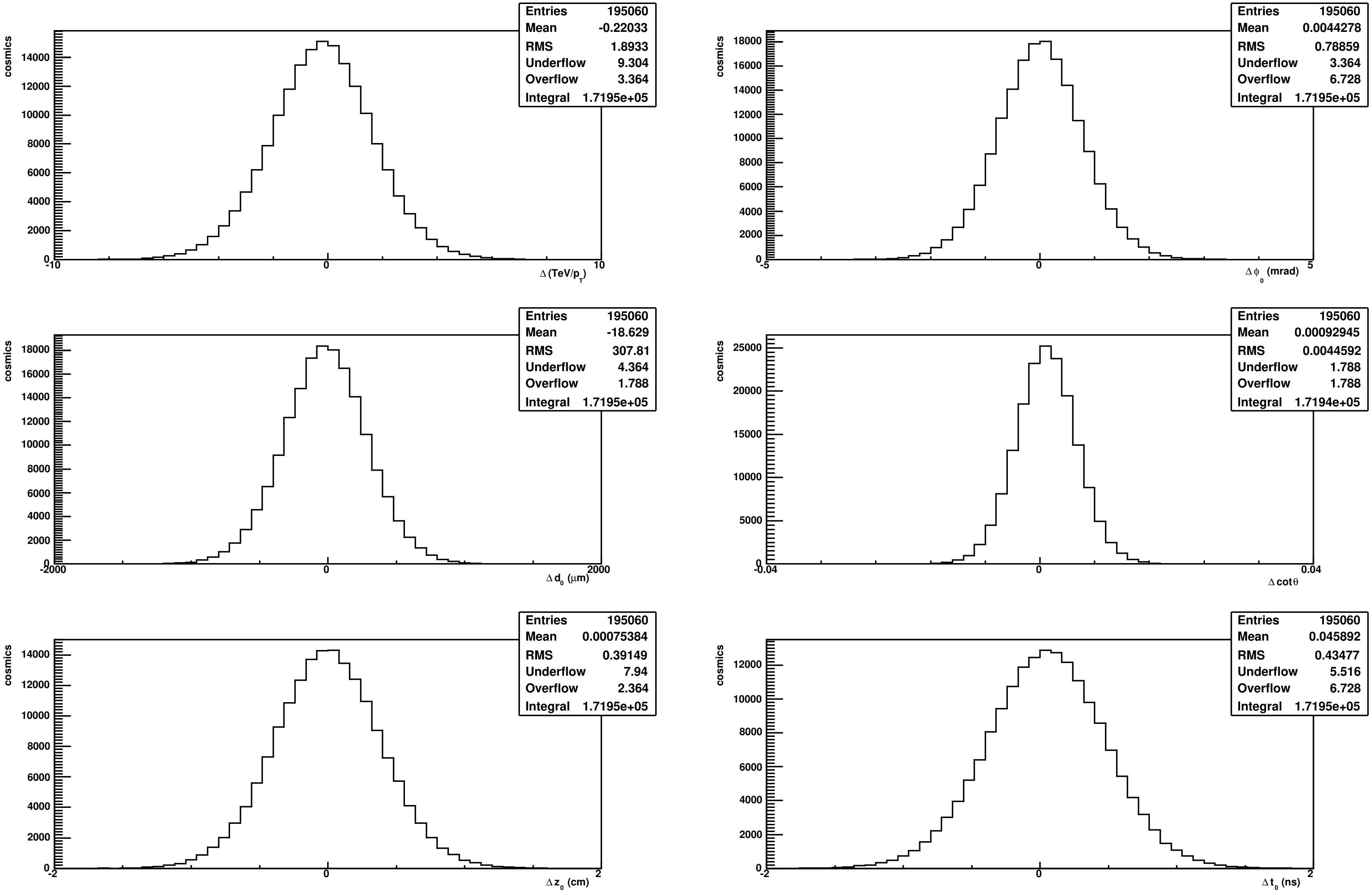
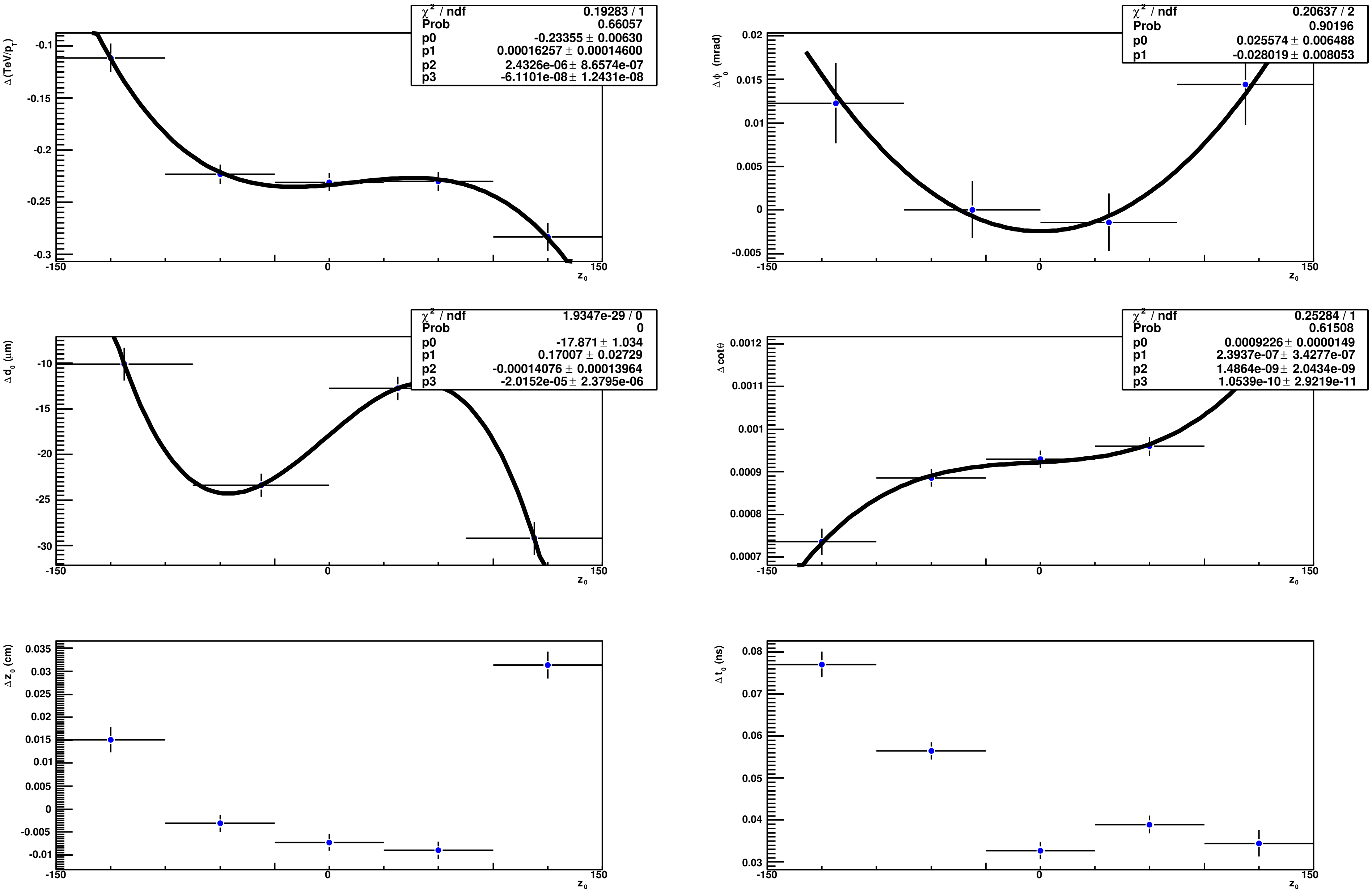
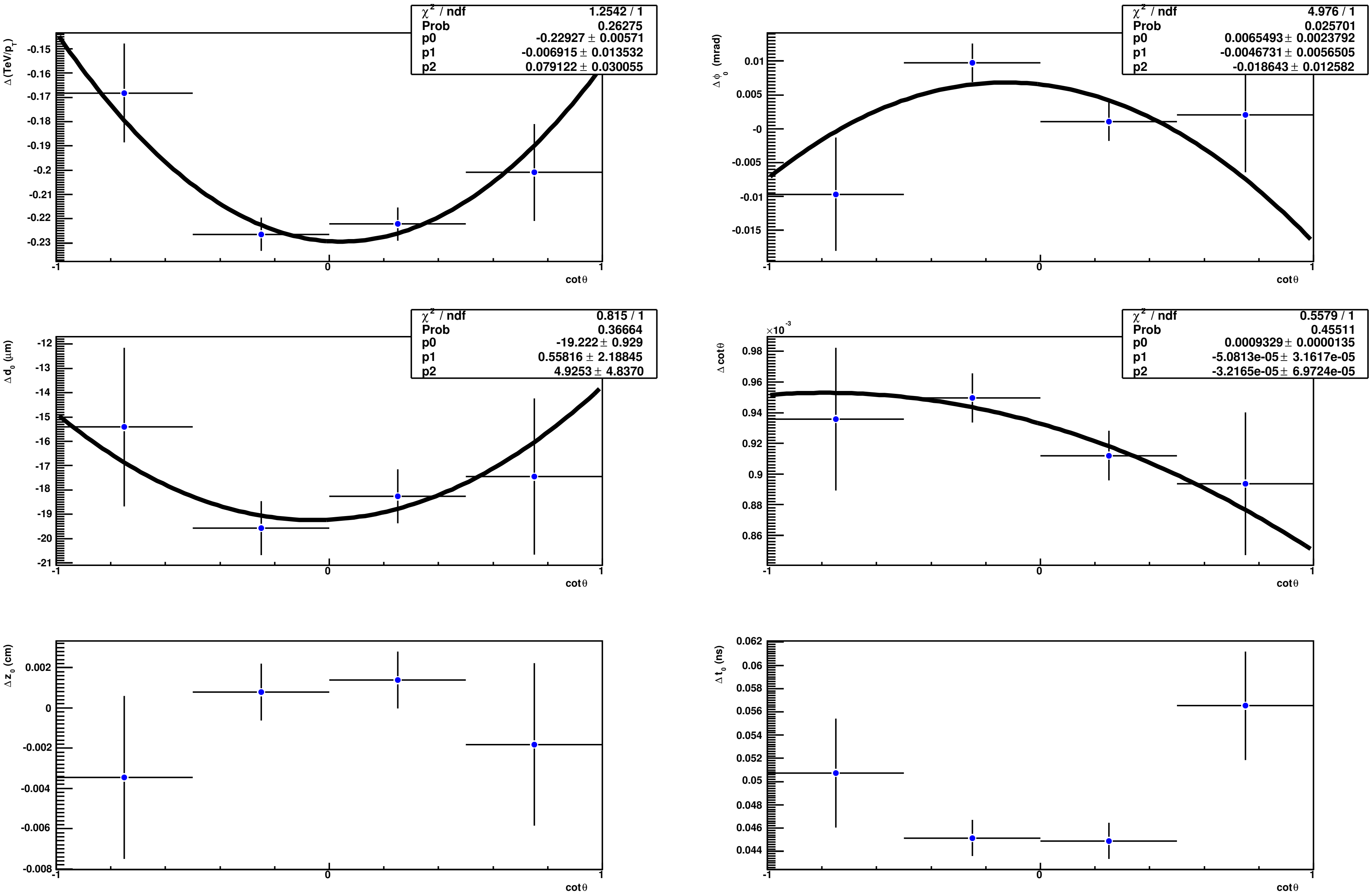
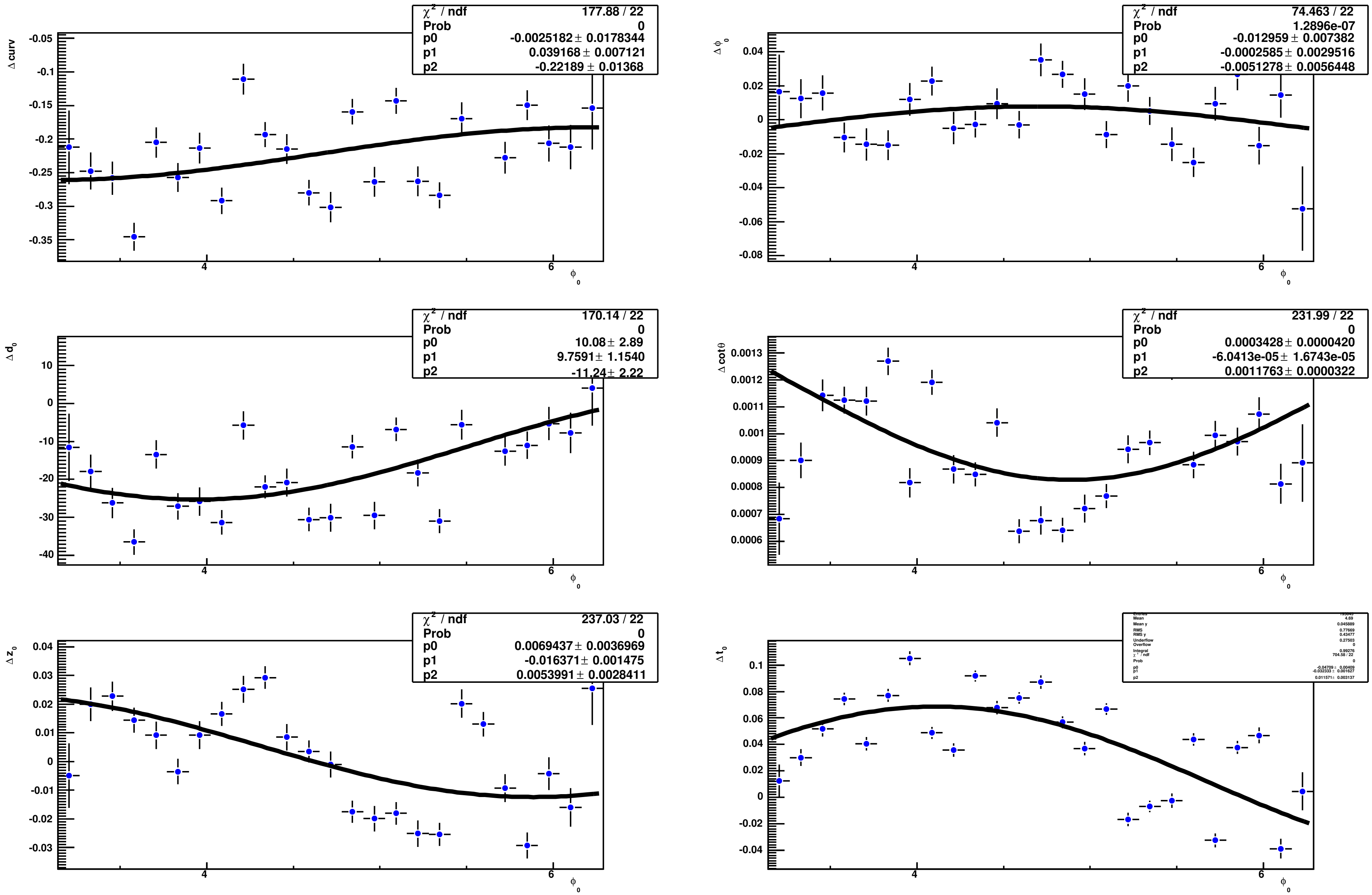

Entries 195060
Mean -0.22033
RMS 1.8933
Underflow 9.304
Overflow 3.364
Integral 1.7195e+05
cosmics
Δ(TeV/p_T)
Entries 195060
Mean 0.0044278
RMS 0.78859
Underflow 3.364
Overflow 6.728
Integral 1.7195e+05
cosmics
Δφ_0 (mrad)
Entries 195060
Mean -18.629
RMS 307.81
Underflow 4.364
Overflow 1.788
Integral 1.7195e+05
cosmics
Δd_0 (μm)
Entries 195060
Mean 0.00092945
RMS 0.0044592
Underflow 1.788
Overflow 1.788
Integral 1.7194e+05
cosmics
Δcotθ
Entries 195060
Mean 0.00075384
RMS 0.39149
Underflow 7.94
Overflow 2.364
Integral 1.7195e+05
cosmics
Δz_0 (cm)
Entries 195060
Mean 0.045892
RMS 0.43477
Underflow 5.516
Overflow 6.728
Integral 1.7195e+05
cosmics
Δt_0 (ns)



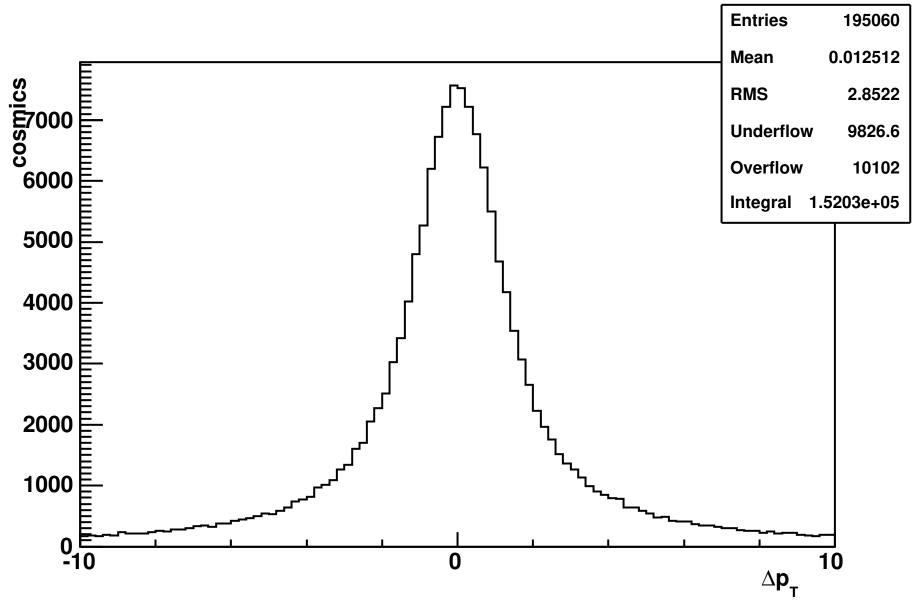
χ² / ndf 0.19283 / 1
Prob 0.66057
p0 -0.23355 ± 0.00630
p1 0.00016257 ± 0.00014600
p2 2.4326e-06 ± 8.6574e-07
p3 -6.1101e-08 ± 1.2431e-08
Δ(TeV/p_T)
z_0
χ² / ndf 0.20637 / 2
Prob 0.90196
p0 0.025574 ± 0.006488
p1 -0.028019 ± 0.008053
Δφ_0 (mrad)
z_0
χ² / ndf 1.9347e-29 / 0
Prob 0
p0 -17.871 ± 1.034
p1 0.17007 ± 0.02729
p2 -0.00014076 ± 0.00013964
p3 -2.0152e-05 ± 2.3795e-06
Δd_0 (μm)
z_0
χ² / ndf 0.25284 / 1
Prob 0.61508
p0 0.0009226 ± 0.0000149
p1 2.3937e-07 ± 3.4277e-07
p2 1.4864e-09 ± 2.0434e-09
p3 1.0539e-10 ± 2.9219e-11
Δcotθ
z_0
Δz_0 (cm)
z_0
Δt_0 (ns)
z_0



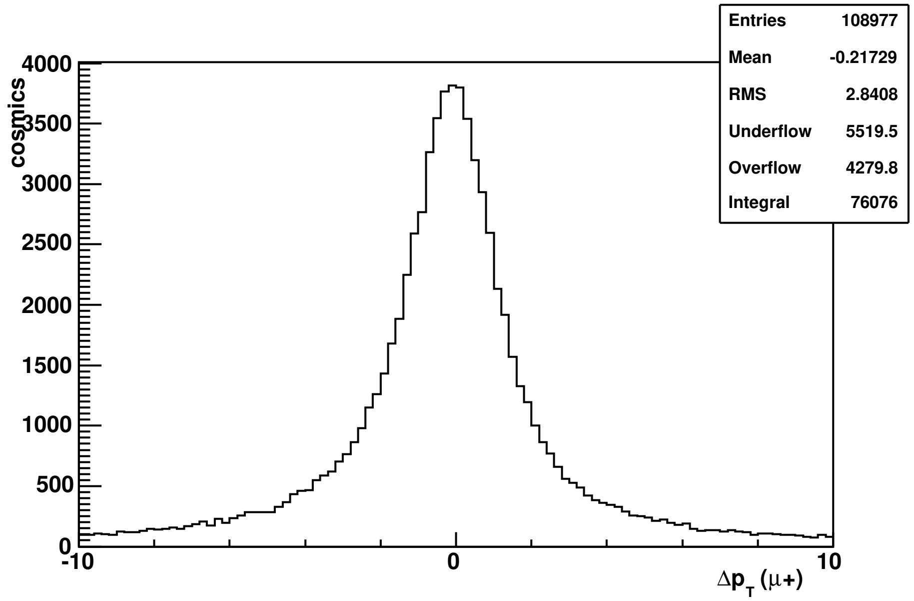
χ^2 / ndf 1.2542 / 1
Prob 0.26275
p0 -0.22927 ± 0.00571
p1 -0.006915 ± 0.013532
p2 0.079122 ± 0.030055
Δ(TeV/p_T)
cotθ
χ^2 / ndf 4.976 / 1
Prob 0.025701
p0 0.0065493 ± 0.0023792
p1 -0.0046731 ± 0.0056505
p2 -0.018643 ± 0.012582
$\Delta\phi_0$ (mrad)
cotθ
χ^2 / ndf 0.815 / 1
Prob 0.36664
p0 -19.222 ± 0.929
p1 0.55816 ± 2.18845
p2 4.9253 ± 4.8370
Δd_0 (μm)
cotθ
χ^2 / ndf 0.5579 / 1
Prob 0.45511
p0 0.0009329 ± 0.0000135
p1 -5.0813e-05 ± 3.1617e-05
p2 -3.2165e-05 ± 6.9724e-05
$\times 10^{-3}$
Δ cotθ
cotθ
Δz_0 (cm)
cotθ
Δt_0 (ns)
cotθ



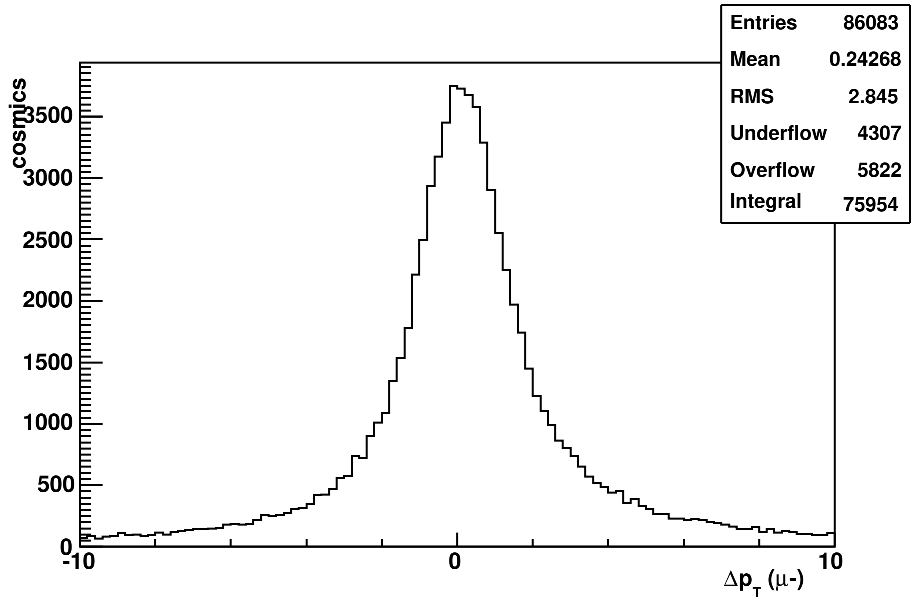
χ² / ndf 177.88 / 22
Prob 0
p0 -0.0025182 ± 0.0178344
p1 0.039168 ± 0.007121
p2 -0.22189 ± 0.01368
Δ curv
φ₀
χ² / ndf 74.463 / 22
Prob 1.2896e-07
p0 -0.012959 ± 0.007382
p1 -0.0002585 ± 0.0029516
p2 -0.0051278 ± 0.0056448
Δ φ₀
φ₀
χ² / ndf 170.14 / 22
Prob 0
p0 10.08 ± 2.89
p1 9.7591 ± 1.1540
p2 -11.24 ± 2.22
Δ d₀
φ₀
χ² / ndf 231.99 / 22
Prob 0
p0 0.0003428 ± 0.0000420
p1 -6.0413e-05 ± 1.6743e-05
p2 0.0011763 ± 0.0000322
Δ cotθ
φ₀
χ² / ndf 237.03 / 22
Prob 0
p0 0.0069437 ± 0.0036969
p1 -0.016371 ± 0.001475
p2 0.0053991 ± 0.0028411
Δ z₀
φ₀
Δ t₀
φ₀



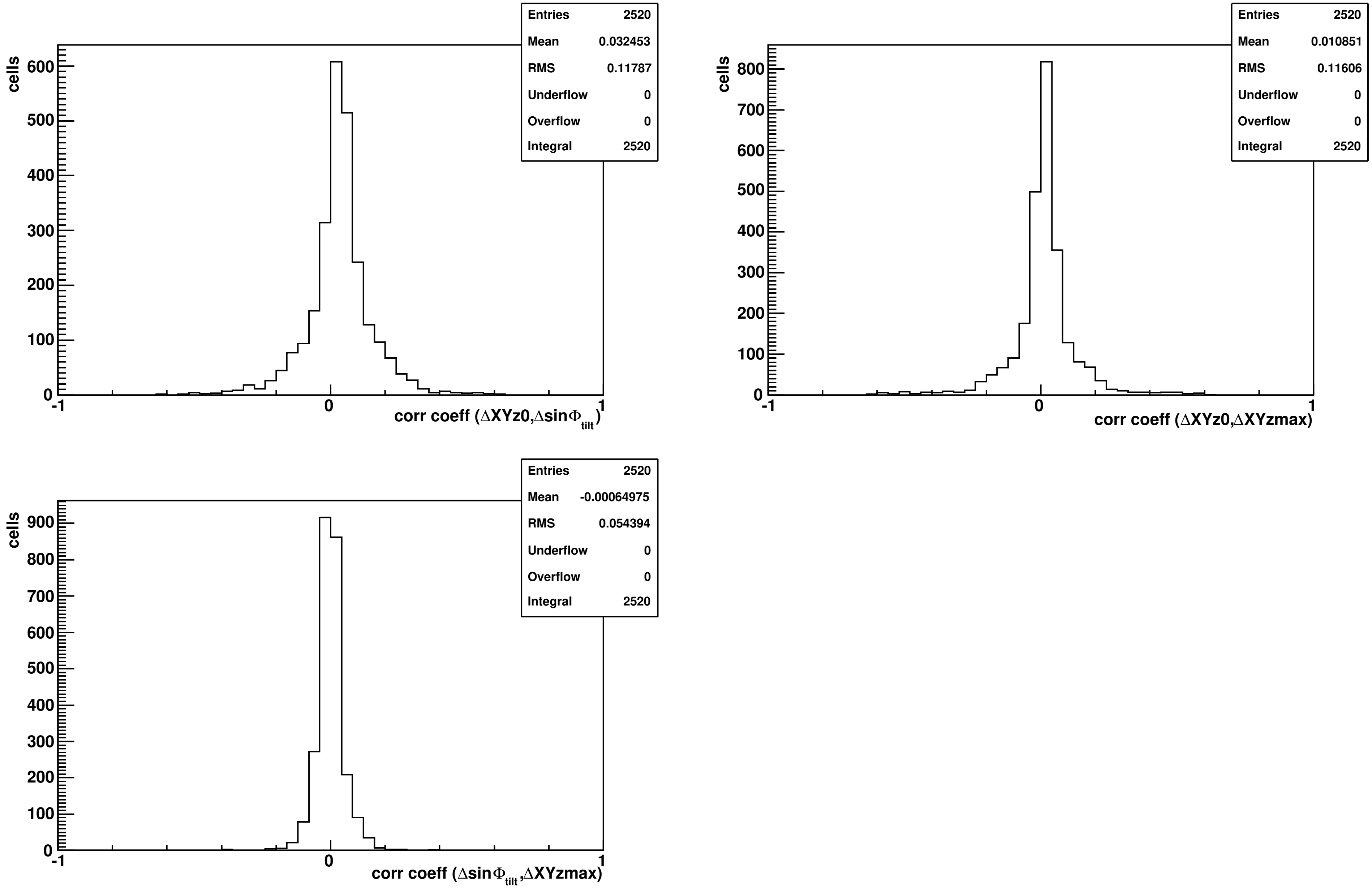
Entries 195060
Mean 0.012512
RMS 2.8522
Underflow 9826.6
Overflow 10102
Integral 1.5203e+05
cosmics
0
1000
2000
3000
4000
5000
6000
7000
-10
0
10
Δp_T



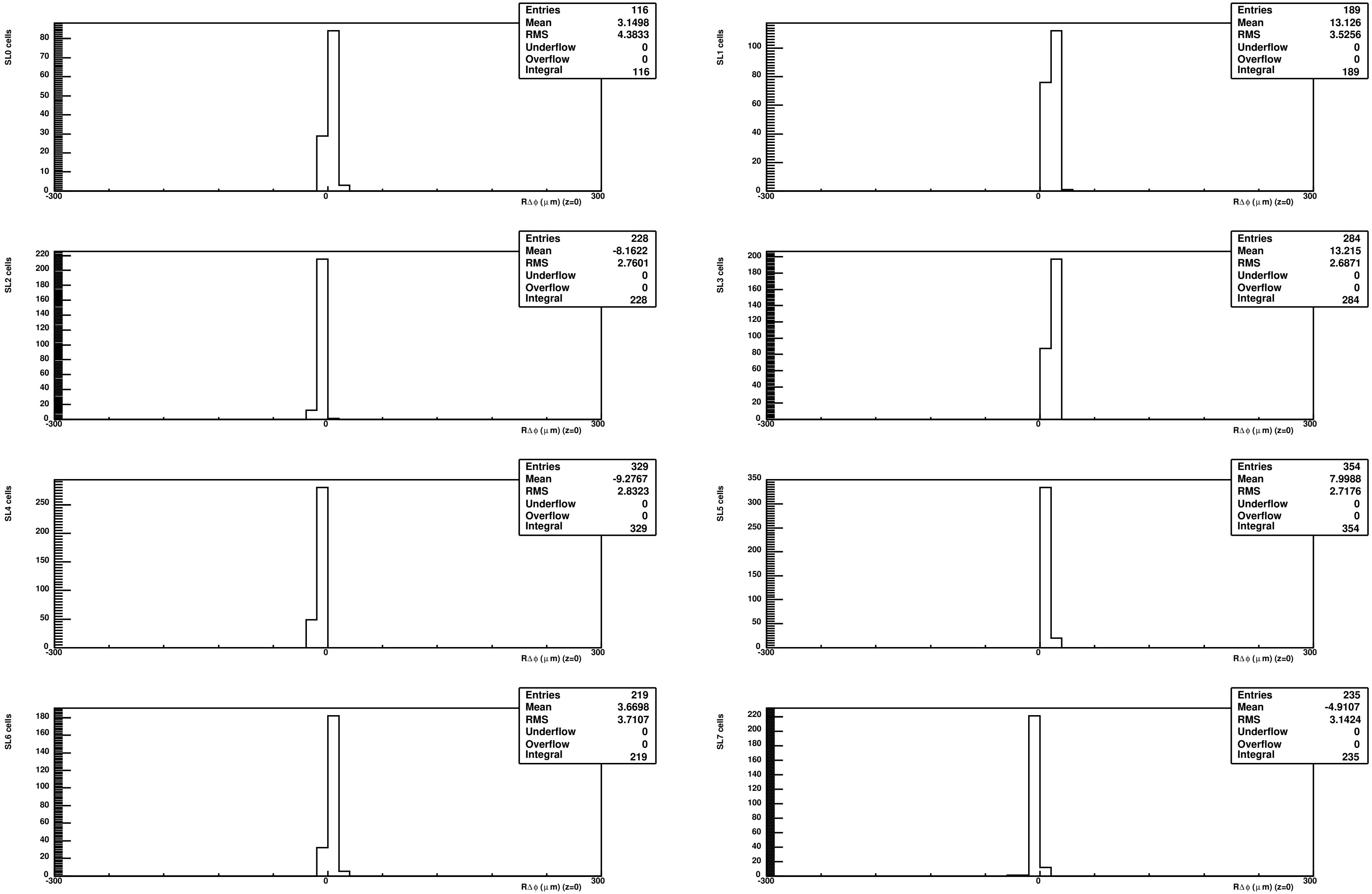
Entries 108977
Mean -0.21729
RMS 2.8408
Underflow 5519.5
Overflow 4279.8
Integral 76076
cosmics
0
500
1000
1500
2000
2500
3000
3500
4000
-10
0
10
Δp_T (μ+)

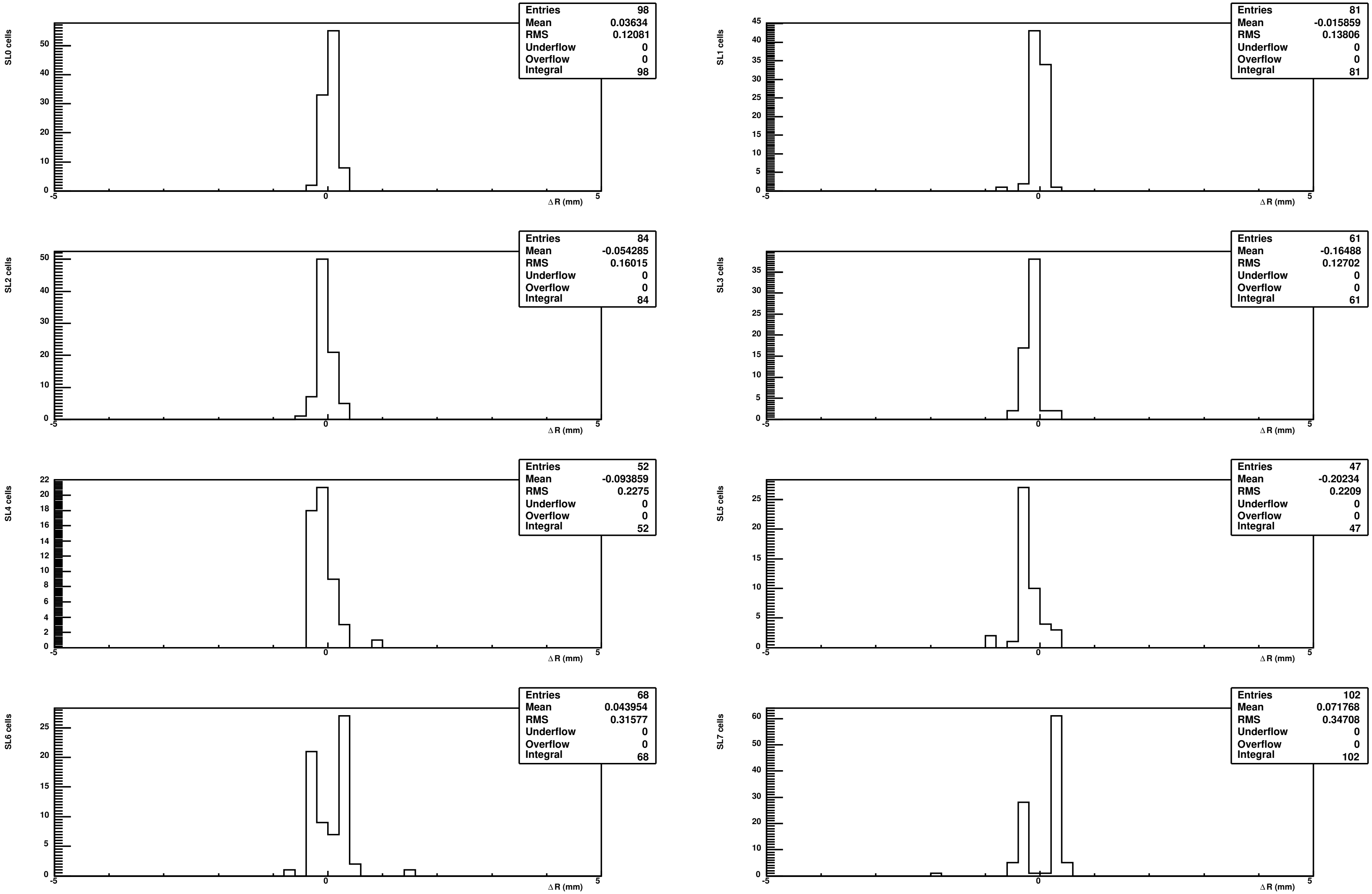


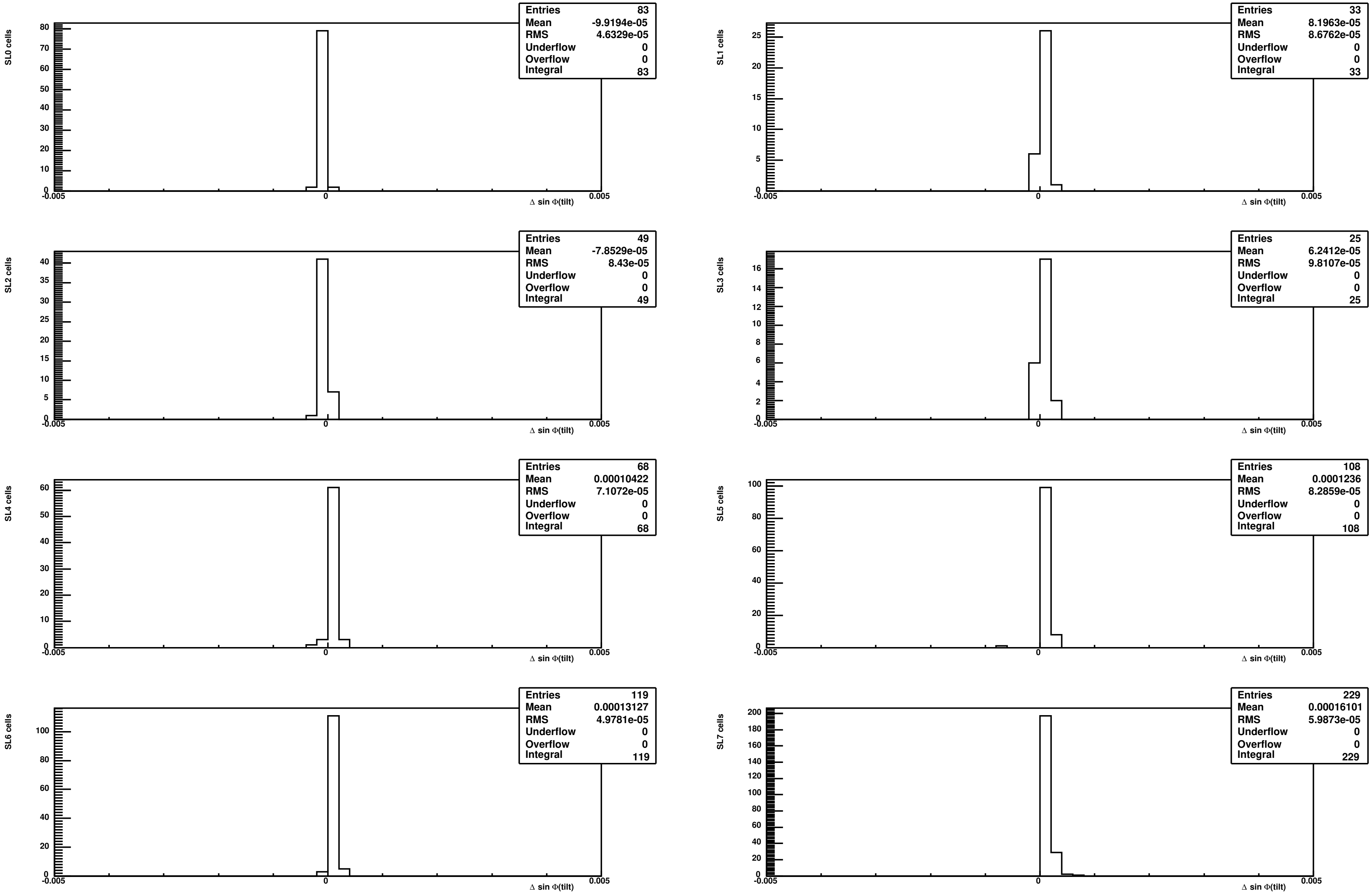
Entries 86083
Mean 0.24268
RMS 2.845
Underflow 4307
Overflow 5822
Integral 75954
cosmics
0
500
1000
1500
2000
2500
3000
3500
-10
0
10
Δp_T (μ-)

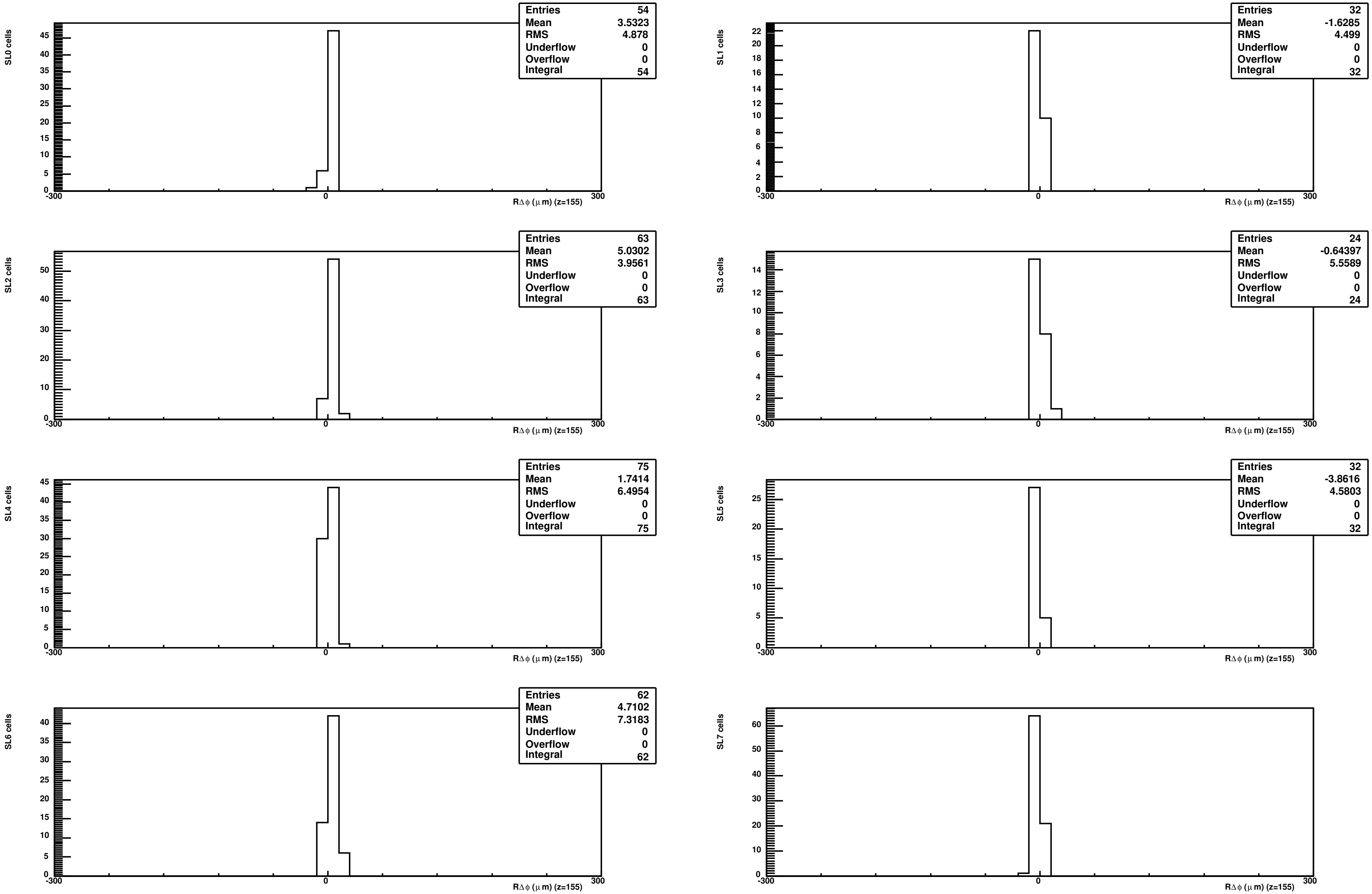


Entries 2520
Mean 0.032453
RMS 0.11787
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔsinΦ$_{tilt}$)
Entries 2520
Mean 0.010851
RMS 0.11606
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔXYzmax)
Entries 2520
Mean -0.00064975
RMS 0.054394
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔsinΦ$_{tilt}$,ΔXYzmax)

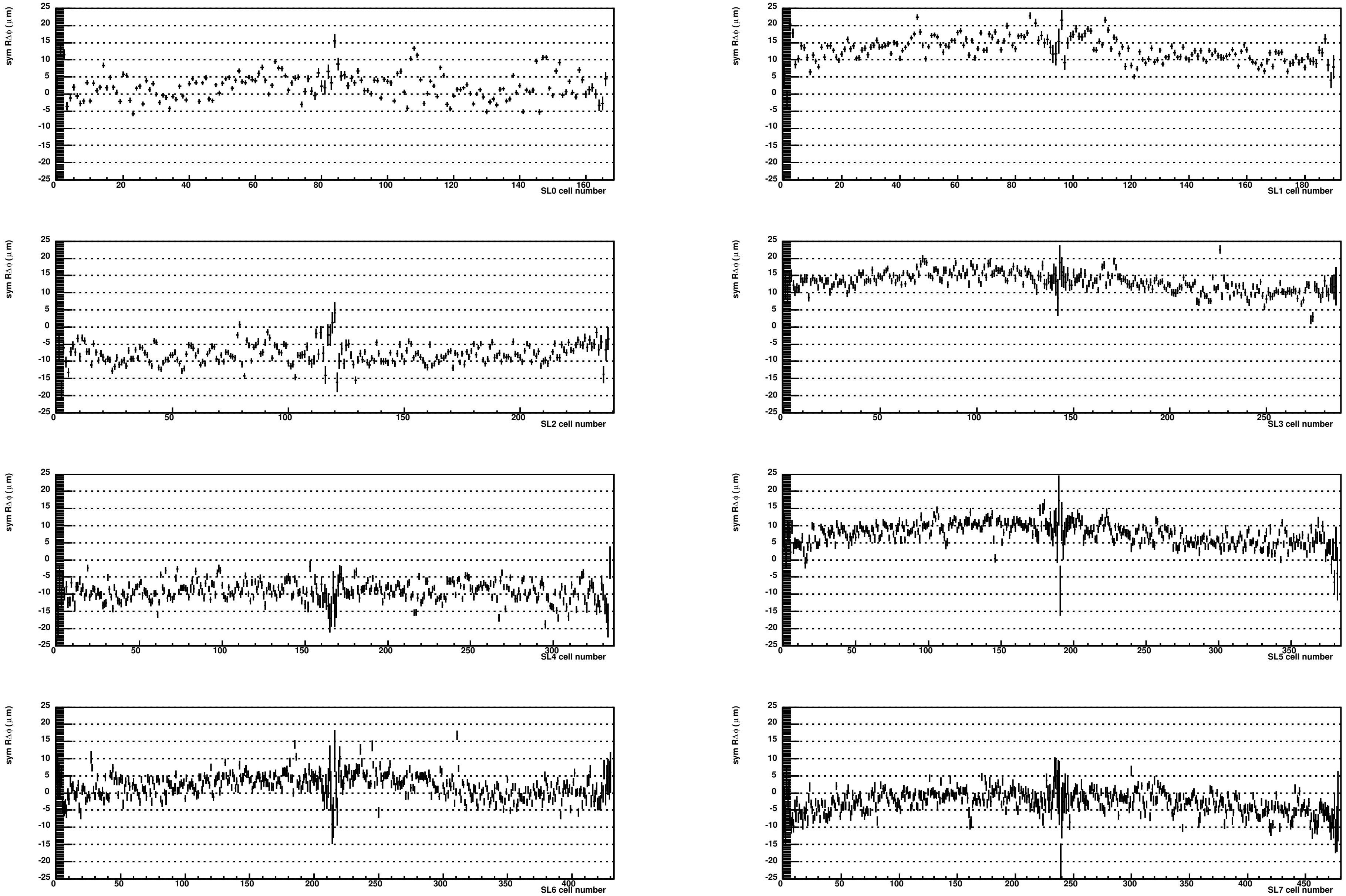

SL0 cells
Entries 116
Mean 3.1498
RMS 4.3833
Underflow 0
Overflow 0
Integral 116
RΔφ (μm) (z=0)
SL1 cells
Entries 189
Mean 13.126
RMS 3.5256
Underflow 0
Overflow 0
Integral 189
RΔφ (μm) (z=0)
SL2 cells
Entries 228
Mean -8.1622
RMS 2.7601
Underflow 0
Overflow 0
Integral 228
RΔφ (μm) (z=0)
SL3 cells
Entries 284
Mean 13.215
RMS 2.6871
Underflow 0
Overflow 0
Integral 284
RΔφ (μm) (z=0)
SL4 cells
Entries 329
Mean -9.2767
RMS 2.8323
Underflow 0
Overflow 0
Integral 329
RΔφ (μm) (z=0)
SL5 cells
Entries 354
Mean 7.9988
RMS 2.7176
Underflow 0
Overflow 0
Integral 354
RΔφ (μm) (z=0)
SL6 cells
Entries 219
Mean 3.6698
RMS 3.7107
Underflow 0
Overflow 0
Integral 219
RΔφ (μm) (z=0)
SL7 cells
Entries 235
Mean -4.9107
RMS 3.1424
Underflow 0
Overflow 0
Integral 235
RΔφ (μm) (z=0)

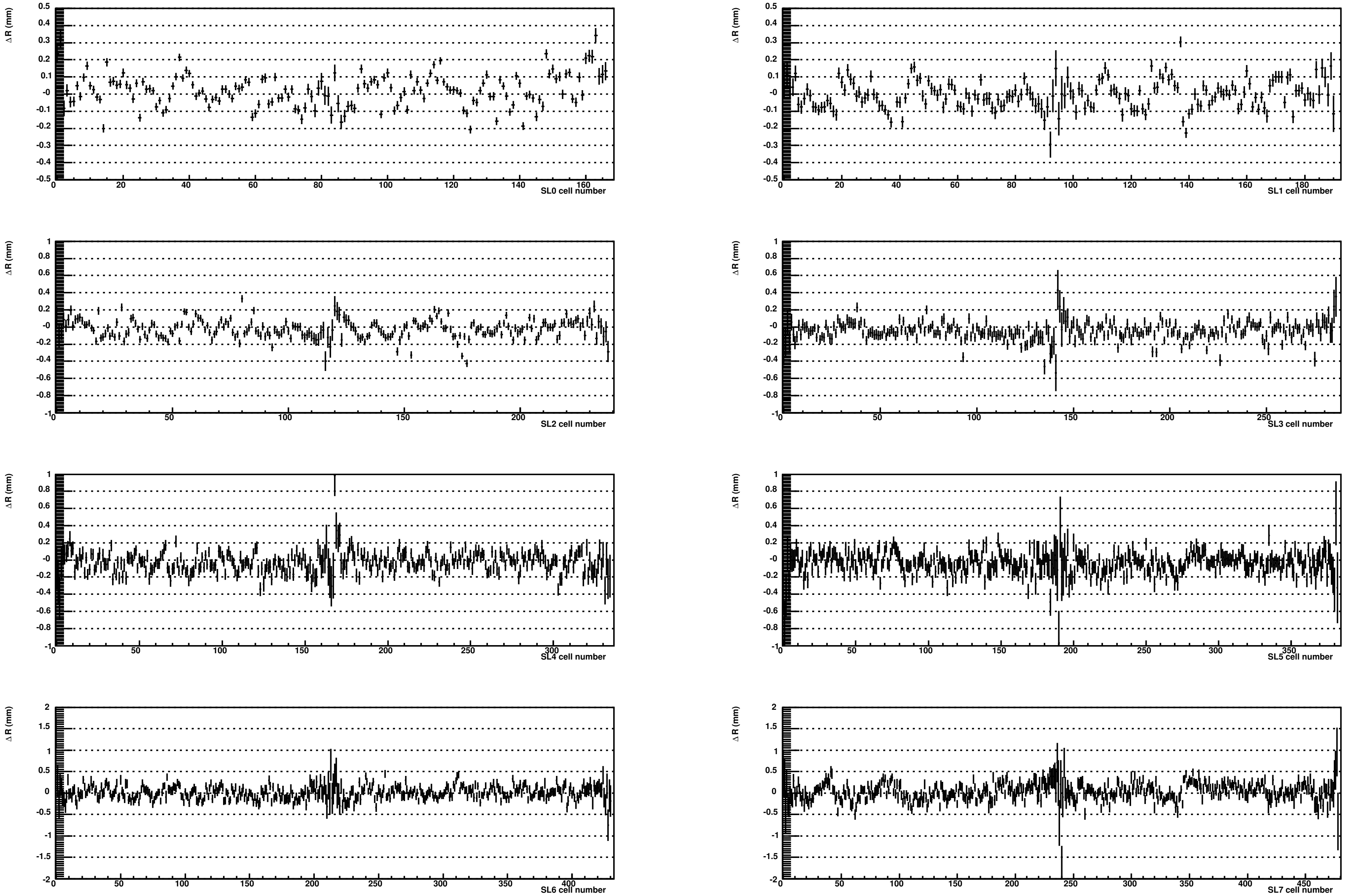

SL0 cells
Entries 98
Mean 0.03634
RMS 0.12081
Underflow 0
Overflow 0
Integral 98
SL1 cells
Entries 81
Mean -0.015859
RMS 0.13806
Underflow 0
Overflow 0
Integral 81
SL2 cells
Entries 84
Mean -0.054285
RMS 0.16015
Underflow 0
Overflow 0
Integral 84
SL3 cells
Entries 61
Mean -0.16488
RMS 0.12702
Underflow 0
Overflow 0
Integral 61
SL4 cells
Entries 52
Mean -0.093859
RMS 0.2275
Underflow 0
Overflow 0
Integral 52
SL5 cells
Entries 47
Mean -0.20234
RMS 0.2209
Underflow 0
Overflow 0
Integral 47
SL6 cells
Entries 68
Mean 0.043954
RMS 0.31577
Underflow 0
Overflow 0
Integral 68
SL7 cells
Entries 102
Mean 0.071768
RMS 0.34708
Underflow 0
Overflow 0
Integral 102
ΔR (mm)


SL0 cells
Entries 83
Mean -9.9194e-05
RMS 4.6329e-05
Underflow 0
Overflow 0
Integral 83
SL1 cells
Entries 33
Mean 8.1963e-05
RMS 8.6762e-05
Underflow 0
Overflow 0
Integral 33
SL2 cells
Entries 49
Mean -7.8529e-05
RMS 8.43e-05
Underflow 0
Overflow 0
Integral 49
SL3 cells
Entries 25
Mean 6.2412e-05
RMS 9.8107e-05
Underflow 0
Overflow 0
Integral 25
SL4 cells
Entries 68
Mean 0.00010422
RMS 7.1072e-05
Underflow 0
Overflow 0
Integral 68
SL5 cells
Entries 108
Mean 0.0001236
RMS 8.2859e-05
Underflow 0
Overflow 0
Integral 108
SL6 cells
Entries 119
Mean 0.00013127
RMS 4.9781e-05
Underflow 0
Overflow 0
Integral 119
SL7 cells
Entries 229
Mean 0.00016101
RMS 5.9873e-05
Underflow 0
Overflow 0
Integral 229
-0.005
0
0.005
Δ sin Φ(tilt)

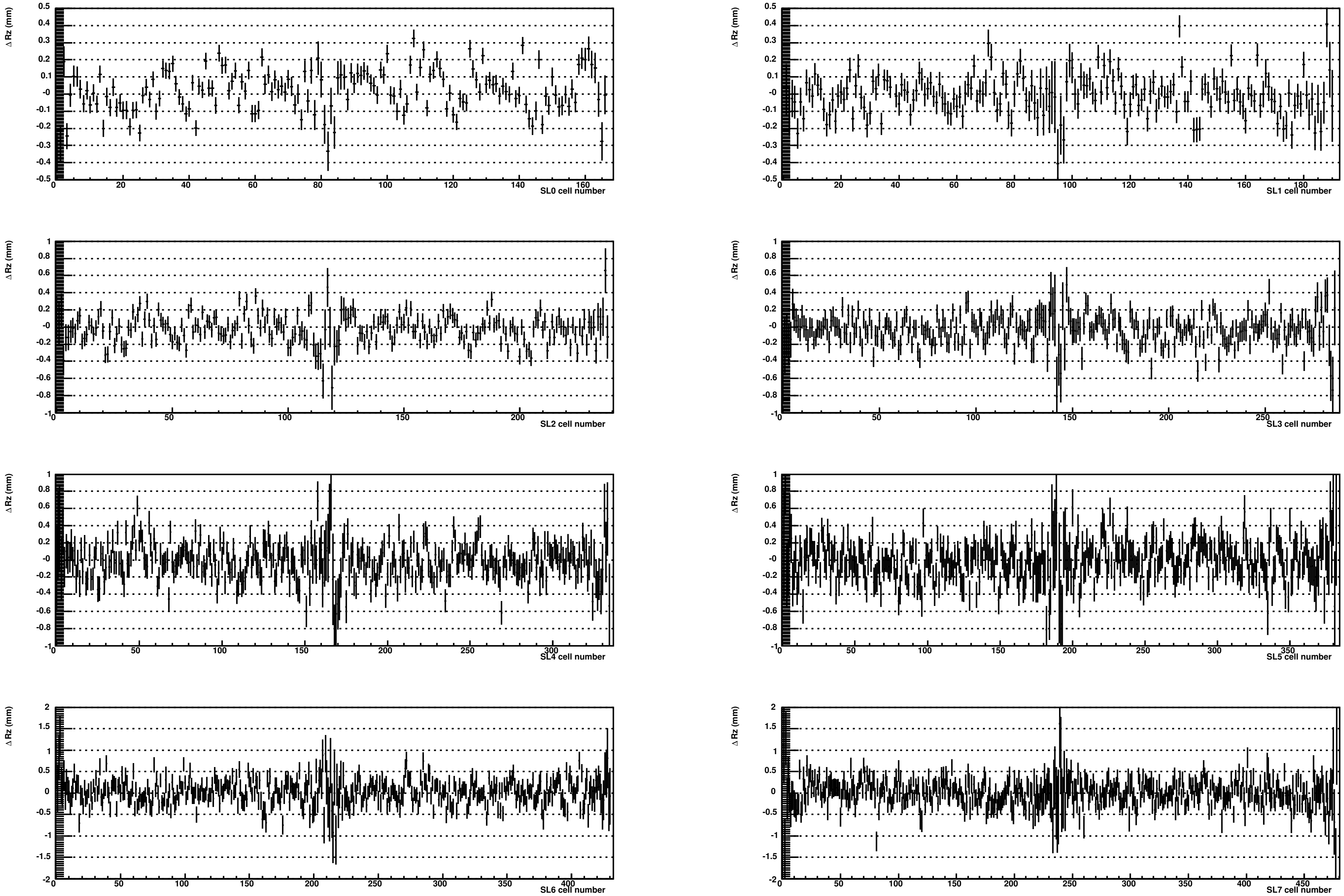


SL0 cells
Entries 54
Mean 3.5323
RMS 4.878
Underflow 0
Overflow 0
Integral 54
RΔφ (μm) (z=155)
SL1 cells
Entries 32
Mean -1.6285
RMS 4.499
Underflow 0
Overflow 0
Integral 32
RΔφ (μm) (z=155)
SL2 cells
Entries 63
Mean 5.0302
RMS 3.9561
Underflow 0
Overflow 0
Integral 63
RΔφ (μm) (z=155)
SL3 cells
Entries 24
Mean -0.64397
RMS 5.5589
Underflow 0
Overflow 0
Integral 24
RΔφ (μm) (z=155)
SL4 cells
Entries 75
Mean 1.7414
RMS 6.4954
Underflow 0
Overflow 0
Integral 75
RΔφ (μm) (z=155)
SL5 cells
Entries 32
Mean -3.8616
RMS 4.5803
Underflow 0
Overflow 0
Integral 32
RΔφ (μm) (z=155)
SL6 cells
Entries 62
Mean 4.7102
RMS 7.3183
Underflow 0
Overflow 0
Integral 62
RΔφ (μm) (z=155)
SL7 cells
RΔφ (μm) (z=155)

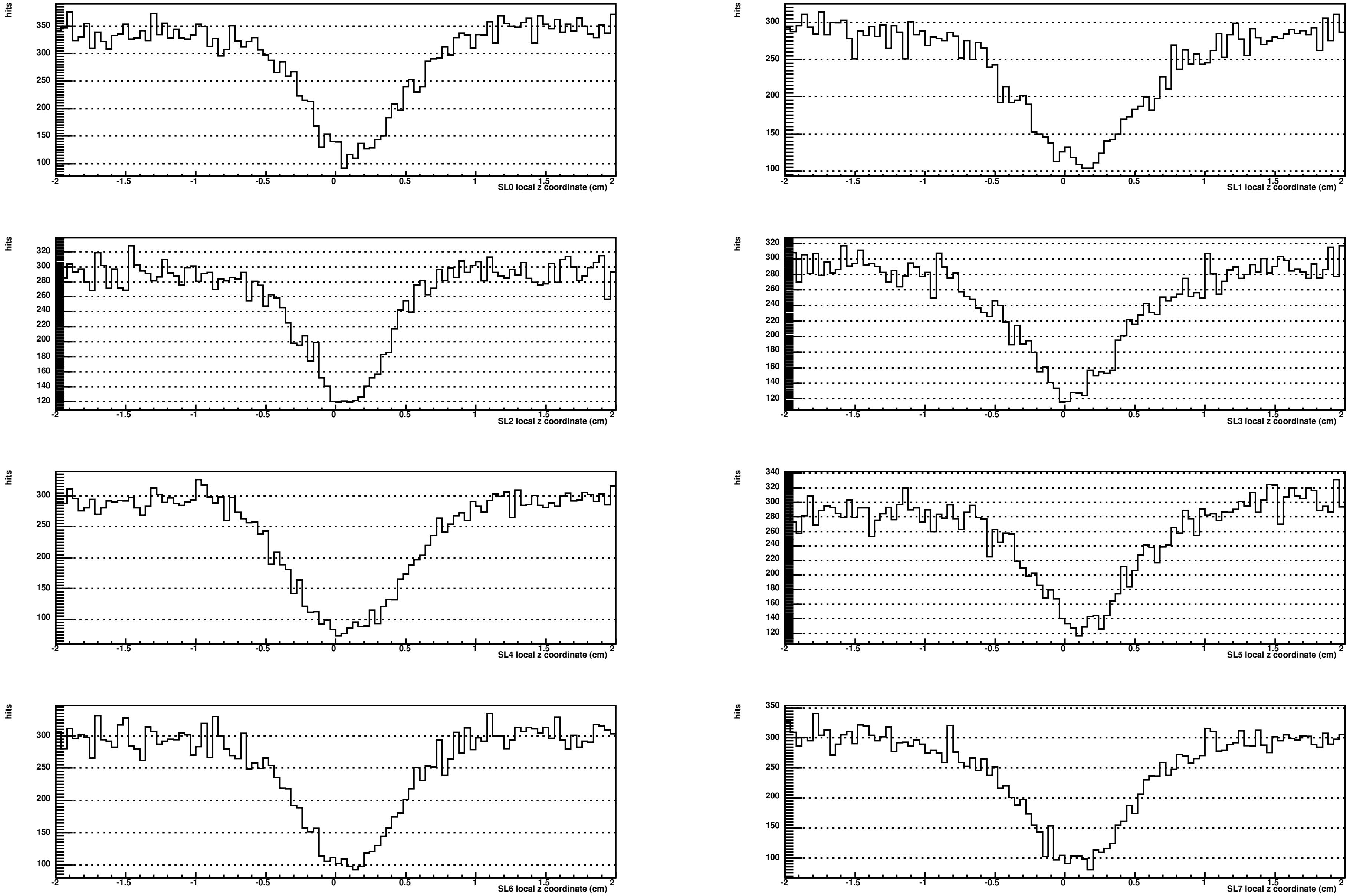

sym RΔφ (μm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number



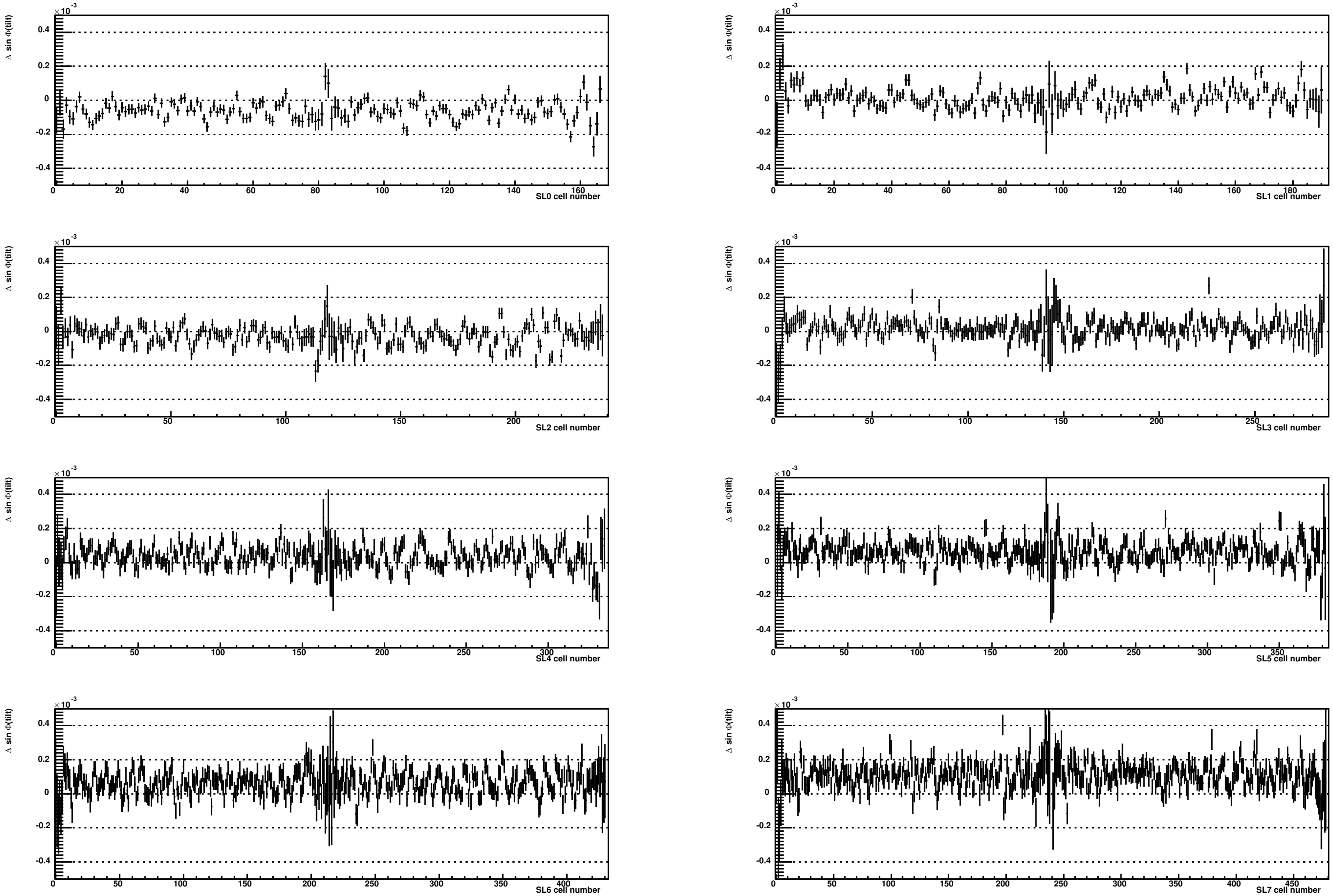
ΔR (mm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

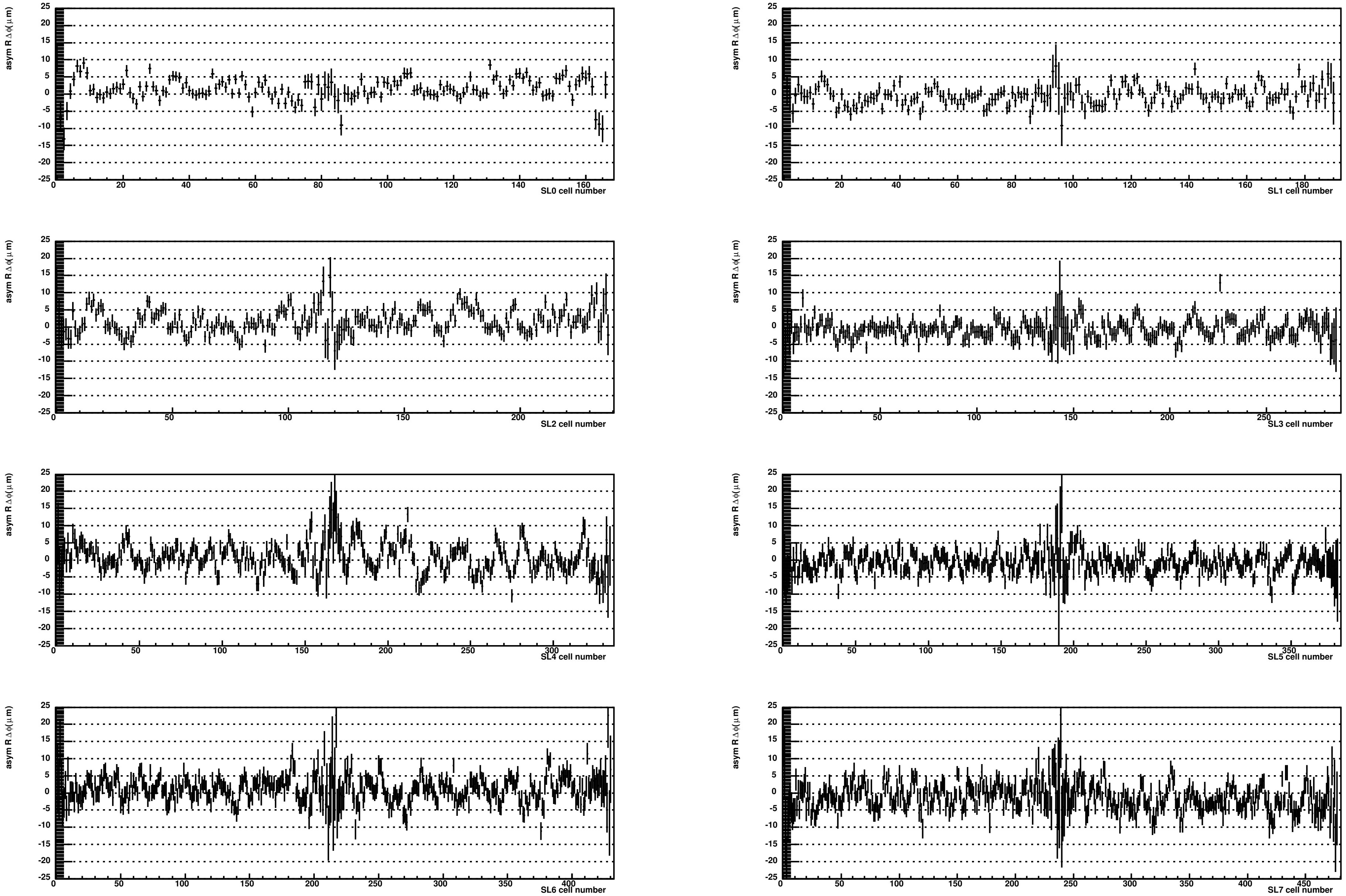


Δ Rz (mm)
SL0 cell number
Δ Rz (mm)
SL1 cell number
Δ Rz (mm)
SL2 cell number
Δ Rz (mm)
SL3 cell number
Δ Rz (mm)
SL4 cell number
Δ Rz (mm)
SL5 cell number
Δ Rz (mm)
SL6 cell number
Δ Rz (mm)
SL7 cell number

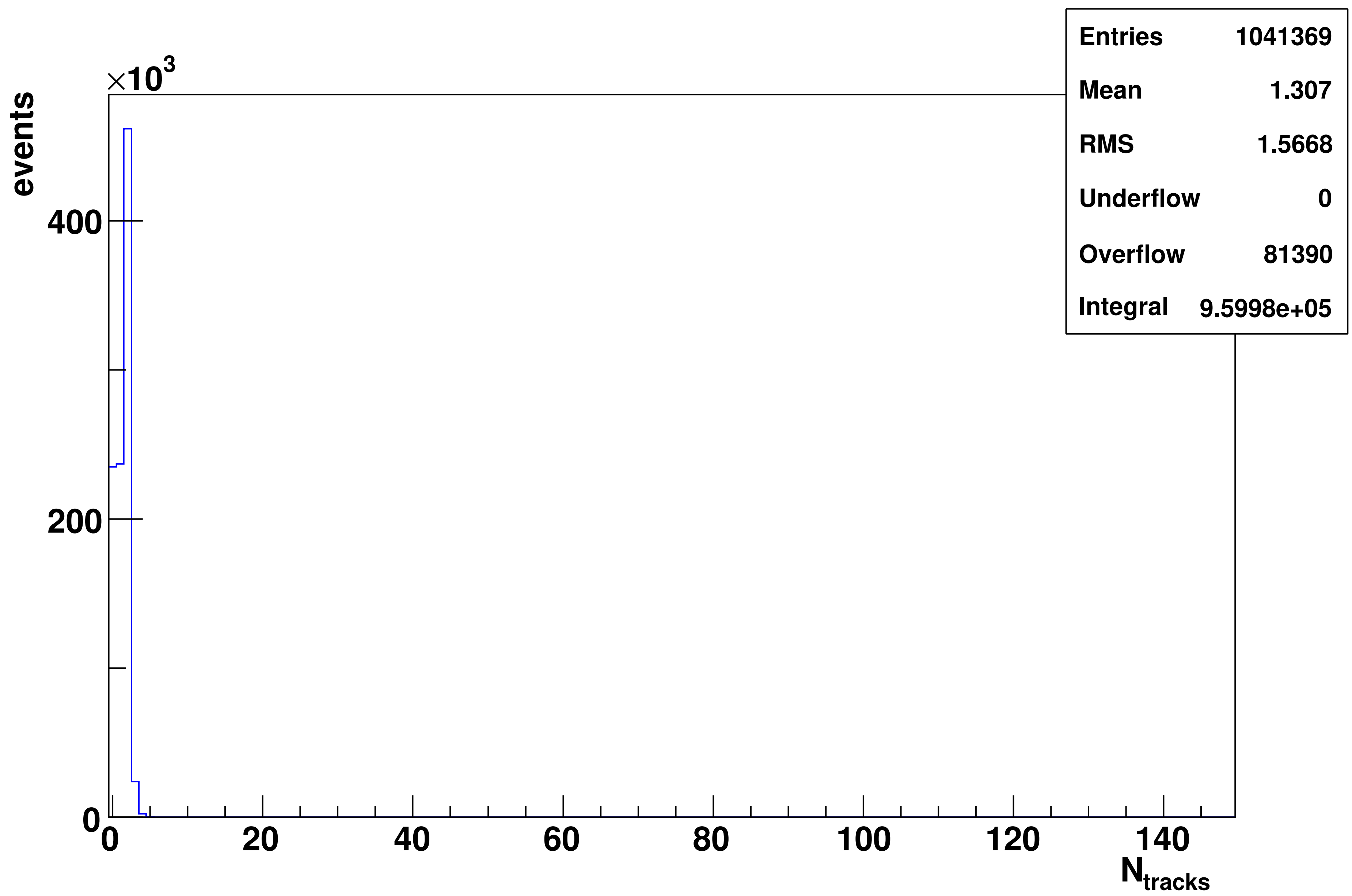


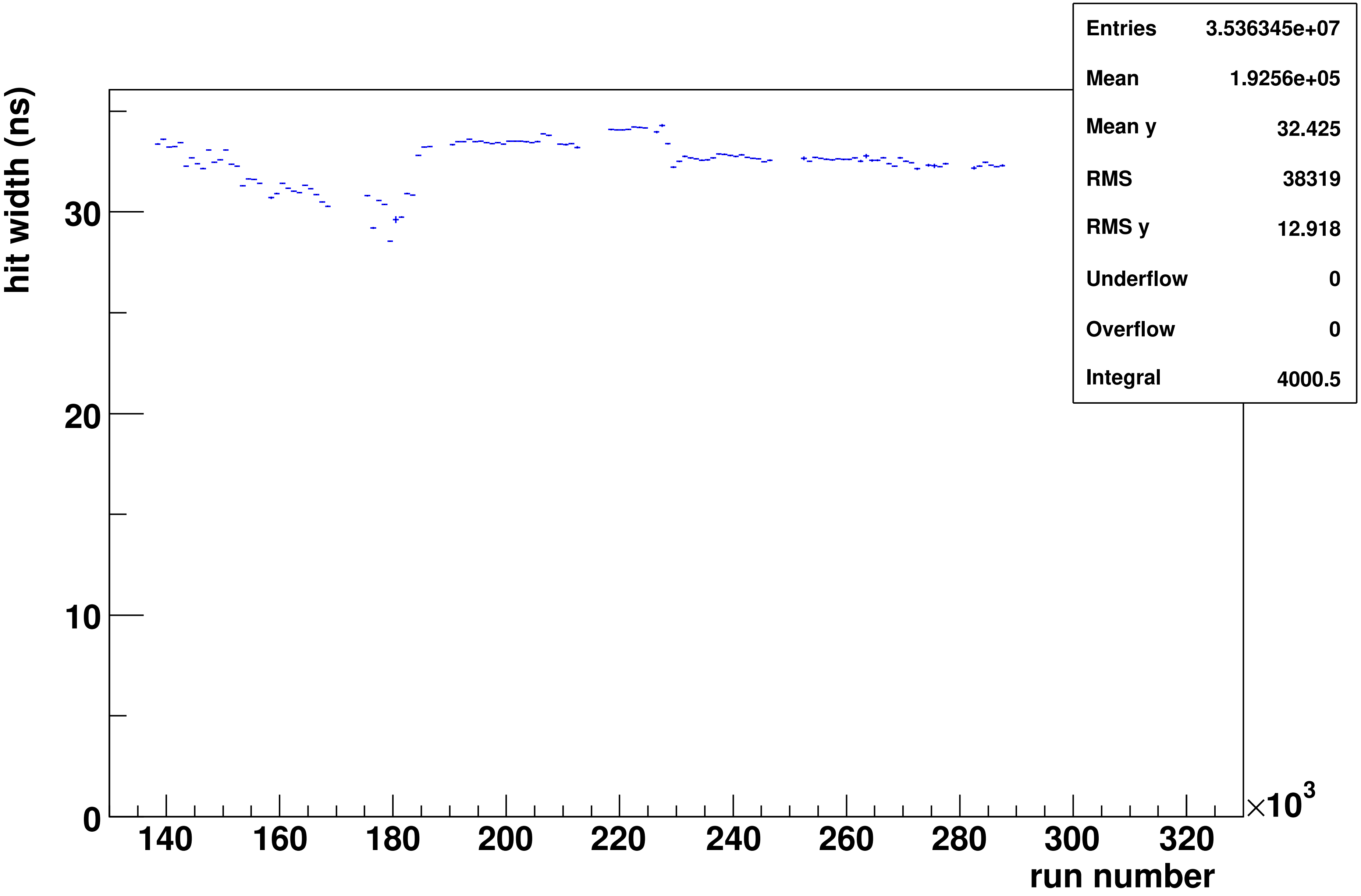
hits
SL0 local z coordinate (cm)
hits
SL1 local z coordinate (cm)
hits
SL2 local z coordinate (cm)
hits
SL3 local z coordinate (cm)
hits
SL4 local z coordinate (cm)
hits
SL5 local z coordinate (cm)
hits
SL6 local z coordinate (cm)
hits
SL7 local z coordinate (cm)


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

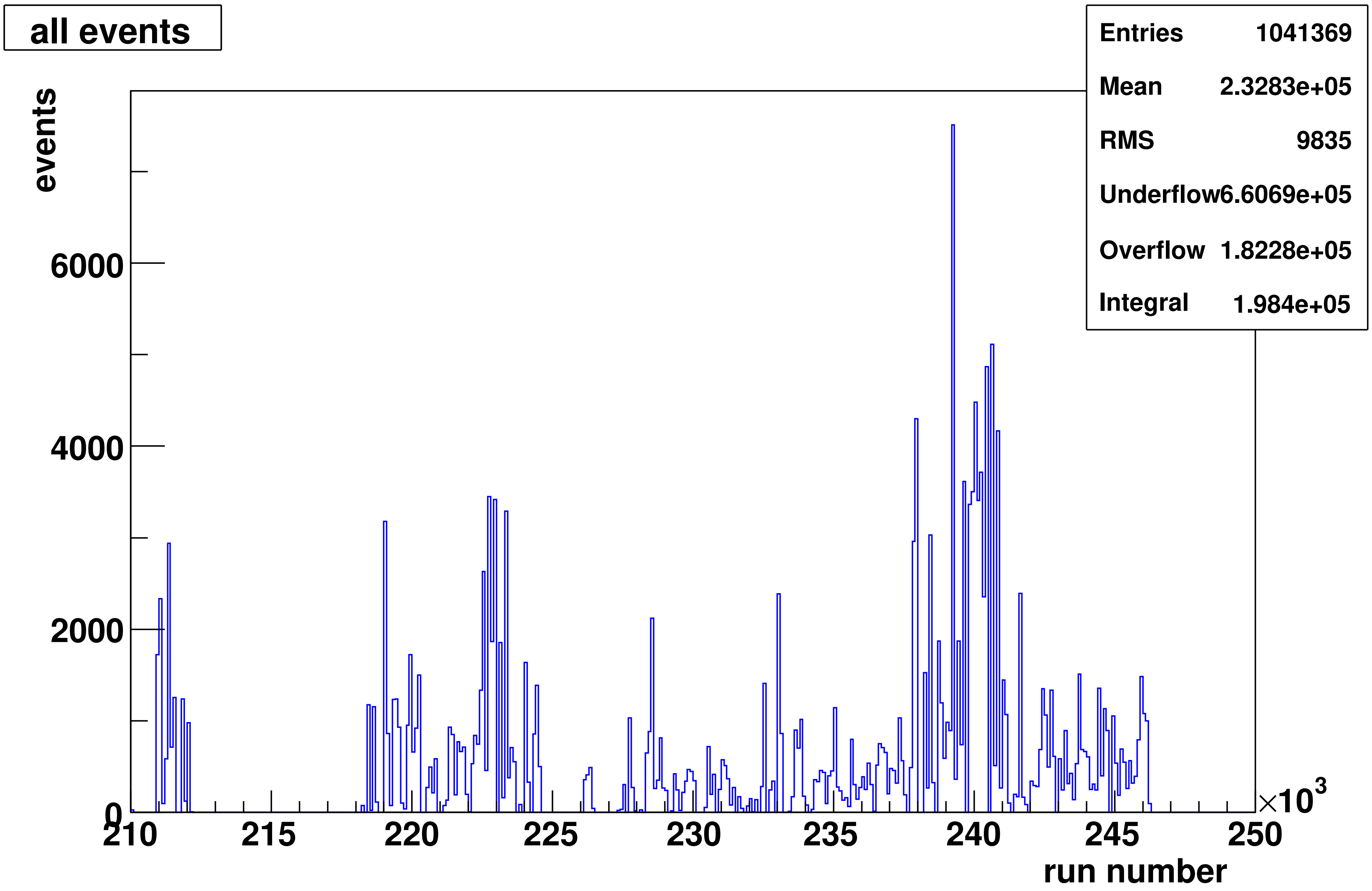


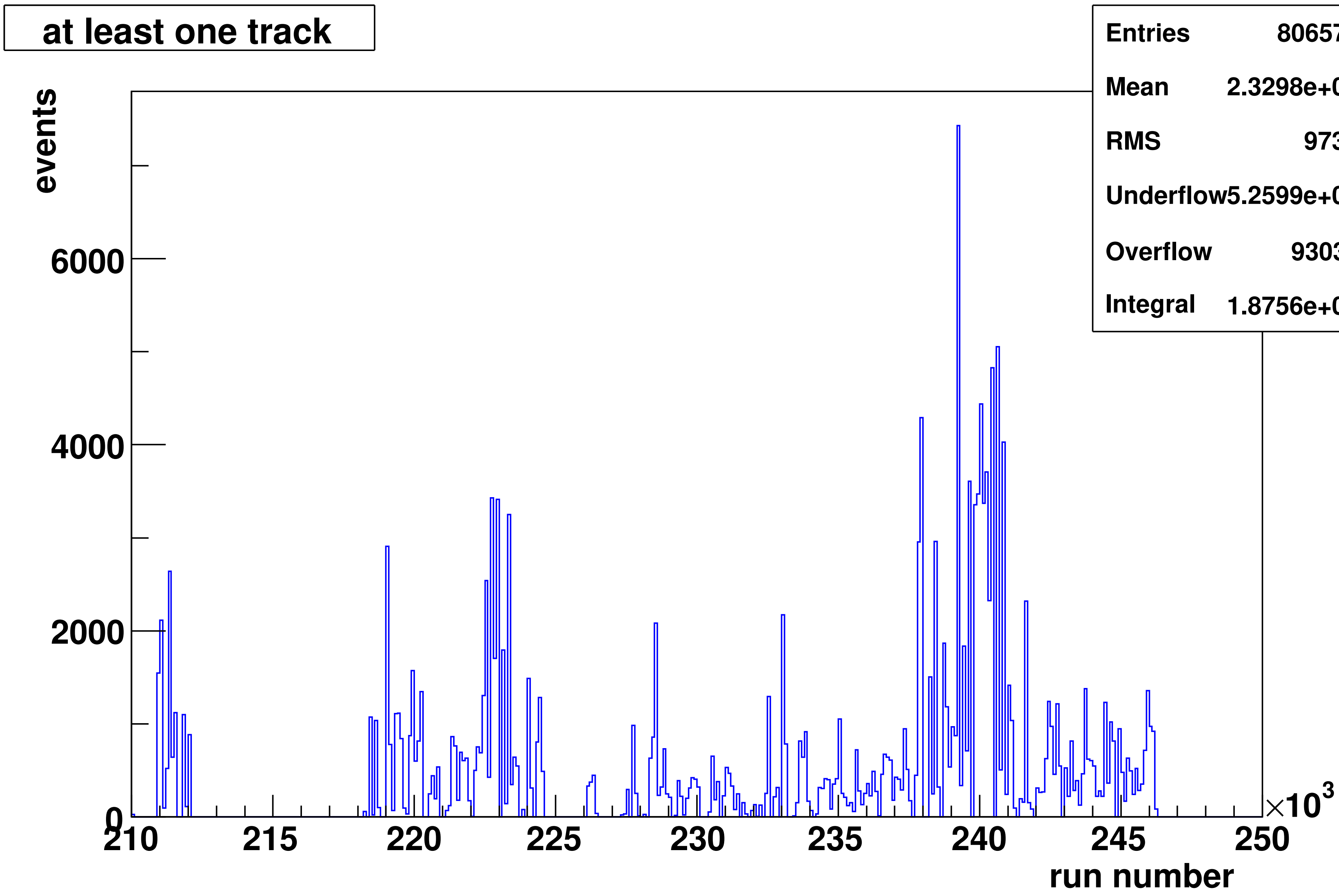
asym R Δφ(μm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

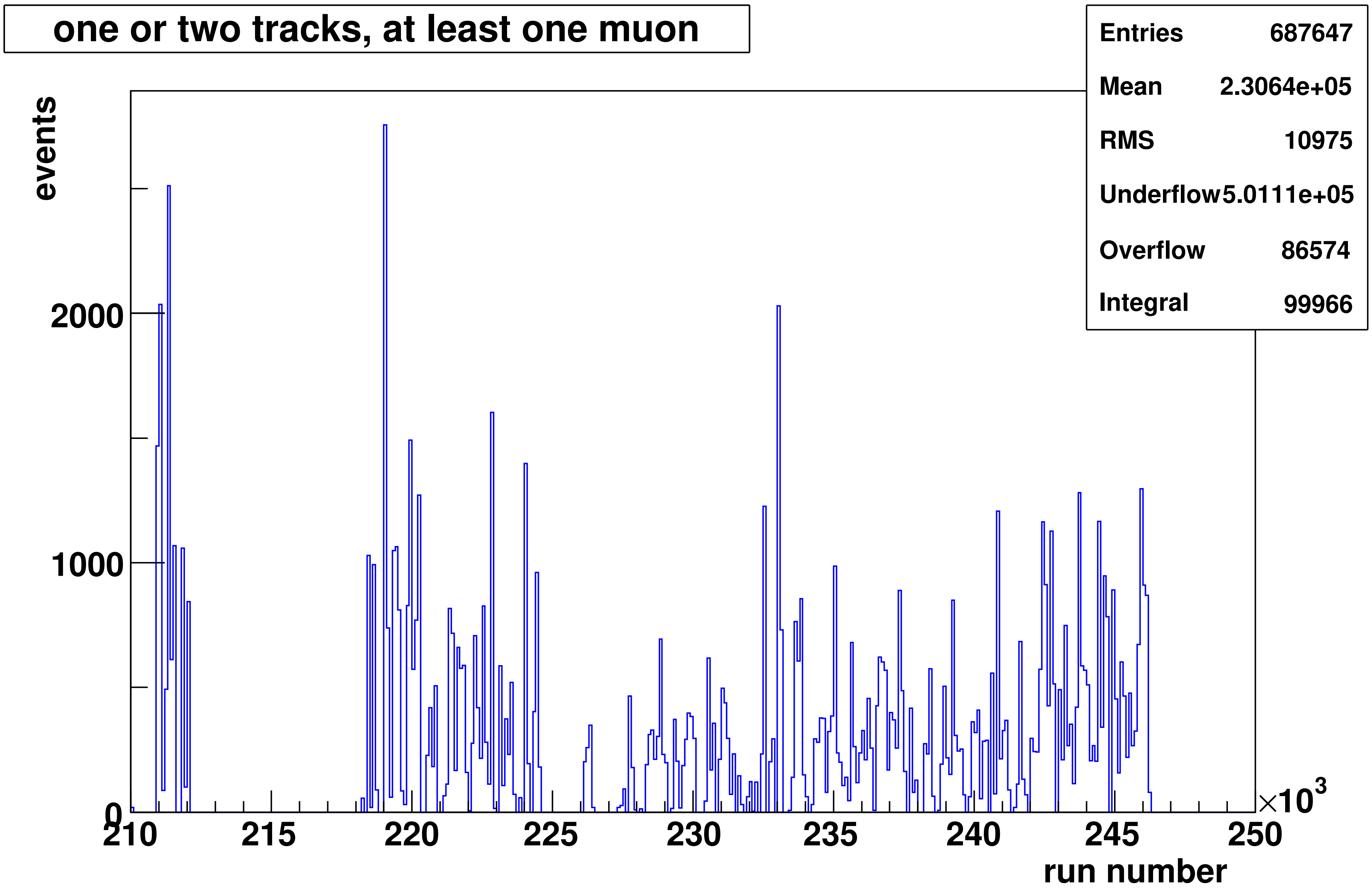

Entries 1041369
Mean 1.307
RMS 1.5668
Underflow 0
Overflow 81390
Integral 9.5998e+05
events
$\times 10^3$
400
200
0
0
20
40
60
80
100
120
140
N_{tracks}



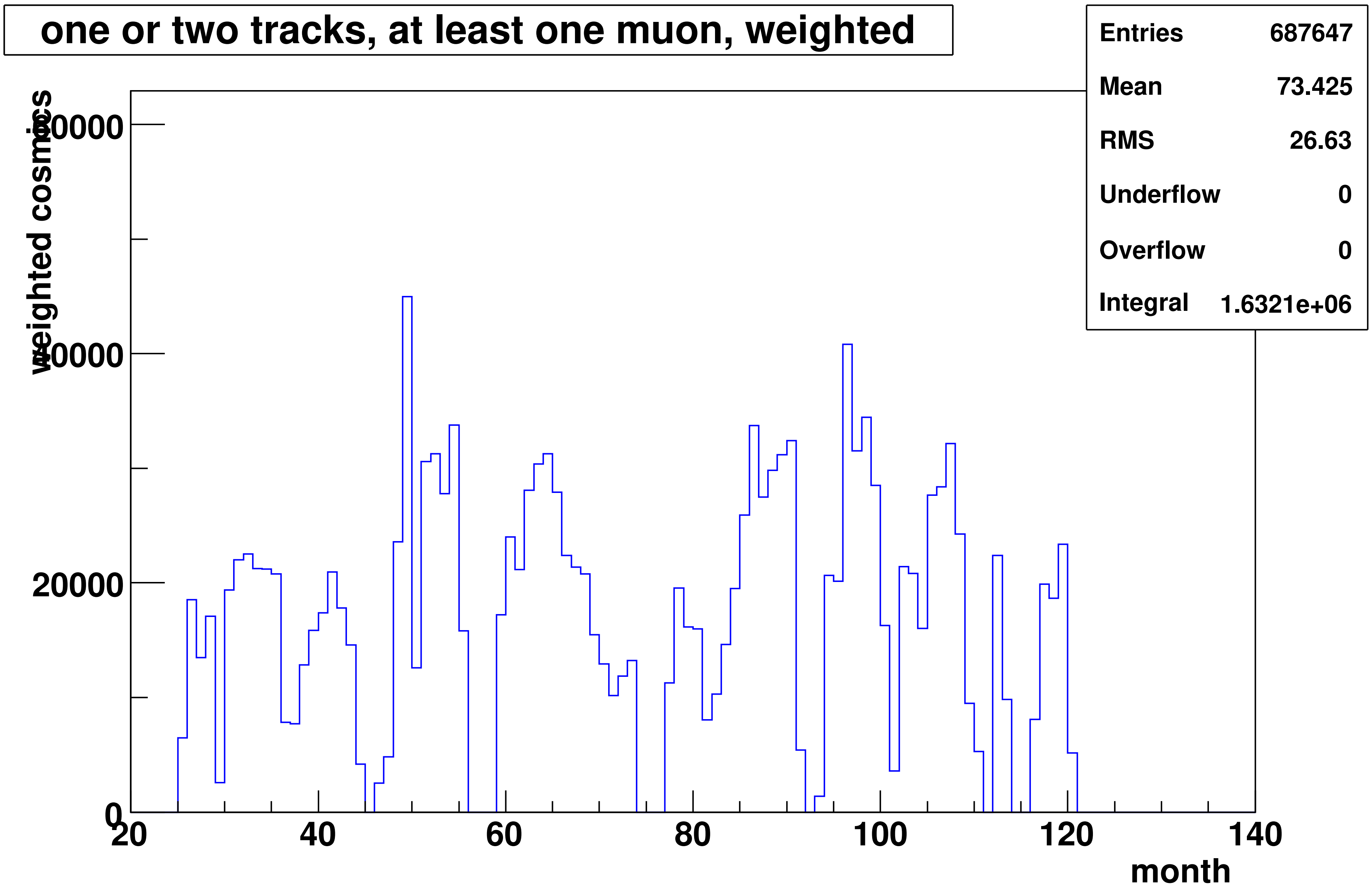
hit width (ns)
0
10
20
30
140
160
180
200
220
240
260
280
300
320
$\times 10^3$
run number
Entries 3.536345e+07
Mean 1.9256e+05
Mean y 32.425
RMS 38319
RMS y 12.918
Underflow 0
Overflow 0
Integral 4000.5

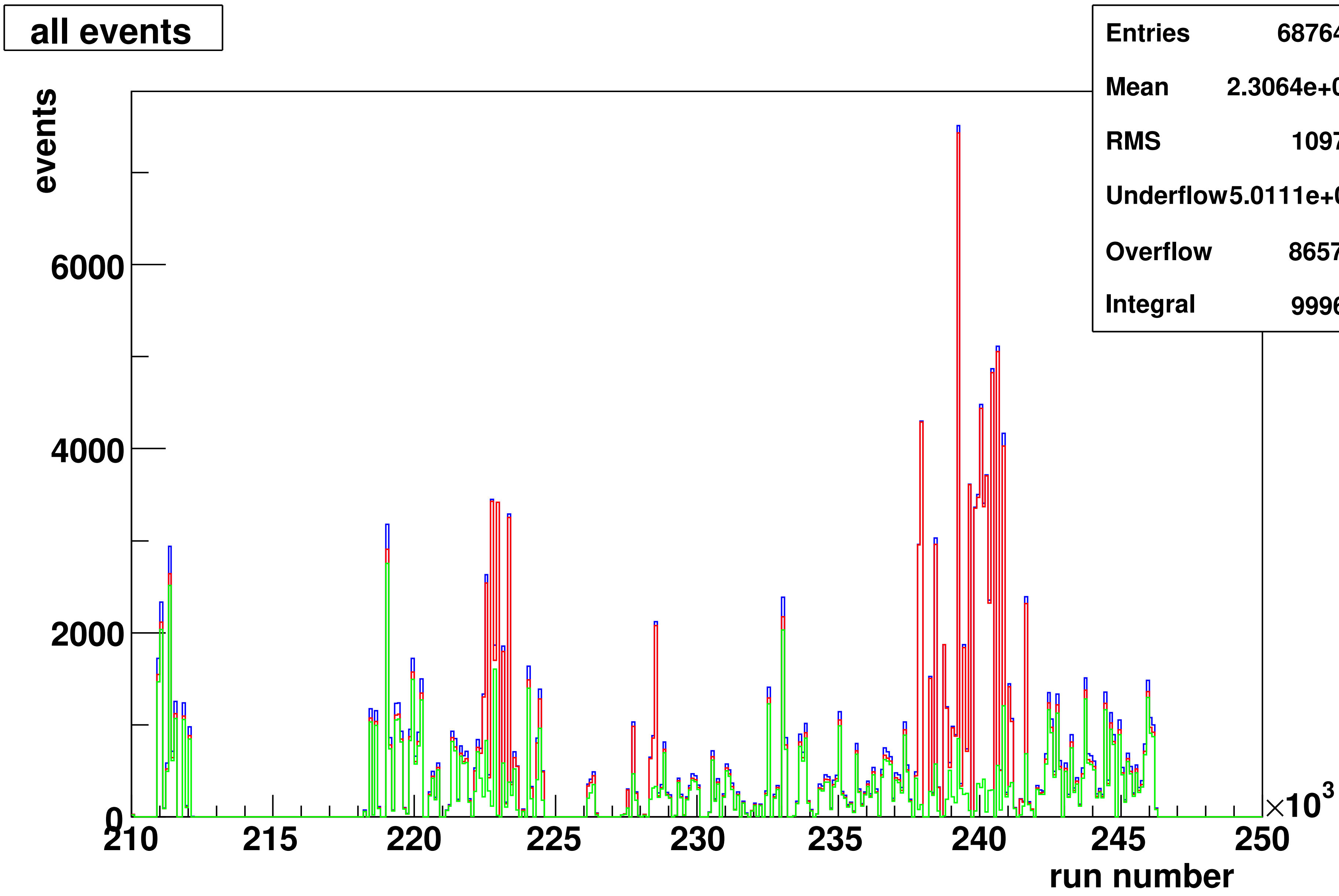

all events
Entries 1041369
Mean 2.3283e+05
RMS 9835
Underflow 6.6069e+05
Overflow 1.8228e+05
Integral 1.984e+05
events
0
2000
4000
6000
210
215
220
225
230
235
240
245
250
×10^3
run number

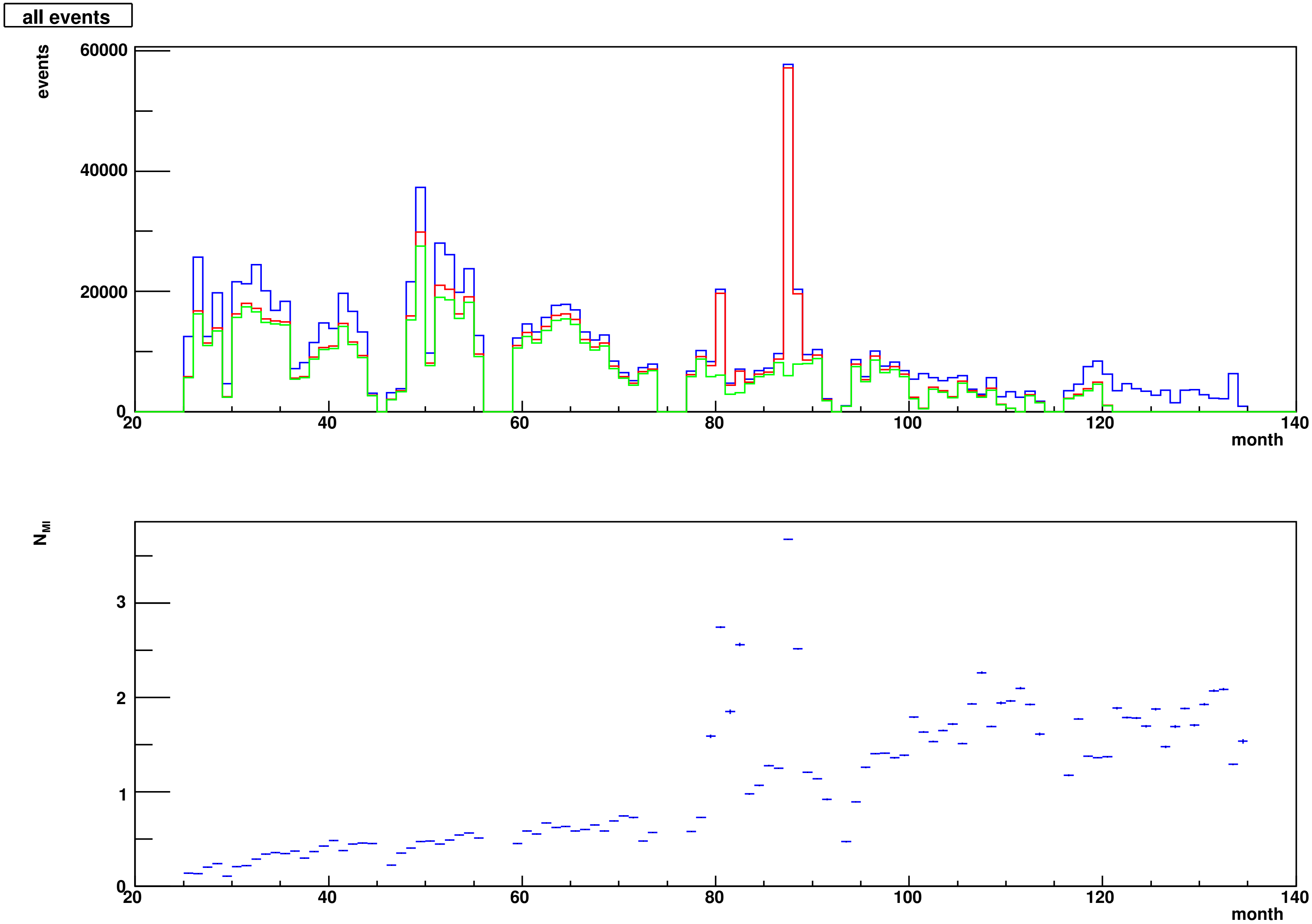

at least one track
Entries 806578
Mean 2.3298e+05
RMS 9737
Underflow5.2599e+05
Overflow 93032
Integral 1.8756e+05
events
0
2000
4000
6000
210
215
220
225
230
235
240
245
250
×10^3
run number



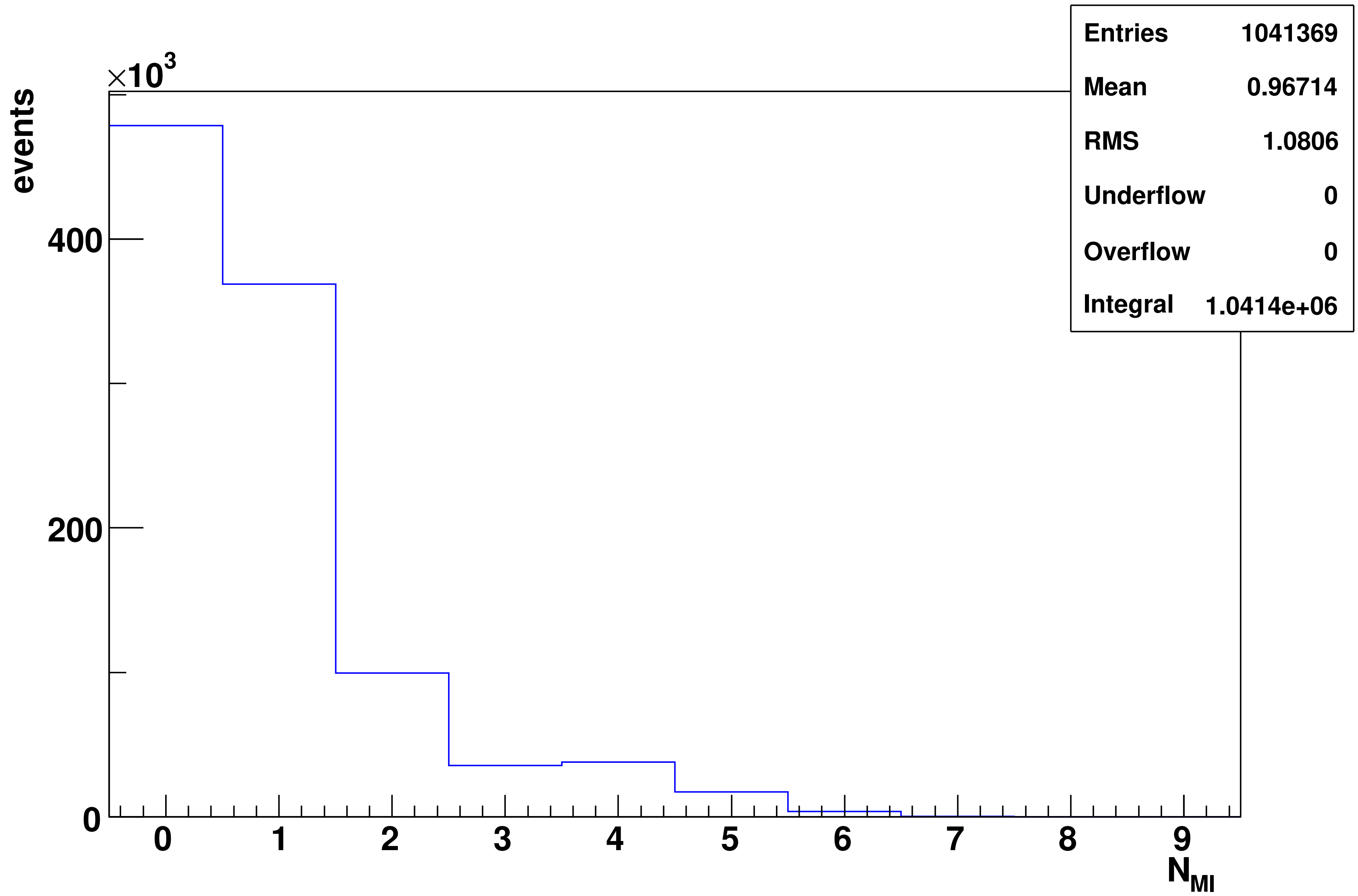
one or two tracks, at least one muon
Entries 687647
Mean 2.3064e+05
RMS 10975
Underflow 5.0111e+05
Overflow 86574
Integral 99966
events
2000
1000
0
210
215
220
225
230
235
240
245
250
×10^3
run number


one or two tracks, at least one muon, weighted
Entries 687647
Mean 73.425
RMS 26.63
Underflow 0
Overflow 0
Integral 1.6321e+06
weighted cosmics
0
20000
40000
60000
20
40
60
80
100
120
140
month

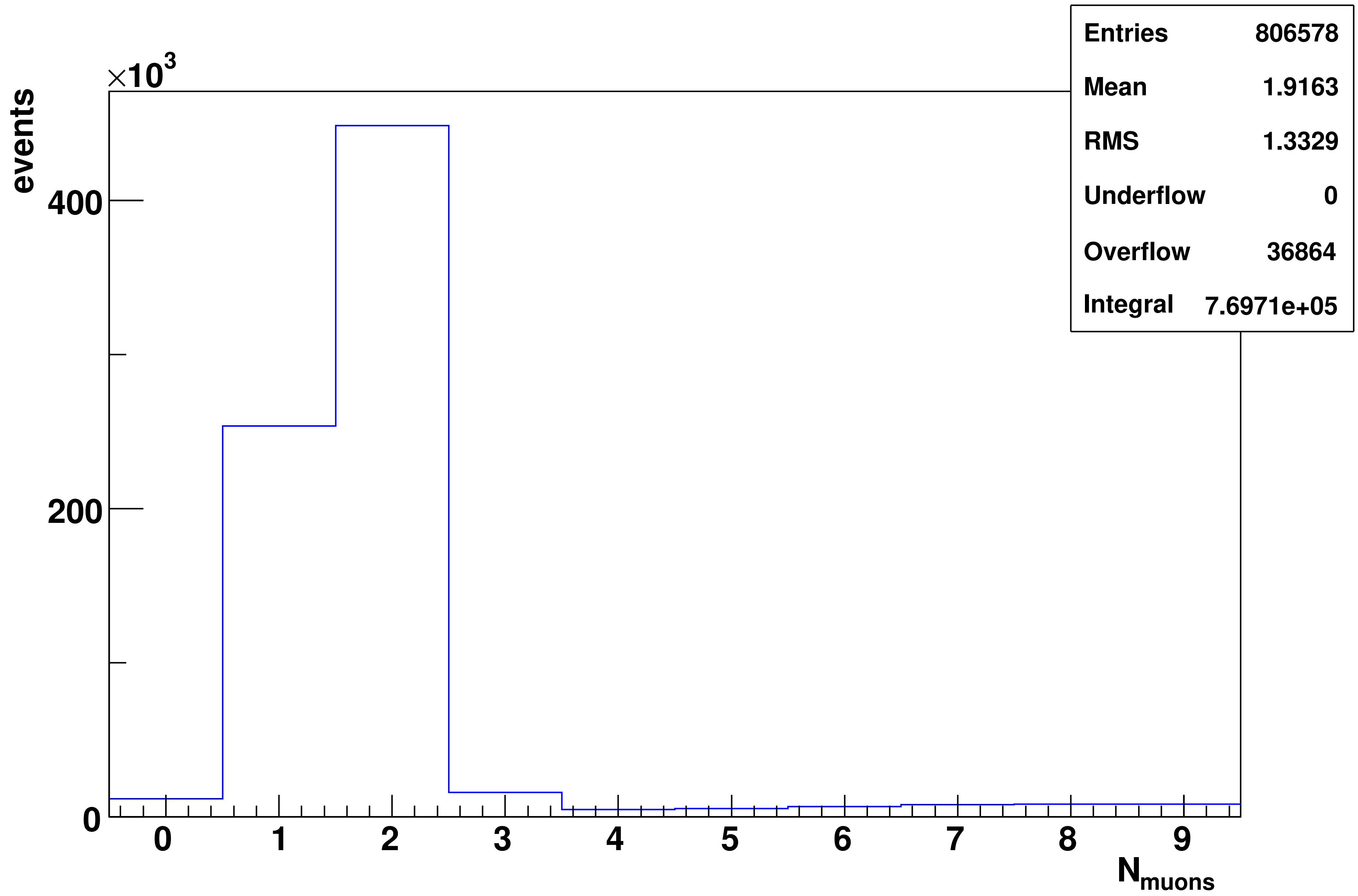

all events
events
Entries 687647
Mean 2.3064e+05
RMS 10975
Underflow 5.0111e+05
Overflow 86574
Integral 99966
0
2000
4000
6000
210
215
220
225
230
235
240
245
250
×10^3
run number

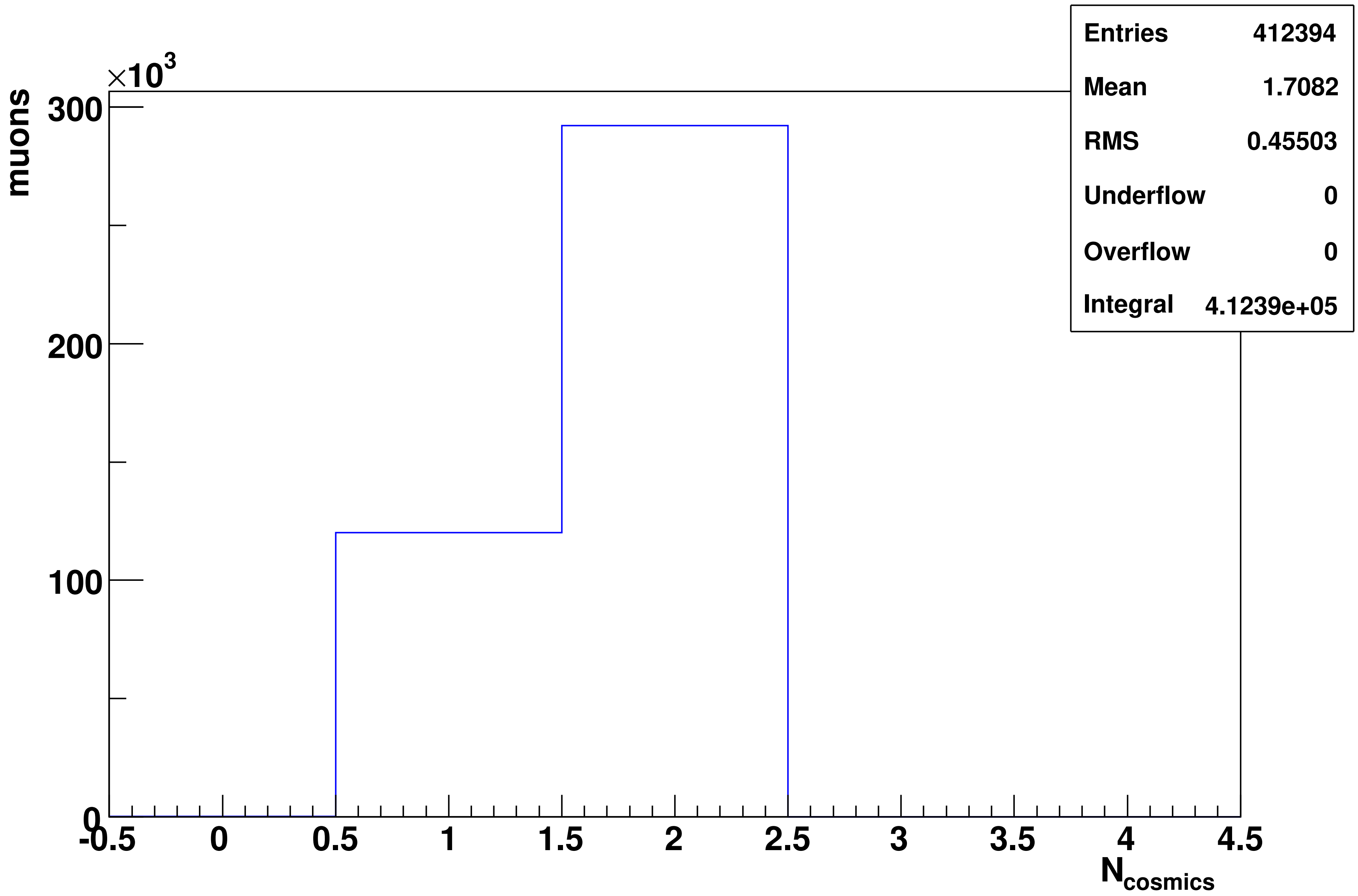


all events
events
60000
40000
20000
0
20
40
60
80
100
120
140
month
N_MI
3
2
1
0
20
40
60
80
100
120
140
month

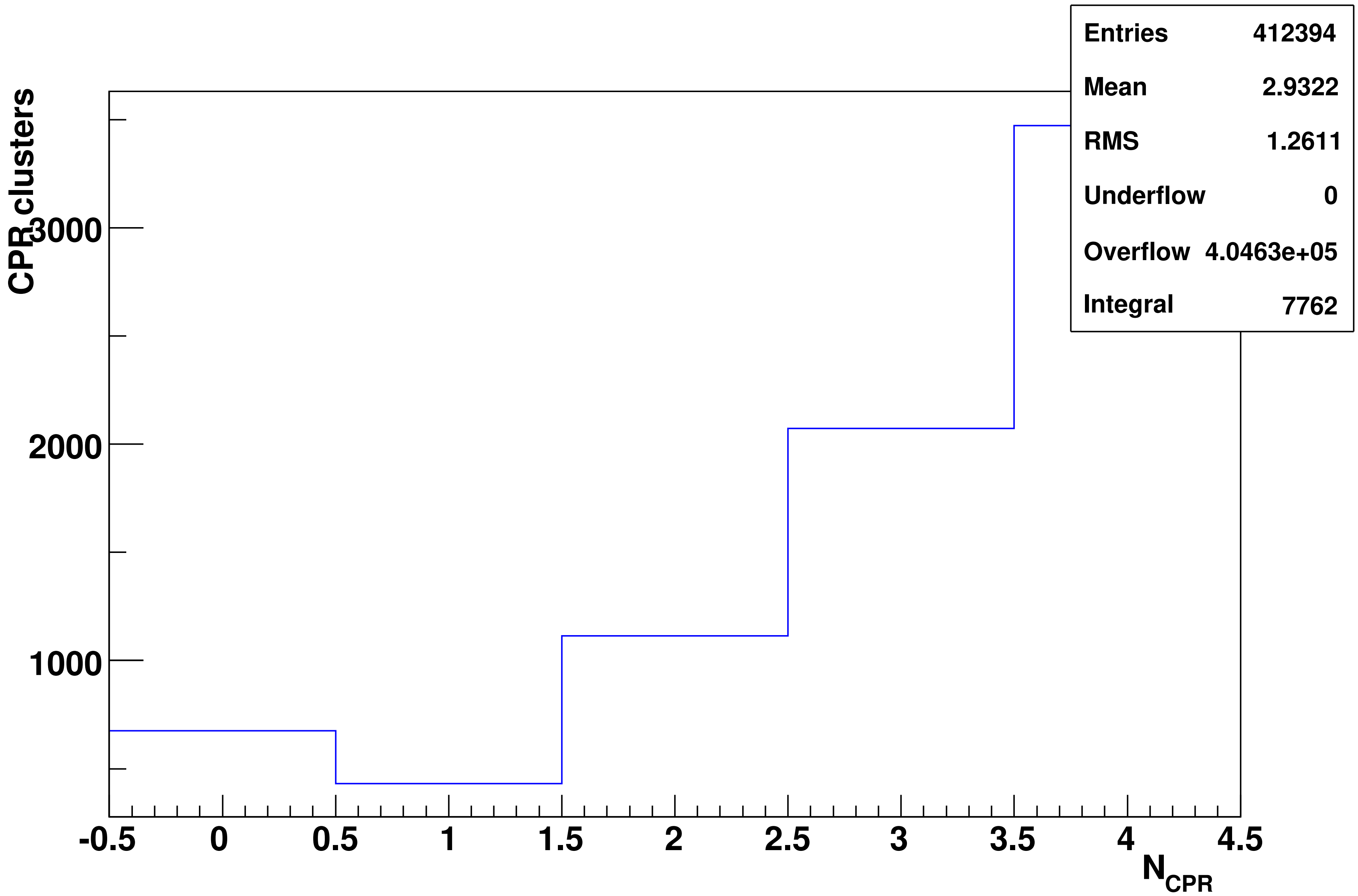


Entries 1041369
Mean 0.96714
RMS 1.0806
Underflow 0
Overflow 0
Integral 1.0414e+06
×10^3
events
400
200
0
0
1
2
3
4
5
6
7
8
9
N_MI

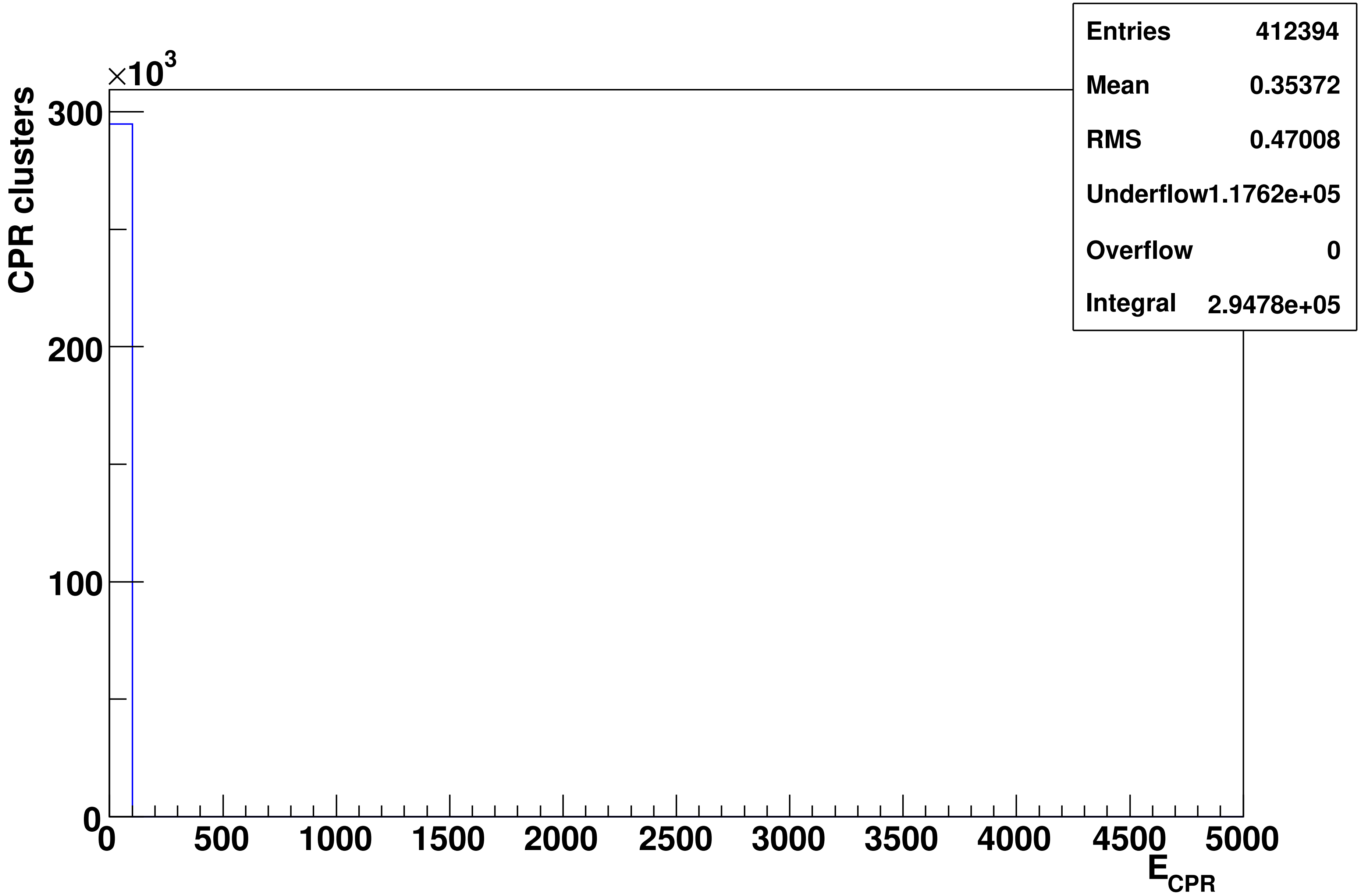

Entries 806578
Mean 1.9163
RMS 1.3329
Underflow 0
Overflow 36864
Integral 7.6971e+05
×10^3
events
400
200
0
0
1
2
3
4
5
6
7
8
9
N_muons

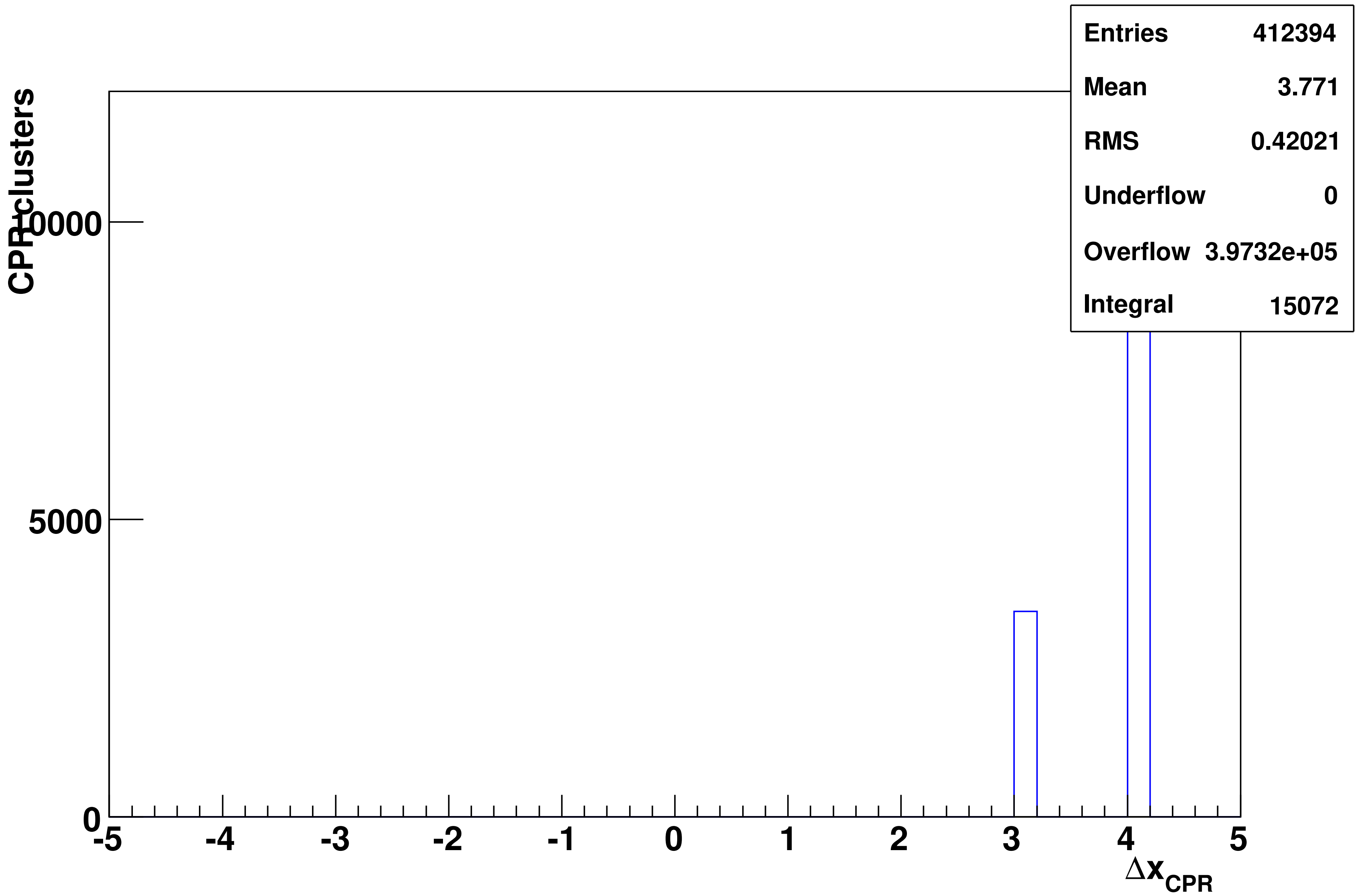


Entries 412394
Mean 1.7082
RMS 0.45503
Underflow 0
Overflow 0
Integral 4.1239e+05
×10^3
muons
300
200
100
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_cosmics

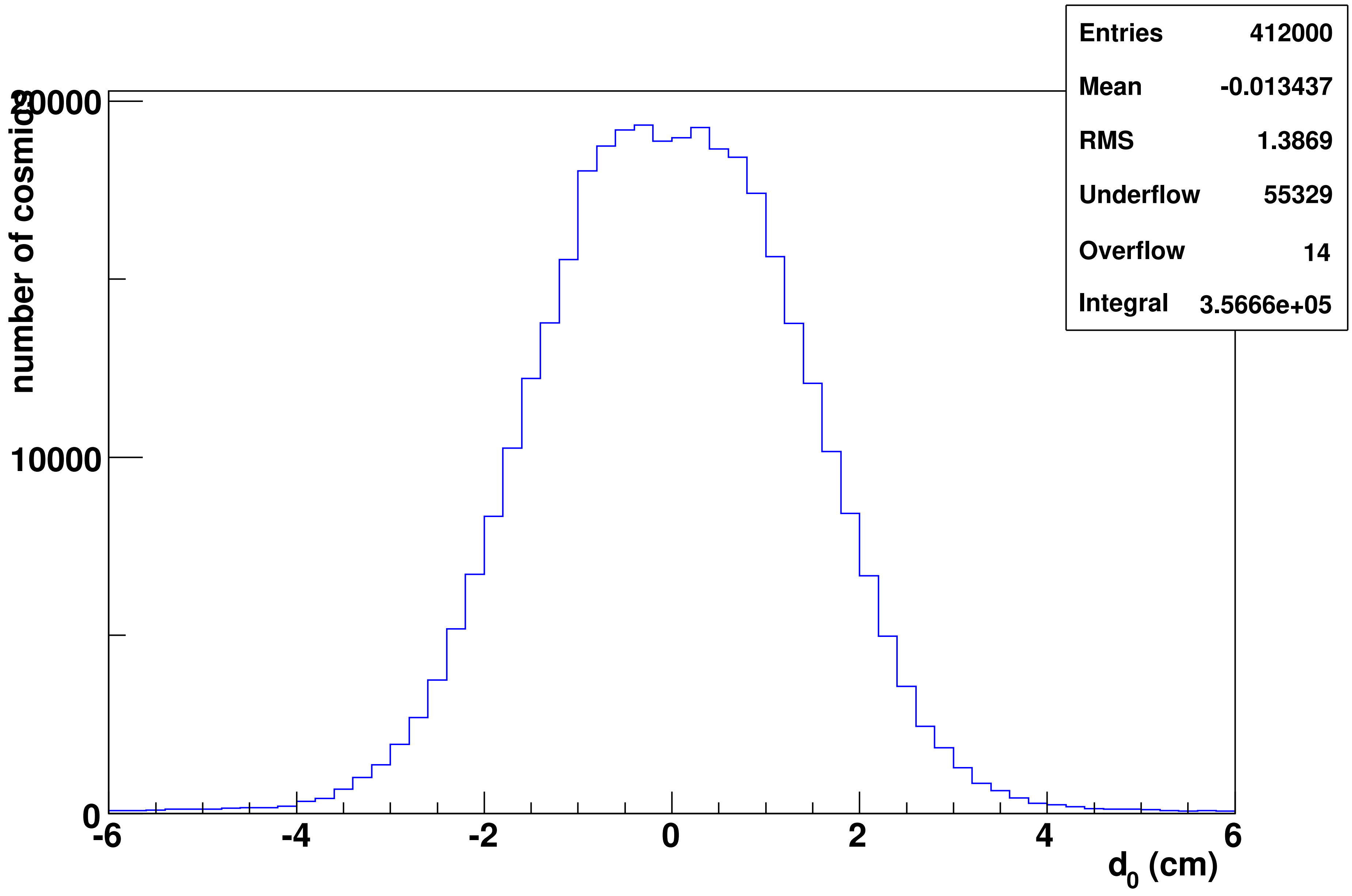


Entries 412394
Mean 2.9322
RMS 1.2611
Underflow 0
Overflow 4.0463e+05
Integral 7762
CPR clusters
3000
2000
1000
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_{CPR}

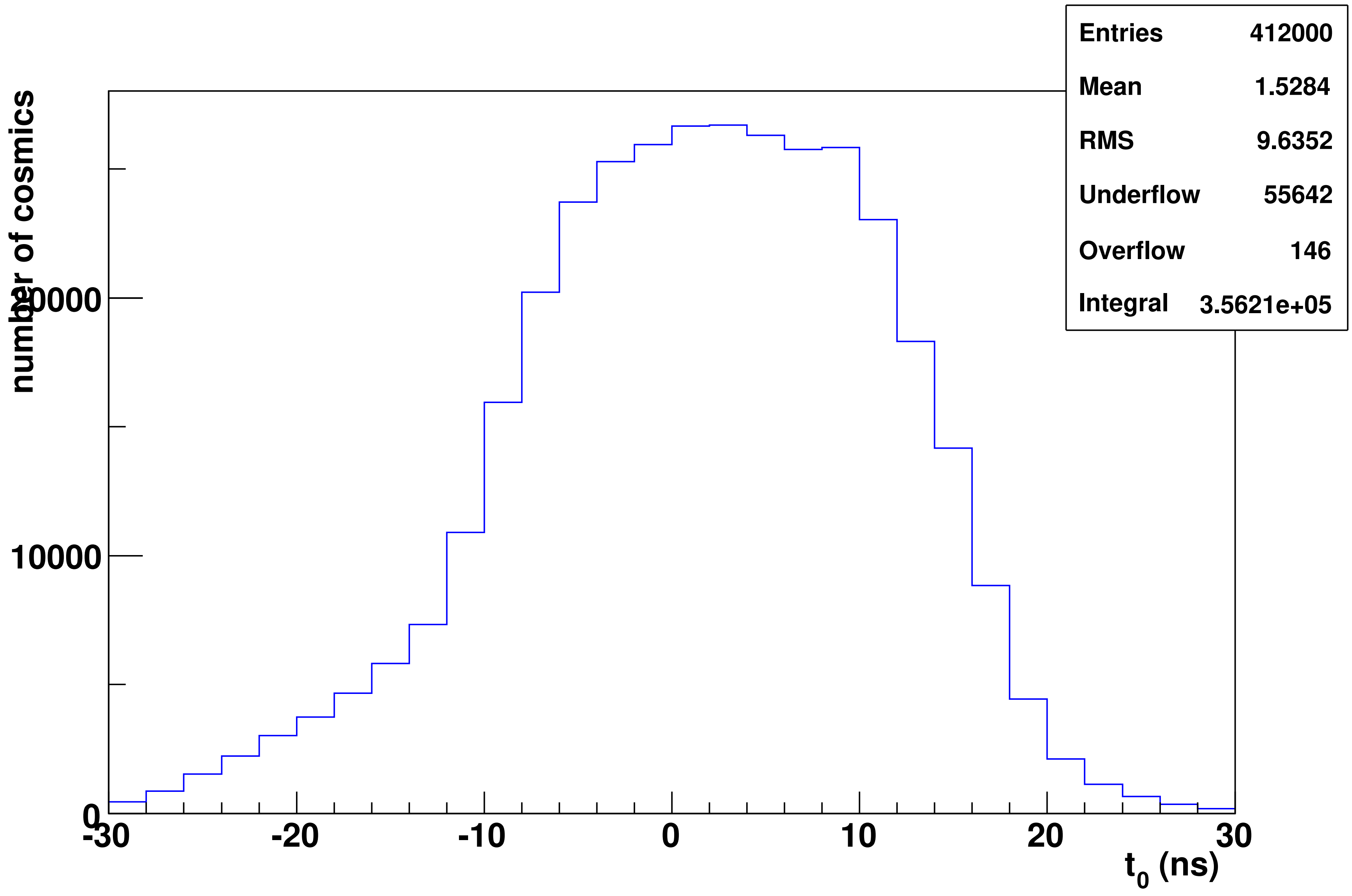

Entries 412394
Mean 0.35372
RMS 0.47008
Underflow 1.1762e+05
Overflow 0
Integral 2.9478e+05
CPR clusters
×10^3
300
200
100
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
E_CPR

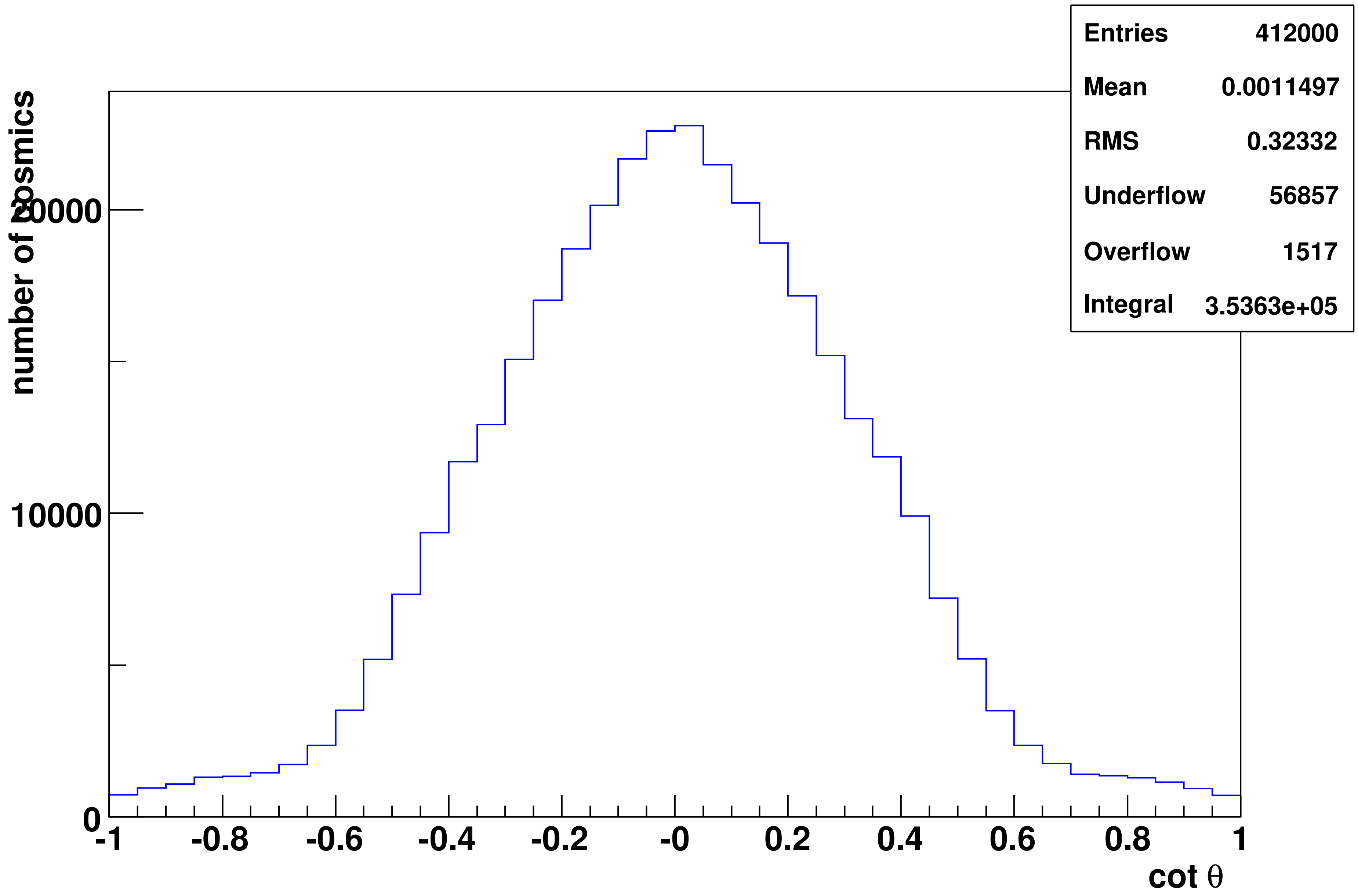


Entries 412394
Mean 3.771
RMS 0.42021
Underflow 0
Overflow 3.9732e+05
Integral 15072
CPR clusters
10000
5000
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
Δx_{CPR}

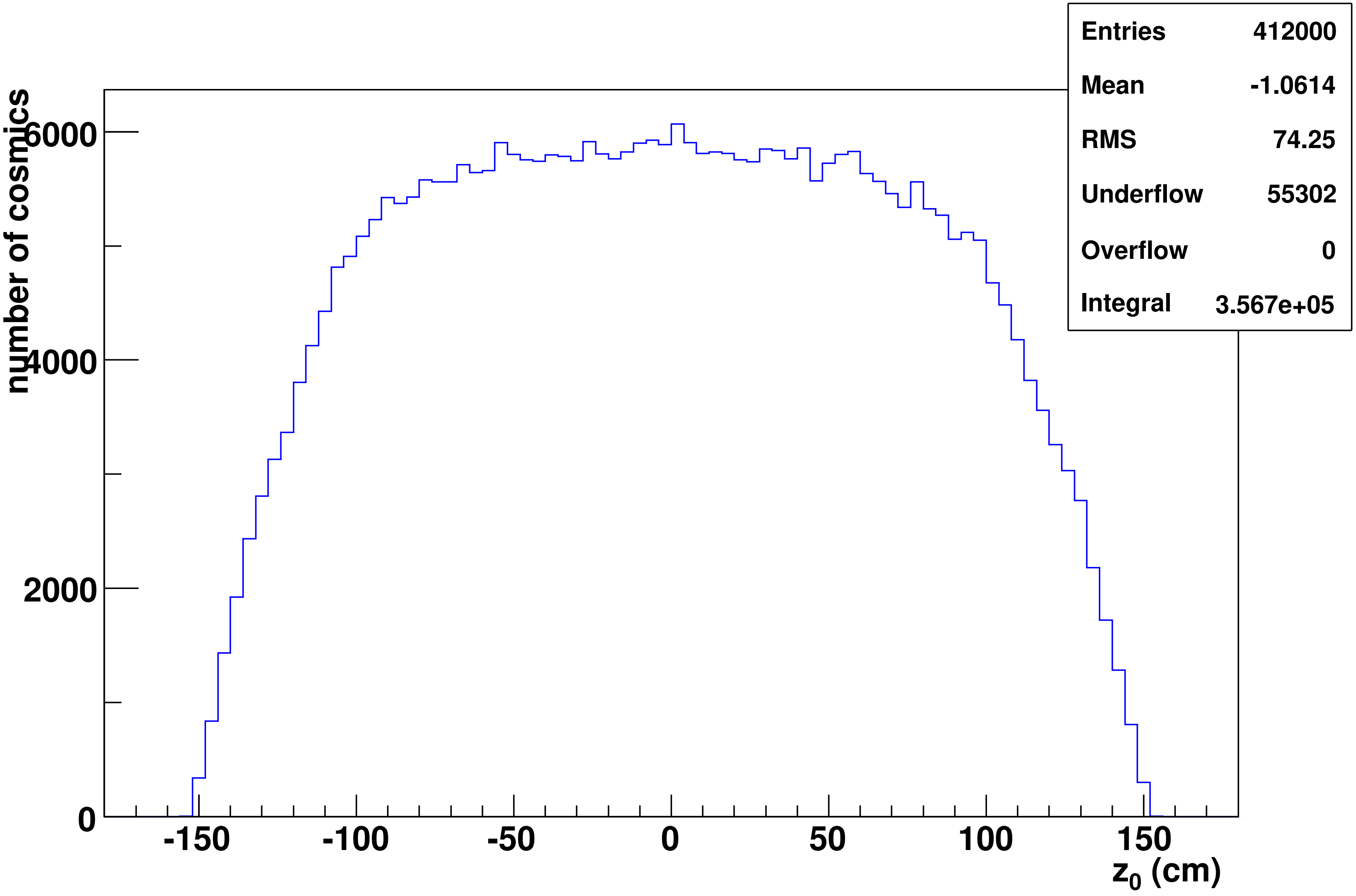


Entries 412000
Mean -0.013437
RMS 1.3869
Underflow 55329
Overflow 14
Integral 3.5666e+05
number of cosmics
20000
10000
0
-6
-4
-2
0
2
4
6
d0 (cm)

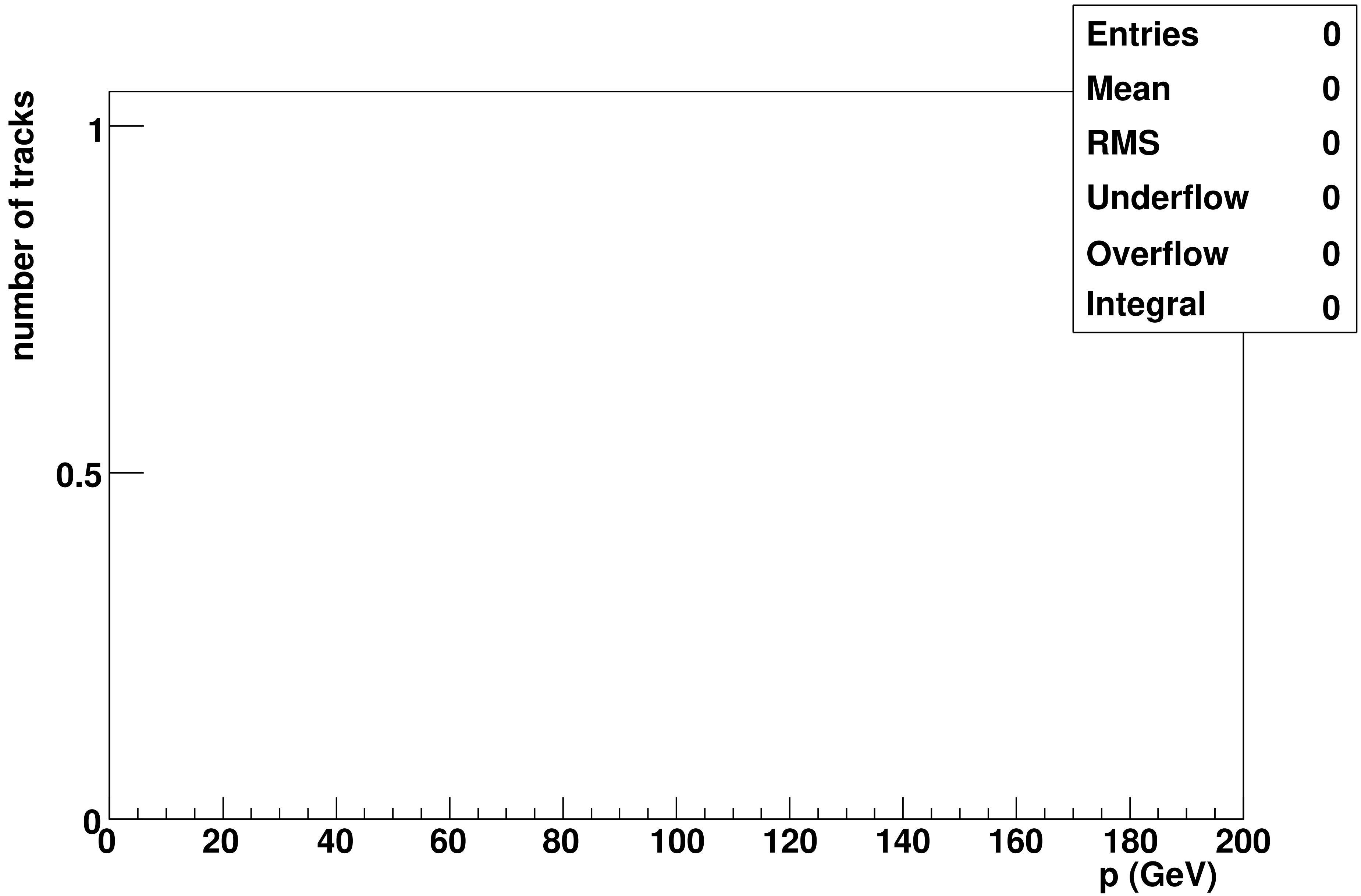

Entries 412000
Mean 1.5284
RMS 9.6352
Underflow 55642
Overflow 146
Integral 3.5621e+05
number of cosmics
20000
10000
0
-30
-20
-10
0
10
20
30
t_0 (ns)

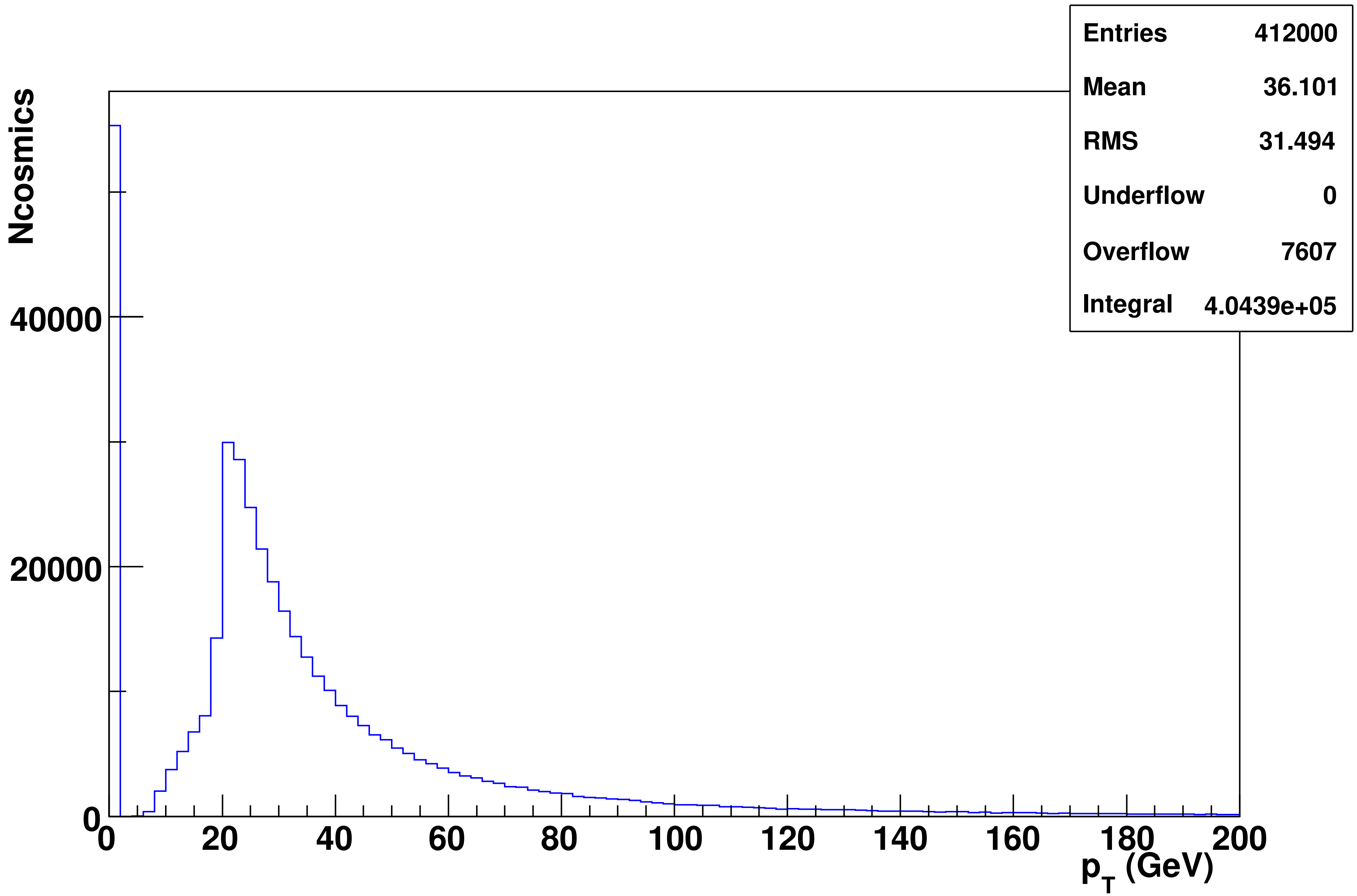


Entries 412000
Mean 0.0011497
RMS 0.32332
Underflow 56857
Overflow 1517
Integral 3.5363e+05
number of cosmics
20000
10000
0
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
cot θ

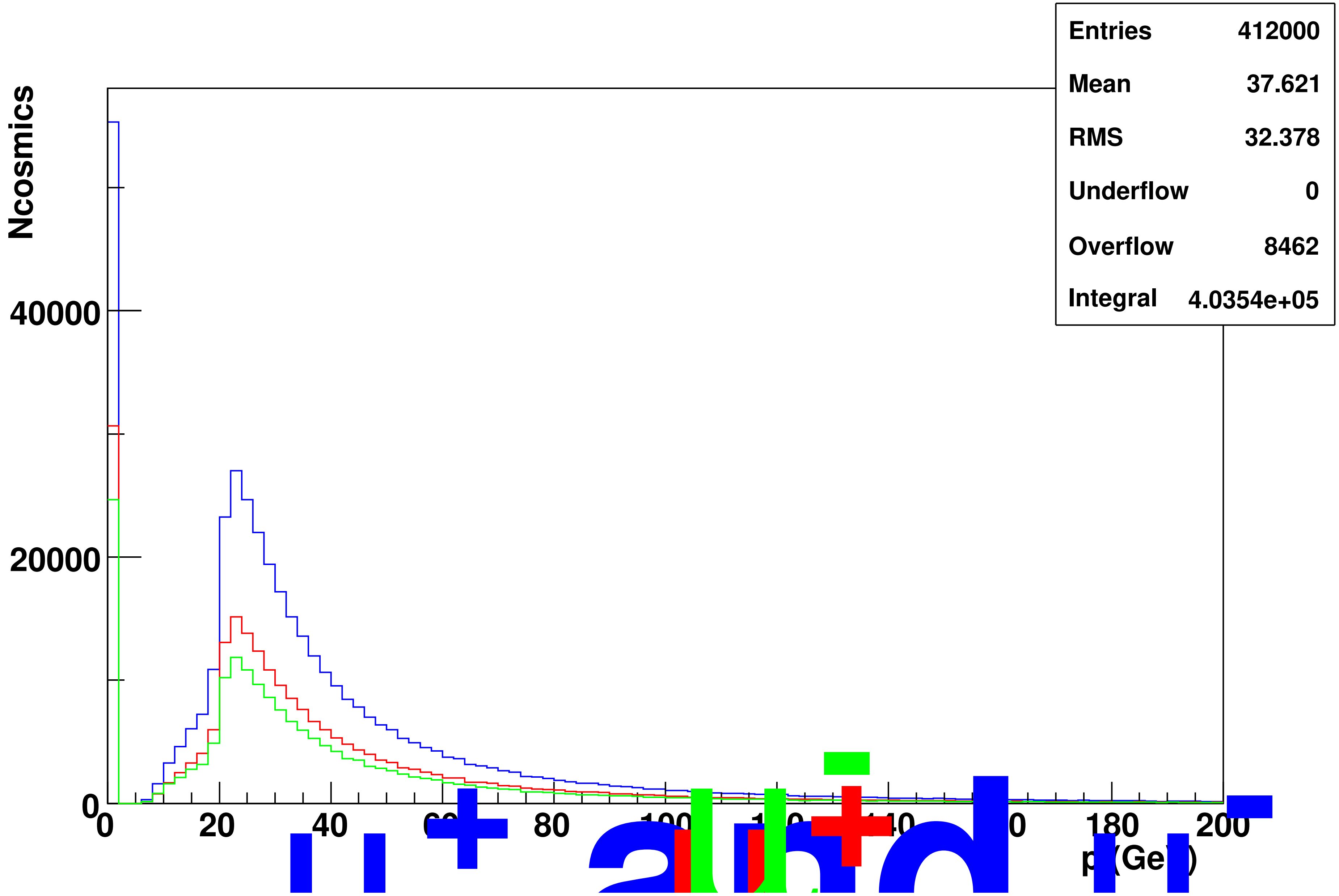


Entries 412000
Mean -1.0614
RMS 74.25
Underflow 55302
Overflow 0
Integral 3.567e+05
number of cosmics
6000
4000
2000
0
-150
-100
-50
0
50
100
150
z_0 (cm)

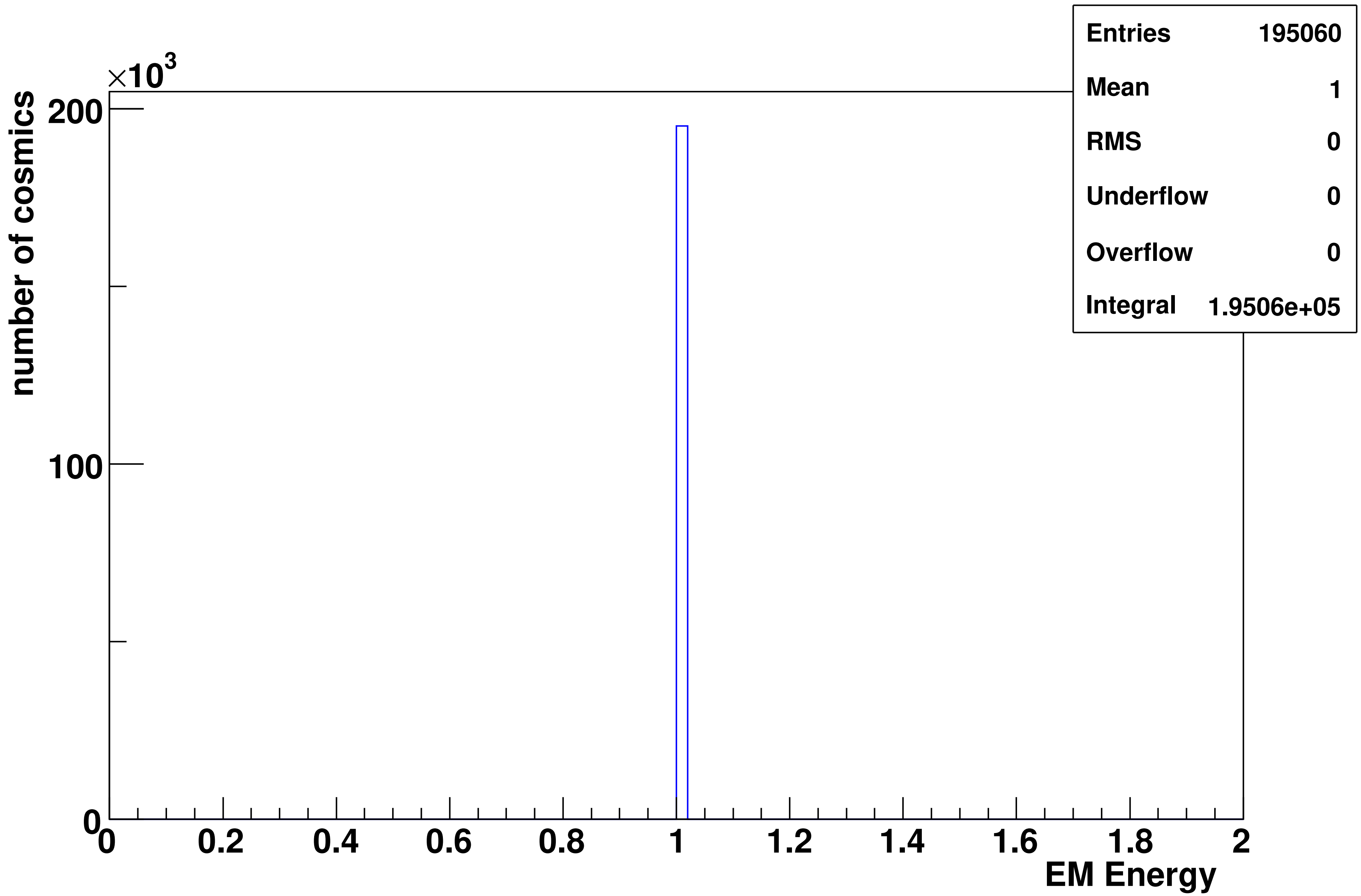

Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Integral 0
number of tracks
1
0.5
0
0
20
40
60
80
100
120
140
160
180
200
p (GeV)



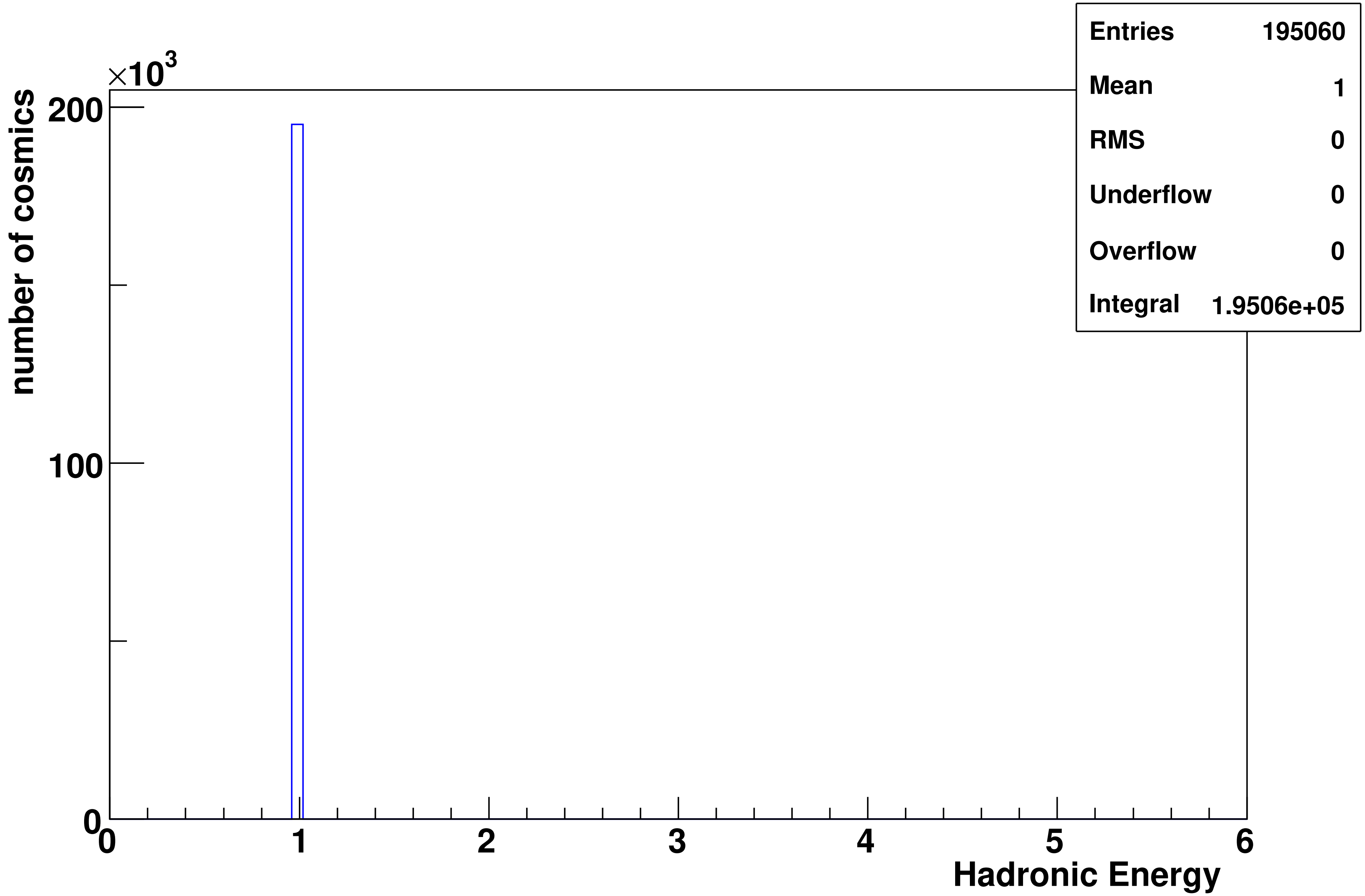
Entries 412000
Mean 36.101
RMS 31.494
Underflow 0
Overflow 7607
Integral 4.0439e+05
Ncosmics
40000
20000
0
0
20
40
60
80
100
120
140
160
180
200
p_T (GeV)



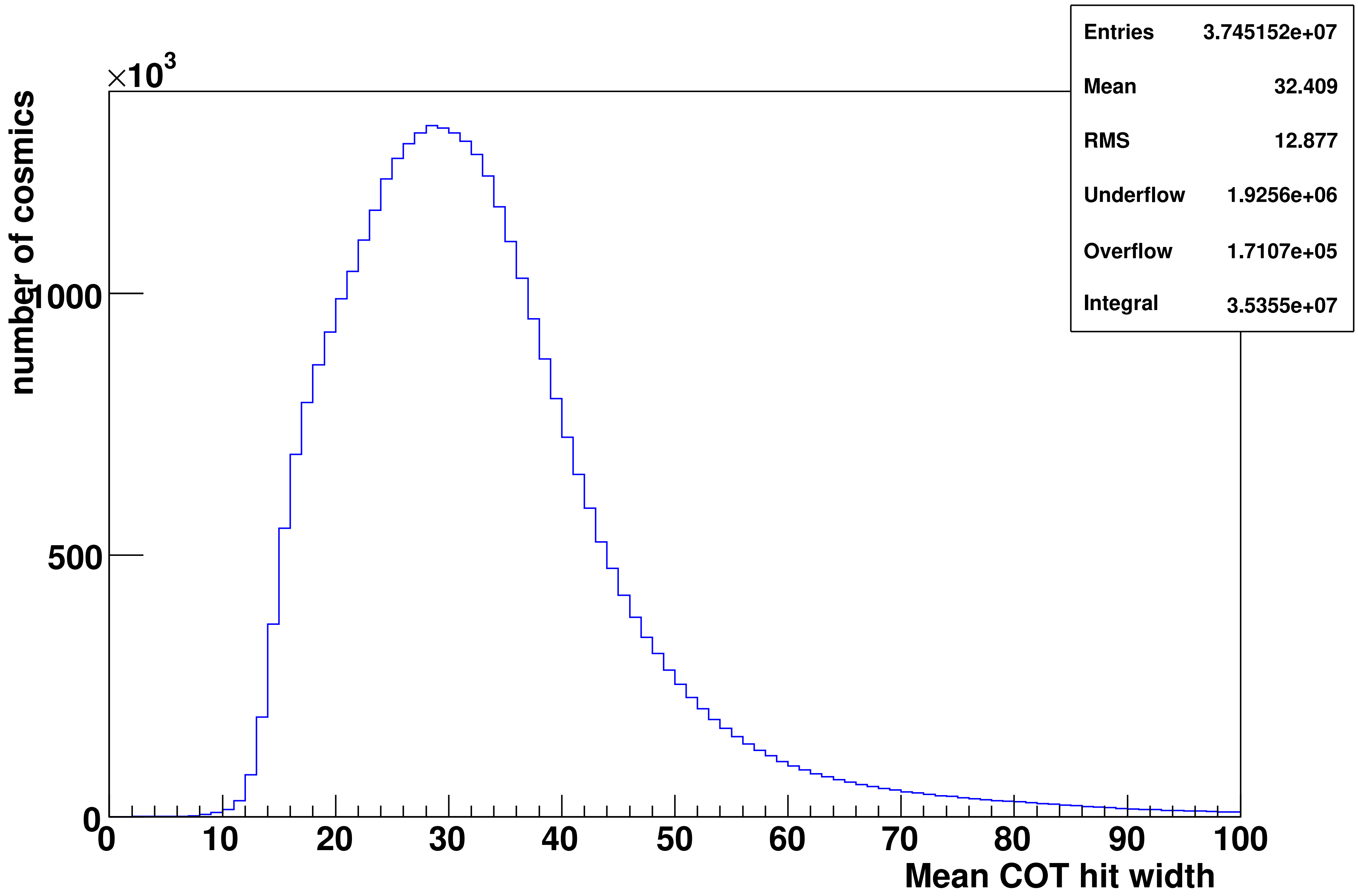
Ncosmics
40000
20000
0
0
20
40
80
180
200
Entries 412000
Mean 37.621
RMS 32.378
Underflow 0
Overflow 8462
Integral 4.0354e+05



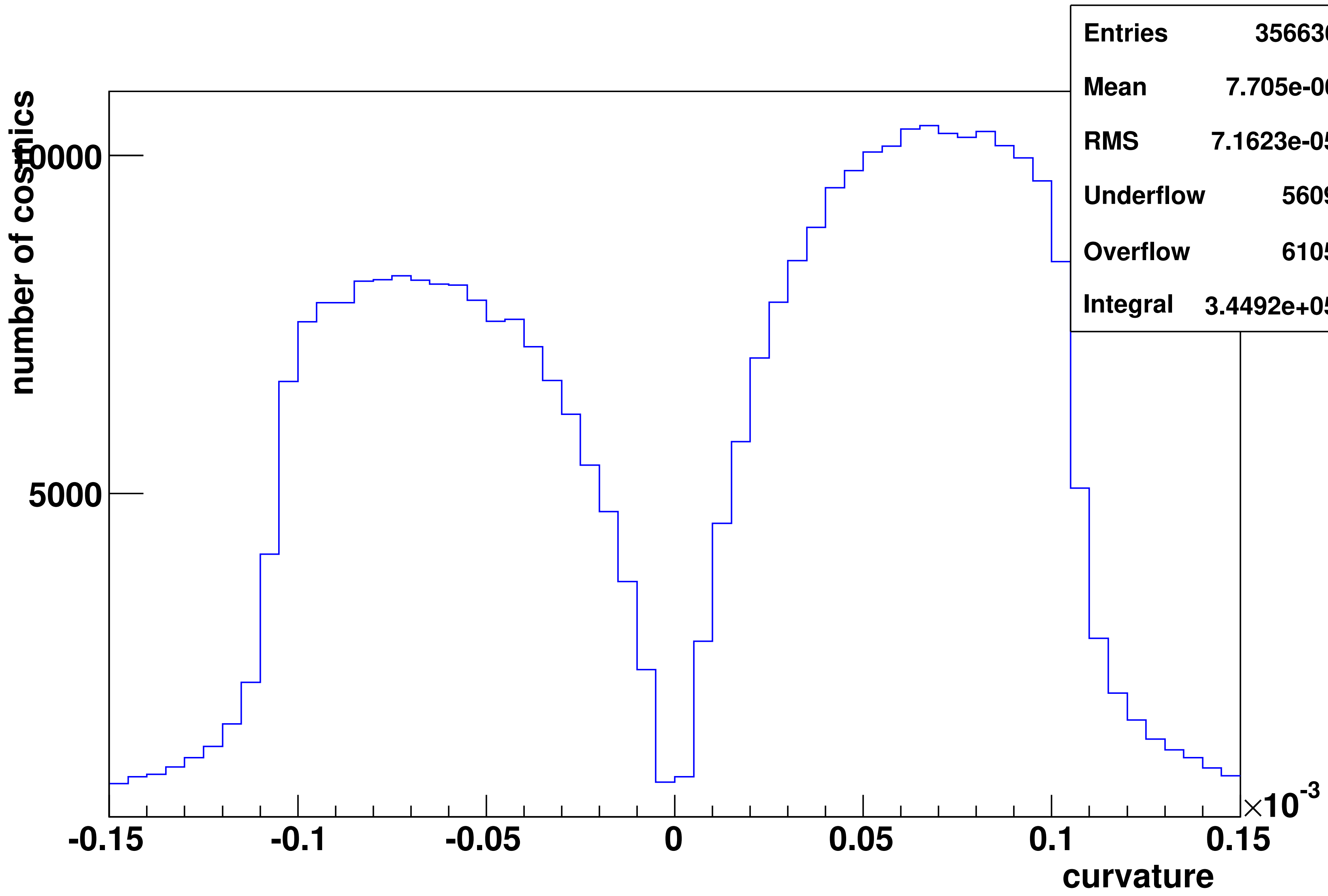
Entries 195060
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 1.9506e+05
×10^3
200
100
0
number of cosmics
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
EM Energy



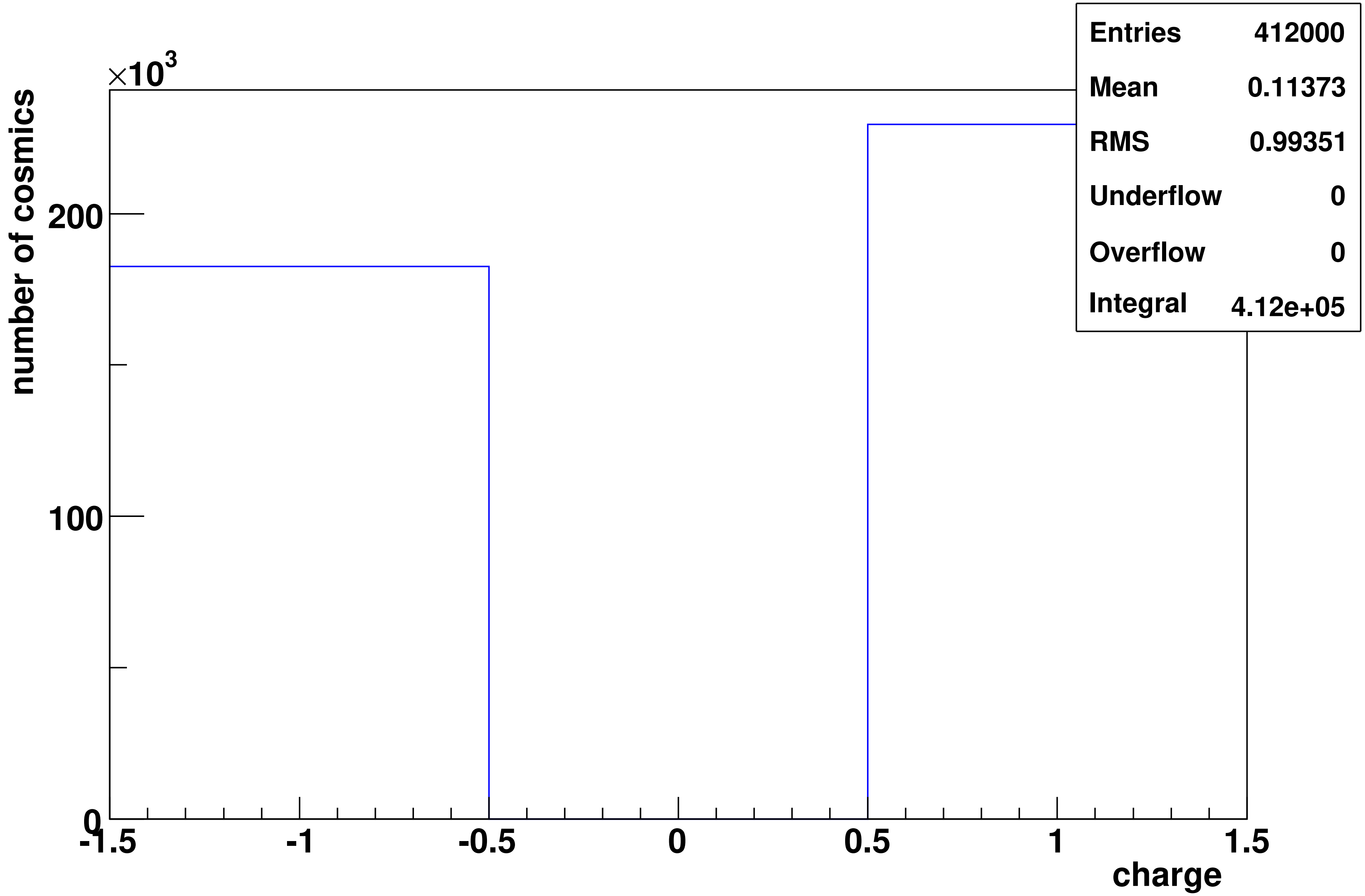
Entries 195060
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 1.9506e+05
×10^3
number of cosmics
200
100
0
0
1
2
3
4
5
6
Hadronic Energy



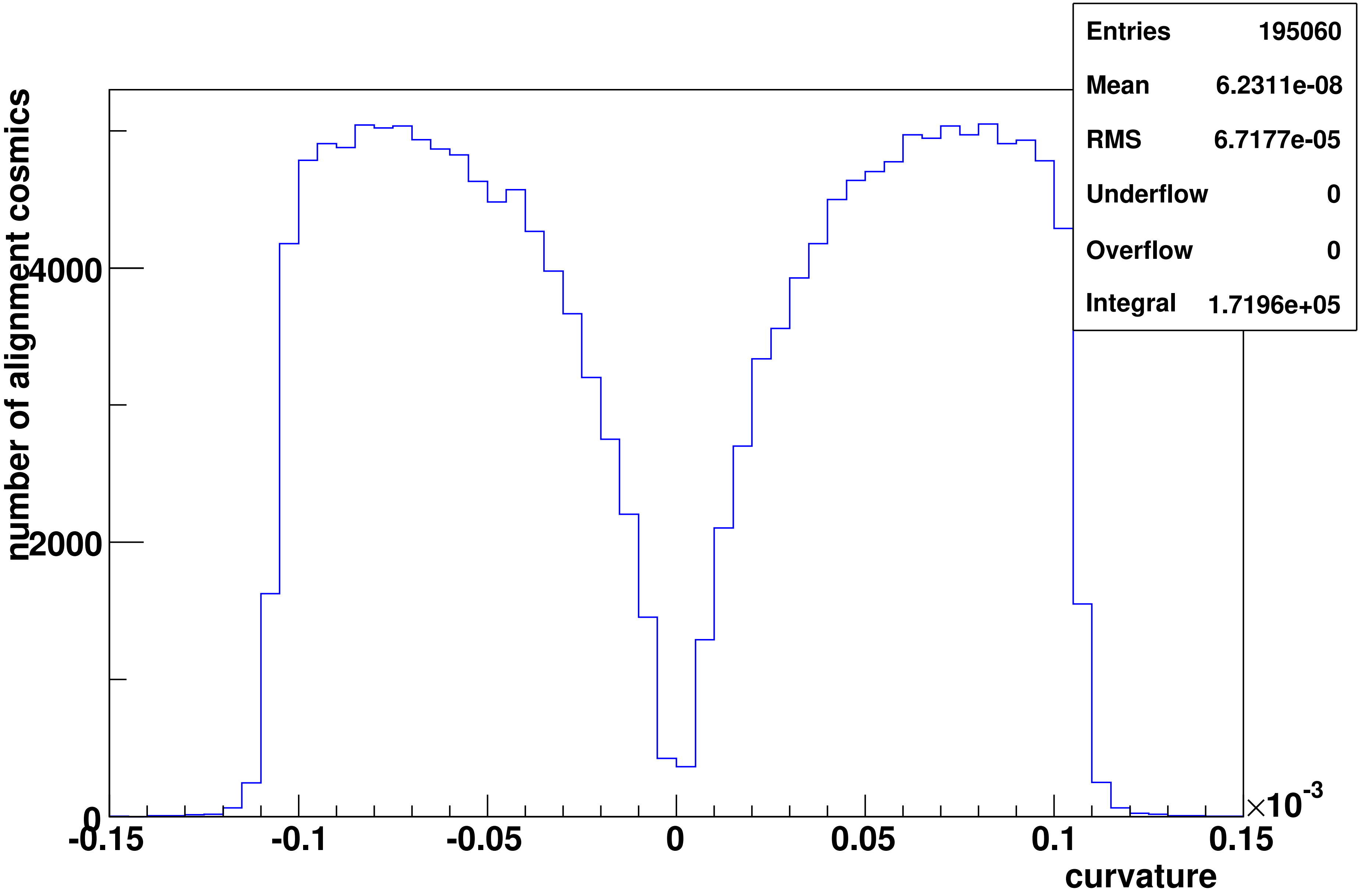
Entries 3.745152e+07
Mean 32.409
RMS 12.877
Underflow 1.9256e+06
Overflow 1.7107e+05
Integral 3.5355e+07
×10^3
number of cosmics
1000
500
0
0
10
20
30
40
50
60
70
80
90
100
Mean COT hit width



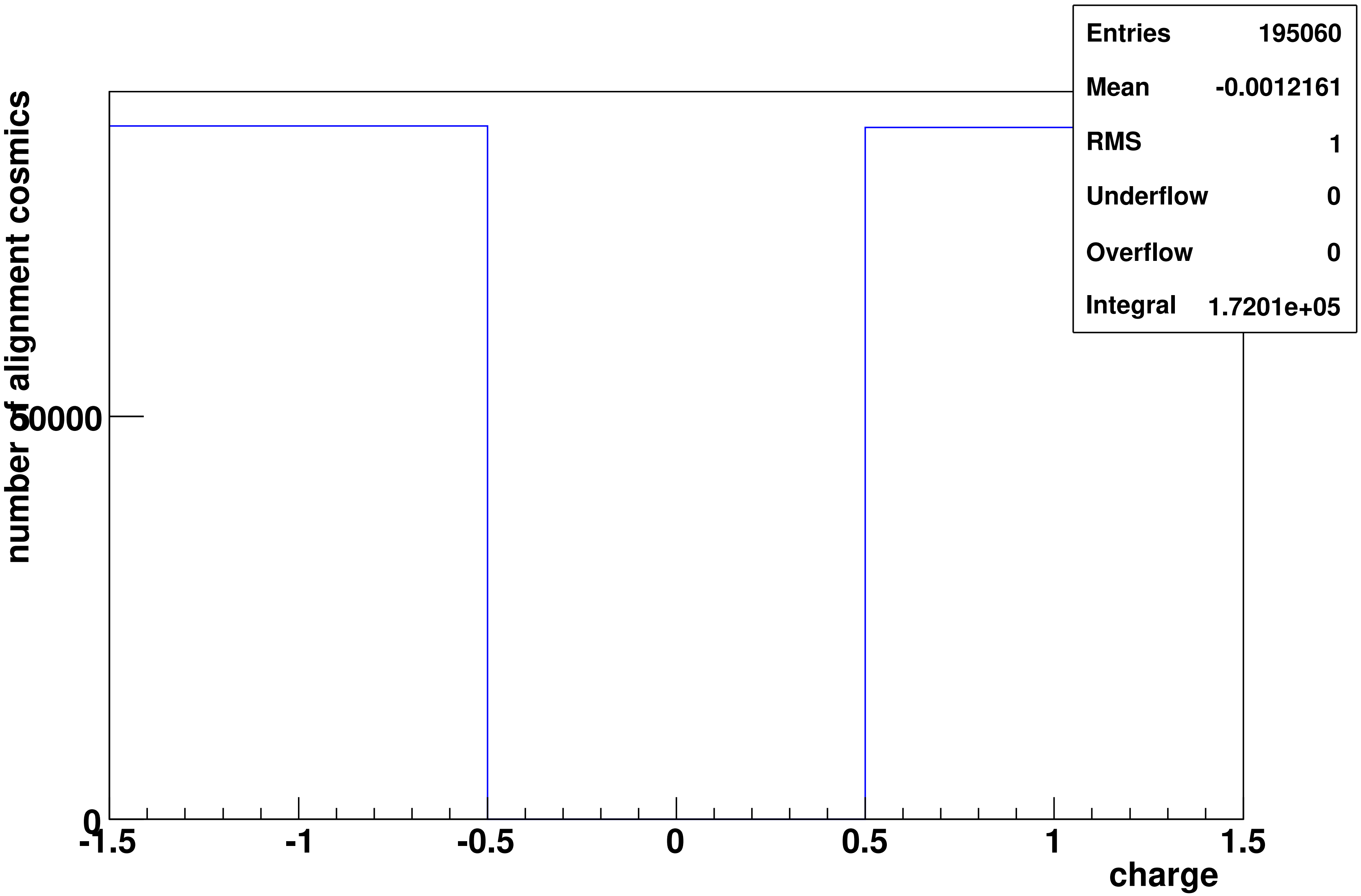
Entries 356636
Mean 7.705e-06
RMS 7.1623e-05
Underflow 5609
Overflow 6105
Integral 3.4492e+05
number of cosmics
10000
5000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

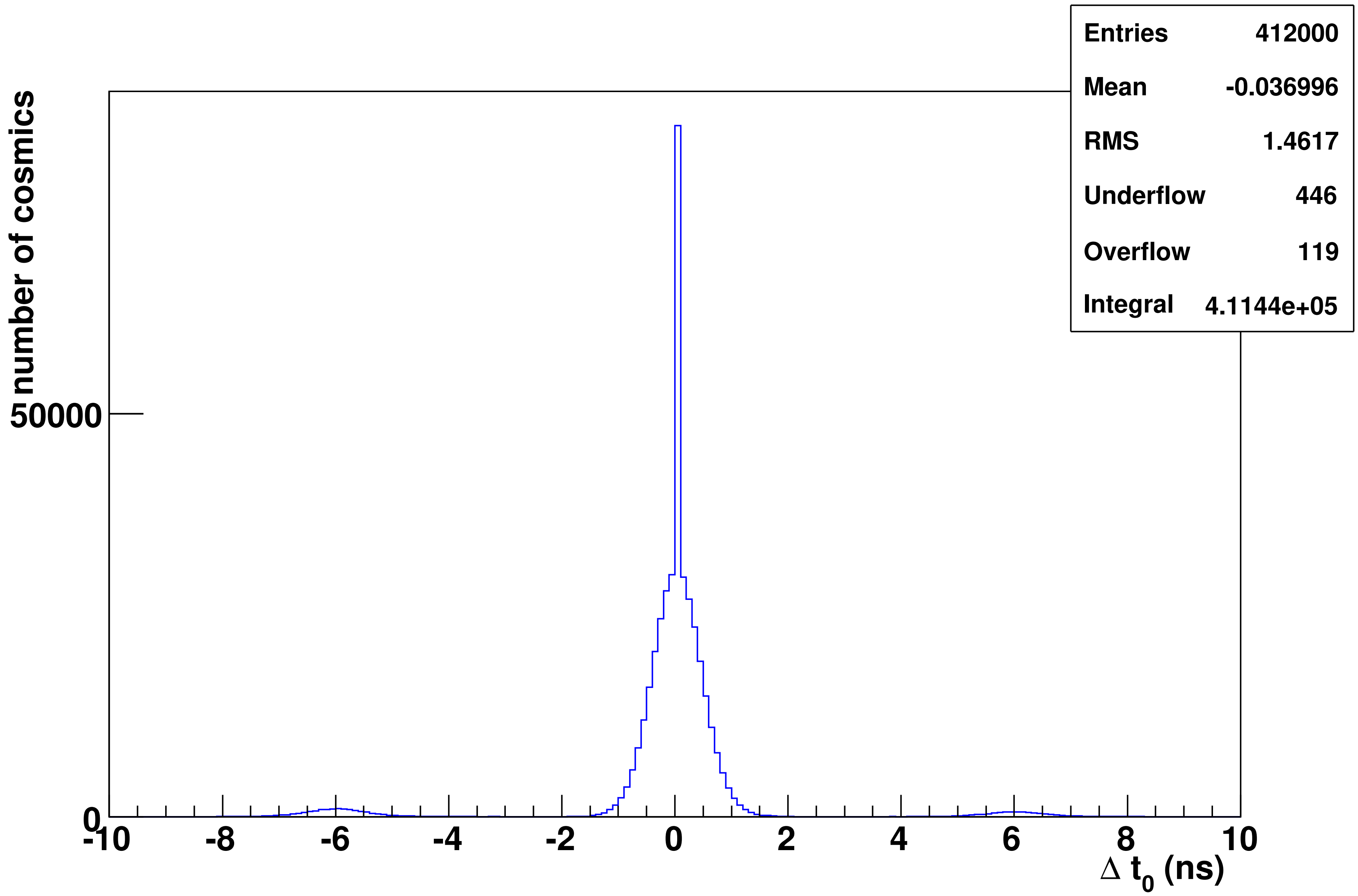


Entries 412000
Mean 0.11373
RMS 0.99351
Underflow 0
Overflow 0
Integral 4.12e+05
×10^3
number of cosmics
200
100
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge

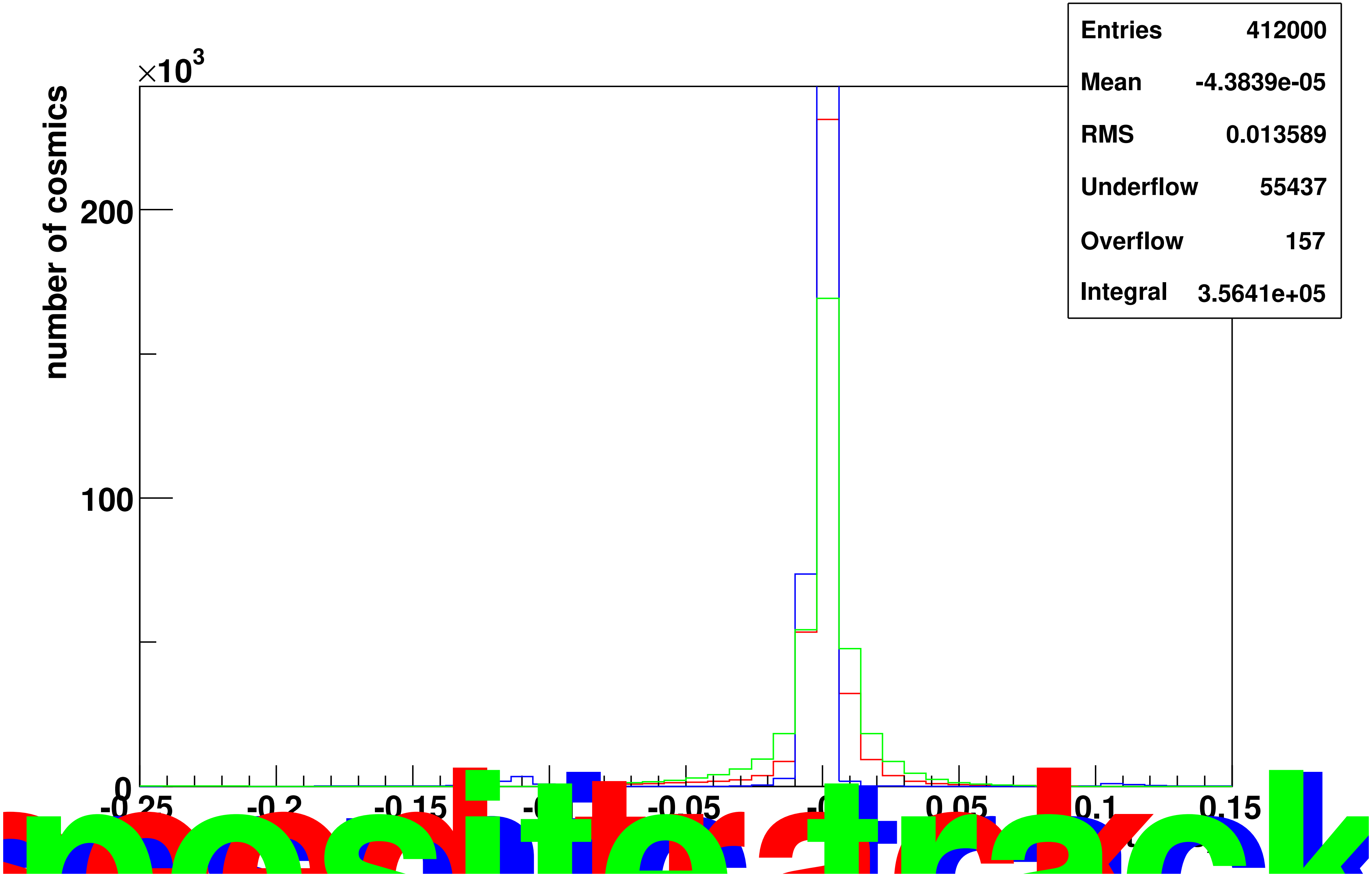


Entries 195060
Mean 6.2311e-08
RMS 6.7177e-05
Underflow 0
Overflow 0
Integral 1.7196e+05
number of alignment cosmics
0
2000
4000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

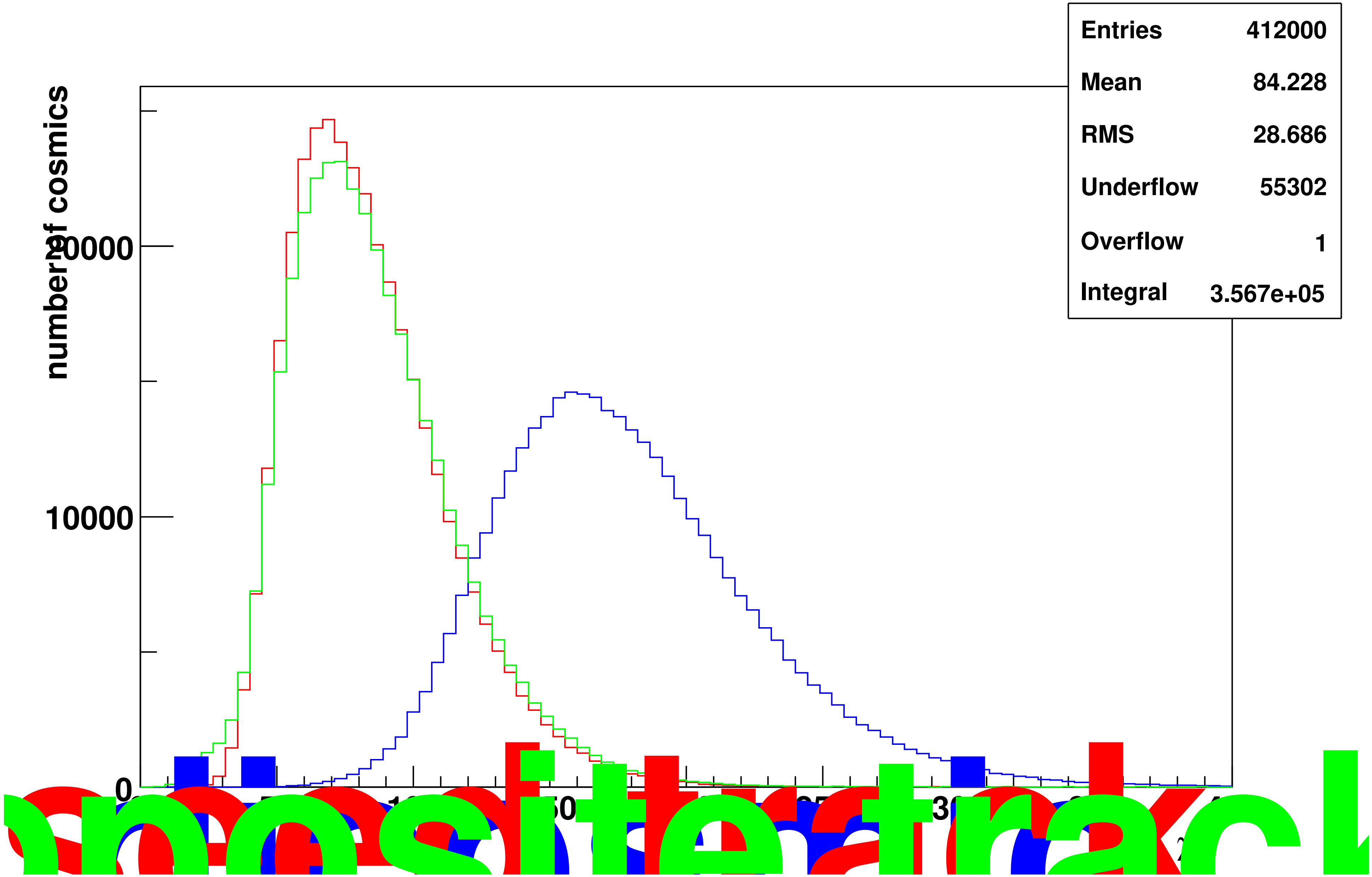

Entries 195060
Mean -0.0012161
RMS 1
Underflow 0
Overflow 0
Integral 1.7201e+05
number of alignment cosmics
50000
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge

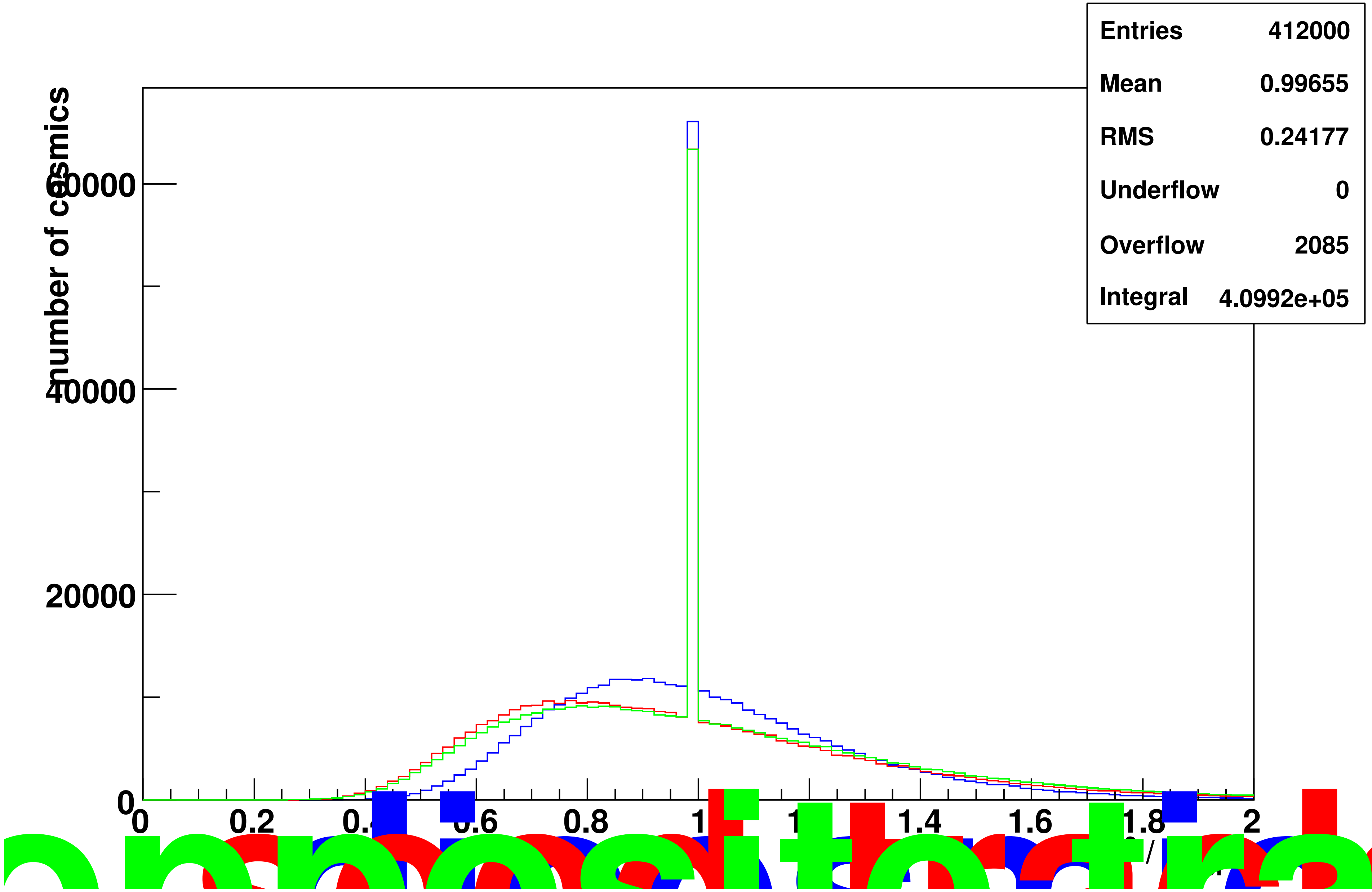


Entries 412000
Mean -0.036996
RMS 1.4617
Underflow 446
Overflow 119
Integral 4.1144e+05
number of cosmics
50000
0
-10
-8
-6
-4
-2
0
2
4
6
8
10
Δ t0 (ns)

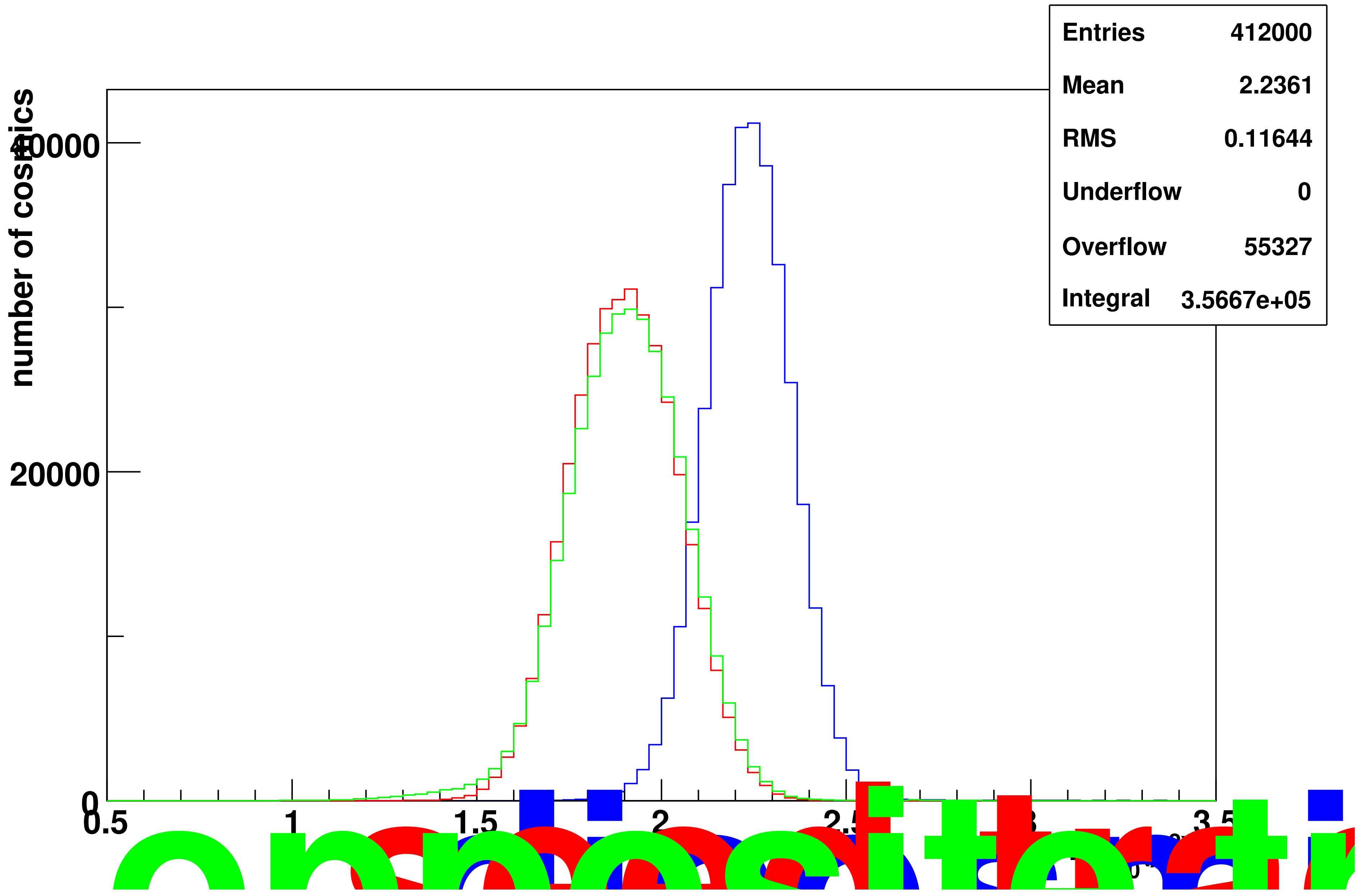


Entries 412000
Mean -4.3839e-05
RMS 0.013589
Underflow 55437
Overflow 157
Integral 3.5641e+05
×10^3
number of cosmics
200
100
0
-0.25
-0.2
-0.15
-0.05
0.05
0.1
0.15

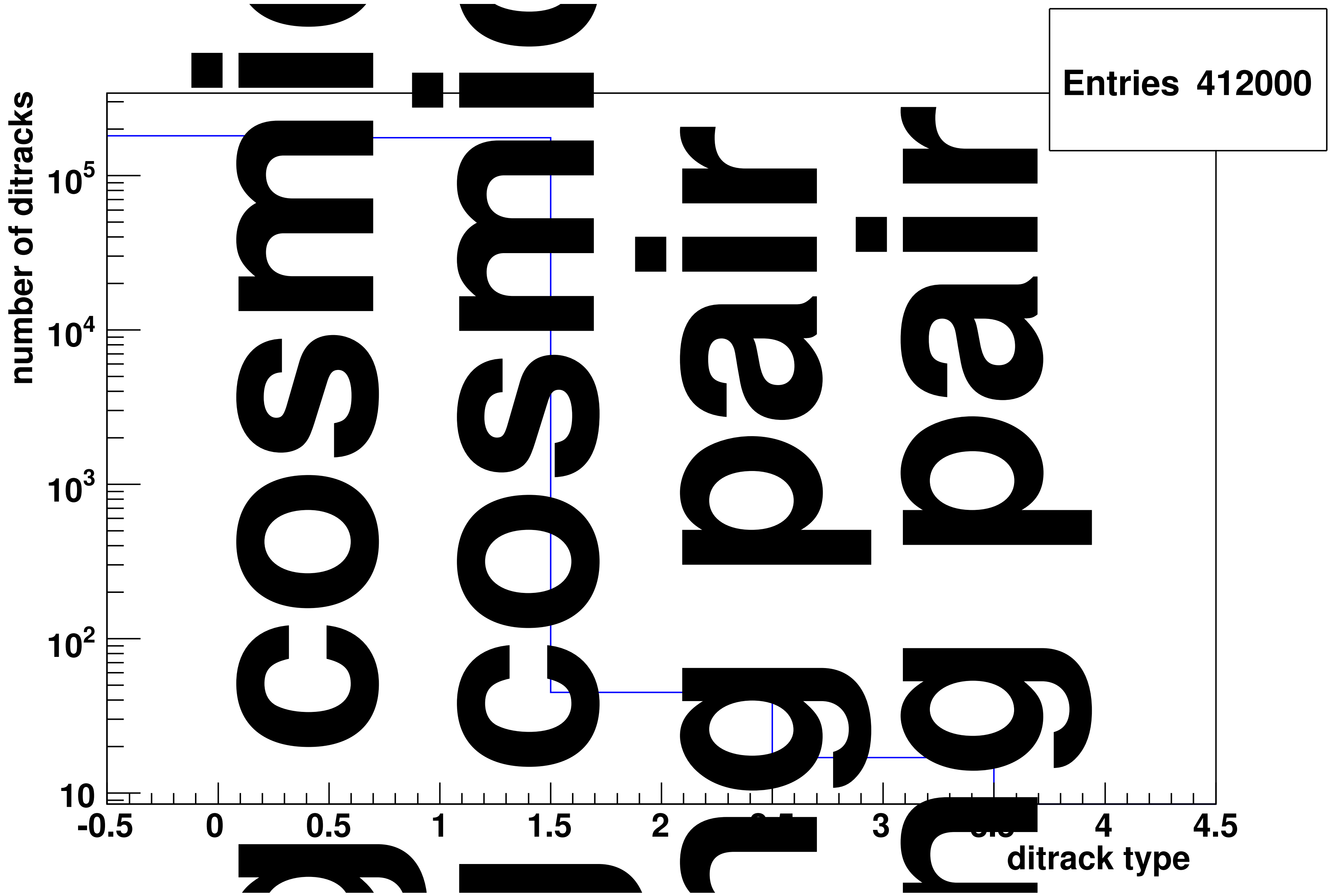

Entries 412000
Mean 84.228
RMS 28.686
Underflow 55302
Overflow 1
Integral 3.567e+05
number of cosmics
10000
0

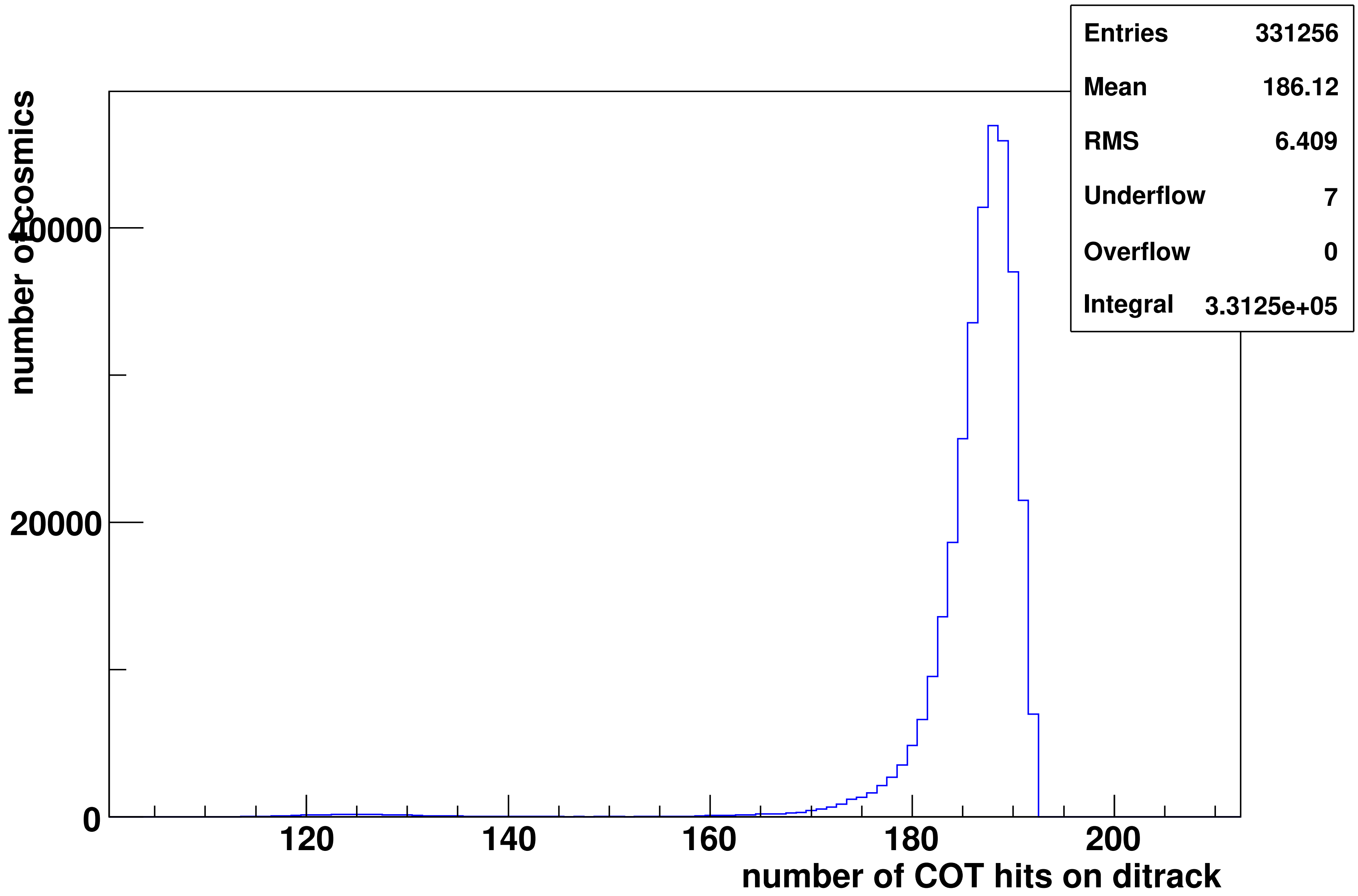


Entries 412000
Mean 0.99655
RMS 0.24177
Underflow 0
Overflow 2085
Integral 4.0992e+05
number of cosmics
60000
40000
20000
0
0
0.2
0.6
0.8
1
1.4
1.6
1.8
2

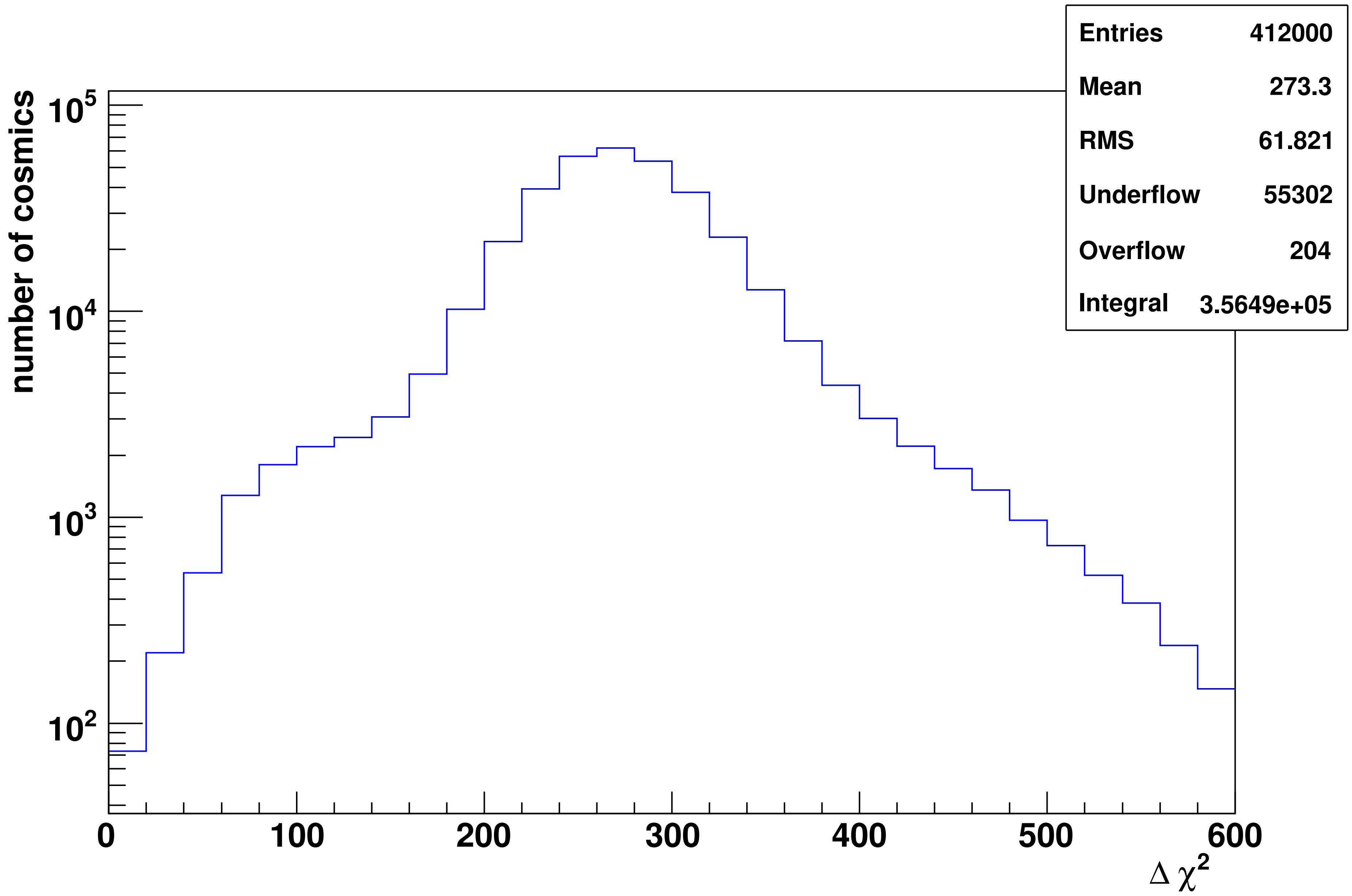


Entries 412000
Mean 2.2361
RMS 0.11644
Underflow 0
Overflow 55327
Integral 3.5667e+05
number of cosmics
40000
20000
0
0.5
1
1.5
2
2.5
3
3.5

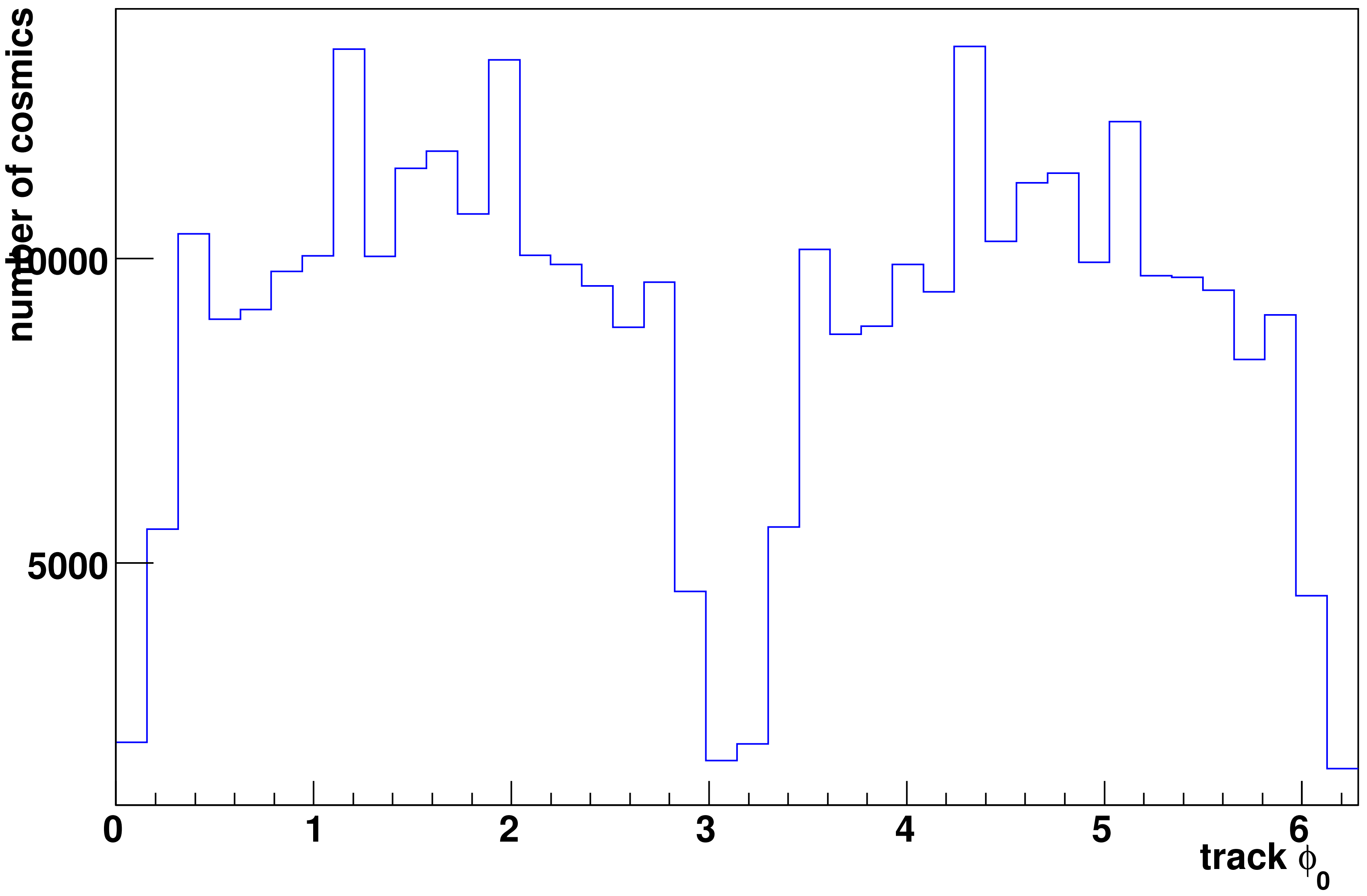

Entries 412000
number of ditracks
ditrack type



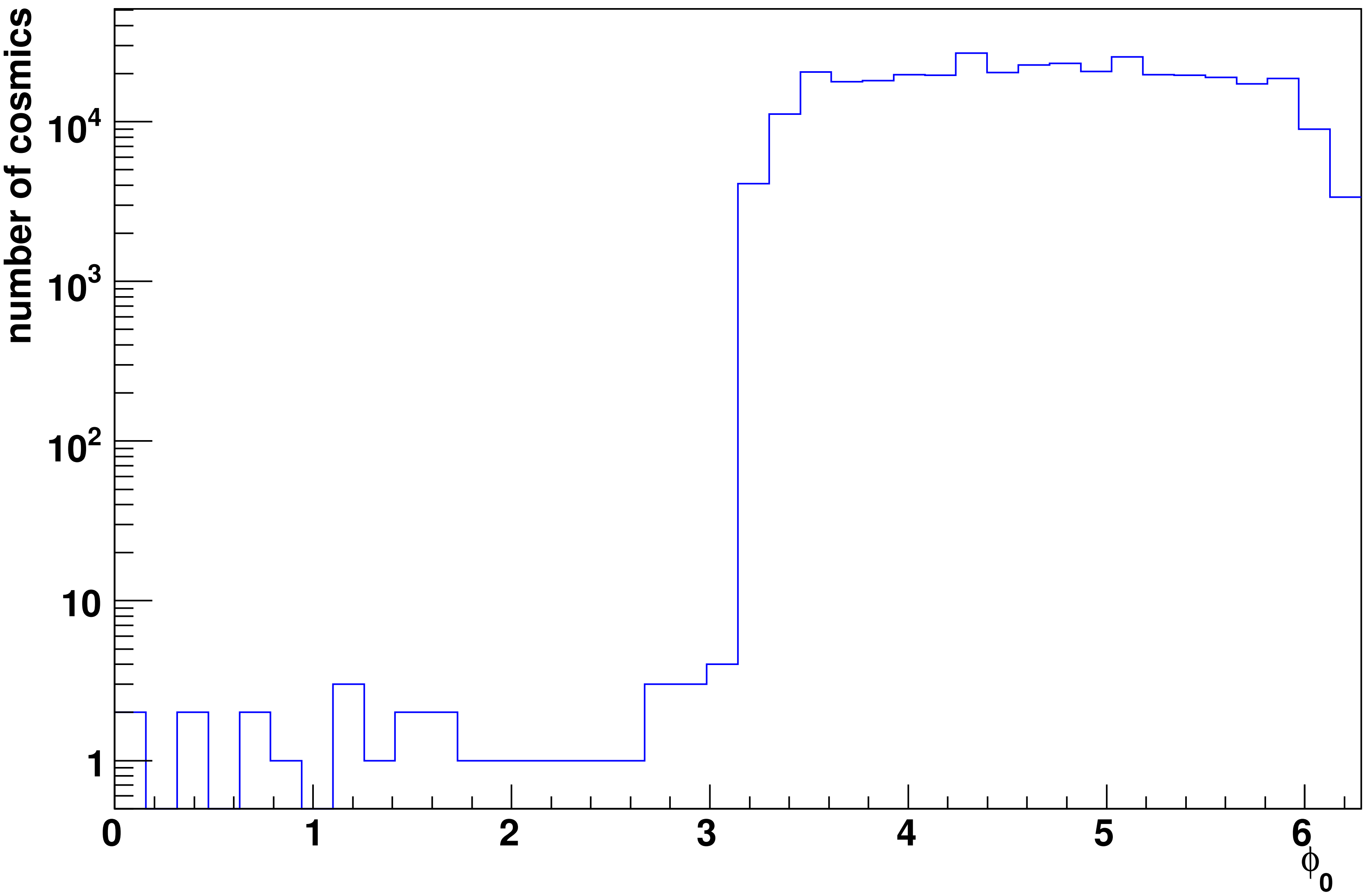
Entries 331256
Mean 186.12
RMS 6.409
Underflow 7
Overflow 0
Integral 3.3125e+05
number of cosmics
0
20000
40000
120
140
160
180
200
number of COT hits on ditrack



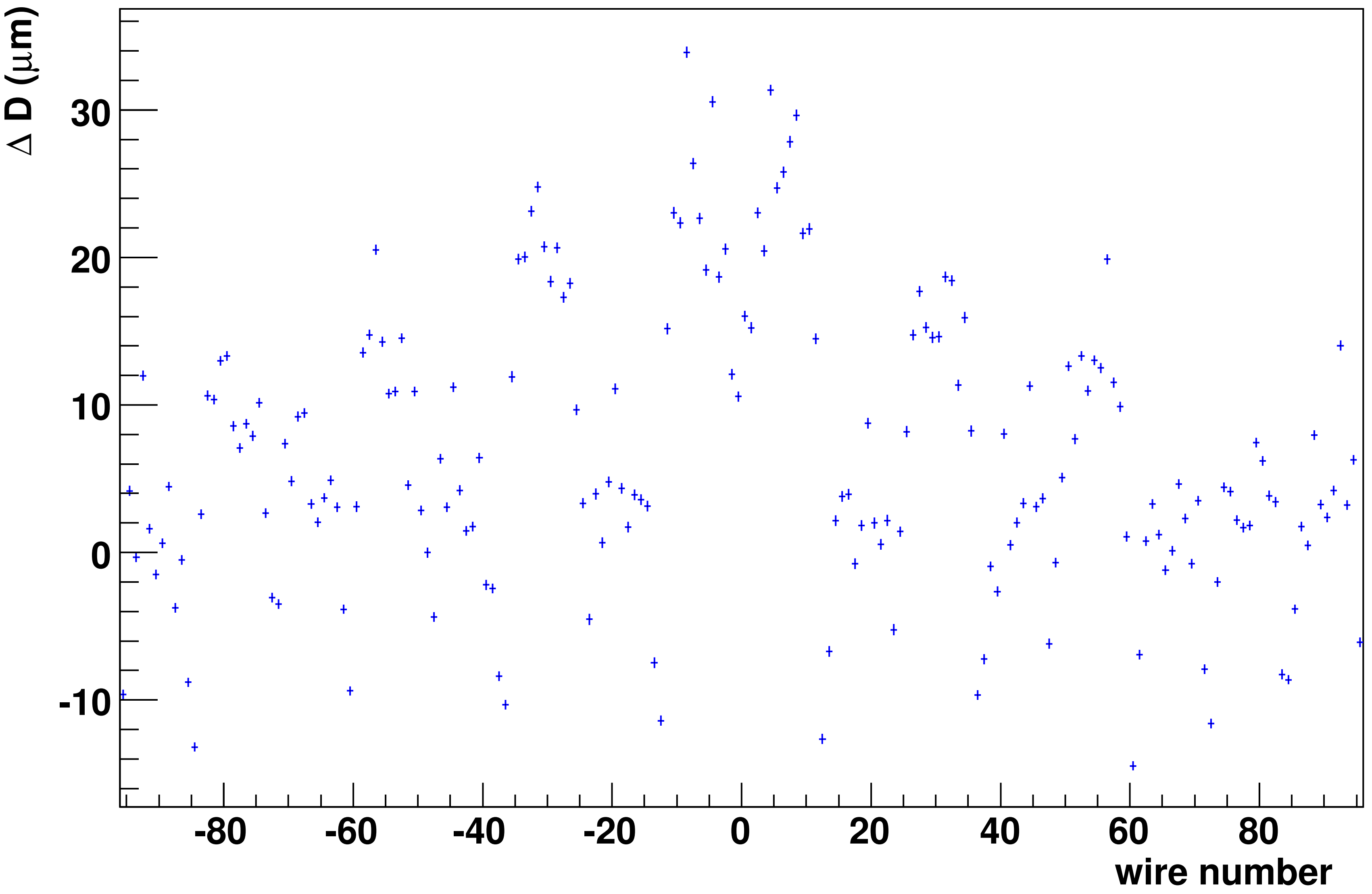
Entries 412000
Mean 273.3
RMS 61.821
Underflow 55302
Overflow 204
Integral 3.5649e+05
number of cosmics
10^5
10^4
10^3
10^2
0
100
200
300
400
500
600
$\Delta\chi^2$



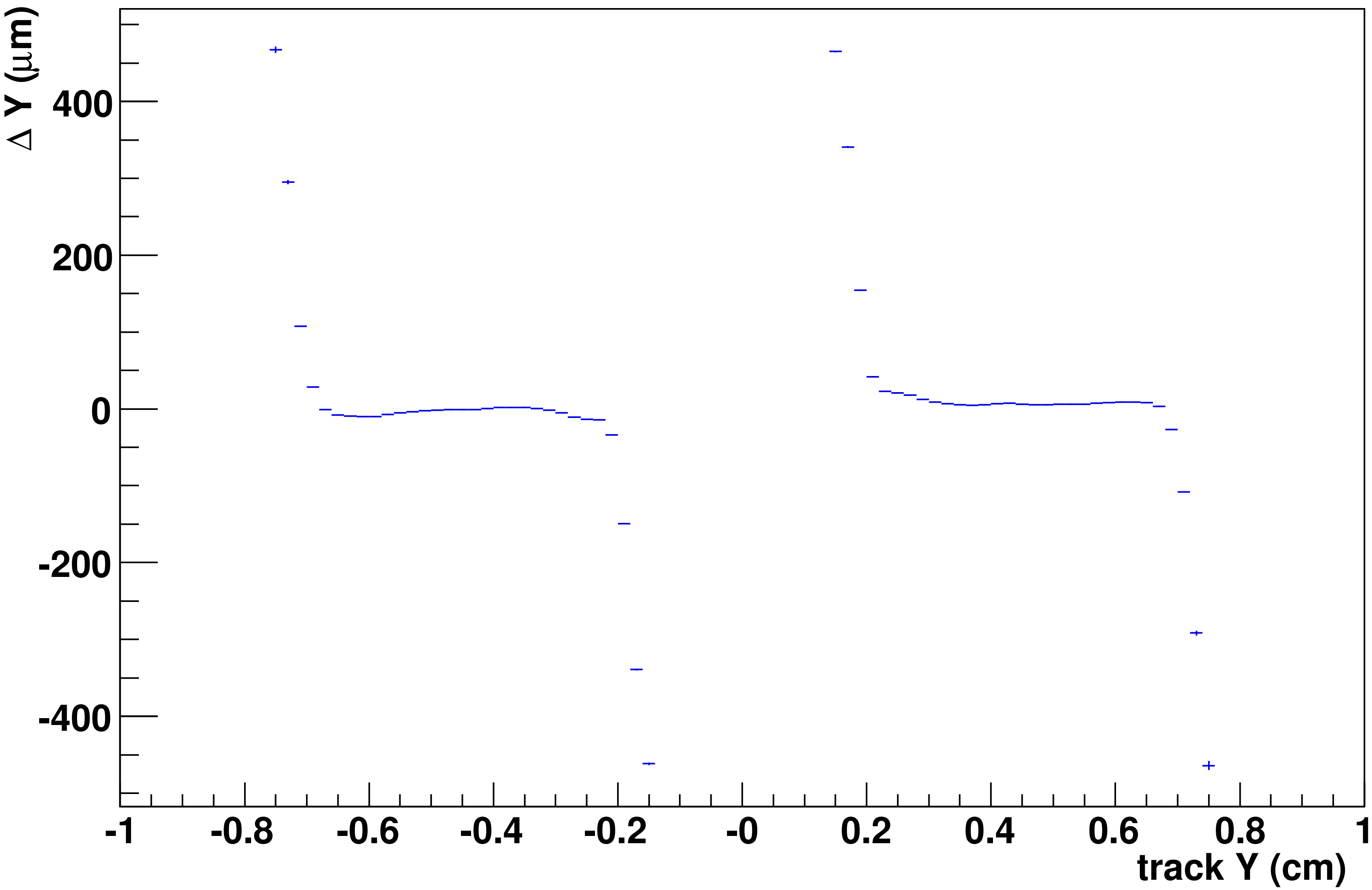
number of cosmics
10000
5000
0
1
2
3
4
5
6
track ϕ_0



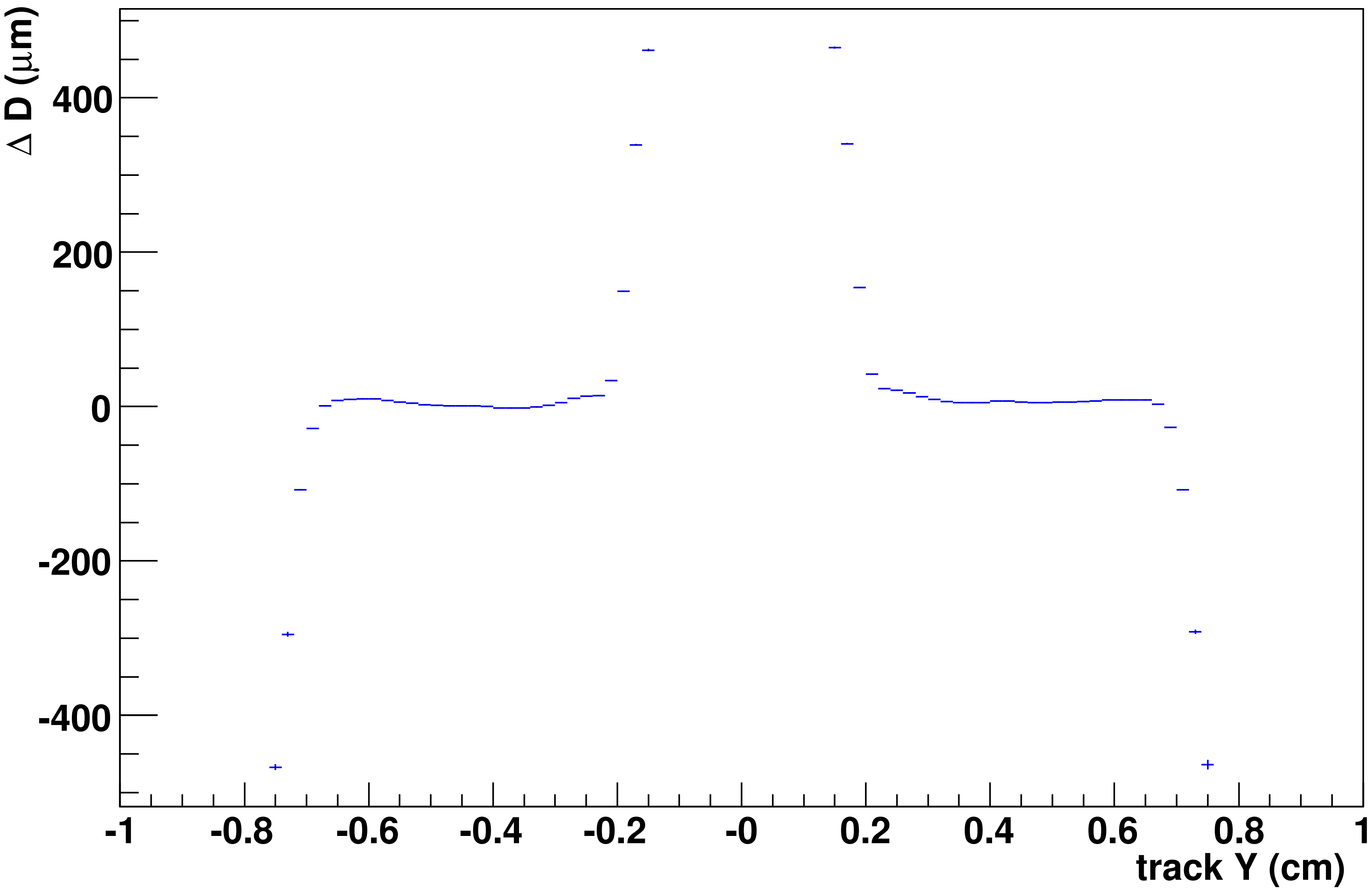
number of cosmics
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
ϕ_0



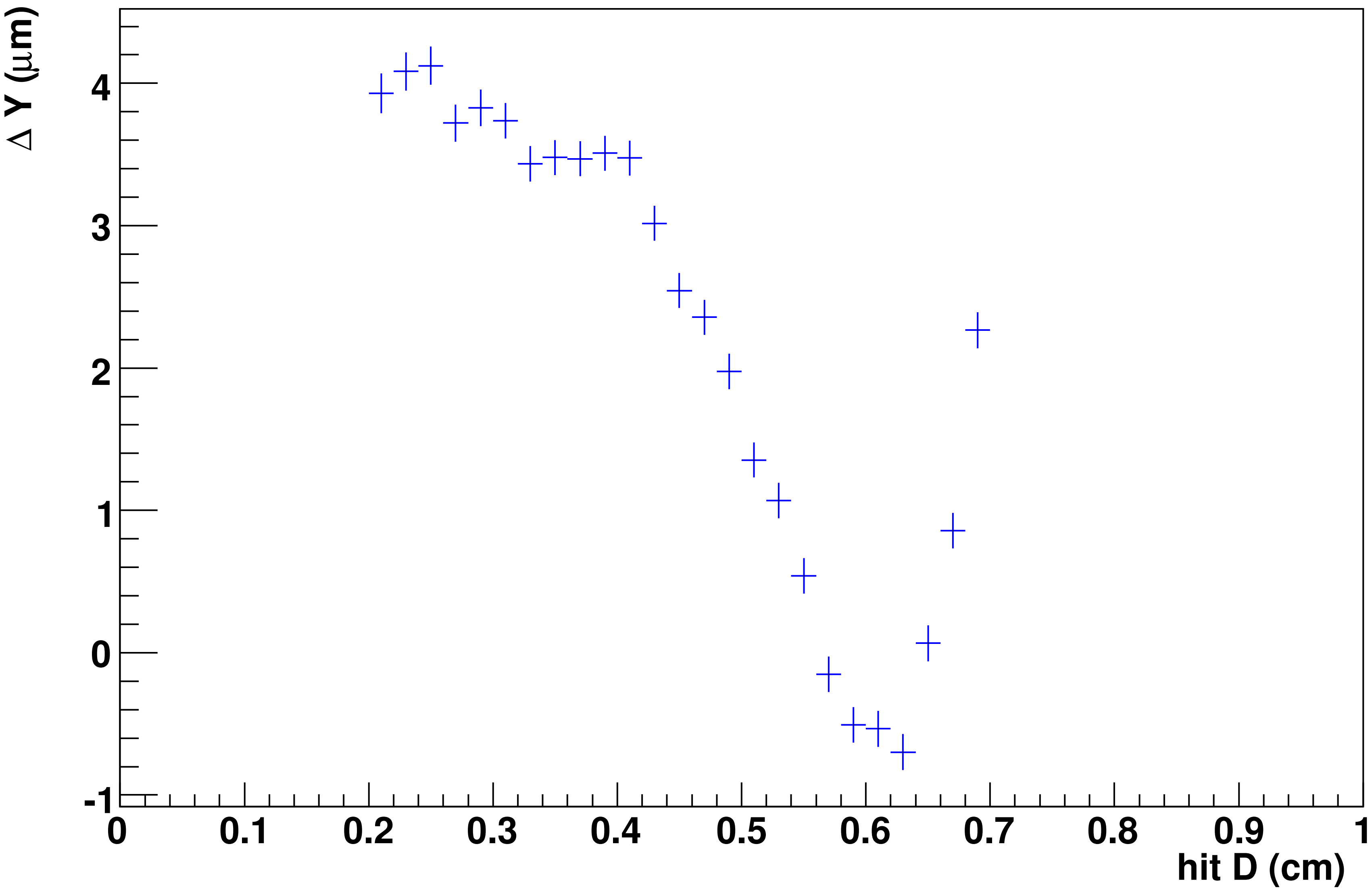
Δ D (μm)
30
20
10
0
-10
-80
-60
-40
-20
0
20
40
60
80
wire number



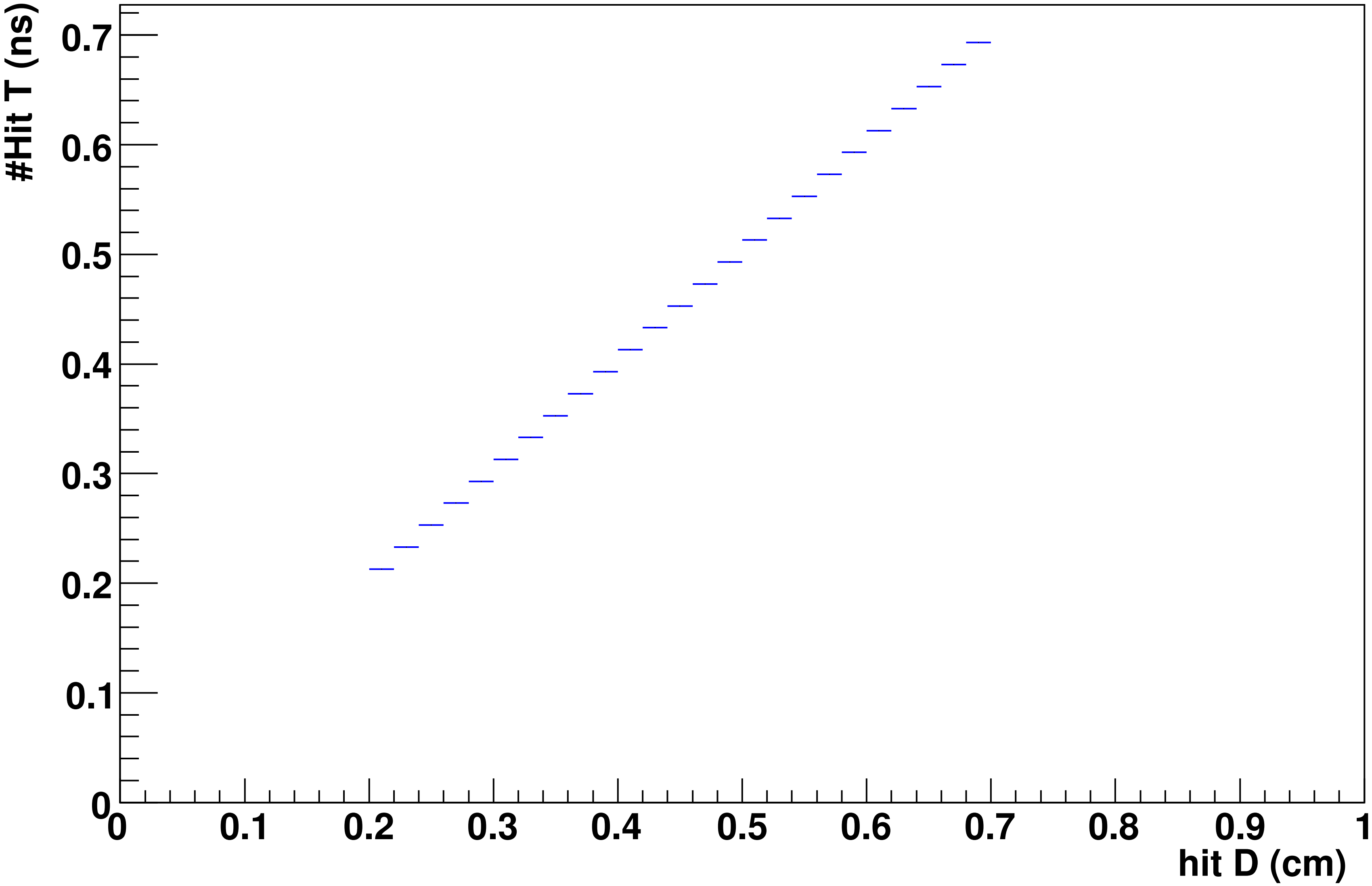
Δ Y (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)



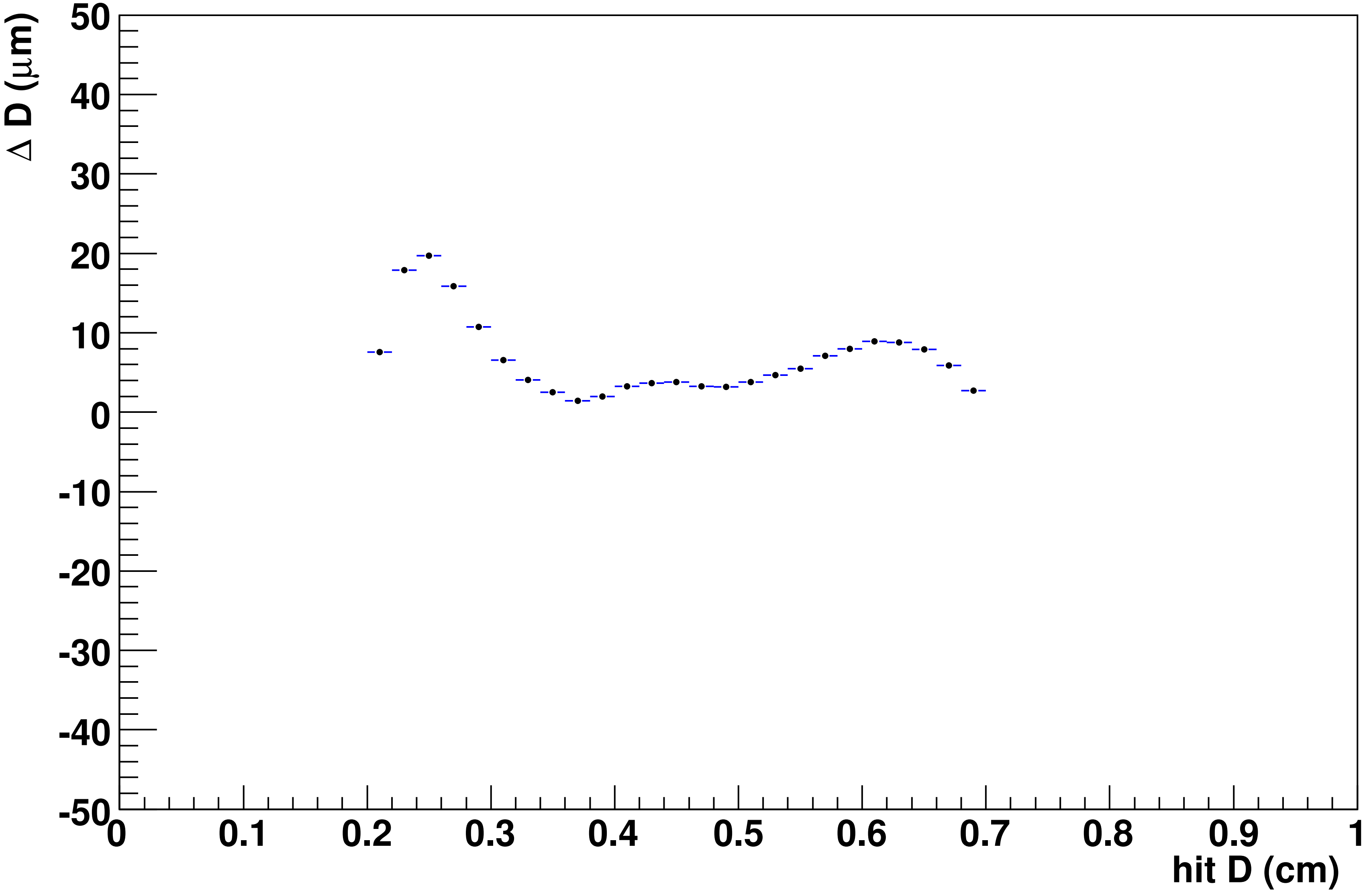
Δ D (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)



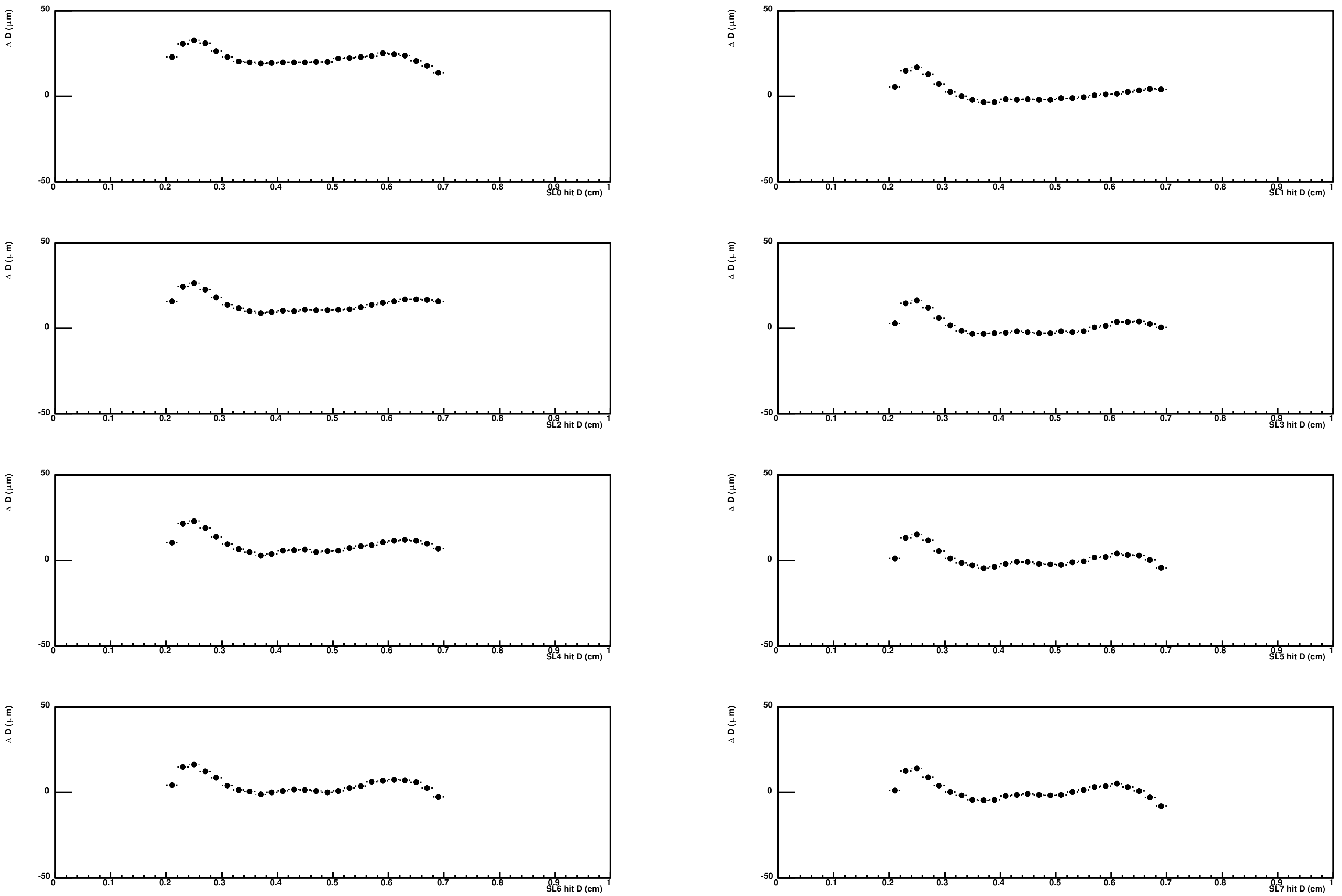
Δ Y (μm)
4
3
2
1
0
-1
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

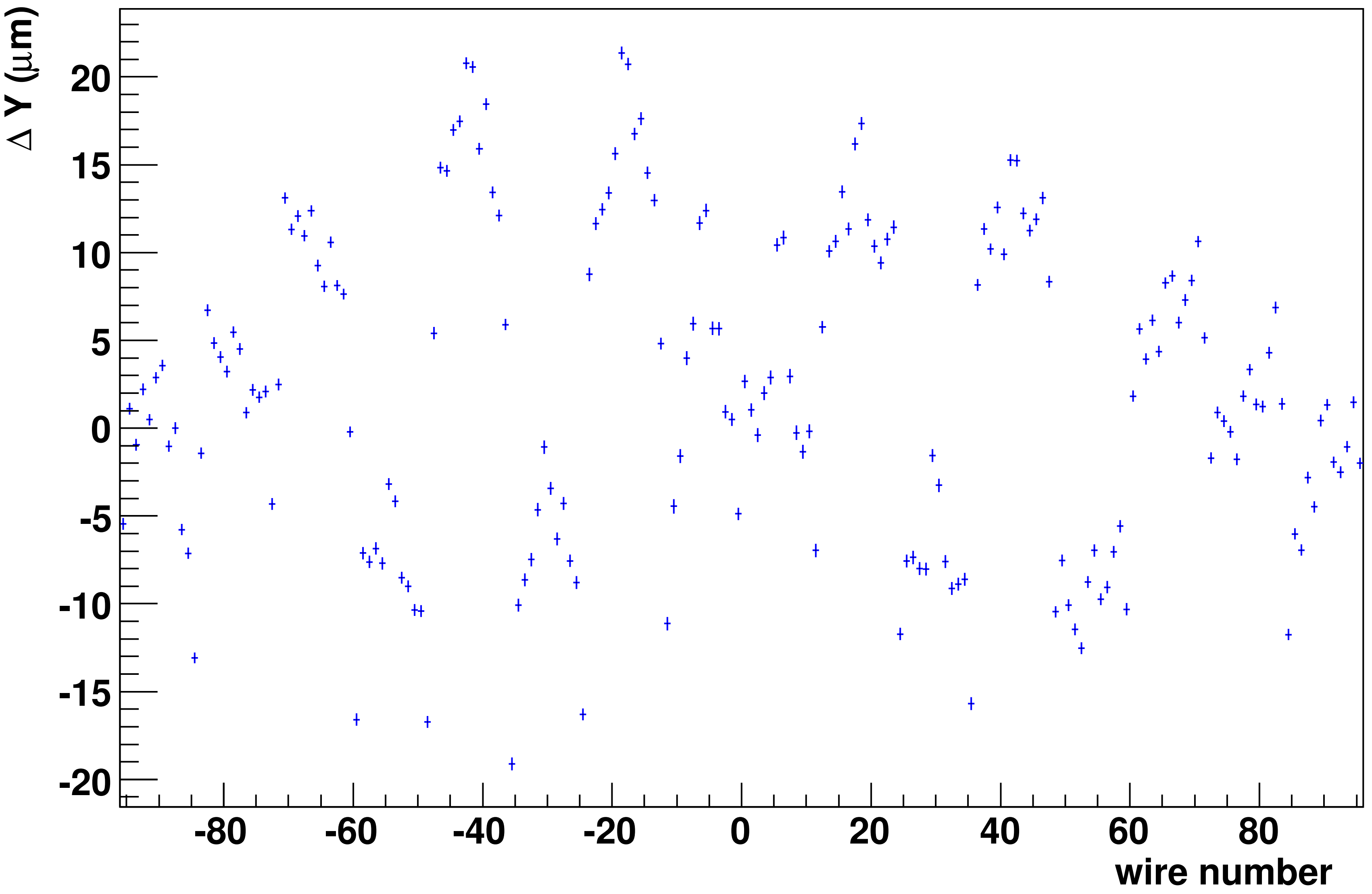


#Hit T (ns)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

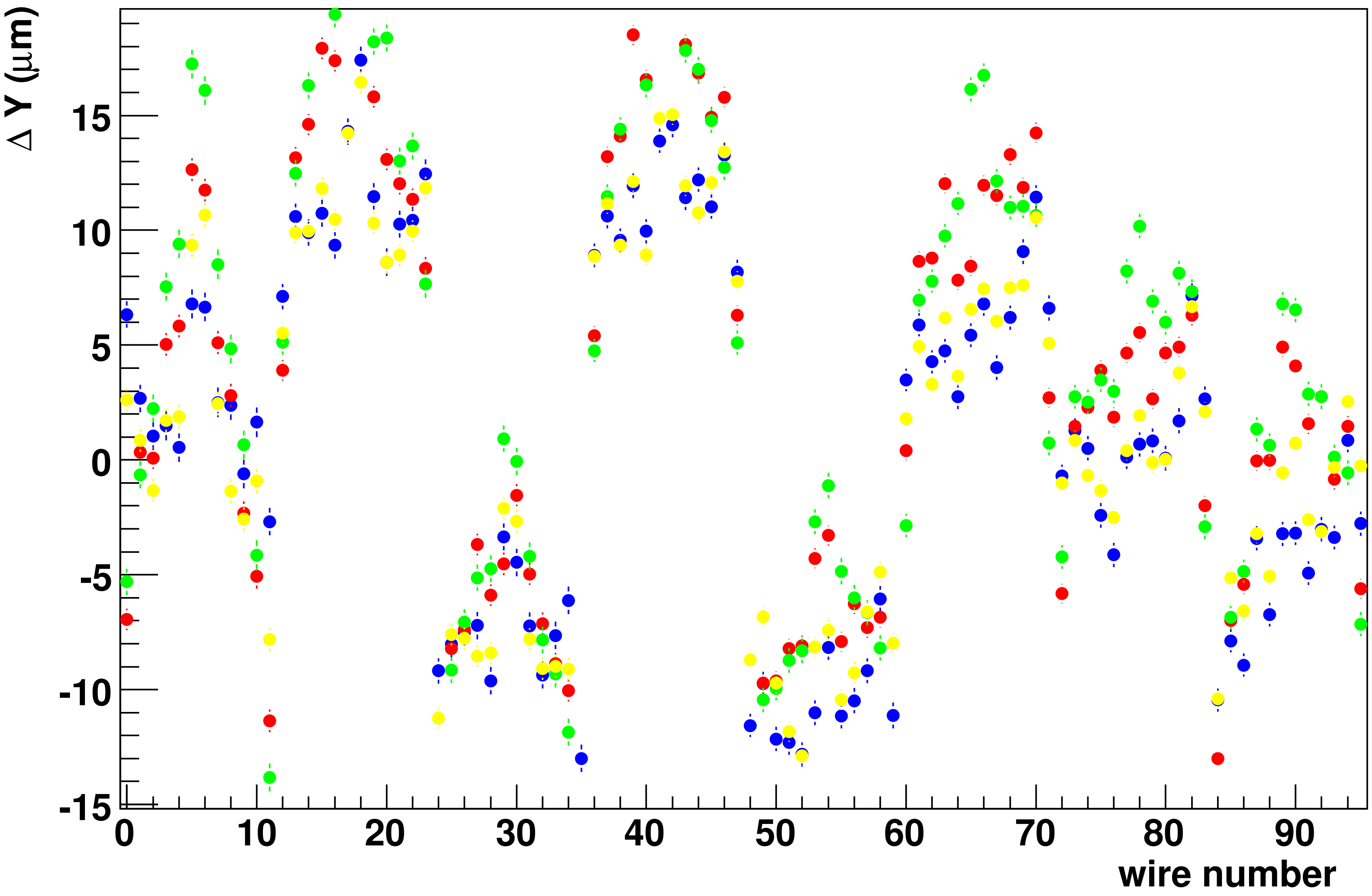


Δ D (μm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

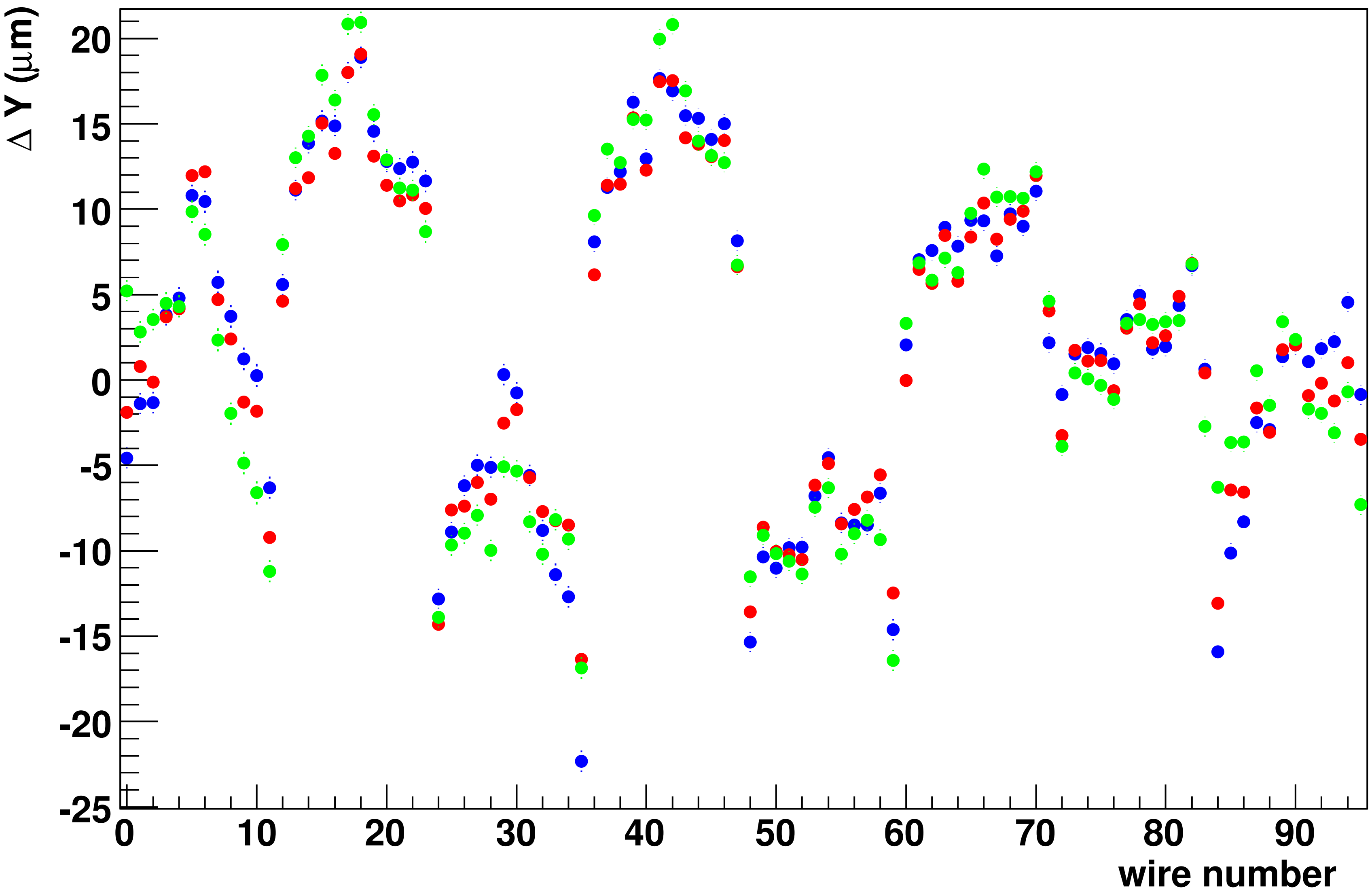

Δ D (μm)
SL0 hit D (cm)
SL1 hit D (cm)
SL2 hit D (cm)
SL3 hit D (cm)
SL4 hit D (cm)
SL5 hit D (cm)
SL6 hit D (cm)
SL7 hit D (cm)



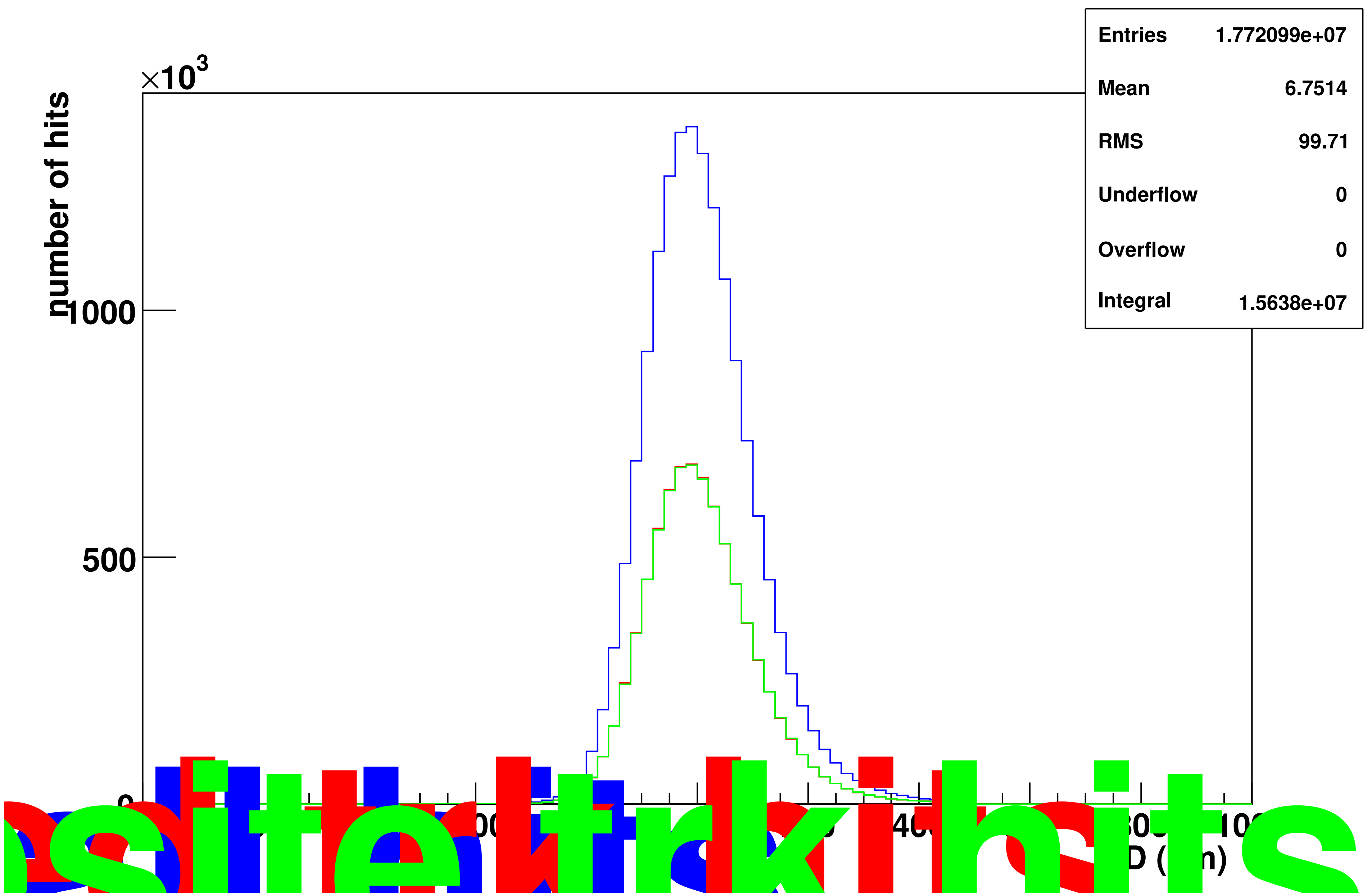
Δ Y (μm)
20
15
10
5
0
-5
-10
-15
-20
-80
-60
-40
-20
0
20
40
60
80
wire number

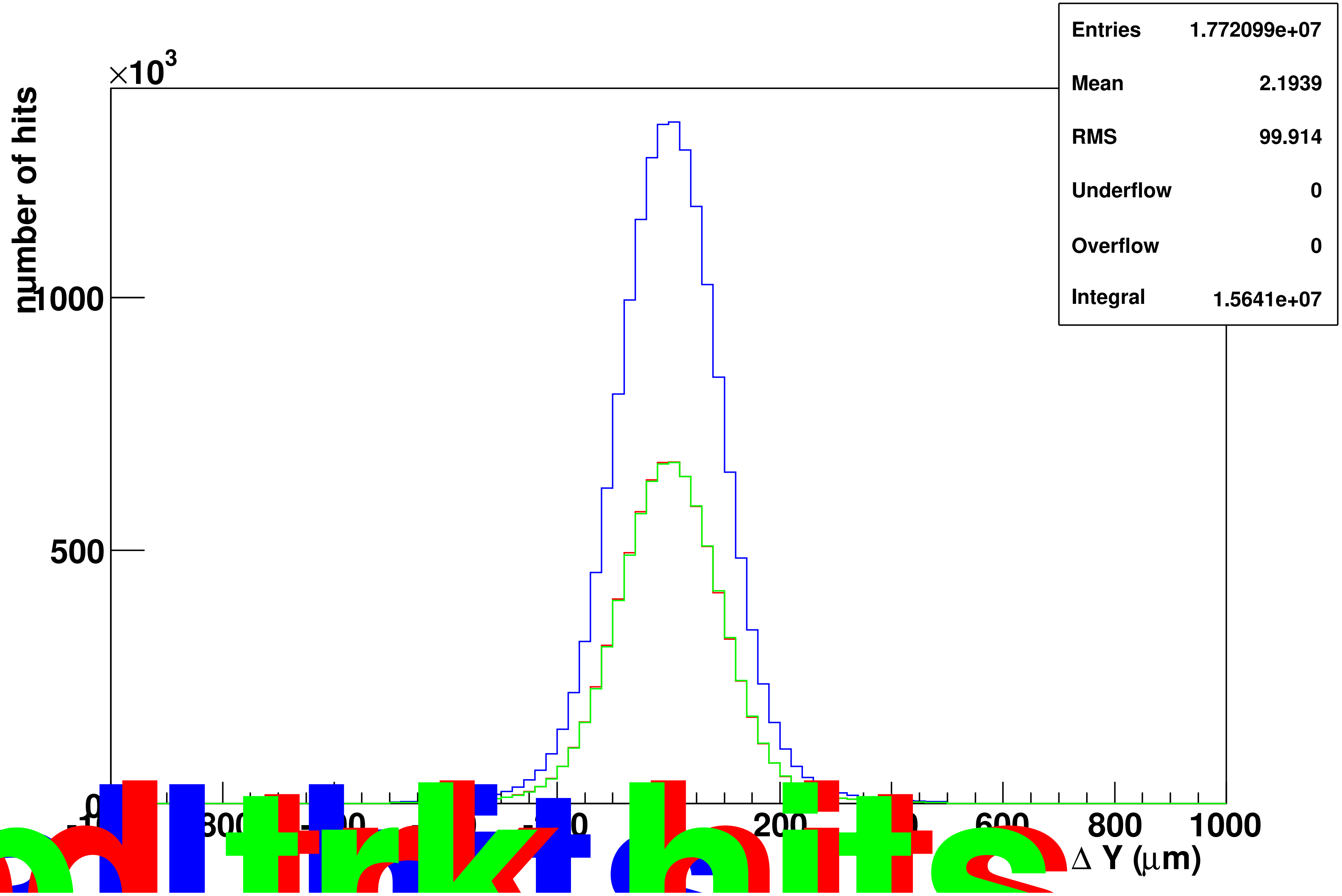


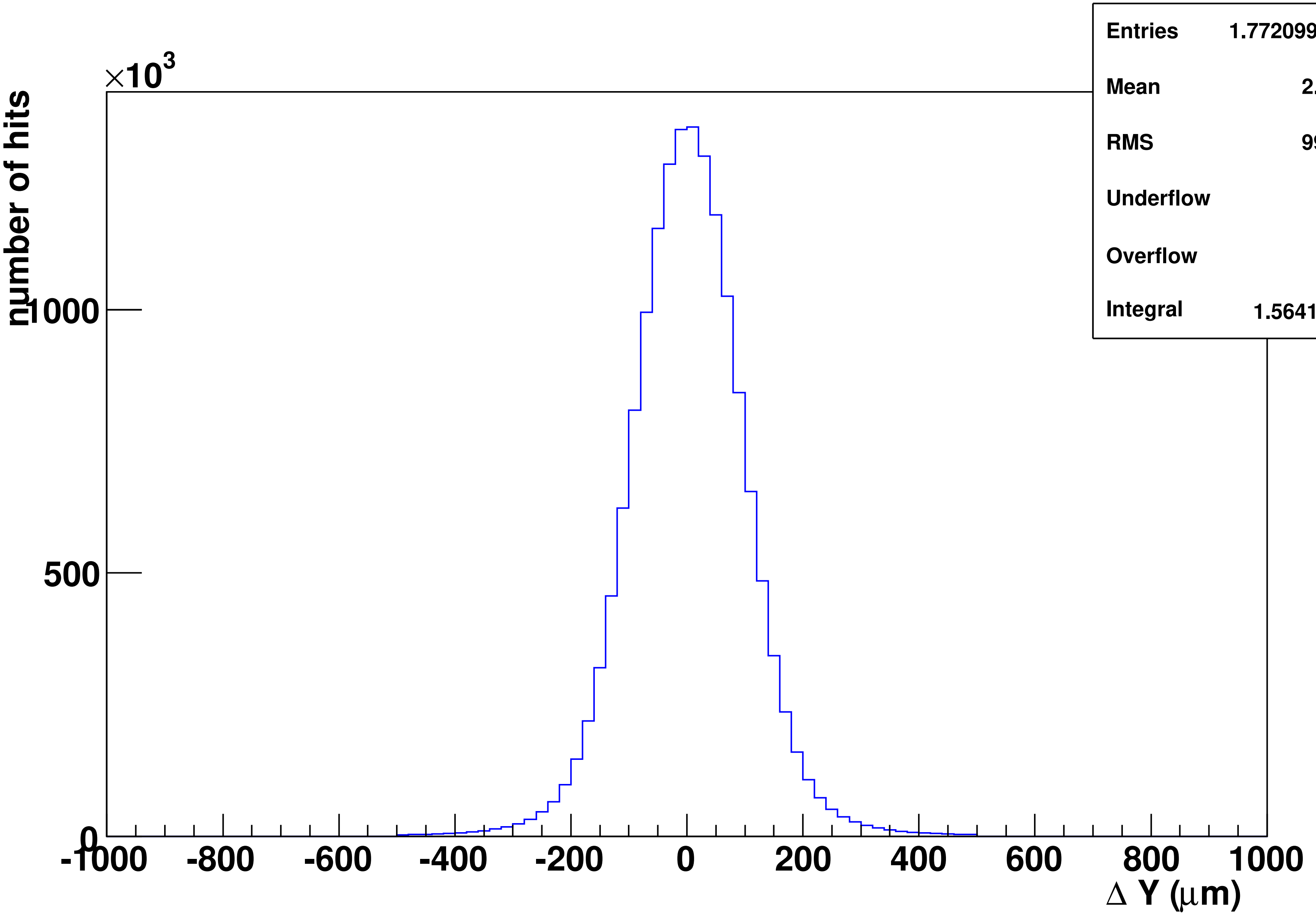
Δ Y (μm)
15
10
5
0
-5
-10
-15
0
10
20
30
40
50
60
70
80
90
wire number



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


×10^3
number of hits
1000
500
0
Entries 1.772099e+07
Mean 6.7514
RMS 99.71
Underflow 0
Overflow 0
Integral 1.5638e+07


Entries 1.772099e+07
Mean 2.1939
RMS 99.914
Underflow 0
Overflow 0
Integral 1.5641e+07
number of hits
×10^3
1000
500
0
200
600
800
1000
Δ Y (μm)



Entries 1.772099e+07
Mean 2.1939
RMS 99.914
Underflow 0
Overflow 0
Integral 1.5641e+07
×10^3
number of hits
1000
500
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000
Δ Y (μm)