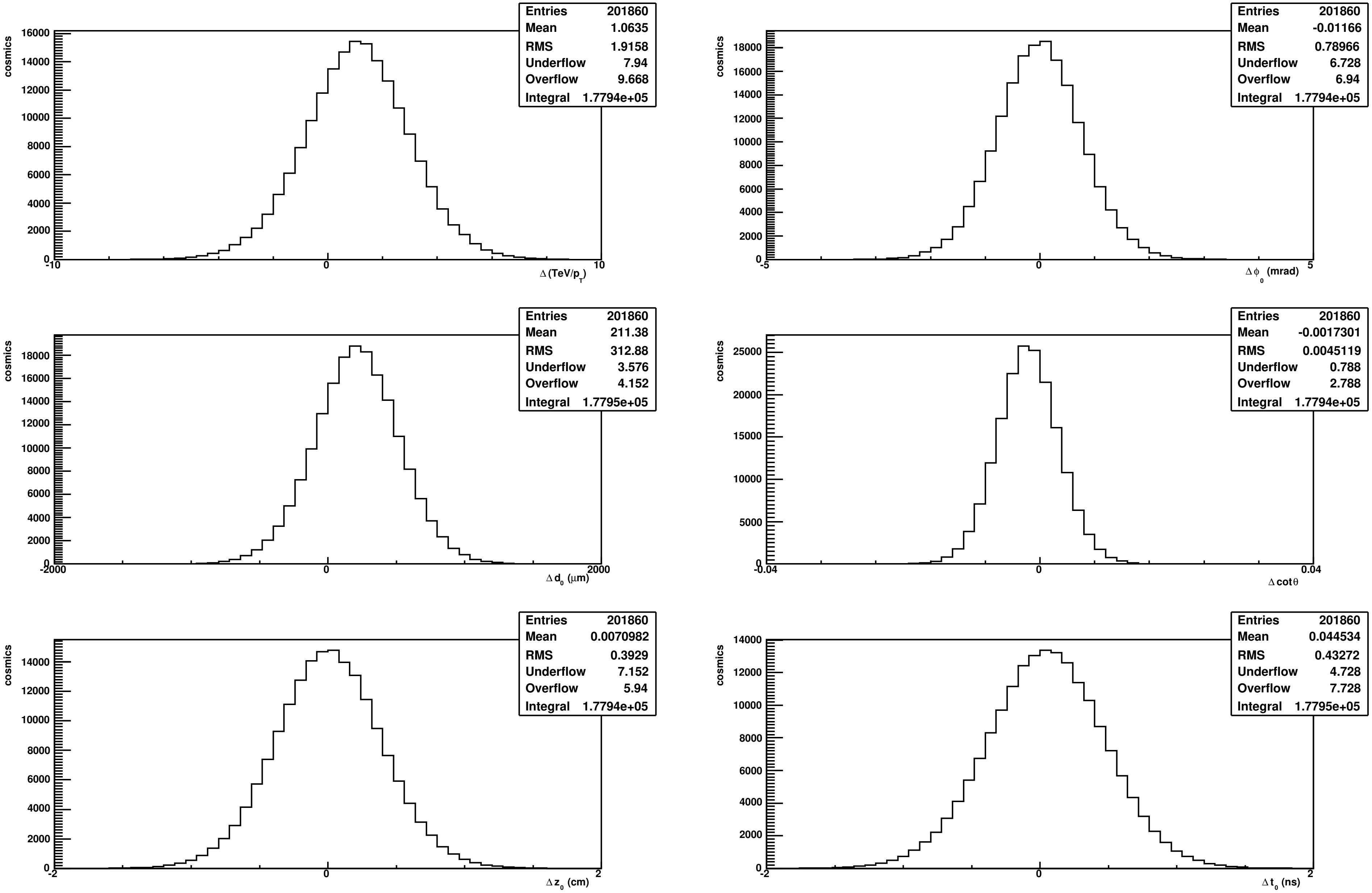
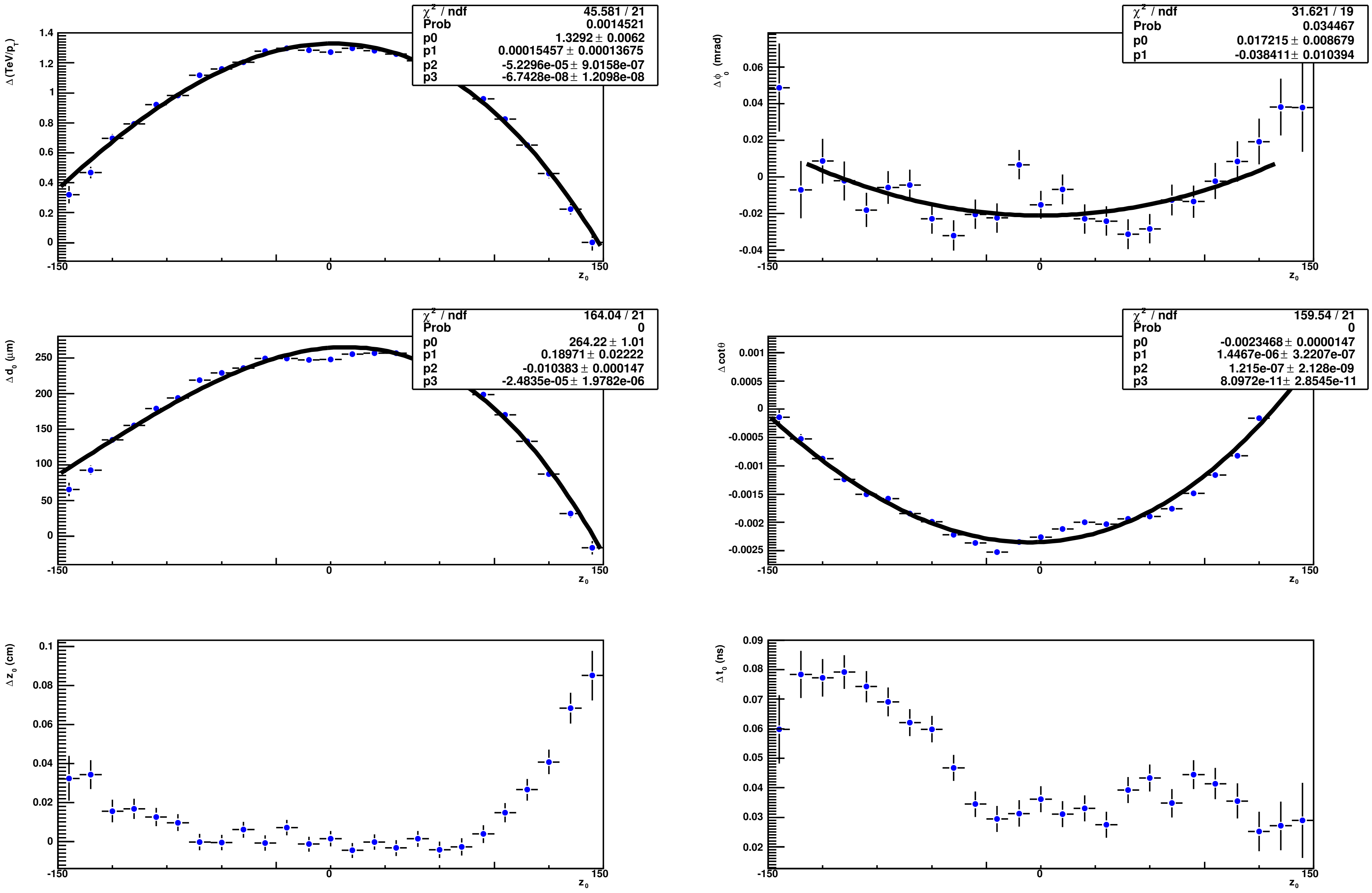
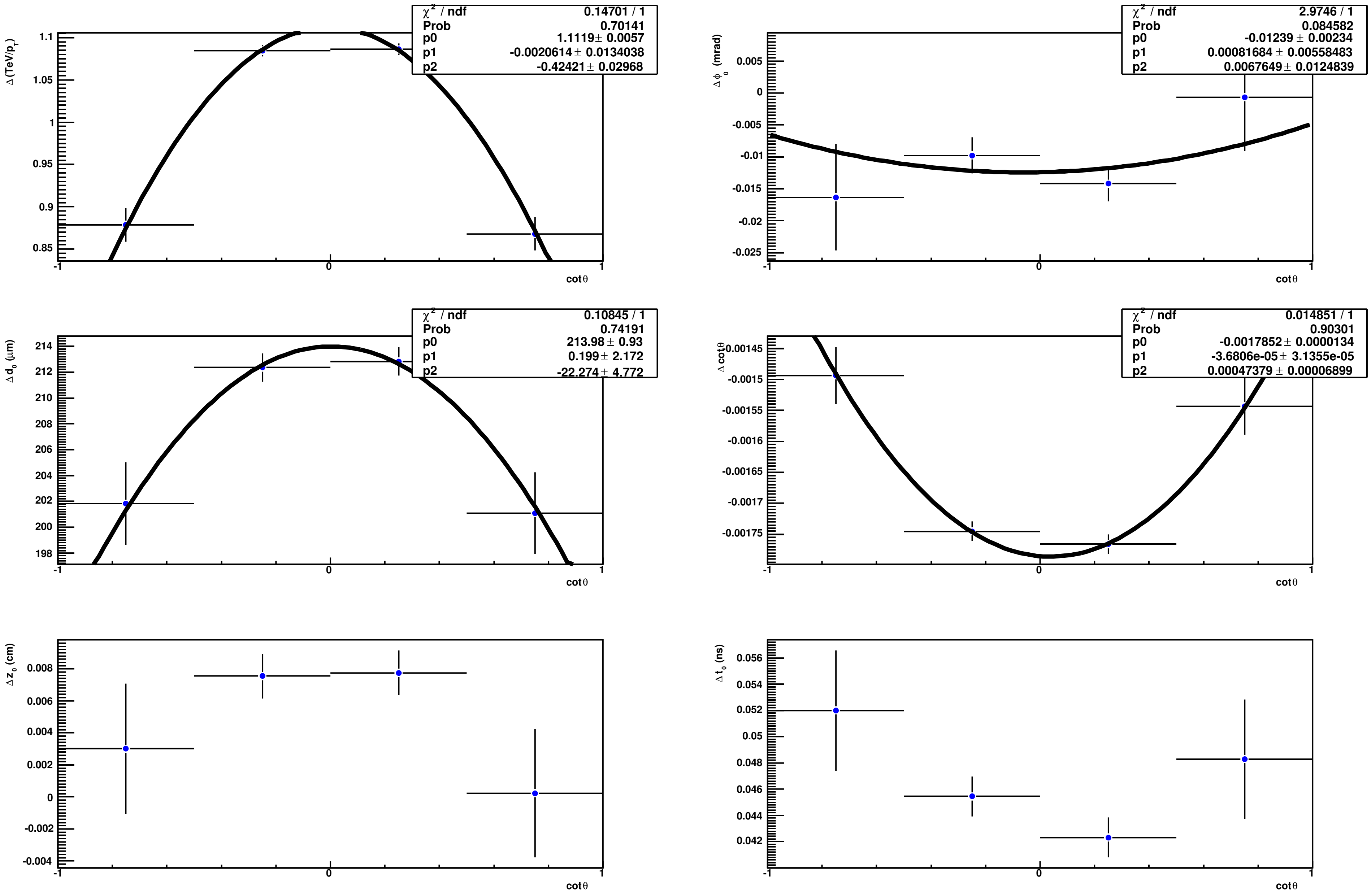
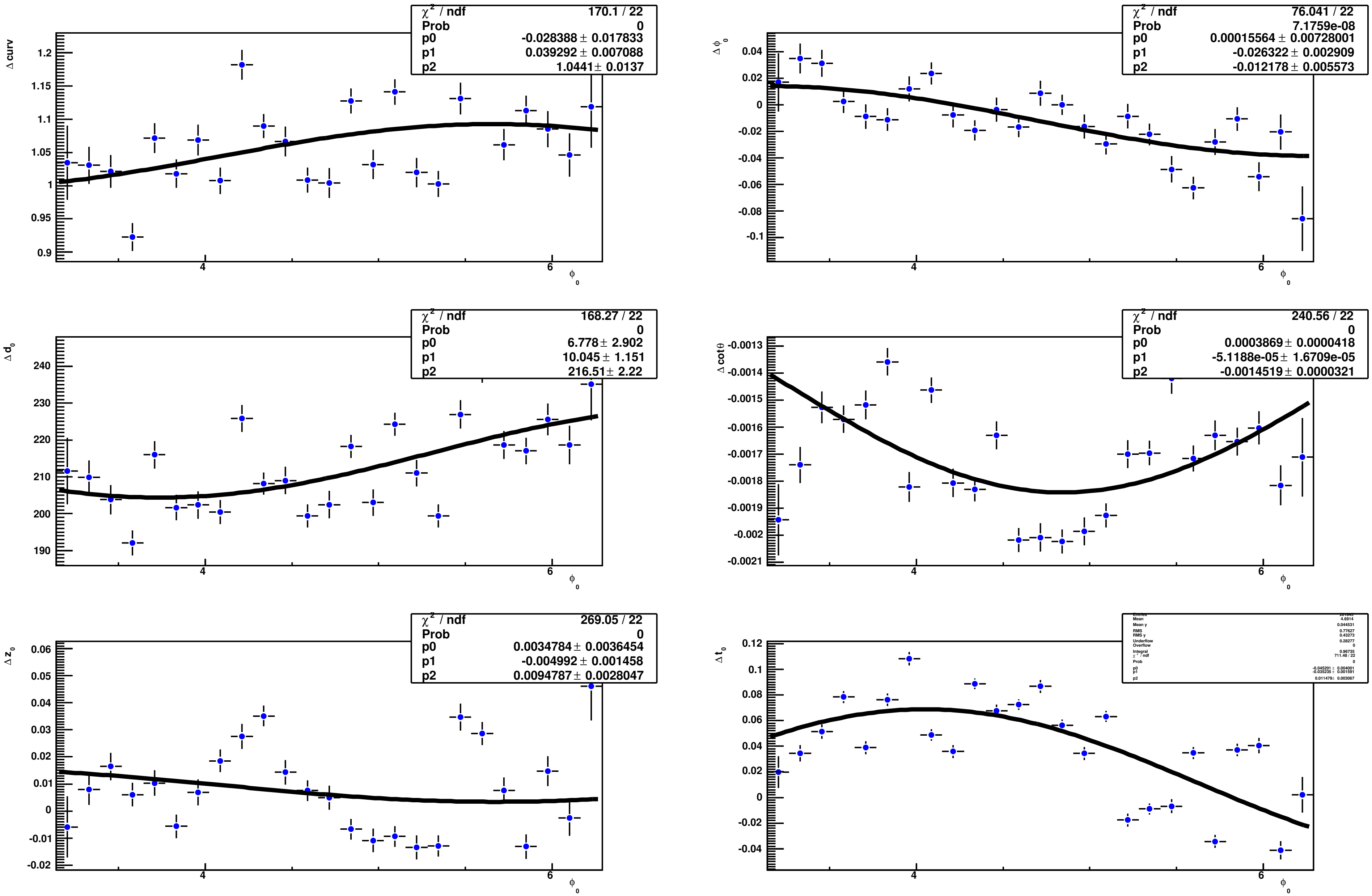

cosmics
Entries 201860
Mean 1.0635
RMS 1.9158
Underflow 7.94
Overflow 9.668
Integral 1.7794e+05
Δ(TeV/p_T)
cosmics
Entries 201860
Mean -0.01166
RMS 0.78966
Underflow 6.728
Overflow 6.94
Integral 1.7794e+05
Δφ_0 (mrad)
cosmics
Entries 201860
Mean 211.38
RMS 312.88
Underflow 3.576
Overflow 4.152
Integral 1.7795e+05
Δd_0 (μm)
cosmics
Entries 201860
Mean -0.0017301
RMS 0.0045119
Underflow 0.788
Overflow 2.788
Integral 1.7794e+05
Δcotθ
cosmics
Entries 201860
Mean 0.0070982
RMS 0.3929
Underflow 7.152
Overflow 5.94
Integral 1.7794e+05
Δz_0 (cm)
cosmics
Entries 201860
Mean 0.044534
RMS 0.43272
Underflow 4.728
Overflow 7.728
Integral 1.7795e+05
Δt_0 (ns)

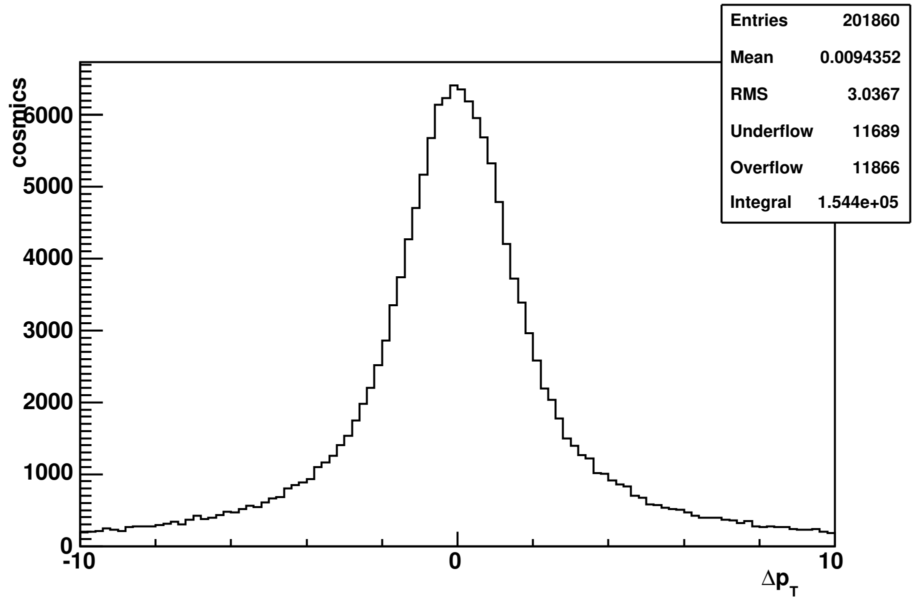


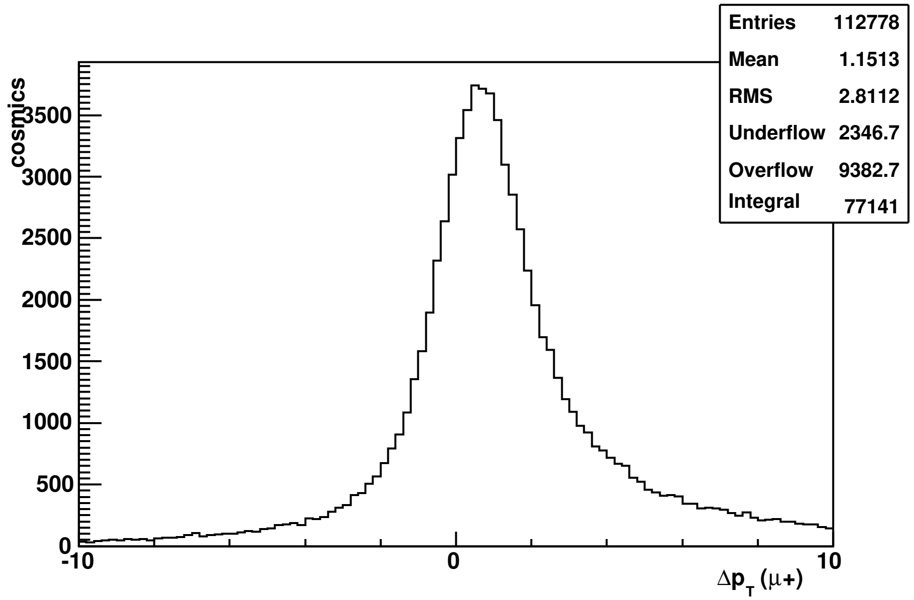
χ² / ndf 45.581 / 21
Prob 0.0014521
p0 1.3292 ± 0.0062
p1 0.00015457 ± 0.00013675
p2 -5.2296e-05 ± 9.0158e-07
p3 -6.7428e-08 ± 1.2098e-08
Δ(TeV/p_T)
z_0
χ² / ndf 31.621 / 19
Prob 0.034467
p0 0.017215 ± 0.008679
p1 -0.038411 ± 0.010394
Δφ_0 (mrad)
z_0
χ² / ndf 164.04 / 21
Prob 0
p0 264.22 ± 1.01
p1 0.18971 ± 0.02222
p2 -0.010383 ± 0.000147
p3 -2.4835e-05 ± 1.9782e-06
Δd_0 (μm)
z_0
χ² / ndf 159.54 / 21
Prob 0
p0 -0.0023468 ± 0.0000147
p1 1.4467e-06 ± 3.2207e-07
p2 1.215e-07 ± 2.128e-09
p3 8.0972e-11 ± 2.8545e-11
Δcotθ
z_0
Δz_0 (cm)
z_0
Δt_0 (ns)
z_0

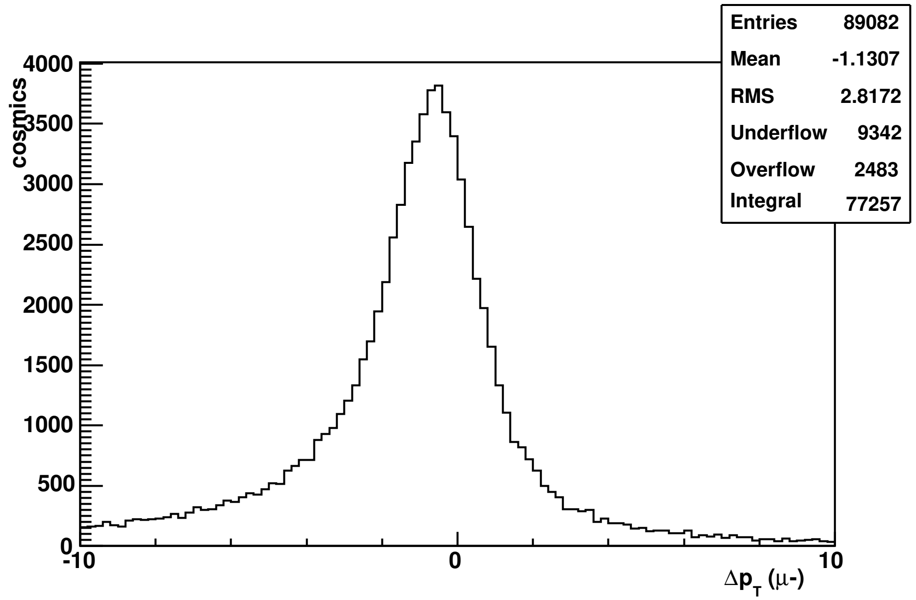

χ2 / ndf 0.14701 / 1
Prob 0.70141
p0 1.1119 ± 0.0057
p1 -0.0020614 ± 0.0134038
p2 -0.42421 ± 0.02968
Δ(TeV/pT)
cotθ
χ2 / ndf 2.9746 / 1
Prob 0.084582
p0 -0.01239 ± 0.00234
p1 0.00081684 ± 0.00558483
p2 0.0067649 ± 0.0124839
Δ φ0 (mrad)
cotθ
χ2 / ndf 0.10845 / 1
Prob 0.74191
p0 213.98 ± 0.93
p1 0.199 ± 2.172
p2 -22.274 ± 4.772
Δ d0 (μm)
cotθ
χ2 / ndf 0.014851 / 1
Prob 0.90301
p0 -0.0017852 ± 0.0000134
p1 -3.6806e-05 ± 3.1355e-05
p2 0.00047379 ± 0.00006899
Δ cotθ
cotθ
Δ z0 (cm)
cotθ
Δ t0 (ns)
cotθ

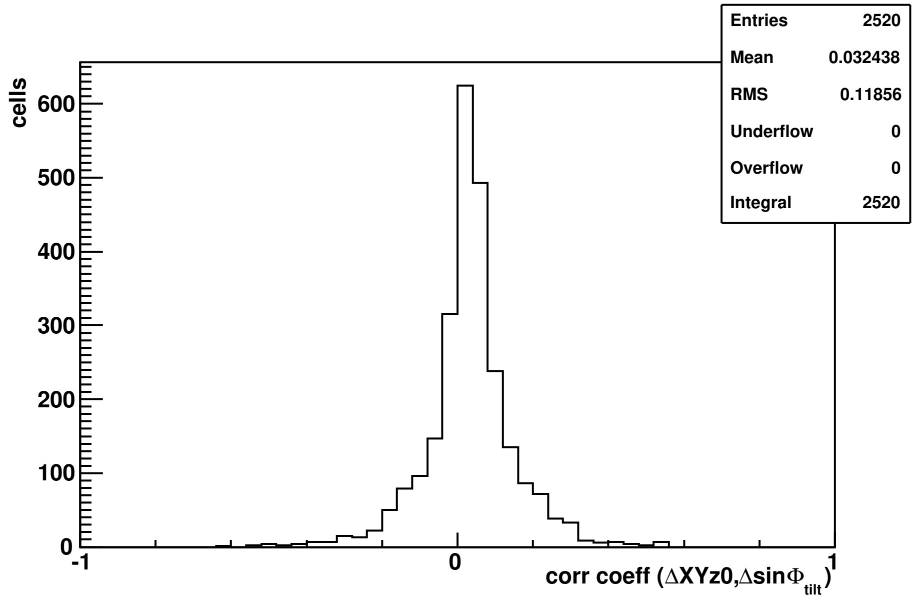


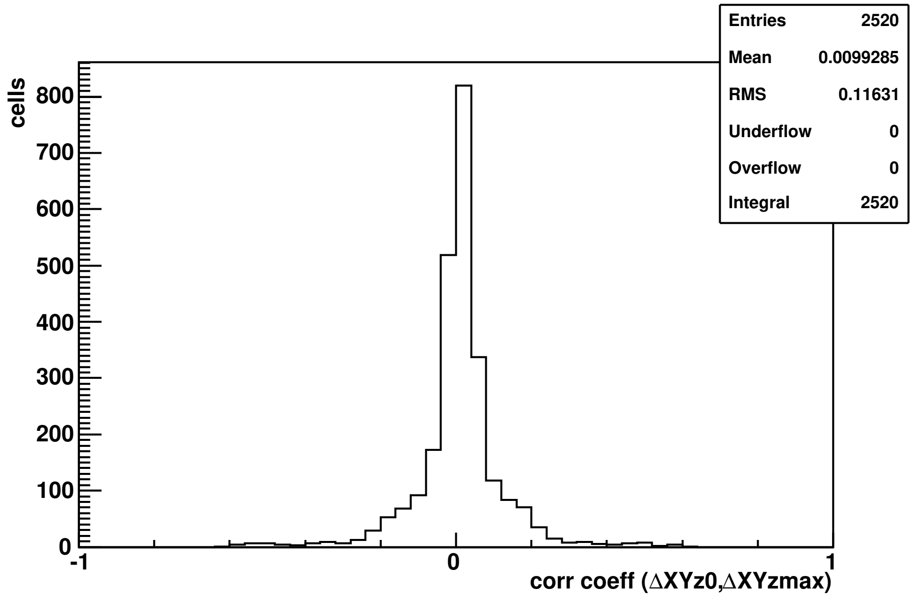
χ² / ndf 170.1 / 22
Prob 0
p0 -0.028388 ± 0.017833
p1 0.039292 ± 0.007088
p2 1.0441 ± 0.0137
Δ curv
ϕ_0
χ² / ndf 76.041 / 22
Prob 7.1759e-08
p0 0.00015564 ± 0.00728001
p1 -0.026322 ± 0.002909
p2 -0.012178 ± 0.005573
$\Delta\phi_0$
χ² / ndf 168.27 / 22
Prob 0
p0 6.778 ± 2.902
p1 10.045 ± 1.151
p2 216.51 ± 2.22
Δd_0
χ² / ndf 240.56 / 22
Prob 0
p0 0.0003869 ± 0.0000418
p1 -5.1188e-05 ± 1.6709e-05
p2 -0.0014519 ± 0.0000321
$\Delta \cot\theta$
χ² / ndf 269.05 / 22
Prob 0
p0 0.0034784 ± 0.0036454
p1 -0.004992 ± 0.001458
p2 0.0094787 ± 0.0028047
Δz_0
Δt_0

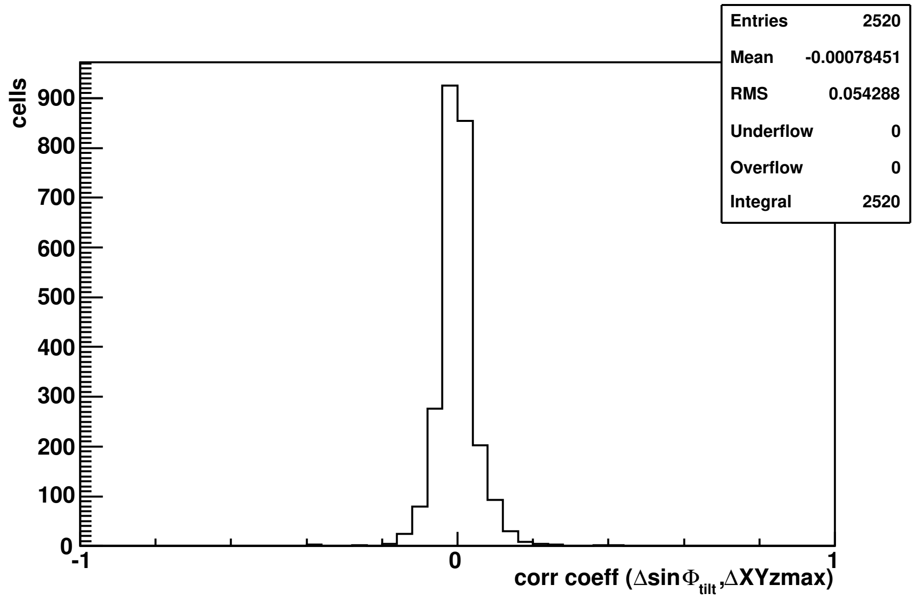

Entries 201860
Mean 0.0094352
RMS 3.0367
Underflow 11689
Overflow 11866
Integral 1.544e+05
cosmics
Δp_T

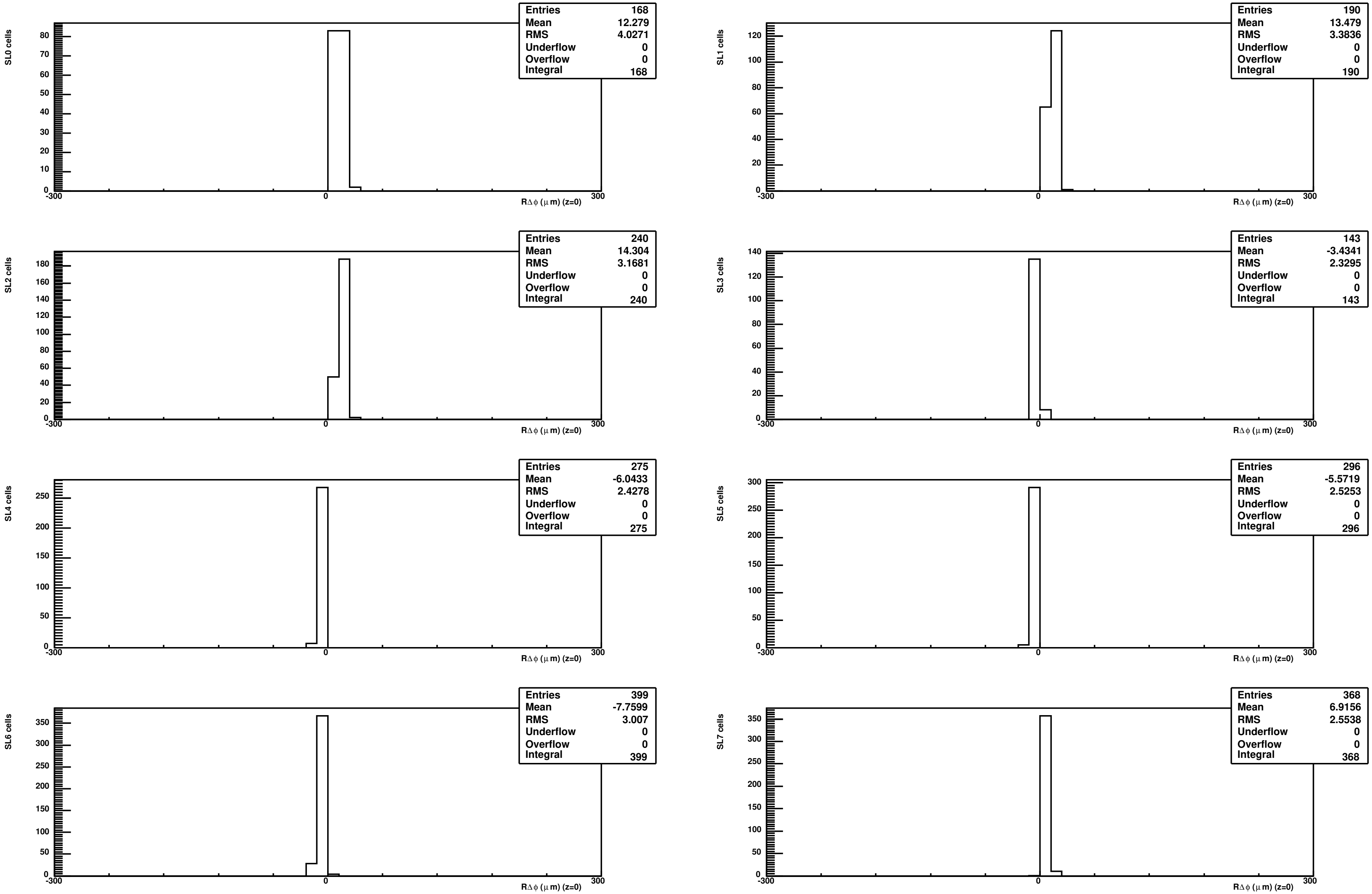

Entries 112778
Mean 1.1513
RMS 2.8112
Underflow 2346.7
Overflow 9382.7
Integral 77141
cosmics
Δp_T (μ+)

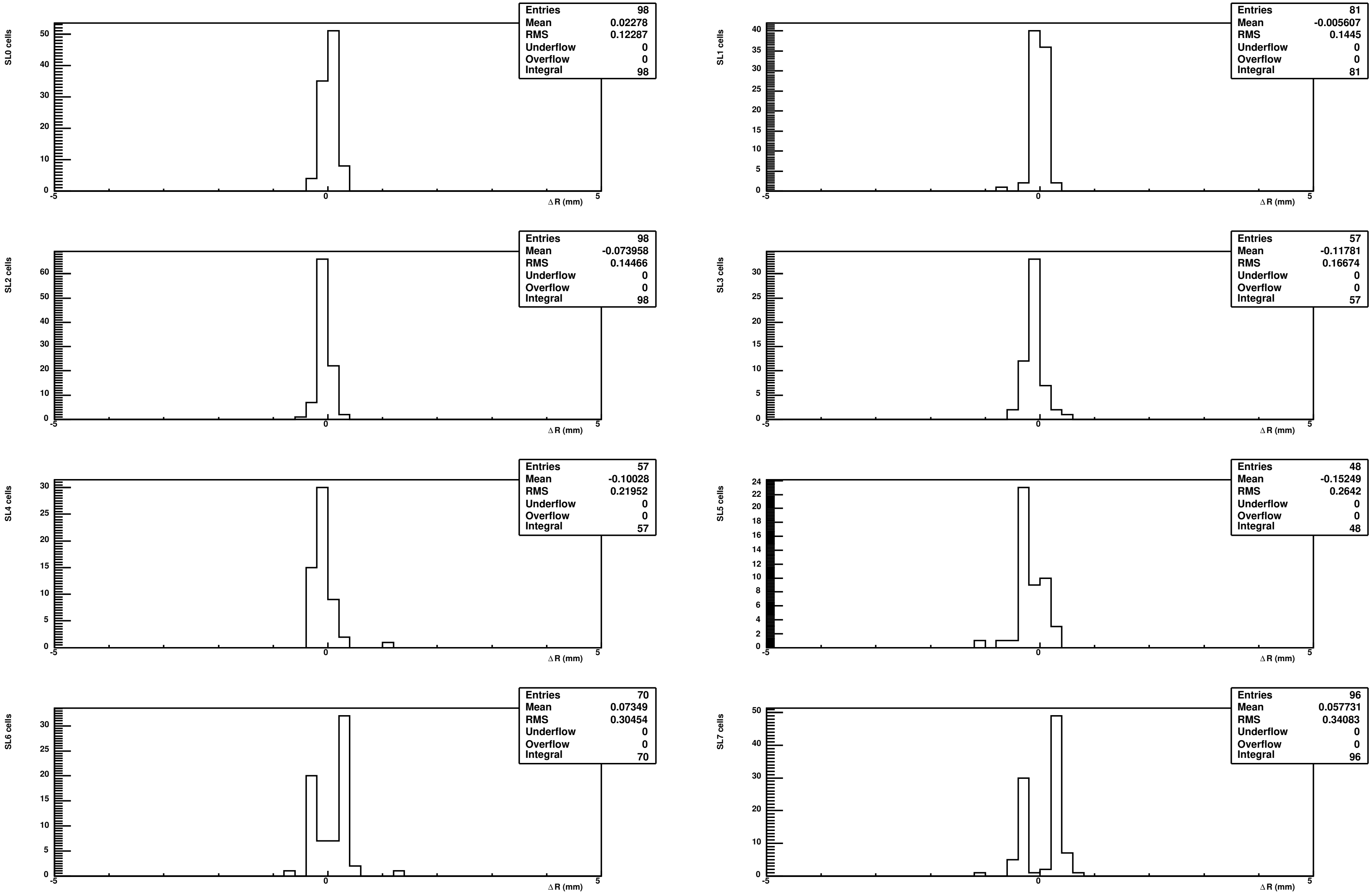

Entries 89082
Mean -1.1307
RMS 2.8172
Underflow 9342
Overflow 2483
Integral 77257
cosmics
Δp_T (μ-)

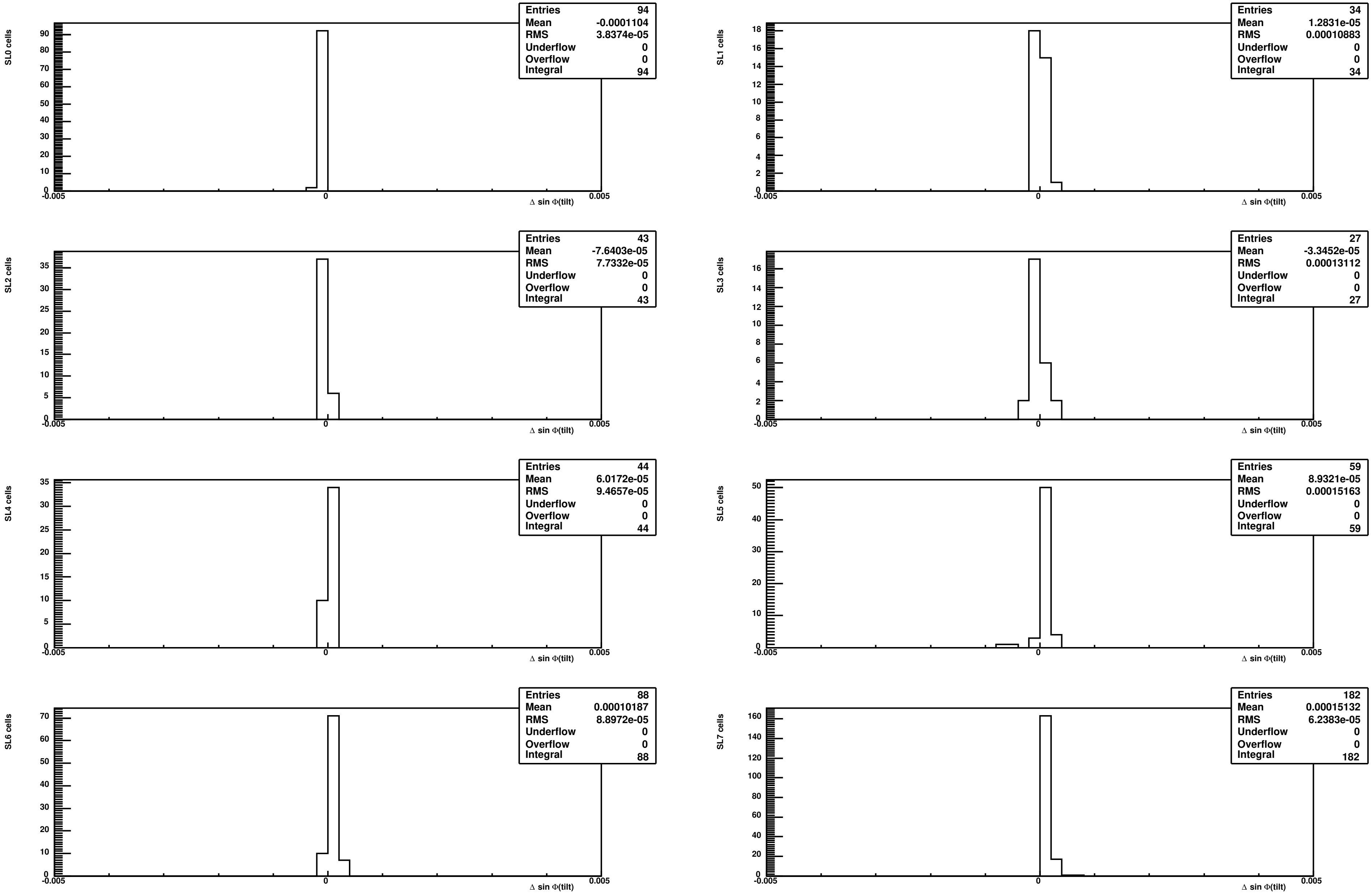

Entries 2520
Mean 0.032438
RMS 0.11856
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔsinΦ_tilt)


Entries 2520
Mean 0.0099285
RMS 0.11631
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔXYzmax)

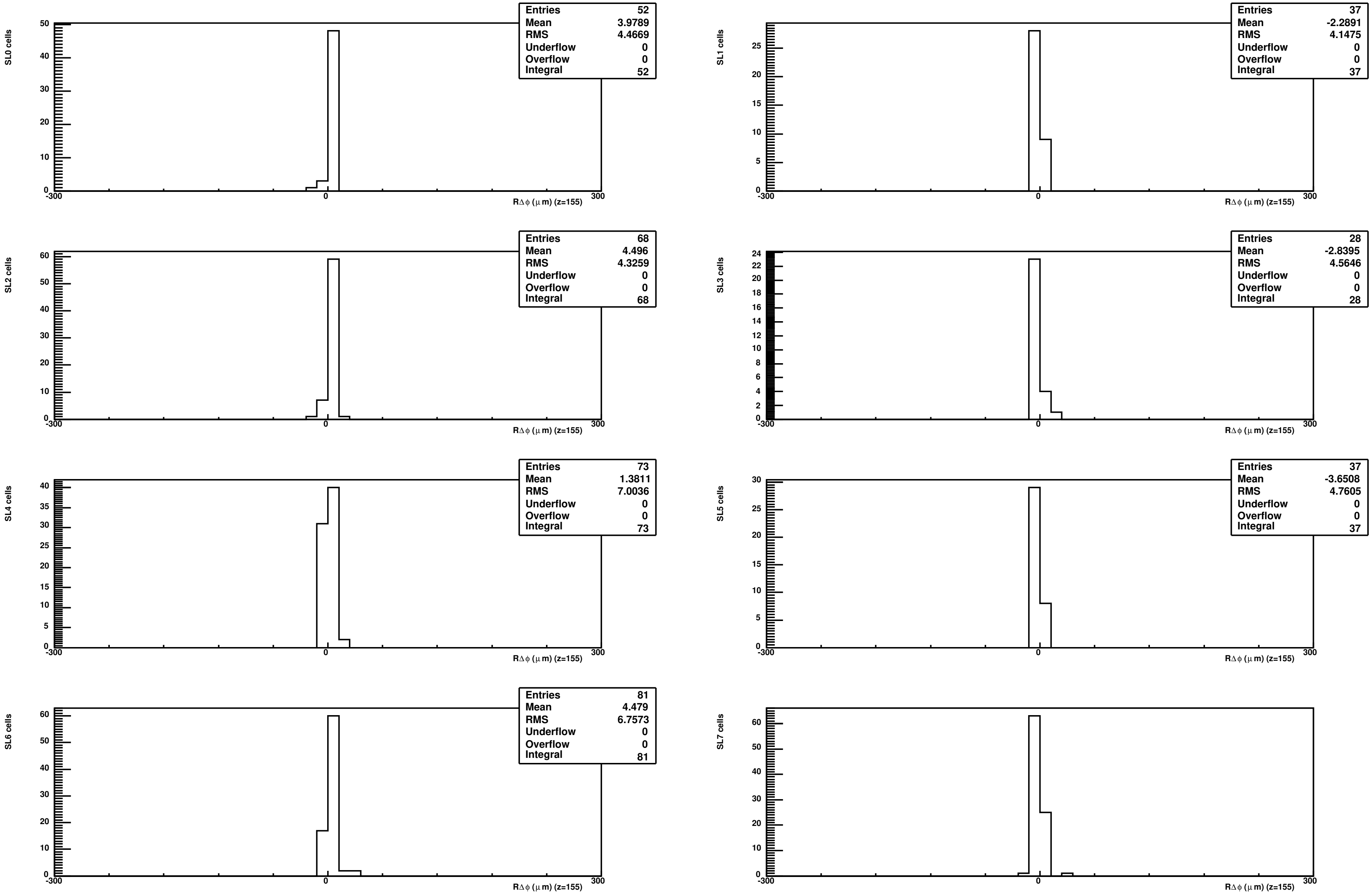

Entries 2520
Mean -0.00078451
RMS 0.054288
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔsinΦ_tilt,ΔXYzmax)

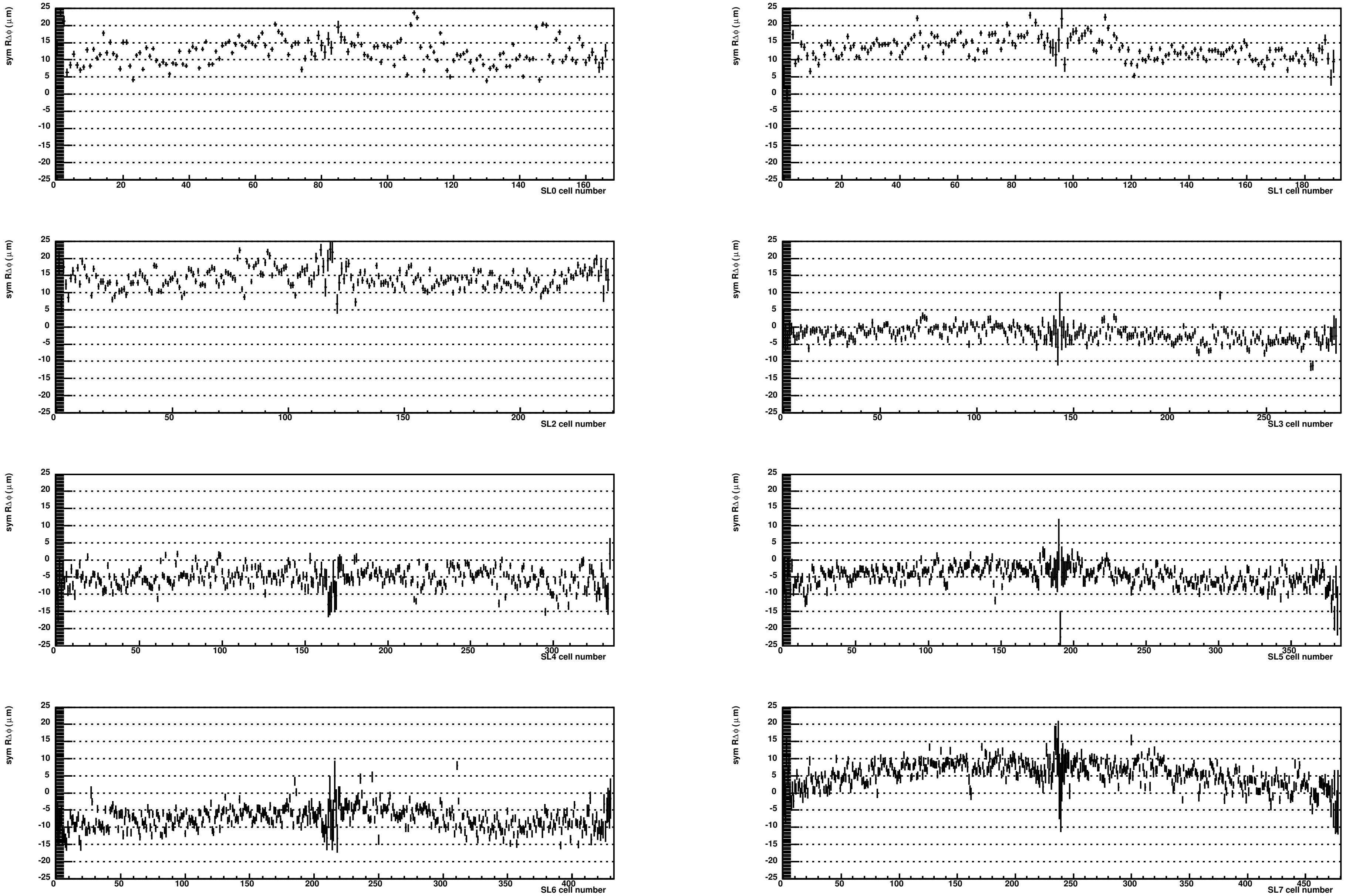

SL0 cells
Entries 168
Mean 12.279
RMS 4.0271
Underflow 0
Overflow 0
Integral 168
RΔφ (μm) (z=0)
SL1 cells
Entries 190
Mean 13.479
RMS 3.3836
Underflow 0
Overflow 0
Integral 190
RΔφ (μm) (z=0)
SL2 cells
Entries 240
Mean 14.304
RMS 3.1681
Underflow 0
Overflow 0
Integral 240
RΔφ (μm) (z=0)
SL3 cells
Entries 143
Mean -3.4341
RMS 2.3295
Underflow 0
Overflow 0
Integral 143
RΔφ (μm) (z=0)
SL4 cells
Entries 275
Mean -6.0433
RMS 2.4278
Underflow 0
Overflow 0
Integral 275
RΔφ (μm) (z=0)
SL5 cells
Entries 296
Mean -5.5719
RMS 2.5253
Underflow 0
Overflow 0
Integral 296
RΔφ (μm) (z=0)
SL6 cells
Entries 399
Mean -7.7599
RMS 3.007
Underflow 0
Overflow 0
Integral 399
RΔφ (μm) (z=0)
SL7 cells
Entries 368
Mean 6.9156
RMS 2.5538
Underflow 0
Overflow 0
Integral 368
RΔφ (μm) (z=0)


SL0 cells
Entries 98
Mean 0.02278
RMS 0.12287
Underflow 0
Overflow 0
Integral 98
ΔR (mm)
SL1 cells
Entries 81
Mean -0.005607
RMS 0.1445
Underflow 0
Overflow 0
Integral 81
ΔR (mm)
SL2 cells
Entries 98
Mean -0.073958
RMS 0.14466
Underflow 0
Overflow 0
Integral 98
ΔR (mm)
SL3 cells
Entries 57
Mean -0.11781
RMS 0.16674
Underflow 0
Overflow 0
Integral 57
ΔR (mm)
SL4 cells
Entries 57
Mean -0.10028
RMS 0.21952
Underflow 0
Overflow 0
Integral 57
ΔR (mm)
SL5 cells
Entries 48
Mean -0.15249
RMS 0.2642
Underflow 0
Overflow 0
Integral 48
ΔR (mm)
SL6 cells
Entries 70
Mean 0.07349
RMS 0.30454
Underflow 0
Overflow 0
Integral 70
ΔR (mm)
SL7 cells
Entries 96
Mean 0.057731
RMS 0.34083
Underflow 0
Overflow 0
Integral 96
ΔR (mm)

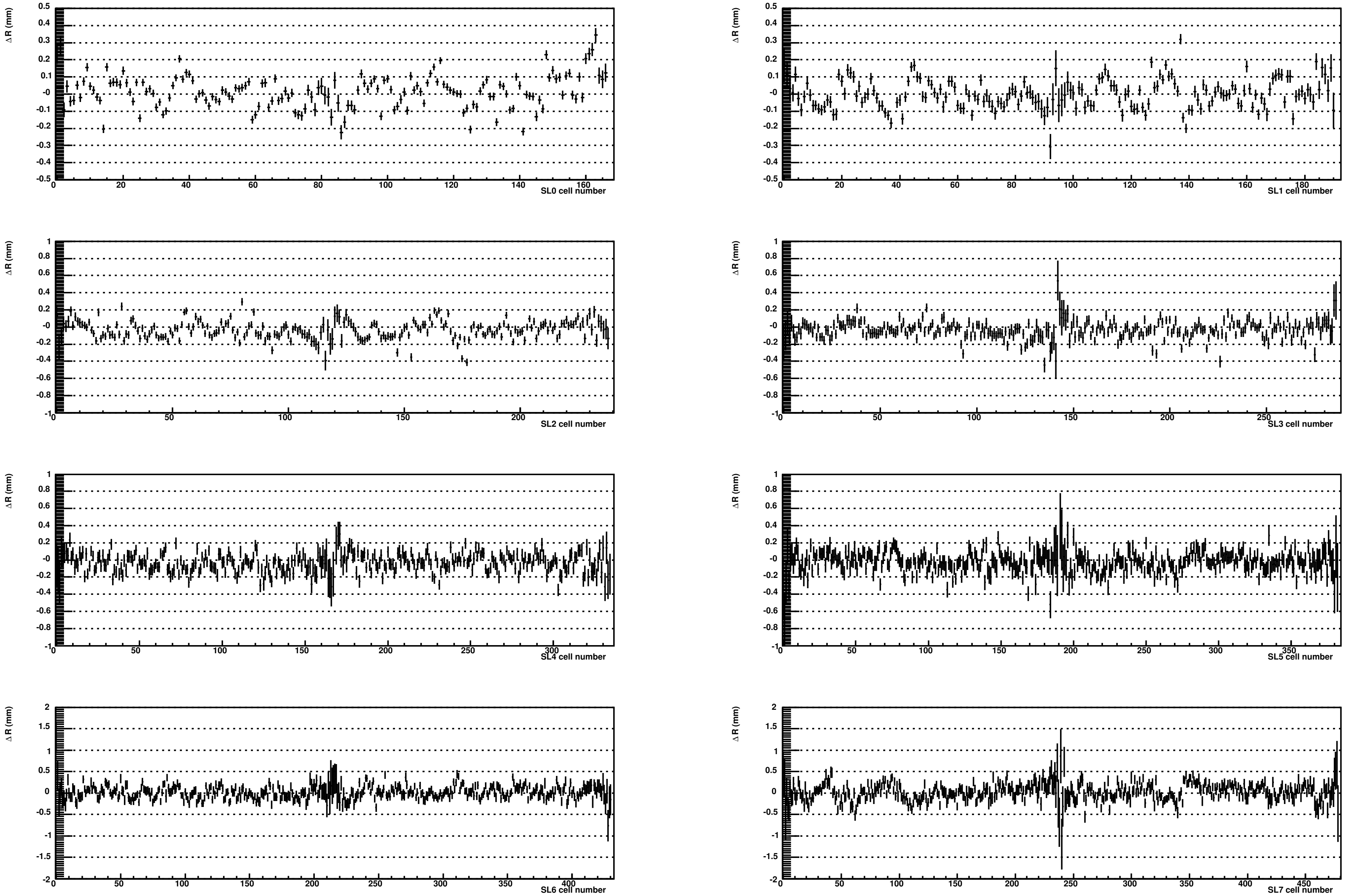


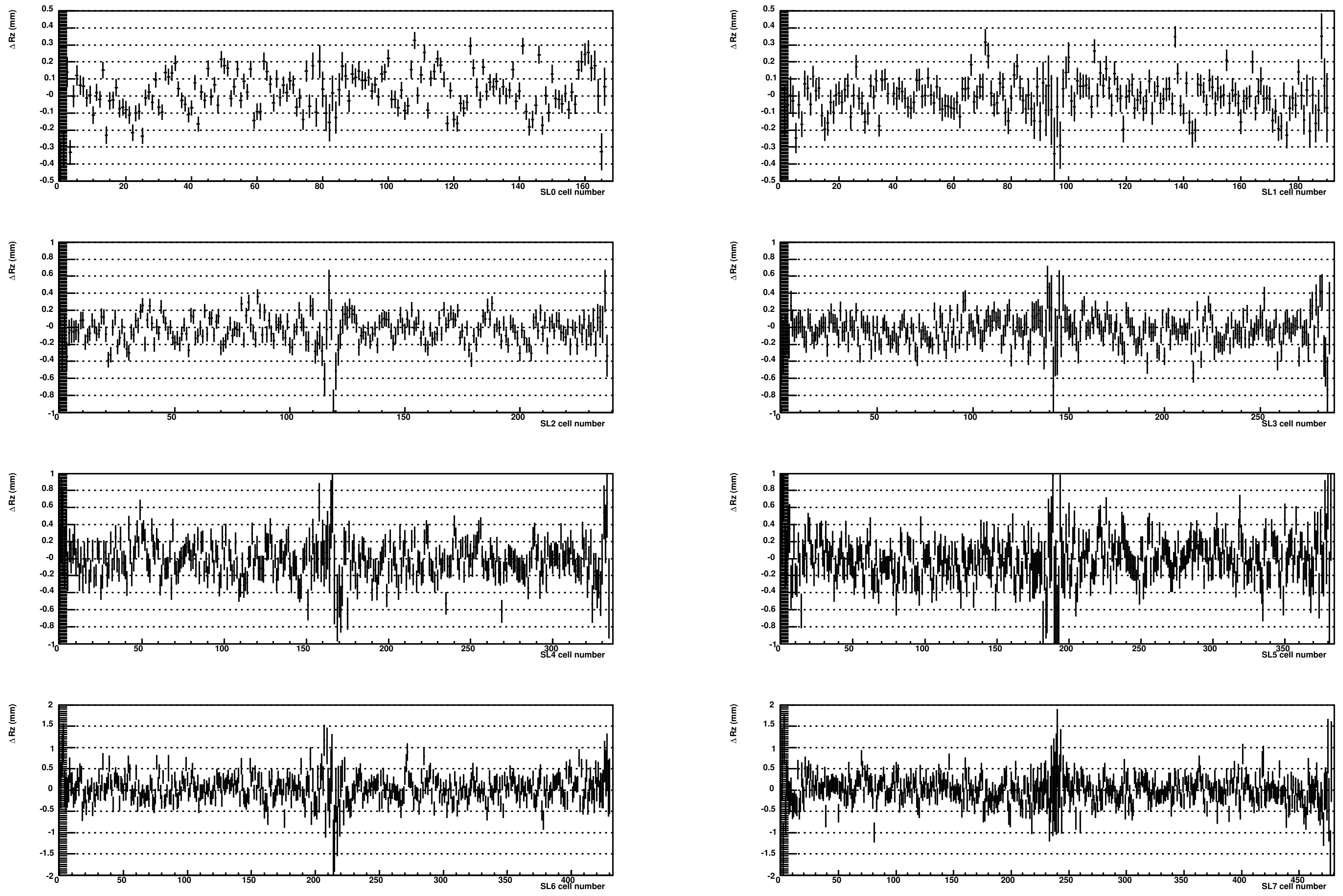
SL0 cells
Entries 94
Mean -0.0001104
RMS 3.8374e-05
Underflow 0
Overflow 0
Integral 94
Δ sin Φ(tilt)
SL1 cells
Entries 34
Mean 1.2831e-05
RMS 0.00010883
Underflow 0
Overflow 0
Integral 34
Δ sin Φ(tilt)
SL2 cells
Entries 43
Mean -7.6403e-05
RMS 7.7332e-05
Underflow 0
Overflow 0
Integral 43
Δ sin Φ(tilt)
SL3 cells
Entries 27
Mean -3.3452e-05
RMS 0.00013112
Underflow 0
Overflow 0
Integral 27
Δ sin Φ(tilt)
SL4 cells
Entries 44
Mean 6.0172e-05
RMS 9.4657e-05
Underflow 0
Overflow 0
Integral 44
Δ sin Φ(tilt)
SL5 cells
Entries 59
Mean 8.9321e-05
RMS 0.00015163
Underflow 0
Overflow 0
Integral 59
Δ sin Φ(tilt)
SL6 cells
Entries 88
Mean 0.00010187
RMS 8.8972e-05
Underflow 0
Overflow 0
Integral 88
Δ sin Φ(tilt)
SL7 cells
Entries 182
Mean 0.00015132
RMS 6.2383e-05
Underflow 0
Overflow 0
Integral 182
Δ sin Φ(tilt)

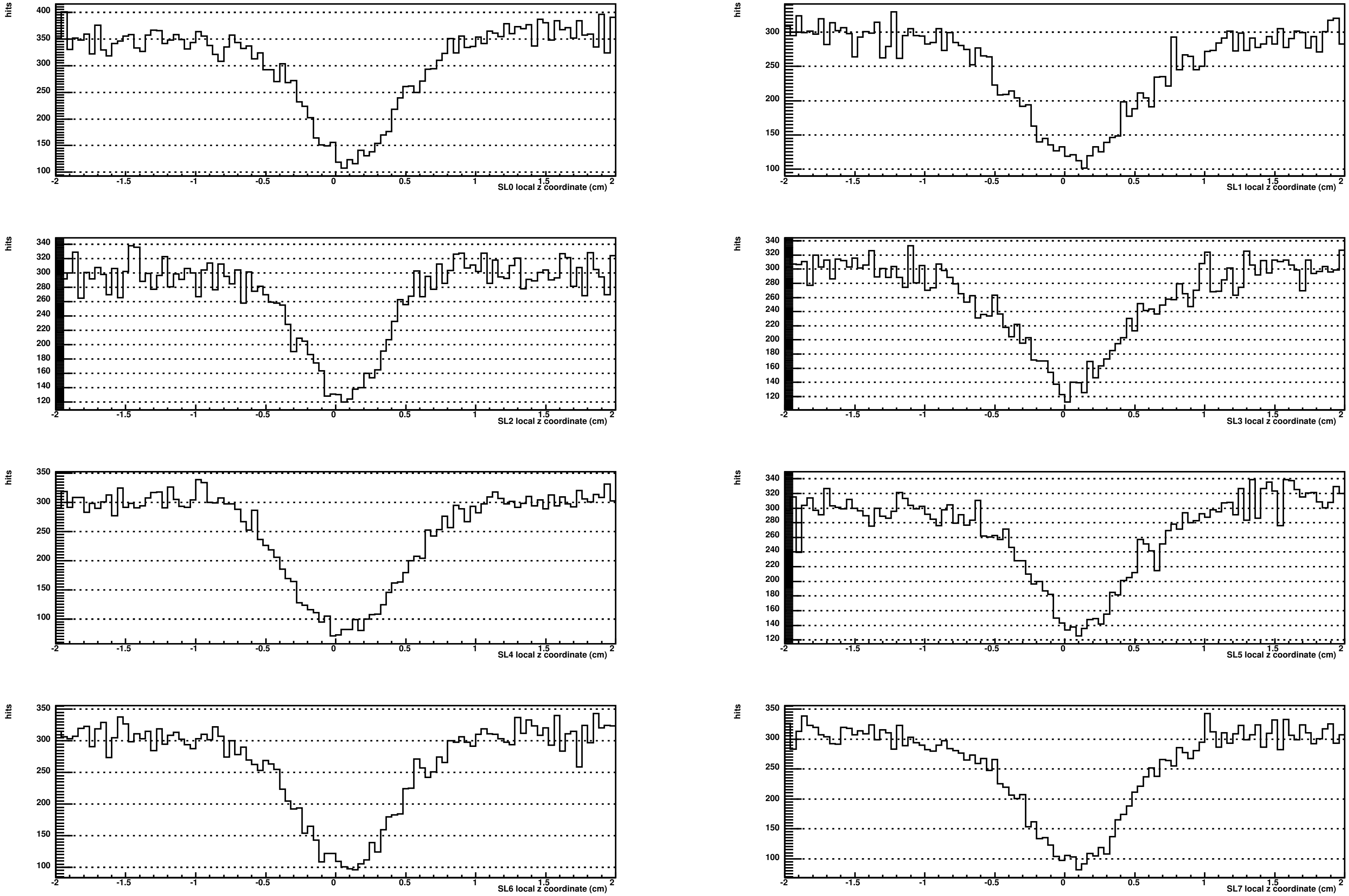

SL0 cells
Entries 52
Mean 3.9789
RMS 4.4669
Underflow 0
Overflow 0
Integral 52
RΔϕ (μm) (z=155)
SL1 cells
Entries 37
Mean -2.2891
RMS 4.1475
Underflow 0
Overflow 0
Integral 37
RΔϕ (μm) (z=155)
SL2 cells
Entries 68
Mean 4.496
RMS 4.3259
Underflow 0
Overflow 0
Integral 68
RΔϕ (μm) (z=155)
SL3 cells
Entries 28
Mean -2.8395
RMS 4.5646
Underflow 0
Overflow 0
Integral 28
RΔϕ (μm) (z=155)
SL4 cells
Entries 73
Mean 1.3811
RMS 7.0036
Underflow 0
Overflow 0
Integral 73
RΔϕ (μm) (z=155)
SL5 cells
Entries 37
Mean -3.6508
RMS 4.7605
Underflow 0
Overflow 0
Integral 37
RΔϕ (μm) (z=155)
SL6 cells
Entries 81
Mean 4.479
RMS 6.7573
Underflow 0
Overflow 0
Integral 81
RΔϕ (μm) (z=155)
SL7 cells
RΔϕ (μm) (z=155)

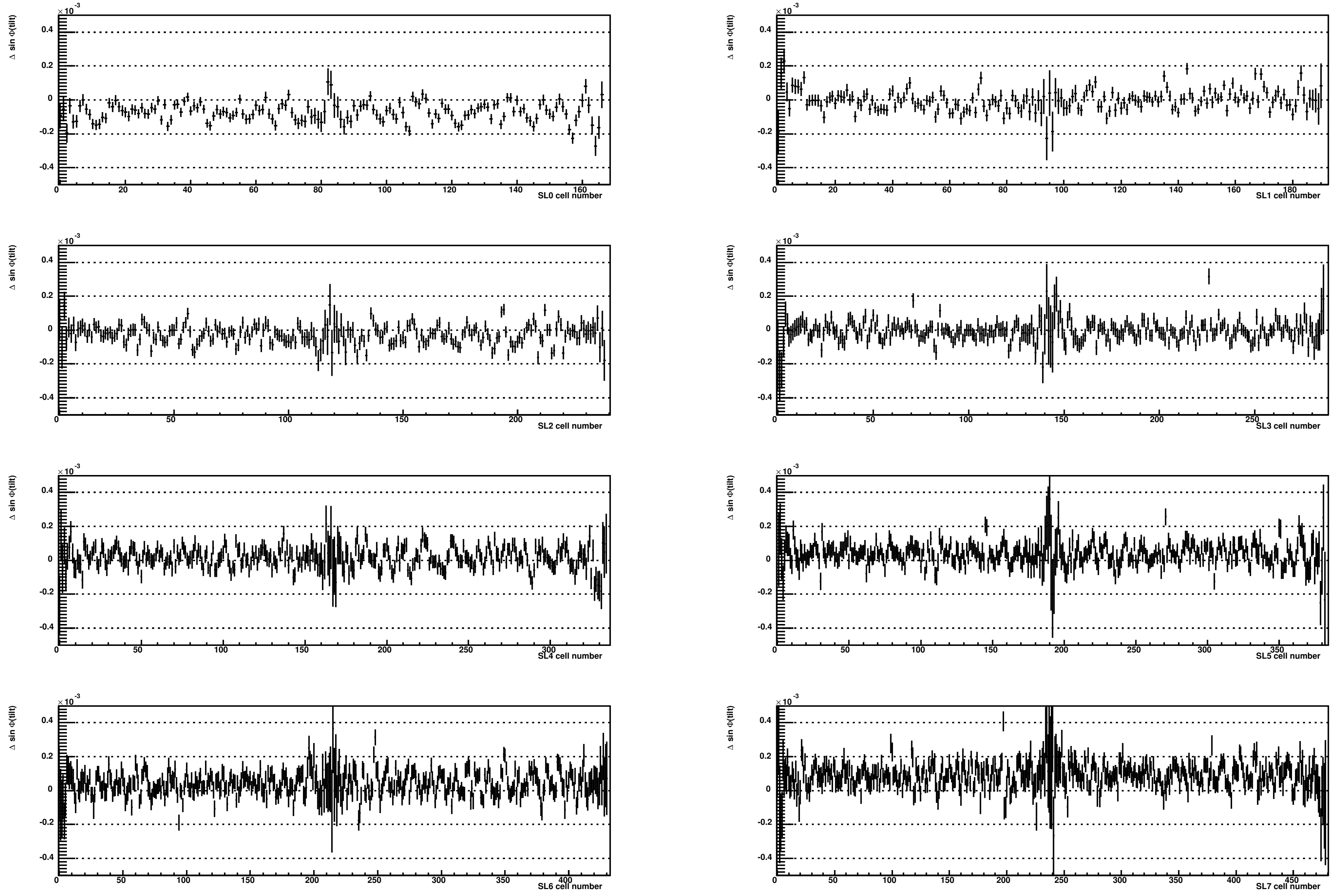


sym RΔϕ (μm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

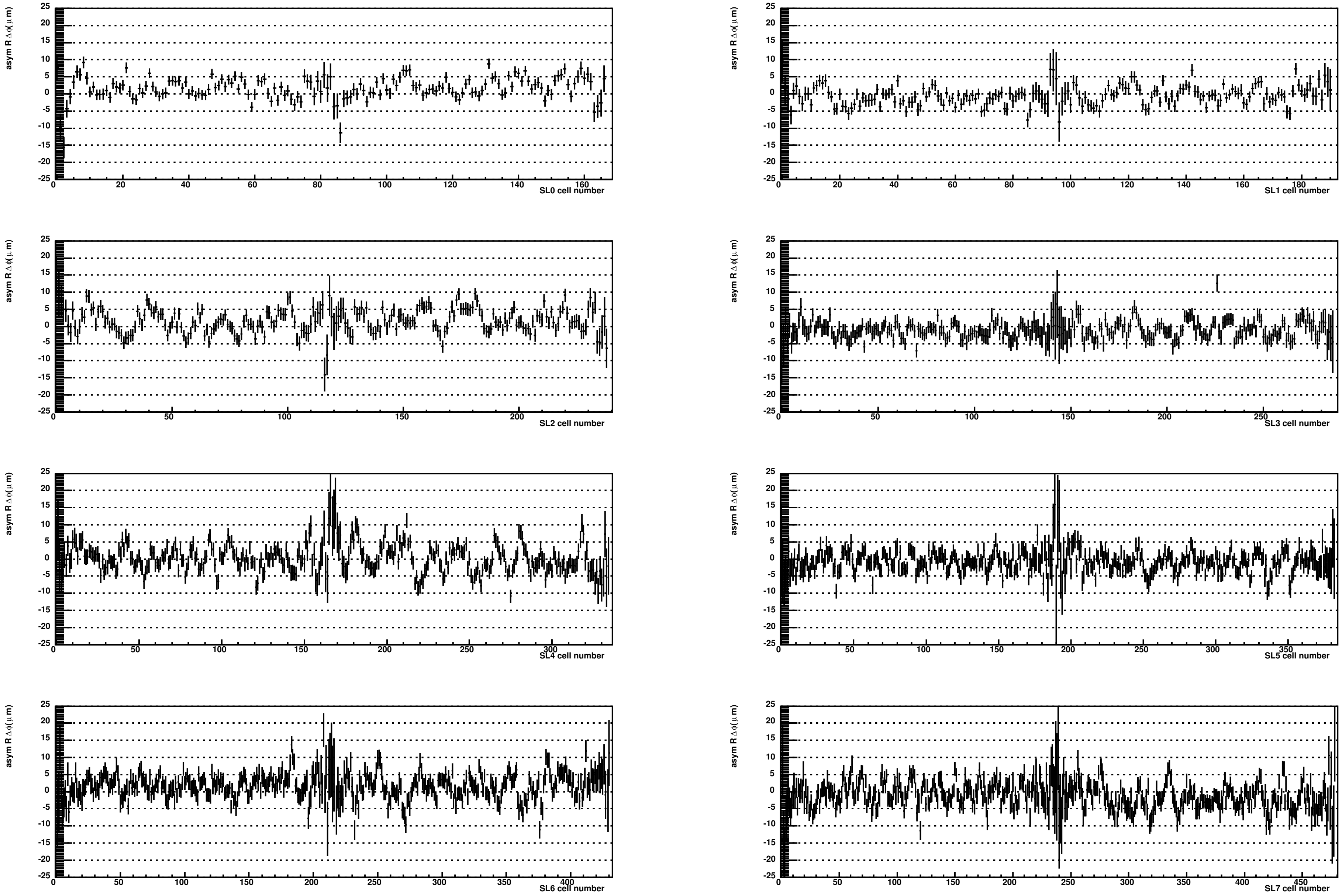

ΔR (mm)
SL0 cell number
ΔR (mm)
SL1 cell number
ΔR (mm)
SL2 cell number
ΔR (mm)
SL3 cell number
ΔR (mm)
SL4 cell number
ΔR (mm)
SL5 cell number
ΔR (mm)
SL6 cell number
ΔR (mm)
SL7 cell number


Δ Rz (mm)
SL0 cell number
Δ Rz (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

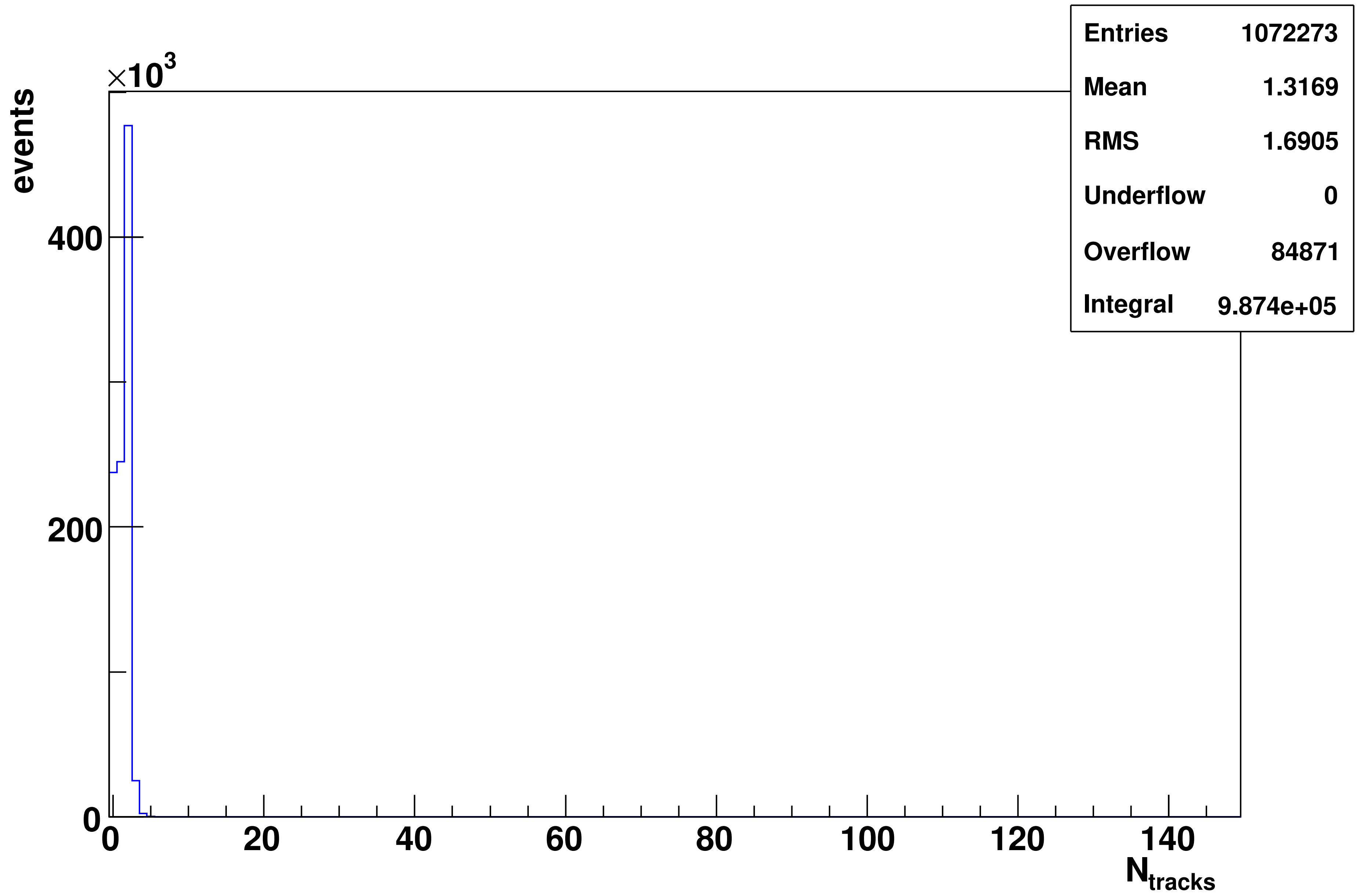

hits
SL0 local z coordinate (cm)
SL1 local z coordinate (cm)
SL2 local z coordinate (cm)
SL3 local z coordinate (cm)
SL4 local z coordinate (cm)
SL5 local z coordinate (cm)
SL6 local z coordinate (cm)
SL7 local z coordinate (cm)

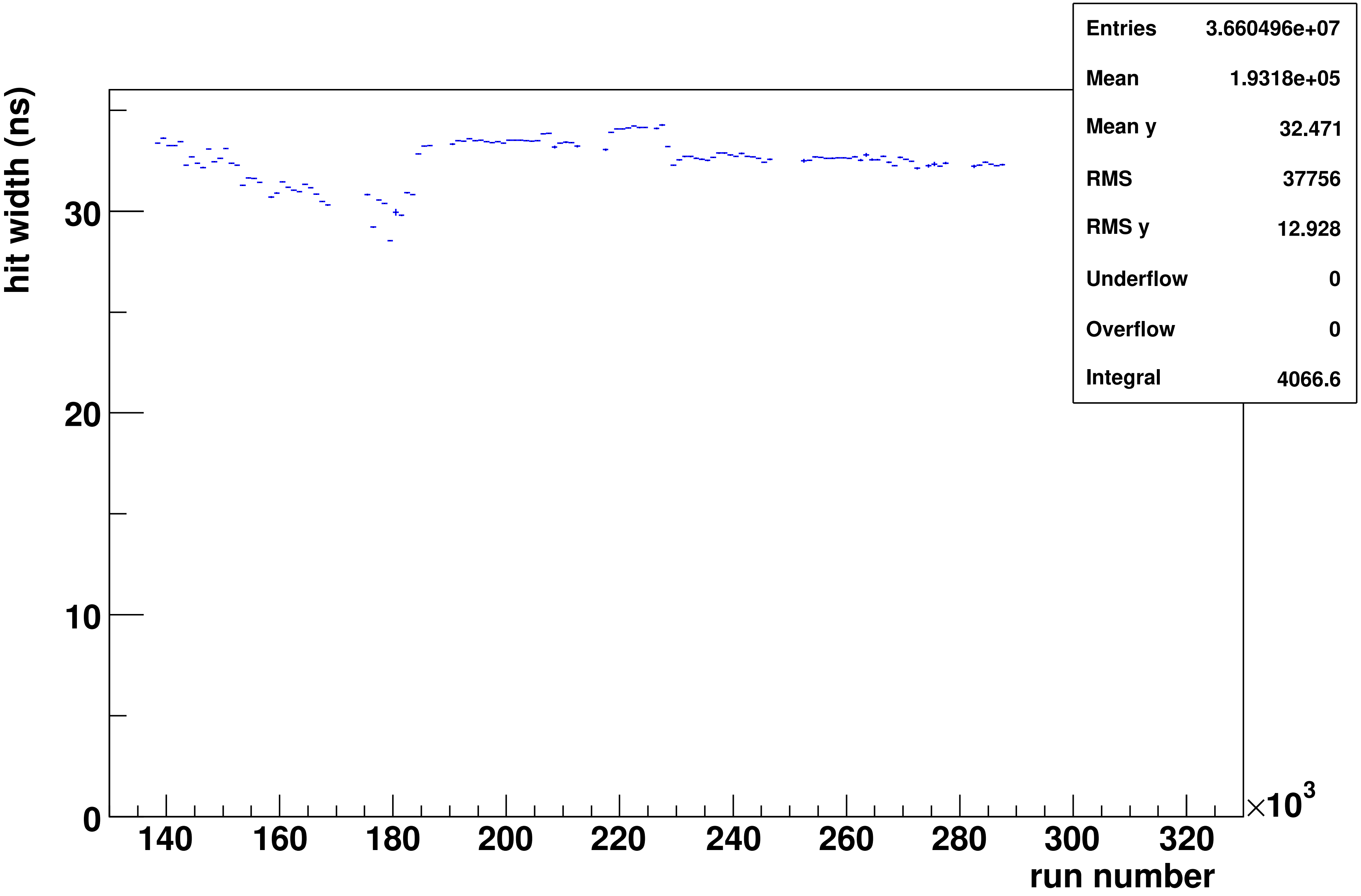


Δ sin Φ(tilt)
×10^-3
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

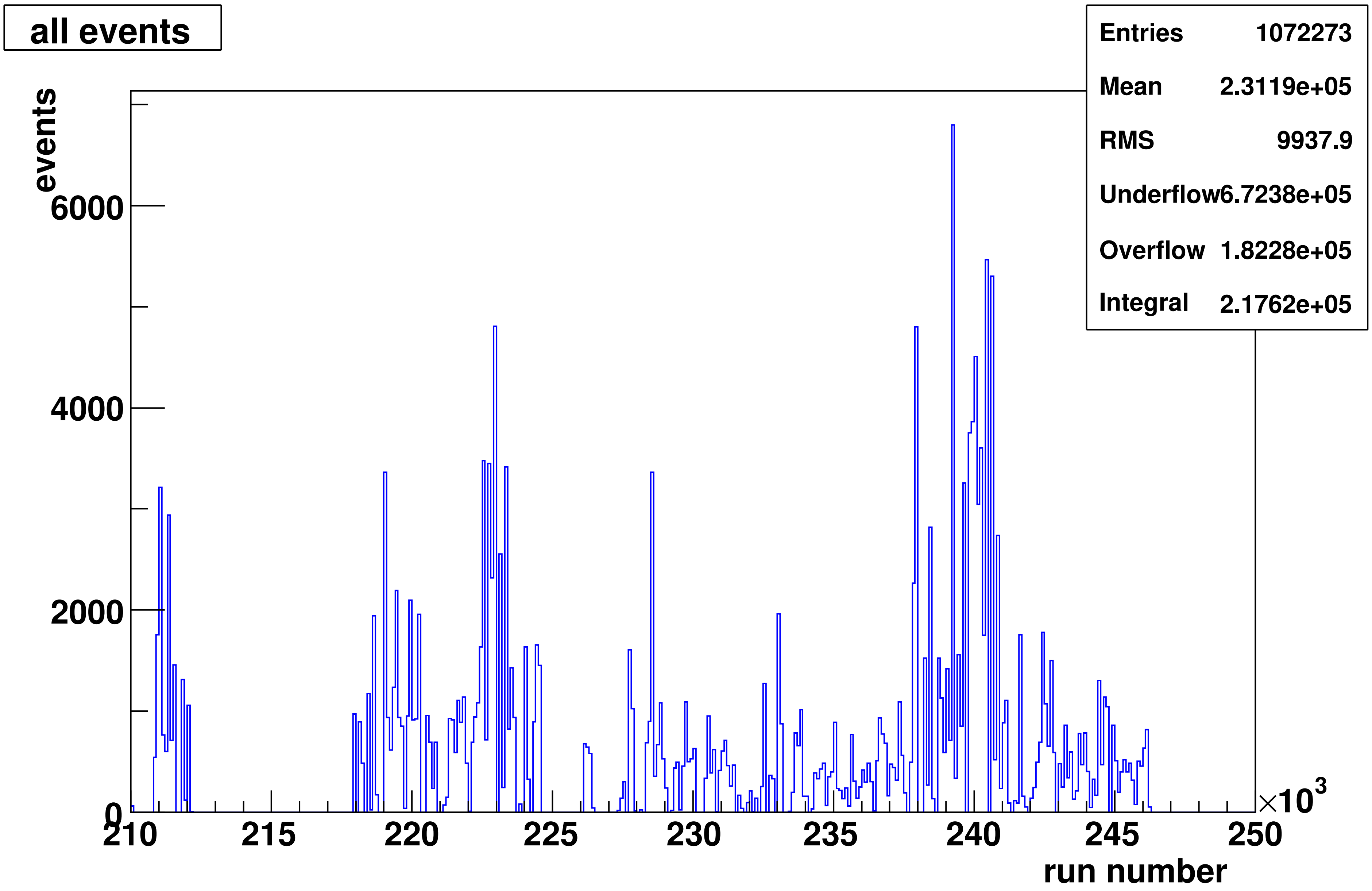


asym R Δφ(μ m)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

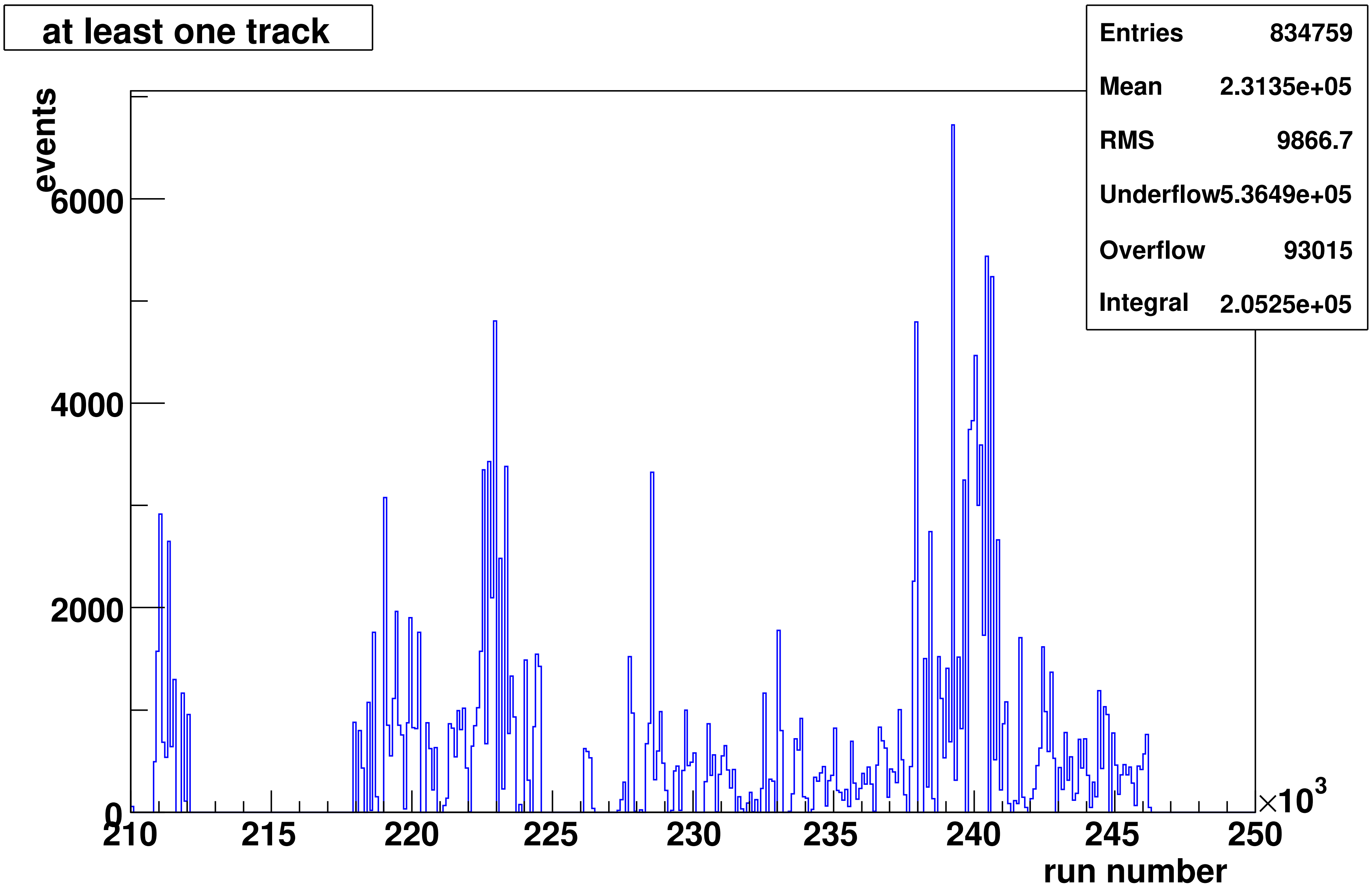

events
$\times 10^3$
400
200
0
0
20
40
60
80
100
120
140
N_{tracks}
Entries 1072273
Mean 1.3169
RMS 1.6905
Underflow 0
Overflow 84871
Integral 9.874e+05



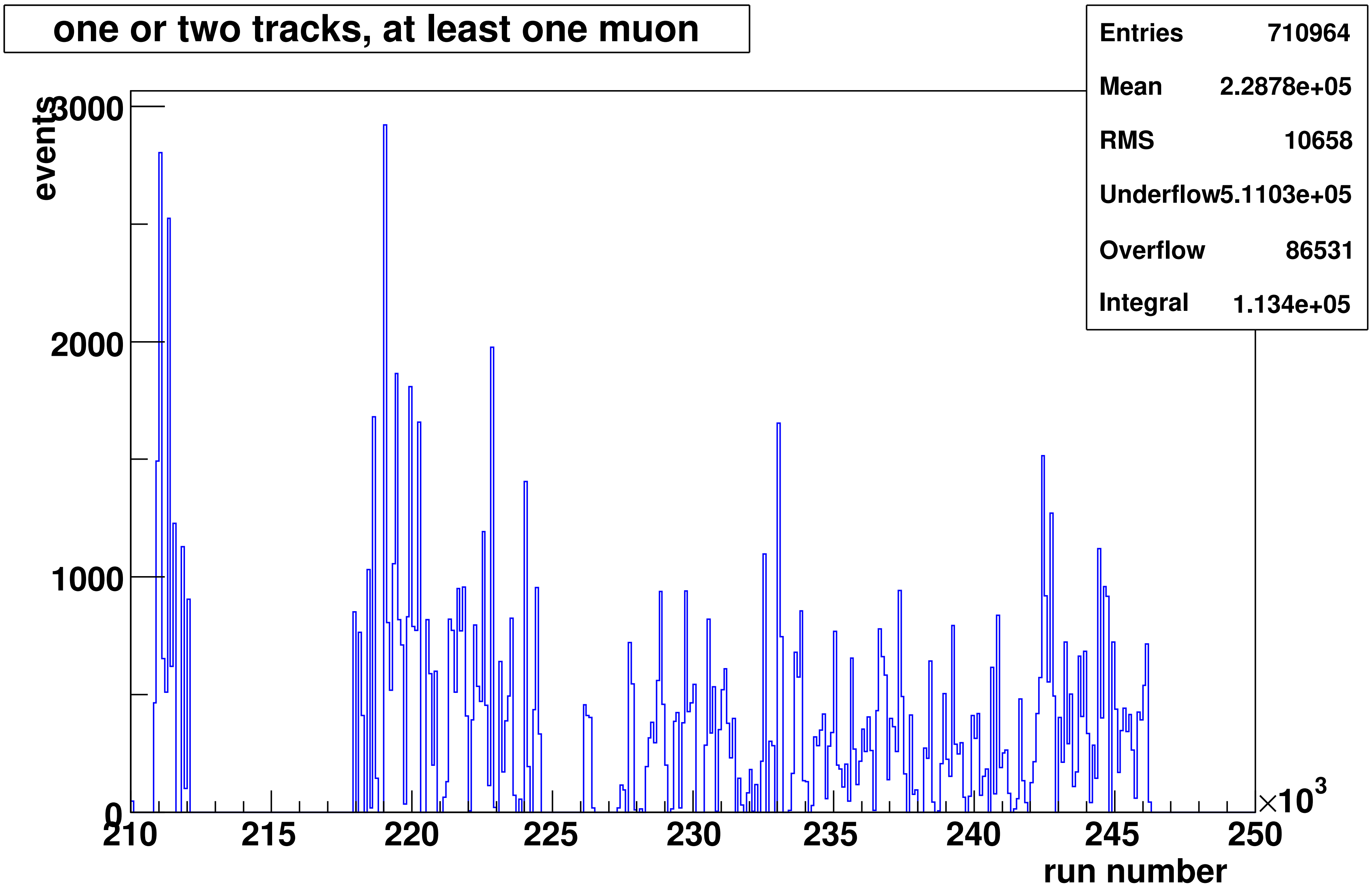
Entries 3.660496e+07
Mean 1.9318e+05
Mean y 32.471
RMS 37756
RMS y 12.928
Underflow 0
Overflow 0
Integral 4066.6
hit width (ns)
0
10
20
30
140
160
180
200
220
240
260
280
300
320
×10^3
run number

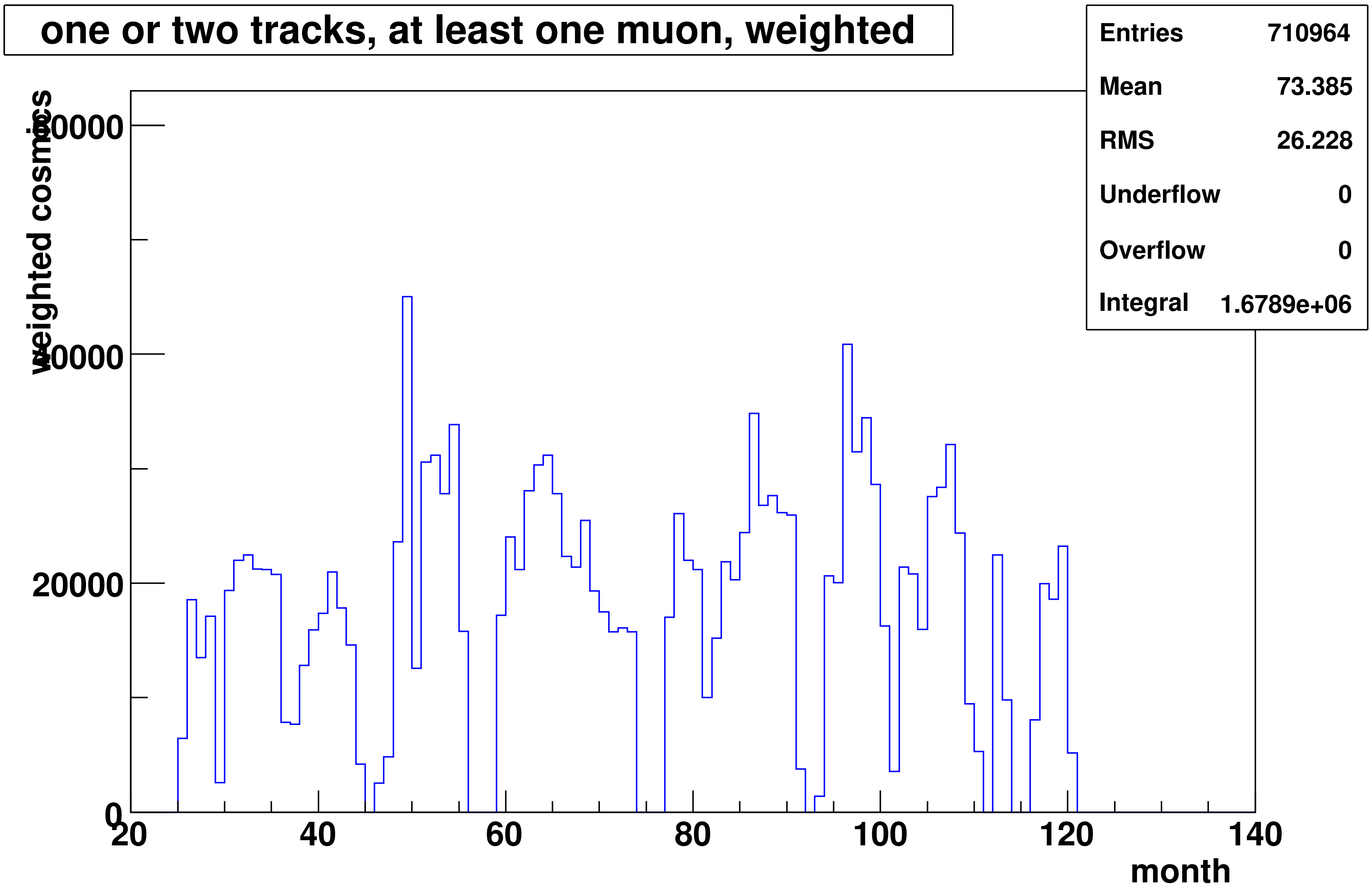


all events
Entries 1072273
Mean 2.3119e+05
RMS 9937.9
Underflow 6.7238e+05
Overflow 1.8228e+05
Integral 2.1762e+05
events
6000
4000
2000
0
210
215
220
225
230
235
240
245
250
×10³
run number

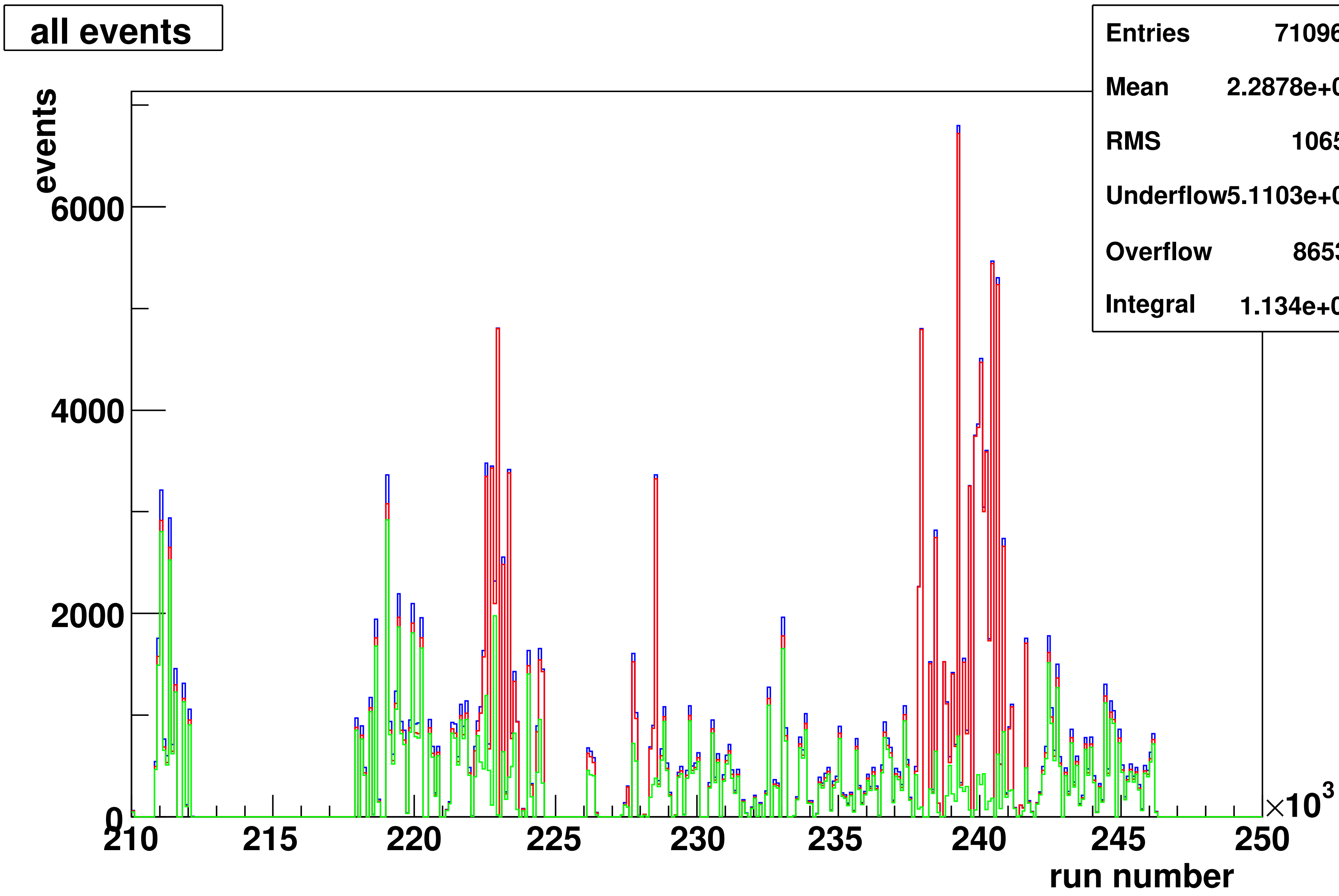


at least one track
Entries 834759
Mean 2.3135e+05
RMS 9866.7
Underflow5.3649e+05
Overflow 93015
Integral 2.0525e+05
events
0
2000
4000
6000
210
215
220
225
230
235
240
245
250
$\times 10^3$
run number

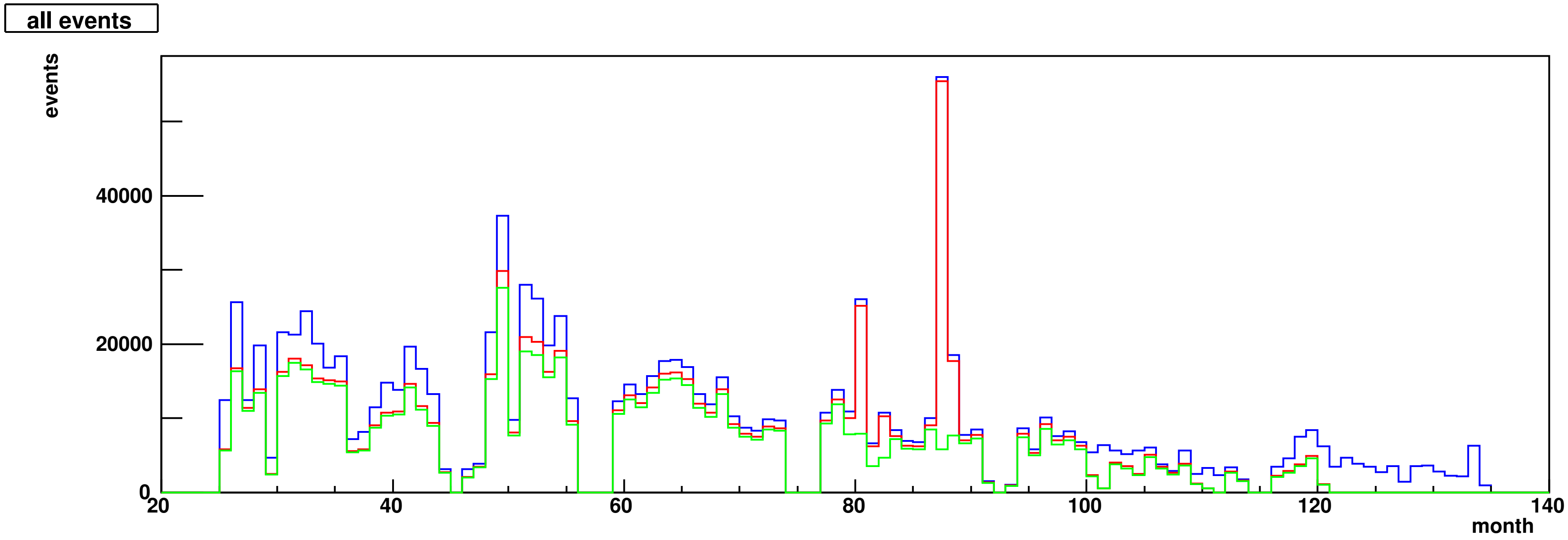

one or two tracks, at least one muon
Entries 710964
Mean 2.2878e+05
RMS 10658
Underflow5.1103e+05
Overflow 86531
Integral 1.134e+05
events
3000
2000
1000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

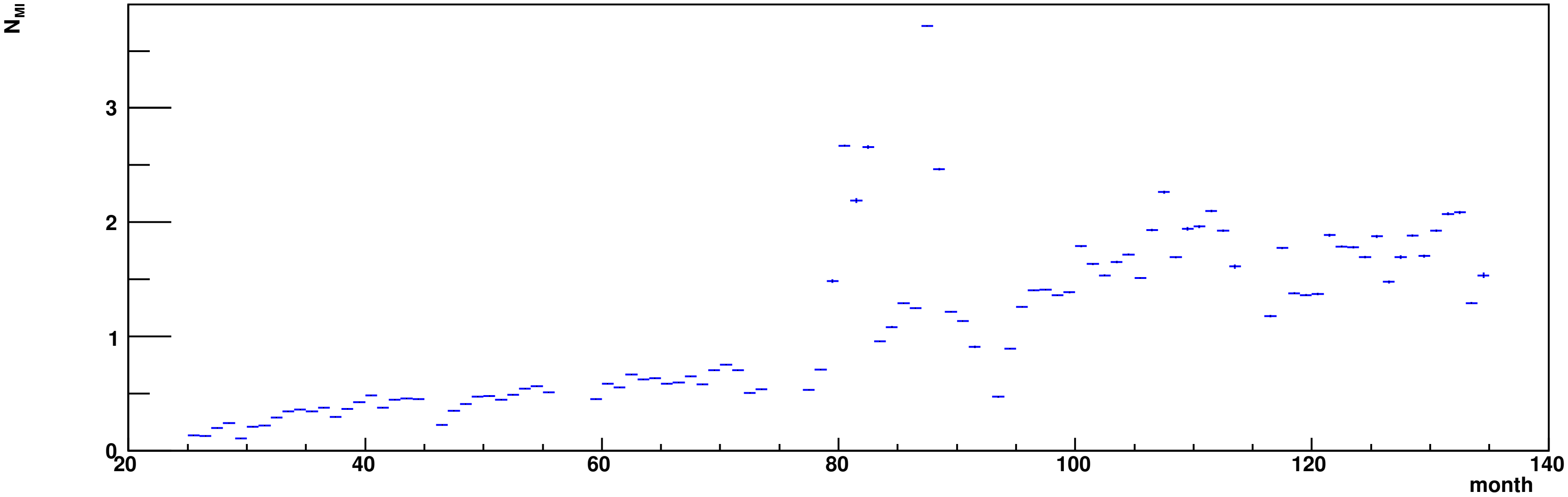


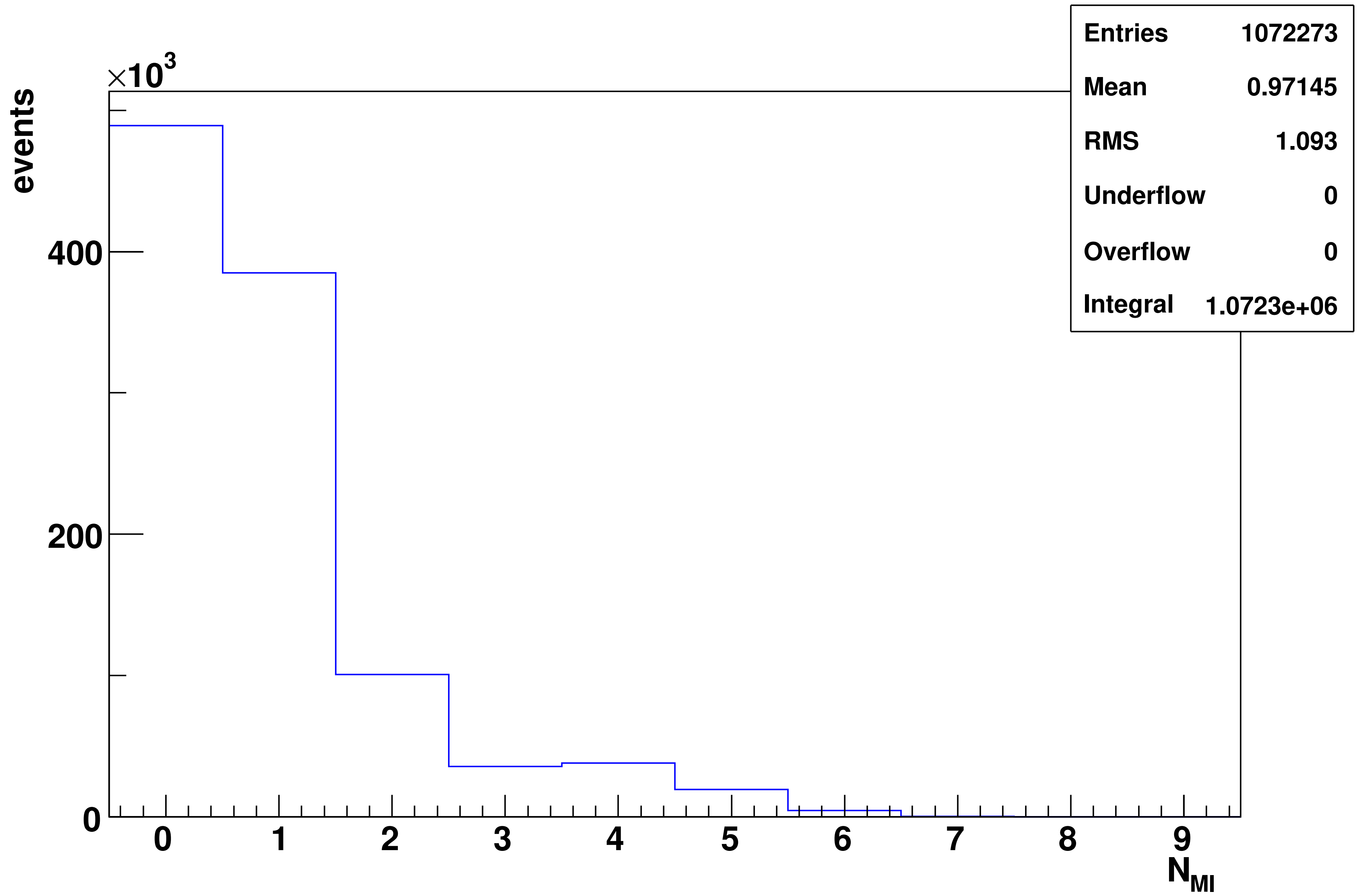
one or two tracks, at least one muon, weighted
Entries 710964
Mean 73.385
RMS 26.228
Underflow 0
Overflow 0
Integral 1.6789e+06
weighted cosmics
60000
40000
20000
0
20
40
60
80
100
120
140
month



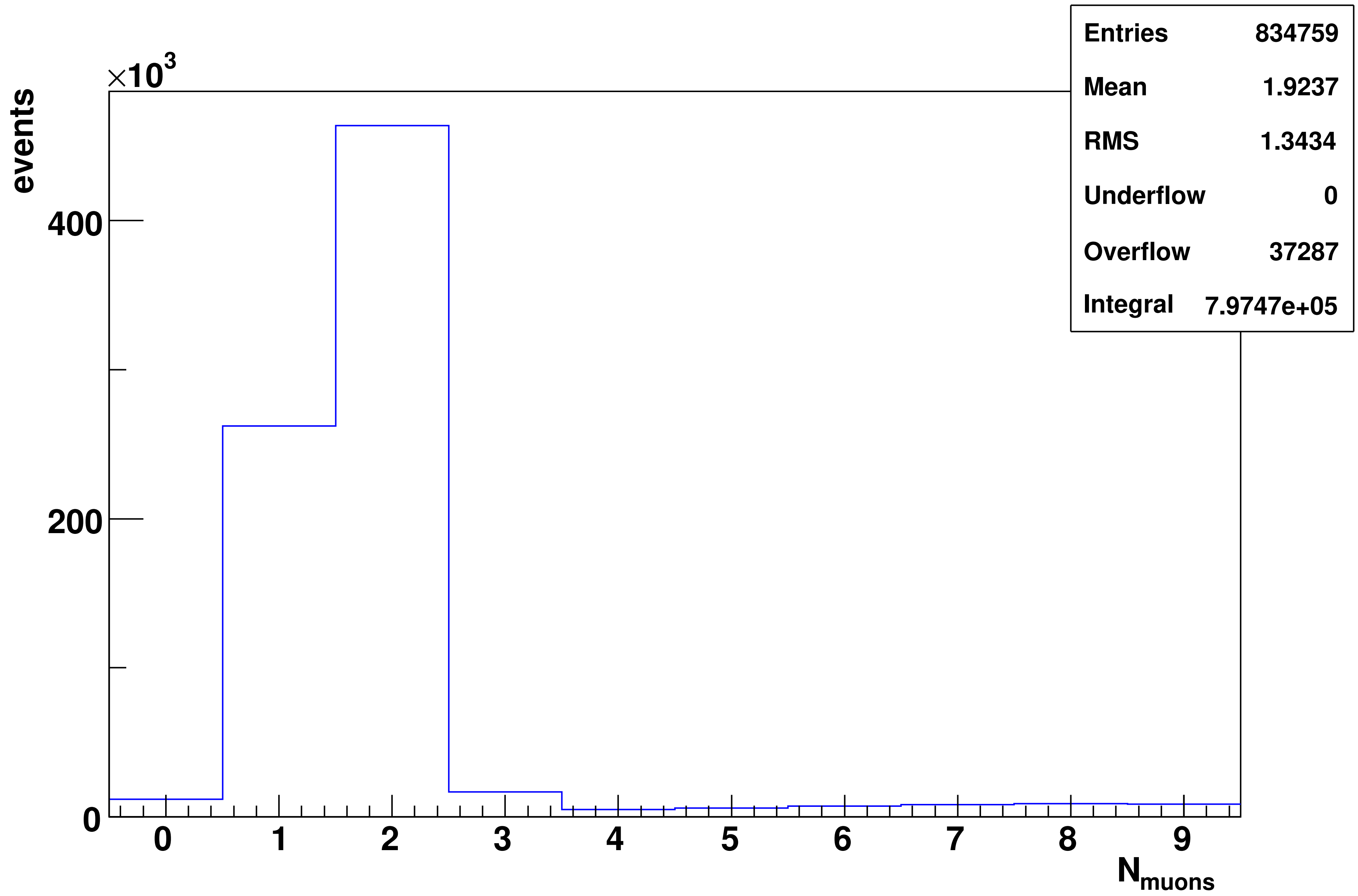
all events
events
Entries 710964
Mean 2.2878e+05
RMS 10658
Underflow5.1103e+05
Overflow 86531
Integral 1.134e+05
6000
4000
2000
0
210
215
220
225
230
235
240
245
250
$\times 10^3$
run number


all events
events
40000
20000
0
20
40
60
80
100
120
140
month

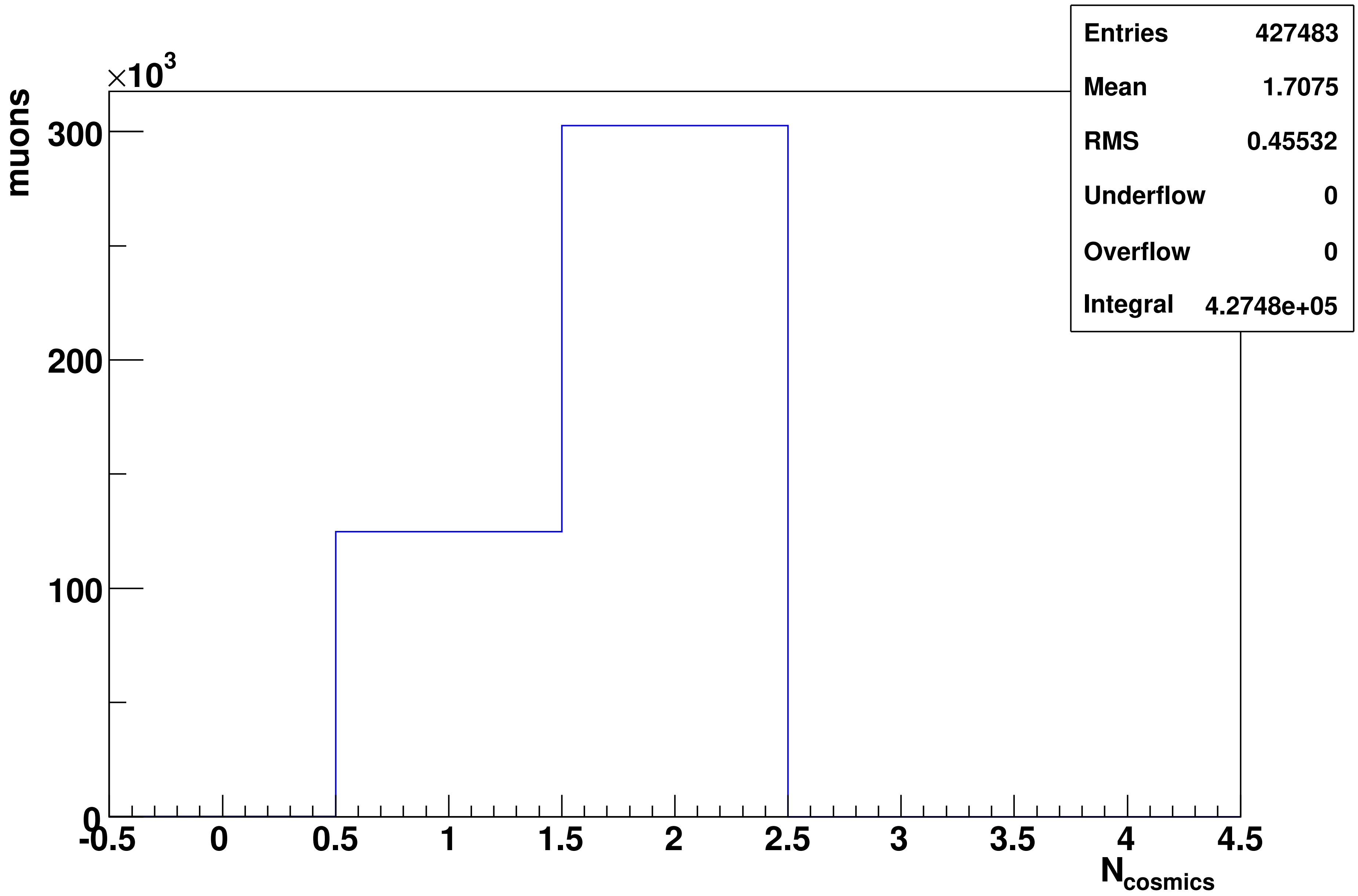

N_{MI}
3
2
1
0
20
40
60
80
100
120
140
month



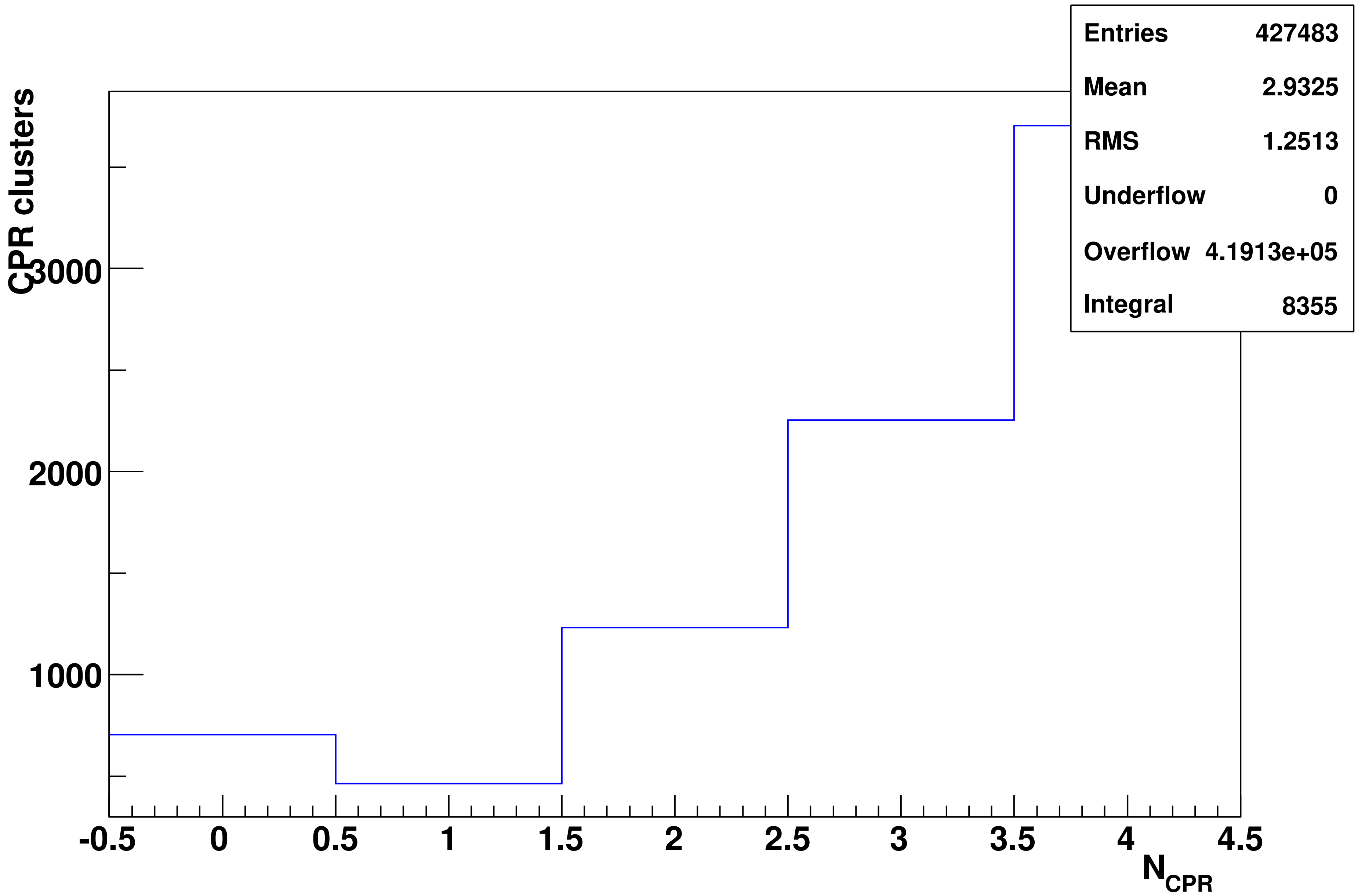
Entries 1072273
Mean 0.97145
RMS 1.093
Underflow 0
Overflow 0
Integral 1.0723e+06
$\times 10^3$
events
400
200
0
0 1 2 3 4 5 6 7 8 9
N_{MI}

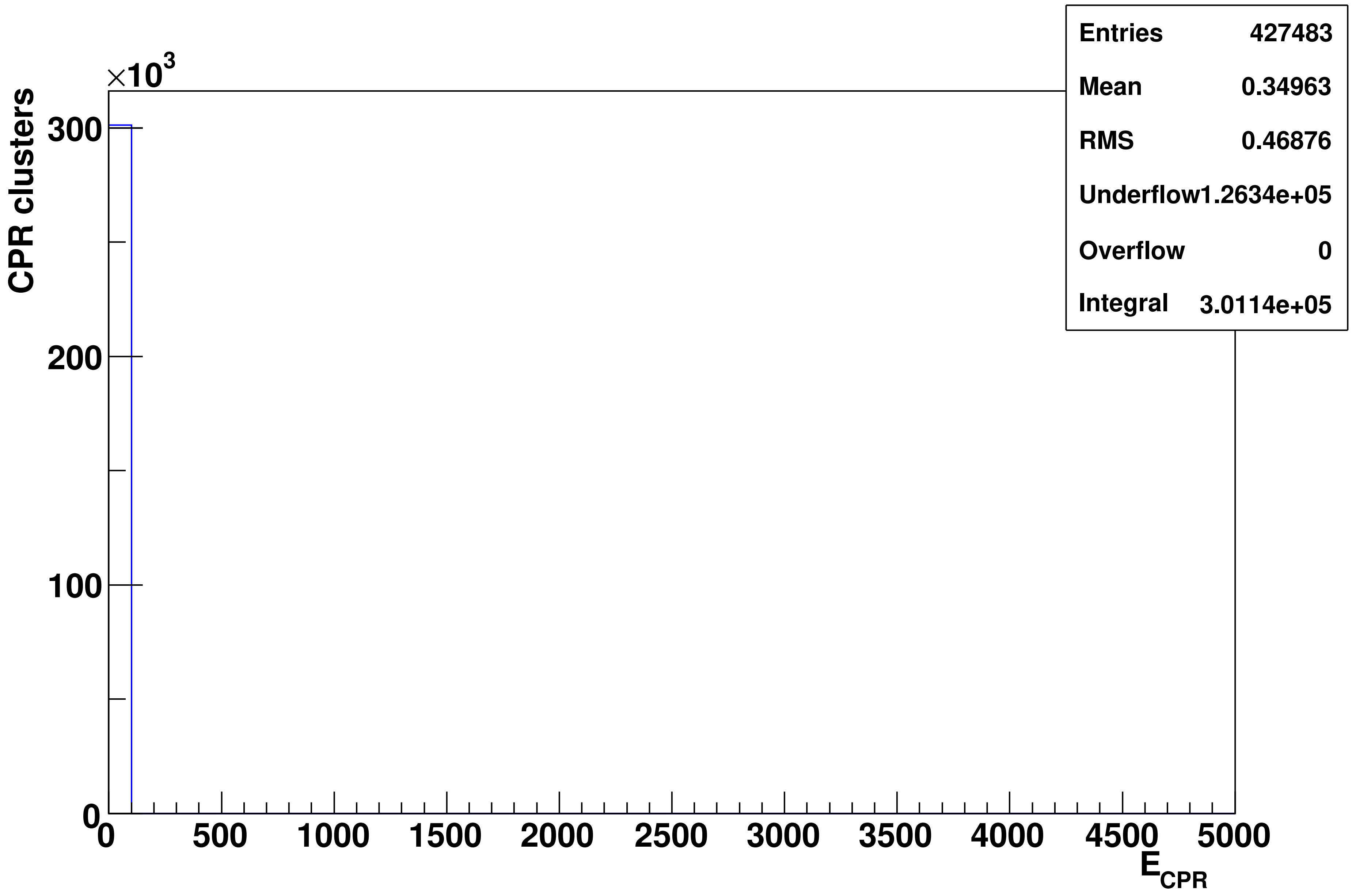


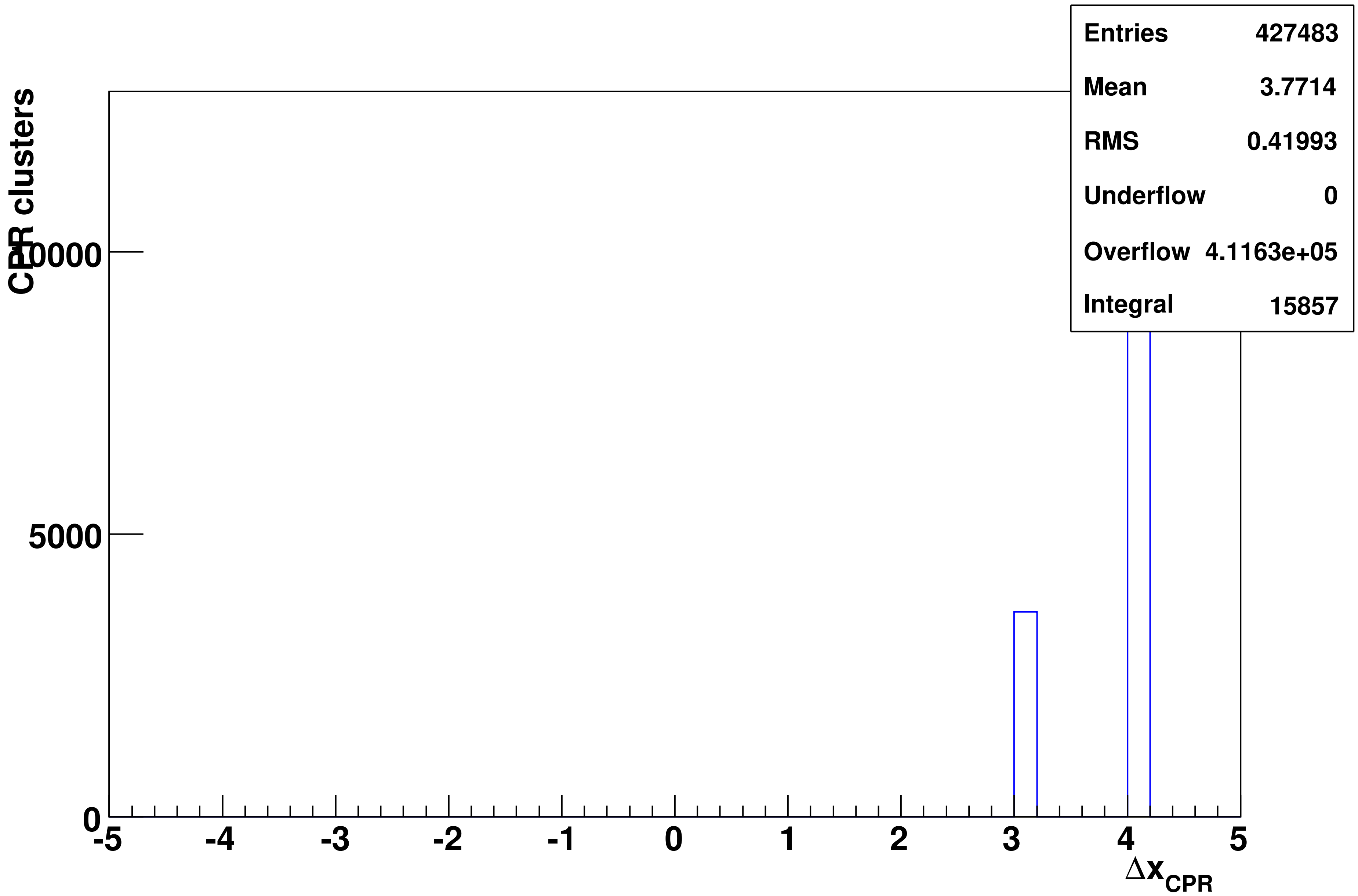
events
×10^3
400
200
0
0
1
2
3
4
5
6
7
8
9
N muons
Entries 834759
Mean 1.9237
RMS 1.3434
Underflow 0
Overflow 37287
Integral 7.9747e+05

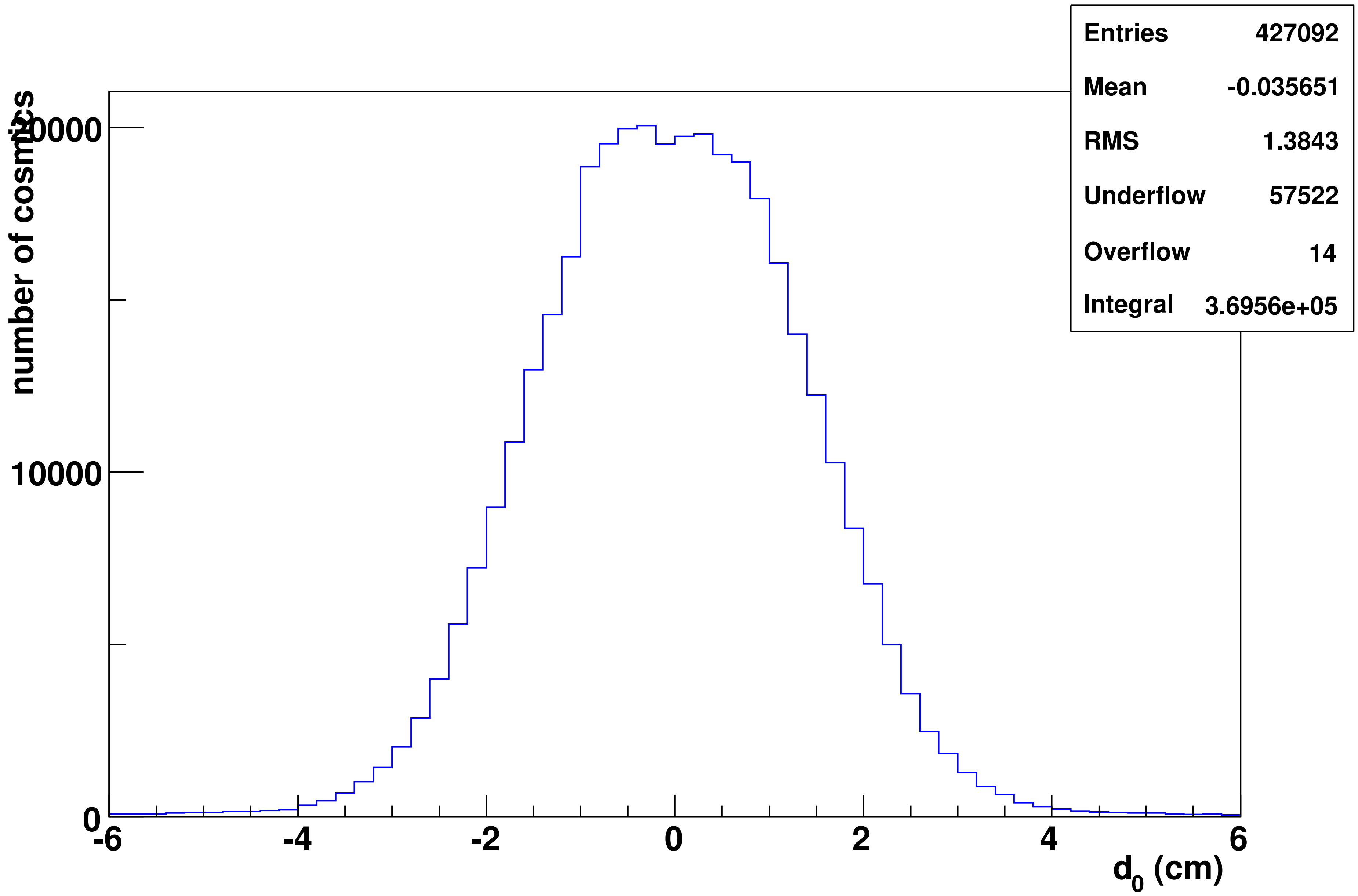


Entries 427483
Mean 1.7075
RMS 0.45532
Underflow 0
Overflow 0
Integral 4.2748e+05
×10^3
muons
300
200
100
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_cosmics

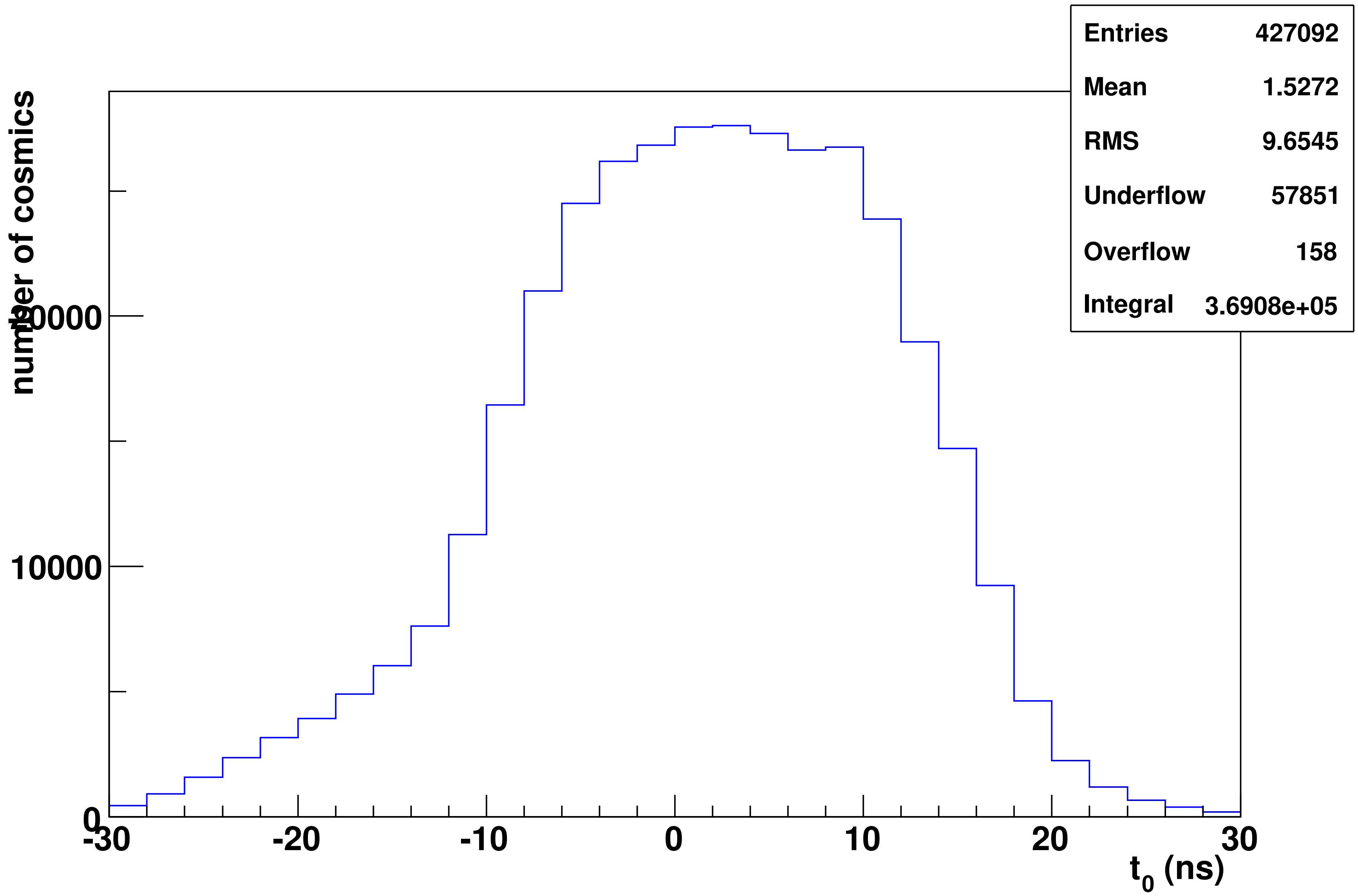

Entries 427483
Mean 2.9325
RMS 1.2513
Underflow 0
Overflow 4.1913e+05
Integral 8355
CPR clusters
1000
2000
3000
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_{CPR}


Entries 427483
Mean 0.34963
RMS 0.46876
Underflow1.2634e+05
Overflow 0
Integral 3.0114e+05
×10^3
CPR clusters
300
200
100
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
E_CPR

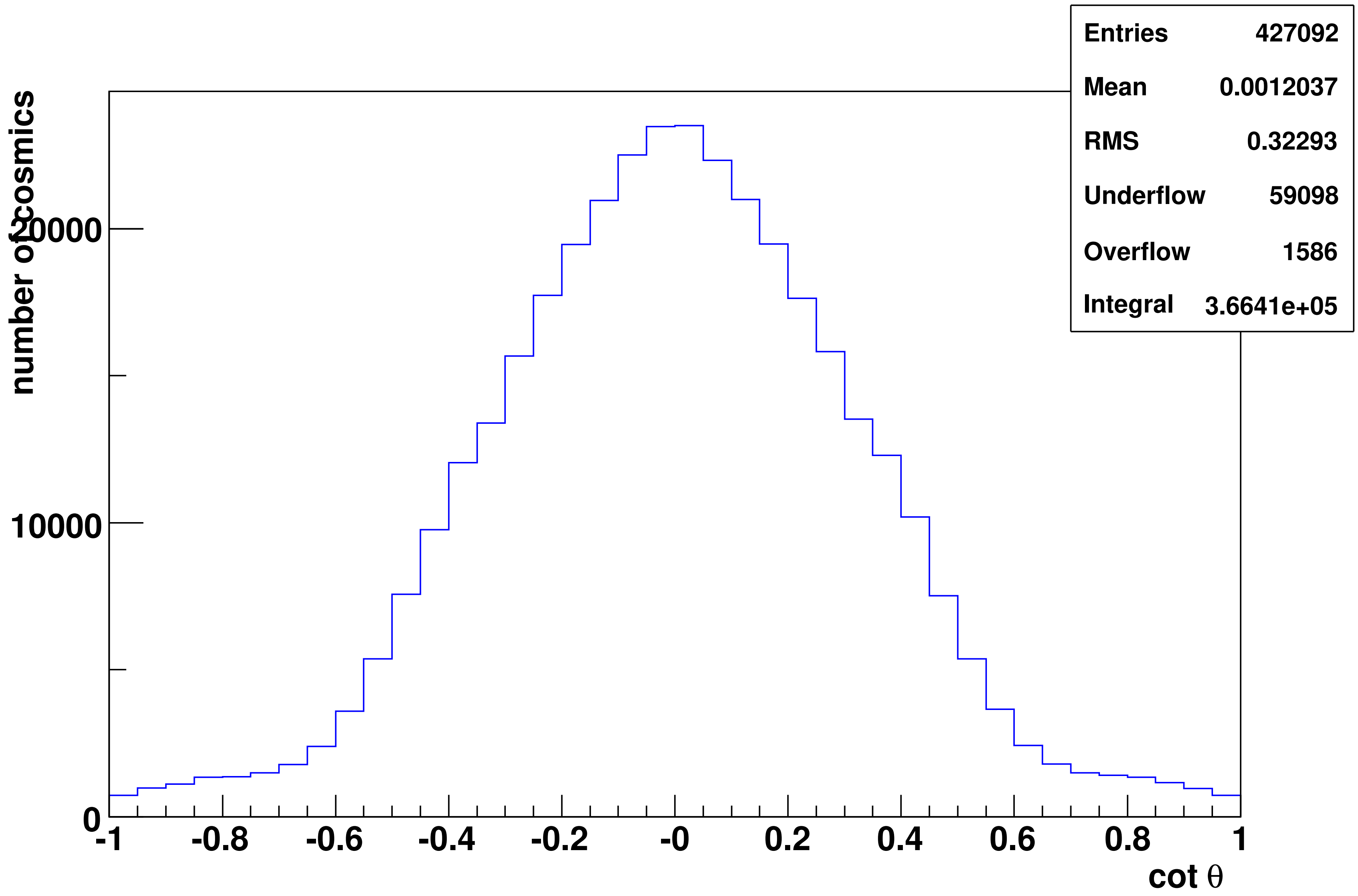

Entries 427483
Mean 3.7714
RMS 0.41993
Underflow 0
Overflow 4.1163e+05
Integral 15857
CPR clusters
10000
5000
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
Δx_{CPR}



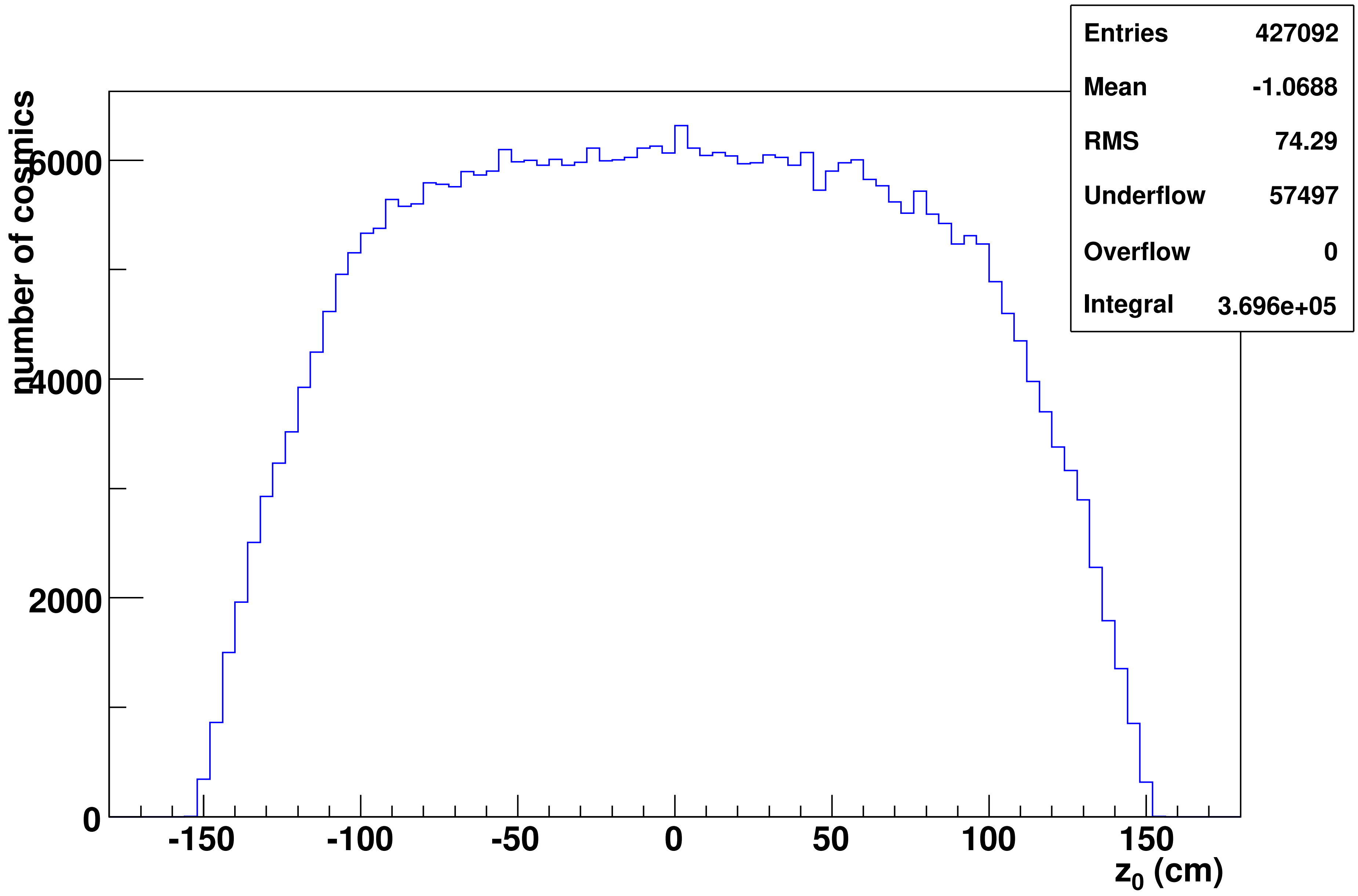
Entries 427092
Mean -0.035651
RMS 1.3843
Underflow 57522
Overflow 14
Integral 3.6956e+05
number of cosmics
20000
10000
0
-6
-4
-2
0
2
4
6
d0 (cm)



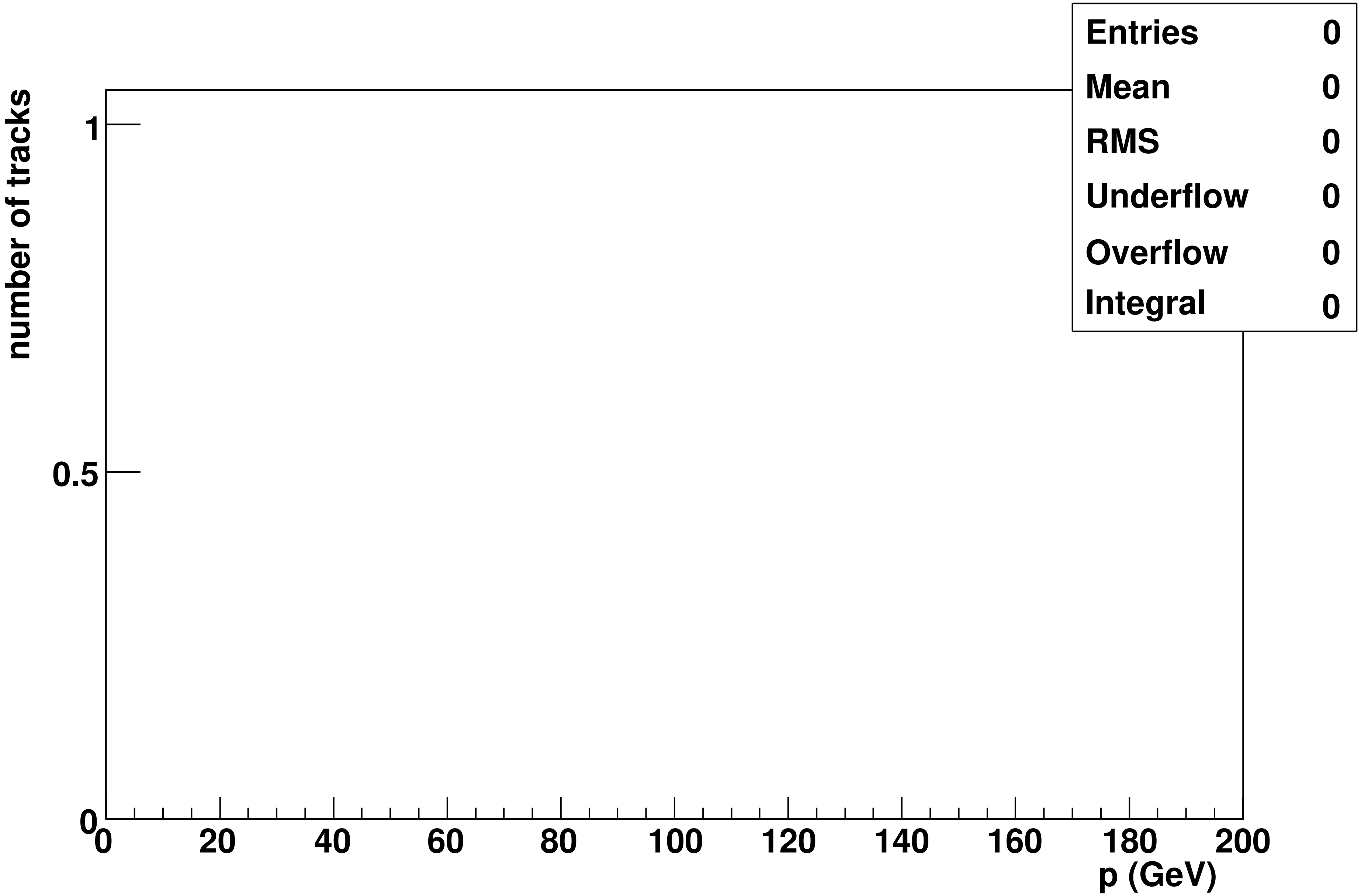
Entries 427092
Mean 1.5272
RMS 9.6545
Underflow 57851
Overflow 158
Integral 3.6908e+05
number of cosmics
20000
10000
0
-30
-20
-10
0
10
20
30
t_0 (ns)

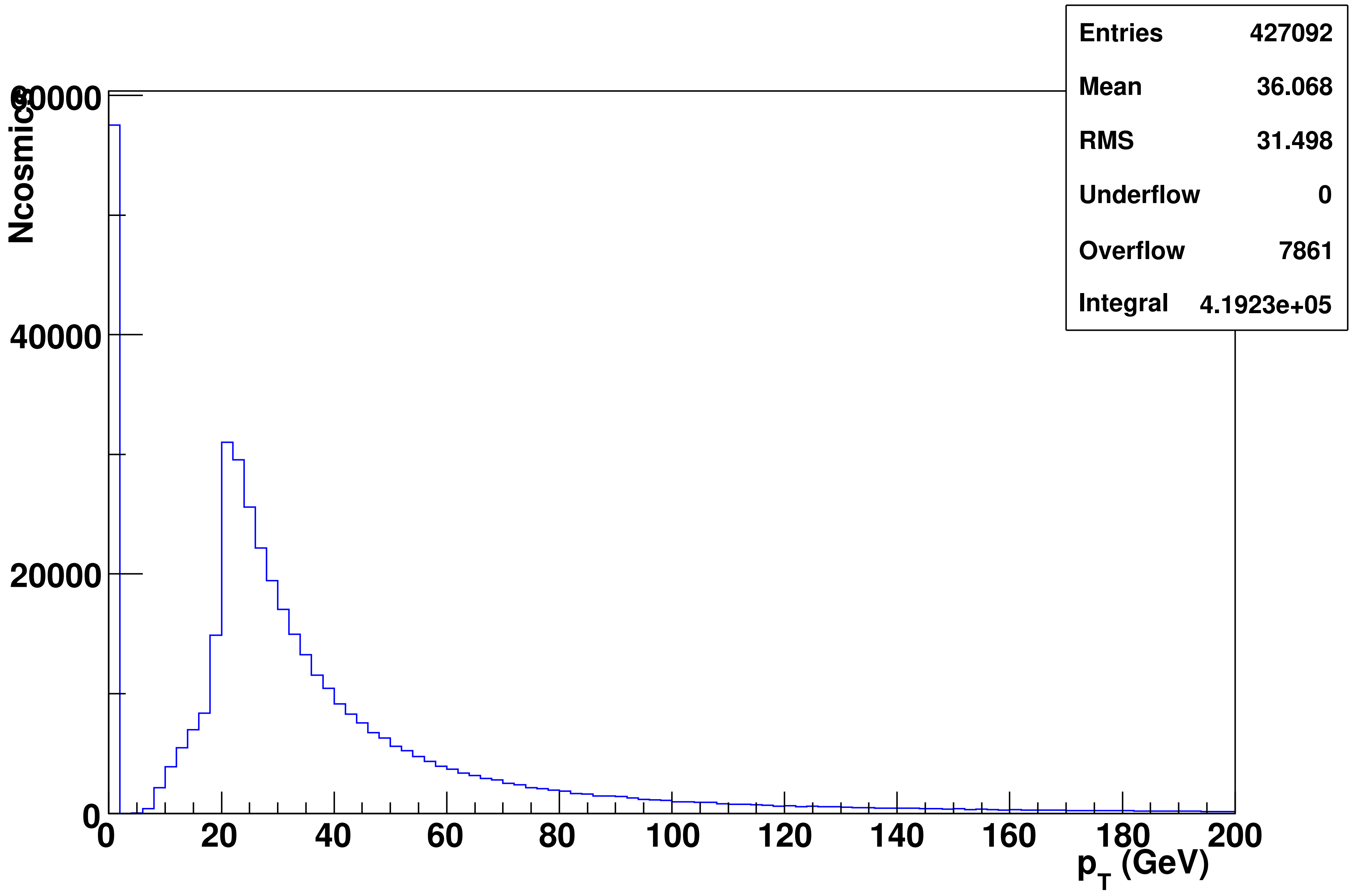


Entries 427092
Mean 0.0012037
RMS 0.32293
Underflow 59098
Overflow 1586
Integral 3.6641e+05
number of cosmics
20000
10000
0
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
cot θ

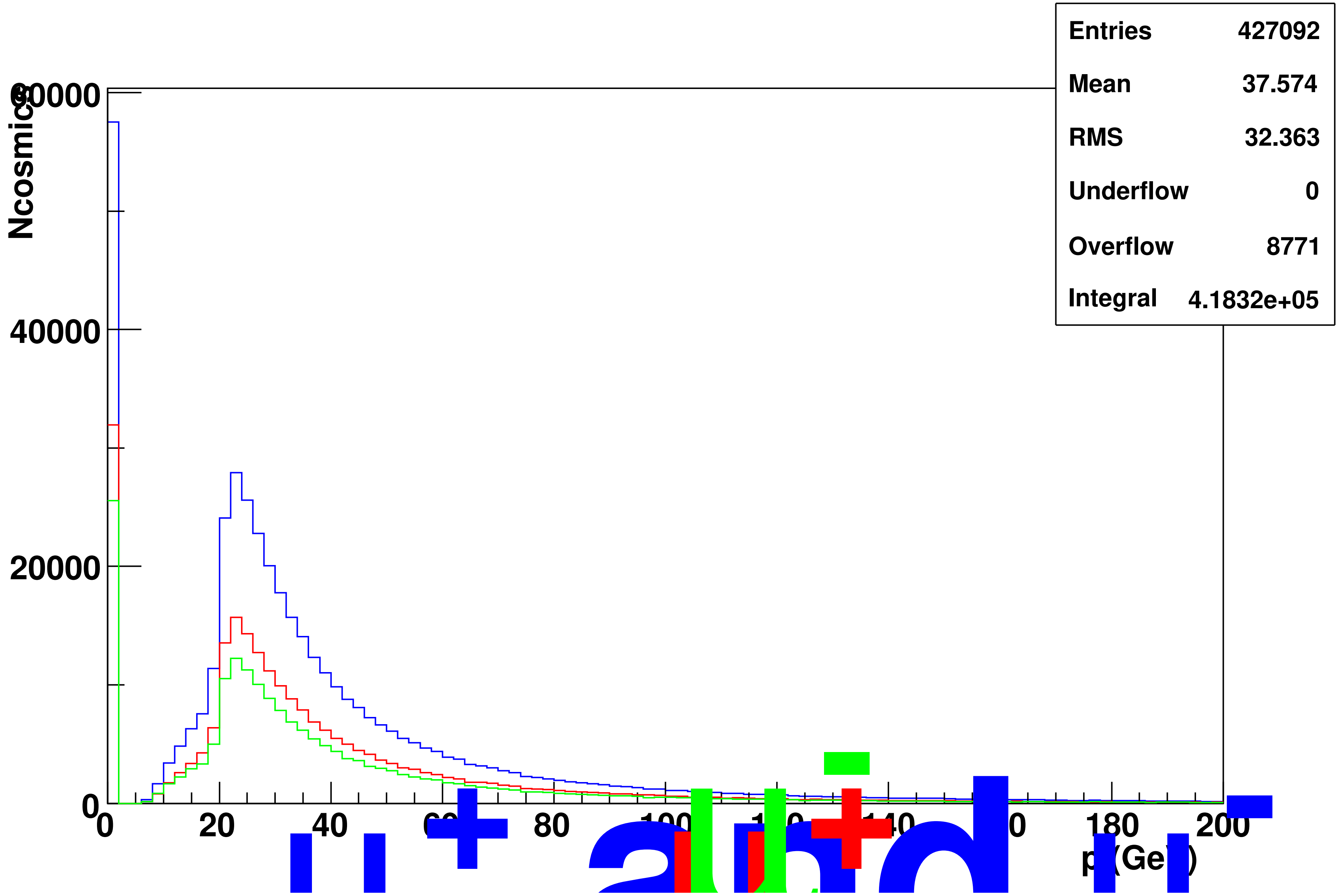


Entries 427092
Mean -1.0688
RMS 74.29
Underflow 57497
Overflow 0
Integral 3.696e+05
number of cosmics
0
2000
4000
6000
-150
-100
-50
0
50
100
150
z_0 (cm)

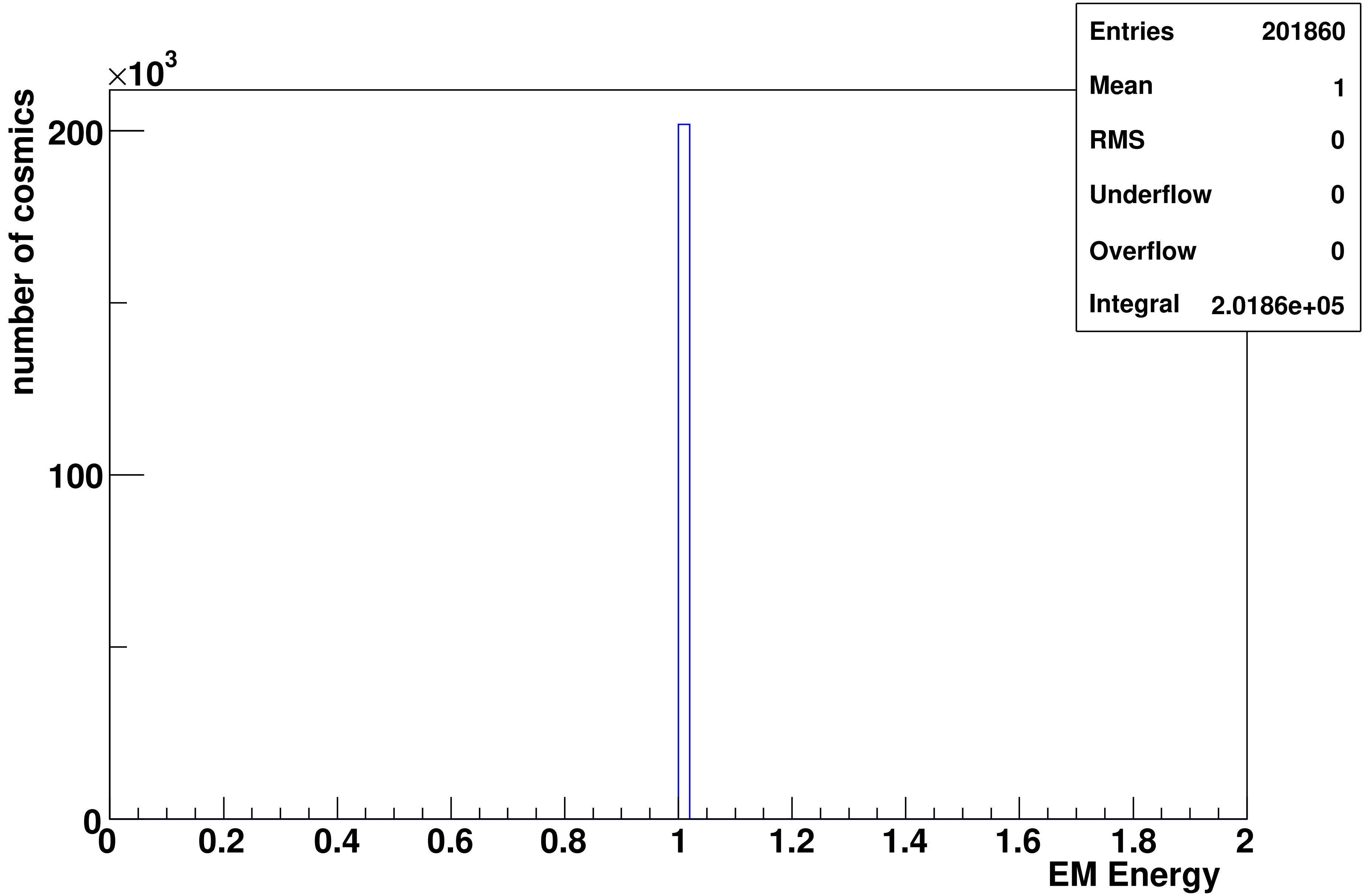

Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Integral 0
number of tracks
1
0.5
0
0
20
40
60
80
100
120
140
160
180
200
p (GeV)

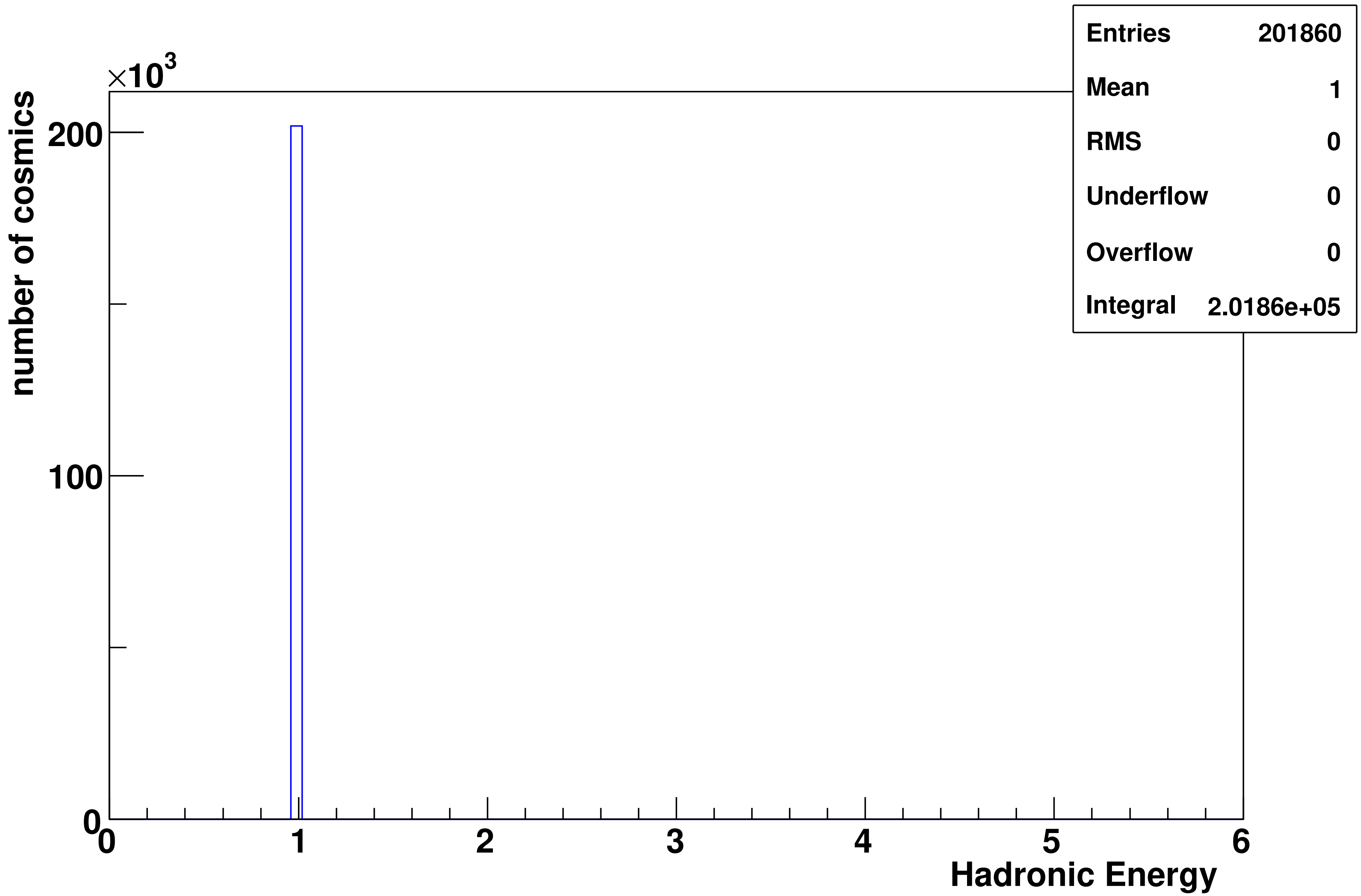


Entries 427092
Mean 36.068
RMS 31.498
Underflow 0
Overflow 7861
Integral 4.1923e+05
Ncosmics
60000
40000
20000
0
0
20
40
60
80
100
120
140
160
180
200
p_T (GeV)

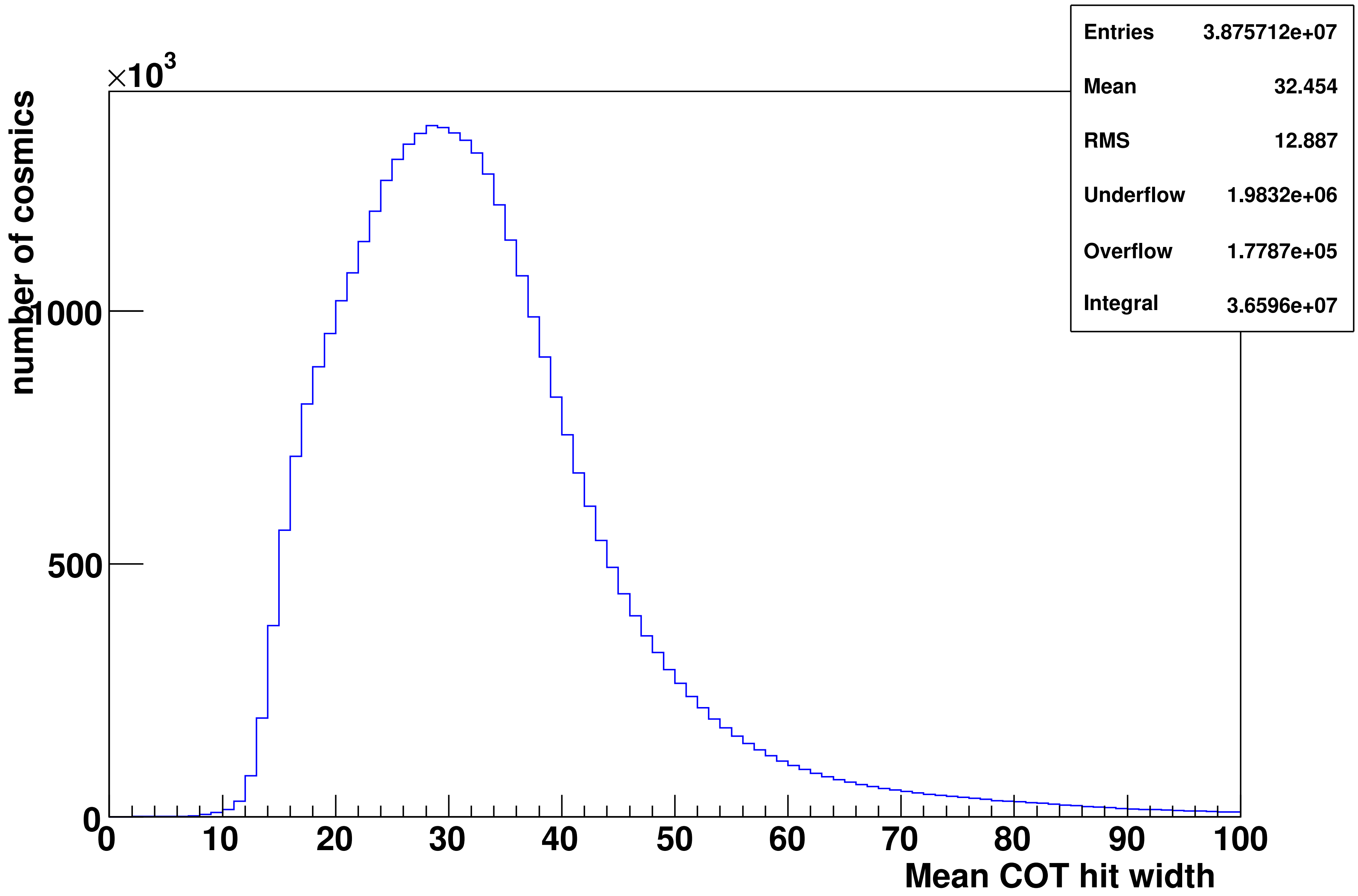


Entries 427092
Mean 37.574
RMS 32.363
Underflow 0
Overflow 8771
Integral 4.1832e+05
Ncosmics
60000
40000
20000
0
0
20
40
80
180
200
p (GeV)

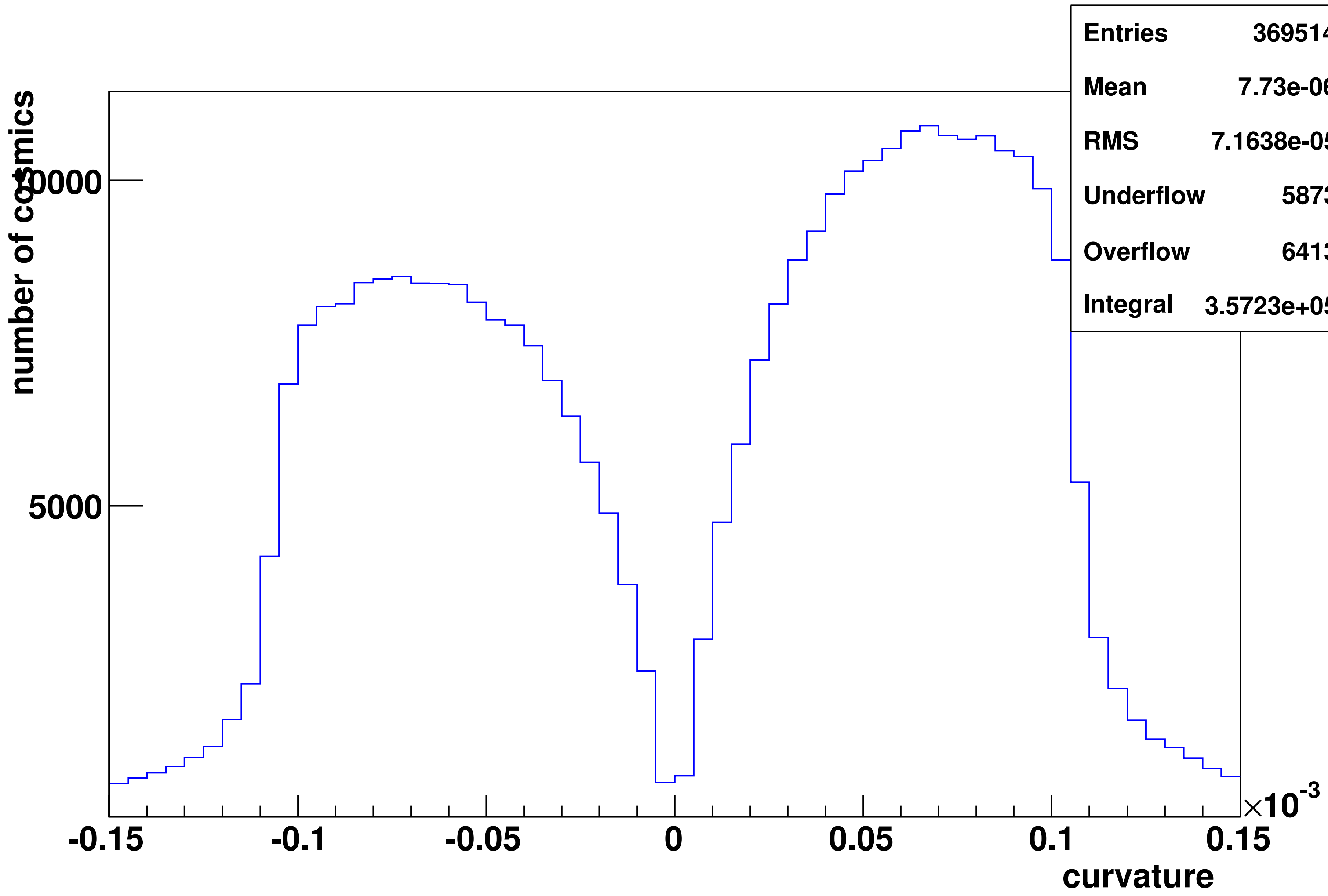

Entries 201860
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.0186e+05
×10^3
number of cosmics
200
100
0
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
EM Energy



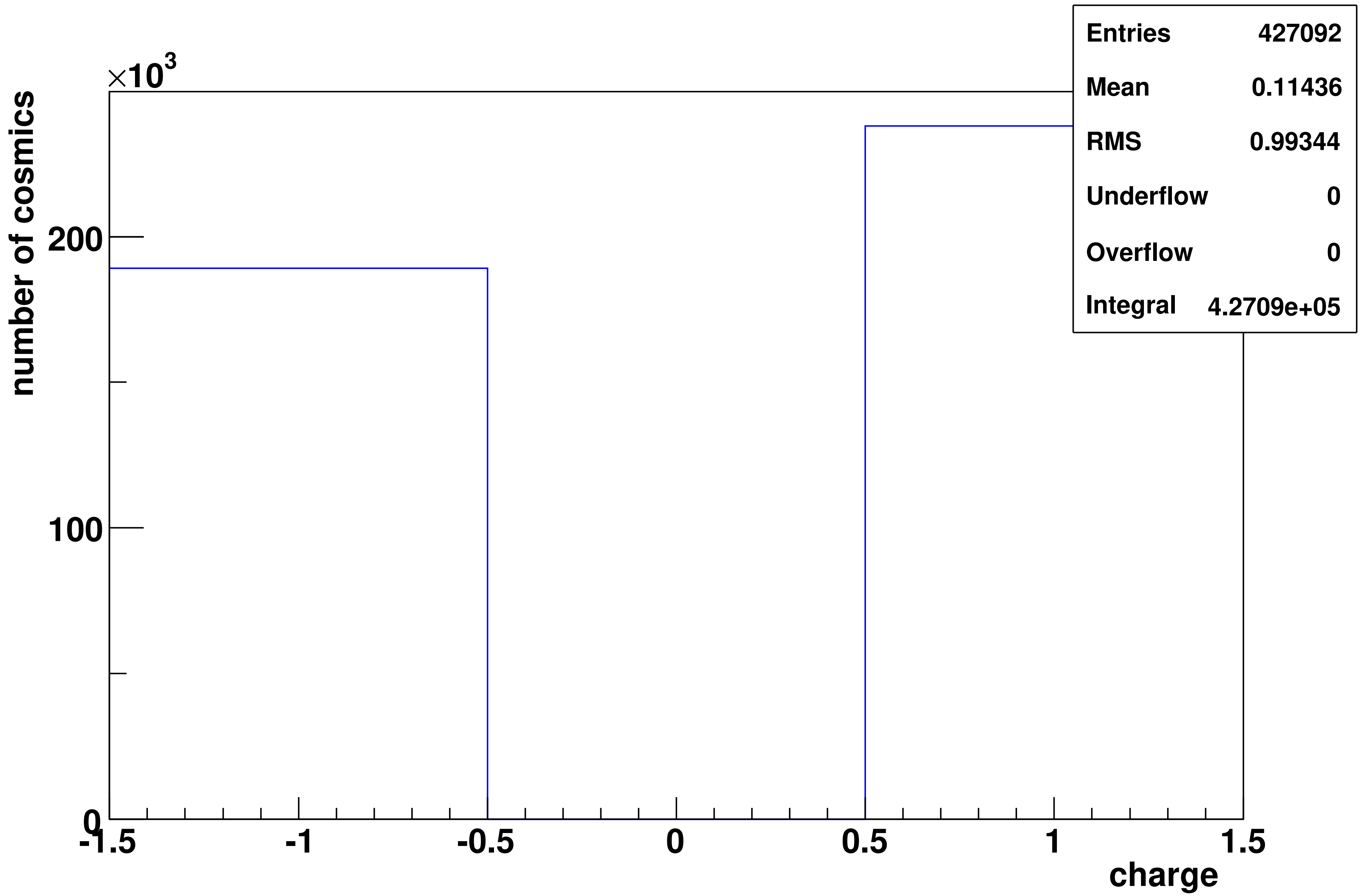
Entries 201860
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.0186e+05
×10^3
200
100
0
0
1
2
3
4
5
6
Hadronic Energy
number of cosmics



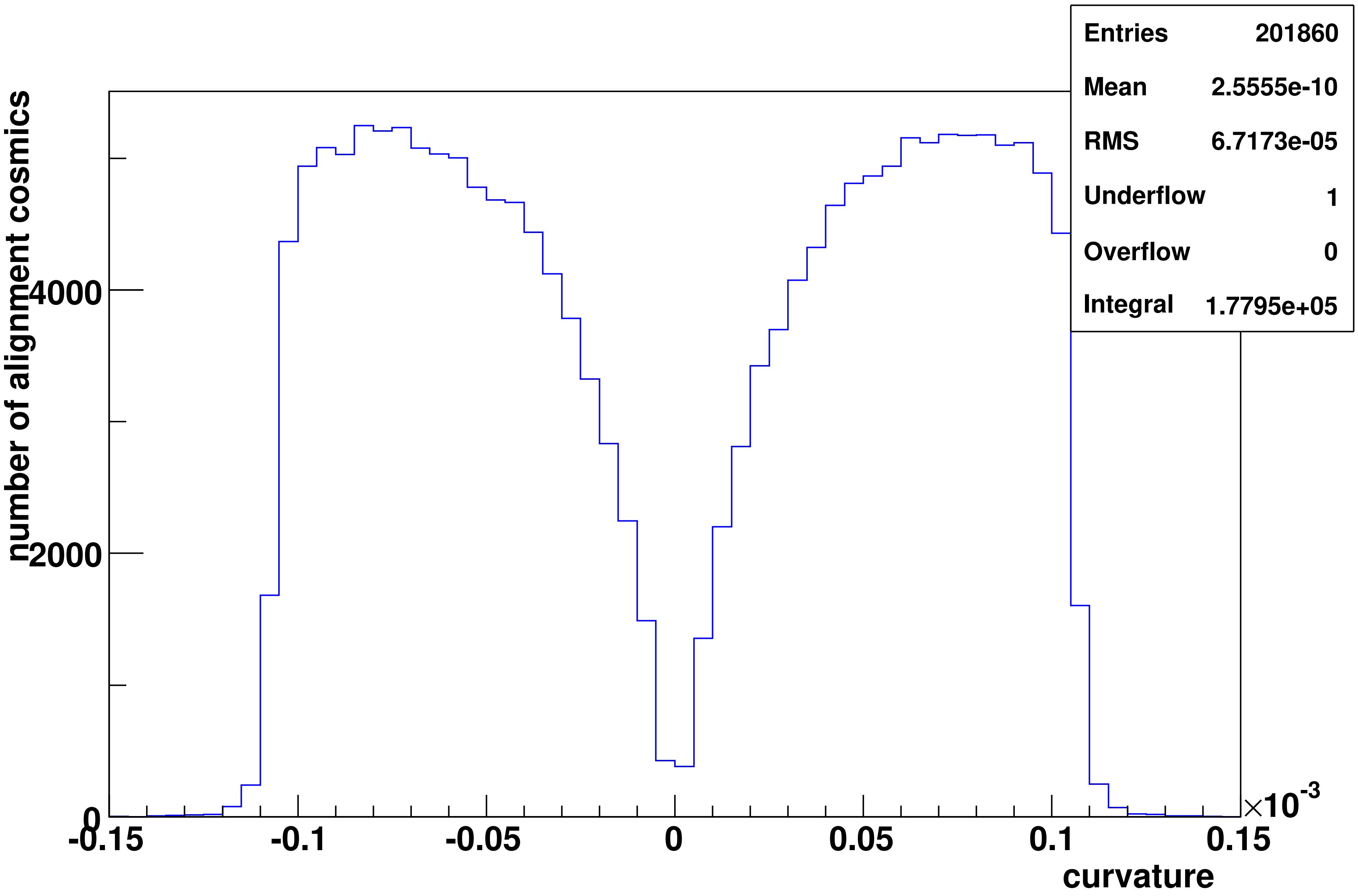
Entries 3.875712e+07
Mean 32.454
RMS 12.887
Underflow 1.9832e+06
Overflow 1.7787e+05
Integral 3.6596e+07
×10^3
number of cosmics
1000
500
0
0
10
20
30
40
50
60
70
80
90
100
Mean COT hit width

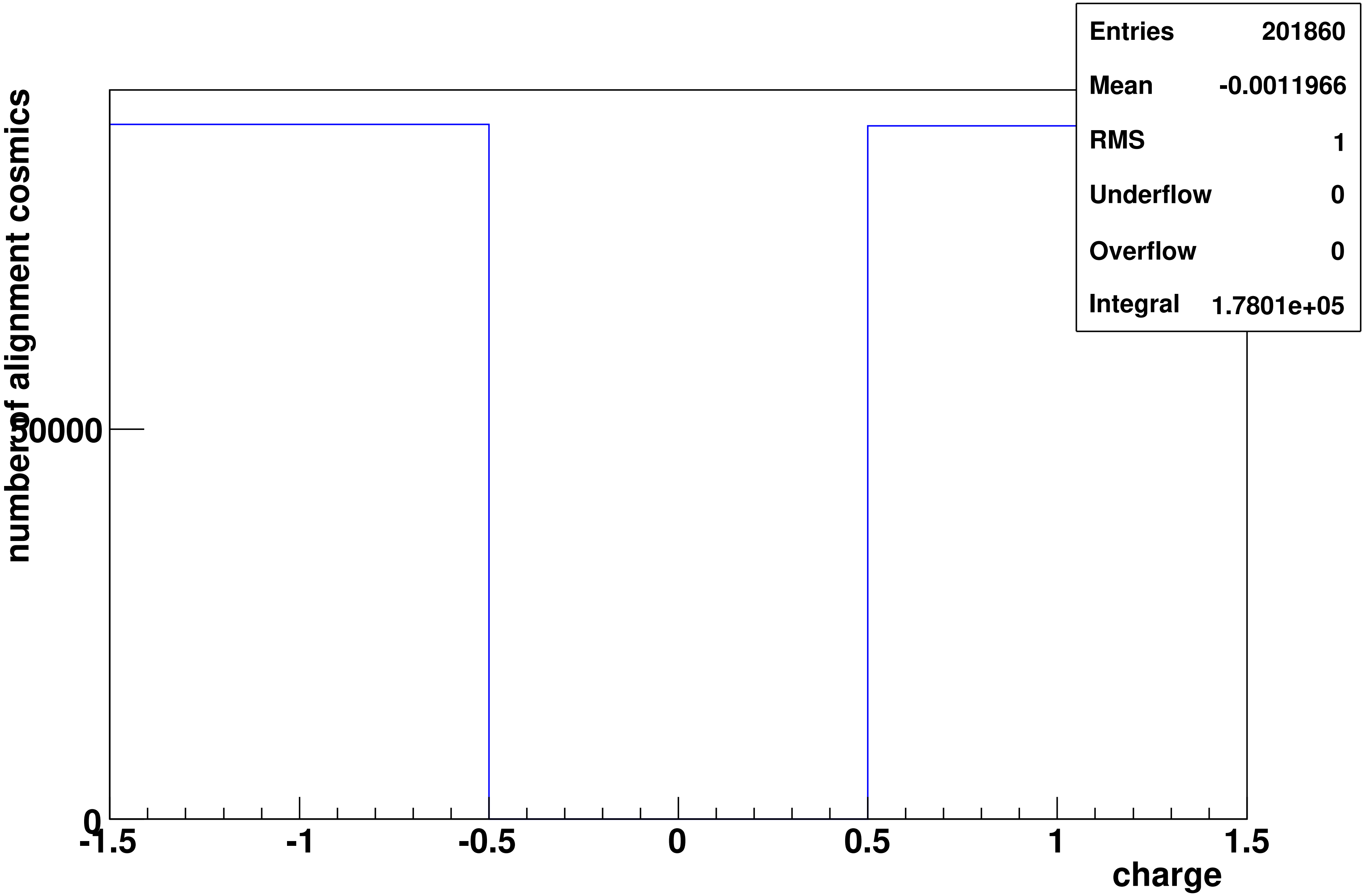


Entries 369514
Mean 7.73e-06
RMS 7.1638e-05
Underflow 5873
Overflow 6413
Integral 3.5723e+05
number of cosmics
10000
5000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10-3
curvature

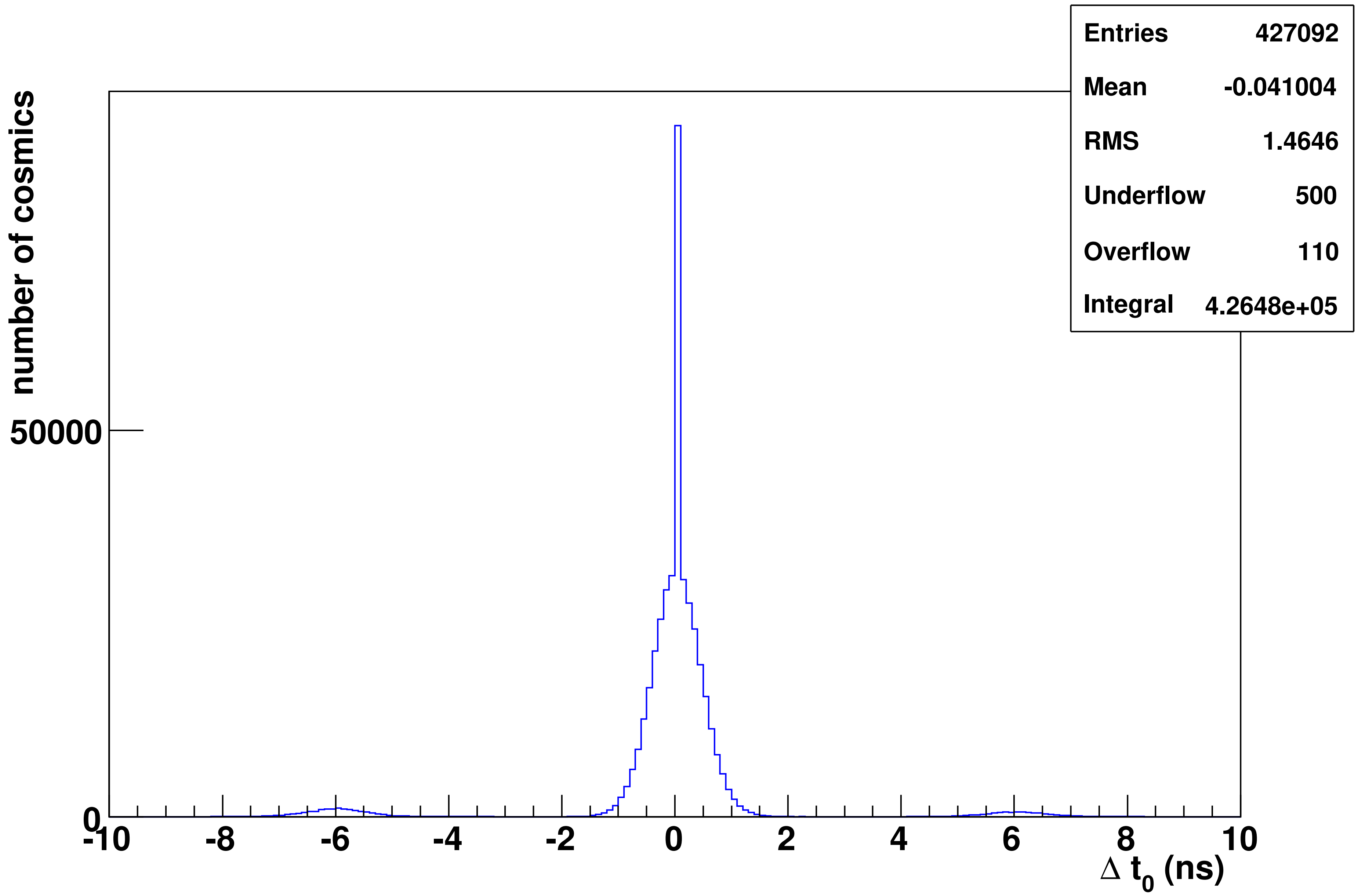


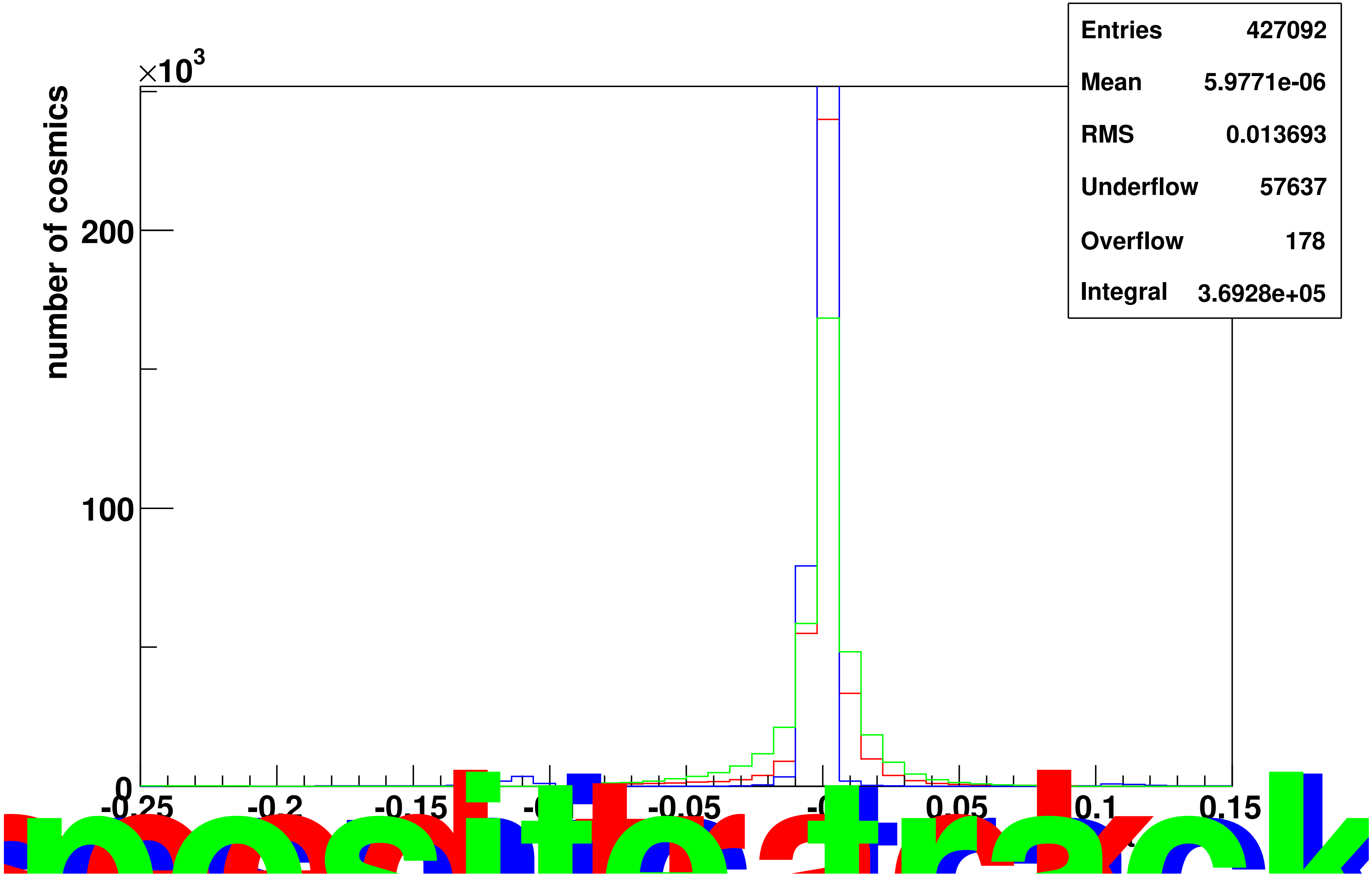
number of cosmics
$\times 10^3$
200
100
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge
Entries 427092
Mean 0.11436
RMS 0.99344
Underflow 0
Overflow 0
Integral 4.2709e+05


Entries 201860
Mean 2.5555e-10
RMS 6.7173e-05
Underflow 1
Overflow 0
Integral 1.7795e+05
number of alignment cosmics
0
2000
4000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

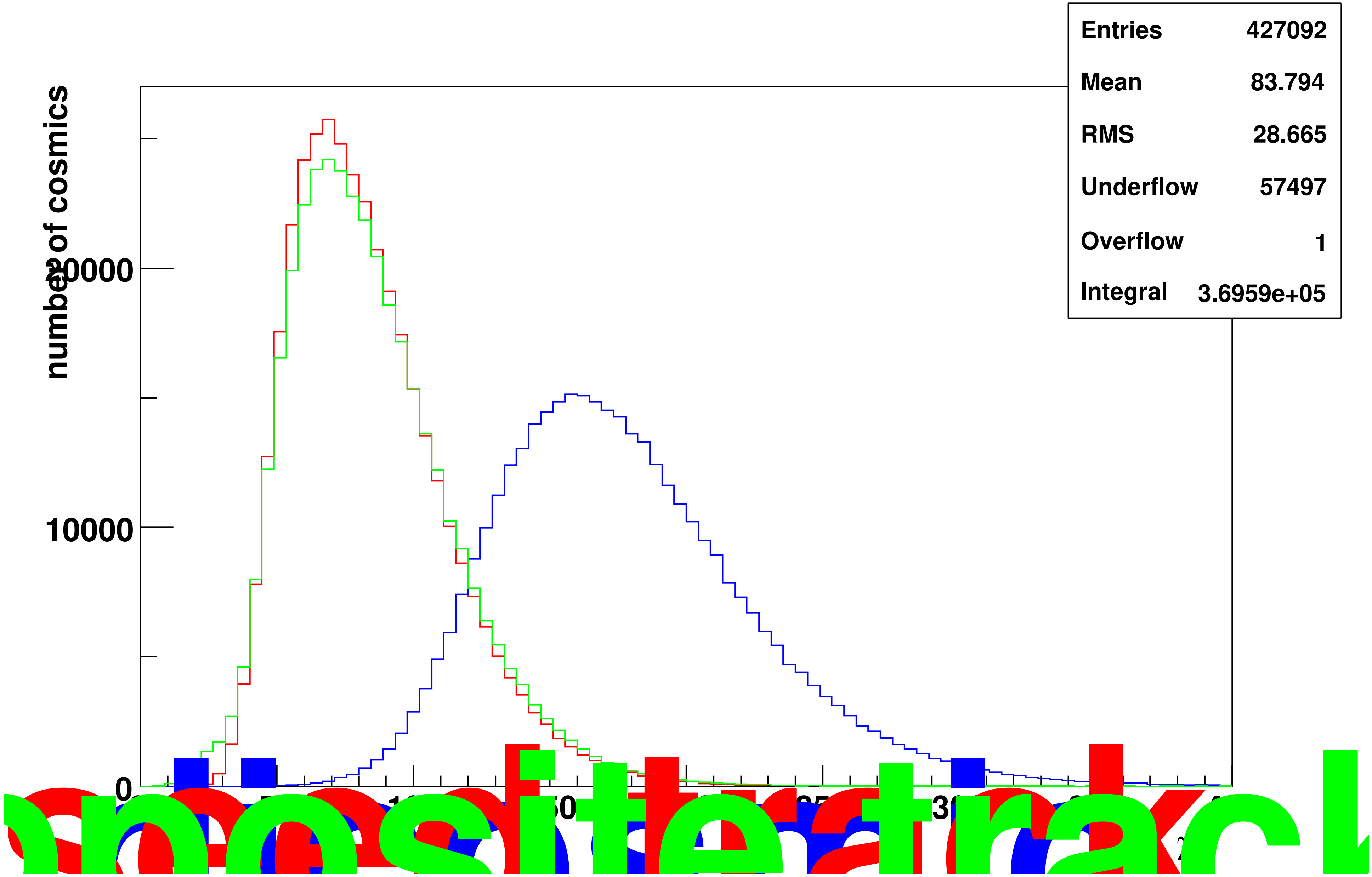


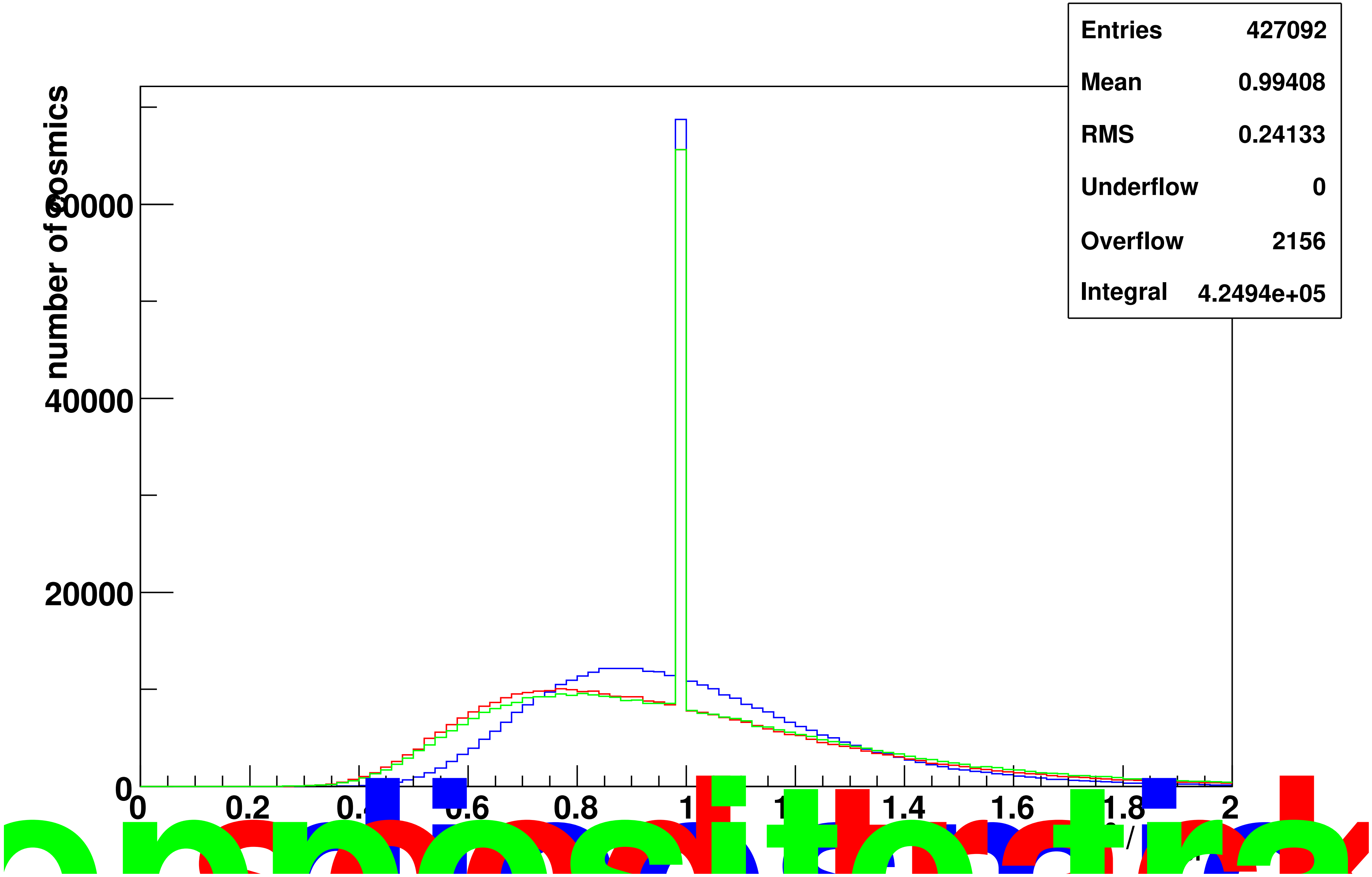
Entries 201860
Mean -0.0011966
RMS 1
Underflow 0
Overflow 0
Integral 1.7801e+05
number of alignment cosmics
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge


Entries 427092
Mean -0.041004
RMS 1.4646
Underflow 500
Overflow 110
Integral 4.2648e+05
number of cosmics
50000
0
-10
-8
-6
-4
-2
0
2
4
6
8
10
$\Delta\ t_0$ (ns)

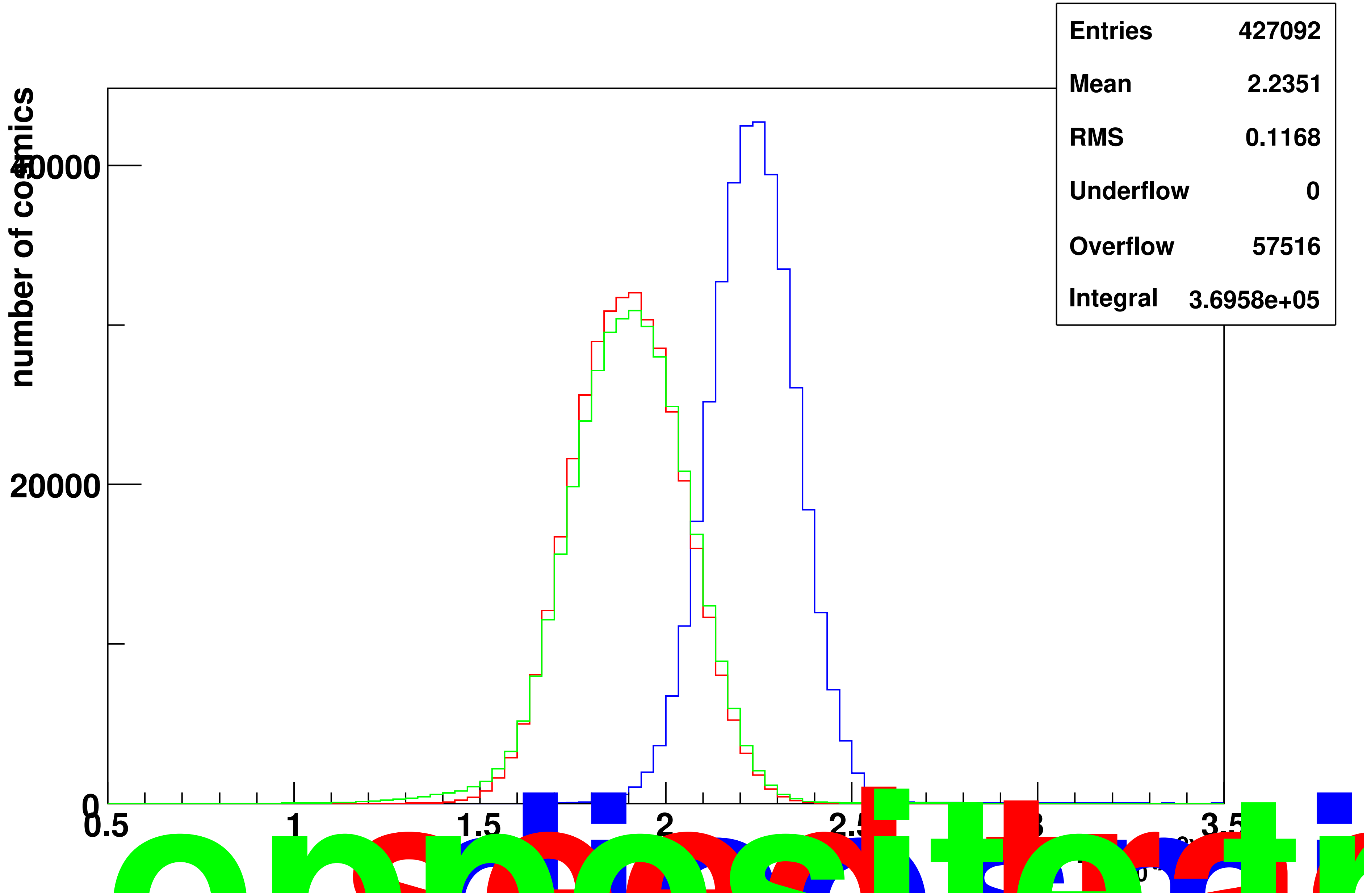


Entries 427092
Mean 5.9771e-06
RMS 0.013693
Underflow 57637
Overflow 178
Integral 3.6928e+05
×10^3
number of cosmics
200
100
0
-0.25
-0.2
-0.15
-0.05
0.05
0.1
0.15

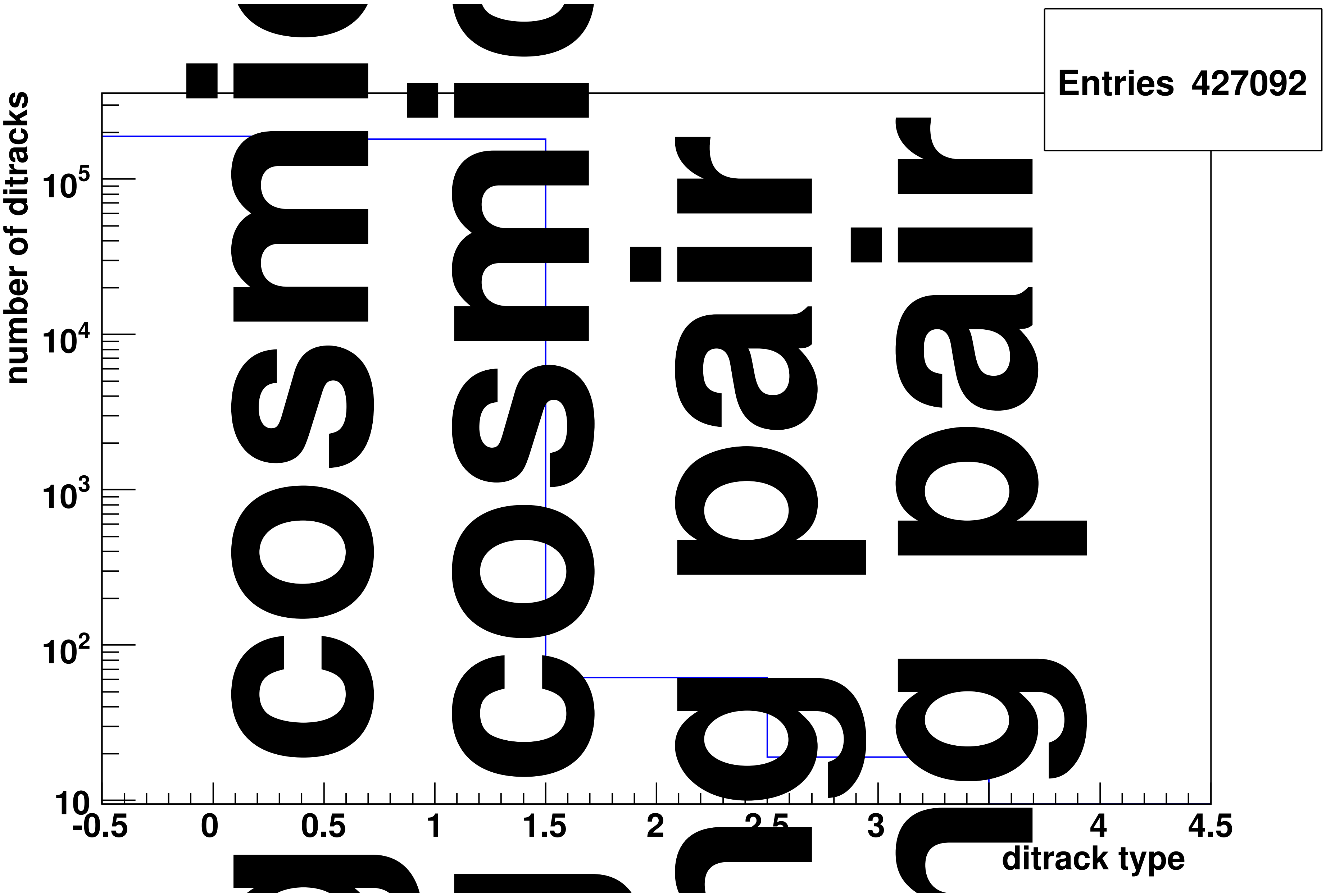

number of cosmics
Entries 427092
Mean 83.794
RMS 28.665
Underflow 57497
Overflow 1
Integral 3.6959e+05
20000
10000
0



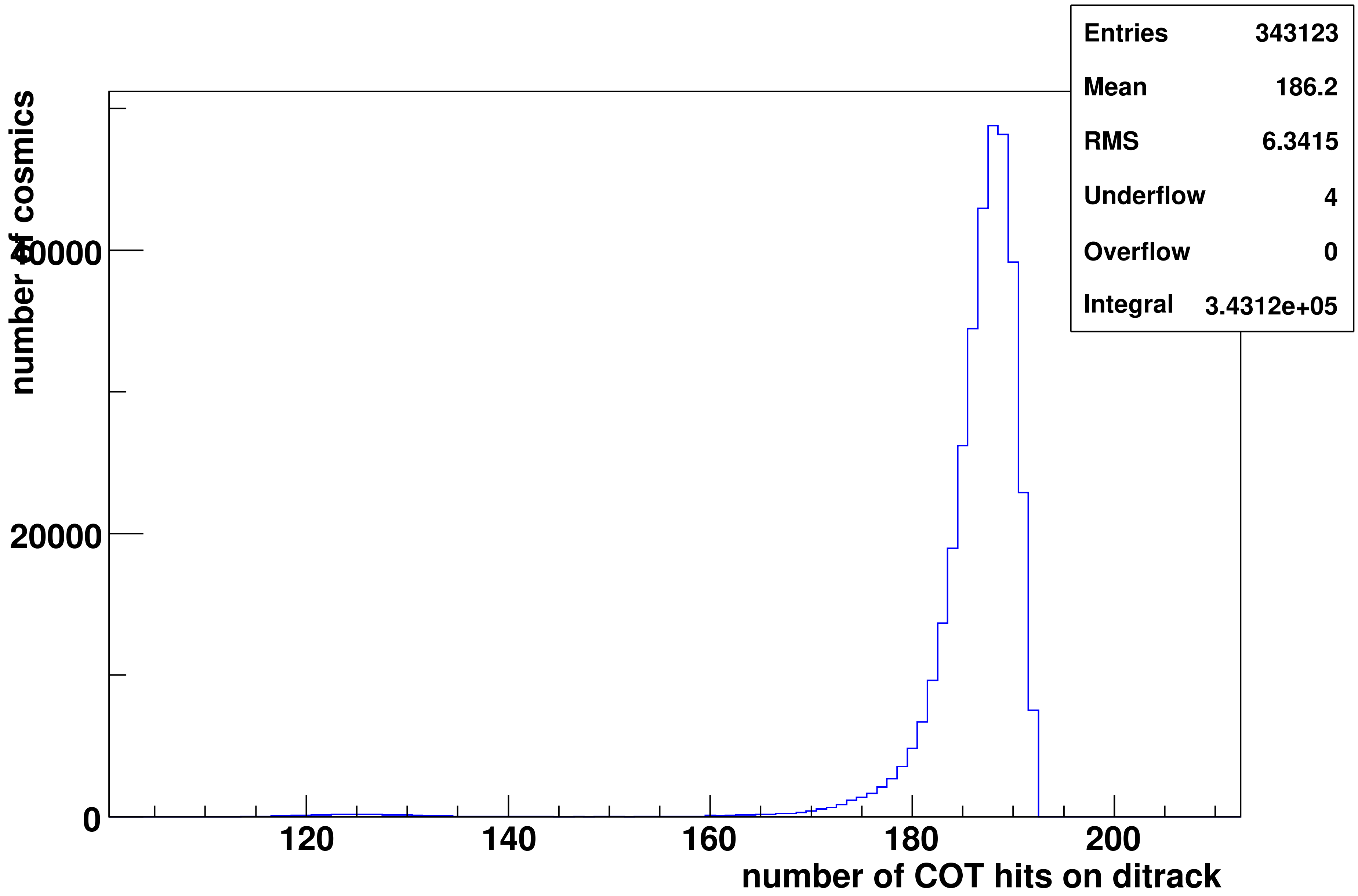
Entries 427092
Mean 0.99408
RMS 0.24133
Underflow 0
Overflow 2156
Integral 4.2494e+05
number of cosmics
0
20000
40000
60000
0
0.2
0.8
1
1.4
1.6
1.8
2



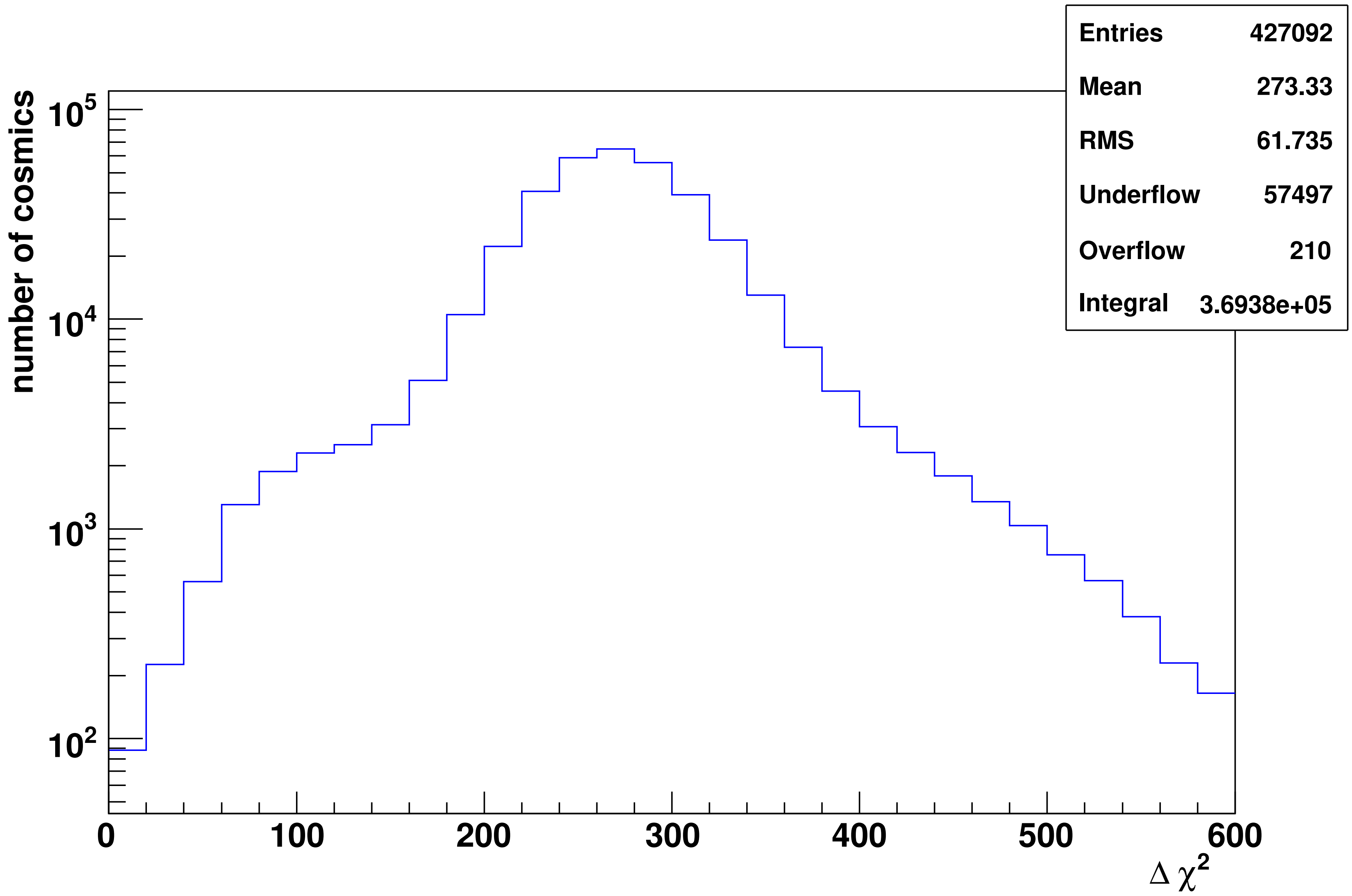
Entries 427092
Mean 2.2351
RMS 0.1168
Underflow 0
Overflow 57516
Integral 3.6958e+05
number of cosmics
40000
20000
0
0.5
1
1.5
2



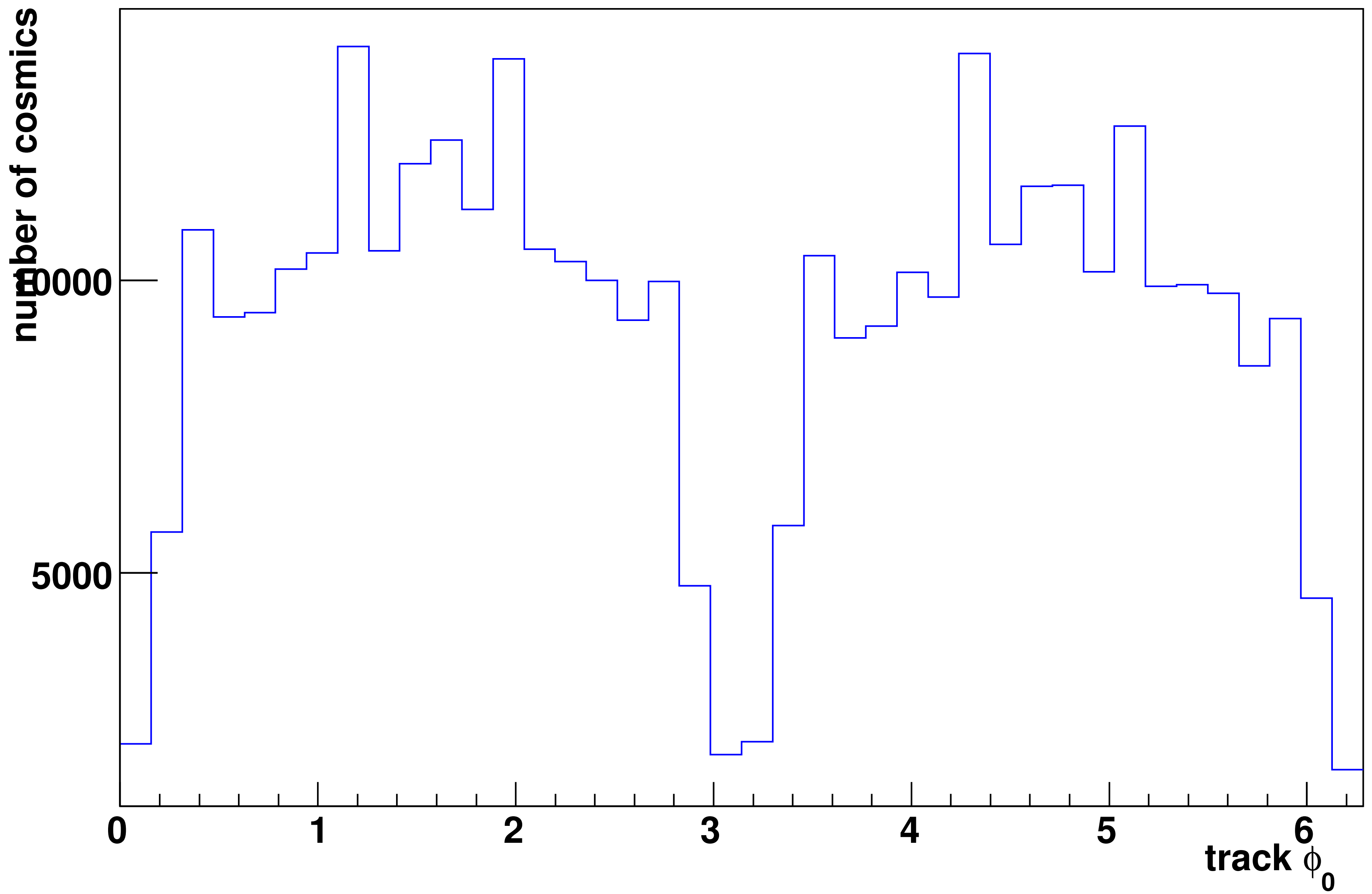
Entries 427092
number of ditracks
ditrack type
cosmi
cosmi
pair
pair



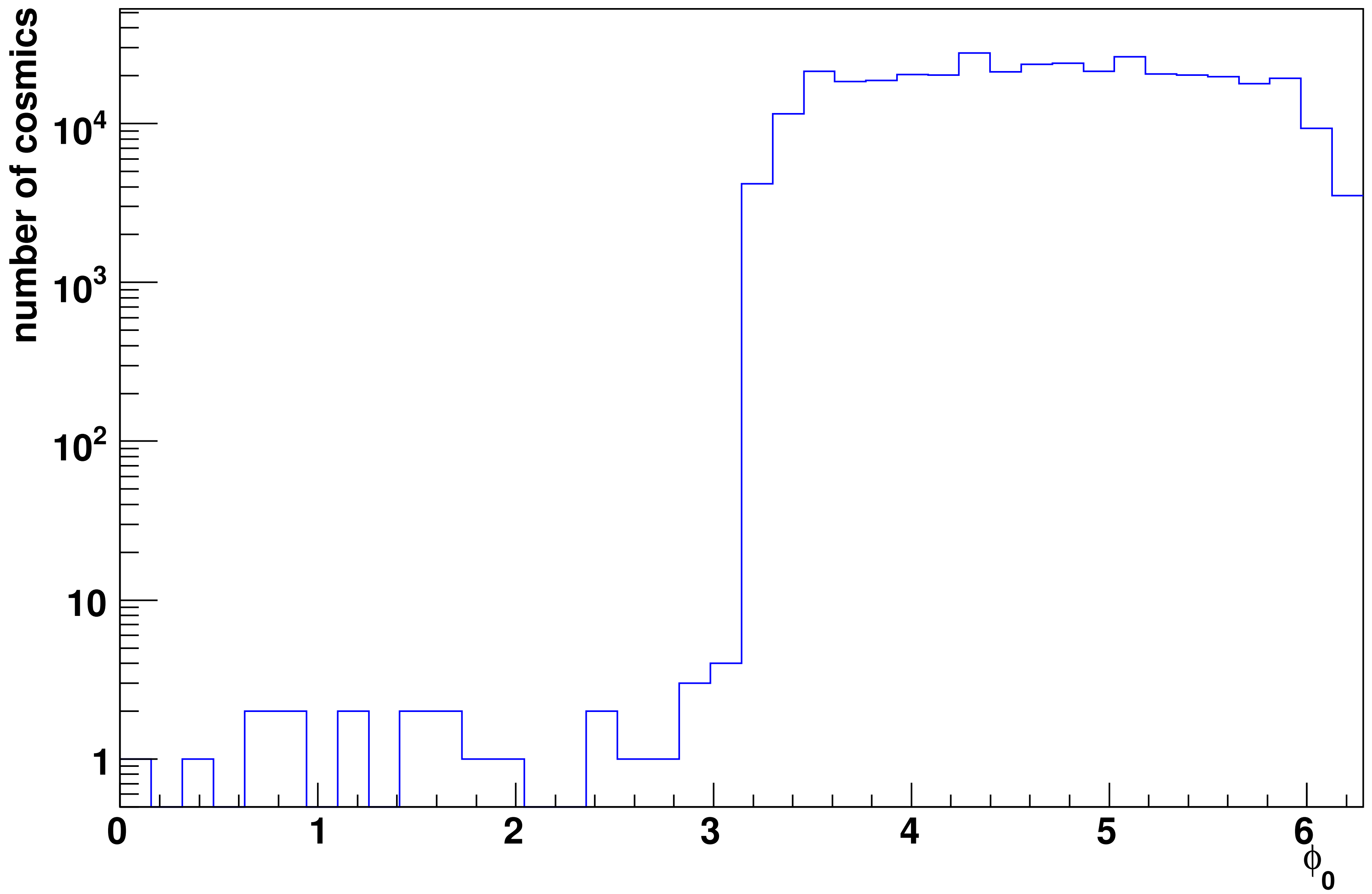
Entries 343123
Mean 186.2
RMS 6.3415
Underflow 4
Overflow 0
Integral 3.4312e+05
number of cosmics
40000
20000
0
120
140
160
180
200
number of COT hits on ditrack

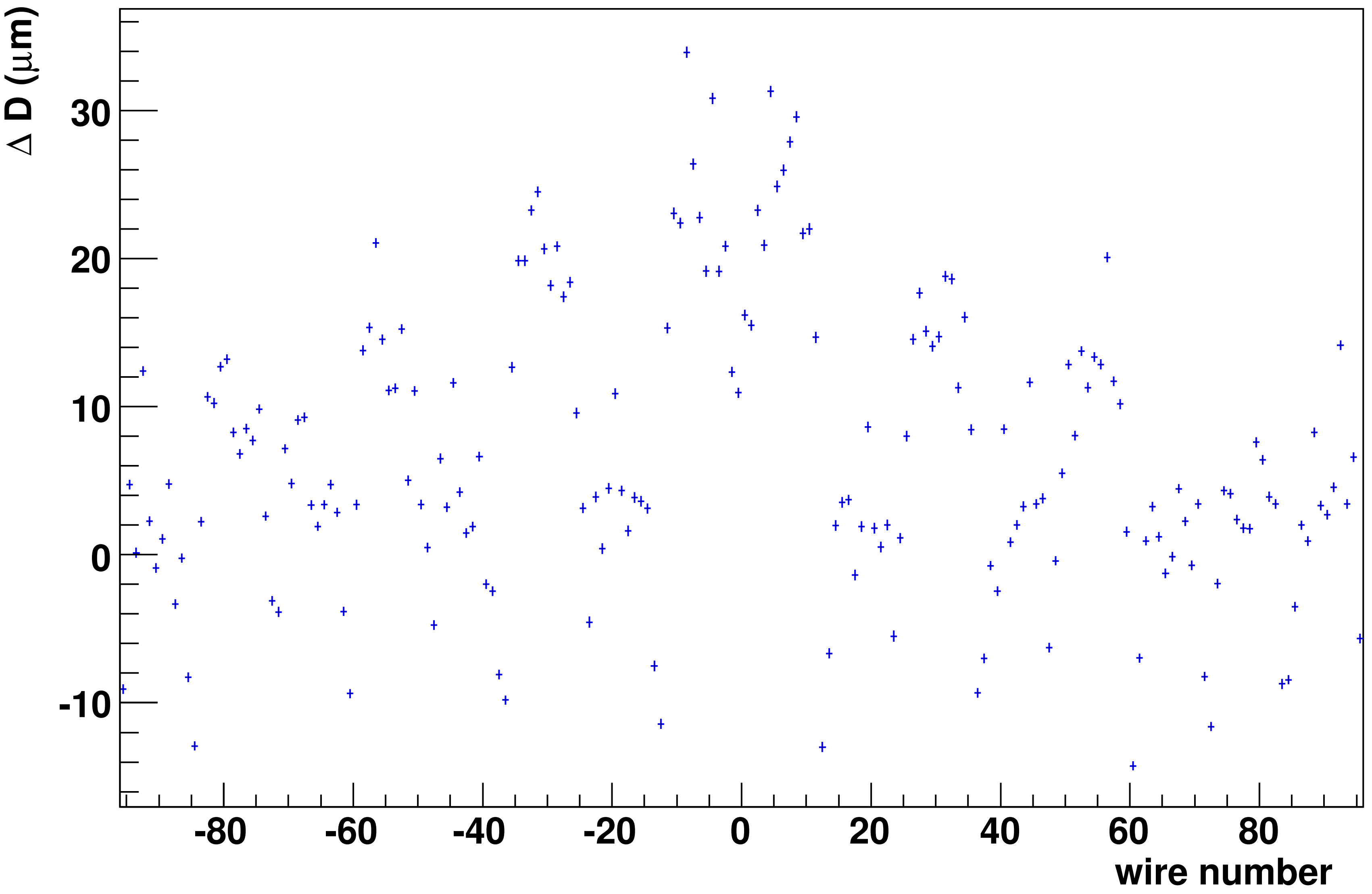


Entries 427092
Mean 273.33
RMS 61.735
Underflow 57497
Overflow 210
Integral 3.6938e+05
number of cosmics
10^5
10^4
10^3
10^2
0
100
200
300
400
500
600
$\Delta \chi^2$

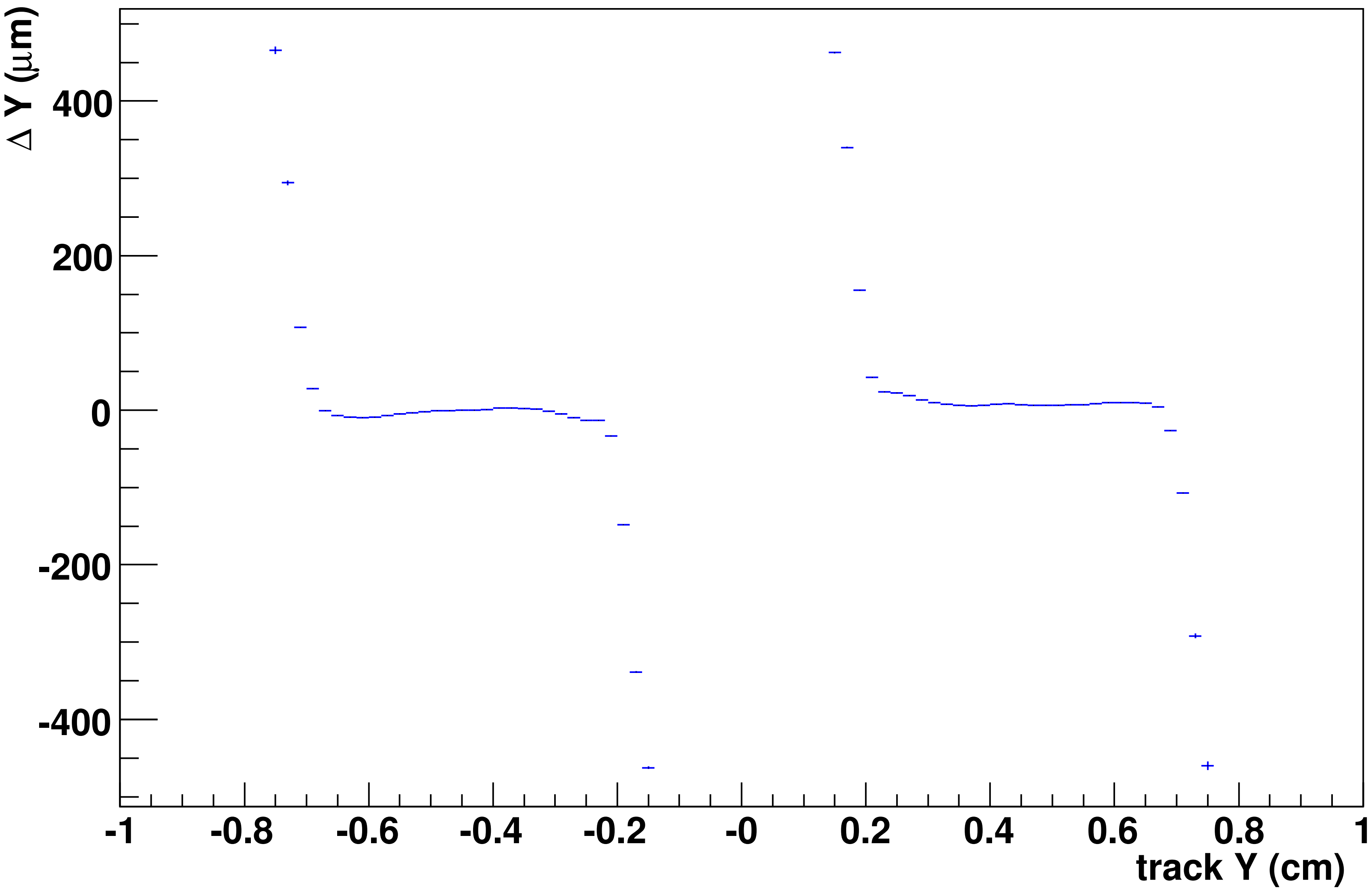


number of cosmics
10000
5000
0
1
2
3
4
5
6
track ϕ_0

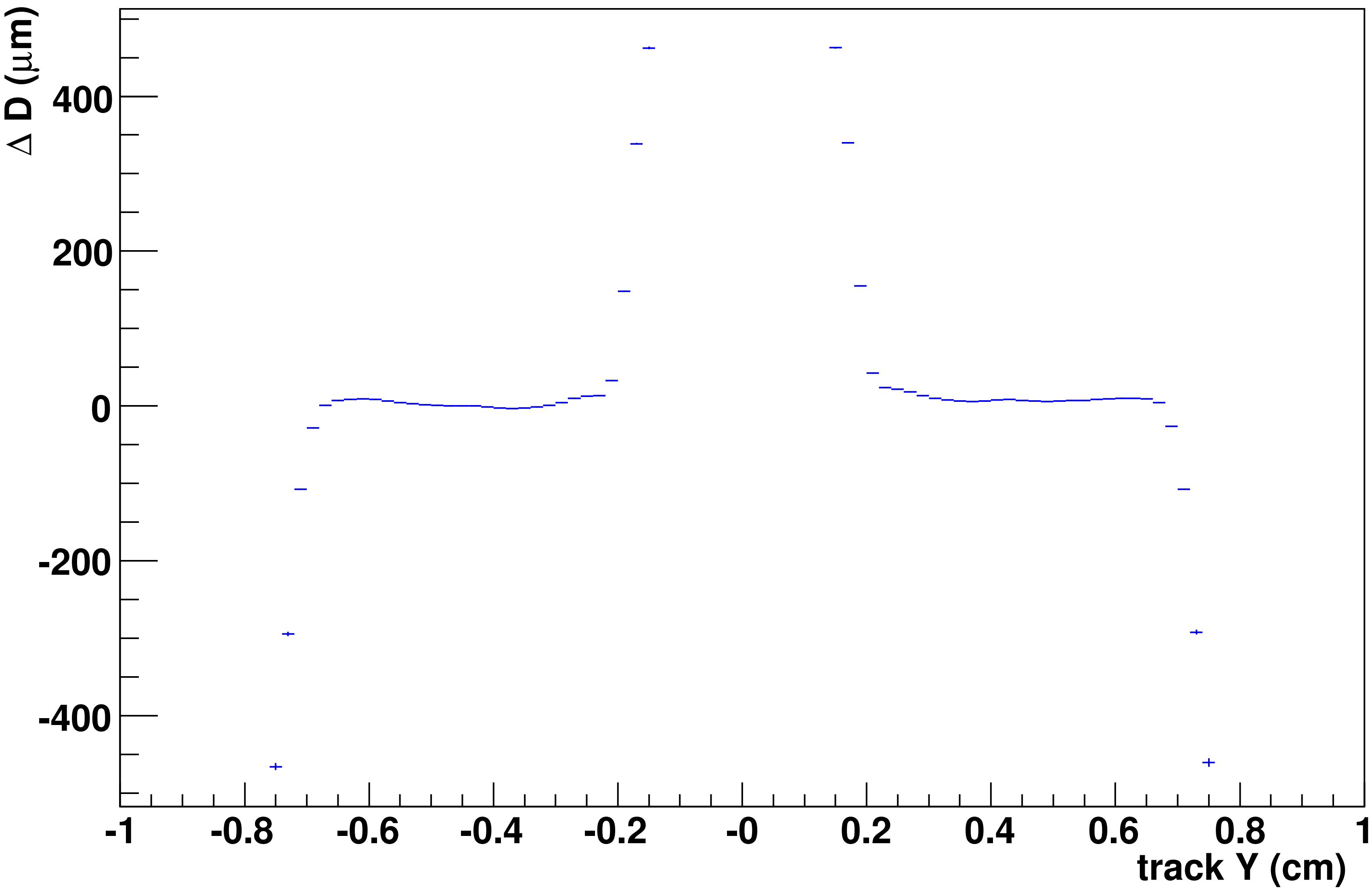

number of cosmics
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
φ0



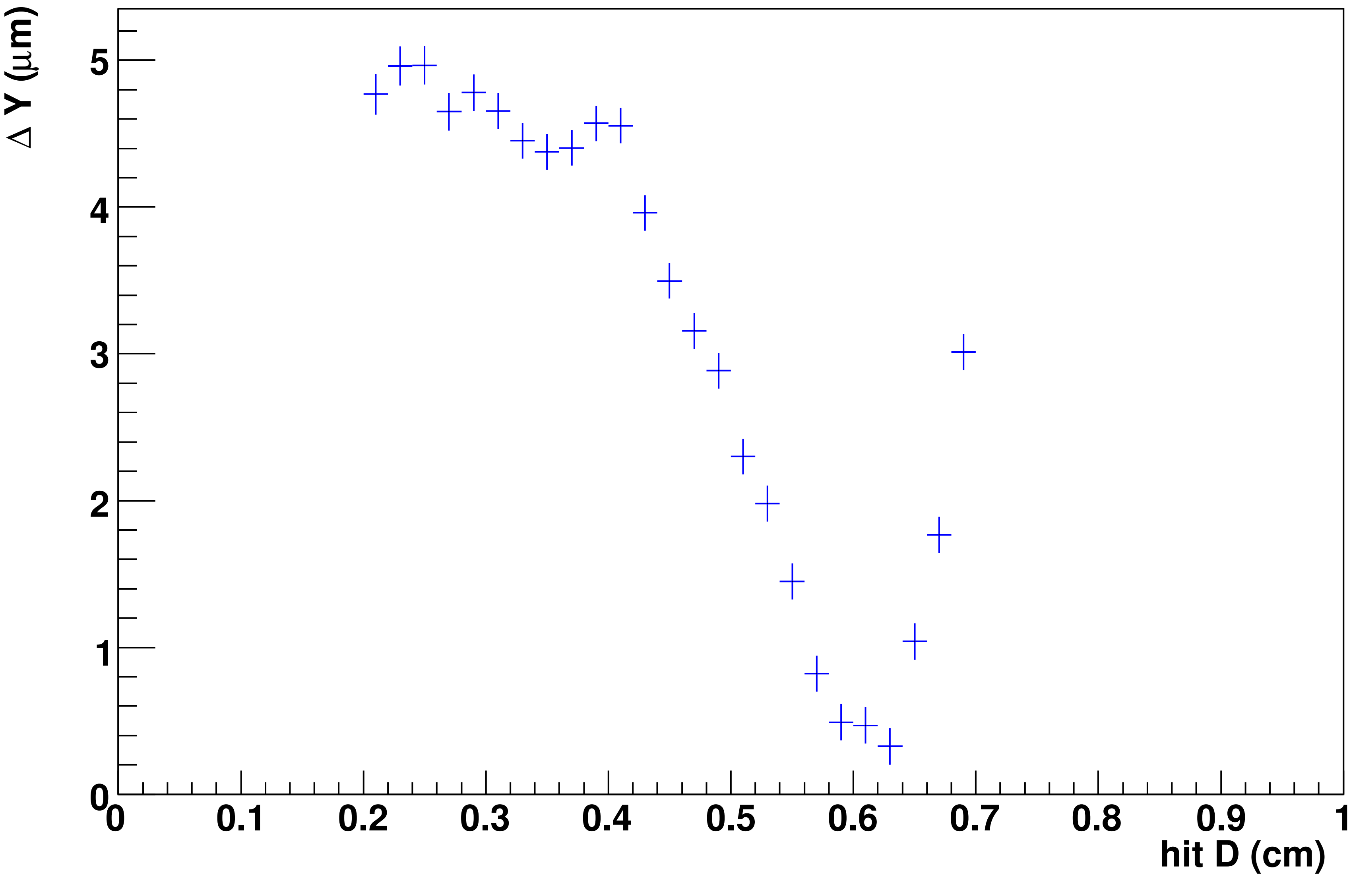
Δ D (μm)
30
20
10
0
-10
-80
-60
-40
-20
0
20
40
60
80
wire number



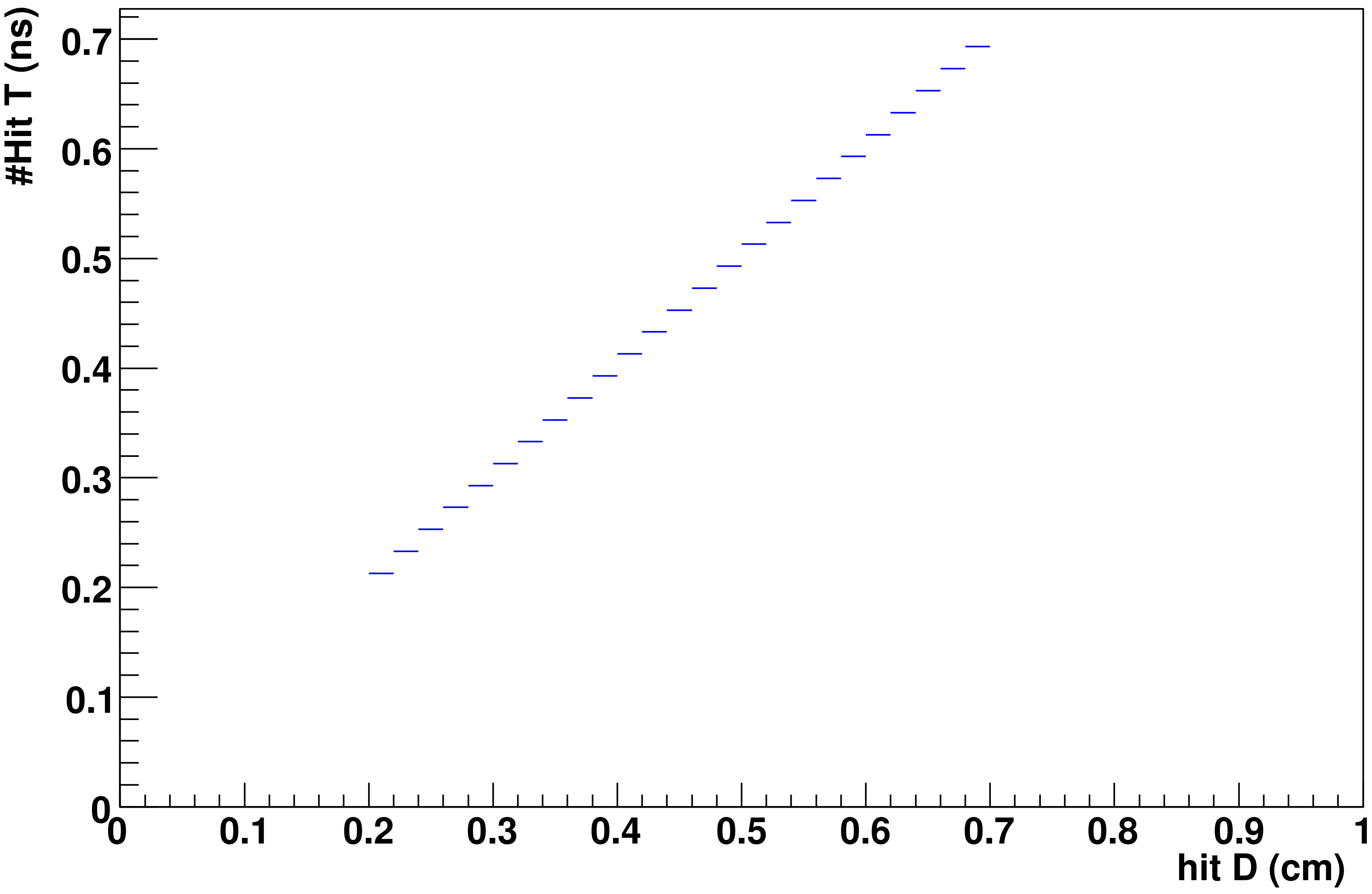
Δ Y (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)



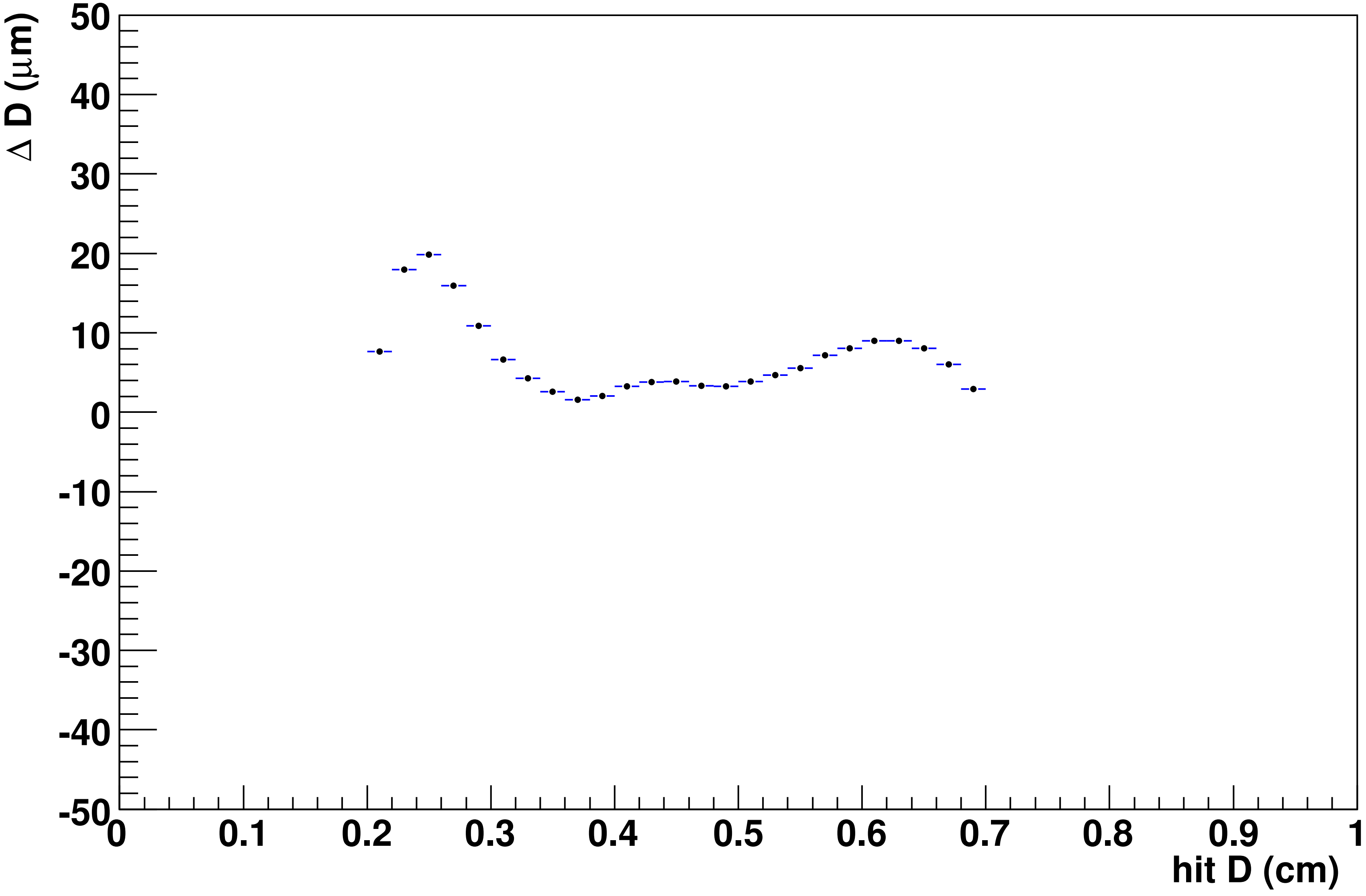
Δ D (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)



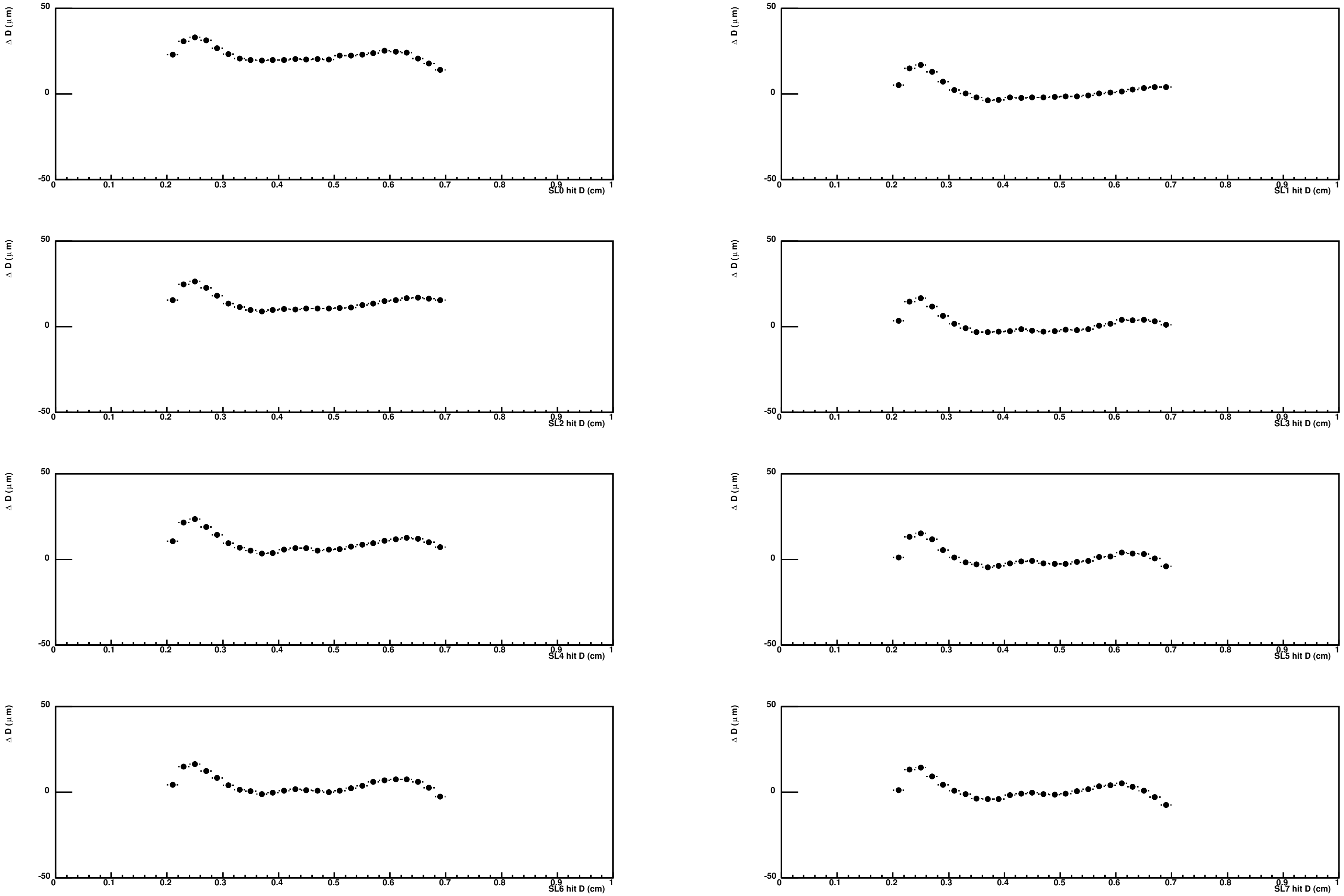
Δ Y (μm)
5
4
3
2
1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)



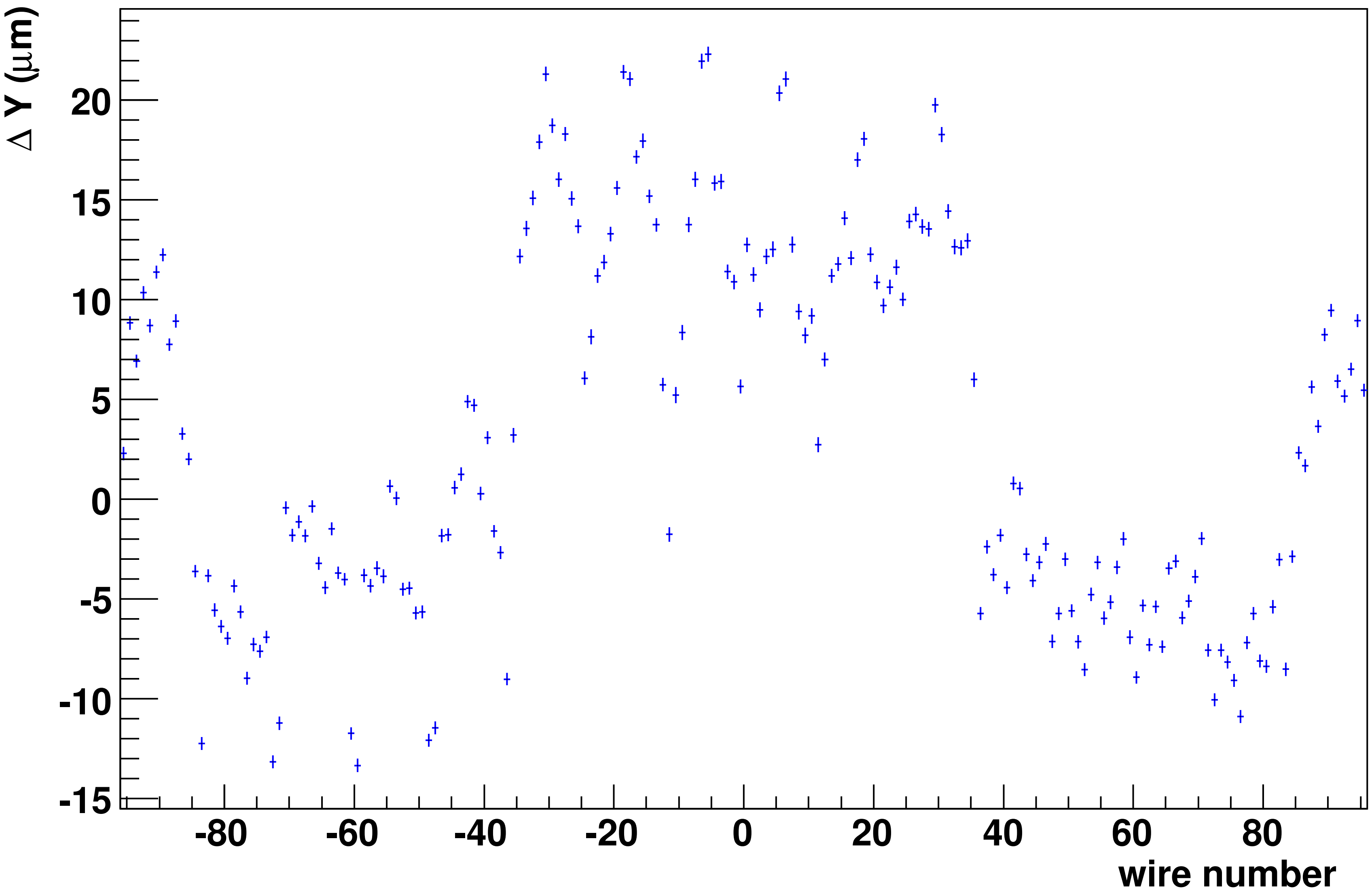
#Hit T (ns)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)



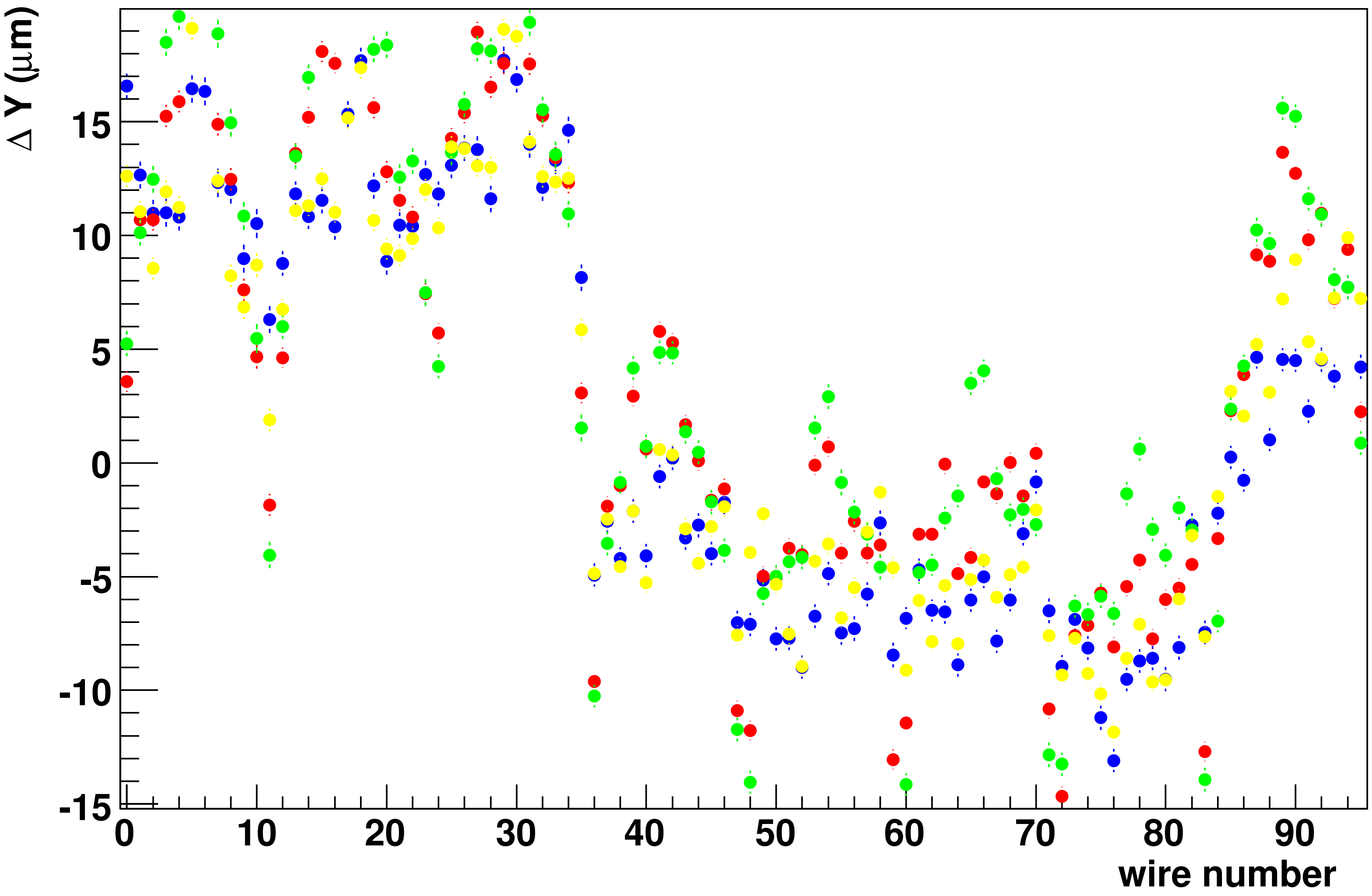
Δ D (μm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

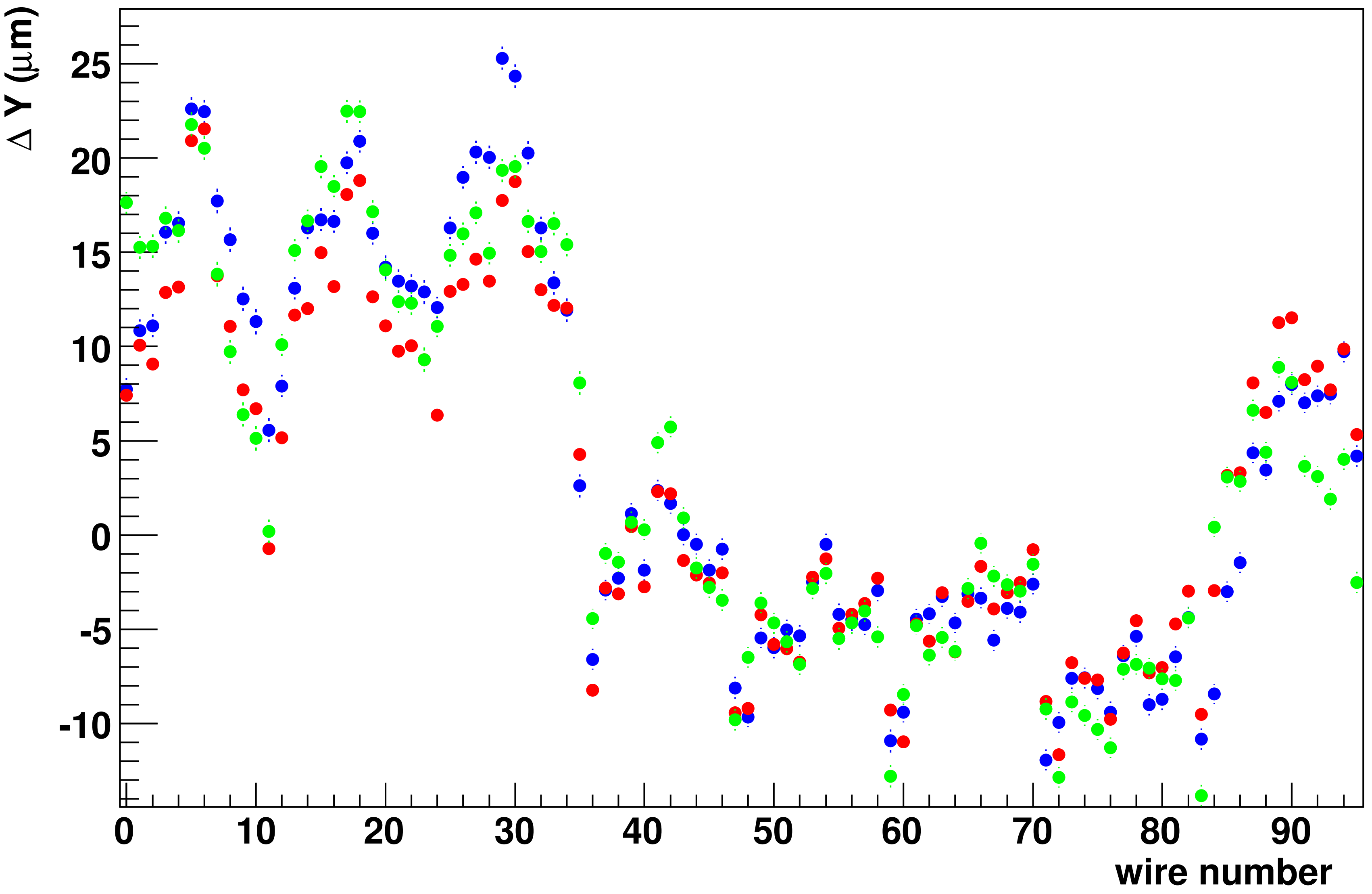


Δ D (μm)
SL0 hit D (cm)
SL1 hit D (cm)
SL2 hit D (cm)
SL3 hit D (cm)
SL4 hit D (cm)
SL5 hit D (cm)
SL6 hit D (cm)
SL7 hit D (cm)

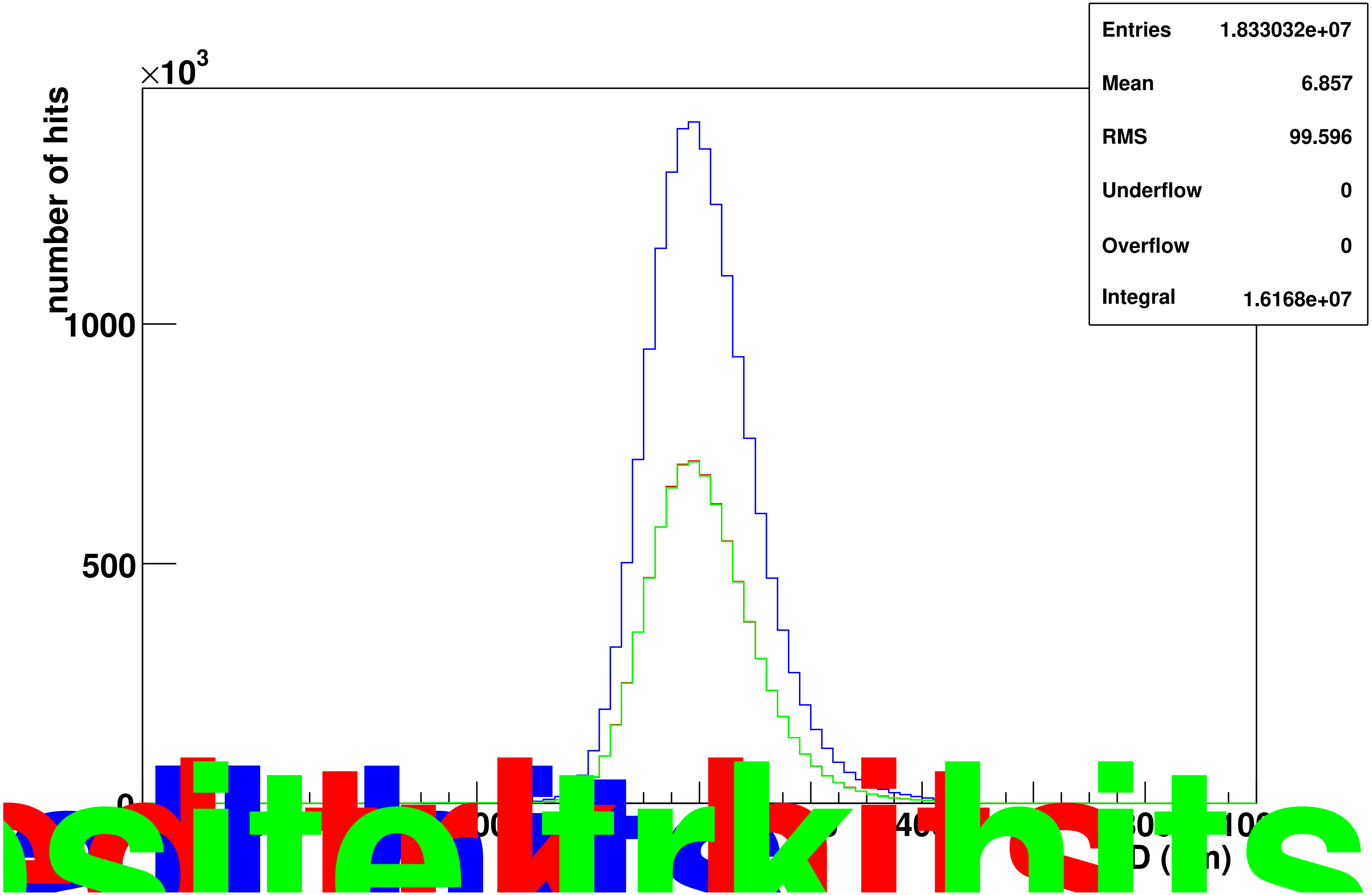


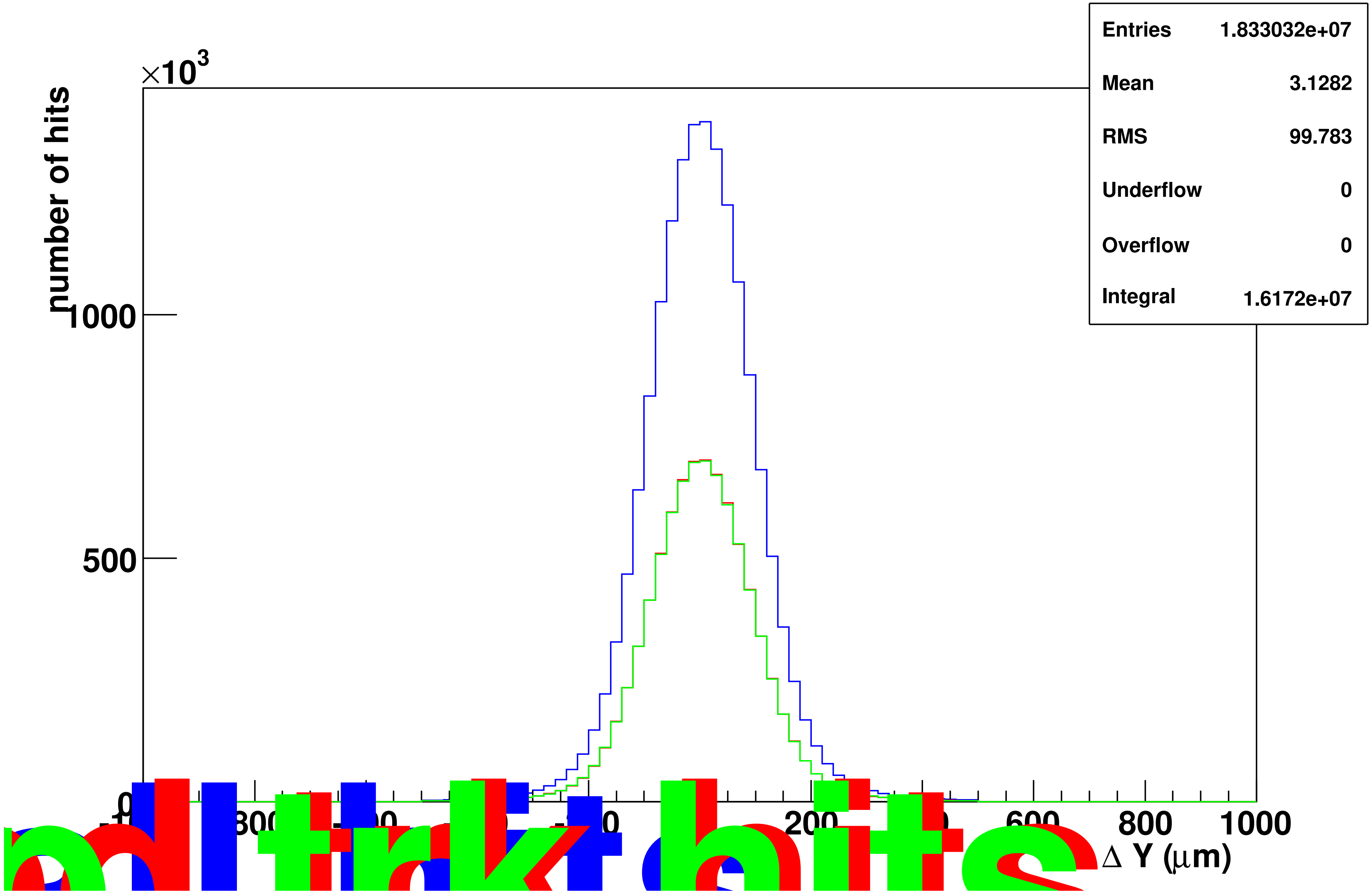
Δ Y (μm)
20
15
10
5
0
-5
-10
-15
-80
-60
-40
-20
0
20
40
60
80
wire number


Δ Y (μm)
15
10
5
0
-5
-10
-15
0
10
20
30
40
50
60
70
80
90
wire number

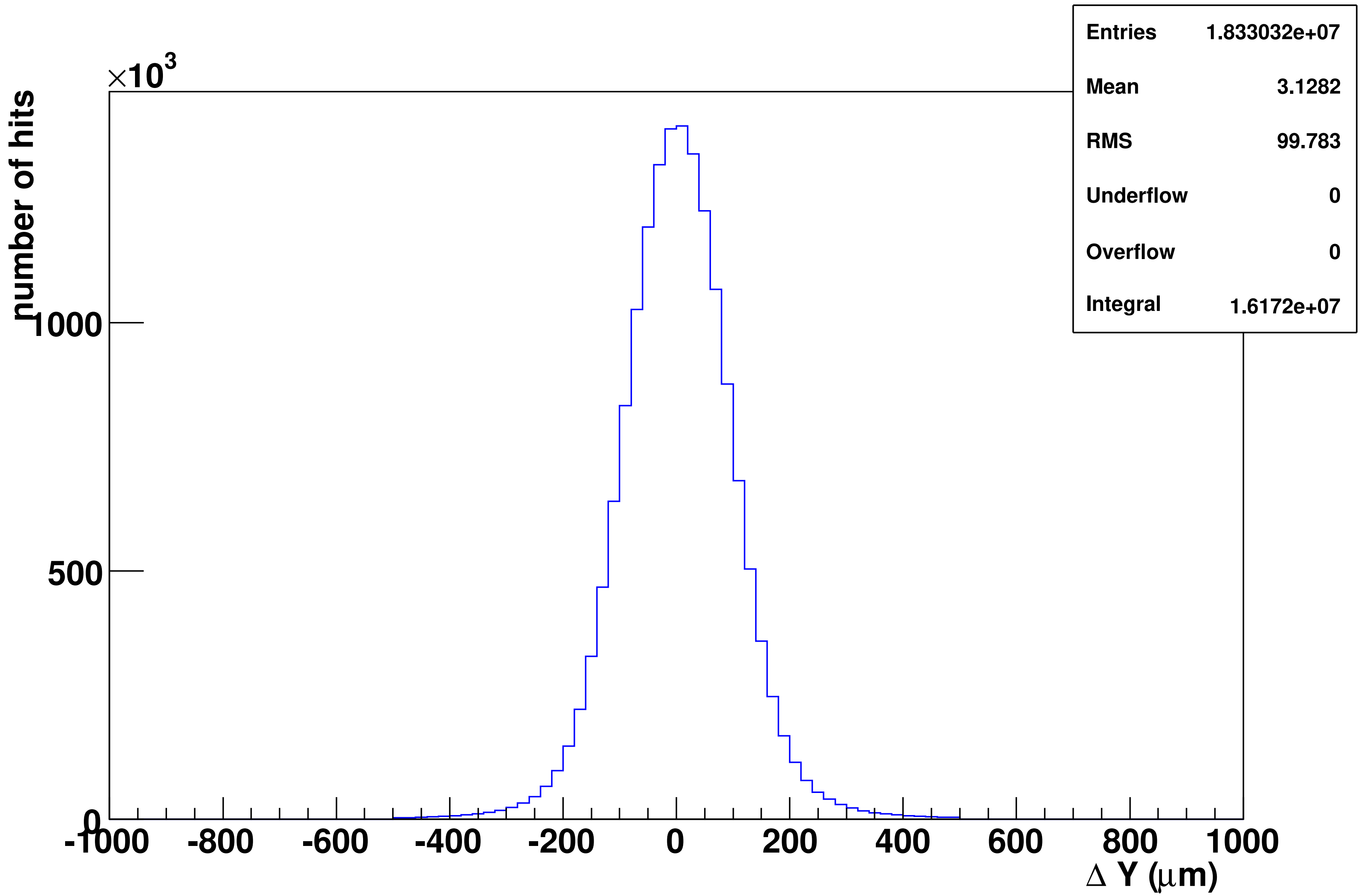


Δ Y (μm)
25
20
15
10
5
0
-5
-10
0
10
20
30
40
50
60
70
80
90
wire number


Entries 1.833032e+07
Mean 6.857
RMS 99.596
Underflow 0
Overflow 0
Integral 1.6168e+07
×10^3
number of hits
1000
500
0



Entries 1.833032e+07
Mean 3.1282
RMS 99.783
Underflow 0
Overflow 0
Integral 1.6172e+07
$\times 10^3$
number of hits
1000
500
0
200
600
800
1000
Δ Y (μm)


Entries 1.833032e+07
Mean 3.1282
RMS 99.783
Underflow 0
Overflow 0
Integral 1.6172e+07
×10^3
number of hits
1000
500
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000
Δ Y (μm)