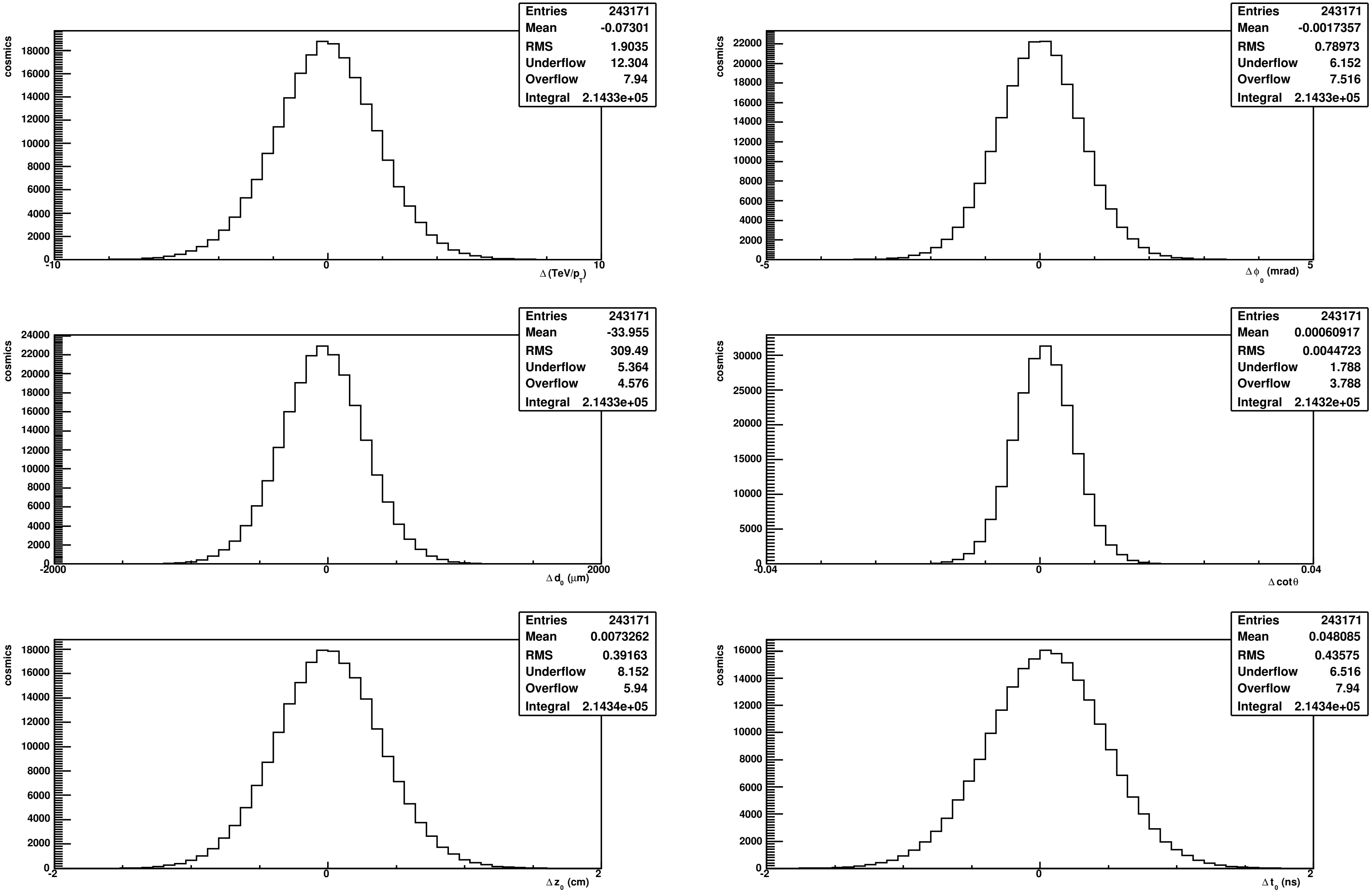
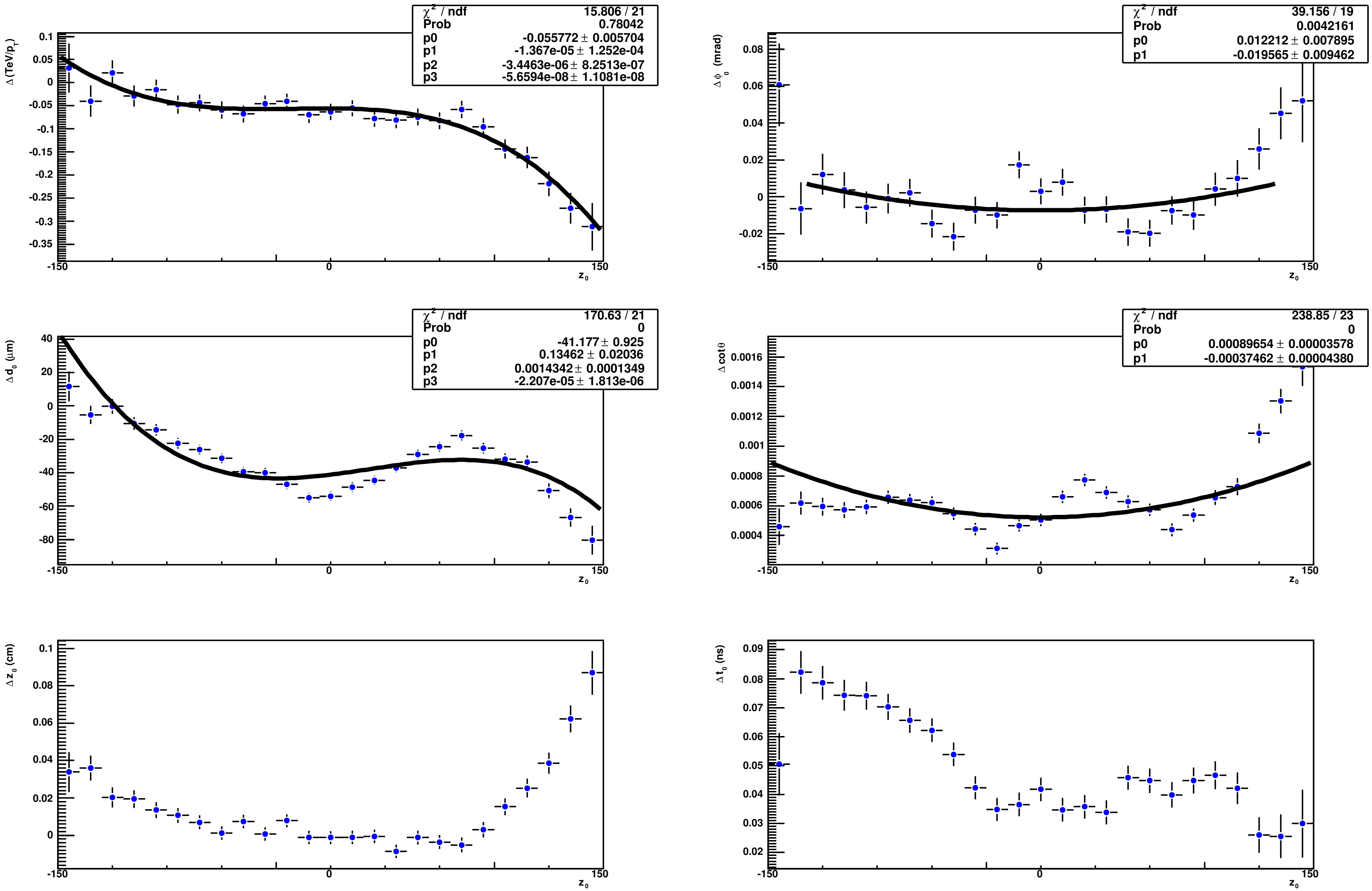
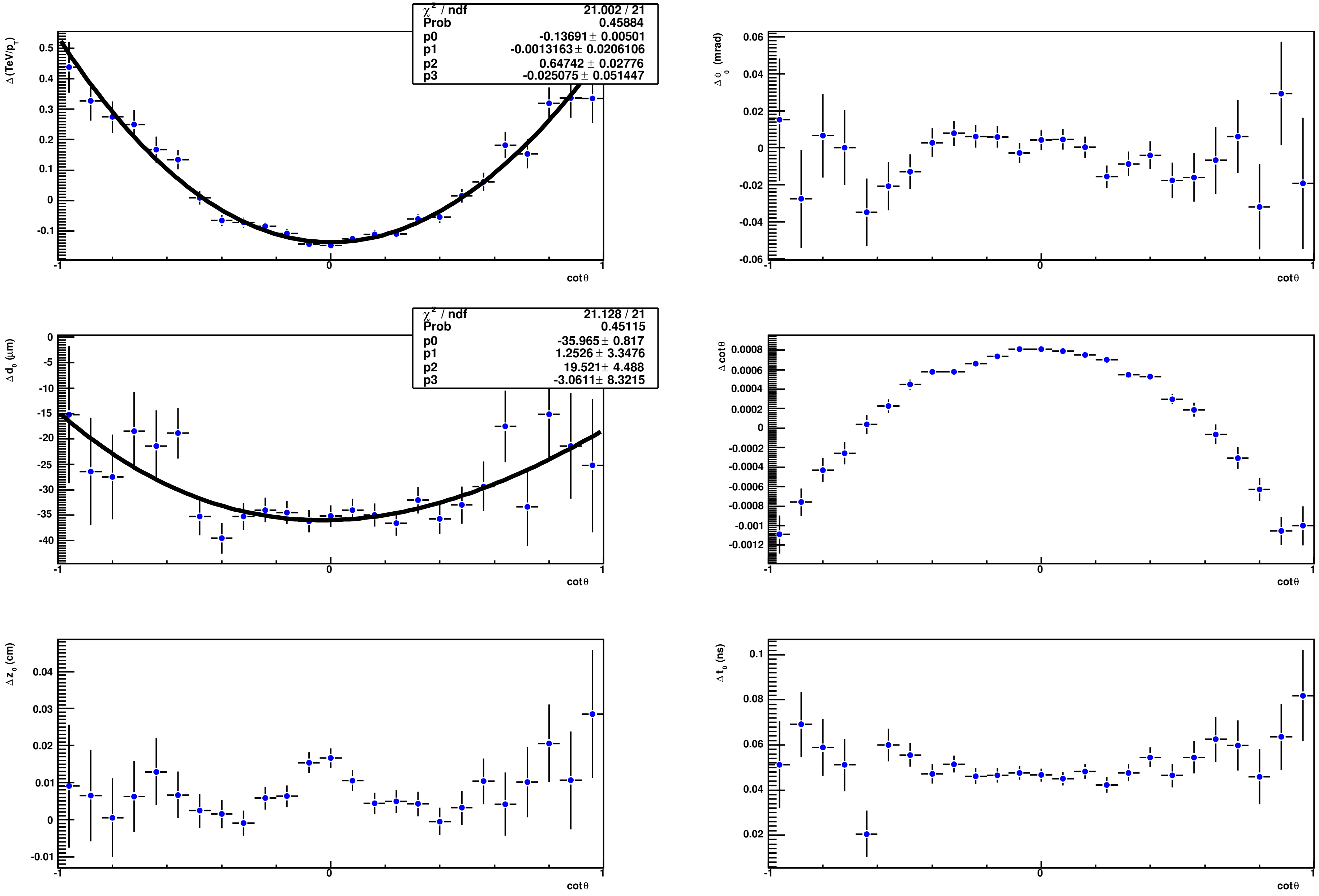
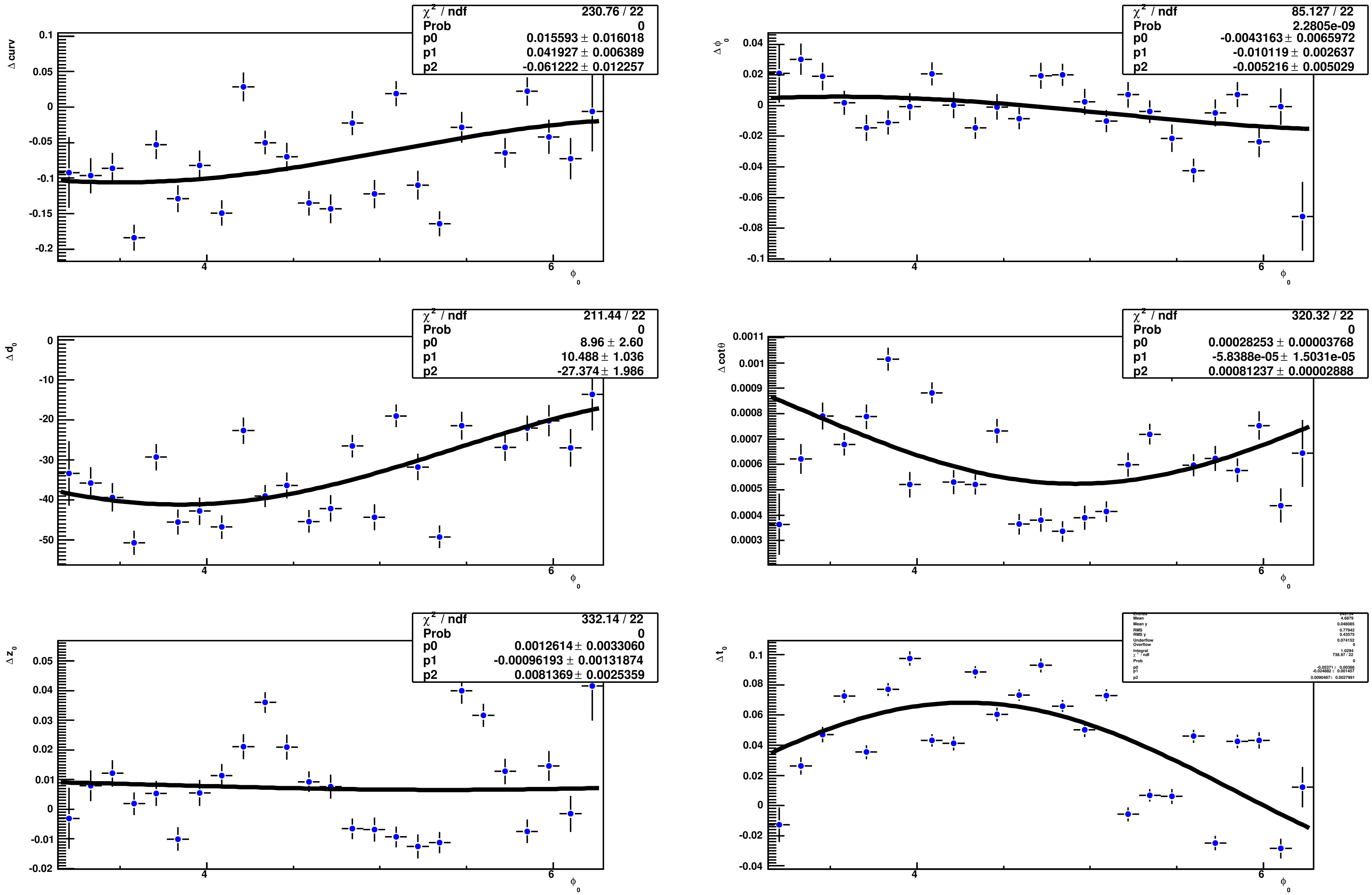
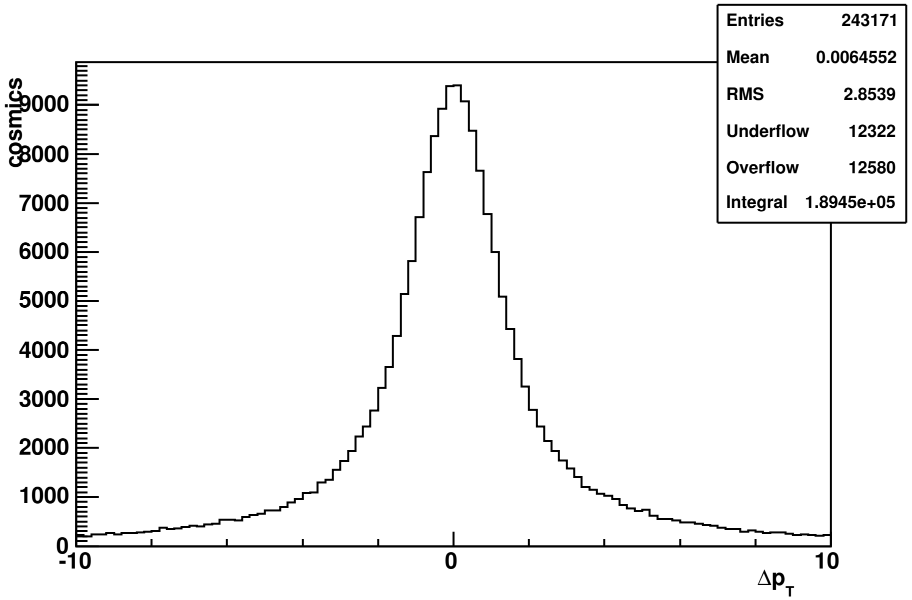

Entries 243171
Mean -0.07301
RMS 1.9035
Underflow 12.304
Overflow 7.94
Integral 2.1433e+05
cosmics
Δ(TeV/p_T)
Entries 243171
Mean -0.0017357
RMS 0.78973
Underflow 6.152
Overflow 7.516
Integral 2.1433e+05
cosmics
Δϕ_0 (mrad)
Entries 243171
Mean -33.955
RMS 309.49
Underflow 5.364
Overflow 4.576
Integral 2.1433e+05
cosmics
Δd_0 (μm)
Entries 243171
Mean 0.00060917
RMS 0.0044723
Underflow 1.788
Overflow 3.788
Integral 2.1432e+05
cosmics
Δcotθ
Entries 243171
Mean 0.0073262
RMS 0.39163
Underflow 8.152
Overflow 5.94
Integral 2.1434e+05
cosmics
Δz_0 (cm)
Entries 243171
Mean 0.048085
RMS 0.43575
Underflow 6.516
Overflow 7.94
Integral 2.1434e+05
cosmics
Δt_0 (ns)

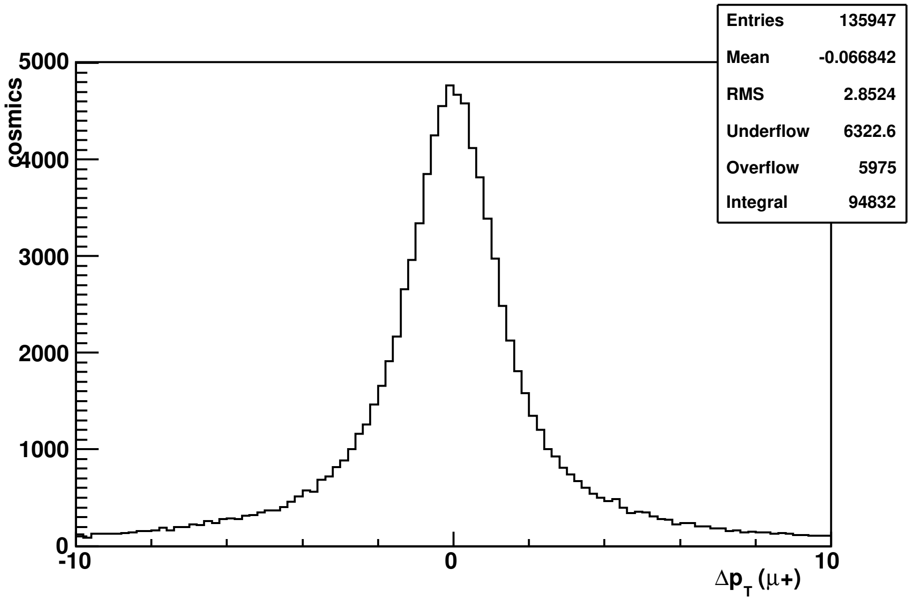

χ2 / ndf 15.806 / 21
Prob 0.78042
p0 -0.055772 ± 0.005704
p1 -1.367e-05 ± 1.252e-04
p2 -3.4463e-06 ± 8.2513e-07
p3 -5.6594e-08 ± 1.1081e-08
Δ(TeV/pT)
z0
χ2 / ndf 39.156 / 19
Prob 0.0042161
p0 0.012212 ± 0.007895
p1 -0.019565 ± 0.009462
Δφ0 (mrad)
z0
χ2 / ndf 170.63 / 21
Prob 0
p0 -41.177 ± 0.925
p1 0.13462 ± 0.02036
p2 0.0014342 ± 0.0001349
p3 -2.207e-05 ± 1.813e-06
Δd0 (μm)
z0
χ2 / ndf 238.85 / 23
Prob 0
p0 0.00089654 ± 0.00003578
p1 -0.00037462 ± 0.00004380
Δcotθ
z0
Δz0 (cm)
z0
Δt0 (ns)
z0

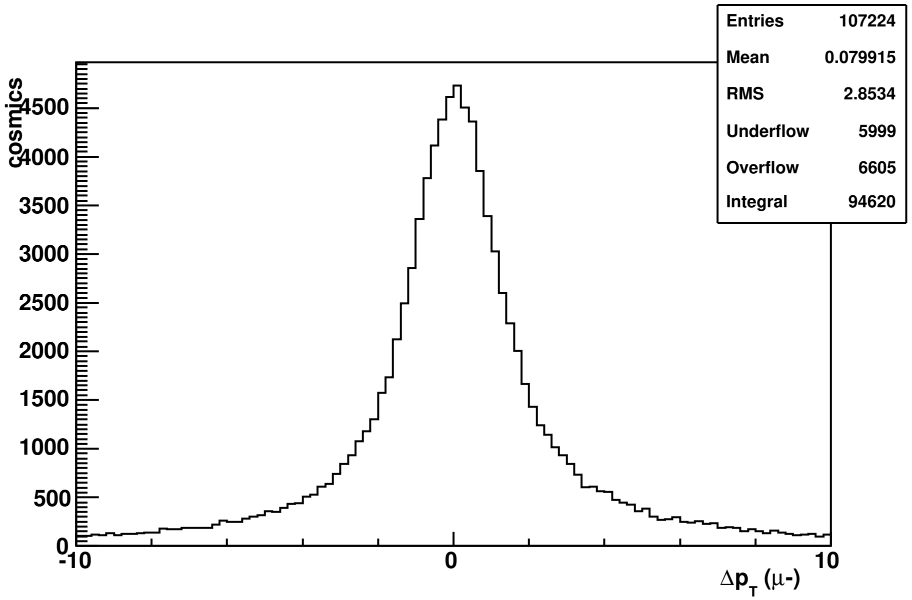

χ² / ndf 21.002 / 21
Prob 0.45884
p0 -0.13691 ± 0.00501
p1 -0.0013163 ± 0.0206106
p2 0.64742 ± 0.02776
p3 -0.025075 ± 0.051447
Δ(TeV/p_T)
cotθ
Δφ_0 (mrad)
cotθ
χ² / ndf 21.128 / 21
Prob 0.45115
p0 -35.965 ± 0.817
p1 1.2526 ± 3.3476
p2 19.521 ± 4.488
p3 -3.0611 ± 8.3215
Δd_0 (μm)
cotθ
Δcotθ
cotθ
Δz_0 (cm)
cotθ
Δt_0 (ns)
cotθ

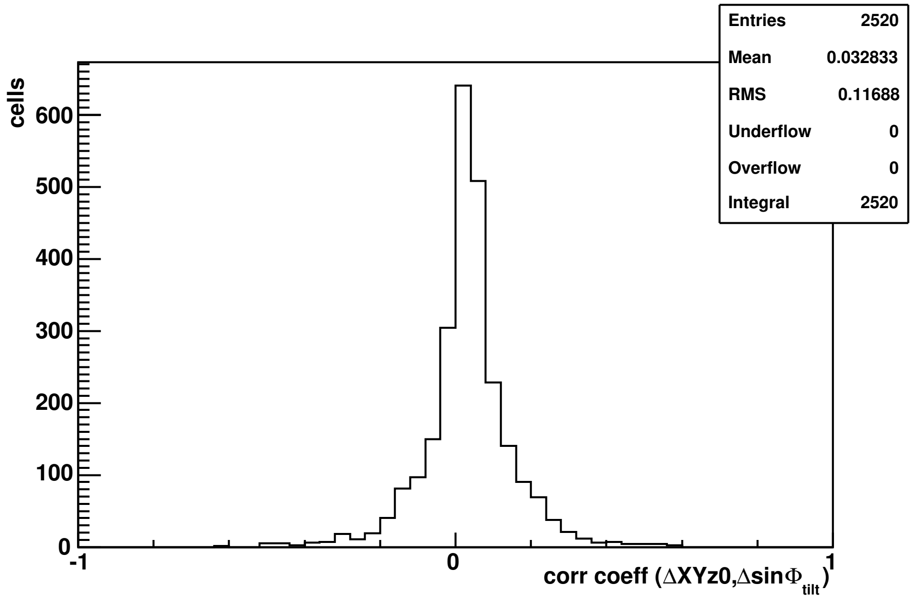


χ² / ndf 230.76 / 22
Prob 0
p0 0.015593 ± 0.016018
p1 0.041927 ± 0.006389
p2 -0.061222 ± 0.012257
Δ curv
φ0
χ² / ndf 85.127 / 22
Prob 2.2805e-09
p0 -0.0043163 ± 0.0065972
p1 -0.010119 ± 0.002637
p2 -0.005216 ± 0.005029
Δ φ0
φ0
χ² / ndf 211.44 / 22
Prob 0
p0 8.96 ± 2.60
p1 10.488 ± 1.036
p2 -27.374 ± 1.986
Δ d0
φ0
χ² / ndf 320.32 / 22
Prob 0
p0 0.00028253 ± 0.00003768
p1 -5.8388e-05 ± 1.5031e-05
p2 0.00081237 ± 0.00002888
Δ cotθ
φ0
χ² / ndf 332.14 / 22
Prob 0
p0 0.0012614 ± 0.0033060
p1 -0.00096193 ± 0.00131874
p2 0.0081369 ± 0.0025359
Δ z0
φ0
Mean 4.6879
Mean y 0.048085
RMS 0.77942
RMS y 0.43575
Underflow 0.074152
Overflow 0
Integral 1.0294
χ² / ndf 738.97 / 22
Prob 0
p0 -0.05371 ± 0.00366
p1 -0.024882 ± 0.001457
p2 0.0090487 ± 0.0027991
Δ t0
φ0

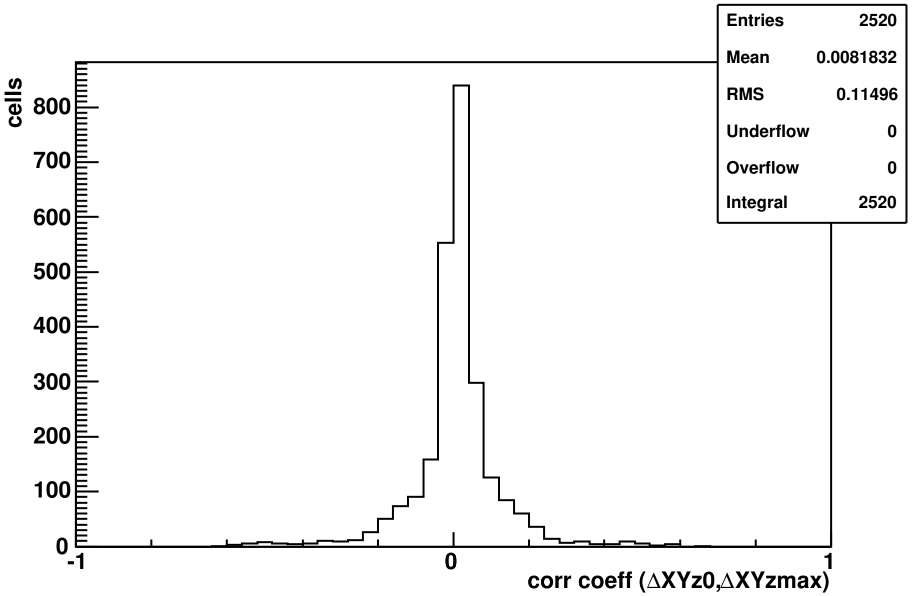

Entries 243171
Mean 0.0064552
RMS 2.8539
Underflow 12322
Overflow 12580
Integral 1.8945e+05
cosmics
Δp_T
-10
0
10


Entries 135947
Mean -0.066842
RMS 2.8524
Underflow 6322.6
Overflow 5975
Integral 94832
cosmics
Δp_T (μ+)
-10
0
10

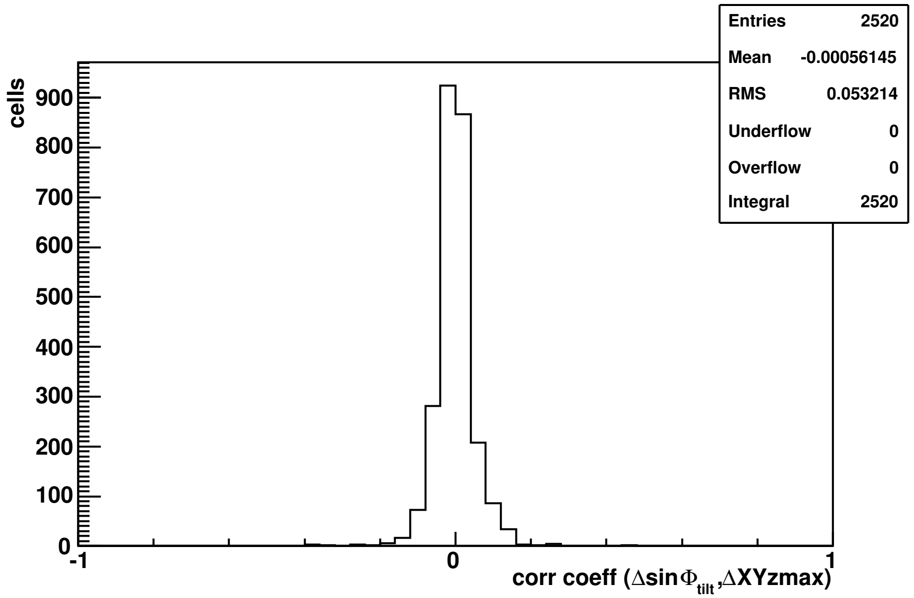

Entries 107224
Mean 0.079915
RMS 2.8534
Underflow 5999
Overflow 6605
Integral 94620
cosmics
Δp_T (μ-)
-10
0
10



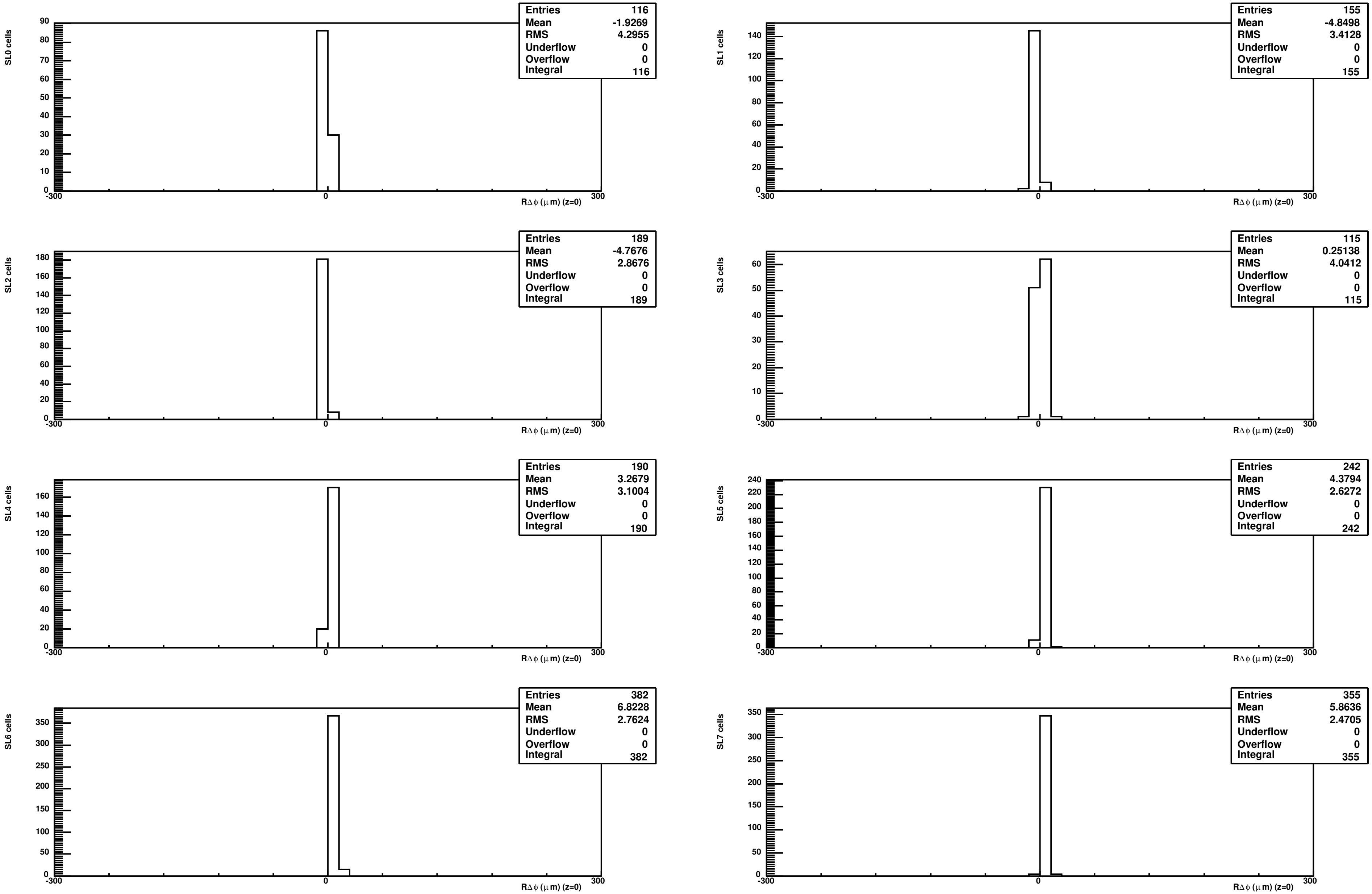
Entries 2520
Mean 0.032833
RMS 0.11688
Underflow 0
Overflow 0
Integral 2520
cells
600
500
400
300
200
100
0
-1
0
1
corr coeff (ΔXYz0,ΔsinΦ$_{tilt}$)



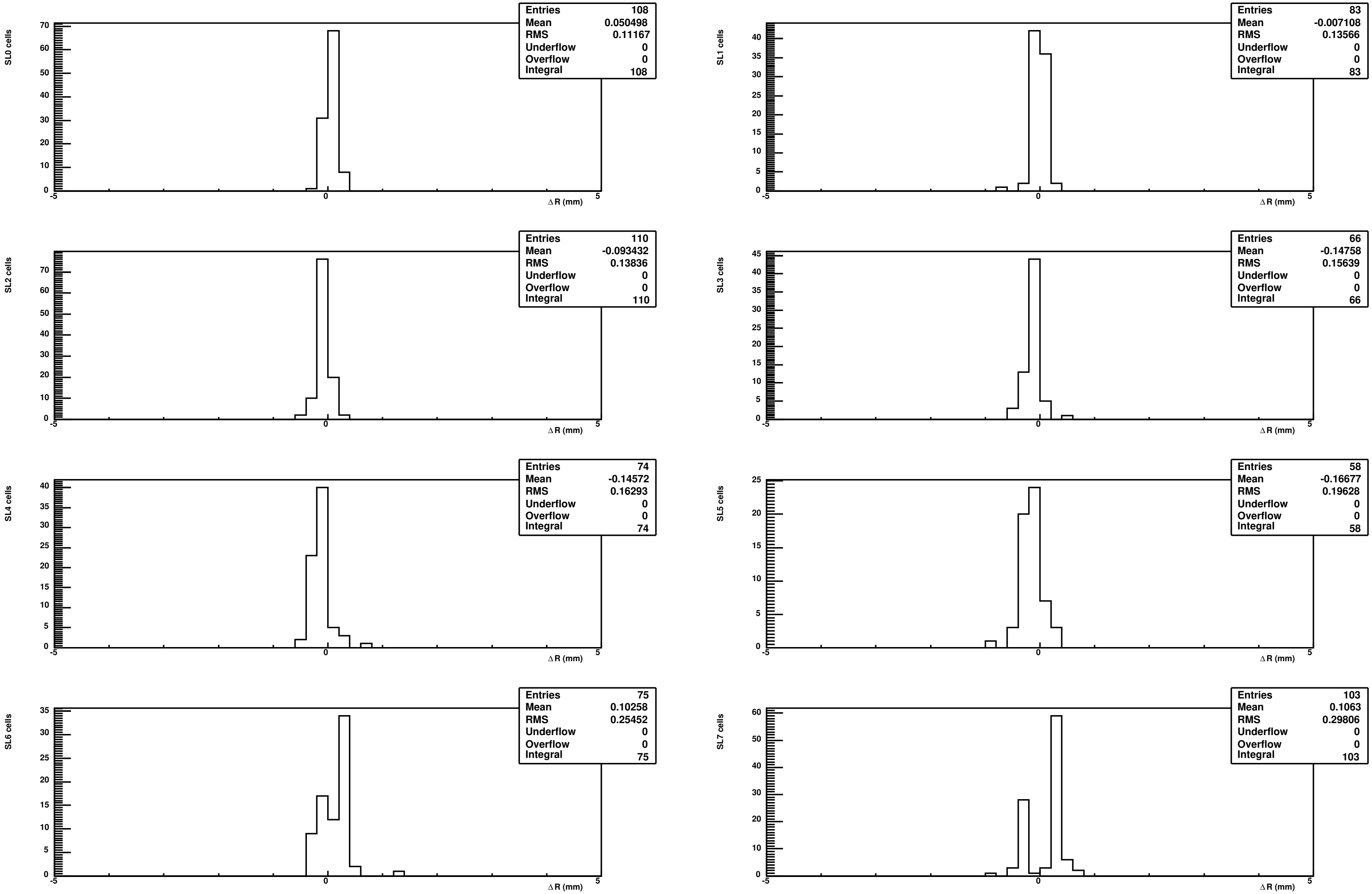
Entries 2520
Mean 0.0081832
RMS 0.11496
Underflow 0
Overflow 0
Integral 2520
cells
800
700
600
500
400
300
200
100
0
-1
0
1
corr coeff (ΔXYz0,ΔXYzmax)

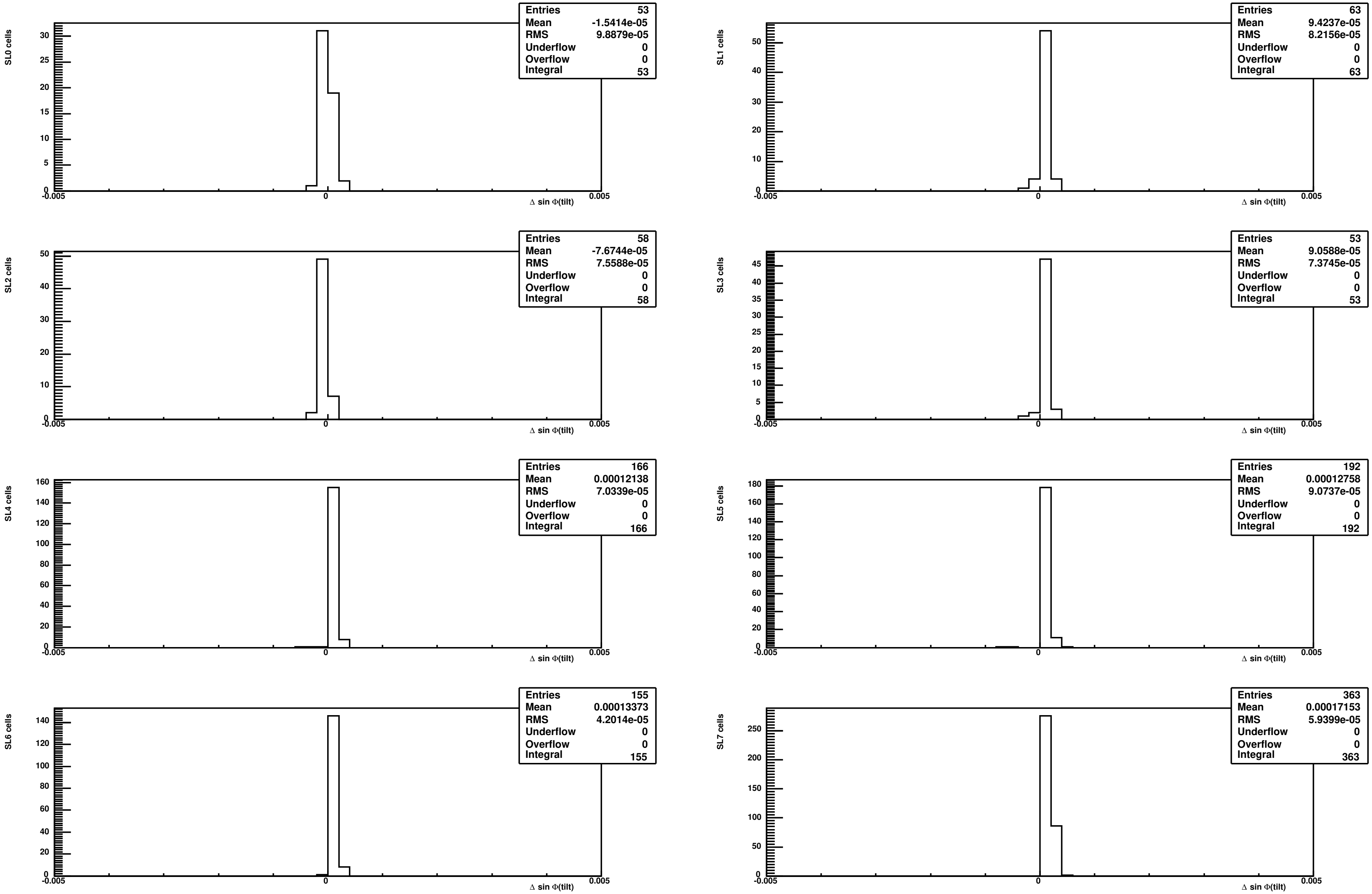


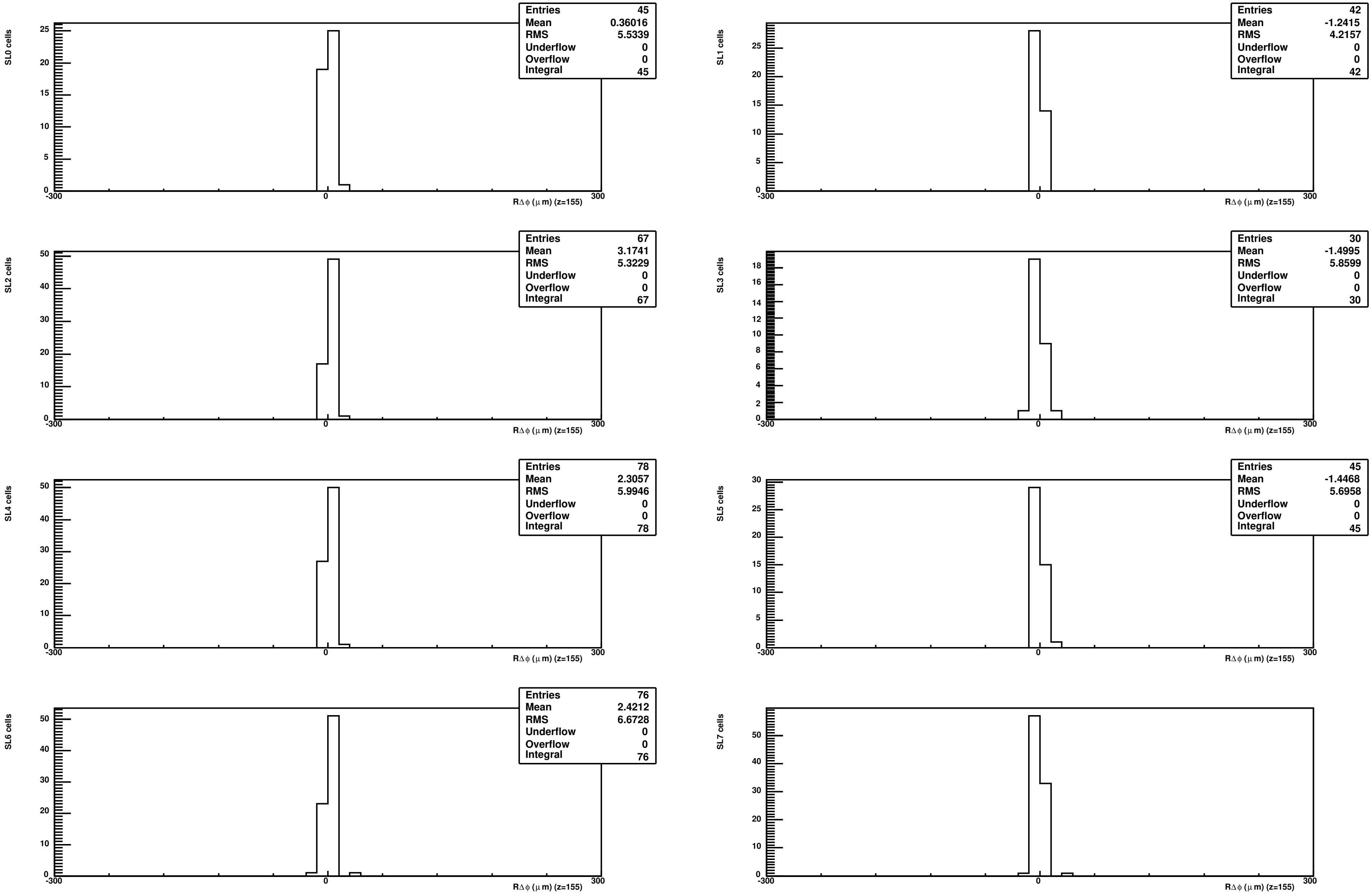
Entries 2520
Mean -0.00056145
RMS 0.053214
Underflow 0
Overflow 0
Integral 2520
cells
900
800
700
600
500
400
300
200
100
0
-1
0
1
corr coeff (ΔsinΦ$_{tilt}$,ΔXYzmax)

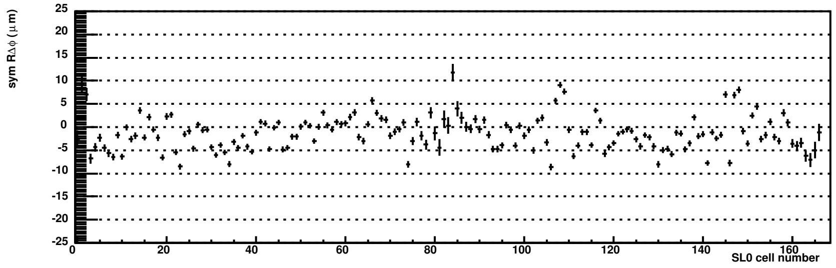


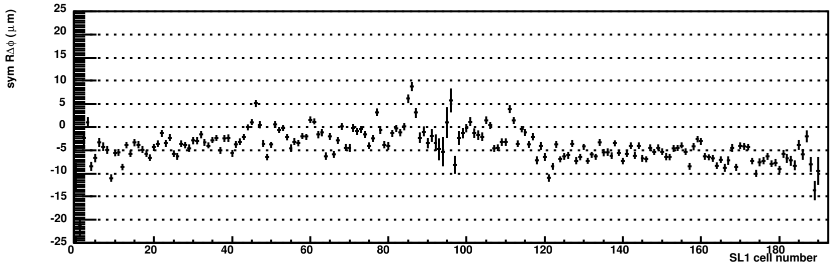
SL0 cells
Entries 116
Mean -1.9269
RMS 4.2955
Underflow 0
Overflow 0
Integral 116
SL1 cells
Entries 155
Mean -4.8498
RMS 3.4128
Underflow 0
Overflow 0
Integral 155
SL2 cells
Entries 189
Mean -4.7676
RMS 2.8676
Underflow 0
Overflow 0
Integral 189
SL3 cells
Entries 115
Mean 0.25138
RMS 4.0412
Underflow 0
Overflow 0
Integral 115
SL4 cells
Entries 190
Mean 3.2679
RMS 3.1004
Underflow 0
Overflow 0
Integral 190
SL5 cells
Entries 242
Mean 4.3794
RMS 2.6272
Underflow 0
Overflow 0
Integral 242
SL6 cells
Entries 382
Mean 6.8228
RMS 2.7624
Underflow 0
Overflow 0
Integral 382
SL7 cells
Entries 355
Mean 5.8636
RMS 2.4705
Underflow 0
Overflow 0
Integral 355
RΔϕ (μm) (z=0)
-300
0
300

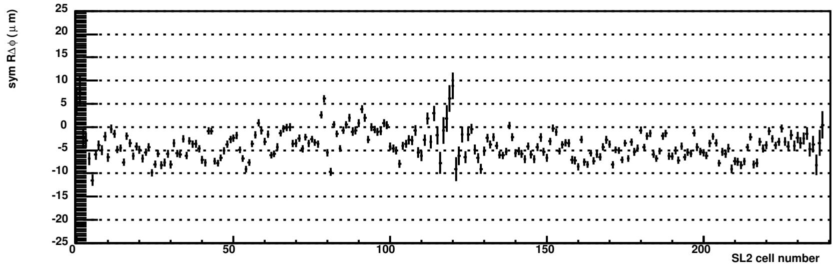

SL0 cells
Entries 108
Mean 0.050498
RMS 0.11167
Underflow 0
Overflow 0
Integral 108
ΔR (mm)
SL1 cells
Entries 83
Mean -0.007108
RMS 0.13566
Underflow 0
Overflow 0
Integral 83
ΔR (mm)
SL2 cells
Entries 110
Mean -0.093432
RMS 0.13836
Underflow 0
Overflow 0
Integral 110
ΔR (mm)
SL3 cells
Entries 66
Mean -0.14758
RMS 0.15639
Underflow 0
Overflow 0
Integral 66
ΔR (mm)
SL4 cells
Entries 74
Mean -0.14572
RMS 0.16293
Underflow 0
Overflow 0
Integral 74
ΔR (mm)
SL5 cells
Entries 58
Mean -0.16677
RMS 0.19628
Underflow 0
Overflow 0
Integral 58
ΔR (mm)
SL6 cells
Entries 75
Mean 0.10258
RMS 0.25452
Underflow 0
Overflow 0
Integral 75
ΔR (mm)
SL7 cells
Entries 103
Mean 0.1063
RMS 0.29806
Underflow 0
Overflow 0
Integral 103
ΔR (mm)

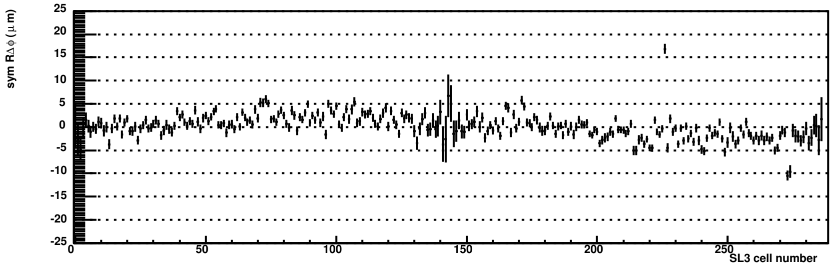

SL0 cells
Entries 53
Mean -1.5414e-05
RMS 9.8879e-05
Underflow 0
Overflow 0
Integral 53
SL1 cells
Entries 63
Mean 9.4237e-05
RMS 8.2156e-05
Underflow 0
Overflow 0
Integral 63
SL2 cells
Entries 58
Mean -7.6744e-05
RMS 7.5588e-05
Underflow 0
Overflow 0
Integral 58
SL3 cells
Entries 53
Mean 9.0588e-05
RMS 7.3745e-05
Underflow 0
Overflow 0
Integral 53
SL4 cells
Entries 166
Mean 0.00012138
RMS 7.0339e-05
Underflow 0
Overflow 0
Integral 166
SL5 cells
Entries 192
Mean 0.00012758
RMS 9.0737e-05
Underflow 0
Overflow 0
Integral 192
SL6 cells
Entries 155
Mean 0.00013373
RMS 4.2014e-05
Underflow 0
Overflow 0
Integral 155
SL7 cells
Entries 363
Mean 0.00017153
RMS 5.9399e-05
Underflow 0
Overflow 0
Integral 363
Δ sin Φ(tilt)

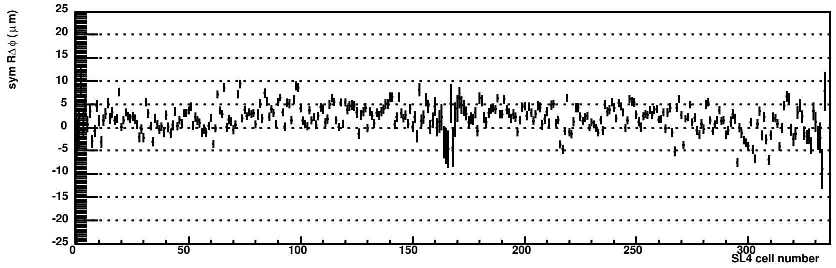

SL0 cells
Entries 45
Mean 0.36016
RMS 5.5339
Underflow 0
Overflow 0
Integral 45
RΔϕ (μm) (z=155)
SL1 cells
Entries 42
Mean -1.2415
RMS 4.2157
Underflow 0
Overflow 0
Integral 42
RΔϕ (μm) (z=155)
SL2 cells
Entries 67
Mean 3.1741
RMS 5.3229
Underflow 0
Overflow 0
Integral 67
RΔϕ (μm) (z=155)
SL3 cells
Entries 30
Mean -1.4995
RMS 5.8599
Underflow 0
Overflow 0
Integral 30
RΔϕ (μm) (z=155)
SL4 cells
Entries 78
Mean 2.3057
RMS 5.9946
Underflow 0
Overflow 0
Integral 78
RΔϕ (μm) (z=155)
SL5 cells
Entries 45
Mean -1.4468
RMS 5.6958
Underflow 0
Overflow 0
Integral 45
RΔϕ (μm) (z=155)
SL6 cells
Entries 76
Mean 2.4212
RMS 6.6728
Underflow 0
Overflow 0
Integral 76
RΔϕ (μm) (z=155)
SL7 cells
RΔϕ (μm) (z=155)

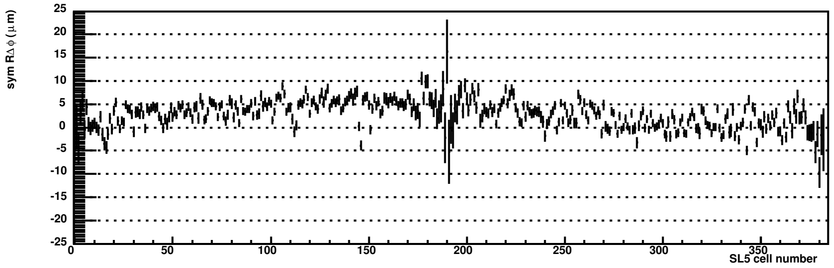

sym RΔφ (μm)
25 20 15 10 5 0 -5 -10 -15 -20 -25
0 20 40 60 80 100 120 140 160
SL0 cell number

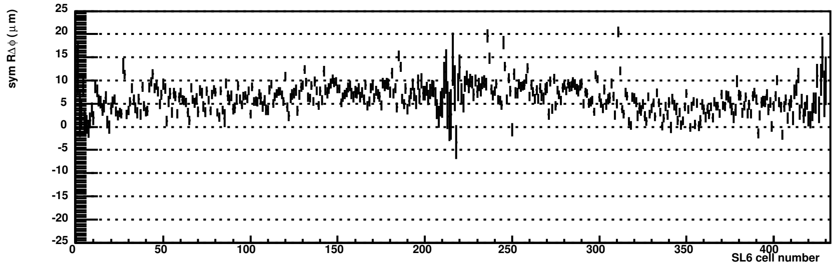

sym RΔφ (μm)
25 20 15 10 5 0 -5 -10 -15 -20 -25
0 20 40 60 80 100 120 140 160 180
SL1 cell number

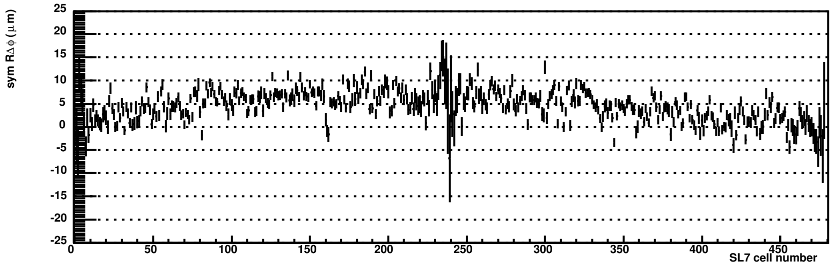

sym RΔφ (μm)
25 20 15 10 5 0 -5 -10 -15 -20 -25
0 50 100 150 200
SL2 cell number

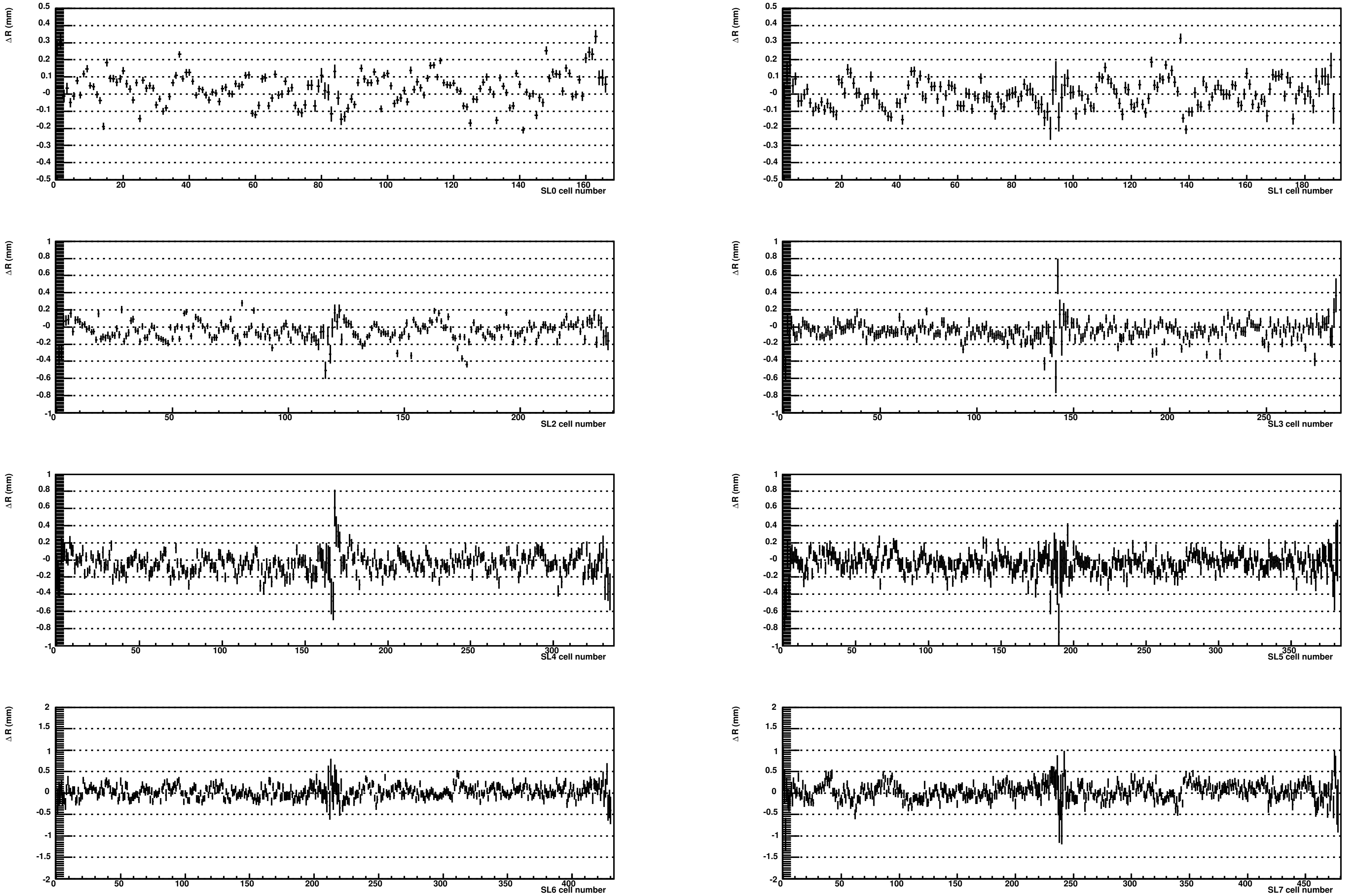

sym RΔφ (μm)
25 20 15 10 5 0 -5 -10 -15 -20 -25
0 50 100 150 200 250
SL3 cell number


sym RΔφ (μm)
25 20 15 10 5 0 -5 -10 -15 -20 -25
0 50 100 150 200 250 300
SL4 cell number

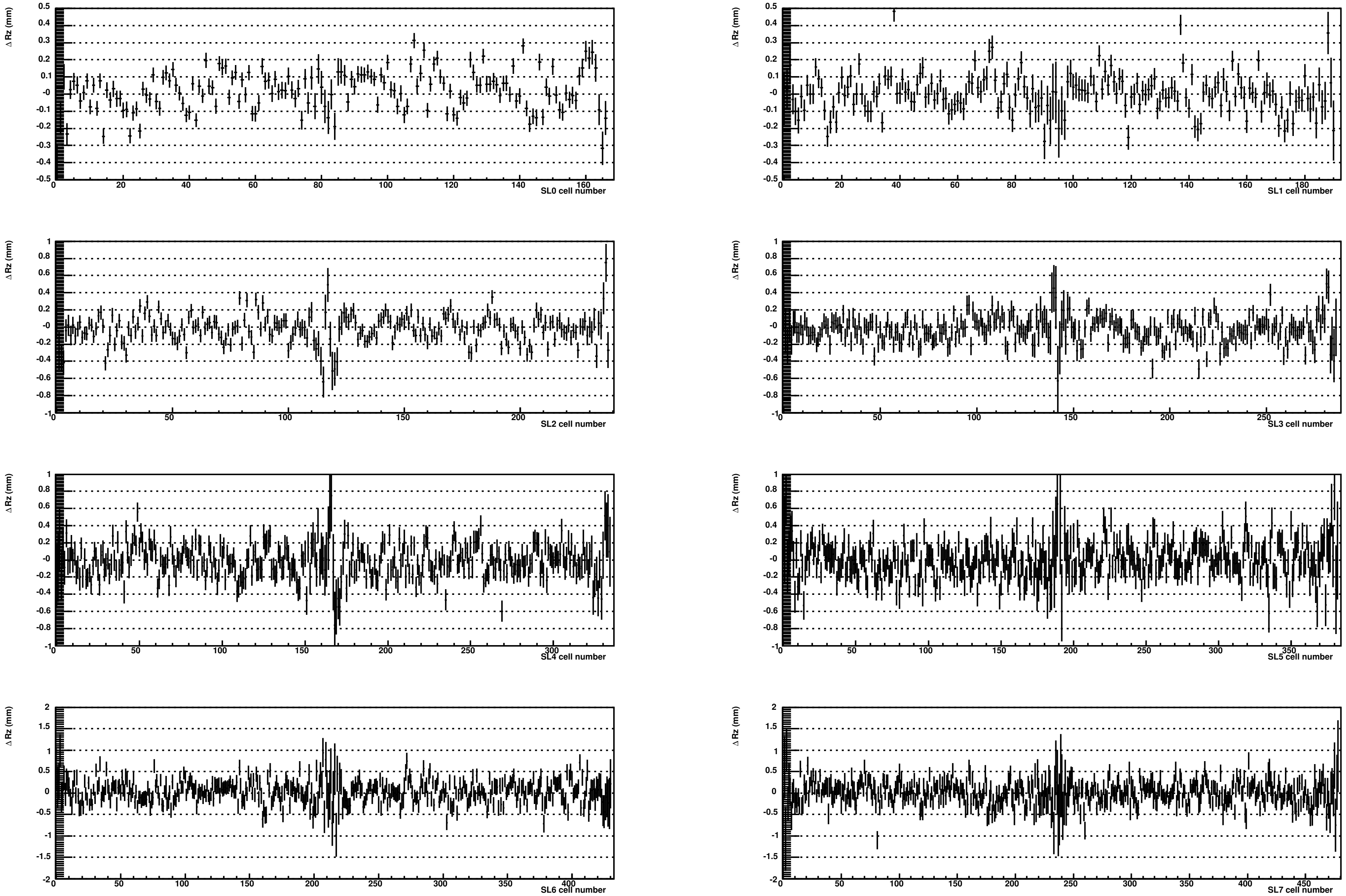

sym RΔφ (μm)
25 20 15 10 5 0 -5 -10 -15 -20 -25
0 50 100 150 200 250 300 350
SL5 cell number

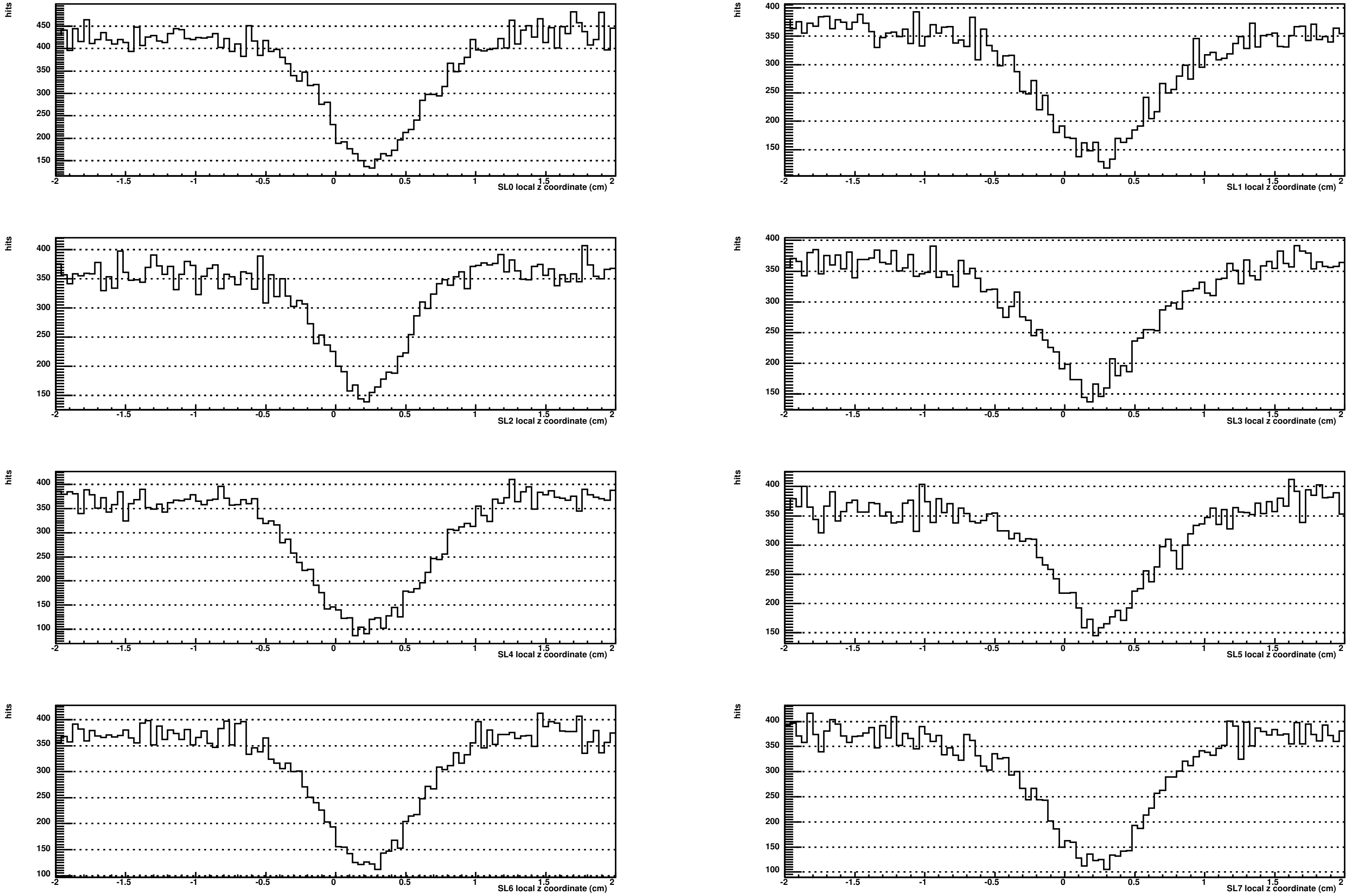

sym RΔφ (μm)
25 20 15 10 5 0 -5 -10 -15 -20 -25
0 50 100 150 200 250 300 350 400
SL6 cell number

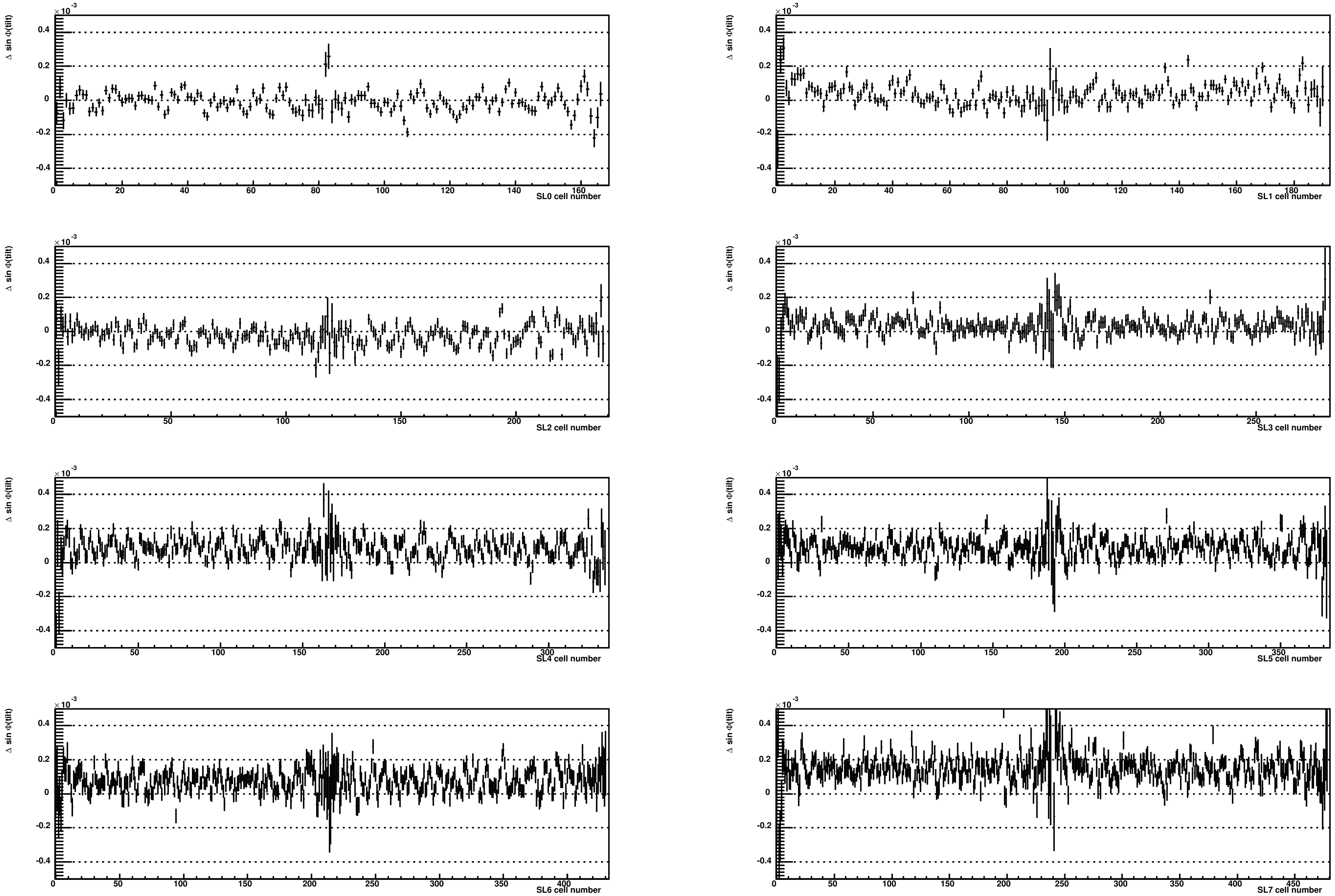

sym RΔφ (μm)
25 20 15 10 5 0 -5 -10 -15 -20 -25
0 50 100 150 200 250 300 350 400 450
SL7 cell number

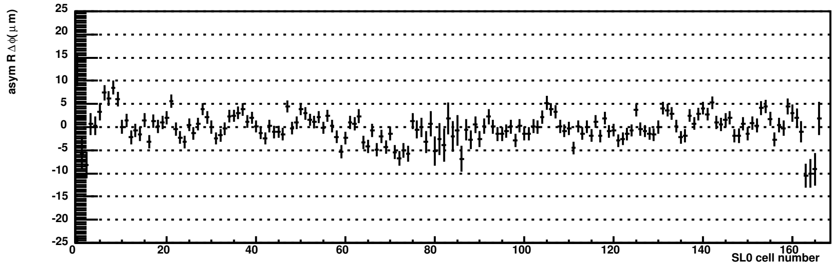


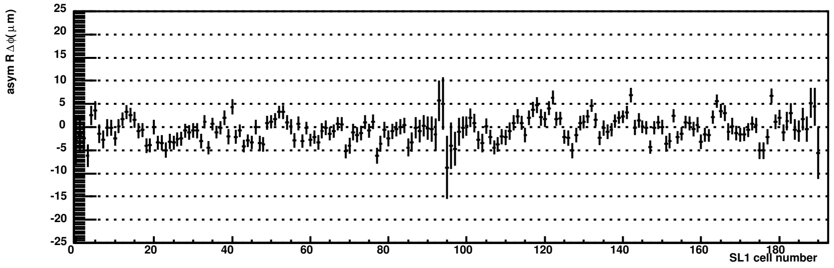
ΔR (mm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

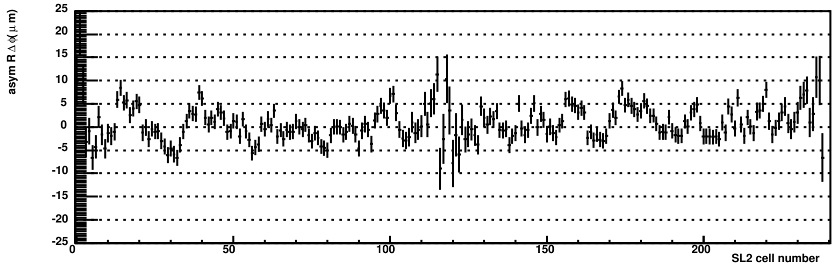

Δ Rz (mm)
SL0 cell number
Δ Rz (mm)
SL1 cell number
Δ Rz (mm)
SL2 cell number
Δ Rz (mm)
SL3 cell number
Δ Rz (mm)
SL4 cell number
Δ Rz (mm)
SL5 cell number
Δ Rz (mm)
SL6 cell number
Δ Rz (mm)
SL7 cell number

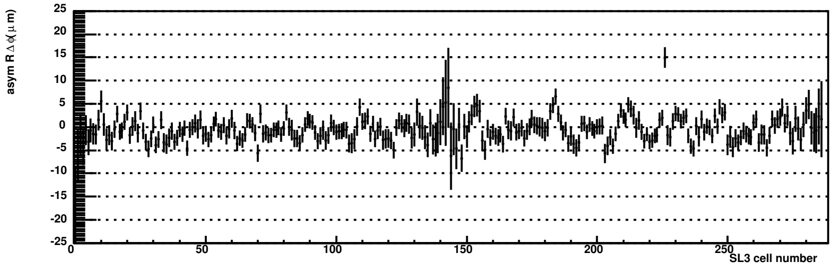

hits
SL0 local z coordinate (cm)
SL1 local z coordinate (cm)
SL2 local z coordinate (cm)
SL3 local z coordinate (cm)
SL4 local z coordinate (cm)
SL5 local z coordinate (cm)
SL6 local z coordinate (cm)
SL7 local z coordinate (cm)

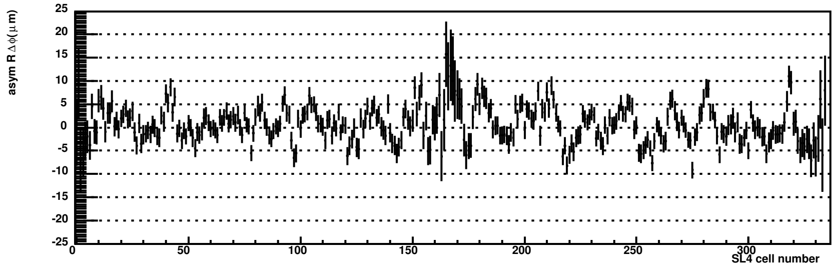

Δ sin Φ(tilt)
×10^-3
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

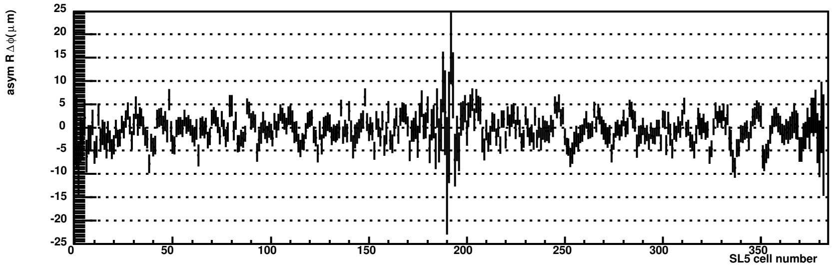

asym R Δφ(μ m)
SL0 cell number

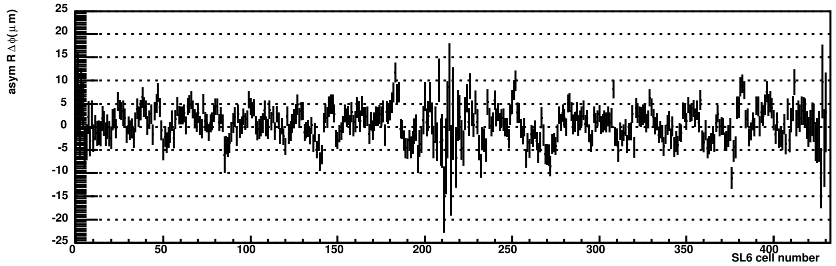

asym R Δφ(μ m)
SL1 cell number

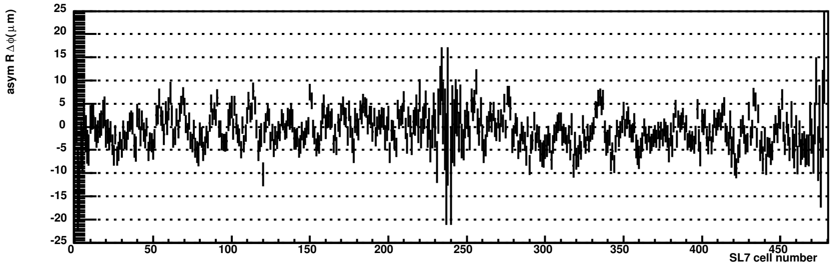

asym R Δφ(μ m)
SL2 cell number

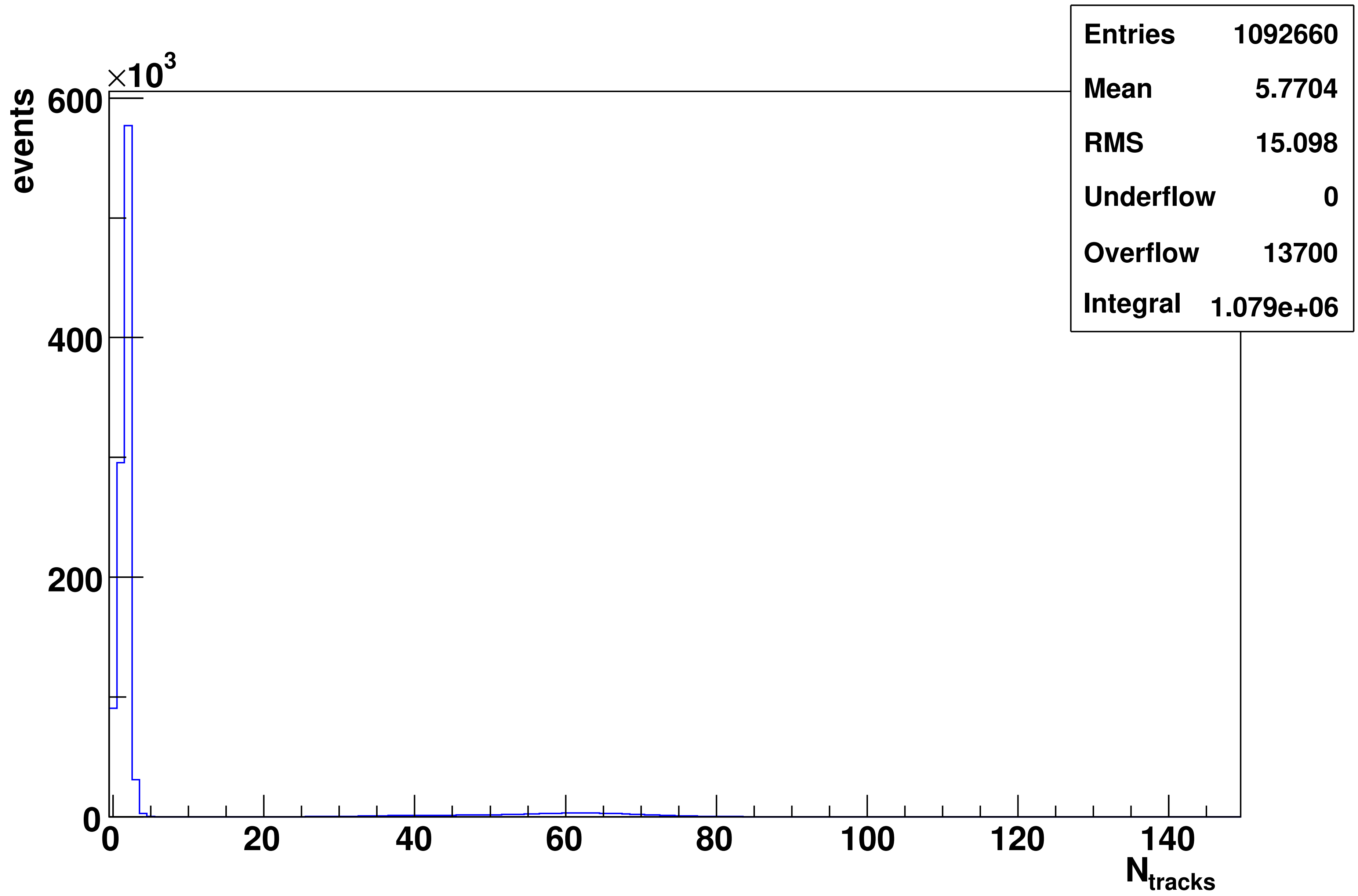

asym R Δφ(μ m)
SL3 cell number


asym R Δφ(μ m)
SL4 cell number

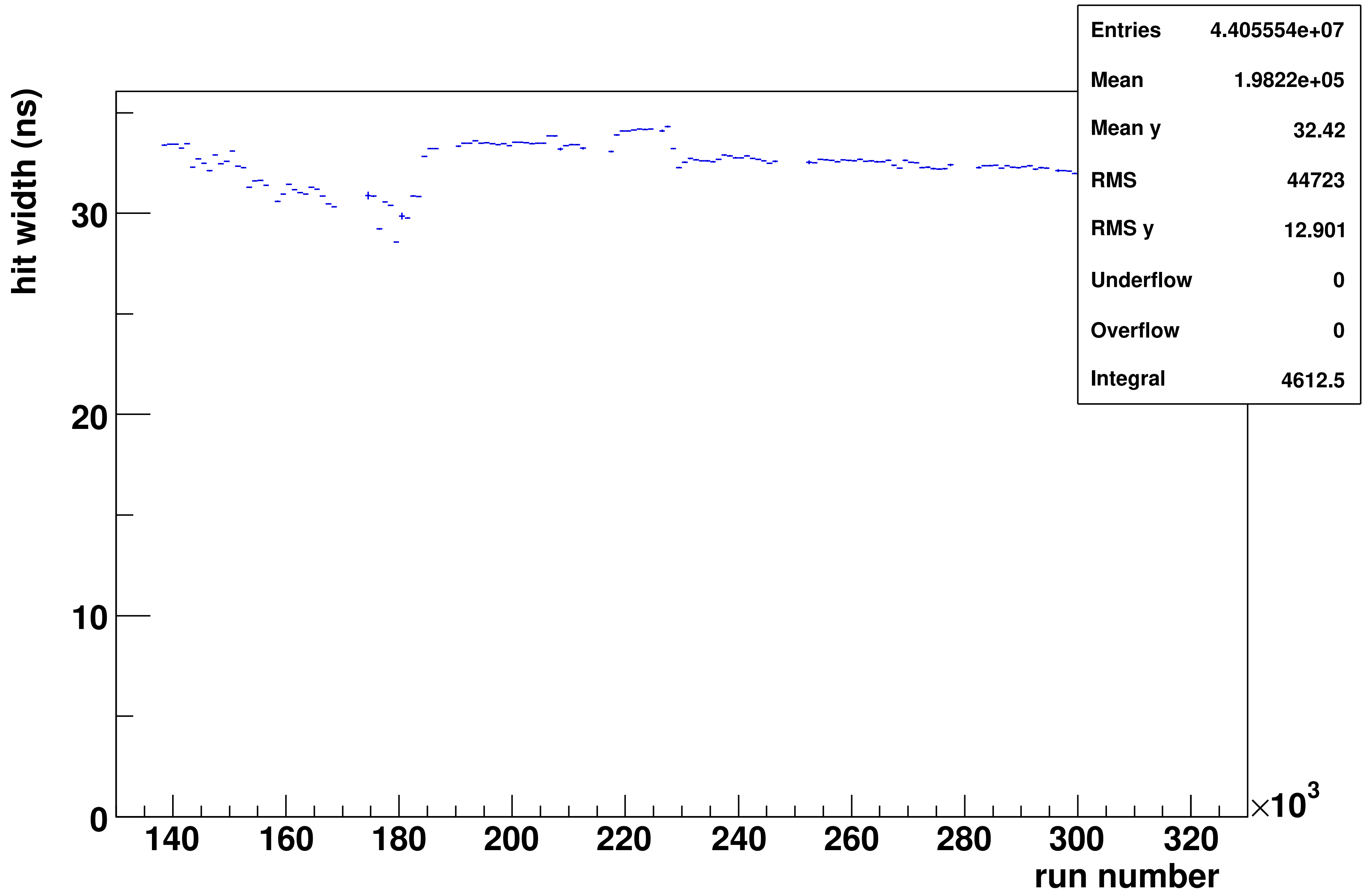

asym R Δφ(μ m)
SL5 cell number


asym R Δφ(μ m)
SL6 cell number

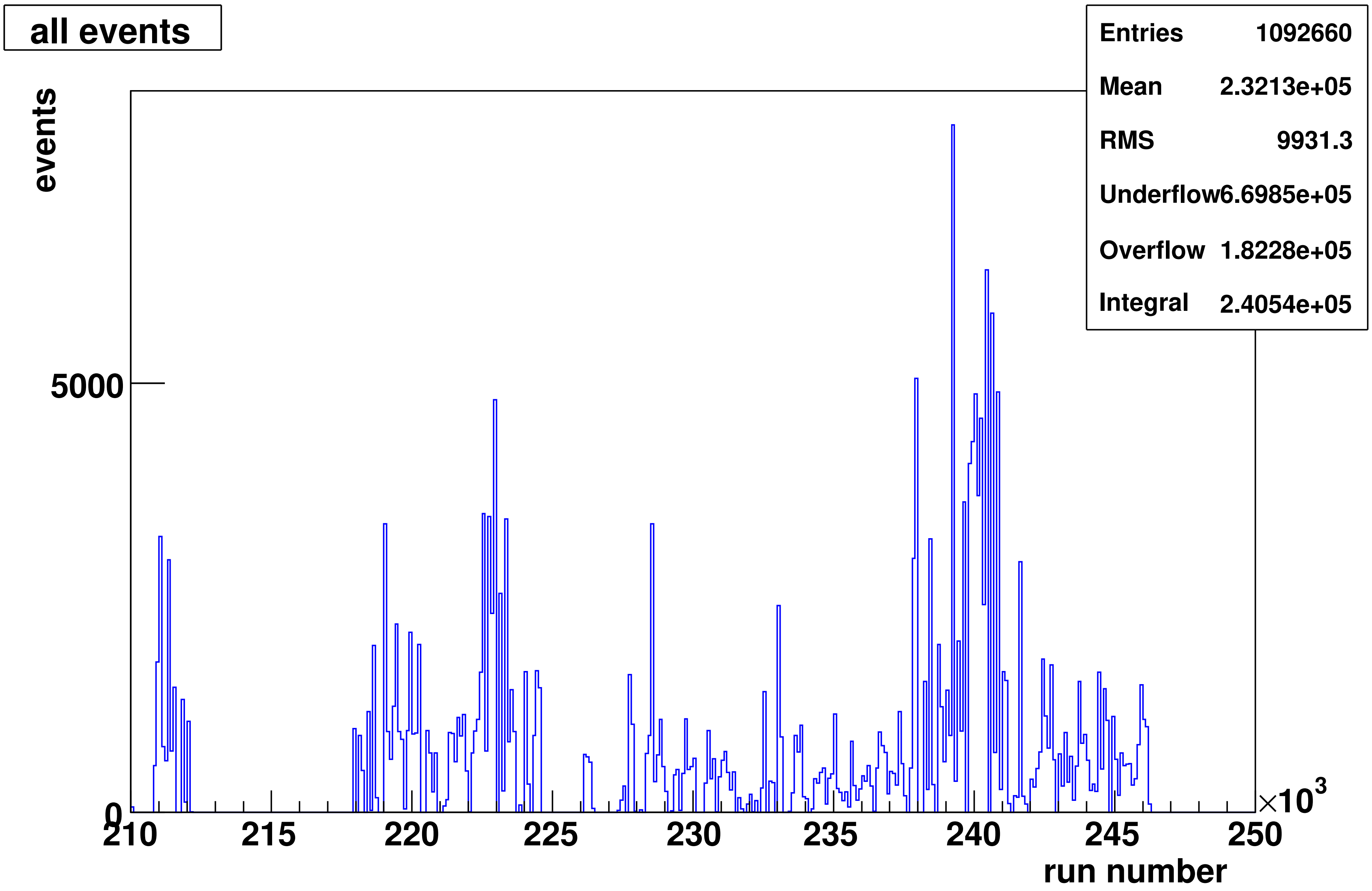

asym R Δφ(μ m)
SL7 cell number

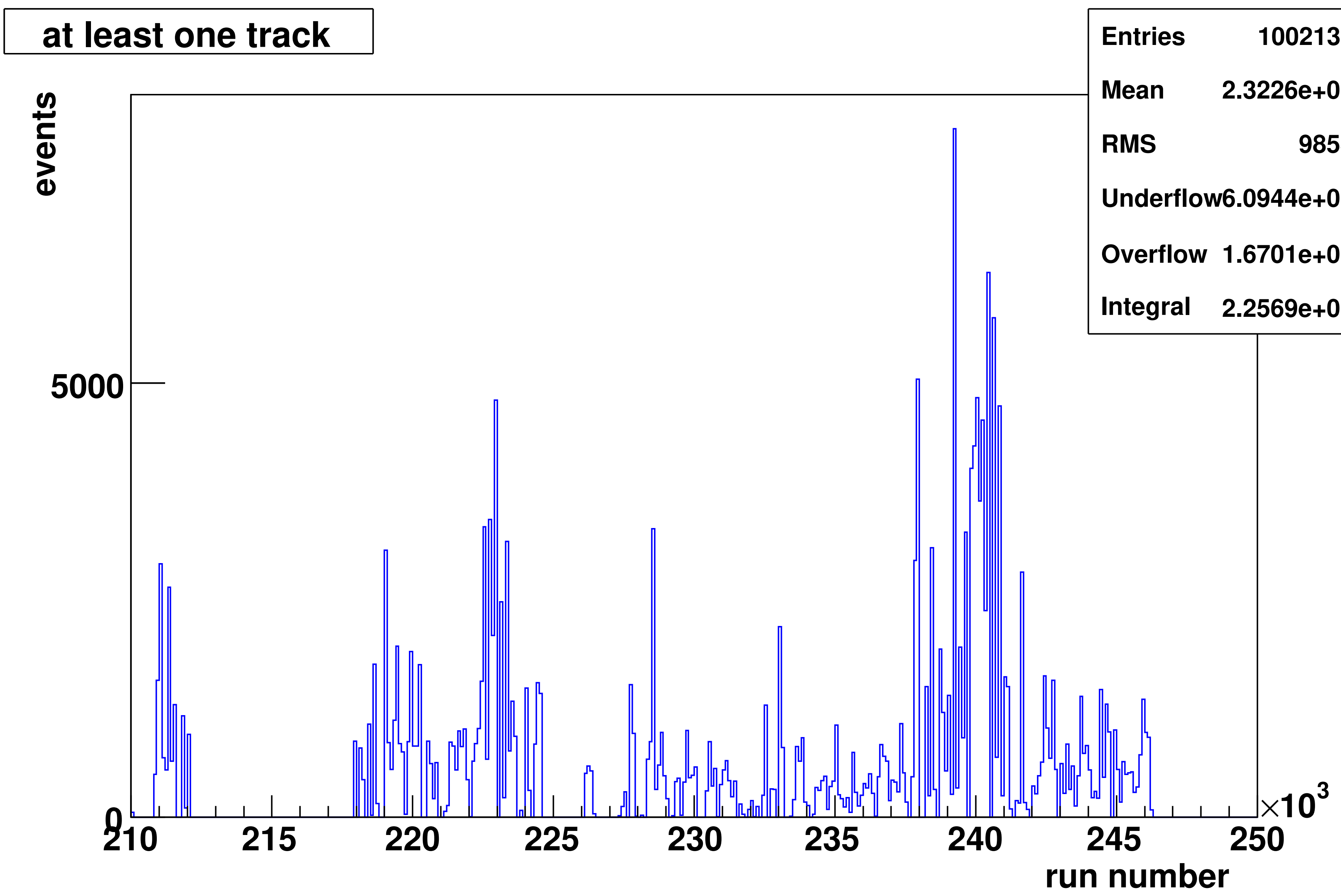


Entries 1092660
Mean 5.7704
RMS 15.098
Underflow 0
Overflow 13700
Integral 1.079e+06
×10^3
events
600
400
200
0
0
20
40
60
80
100
120
140
N_tracks

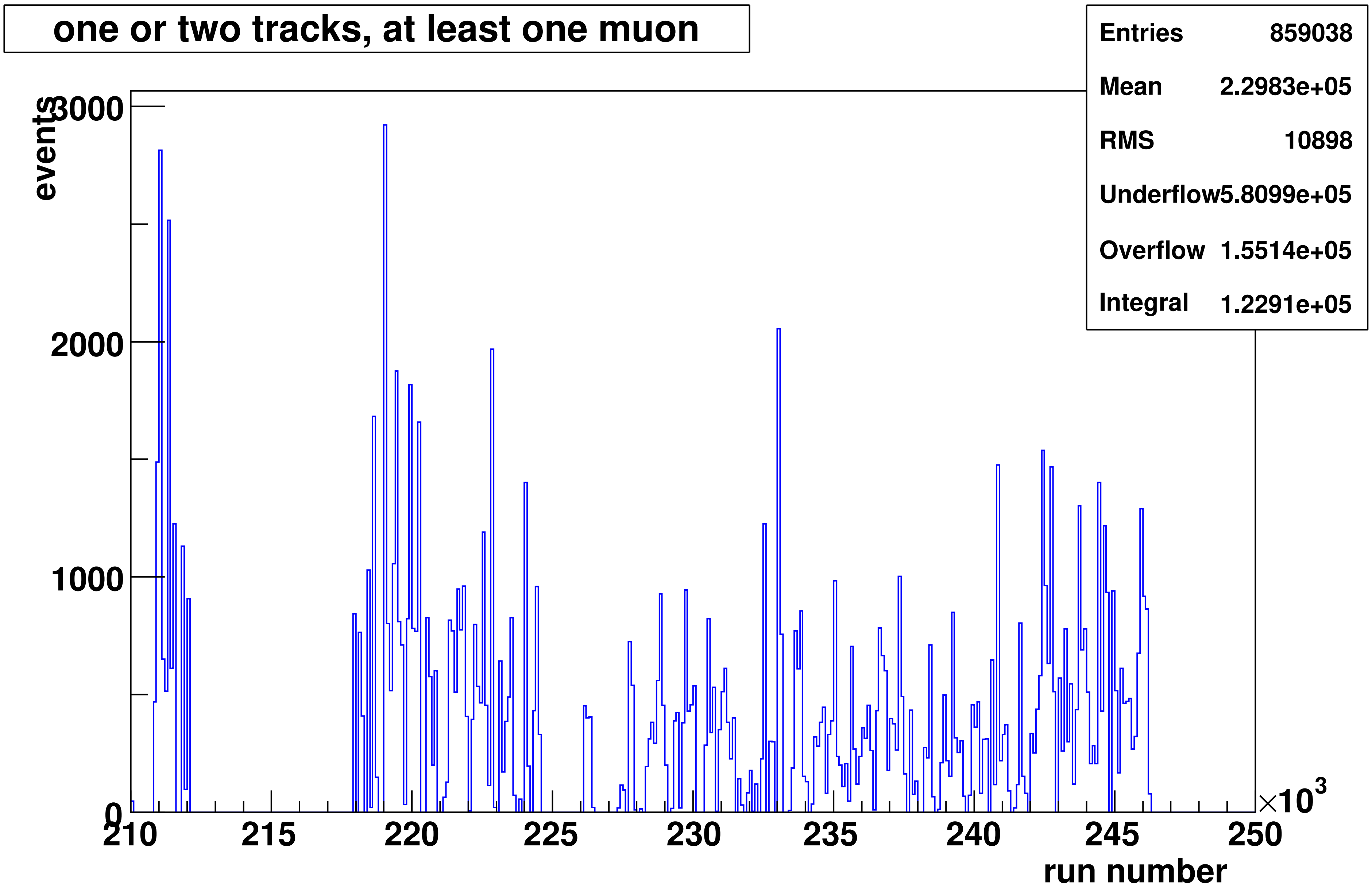


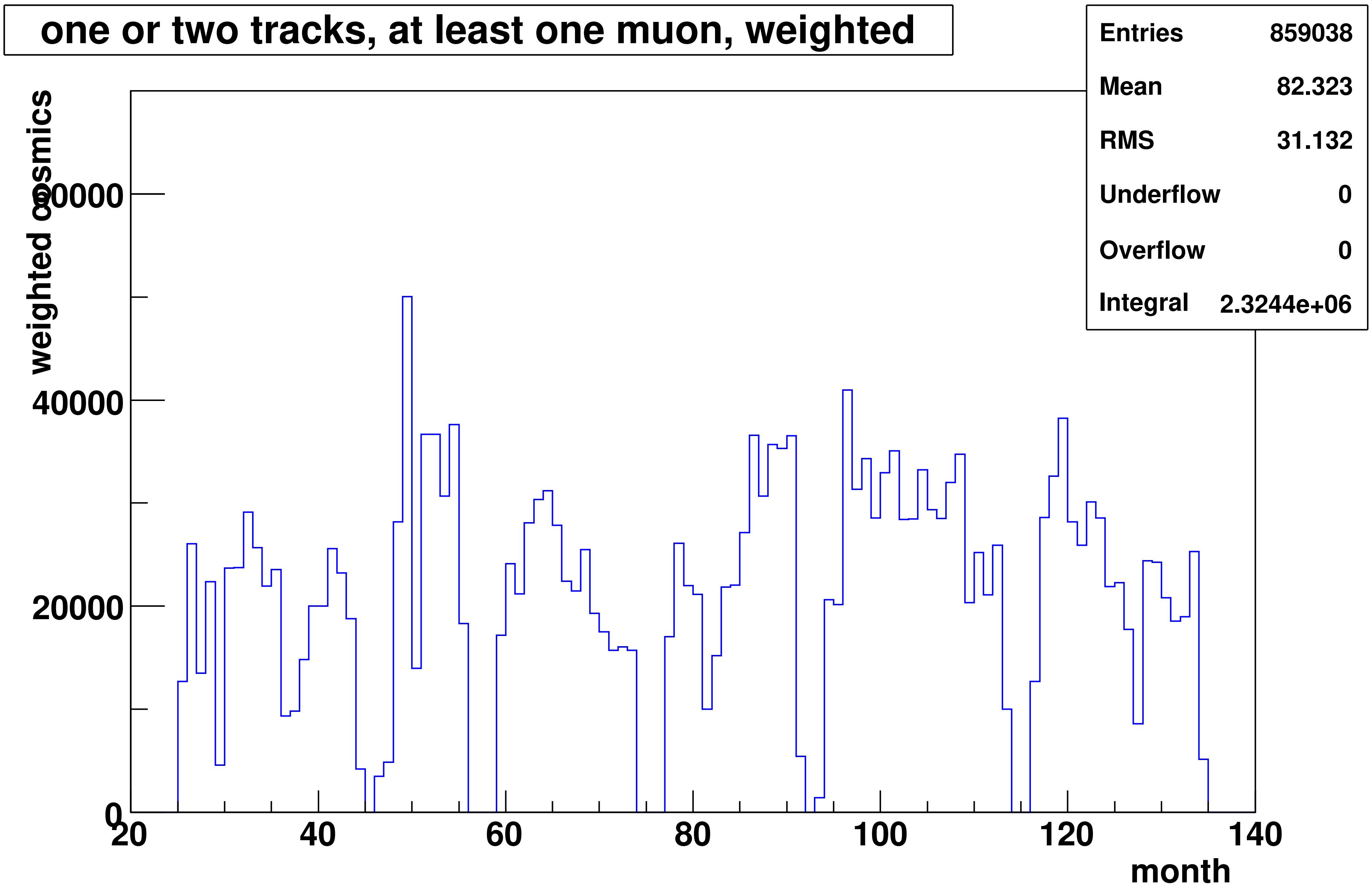
Entries 4.405554e+07
Mean 1.9822e+05
Mean y 32.42
RMS 44723
RMS y 12.901
Underflow 0
Overflow 0
Integral 4612.5
hit width (ns)
0
10
20
30
140
160
180
200
220
240
260
280
300
320
$\times 10^3$
run number


all events
events
5000
0
210
215
220
225
230
235
240
245
250
$\times 10^3$
run number
Entries 1092660
Mean 2.3213e+05
RMS 9931.3
Underflow 6.6985e+05
Overflow 1.8228e+05
Integral 2.4054e+05

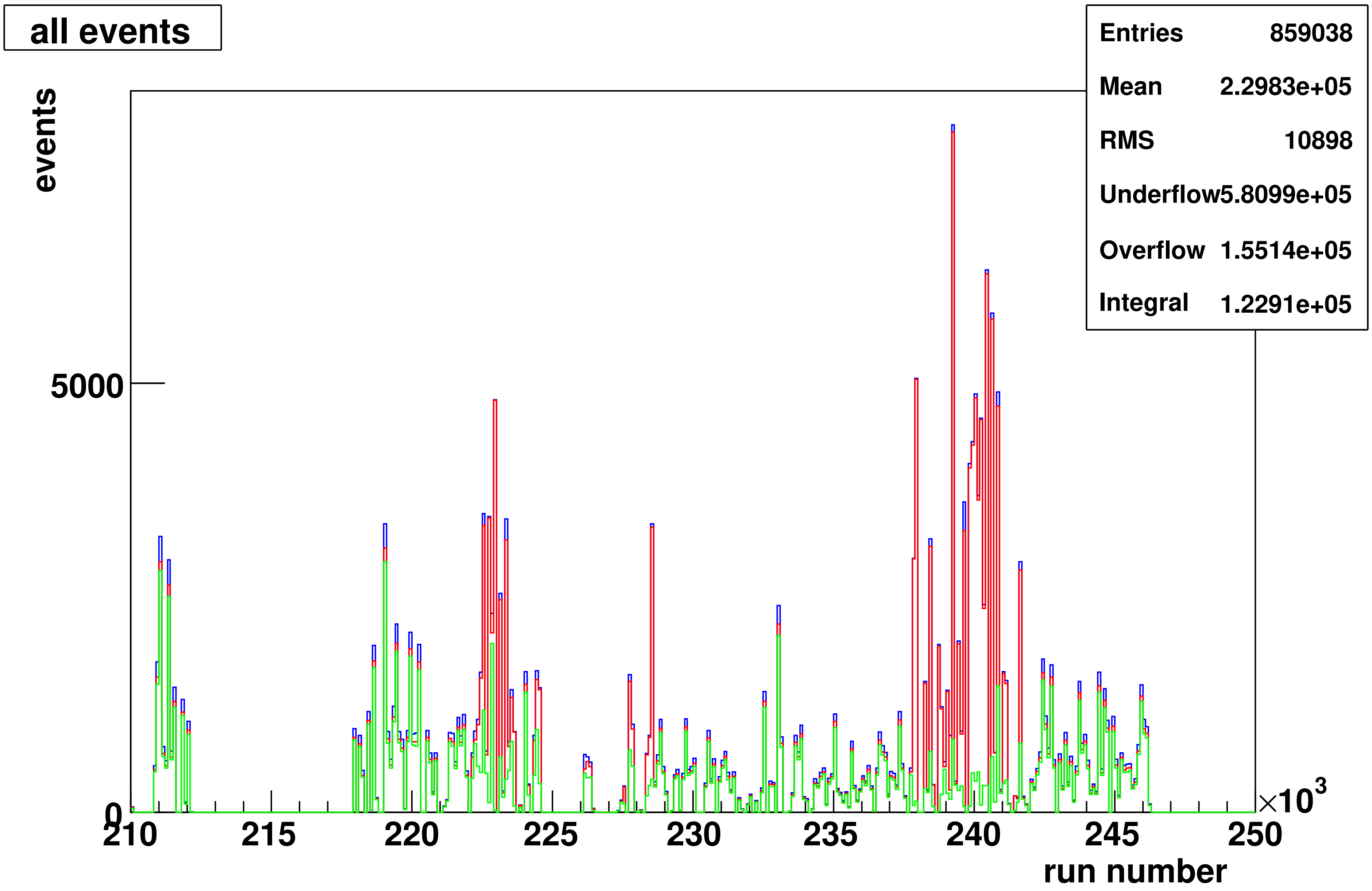


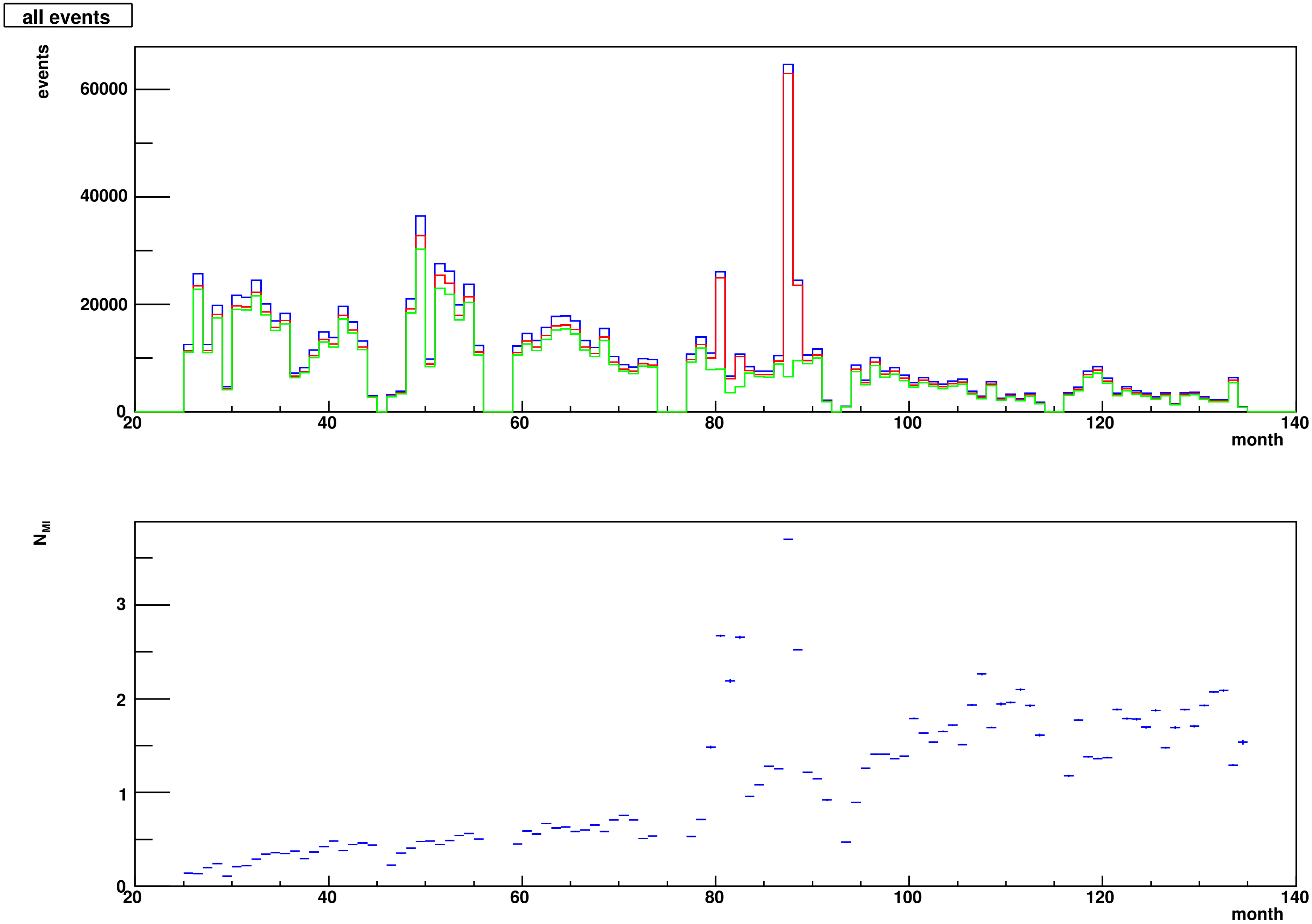
at least one track
Entries 1002139
Mean 2.3226e+05
RMS 9858
Underflow6.0944e+05
Overflow 1.6701e+05
Integral 2.2569e+05
events
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number


one or two tracks, at least one muon
Entries 859038
Mean 2.2983e+05
RMS 10898
Underflow 5.8099e+05
Overflow 1.5514e+05
Integral 1.2291e+05
events
3000
2000
1000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

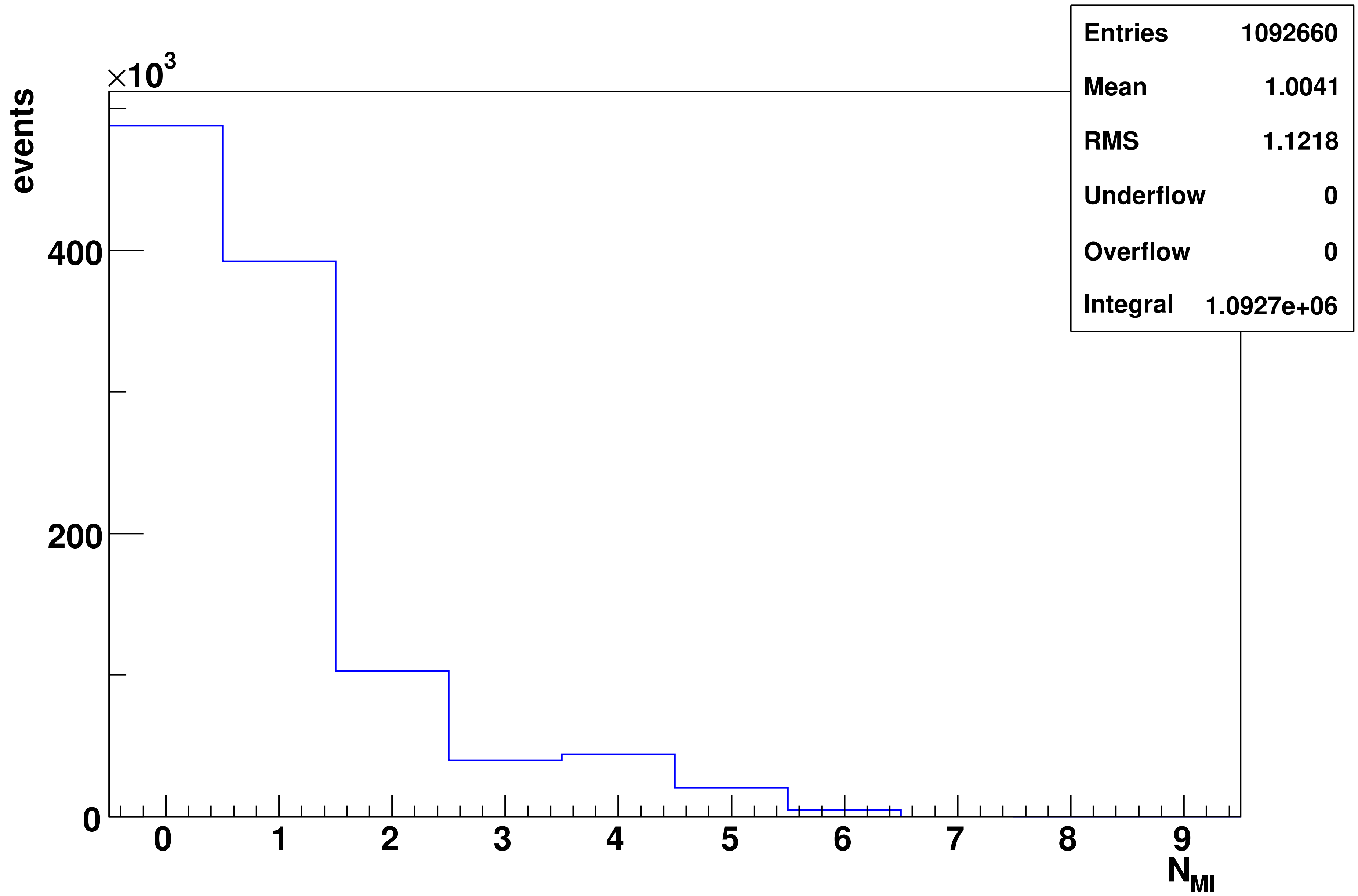


one or two tracks, at least one muon, weighted
Entries 859038
Mean 82.323
RMS 31.132
Underflow 0
Overflow 0
Integral 2.3244e+06
weighted cosmics
0
20000
40000
60000
20
40
60
80
100
120
140
month

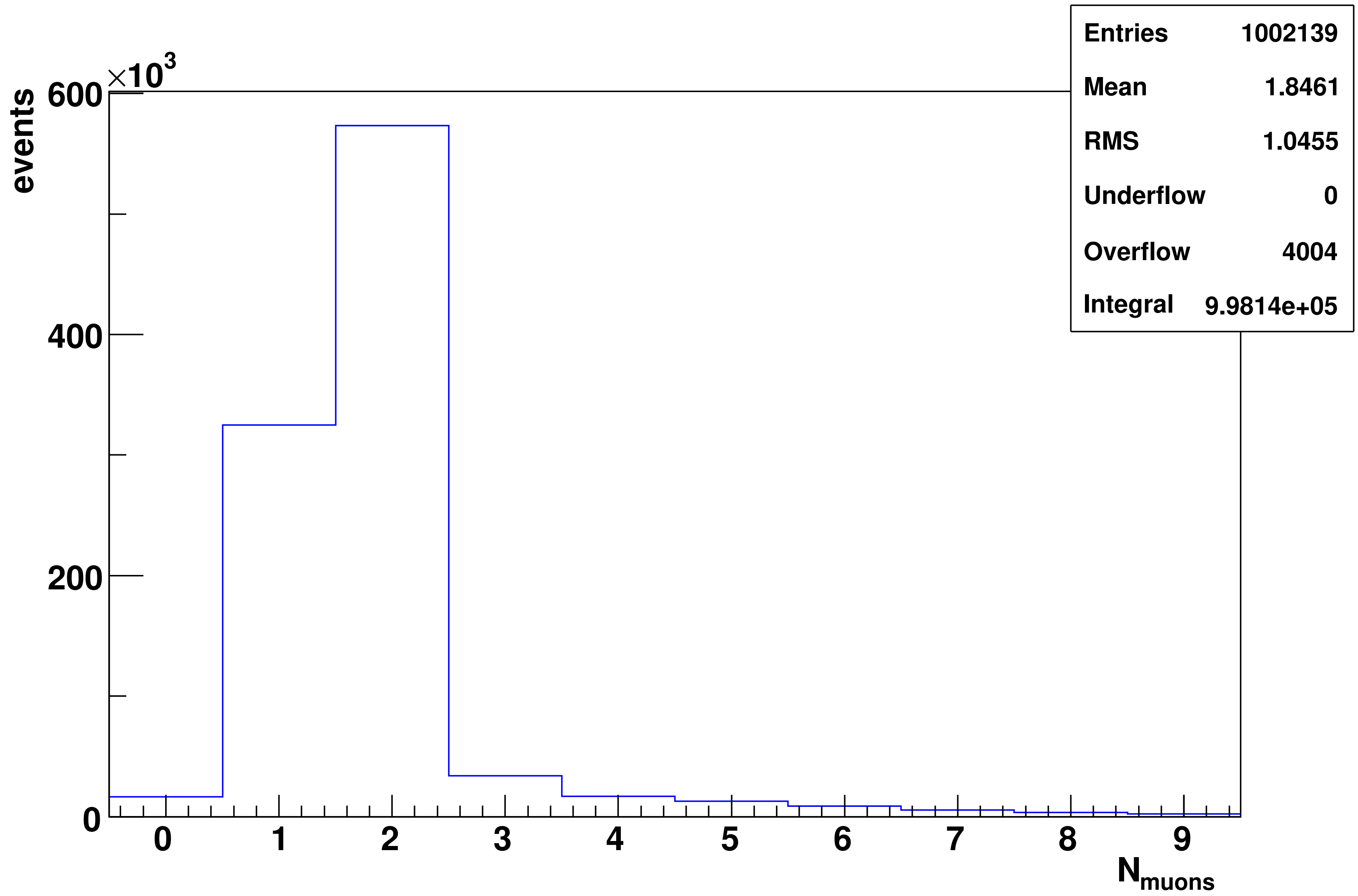

all events
events
Entries 859038
Mean 2.2983e+05
RMS 10898
Underflow 5.8099e+05
Overflow 1.5514e+05
Integral 1.2291e+05
5000
0
210
215
220
225
230
235
240
245
250
×10^3
run number



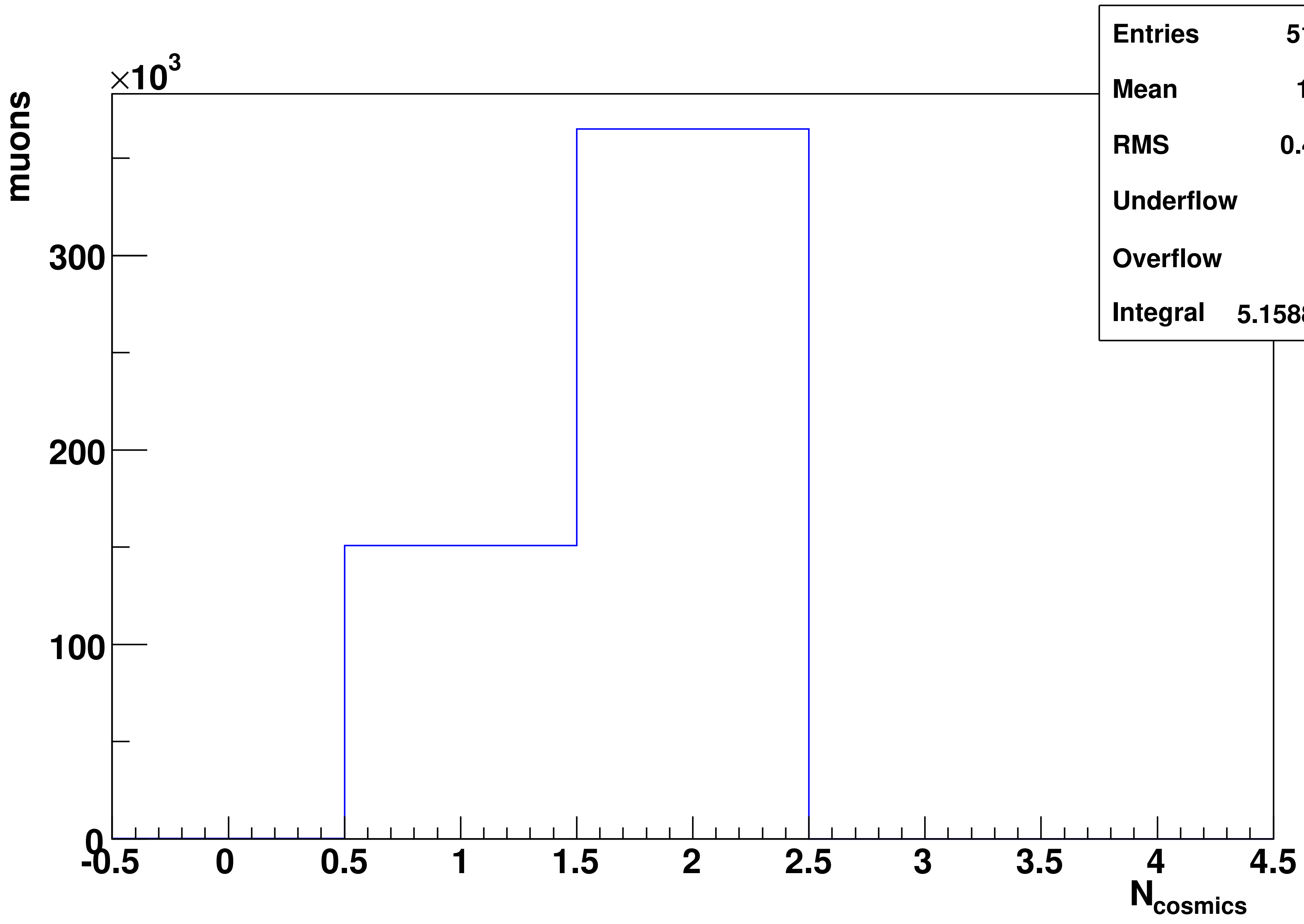
all events
events
60000
40000
20000
0
20
40
60
80
100
120
140
month
N_{MI}
3
2
1
0
20
40
60
80
100
120
140
month



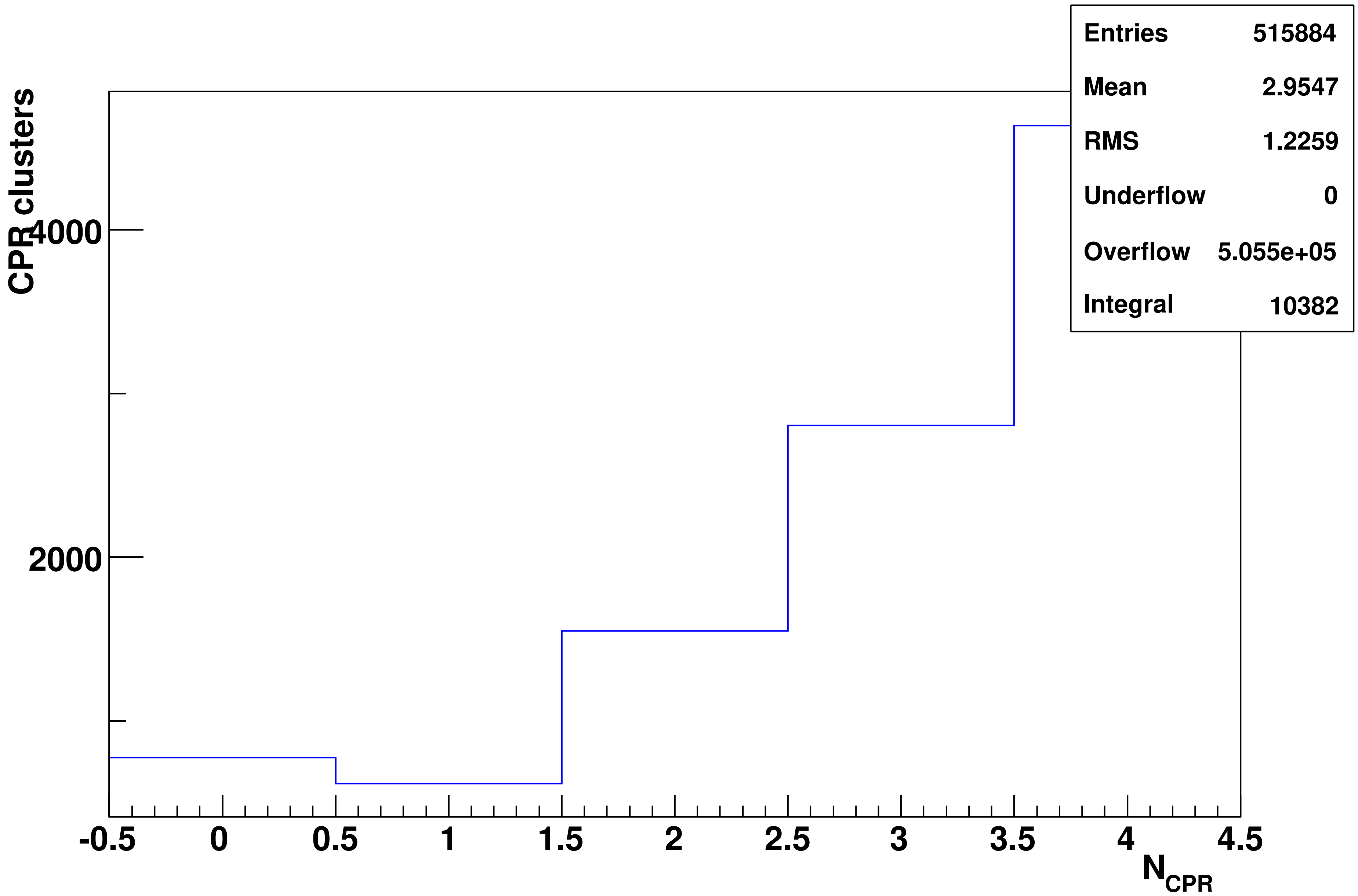
Entries 1092660
Mean 1.0041
RMS 1.1218
Underflow 0
Overflow 0
Integral 1.0927e+06
×10^3
events
400
200
0
0 1 2 3 4 5 6 7 8 9
N_MI



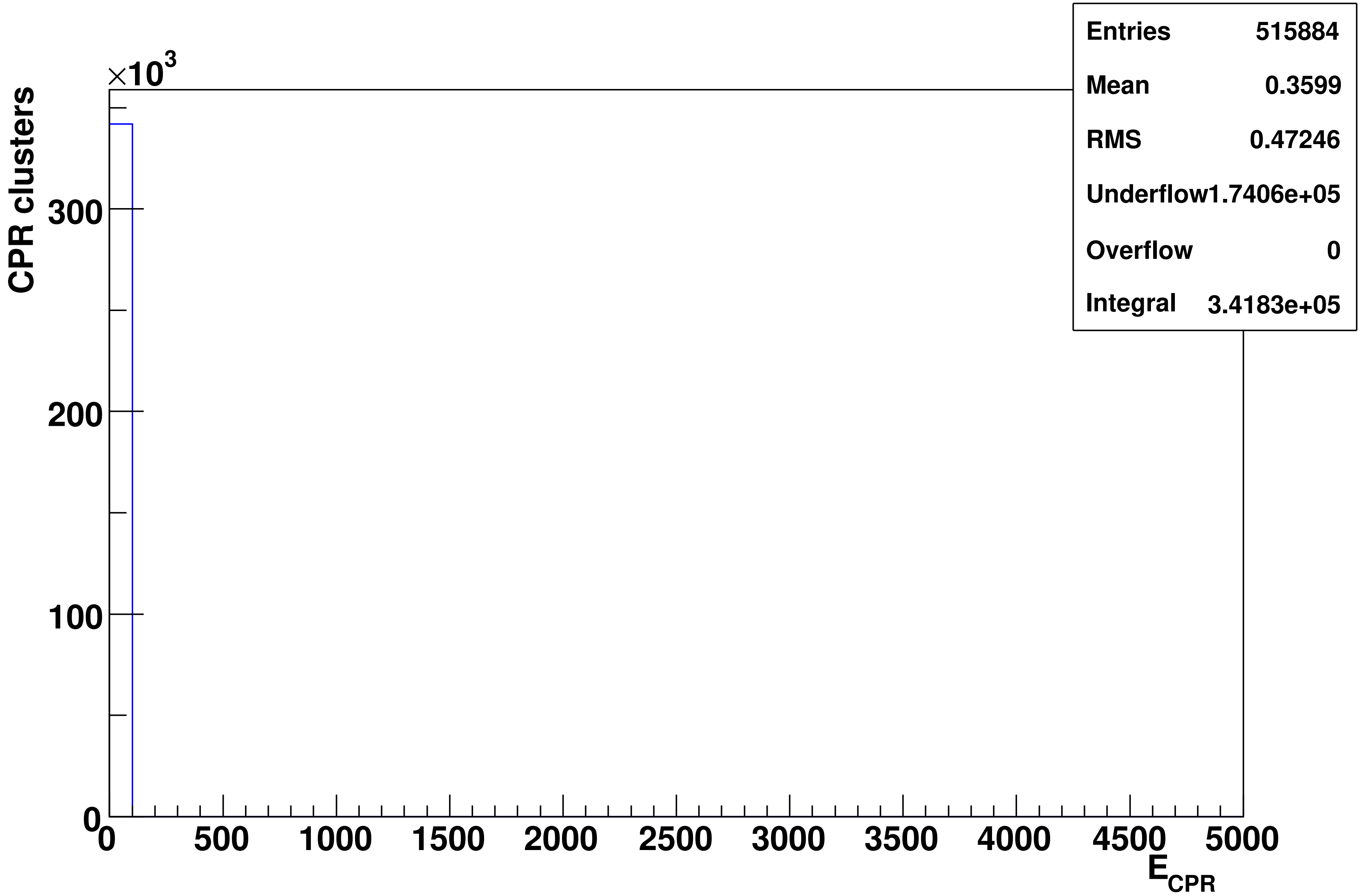
Entries 1002139
Mean 1.8461
RMS 1.0455
Underflow 0
Overflow 4004
Integral 9.9814e+05
×10^3
events
600
400
200
0
0 1 2 3 4 5 6 7 8 9
N_muons



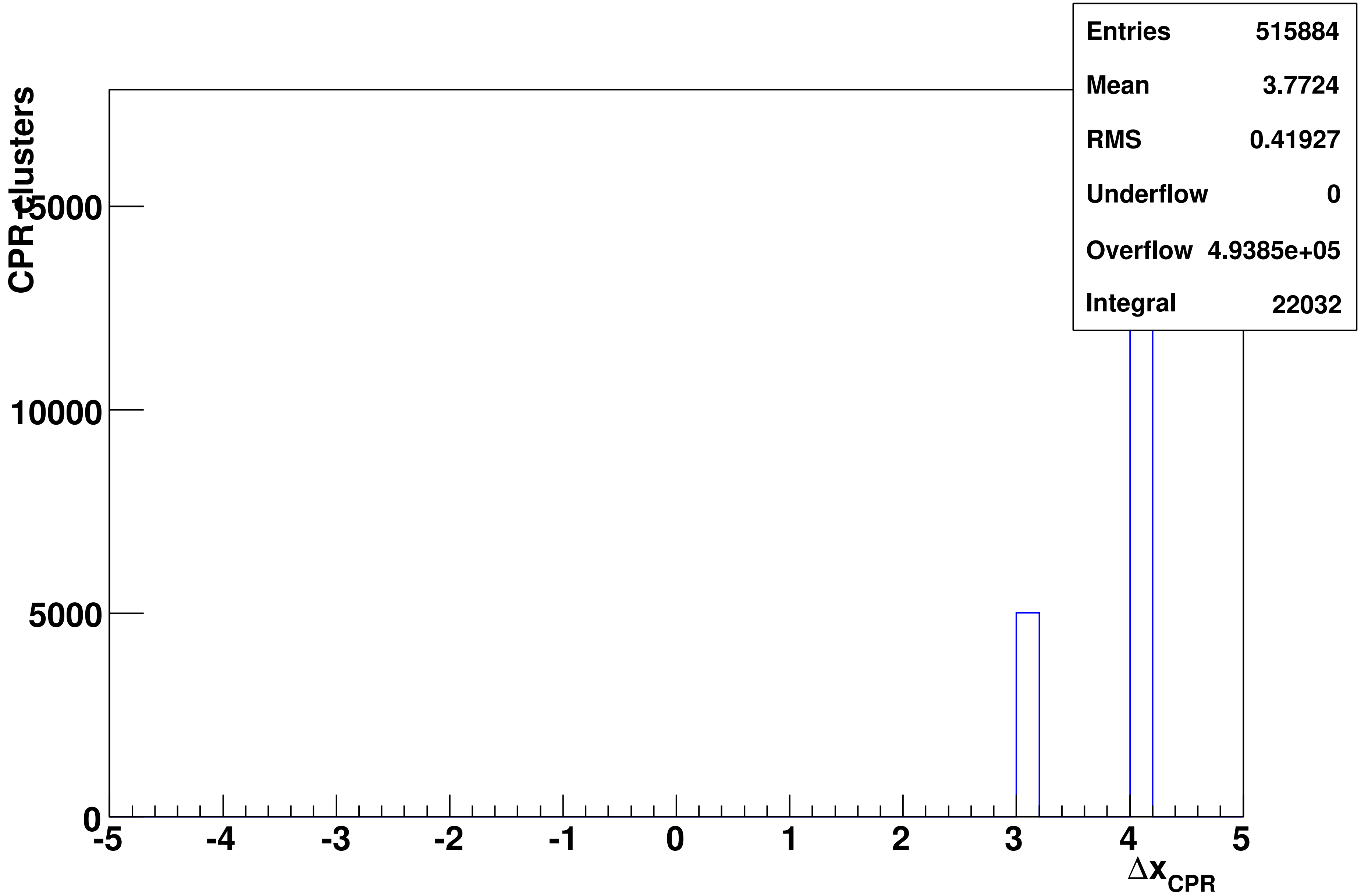
Entries 515884
Mean 1.7072
RMS 0.45548
Underflow 0
Overflow 0
Integral 5.1588e+05
×10^3
muons
300
200
100
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_cosmics

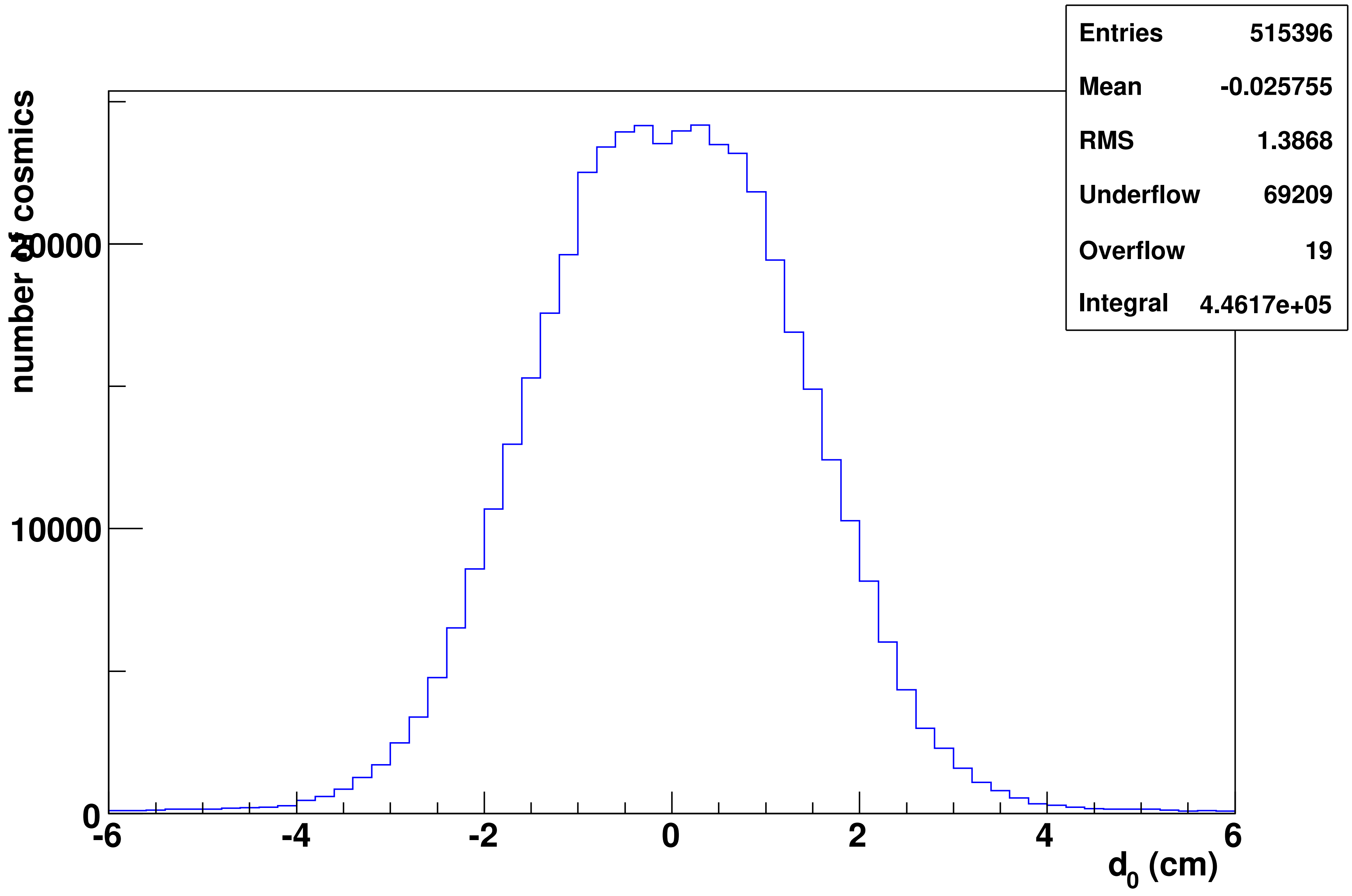


Entries 515884
Mean 2.9547
RMS 1.2259
Underflow 0
Overflow 5.055e+05
Integral 10382
CPR clusters
4000
2000
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_{CPR}

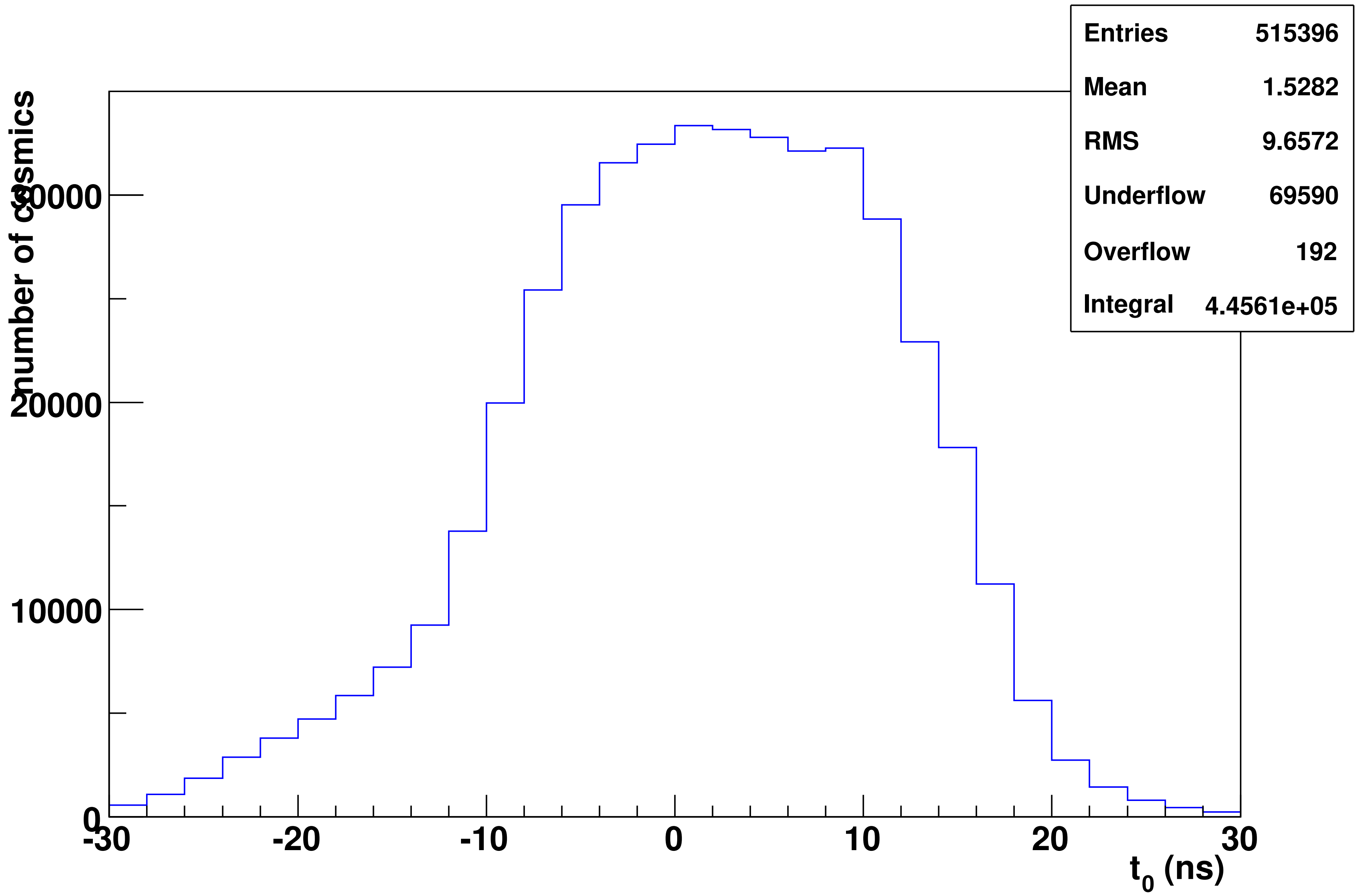


Entries 515884
Mean 0.3599
RMS 0.47246
Underflow 1.7406e+05
Overflow 0
Integral 3.4183e+05
×10³
CPR clusters
0
100
200
300
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
E_CPR

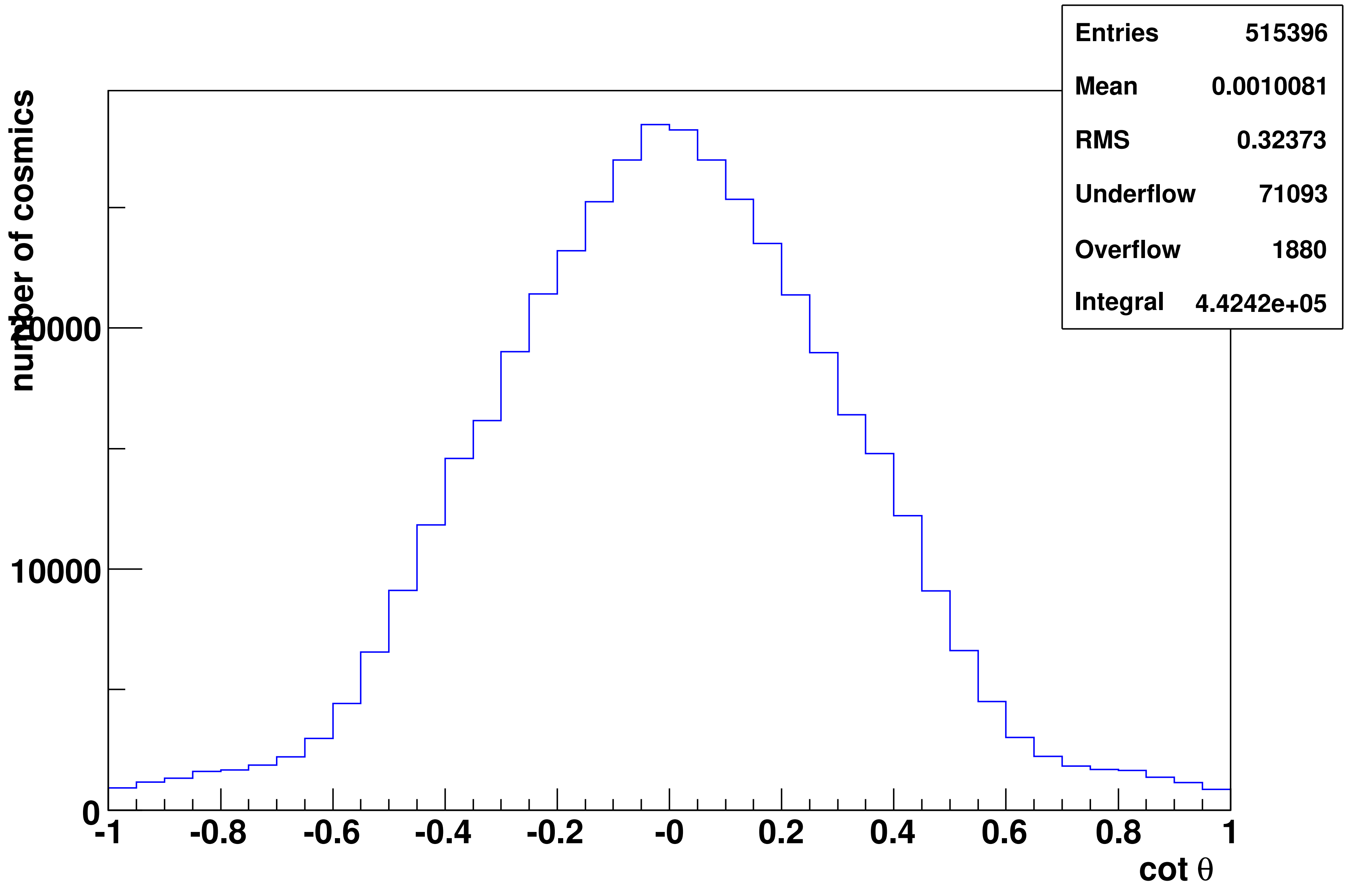

Entries 515884
Mean 3.7724
RMS 0.41927
Underflow 0
Overflow 4.9385e+05
Integral 22032
CPR clusters
0
5000
10000
15000
-5
-4
-3
-2
-1
0
1
2
3
4
5
Δx_{CPR}



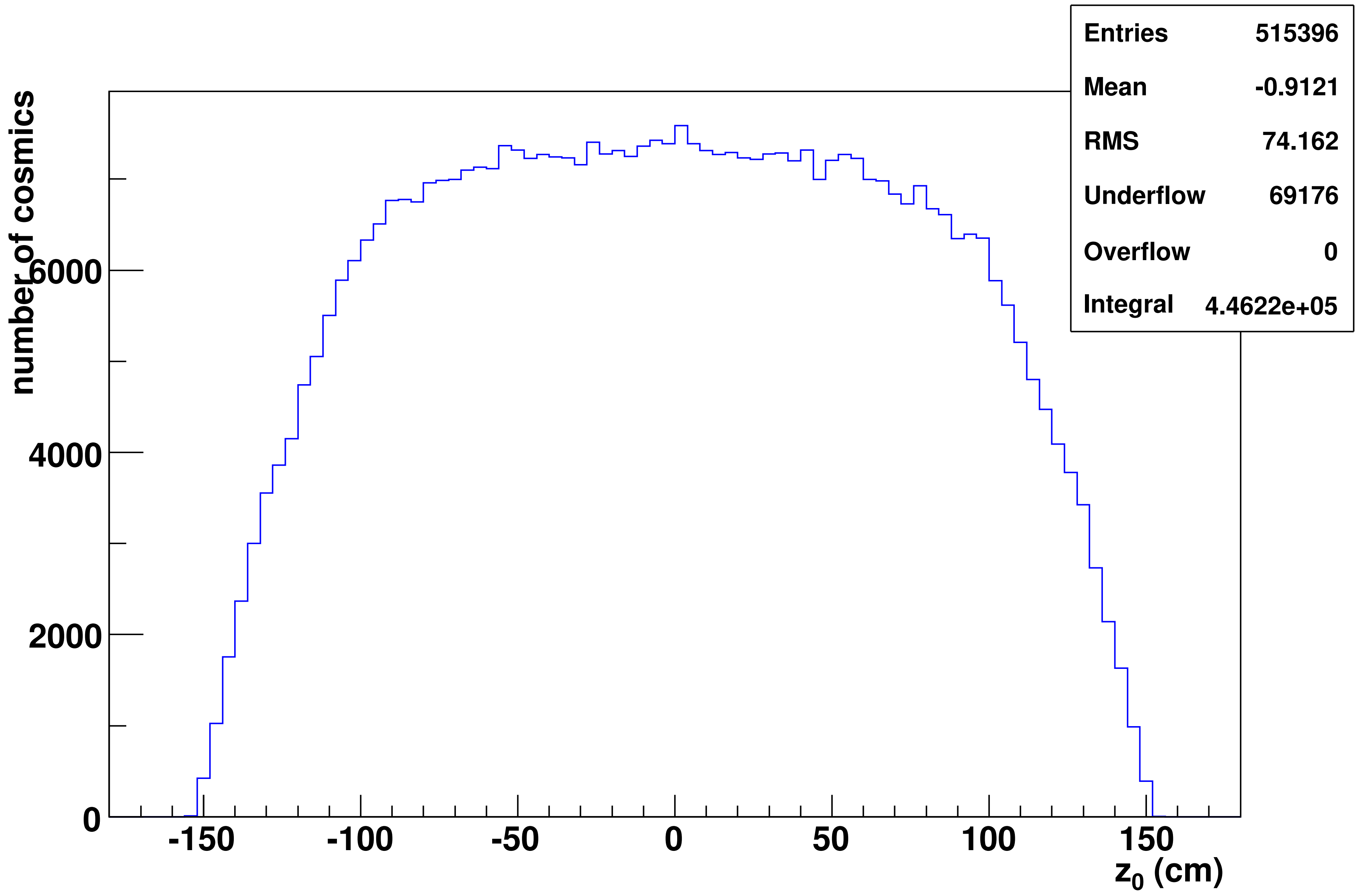
Entries 515396
Mean -0.025755
RMS 1.3868
Underflow 69209
Overflow 19
Integral 4.4617e+05
number of cosmics
20000
10000
0
-6
-4
-2
0
2
4
6
d0 (cm)

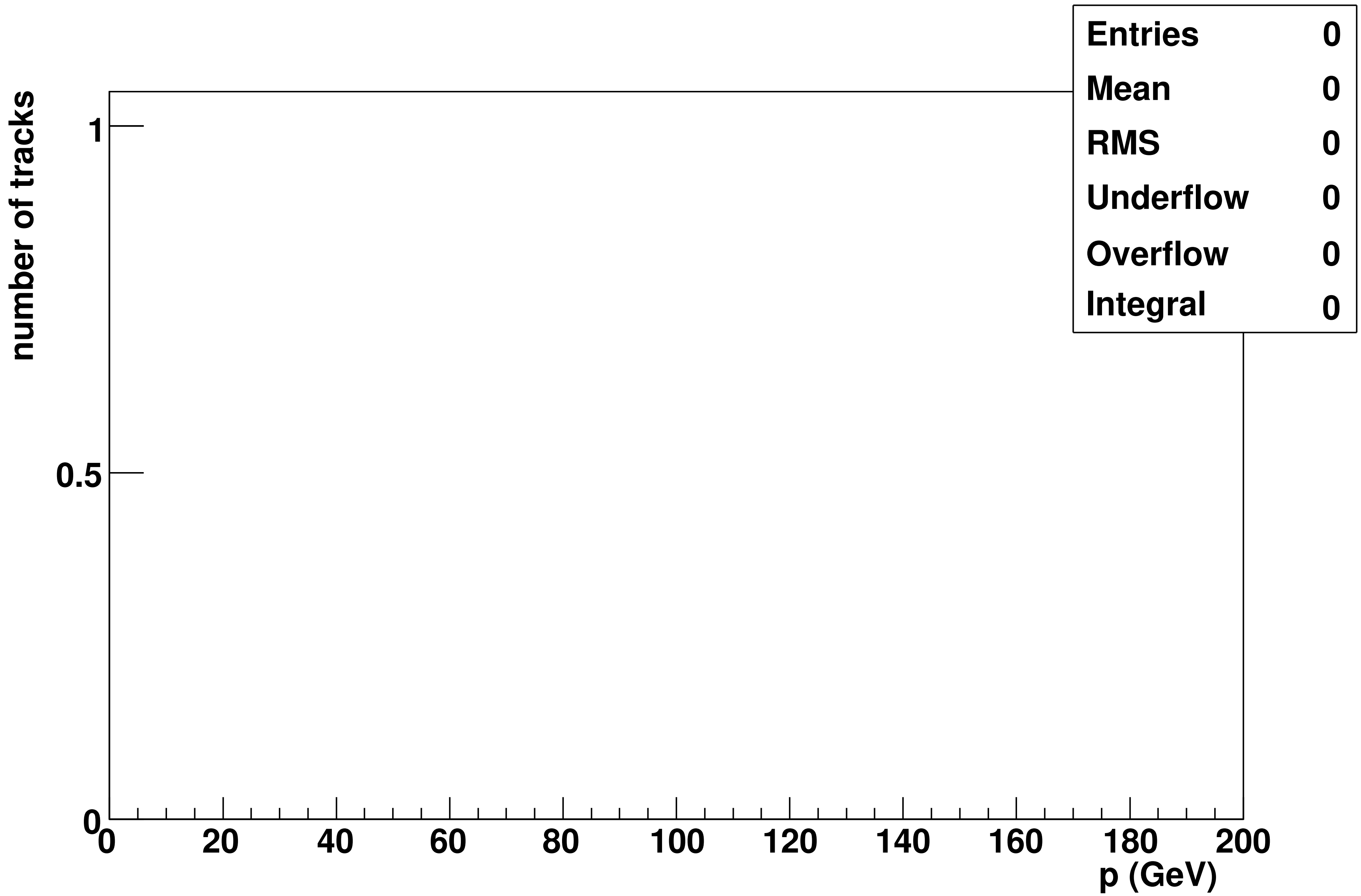


Entries 515396
Mean 1.5282
RMS 9.6572
Underflow 69590
Overflow 192
Integral 4.4561e+05
number of cosmics
0
10000
20000
30000
-30
-20
-10
0
10
20
30
t_0 (ns)

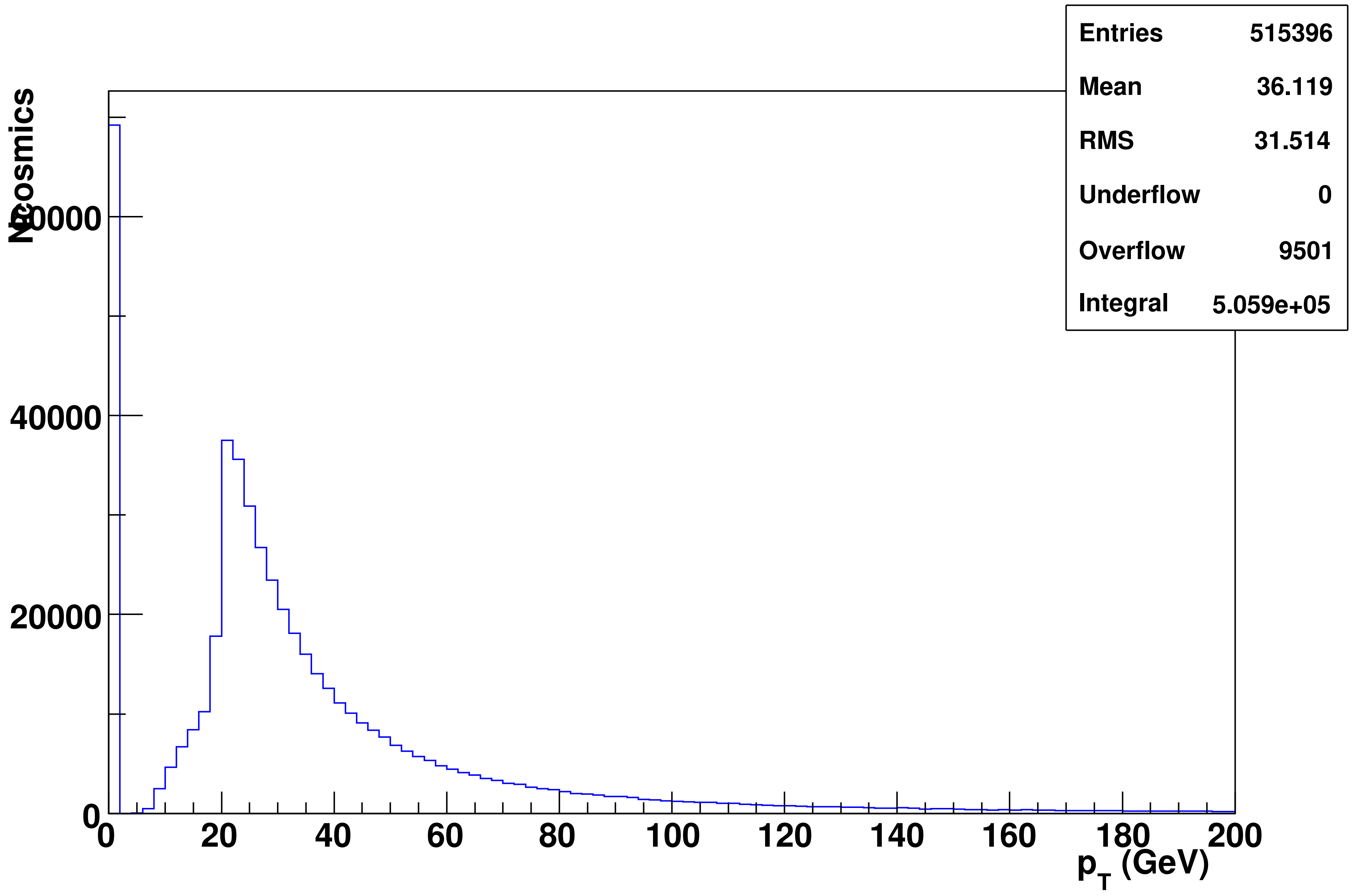


Entries 515396
Mean 0.0010081
RMS 0.32373
Underflow 71093
Overflow 1880
Integral 4.4242e+05
number of cosmics
20000
10000
0
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
cot θ

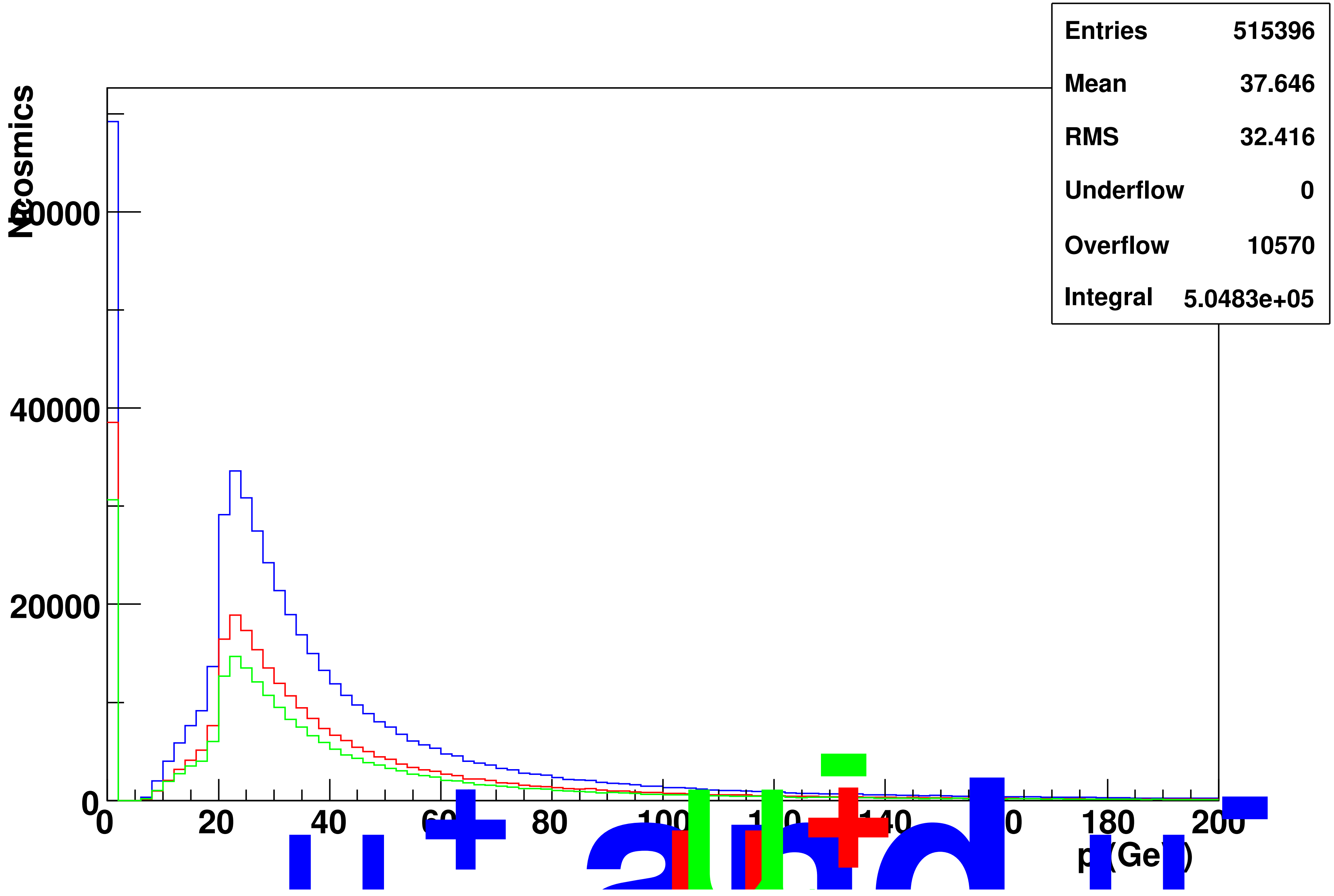

Entries 515396
Mean -0.9121
RMS 74.162
Underflow 69176
Overflow 0
Integral 4.4622e+05
number of cosmics
0
2000
4000
6000
-150
-100
-50
0
50
100
150
z_0 (cm)



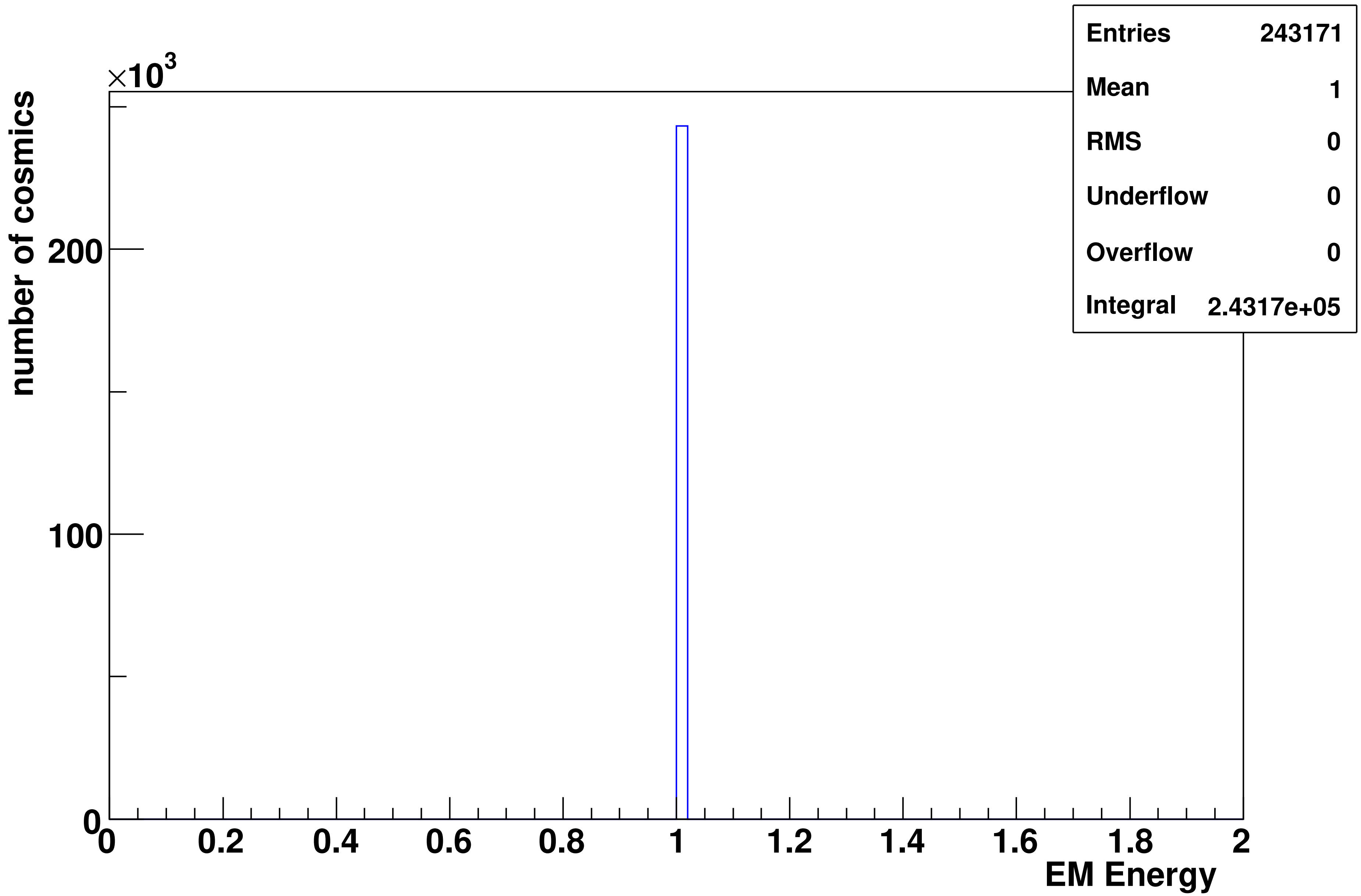
Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Integral 0
number of tracks
1
0.5
0
0
20
40
60
80
100
120
140
160
180
200
p (GeV)



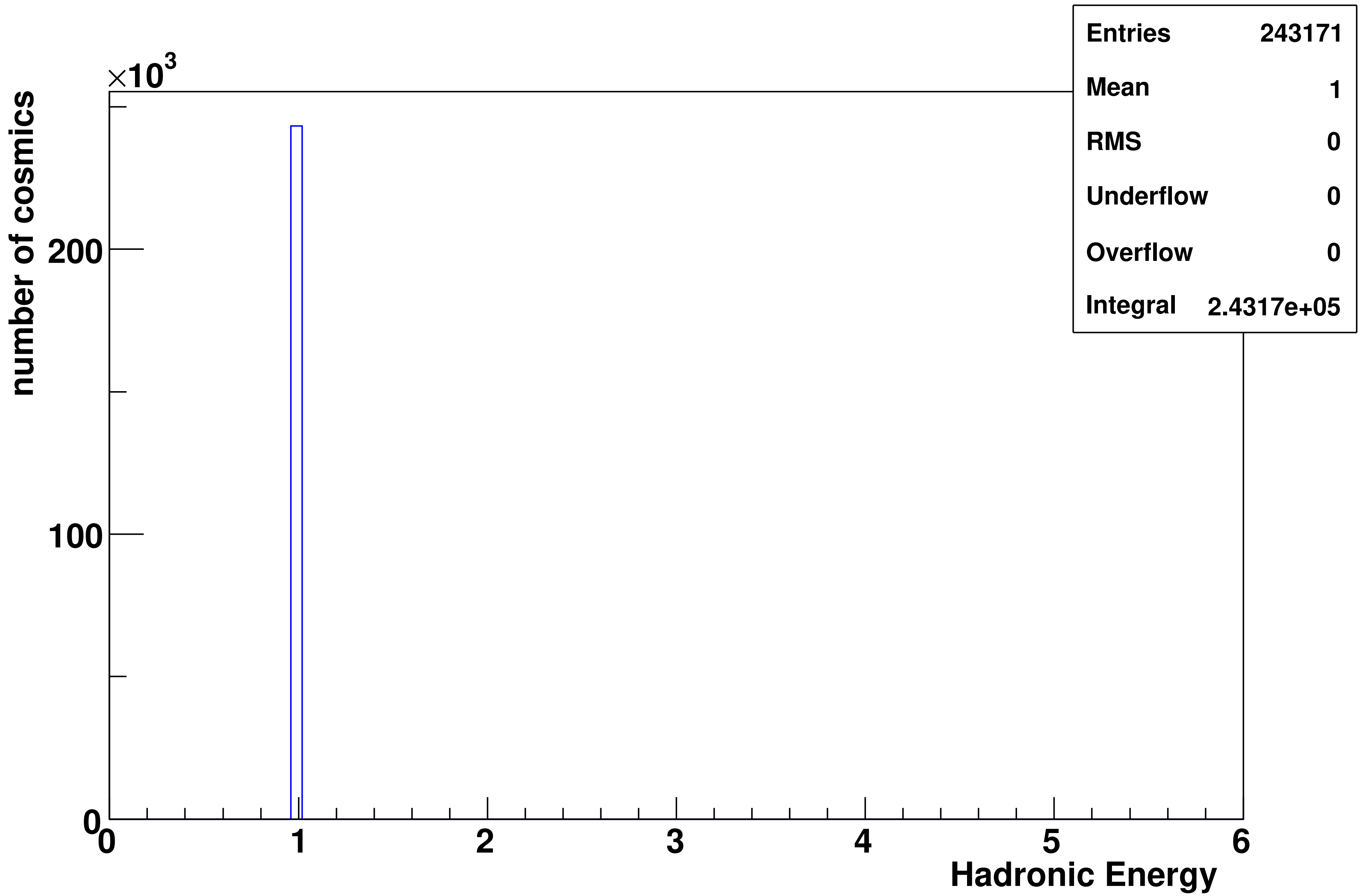
Entries 515396
Mean 36.119
RMS 31.514
Underflow 0
Overflow 9501
Integral 5.059e+05
Ncosmics
0
20000
40000
60000
0
20
40
60
80
100
120
140
160
180
200
p_T (GeV)



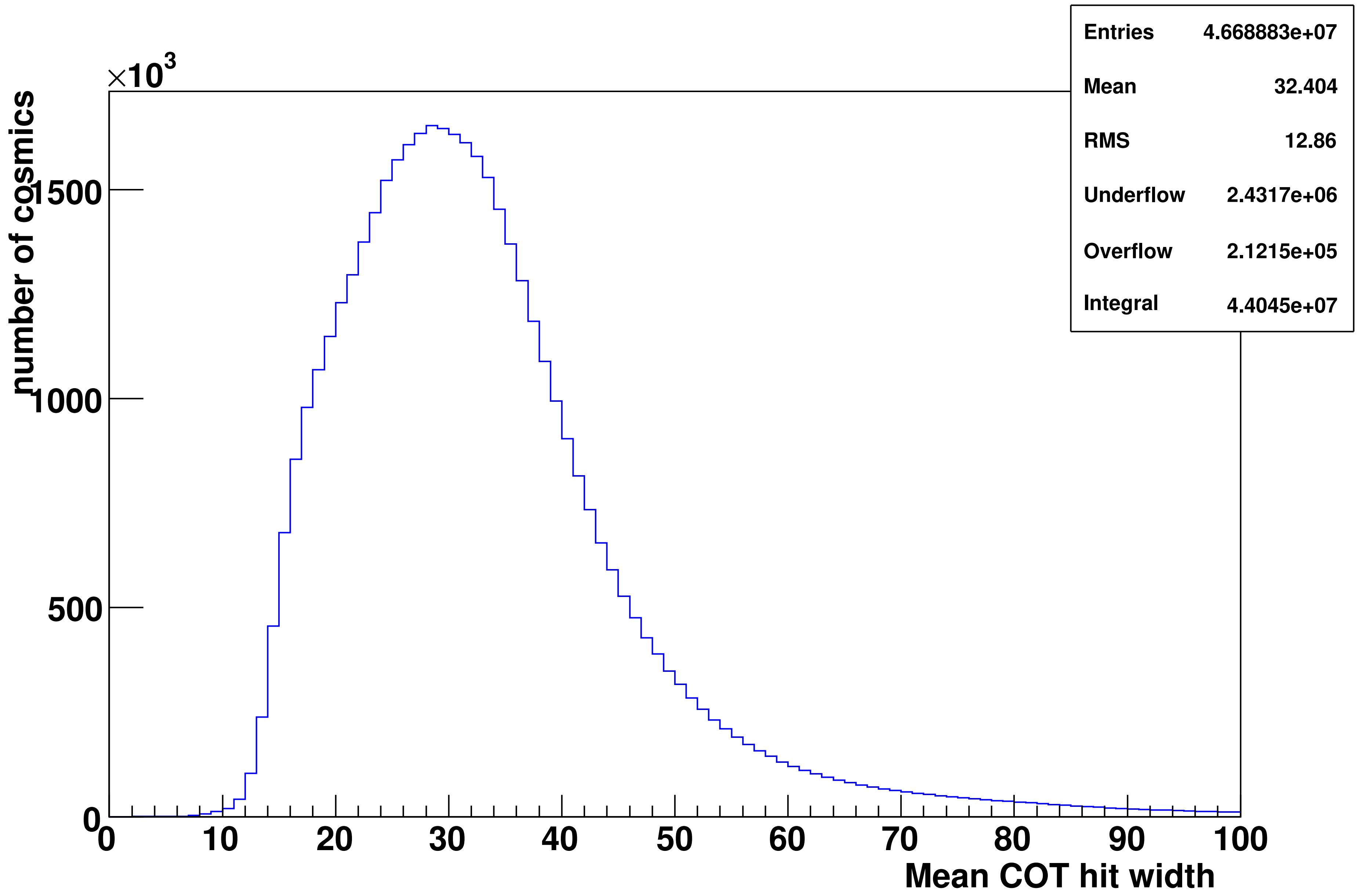
Entries 515396
Mean 37.646
RMS 32.416
Underflow 0
Overflow 10570
Integral 5.0483e+05
Ncosmics
0
20000
40000
0
20
40
80
180
200



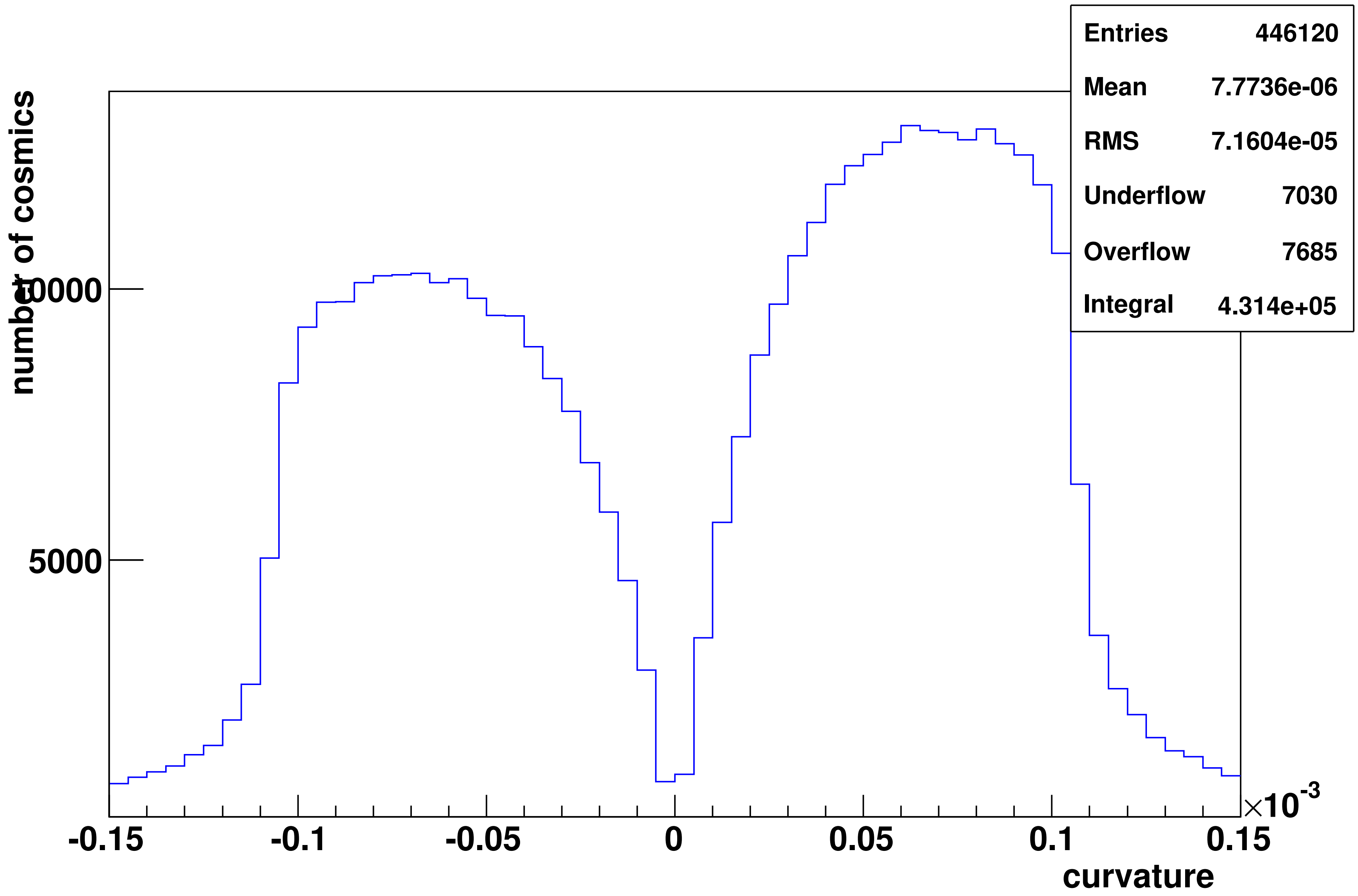
Entries 243171
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.4317e+05
×10^3
number of cosmics
200
100
0
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
EM Energy



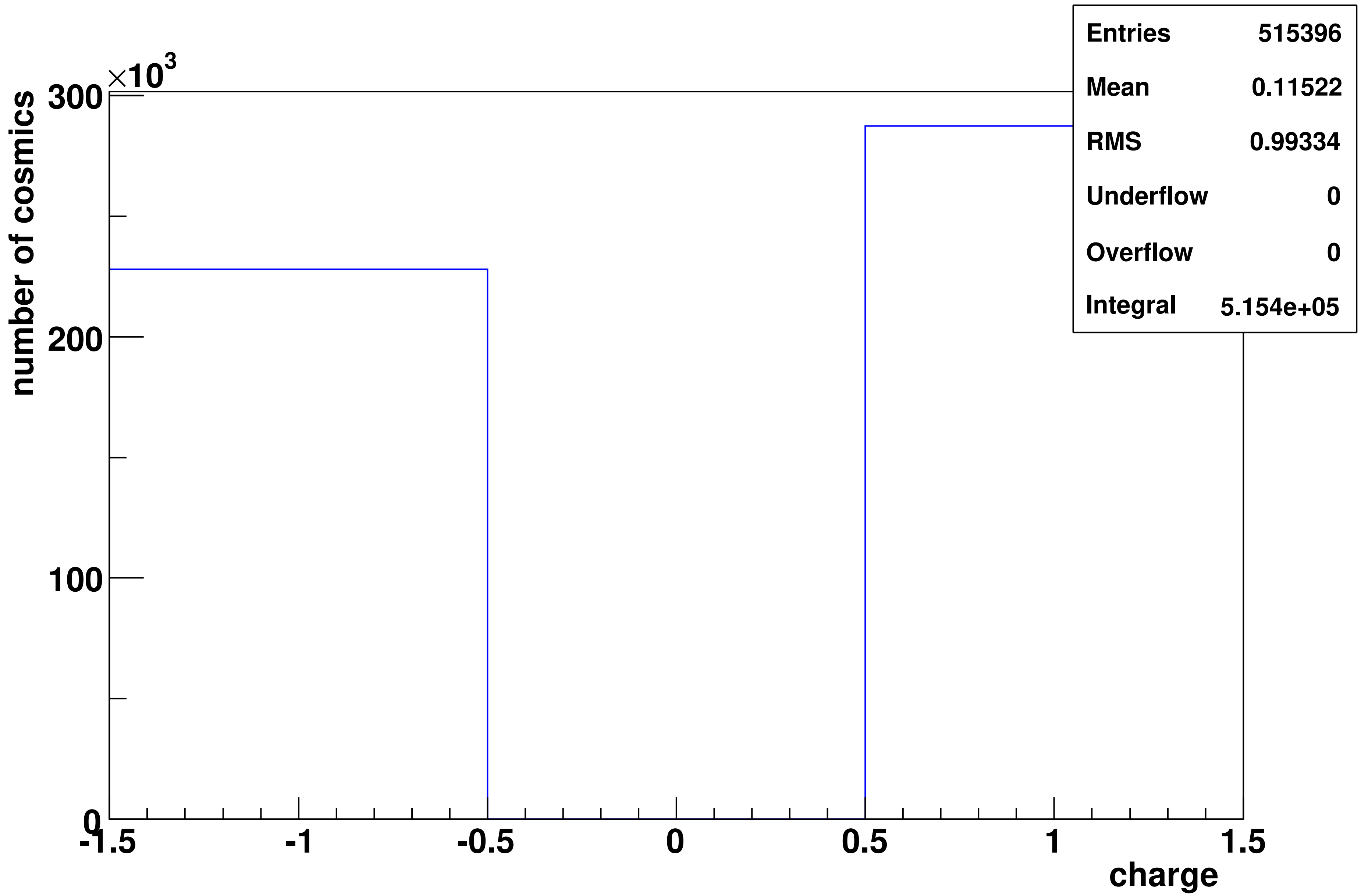
Entries 243171
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 2.4317e+05
$\times 10^3$
number of cosmics
200
100
0
0
1
2
3
4
5
6
Hadronic Energy



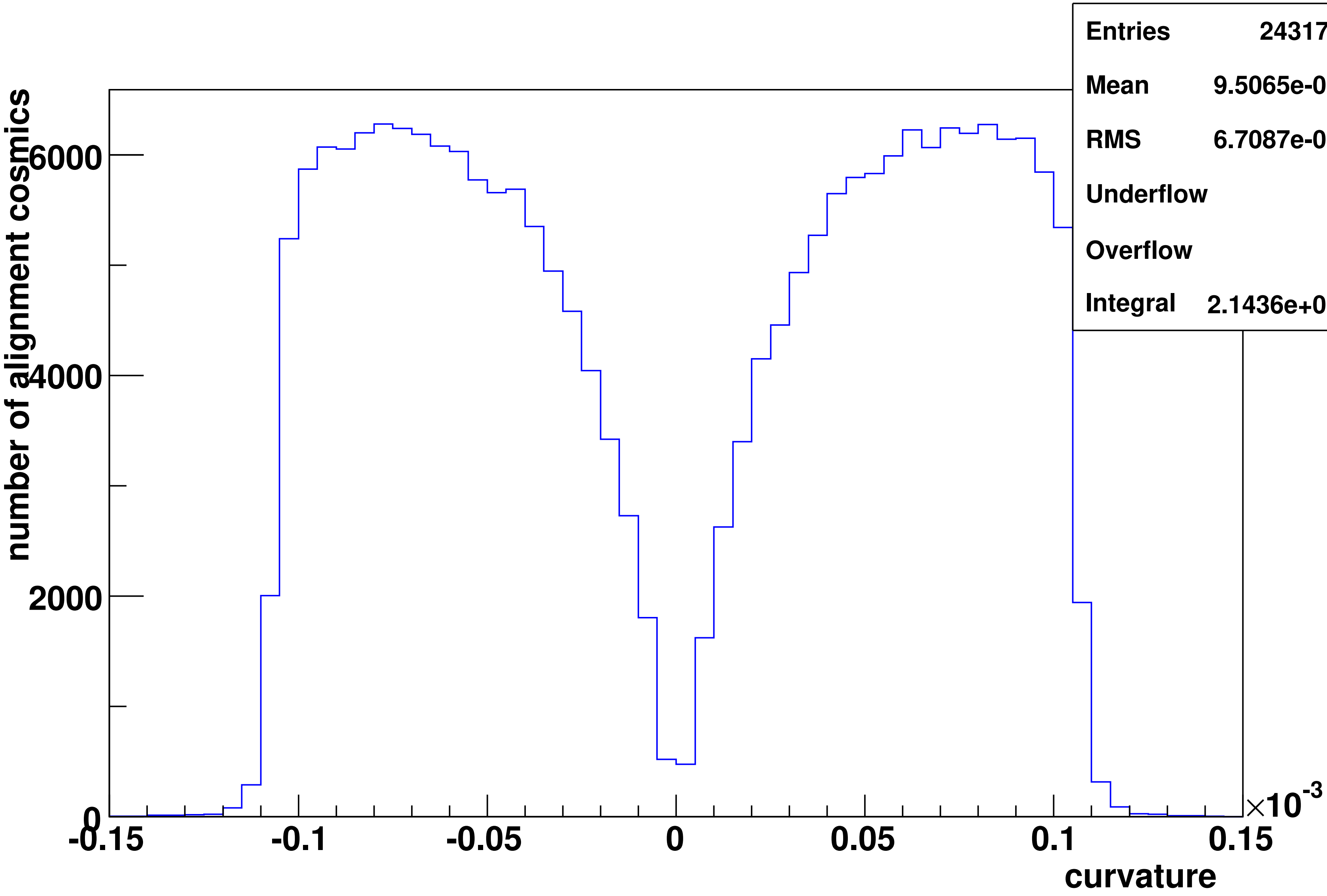
Entries 4.668883e+07
Mean 32.404
RMS 12.86
Underflow 2.4317e+06
Overflow 2.1215e+05
Integral 4.4045e+07
×10^3
number of cosmics
1500
1000
500
0
0
10
20
30
40
50
60
70
80
90
100
Mean COT hit width



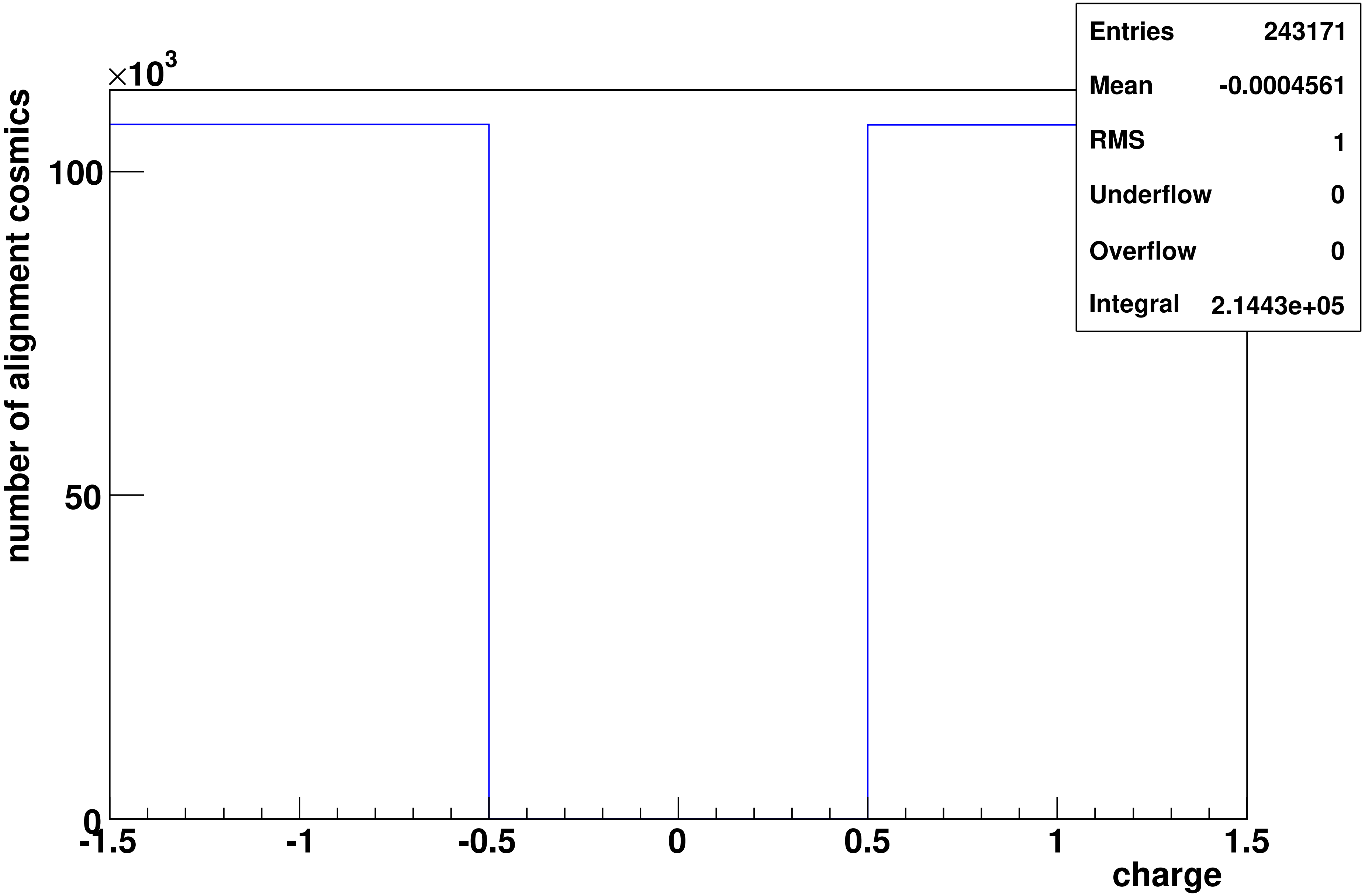
Entries 446120
Mean 7.7736e-06
RMS 7.1604e-05
Underflow 7030
Overflow 7685
Integral 4.314e+05
number of cosmics
10000
5000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10-3
curvature



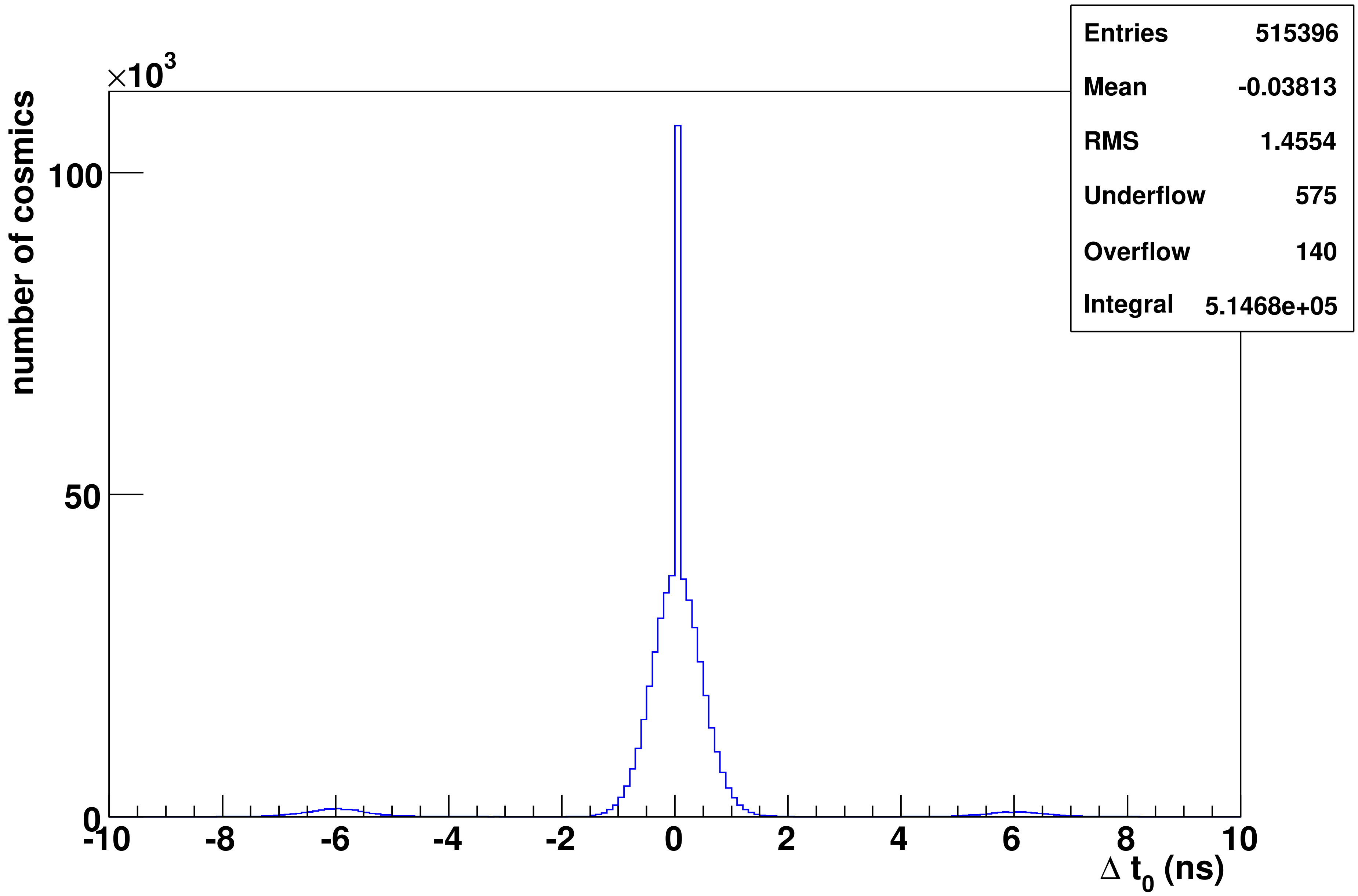
Entries 515396
Mean 0.11522
RMS 0.99334
Underflow 0
Overflow 0
Integral 5.154e+05
×10^3
300
200
100
0
number of cosmics
-1.5
-1
-0.5
0
0.5
1
1.5
charge



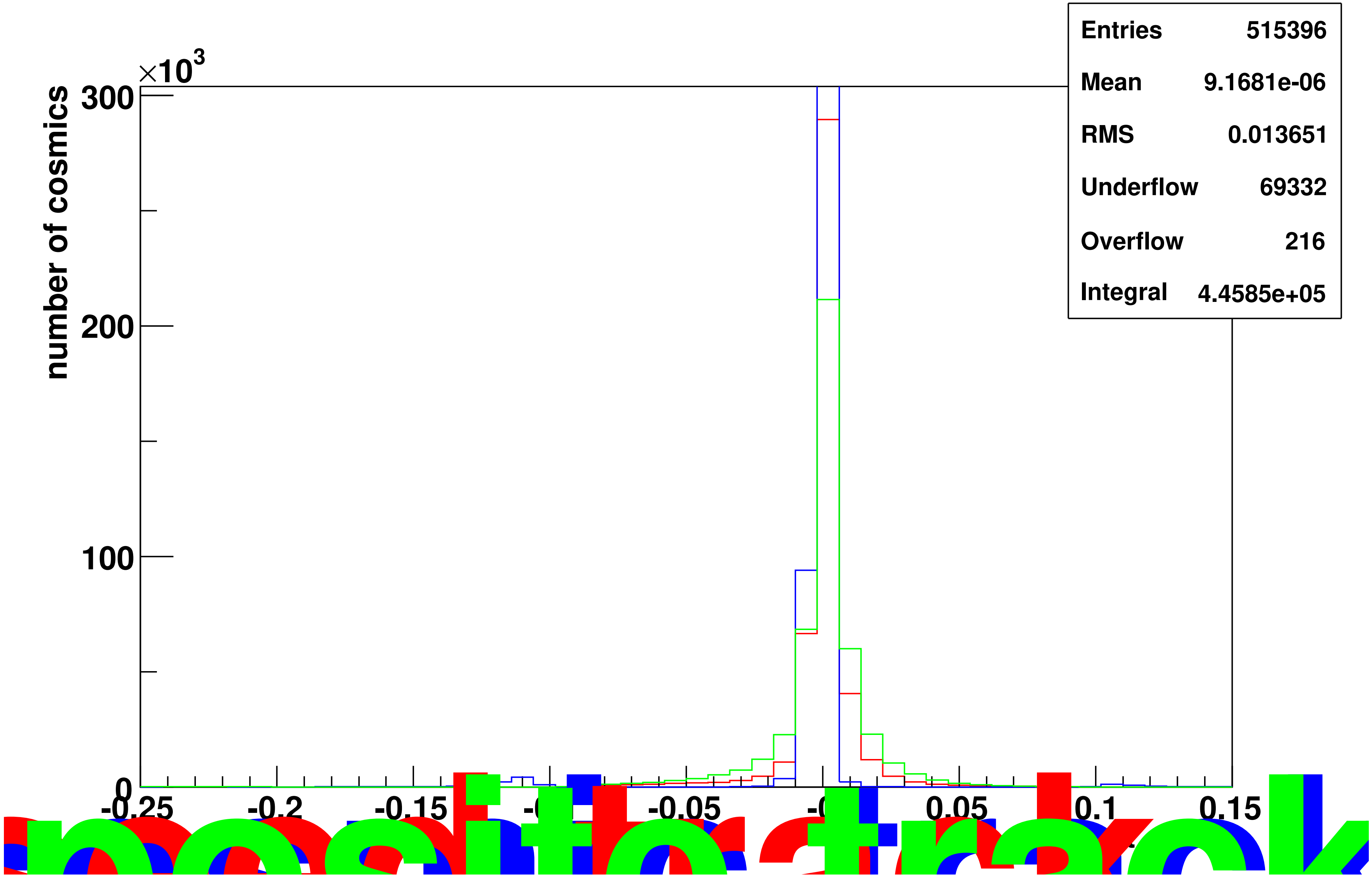
Entries 243171
Mean 9.5065e-08
RMS 6.7087e-05
Underflow 0
Overflow 0
Integral 2.1436e+05
number of alignment cosmics
0
2000
4000
6000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10-3
curvature



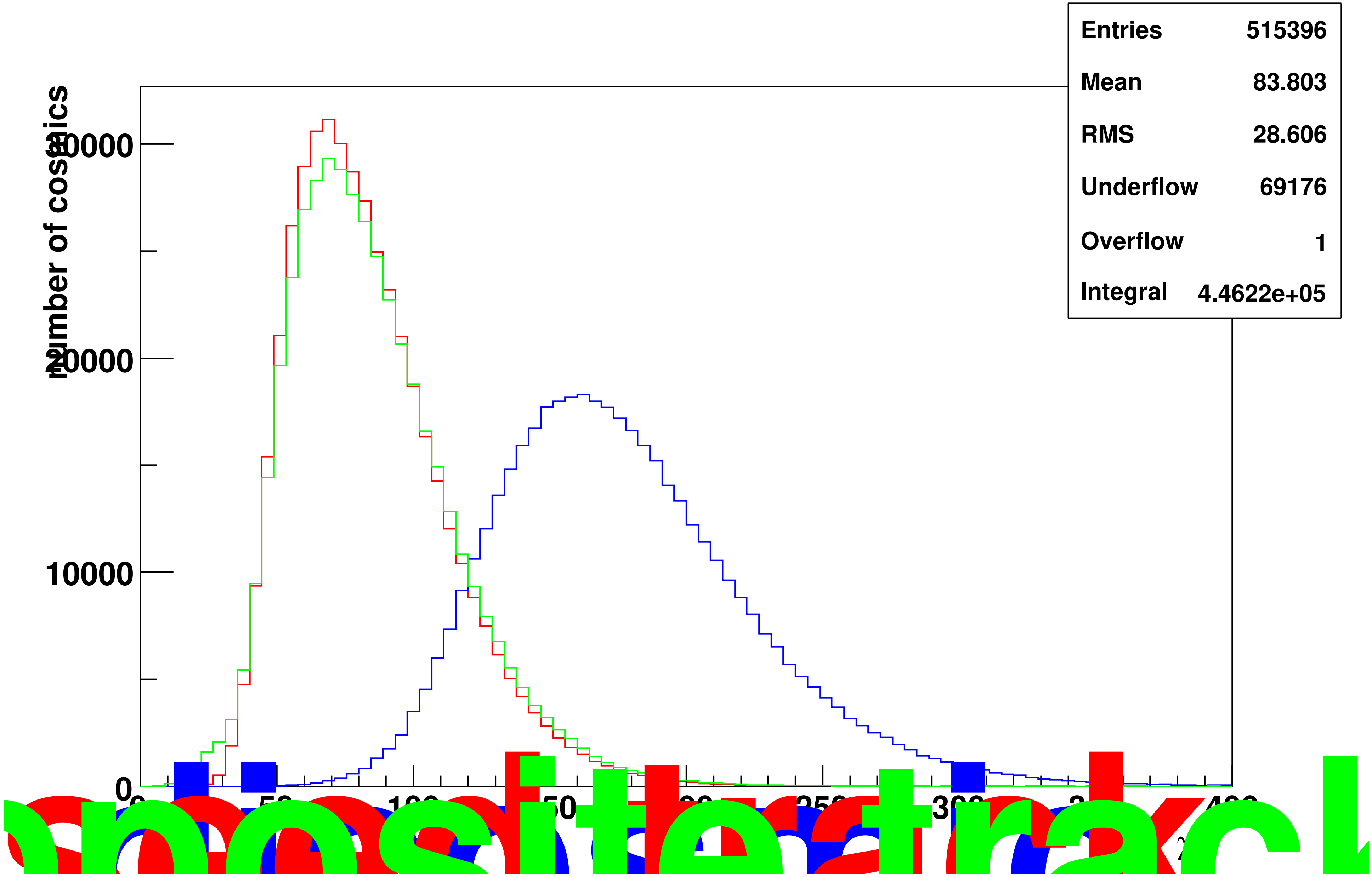
Entries 243171
Mean -0.0004561
RMS 1
Underflow 0
Overflow 0
Integral 2.1443e+05
×10^3
100
50
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge
number of alignment cosmics

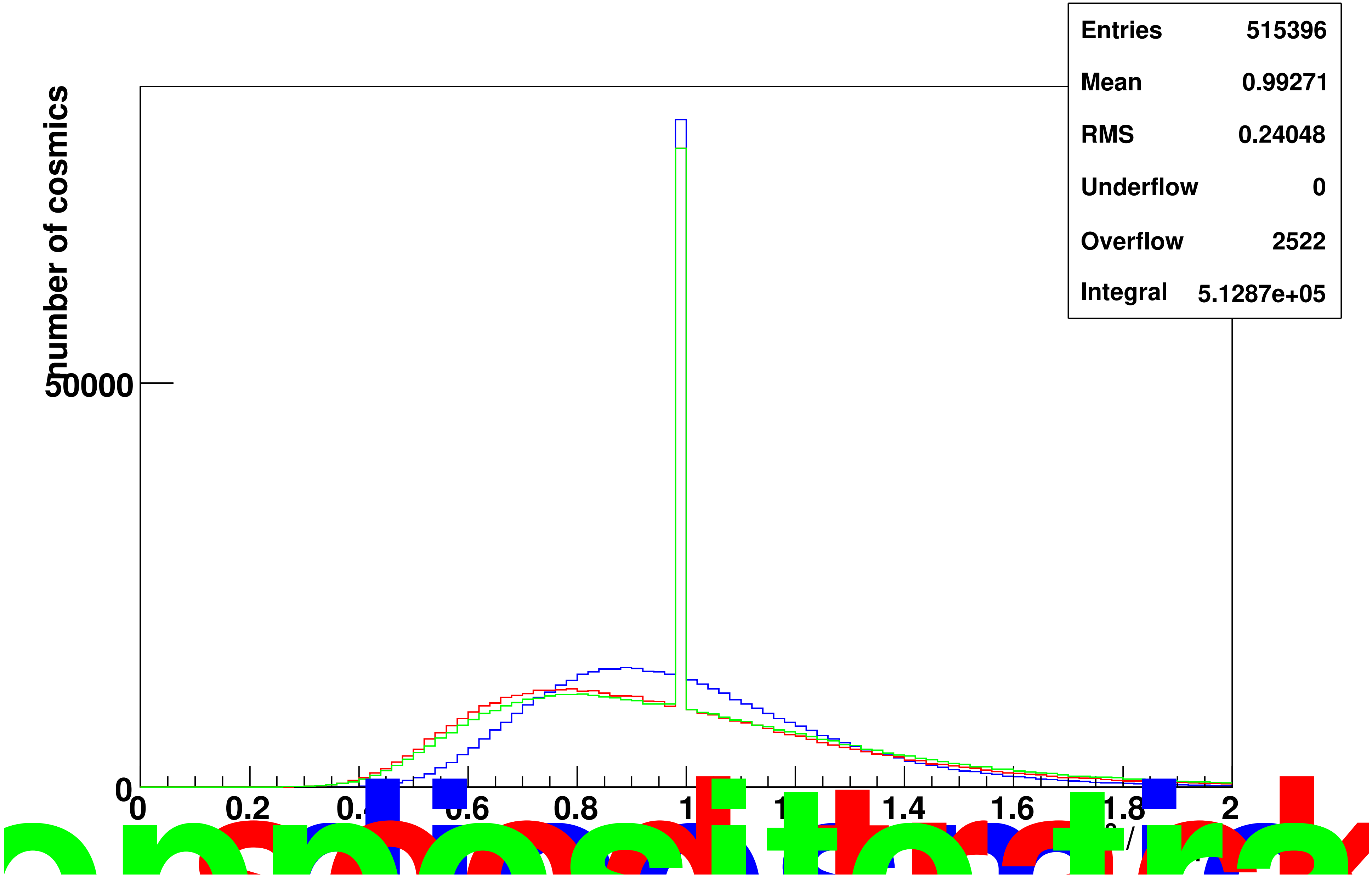


Entries 515396
Mean -0.03813
RMS 1.4554
Underflow 575
Overflow 140
Integral 5.1468e+05
×10^3
number of cosmics
100
50
0
-10
-8
-6
-4
-2
0
2
4
6
8
10
Δ t0 (ns)

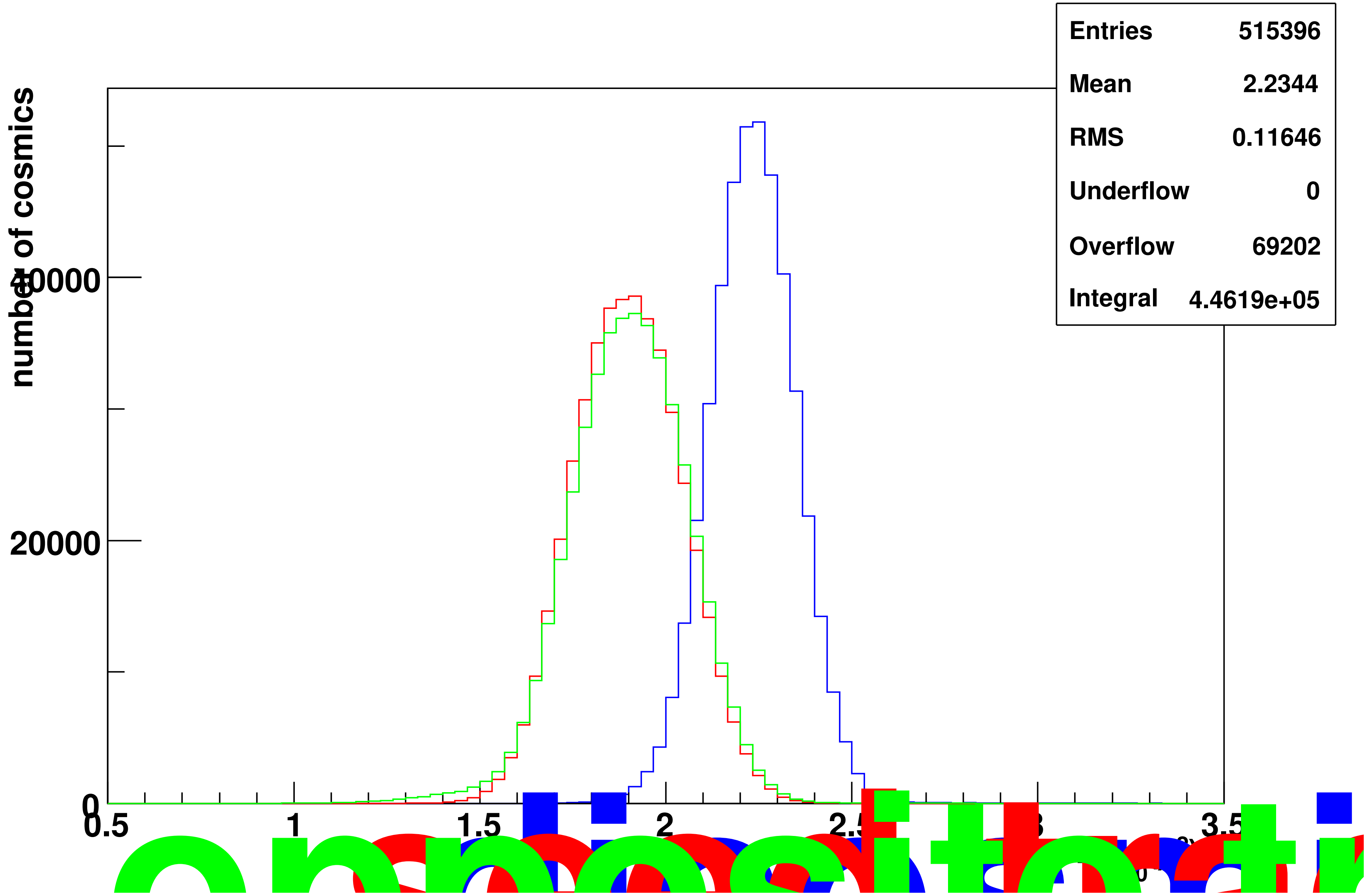


Entries 515396
Mean 9.1681e-06
RMS 0.013651
Underflow 69332
Overflow 216
Integral 4.4585e+05
number of cosmics
×10^3
300
200
100
0
-0.25
-0.2
-0.15
-0.05
0.05
0.1
0.15

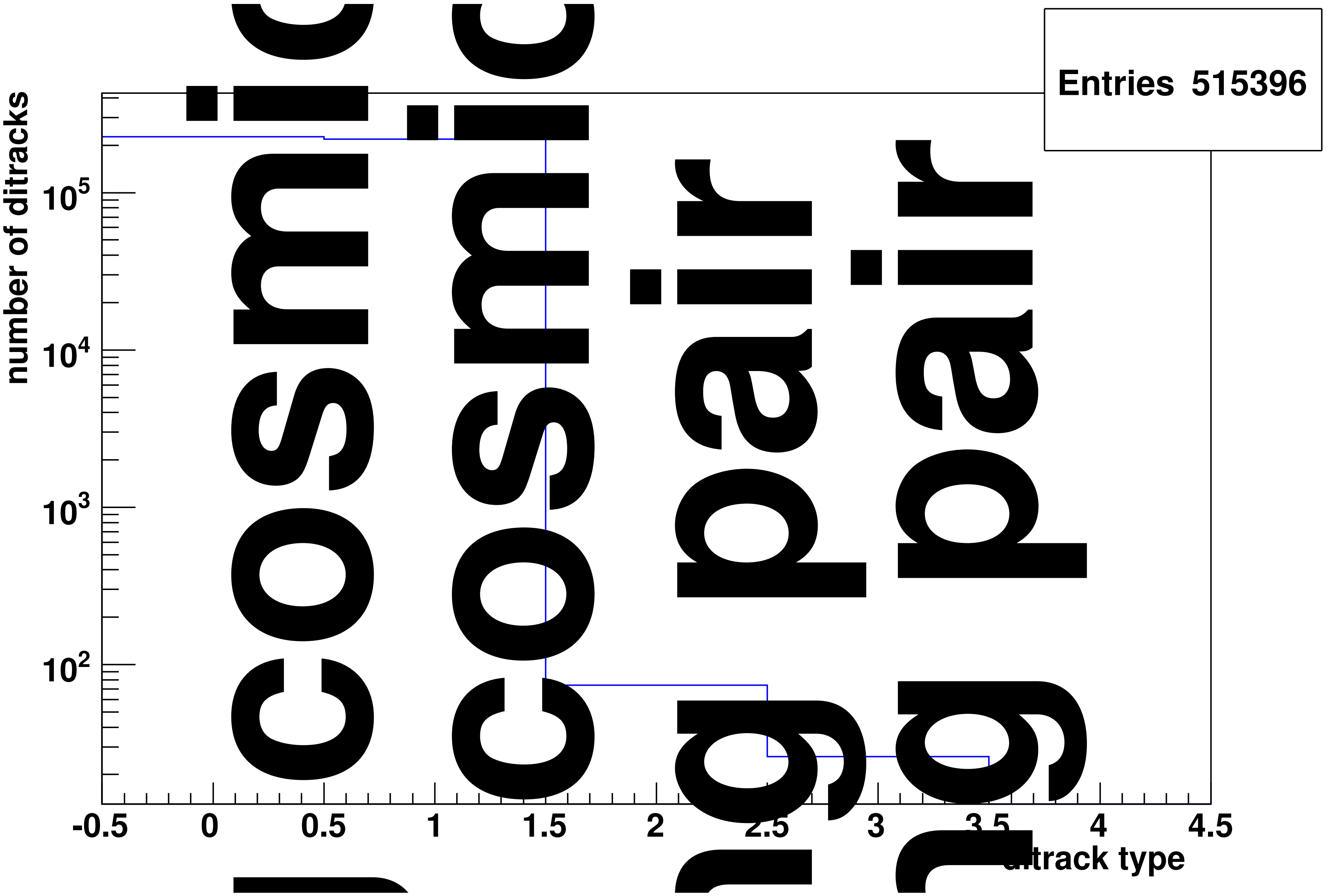

number of cosmics
Entries 515396
Mean 83.803
RMS 28.606
Underflow 69176
Overflow 1
Integral 4.4622e+05
0
10000
20000
30000
0
50
100
150
200
250
300
350
400



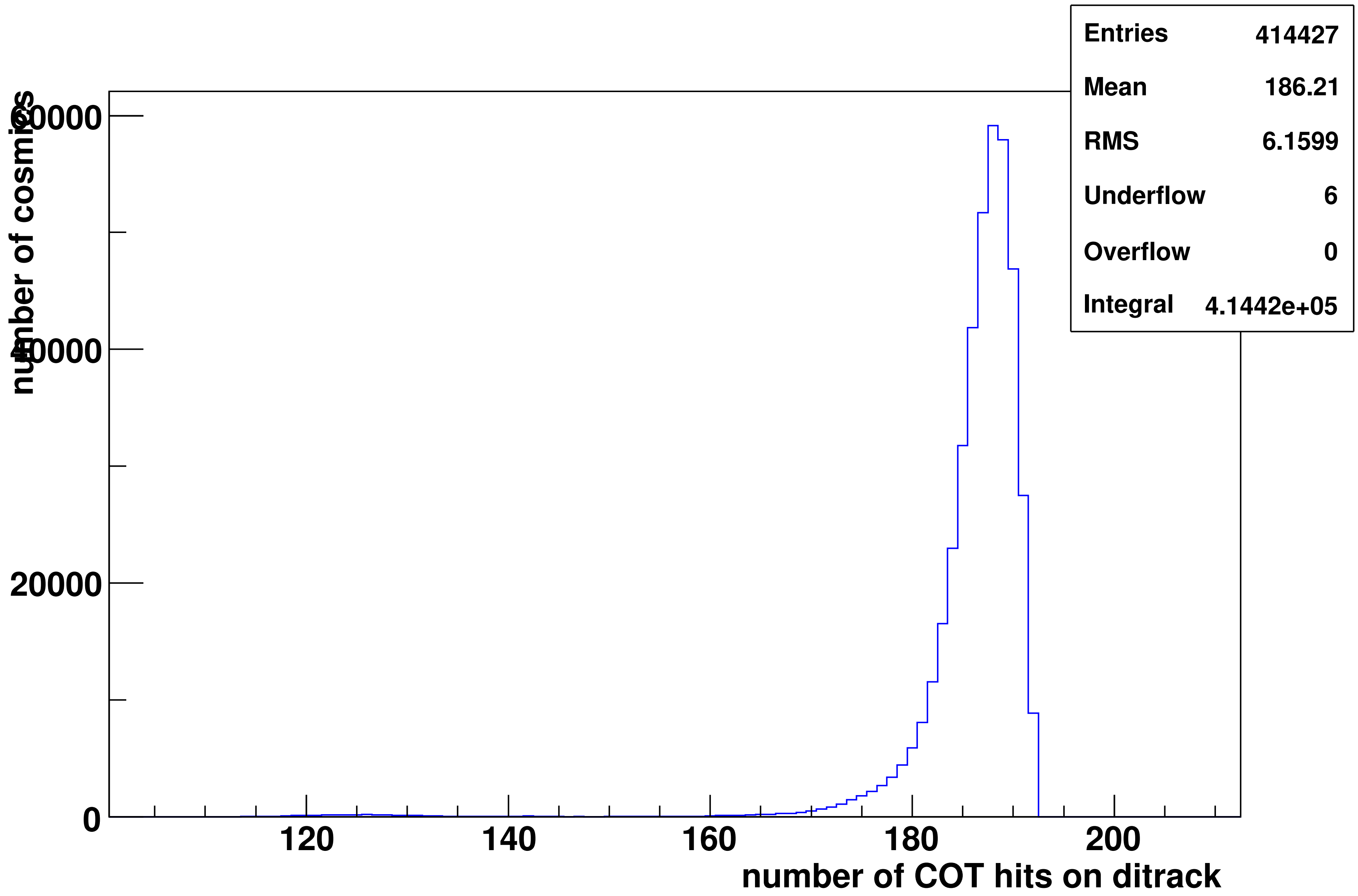
Entries 515396
Mean 0.99271
RMS 0.24048
Underflow 0
Overflow 2522
Integral 5.1287e+05
number of cosmics
50000
0
0
0.2
0.6
0.8
1
1.4
1.6
1.8
2



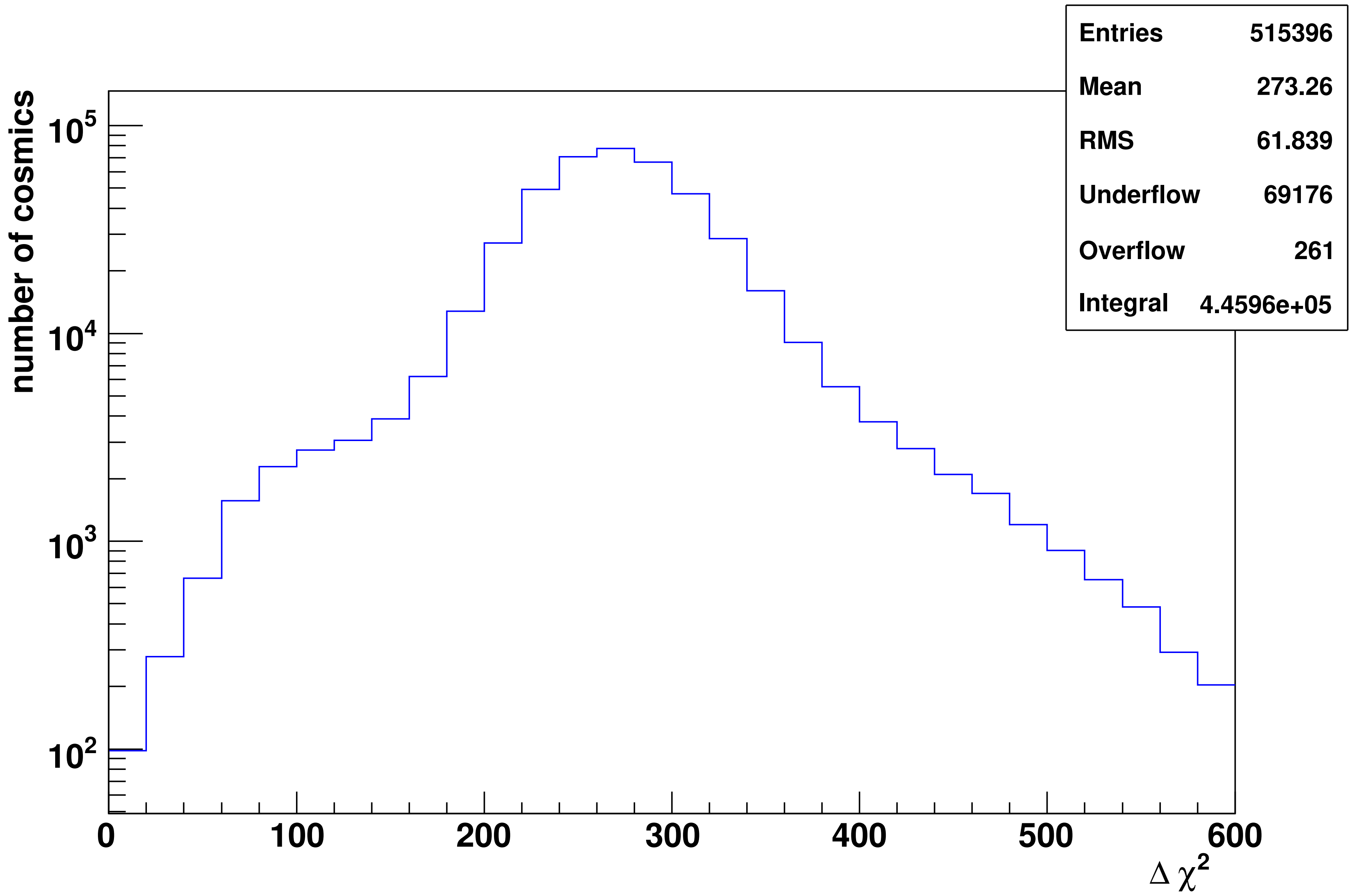
Entries 515396
Mean 2.2344
RMS 0.11646
Underflow 0
Overflow 69202
Integral 4.4619e+05
number of cosmics
40000
20000
0
0.5
1
1.5
2
3.5



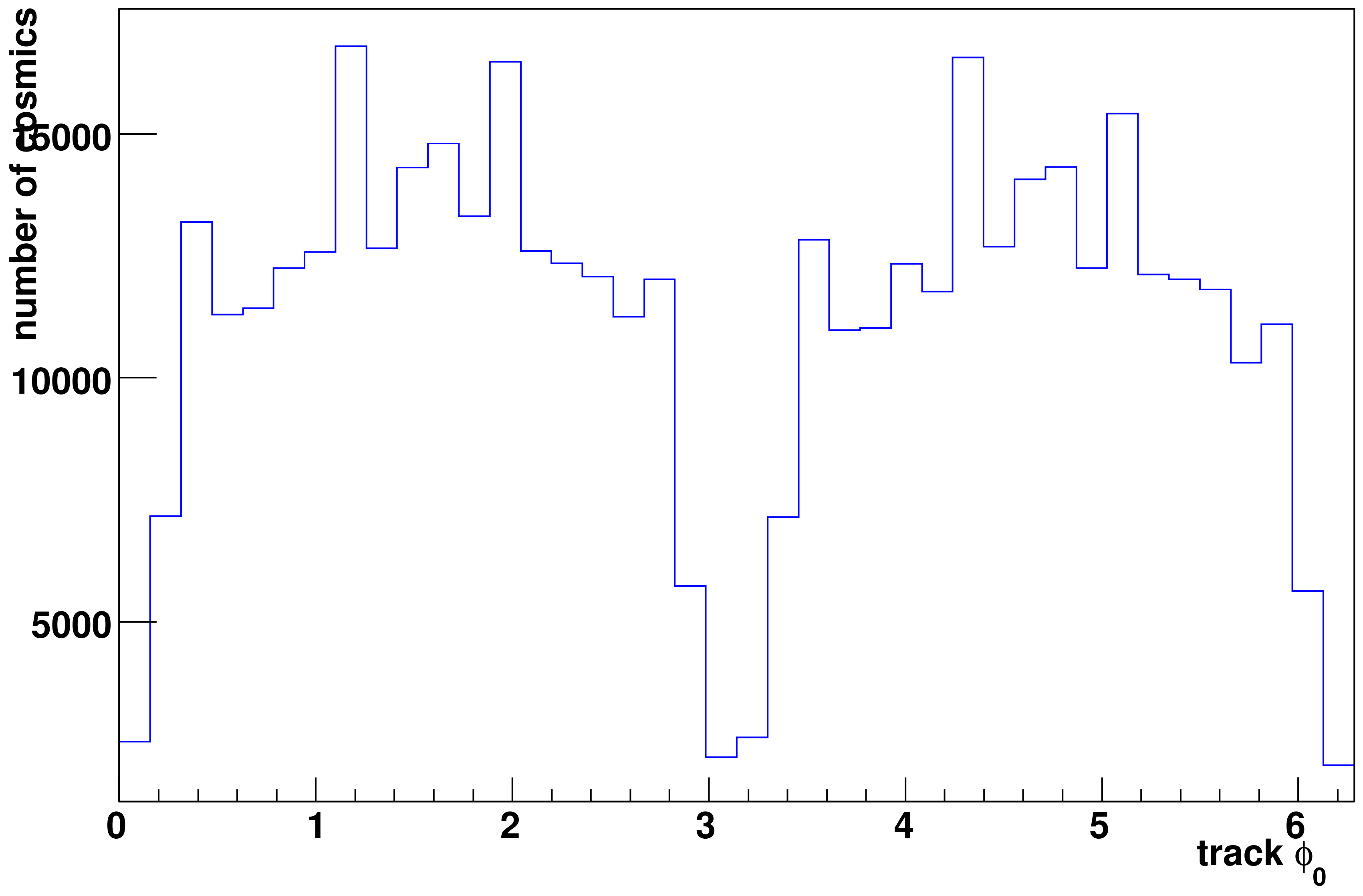
Entries 515396
number of ditracks
ditrack type
cosmic
cosmic



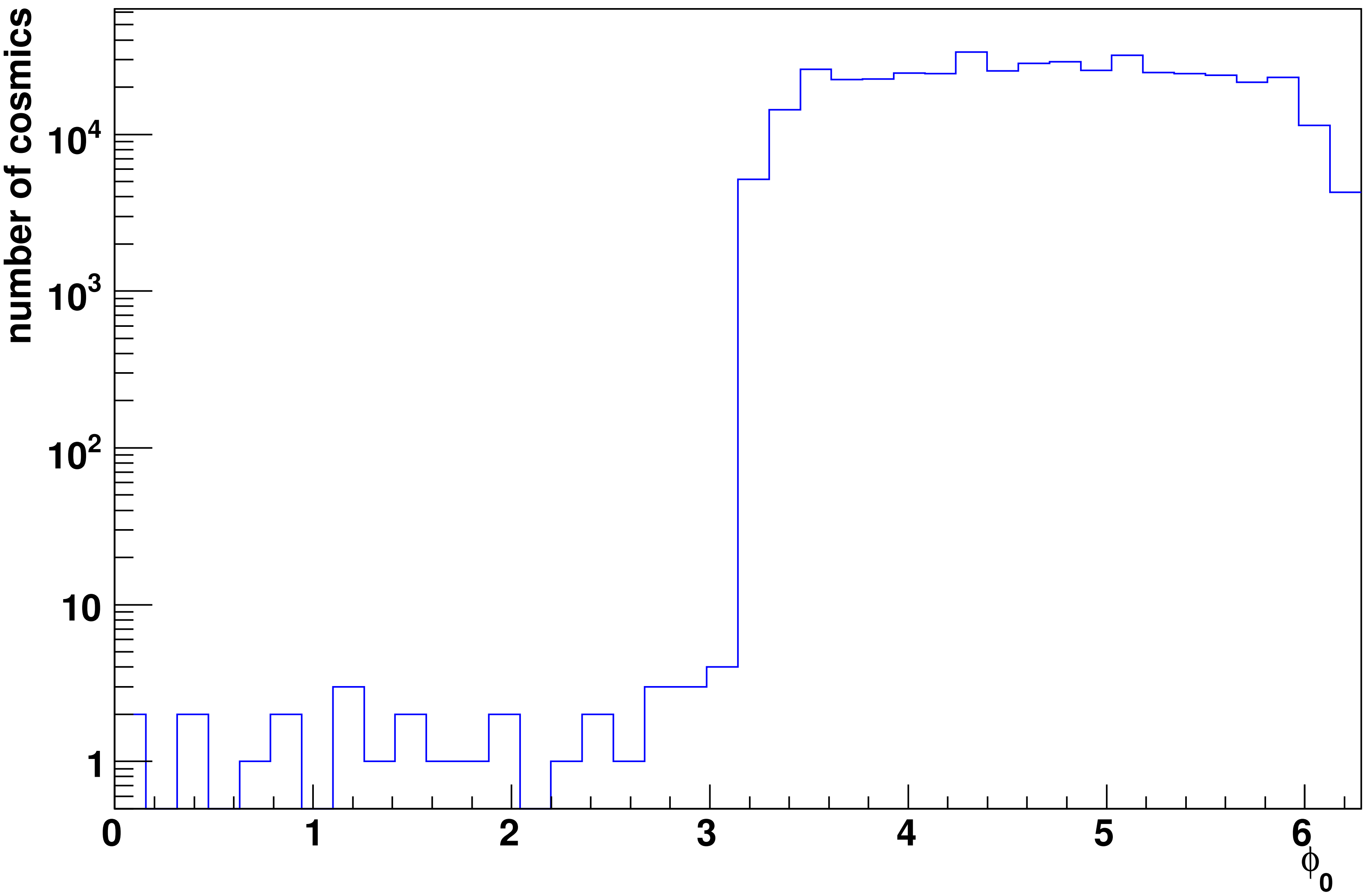
Entries 414427
Mean 186.21
RMS 6.1599
Underflow 6
Overflow 0
Integral 4.1442e+05
number of cosmics
0
20000
40000
60000
120
140
160
180
200
number of COT hits on ditrack



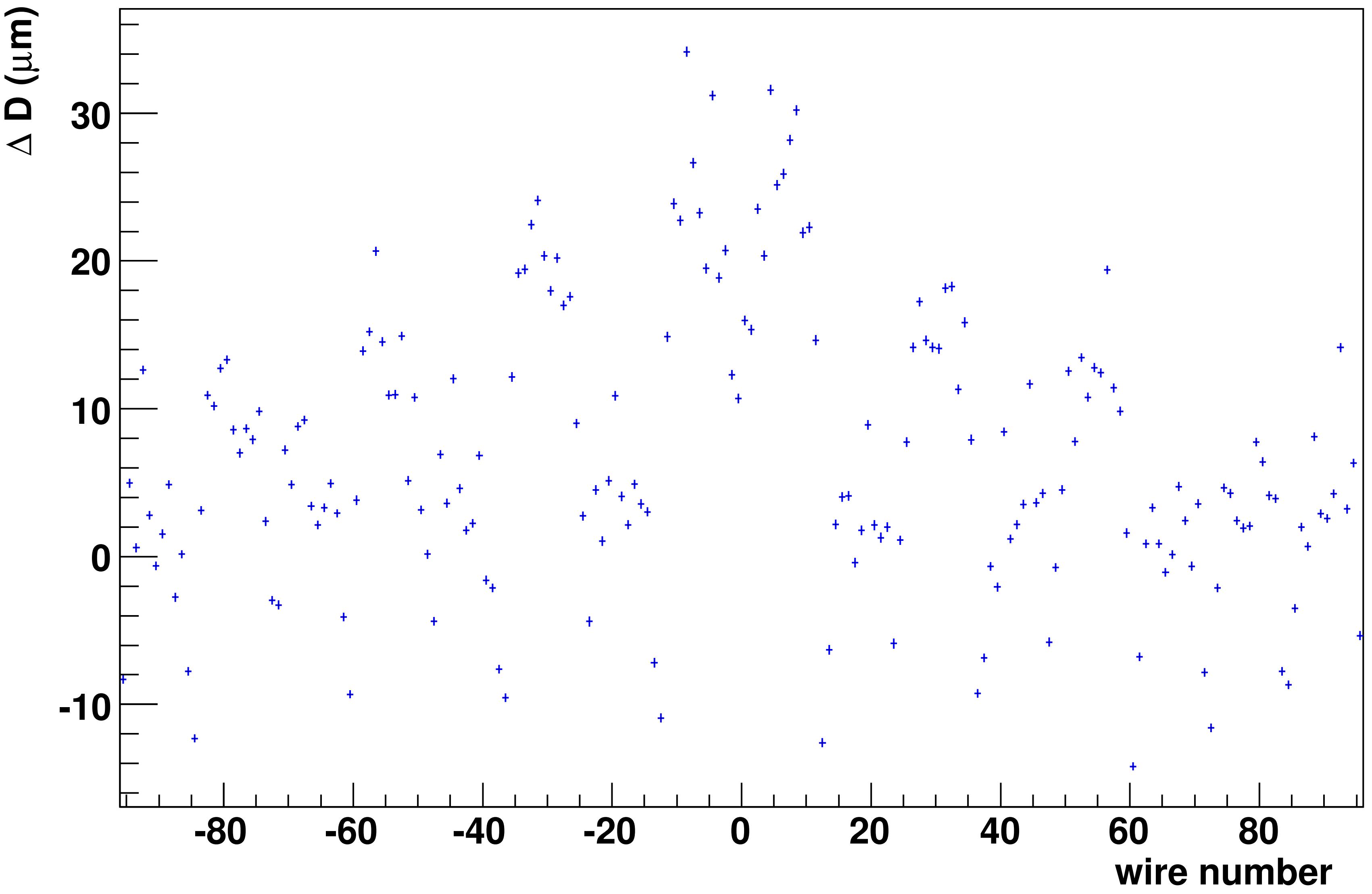
Entries 515396
Mean 273.26
RMS 61.839
Underflow 69176
Overflow 261
Integral 4.4596e+05
number of cosmics
10^5
10^4
10^3
10^2
0
100
200
300
400
500
600
$\Delta\chi^2$



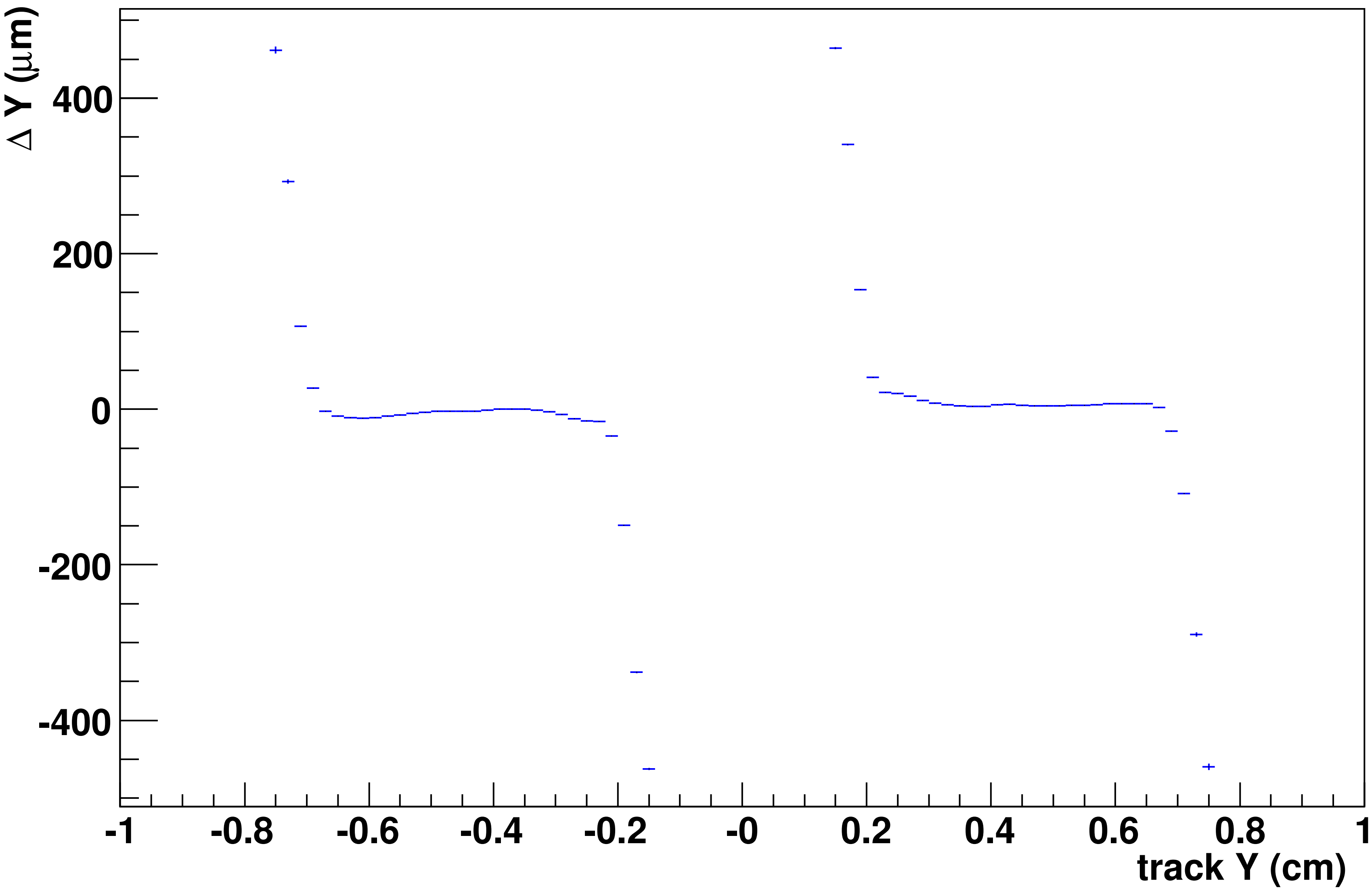
number of cosmics
15000
10000
5000
0
1
2
3
4
5
6
track ϕ_0



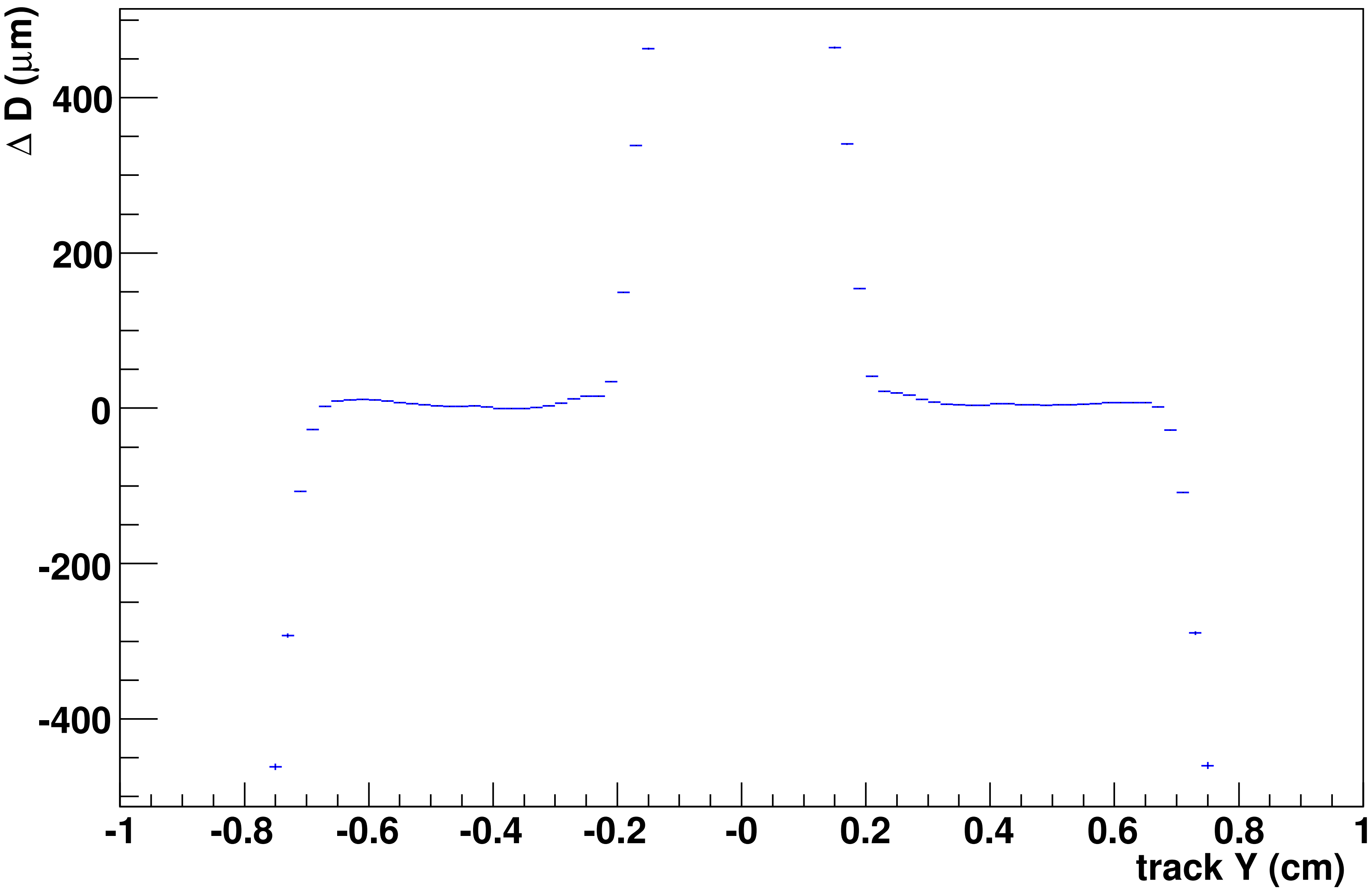
number of cosmics
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
ϕ_0



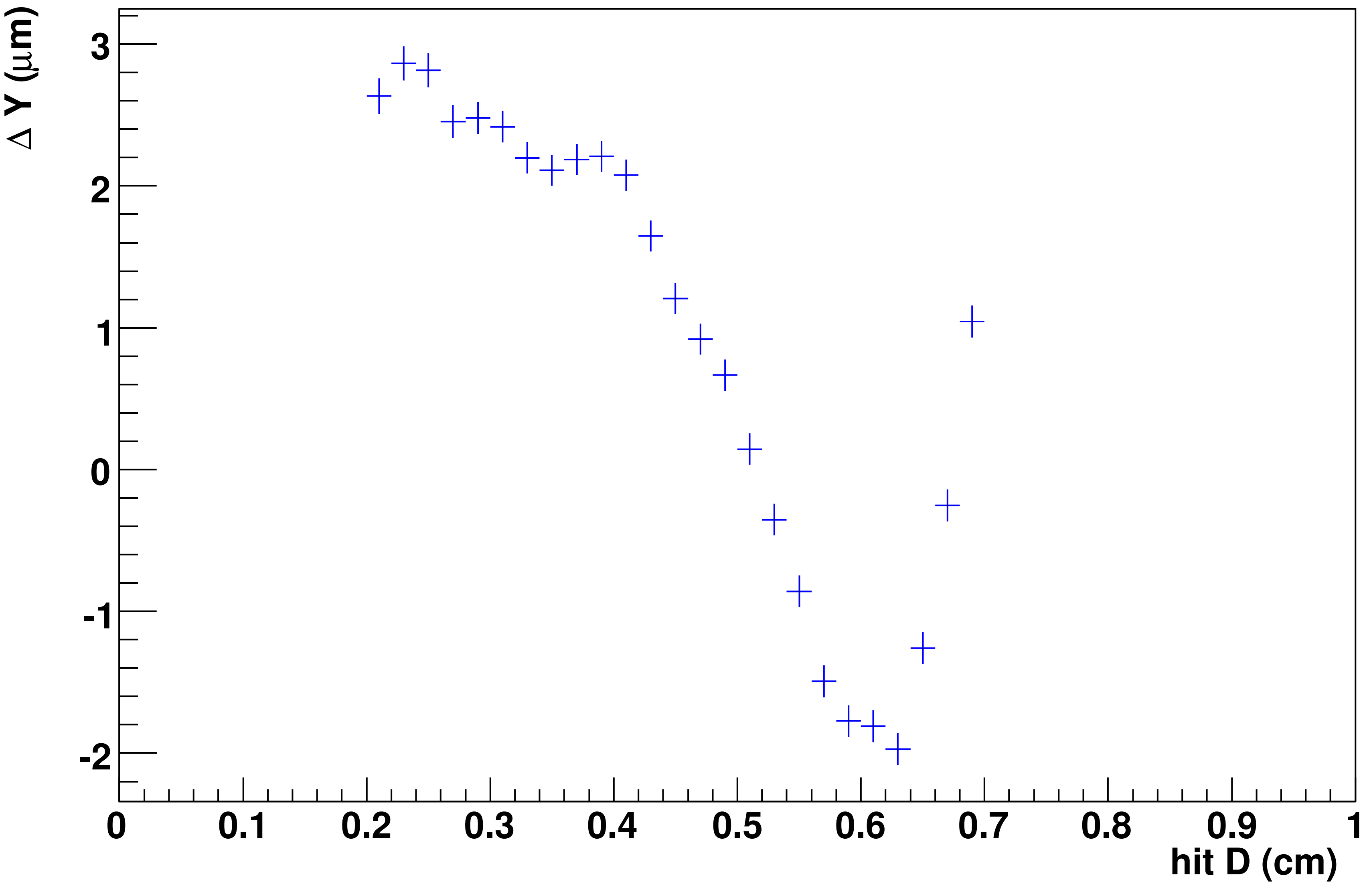
Δ D (μm)
30
20
10
0
-10
-80
-60
-40
-20
0
20
40
60
80
wire number



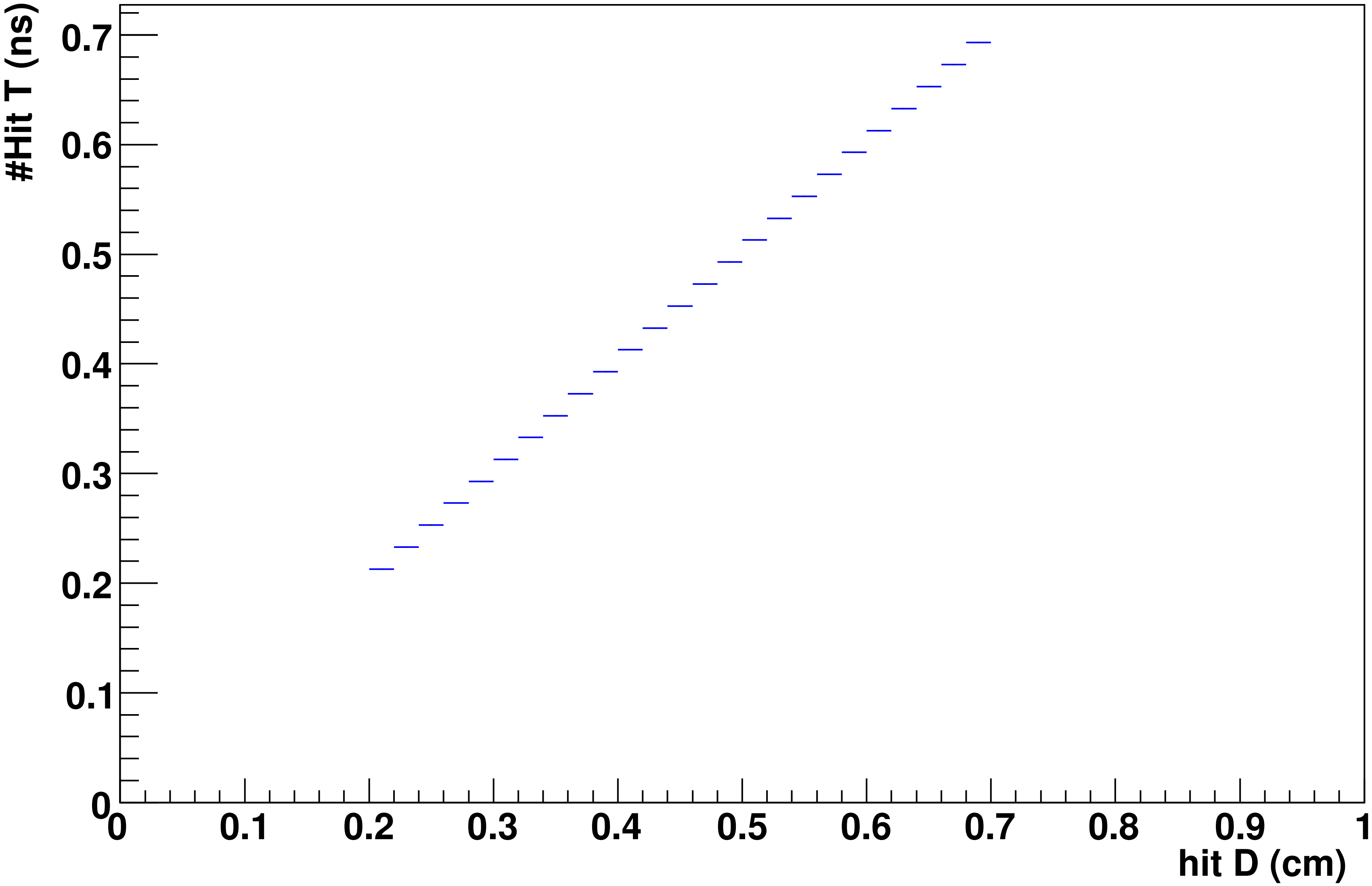
Δ Y (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)



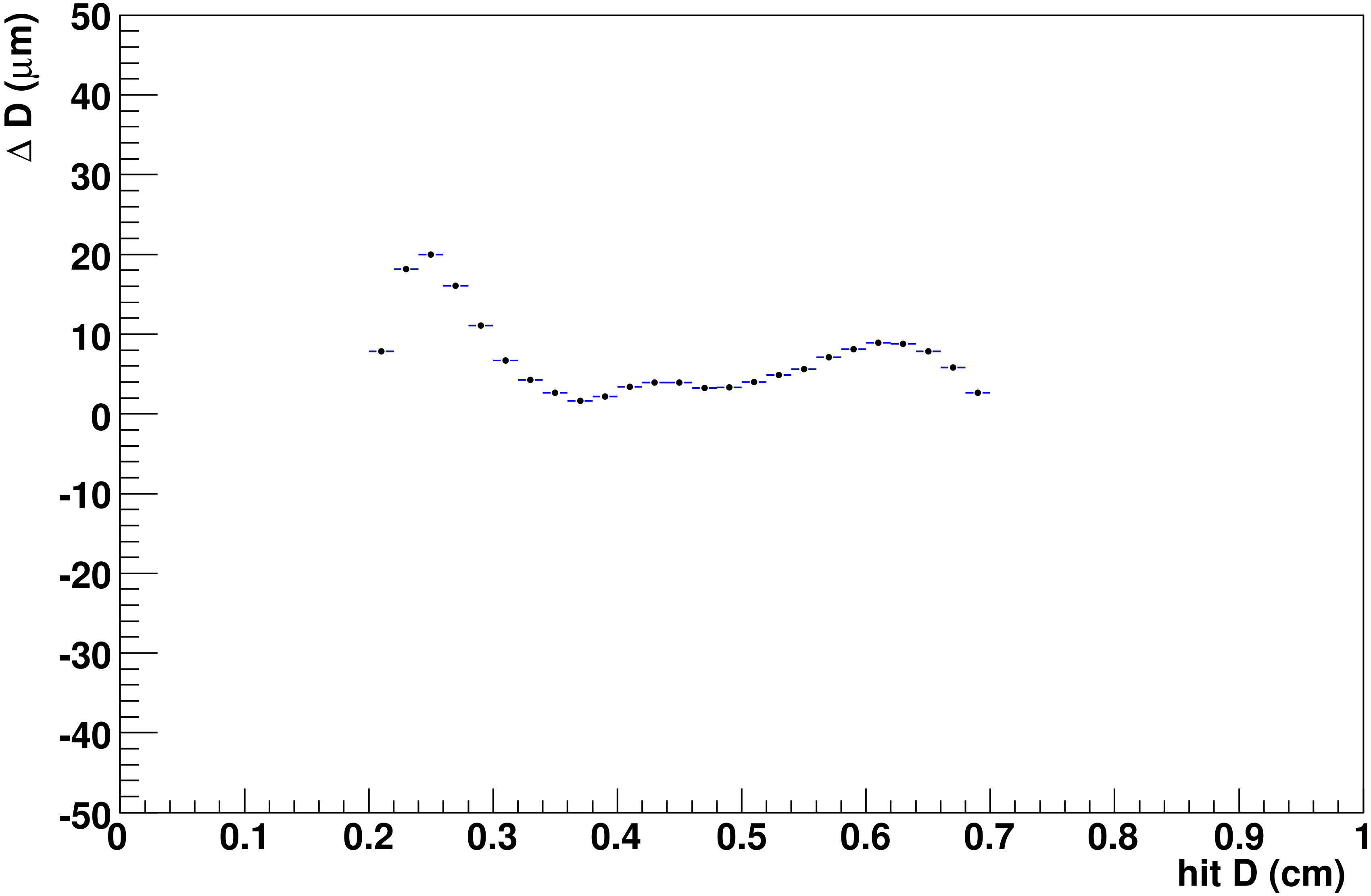
Δ D (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)



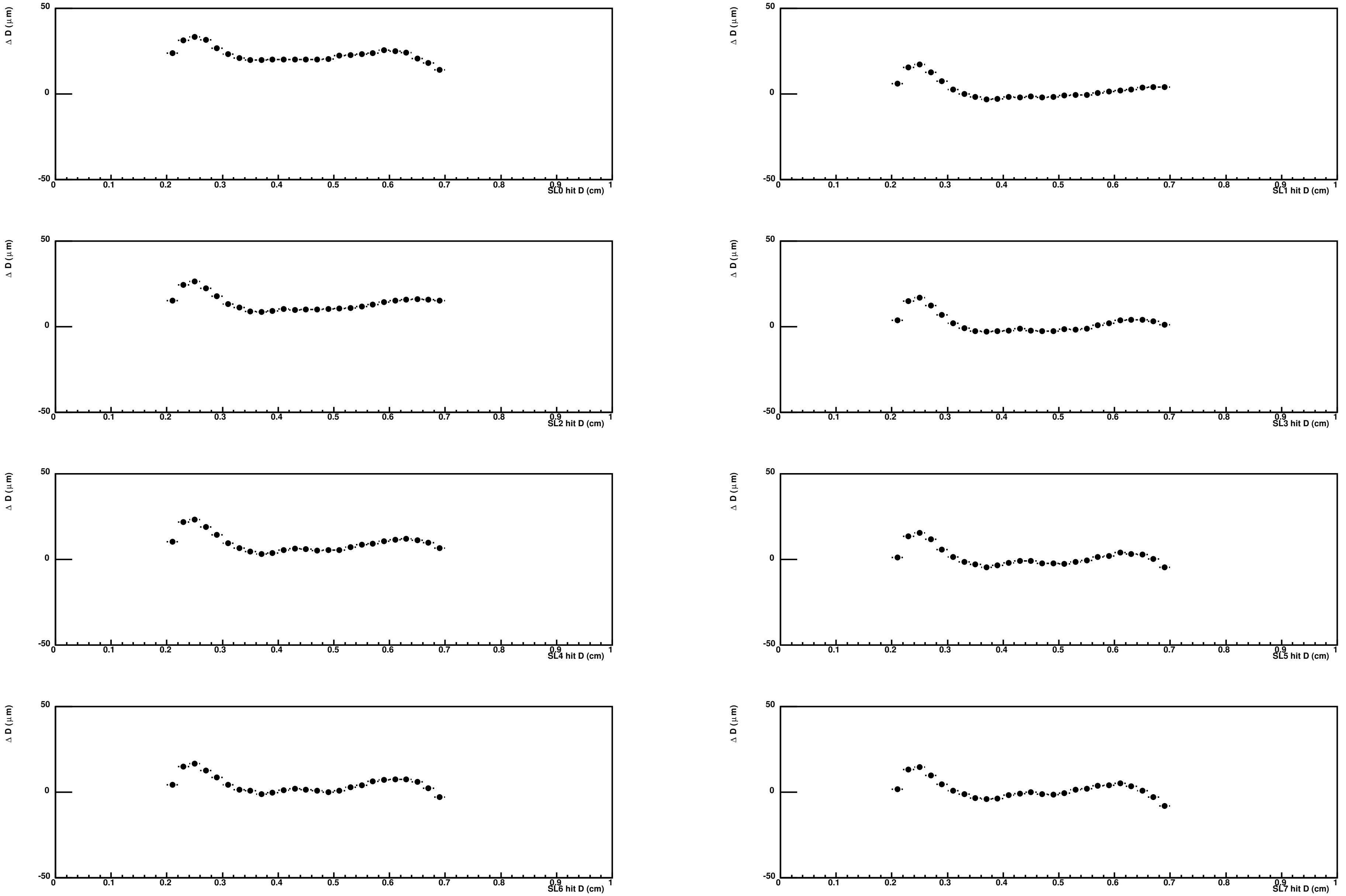
Δ Y (μm)
3
2
1
0
-1
-2
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

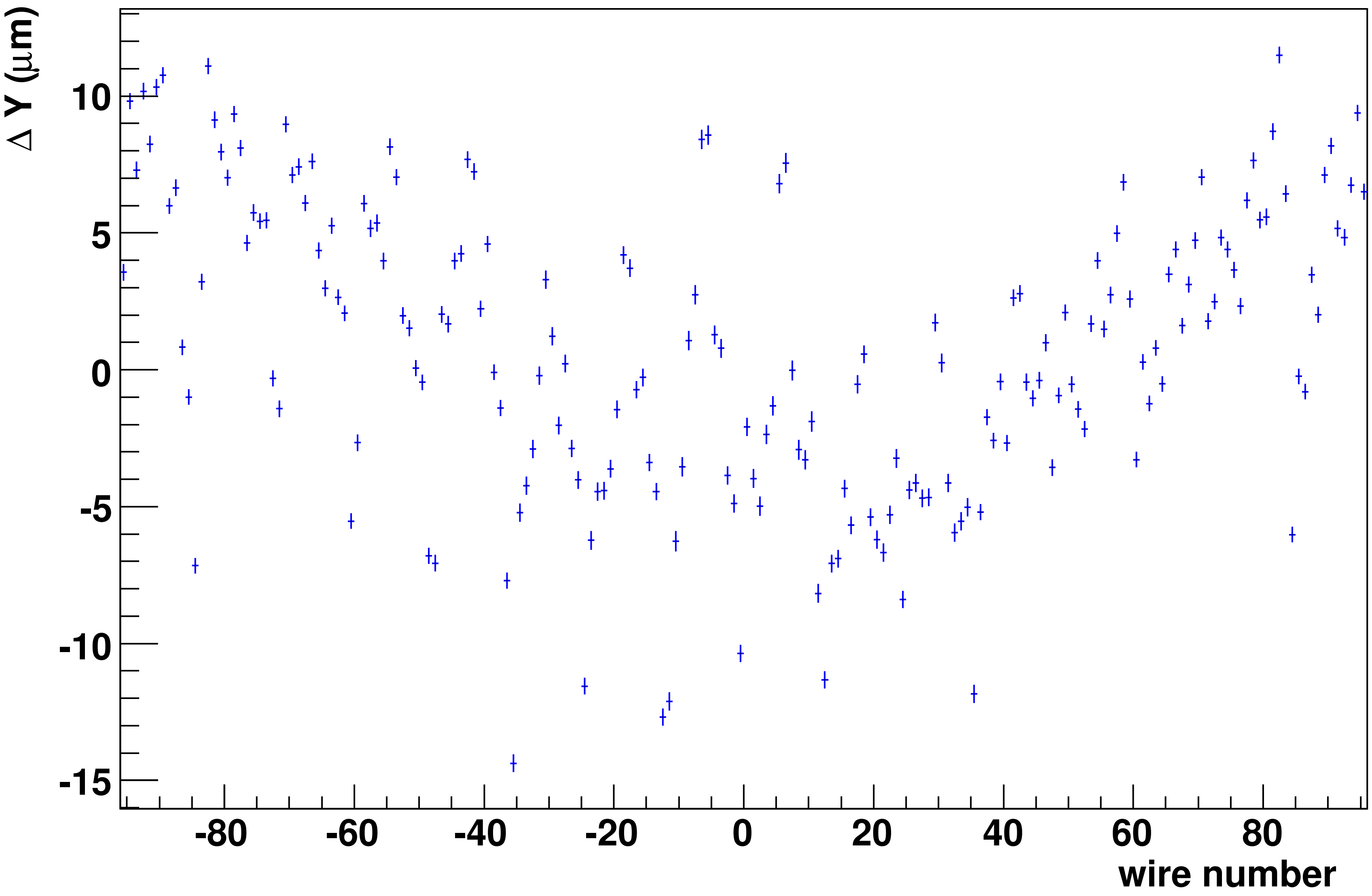


#Hit T (ns)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

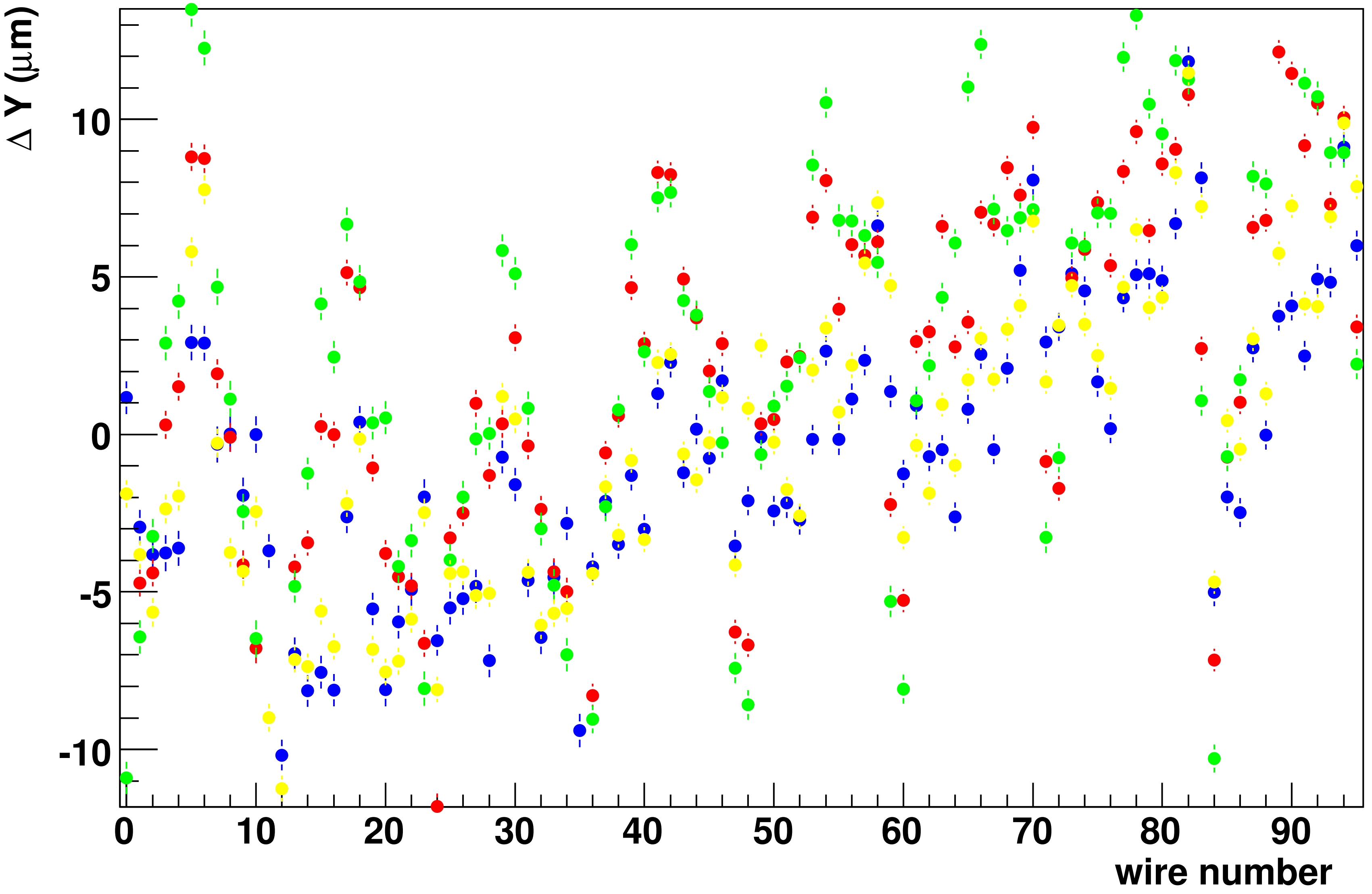


Δ D (μm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

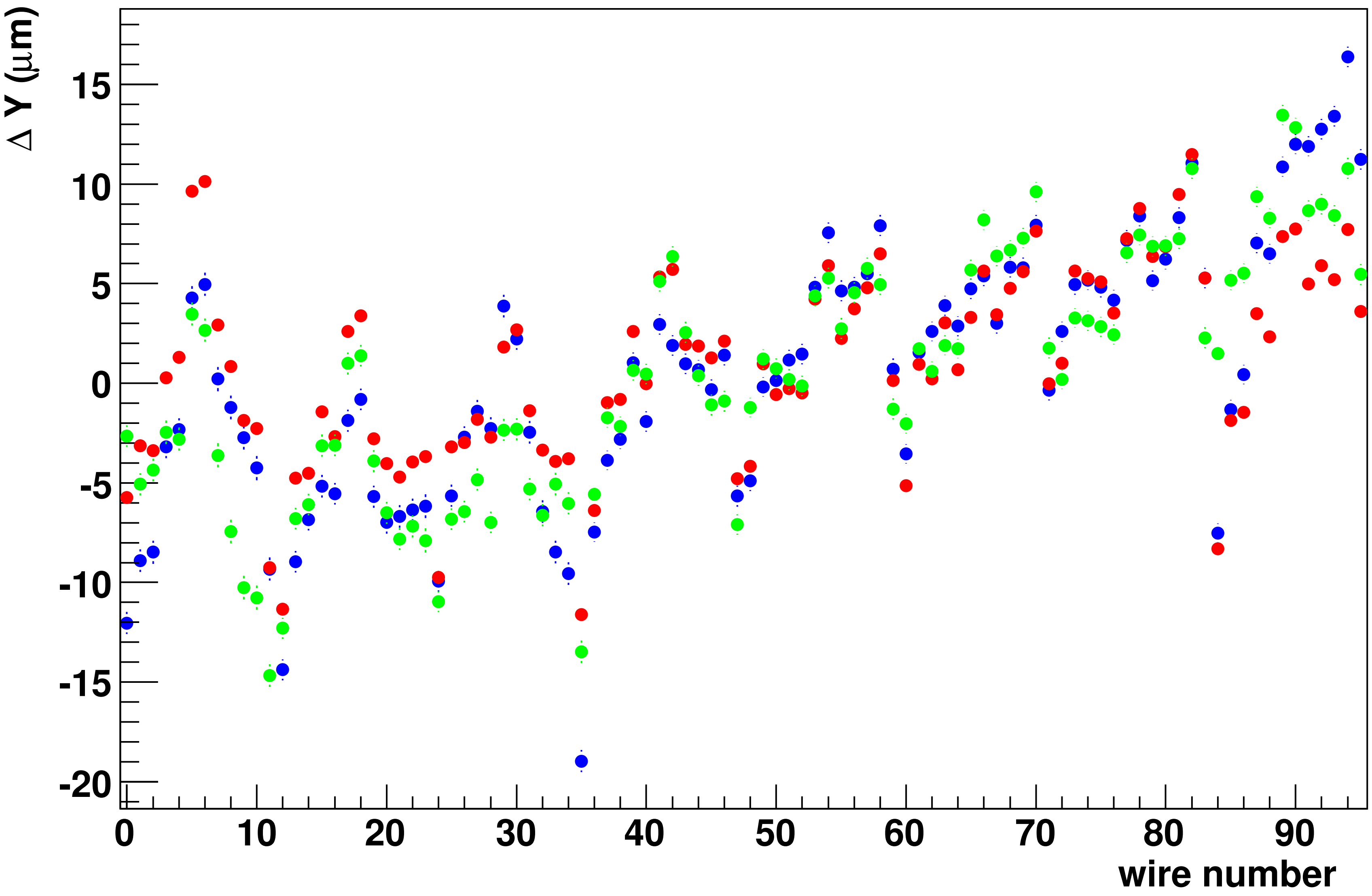

Δ D (μm)
50
0
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
SL0 hit D (cm)
SL1 hit D (cm)
SL2 hit D (cm)
SL3 hit D (cm)
SL4 hit D (cm)
SL5 hit D (cm)
SL6 hit D (cm)
SL7 hit D (cm)



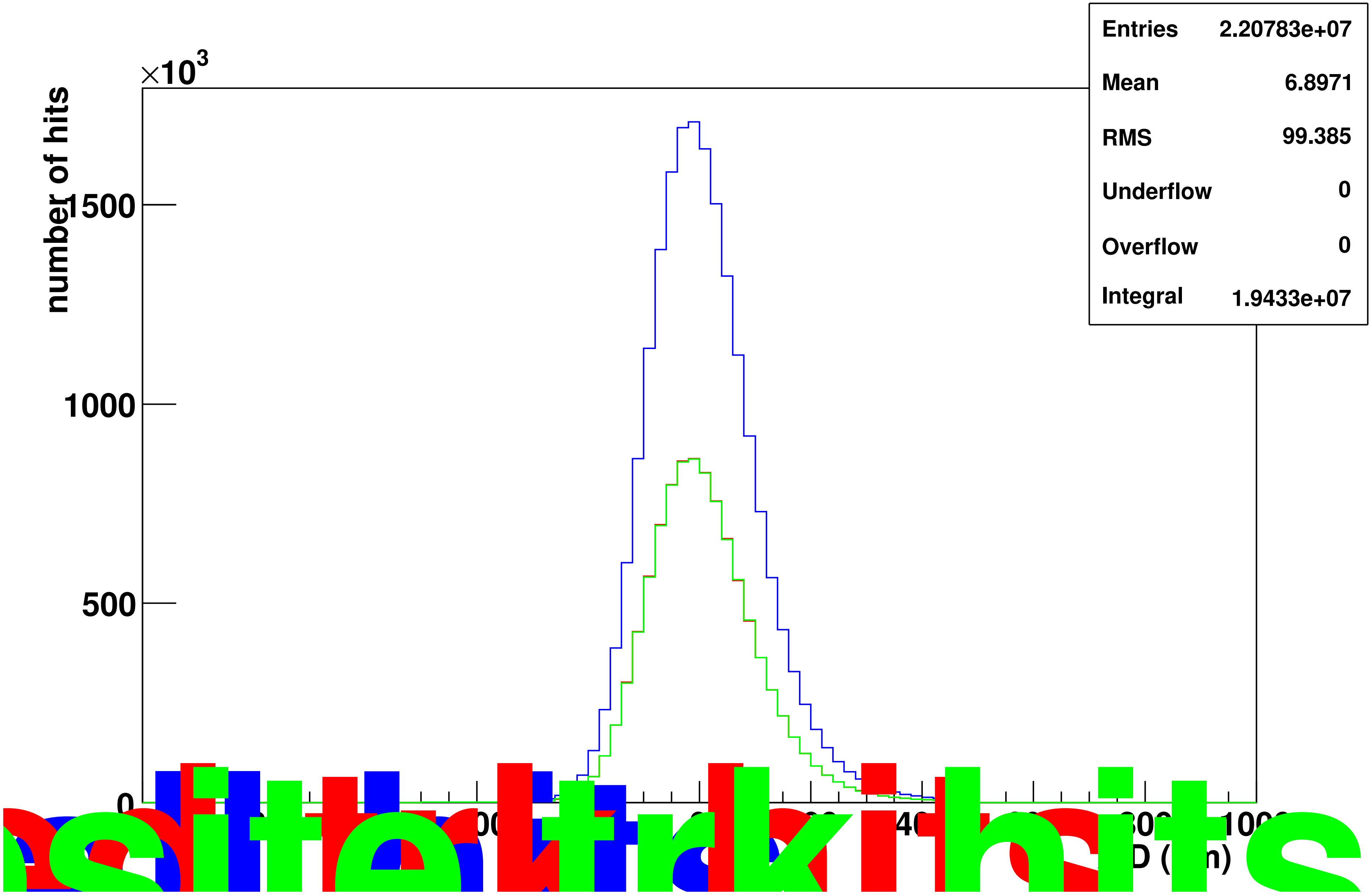
Δ Y (μm)
10
5
0
-5
-10
-15
-80
-60
-40
-20
0
20
40
60
80
wire number



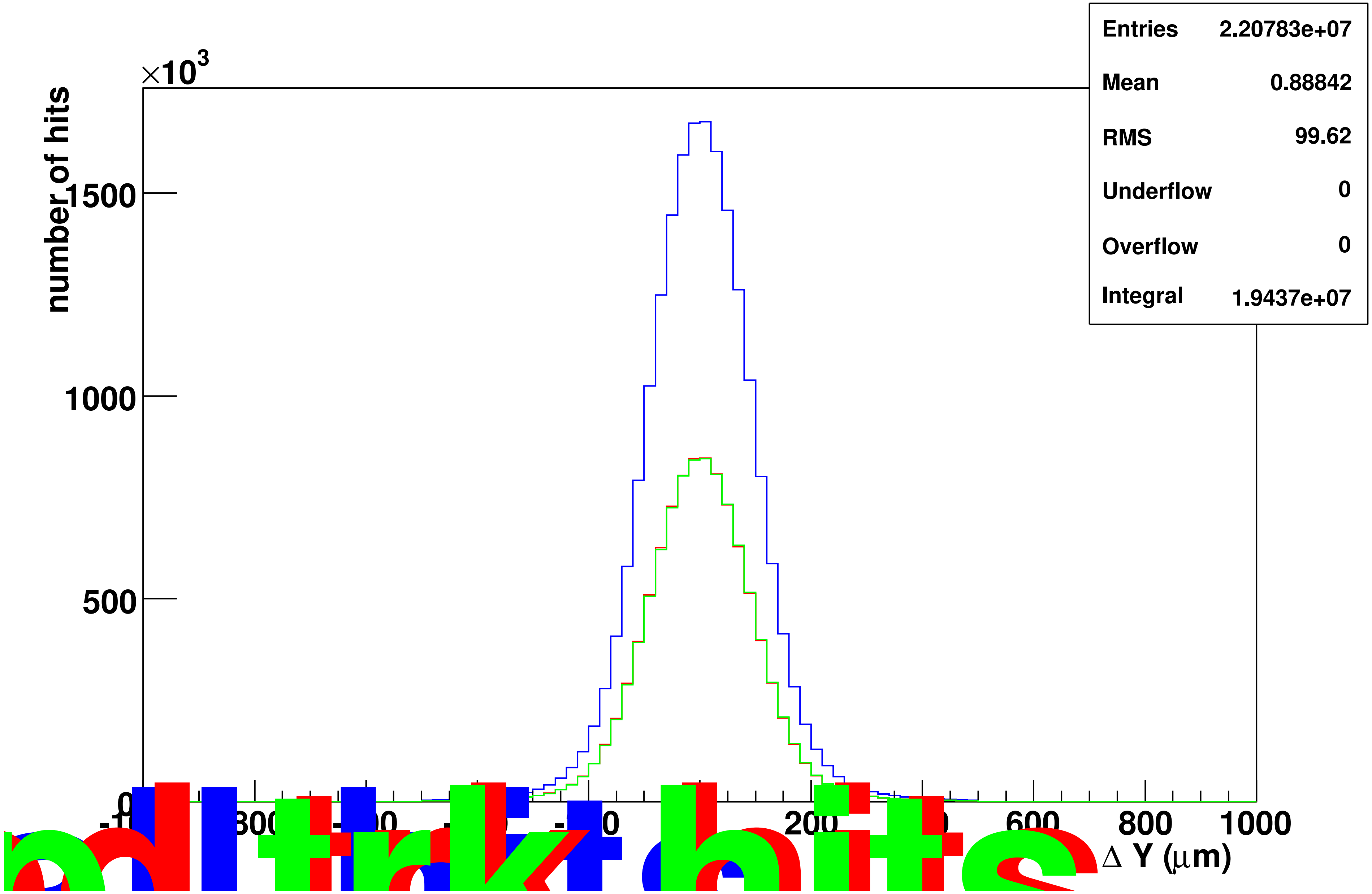
Δ Y (μm)
10
5
0
-5
-10
0
10
20
30
40
50
60
70
80
90
wire number



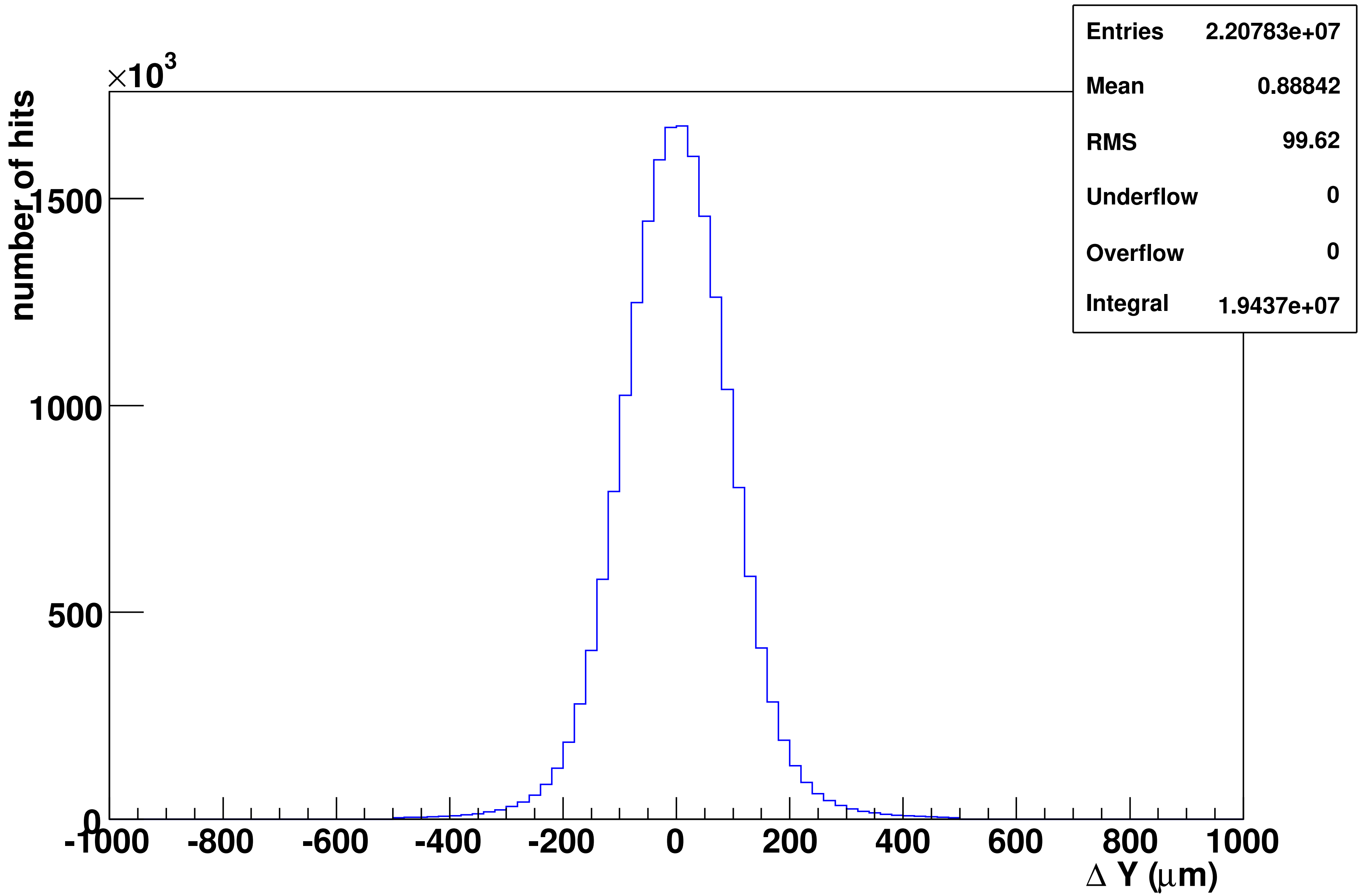
Δ Y (μm)
15
10
5
0
-5
-10
-15
-20
0
10
20
30
40
50
60
70
80
90
wire number



Entries 2.20783e+07
Mean 6.8971
RMS 99.385
Underflow 0
Overflow 0
Integral 1.9433e+07
number of hits
$\times 10^3$



Entries 2.20783e+07
Mean 0.88842
RMS 99.62
Underflow 0
Overflow 0
Integral 1.9437e+07
number of hits
×10^3
1500
1000
500
0
200
600
800
1000
Δ Y (μm)



Entries 2.20783e+07
Mean 0.88842
RMS 99.62
Underflow 0
Overflow 0
Integral 1.9437e+07
×10^3
number of hits
1500
1000
500
0
-1000
-800
-600
-400
-200
0
200
400
600
800
1000
Δ Y (μm)