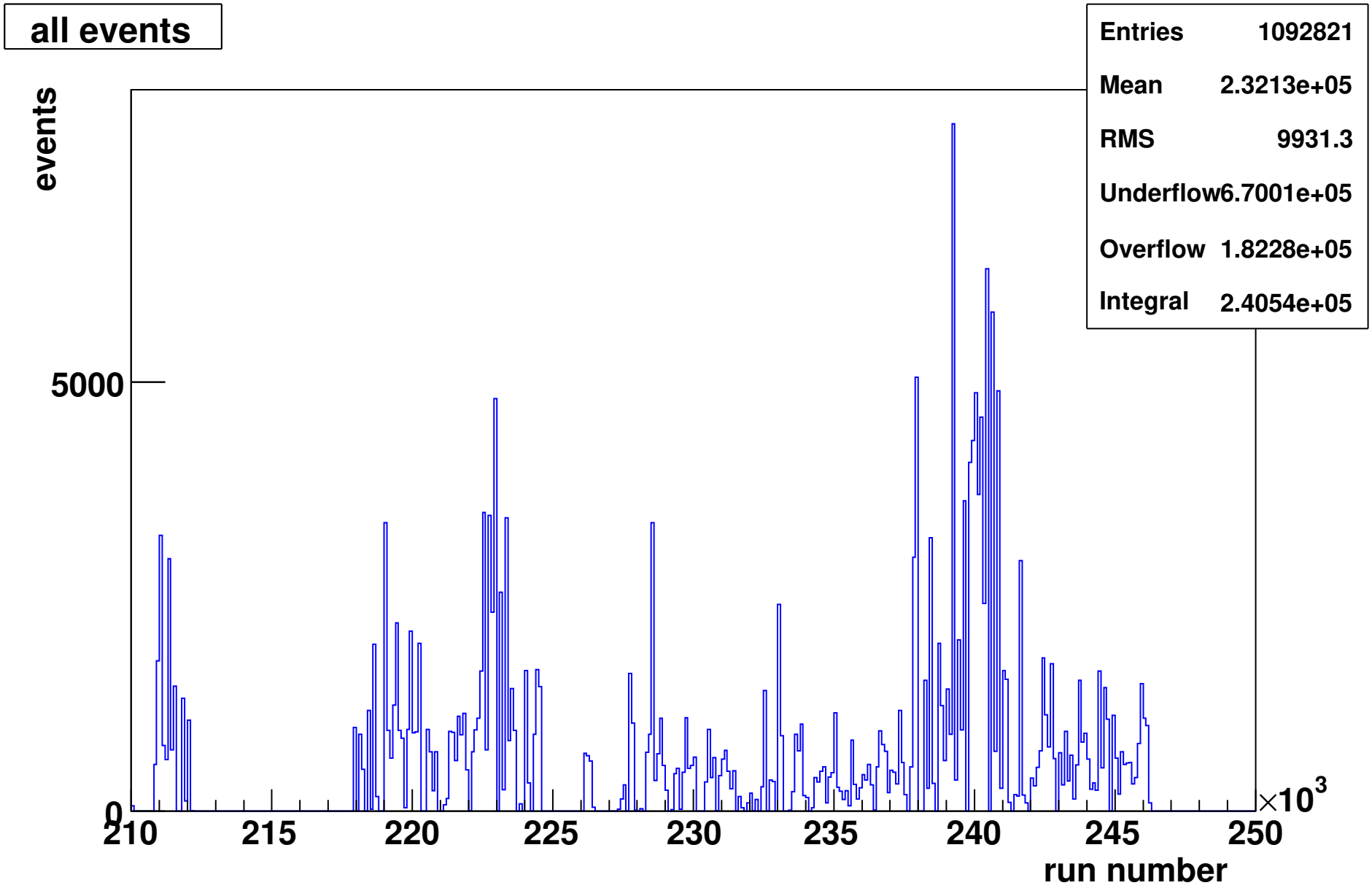

asym R Δφ(μm)
SL5 cell number

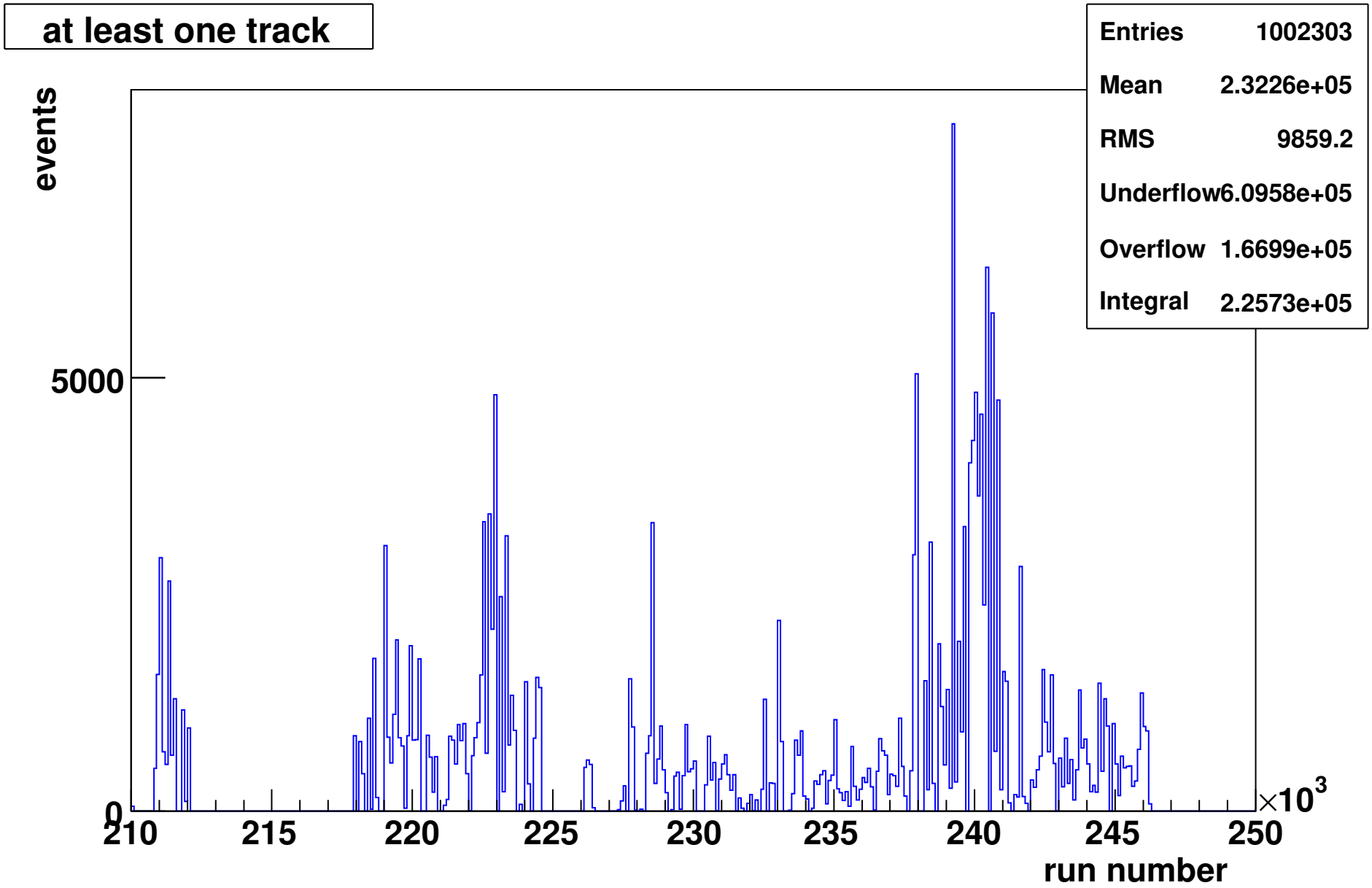

asym R Δφ(μm)
SL6 cell number

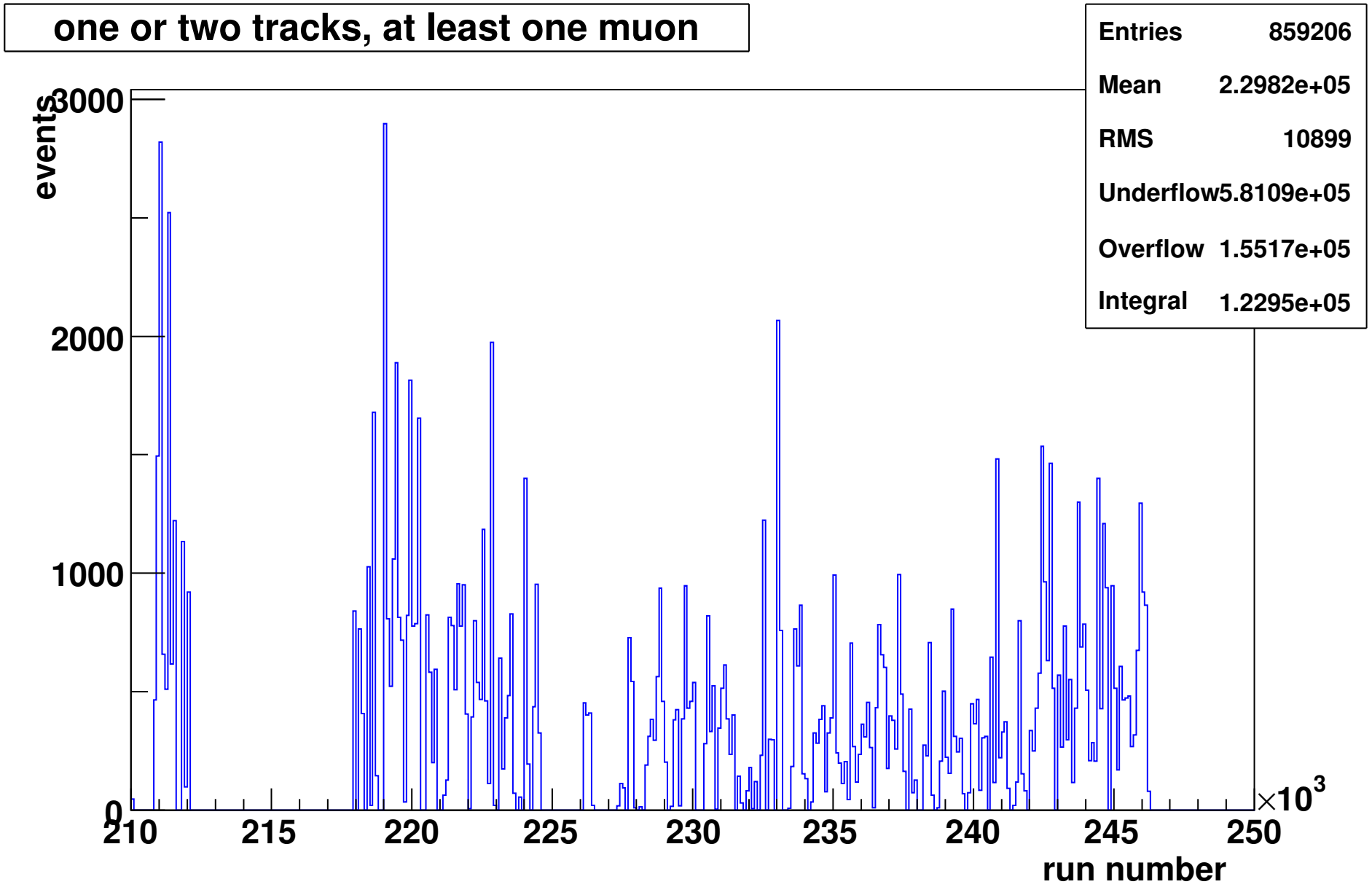

asym R Δφ(μm)
SL7 cell number

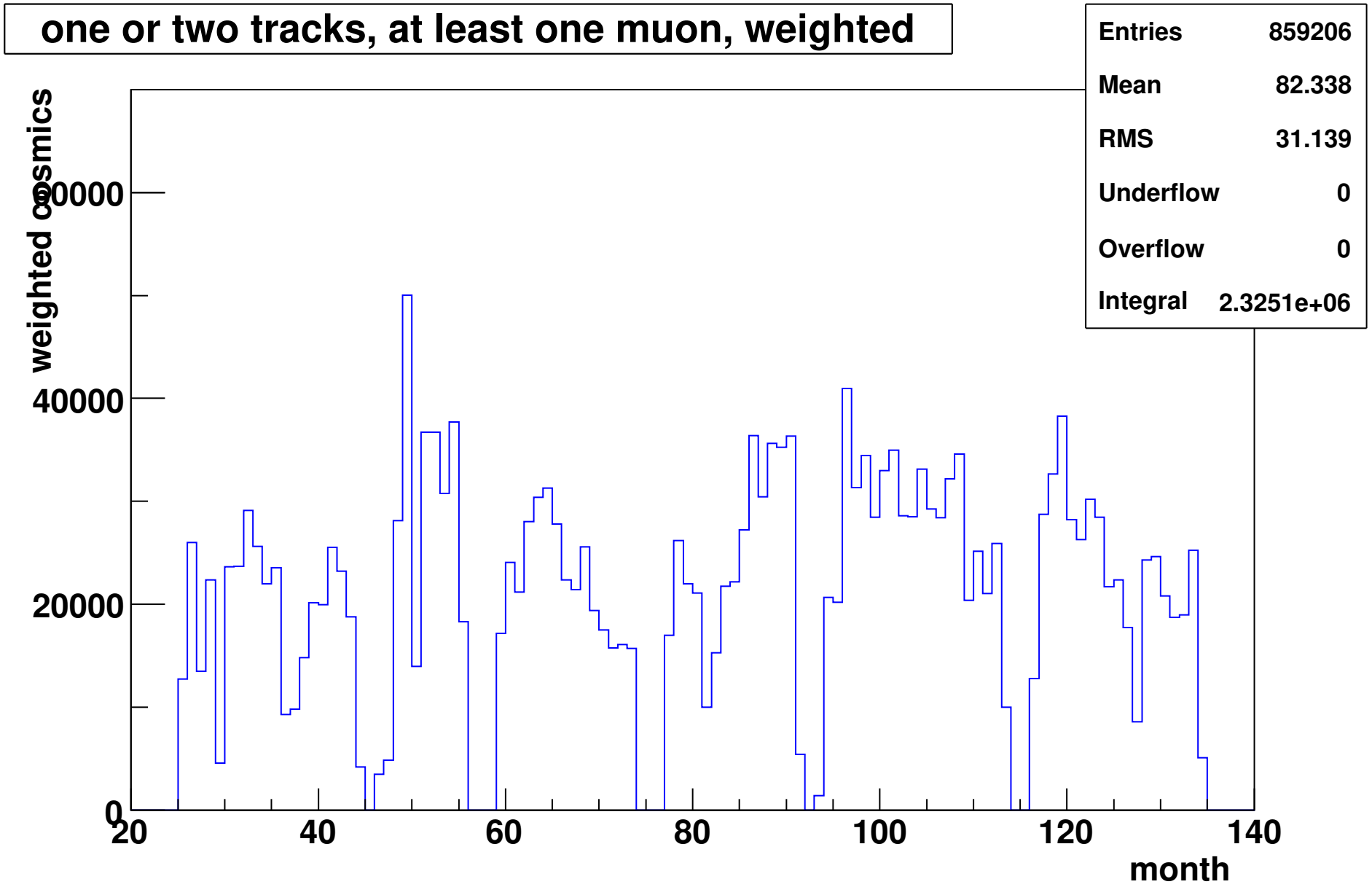

Entries 1092821
Mean 5.772
RMS 15.106
Underflow 0
Overflow 13693
Integral 1.0791e+06
events
×10^3
600
400
200
0
0
20
40
60
80
100
120
140
N_tracks

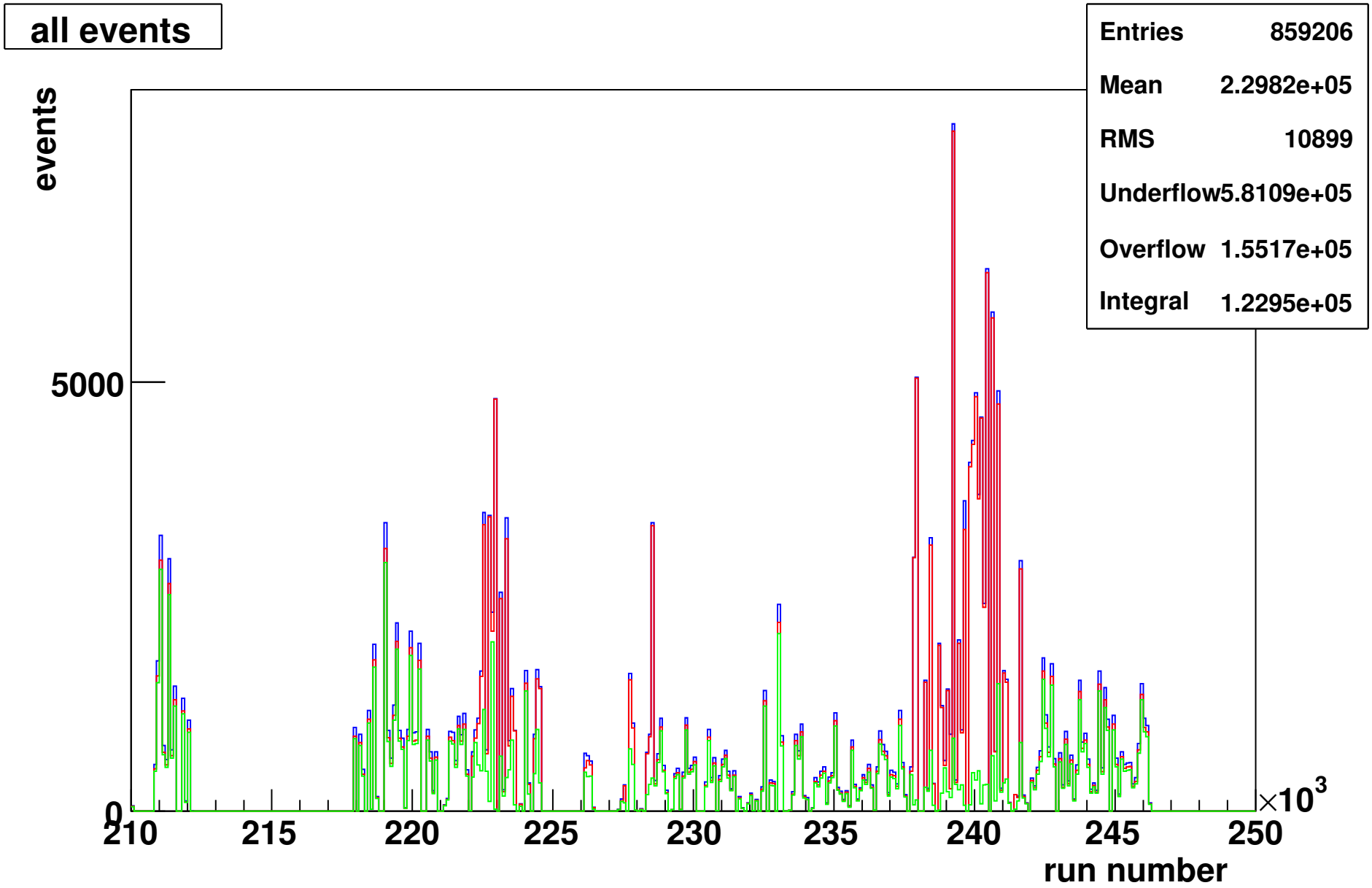

hit width (ns)
30
20
10
0
140
160
180
200
220
240
260
280
300
320
×10^3
run number
Entries 4.389882e+07
Mean 1.9821e+05
Mean y 32.42
RMS 44737
RMS y 12.903
Underflow 0
Overflow 0
Integral 4612.4

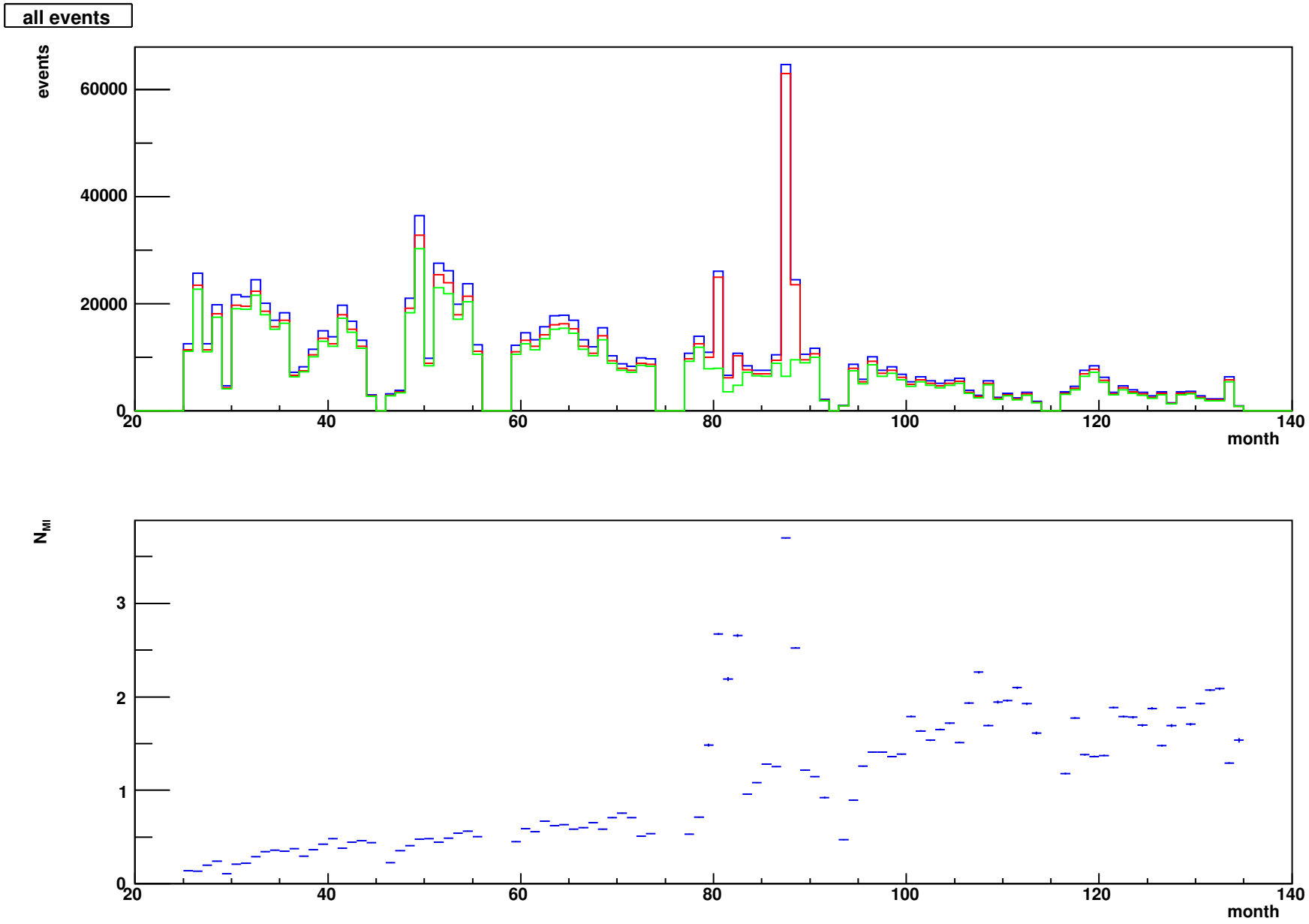

all events
Entries 1092821
Mean 2.3213e+05
RMS 9931.3
Underflow 6.7001e+05
Overflow 1.8228e+05
Integral 2.4054e+05
events
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

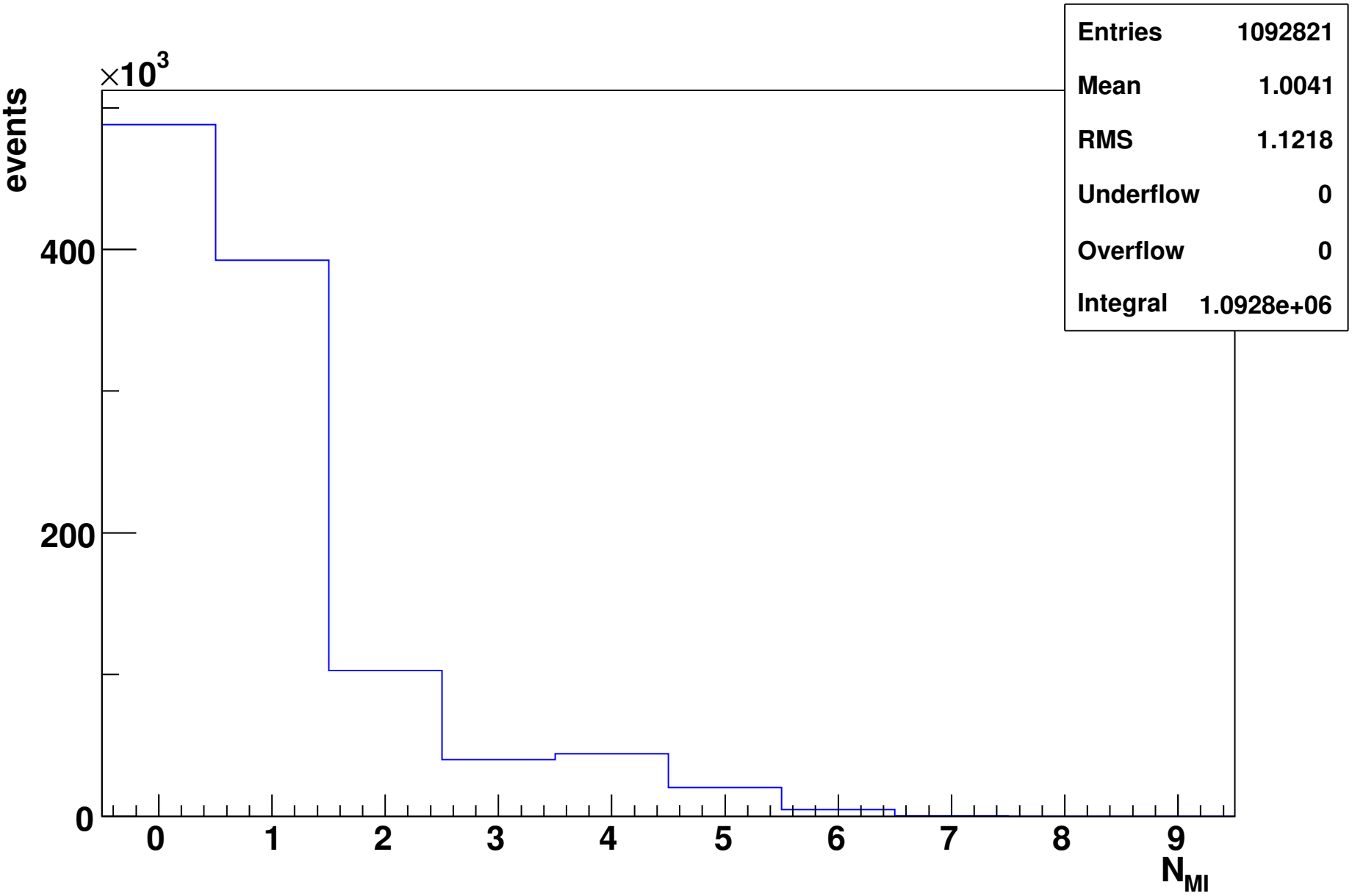

at least one track
Entries 1002303
Mean 2.3226e+05
RMS 9859.2
Underflow 6.0958e+05
Overflow 1.6699e+05
Integral 2.2573e+05
events
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

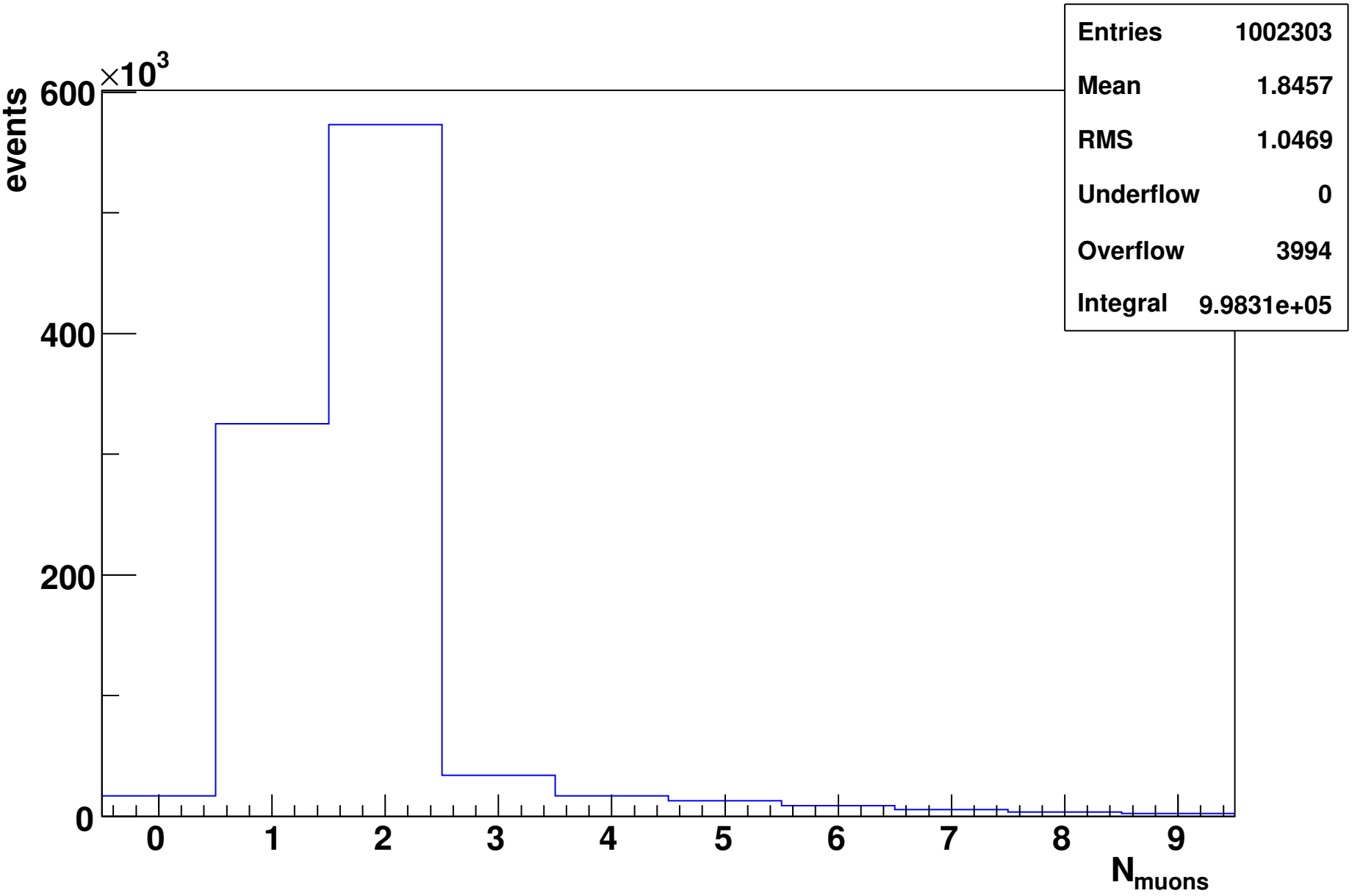

one or two tracks, at least one muon
Entries 859206
Mean 2.2982e+05
RMS 10899
Underflow 5.8109e+05
Overflow 1.5517e+05
Integral 1.2295e+05
events
3000
2000
1000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

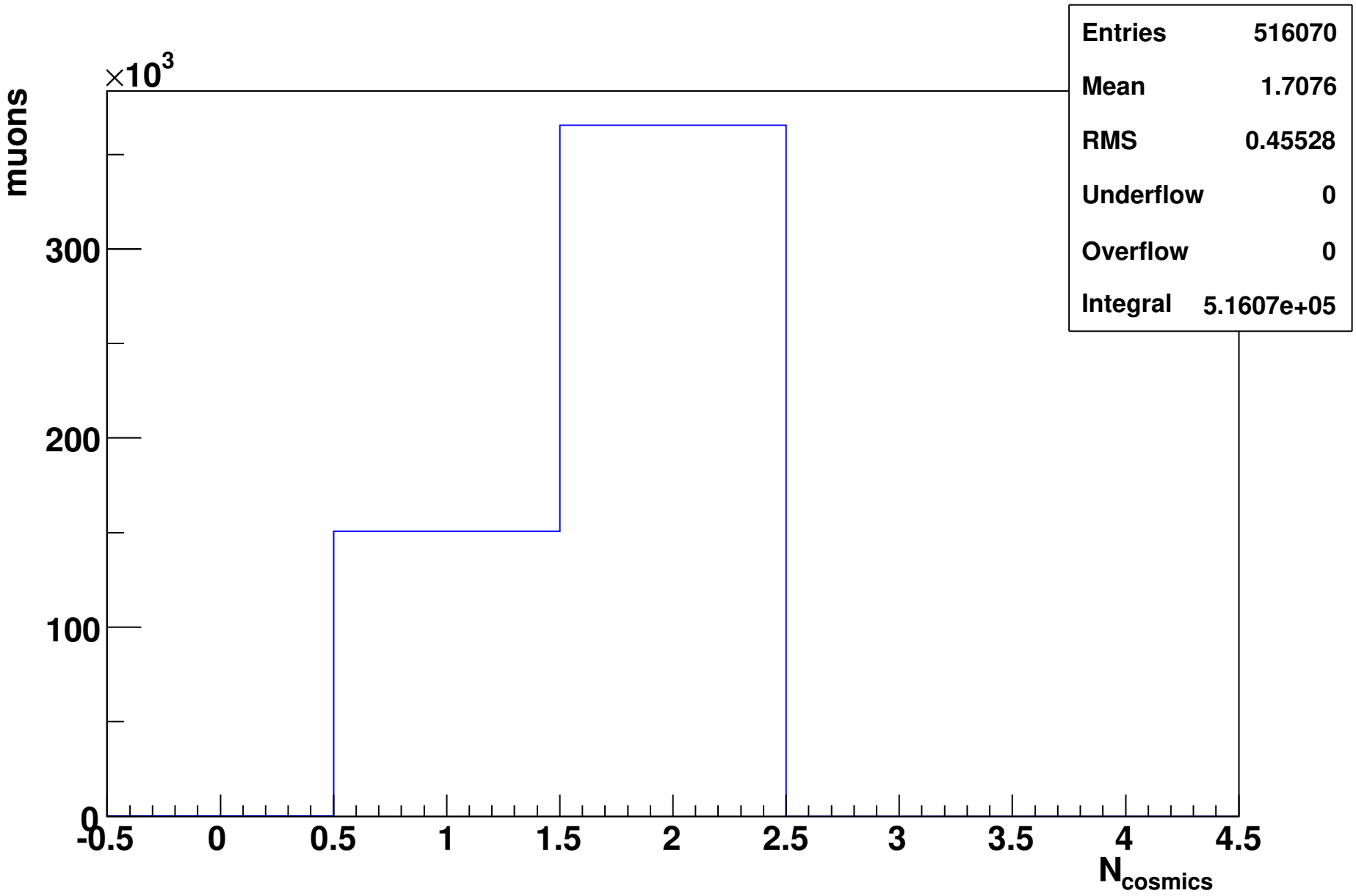

one or two tracks, at least one muon, weighted
Entries 859206
Mean 82.338
RMS 31.139
Underflow 0
Overflow 0
Integral 2.3251e+06
weighted cosmics
60000
40000
20000
0
20
40
60
80
100
120
140
month

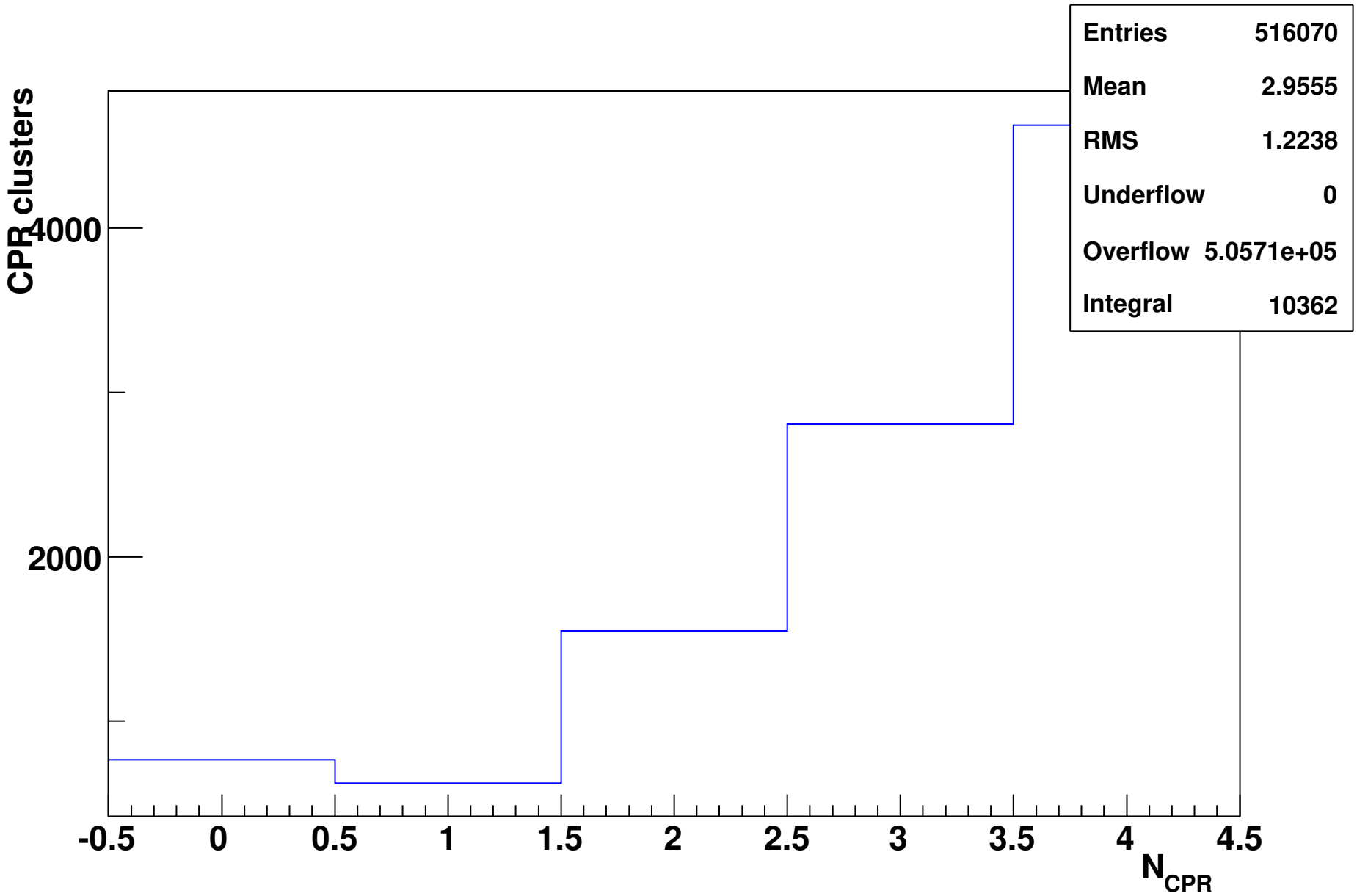

all events
Entries 859206
Mean 2.2982e+05
RMS 10899
Underflow 5.8109e+05
Overflow 1.5517e+05
Integral 1.2295e+05
events
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

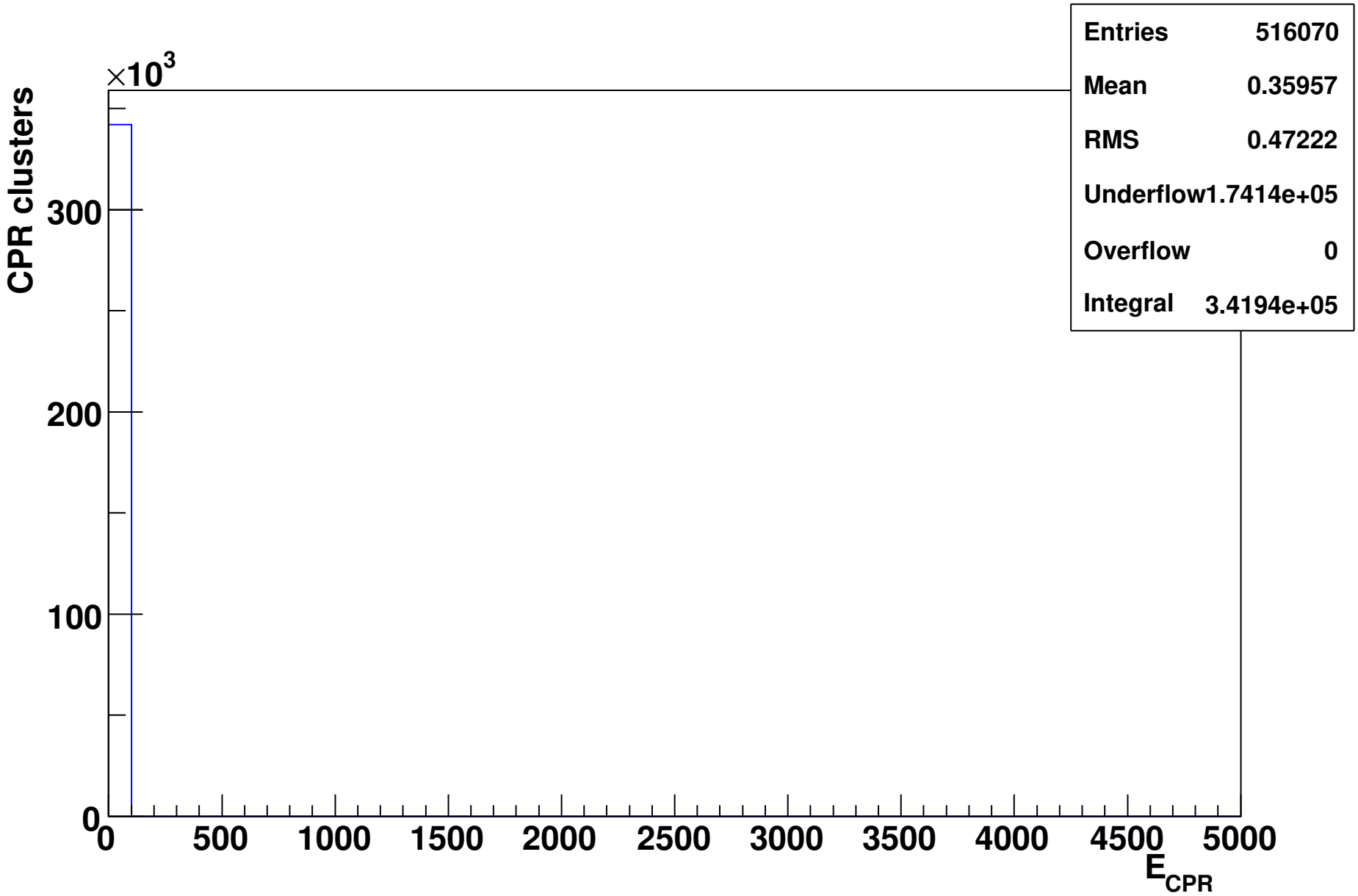

all events
events
60000
40000
20000
0
20
40
60
80
100
120
140
month
N_{MI}
3
2
1
0
20
40
60
80
100
120
140
month

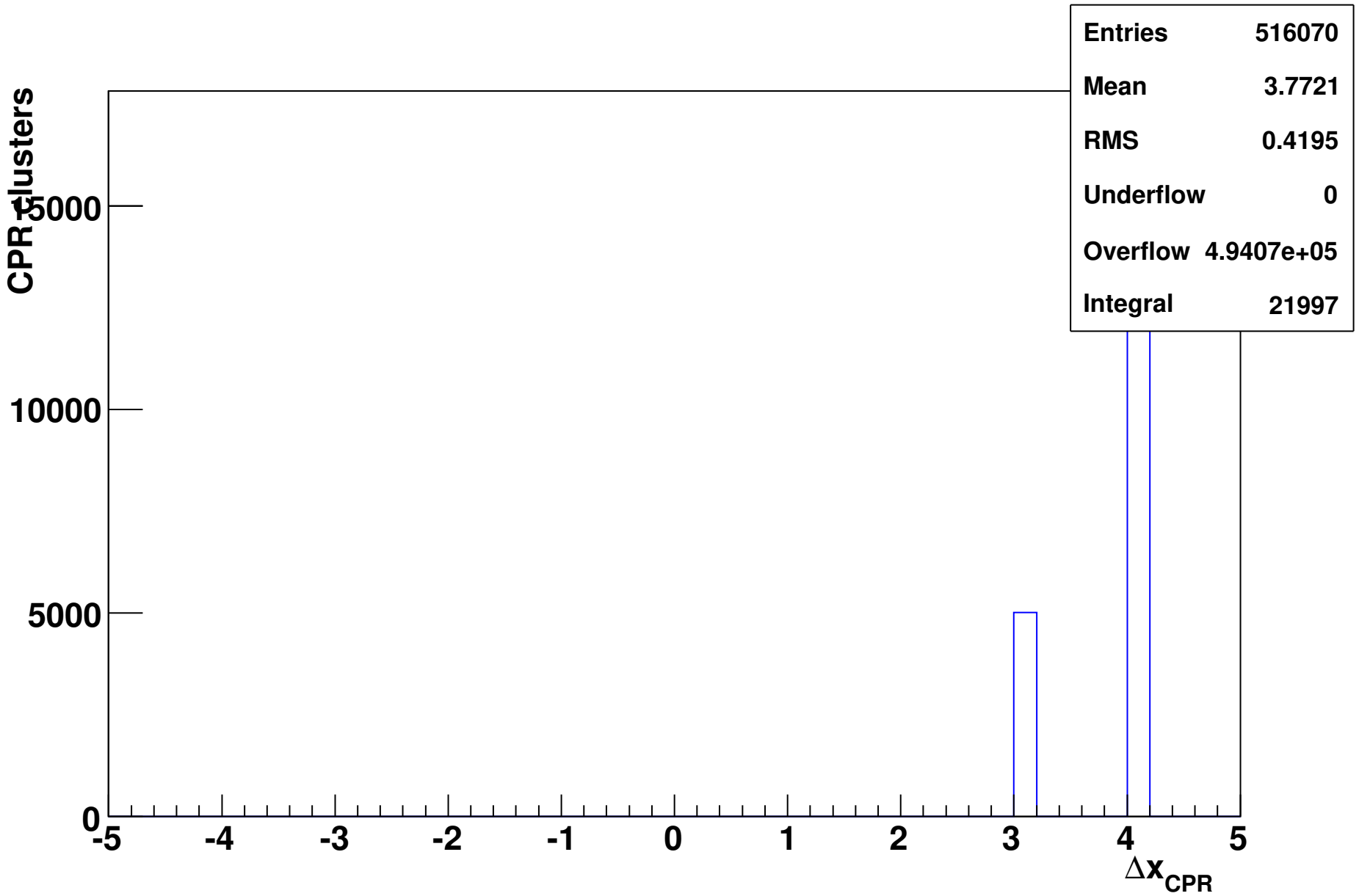

Entries 1092821
Mean 1.0041
RMS 1.1218
Underflow 0
Overflow 0
Integral 1.0928e+06
×10^3
events
400
200
0
0 1 2 3 4 5 6 7 8 9
N_MI

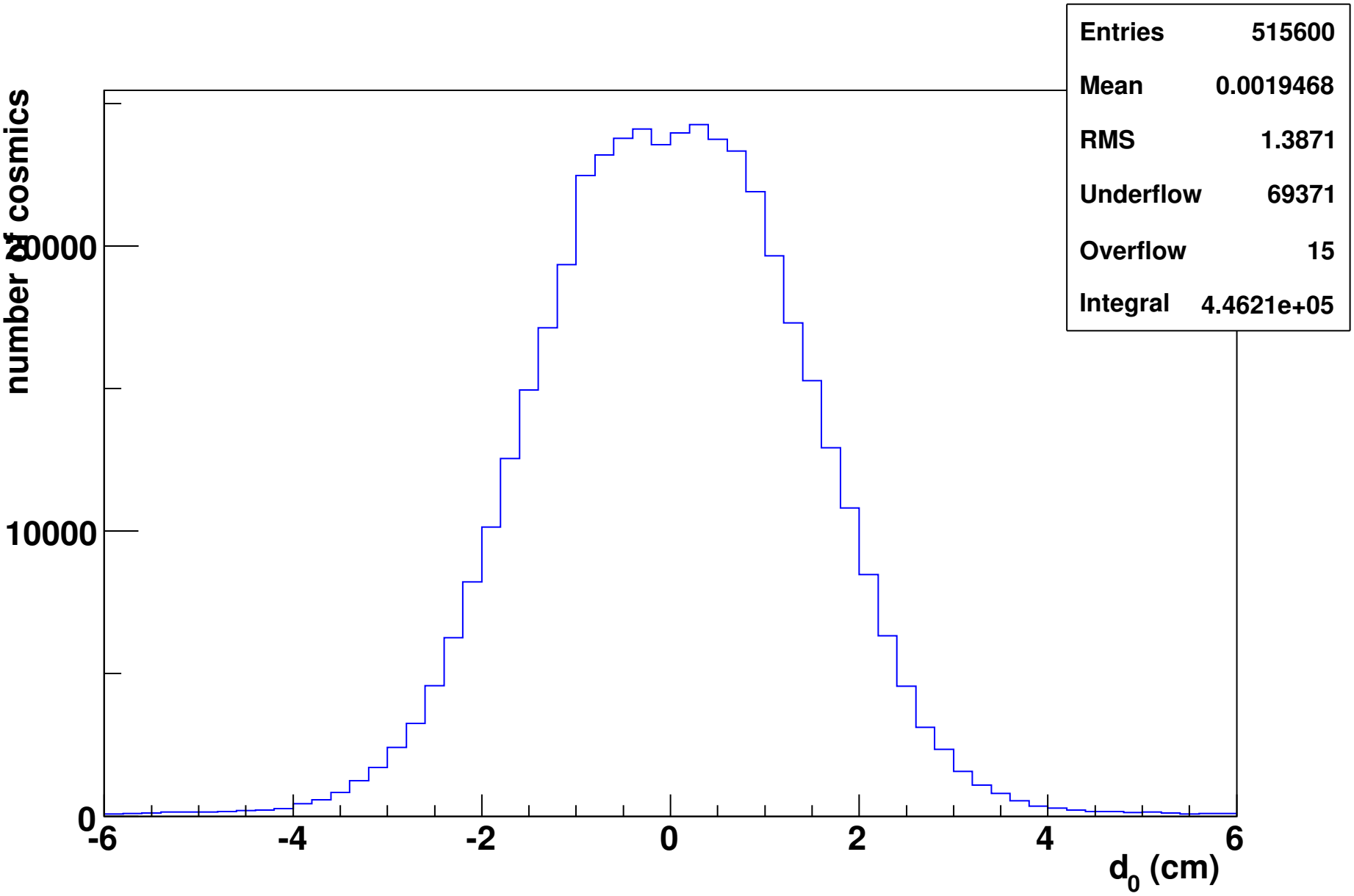

Entries 1002303
Mean 1.8457
RMS 1.0469
Underflow 0
Overflow 3994
Integral 9.9831e+05
events
×10^3
600
400
200
0
0
1
2
3
4
5
6
7
8
9
N_muons

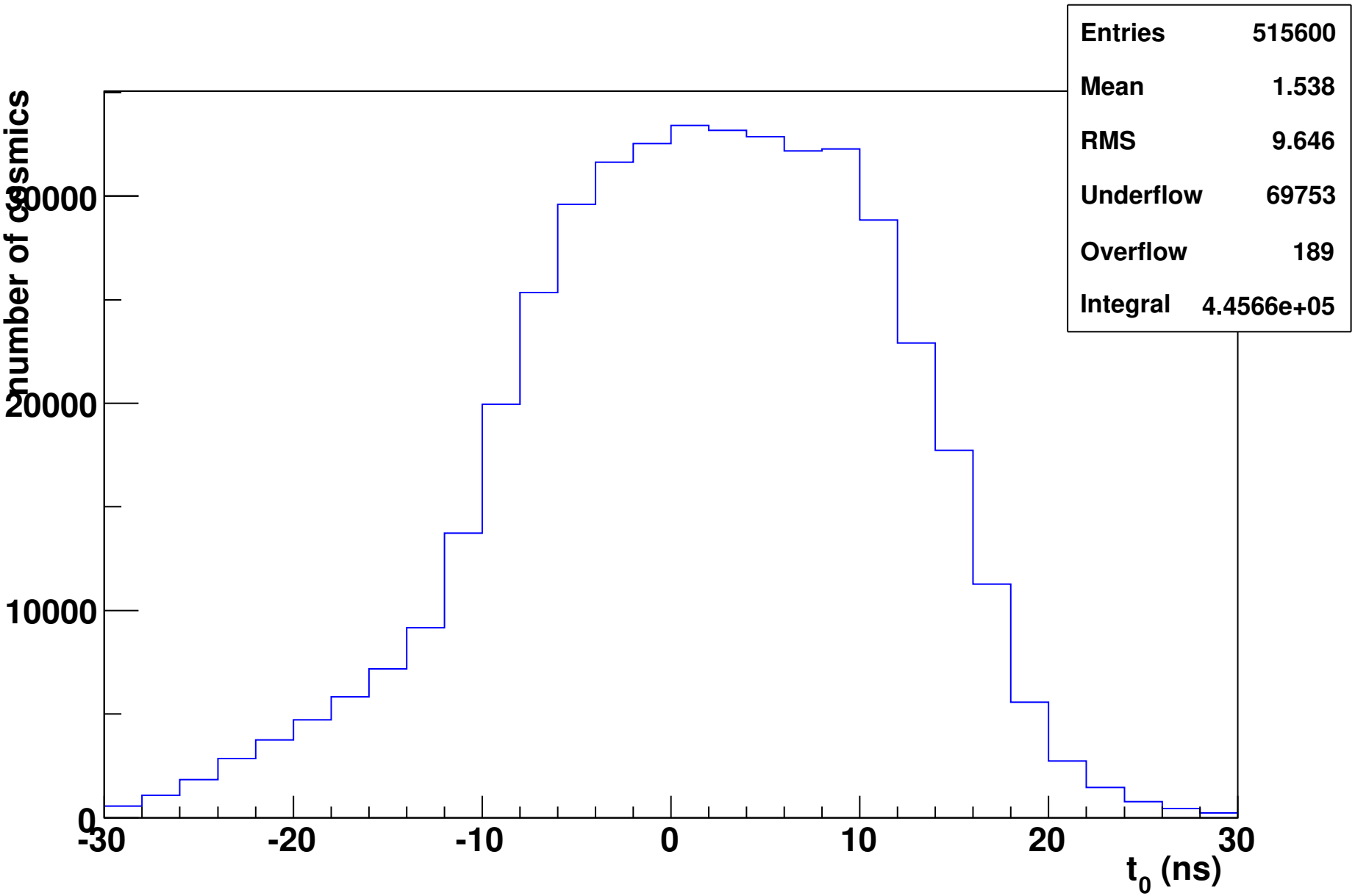

Entries 516070
Mean 1.7076
RMS 0.45528
Underflow 0
Overflow 0
Integral 5.1607e+05
muons
×10^3
300
200
100
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_cosmics

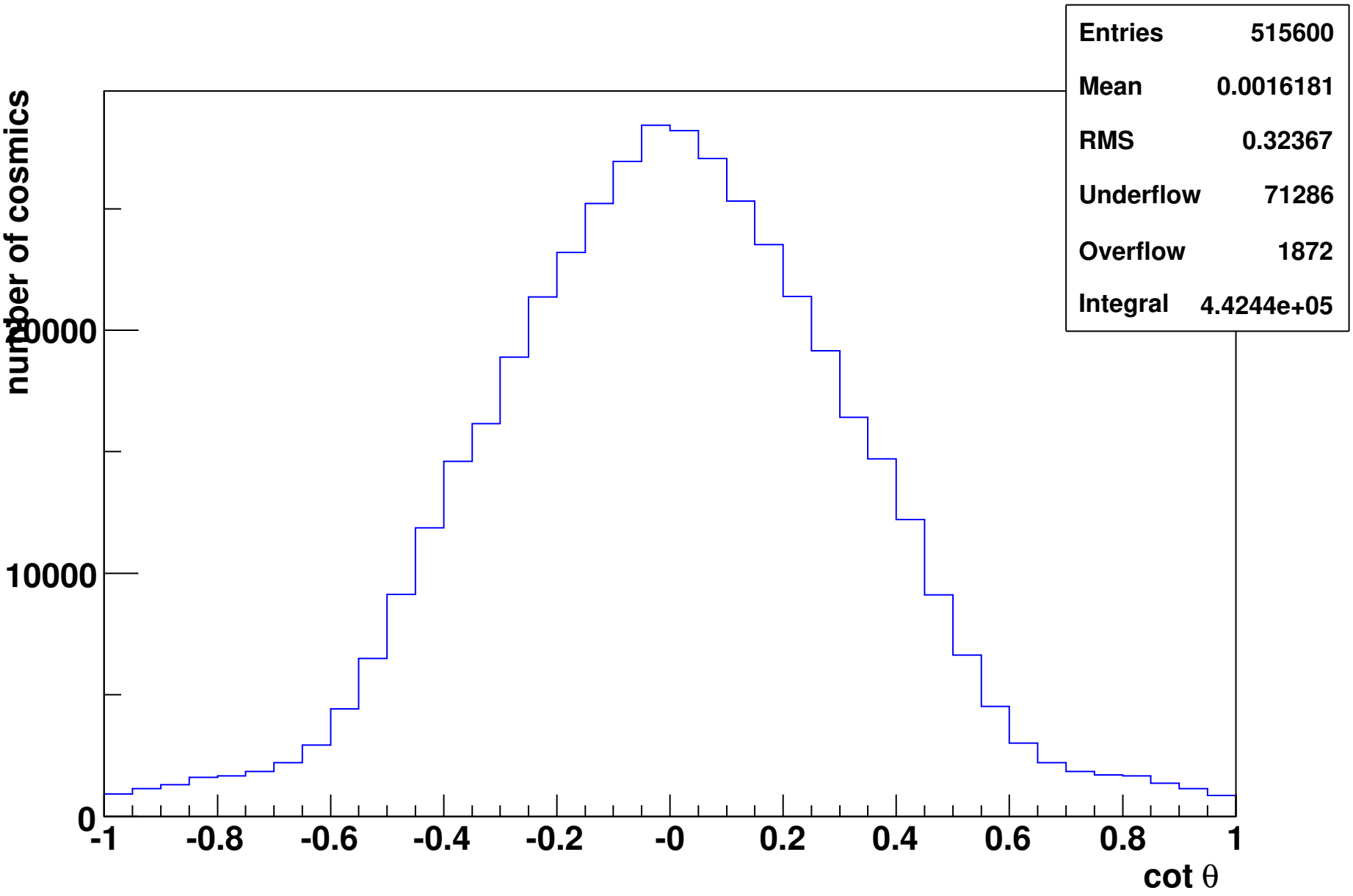

Entries 516070
Mean 2.9555
RMS 1.2238
Underflow 0
Overflow 5.0571e+05
Integral 10362
CPR clusters
4000
2000
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_CPR

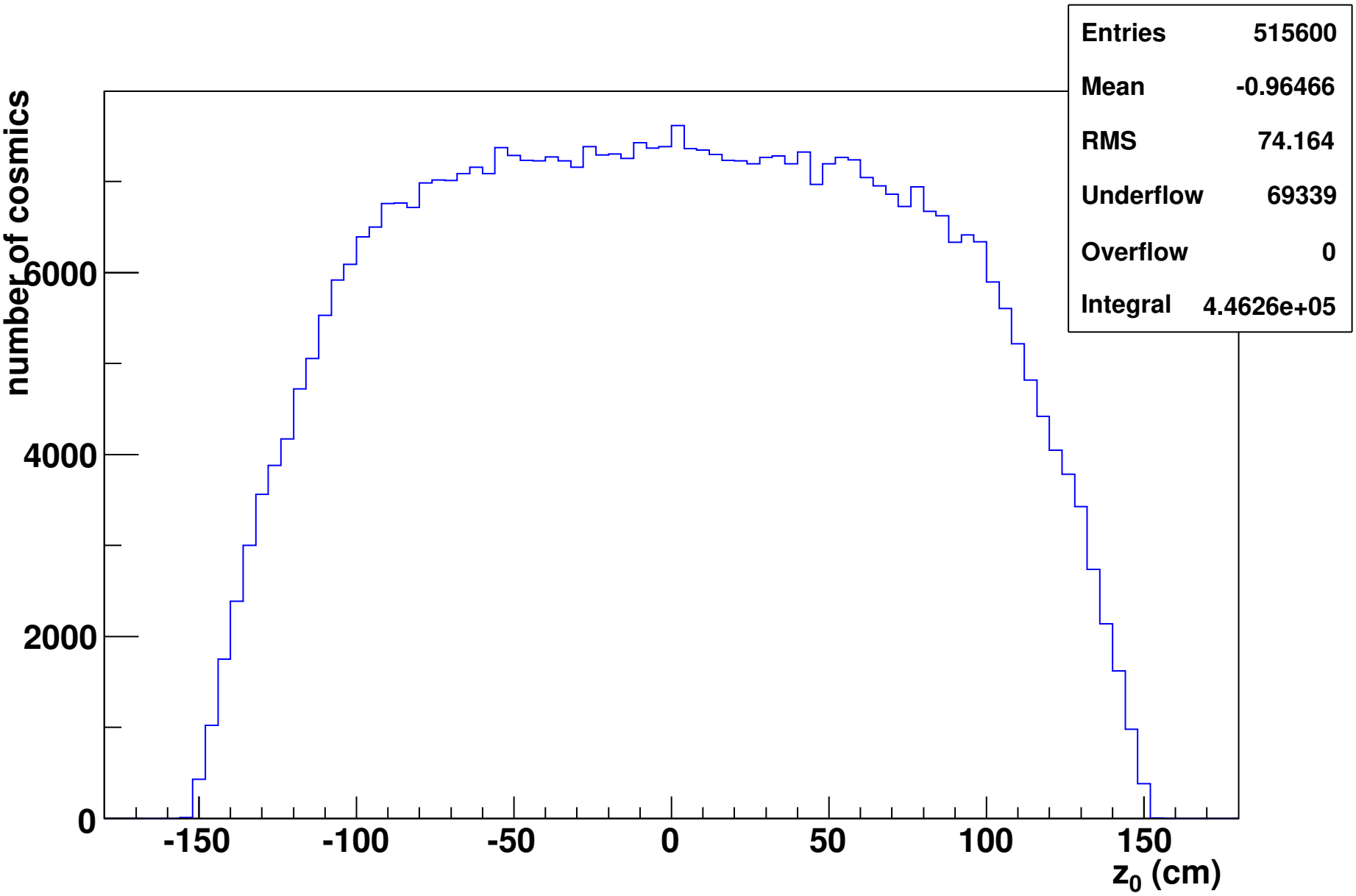

Entries 516070
Mean 0.35957
RMS 0.47222
Underflow 1.7414e+05
Overflow 0
Integral 3.4194e+05
×10^3
CPR clusters
300
200
100
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
E_CPR

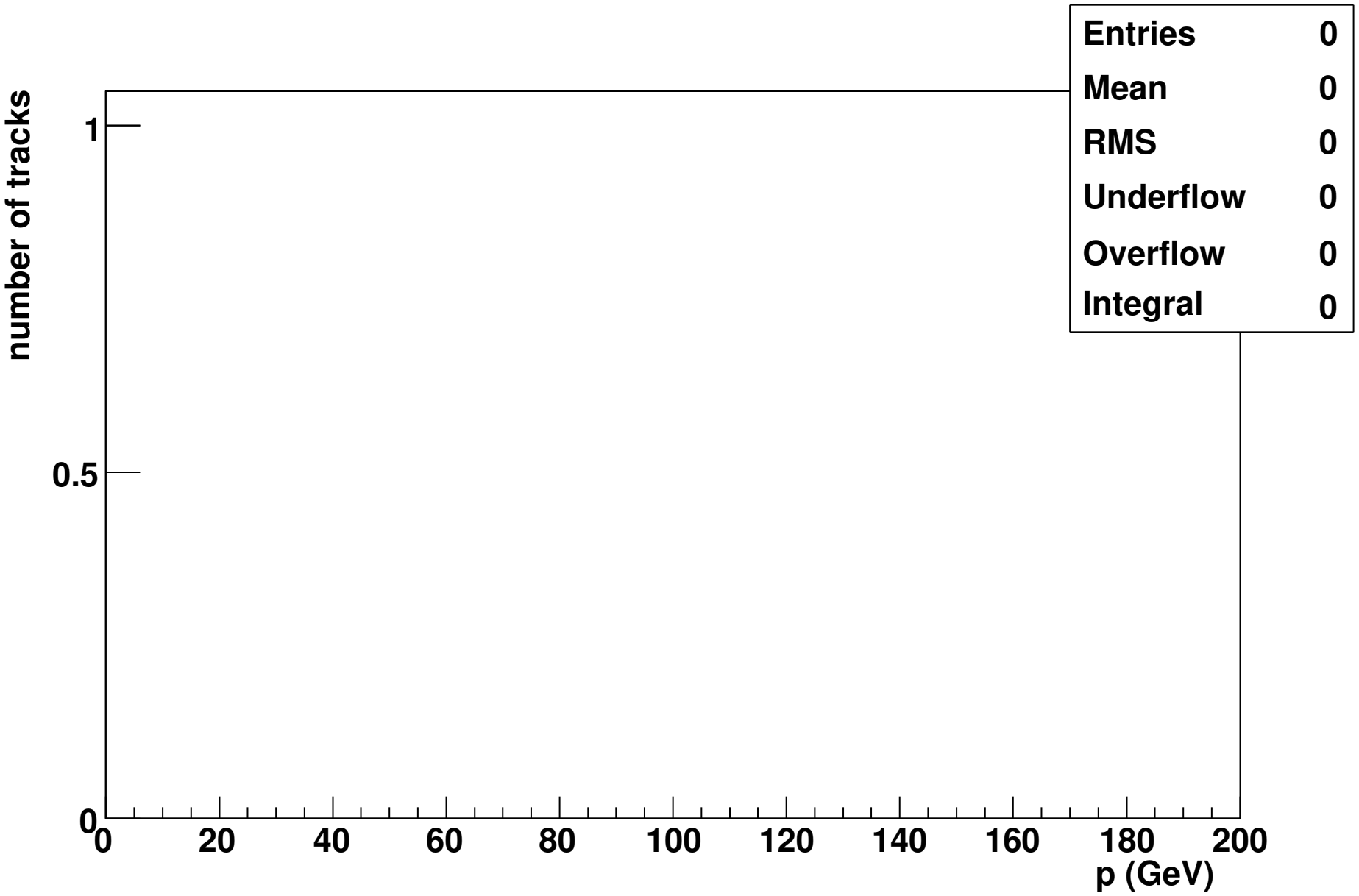

Entries 516070
Mean 3.7721
RMS 0.4195
Underflow 0
Overflow 4.9407e+05
Integral 21997
CPR clusters
15000
10000
5000
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
Δx_CPR

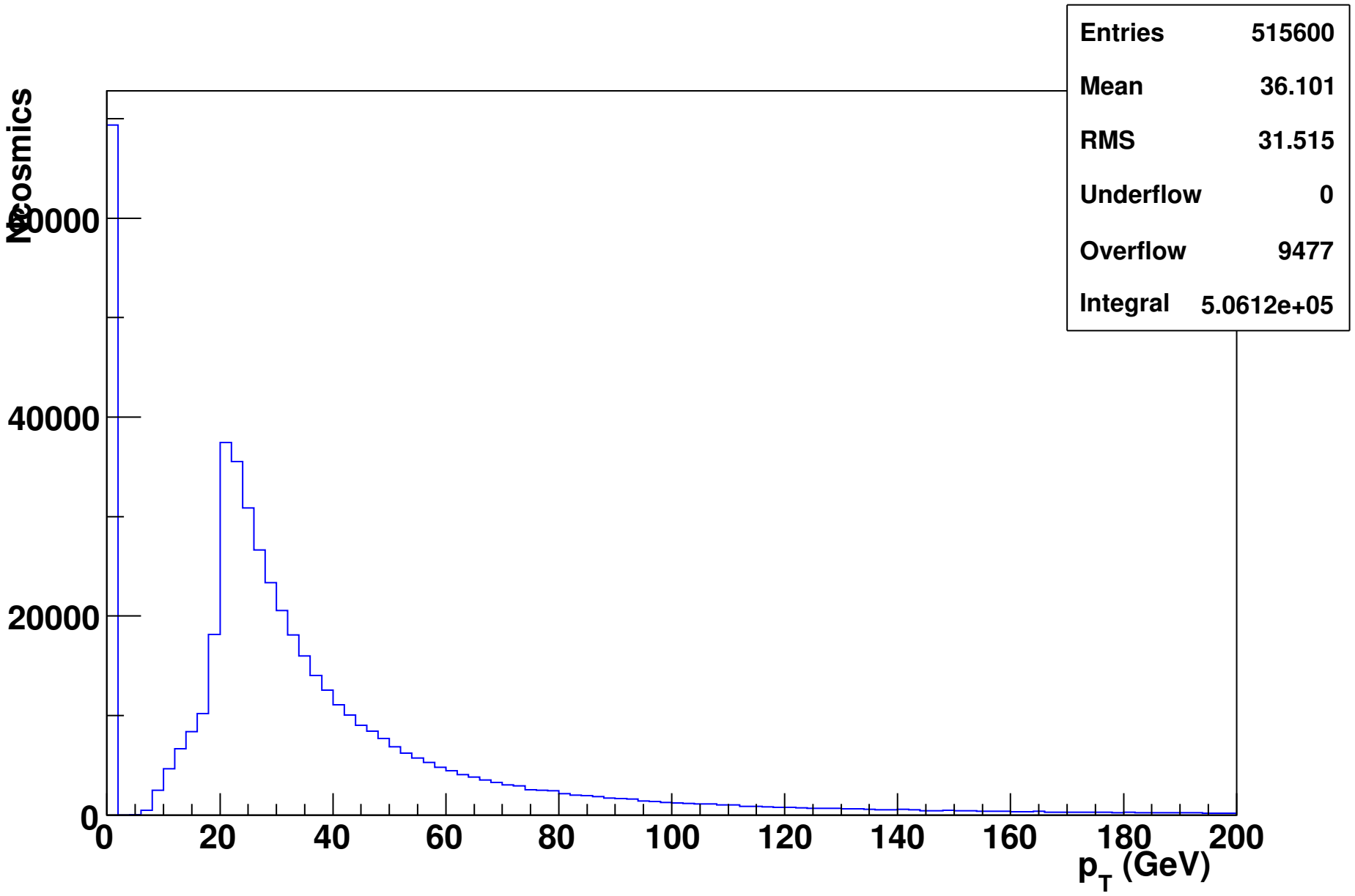

Entries 515600
Mean 0.0019468
RMS 1.3871
Underflow 69371
Overflow 15
Integral 4.4621e+05
number of cosmics
20000
10000
0
-6
-4
-2
0
2
4
6
d0 (cm)

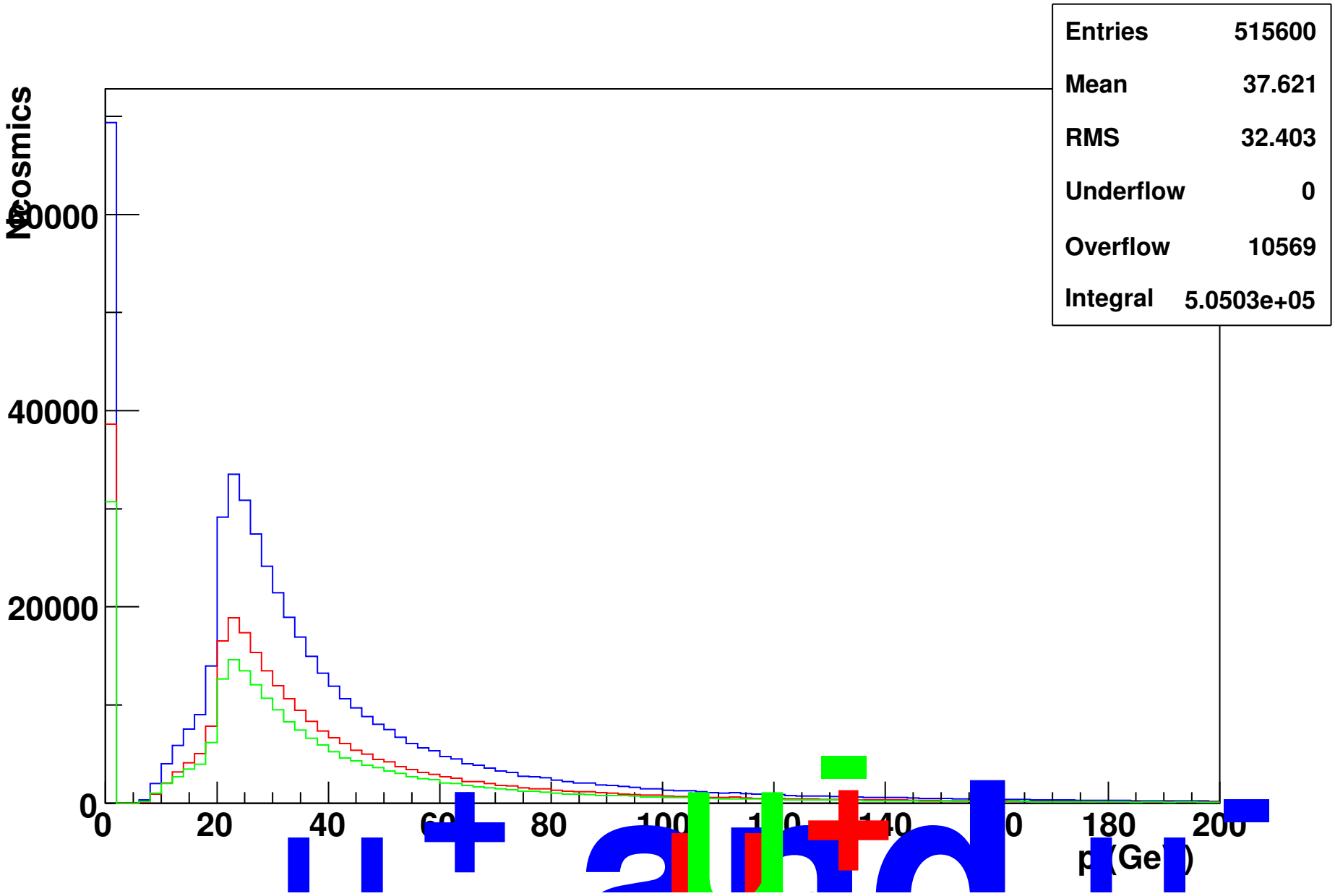

Entries 515600
Mean 1.538
RMS 9.646
Underflow 69753
Overflow 189
Integral 4.4566e+05
number of cosmics
30000
20000
10000
0
-30
-20
-10
0
10
20
30
t_0 (ns)

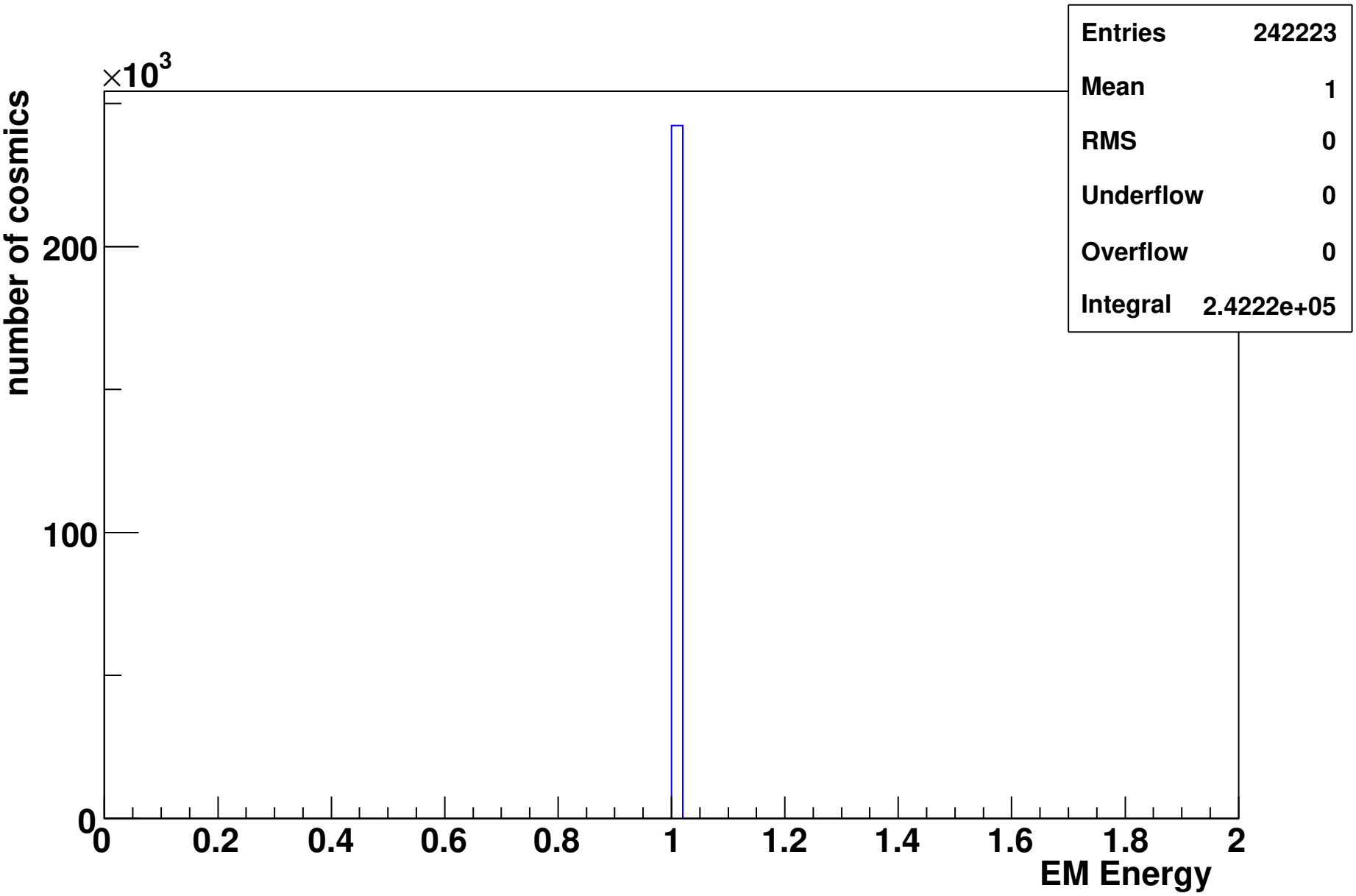

Entries 515600
Mean 0.0016181
RMS 0.32367
Underflow 71286
Overflow 1872
Integral 4.4244e+05
number of cosmics
20000
10000
0
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
cot θ

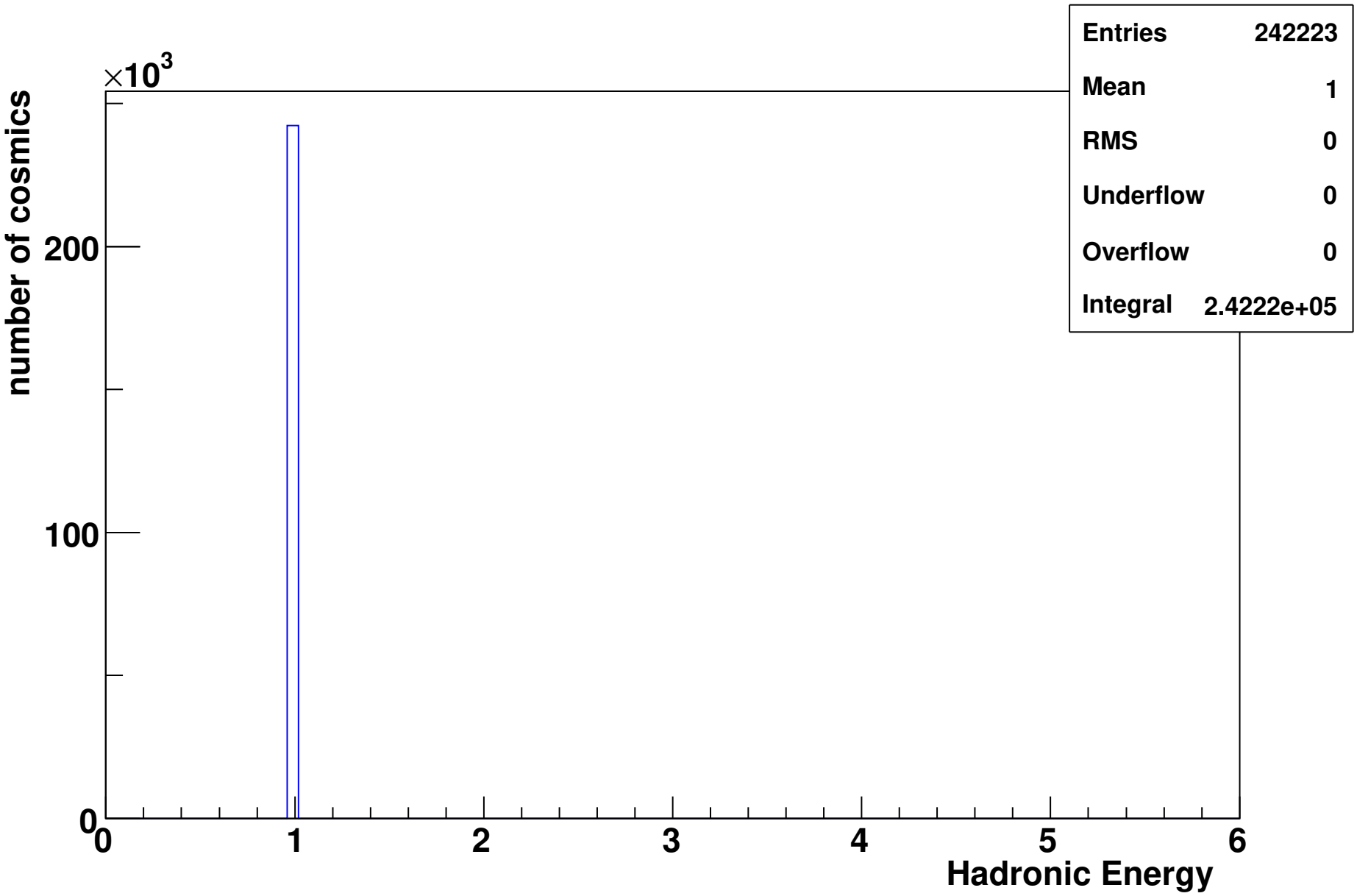

Entries 515600
Mean -0.96466
RMS 74.164
Underflow 69339
Overflow 0
Integral 4.4626e+05
number of cosmics
0
2000
4000
6000
-150
-100
-50
0
50
100
150
z_0 (cm)

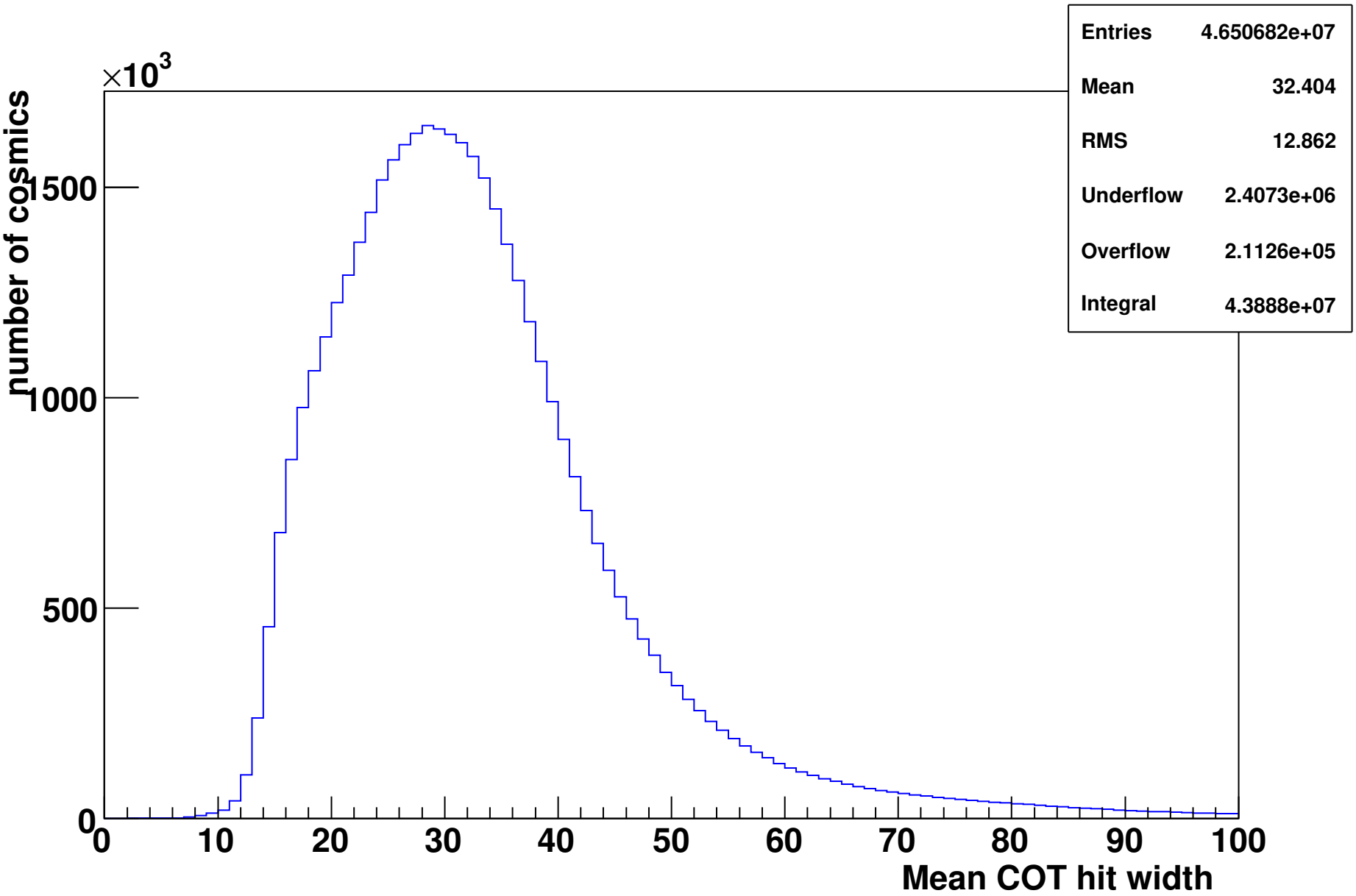

Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Integral 0
number of tracks
1
0.5
0
0
20
40
60
80
100
120
140
160
180
200
p (GeV)

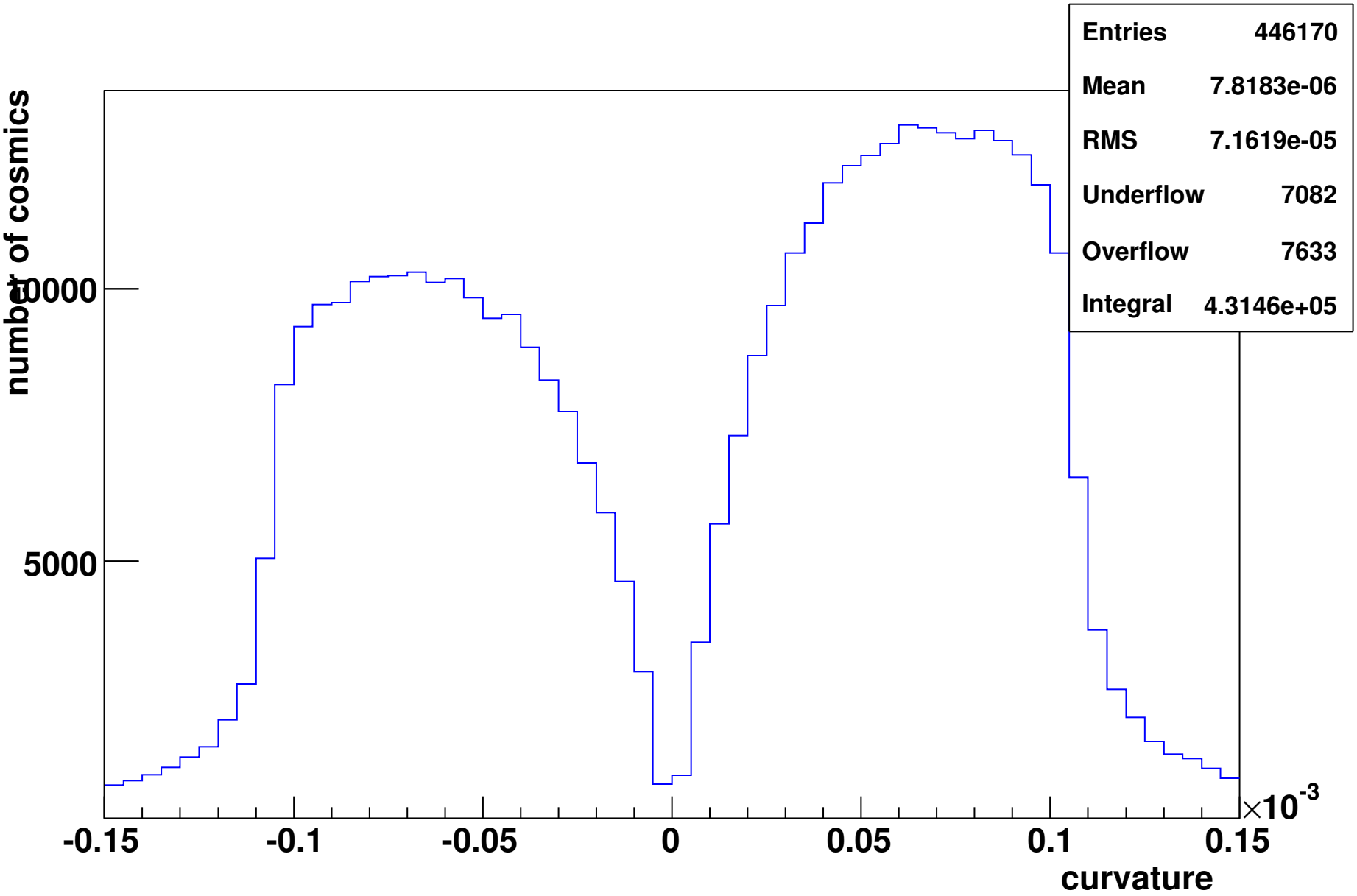

Entries 515600
Mean 36.101
RMS 31.515
Underflow 0
Overflow 9477
Integral 5.0612e+05
N cosmics
60000
40000
20000
0
0
20
40
60
80
100
120
140
160
180
200
p_T (GeV)

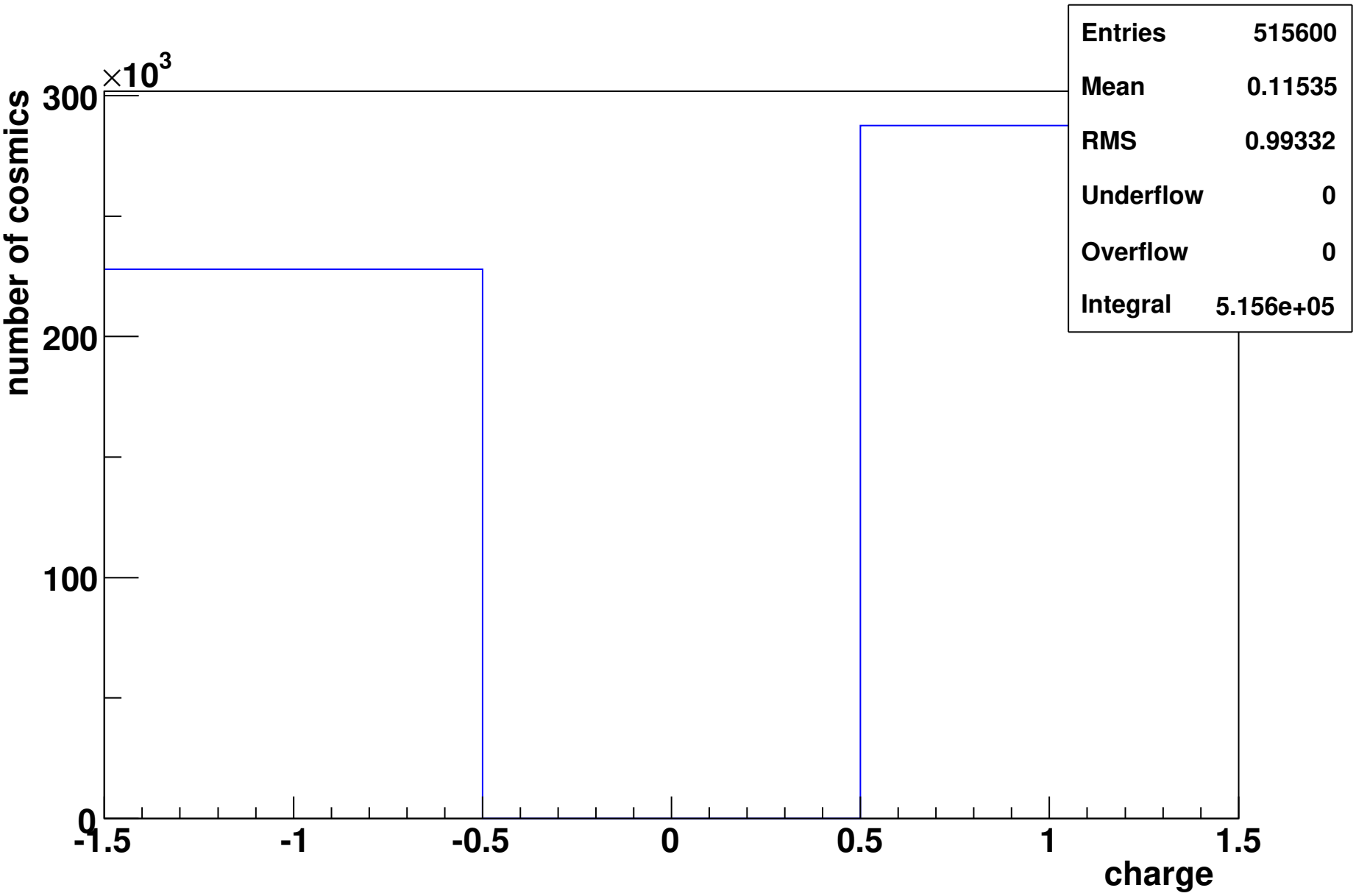

Entries 515600
Mean 37.621
RMS 32.403
Underflow 0
Overflow 10569
Integral 5.0503e+05
N cosmics
60000
40000
20000
0
0
20
40
80
180
200
p (GeV)

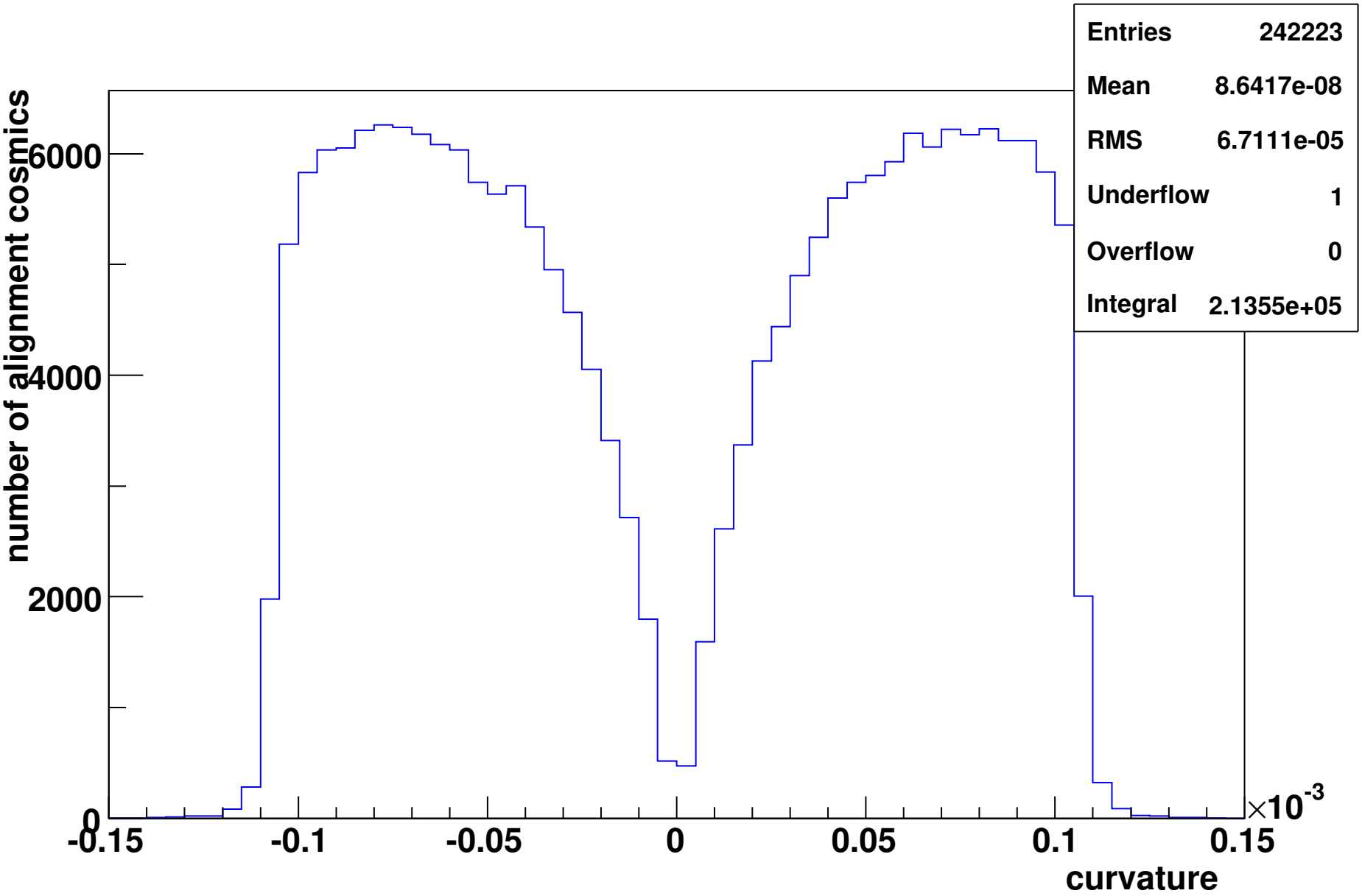

Entries 242223
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.4222e+05
×10^3
number of cosmics
200
100
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
EM Energy

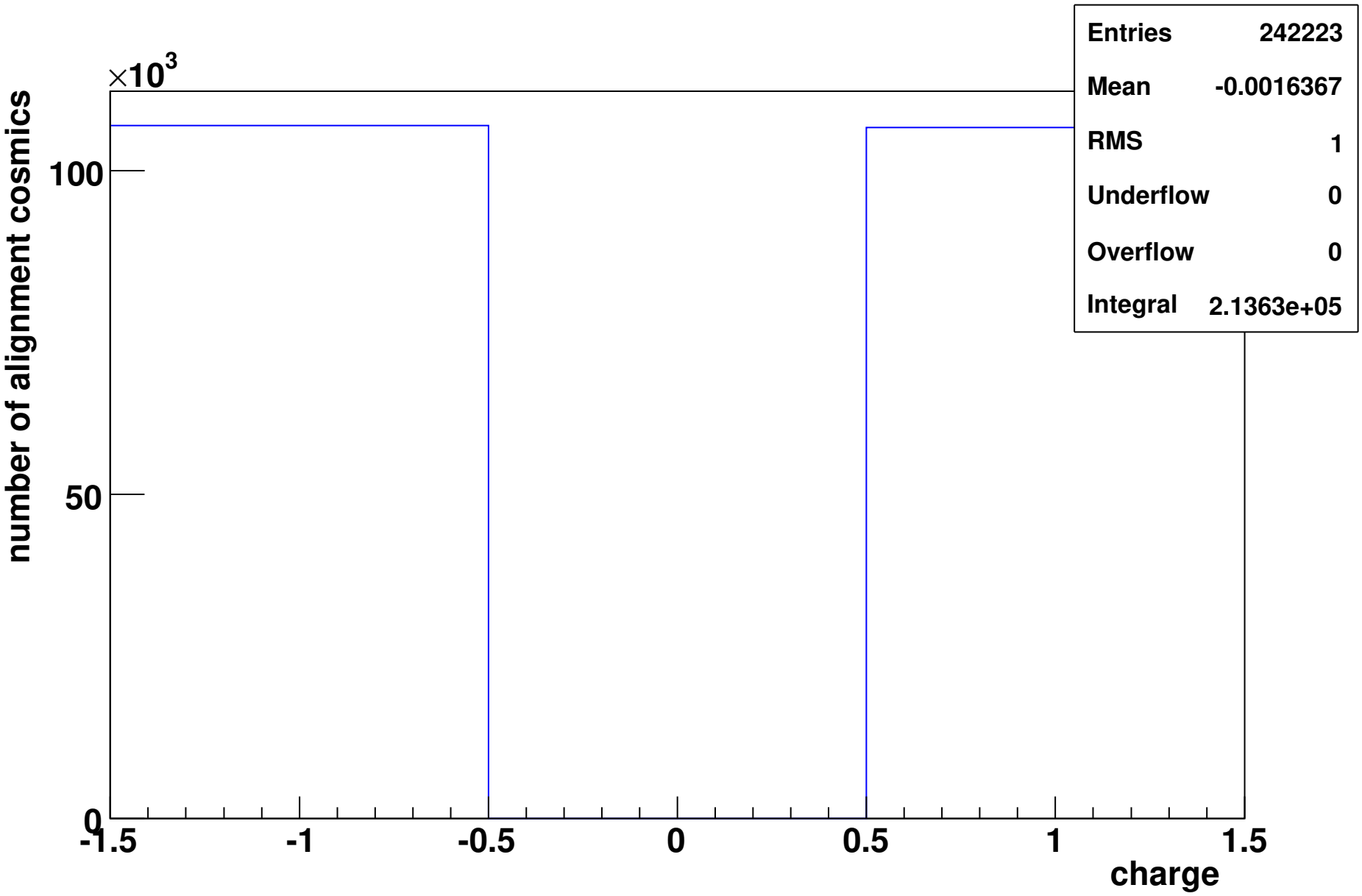

Entries 242223
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.4222e+05
×10^3
number of cosmics
200
100
0
0
1
2
3
4
5
6
Hadronic Energy

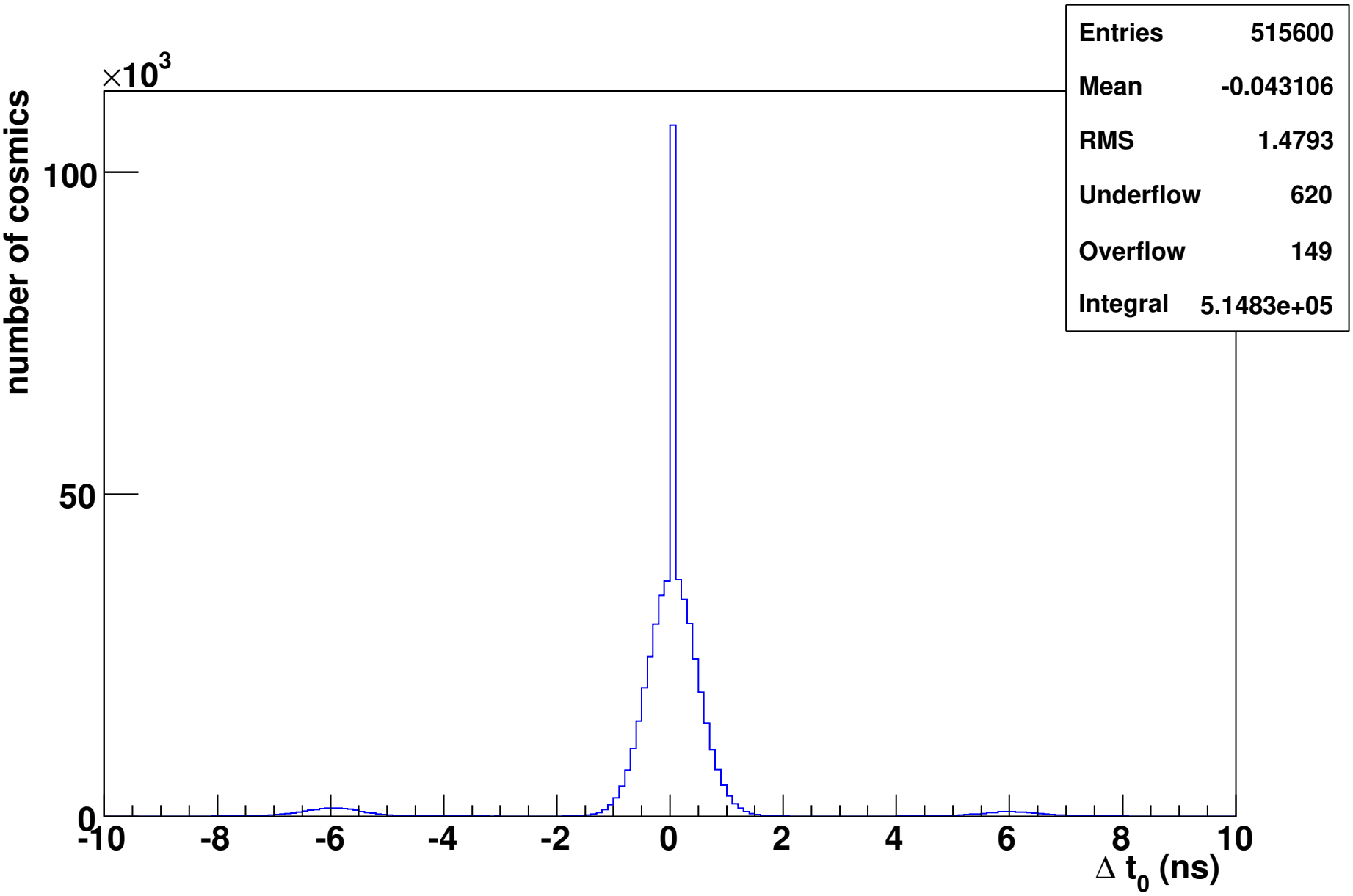

Entries 4.650682e+07
Mean 32.404
RMS 12.862
Underflow 2.4073e+06
Overflow 2.1126e+05
Integral 4.3888e+07
×10^3
number of cosmics
1500
1000
500
0
0
10
20
30
40
50
60
70
80
90
100
Mean COT hit width

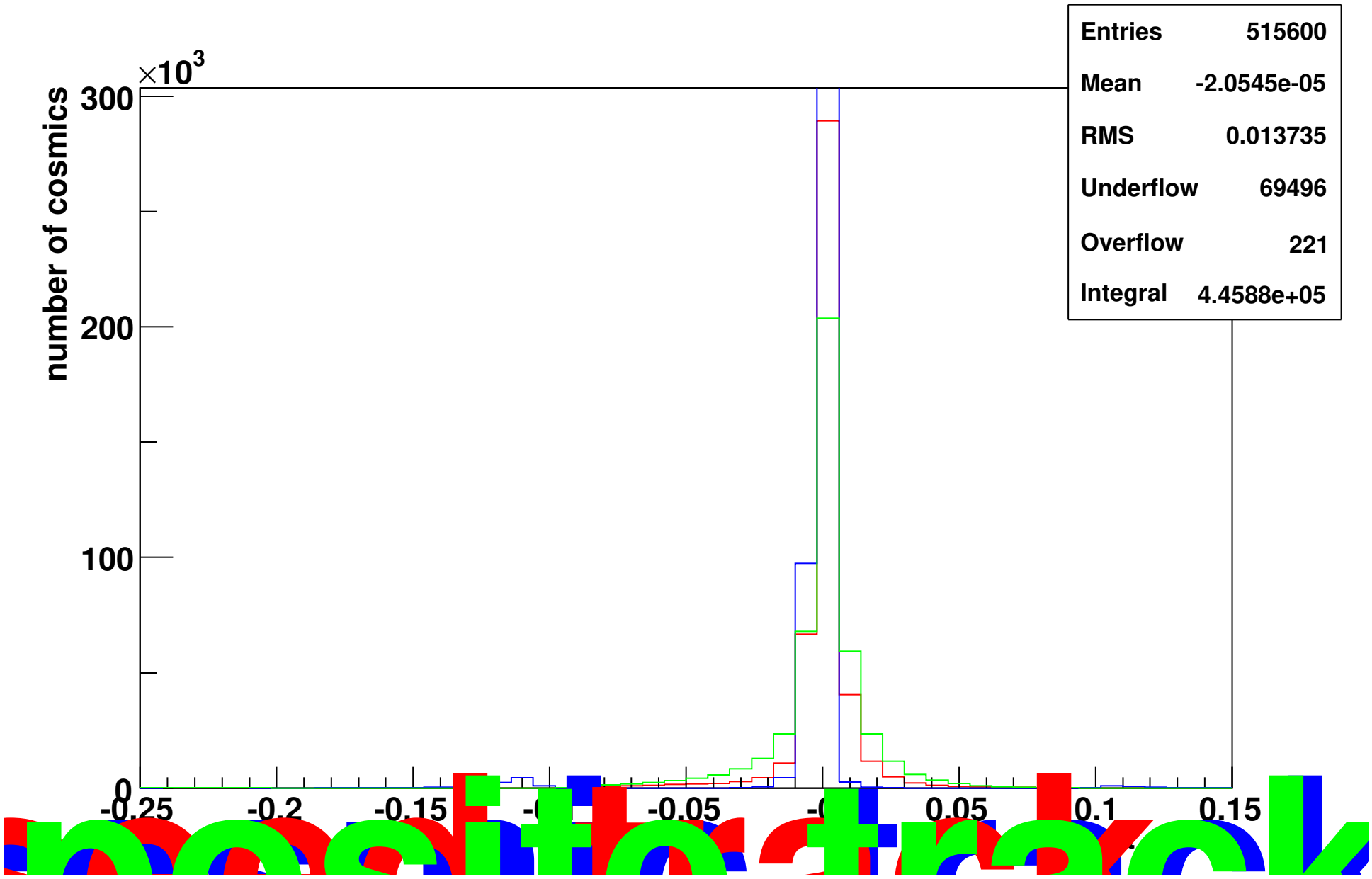

Entries 446170
Mean 7.8183e-06
RMS 7.1619e-05
Underflow 7082
Overflow 7633
Integral 4.3146e+05
number of cosmics
10000
5000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

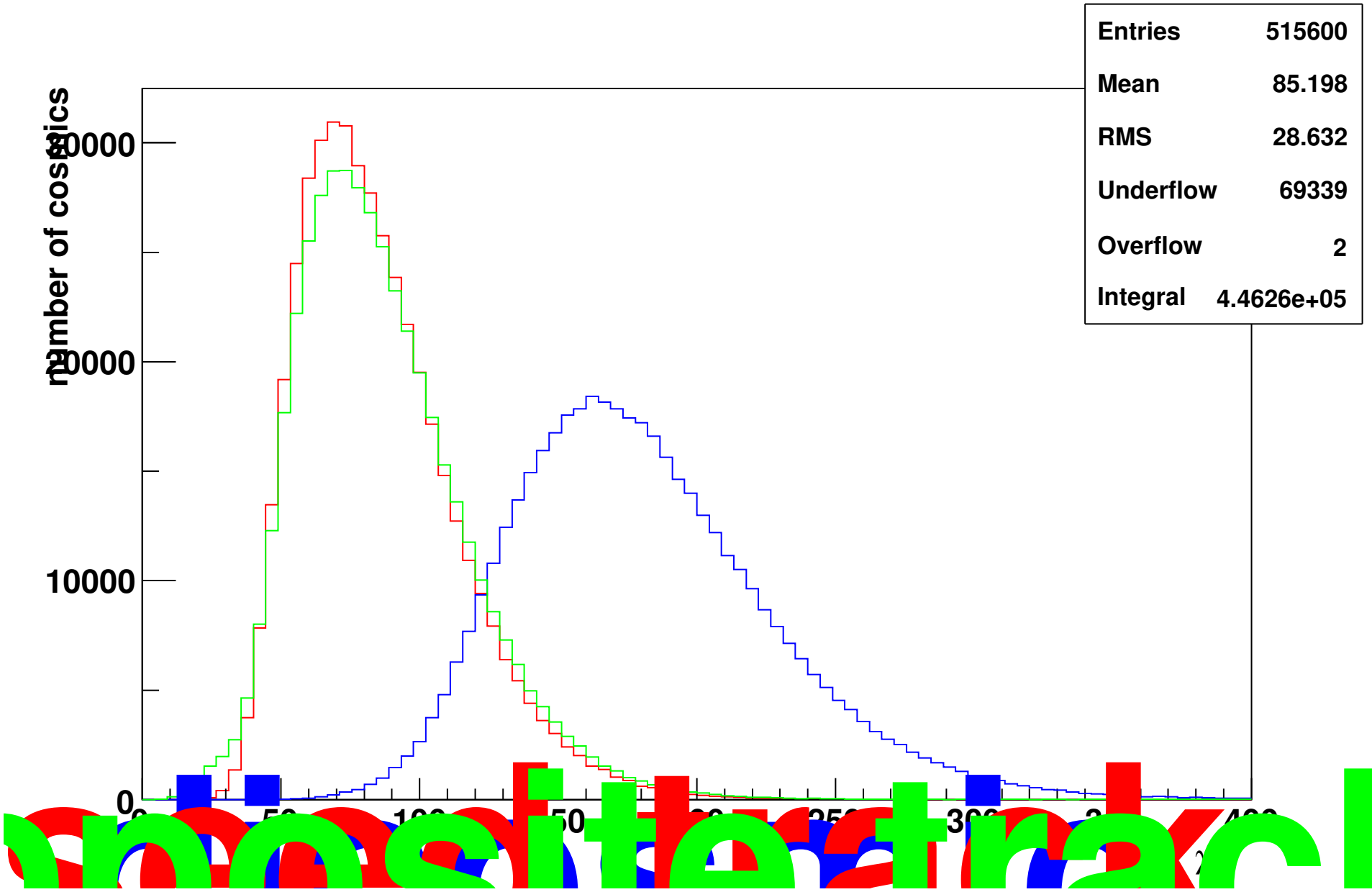

Entries 515600
Mean 0.11535
RMS 0.99332
Underflow 0
Overflow 0
Integral 5.156e+05
×10^3
300
200
100
0
number of cosmics
-1.5
-1
-0.5
0
0.5
1
1.5
charge

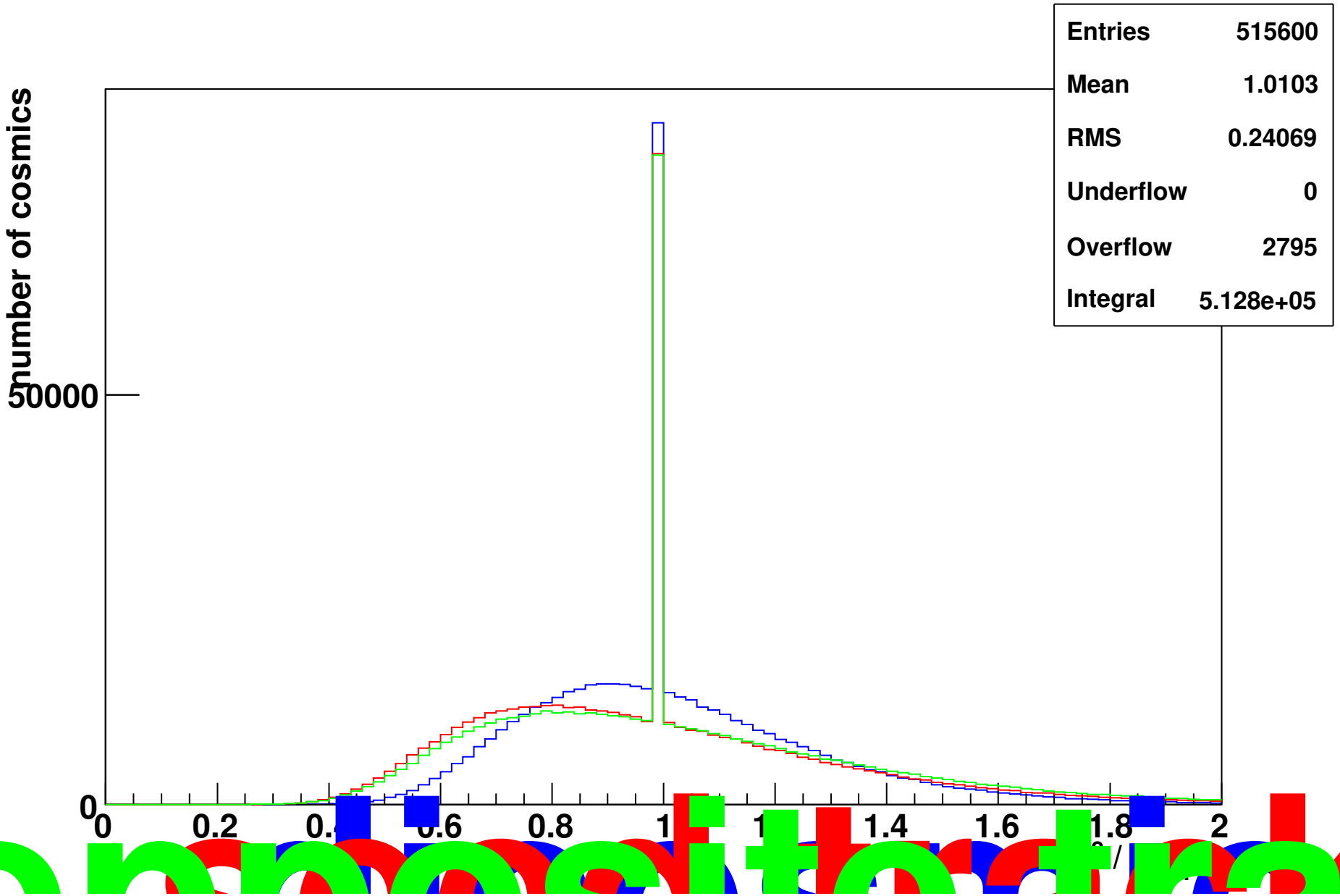

Entries 242223
Mean 8.6417e-08
RMS 6.7111e-05
Underflow 1
Overflow 0
Integral 2.1355e+05
number of alignment cosmics
6000
4000
2000
0
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

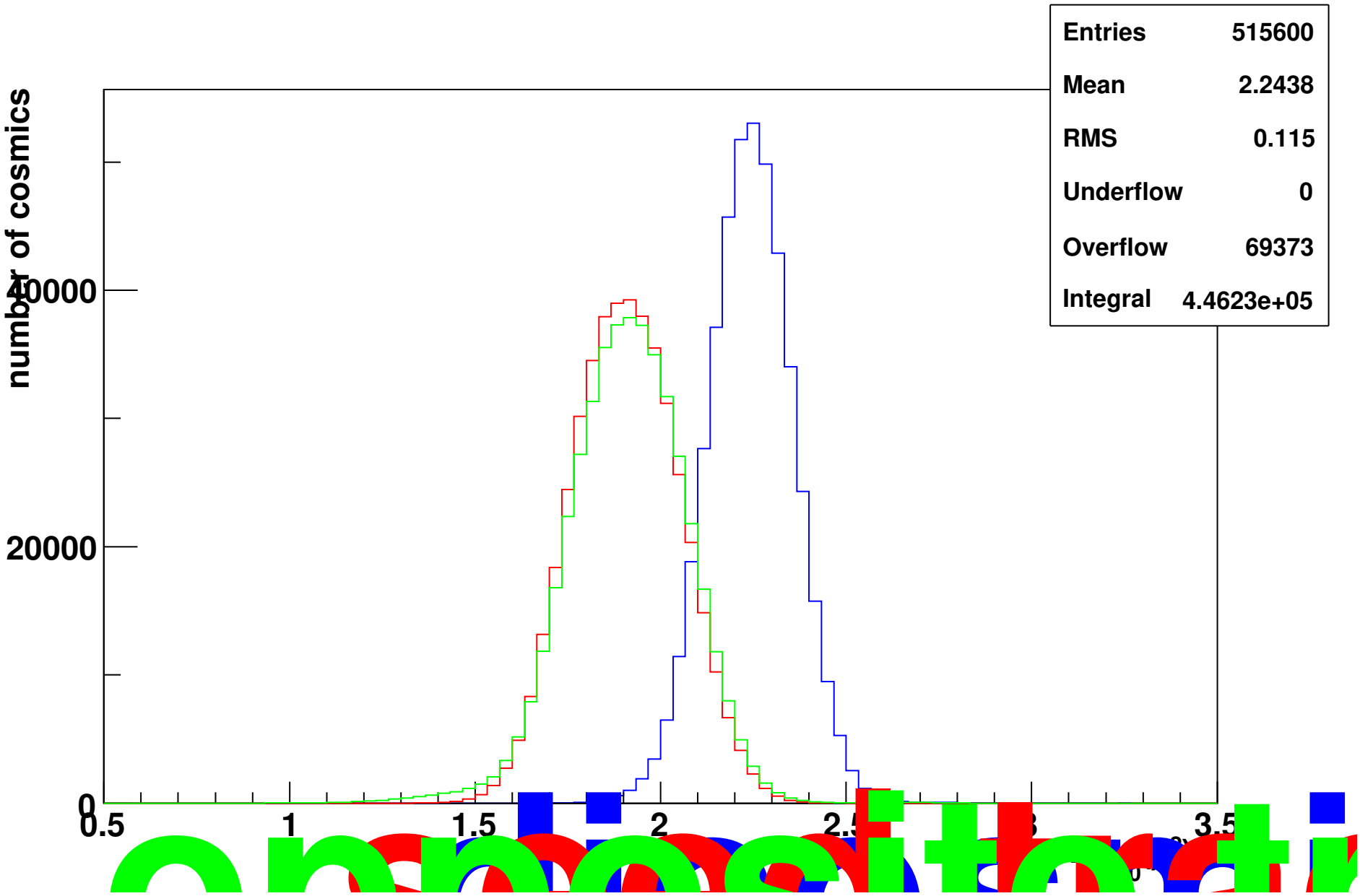

Entries 242223
Mean -0.0016367
RMS 1
Underflow 0
Overflow 0
Integral 2.1363e+05
×10^3
number of alignment cosmics
100
50
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge


Entries 515600
Mean -0.043106
RMS 1.4793
Underflow 620
Overflow 149
Integral 5.1483e+05
×10^3
number of cosmics
100
50
0
-10
-8
-6
-4
-2
0
2
4
6
8
10
Δ t0 (ns)

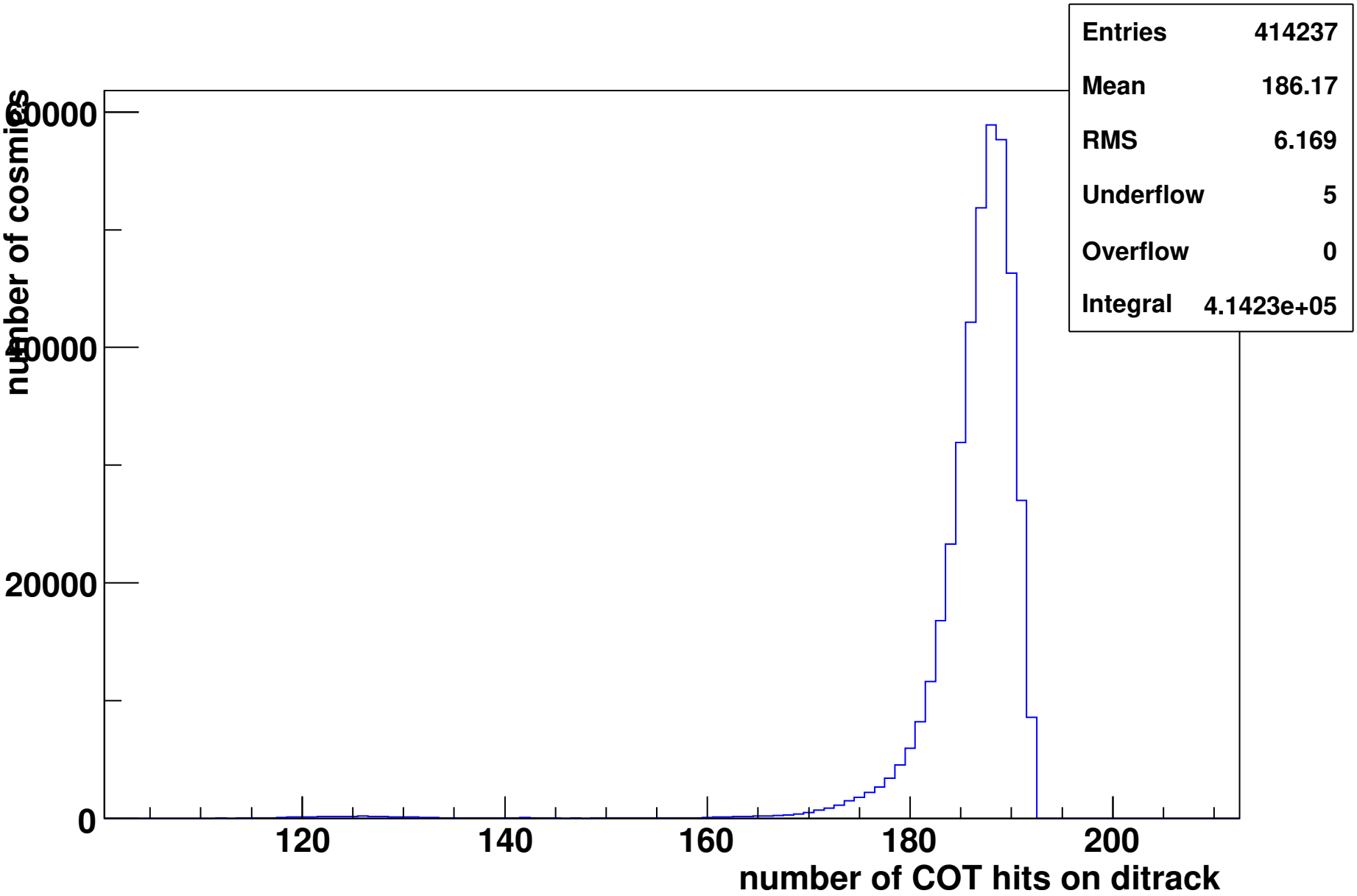

Entries 515600
Mean -2.0545e-05
RMS 0.013735
Underflow 69496
Overflow 221
Integral 4.4588e+05
number of cosmics
×10^3
300
200
100
0
-0.25
-0.2
-0.15
-0.05
0.05
0.1
0.15

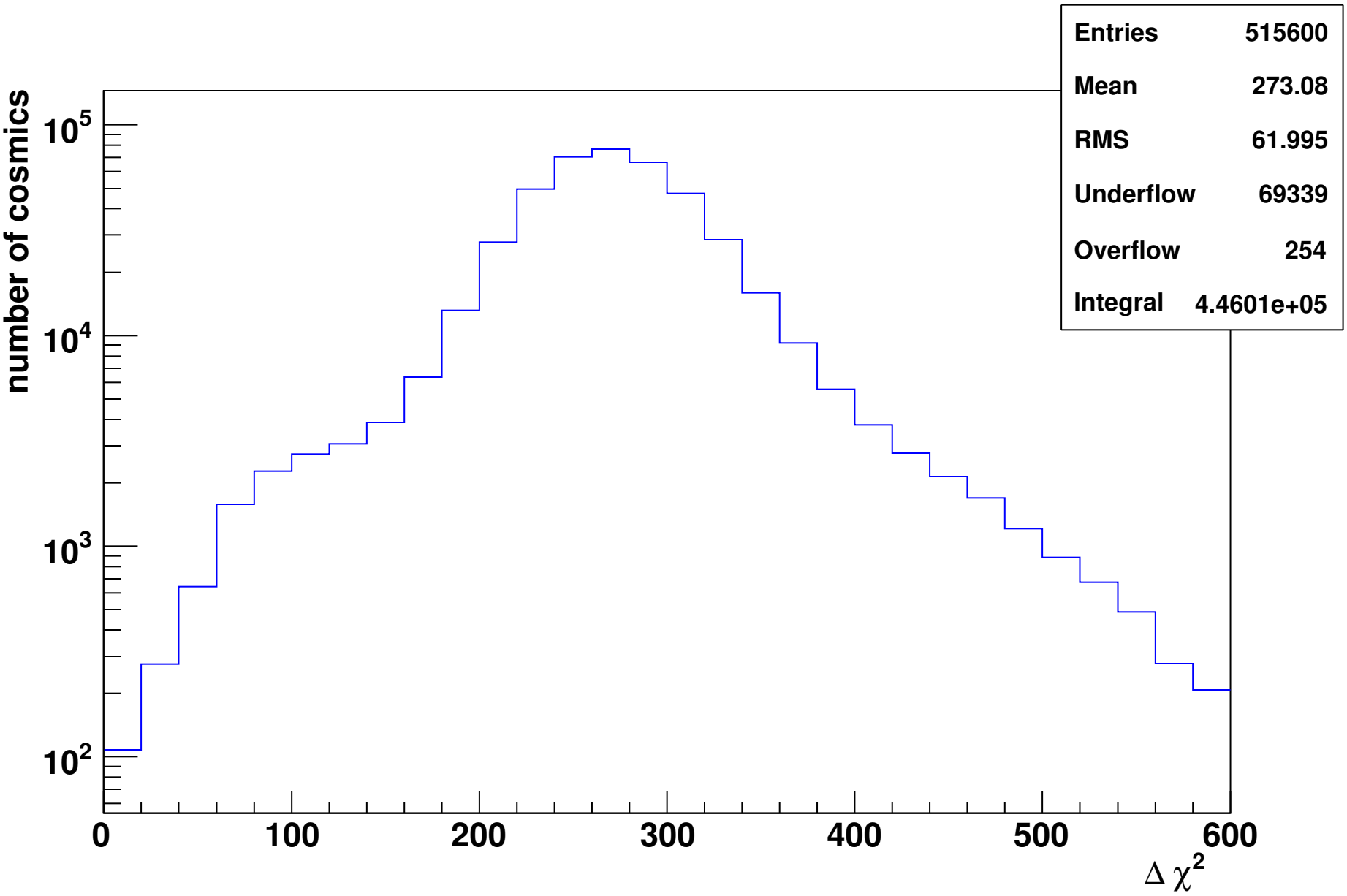

Entries 515600
Mean 85.198
RMS 28.632
Underflow 69339
Overflow 2
Integral 4.4626e+05
number of cosmics
20000
10000
0

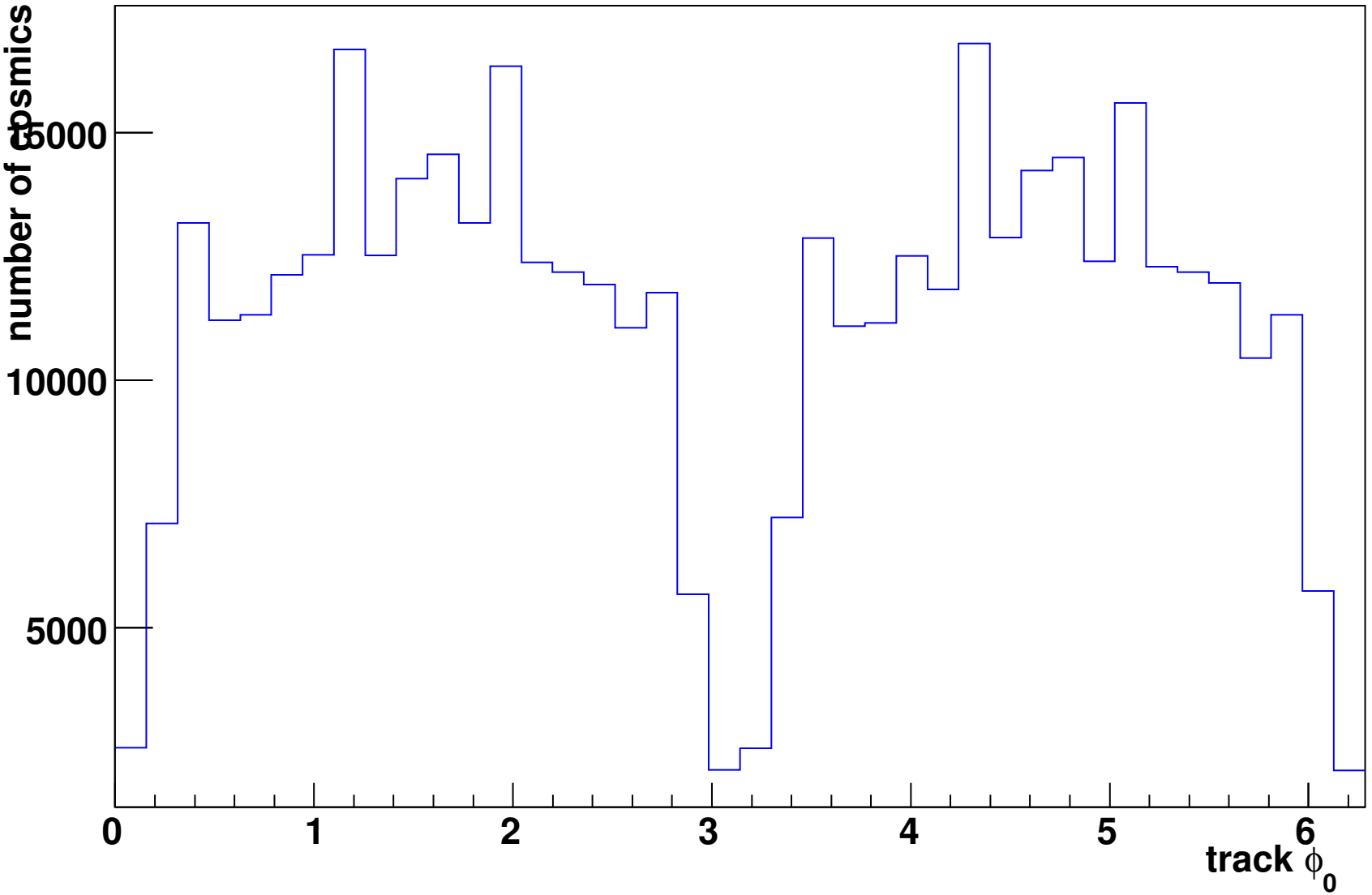

Entries 515600
Mean 1.0103
RMS 0.24069
Underflow 0
Overflow 2795
Integral 5.128e+05
number of cosmics
50000
0
0
0.2
0.6
0.8
1.4
1.6
1.8
2

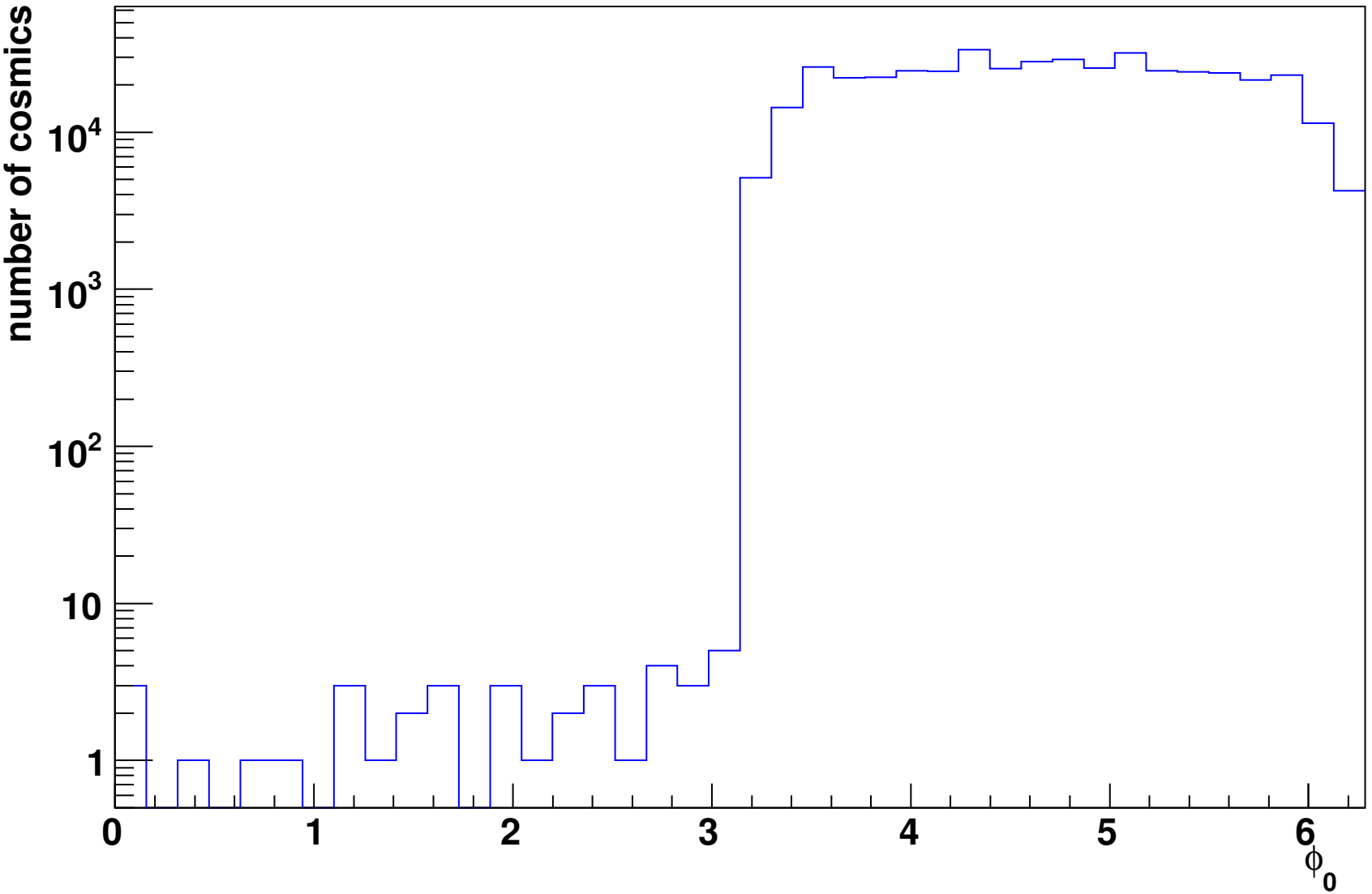

Entries 515600
Mean 2.2438
RMS 0.115
Underflow 0
Overflow 69373
Integral 4.4623e+05
number of cosmics
40000
20000
0
0.5
1
1.5
2
2.5
3.5

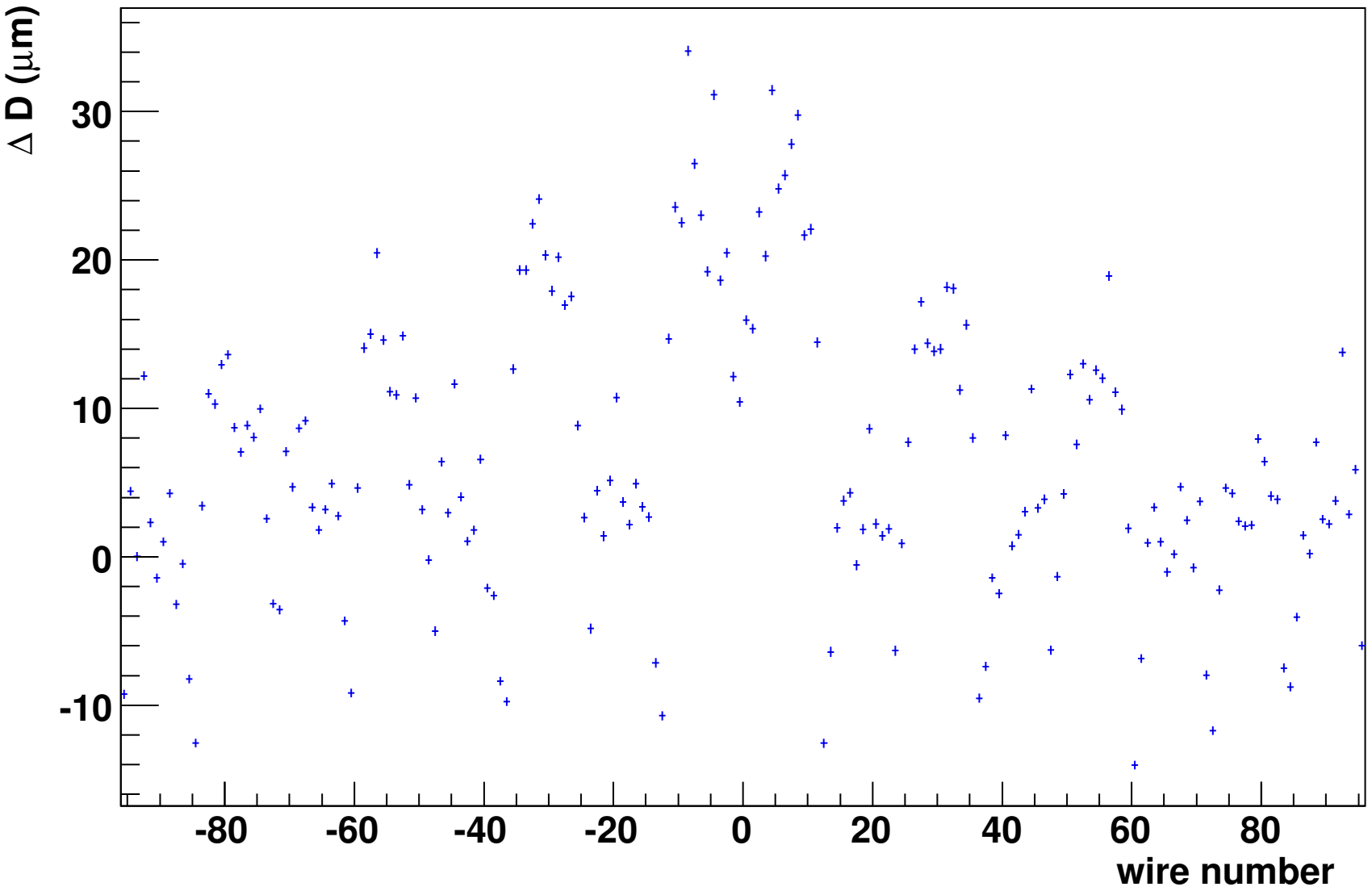
Entries 515600
number of ditracks
10^5
10^4
10^3
10^2
-0.5
0
0.5
1
1.5
2
2.5
3
4
4.5
ditrack type
cosmic
cosmic
pair
pair

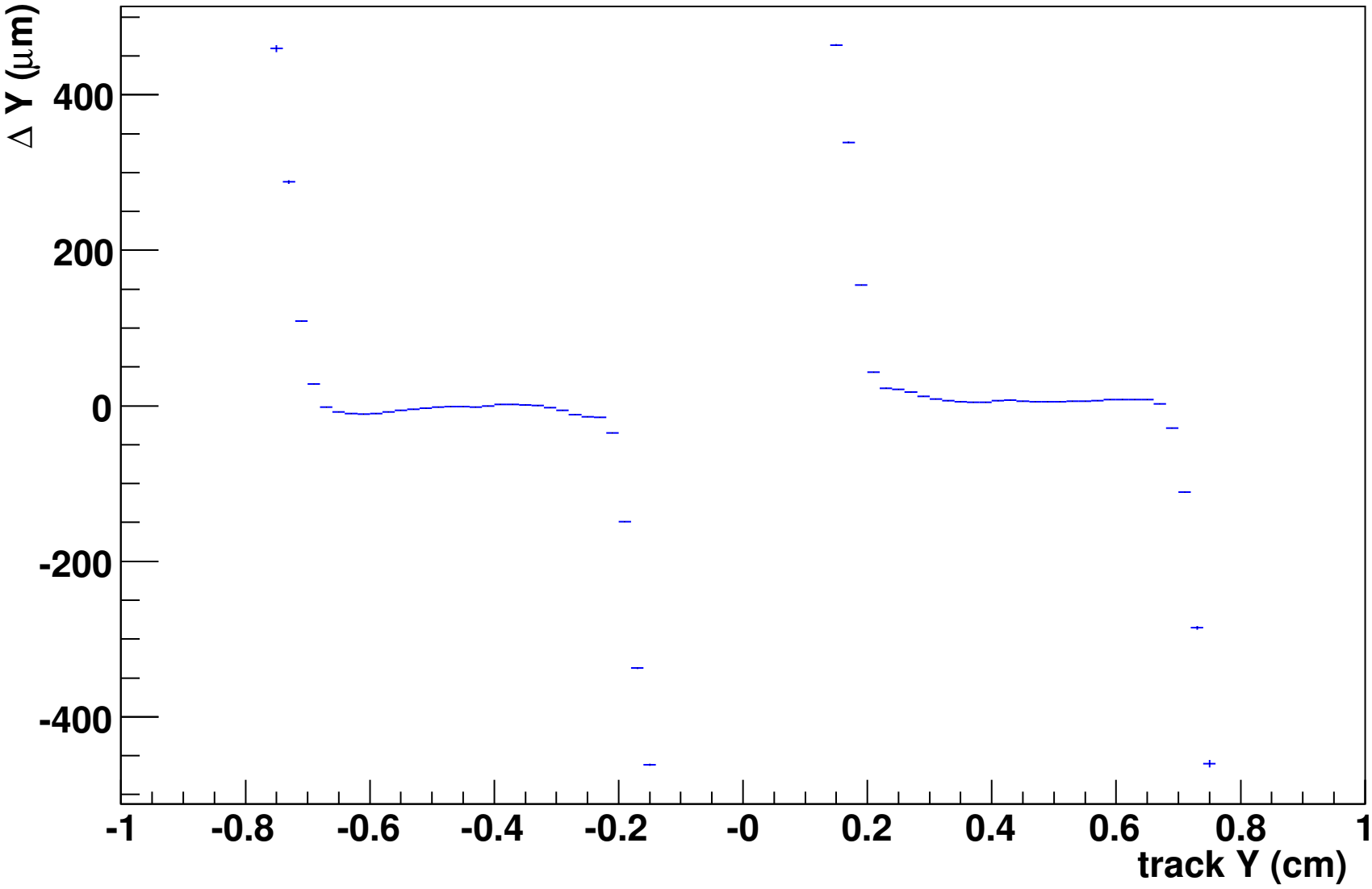

Entries 414237
Mean 186.17
RMS 6.169
Underflow 5
Overflow 0
Integral 4.1423e+05
number of cosmics
40000
20000
0
120
140
160
180
200
number of COT hits on ditrack

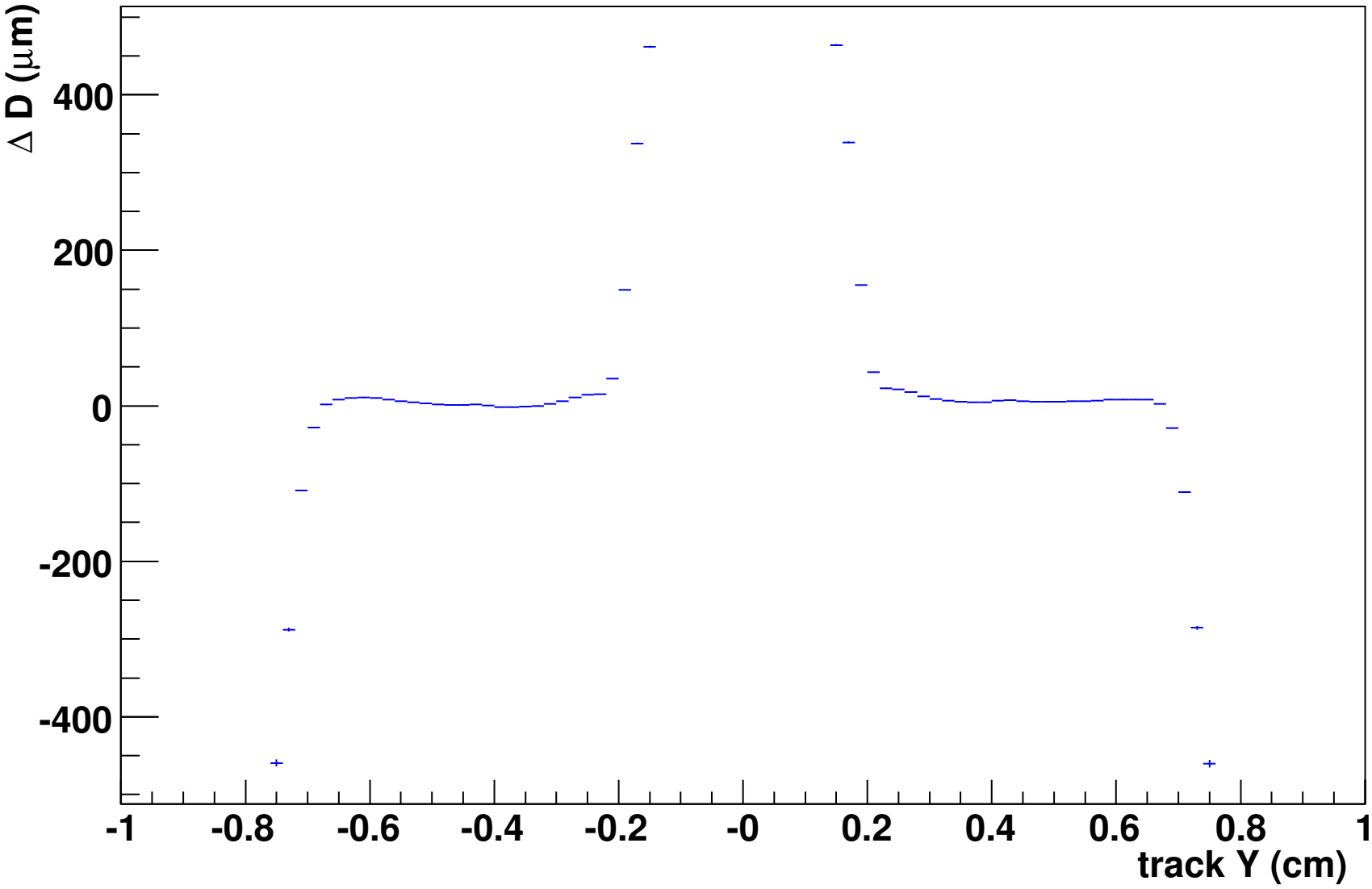

Entries 515600
Mean 273.08
RMS 61.995
Underflow 69339
Overflow 254
Integral 4.4601e+05
number of cosmics
10^5
10^4
10^3
10^2
0
100
200
300
400
500
600
$\Delta\ \chi^2$

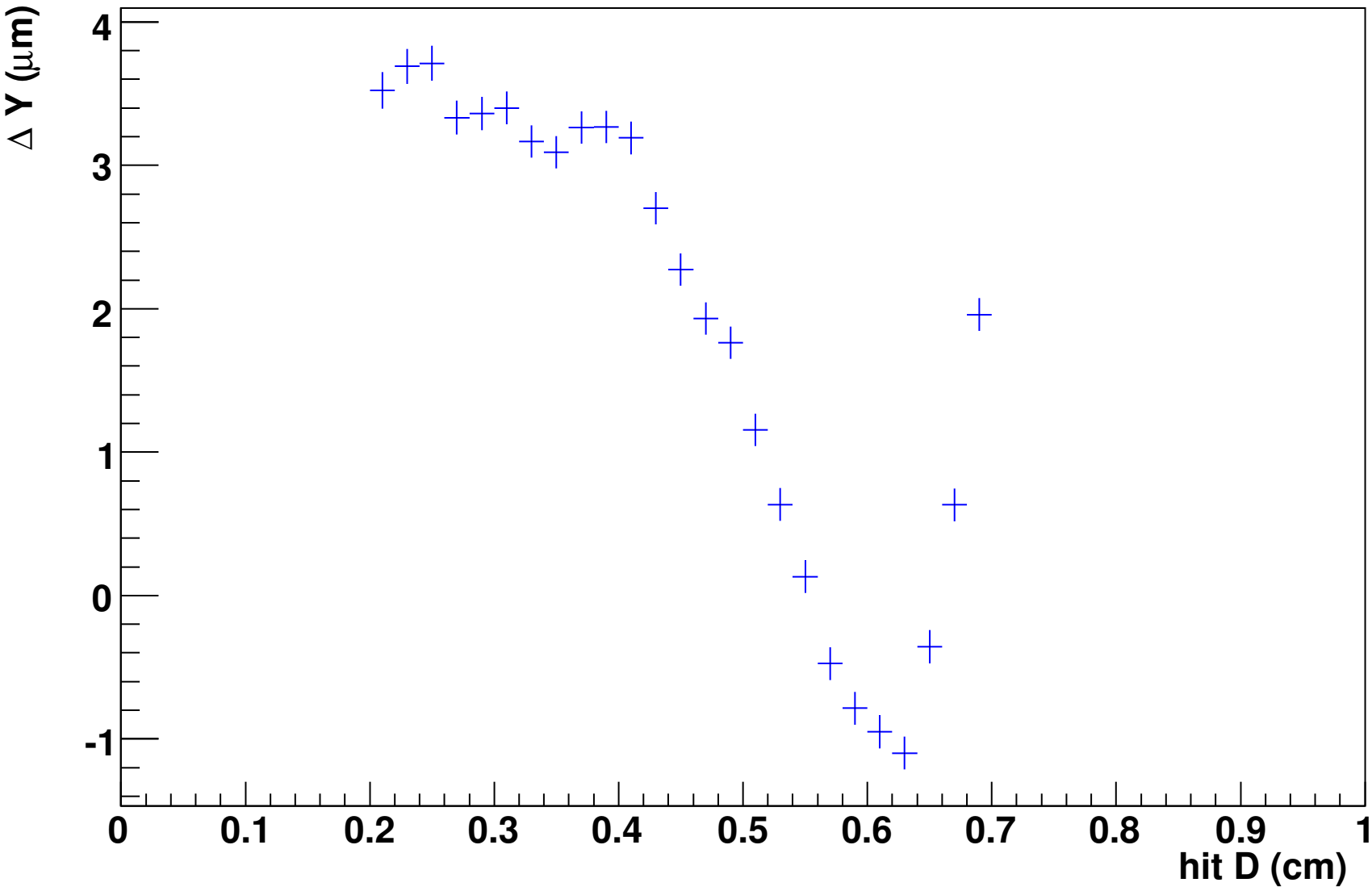

number of cosmics
15000
10000
5000
0
1
2
3
4
5
6
track ϕ_0

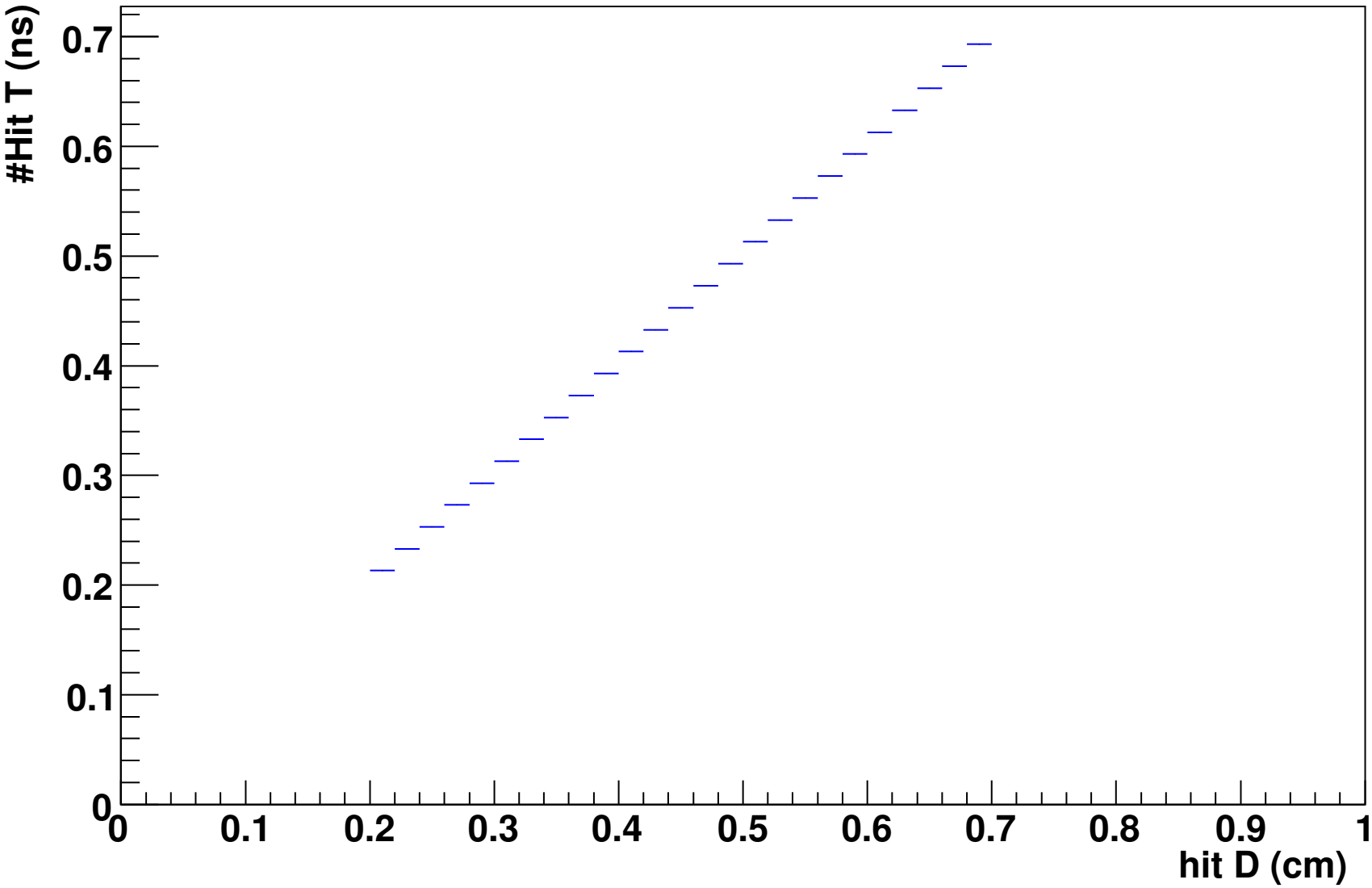

number of cosmics
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
ϕ_0

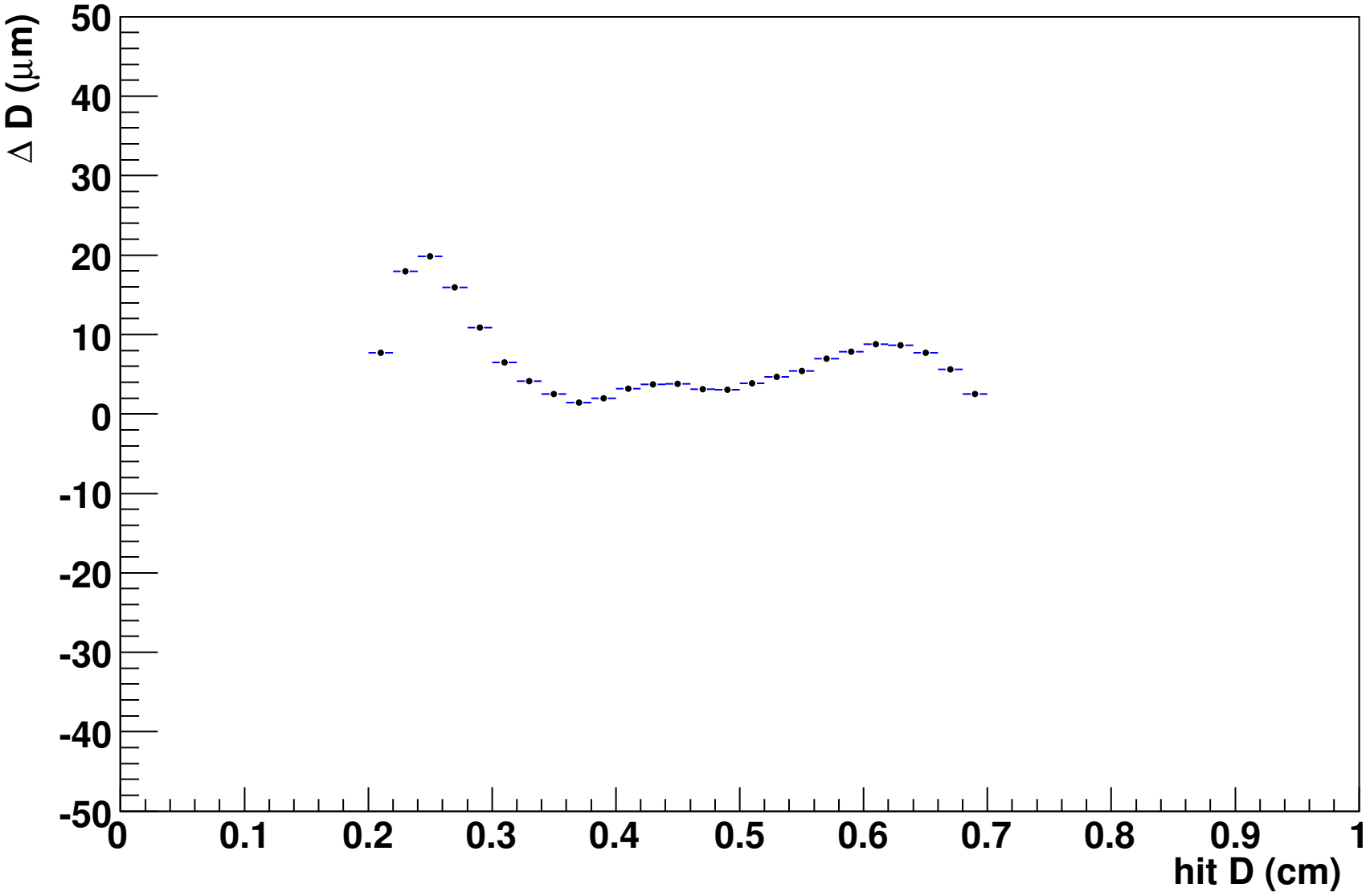

Δ D (μm)
30
20
10
0
-10
-80
-60
-40
-20
0
20
40
60
80
wire number

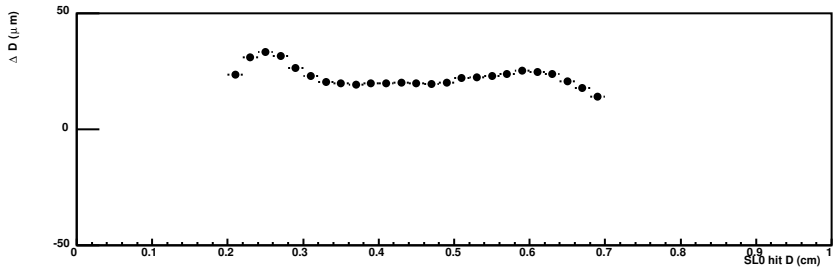

Δ Y (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

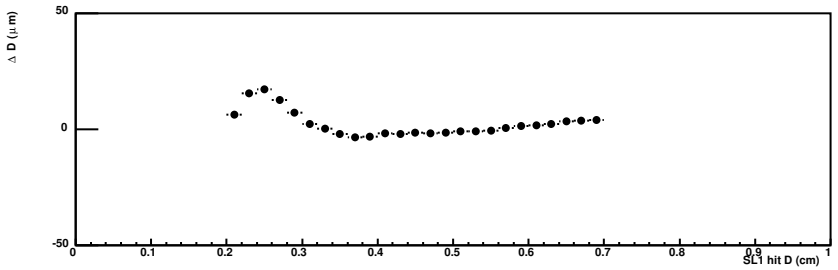

Δ D (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

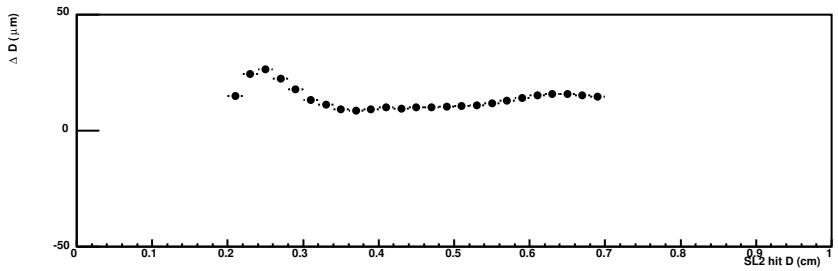

Δ Y (μm)
4
3
2
1
0
-1
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

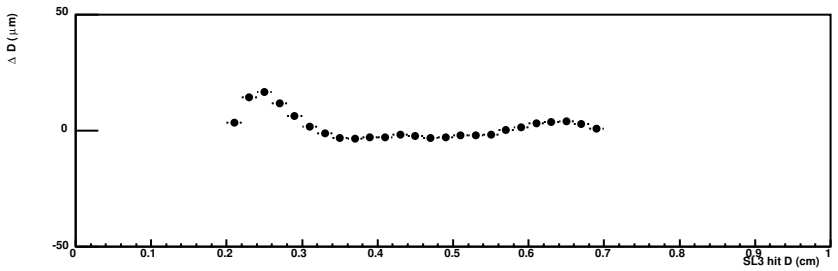

#Hit T (ns)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

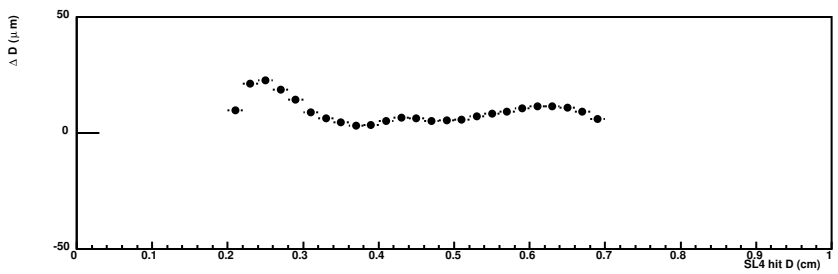

Δ D (μm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

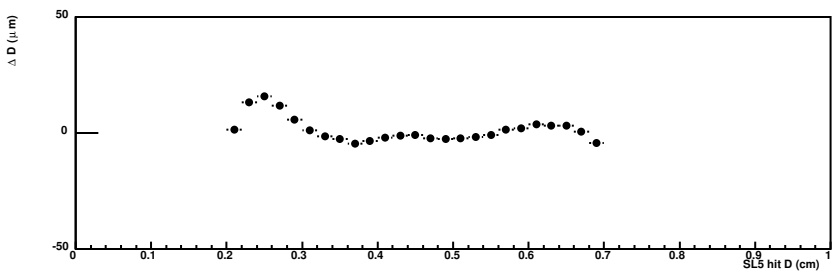

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL0 hit D (cm)

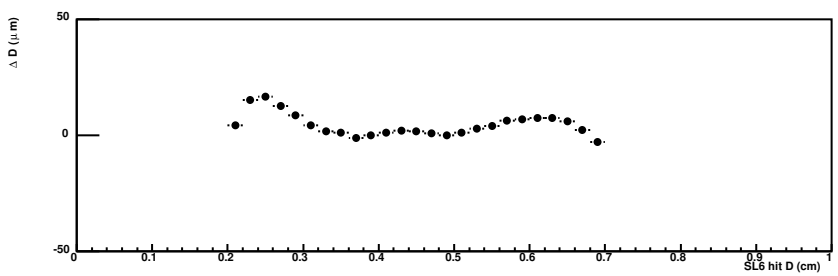

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL1 hit D (cm)

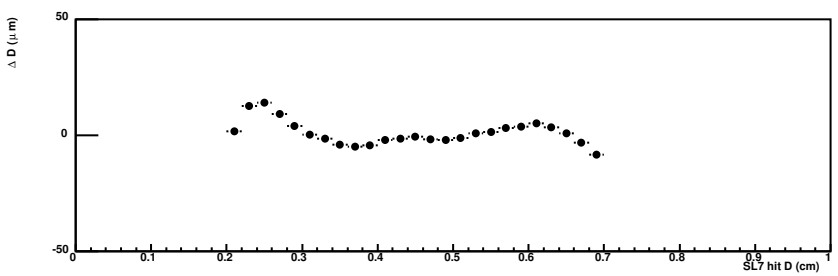

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL2 hit D (cm)

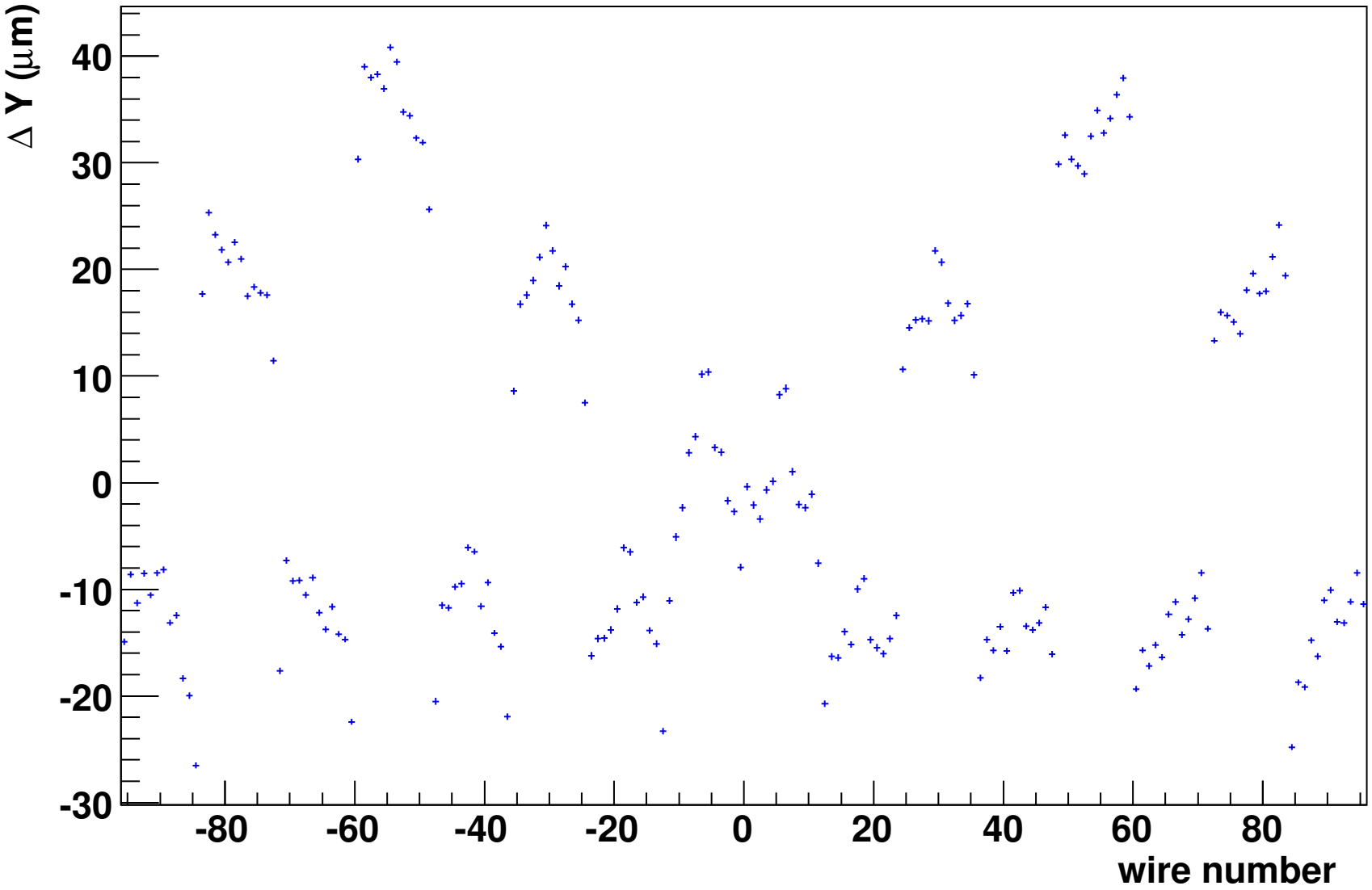

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL3 hit D (cm)

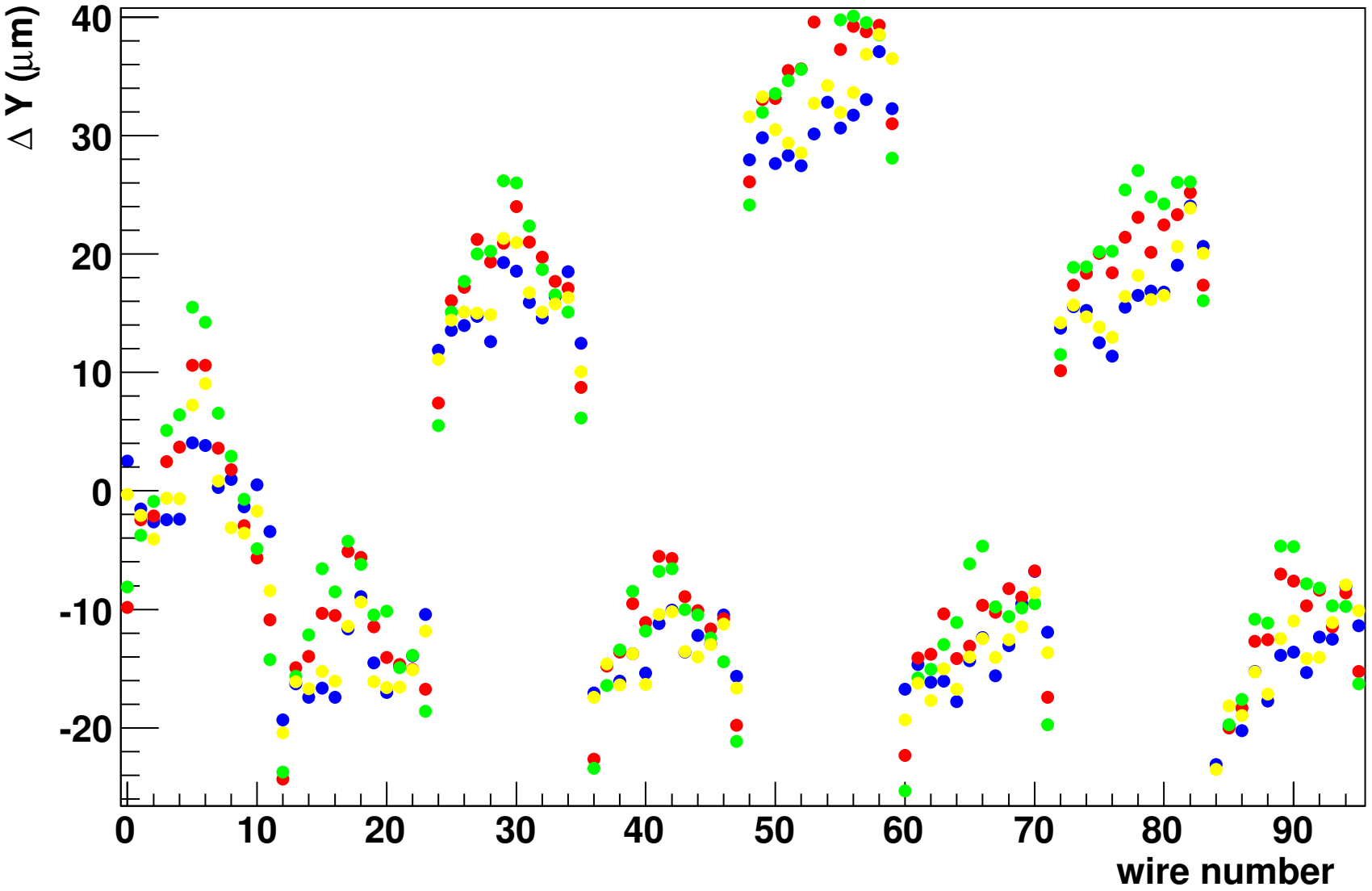

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL4 hit D (cm)

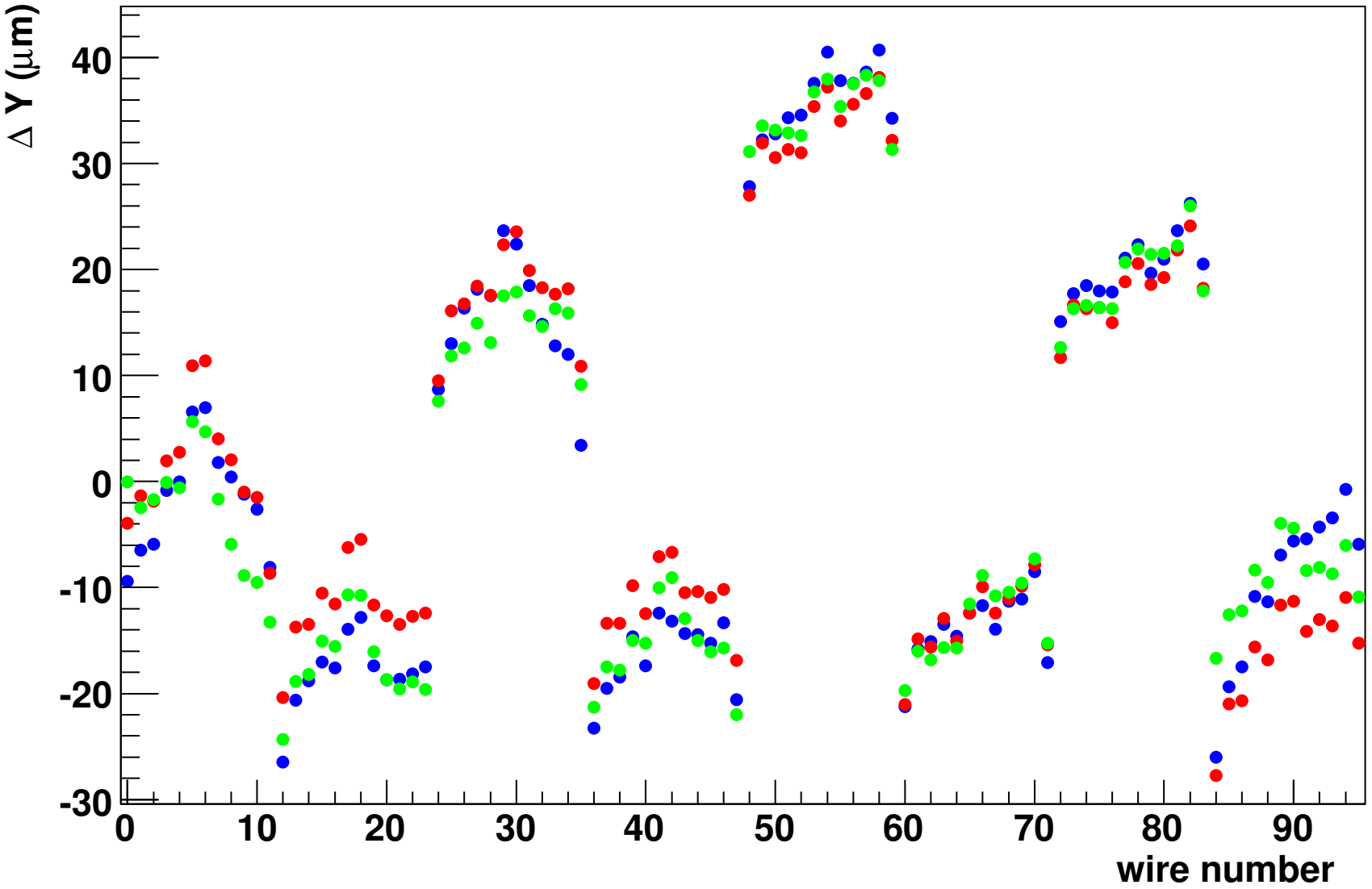

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL5 hit D (cm)

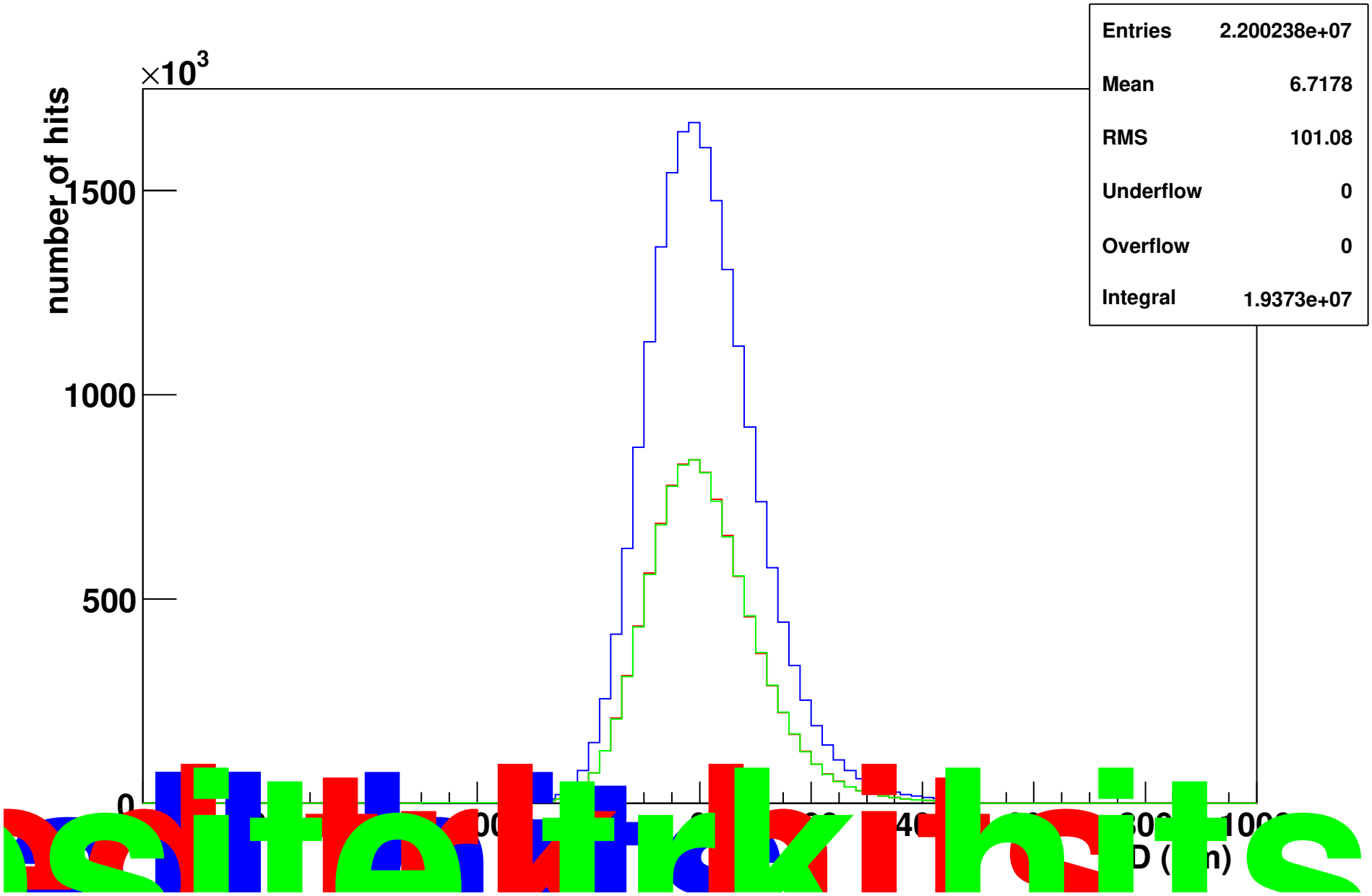

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL6 hit D (cm)

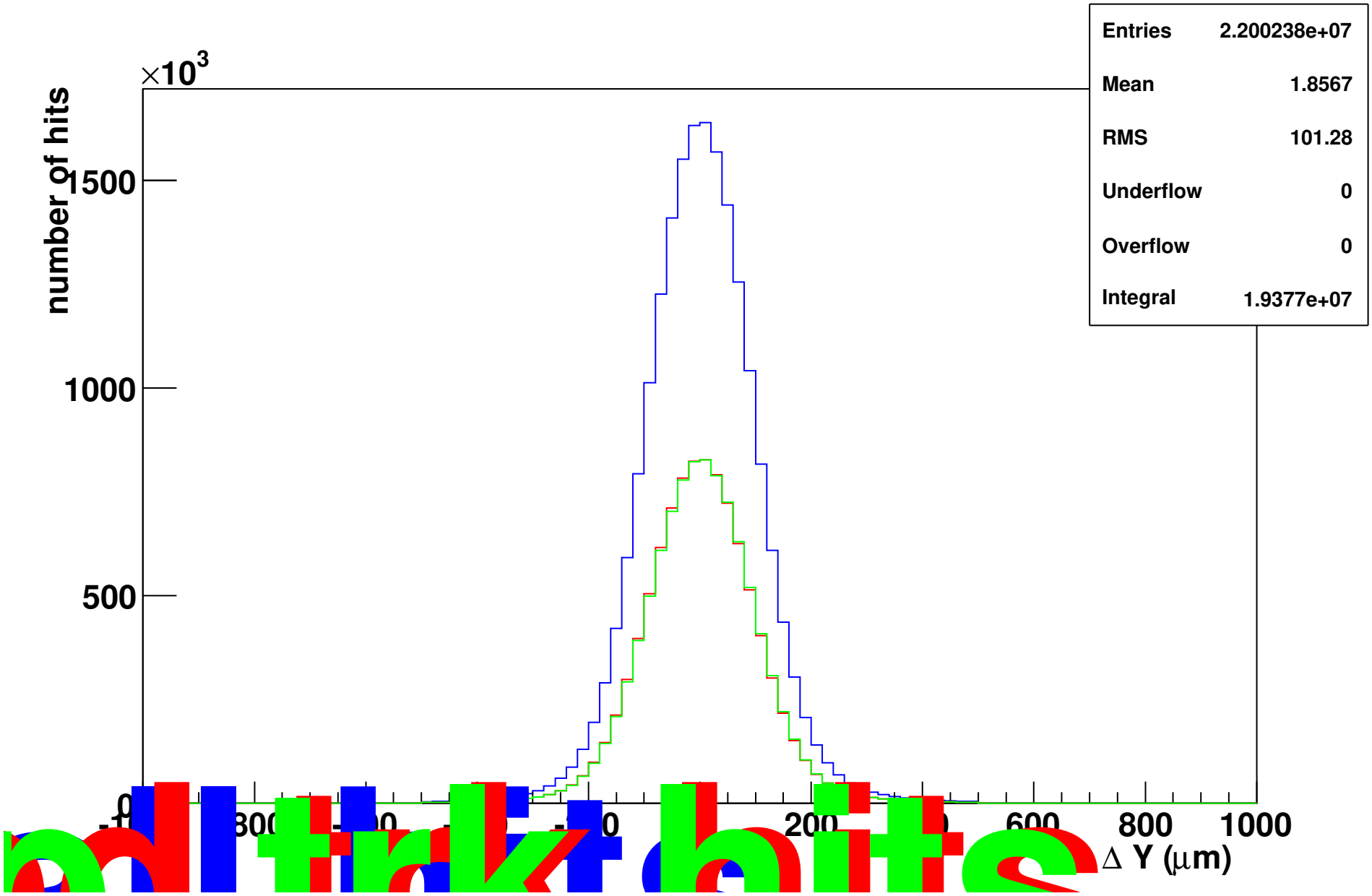

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL7 hit D (cm)

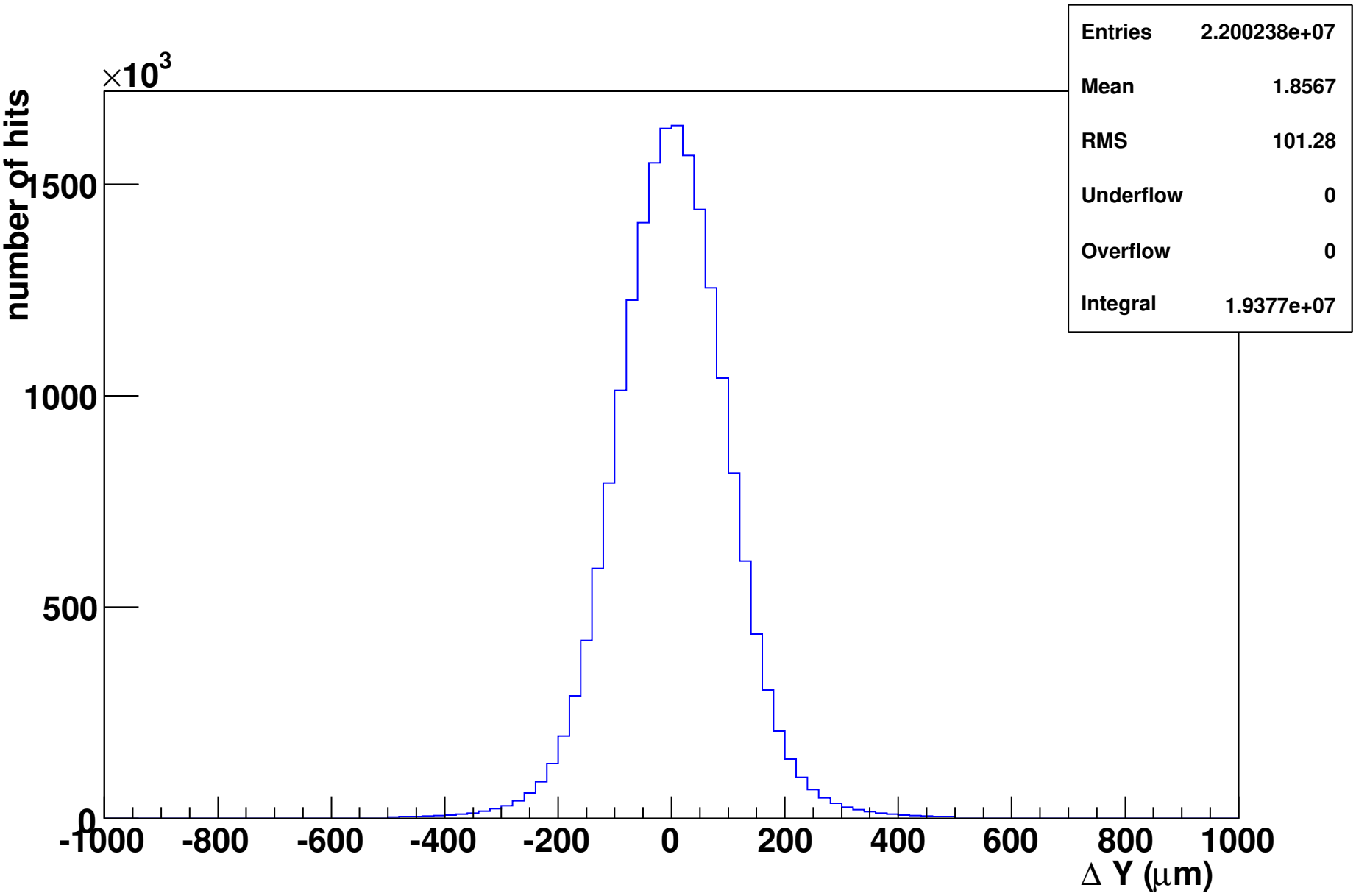

Δ Y (μm)
40
30
20
10
0
-10
-20
-30
-80
-60
-40
-20
0
20
40
60
80
wire number


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 2.200238e+07
Mean 6.7178
RMS 101.08
Underflow 0
Overflow 0
Integral 1.9373e+07
×10^3
number of hits
1500
1000
500
0


Entries 2.200238e+07
Mean 1.8567
RMS 101.28
Underflow 0
Overflow 0
Integral 1.9377e+07
number of hits
×10^3
1500
1000
500
0
-800
200
600
800
1000
Δ Y (μm)


Entries 2.200238e+07
Mean 1.8567
RMS 101.28
Underflow 0
Overflow 0
Integral 1.9377e+07
×10^3
number of hits
1500
1000
500
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000
Δ Y (μm)