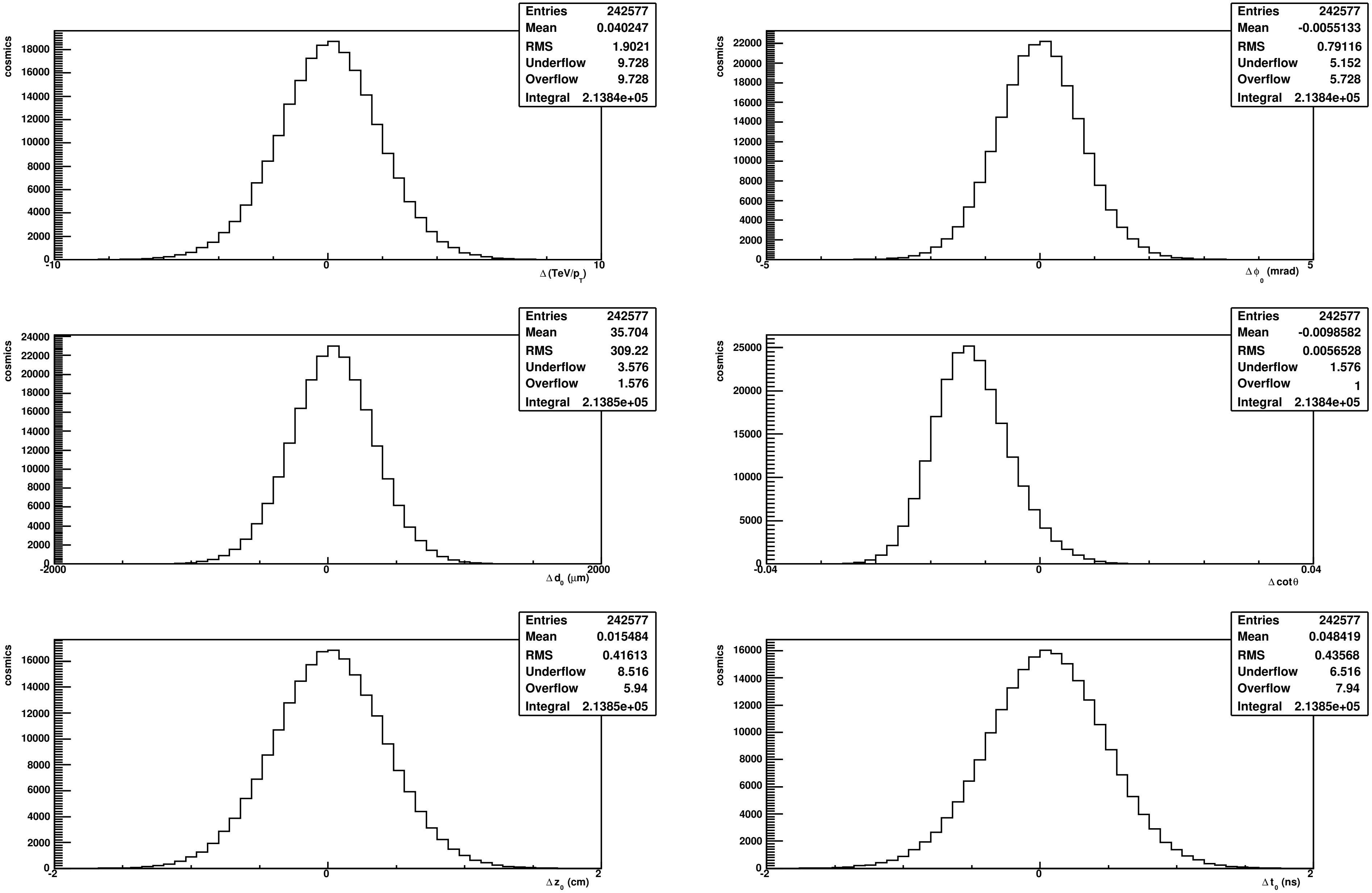
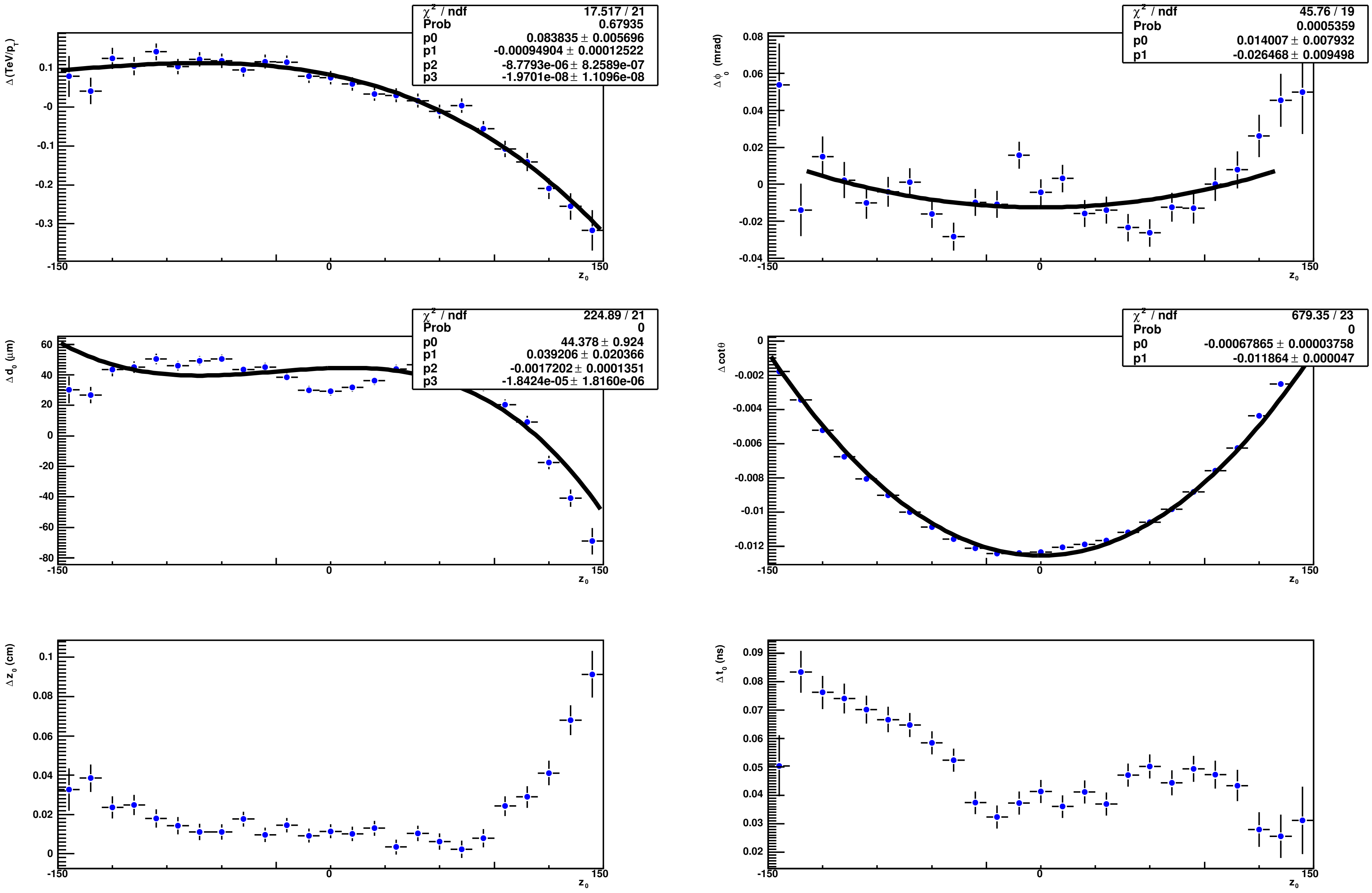
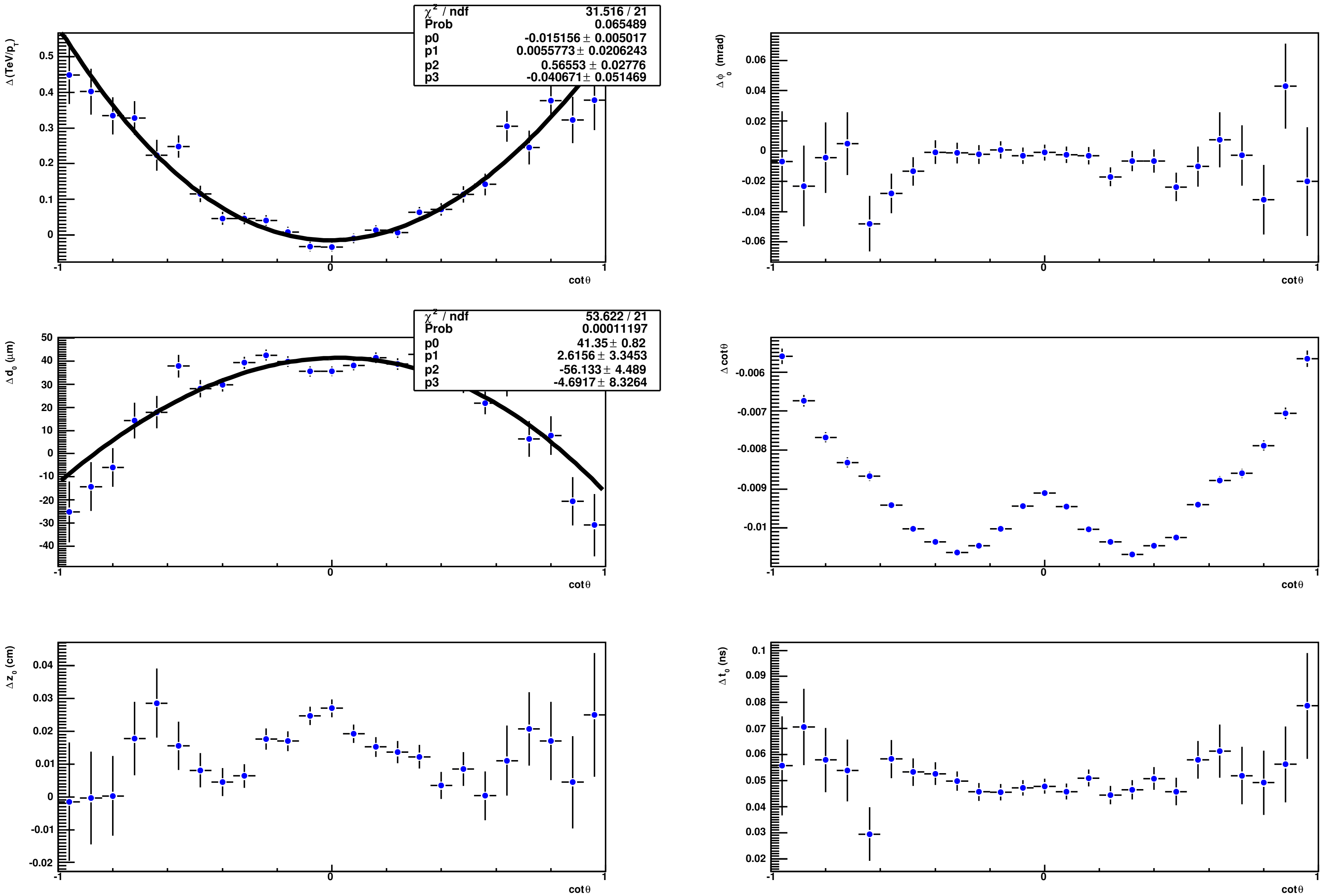
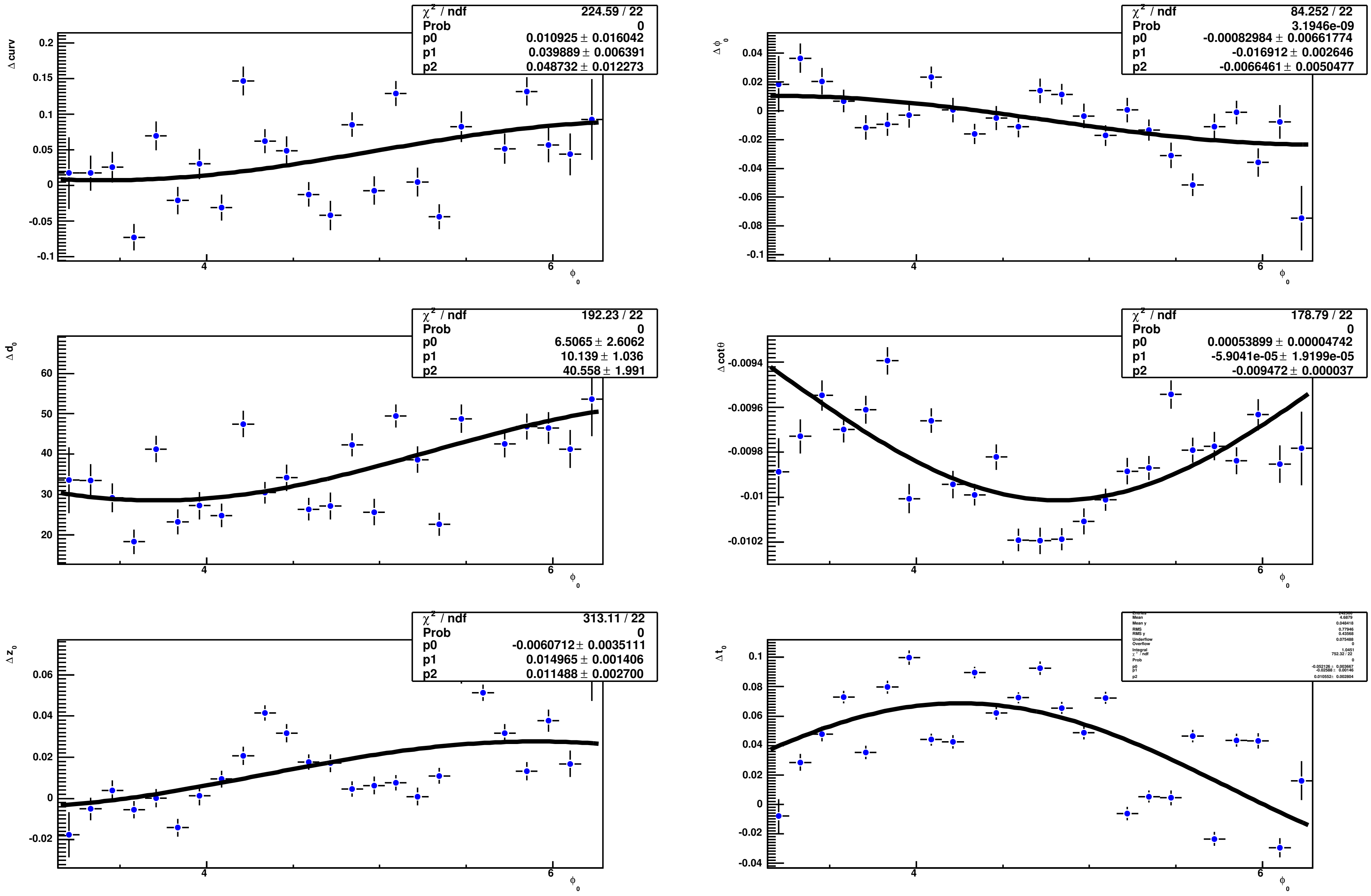


Entries 242577
Mean 0.040247
RMS 1.9021
Underflow 9.728
Overflow 9.728
Integral 2.1384e+05
cosmics
Δ(TeV/p_T)
Entries 242577
Mean -0.0055133
RMS 0.79116
Underflow 5.152
Overflow 5.728
Integral 2.1384e+05
cosmics
Δϕ_0 (mrad)
Entries 242577
Mean 35.704
RMS 309.22
Underflow 3.576
Overflow 1.576
Integral 2.1385e+05
cosmics
Δd_0 (μm)
Entries 242577
Mean -0.0098582
RMS 0.0056528
Underflow 1.576
Overflow 1
Integral 2.1384e+05
cosmics
Δcotθ
Entries 242577
Mean 0.015484
RMS 0.41613
Underflow 8.516
Overflow 5.94
Integral 2.1385e+05
cosmics
Δz_0 (cm)
Entries 242577
Mean 0.048419
RMS 0.43568
Underflow 6.516
Overflow 7.94
Integral 2.1385e+05
cosmics
Δt_0 (ns)

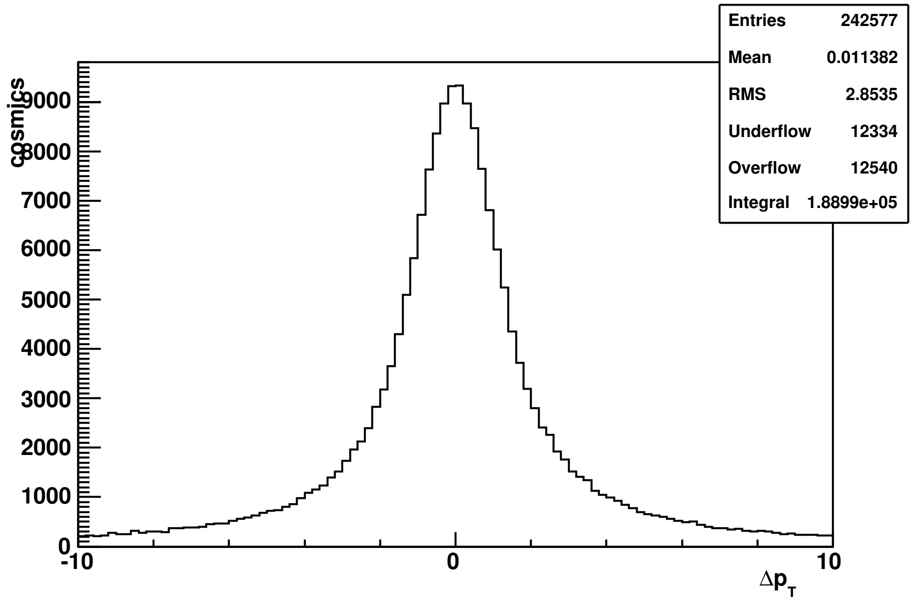

χ² / ndf 17.517 / 21
Prob 0.67935
p0 0.083835 ± 0.005696
p1 -0.00094904 ± 0.00012522
p2 -8.7793e-06 ± 8.2589e-07
p3 -1.9701e-08 ± 1.1096e-08
Δ(TeV/p_T)
z_0
χ² / ndf 45.76 / 19
Prob 0.0005359
p0 0.014007 ± 0.007932
p1 -0.026468 ± 0.009498
Δφ_0 (mrad)
z_0
χ² / ndf 224.89 / 21
Prob 0
p0 44.378 ± 0.924
p1 0.039206 ± 0.020366
p2 -0.0017202 ± 0.0001351
p3 -1.8424e-05 ± 1.8160e-06
Δd_0 (μm)
z_0
χ² / ndf 679.35 / 23
Prob 0
p0 -0.00067865 ± 0.00003758
p1 -0.011864 ± 0.000047
Δcotθ
z_0
Δz_0 (cm)
z_0
Δt_0 (ns)
z_0

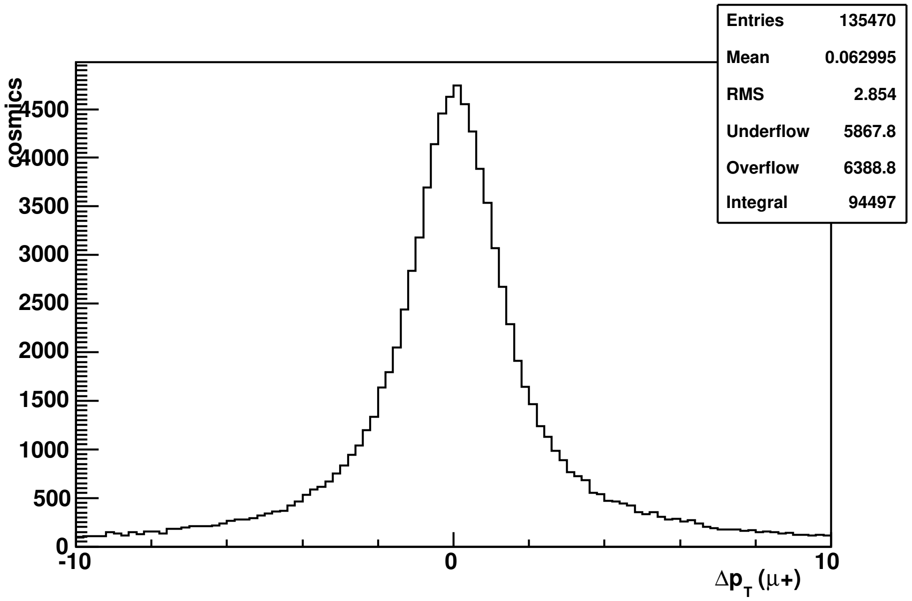


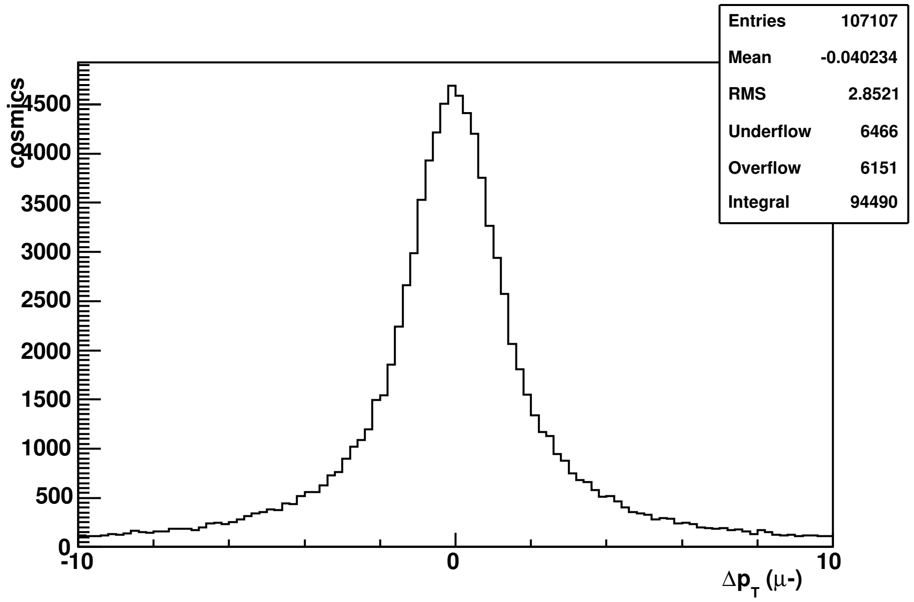
χ^2 / ndf 31.516 / 21
Prob 0.065489
p0 -0.015156 ± 0.005017
p1 0.0055773 ± 0.0206243
p2 0.56553 ± 0.02776
p3 -0.040671 ± 0.051469
Δ(TeV/p_T)
$\Delta\phi_0$ (mrad)
χ^2 / ndf 53.622 / 21
Prob 0.00011197
p0 41.35 ± 0.82
p1 2.6156 ± 3.3453
p2 -56.133 ± 4.489
p3 -4.6917 ± 8.3264
Δd_0 (μm)
Δ cotθ
Δz_0 (cm)
Δt_0 (ns)
cotθ

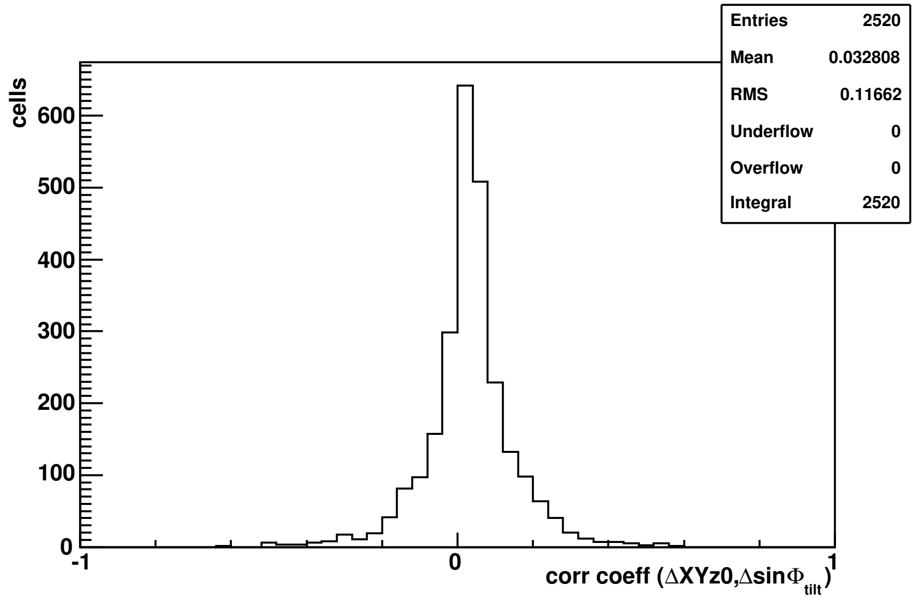


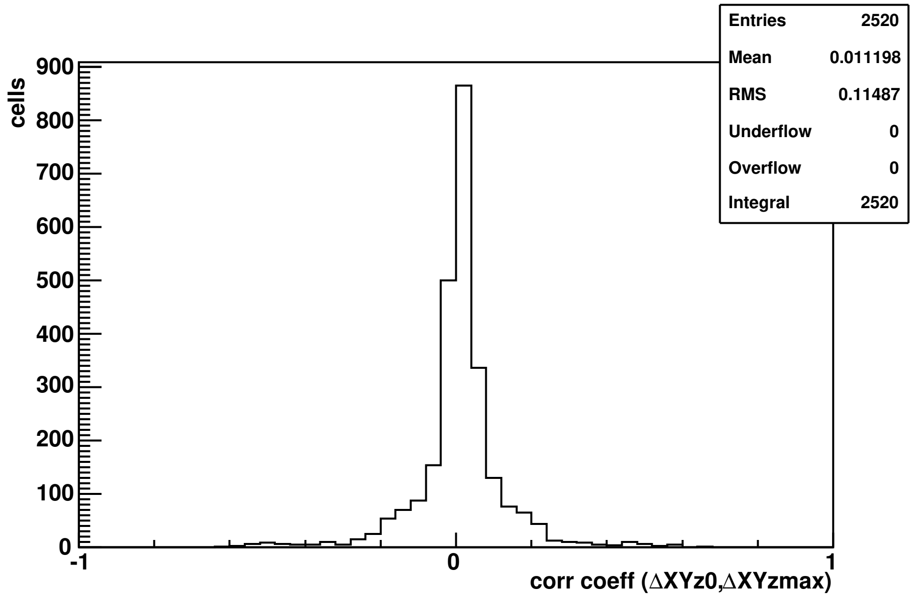
χ2 / ndf 224.59 / 22
Prob 0
p0 0.010925 ± 0.016042
p1 0.039889 ± 0.006391
p2 0.048732 ± 0.012273
Δ curv
φ0
χ2 / ndf 84.252 / 22
Prob 3.1946e-09
p0 -0.00082984 ± 0.00661774
p1 -0.016912 ± 0.002646
p2 -0.0066461 ± 0.0050477
Δ φ0
φ0
χ2 / ndf 192.23 / 22
Prob 0
p0 6.5065 ± 2.6062
p1 10.139 ± 1.036
p2 40.558 ± 1.991
Δ d0
φ0
χ2 / ndf 178.79 / 22
Prob 0
p0 0.00053899 ± 0.00004742
p1 -5.9041e-05 ± 1.9199e-05
p2 -0.009472 ± 0.000037
Δ cotθ
φ0
χ2 / ndf 313.11 / 22
Prob 0
p0 -0.0060712 ± 0.0035111
p1 0.014965 ± 0.001406
p2 0.011488 ± 0.002700
Δ z0
φ0
Δ t0
φ0

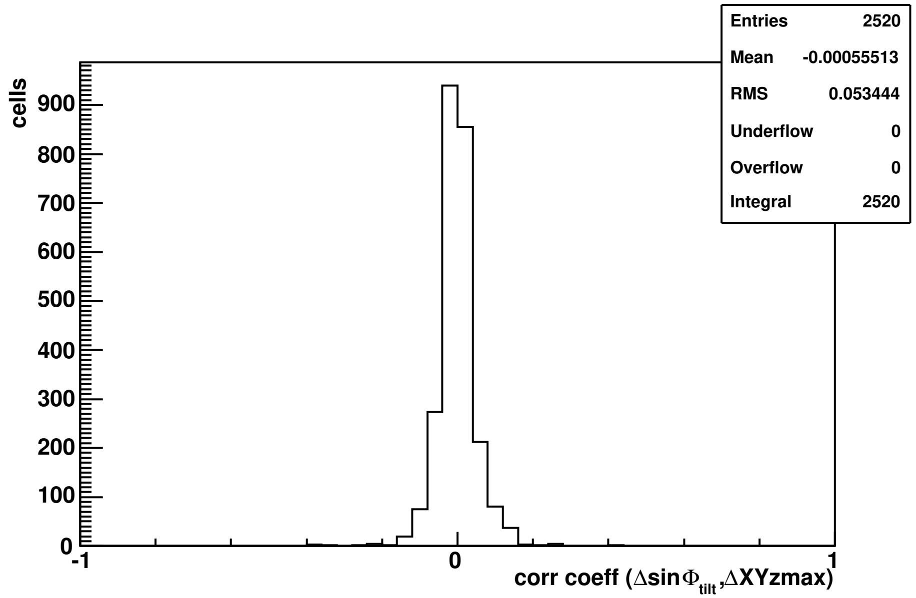

Entries 242577
Mean 0.011382
RMS 2.8535
Underflow 12334
Overflow 12540
Integral 1.8899e+05
cosmics
Δp_T

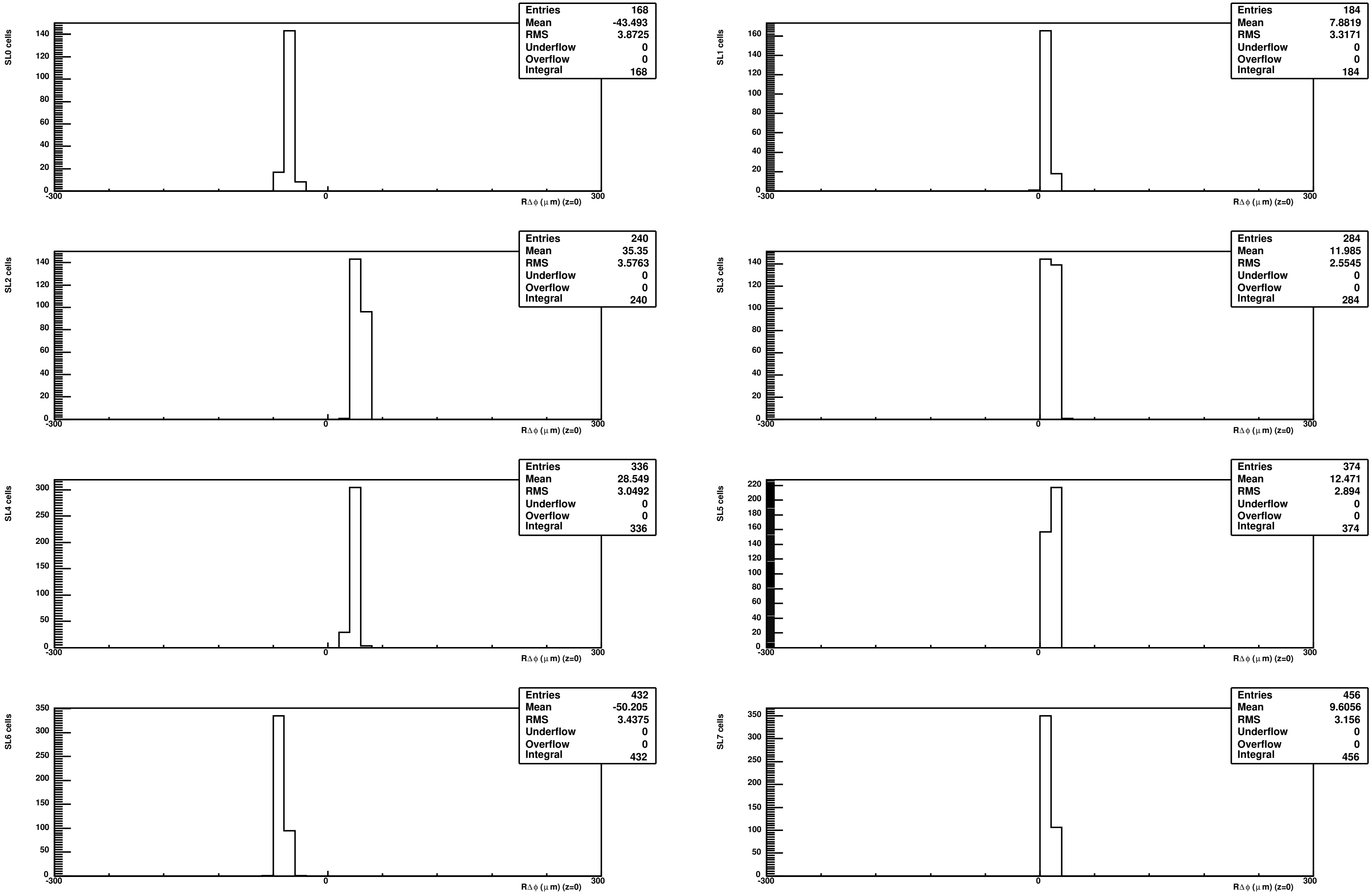

Entries 135470
Mean 0.062995
RMS 2.854
Underflow 5867.8
Overflow 6388.8
Integral 94497
cosmics
Δp_T (μ+)

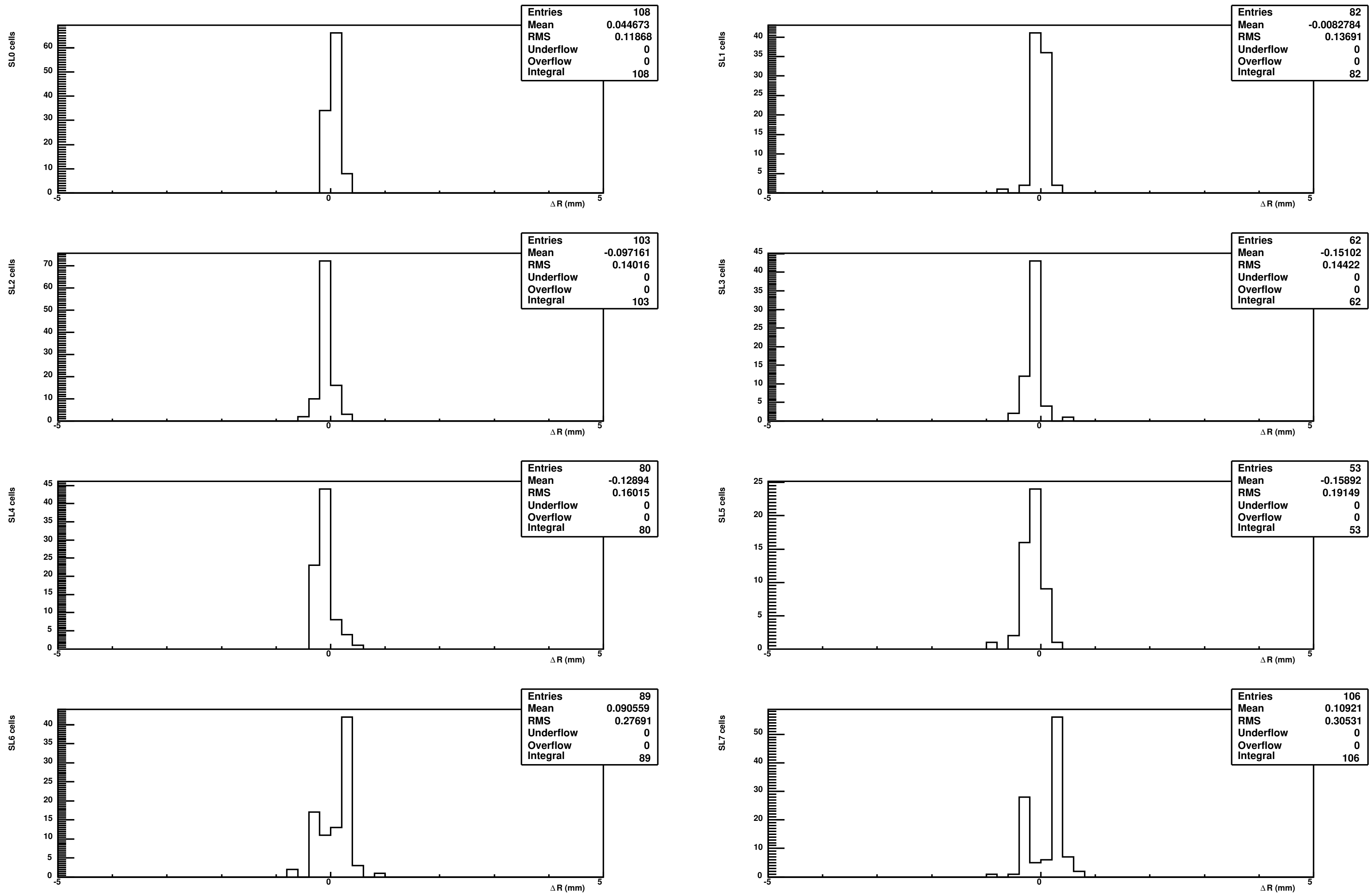

Entries 107107
Mean -0.040234
RMS 2.8521
Underflow 6466
Overflow 6151
Integral 94490
cosmics
Δp_T (μ-)

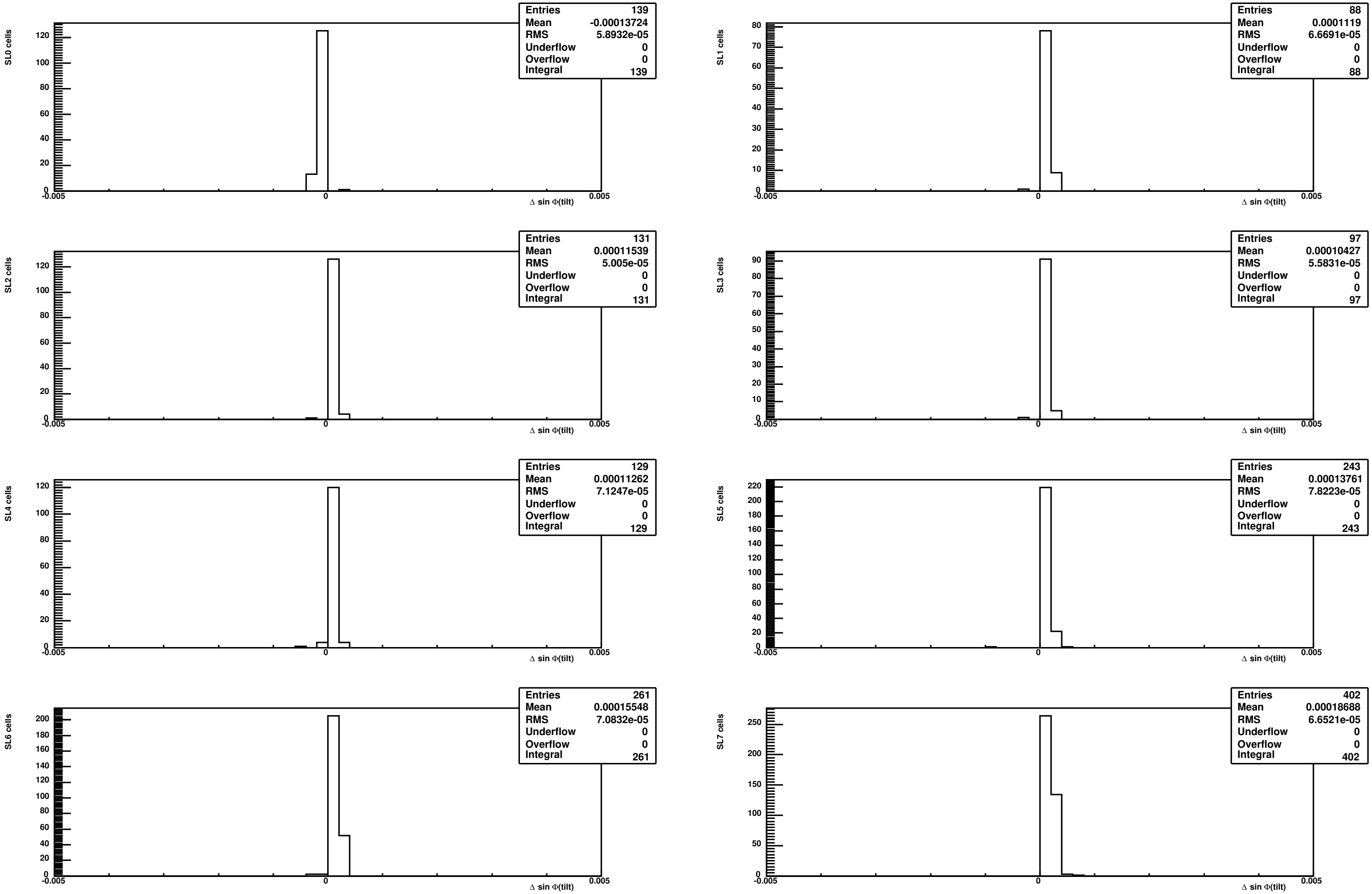

Entries 2520
Mean 0.032808
RMS 0.11662
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔsinΦ_{tilt})


Entries 2520
Mean 0.011198
RMS 0.11487
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔXYzmax)

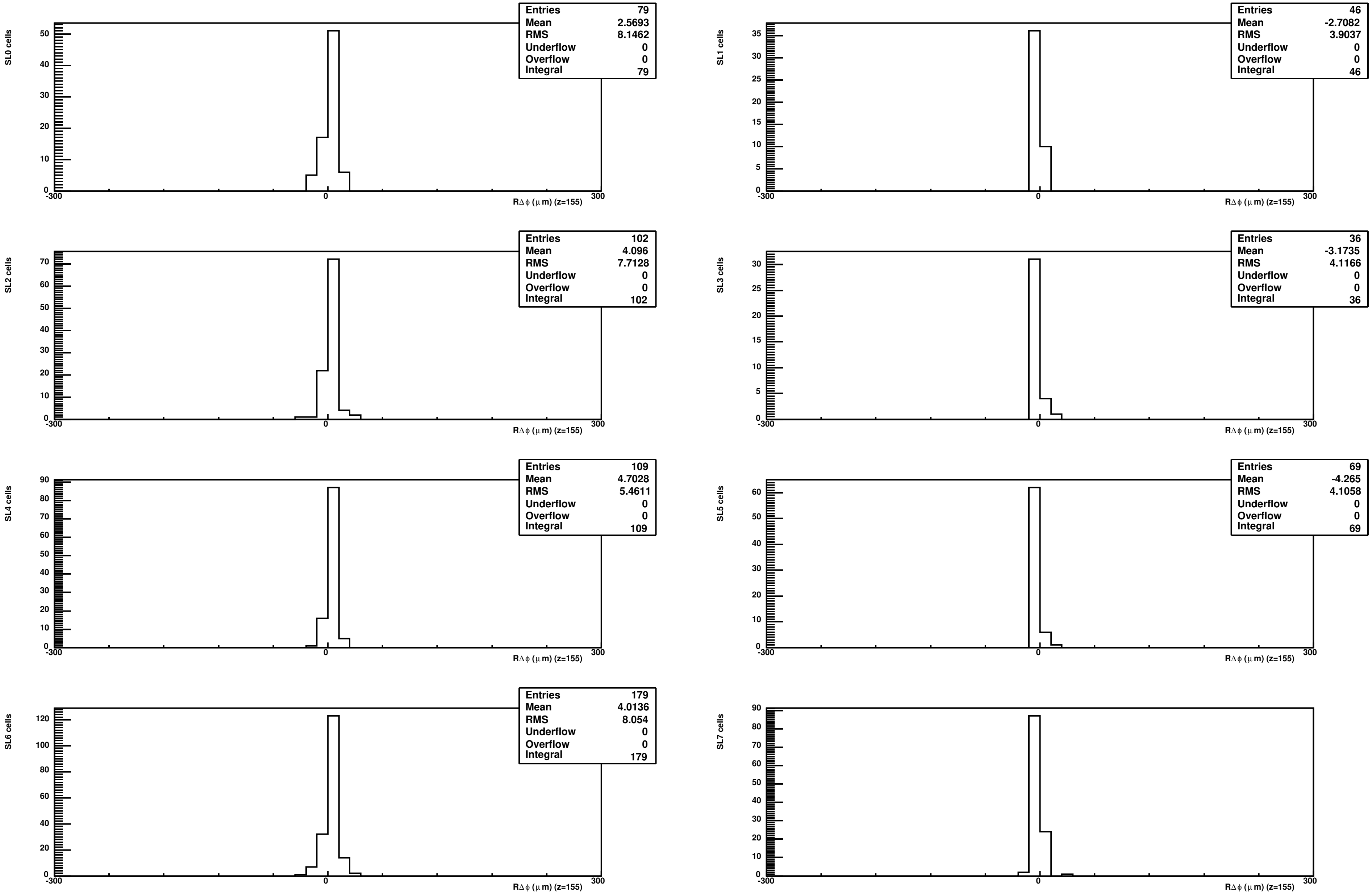

Entries 2520
Mean -0.00055513
RMS 0.053444
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔsinΦ_{tilt},ΔXYzmax)


SL0 cells
Entries 168
Mean -43.493
RMS 3.8725
Underflow 0
Overflow 0
Integral 168
RΔφ (μm) (z=0)
SL1 cells
Entries 184
Mean 7.8819
RMS 3.3171
Underflow 0
Overflow 0
Integral 184
RΔφ (μm) (z=0)
SL2 cells
Entries 240
Mean 35.35
RMS 3.5763
Underflow 0
Overflow 0
Integral 240
RΔφ (μm) (z=0)
SL3 cells
Entries 284
Mean 11.985
RMS 2.5545
Underflow 0
Overflow 0
Integral 284
RΔφ (μm) (z=0)
SL4 cells
Entries 336
Mean 28.549
RMS 3.0492
Underflow 0
Overflow 0
Integral 336
RΔφ (μm) (z=0)
SL5 cells
Entries 374
Mean 12.471
RMS 2.894
Underflow 0
Overflow 0
Integral 374
RΔφ (μm) (z=0)
SL6 cells
Entries 432
Mean -50.205
RMS 3.4375
Underflow 0
Overflow 0
Integral 432
RΔφ (μm) (z=0)
SL7 cells
Entries 456
Mean 9.6056
RMS 3.156
Underflow 0
Overflow 0
Integral 456
RΔφ (μm) (z=0)

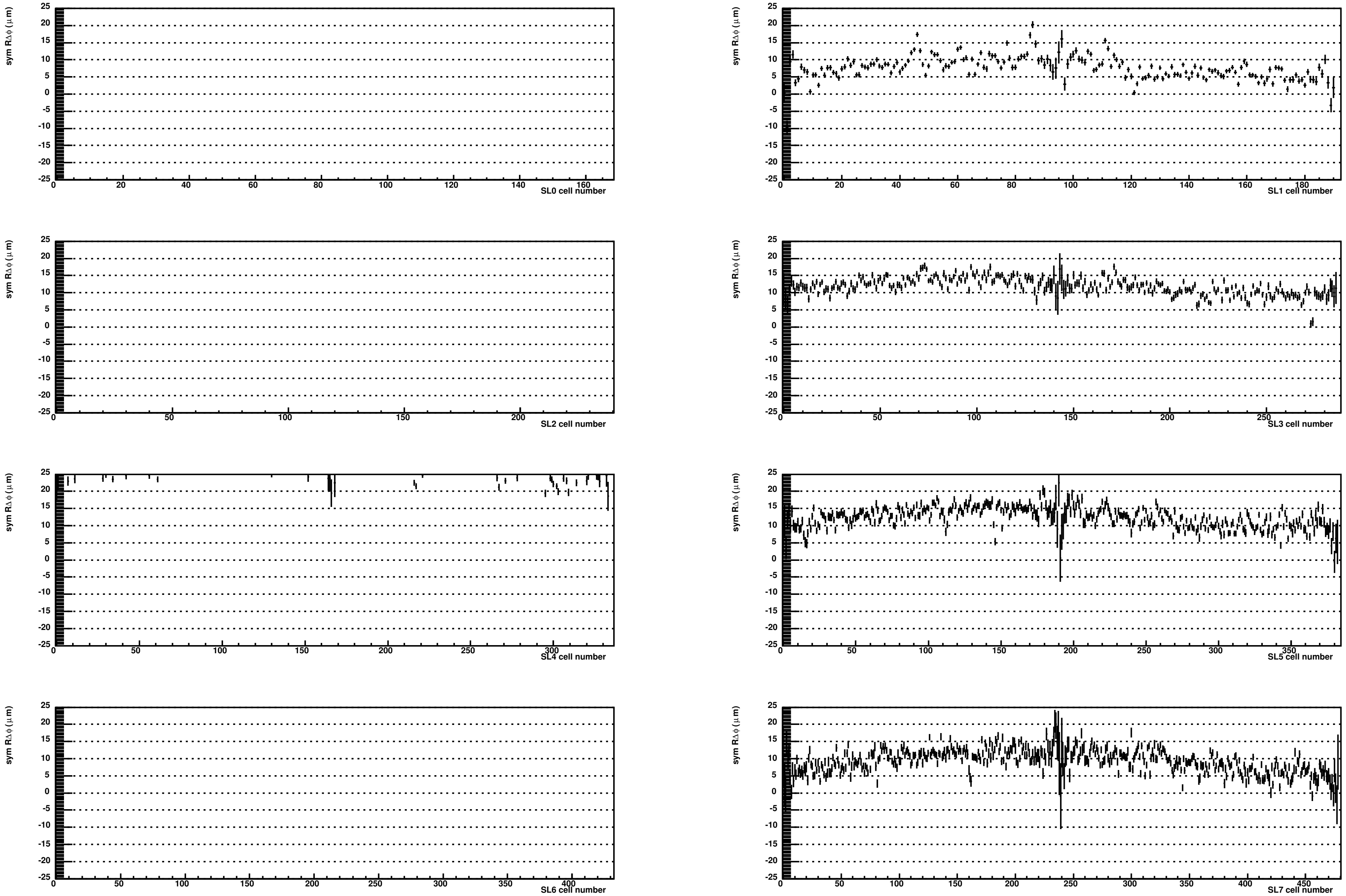

SL0 cells
Entries 108
Mean 0.044673
RMS 0.11868
Underflow 0
Overflow 0
Integral 108
ΔR (mm)
SL1 cells
Entries 82
Mean -0.0082784
RMS 0.13691
Underflow 0
Overflow 0
Integral 82
ΔR (mm)
SL2 cells
Entries 103
Mean -0.097161
RMS 0.14016
Underflow 0
Overflow 0
Integral 103
ΔR (mm)
SL3 cells
Entries 62
Mean -0.15102
RMS 0.14422
Underflow 0
Overflow 0
Integral 62
ΔR (mm)
SL4 cells
Entries 80
Mean -0.12894
RMS 0.16015
Underflow 0
Overflow 0
Integral 80
ΔR (mm)
SL5 cells
Entries 53
Mean -0.15892
RMS 0.19149
Underflow 0
Overflow 0
Integral 53
ΔR (mm)
SL6 cells
Entries 89
Mean 0.090559
RMS 0.27691
Underflow 0
Overflow 0
Integral 89
ΔR (mm)
SL7 cells
Entries 106
Mean 0.10921
RMS 0.30531
Underflow 0
Overflow 0
Integral 106
ΔR (mm)

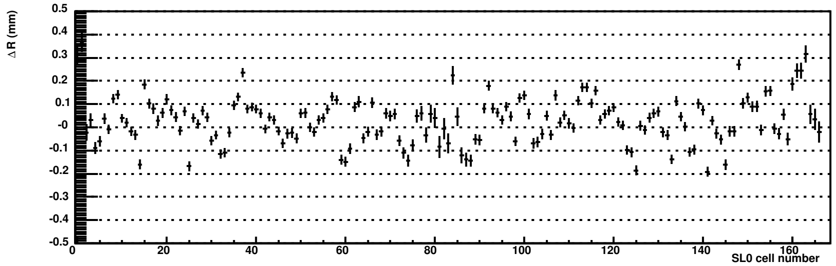


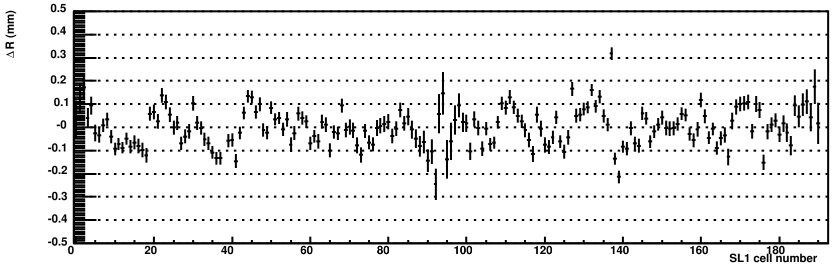
SL0 cells
Entries 139
Mean -0.00013724
RMS 5.8932e-05
Underflow 0
Overflow 0
Integral 139
Δ sin Φ(tilt)
SL1 cells
Entries 88
Mean 0.0001119
RMS 6.6691e-05
Underflow 0
Overflow 0
Integral 88
Δ sin Φ(tilt)
SL2 cells
Entries 131
Mean 0.00011539
RMS 5.005e-05
Underflow 0
Overflow 0
Integral 131
Δ sin Φ(tilt)
SL3 cells
Entries 97
Mean 0.00010427
RMS 5.5831e-05
Underflow 0
Overflow 0
Integral 97
Δ sin Φ(tilt)
SL4 cells
Entries 129
Mean 0.00011262
RMS 7.1247e-05
Underflow 0
Overflow 0
Integral 129
Δ sin Φ(tilt)
SL5 cells
Entries 243
Mean 0.00013761
RMS 7.8223e-05
Underflow 0
Overflow 0
Integral 243
Δ sin Φ(tilt)
SL6 cells
Entries 261
Mean 0.00015548
RMS 7.0832e-05
Underflow 0
Overflow 0
Integral 261
Δ sin Φ(tilt)
SL7 cells
Entries 402
Mean 0.00018688
RMS 6.6521e-05
Underflow 0
Overflow 0
Integral 402
Δ sin Φ(tilt)

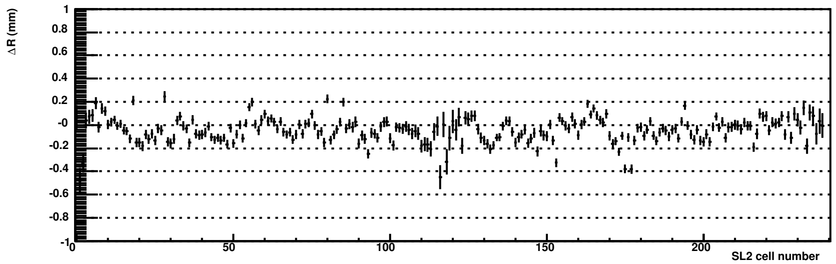


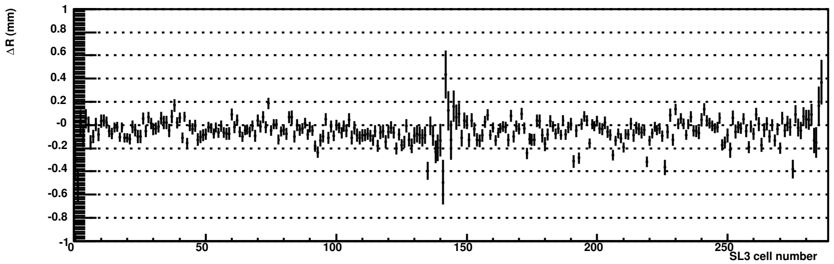
SL0 cells
Entries 79
Mean 2.5693
RMS 8.1462
Underflow 0
Overflow 0
Integral 79
SL1 cells
Entries 46
Mean -2.7082
RMS 3.9037
Underflow 0
Overflow 0
Integral 46
SL2 cells
Entries 102
Mean 4.096
RMS 7.7128
Underflow 0
Overflow 0
Integral 102
SL3 cells
Entries 36
Mean -3.1735
RMS 4.1166
Underflow 0
Overflow 0
Integral 36
SL4 cells
Entries 109
Mean 4.7028
RMS 5.4611
Underflow 0
Overflow 0
Integral 109
SL5 cells
Entries 69
Mean -4.265
RMS 4.1058
Underflow 0
Overflow 0
Integral 69
SL6 cells
Entries 179
Mean 4.0136
RMS 8.054
Underflow 0
Overflow 0
Integral 179
SL7 cells
RΔφ (μm) (z=155)
-300
0
300

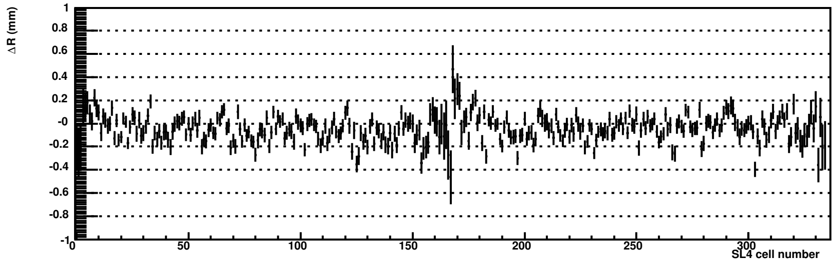

sym RΔφ (μm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

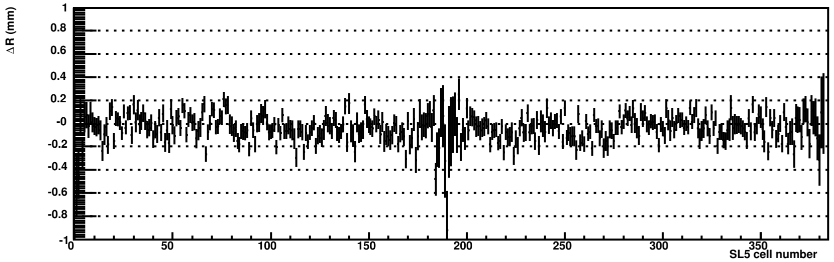

ΔR (mm)
SL0 cell number

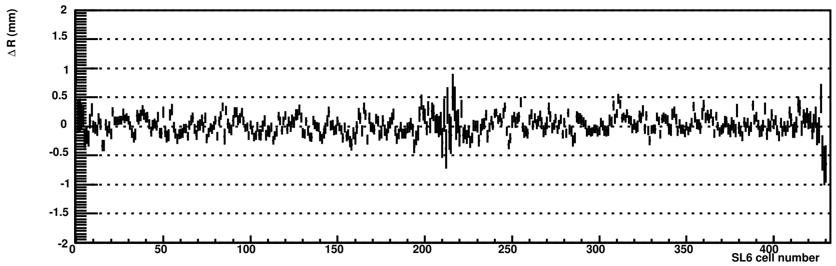

ΔR (mm)
SL1 cell number

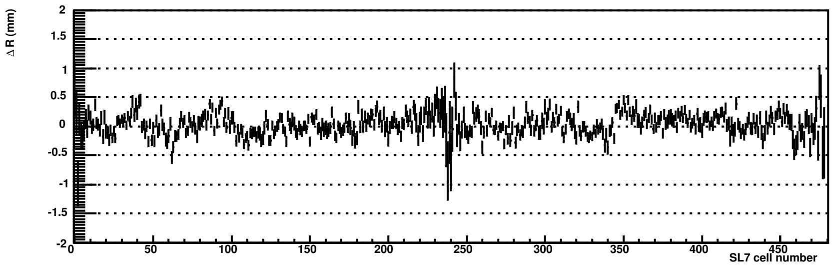

ΔR (mm)
SL2 cell number

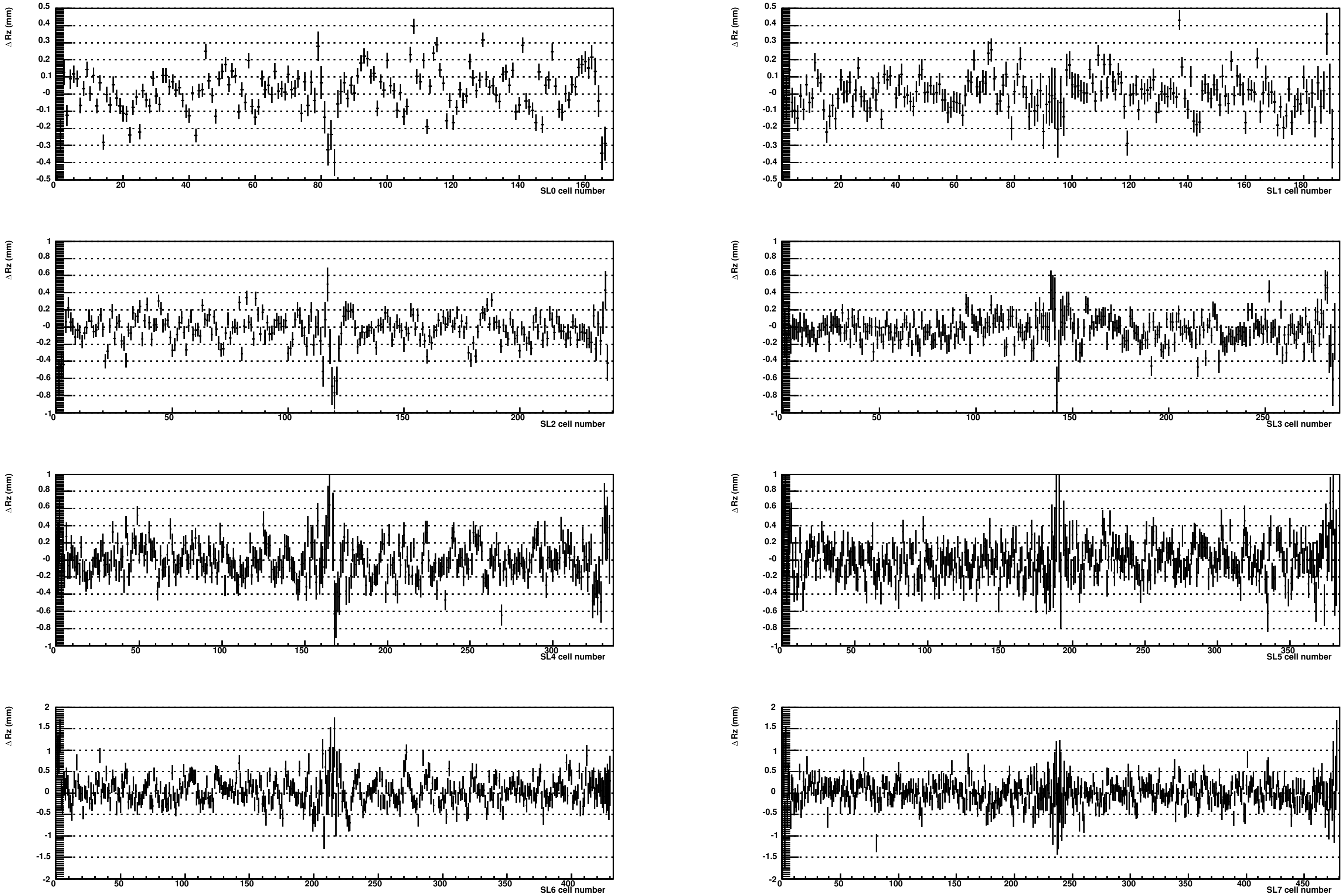

ΔR (mm)
SL3 cell number


ΔR (mm)
SL4 cell number

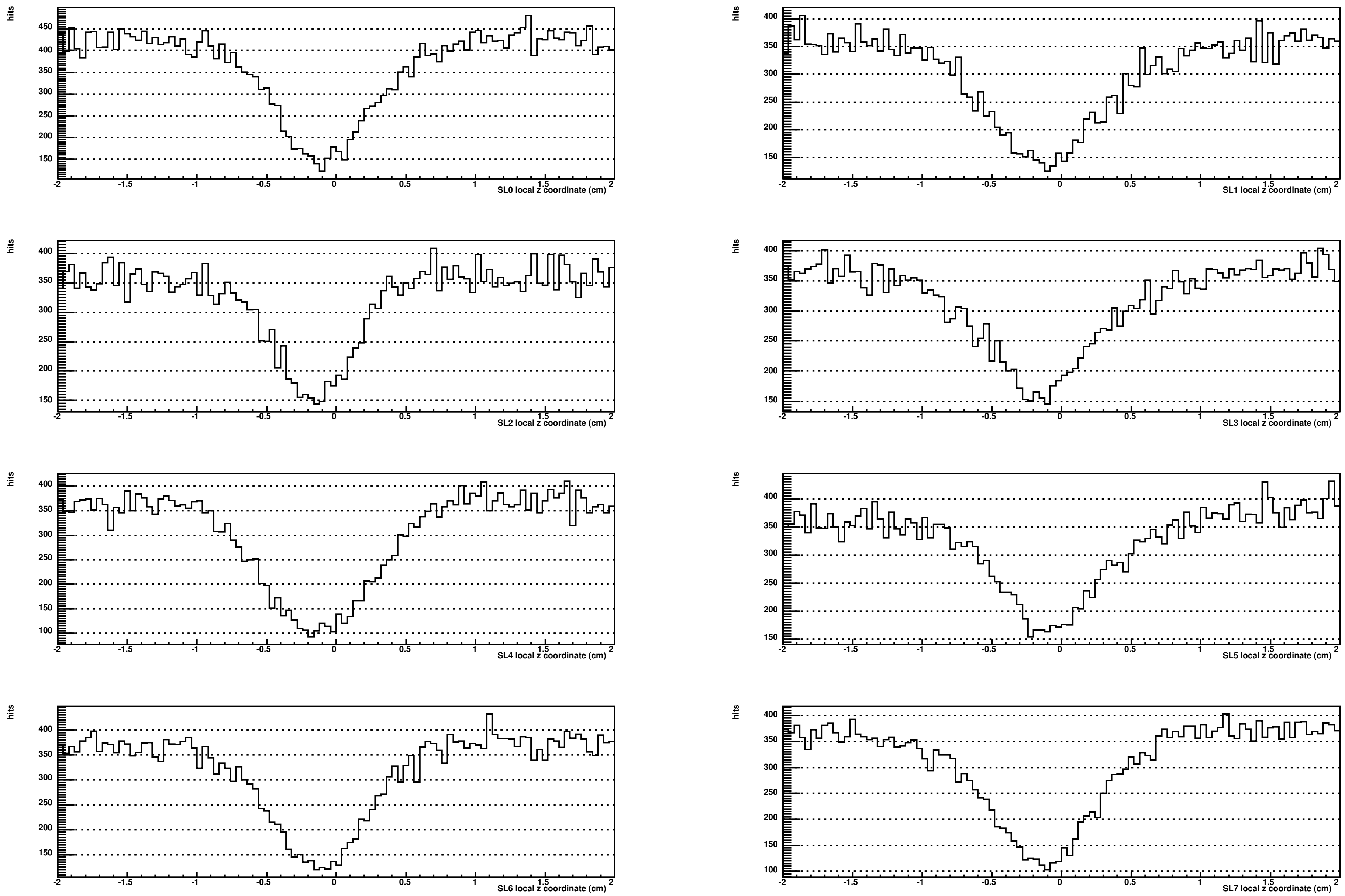

ΔR (mm)
SL5 cell number

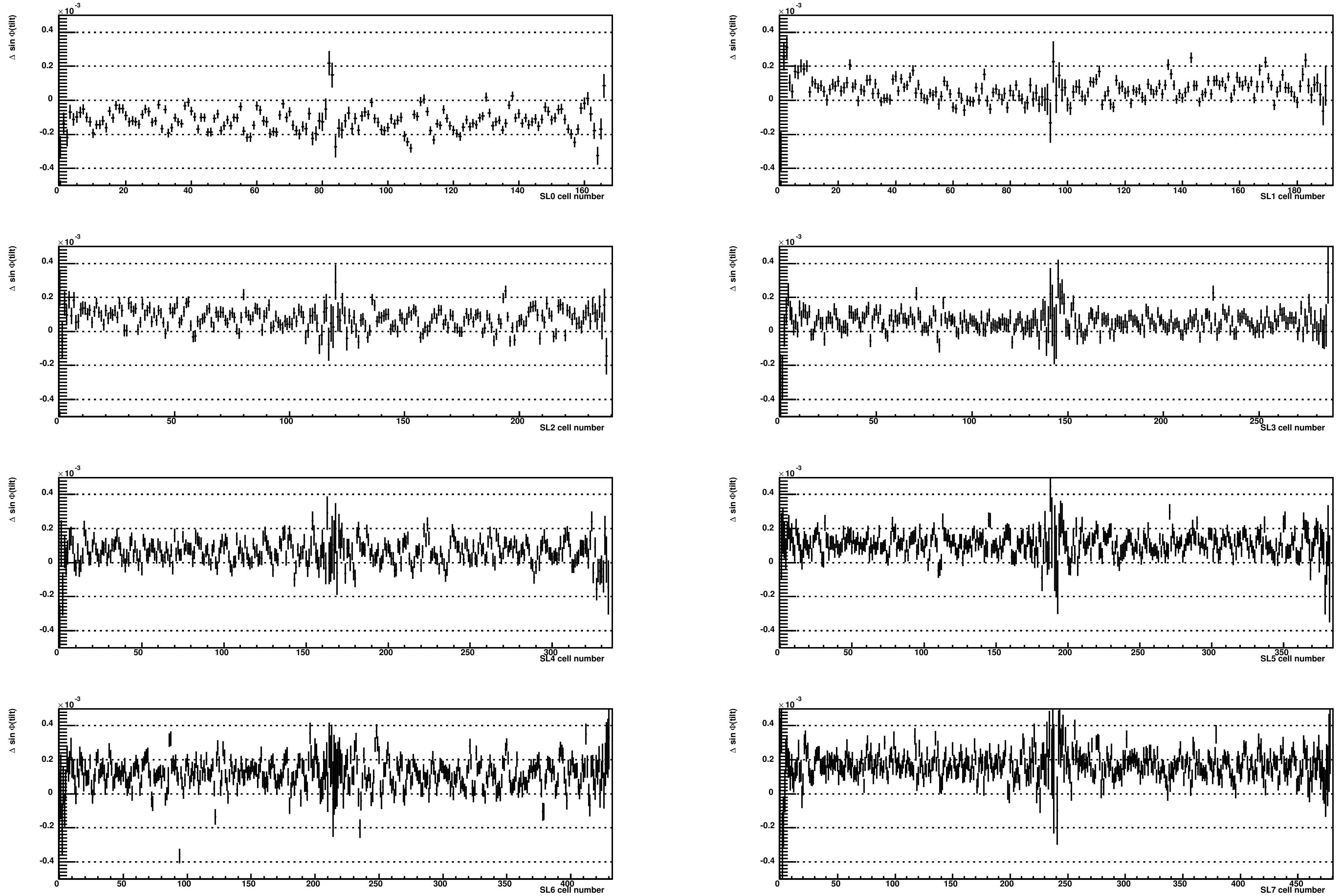

ΔR (mm)
SL6 cell number

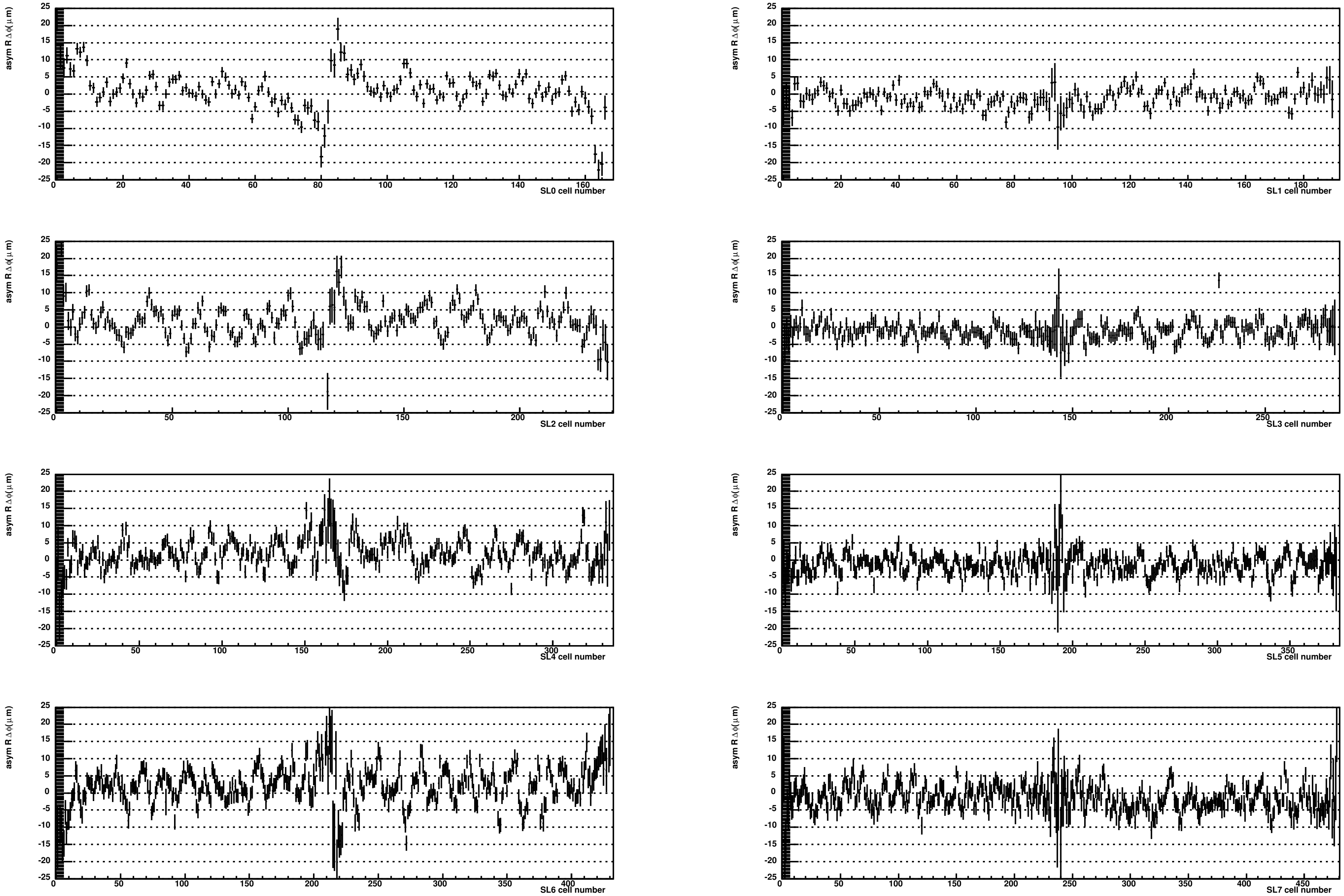

ΔR (mm)
SL7 cell number

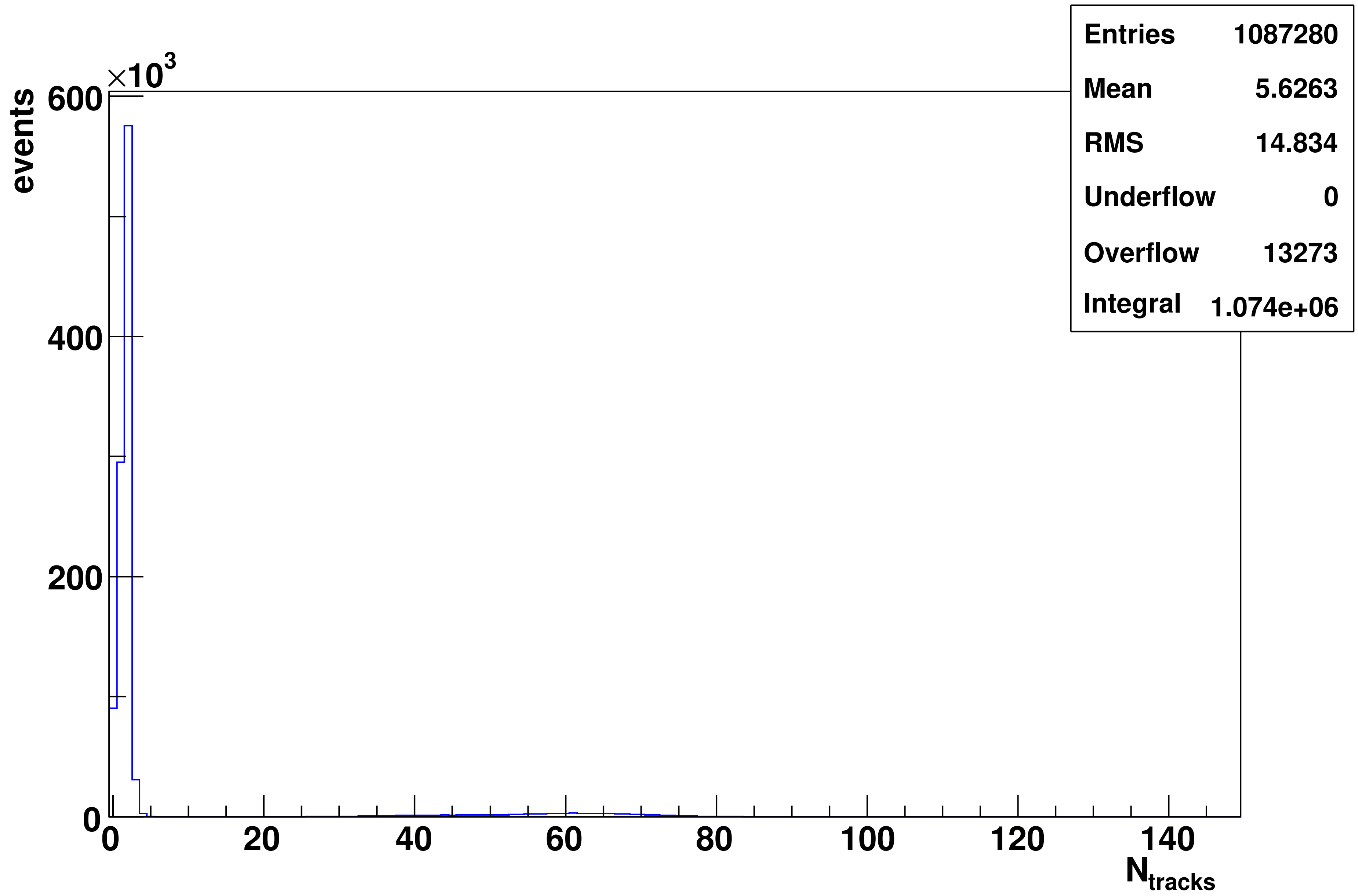


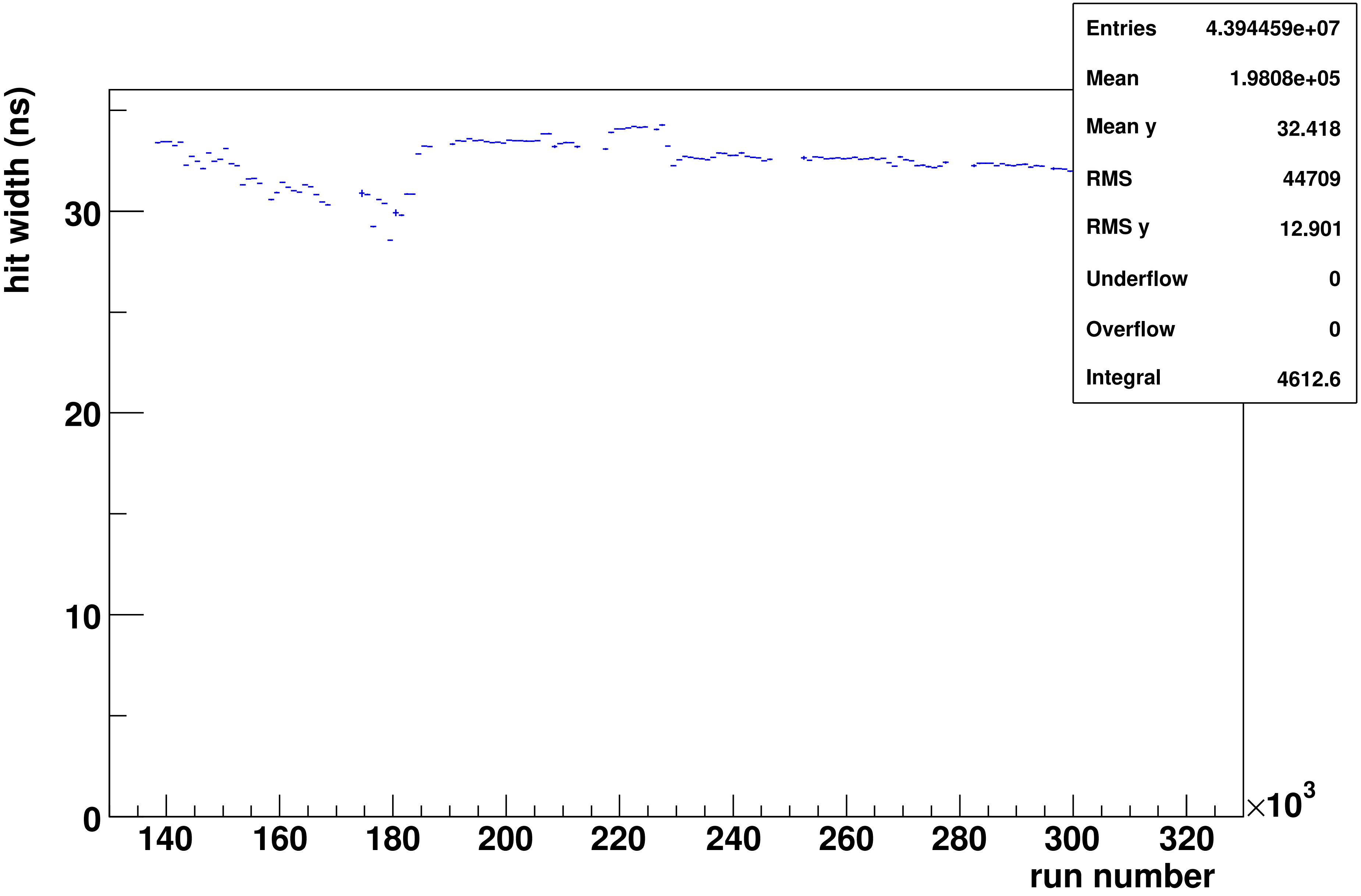
Δ Rz (mm)
SL0 cell number
Δ Rz (mm)
SL1 cell number
Δ Rz (mm)
SL2 cell number
Δ Rz (mm)
SL3 cell number
Δ Rz (mm)
SL4 cell number
Δ Rz (mm)
SL5 cell number
Δ Rz (mm)
SL6 cell number
Δ Rz (mm)
SL7 cell number


hits
SL0 local z coordinate (cm)
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)

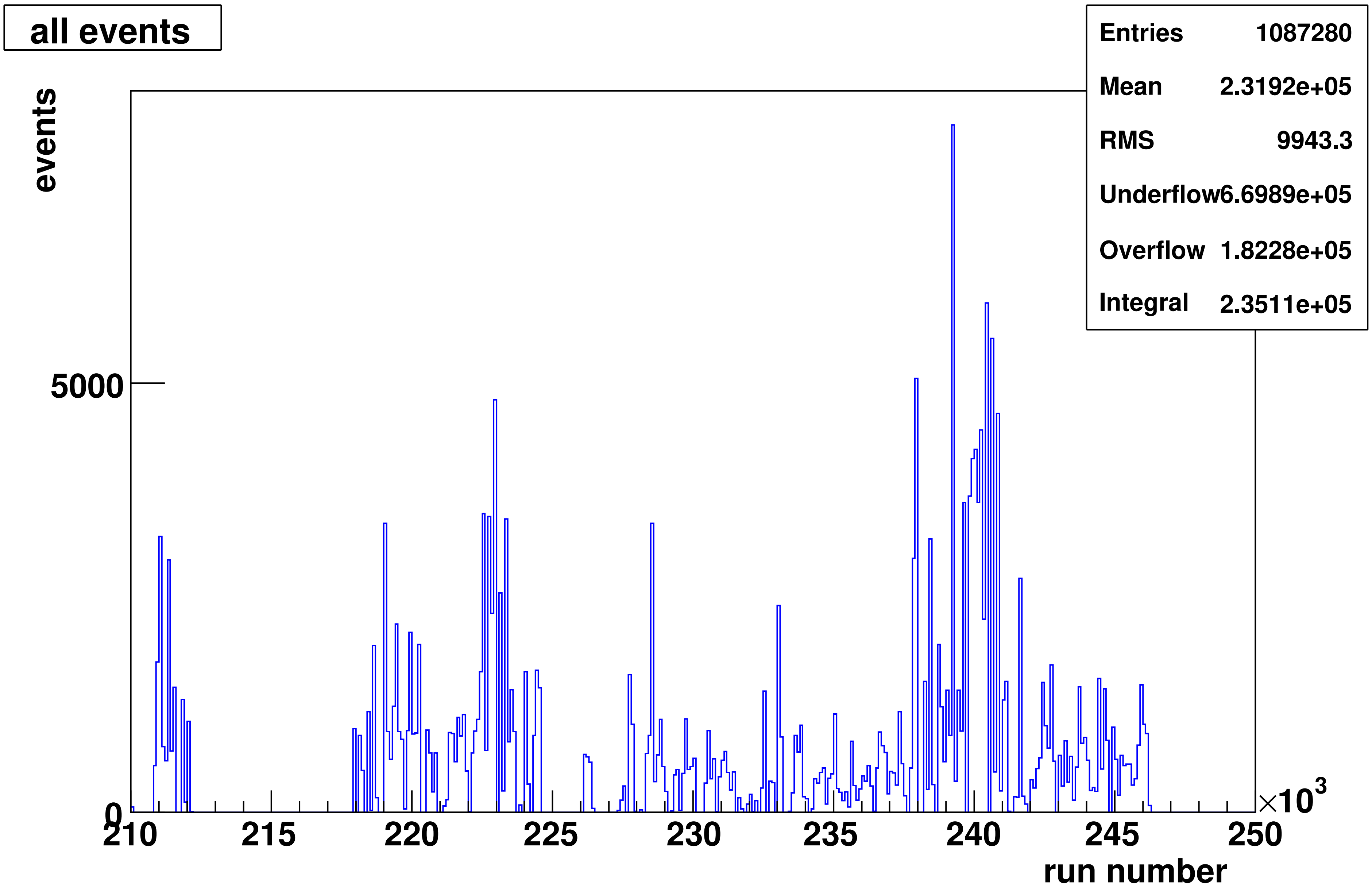

Δ sin Φ(tilt)
×10^-3
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

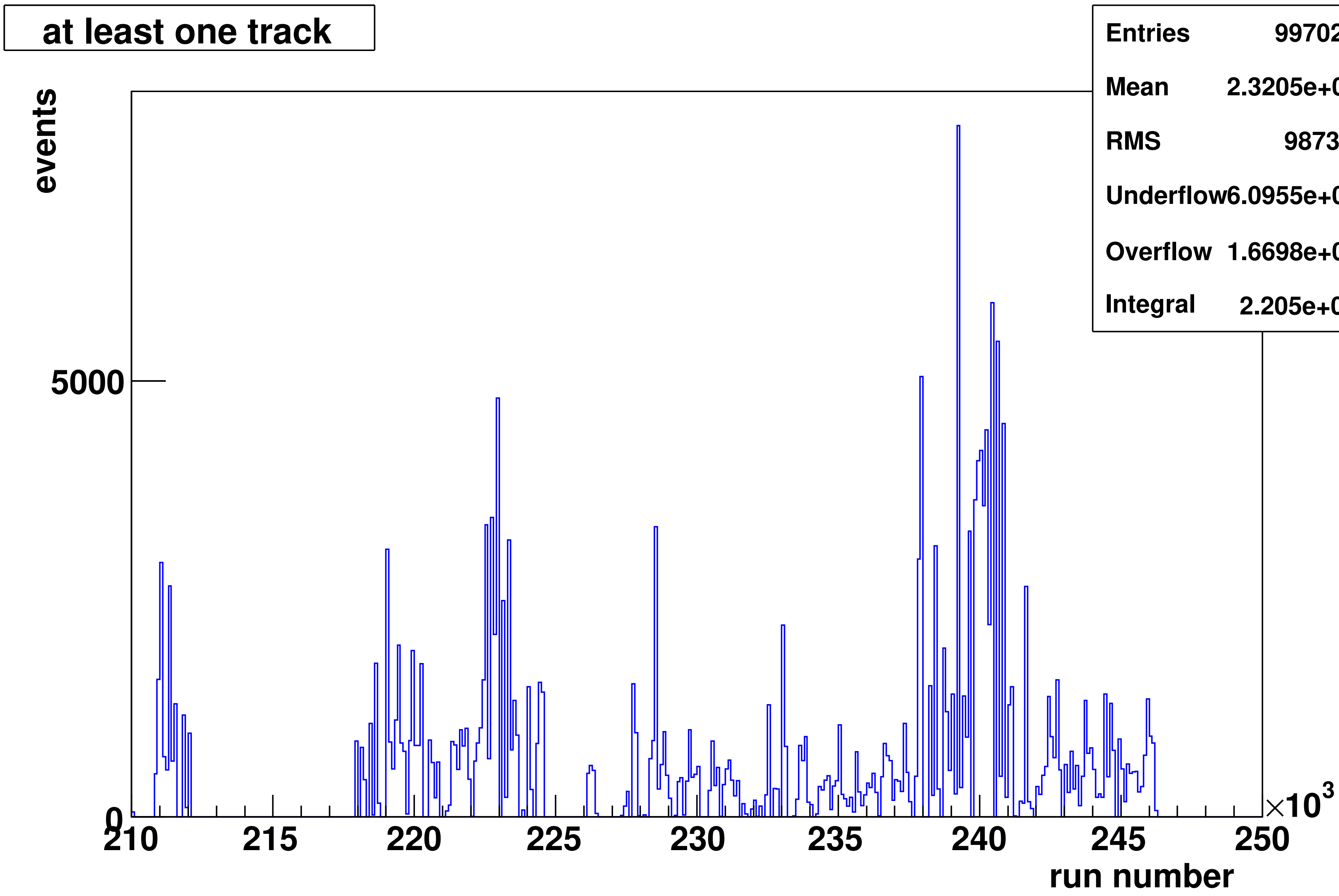

asym R Δφ(μm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number


Entries 1087280
Mean 5.6263
RMS 14.834
Underflow 0
Overflow 13273
Integral 1.074e+06
events
×10^3
600
400
200
0
0 20 40 60 80 100 120 140
N_tracks

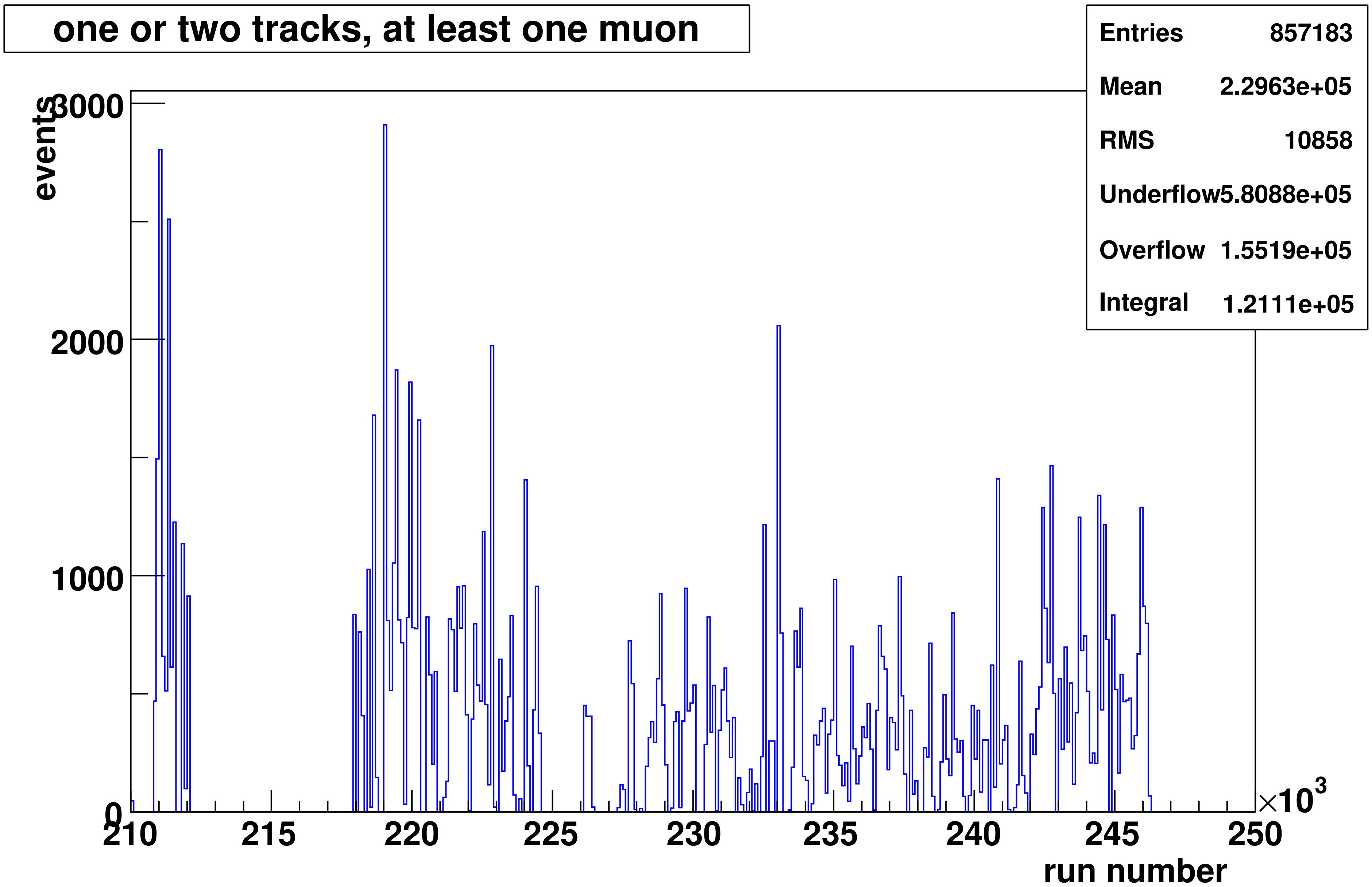


Entries 4.394459e+07
Mean 1.9808e+05
Mean y 32.418
RMS 44709
RMS y 12.901
Underflow 0
Overflow 0
Integral 4612.6
hit width (ns)
0
10
20
30
140
160
180
200
220
240
260
280
300
320
×10^3
run number

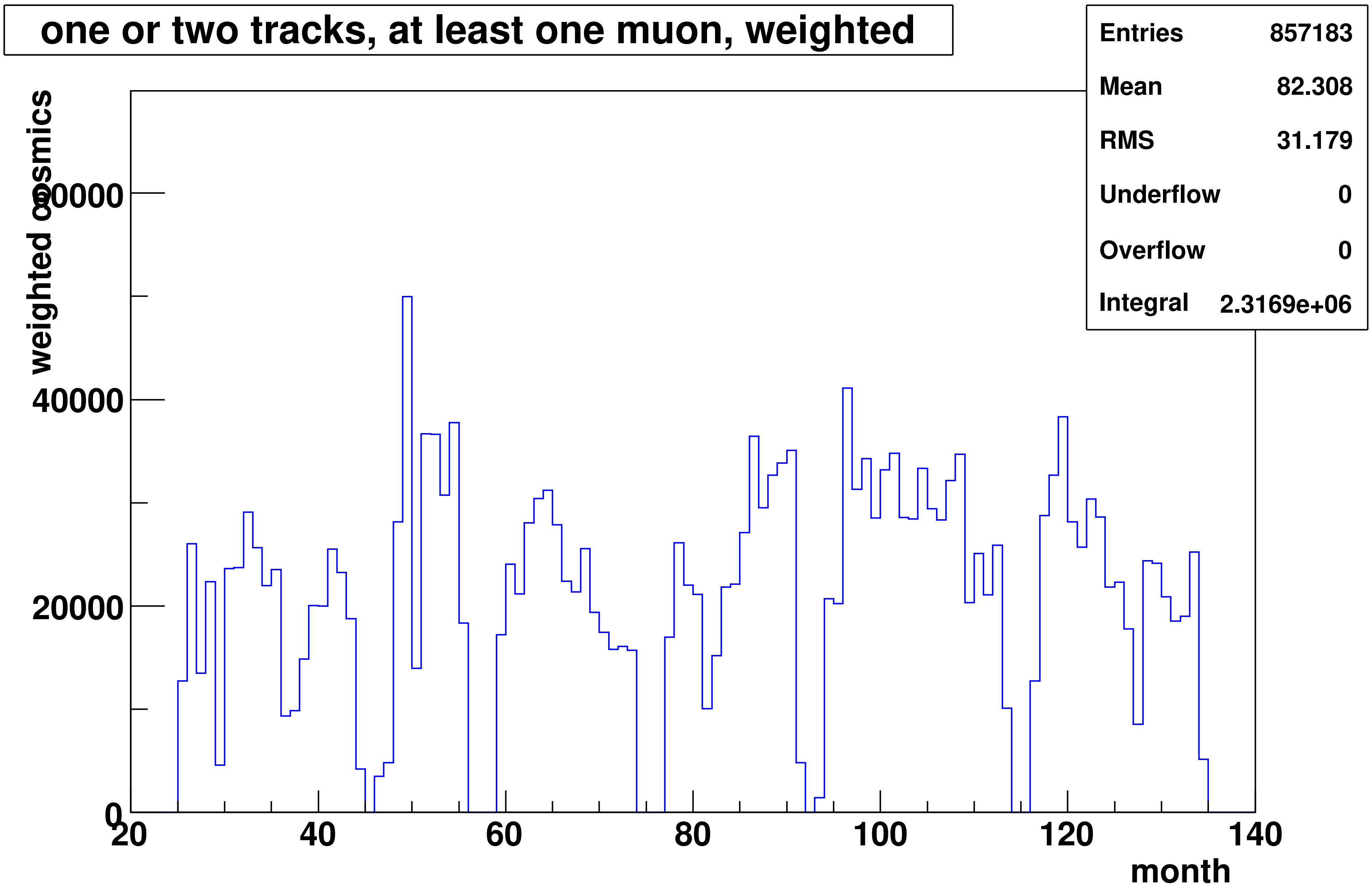

all events
events
Entries 1087280
Mean 2.3192e+05
RMS 9943.3
Underflow 6.6989e+05
Overflow 1.8228e+05
Integral 2.3511e+05
5000
0
210
215
220
225
230
235
240
245
250
×10³
run number

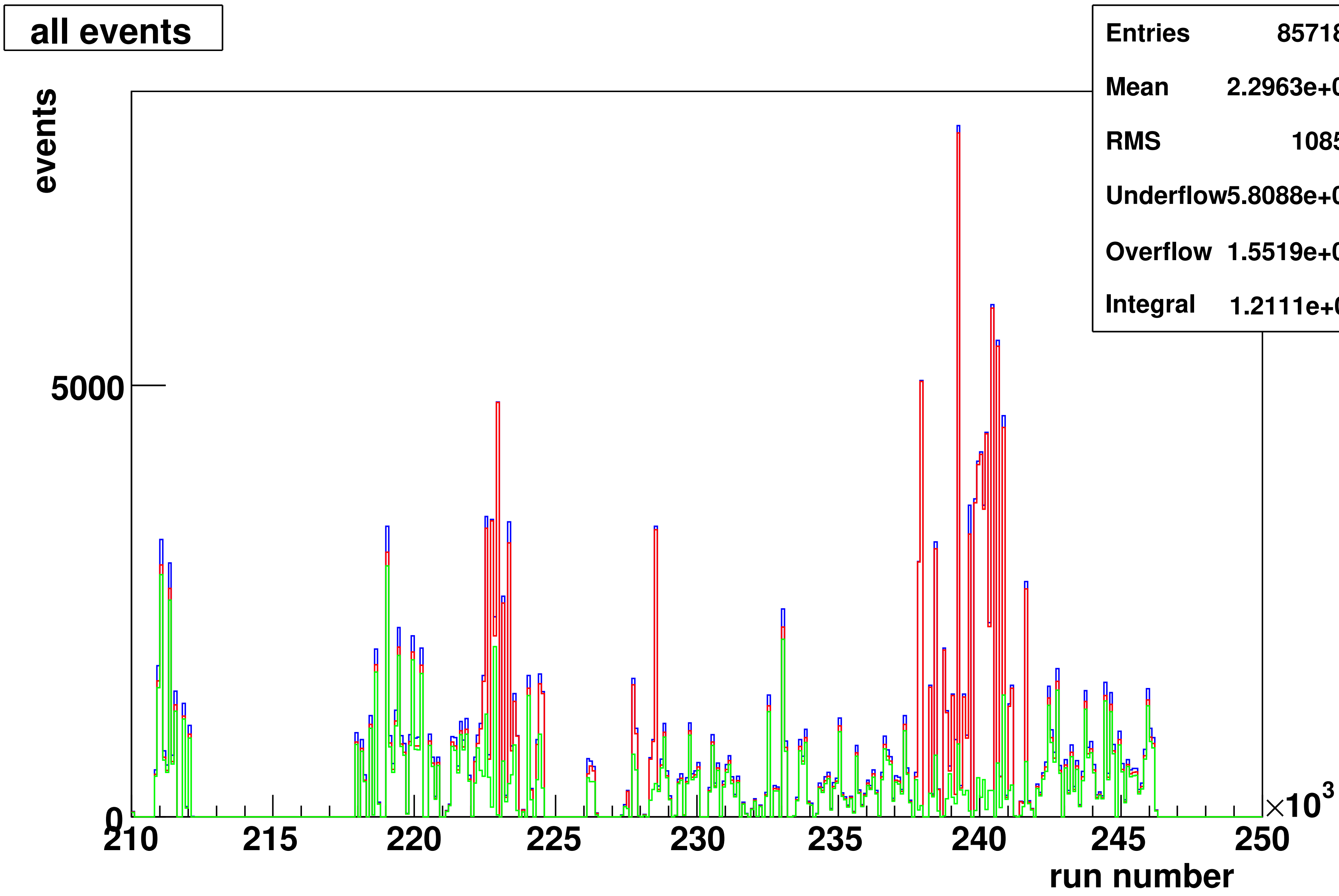


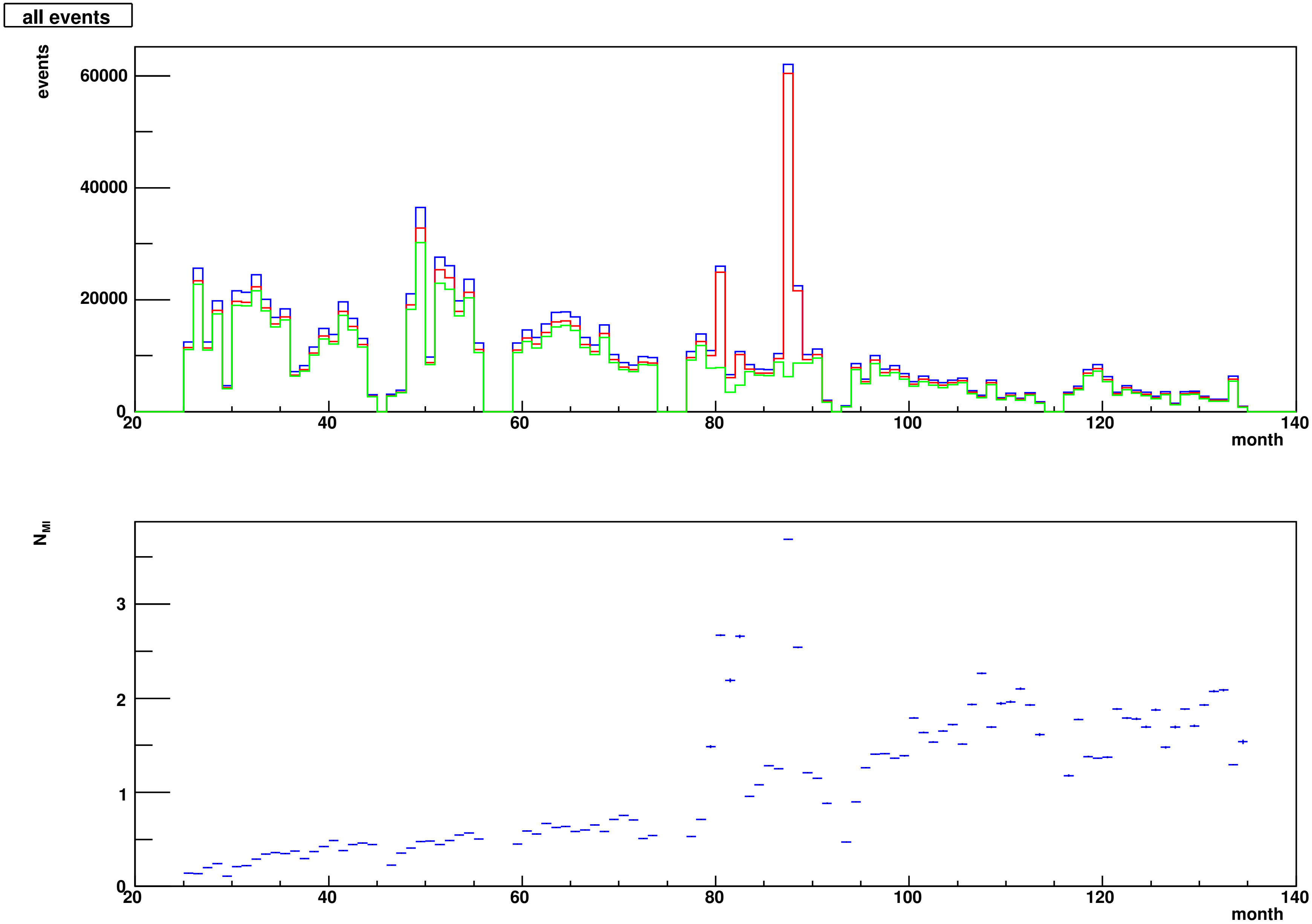
at least one track
events
Entries 997024
Mean 2.3205e+05
RMS 9873.2
Underflow 6.0955e+05
Overflow 1.6698e+05
Integral 2.205e+05
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number



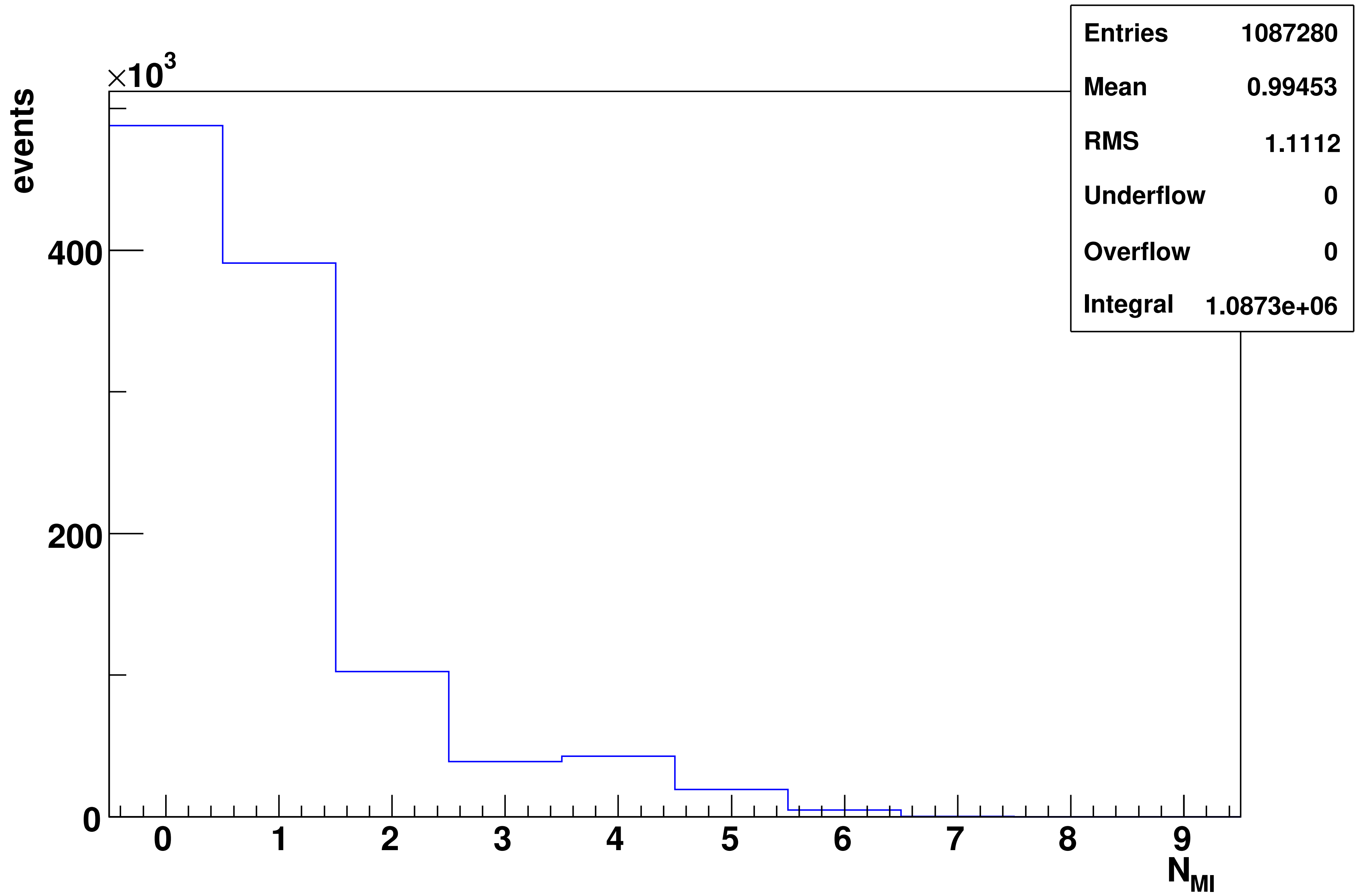
one or two tracks, at least one muon
Entries 857183
Mean 2.2963e+05
RMS 10858
Underflow5.8088e+05
Overflow 1.5519e+05
Integral 1.2111e+05
events
3000
2000
1000
0
210
215
220
225
230
235
240
245
250
$\times 10^3$
run number


one or two tracks, at least one muon, weighted
Entries 857183
Mean 82.308
RMS 31.179
Underflow 0
Overflow 0
Integral 2.3169e+06
weighted cosmics
0
20000
40000
60000
20
40
60
80
100
120
140
month

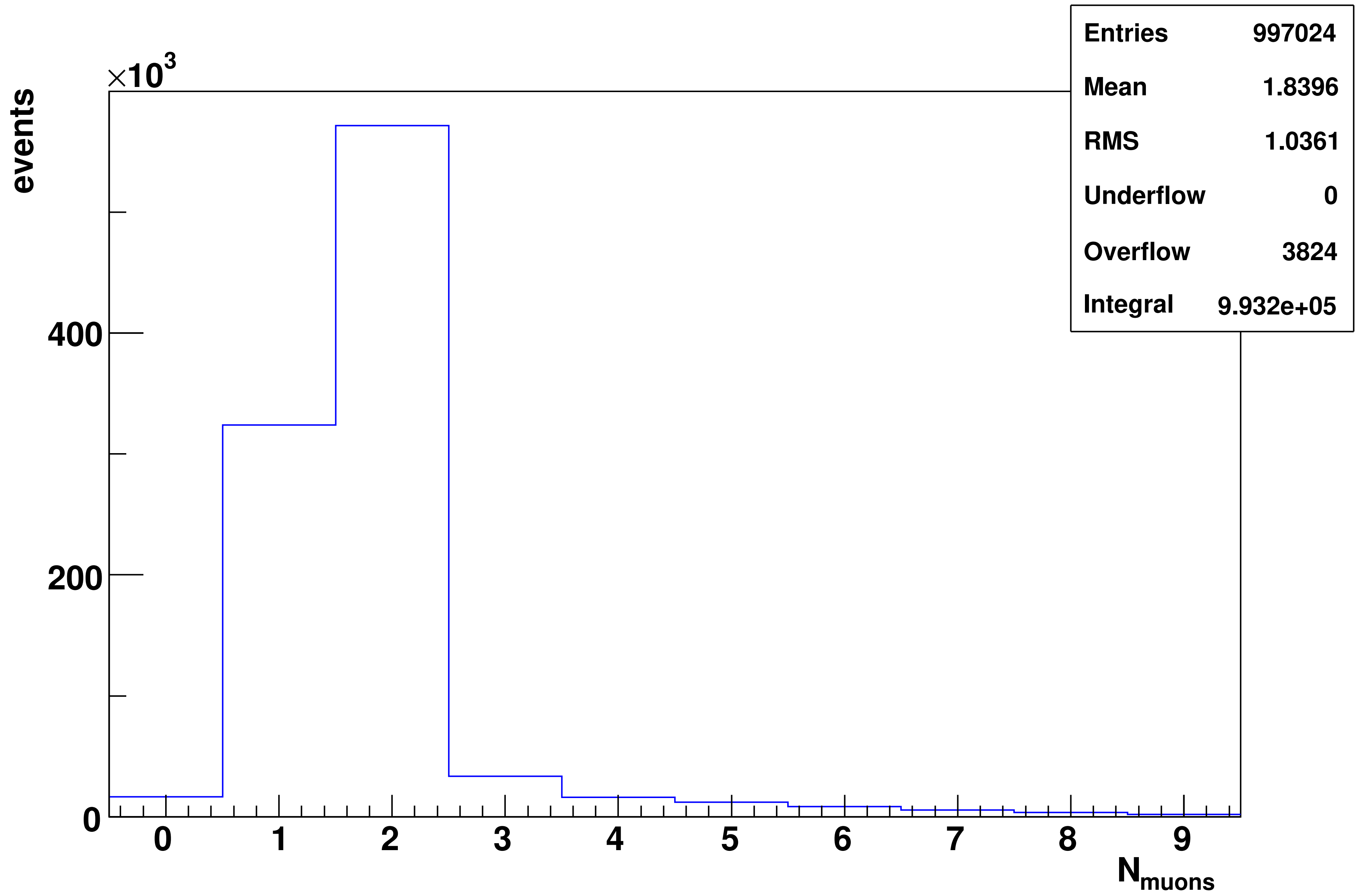

all events
events
Entries 857183
Mean 2.2963e+05
RMS 10858
Underflow 5.8088e+05
Overflow 1.5519e+05
Integral 1.2111e+05
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number



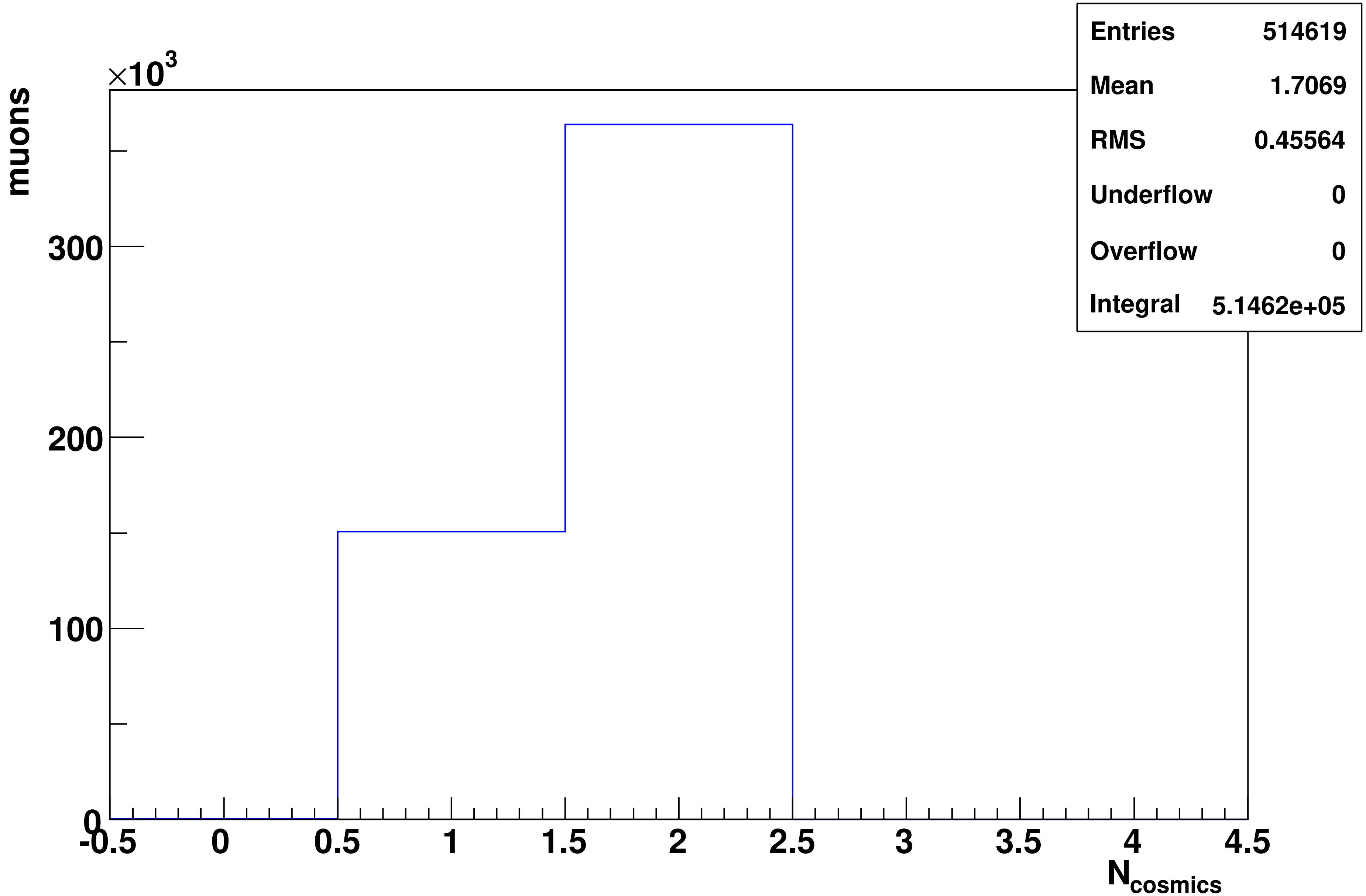
all events
events
60000
40000
20000
0
20
40
60
80
100
120
140
month
N_{MI}
3
2
1
0
20
40
60
80
100
120
140
month

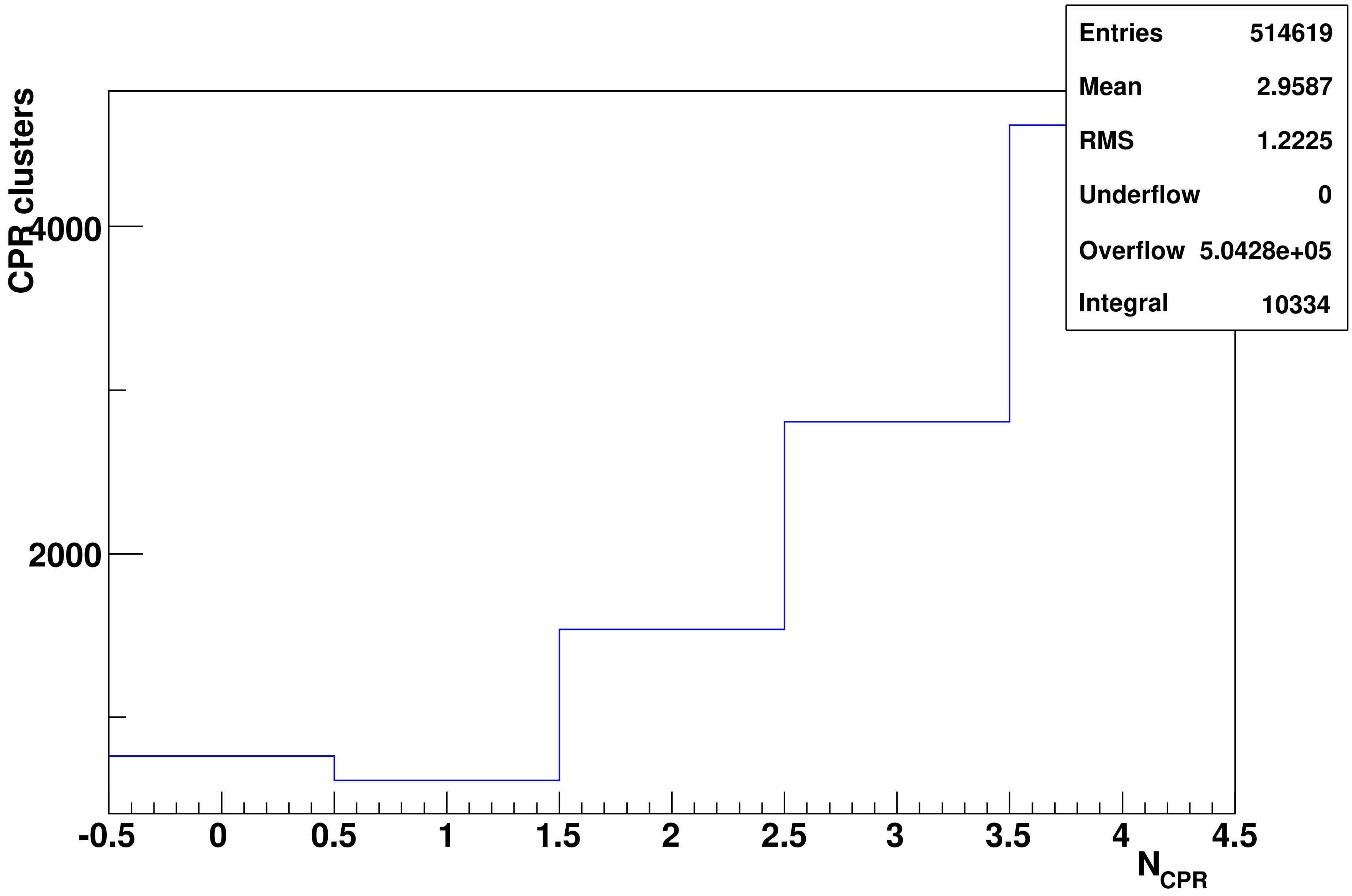


Entries 1087280
Mean 0.99453
RMS 1.1112
Underflow 0
Overflow 0
Integral 1.0873e+06
×10^3
events
400
200
0
0 1 2 3 4 5 6 7 8 9
N_MI

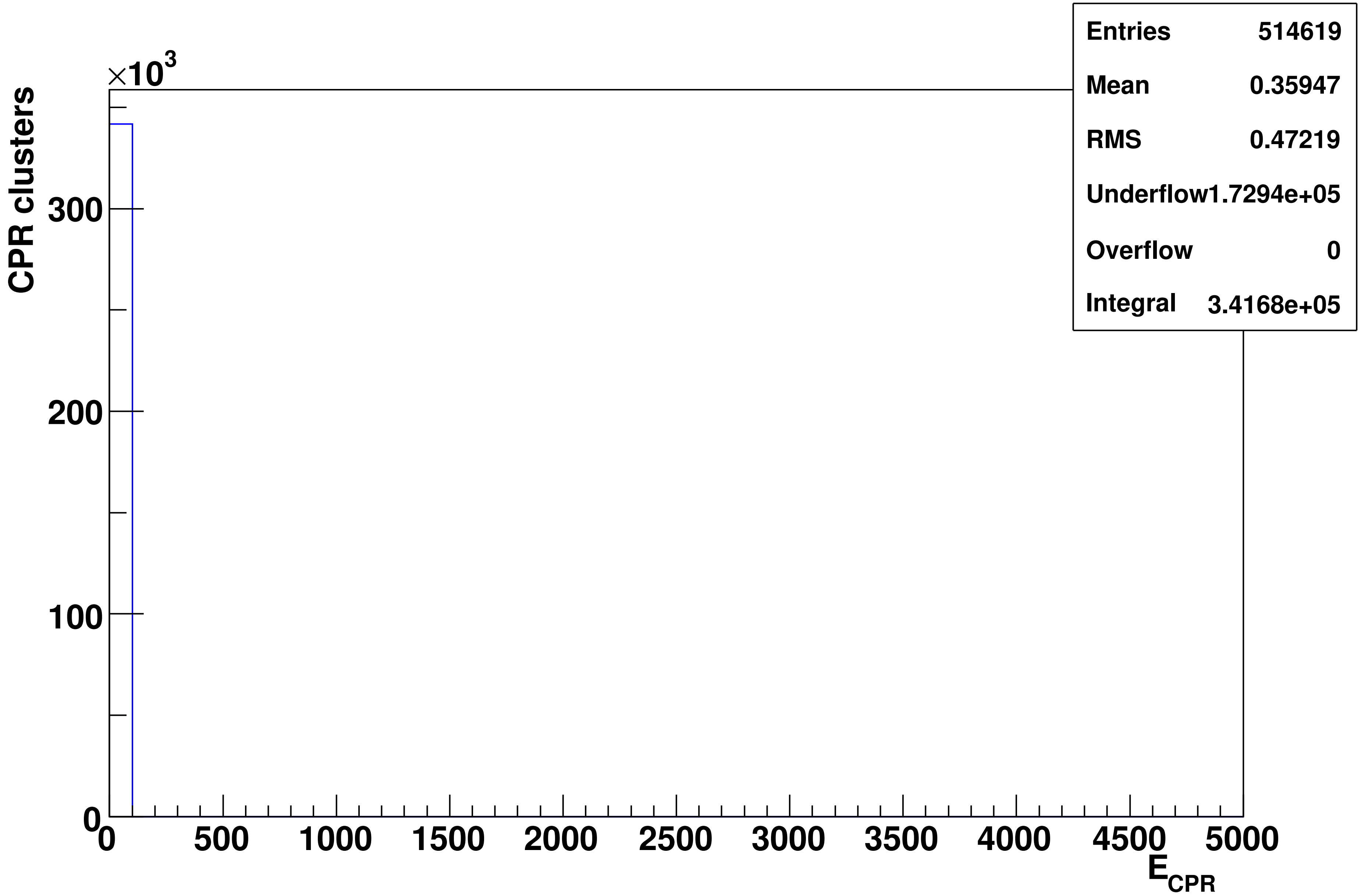


Entries 997024
Mean 1.8396
RMS 1.0361
Underflow 0
Overflow 3824
Integral 9.932e+05
×10^3
events
400
200
0
0 1 2 3 4 5 6 7 8 9
N_muons

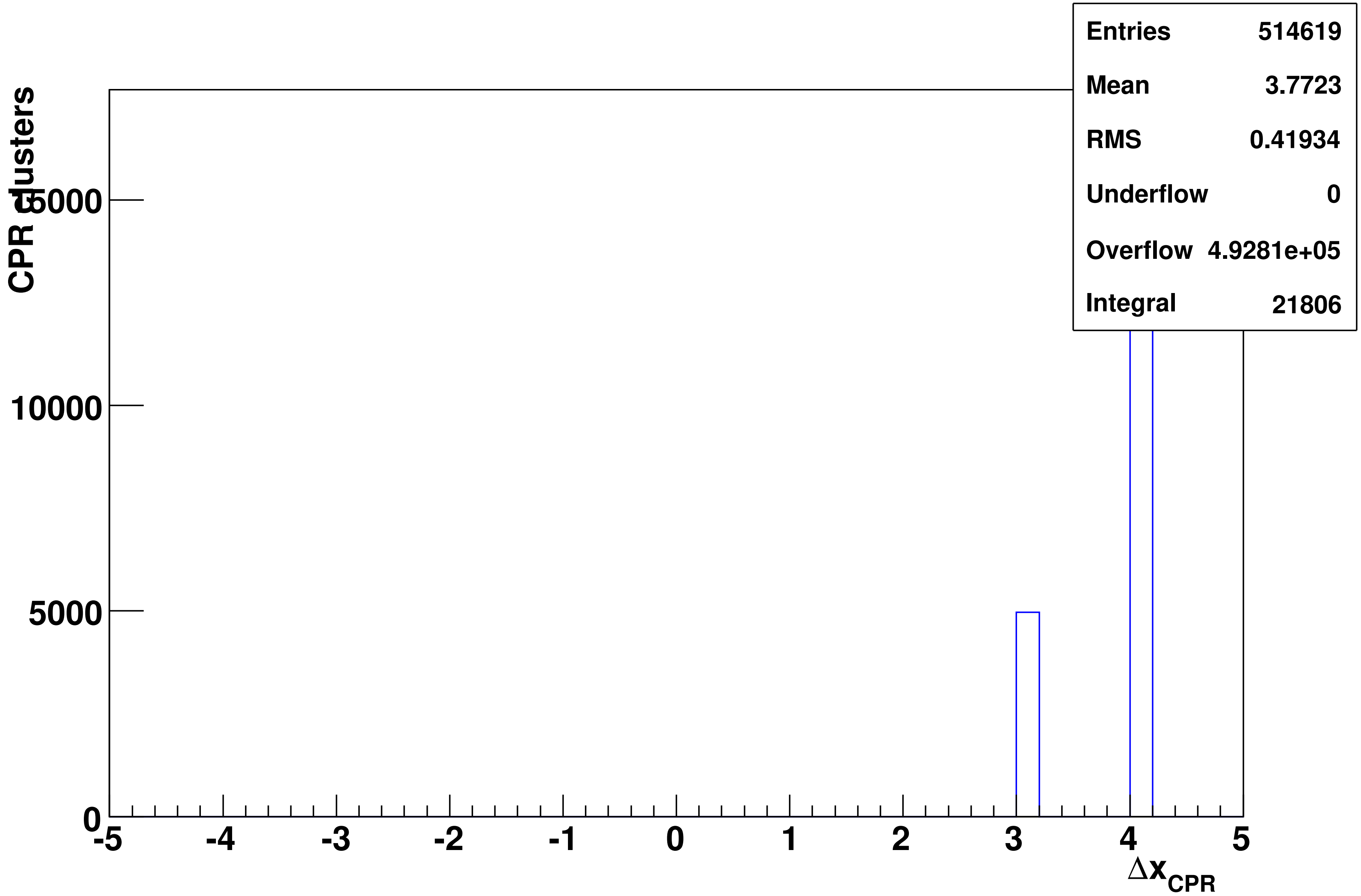

Entries 514619
Mean 1.7069
RMS 0.45564
Underflow 0
Overflow 0
Integral 5.1462e+05
×10^3
muons
300
200
100
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_cosmics



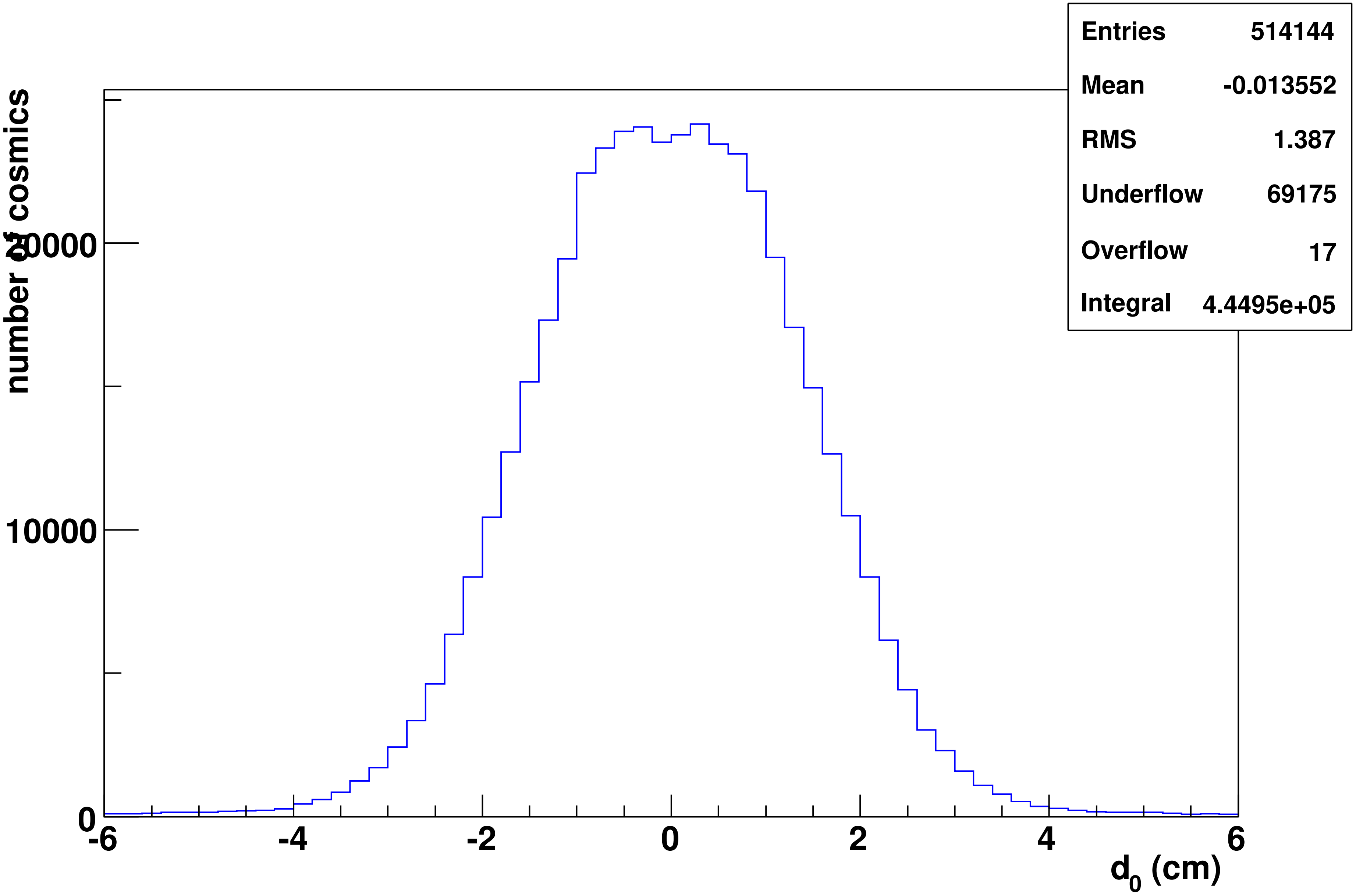
CPR clusters
4000
2000
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_{CPR}
Entries 514619
Mean 2.9587
RMS 1.2225
Underflow 0
Overflow 5.0428e+05
Integral 10334



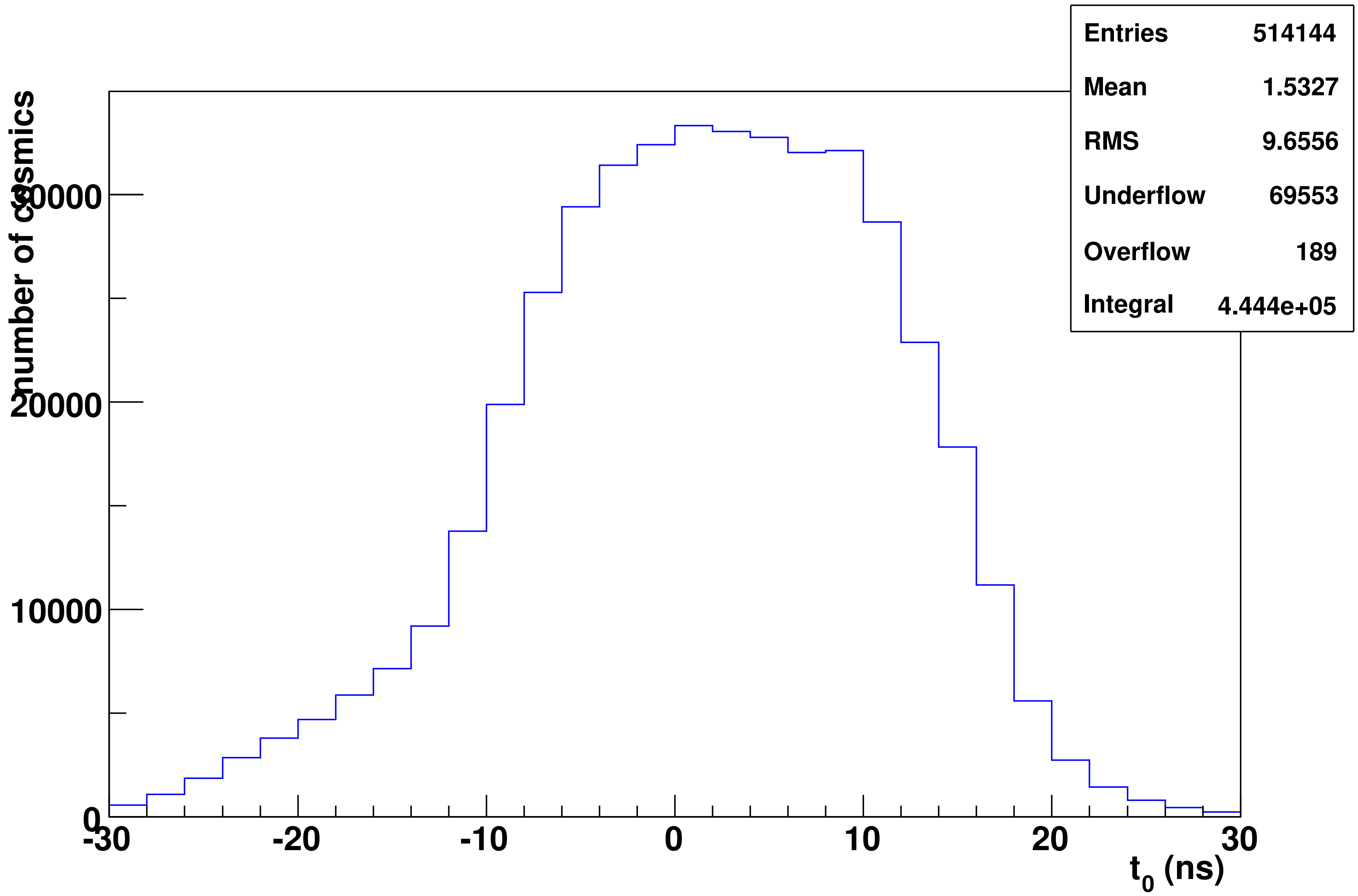
Entries 514619
Mean 0.35947
RMS 0.47219
Underflow1.7294e+05
Overflow 0
Integral 3.4168e+05
×10^3
CPR clusters
300
200
100
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
E_CPR

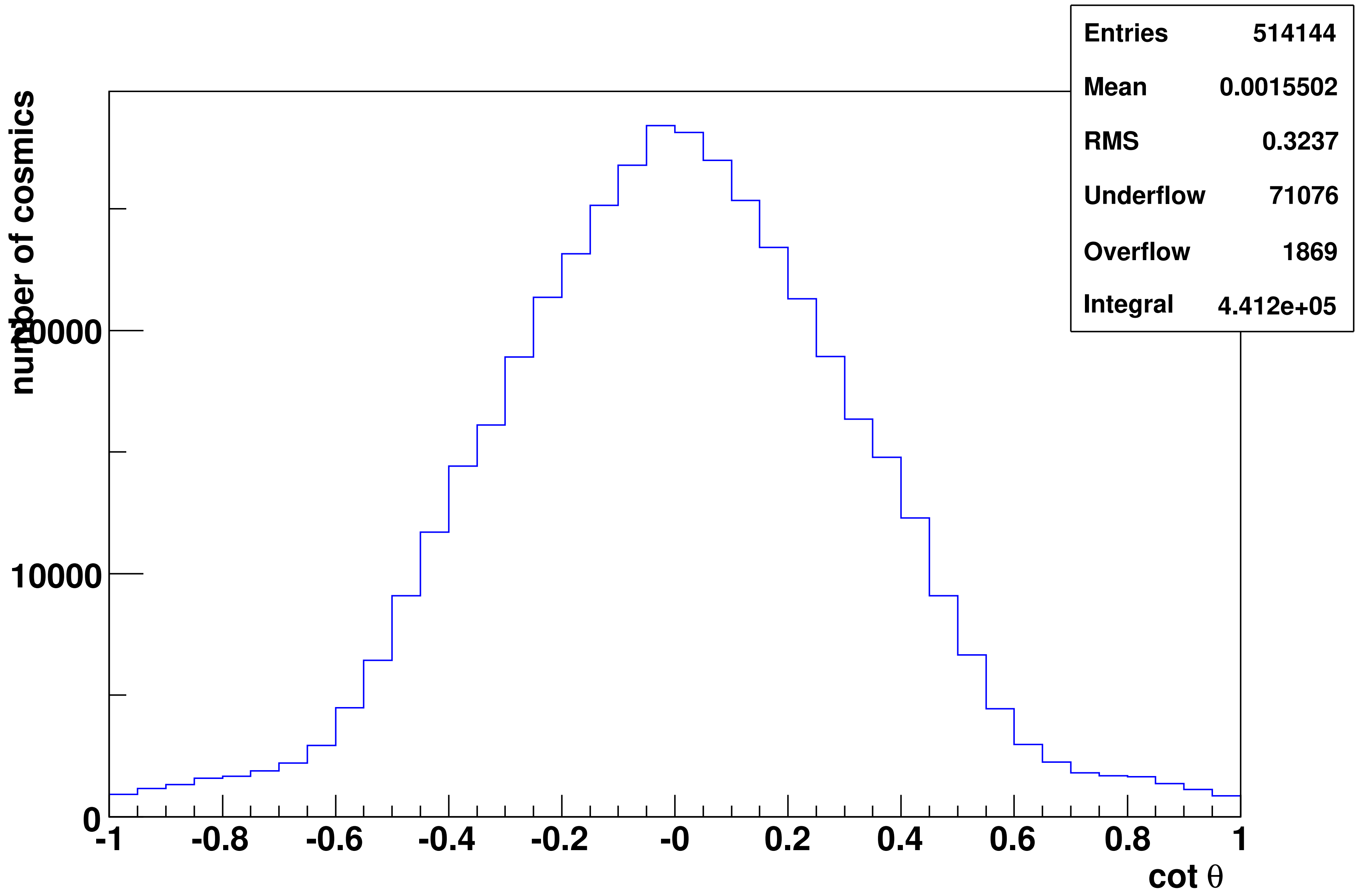


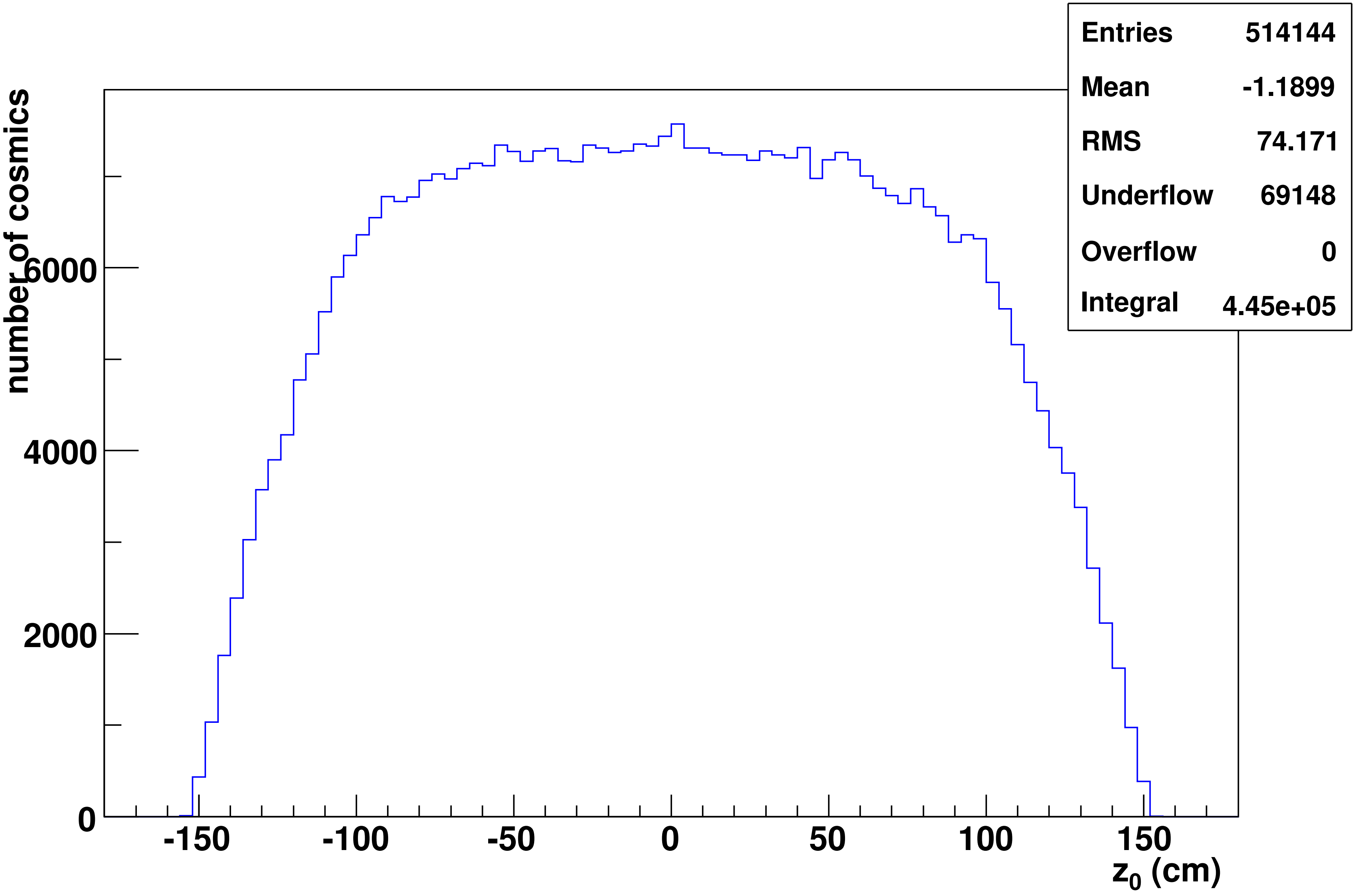
Entries 514619
Mean 3.7723
RMS 0.41934
Underflow 0
Overflow 4.9281e+05
Integral 21806
CPR clusters
15000
10000
5000
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
Δx_{CPR}

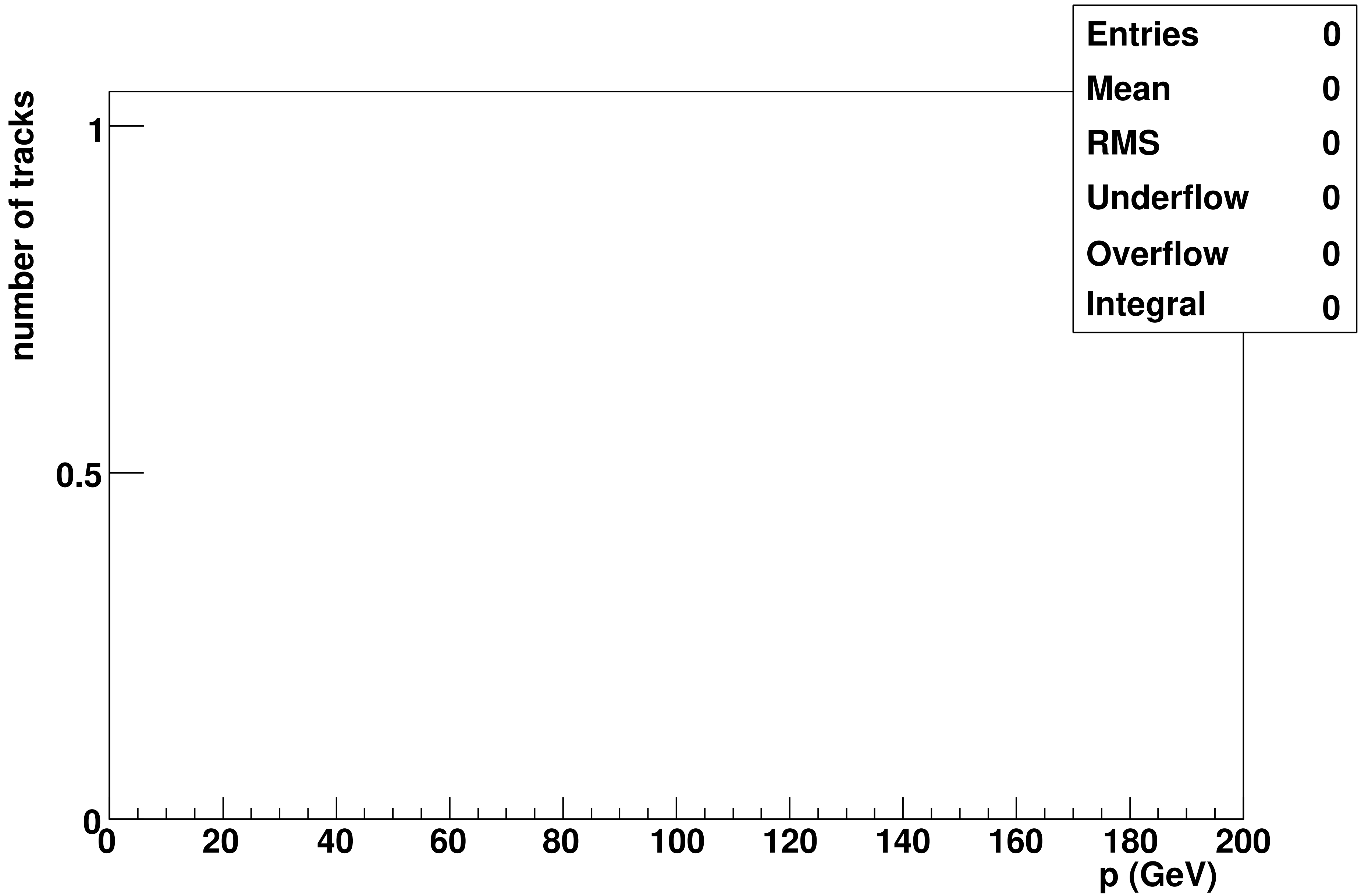


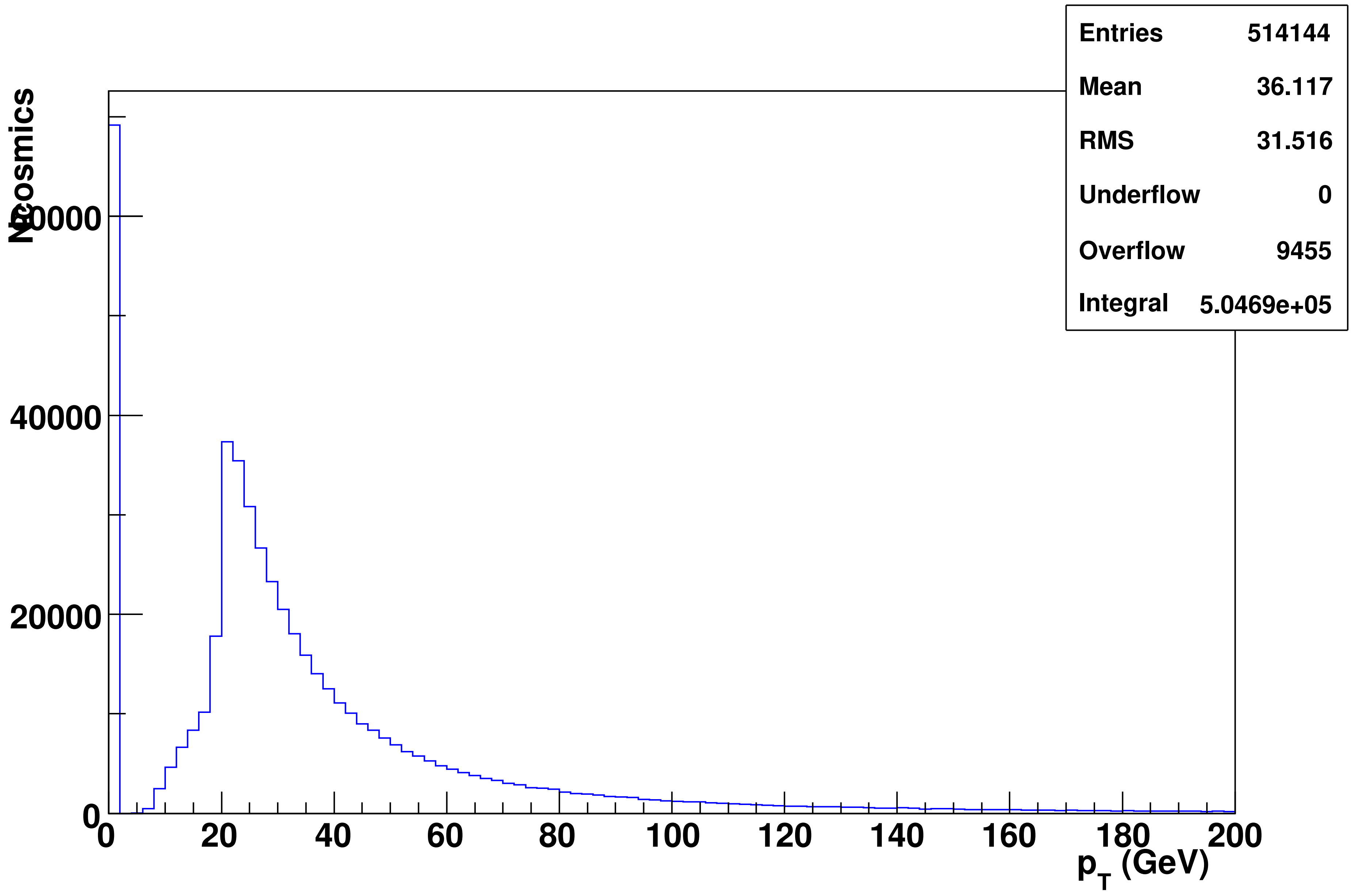
Entries 514144
Mean -0.013552
RMS 1.387
Underflow 69175
Overflow 17
Integral 4.4495e+05
number of cosmics
0
10000
20000
-6
-4
-2
0
2
4
6
d_0 (cm)


Entries 514144
Mean 1.5327
RMS 9.6556
Underflow 69553
Overflow 189
Integral 4.444e+05
number of cosmics
0
10000
20000
30000
-30
-20
-10
0
10
20
30
t_0 (ns)

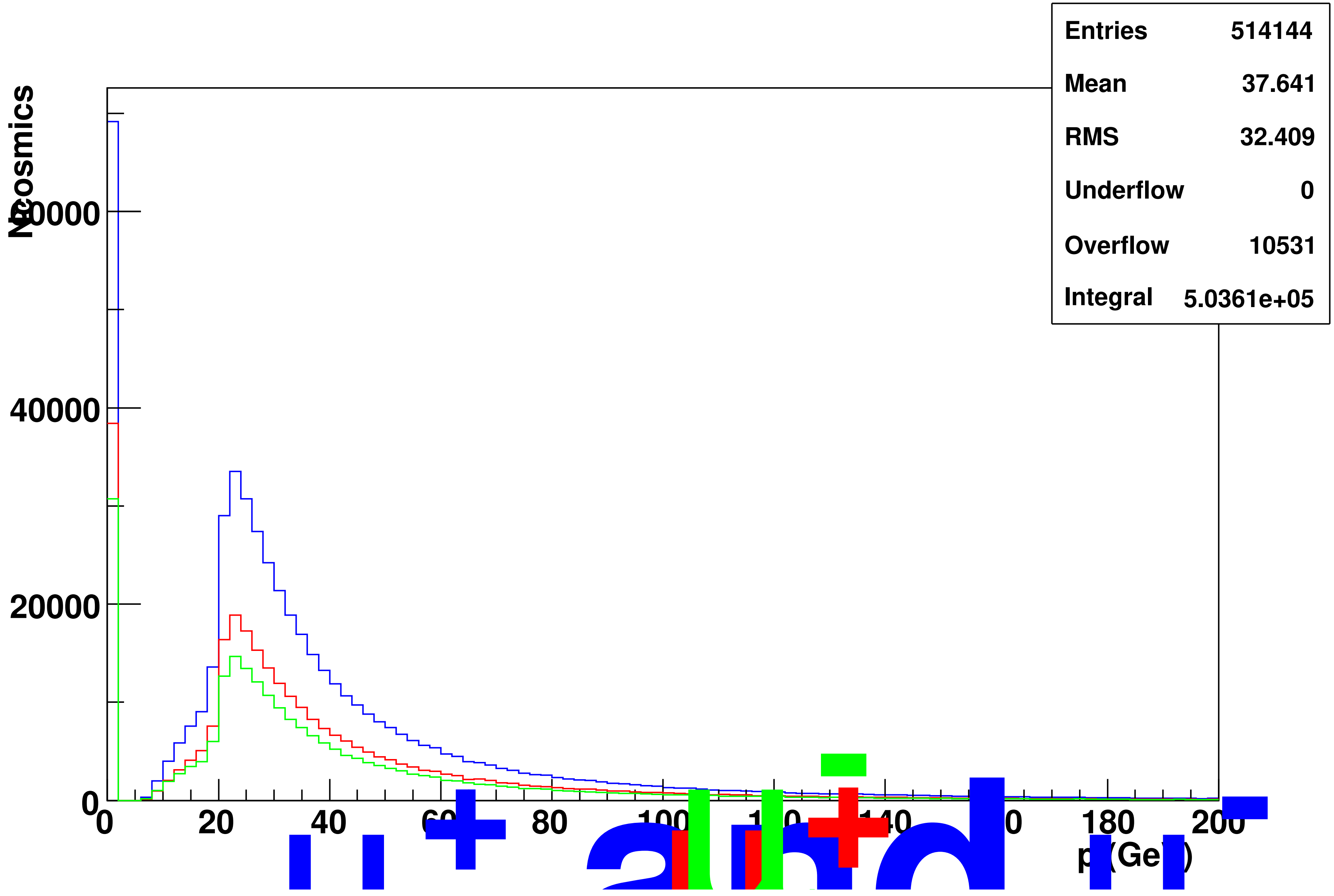

Entries 514144
Mean 0.0015502
RMS 0.3237
Underflow 71076
Overflow 1869
Integral 4.412e+05
number of cosmics
20000
10000
0
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
cot θ

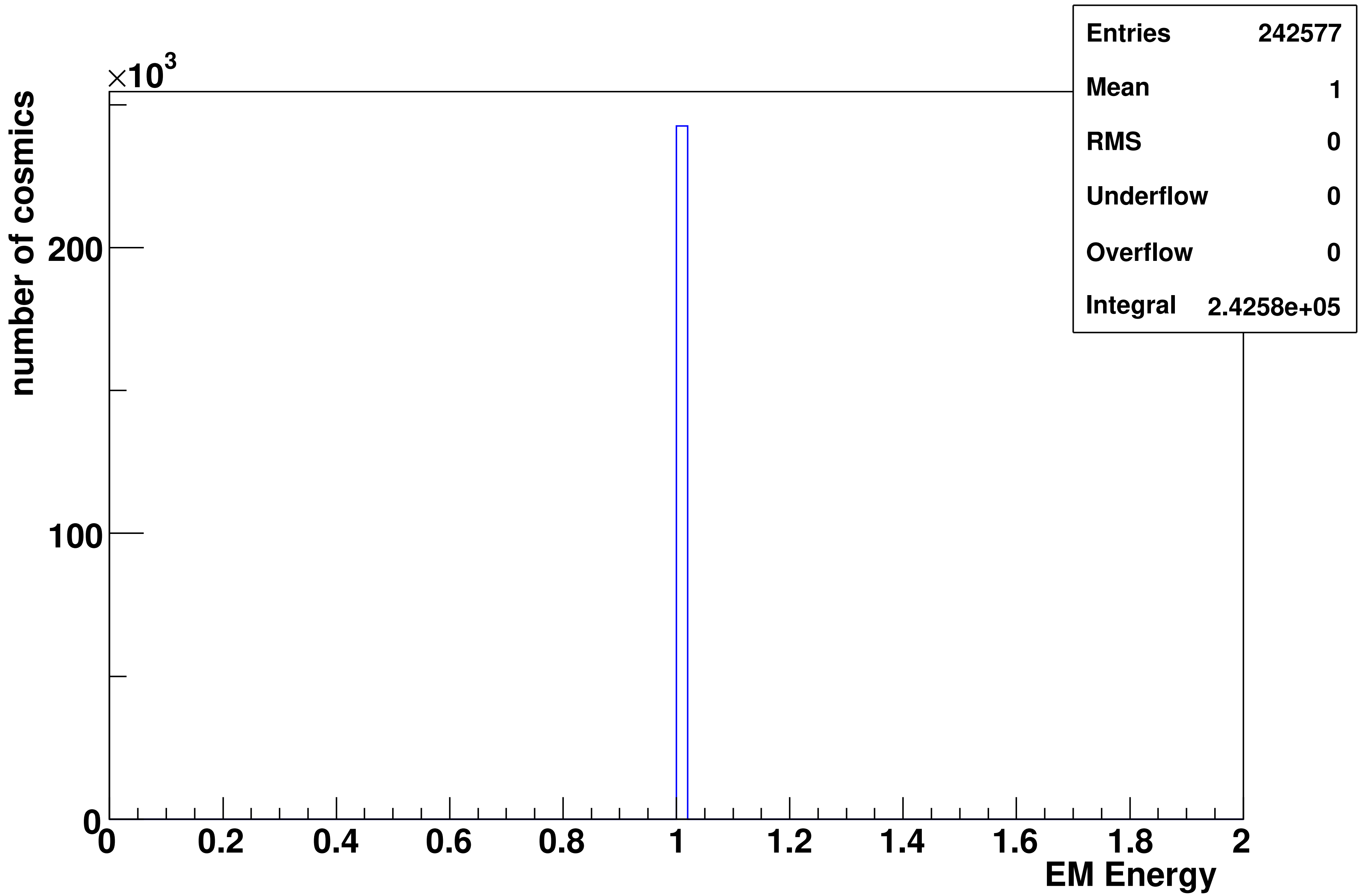

Entries 514144
Mean -1.1899
RMS 74.171
Underflow 69148
Overflow 0
Integral 4.45e+05
number of cosmics
6000
4000
2000
0
-150
-100
-50
0
50
100
150
z_0 (cm)


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)

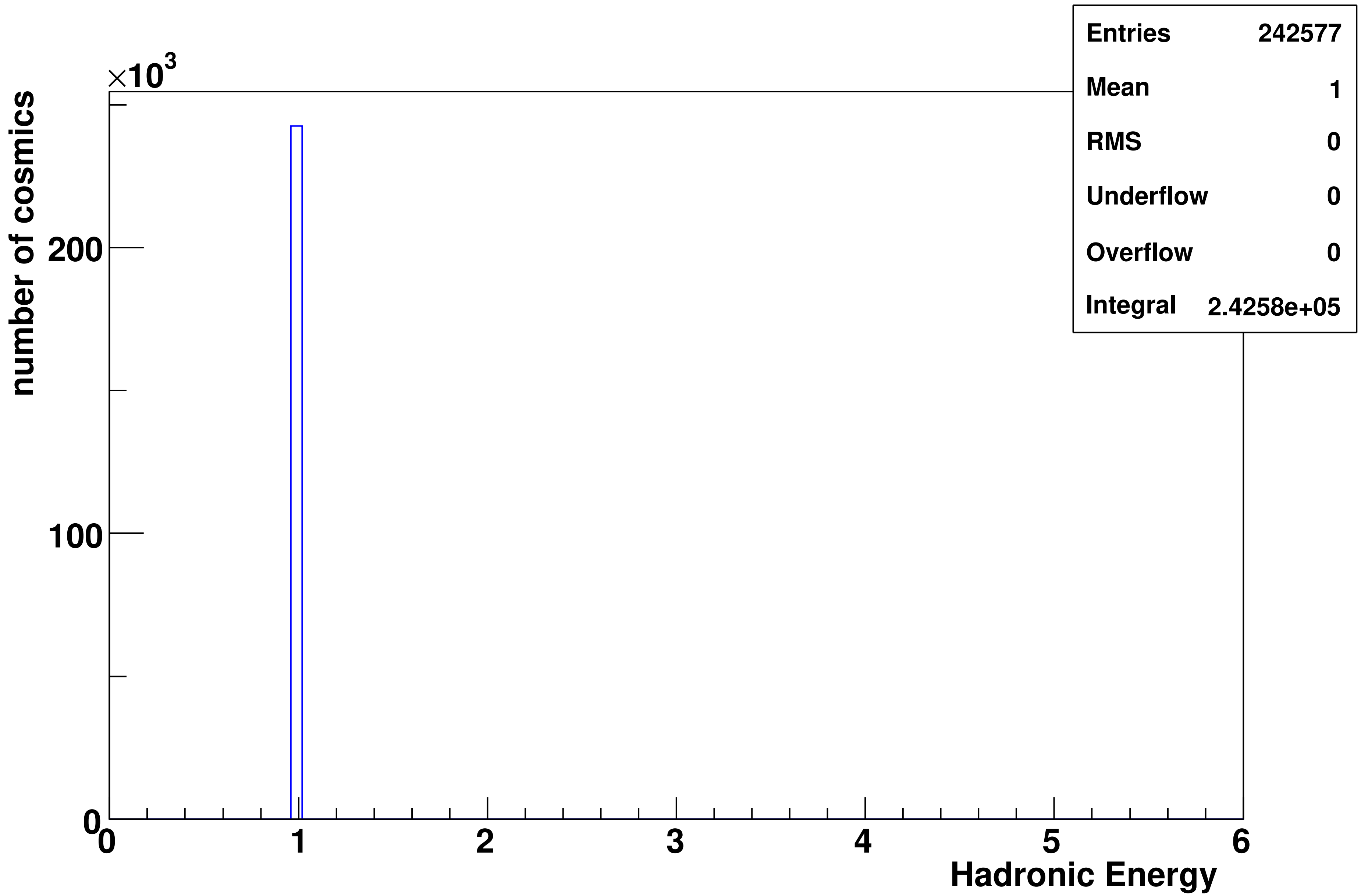


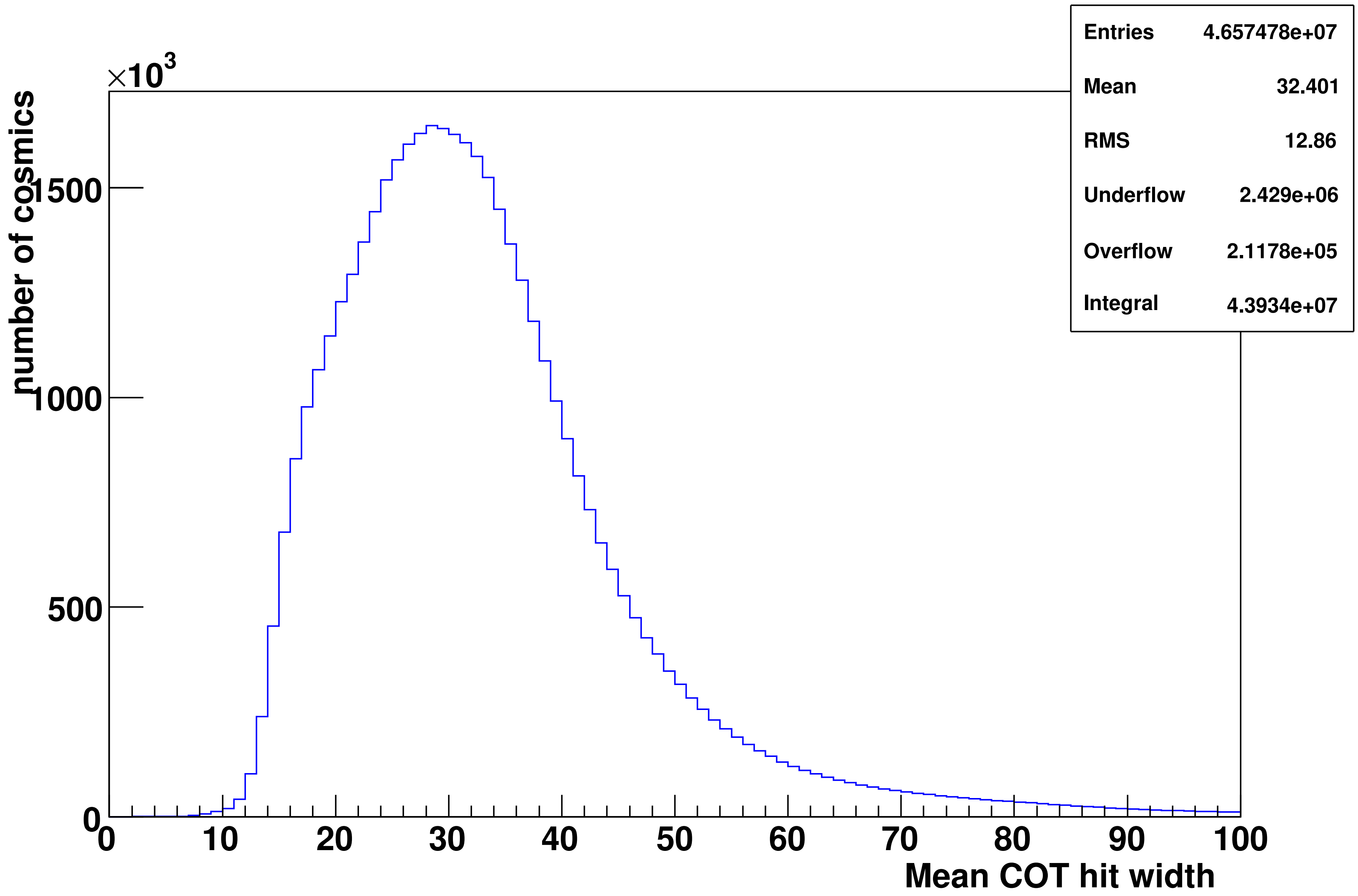
Entries 514144
Mean 36.117
RMS 31.516
Underflow 0
Overflow 9455
Integral 5.0469e+05
Ncosmics
0
20000
40000
60000
0
20
40
60
80
100
120
140
160
180
200
p_T (GeV)

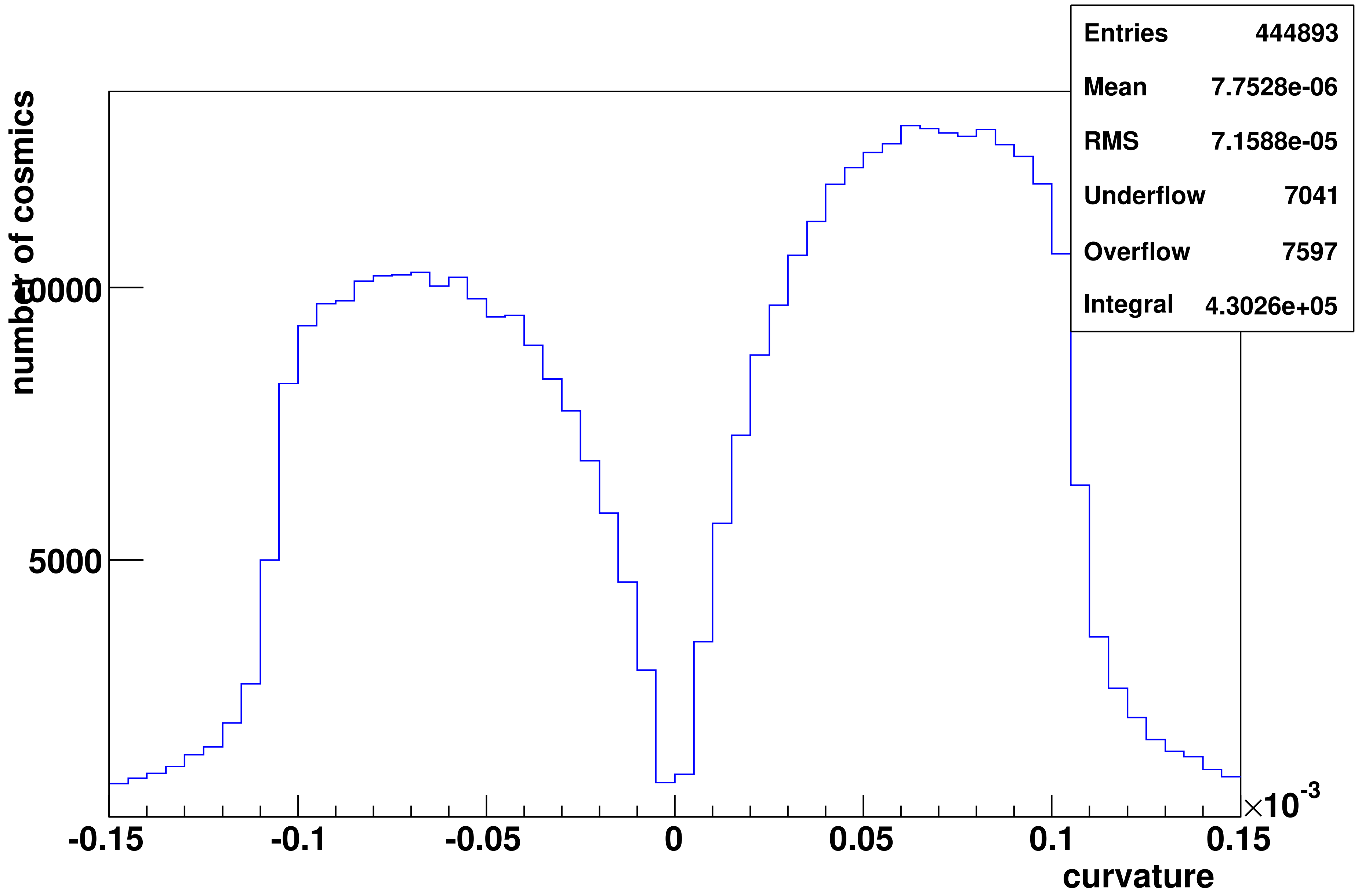

Entries 514144
Mean 37.641
RMS 32.409
Underflow 0
Overflow 10531
Integral 5.0361e+05
Ncosmics
0
20000
40000
0
20
40
80
180
200
p (GeV)



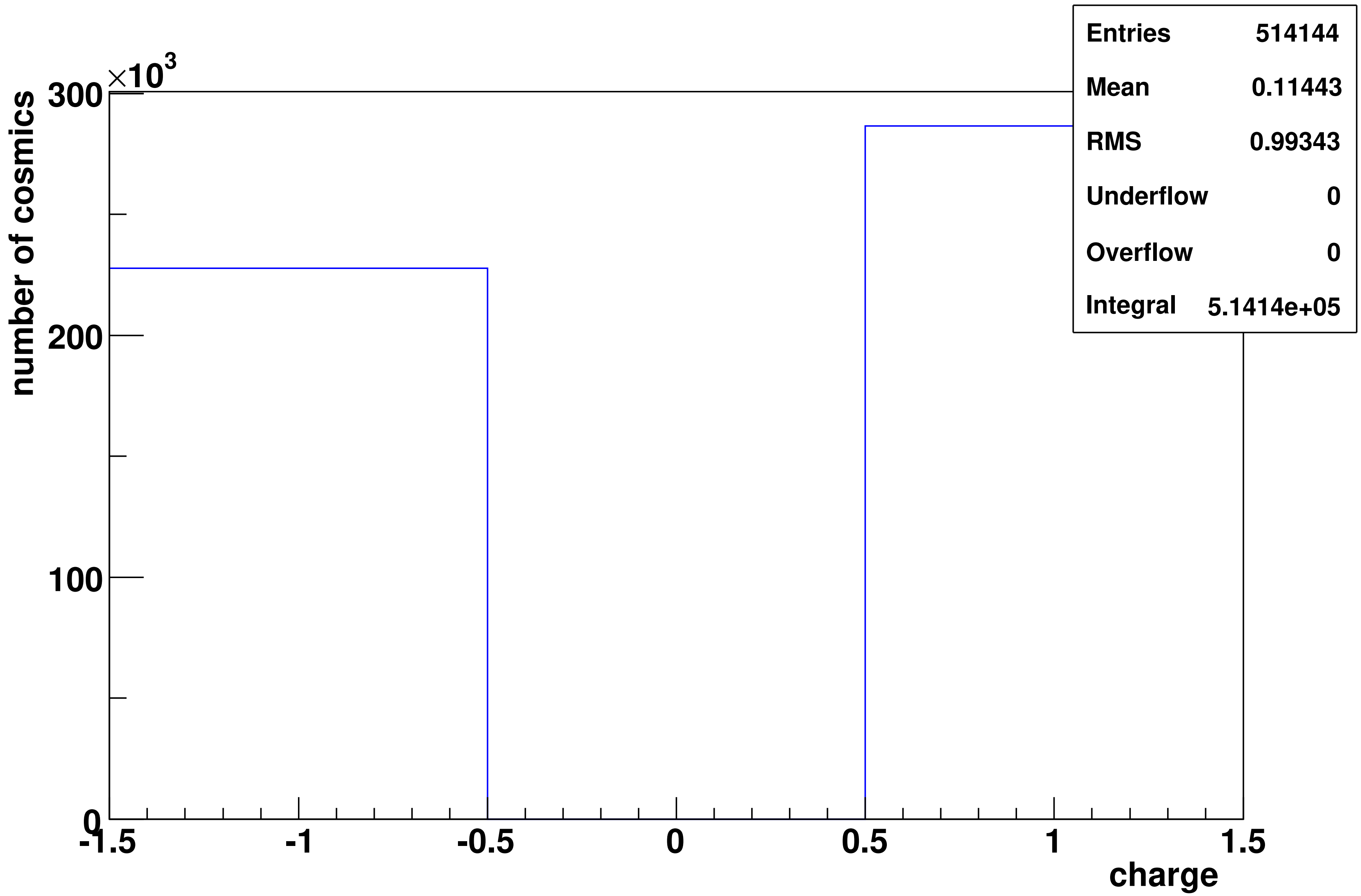
Entries 242577
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.4258e+05
×10^3
number of cosmics
200
100
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
EM Energy


Entries 242577
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.4258e+05
×10^3
number of cosmics
0
100
200
0
1
2
3
4
5
6
Hadronic Energy

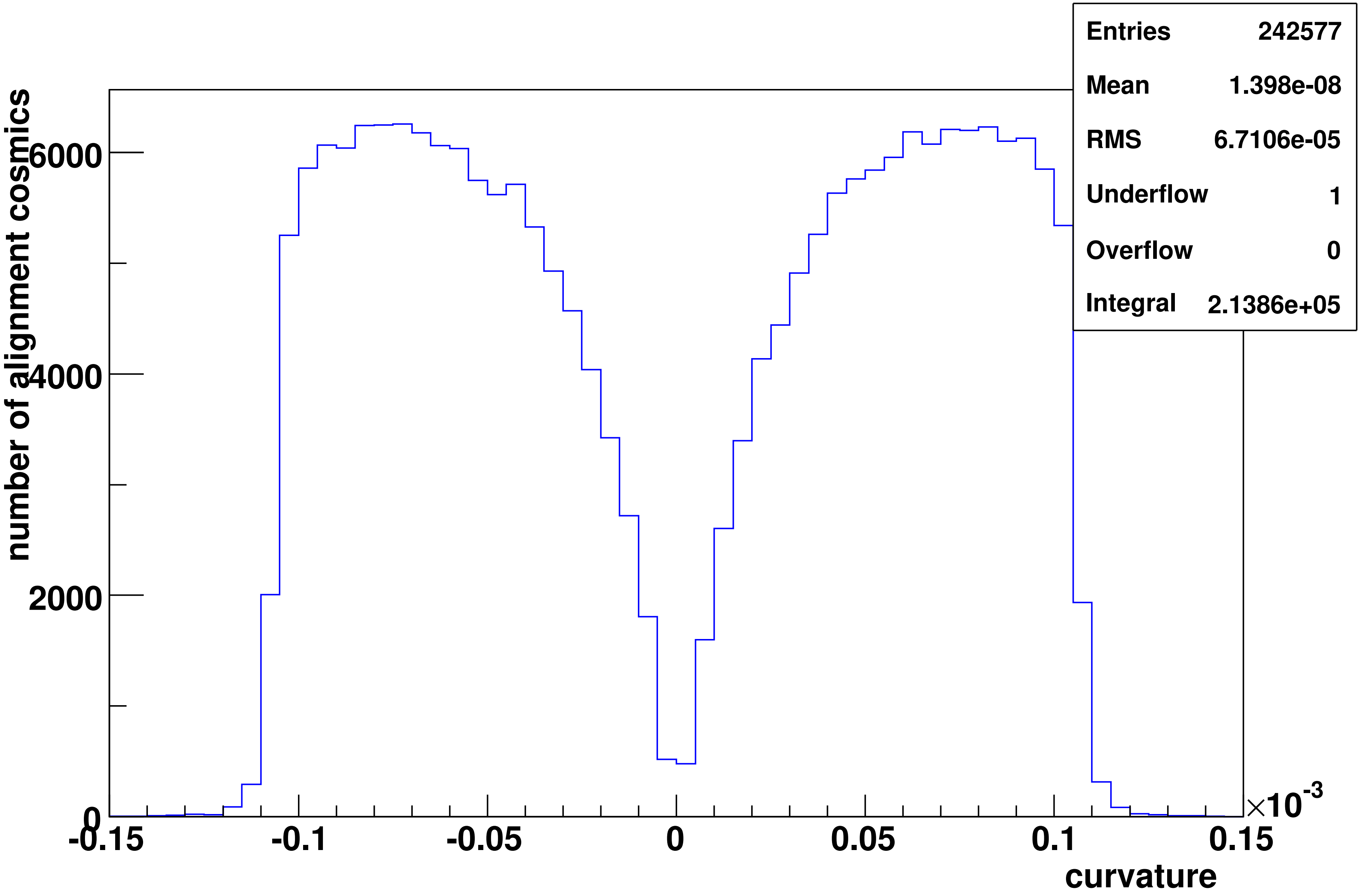

Entries 4.657478e+07
Mean 32.401
RMS 12.86
Underflow 2.429e+06
Overflow 2.1178e+05
Integral 4.3934e+07
×10^3
number of cosmics
1500
1000
500
0
0
10
20
30
40
50
60
70
80
90
100
Mean COT hit width



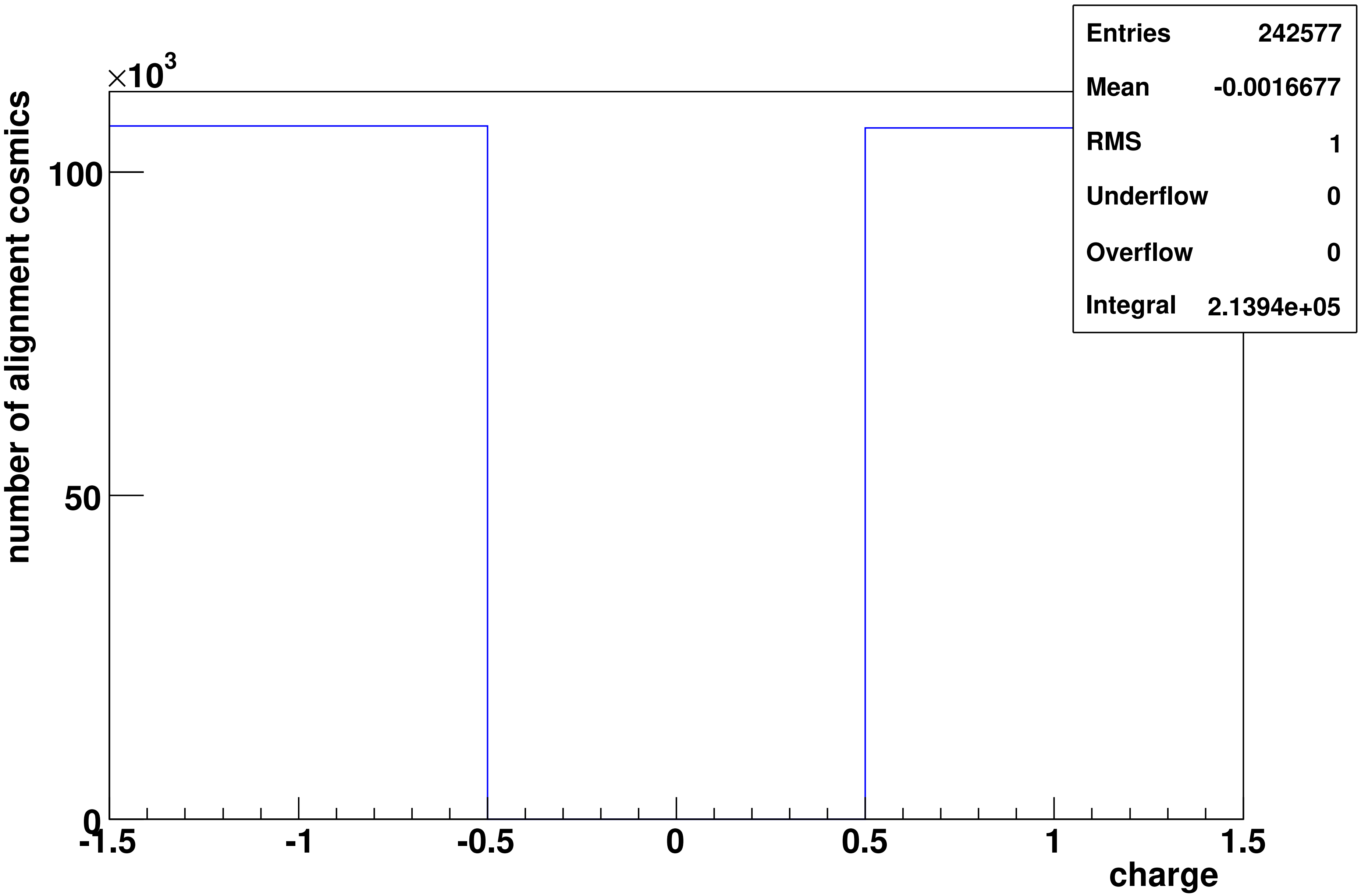
Entries 444893
Mean 7.7528e-06
RMS 7.1588e-05
Underflow 7041
Overflow 7597
Integral 4.3026e+05
number of cosmics
10000
5000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

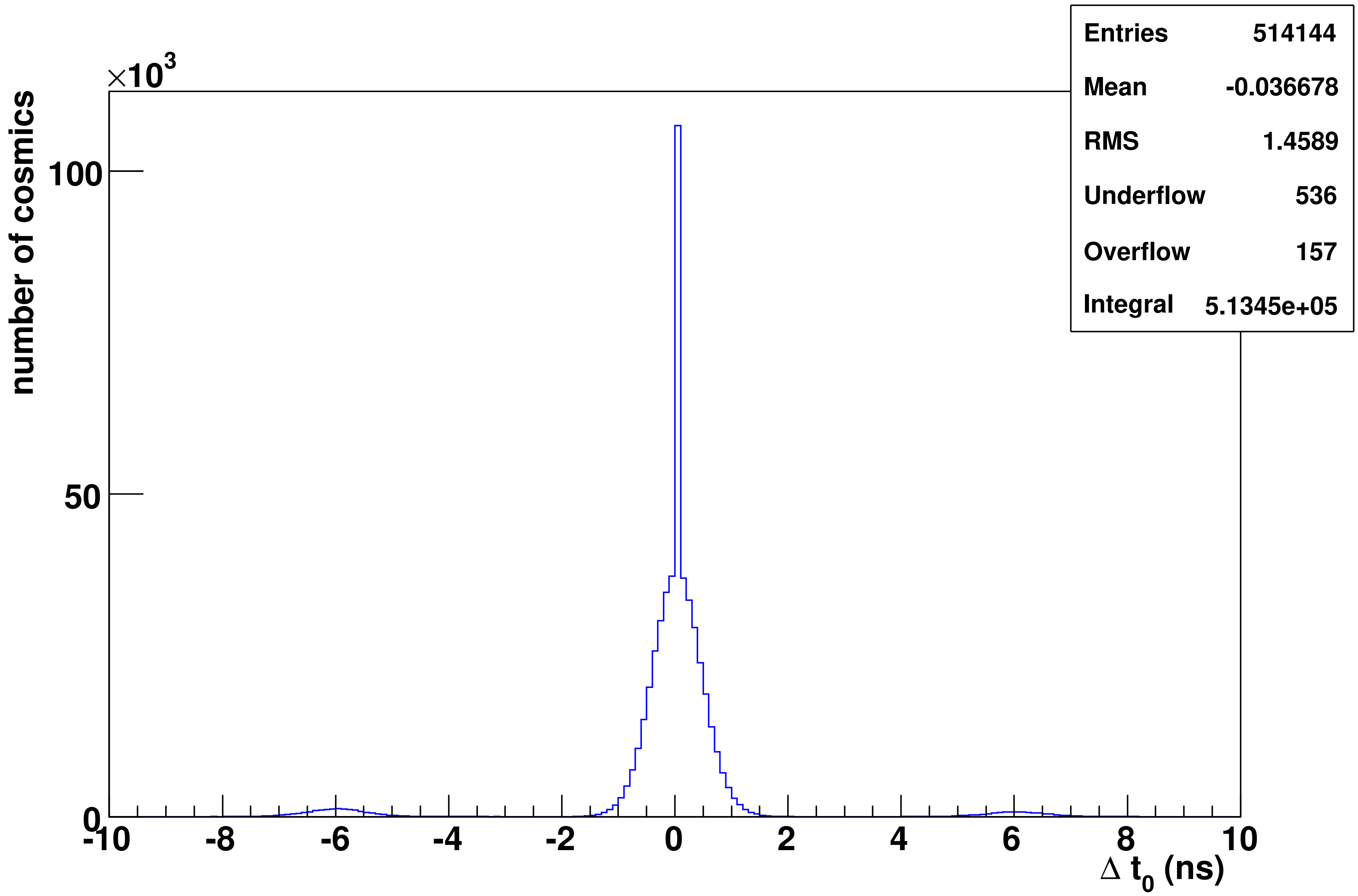


Entries 514144
Mean 0.11443
RMS 0.99343
Underflow 0
Overflow 0
Integral 5.1414e+05
×10^3
300
200
100
0
number of cosmics
-1.5
-1
-0.5
0
0.5
1
1.5
charge

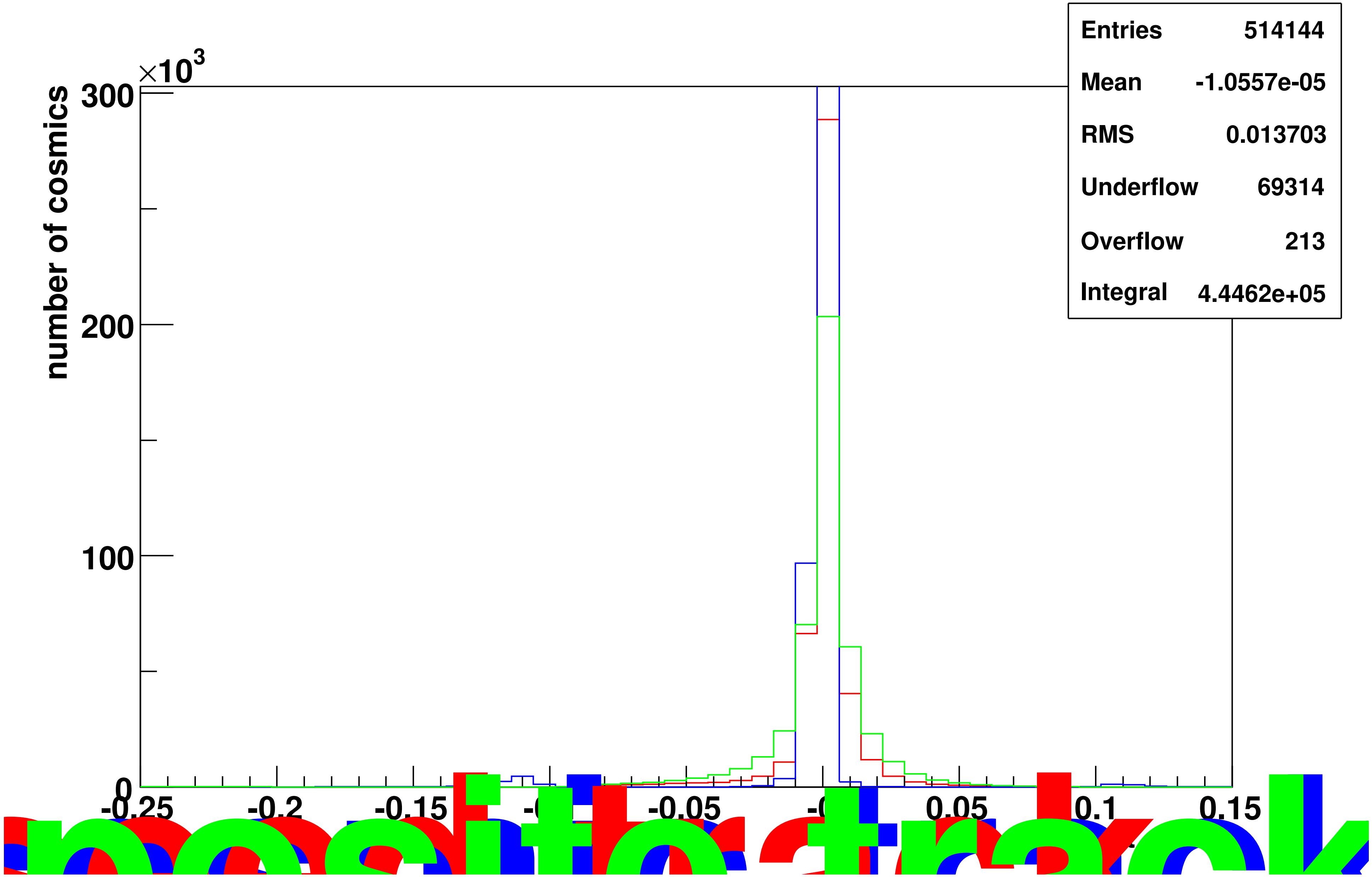


Entries 242577
Mean 1.398e-08
RMS 6.7106e-05
Underflow 1
Overflow 0
Integral 2.1386e+05
number of alignment cosmics
0
2000
4000
6000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
$\times 10^{-3}$
curvature

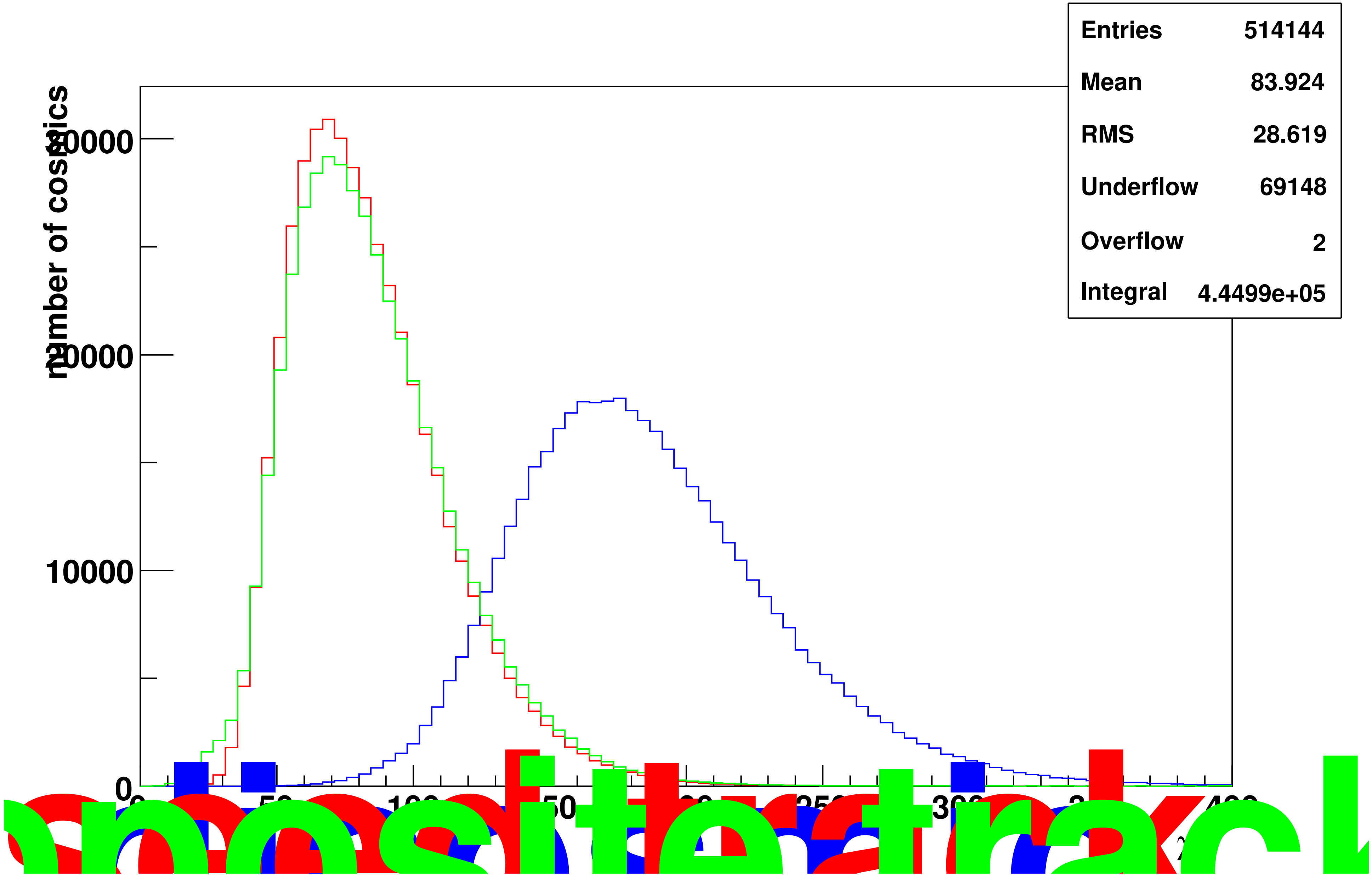

Entries 242577
Mean -0.0016677
RMS 1
Underflow 0
Overflow 0
Integral 2.1394e+05
×10^3
100
50
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge
number of alignment cosmics

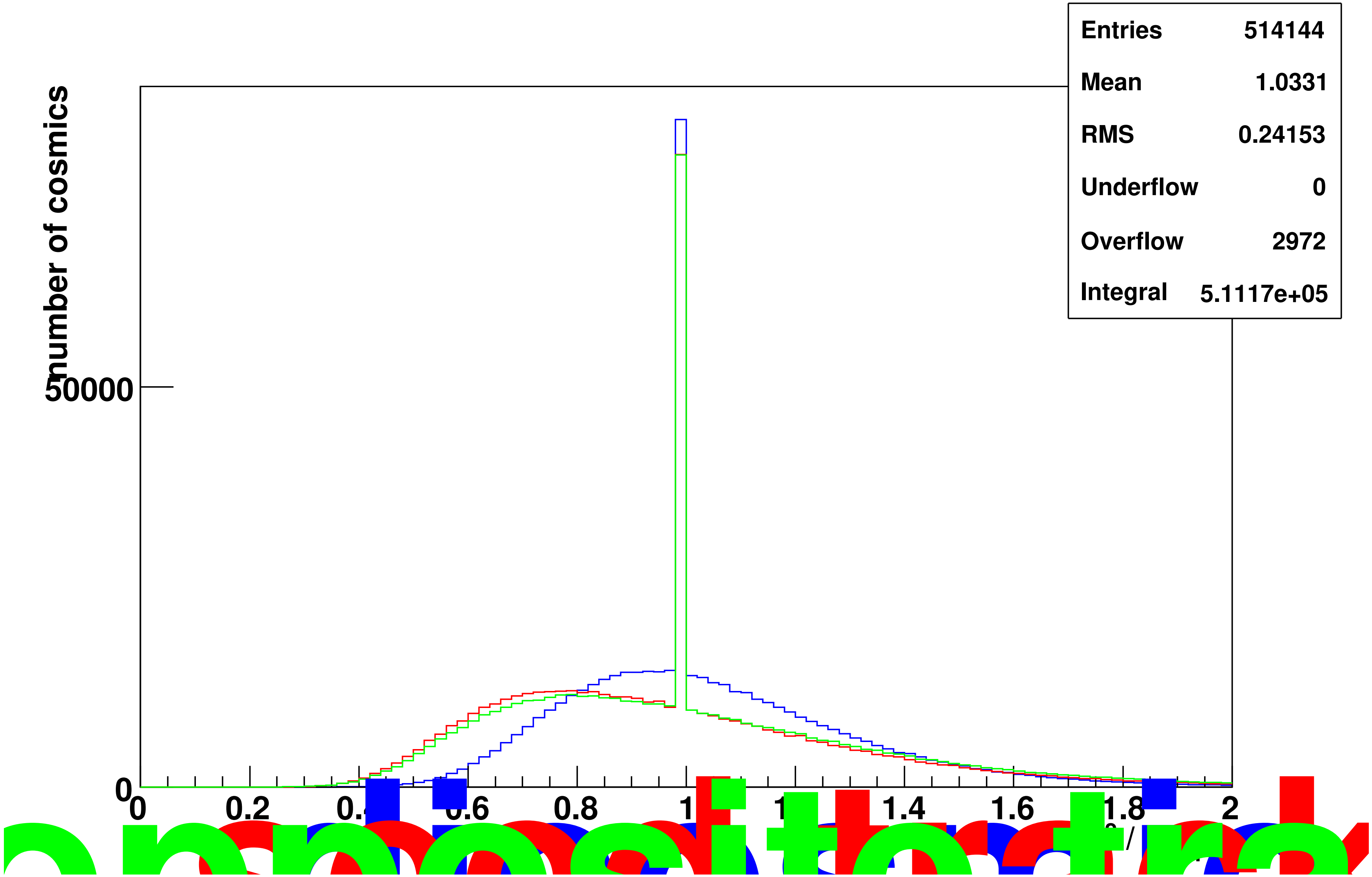


Entries 514144
Mean -0.036678
RMS 1.4589
Underflow 536
Overflow 157
Integral 5.1345e+05
$\times 10^3$
number of cosmics
100
50
0
-10
-8
-6
-4
-2
0
2
4
6
8
10
Δt_0 (ns)

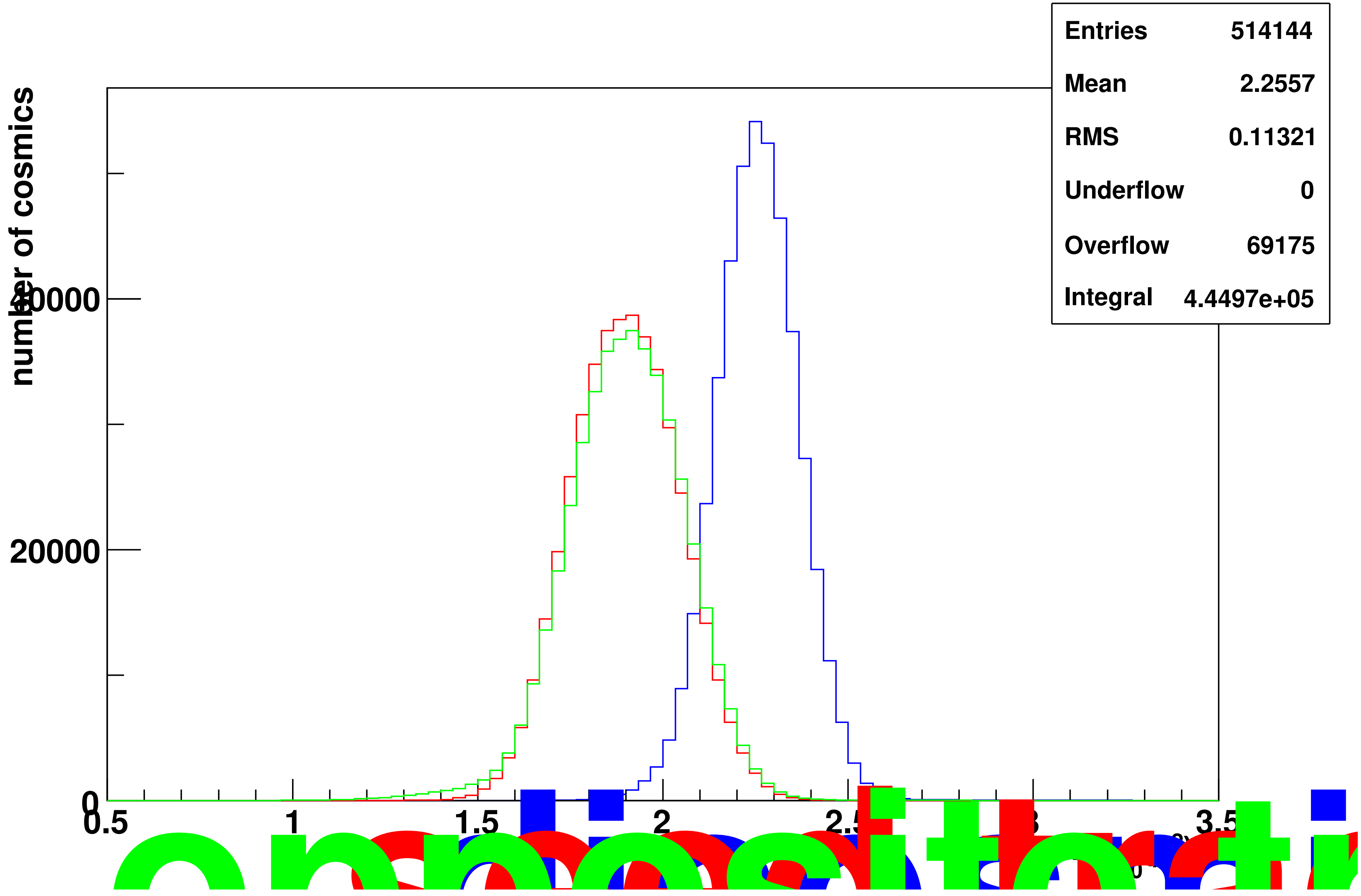


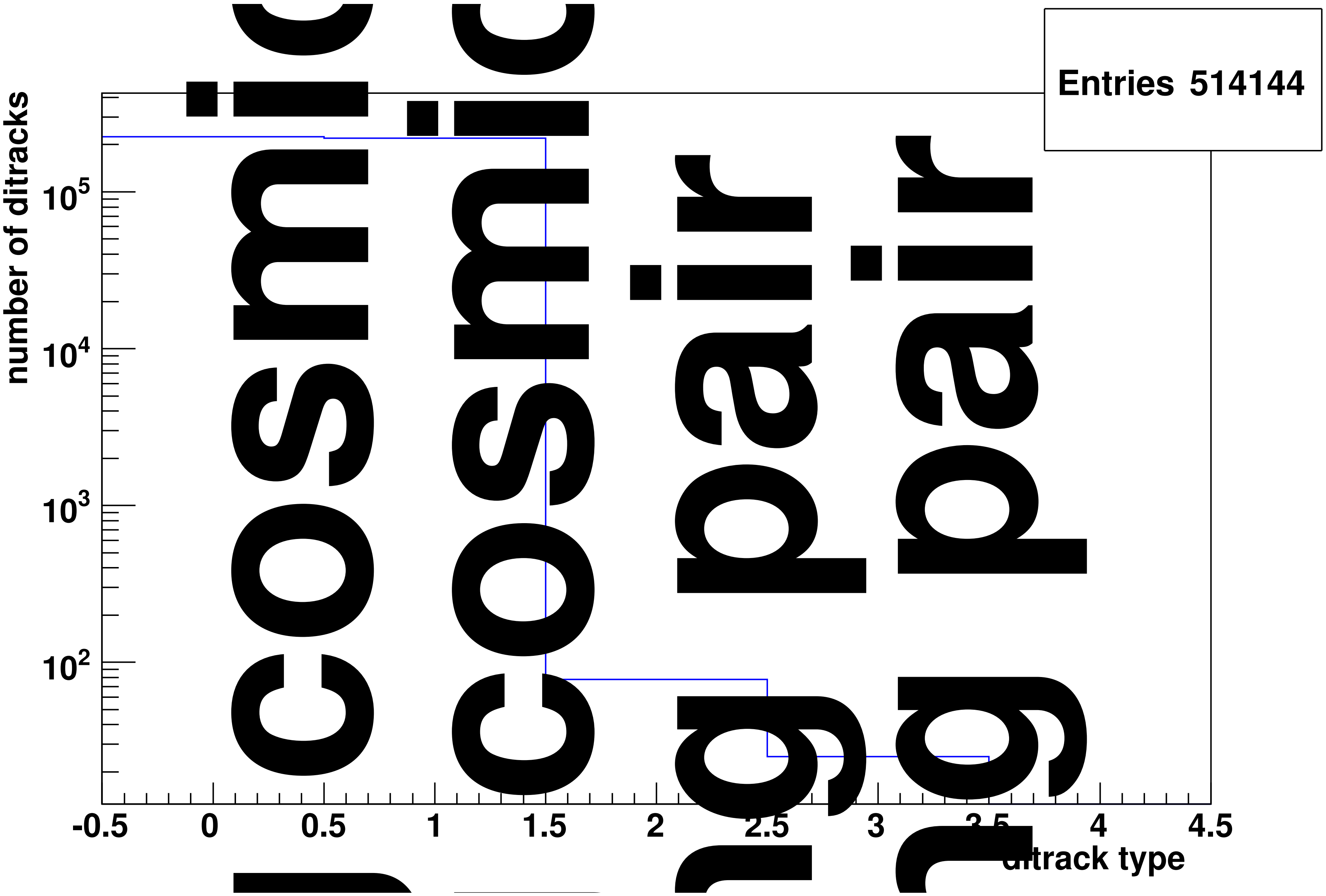
Entries 514144
Mean -1.0557e-05
RMS 0.013703
Underflow 69314
Overflow 213
Integral 4.4462e+05
number of cosmics
×10^3
300
200
100
0
-0.25
-0.2
-0.15
-0.05
0.05
0.1
0.15


number of cosmics
10000
0
Entries 514144
Mean 83.924
RMS 28.619
Underflow 69148
Overflow 2
Integral 4.4499e+05

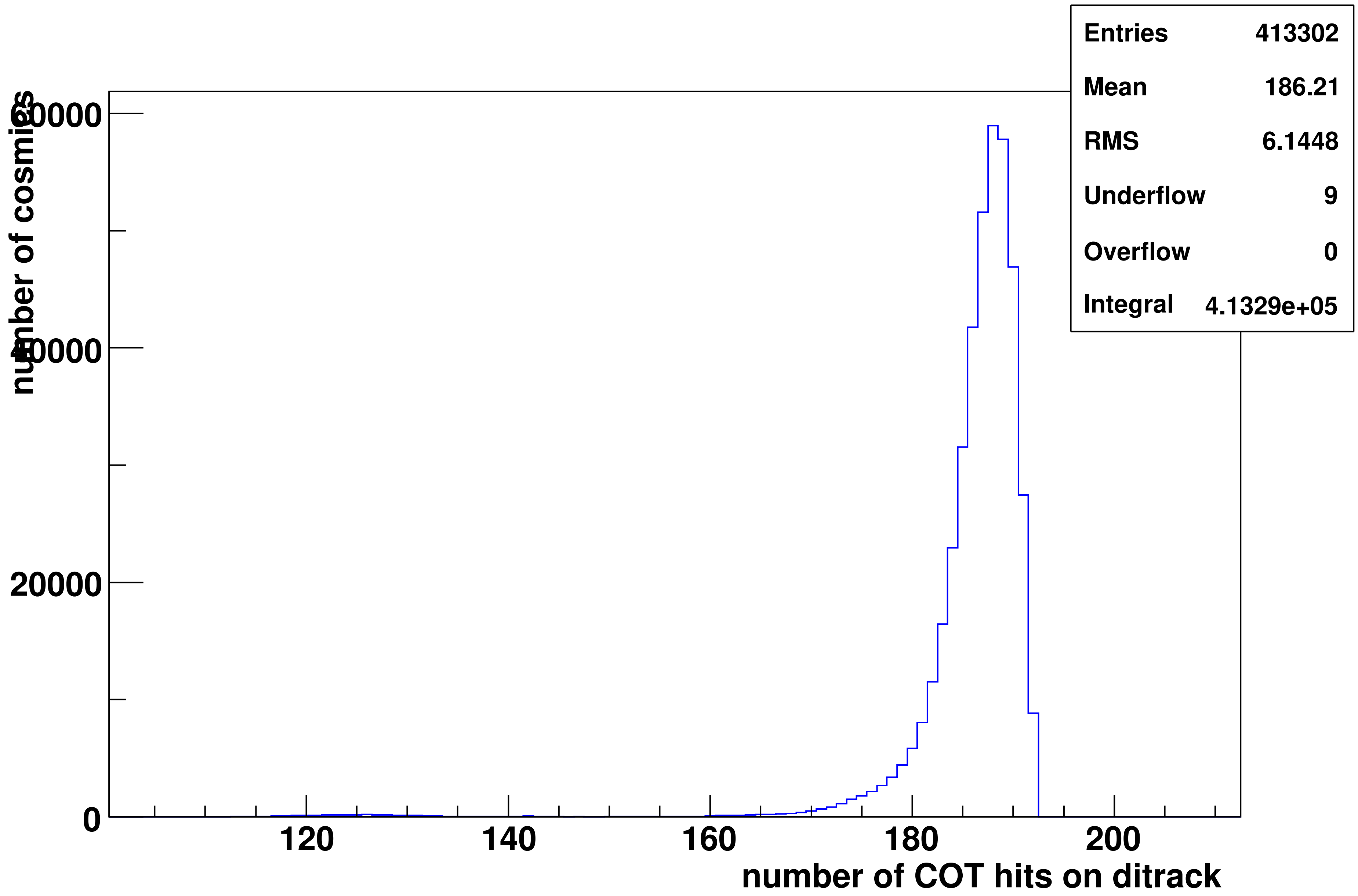


Entries 514144
Mean 1.0331
RMS 0.24153
Underflow 0
Overflow 2972
Integral 5.1117e+05
number of cosmics
50000
0
0
0.2
0.6
0.8
1
1.4
1.6
1.8
2

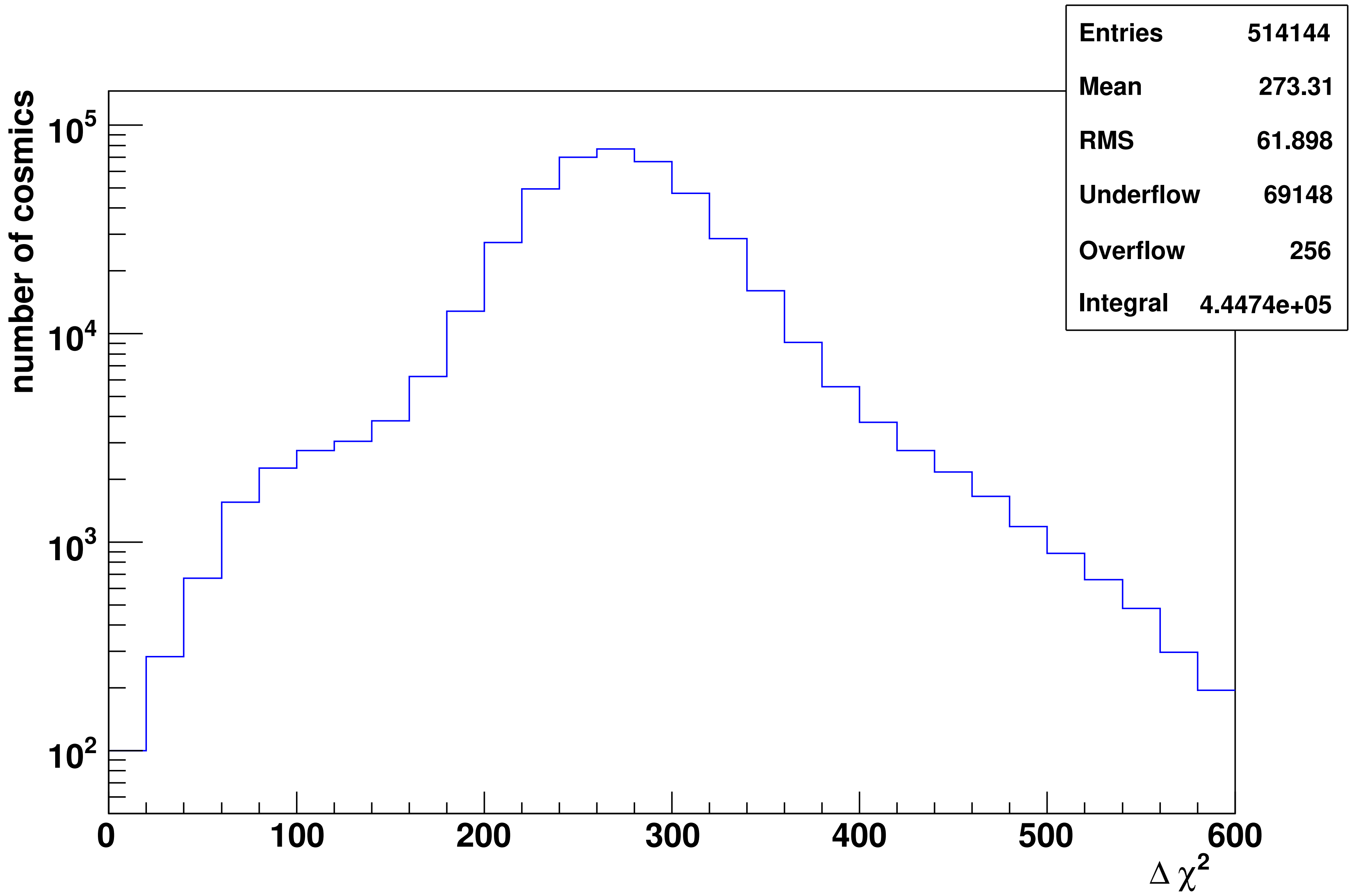

Entries 514144
Mean 2.2557
RMS 0.11321
Underflow 0
Overflow 69175
Integral 4.4497e+05
number of cosmics
40000
20000
0
0.5
1
1.5
2
3.5



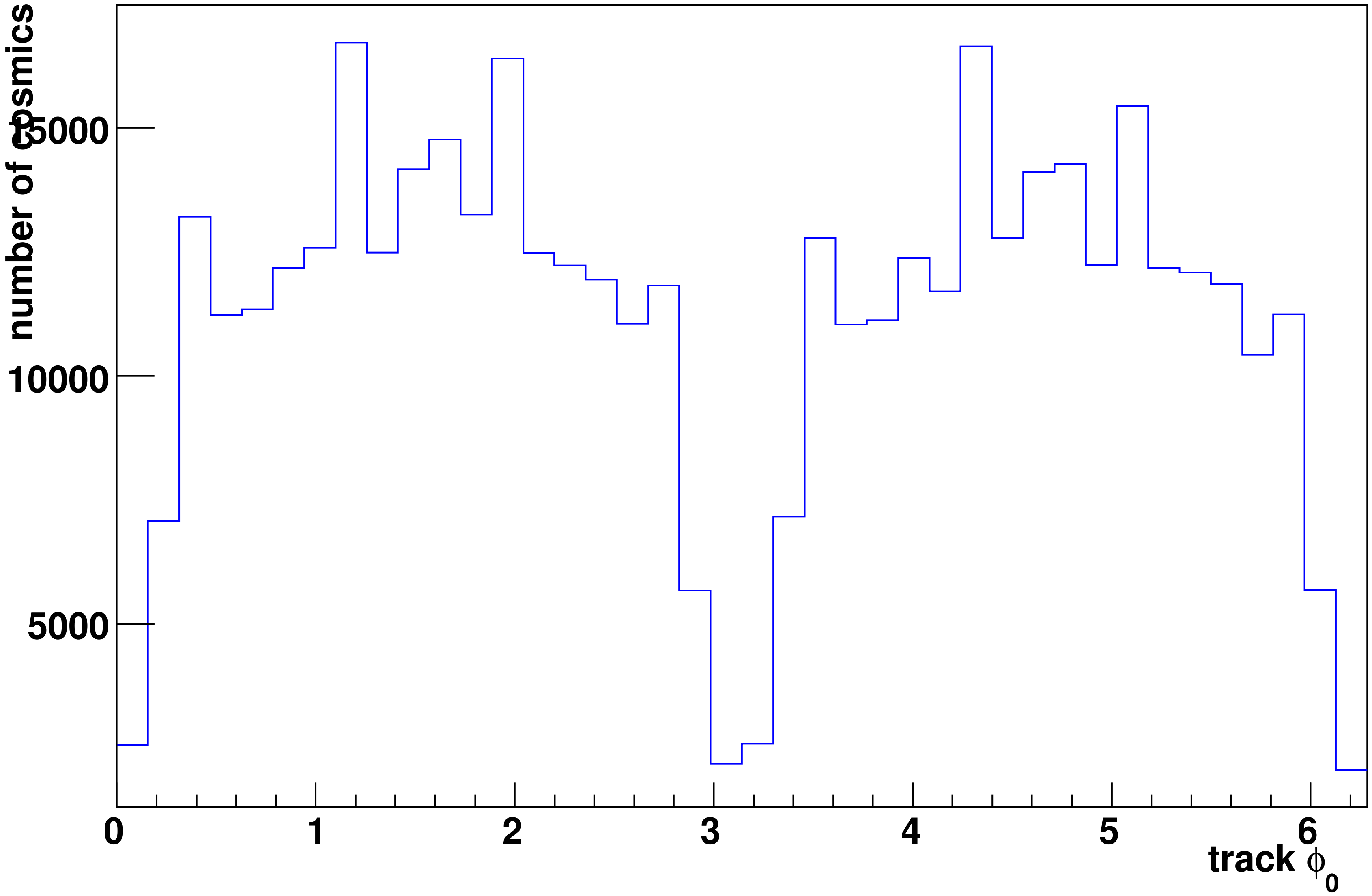
Entries 514144
number of ditracks
10^2
10^3
10^4
10^5
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
ditrack type
cosmic
cosmic
pair
pair



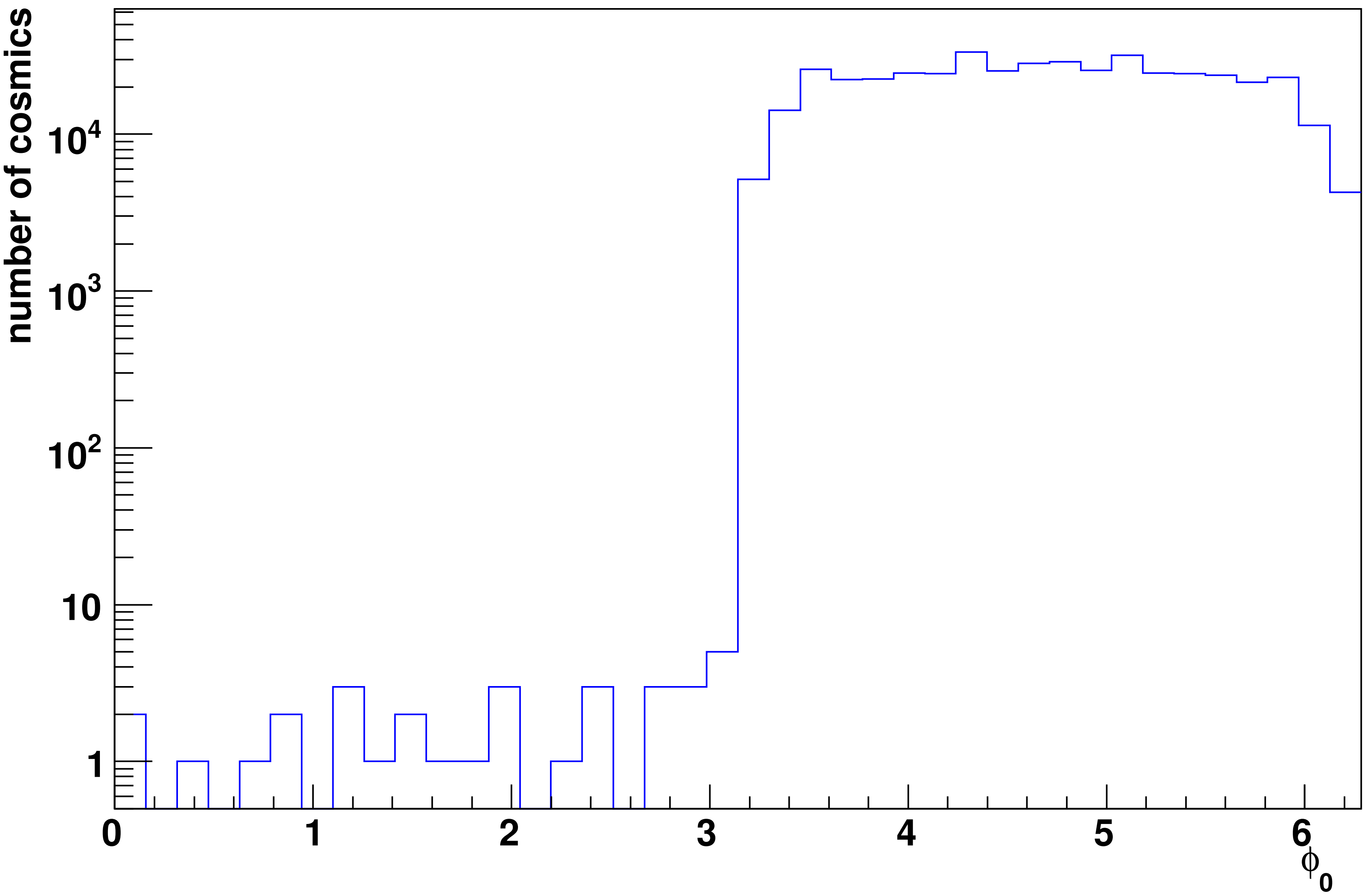
Entries 413302
Mean 186.21
RMS 6.1448
Underflow 9
Overflow 0
Integral 4.1329e+05
number of cosmics
60000
40000
20000
0
120
140
160
180
200
number of COT hits on ditrack



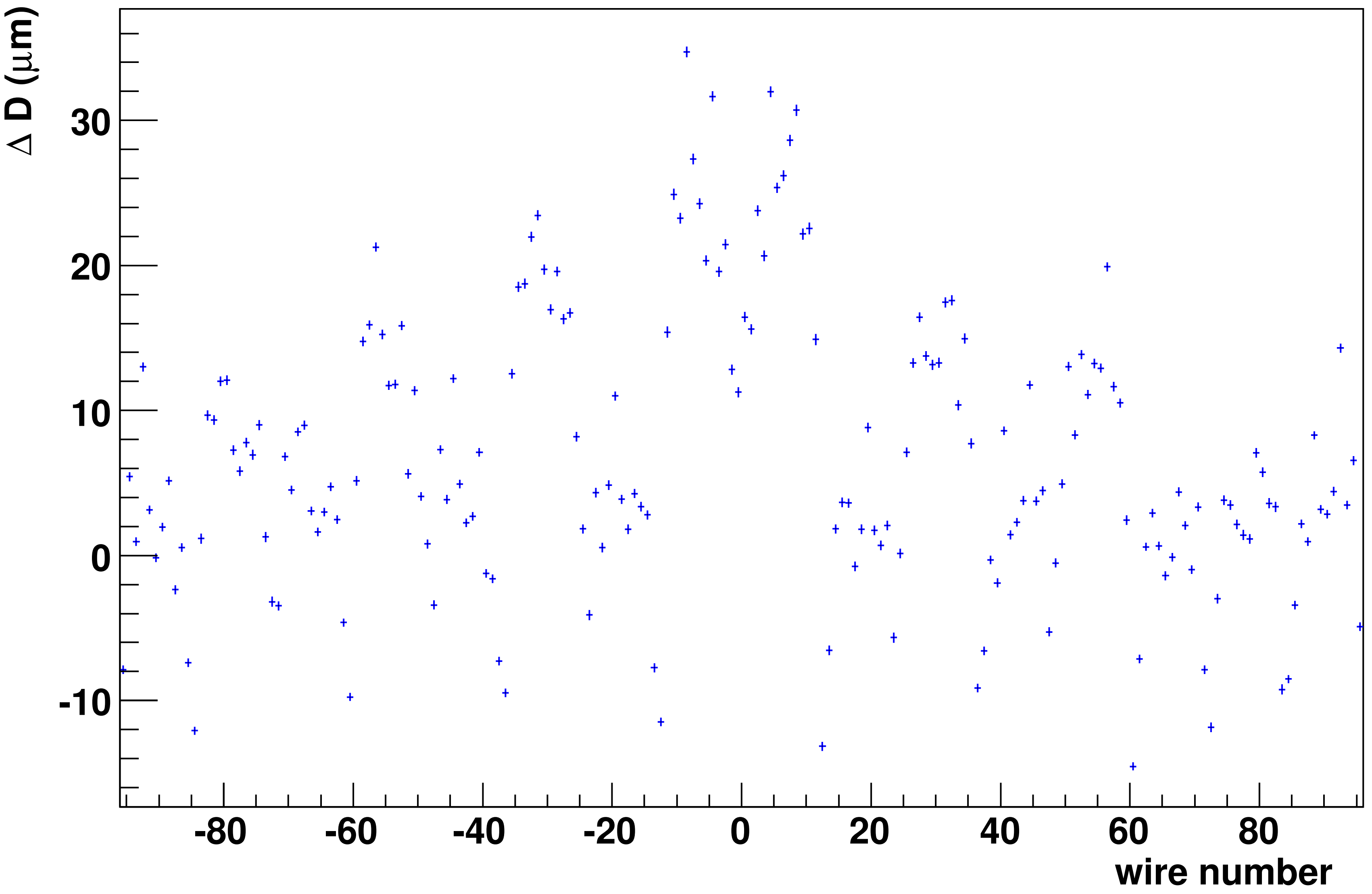
Entries 514144
Mean 273.31
RMS 61.898
Underflow 69148
Overflow 256
Integral 4.4474e+05
number of cosmics
10^5
10^4
10^3
10^2
0
100
200
300
400
500
600
$\Delta\chi^2$



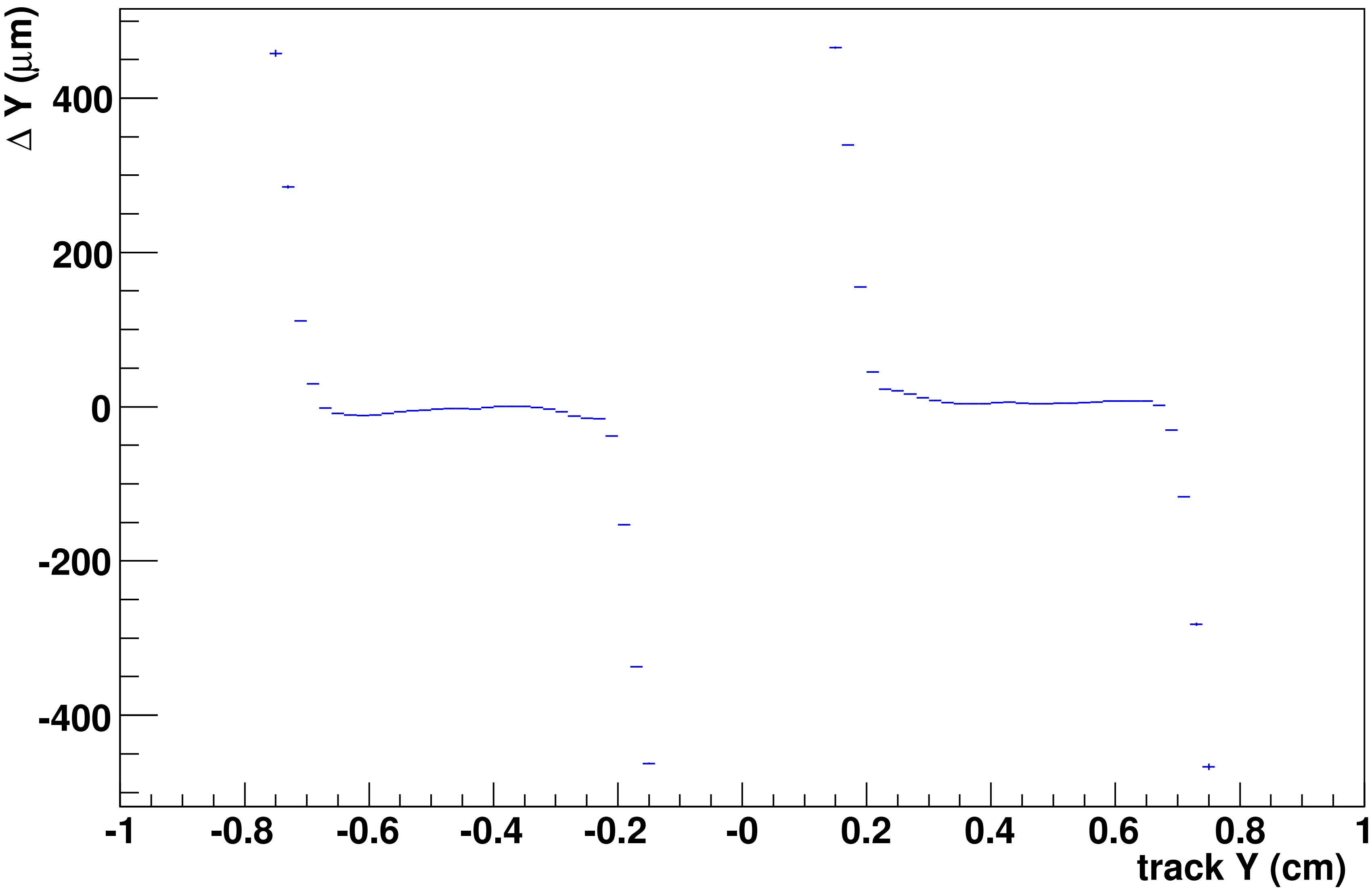
number of cosmics
10000
5000
0
1
2
3
4
5
6
track ϕ_0

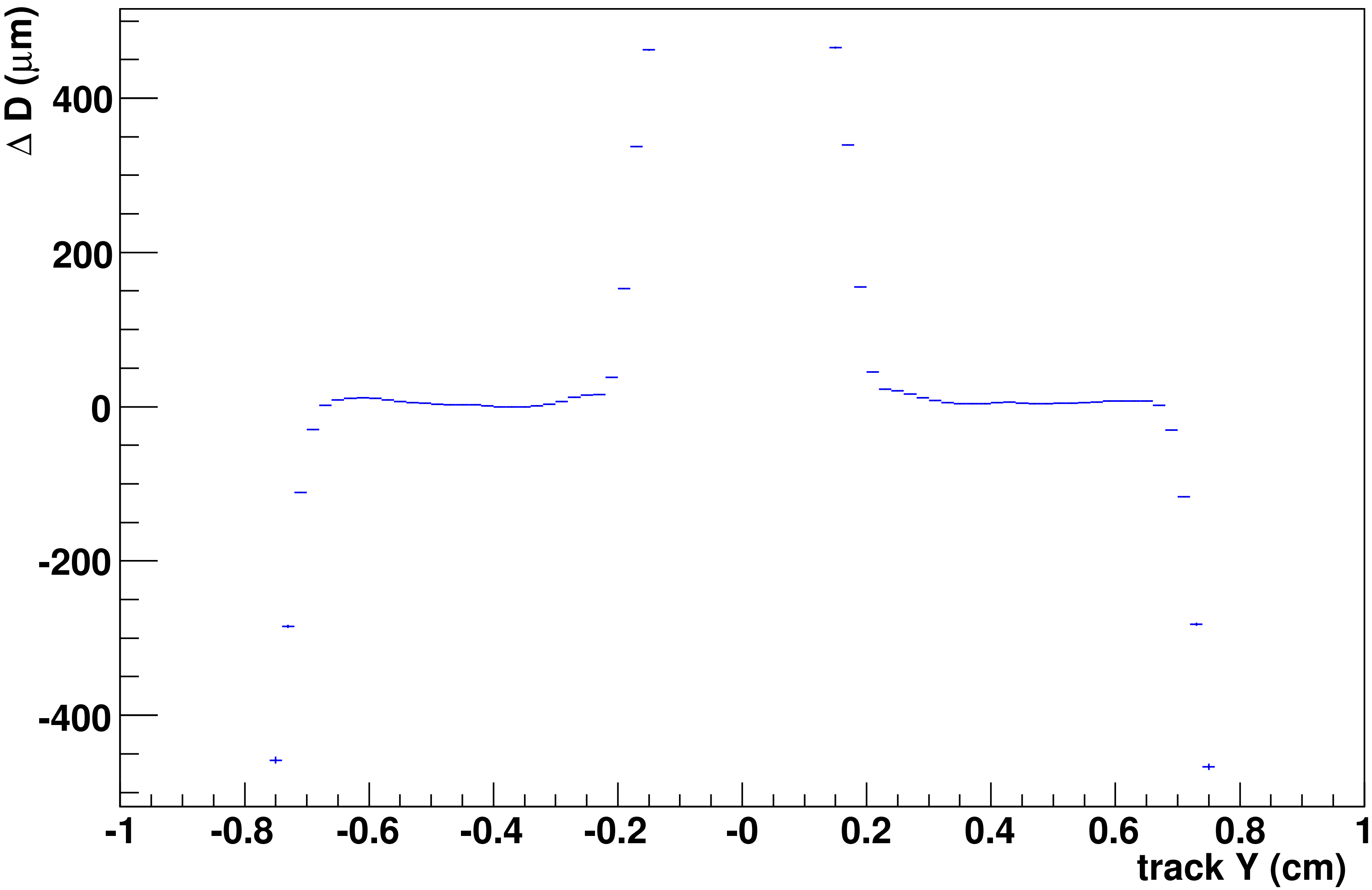


number of cosmics
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
ϕ_0

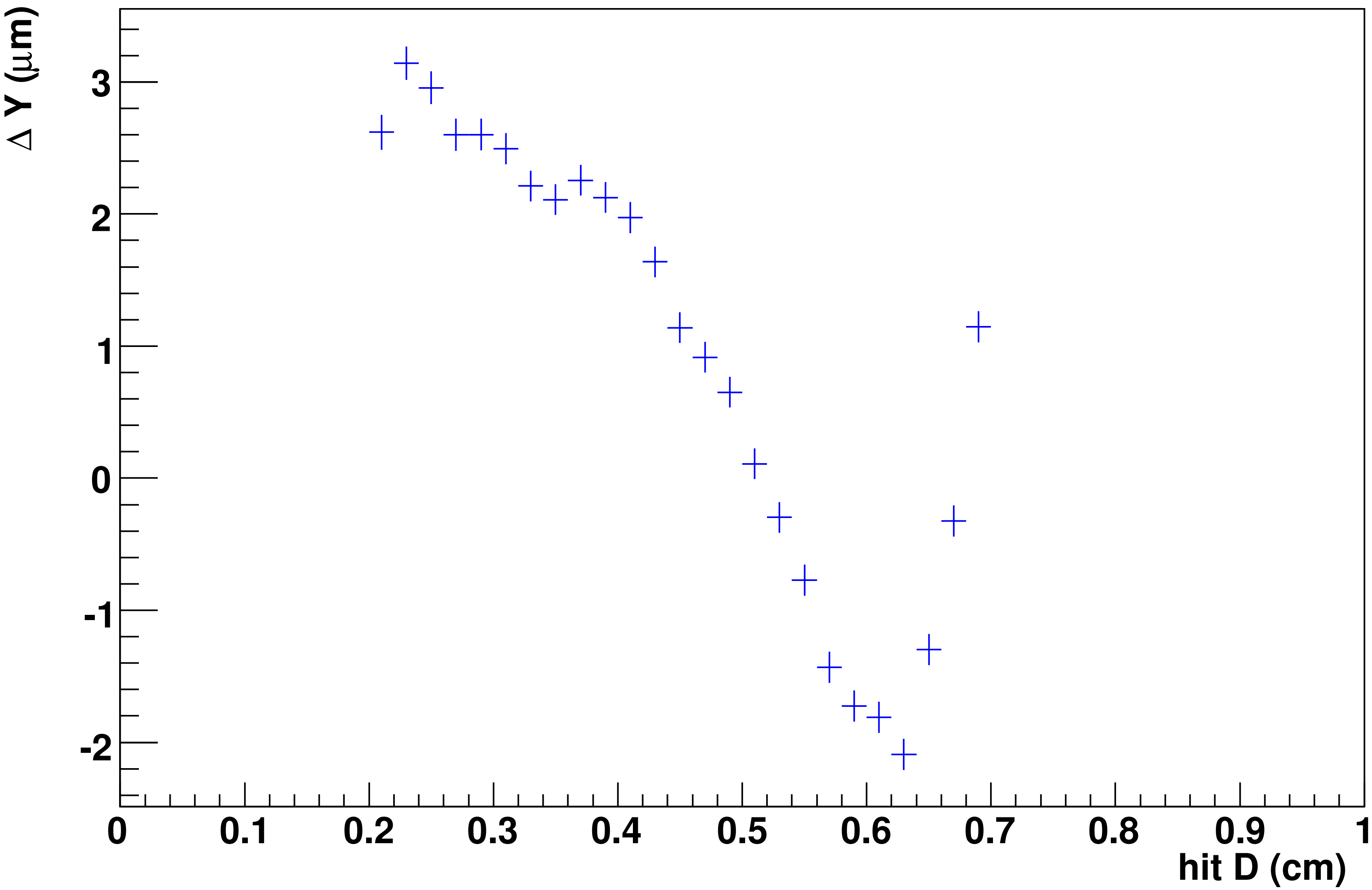


Δ D (μm)
30
20
10
0
-10
-80
-60
-40
-20
0
20
40
60
80
wire number

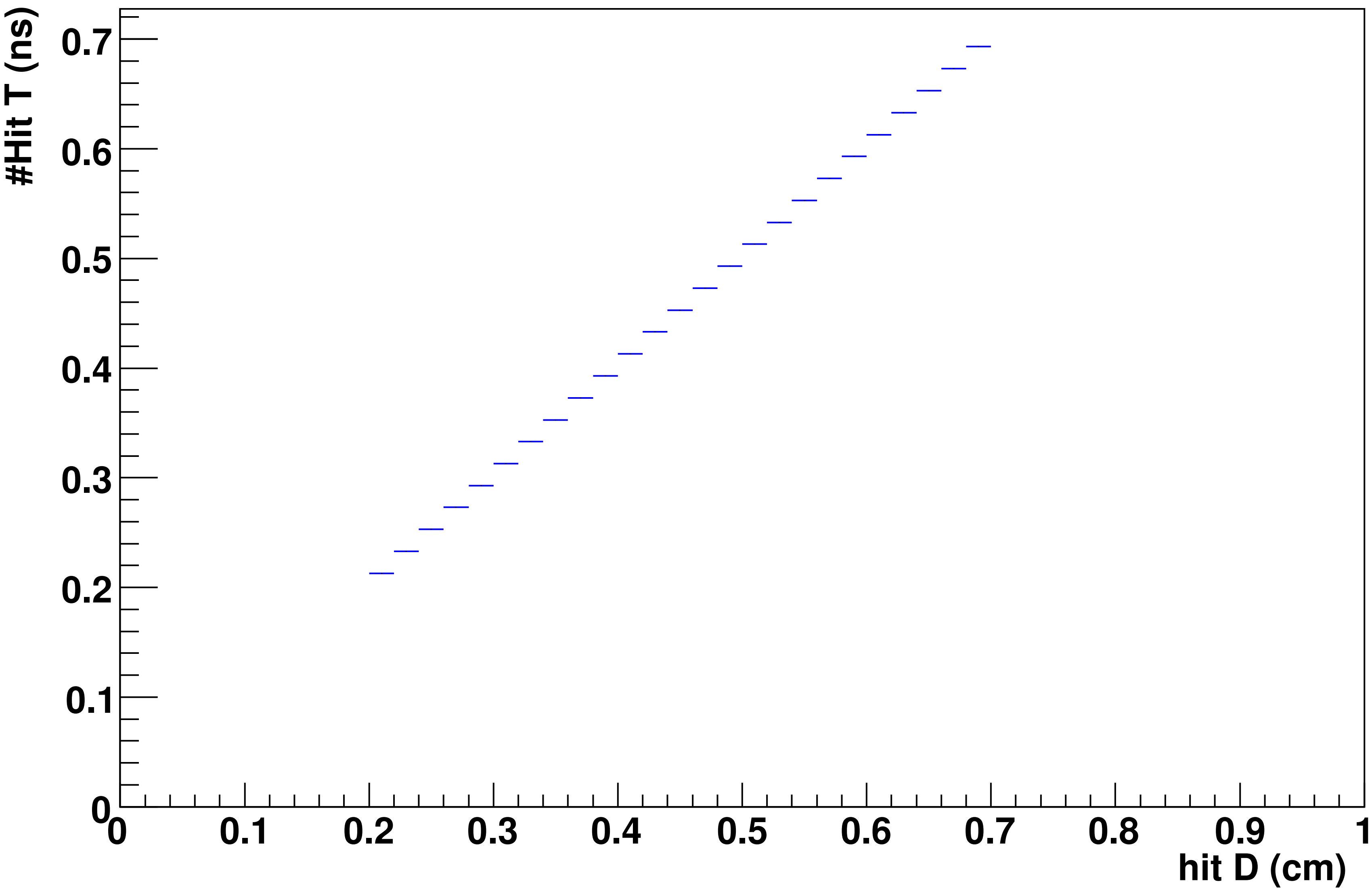

Δ Y (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

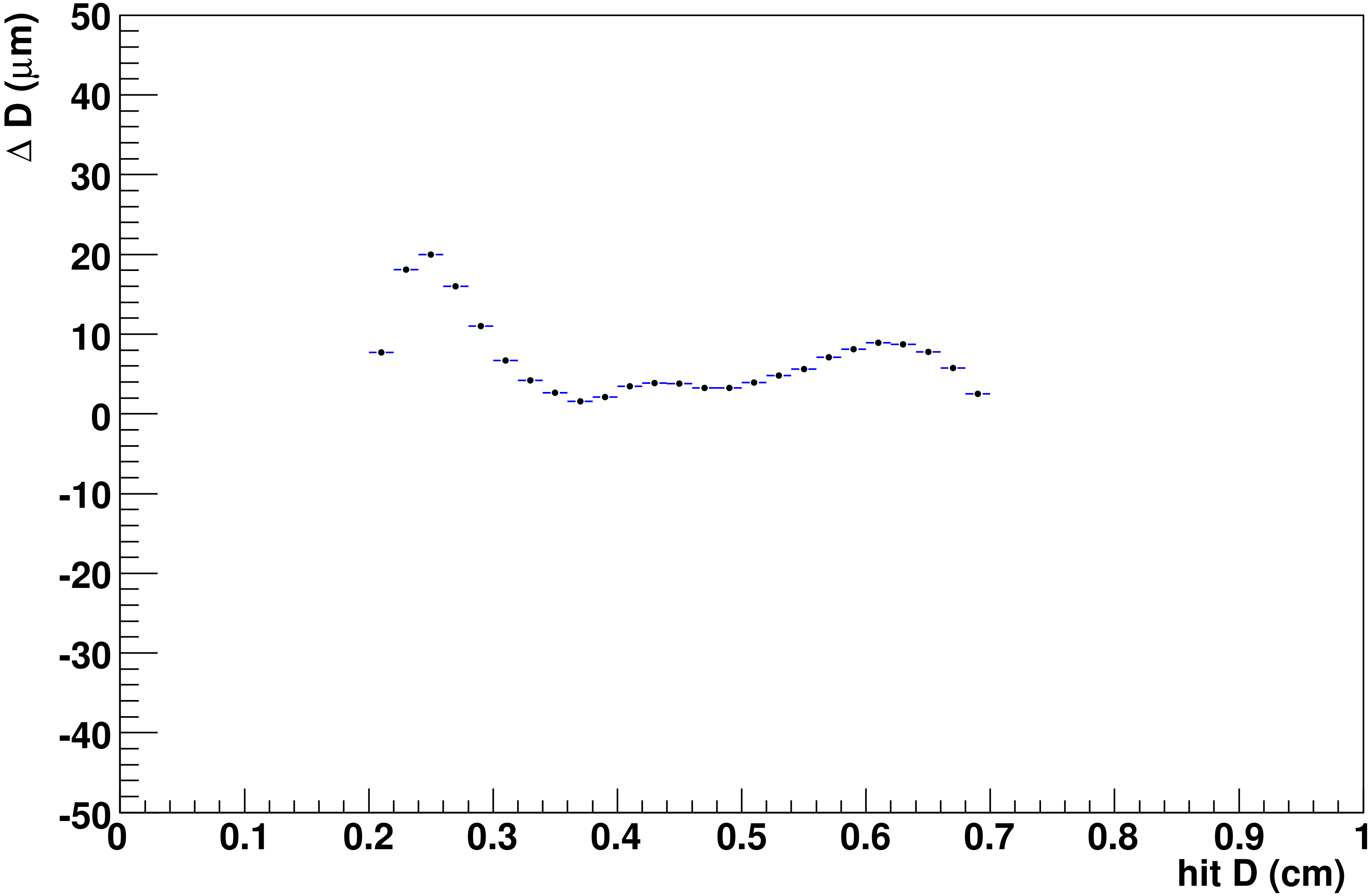


Δ D (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

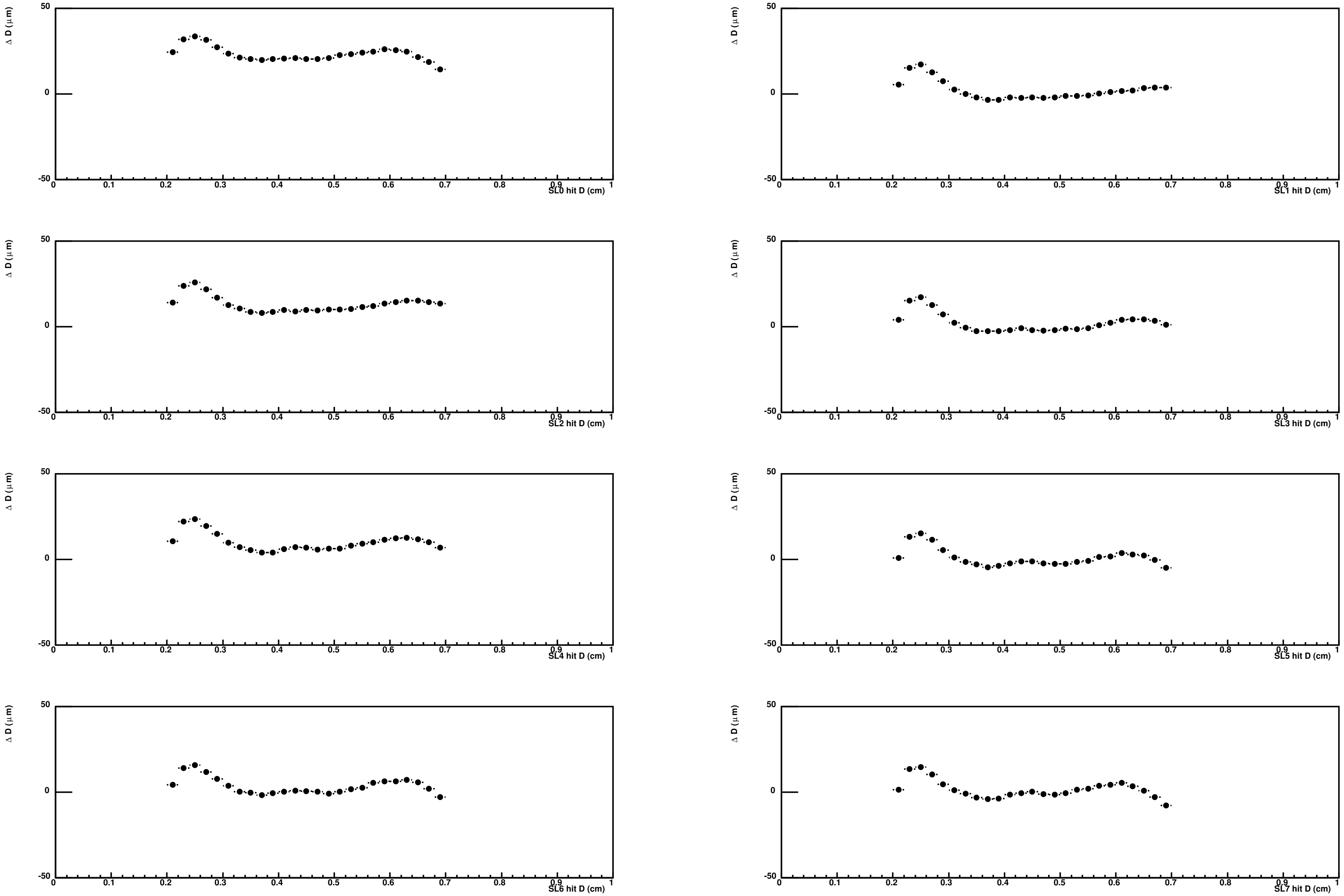


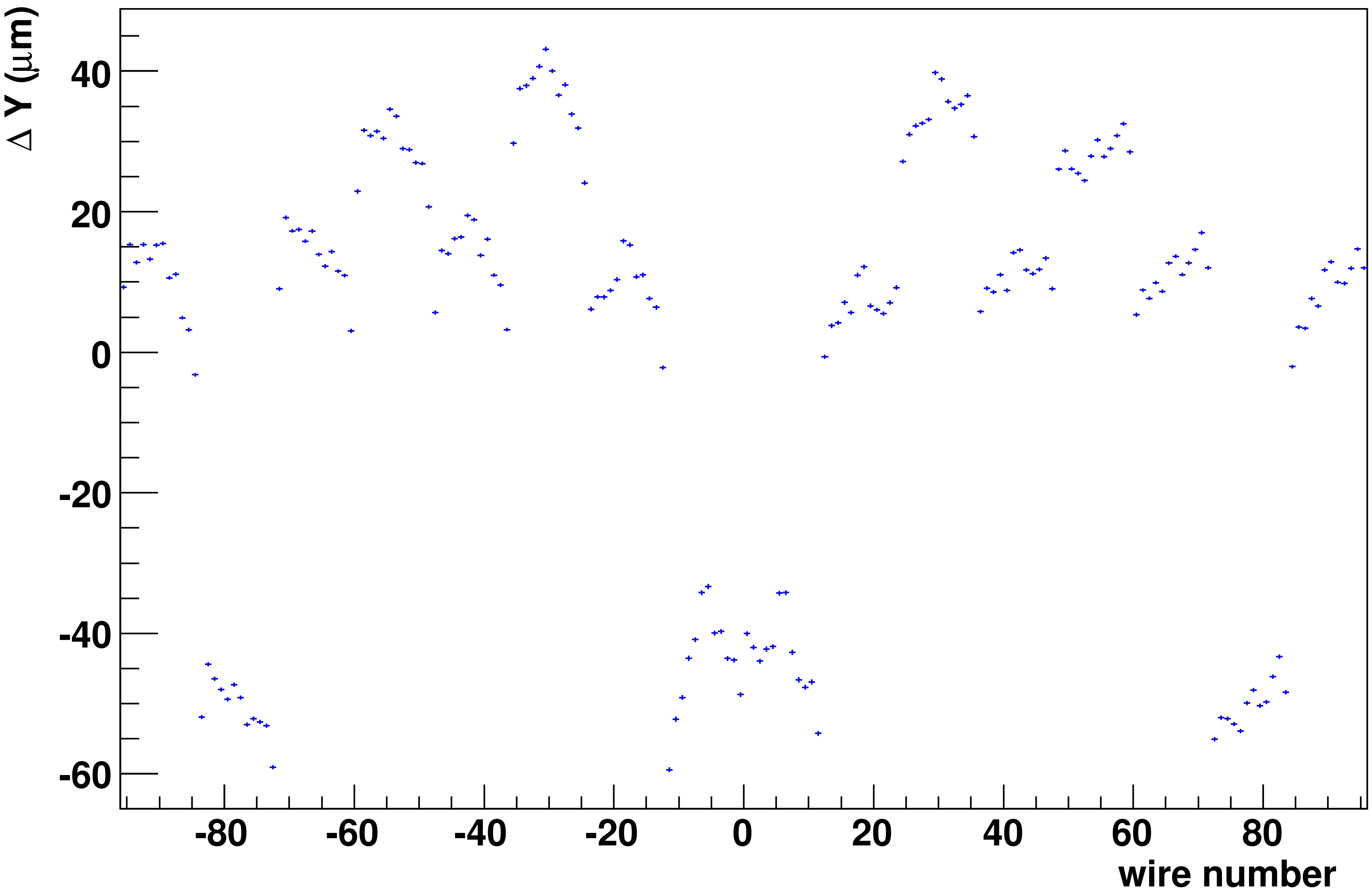
Δ Y (μm)
3
2
1
0
-1
-2
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)


#Hit T (ns)
0.7
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)

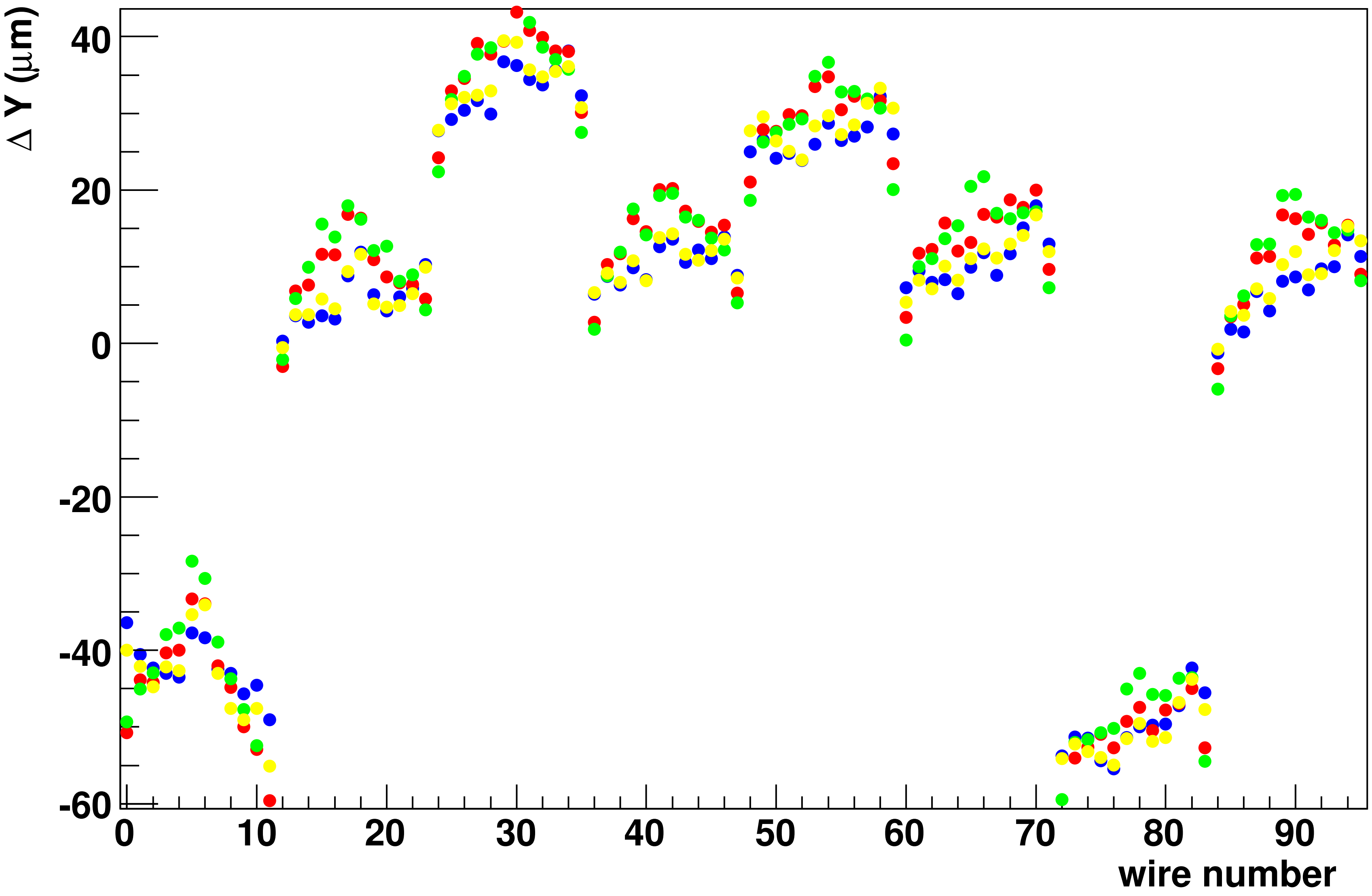


Δ D (μm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

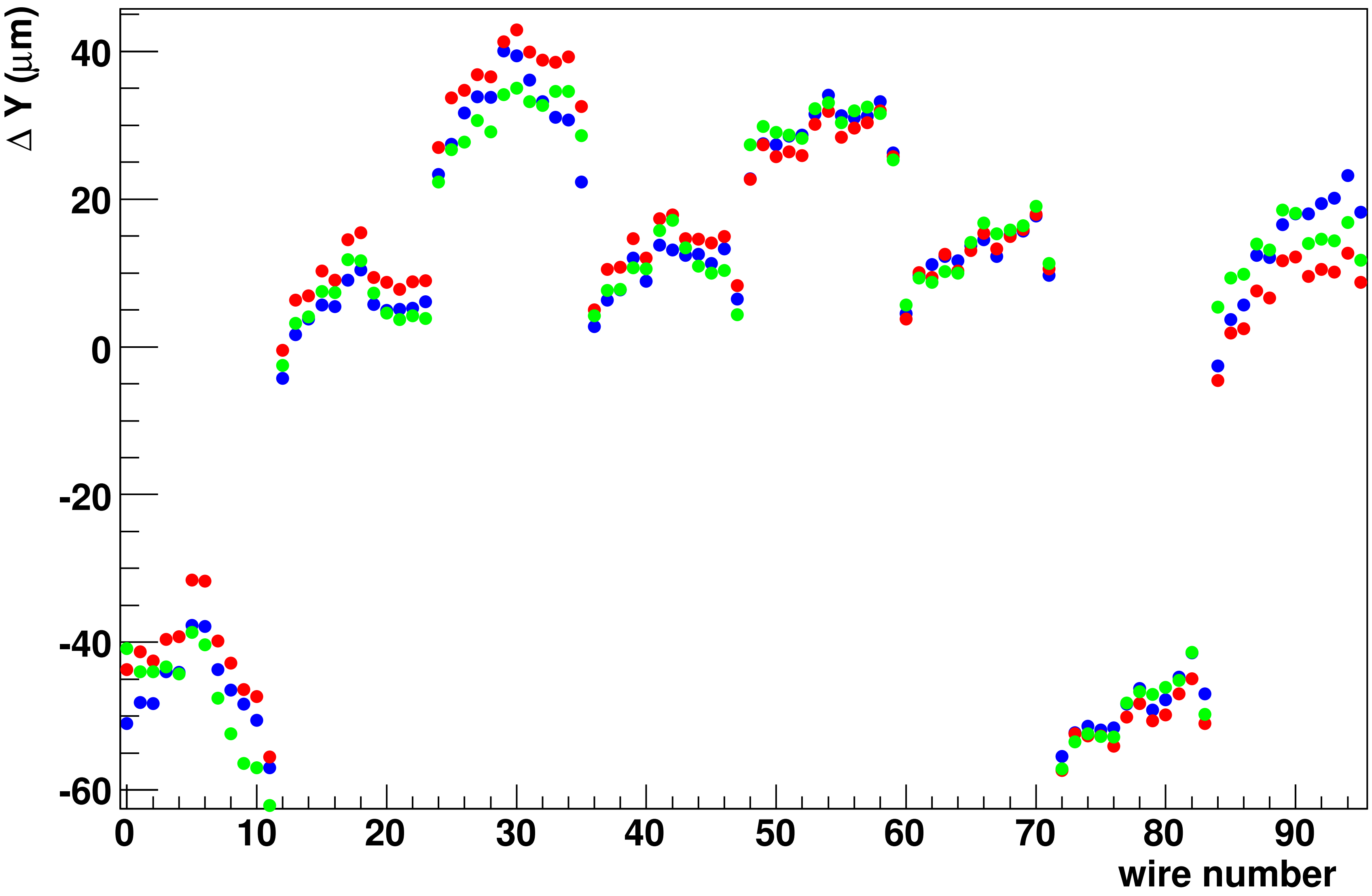

Δ D (μm)
50
0
-50
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
SL0 hit D (cm)
SL1 hit D (cm)
SL2 hit D (cm)
SL3 hit D (cm)
SL4 hit D (cm)
SL5 hit D (cm)
SL6 hit D (cm)
SL7 hit D (cm)



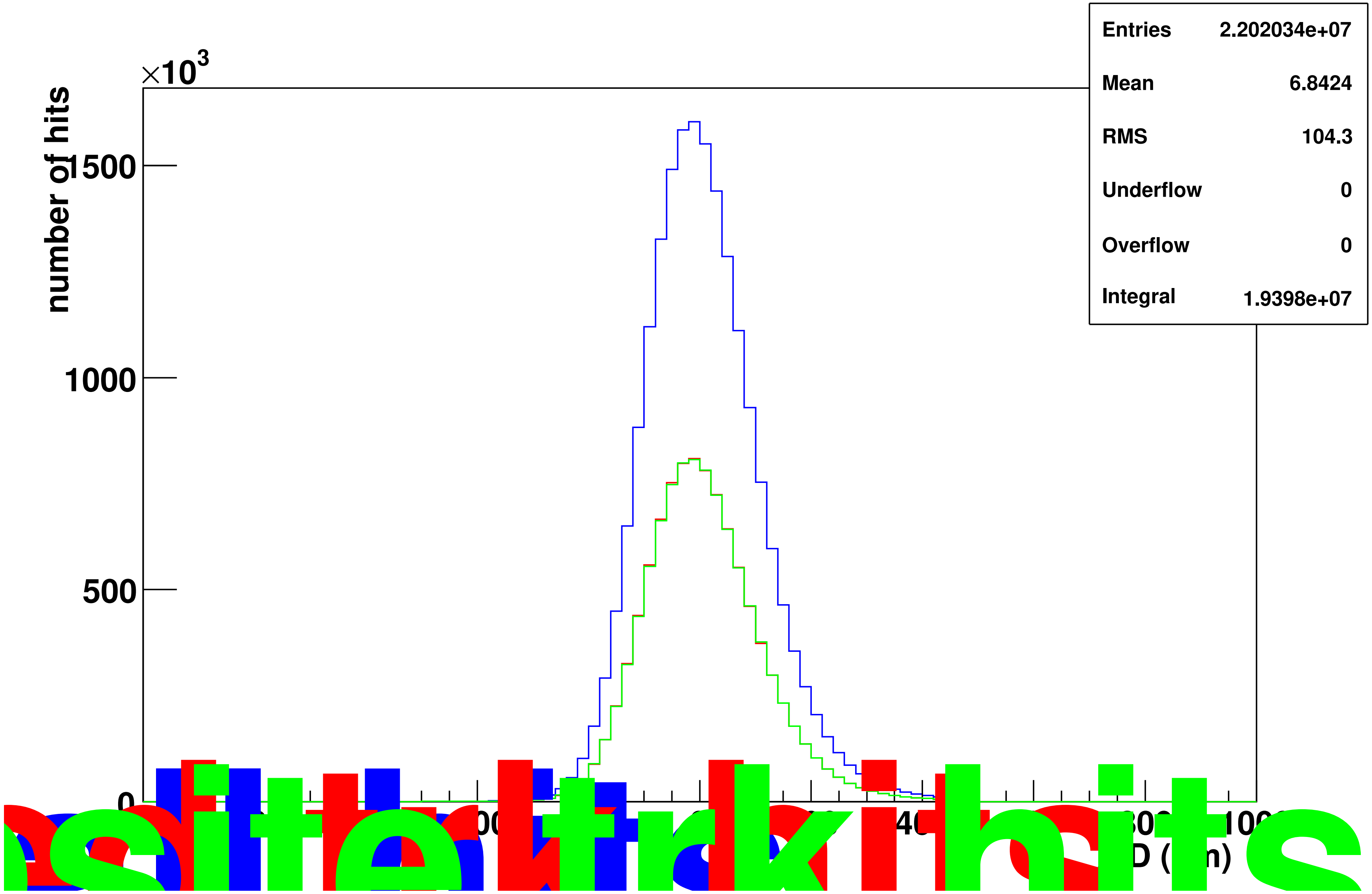
Δ Y (μm)
40
20
0
-20
-40
-60
-80
-60
-40
-20
0
20
40
60
80
wire number



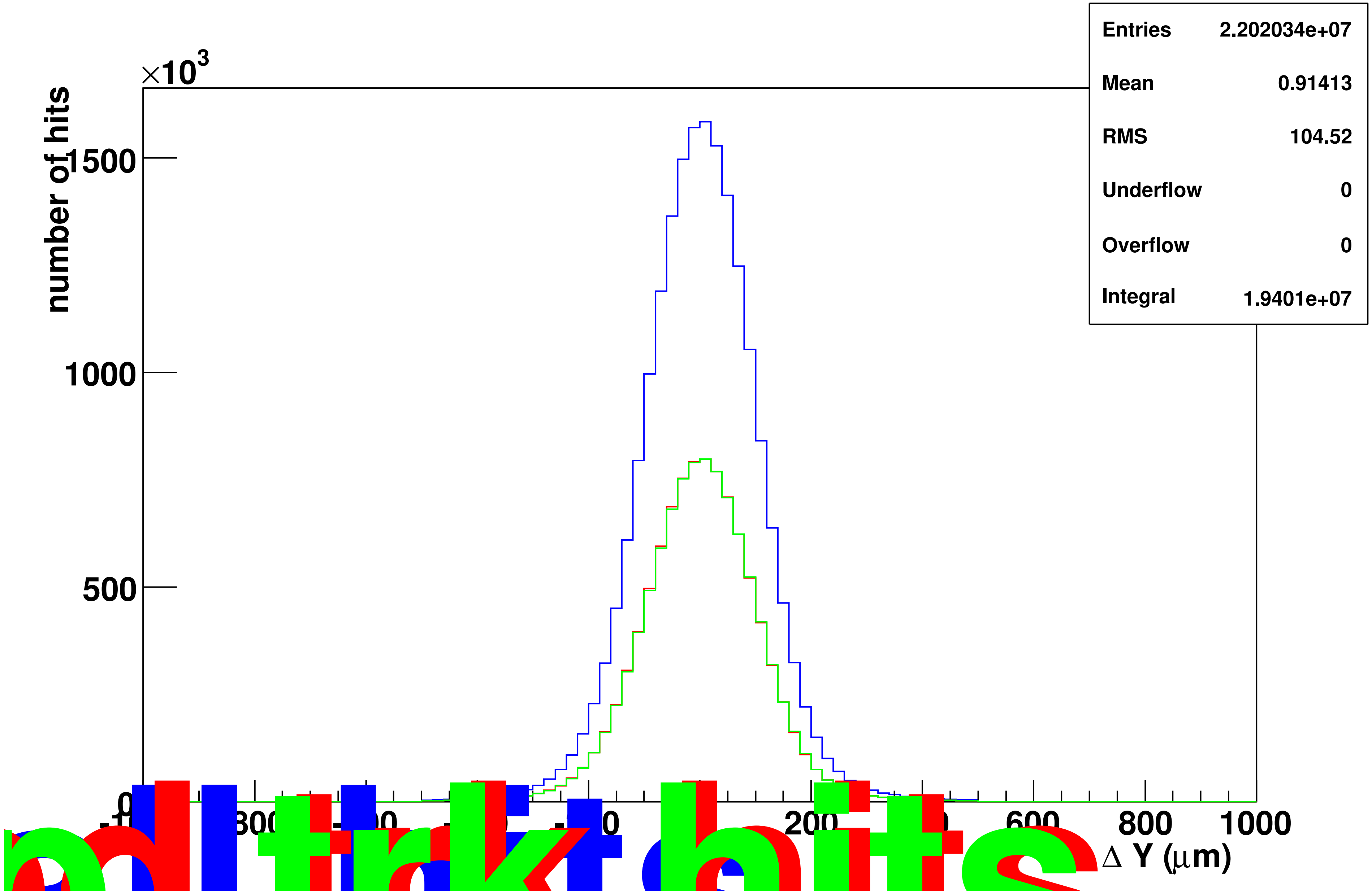
Δ Y (μm)
40
20
0
-20
-40
-60
0
10
20
30
40
50
60
70
80
90
wire number

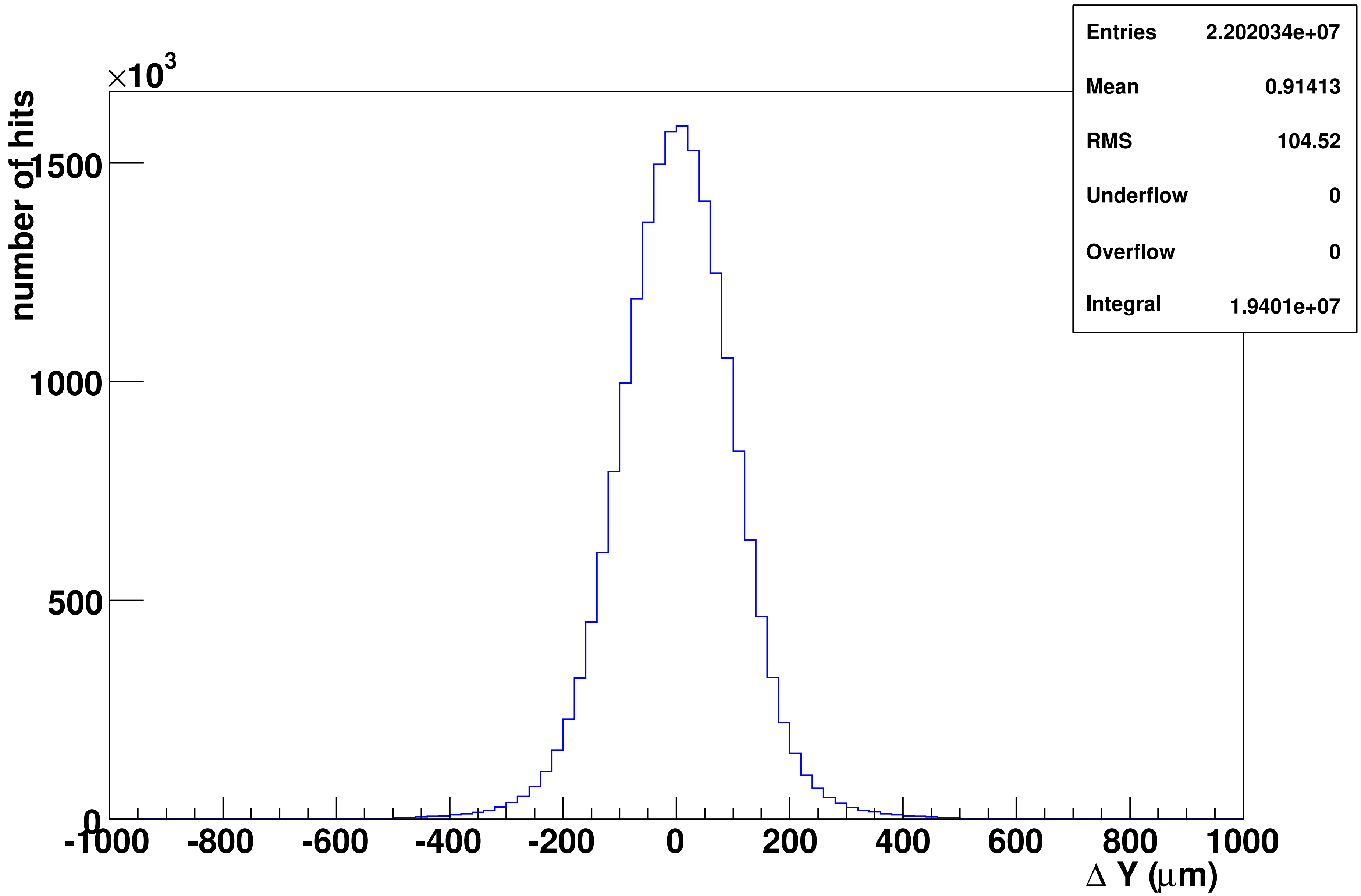


Δ Y (μm)
40
20
0
-20
-40
-60
0
10
20
30
40
50
60
70
80
90
wire number



Entries 2.202034e+07
Mean 6.8424
RMS 104.3
Underflow 0
Overflow 0
Integral 1.9398e+07
×10^3
number of hits
1500
1000
500
0


Entries 2.202034e+07
Mean 0.91413
RMS 104.52
Underflow 0
Overflow 0
Integral 1.9401e+07
number of hits
×10^3
1500
1000
500
0
200
600
800
1000
Δ Y (μm)



Entries 2.202034e+07
Mean 0.91413
RMS 104.52
Underflow 0
Overflow 0
Integral 1.9401e+07
×10^3
number of hits
1500
1000
500
0
-1000 -800 -600 -400 -200 0 200 400 600 800 1000
Δ Y (μm)