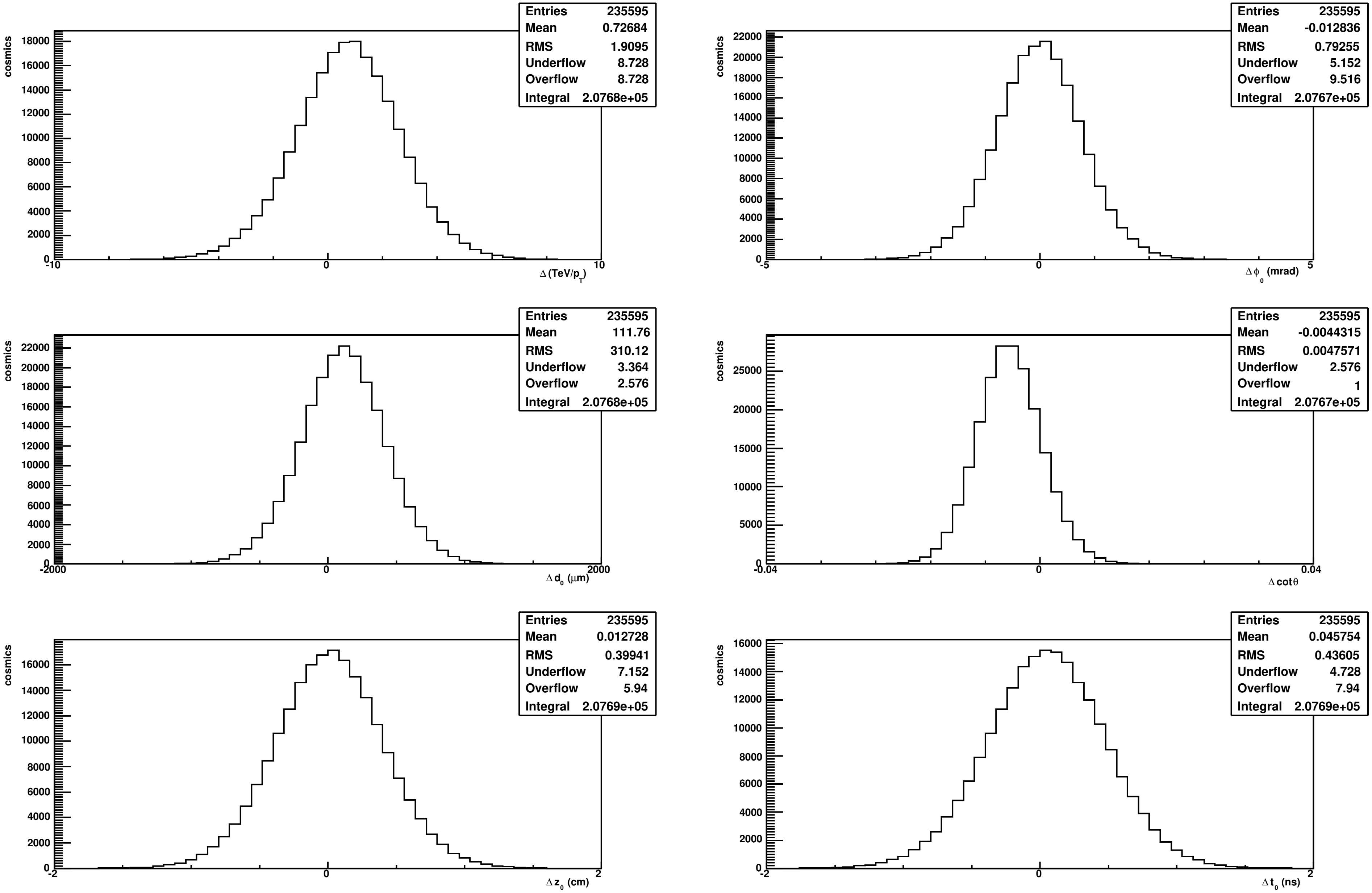
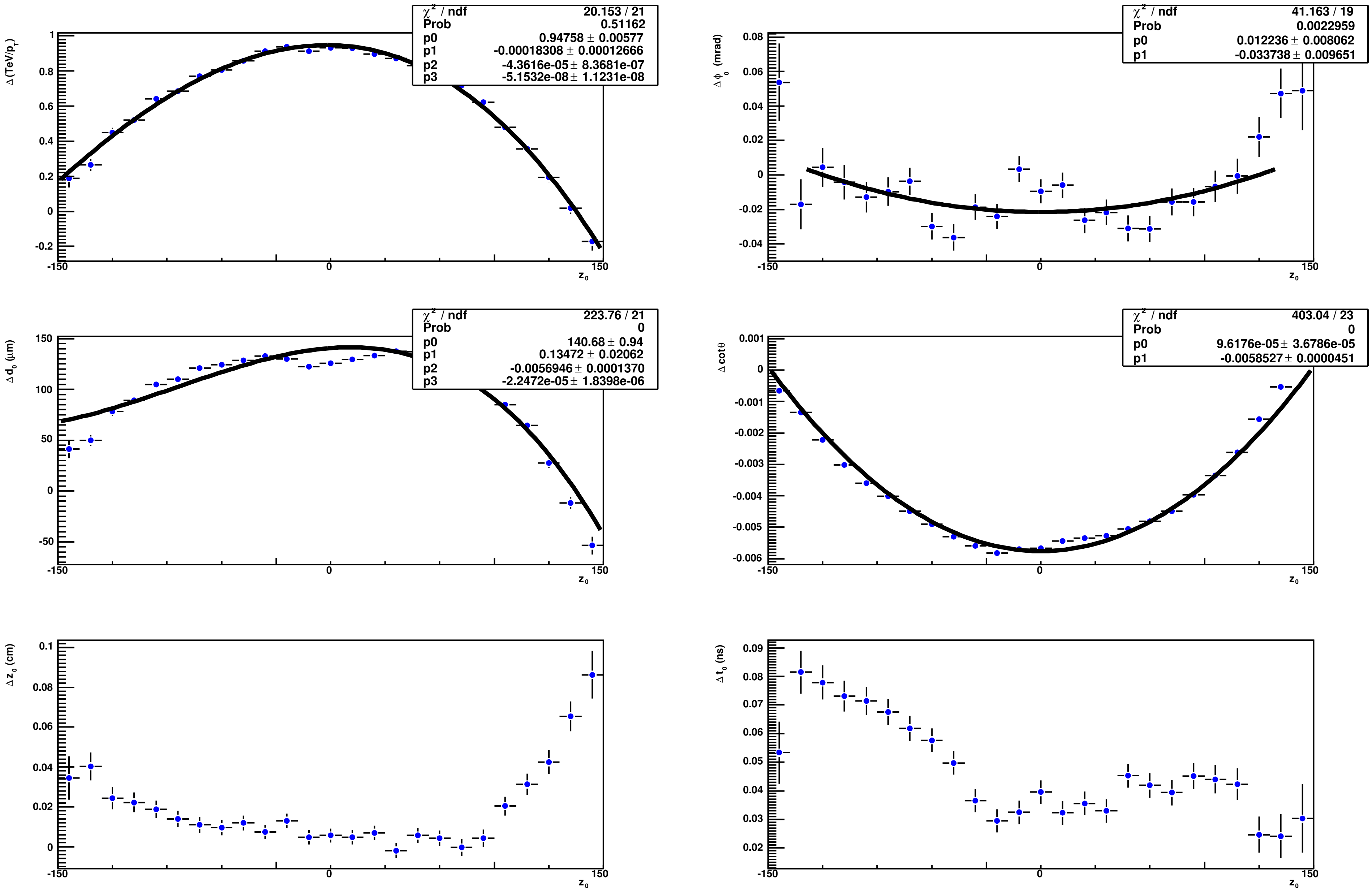
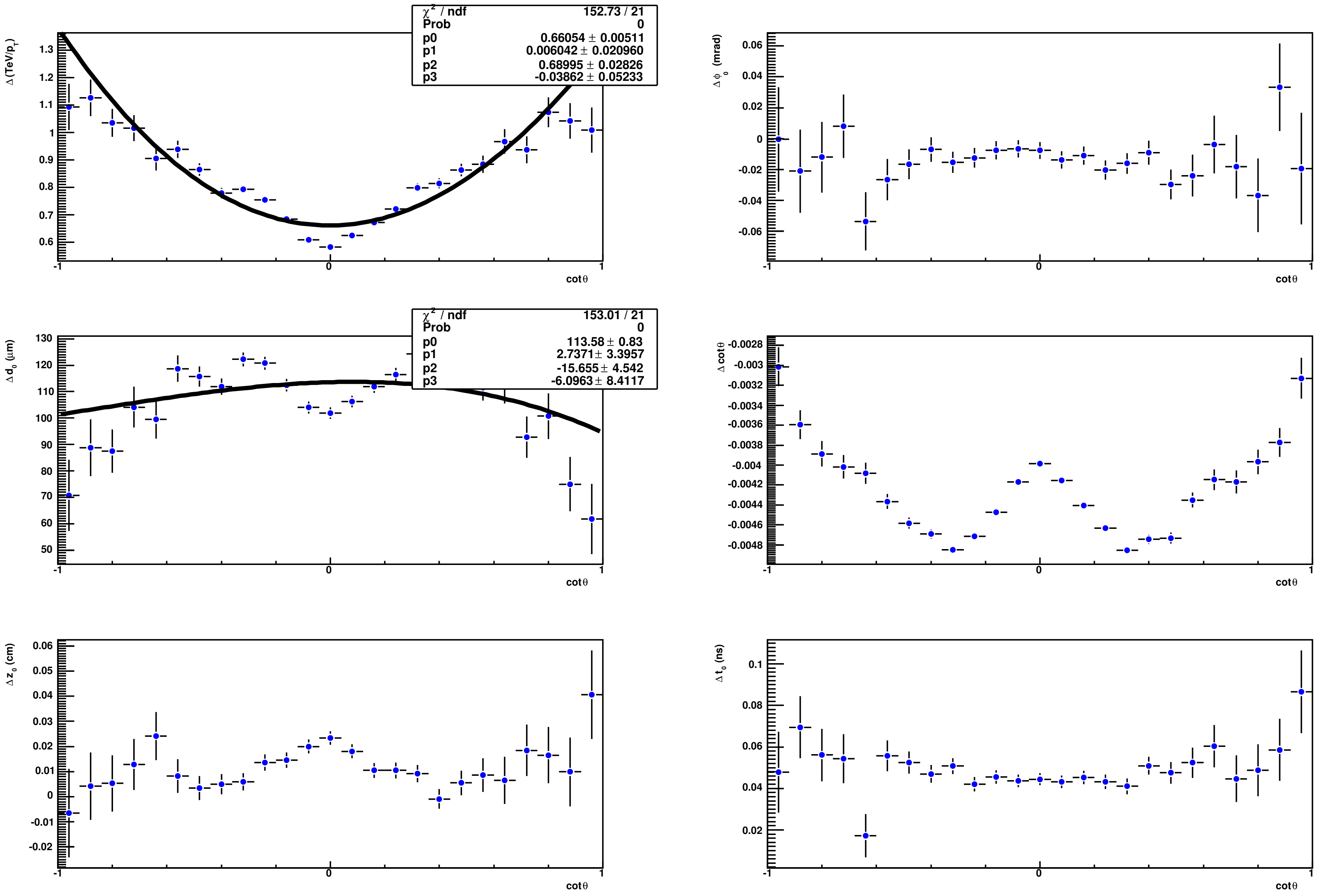
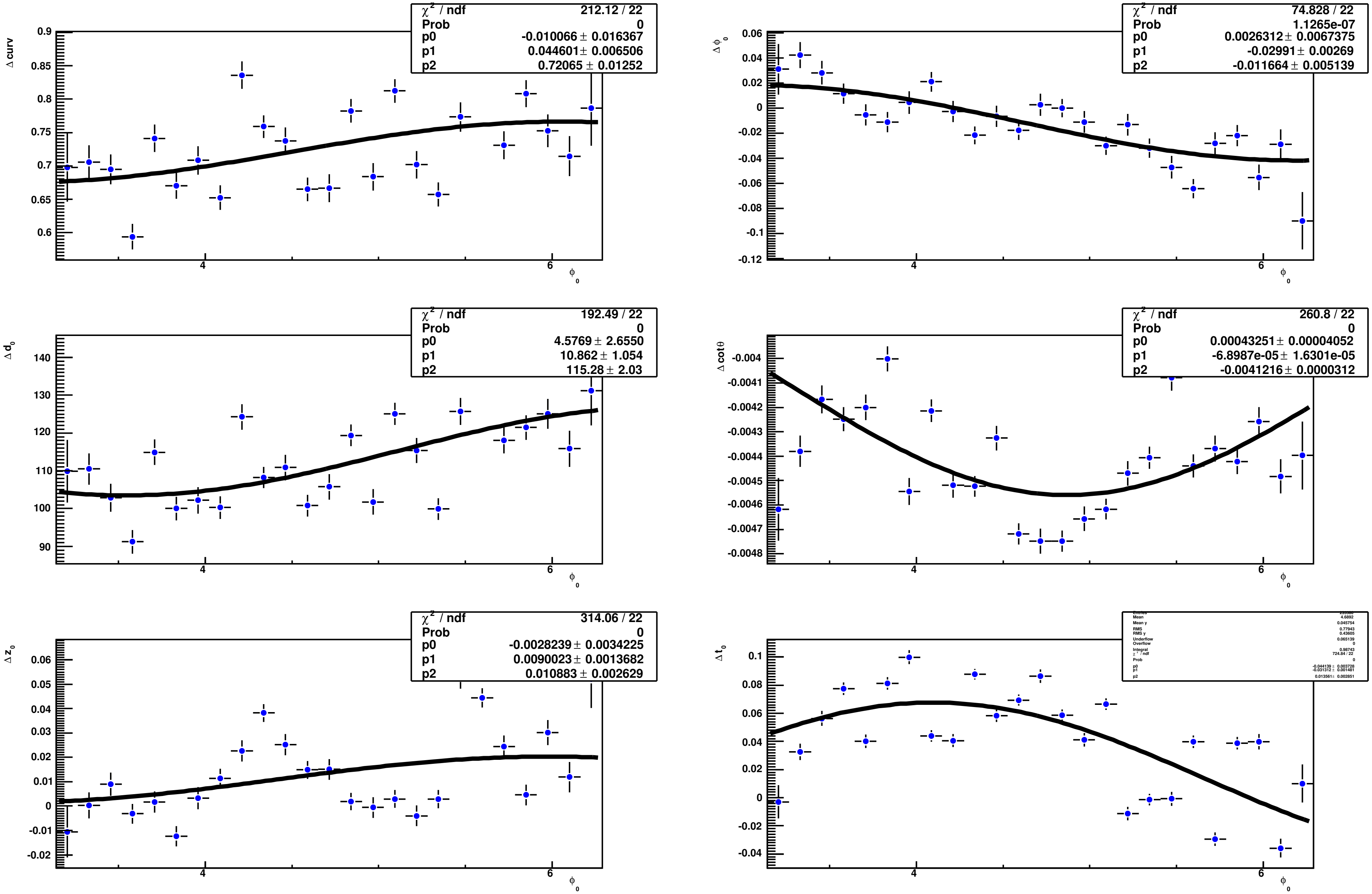

Entries 235595
Mean 0.72684
RMS 1.9095
Underflow 8.728
Overflow 8.728
Integral 2.0768e+05
cosmics
Δ(TeV/p_T)
Entries 235595
Mean -0.012836
RMS 0.79255
Underflow 5.152
Overflow 9.516
Integral 2.0767e+05
cosmics
Δφ_0 (mrad)
Entries 235595
Mean 111.76
RMS 310.12
Underflow 3.364
Overflow 2.576
Integral 2.0768e+05
cosmics
Δd_0 (μm)
Entries 235595
Mean -0.0044315
RMS 0.0047571
Underflow 2.576
Overflow 1
Integral 2.0767e+05
cosmics
Δcotθ
Entries 235595
Mean 0.012728
RMS 0.39941
Underflow 7.152
Overflow 5.94
Integral 2.0769e+05
cosmics
Δz_0 (cm)
Entries 235595
Mean 0.045754
RMS 0.43605
Underflow 4.728
Overflow 7.94
Integral 2.0769e+05
cosmics
Δt_0 (ns)



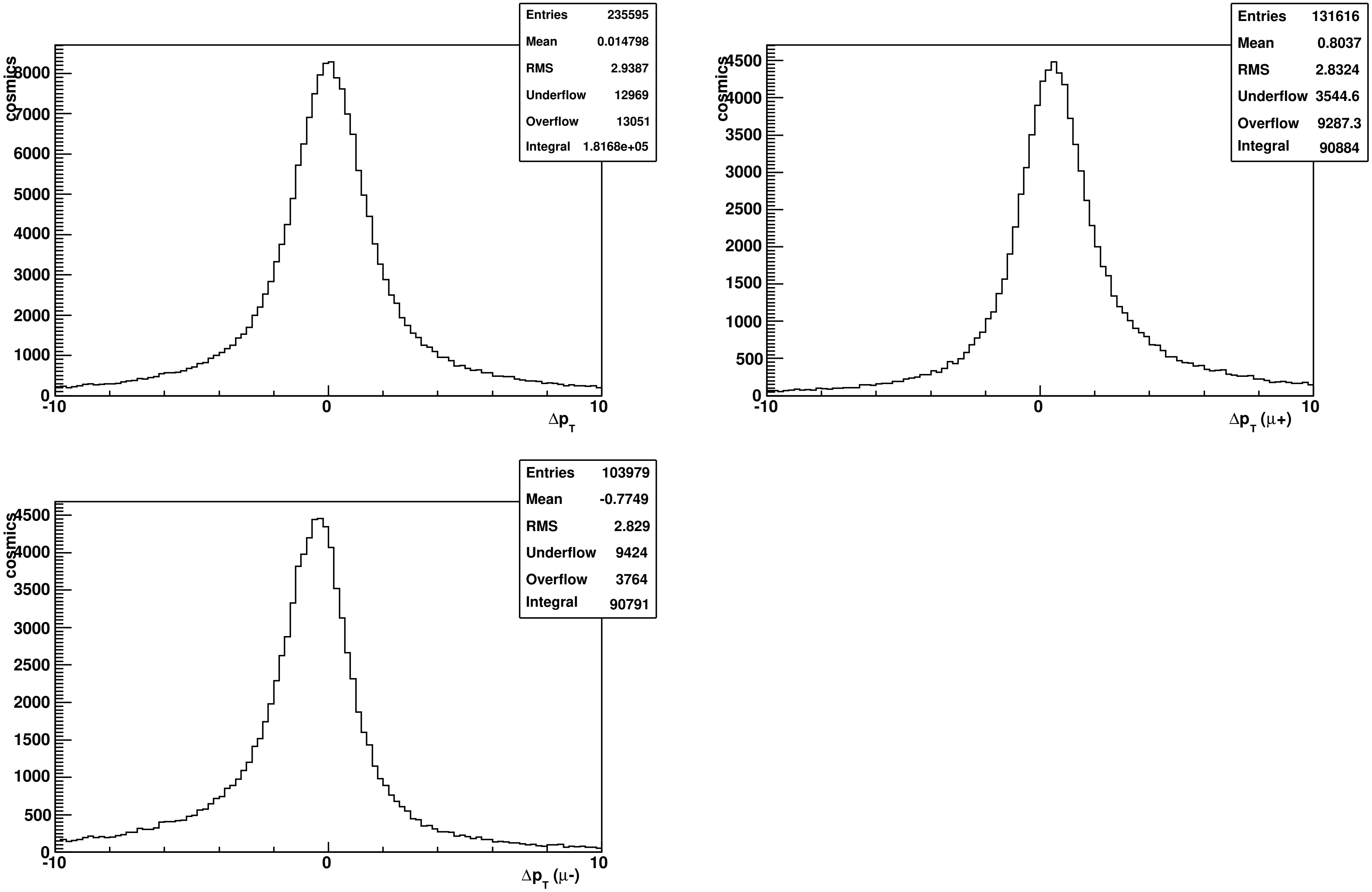
χ^2 / ndf 20.153 / 21
Prob 0.51162
p0 0.94758 ± 0.00577
p1 -0.00018308 ± 0.00012666
p2 -4.3616e-05 ± 8.3681e-07
p3 -5.1532e-08 ± 1.1231e-08
$\Delta(\mathrm{TeV}/p_T)$
z_0
χ^2 / ndf 41.163 / 19
Prob 0.0022959
p0 0.012236 ± 0.008062
p1 -0.033738 ± 0.009651
$\Delta\phi_0$ (mrad)
χ^2 / ndf 223.76 / 21
Prob 0
p0 140.68 ± 0.94
p1 0.13472 ± 0.02062
p2 -0.0056946 ± 0.0001370
p3 -2.2472e-05 ± 1.8398e-06
Δd_0 (μm)
χ^2 / ndf 403.04 / 23
Prob 0
p0 9.6176e-05 ± 3.6786e-05
p1 -0.0058527 ± 0.0000451
$\Delta\cot\theta$
Δz_0 (cm)
Δt_0 (ns)



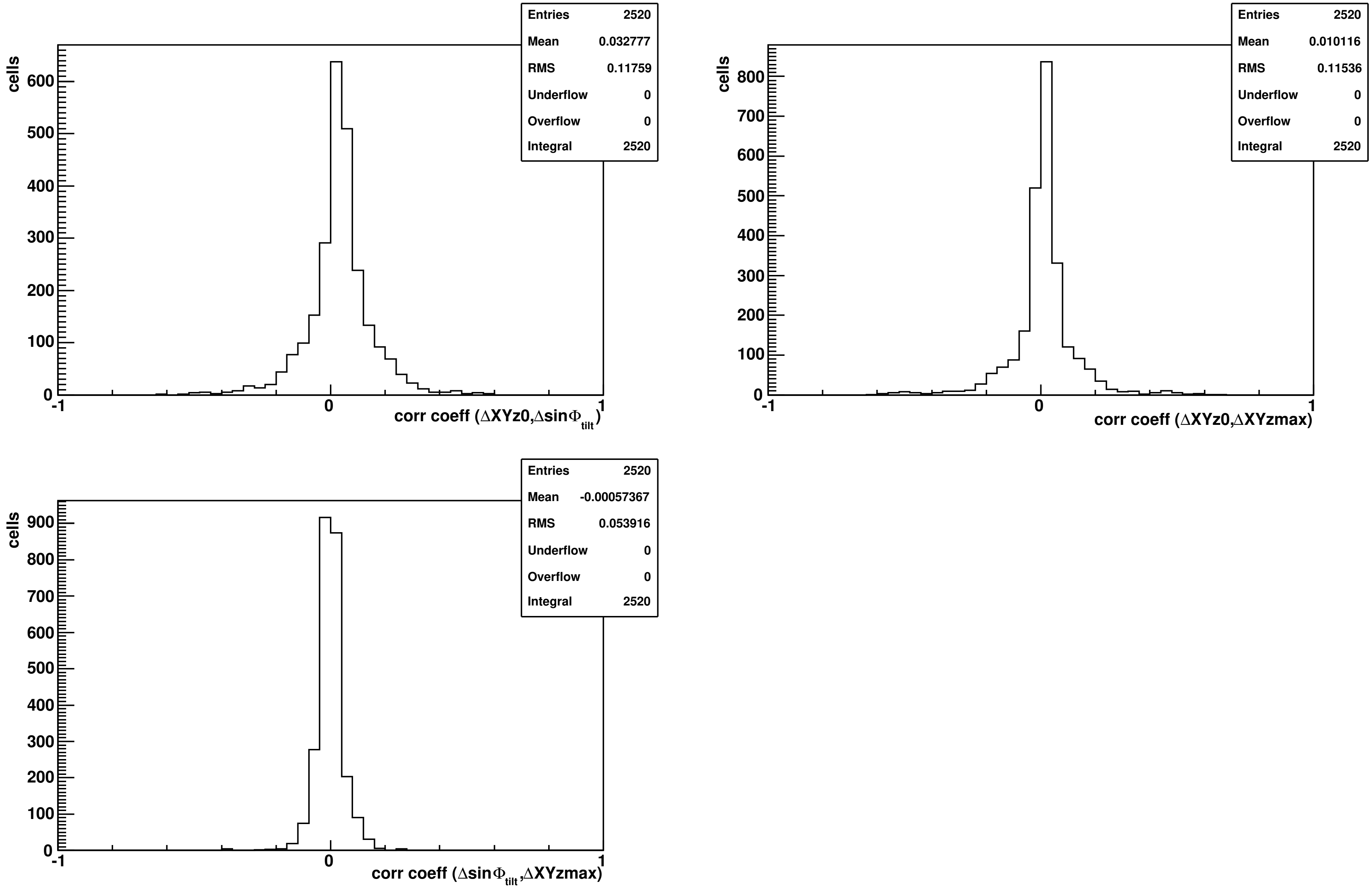
χ2 / ndf 152.73 / 21
Prob 0
p0 0.66054 ± 0.00511
p1 0.006042 ± 0.020960
p2 0.68995 ± 0.02826
p3 -0.03862 ± 0.05233
Δ(TeV/pT)
cotθ
Δφ0 (mrad)
cotθ
χ2 / ndf 153.01 / 21
Prob 0
p0 113.58 ± 0.83
p1 2.7371 ± 3.3957
p2 -15.655 ± 4.542
p3 -6.0963 ± 8.4117
Δd0 (μm)
cotθ
Δcotθ
cotθ
Δz0 (cm)
cotθ
Δt0 (ns)
cotθ



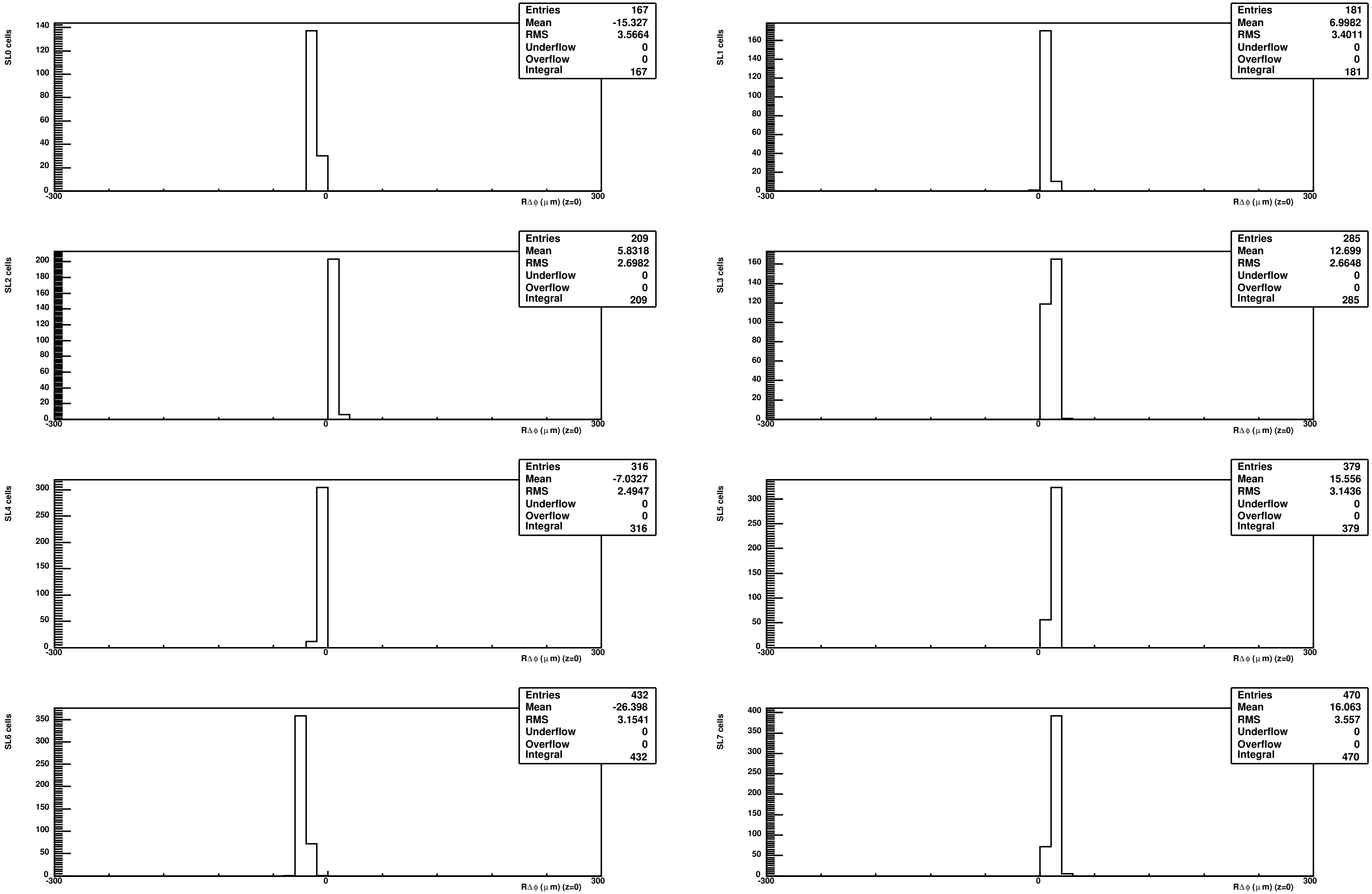
χ2 / ndf 212.12 / 22
Prob 0
p0 -0.010066 ± 0.016367
p1 0.044601 ± 0.006506
p2 0.72065 ± 0.01252
Δ curv
φ0
χ2 / ndf 74.828 / 22
Prob 1.1265e-07
p0 0.0026312 ± 0.0067375
p1 -0.02991 ± 0.00269
p2 -0.011664 ± 0.005139
Δ φ0
φ0
χ2 / ndf 192.49 / 22
Prob 0
p0 4.5769 ± 2.6550
p1 10.862 ± 1.054
p2 115.28 ± 2.03
Δ d0
φ0
χ2 / ndf 260.8 / 22
Prob 0
p0 0.00043251 ± 0.00004052
p1 -6.8987e-05 ± 1.6301e-05
p2 -0.0041216 ± 0.0000312
Δ cotθ
φ0
χ2 / ndf 314.06 / 22
Prob 0
p0 -0.0028239 ± 0.0034225
p1 0.0090023 ± 0.0013682
p2 0.010883 ± 0.002629
Δ z0
φ0
Δ t0
φ0



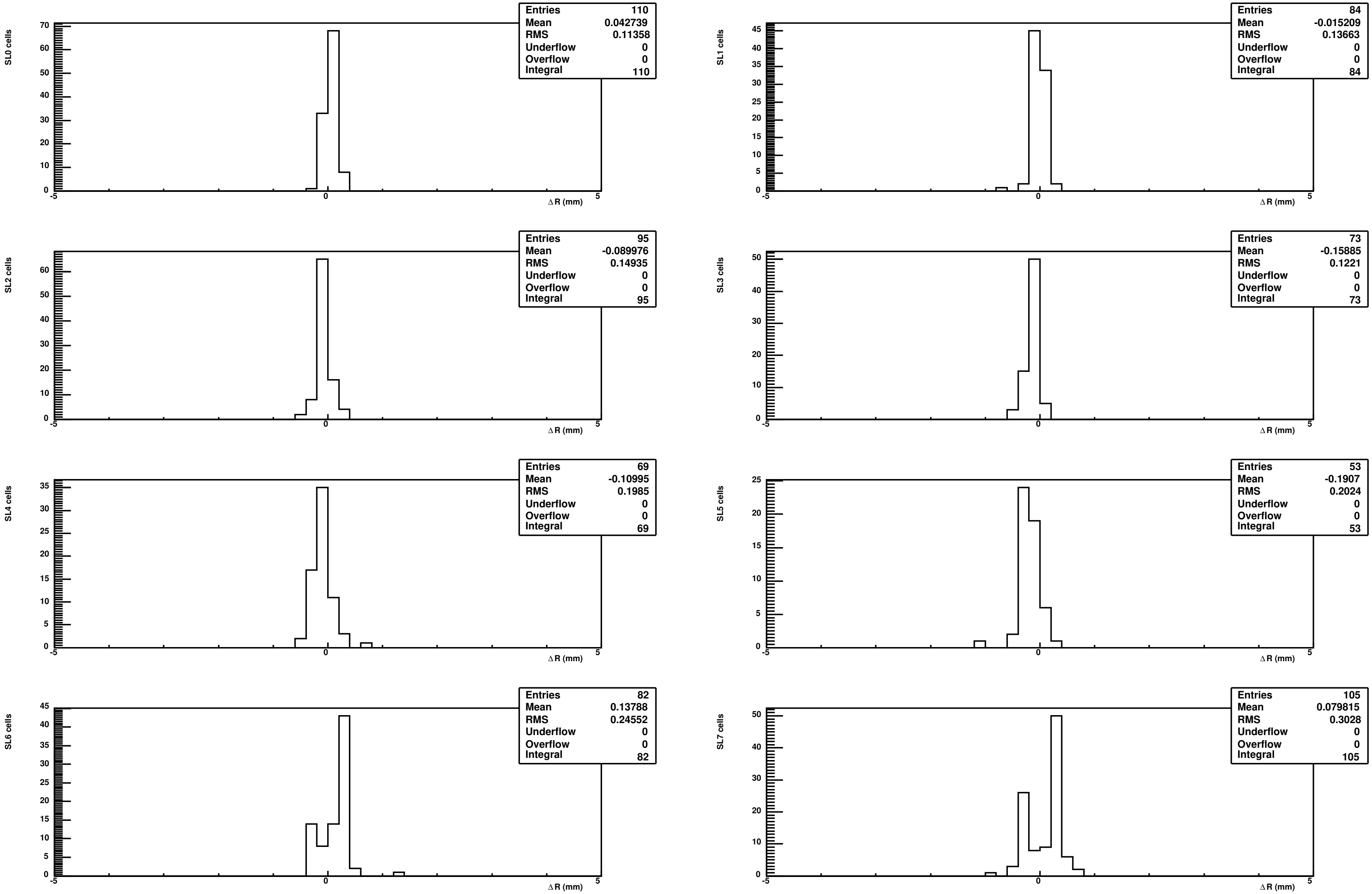
Entries 235595
Mean 0.014798
RMS 2.9387
Underflow 12969
Overflow 13051
Integral 1.8168e+05
cosmics
Δp_T
Entries 131616
Mean 0.8037
RMS 2.8324
Underflow 3544.6
Overflow 9287.3
Integral 90884
cosmics
Δp_T (μ+)
Entries 103979
Mean -0.7749
RMS 2.829
Underflow 9424
Overflow 3764
Integral 90791
cosmics
Δp_T (μ-)



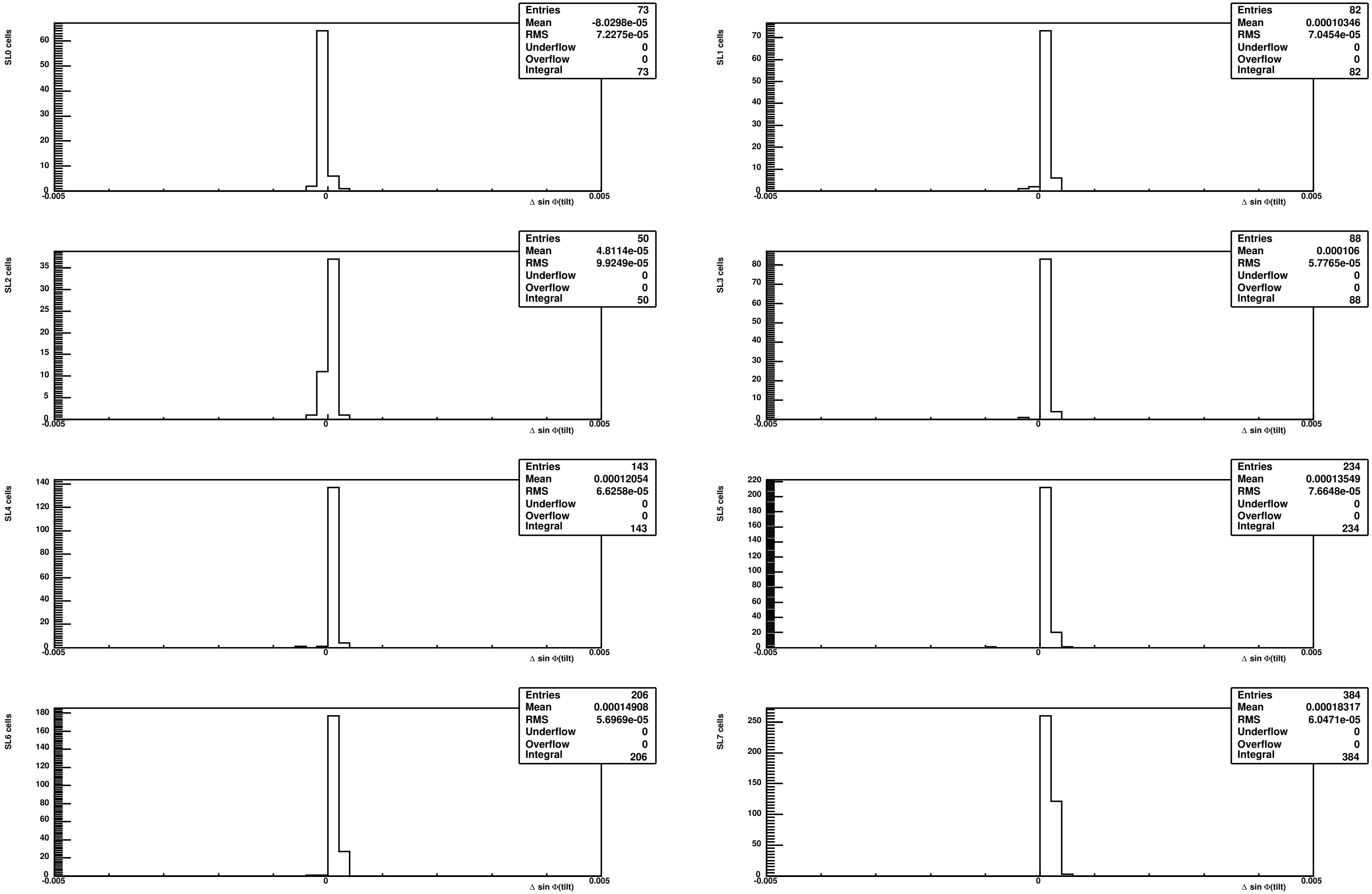
Entries 2520
Mean 0.032777
RMS 0.11759
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔsinΦ$_{tilt}$)
Entries 2520
Mean 0.010116
RMS 0.11536
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔXYzmax)
Entries 2520
Mean -0.00057367
RMS 0.053916
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔsinΦ$_{tilt}$,ΔXYzmax)



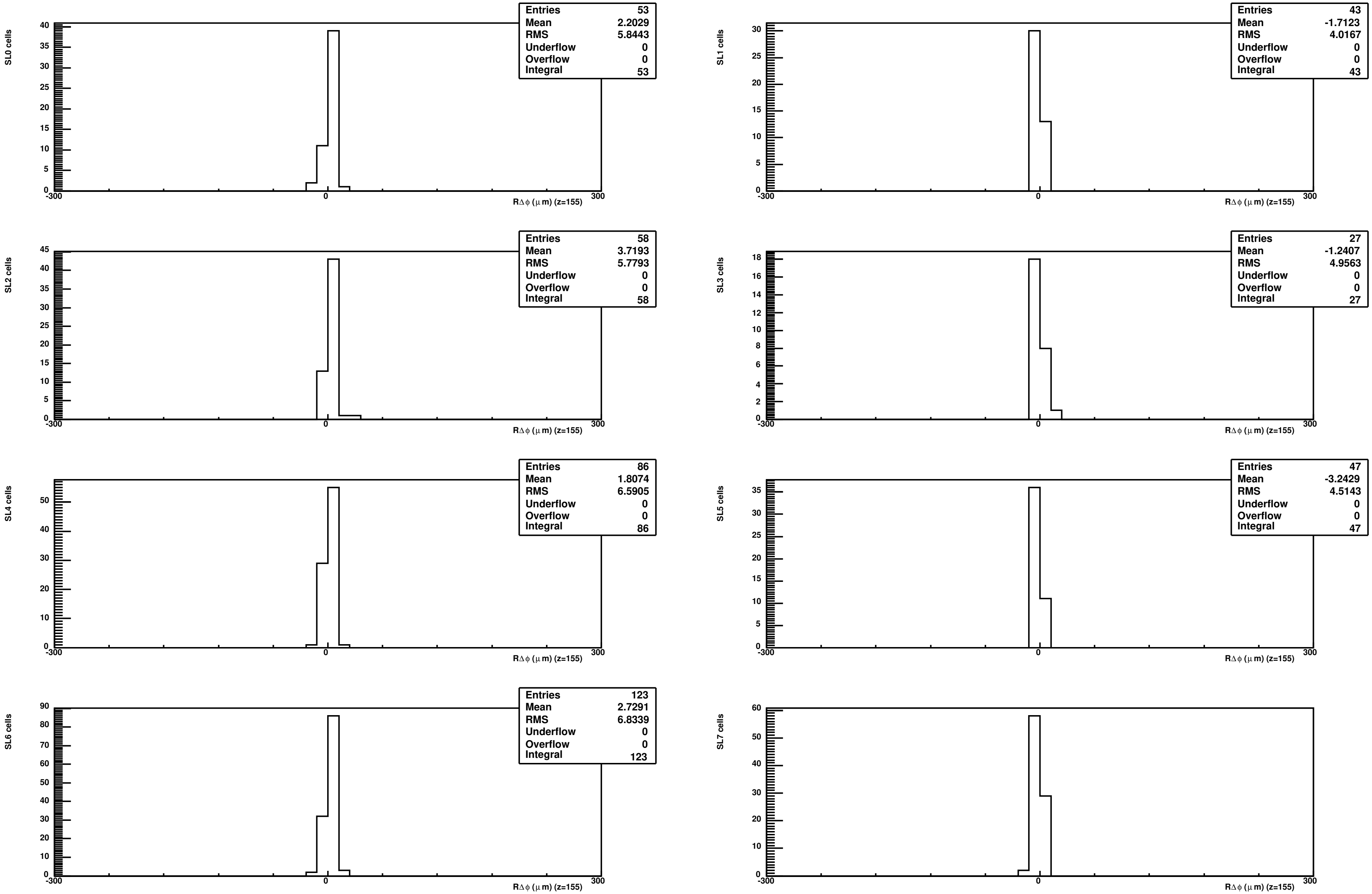
SL0 cells
Entries 167
Mean -15.327
RMS 3.5664
Underflow 0
Overflow 0
Integral 167
RΔφ (μ m) (z=0)
SL1 cells
Entries 181
Mean 6.9982
RMS 3.4011
Underflow 0
Overflow 0
Integral 181
RΔφ (μ m) (z=0)
SL2 cells
Entries 209
Mean 5.8318
RMS 2.6982
Underflow 0
Overflow 0
Integral 209
RΔφ (μ m) (z=0)
SL3 cells
Entries 285
Mean 12.699
RMS 2.6648
Underflow 0
Overflow 0
Integral 285
RΔφ (μ m) (z=0)
SL4 cells
Entries 316
Mean -7.0327
RMS 2.4947
Underflow 0
Overflow 0
Integral 316
RΔφ (μ m) (z=0)
SL5 cells
Entries 379
Mean 15.556
RMS 3.1436
Underflow 0
Overflow 0
Integral 379
RΔφ (μ m) (z=0)
SL6 cells
Entries 432
Mean -26.398
RMS 3.1541
Underflow 0
Overflow 0
Integral 432
RΔφ (μ m) (z=0)
SL7 cells
Entries 470
Mean 16.063
RMS 3.557
Underflow 0
Overflow 0
Integral 470
RΔφ (μ m) (z=0)



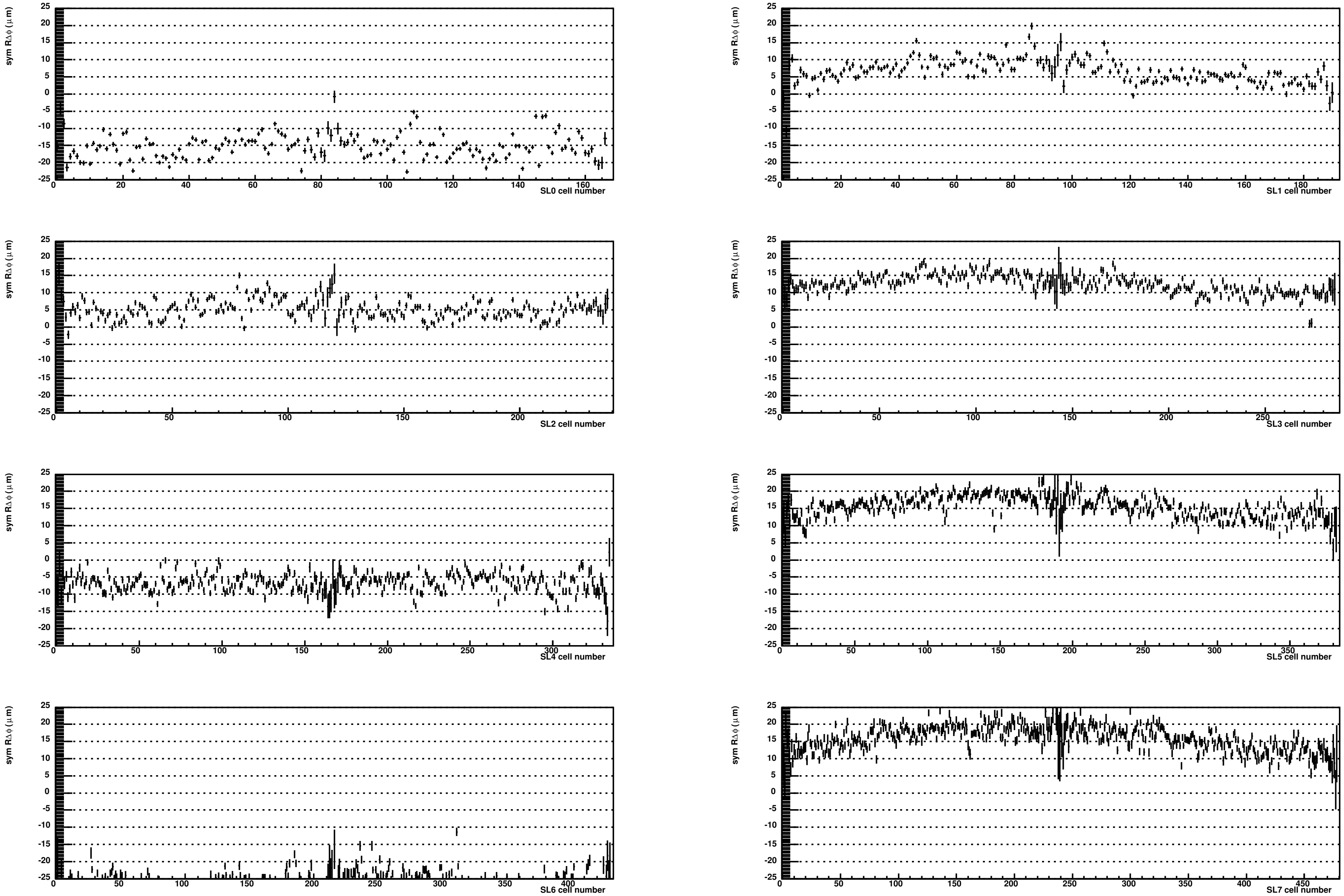
SL0 cells
Entries 110
Mean 0.042739
RMS 0.11358
Underflow 0
Overflow 0
Integral 110
ΔR (mm)
SL1 cells
Entries 84
Mean -0.015209
RMS 0.13663
Underflow 0
Overflow 0
Integral 84
ΔR (mm)
SL2 cells
Entries 95
Mean -0.089976
RMS 0.14935
Underflow 0
Overflow 0
Integral 95
ΔR (mm)
SL3 cells
Entries 73
Mean -0.15885
RMS 0.1221
Underflow 0
Overflow 0
Integral 73
ΔR (mm)
SL4 cells
Entries 69
Mean -0.10995
RMS 0.1985
Underflow 0
Overflow 0
Integral 69
ΔR (mm)
SL5 cells
Entries 53
Mean -0.1907
RMS 0.2024
Underflow 0
Overflow 0
Integral 53
ΔR (mm)
SL6 cells
Entries 82
Mean 0.13788
RMS 0.24552
Underflow 0
Overflow 0
Integral 82
ΔR (mm)
SL7 cells
Entries 105
Mean 0.079815
RMS 0.3028
Underflow 0
Overflow 0
Integral 105
ΔR (mm)

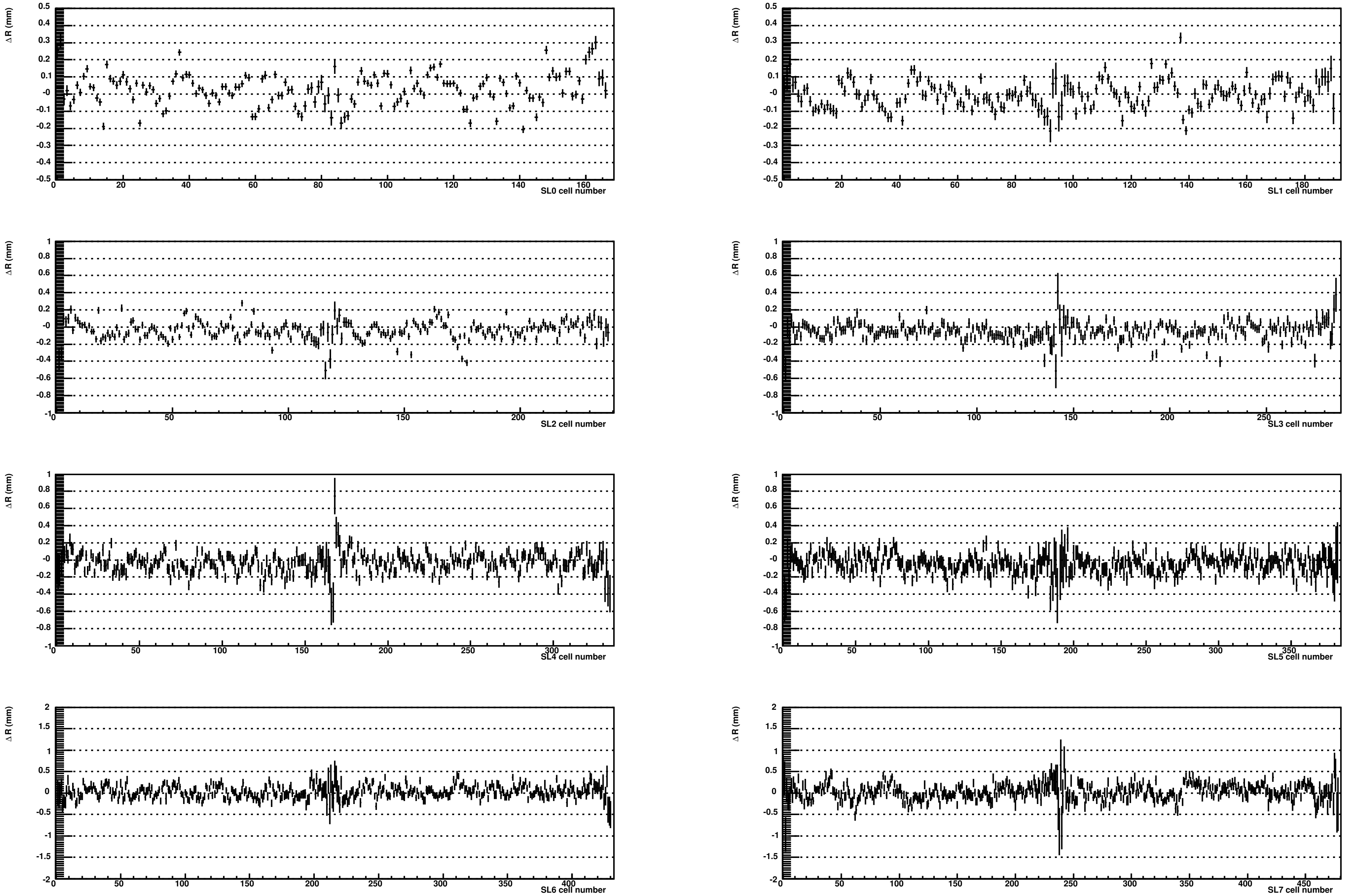


Entries 73
Mean -8.0298e-05
RMS 7.2275e-05
Underflow 0
Overflow 0
Integral 73
SL0 cells
Δ sin Φ(tilt)
Entries 82
Mean 0.00010346
RMS 7.0454e-05
Underflow 0
Overflow 0
Integral 82
SL1 cells
Δ sin Φ(tilt)
Entries 50
Mean 4.8114e-05
RMS 9.9249e-05
Underflow 0
Overflow 0
Integral 50
SL2 cells
Δ sin Φ(tilt)
Entries 88
Mean 0.000106
RMS 5.7765e-05
Underflow 0
Overflow 0
Integral 88
SL3 cells
Δ sin Φ(tilt)
Entries 143
Mean 0.00012054
RMS 6.6258e-05
Underflow 0
Overflow 0
Integral 143
SL4 cells
Δ sin Φ(tilt)
Entries 234
Mean 0.00013549
RMS 7.6648e-05
Underflow 0
Overflow 0
Integral 234
SL5 cells
Δ sin Φ(tilt)
Entries 206
Mean 0.00014908
RMS 5.6969e-05
Underflow 0
Overflow 0
Integral 206
SL6 cells
Δ sin Φ(tilt)
Entries 384
Mean 0.00018317
RMS 6.0471e-05
Underflow 0
Overflow 0
Integral 384
SL7 cells
Δ sin Φ(tilt)

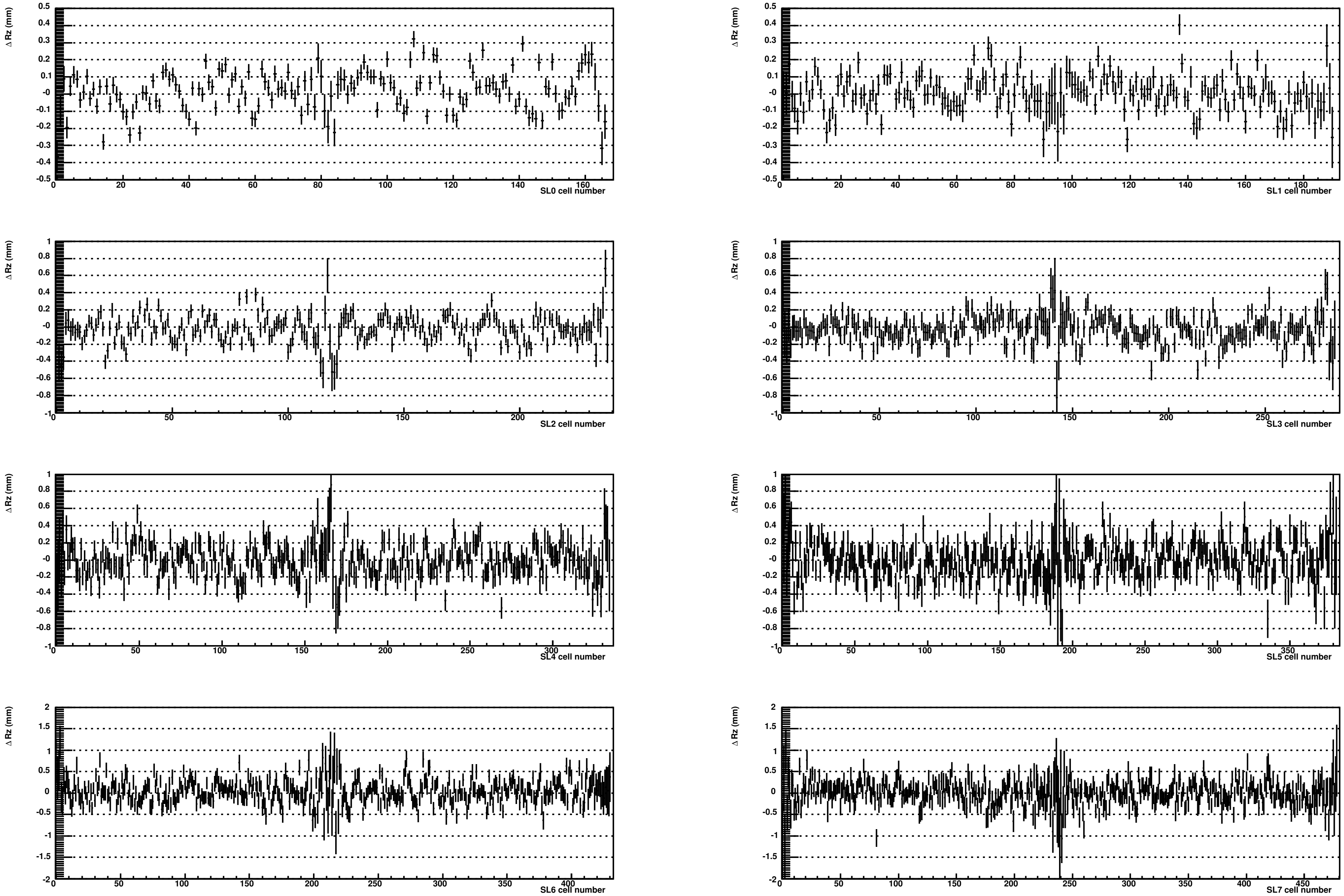


SL0 cells
Entries 53
Mean 2.2029
RMS 5.8443
Underflow 0
Overflow 0
Integral 53
RΔφ (μm) (z=155)
SL1 cells
Entries 43
Mean -1.7123
RMS 4.0167
Underflow 0
Overflow 0
Integral 43
RΔφ (μm) (z=155)
SL2 cells
Entries 58
Mean 3.7193
RMS 5.7793
Underflow 0
Overflow 0
Integral 58
RΔφ (μm) (z=155)
SL3 cells
Entries 27
Mean -1.2407
RMS 4.9563
Underflow 0
Overflow 0
Integral 27
RΔφ (μm) (z=155)
SL4 cells
Entries 86
Mean 1.8074
RMS 6.5905
Underflow 0
Overflow 0
Integral 86
RΔφ (μm) (z=155)
SL5 cells
Entries 47
Mean -3.2429
RMS 4.5143
Underflow 0
Overflow 0
Integral 47
RΔφ (μm) (z=155)
SL6 cells
Entries 123
Mean 2.7291
RMS 6.8339
Underflow 0
Overflow 0
Integral 123
RΔφ (μm) (z=155)
SL7 cells
RΔφ (μm) (z=155)

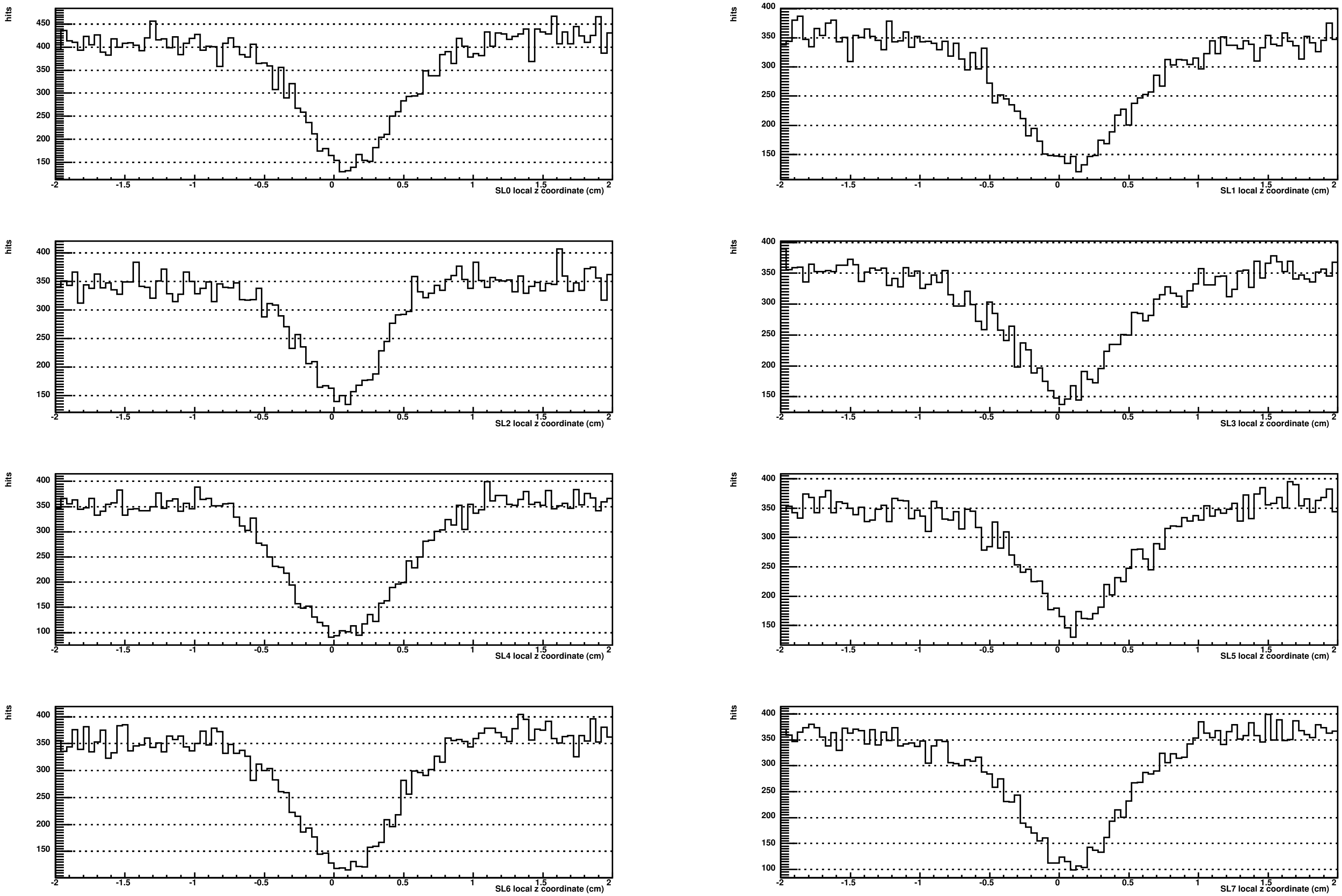

sym RΔφ (μm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

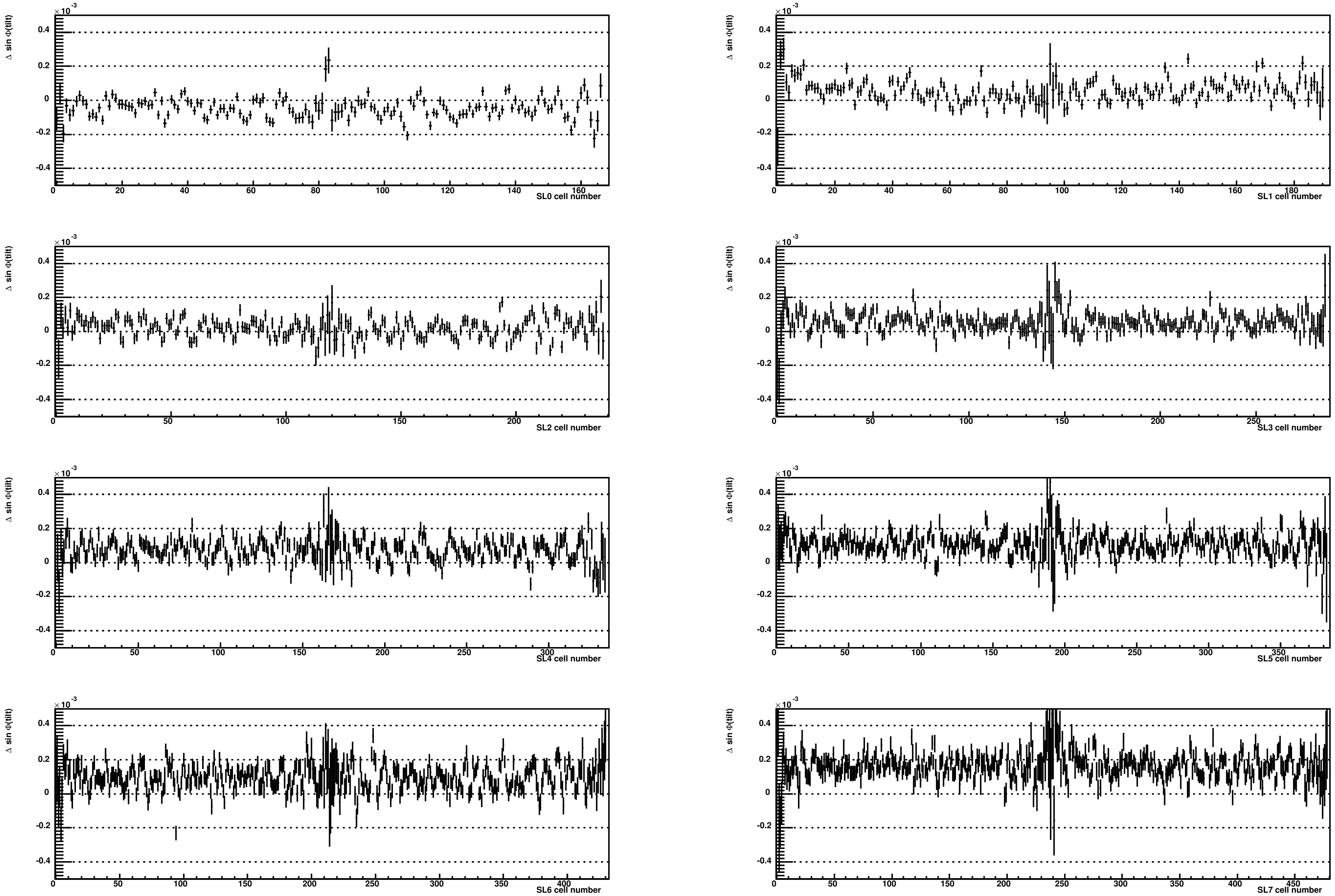


Δ R (mm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

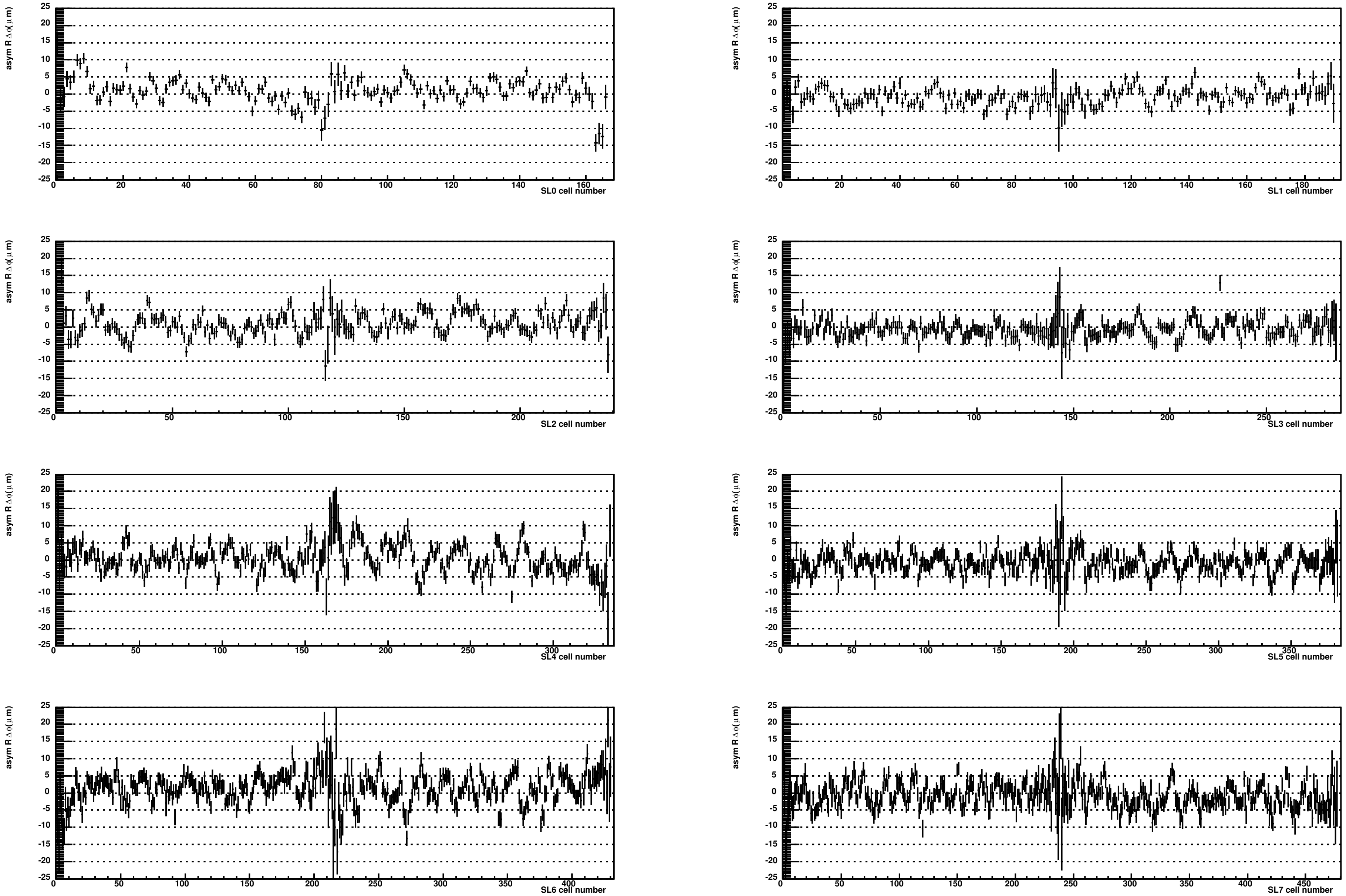


Δ Rz (mm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

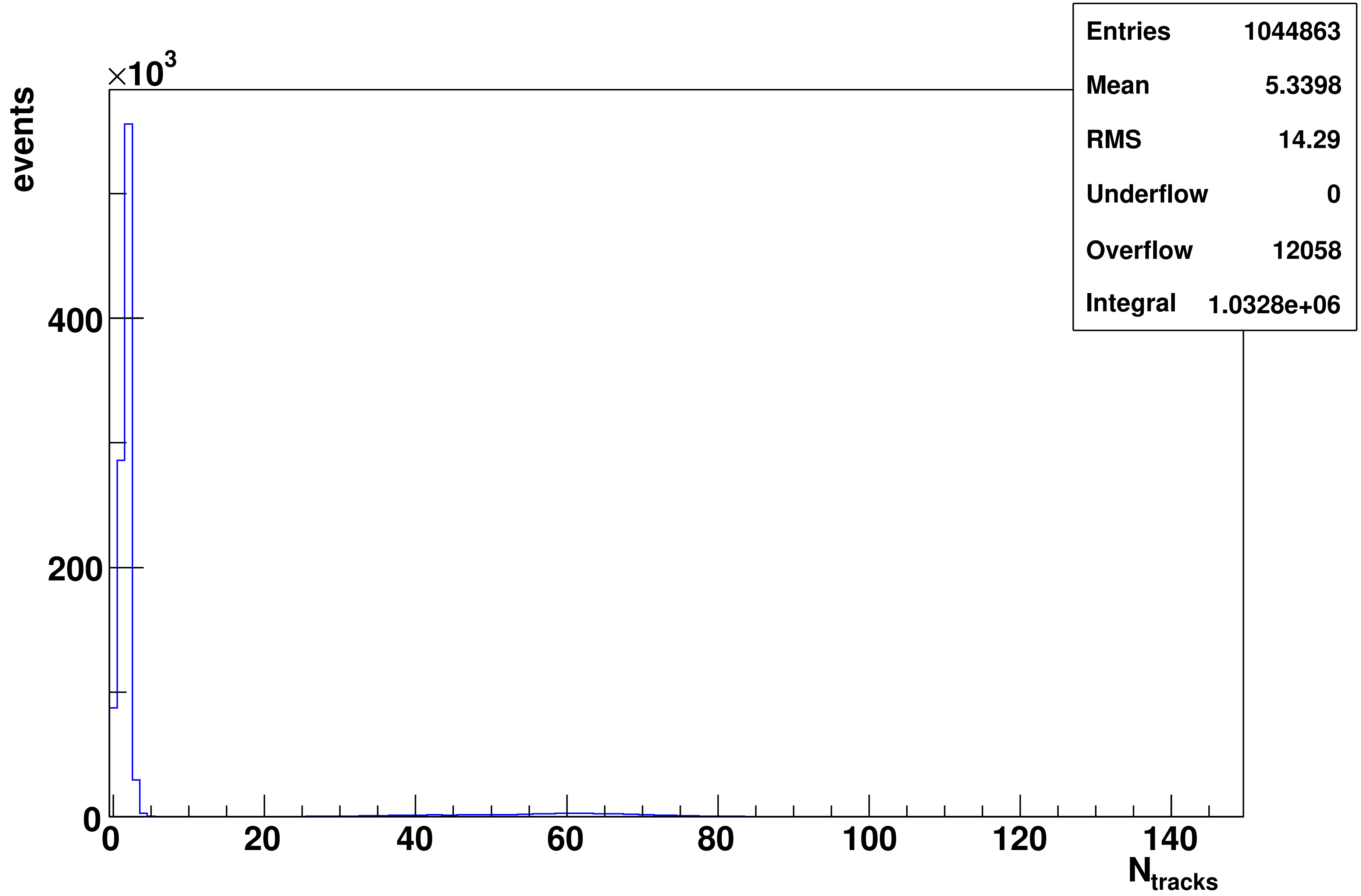

hits
SL0 local z coordinate (cm)
hits
SL1 local z coordinate (cm)
hits
SL2 local z coordinate (cm)
hits
SL3 local z coordinate (cm)
hits
SL4 local z coordinate (cm)
hits
SL5 local z coordinate (cm)
hits
SL6 local z coordinate (cm)
hits
SL7 local z coordinate (cm)



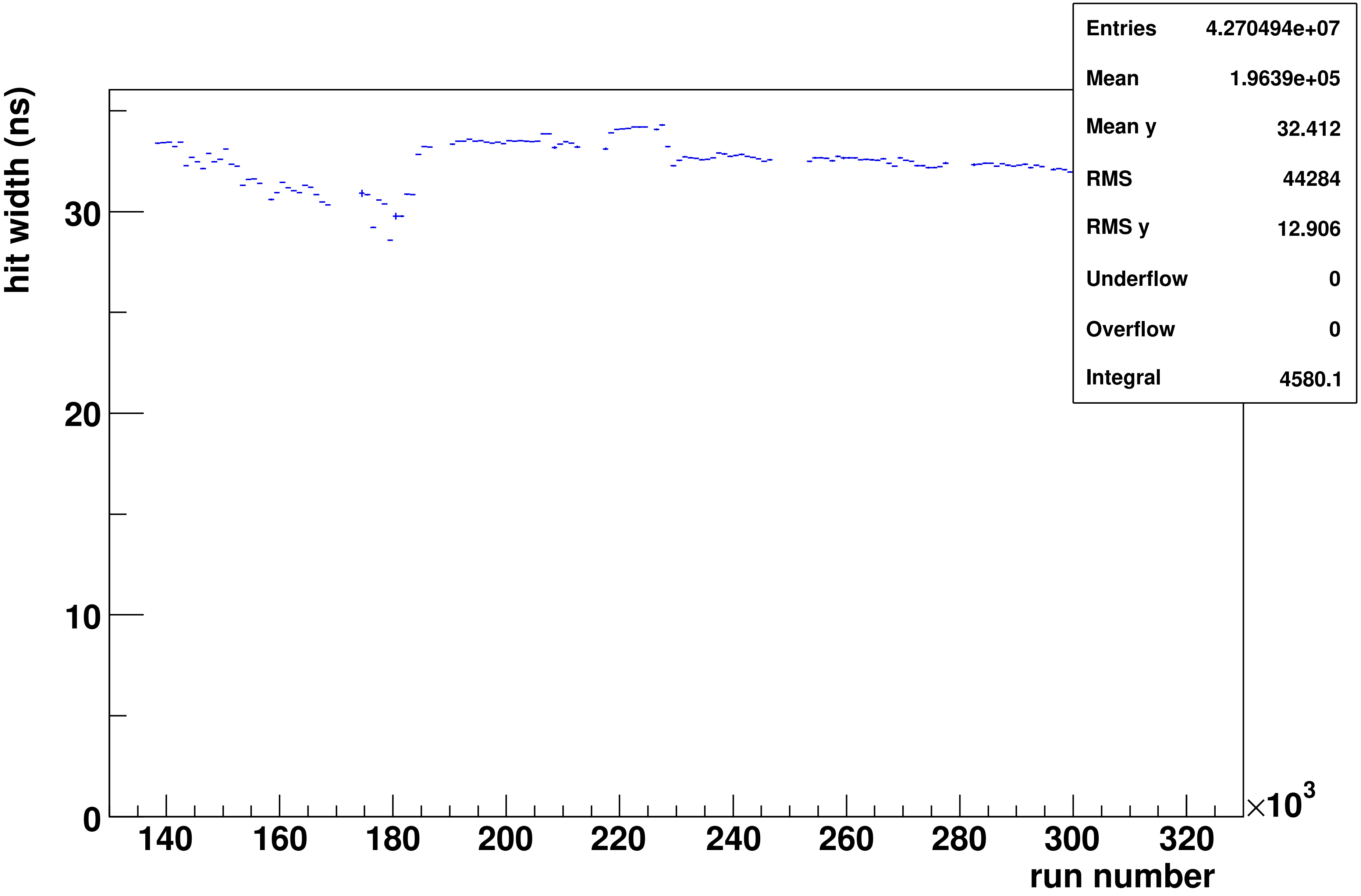
Δ sin Φ(tilt)
×10⁻³
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number



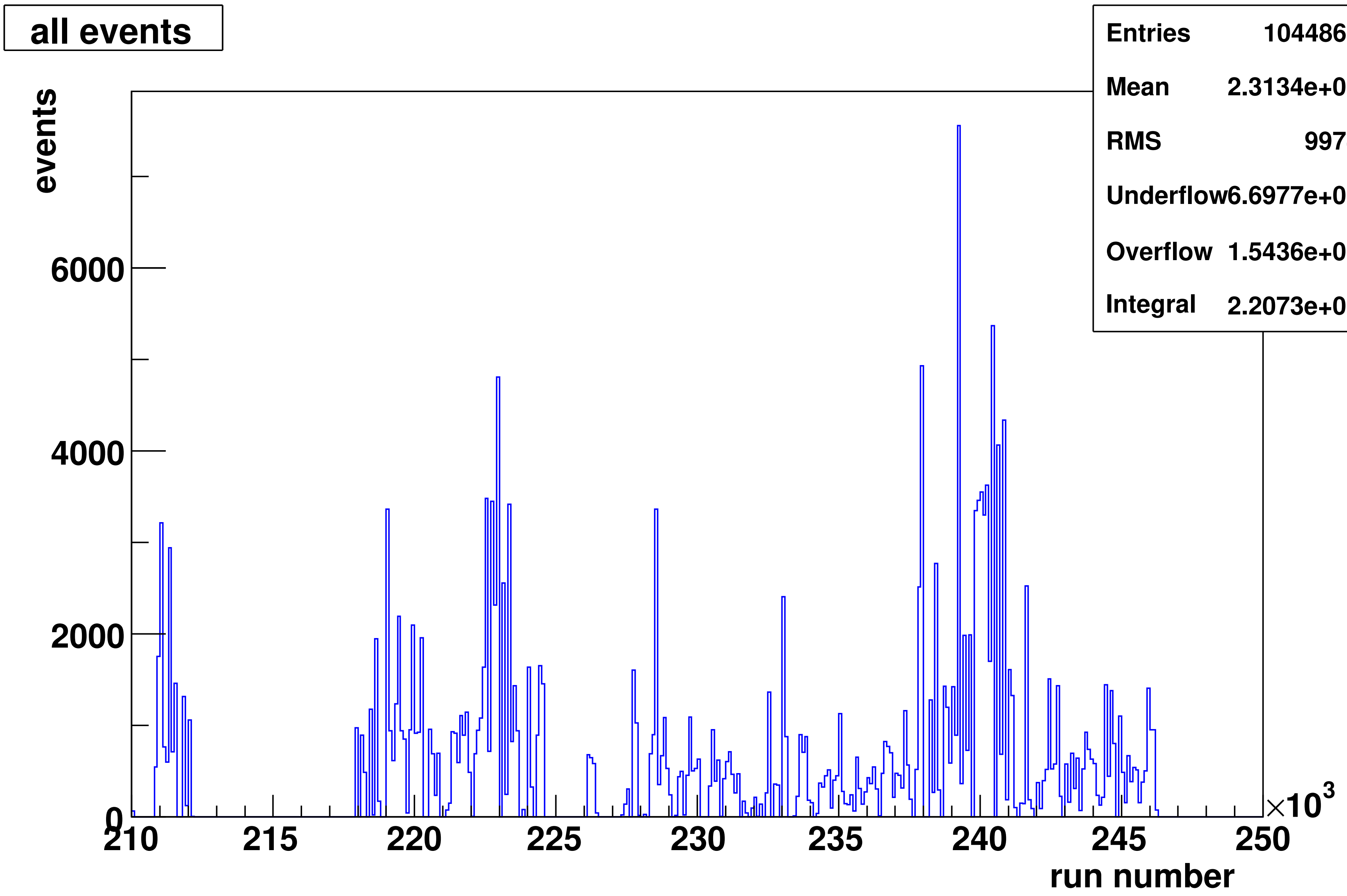
asym R Δφ(μm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number



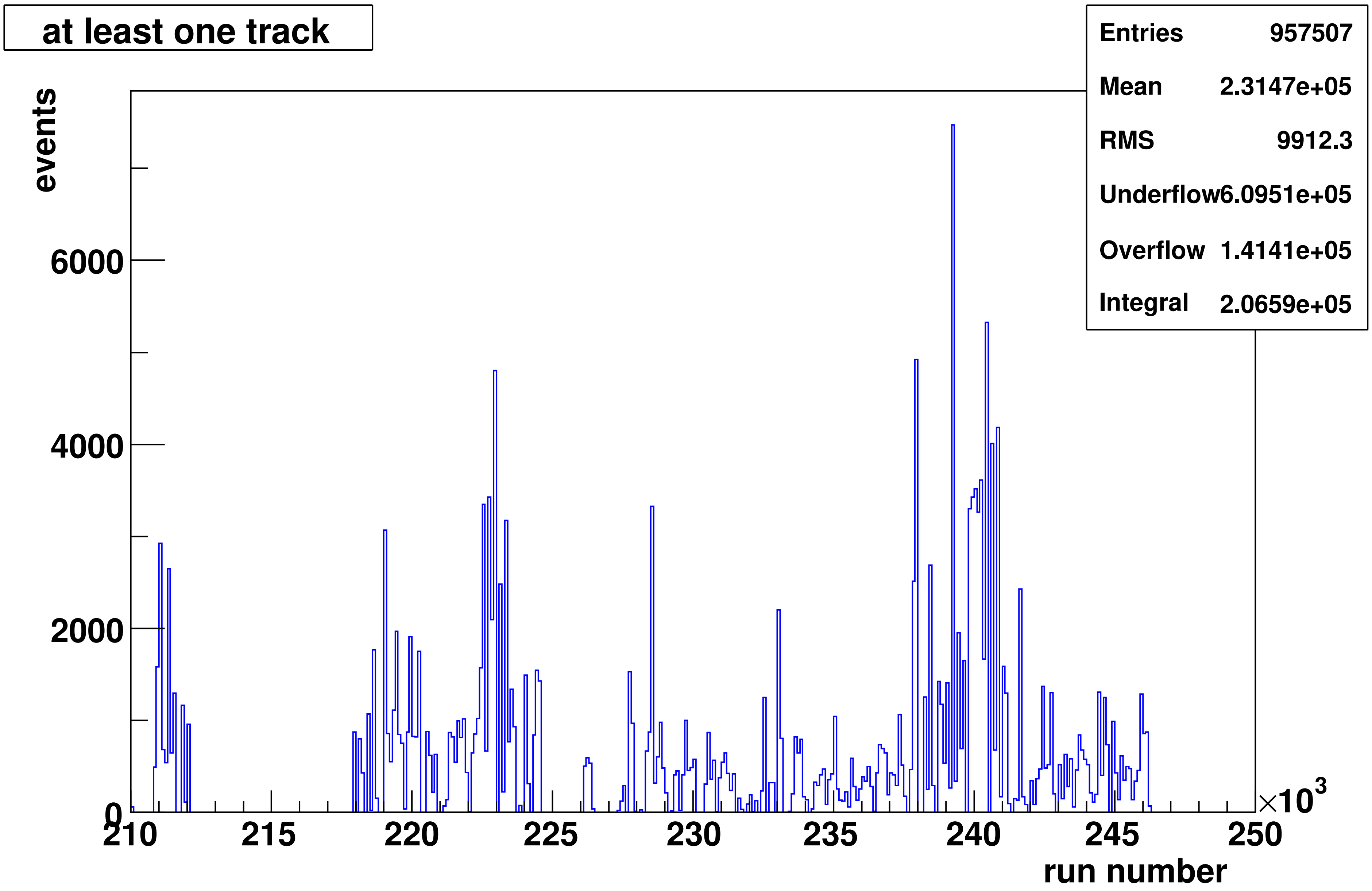
events
$\times 10^3$
0
200
400
0
20
40
60
80
100
120
140
N_{tracks}
Entries 1044863
Mean 5.3398
RMS 14.29
Underflow 0
Overflow 12058
Integral 1.0328e+06



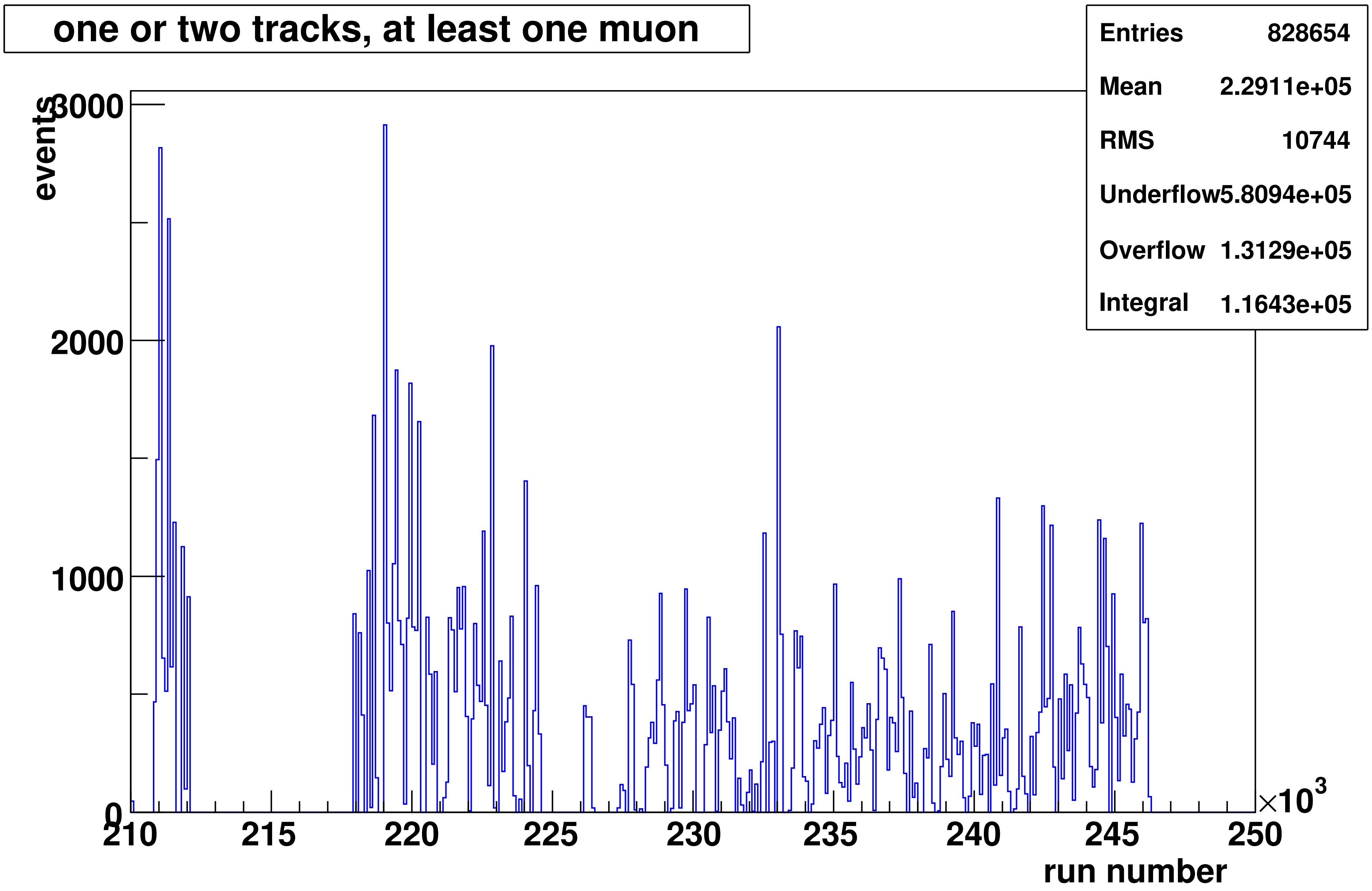
Entries 4.270494e+07
Mean 1.9639e+05
Mean y 32.412
RMS 44284
RMS y 12.906
Underflow 0
Overflow 0
Integral 4580.1
hit width (ns)
0
10
20
30
140
160
180
200
220
240
260
280
300
320
$\times 10^3$
run number

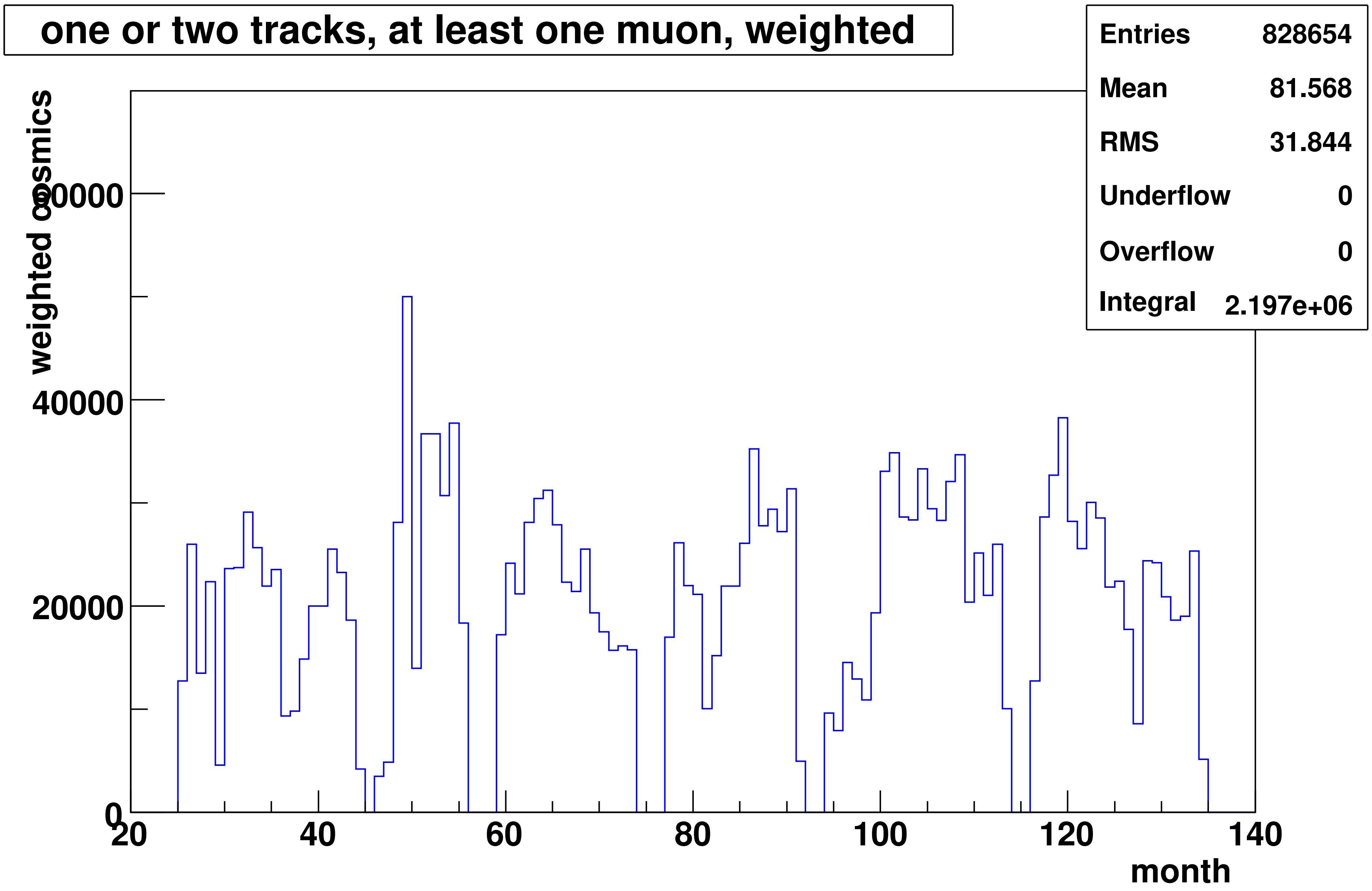


all events
Entries 1044863
Mean 2.3134e+05
RMS 9974
Underflow6.6977e+05
Overflow 1.5436e+05
Integral 2.2073e+05
events
6000
4000
2000
0
210
215
220
225
230
235
240
245
250
$\times 10^3$
run number

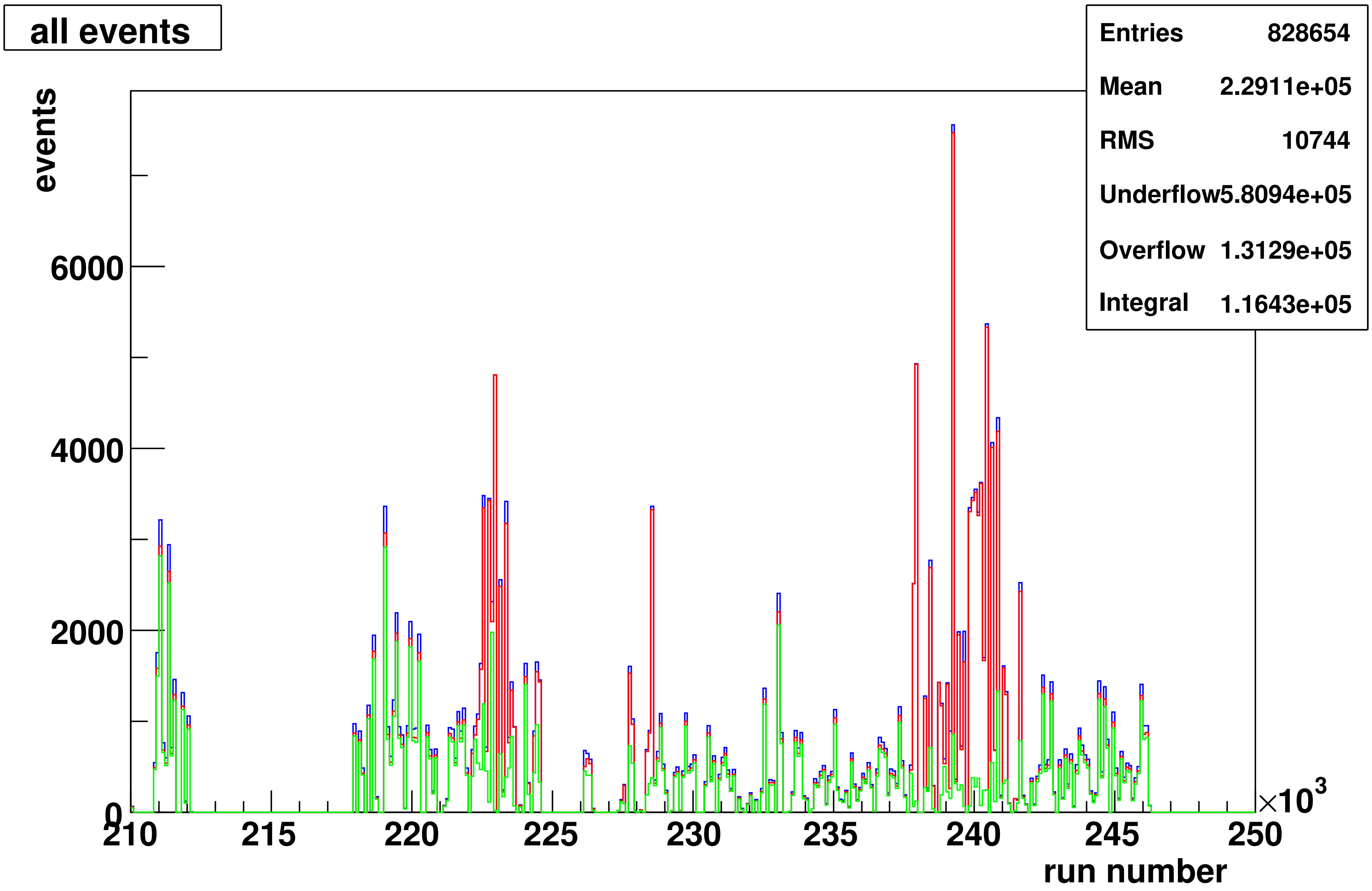


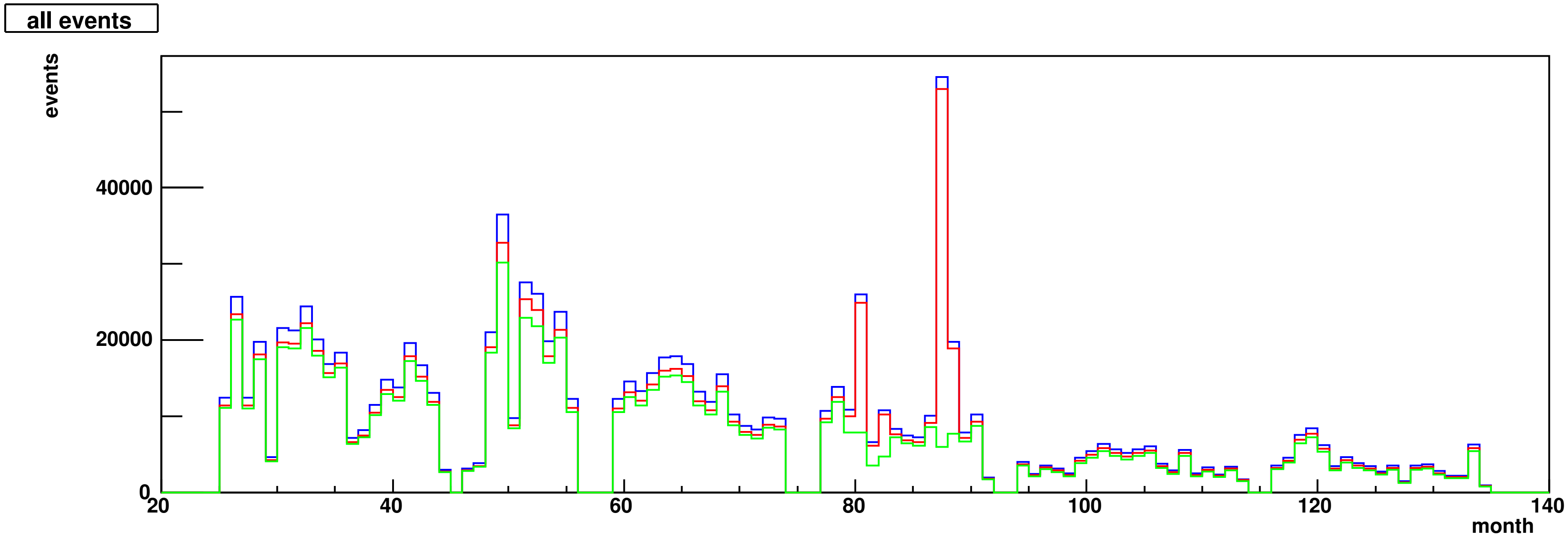
at least one track
Entries 957507
Mean 2.3147e+05
RMS 9912.3
Underflow 6.0951e+05
Overflow 1.4141e+05
Integral 2.0659e+05
events
6000
4000
2000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

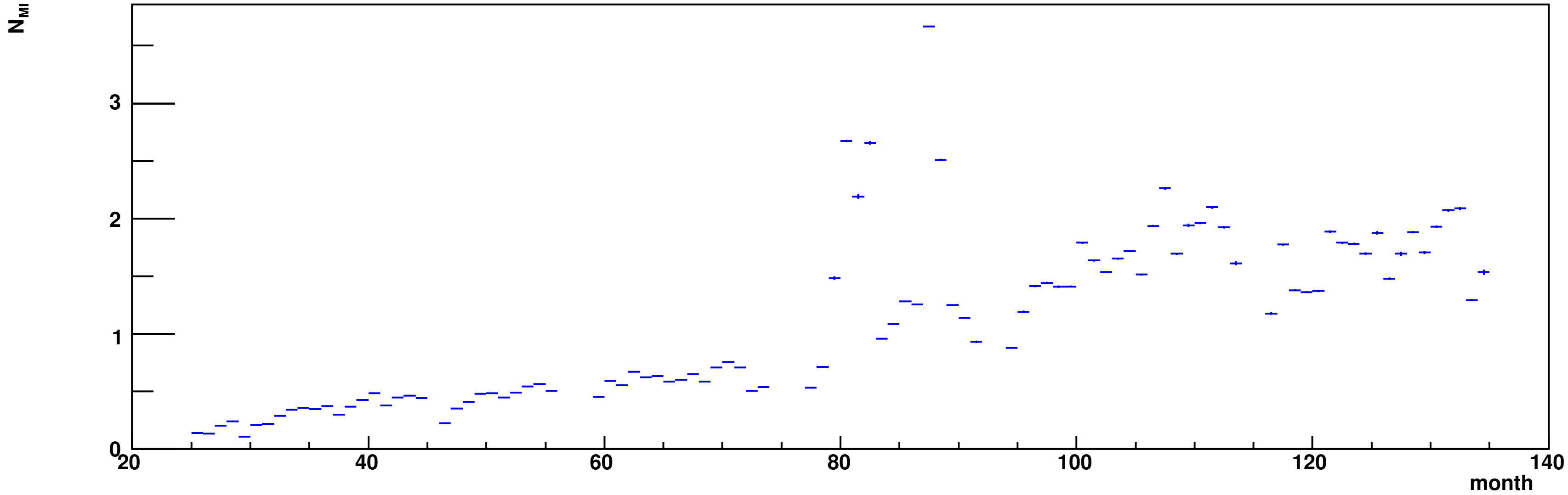

one or two tracks, at least one muon
Entries 828654
Mean 2.2911e+05
RMS 10744
Underflow 5.8094e+05
Overflow 1.3129e+05
Integral 1.1643e+05
events
3000
2000
1000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

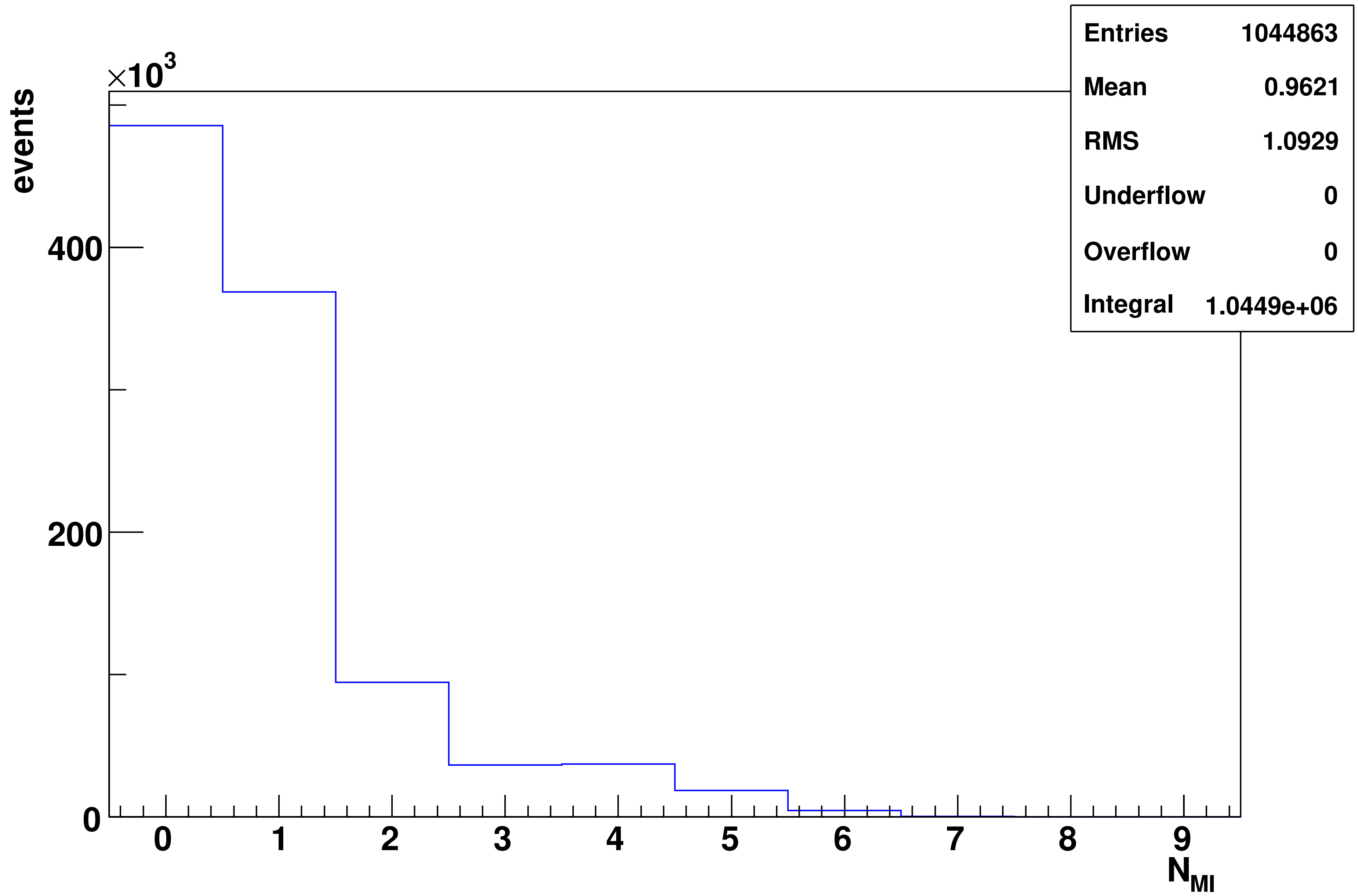


one or two tracks, at least one muon, weighted
Entries 828654
Mean 81.568
RMS 31.844
Underflow 0
Overflow 0
Integral 2.197e+06
weighted cosmics
0
20000
40000
60000
20
40
60
80
100
120
140
month

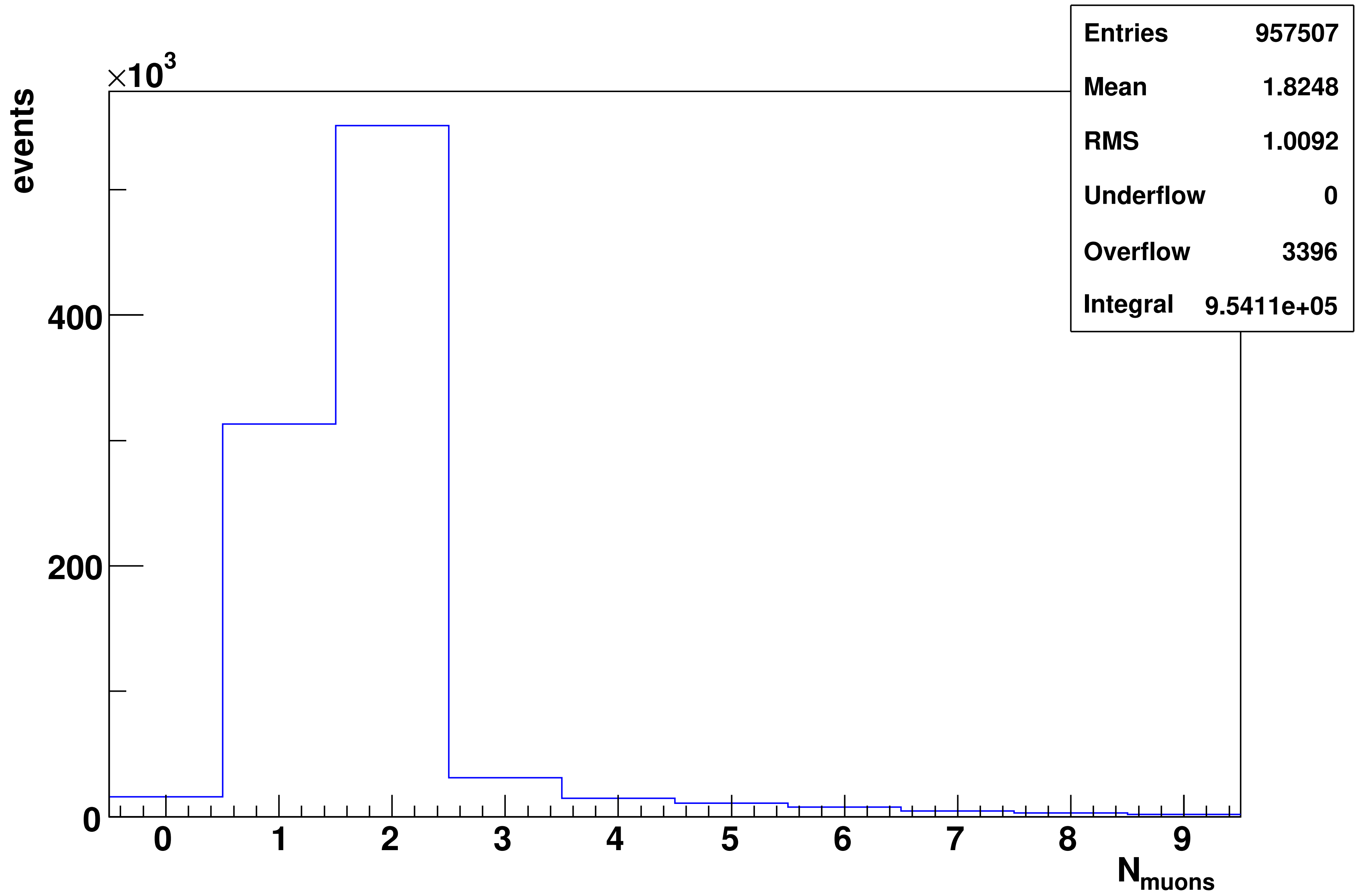

all events
Entries 828654
Mean 2.2911e+05
RMS 10744
Underflow 5.8094e+05
Overflow 1.3129e+05
Integral 1.1643e+05
events
0
2000
4000
6000
210
215
220
225
230
235
240
245
250
×10^3
run number


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

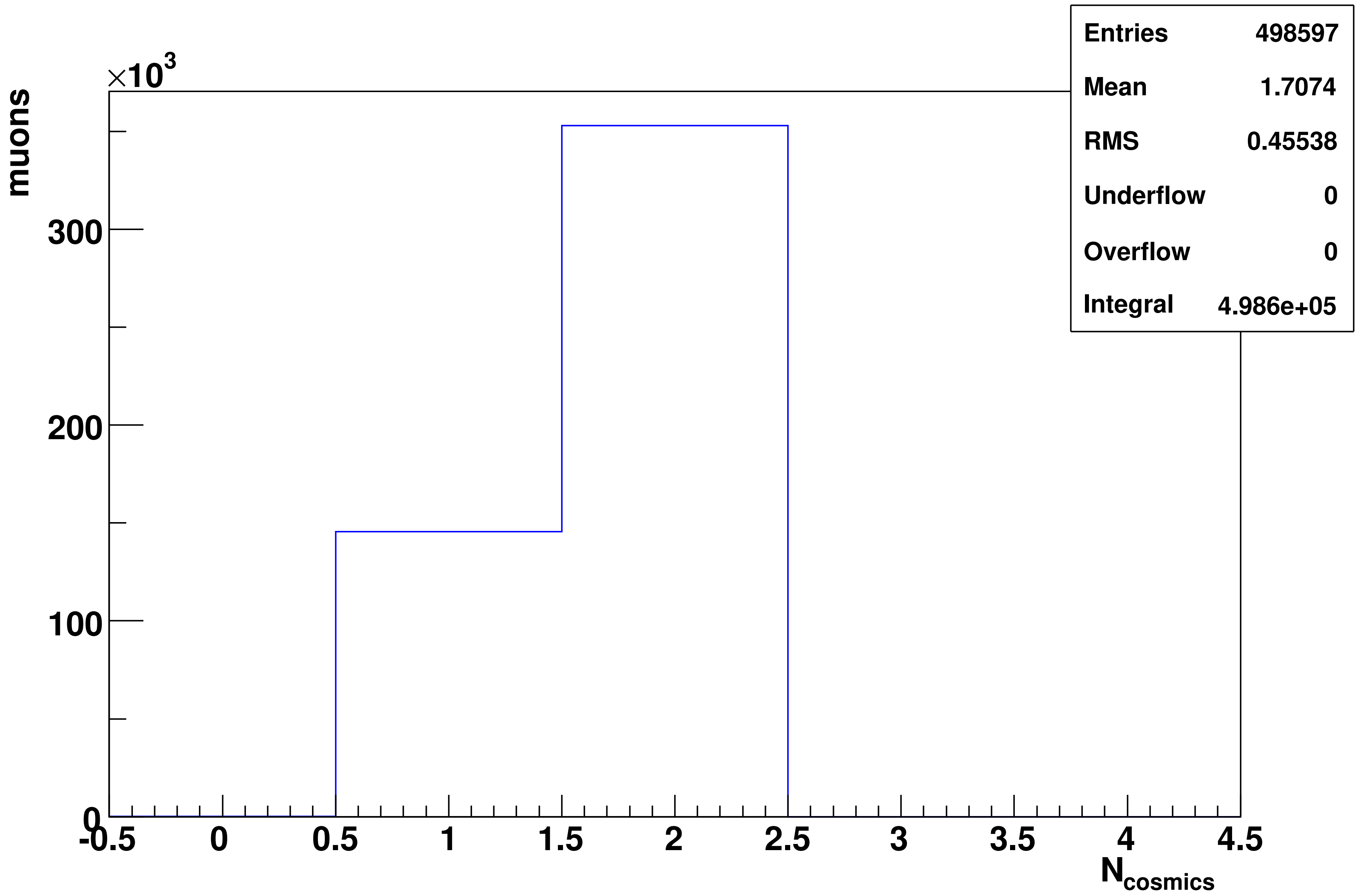

N_{MI}
3
2
1
0
20
40
60
80
100
120
140
month



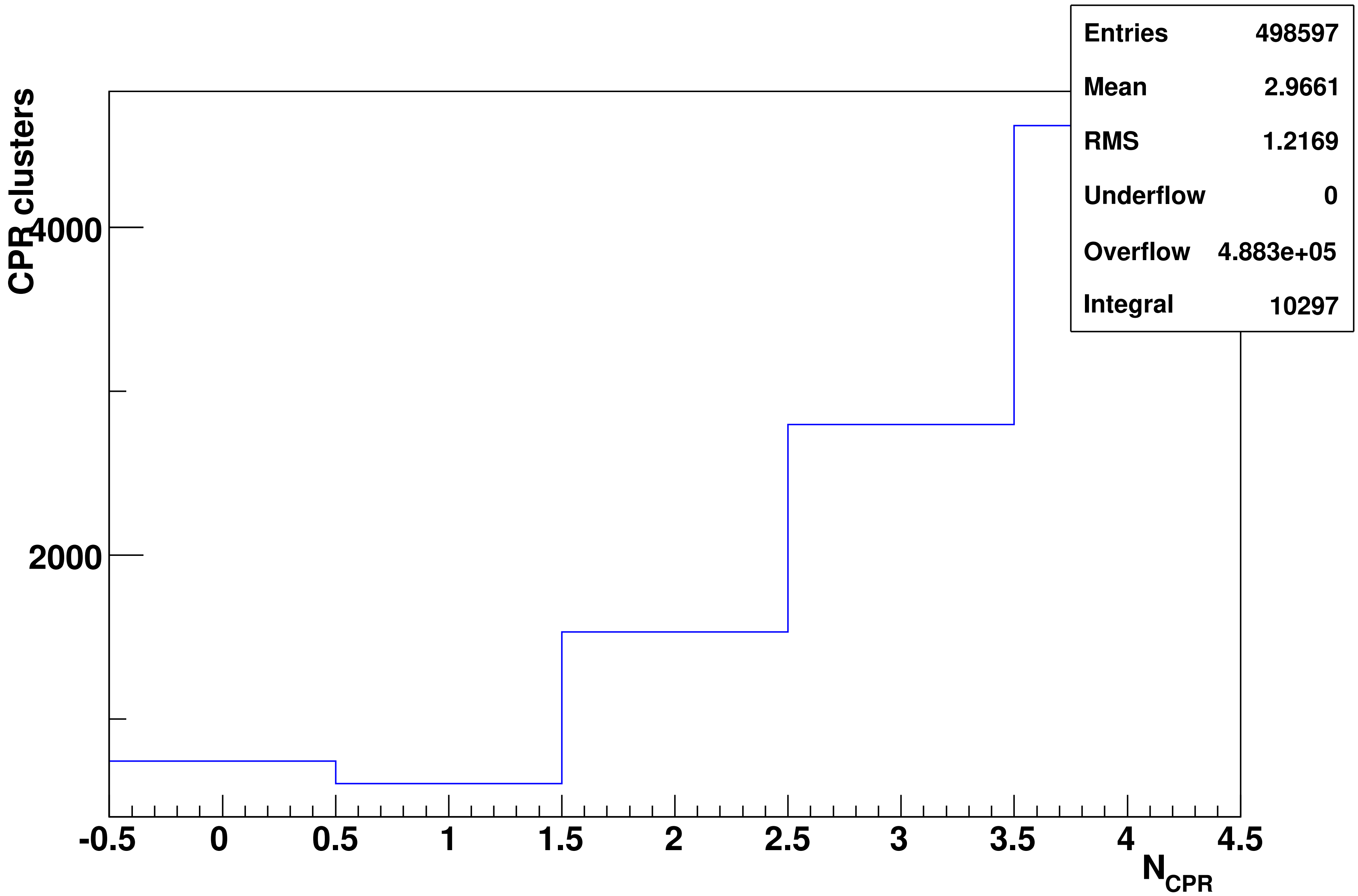
events
×10^3
400
200
0
0 1 2 3 4 5 6 7 8 9
N_MI
Entries 1044863
Mean 0.9621
RMS 1.0929
Underflow 0
Overflow 0
Integral 1.0449e+06

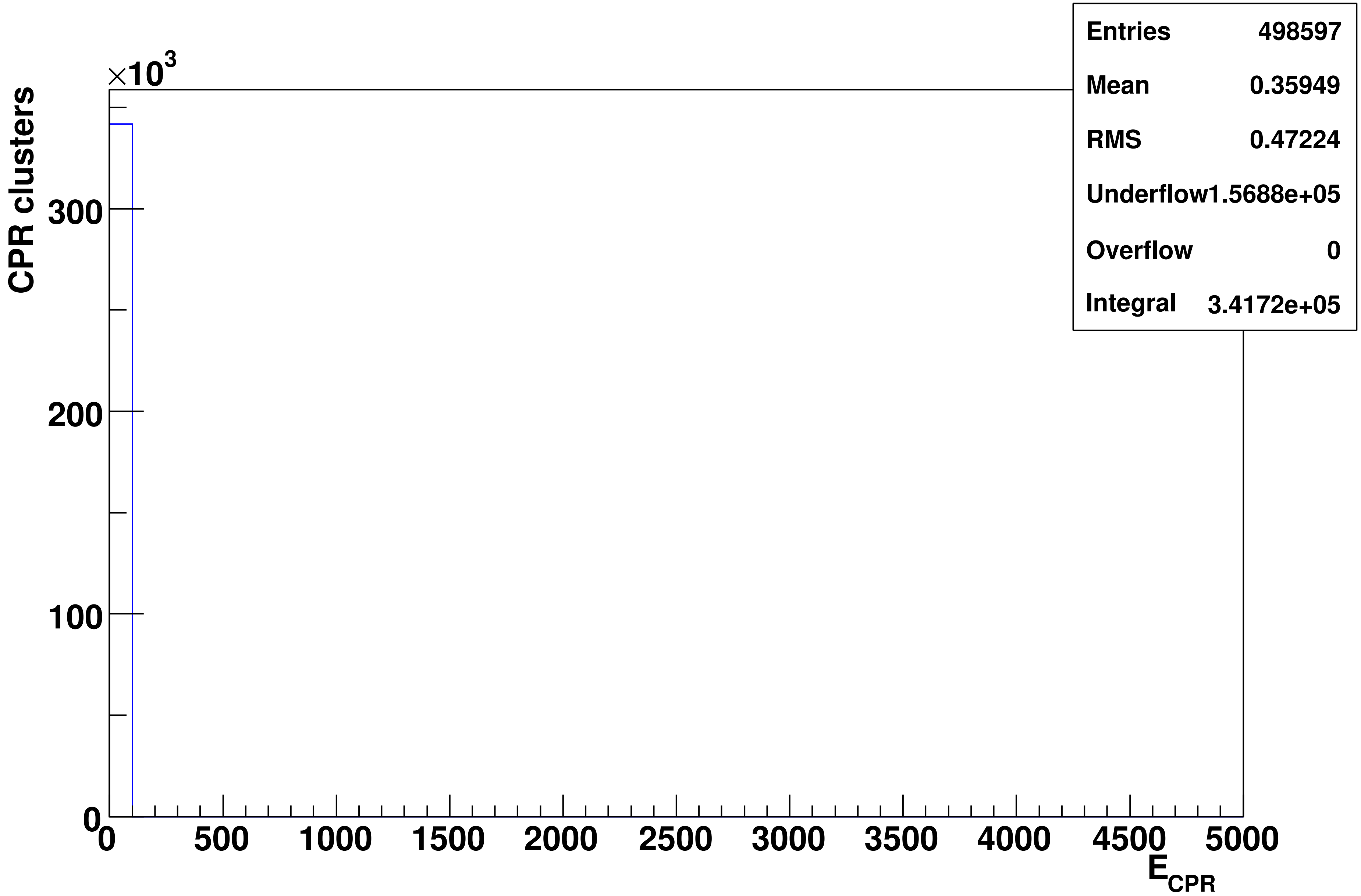


Entries 957507
Mean 1.8248
RMS 1.0092
Underflow 0
Overflow 3396
Integral 9.5411e+05
events
$\times 10^3$
400
200
0
0 1 2 3 4 5 6 7 8 9
N_{muons}

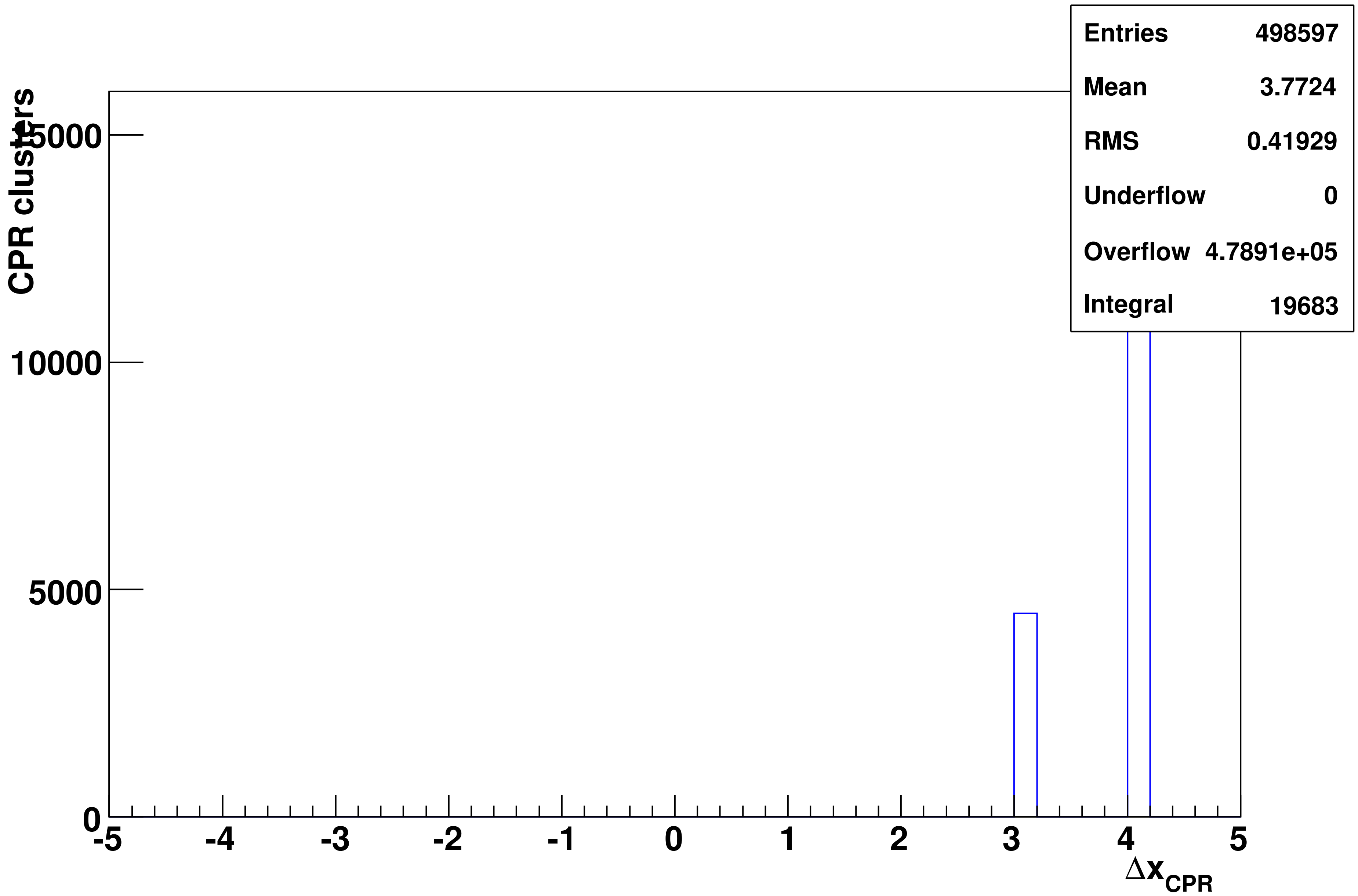


Entries 498597
Mean 1.7074
RMS 0.45538
Underflow 0
Overflow 0
Integral 4.986e+05
$\times 10^3$
muons
300
200
100
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
$N_{cosmics}$

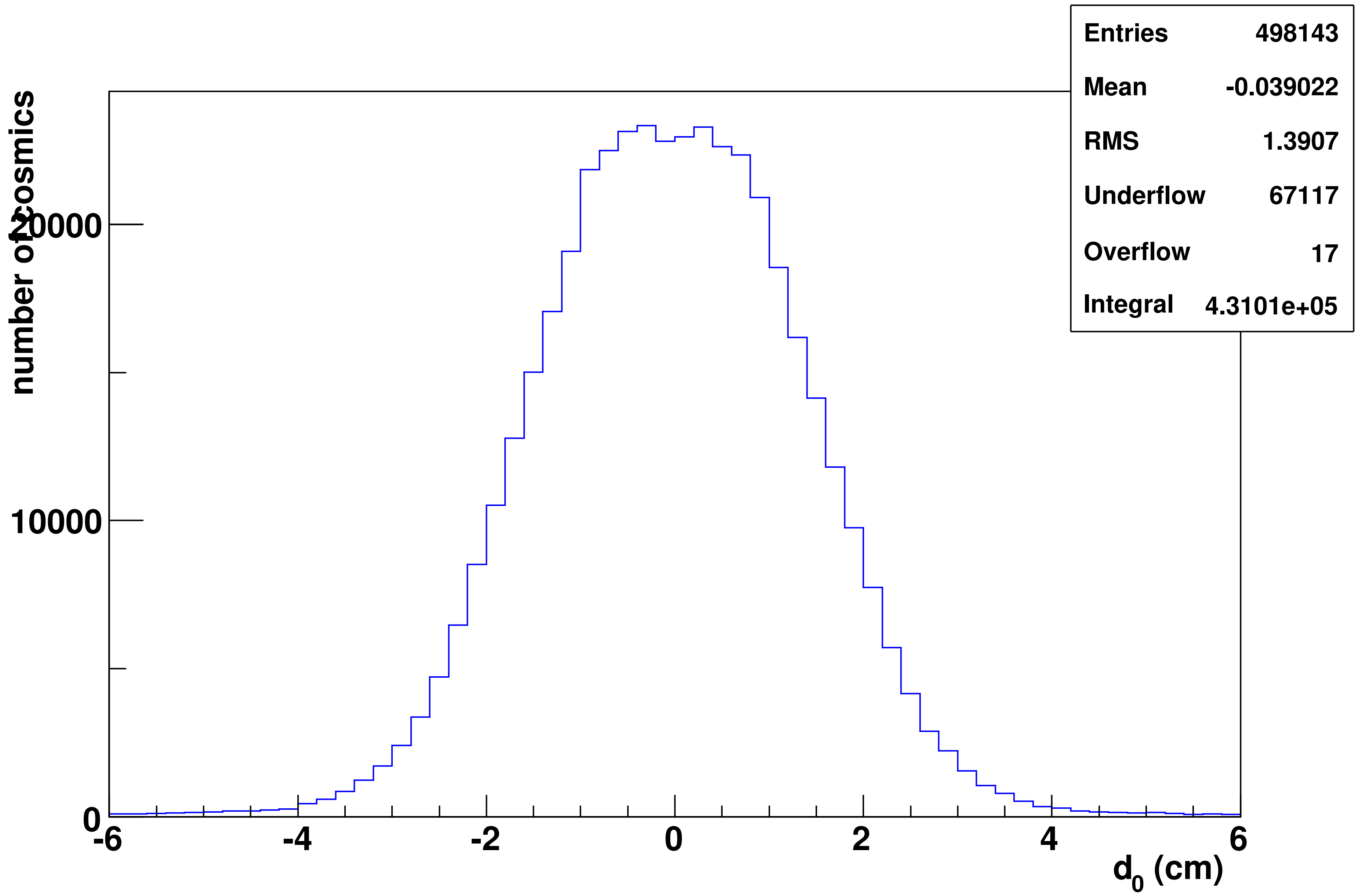

Entries 498597
Mean 2.9661
RMS 1.2169
Underflow 0
Overflow 4.883e+05
Integral 10297
CPR clusters
4000
2000
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_{CPR}



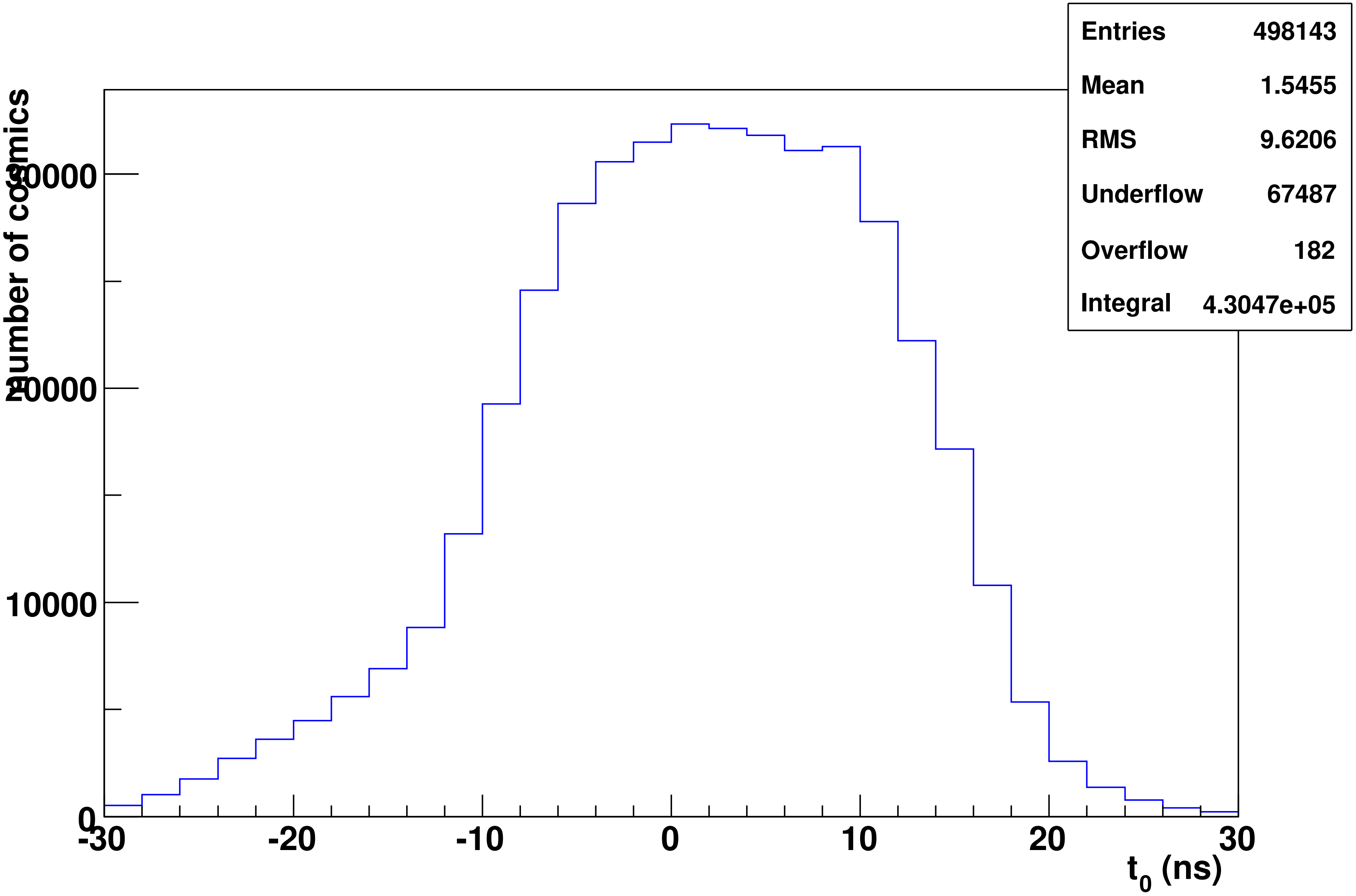
Entries 498597
Mean 0.35949
RMS 0.47224
Underflow 1.5688e+05
Overflow 0
Integral 3.4172e+05
×10^3
CPR clusters
300
200
100
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
E_CPR



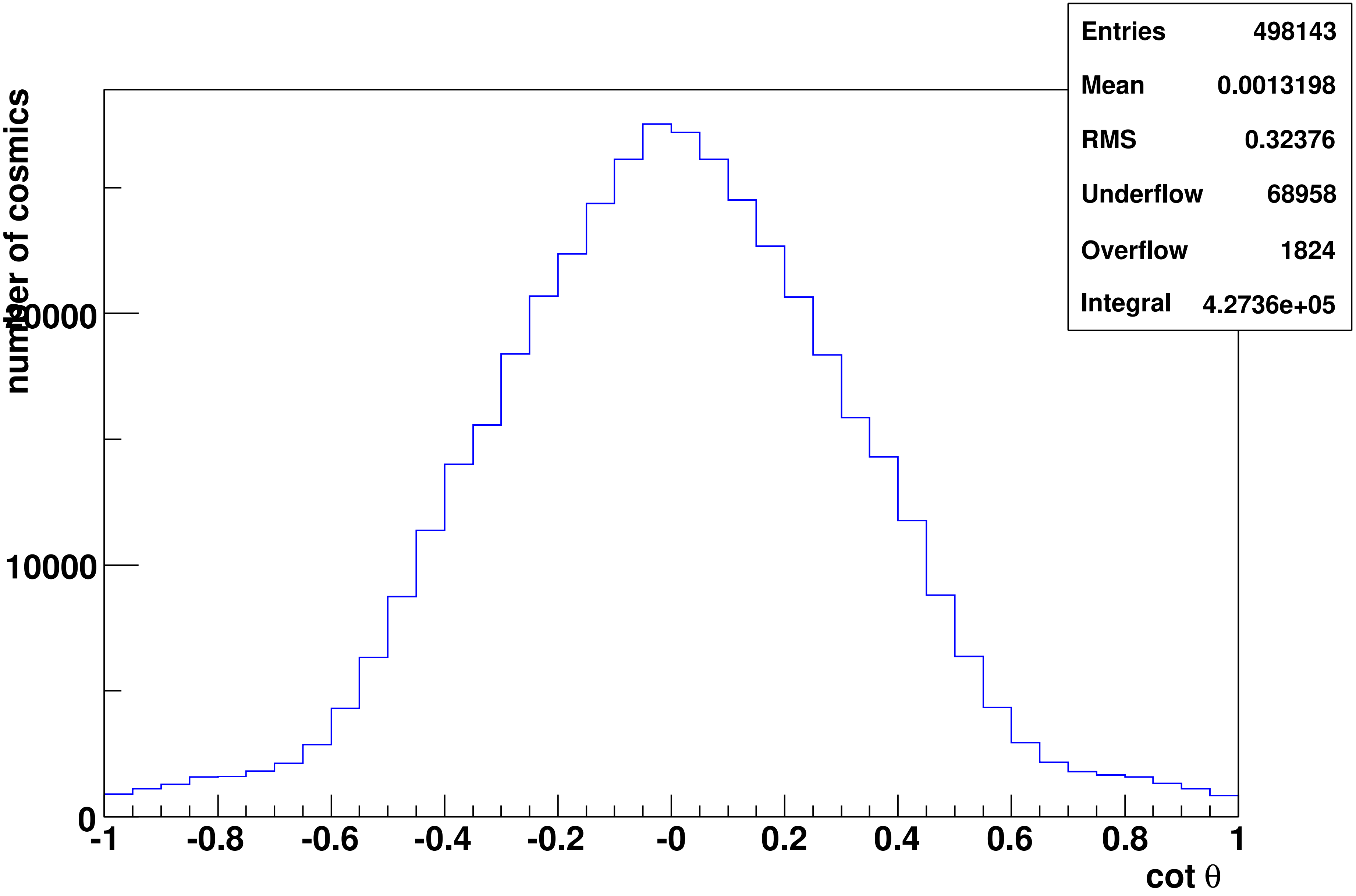
Entries 498597
Mean 3.7724
RMS 0.41929
Underflow 0
Overflow 4.7891e+05
Integral 19683
CPR clusters
15000
10000
5000
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
Δx CPR



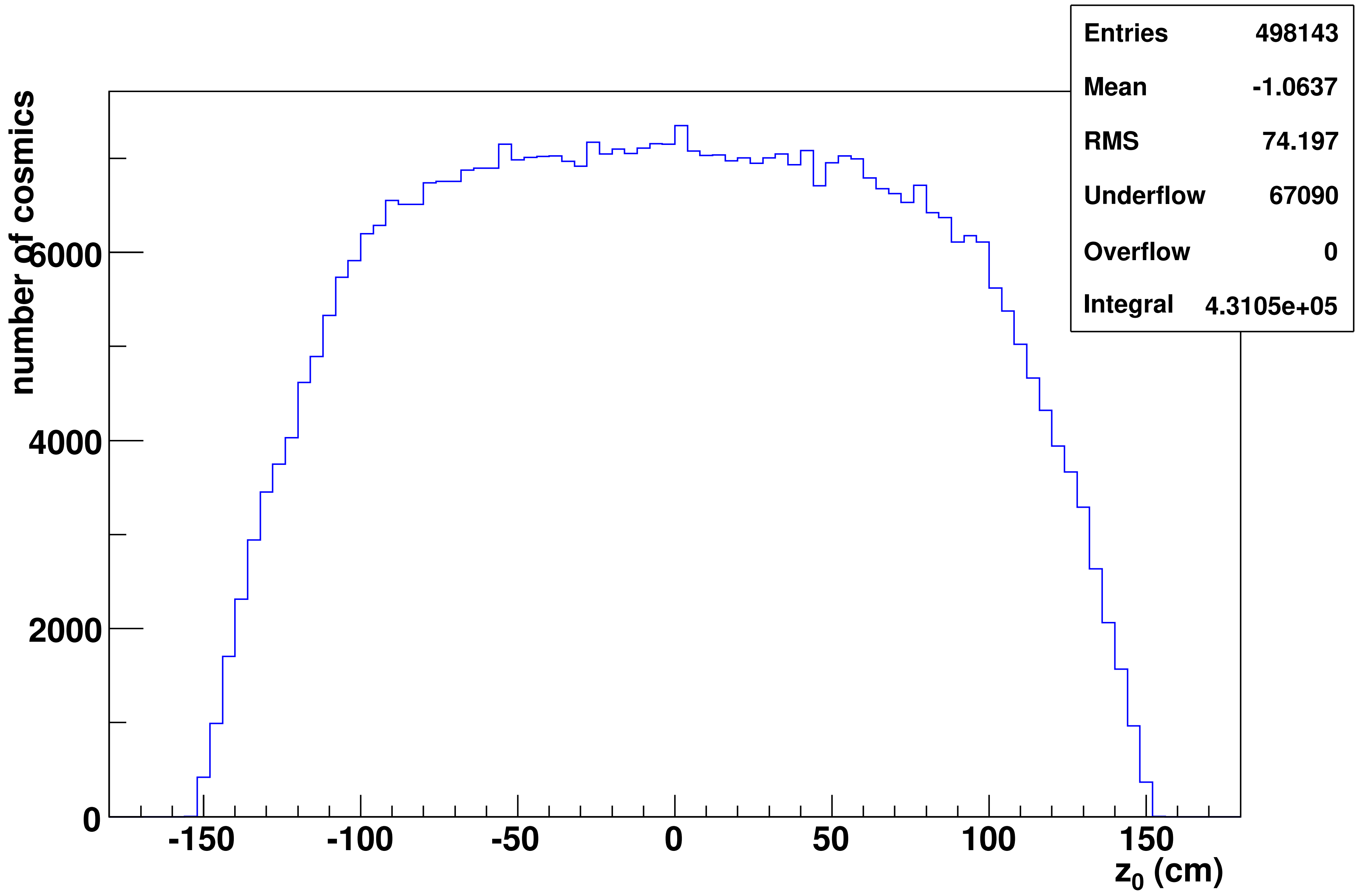
Entries 498143
Mean -0.039022
RMS 1.3907
Underflow 67117
Overflow 17
Integral 4.3101e+05
number of cosmics
20000
10000
0
-6
-4
-2
0
2
4
6
d0 (cm)

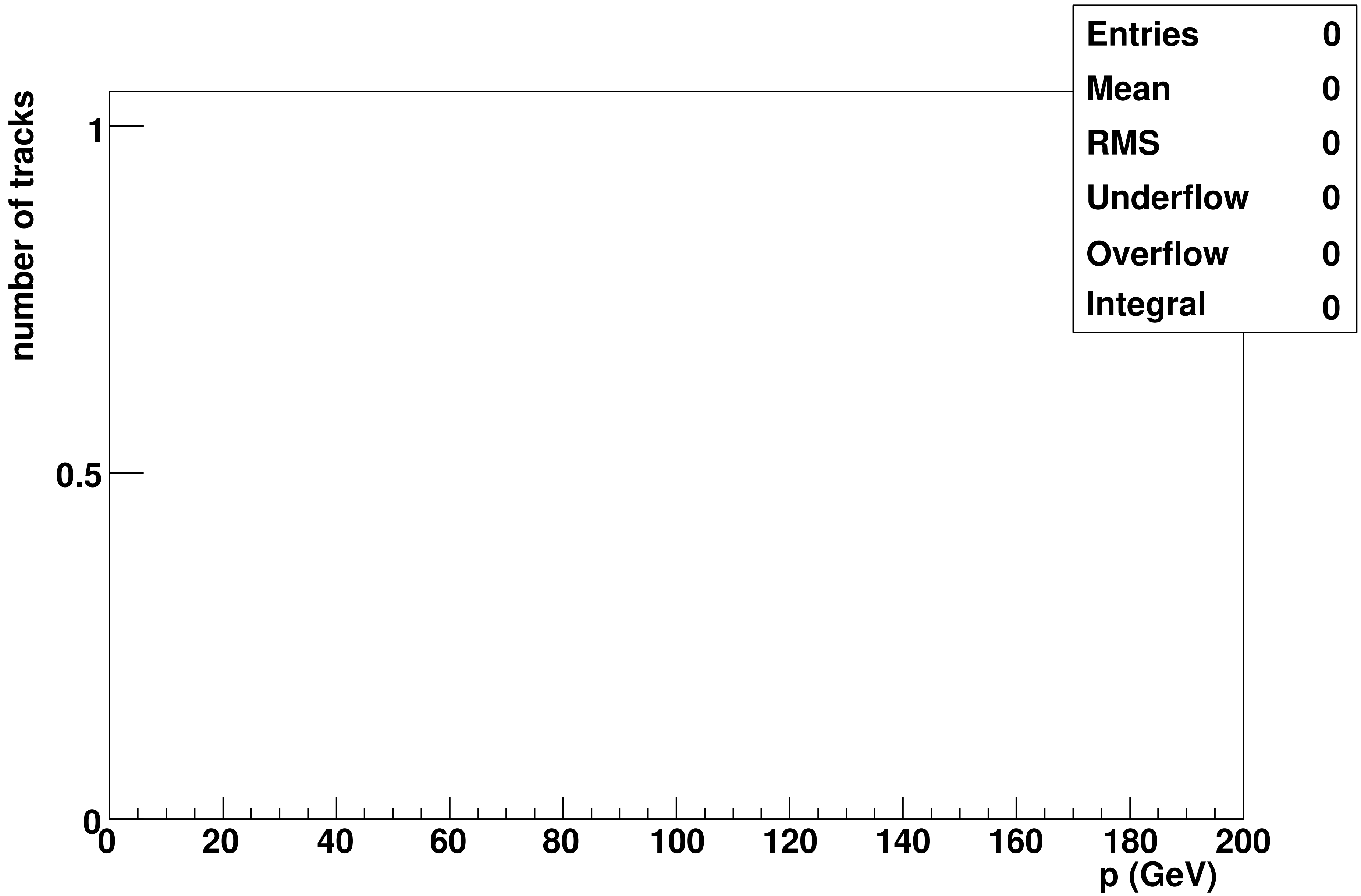


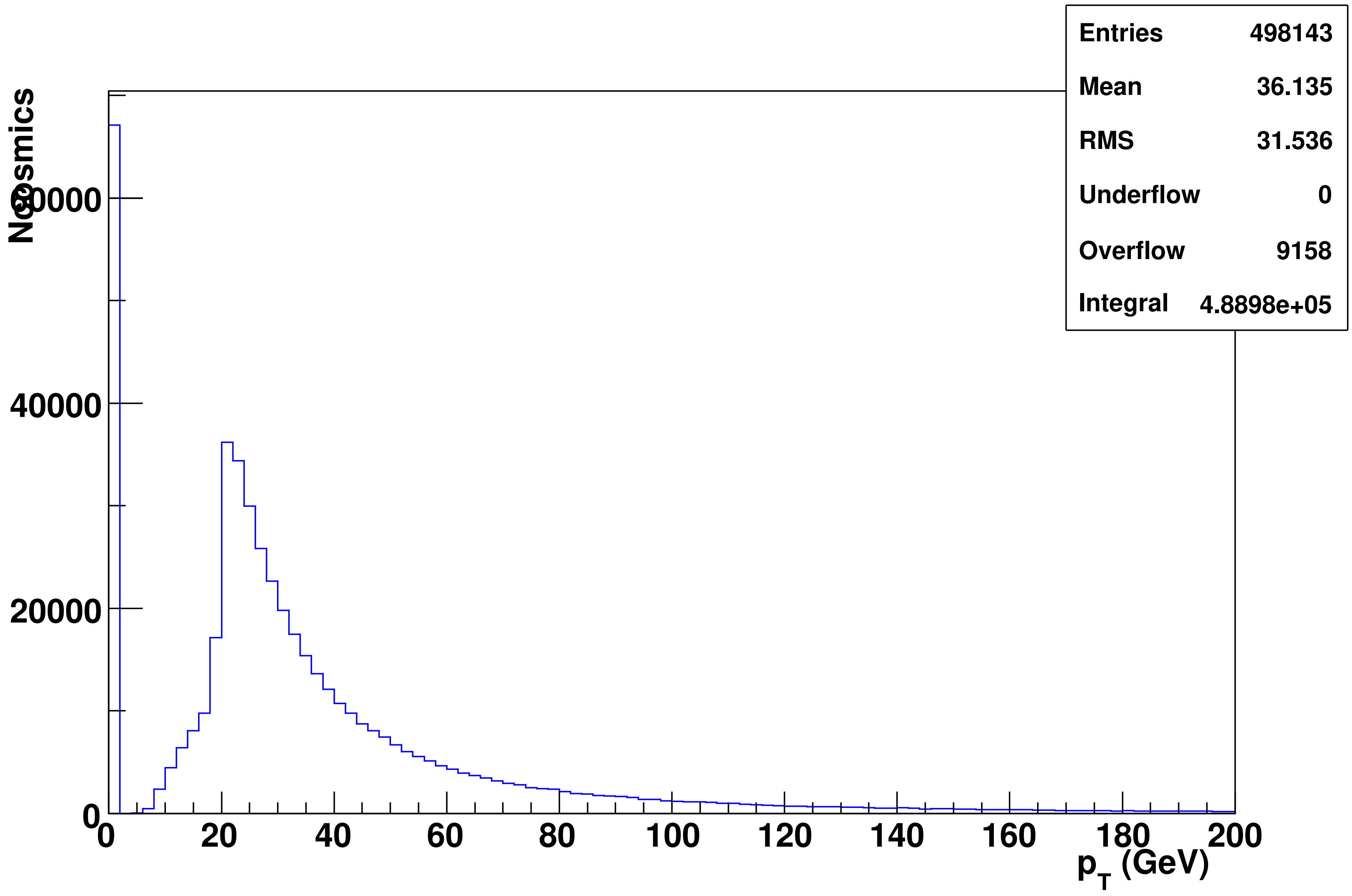
Entries 498143
Mean 1.5455
RMS 9.6206
Underflow 67487
Overflow 182
Integral 4.3047e+05
number of cosmics
30000
20000
10000
0
-30
-20
-10
0
10
20
30
t0 (ns)



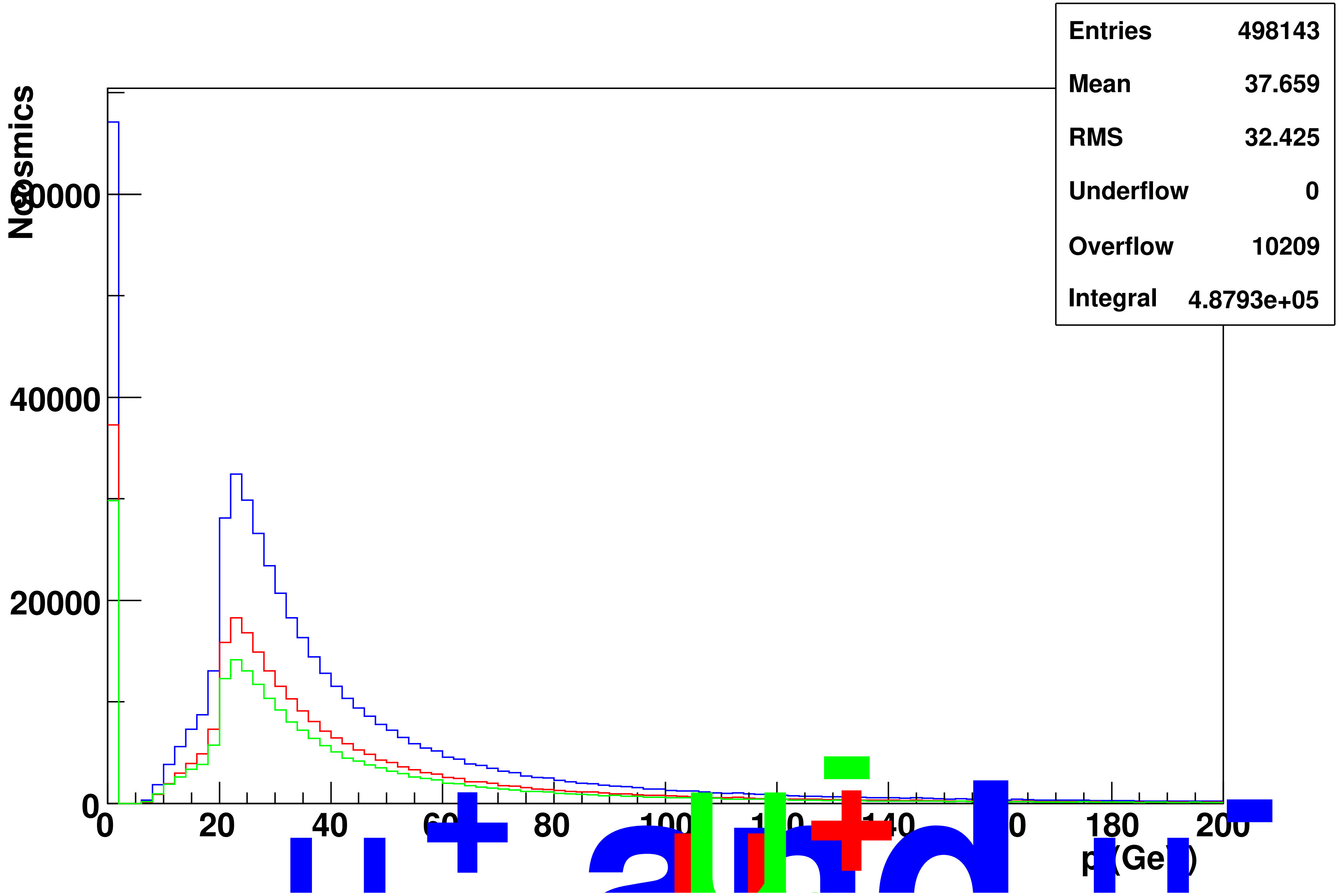
Entries 498143
Mean 0.0013198
RMS 0.32376
Underflow 68958
Overflow 1824
Integral 4.2736e+05
number of cosmics
20000
10000
0
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
cot θ


Entries 498143
Mean -1.0637
RMS 74.197
Underflow 67090
Overflow 0
Integral 4.3105e+05
number of cosmics
0
2000
4000
6000
-150
-100
-50
0
50
100
150
z_0 (cm)

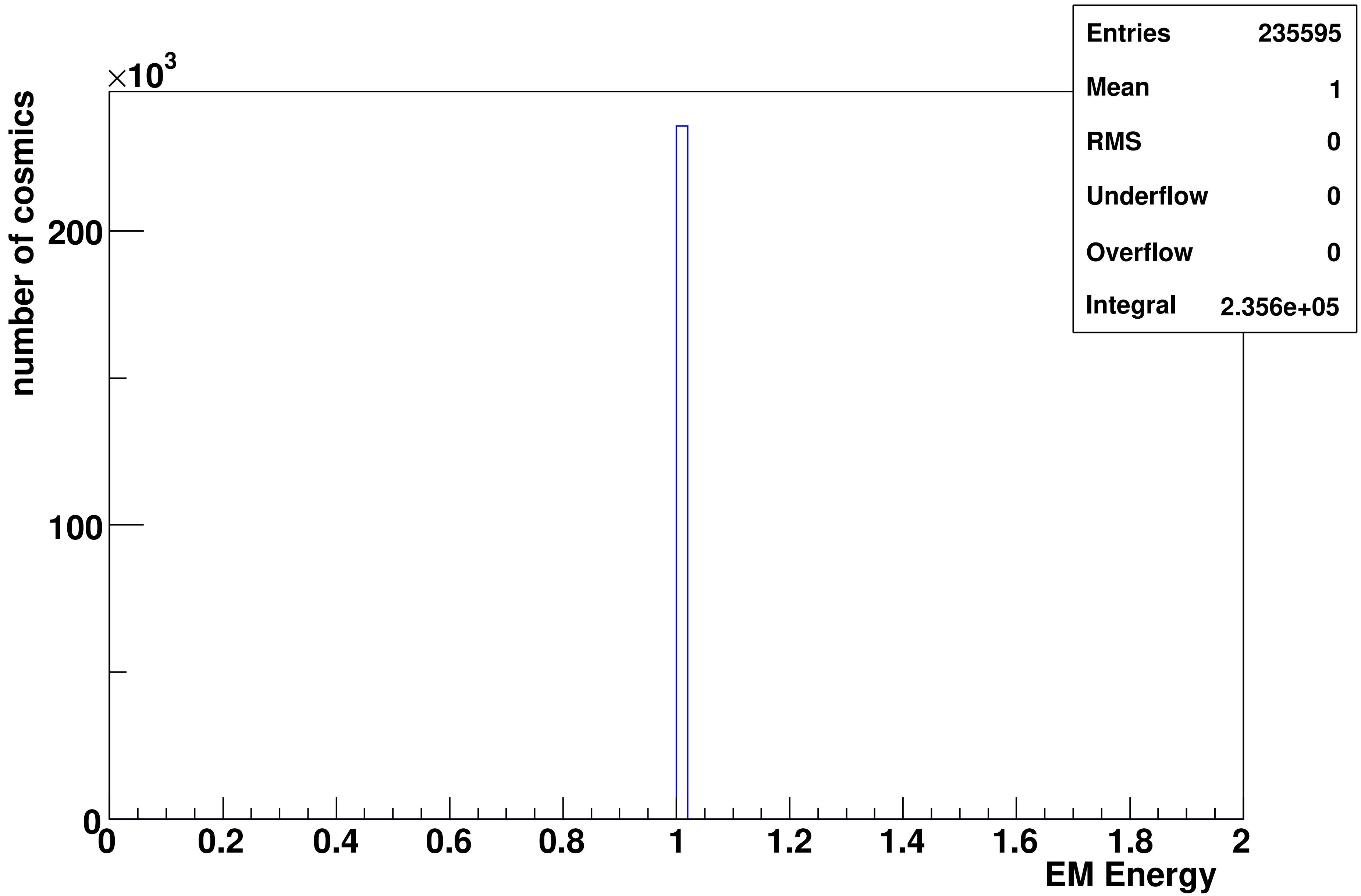

Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Integral 0
number of tracks
p (GeV)



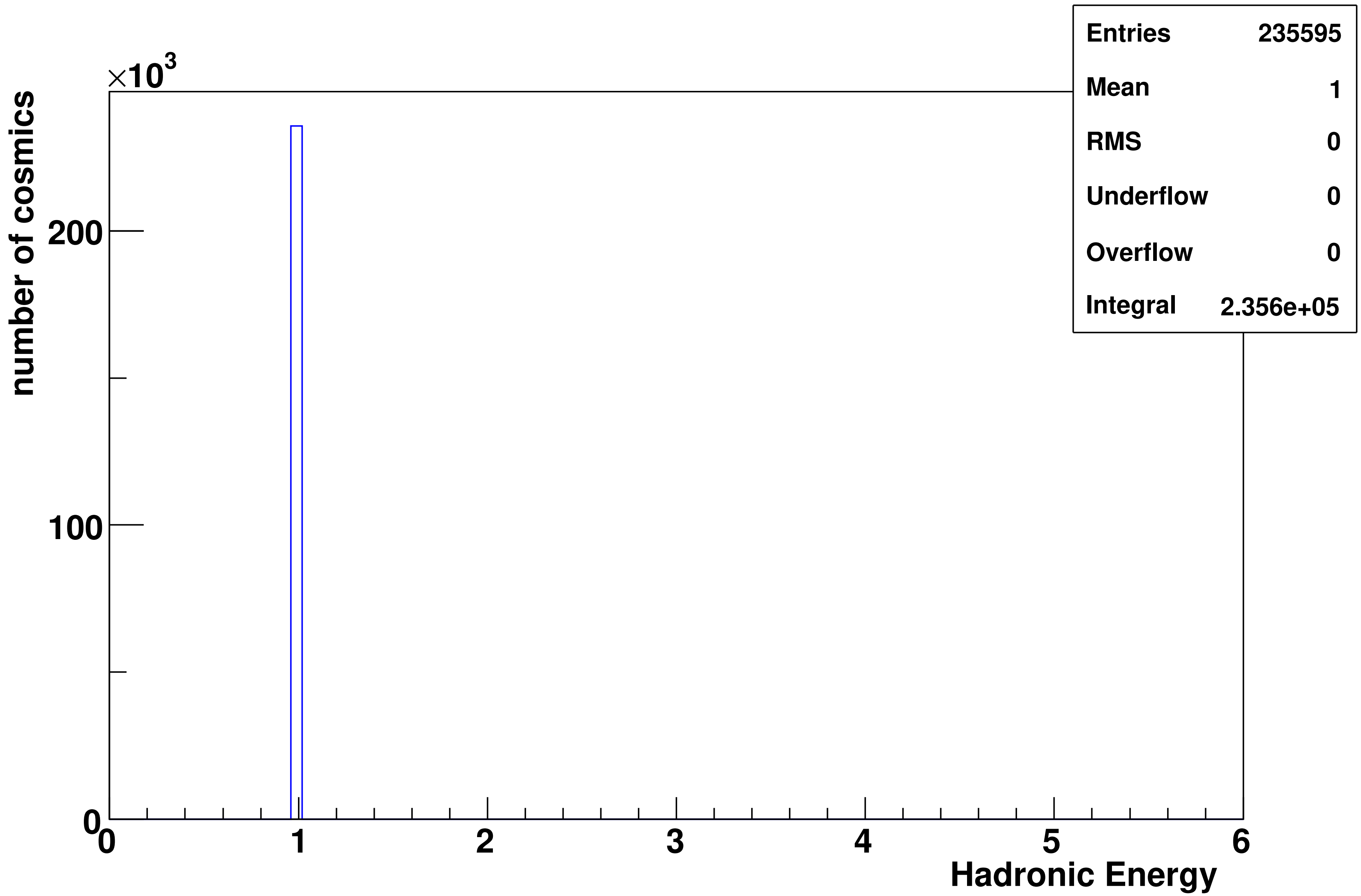
Entries 498143
Mean 36.135
RMS 31.536
Underflow 0
Overflow 9158
Integral 4.8898e+05
Ncosmics
0
20000
40000
60000
0
20
40
60
80
100
120
140
160
180
200
p_T (GeV)



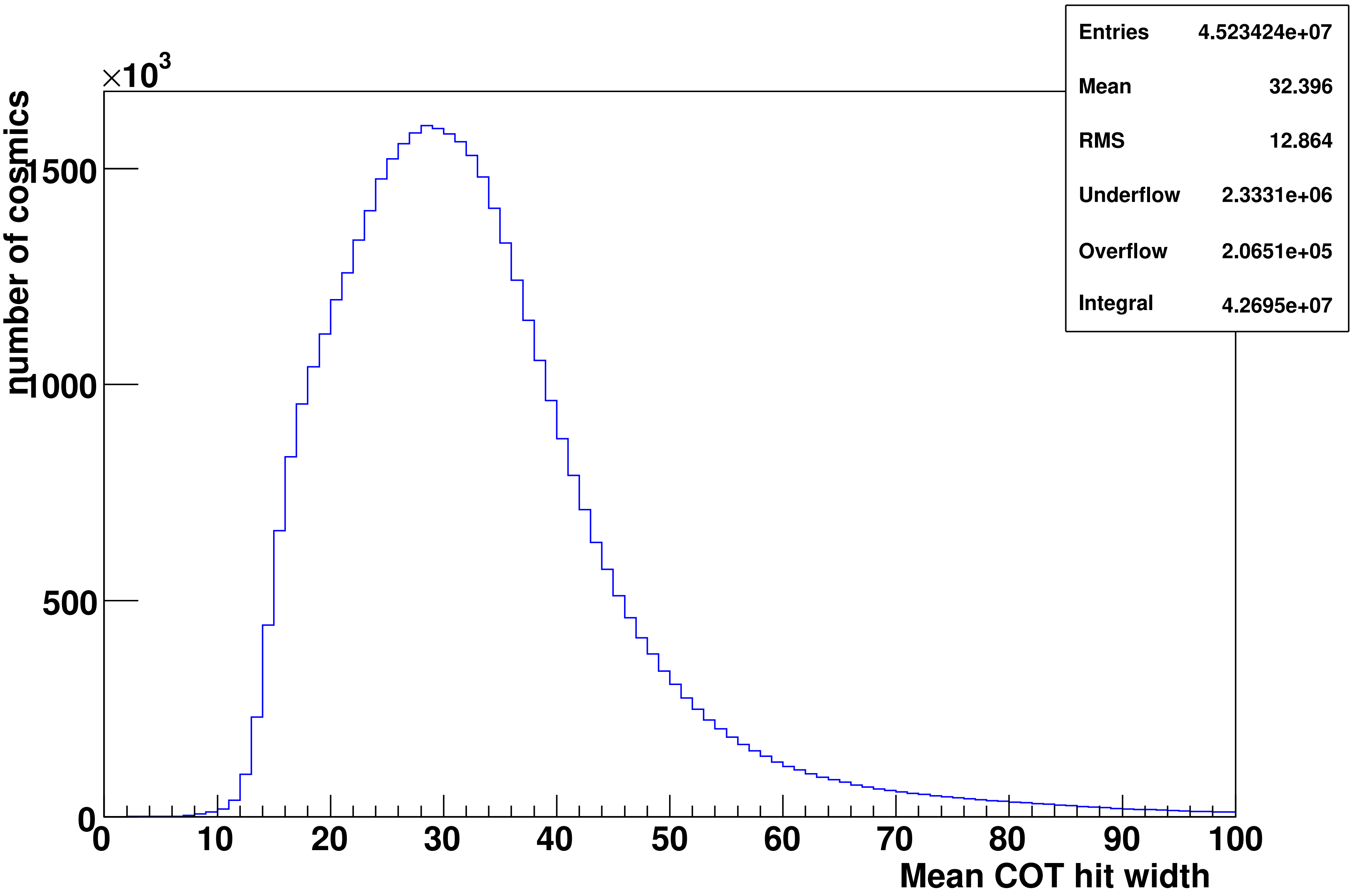
Entries 498143
Mean 37.659
RMS 32.425
Underflow 0
Overflow 10209
Integral 4.8793e+05
Ncosmics
p (GeV)



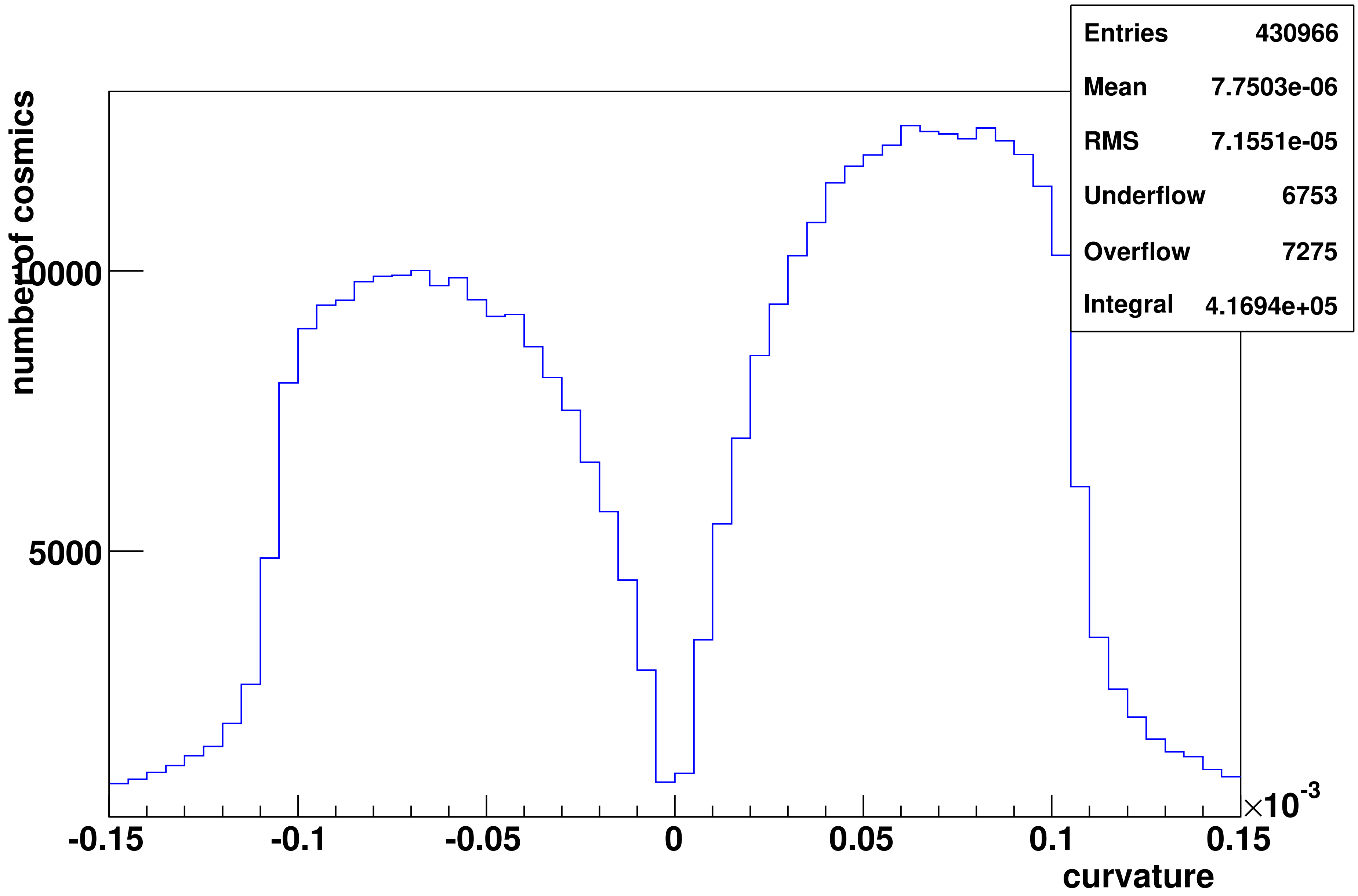
Entries 235595
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.356e+05
×10^3
number of cosmics
200
100
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
EM Energy



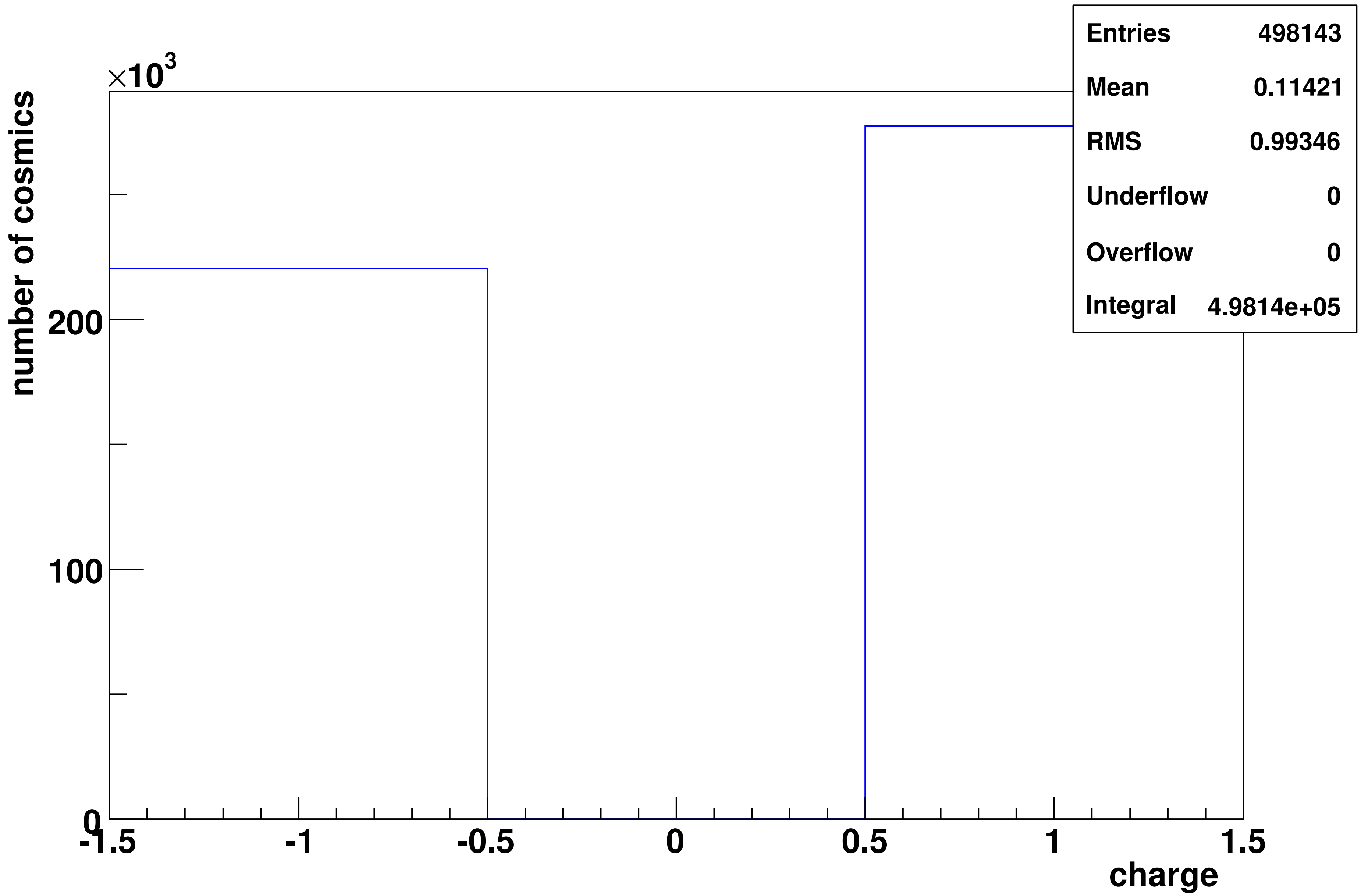
Entries 235595
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.356e+05
×10^3
number of cosmics
200
100
0
0
1
2
3
4
5
6
Hadronic Energy



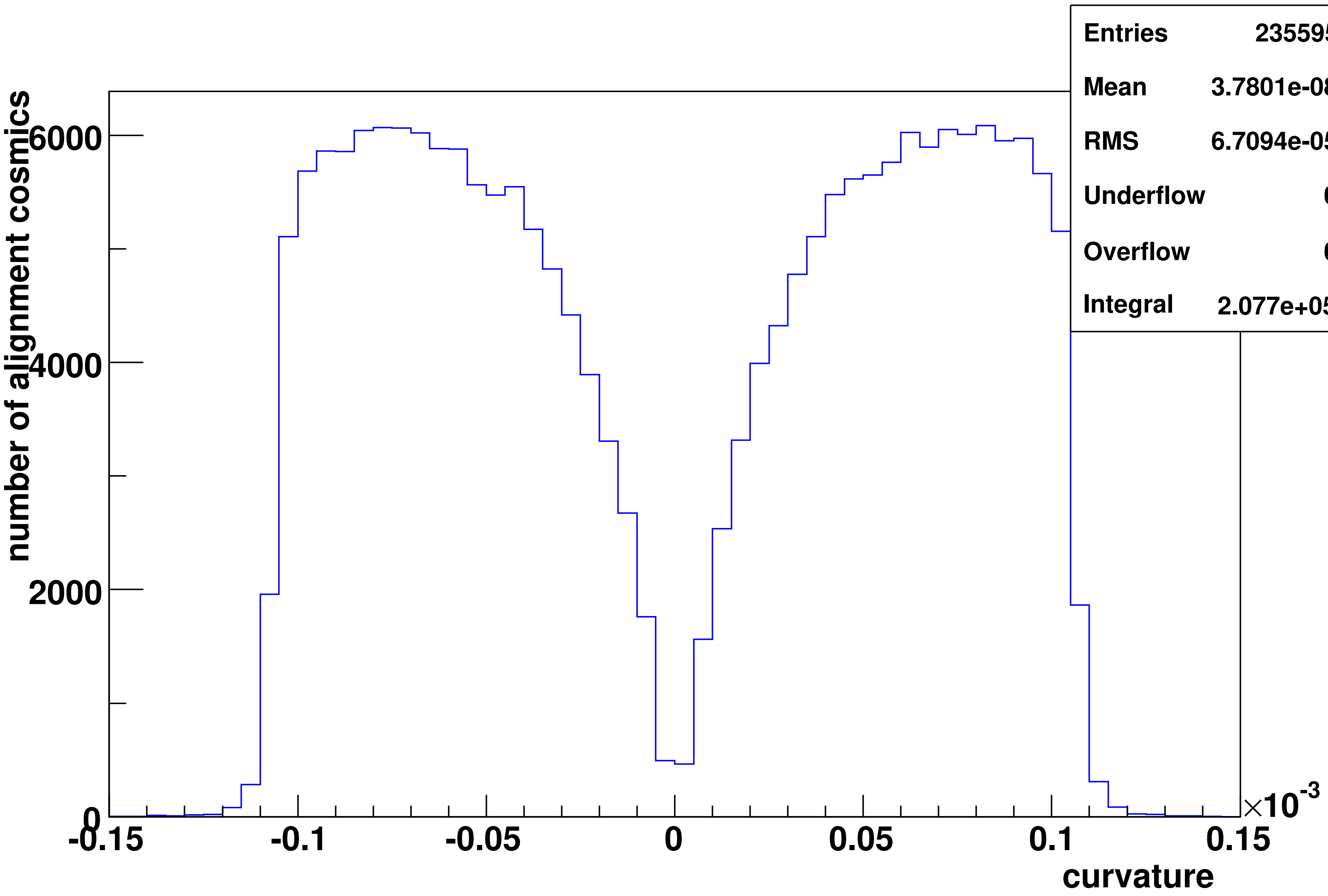
Entries 4.523424e+07
Mean 32.396
RMS 12.864
Underflow 2.3331e+06
Overflow 2.0651e+05
Integral 4.2695e+07
×10^3
number of cosmics
1500
1000
500
0
0
10
20
30
40
50
60
70
80
90
100
Mean COT hit width



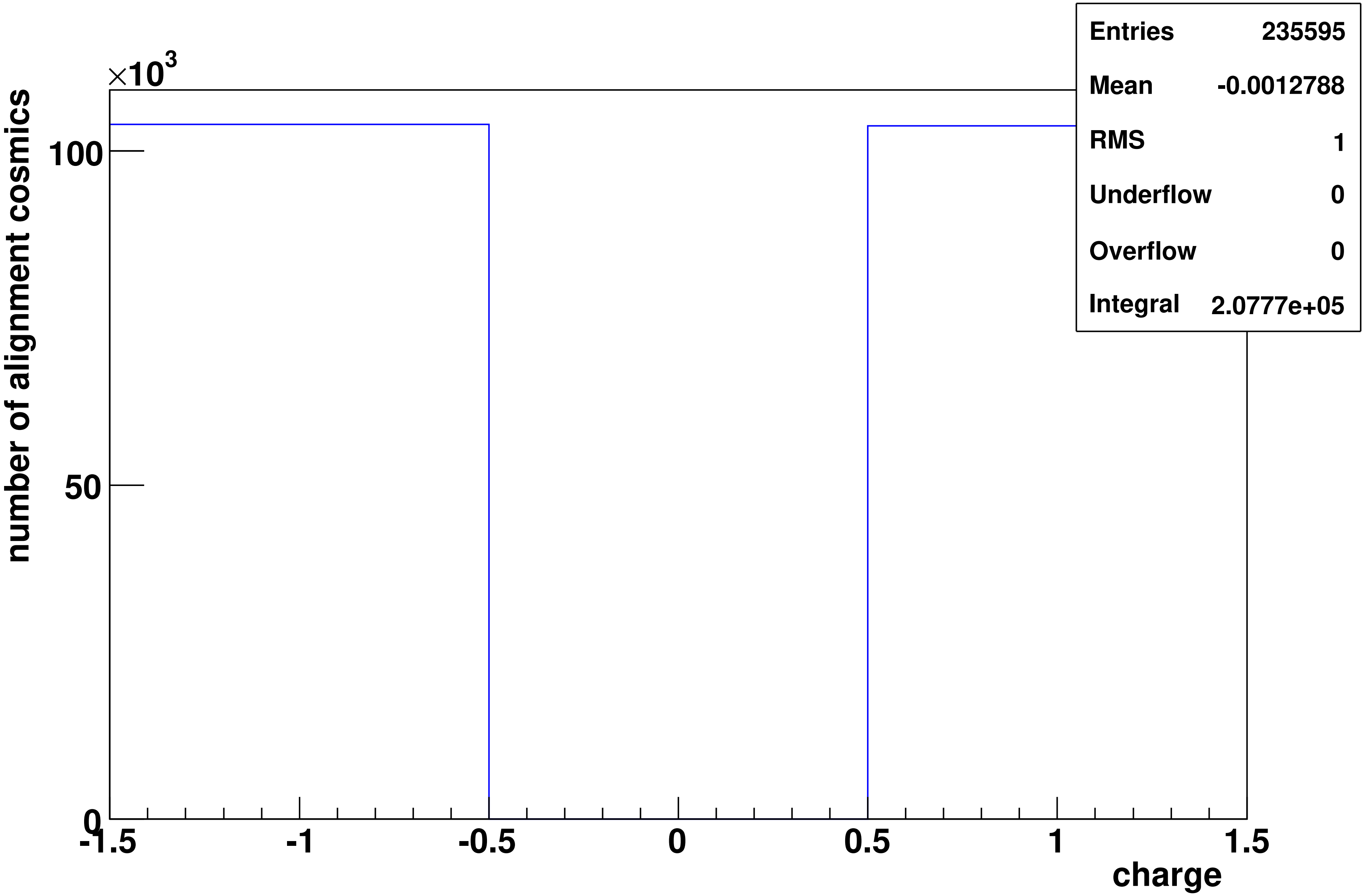
Entries 430966
Mean 7.7503e-06
RMS 7.1551e-05
Underflow 6753
Overflow 7275
Integral 4.1694e+05
number of cosmics
10000
5000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature



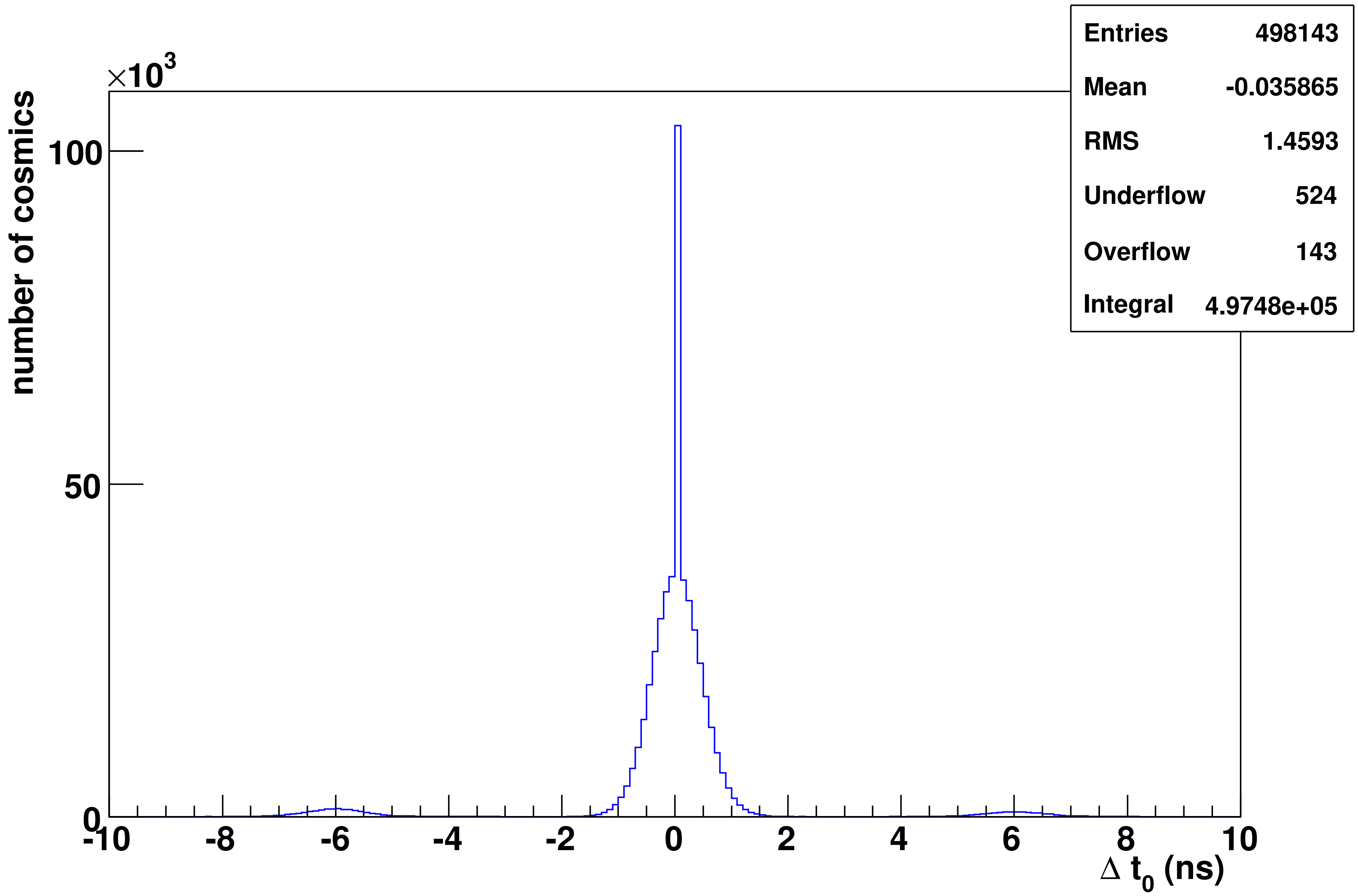
Entries 498143
Mean 0.11421
RMS 0.99346
Underflow 0
Overflow 0
Integral 4.9814e+05
×10^3
number of cosmics
200
100
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge



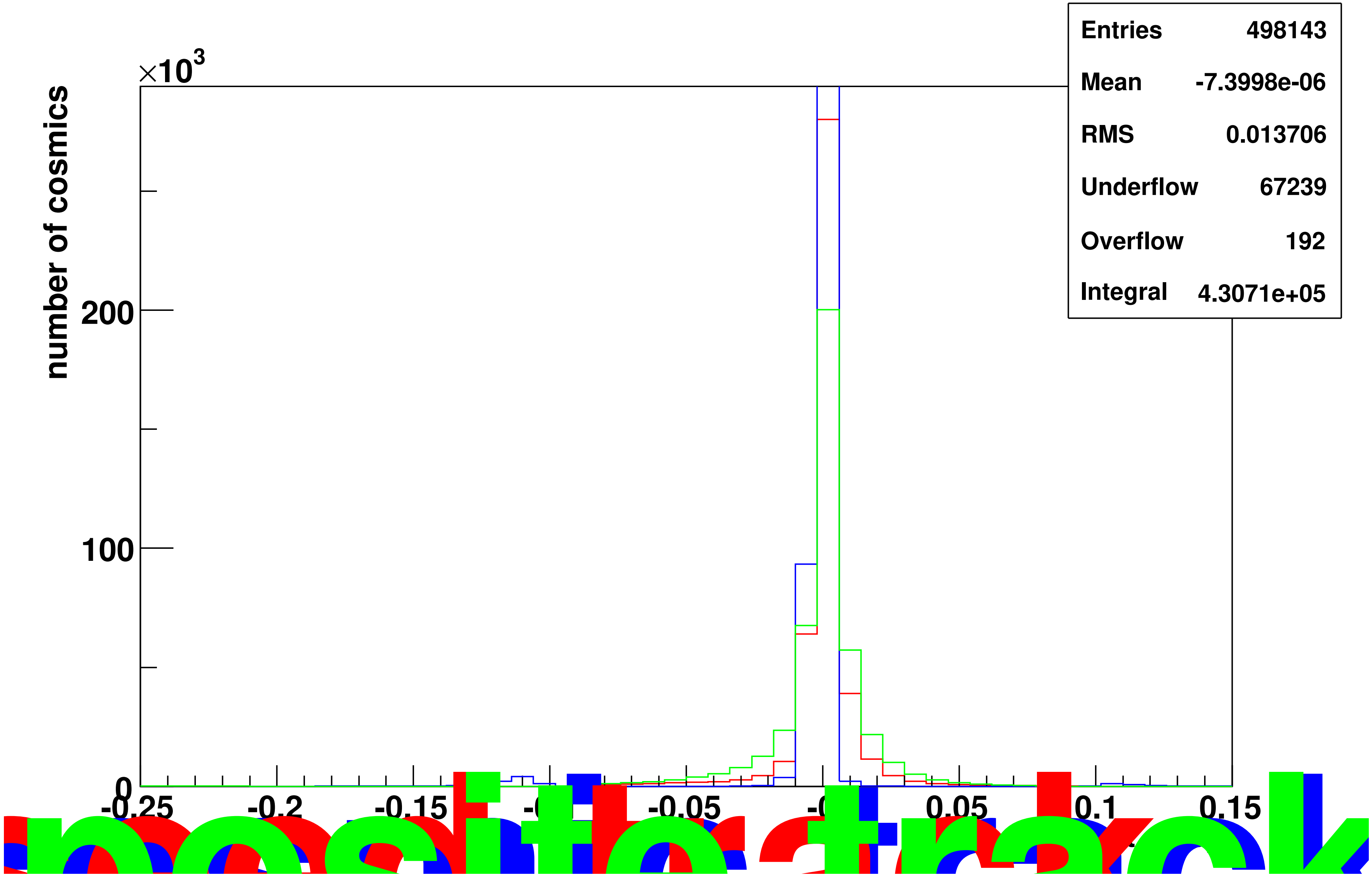
Entries 235595
Mean 3.7801e-08
RMS 6.7094e-05
Underflow 0
Overflow 0
Integral 2.077e+05
number of alignment cosmics
0
2000
4000
6000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10-3
curvature



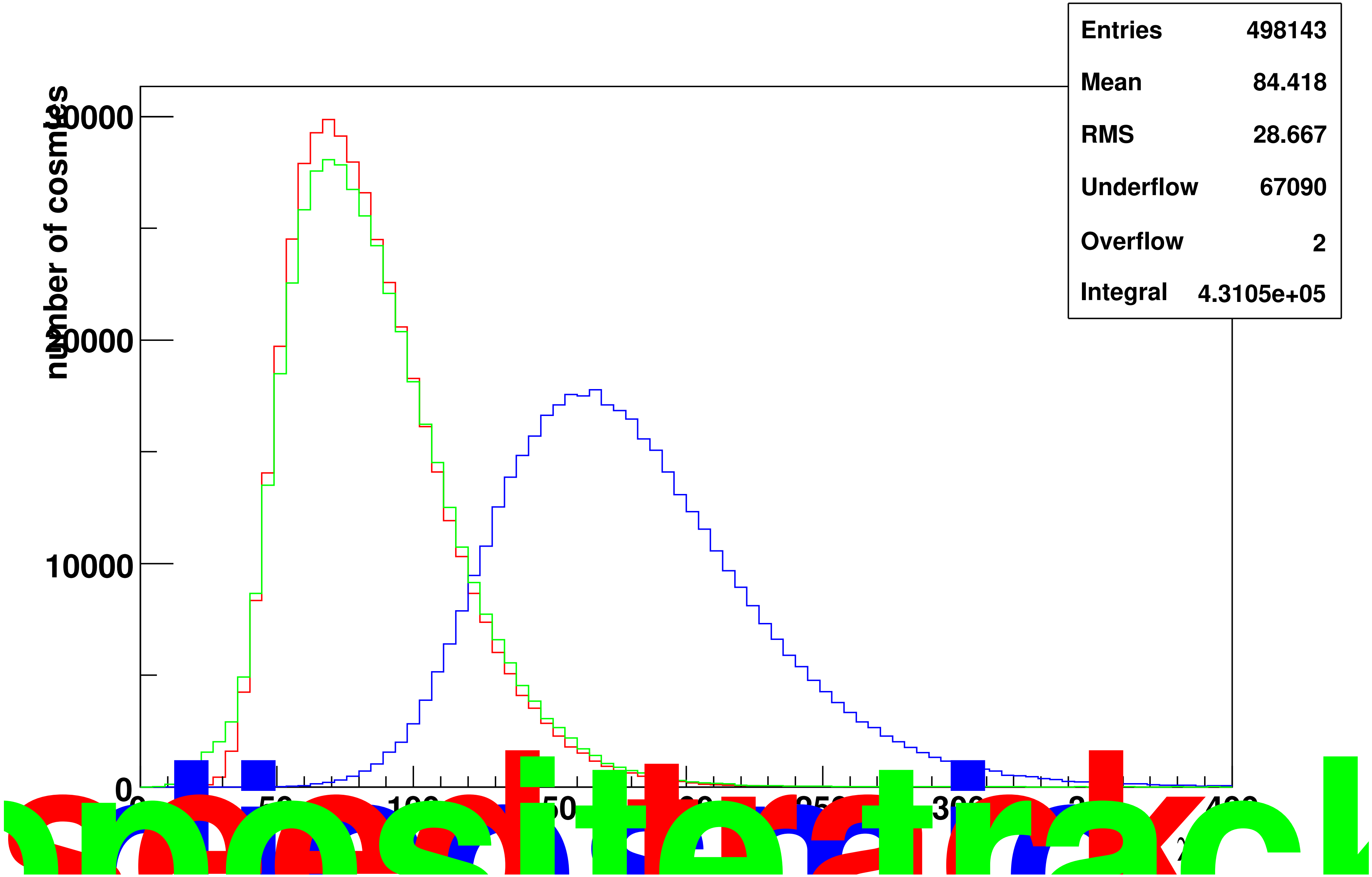
Entries 235595
Mean -0.0012788
RMS 1
Underflow 0
Overflow 0
Integral 2.0777e+05
×10^3
100
50
0
number of alignment cosmics
-1.5
-1
-0.5
0
0.5
1
1.5
charge

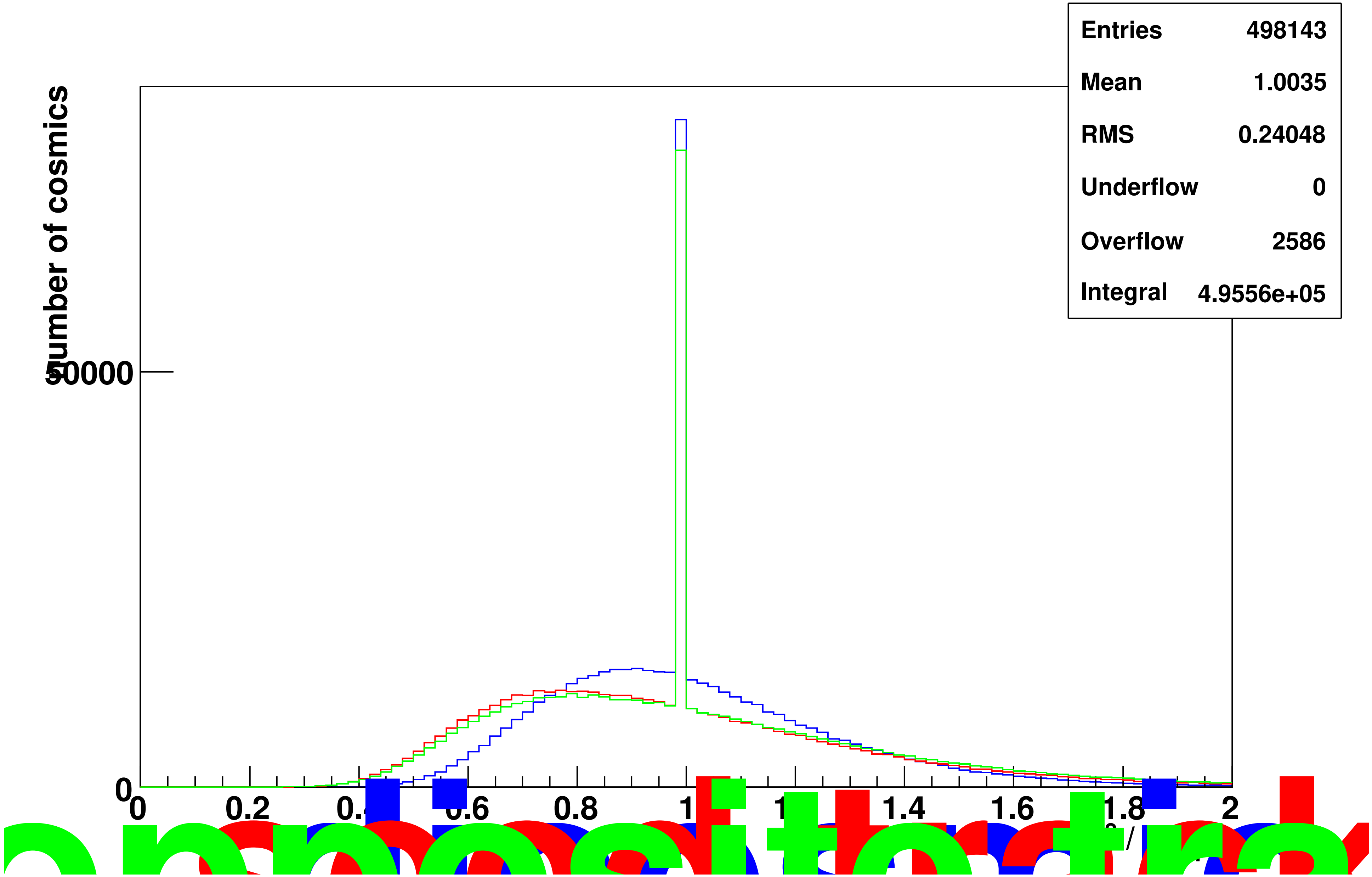


Entries 498143
Mean -0.035865
RMS 1.4593
Underflow 524
Overflow 143
Integral 4.9748e+05
×10^3
number of cosmics
100
50
0
-10
-8
-6
-4
-2
0
2
4
6
8
10
Δ t0 (ns)

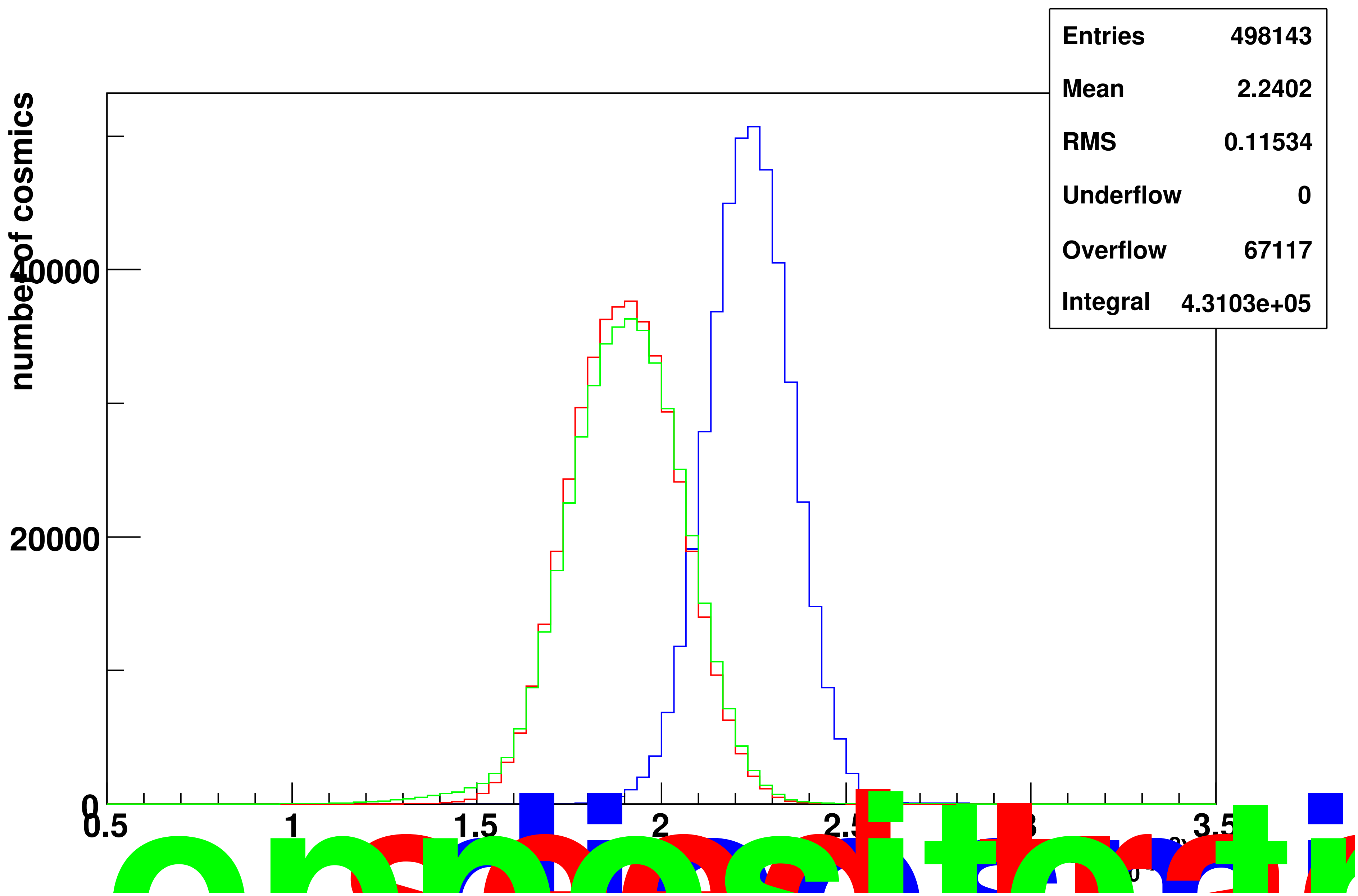


Entries 498143
Mean -7.3998e-06
RMS 0.013706
Underflow 67239
Overflow 192
Integral 4.3071e+05
number of cosmics
×10^3
200
100
0
-0.25
-0.2
-0.15
-0.05
0.05
0.1
0.15

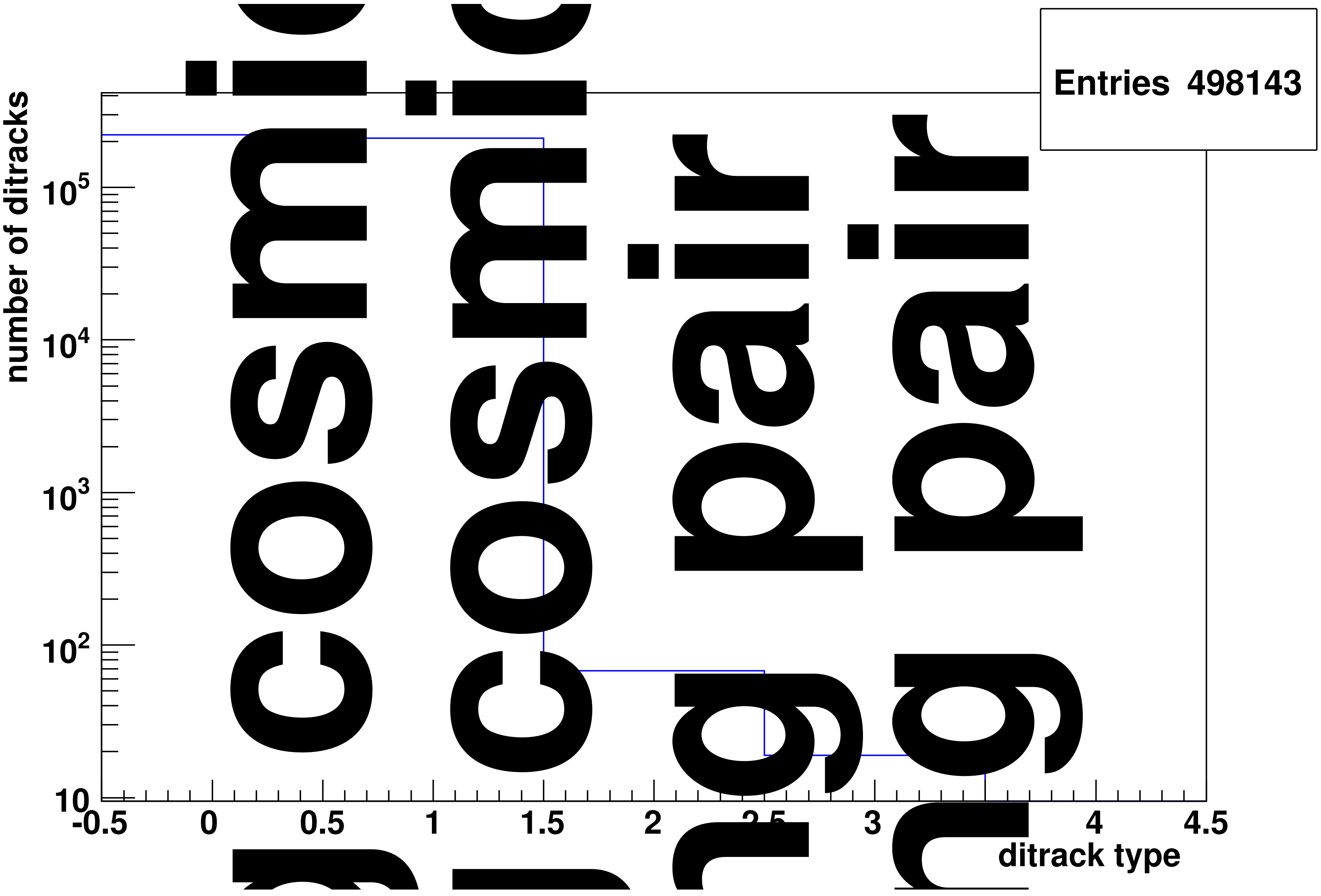

Entries 498143
Mean 84.418
RMS 28.667
Underflow 67090
Overflow 2
Integral 4.3105e+05
number of cosmics
10000
20000
30000
0



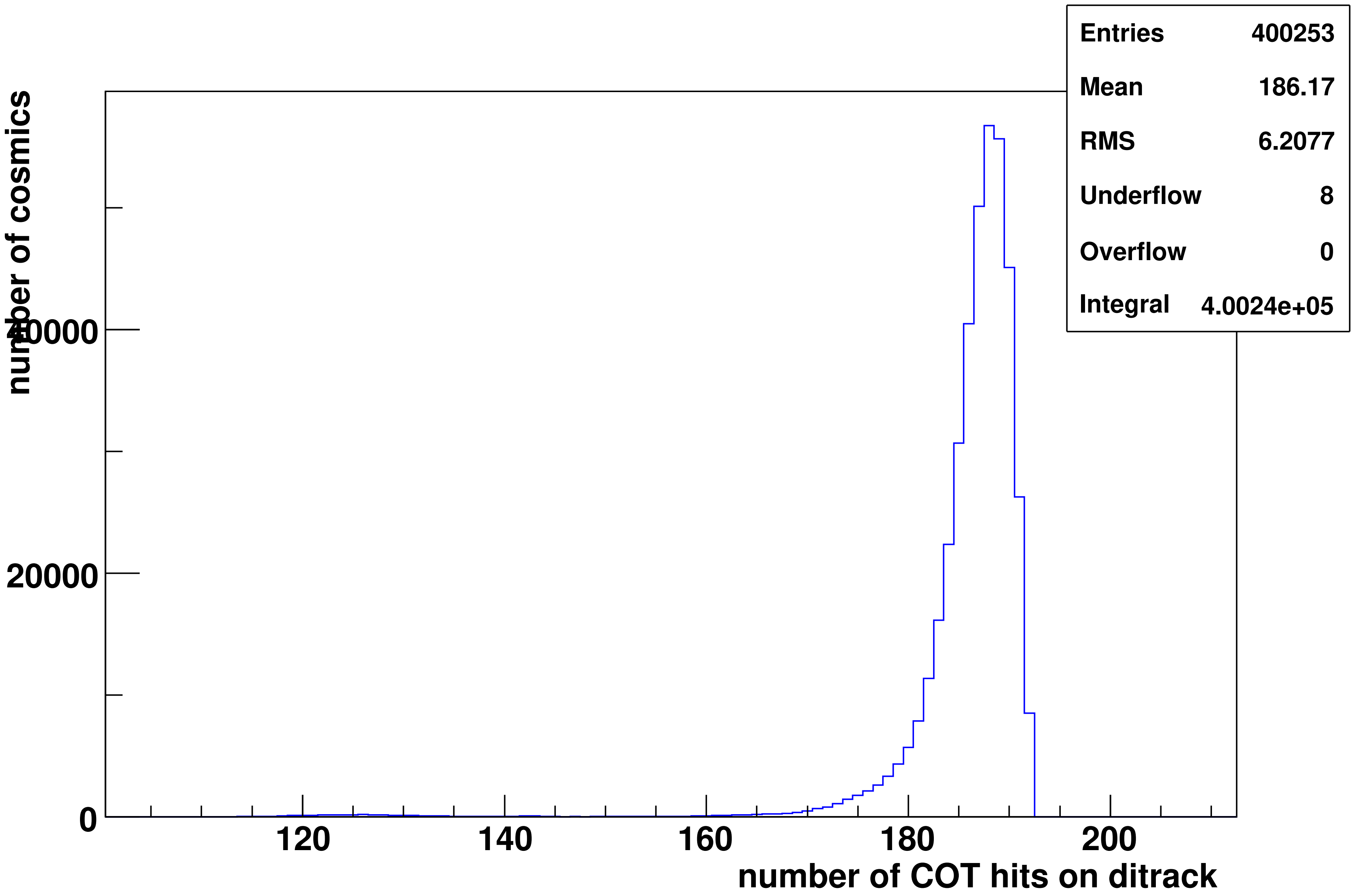
Entries 498143
Mean 1.0035
RMS 0.24048
Underflow 0
Overflow 2586
Integral 4.9556e+05
Number of cosmics
50000
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2



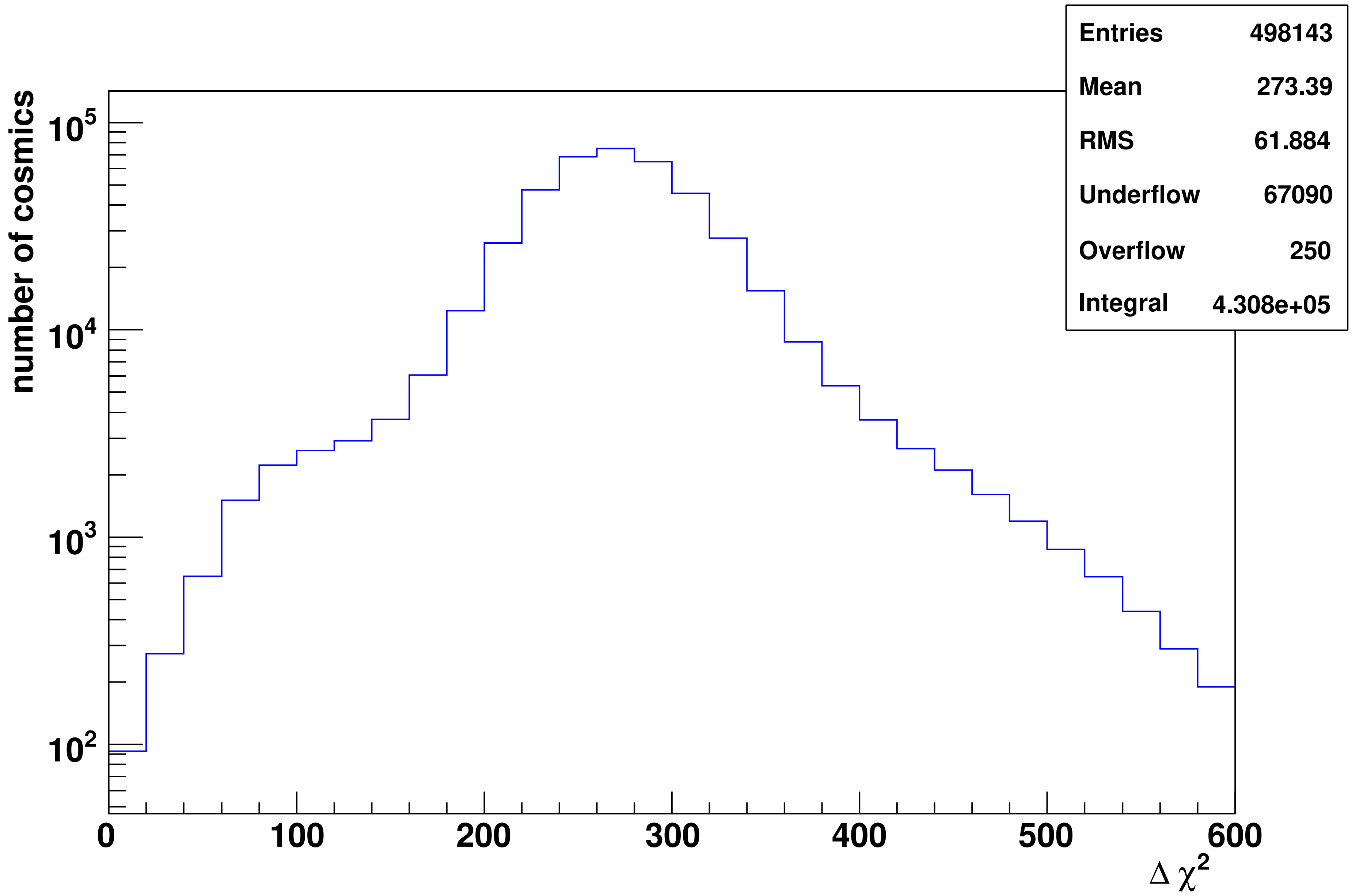
Entries 498143
Mean 2.2402
RMS 0.11534
Underflow 0
Overflow 67117
Integral 4.3103e+05
number of cosmics
40000
20000
0
0.5
1
1.5
2
2.5
3
3.5



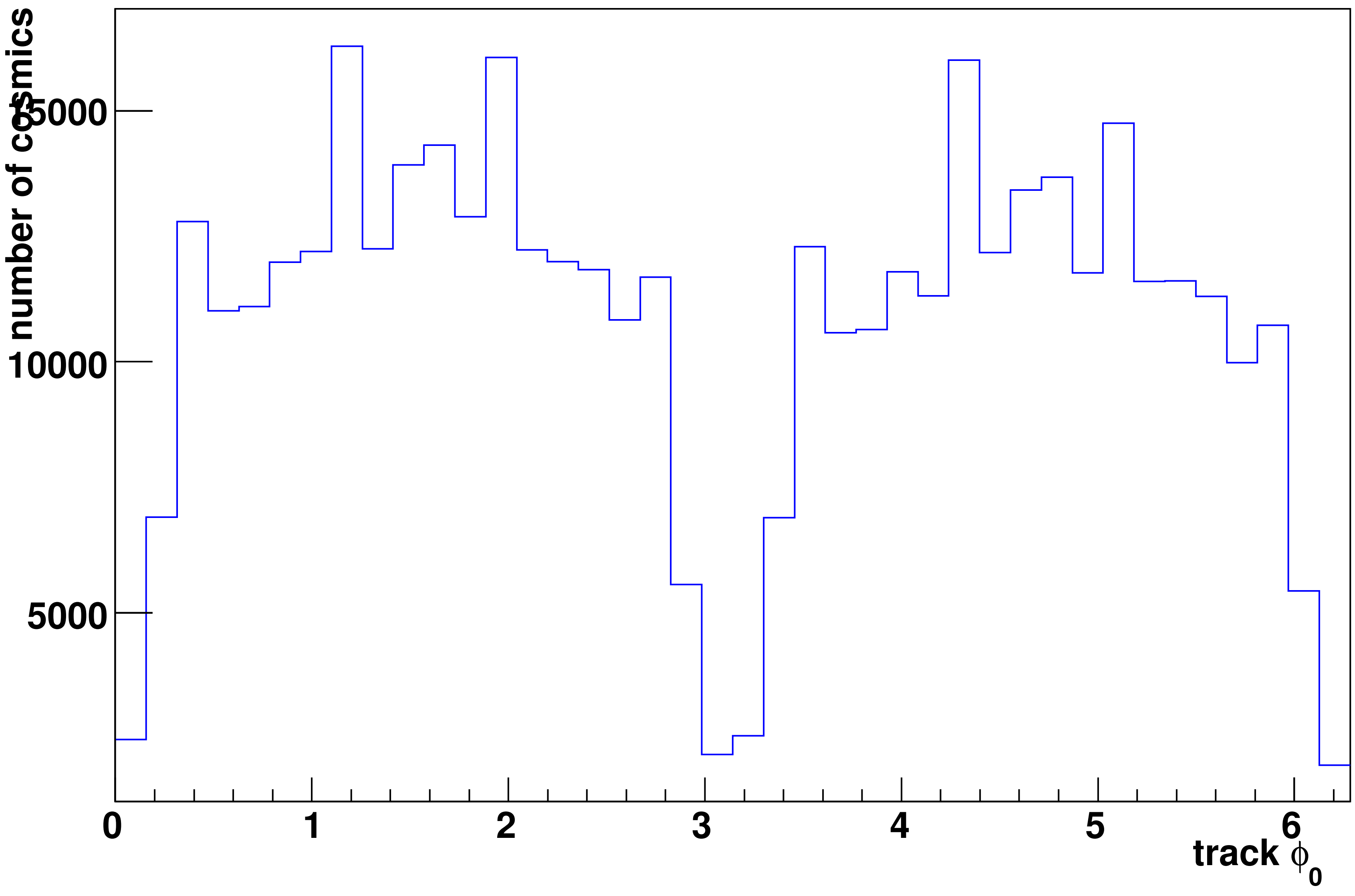
Entries 498143
number of ditracks
ditrack type



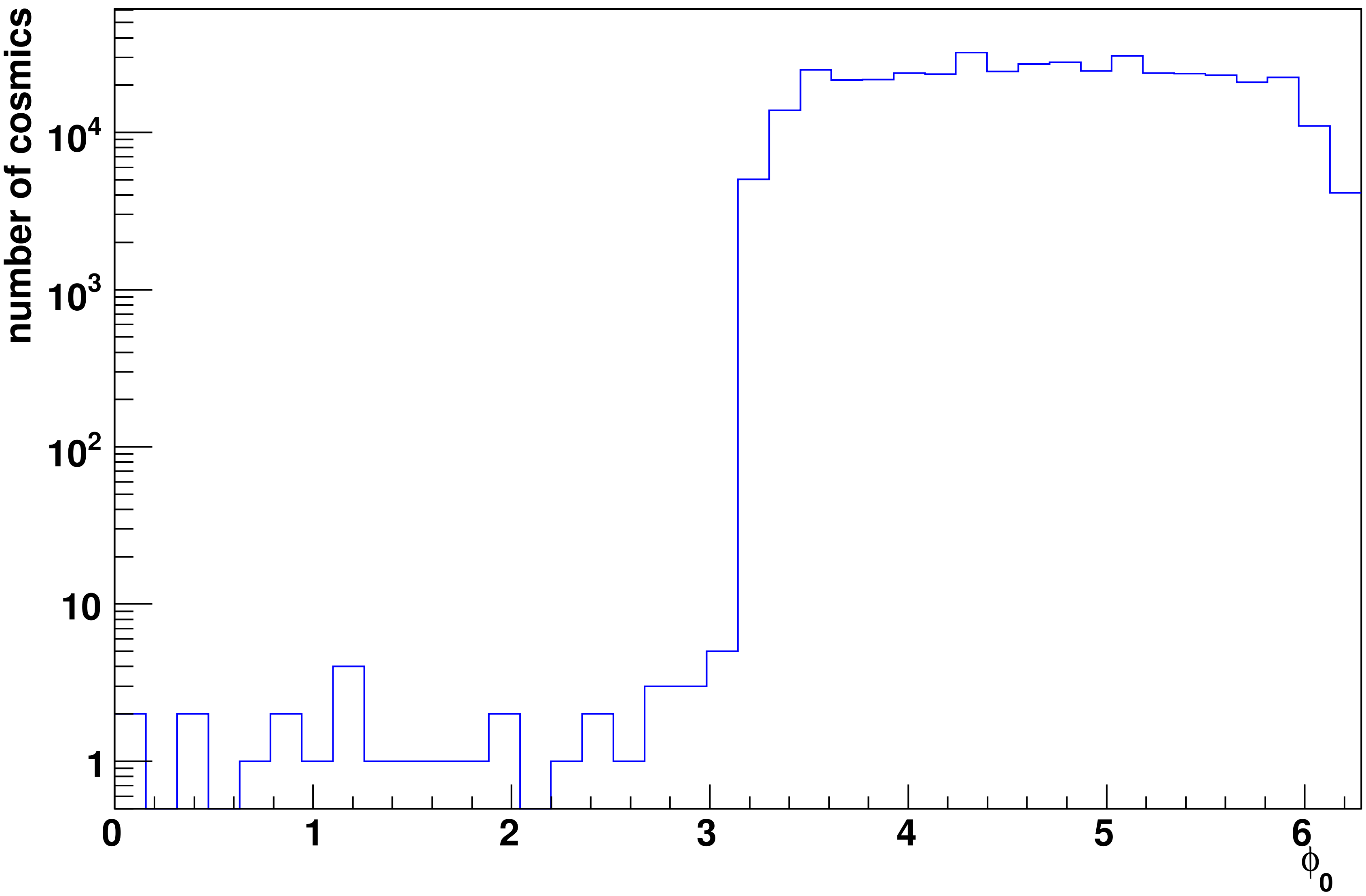
Entries 400253
Mean 186.17
RMS 6.2077
Underflow 8
Overflow 0
Integral 4.0024e+05
number of cosmics
0
20000
40000
120
140
160
180
200
number of COT hits on ditrack

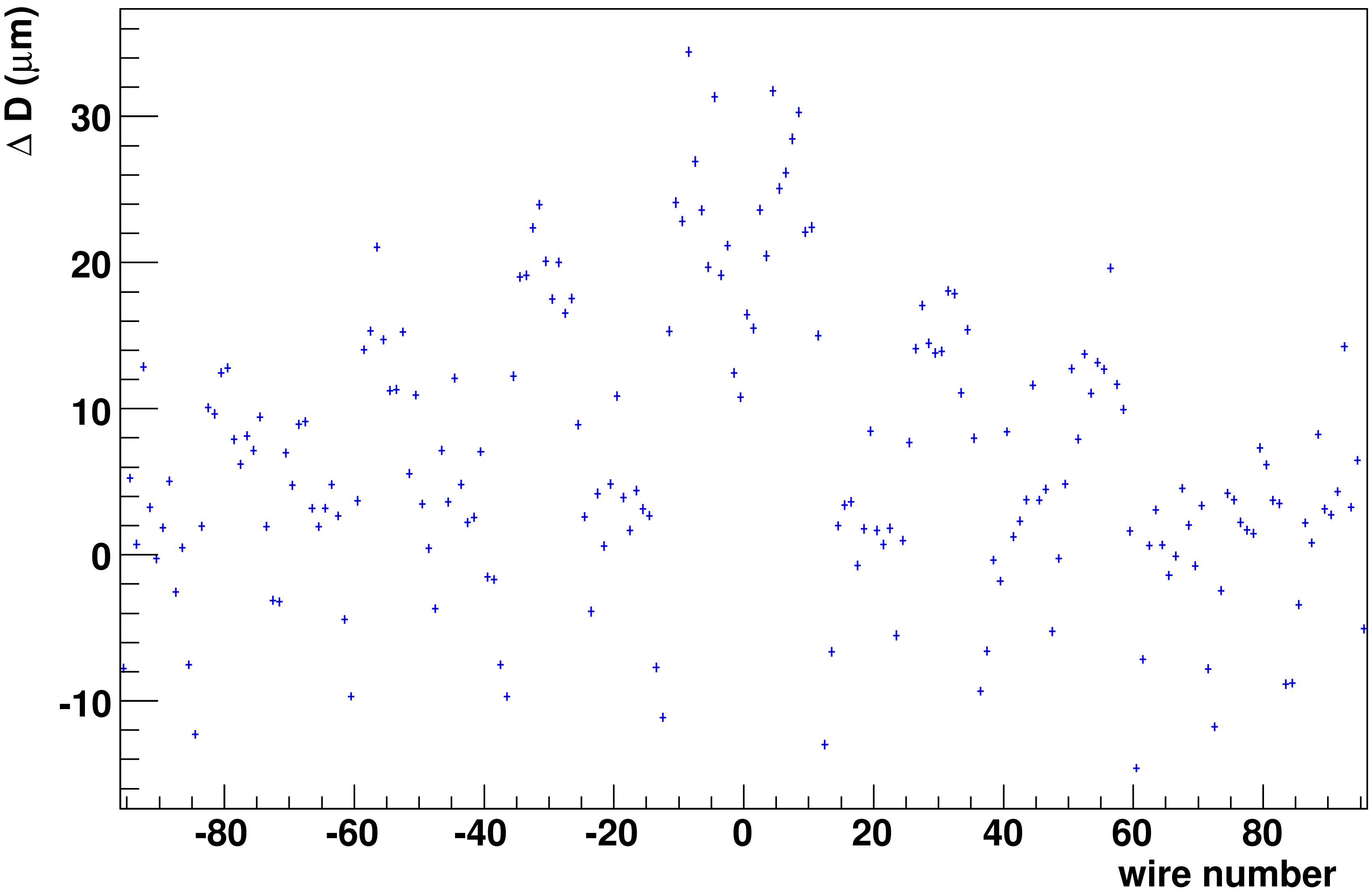


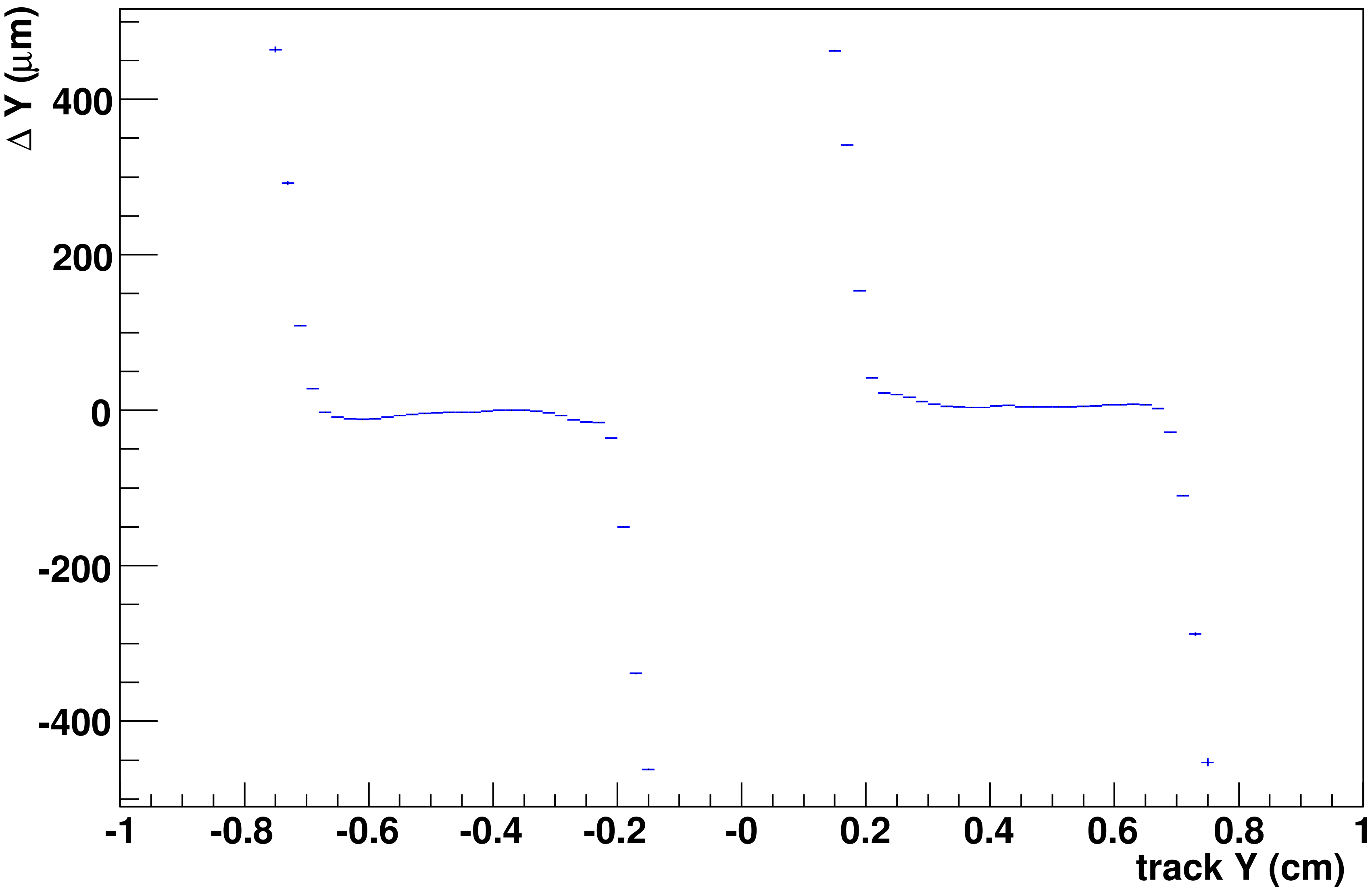
Entries 498143
Mean 273.39
RMS 61.884
Underflow 67090
Overflow 250
Integral 4.308e+05
number of cosmics
10^5
10^4
10^3
10^2
0
100
200
300
400
500
600
$\Delta\chi^2$



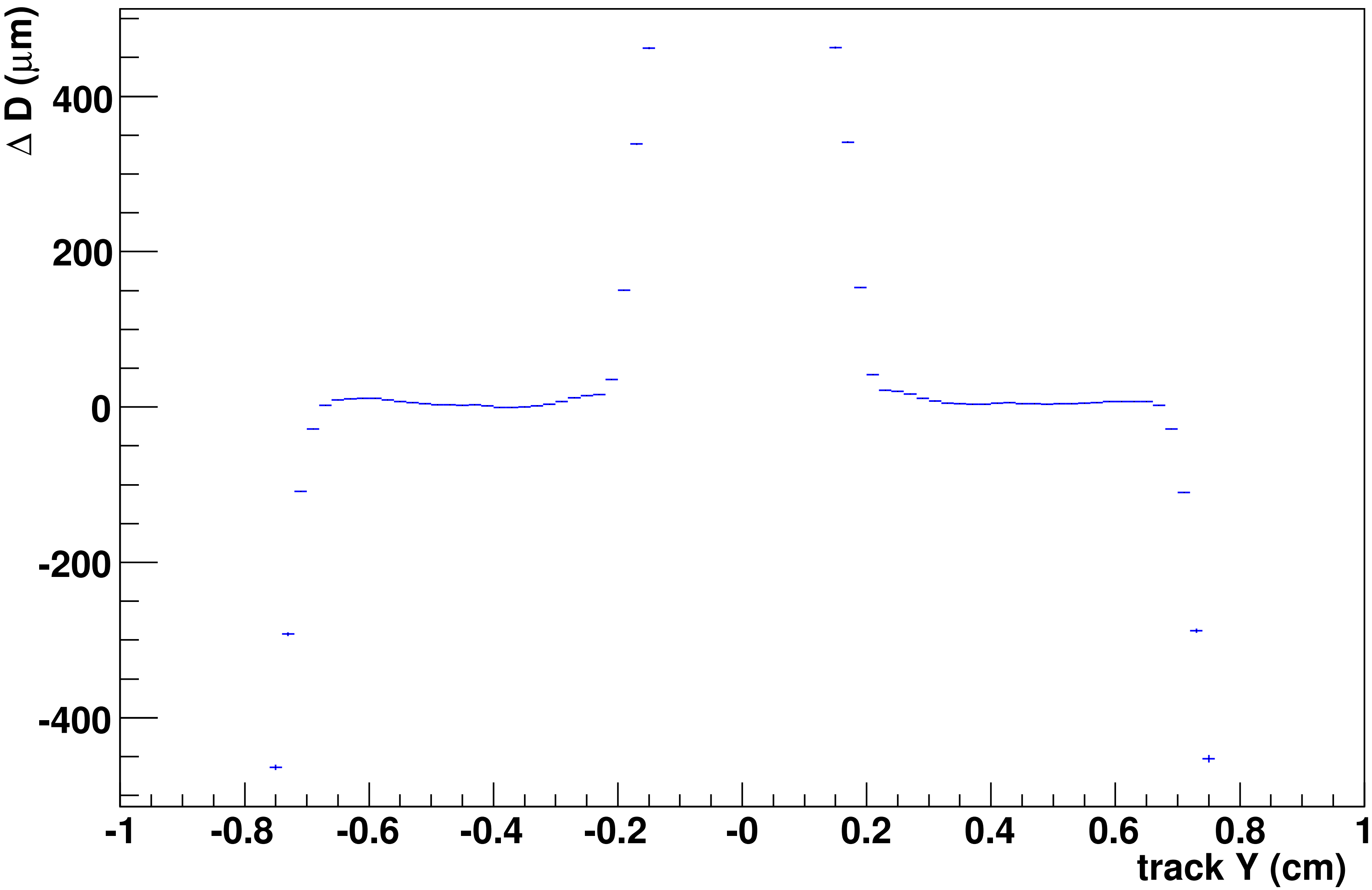
number of cosmics
15000
10000
5000
0
1
2
3
4
5
6
track ϕ_0


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

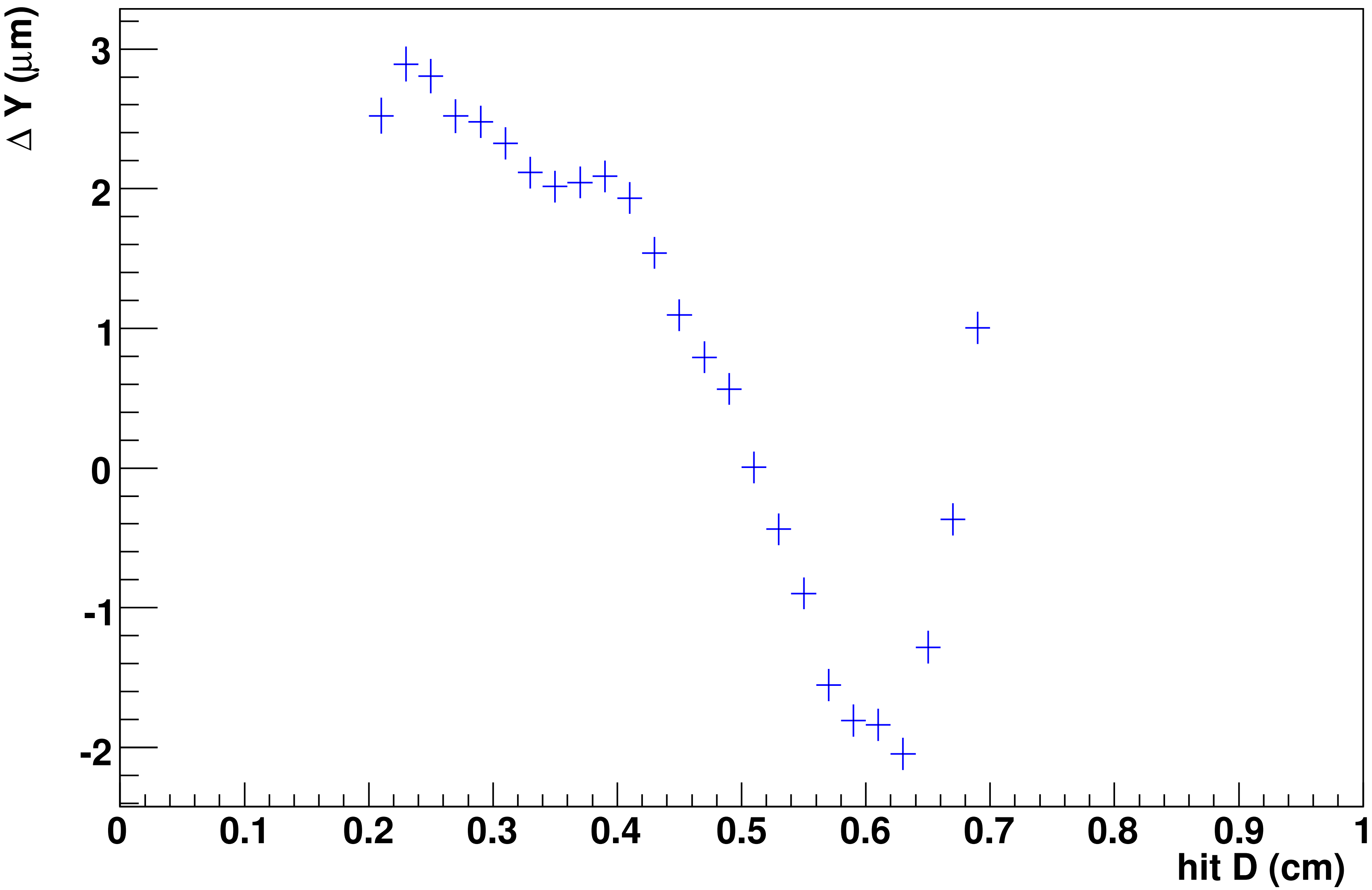

Δ D (μm)
30
20
10
0
-10
-80
-60
-40
-20
0
20
40
60
80
wire number



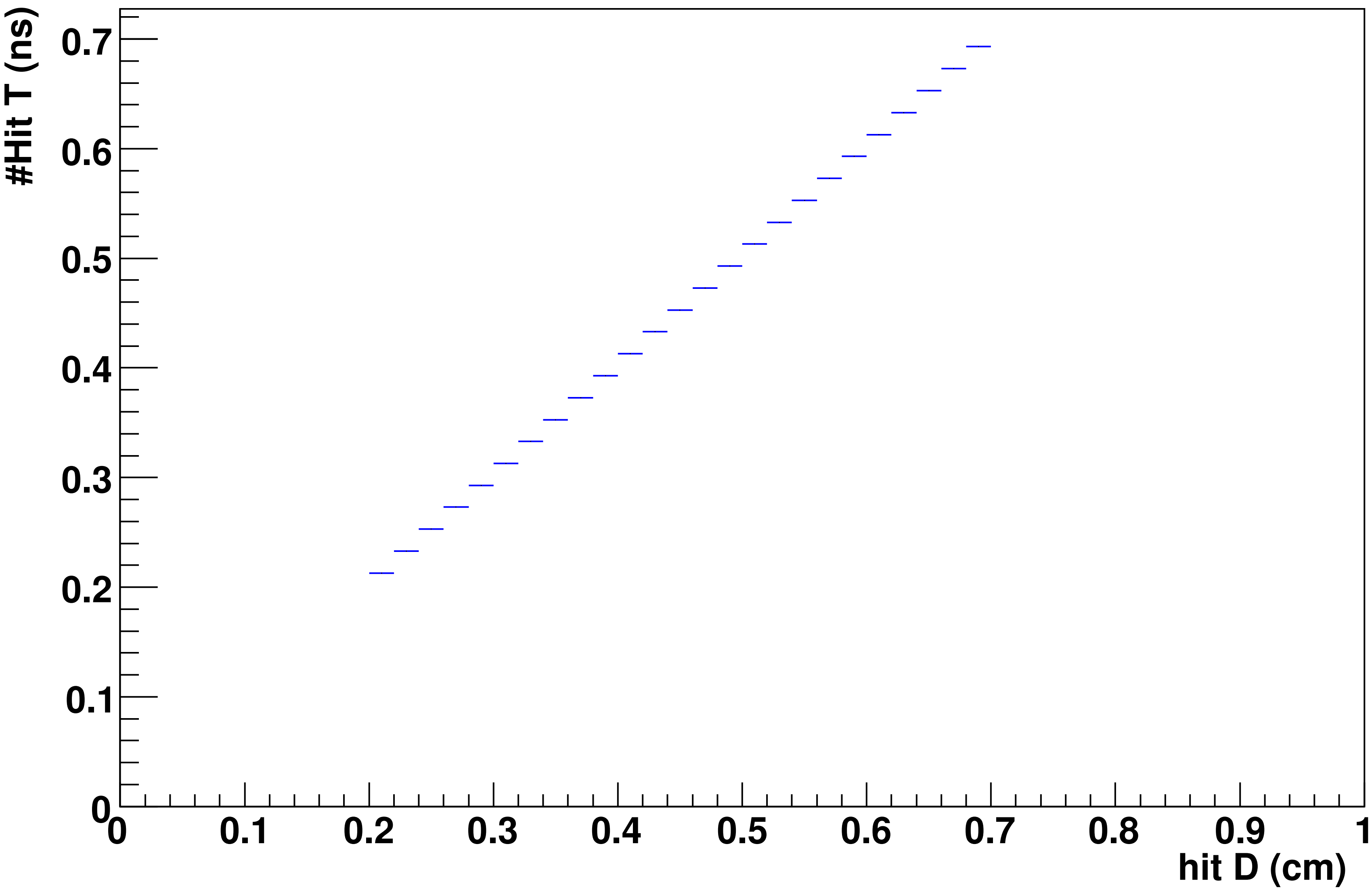
Δ Y (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

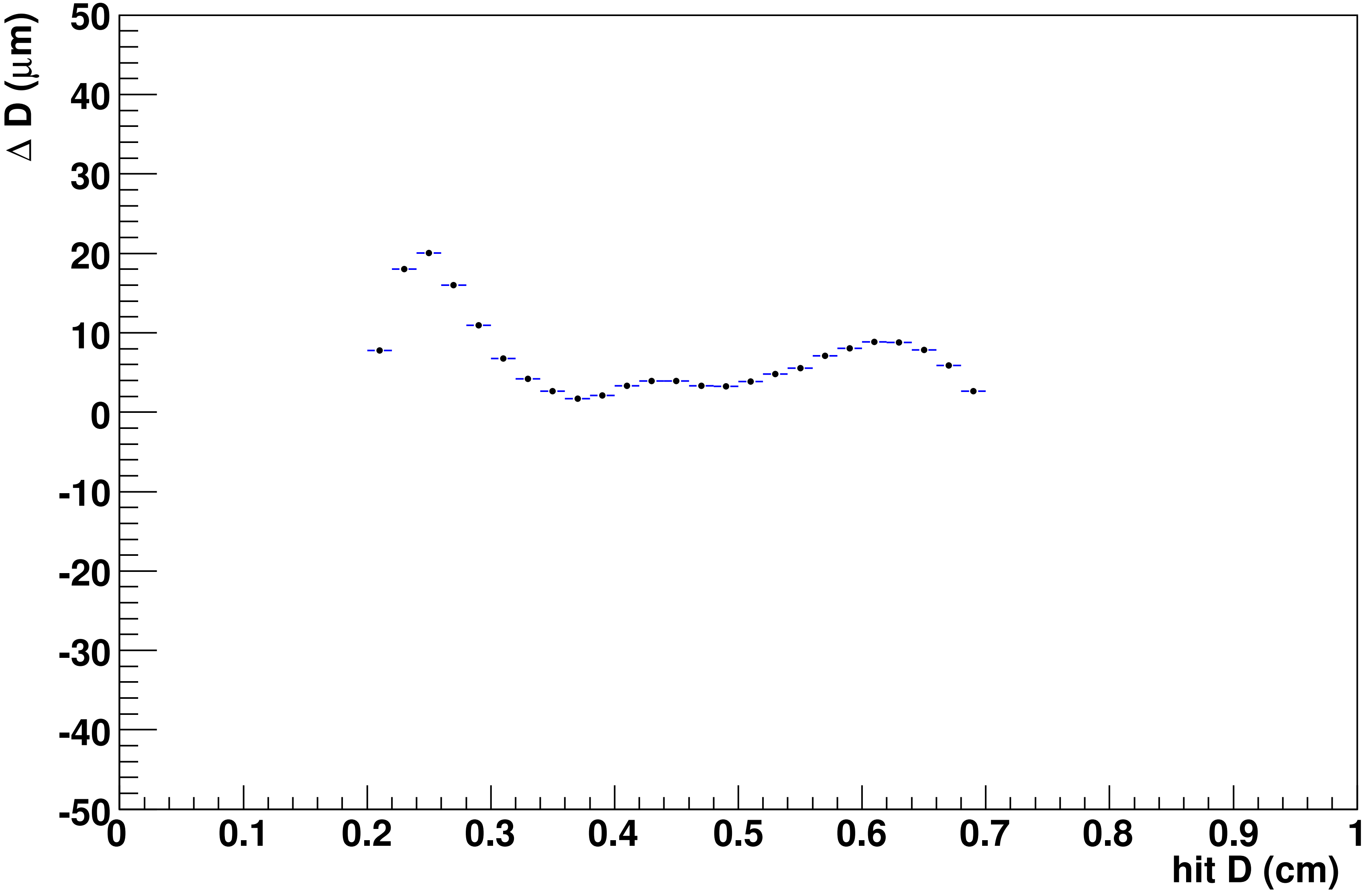


Δ D (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

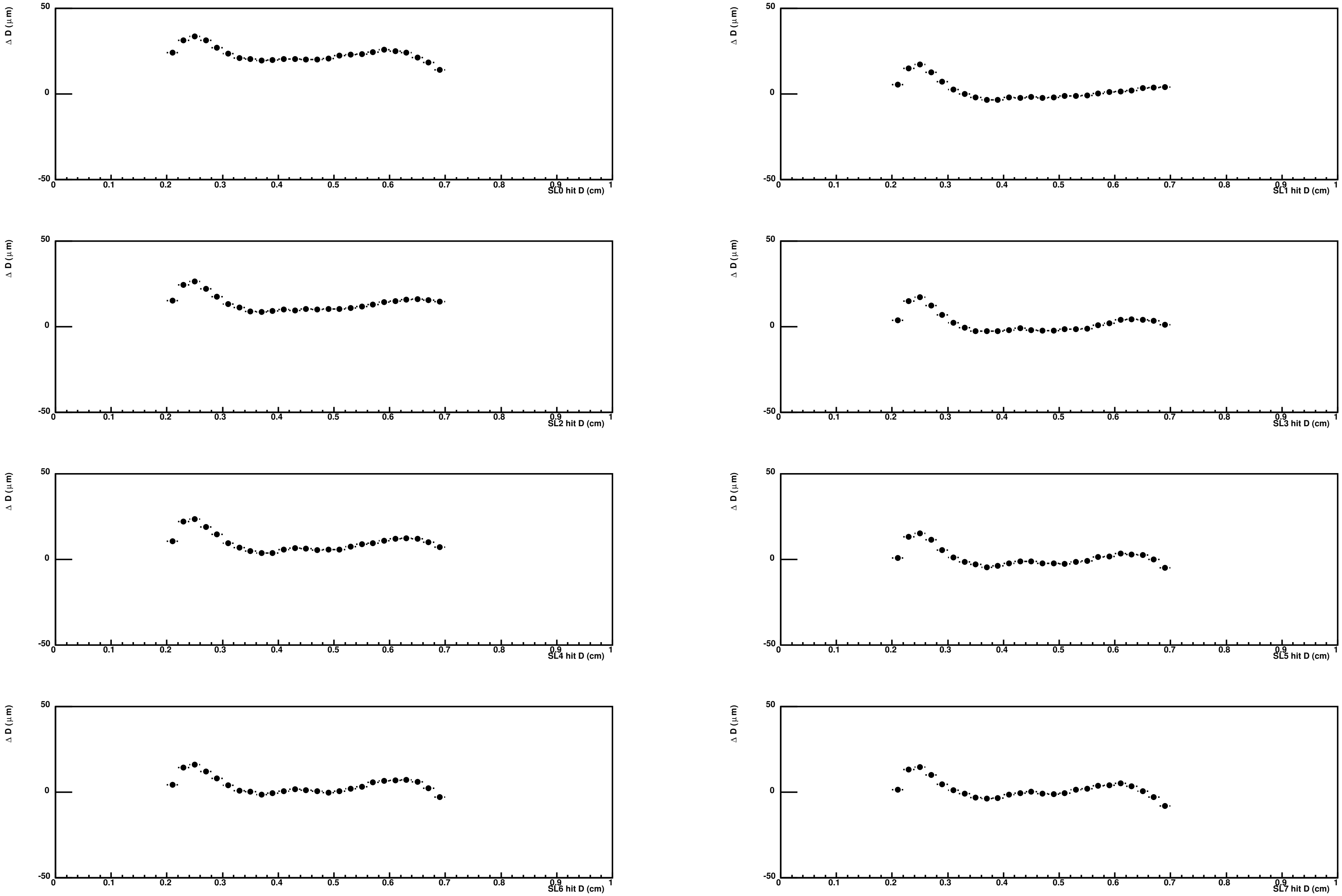


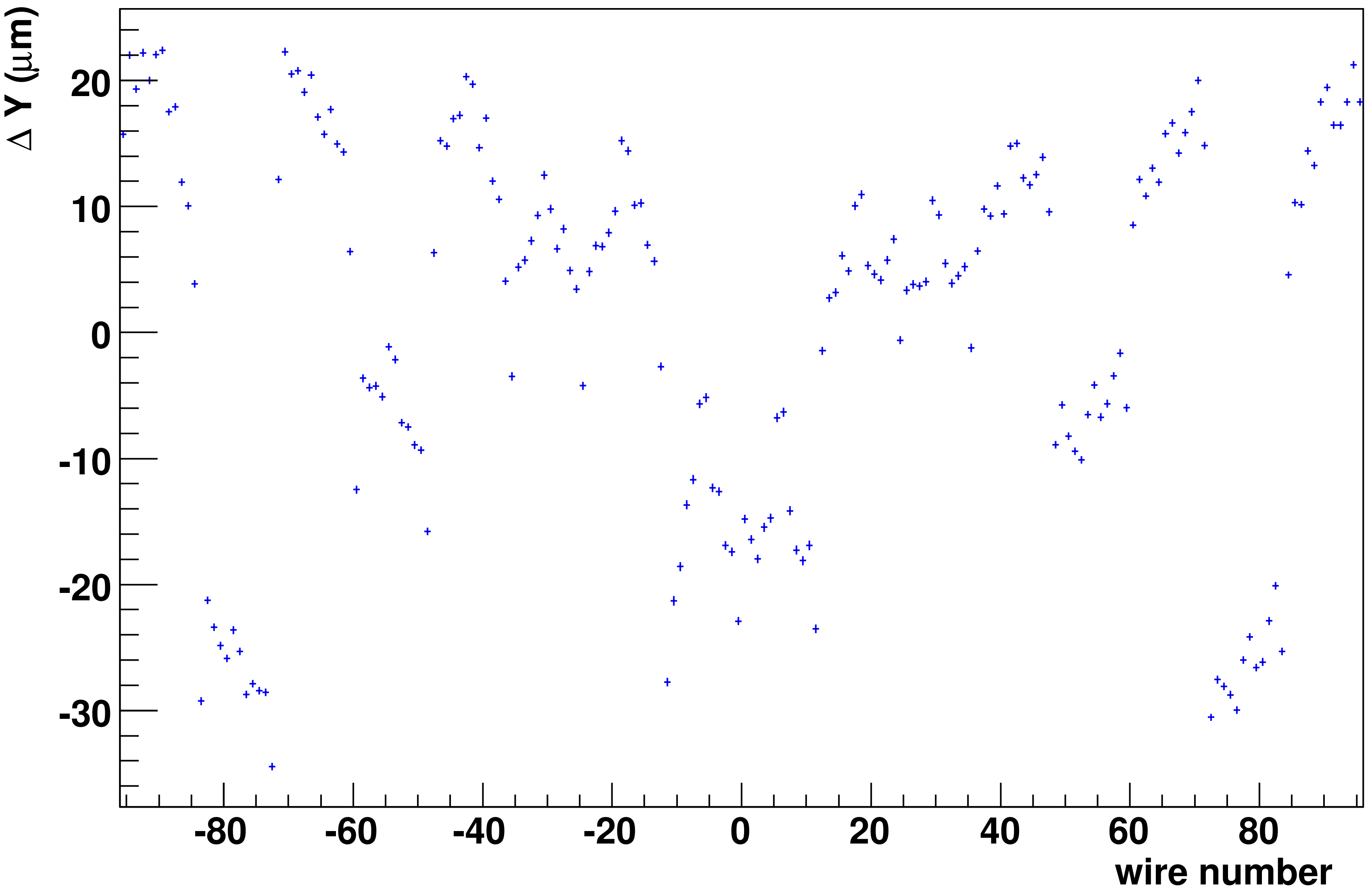
Δ Y (μm)
3
2
1
0
-1
-2
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)


#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)

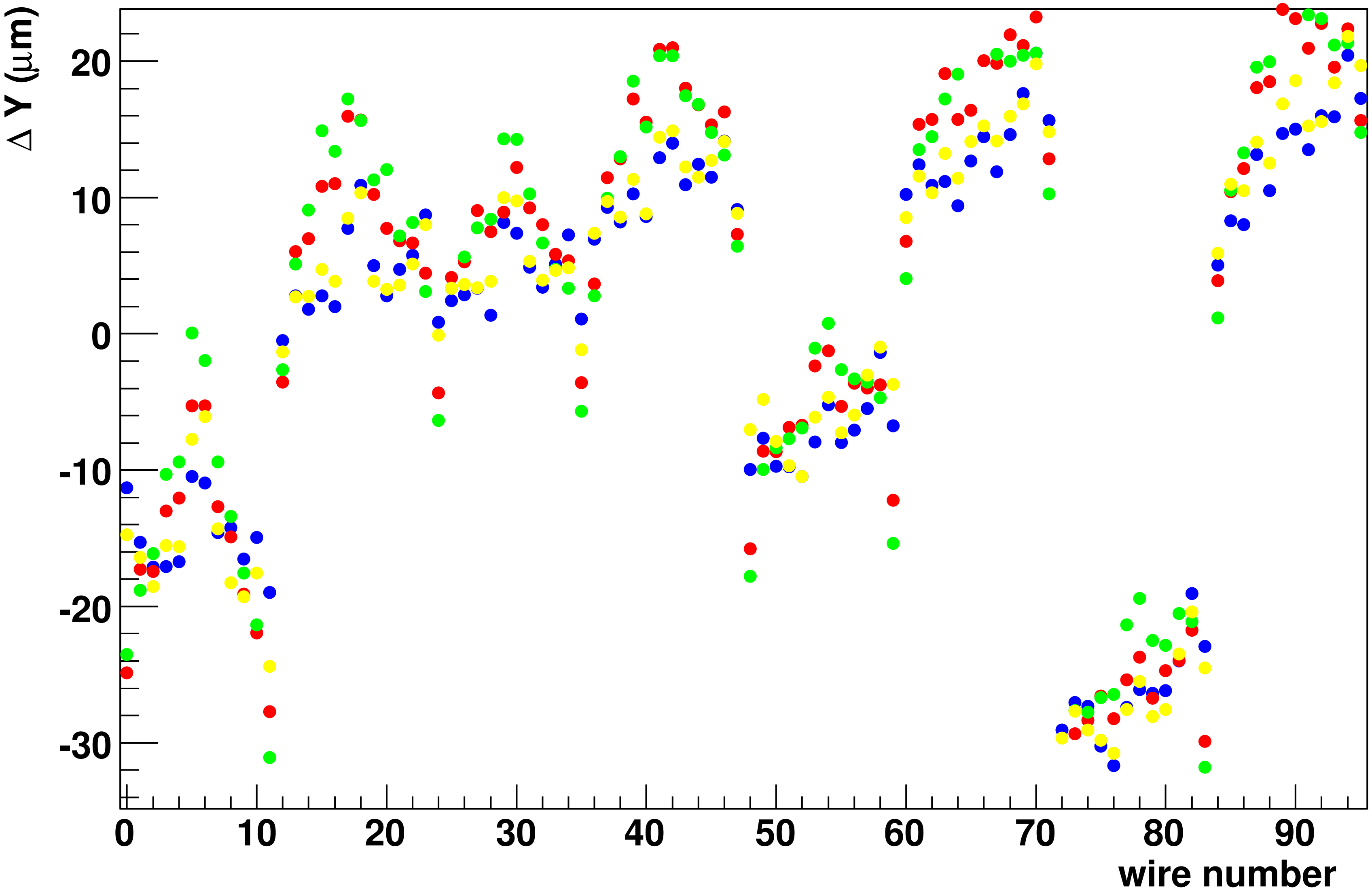


Δ D (μm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

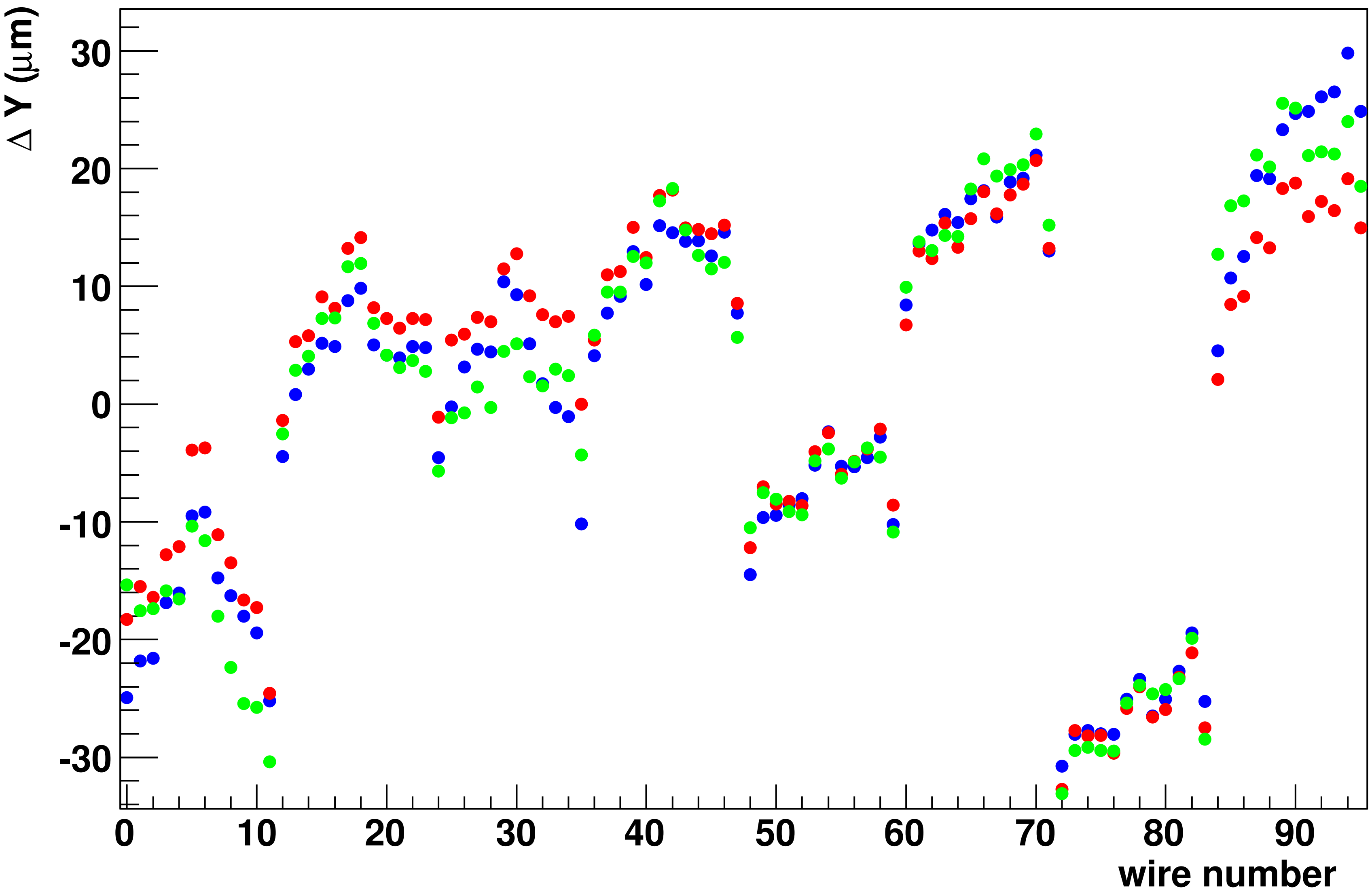

Δ D (μ m)
SL0 hit D (cm)
SL1 hit D (cm)
SL2 hit D (cm)
SL3 hit D (cm)
SL4 hit D (cm)
SL5 hit D (cm)
SL6 hit D (cm)
SL7 hit D (cm)



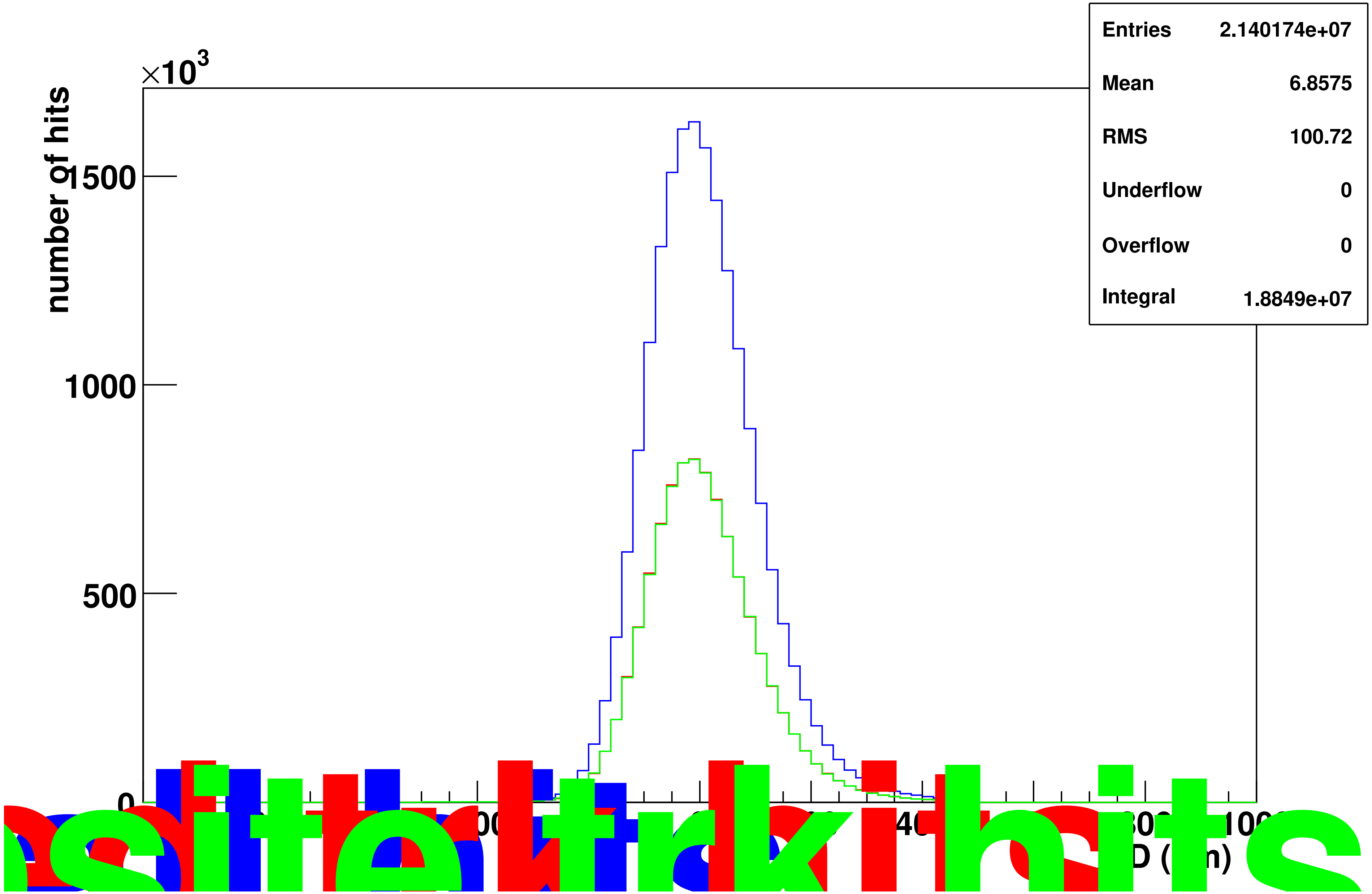
Δ Y (μm)
20
10
0
-10
-20
-30
-80
-60
-40
-20
0
20
40
60
80
wire number



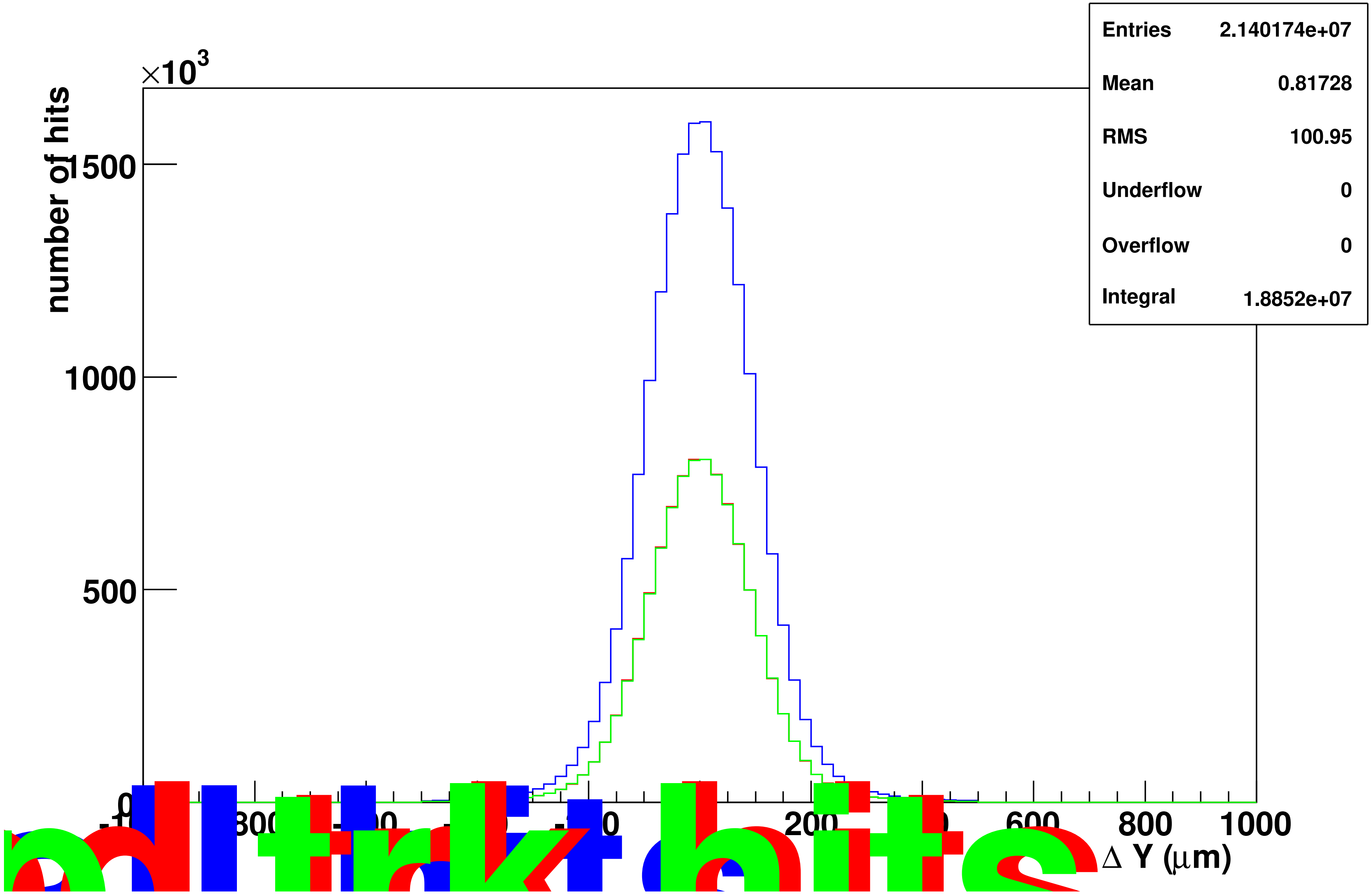
Δ Y (μm)
20
10
0
-10
-20
-30
0
10
20
30
40
50
60
70
80
90
wire number



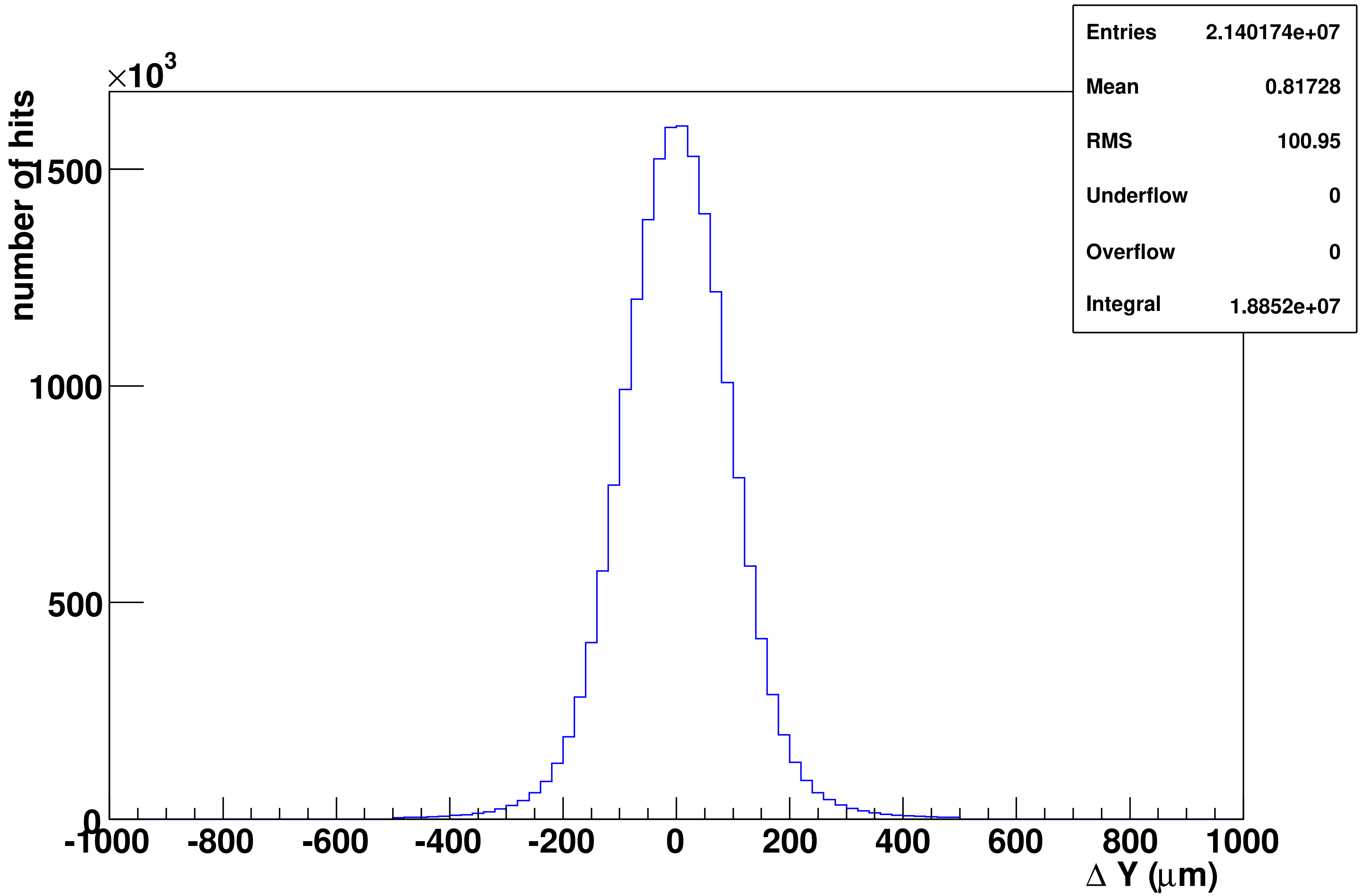
Δ Y (μm)
30
20
10
0
-10
-20
-30
0
10
20
30
40
50
60
70
80
90
wire number



Entries 2.140174e+07
Mean 6.8575
RMS 100.72
Underflow 0
Overflow 0
Integral 1.8849e+07
number of hits
$\times 10^3$
1500
1000
500
0



Entries 2.140174e+07
Mean 0.81728
RMS 100.95
Underflow 0
Overflow 0
Integral 1.8852e+07
×10^3
number of hits
1500
1000
500
0
200
600
800
1000
Δ Y (μm)



Entries 2.140174e+07
Mean 0.81728
RMS 100.95
Underflow 0
Overflow 0
Integral 1.8852e+07
×10³
number of hits
1500
1000
500
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000
Δ Y (μm)