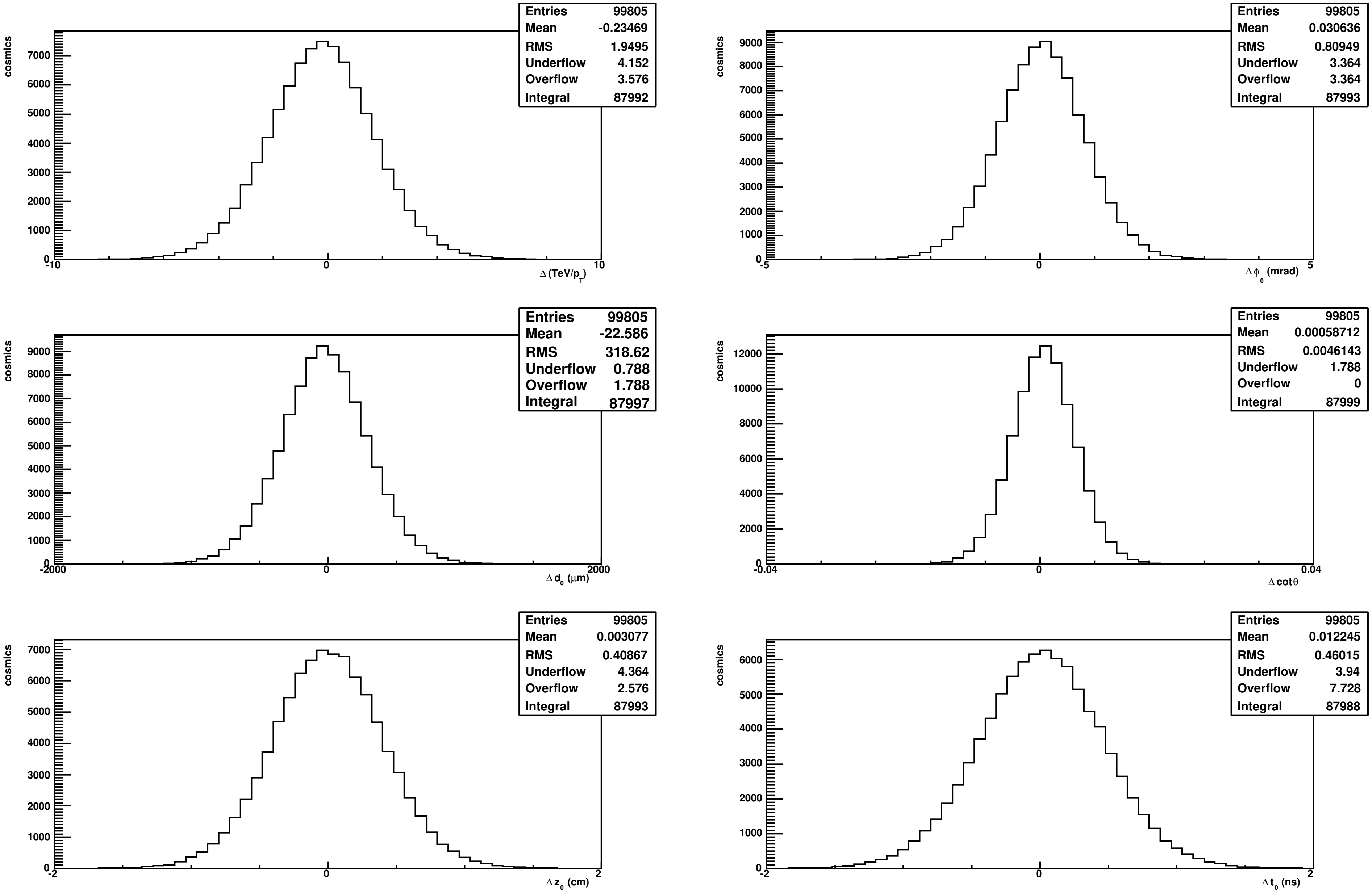
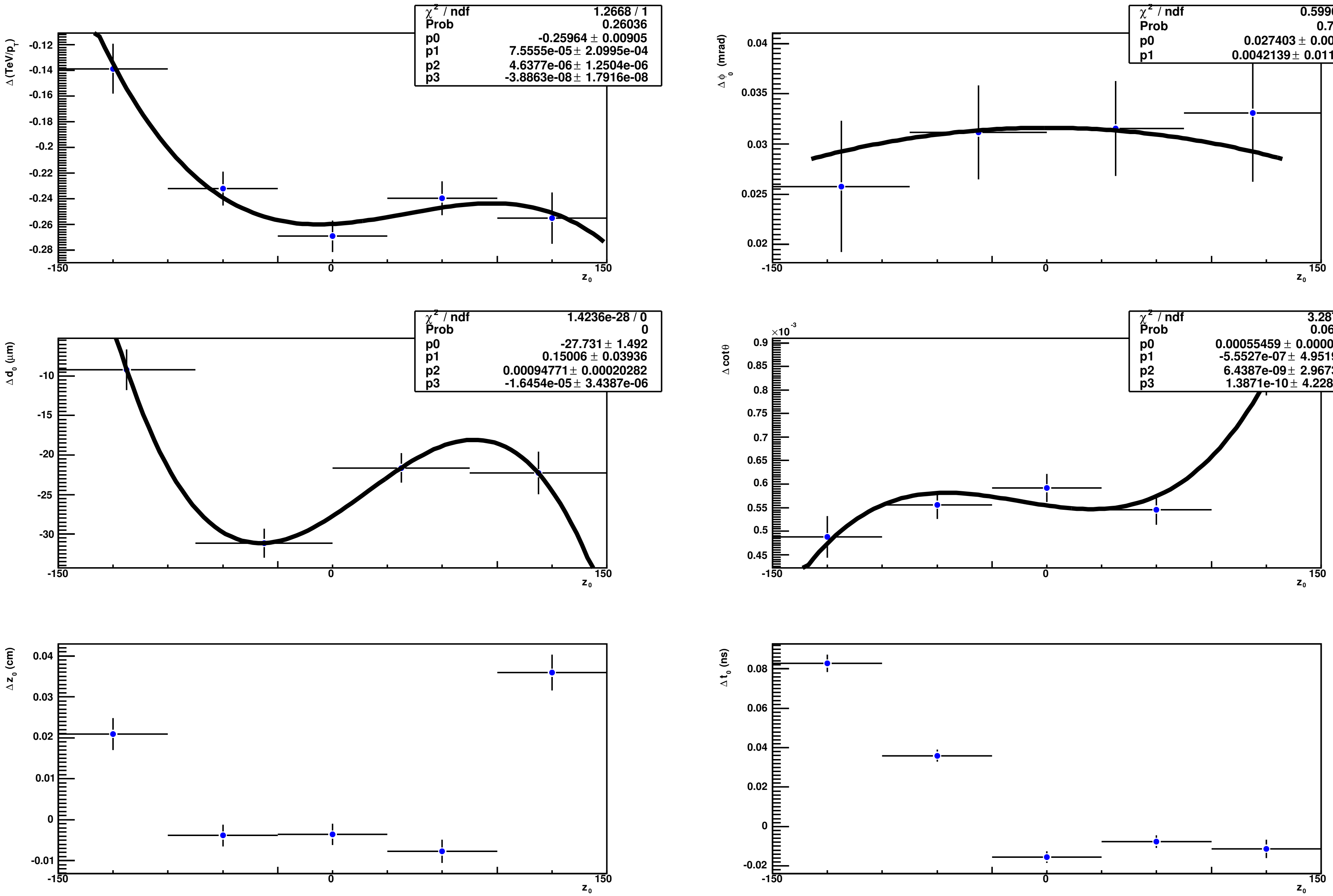
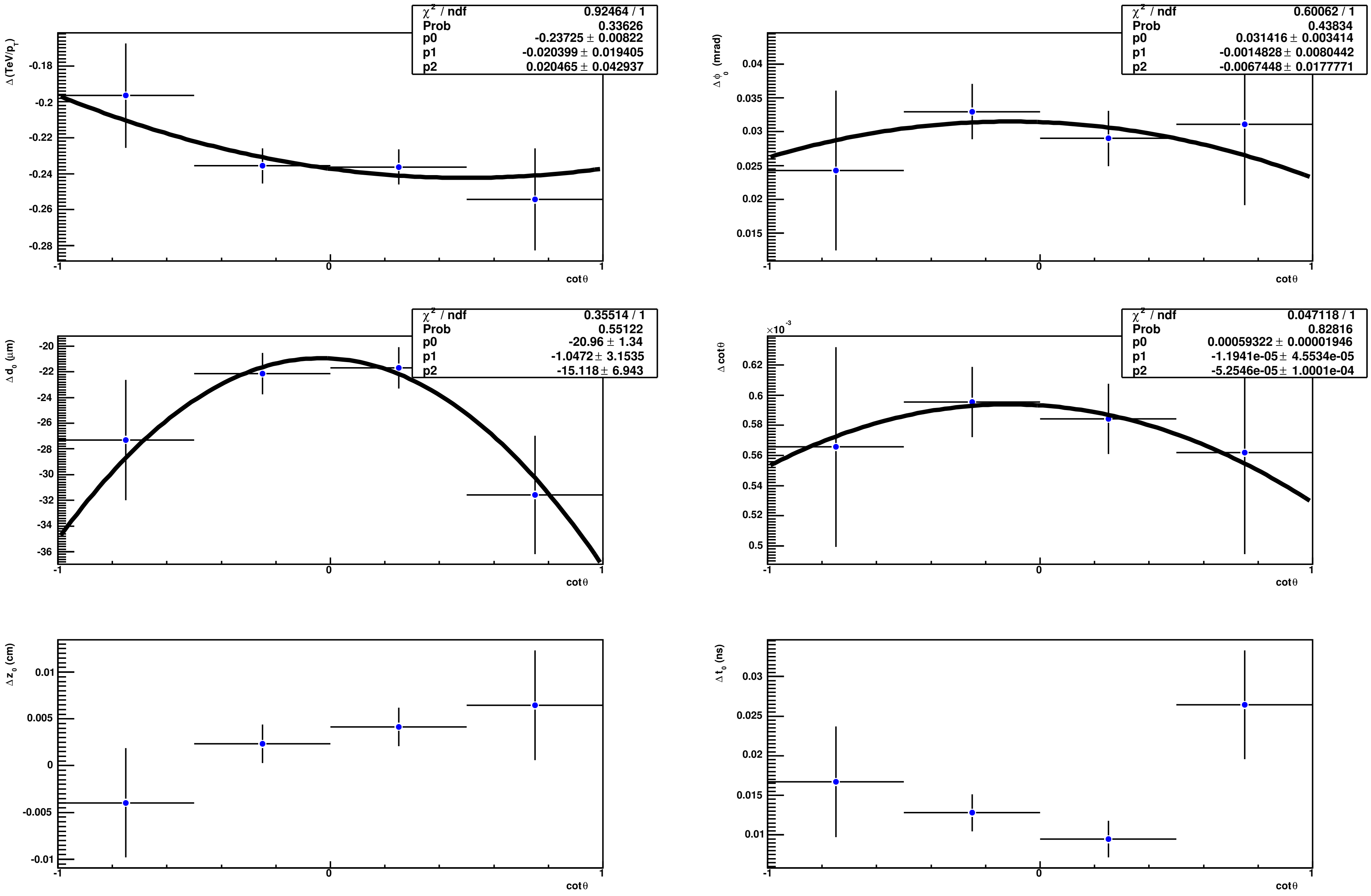
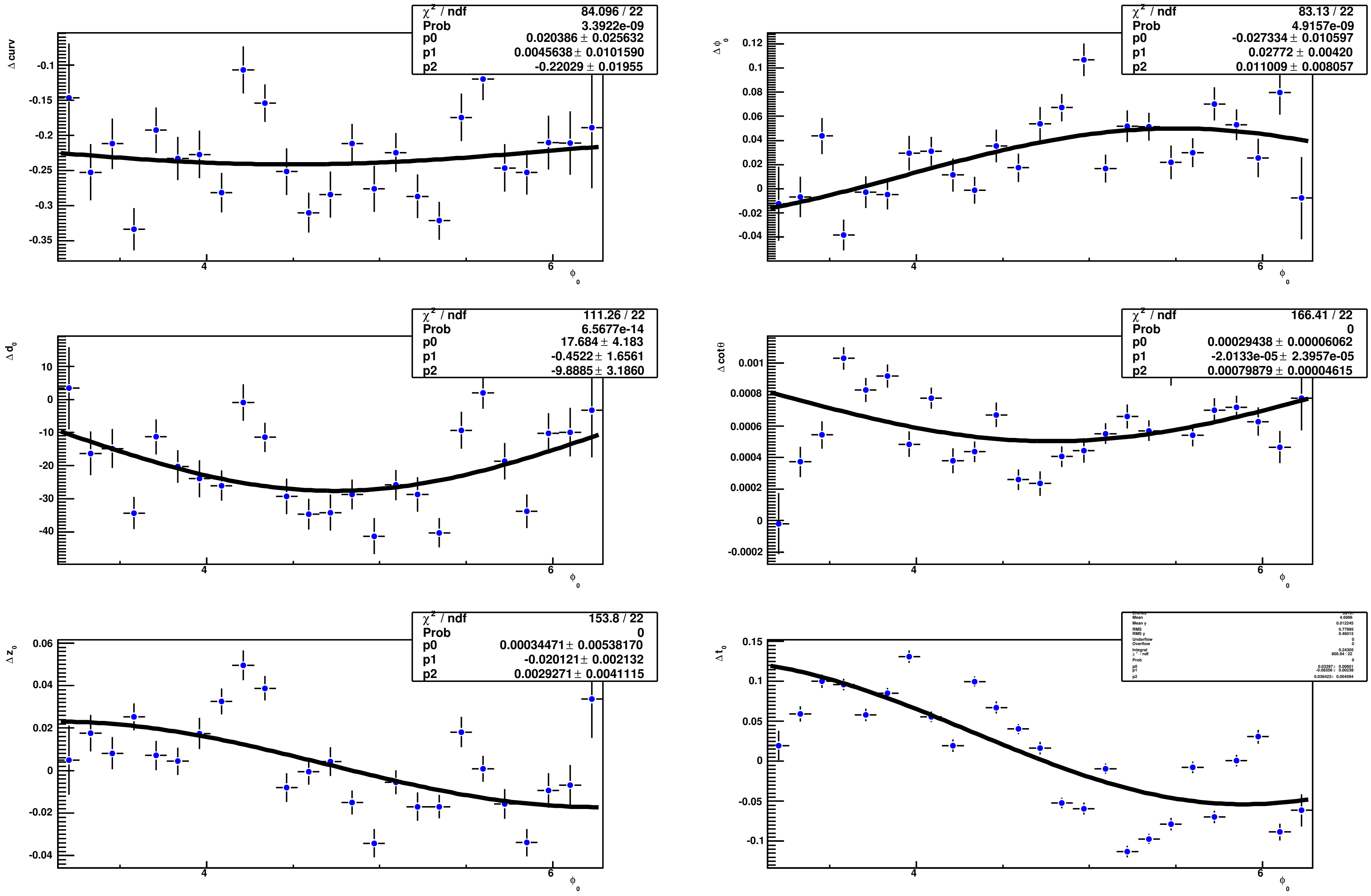

Entries 99805
Mean -0.23469
RMS 1.9495
Underflow 4.152
Overflow 3.576
Integral 87992
cosmics
Δ(TeV/p_T)
Entries 99805
Mean 0.030636
RMS 0.80949
Underflow 3.364
Overflow 3.364
Integral 87993
cosmics
Δφ_0 (mrad)
Entries 99805
Mean -22.586
RMS 318.62
Underflow 0.788
Overflow 1.788
Integral 87997
cosmics
Δd_0 (μm)
Entries 99805
Mean 0.00058712
RMS 0.0046143
Underflow 1.788
Overflow 0
Integral 87999
cosmics
Δcotθ
Entries 99805
Mean 0.003077
RMS 0.40867
Underflow 4.364
Overflow 2.576
Integral 87993
cosmics
Δz_0 (cm)
Entries 99805
Mean 0.012245
RMS 0.46015
Underflow 3.94
Overflow 7.728
Integral 87988
cosmics
Δt_0 (ns)



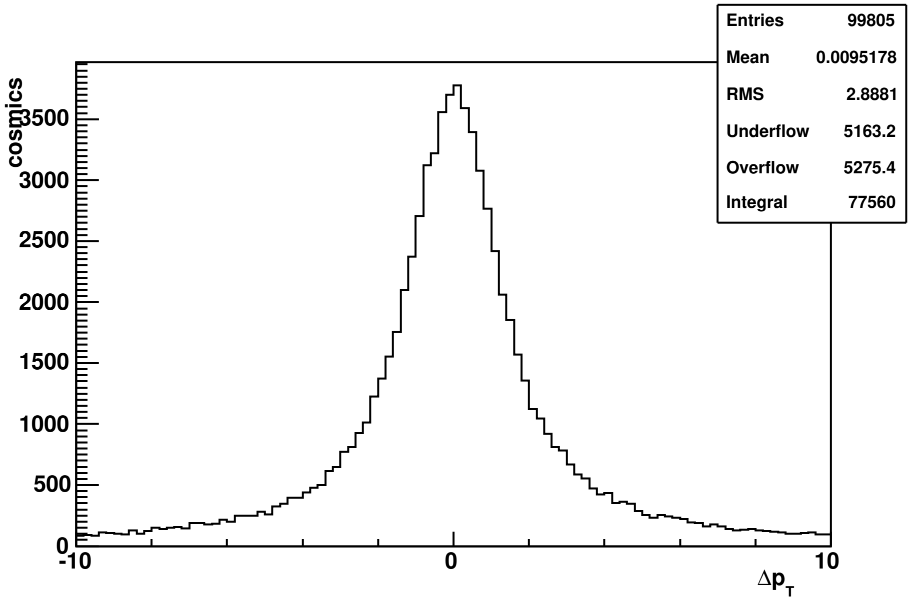
χ² / ndf 1.2668 / 1
Prob 0.26036
p0 -0.25964 ± 0.00905
p1 7.5555e-05 ± 2.0995e-04
p2 4.6377e-06 ± 1.2504e-06
p3 -3.8863e-08 ± 1.7916e-08
Δ(TeV/pT)
z0
χ² / ndf 0.59962 / 2
Prob 0.74096
p0 0.027403 ± 0.009352
p1 0.0042139 ± 0.0115849
Δ φ0 (mrad)
z0
χ² / ndf 1.4236e-28 / 0
Prob 0
p0 -27.731 ± 1.492
p1 0.15006 ± 0.03936
p2 0.00094771 ± 0.00020282
p3 -1.6454e-05 ± 3.4387e-06
Δ d0 (μm)
z0
χ² / ndf 3.2871 / 1
Prob 0.069825
p0 0.00055459 ± 0.00002152
p1 -5.5527e-07 ± 4.9519e-07
p2 6.4387e-09 ± 2.9673e-09
p3 1.3871e-10 ± 4.2289e-11
Δ cotθ
×10⁻³
z0
Δ z0 (cm)
z0
Δ t0 (ns)
z0



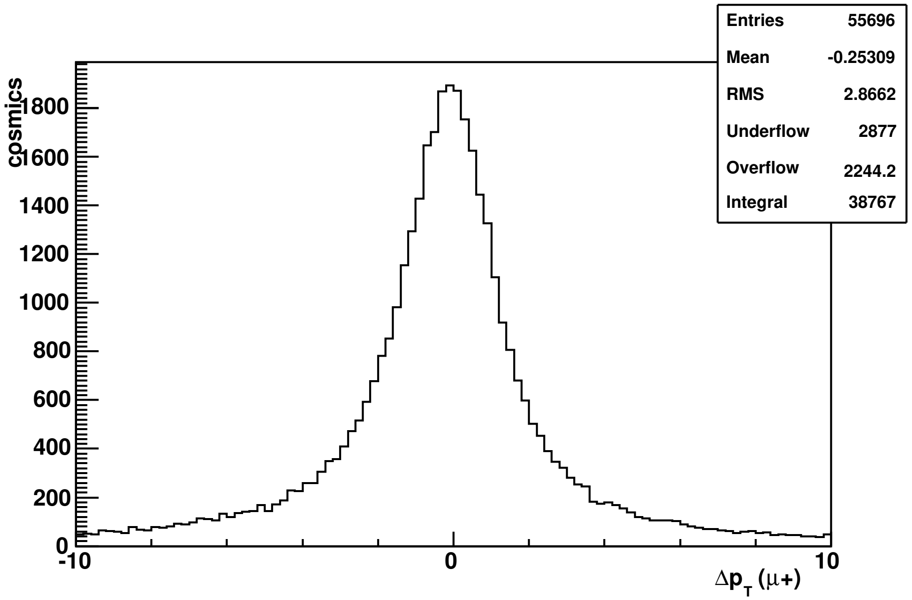
χ² / ndf 0.92464 / 1
Prob 0.33626
p0 -0.23725 ± 0.00822
p1 -0.020399 ± 0.019405
p2 0.020465 ± 0.042937
Δ(TeV/p_T)
cotθ
χ² / ndf 0.60062 / 1
Prob 0.43834
p0 0.031416 ± 0.003414
p1 -0.0014828 ± 0.0080442
p2 -0.0067448 ± 0.0177771
Δφ_0 (mrad)
cotθ
χ² / ndf 0.35514 / 1
Prob 0.55122
p0 -20.96 ± 1.34
p1 -1.0472 ± 3.1535
p2 -15.118 ± 6.943
Δd_0 (μm)
cotθ
χ² / ndf 0.047118 / 1
Prob 0.82816
p0 0.00059322 ± 0.00001946
p1 -1.1941e-05 ± 4.5534e-05
p2 -5.2546e-05 ± 1.0001e-04
×10^-3
Δcotθ
cotθ
Δz_0 (cm)
cotθ
Δt_0 (ns)
cotθ



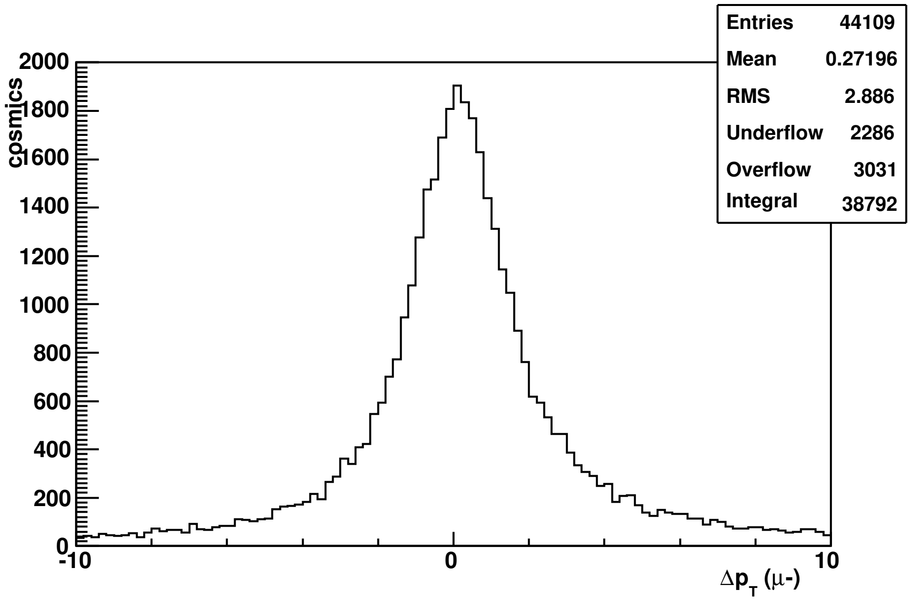
χ² / ndf 84.096 / 22
Prob 3.3922e-09
p0 0.020386 ± 0.025632
p1 0.0045638 ± 0.0101590
p2 -0.22029 ± 0.01955
Δ curv
φ0
χ² / ndf 83.13 / 22
Prob 4.9157e-09
p0 -0.027334 ± 0.010597
p1 0.02772 ± 0.00420
p2 0.011009 ± 0.008057
Δ φ0
φ0
χ² / ndf 111.26 / 22
Prob 6.5677e-14
p0 17.684 ± 4.183
p1 -0.4522 ± 1.6561
p2 -9.8885 ± 3.1860
Δ d0
φ0
χ² / ndf 166.41 / 22
Prob 0
p0 0.00029438 ± 0.00006062
p1 -2.0133e-05 ± 2.3957e-05
p2 0.00079879 ± 0.00004615
Δ cotθ
φ0
χ² / ndf 153.8 / 22
Prob 0
p0 0.00034471 ± 0.00538170
p1 -0.020121 ± 0.002132
p2 0.0029271 ± 0.0041115
Δ z0
φ0
Δ t0
φ0



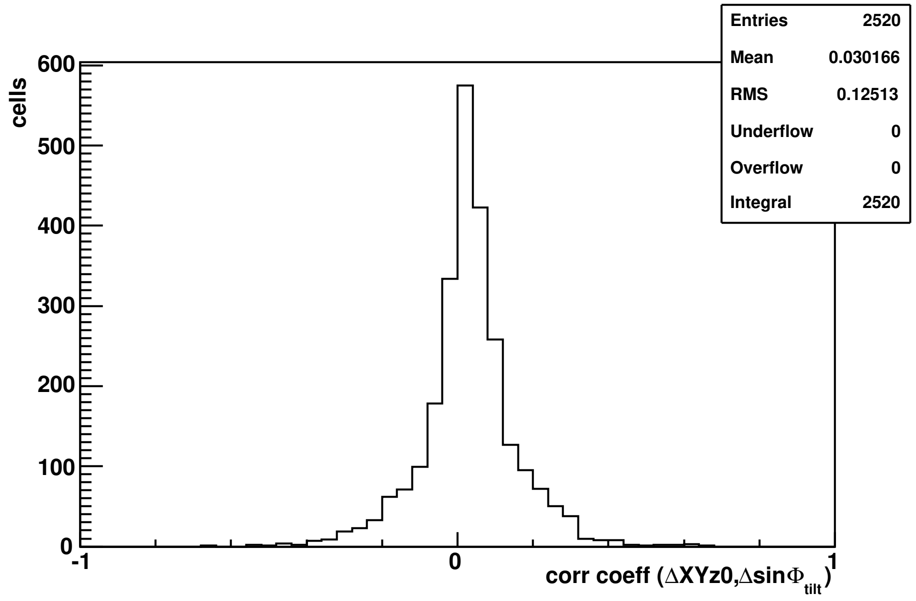
Entries 99805
Mean 0.0095178
RMS 2.8881
Underflow 5163.2
Overflow 5275.4
Integral 77560
cosmics
0
500
1000
1500
2000
2500
3000
3500
-10
0
10
Δp_T



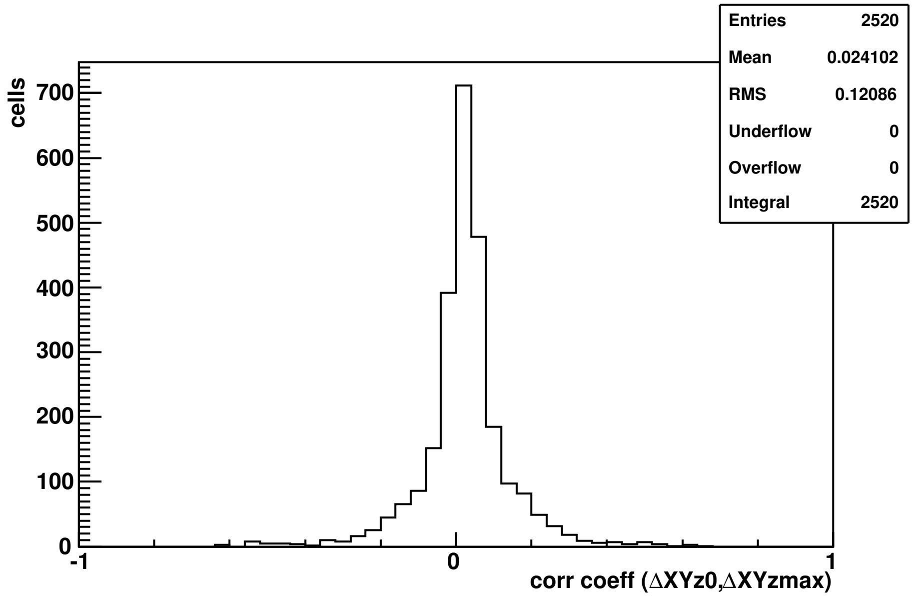
Entries 55696
Mean -0.25309
RMS 2.8662
Underflow 2877
Overflow 2244.2
Integral 38767
cosmics
0
200
400
600
800
1000
1200
1400
1600
1800
-10
0
10
Δp_T (μ+)



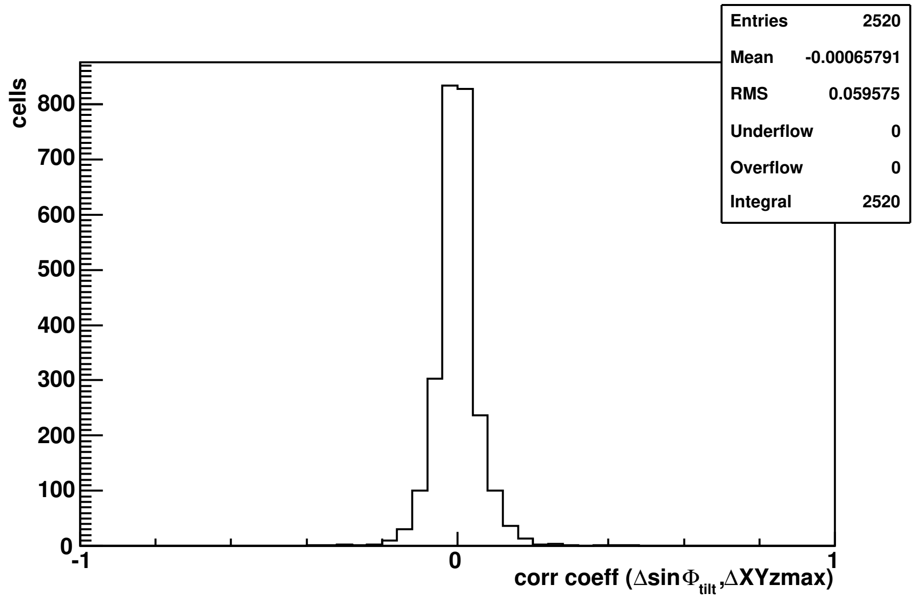
Entries 44109
Mean 0.27196
RMS 2.886
Underflow 2286
Overflow 3031
Integral 38792
cosmics
0
200
400
600
800
1000
1200
1400
1600
1800
2000
-10
0
10
Δp_T (μ-)



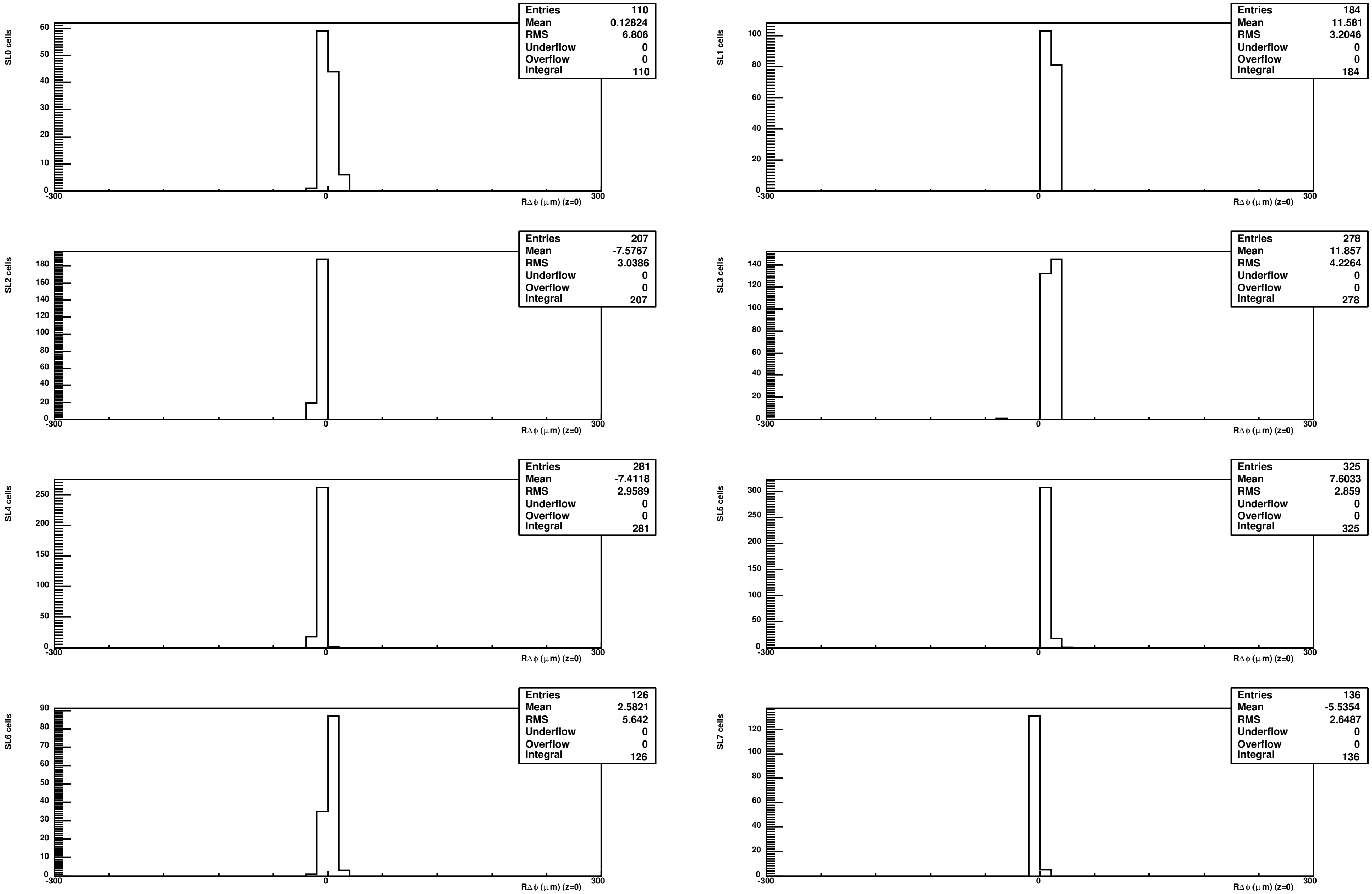
Entries 2520
Mean 0.030166
RMS 0.12513
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔsinΦ$_{tilt}$)

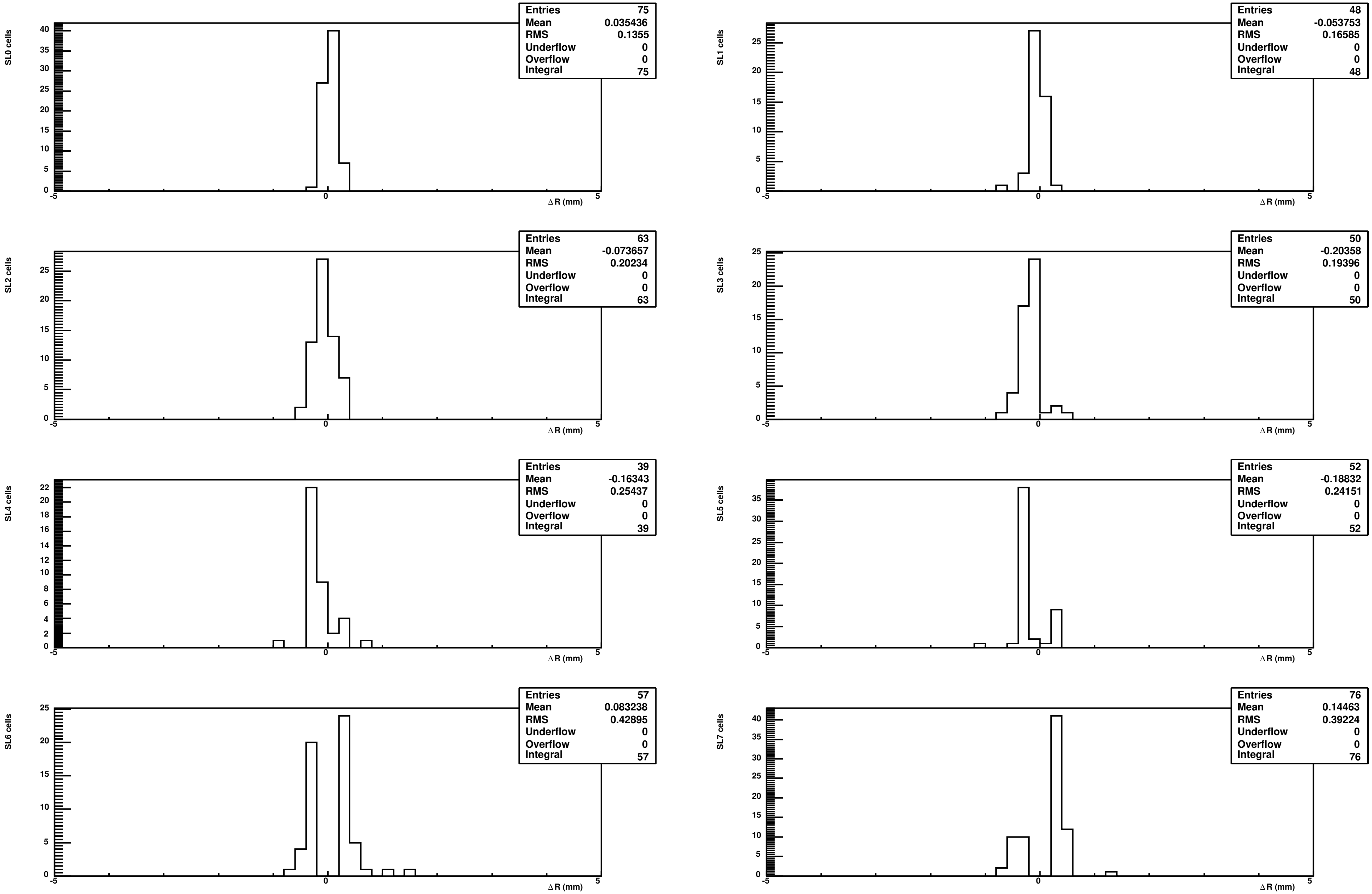


Entries 2520
Mean 0.024102
RMS 0.12086
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔXYz0,ΔXYzmax)

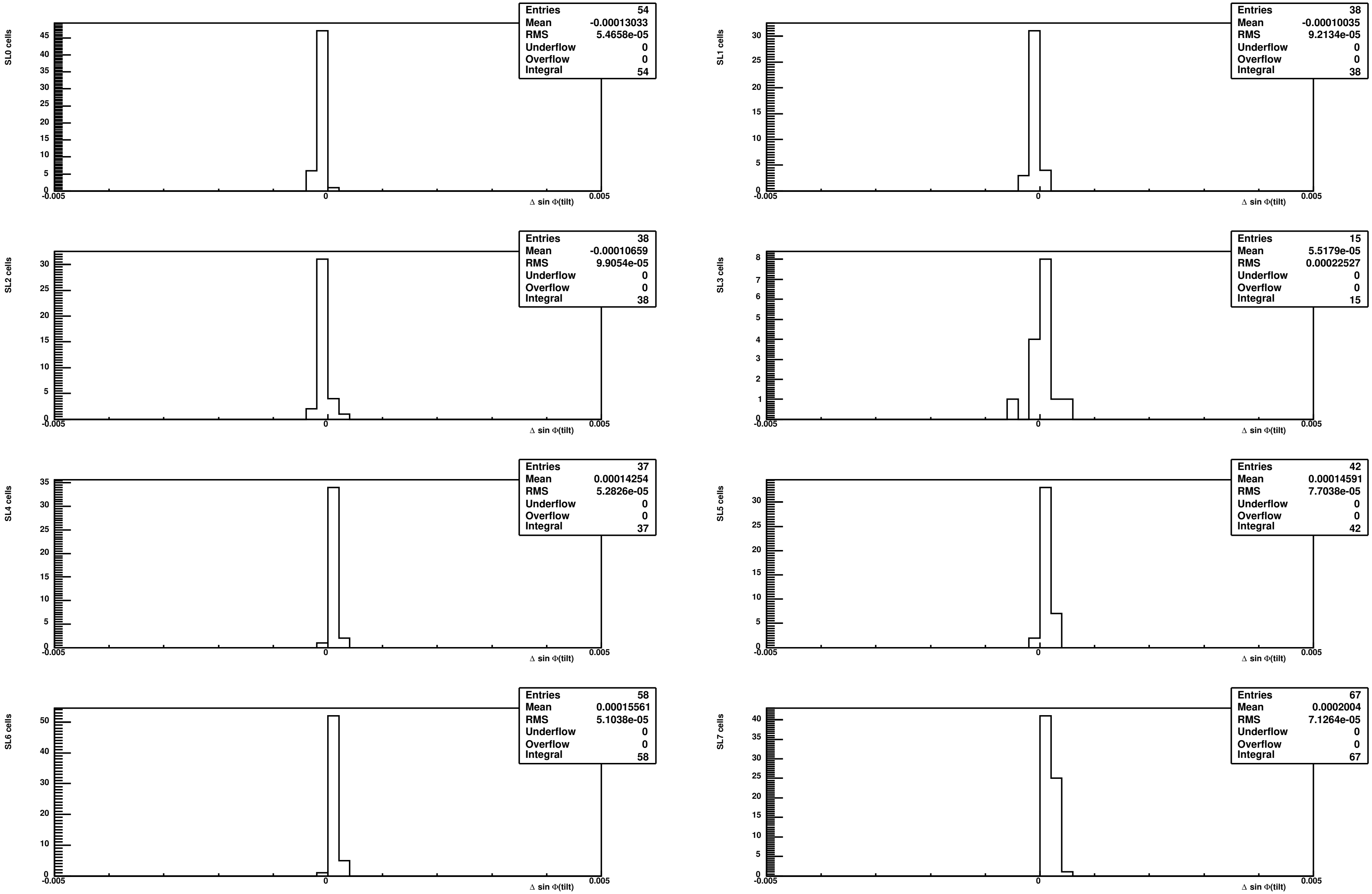


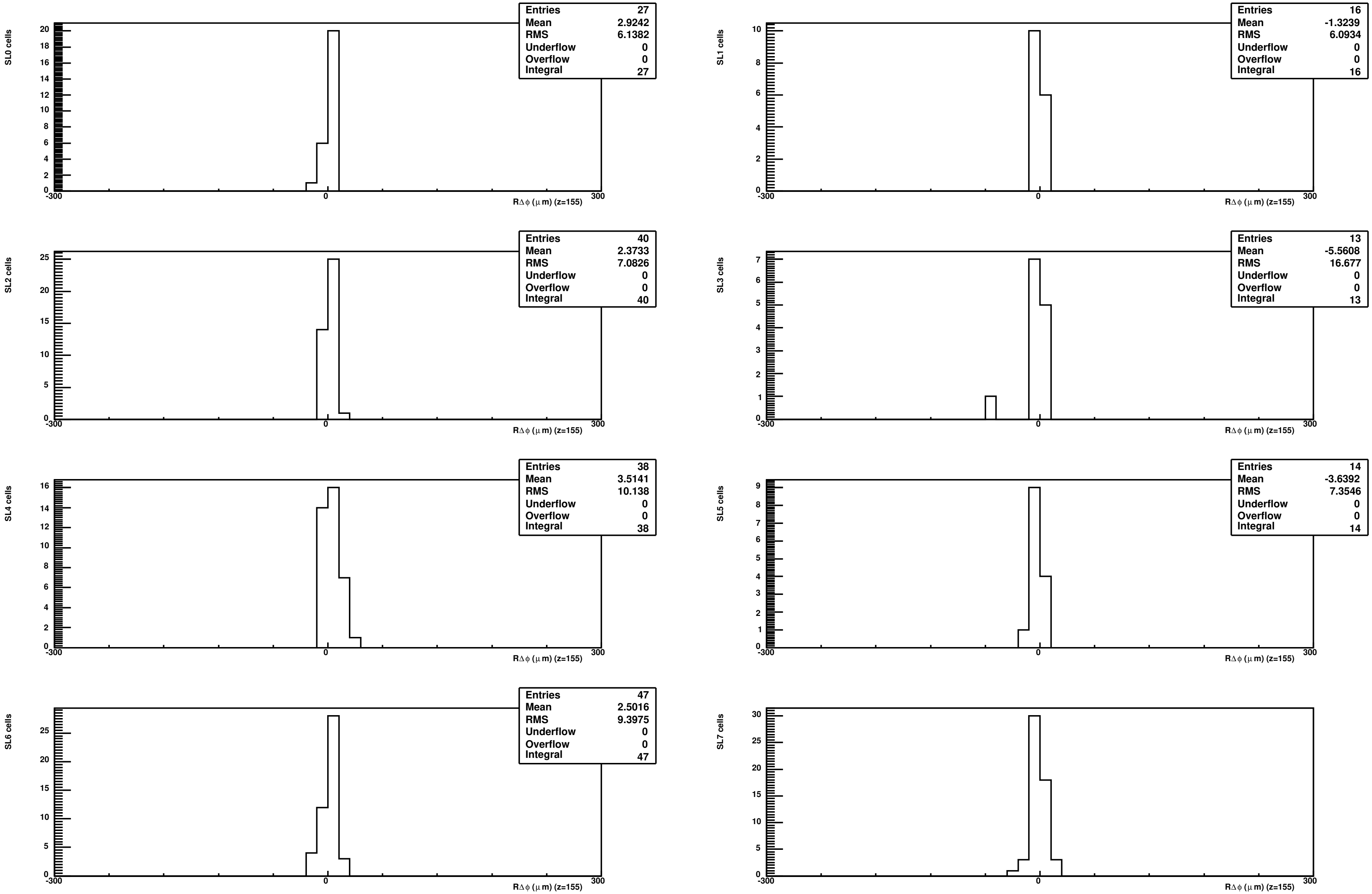
Entries 2520
Mean -0.00065791
RMS 0.059575
Underflow 0
Overflow 0
Integral 2520
cells
corr coeff (ΔsinΦ$_{tilt}$,ΔXYzmax)


SL0 cells
Entries 110
Mean 0.12824
RMS 6.806
Underflow 0
Overflow 0
Integral 110
SL1 cells
Entries 184
Mean 11.581
RMS 3.2046
Underflow 0
Overflow 0
Integral 184
SL2 cells
Entries 207
Mean -7.5767
RMS 3.0386
Underflow 0
Overflow 0
Integral 207
SL3 cells
Entries 278
Mean 11.857
RMS 4.2264
Underflow 0
Overflow 0
Integral 278
SL4 cells
Entries 281
Mean -7.4118
RMS 2.9589
Underflow 0
Overflow 0
Integral 281
SL5 cells
Entries 325
Mean 7.6033
RMS 2.859
Underflow 0
Overflow 0
Integral 325
SL6 cells
Entries 126
Mean 2.5821
RMS 5.642
Underflow 0
Overflow 0
Integral 126
SL7 cells
Entries 136
Mean -5.5354
RMS 2.6487
Underflow 0
Overflow 0
Integral 136
RΔφ (μ m) (z=0)
-300
0
300

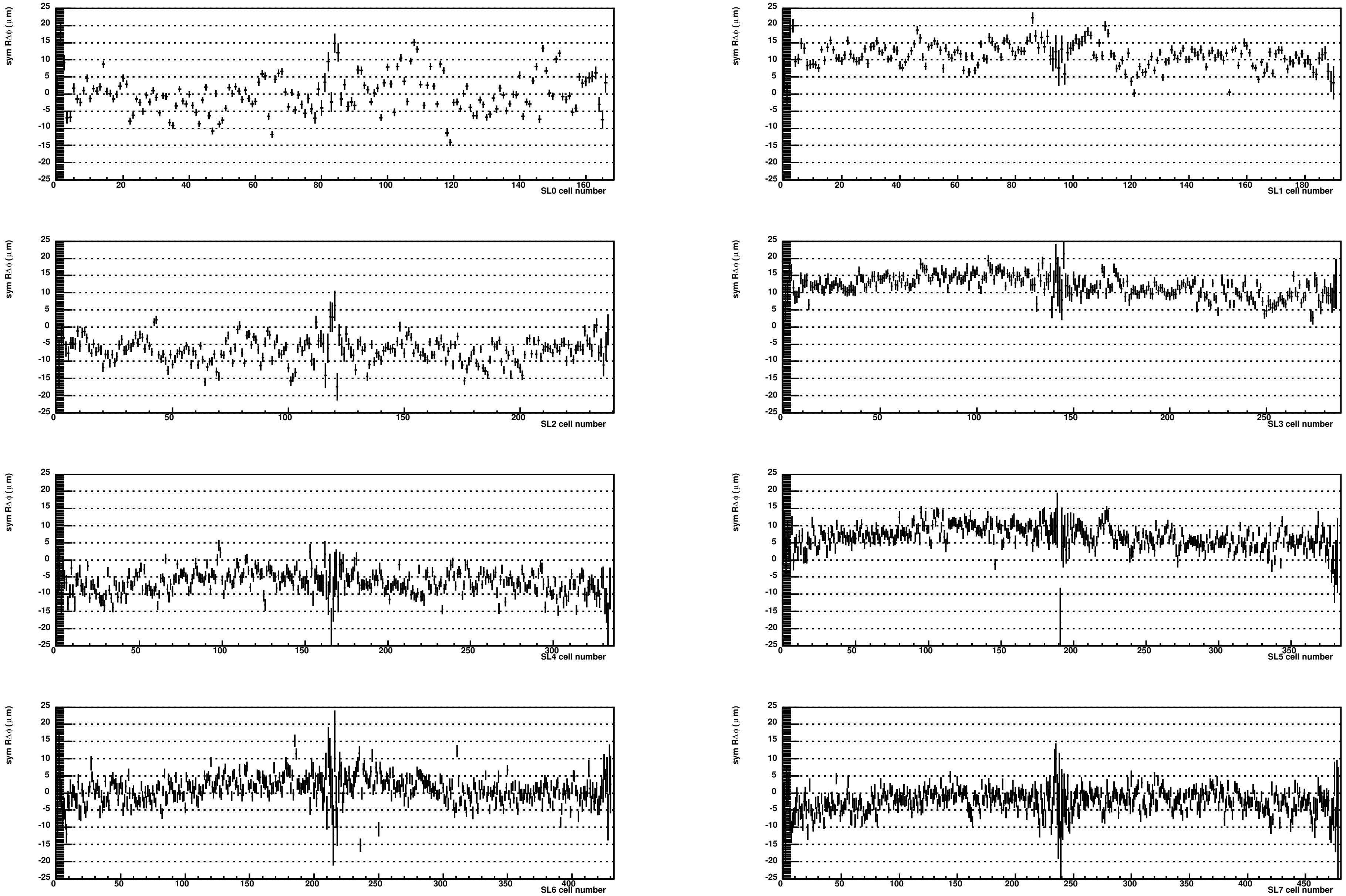


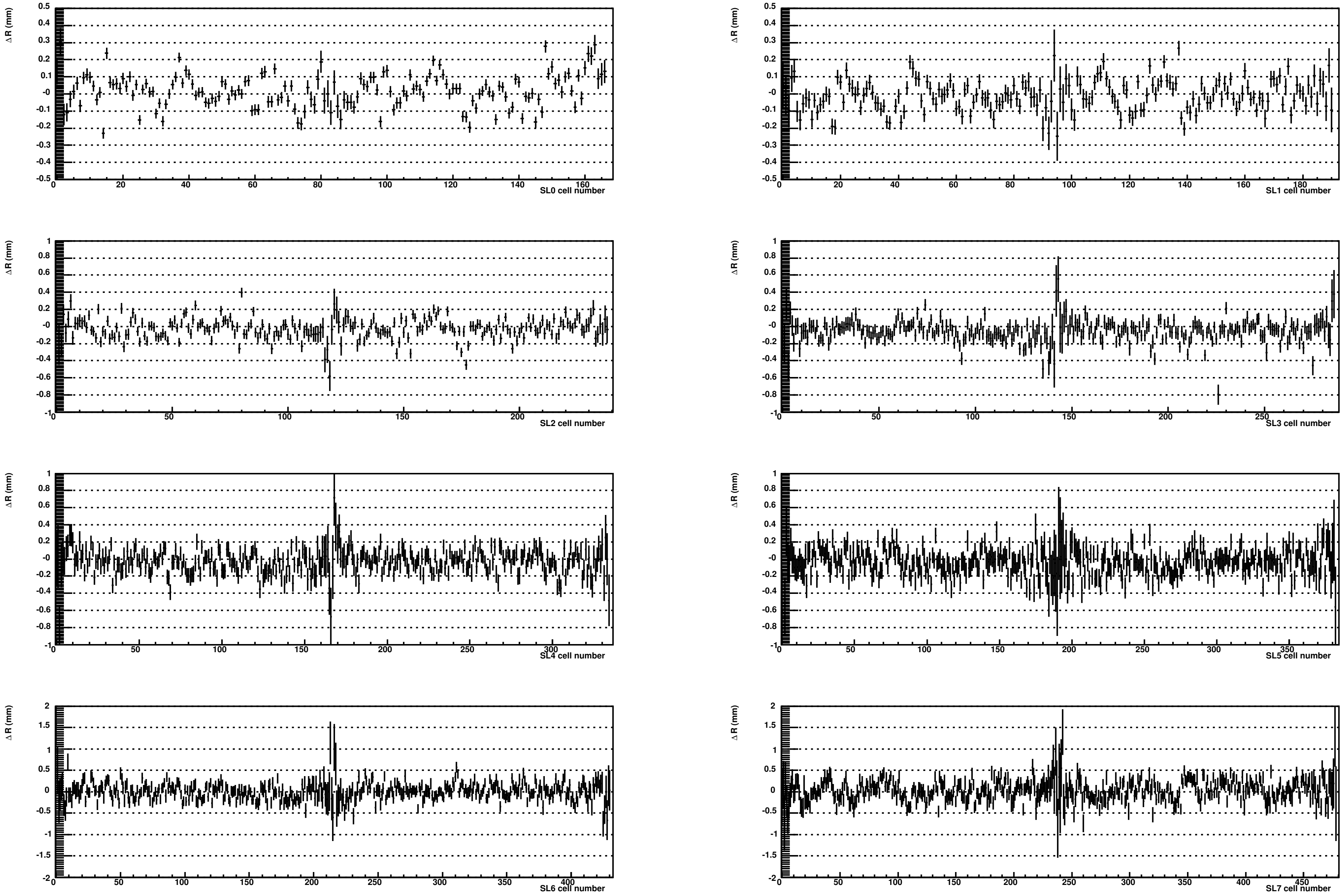
SL0 cells
Entries 75
Mean 0.035436
RMS 0.1355
Underflow 0
Overflow 0
Integral 75
SL1 cells
Entries 48
Mean -0.053753
RMS 0.16585
Underflow 0
Overflow 0
Integral 48
SL2 cells
Entries 63
Mean -0.073657
RMS 0.20234
Underflow 0
Overflow 0
Integral 63
SL3 cells
Entries 50
Mean -0.20358
RMS 0.19396
Underflow 0
Overflow 0
Integral 50
SL4 cells
Entries 39
Mean -0.16343
RMS 0.25437
Underflow 0
Overflow 0
Integral 39
SL5 cells
Entries 52
Mean -0.18832
RMS 0.24151
Underflow 0
Overflow 0
Integral 52
SL6 cells
Entries 57
Mean 0.083238
RMS 0.42895
Underflow 0
Overflow 0
Integral 57
SL7 cells
Entries 76
Mean 0.14463
RMS 0.39224
Underflow 0
Overflow 0
Integral 76
ΔR (mm)


SL0 cells
Entries 54
Mean -0.00013033
RMS 5.4658e-05
Underflow 0
Overflow 0
Integral 54
Δ sin Φ(tilt)
SL1 cells
Entries 38
Mean -0.00010035
RMS 9.2134e-05
Underflow 0
Overflow 0
Integral 38
Δ sin Φ(tilt)
SL2 cells
Entries 38
Mean -0.00010659
RMS 9.9054e-05
Underflow 0
Overflow 0
Integral 38
Δ sin Φ(tilt)
SL3 cells
Entries 15
Mean 5.5179e-05
RMS 0.00022527
Underflow 0
Overflow 0
Integral 15
Δ sin Φ(tilt)
SL4 cells
Entries 37
Mean 0.00014254
RMS 5.2826e-05
Underflow 0
Overflow 0
Integral 37
Δ sin Φ(tilt)
SL5 cells
Entries 42
Mean 0.00014591
RMS 7.7038e-05
Underflow 0
Overflow 0
Integral 42
Δ sin Φ(tilt)
SL6 cells
Entries 58
Mean 0.00015561
RMS 5.1038e-05
Underflow 0
Overflow 0
Integral 58
Δ sin Φ(tilt)
SL7 cells
Entries 67
Mean 0.0002004
RMS 7.1264e-05
Underflow 0
Overflow 0
Integral 67
Δ sin Φ(tilt)
-0.005
0
0.005

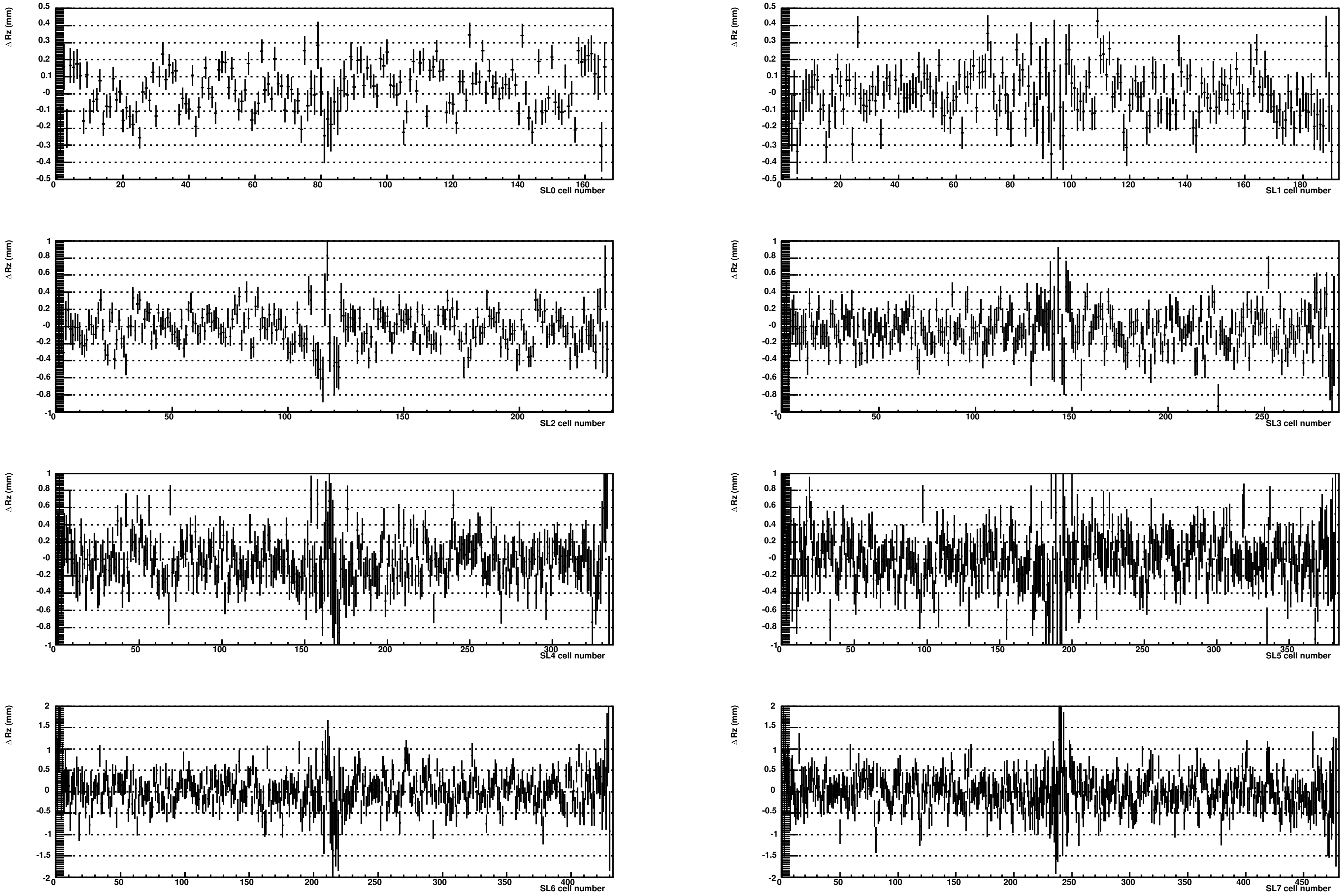


SL0 cells
Entries 27
Mean 2.9242
RMS 6.1382
Underflow 0
Overflow 0
Integral 27
RΔφ (μm) (z=155)
SL1 cells
Entries 16
Mean -1.3239
RMS 6.0934
Underflow 0
Overflow 0
Integral 16
RΔφ (μm) (z=155)
SL2 cells
Entries 40
Mean 2.3733
RMS 7.0826
Underflow 0
Overflow 0
Integral 40
RΔφ (μm) (z=155)
SL3 cells
Entries 13
Mean -5.5608
RMS 16.677
Underflow 0
Overflow 0
Integral 13
RΔφ (μm) (z=155)
SL4 cells
Entries 38
Mean 3.5141
RMS 10.138
Underflow 0
Overflow 0
Integral 38
RΔφ (μm) (z=155)
SL5 cells
Entries 14
Mean -3.6392
RMS 7.3546
Underflow 0
Overflow 0
Integral 14
RΔφ (μm) (z=155)
SL6 cells
Entries 47
Mean 2.5016
RMS 9.3975
Underflow 0
Overflow 0
Integral 47
RΔφ (μm) (z=155)
SL7 cells
RΔφ (μm) (z=155)

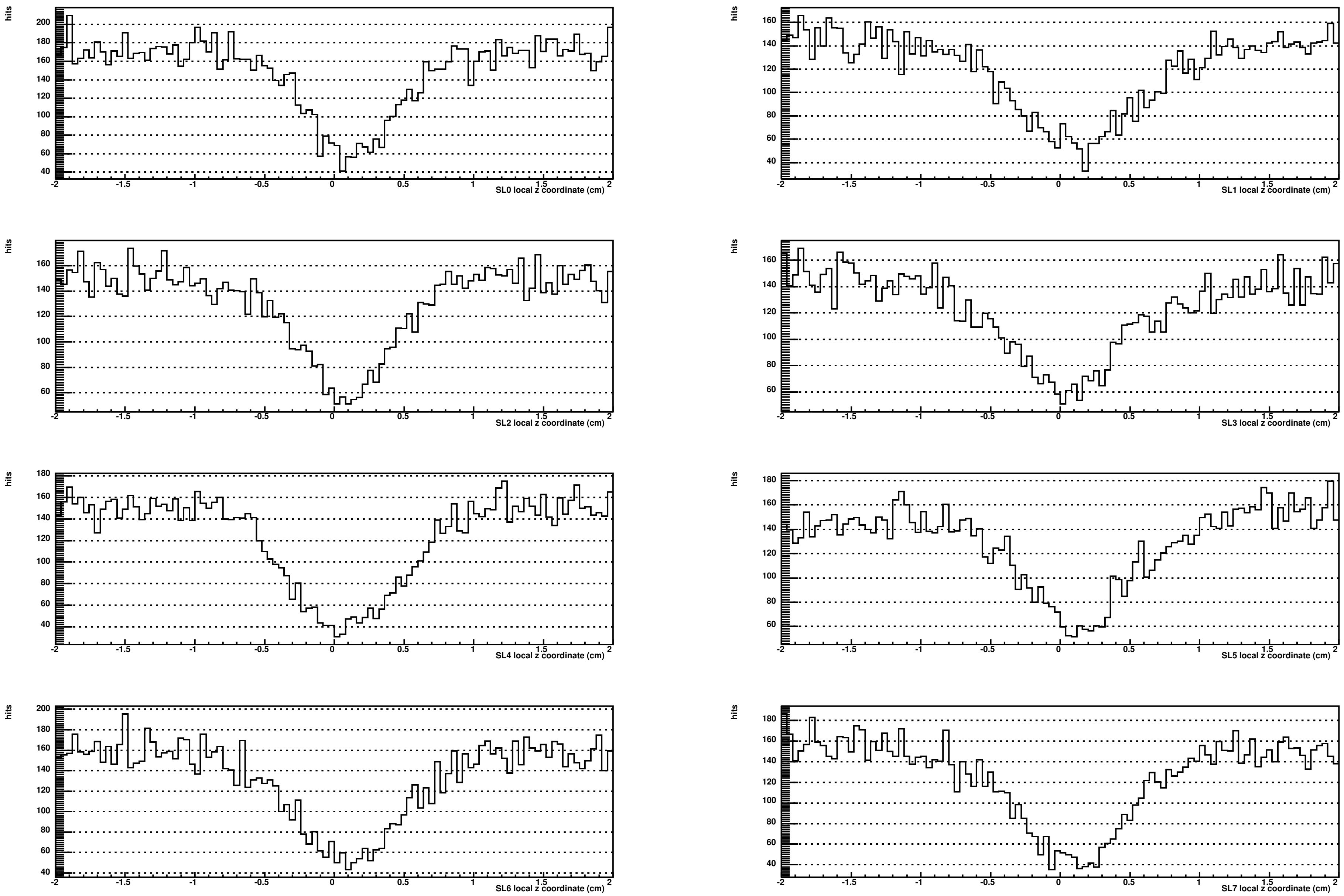

sym RΔφ (μm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number



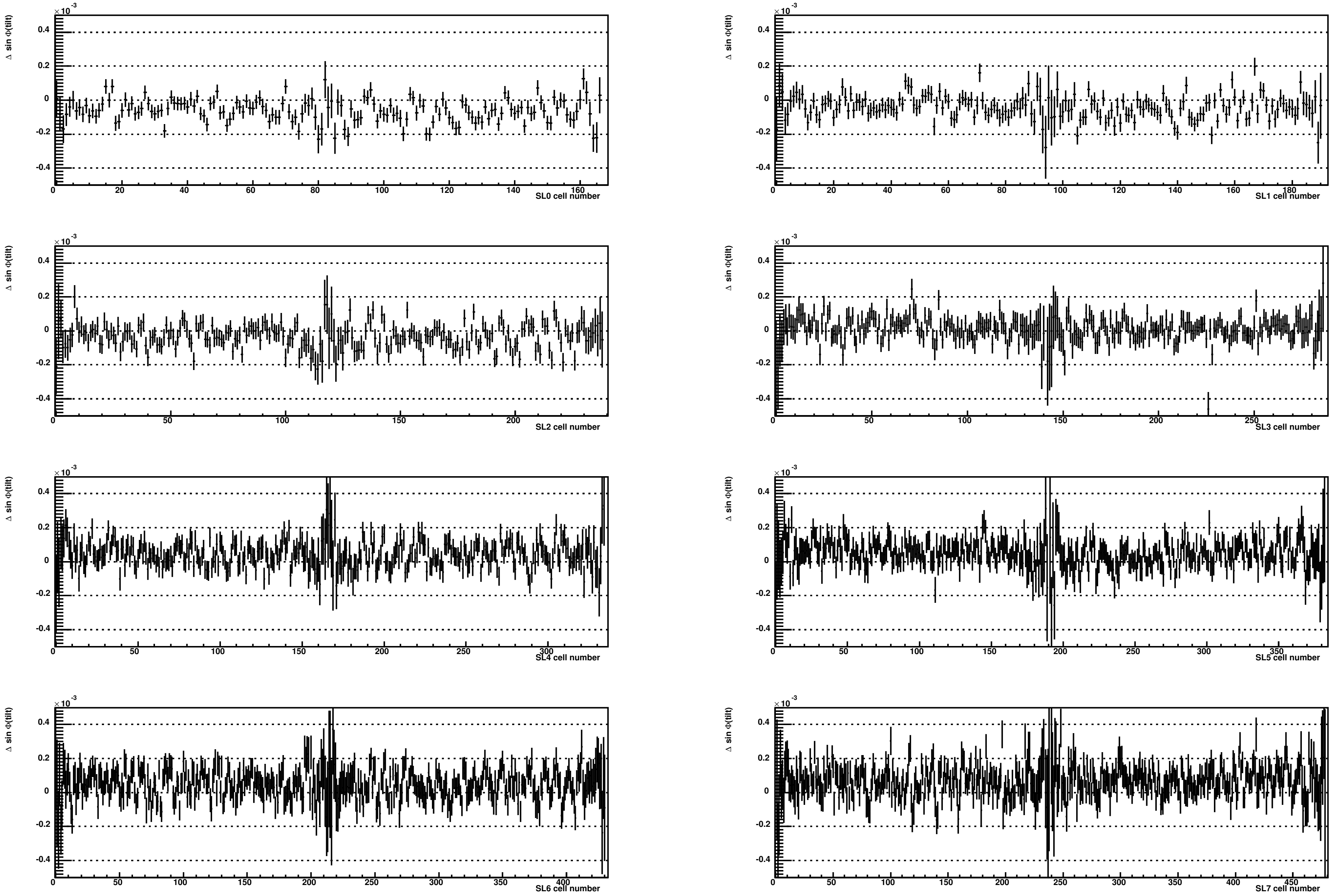
Δ R (mm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number



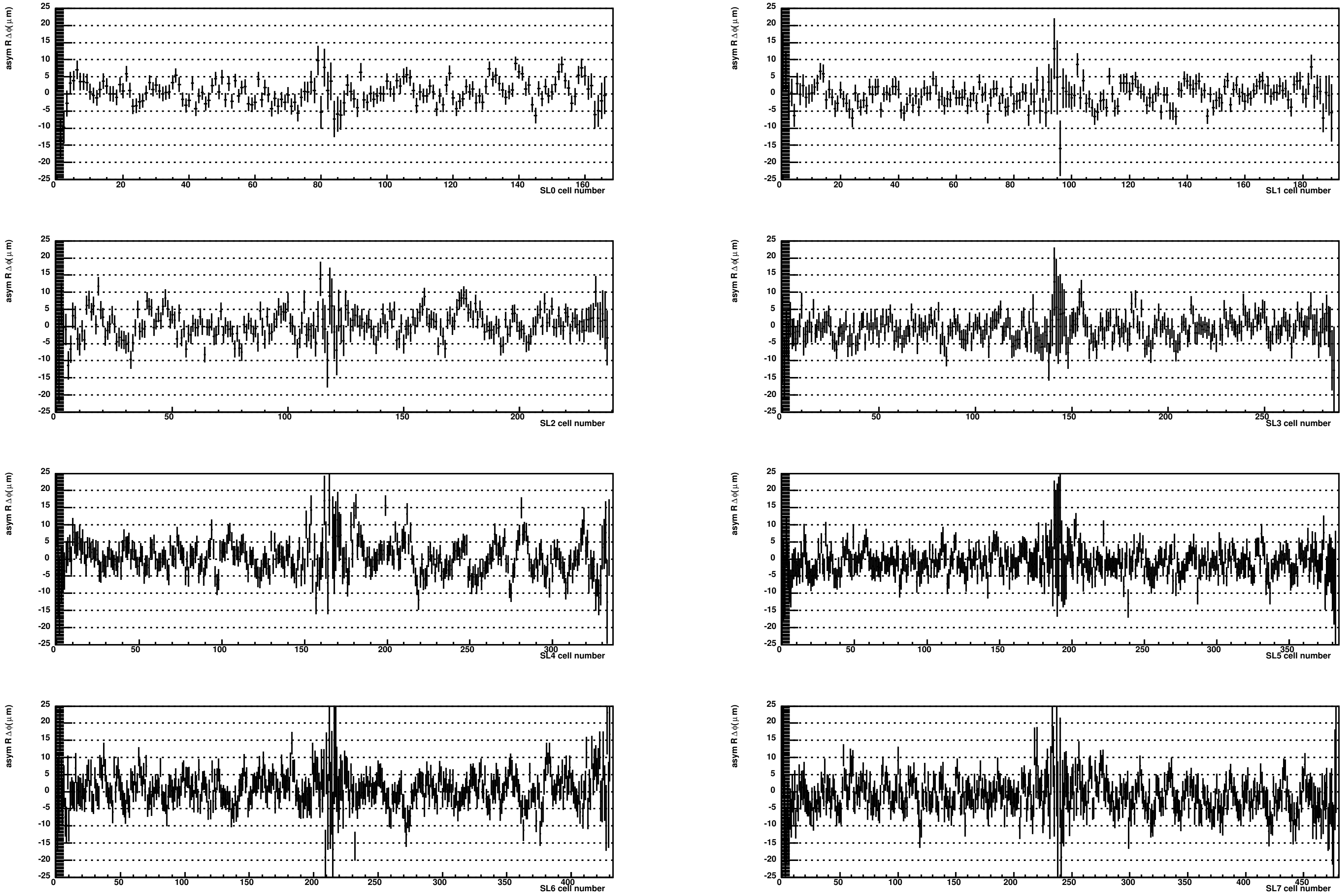
Δ Rz (mm)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number



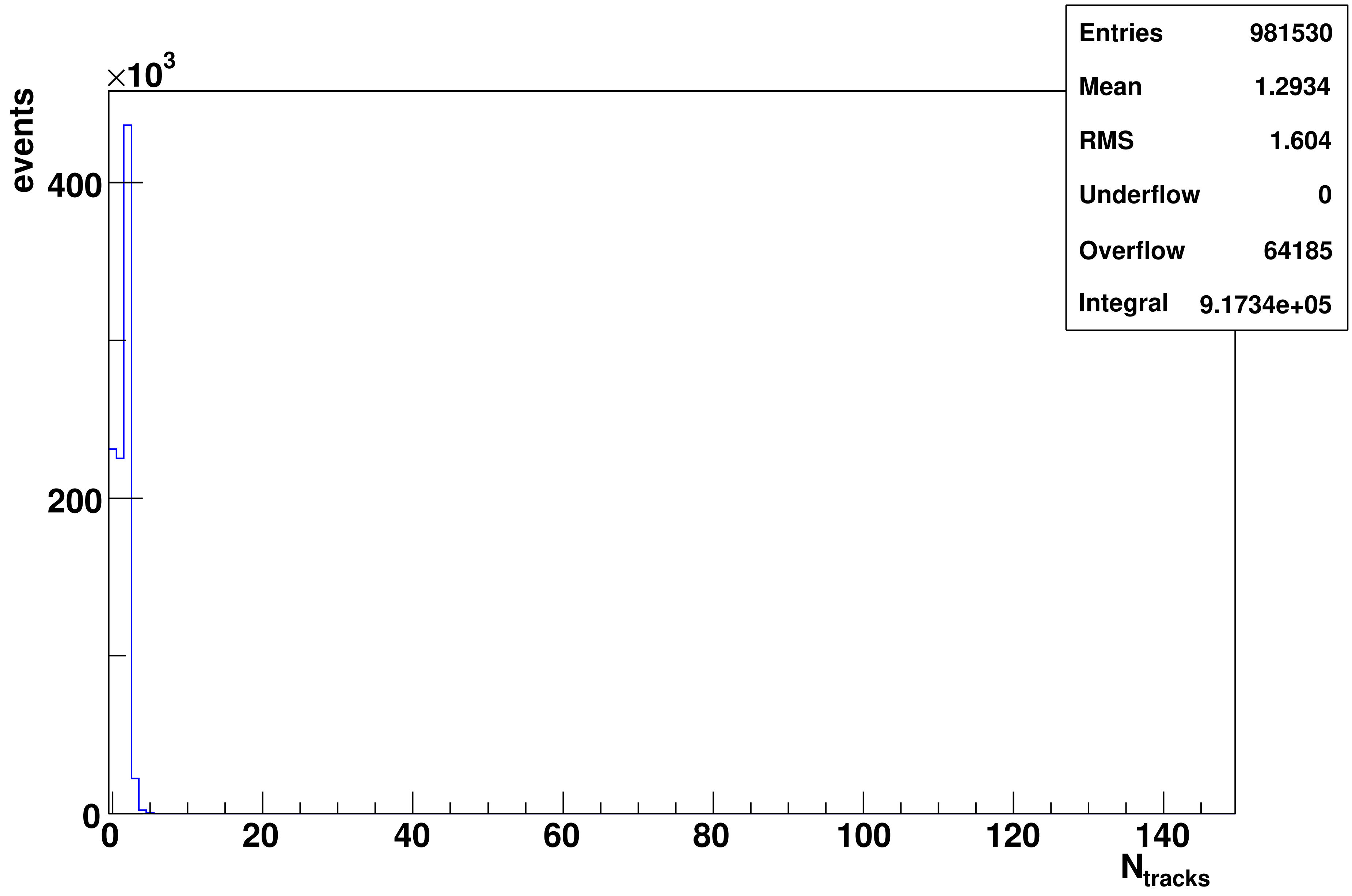
hits
SL0 local z coordinate (cm)
hits
SL1 local z coordinate (cm)
hits
SL2 local z coordinate (cm)
hits
SL3 local z coordinate (cm)
hits
SL4 local z coordinate (cm)
hits
SL5 local z coordinate (cm)
hits
SL6 local z coordinate (cm)
hits
SL7 local z coordinate (cm)



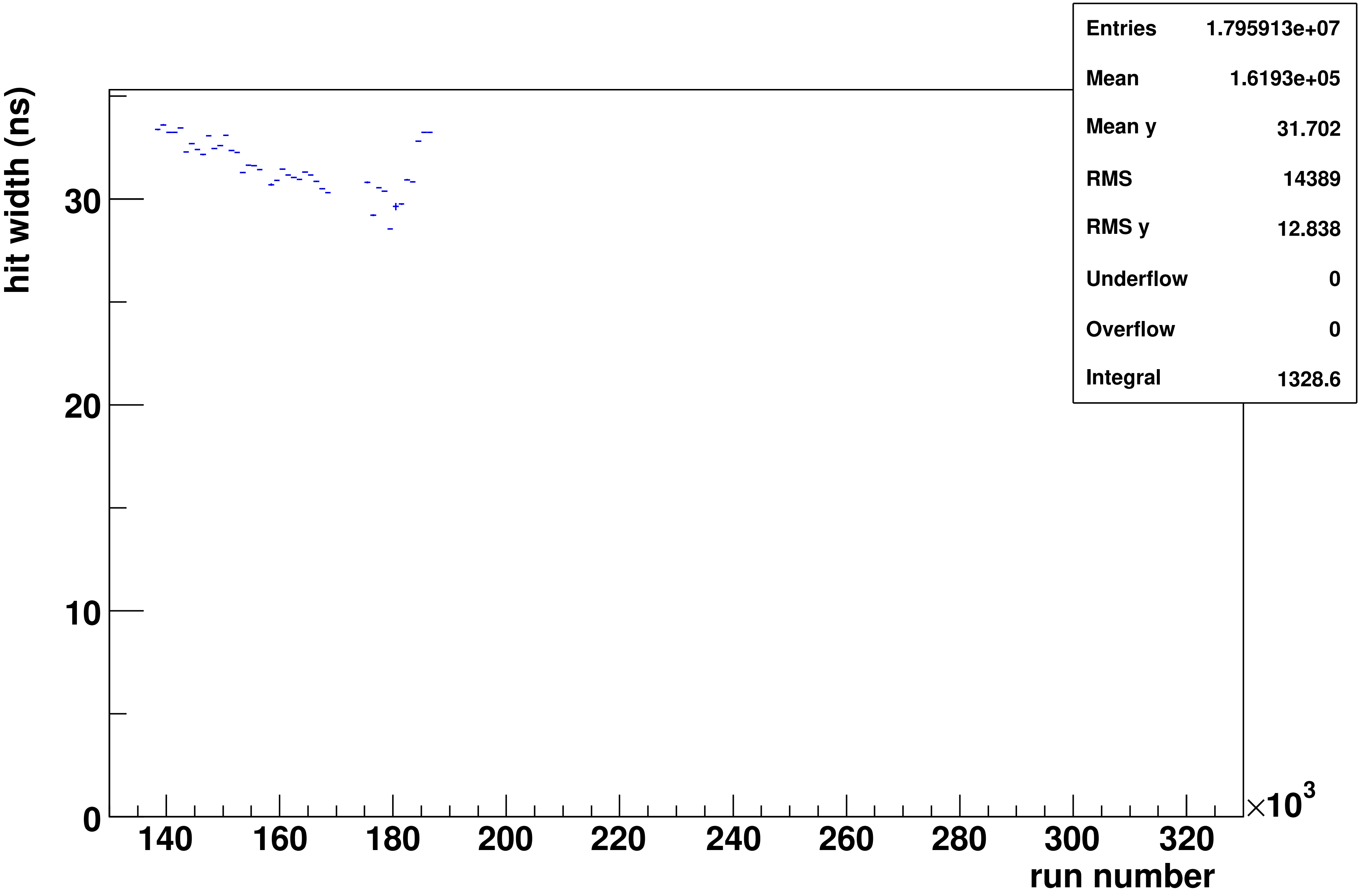
Δ sin Φ(tilt)
×10^-3
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number



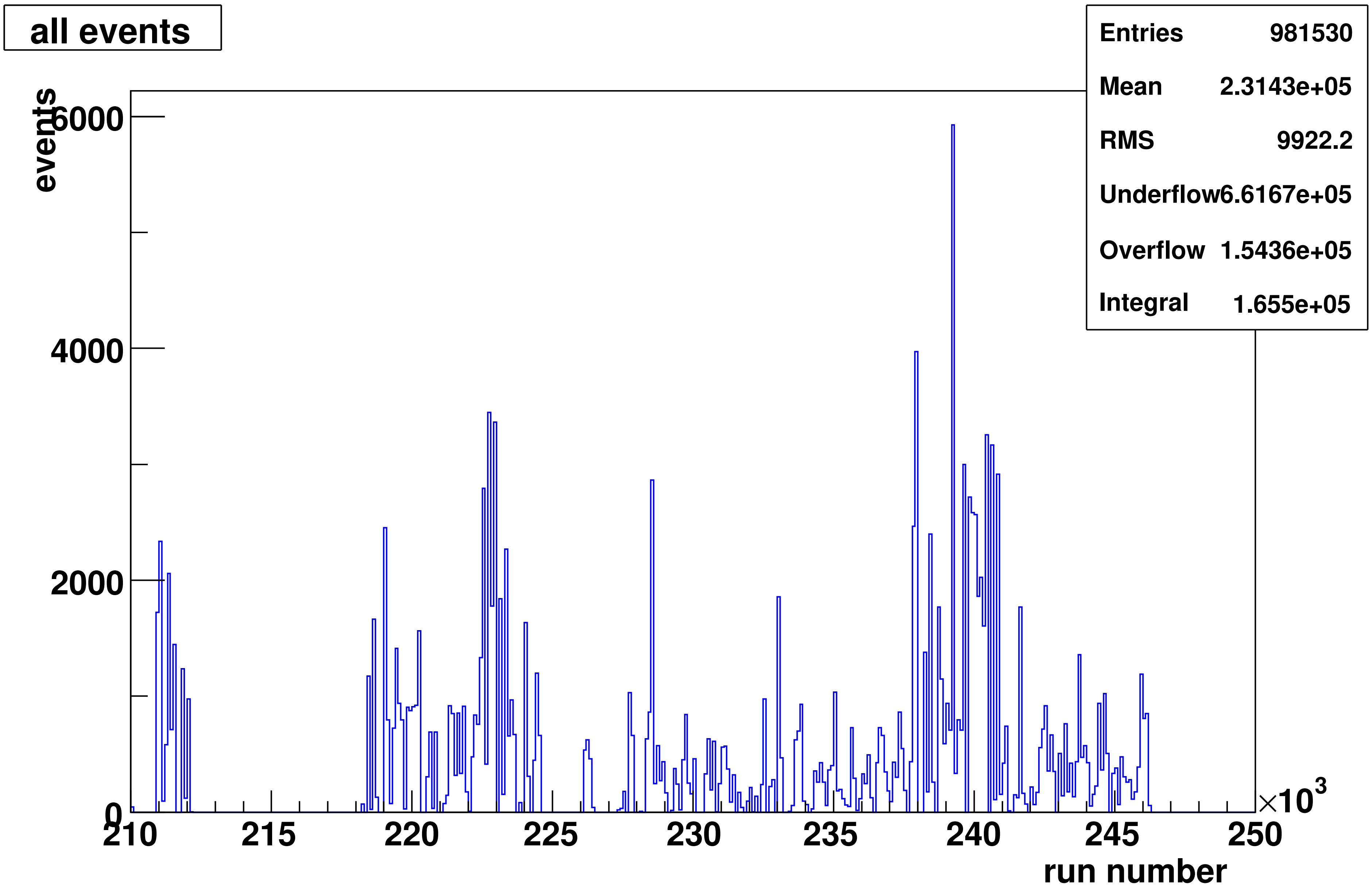
asym R Δϕ(μ m)
SL0 cell number
SL1 cell number
SL2 cell number
SL3 cell number
SL4 cell number
SL5 cell number
SL6 cell number
SL7 cell number

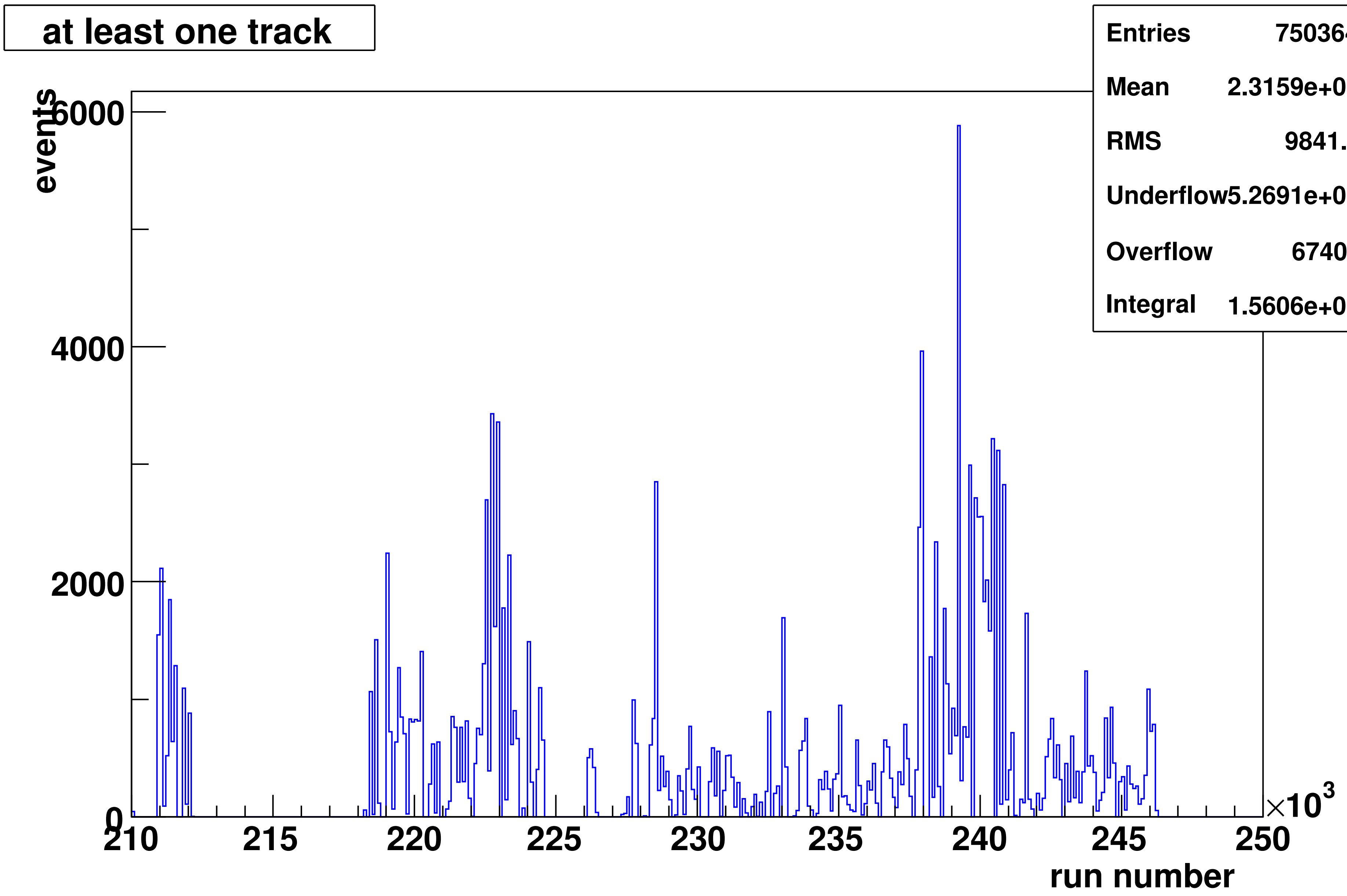


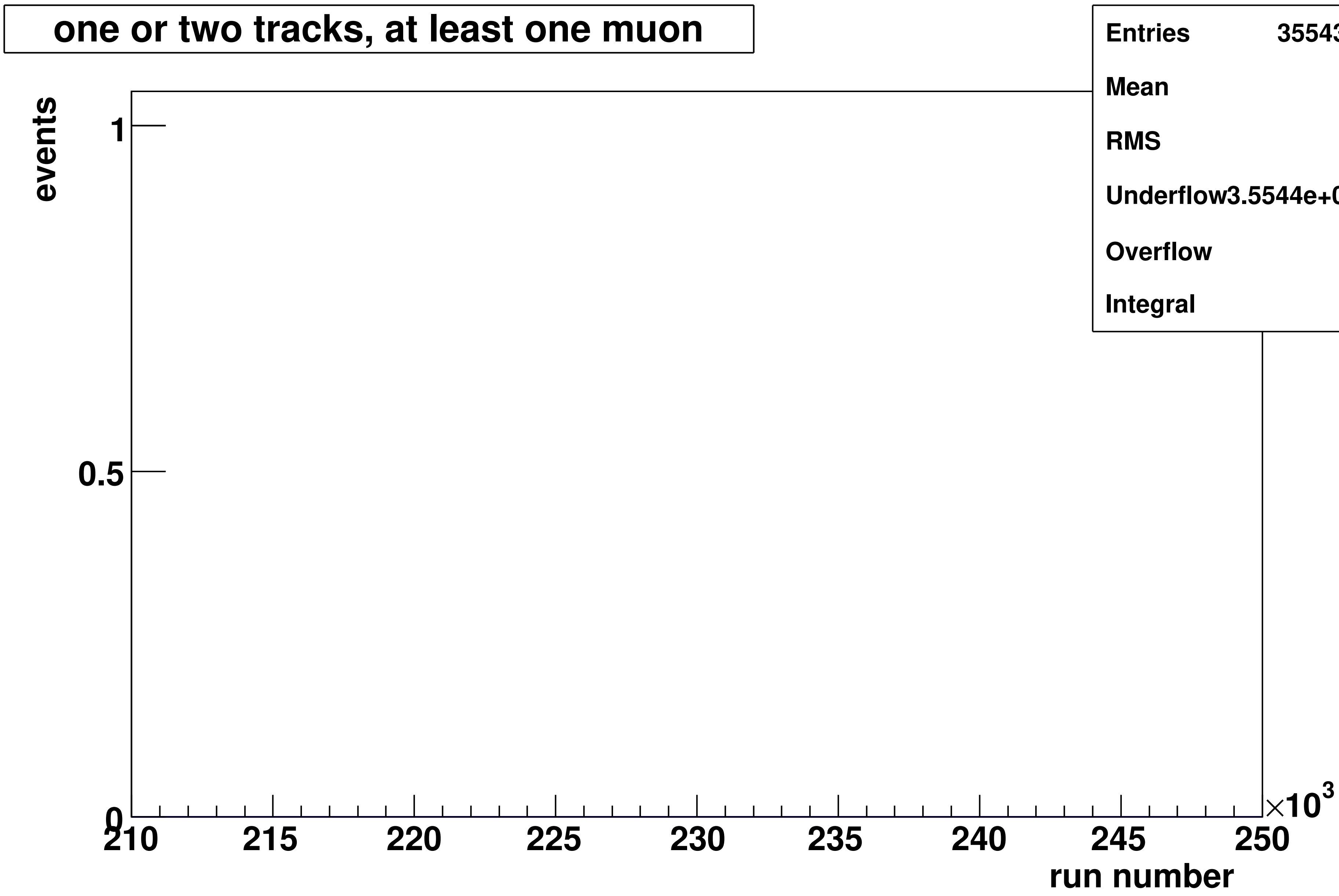
Entries 981530
Mean 1.2934
RMS 1.604
Underflow 0
Overflow 64185
Integral 9.1734e+05
×10^3
events
400
200
0
0
20
40
60
80
100
120
140
N_tracks

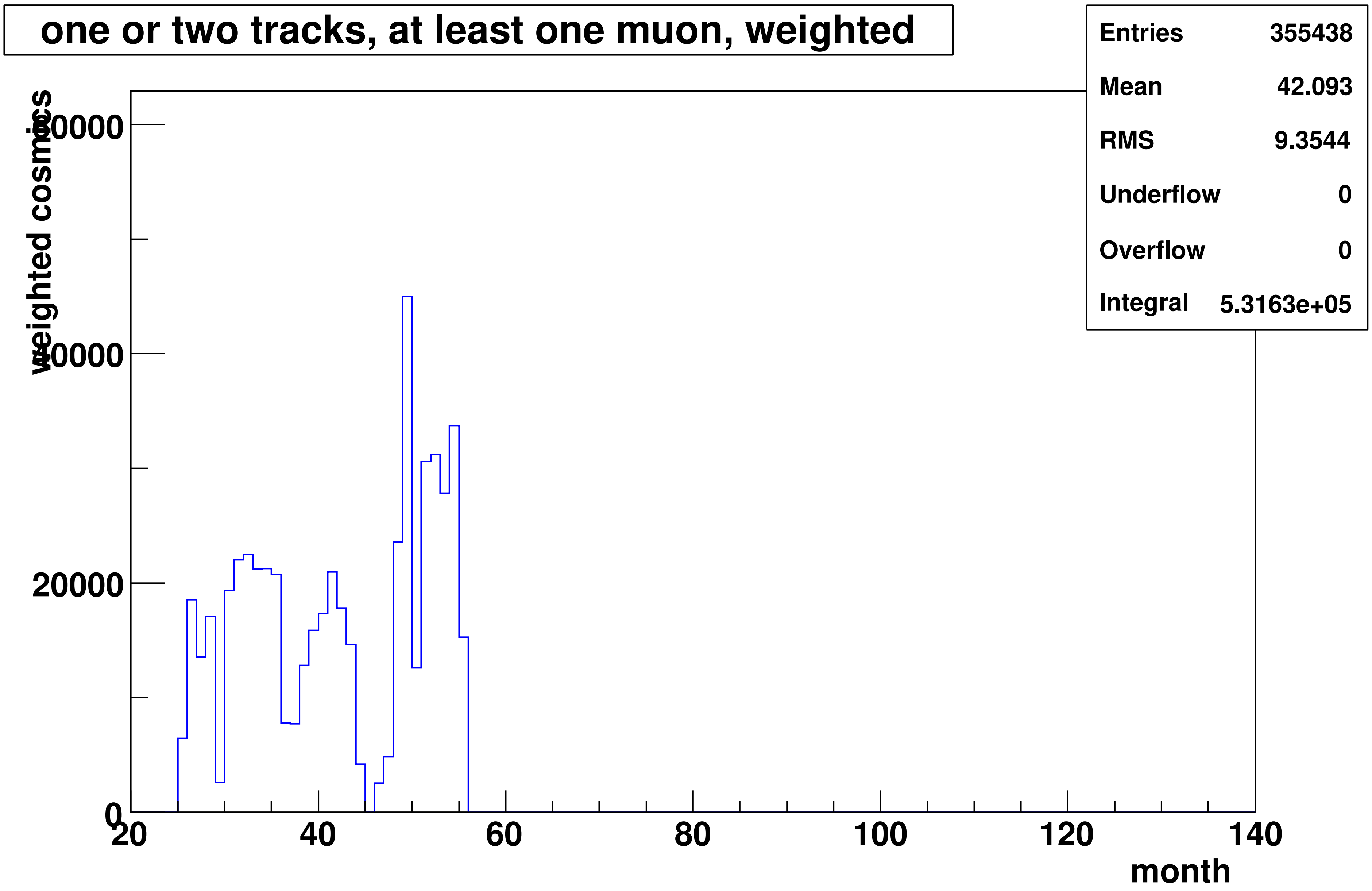


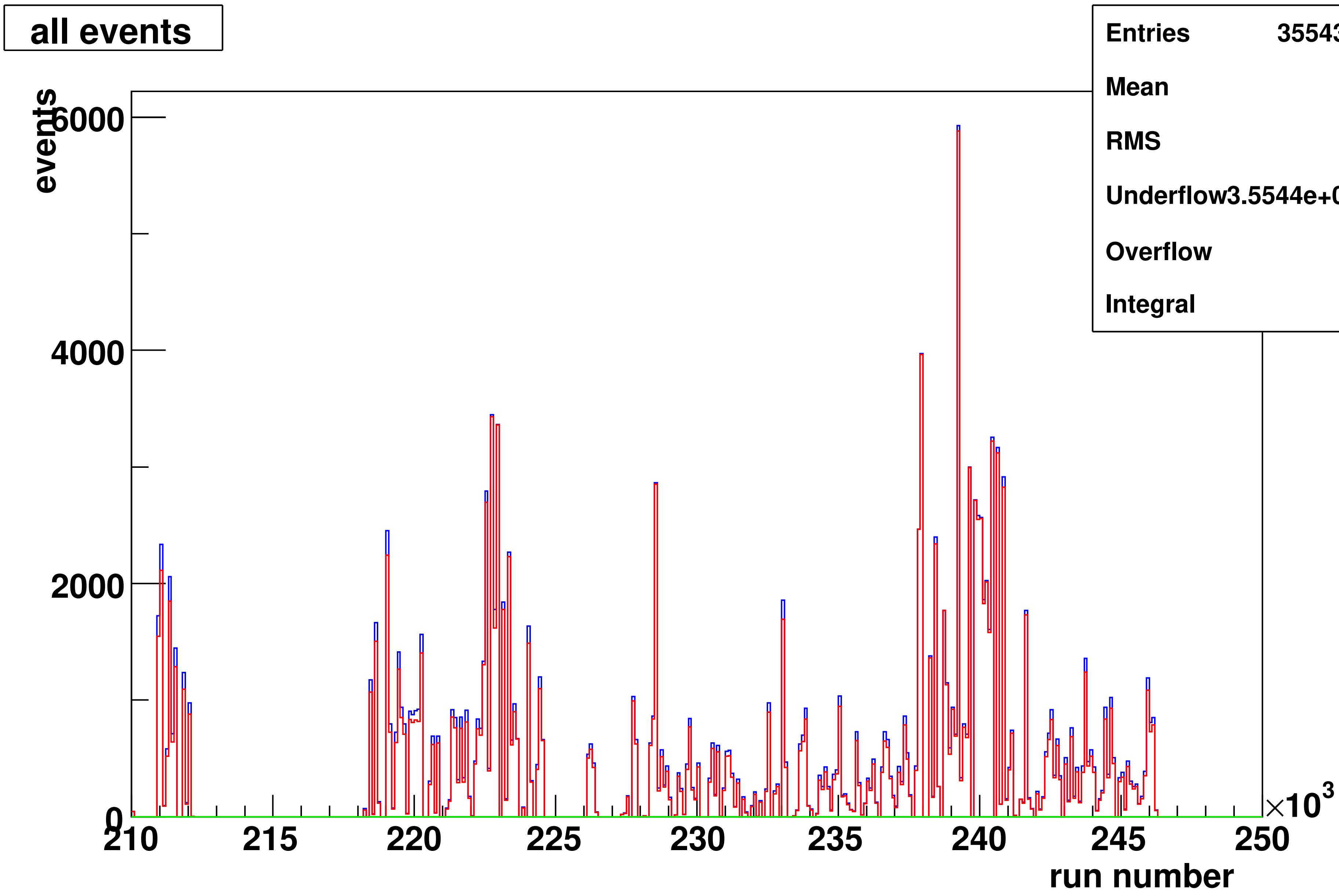
hit width (ns)
0
10
20
30
140
160
180
200
220
240
260
280
300
320
×10^3
run number
Entries 1.795913e+07
Mean 1.6193e+05
Mean y 31.702
RMS 14389
RMS y 12.838
Underflow 0
Overflow 0
Integral 1328.6

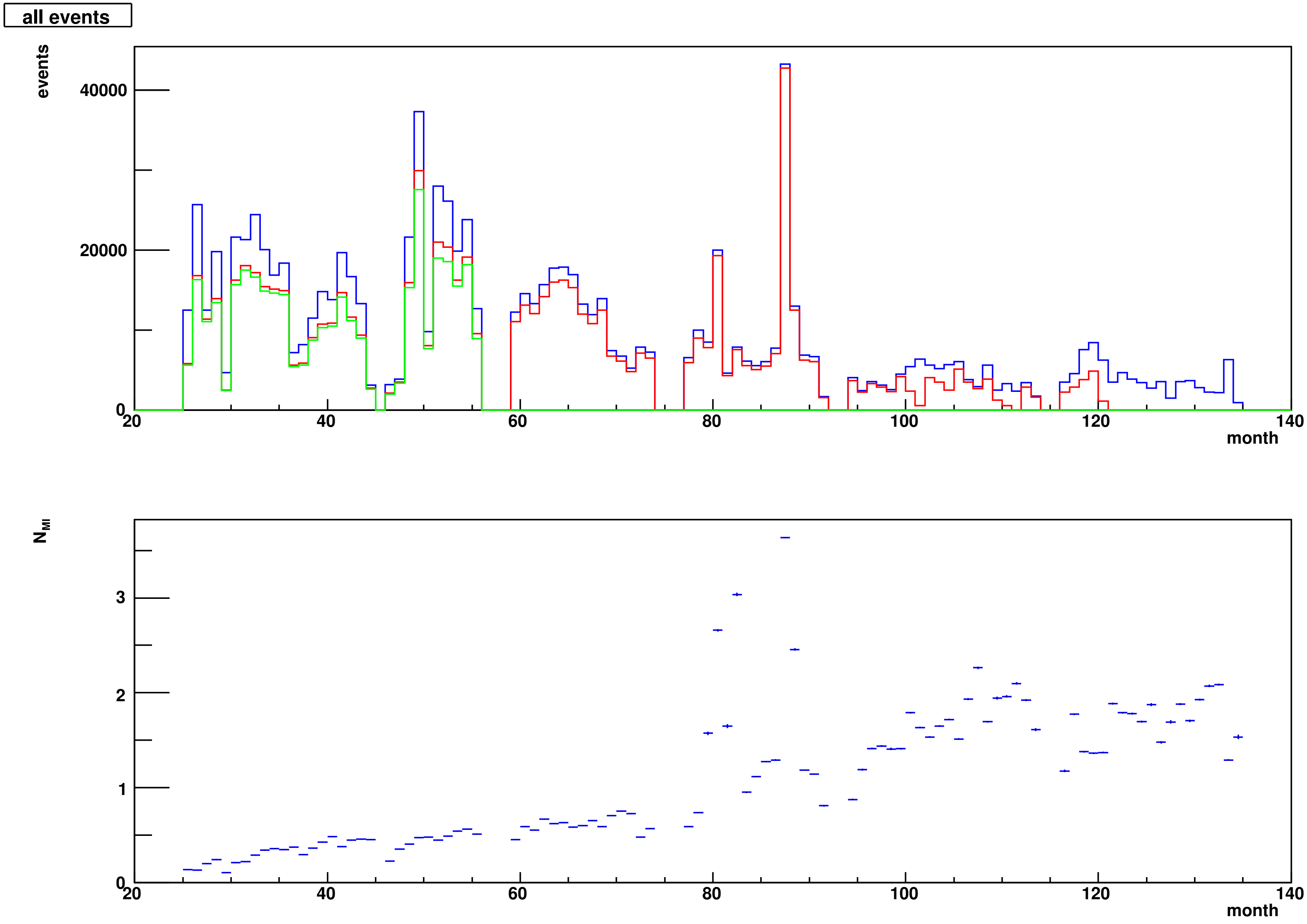

all events
Entries 981530
Mean 2.3143e+05
RMS 9922.2
Underflow 6.6167e+05
Overflow 1.5436e+05
Integral 1.655e+05
events
0
2000
4000
6000
210
215
220
225
230
235
240
245
250
×10^3
run number


at least one track
Entries 750364
Mean 2.3159e+05
RMS 9841.9
Underflow5.2691e+05
Overflow 67402
Integral 1.5606e+05
events
6000
4000
2000
0
210
215
220
225
230
235
240
245
250
×10^3
run number

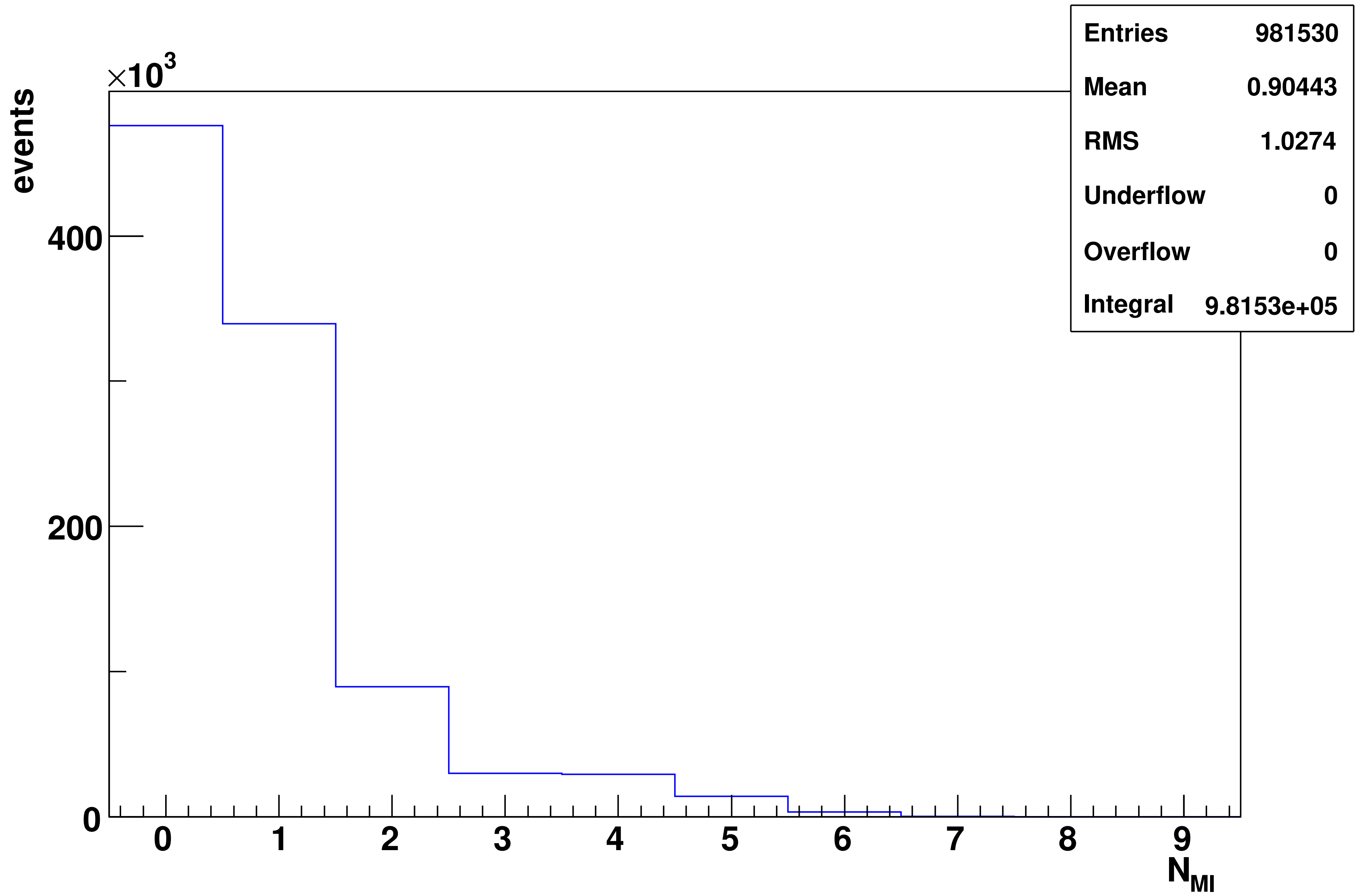

one or two tracks, at least one muon
Entries 355438
Mean 0
RMS 0
Underflow3.5544e+05
Overflow 0
Integral 0
events
1
0.5
0
210
215
220
225
230
235
240
245
250
$\times 10^3$
run number


one or two tracks, at least one muon, weighted
Entries 355438
Mean 42.093
RMS 9.3544
Underflow 0
Overflow 0
Integral 5.3163e+05
weighted cosmics
60000
40000
20000
0
20
40
60
80
100
120
140
month

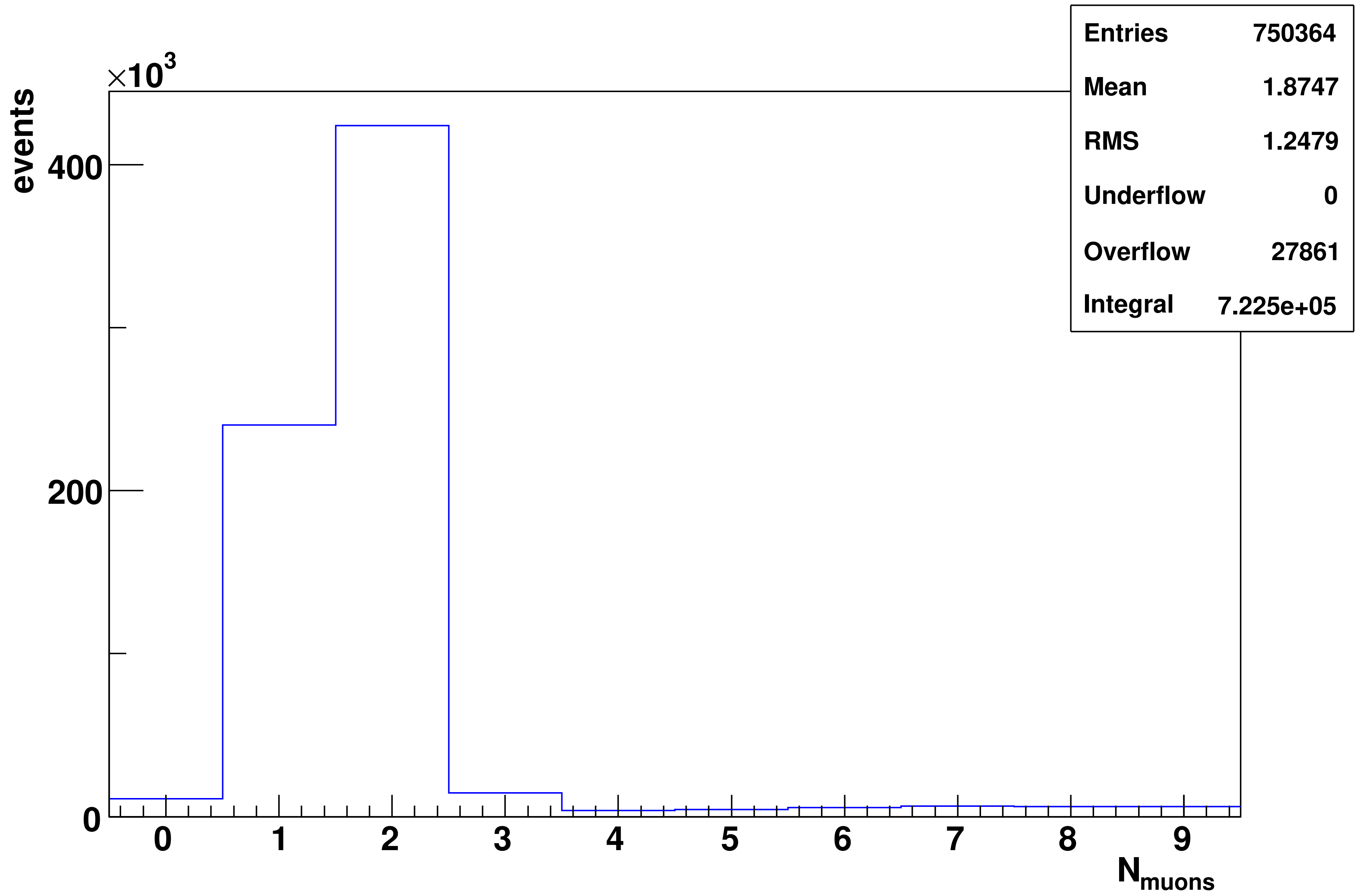

all events
Entries 355438
Mean 0
RMS 0
Underflow 3.5544e+05
Overflow 0
Integral 0
events
6000
4000
2000
0
210
215
220
225
230
235
240
245
250
×10^3
run number



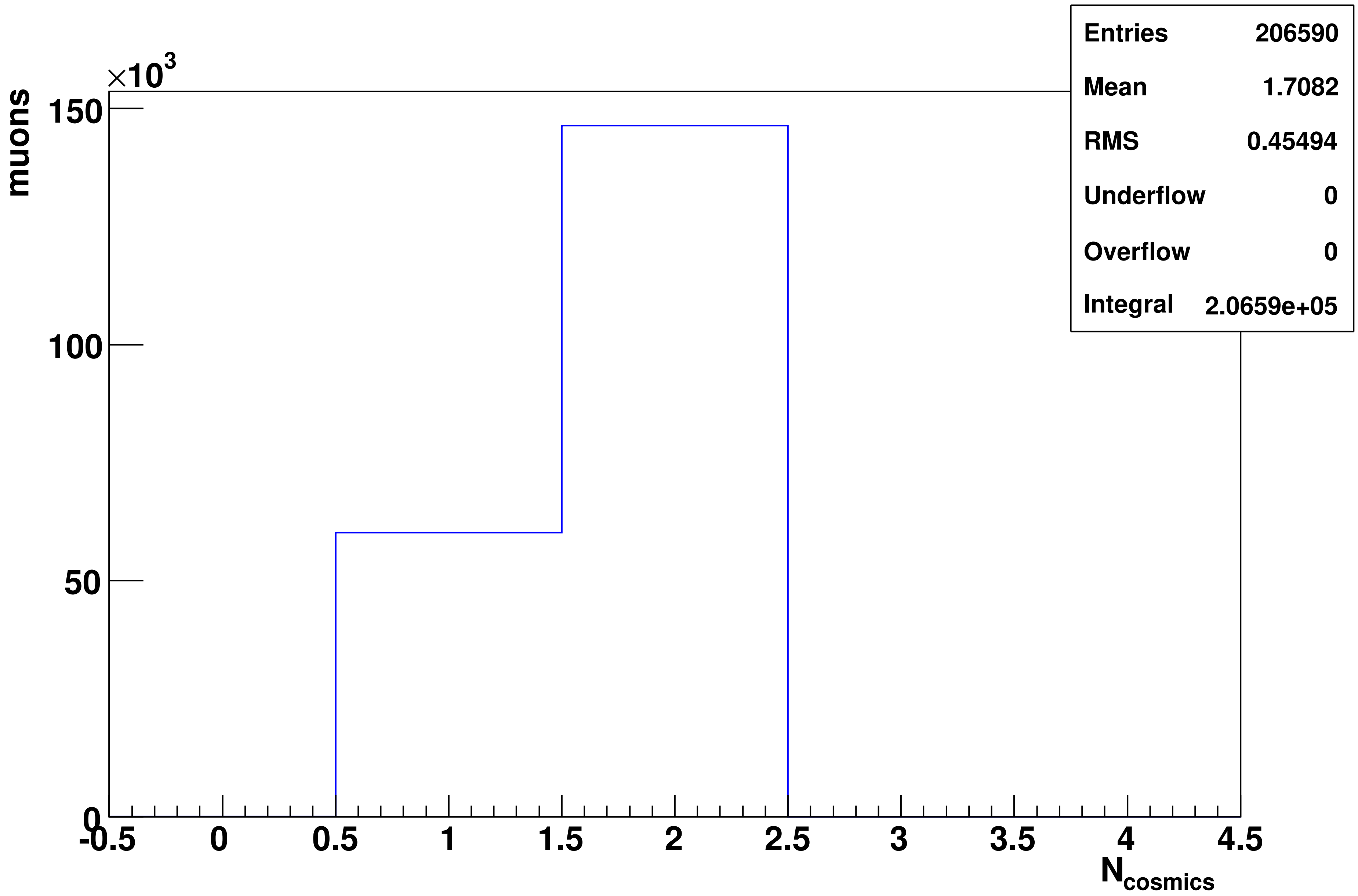
all events
events
40000
20000
0
20
40
60
80
100
120
140
month
N_MI
3
2
1
0
20
40
60
80
100
120
140
month



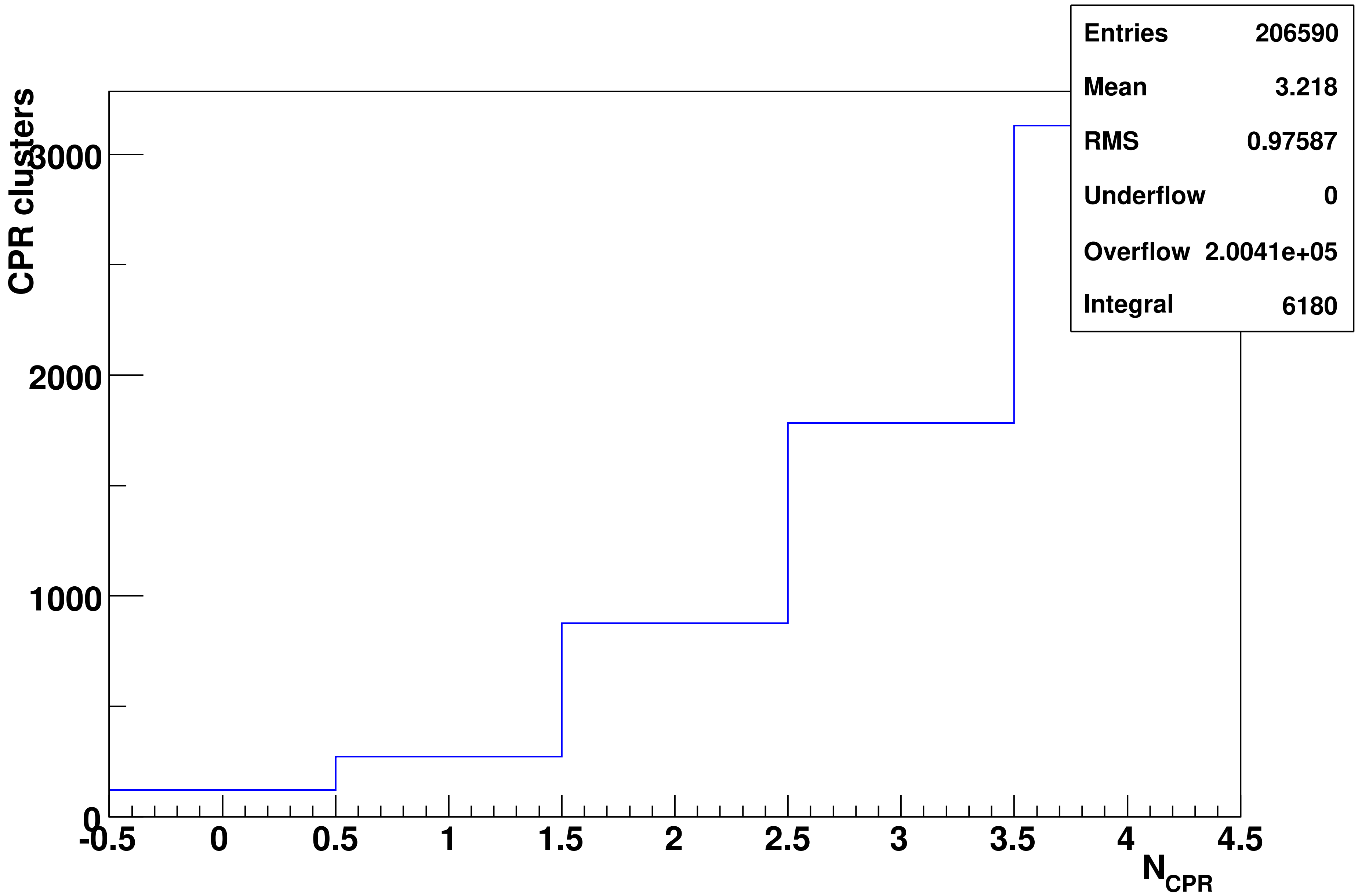
events
$\times 10^3$
400
200
0
0
1
2
3
4
5
6
7
8
9
N_{MI}
Entries 981530
Mean 0.90443
RMS 1.0274
Underflow 0
Overflow 0
Integral 9.8153e+05



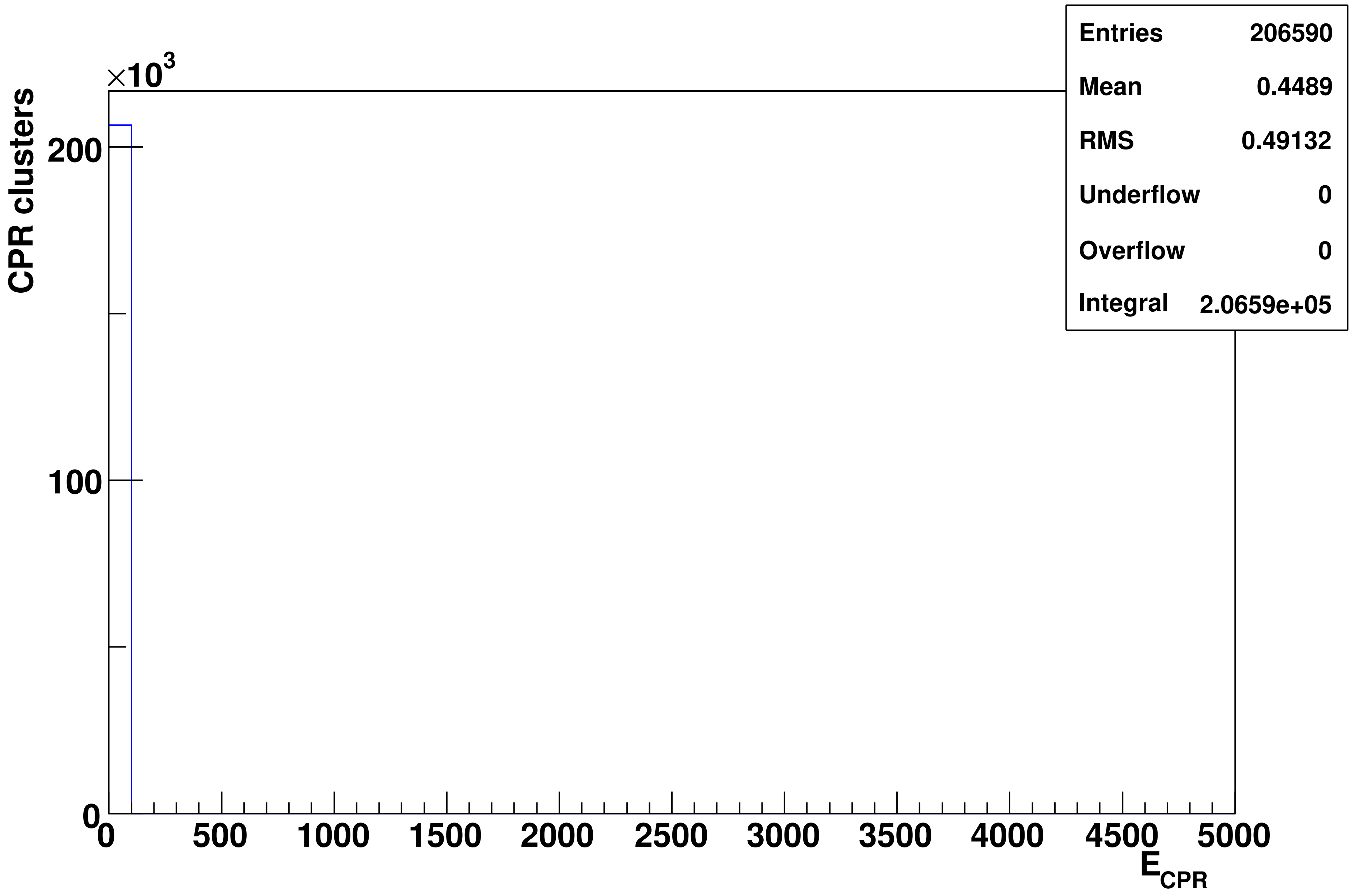
Entries 750364
Mean 1.8747
RMS 1.2479
Underflow 0
Overflow 27861
Integral 7.225e+05
×10^3
events
400
200
0
0 1 2 3 4 5 6 7 8 9
N_muons



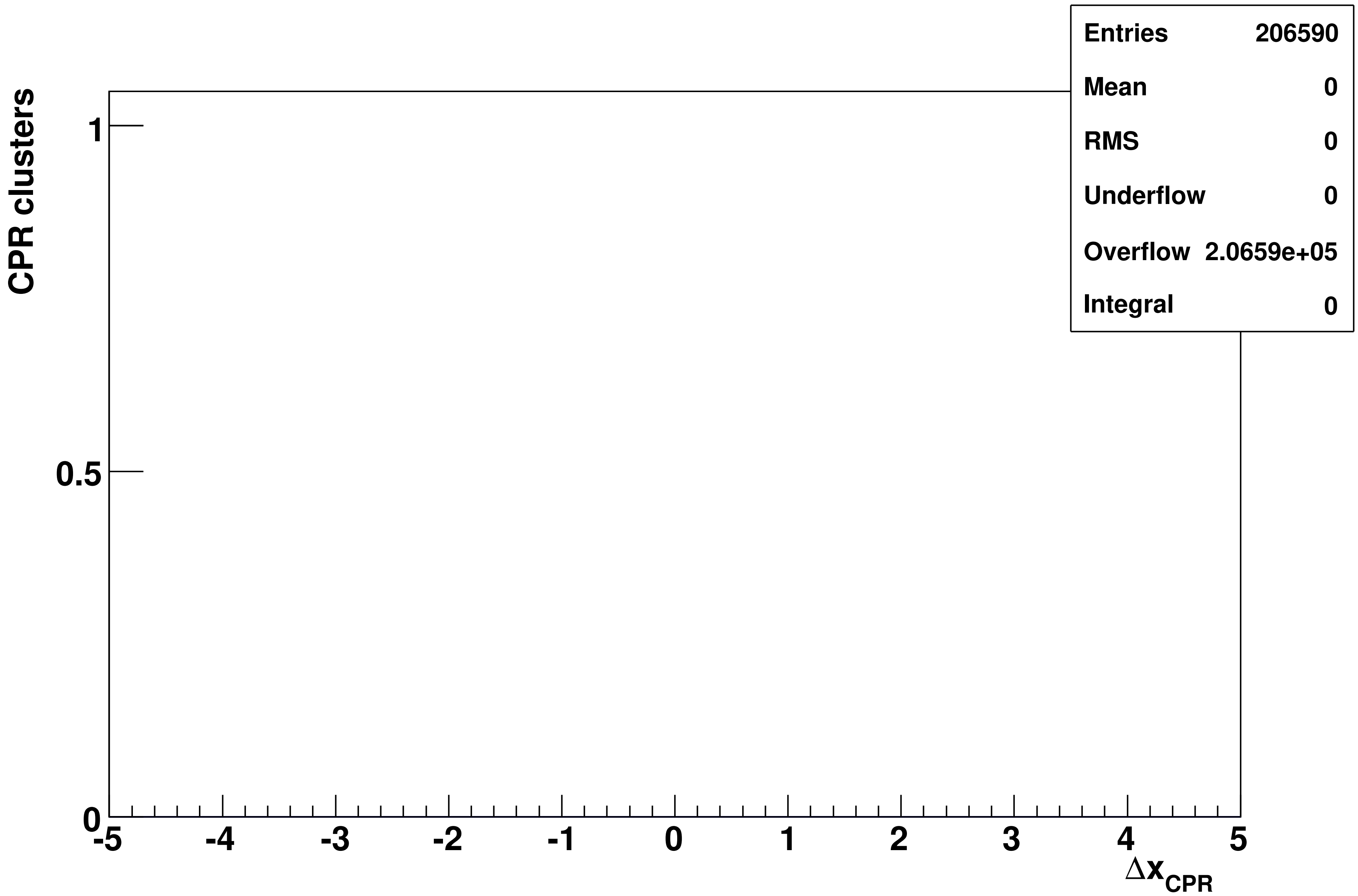
Entries 206590
Mean 1.7082
RMS 0.45494
Underflow 0
Overflow 0
Integral 2.0659e+05
×10^3
muons
150
100
50
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_cosmics



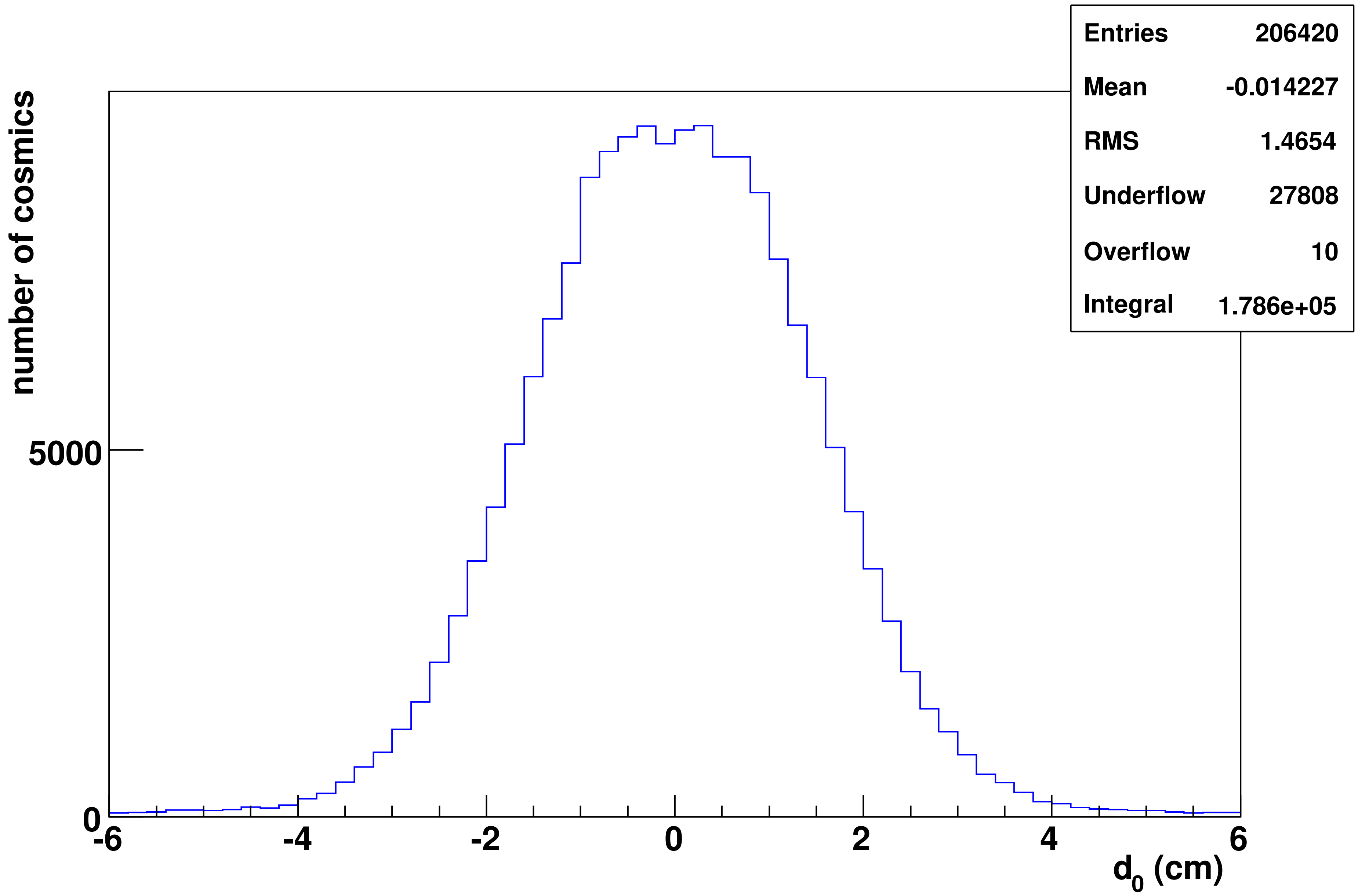
Entries 206590
Mean 3.218
RMS 0.97587
Underflow 0
Overflow 2.0041e+05
Integral 6180
CPR clusters
3000
2000
1000
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
N_{CPR}

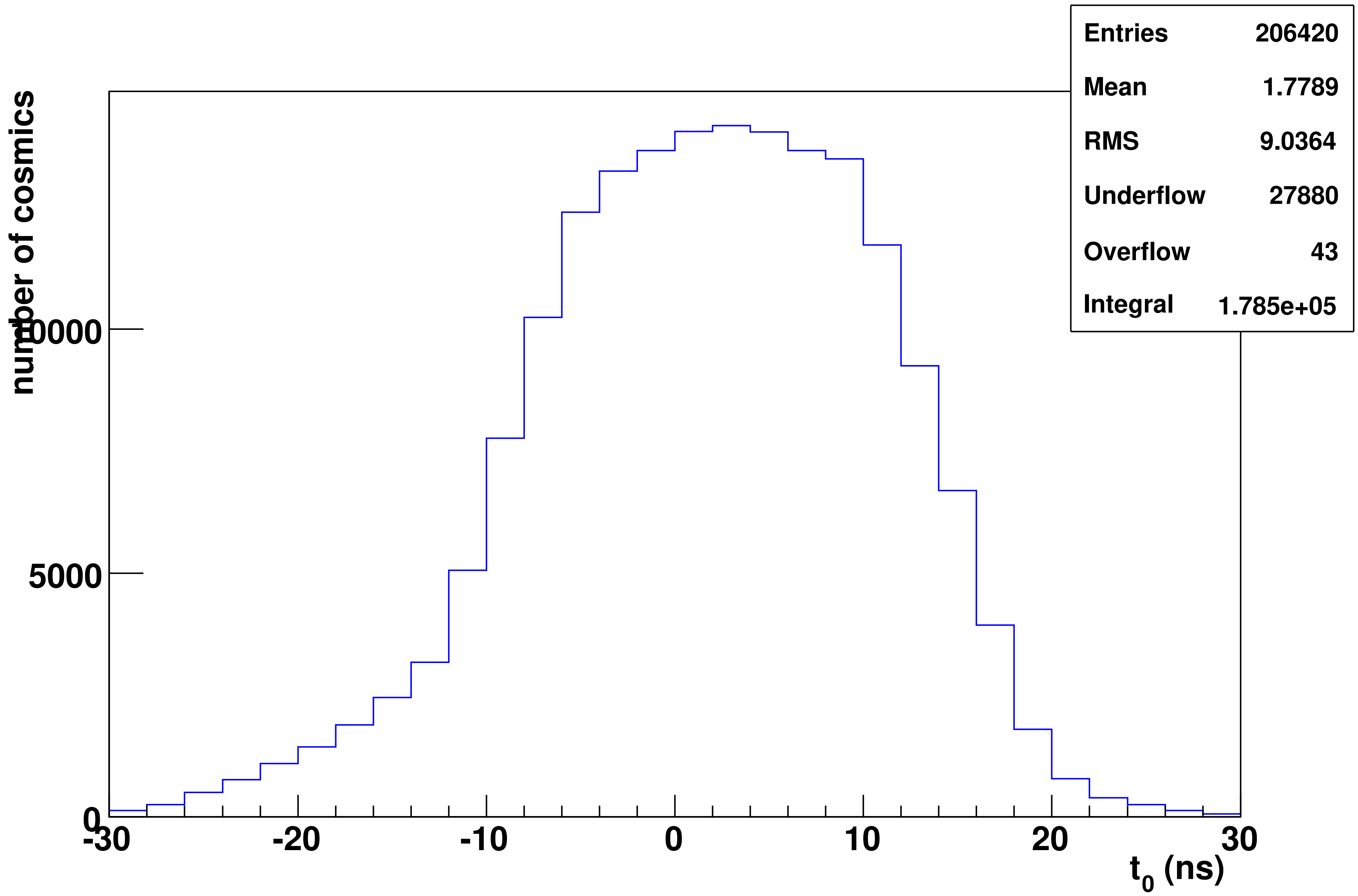


Entries 206590
Mean 0.4489
RMS 0.49132
Underflow 0
Overflow 0
Integral 2.0659e+05
CPR clusters
×10^3
200
100
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
E_CPR

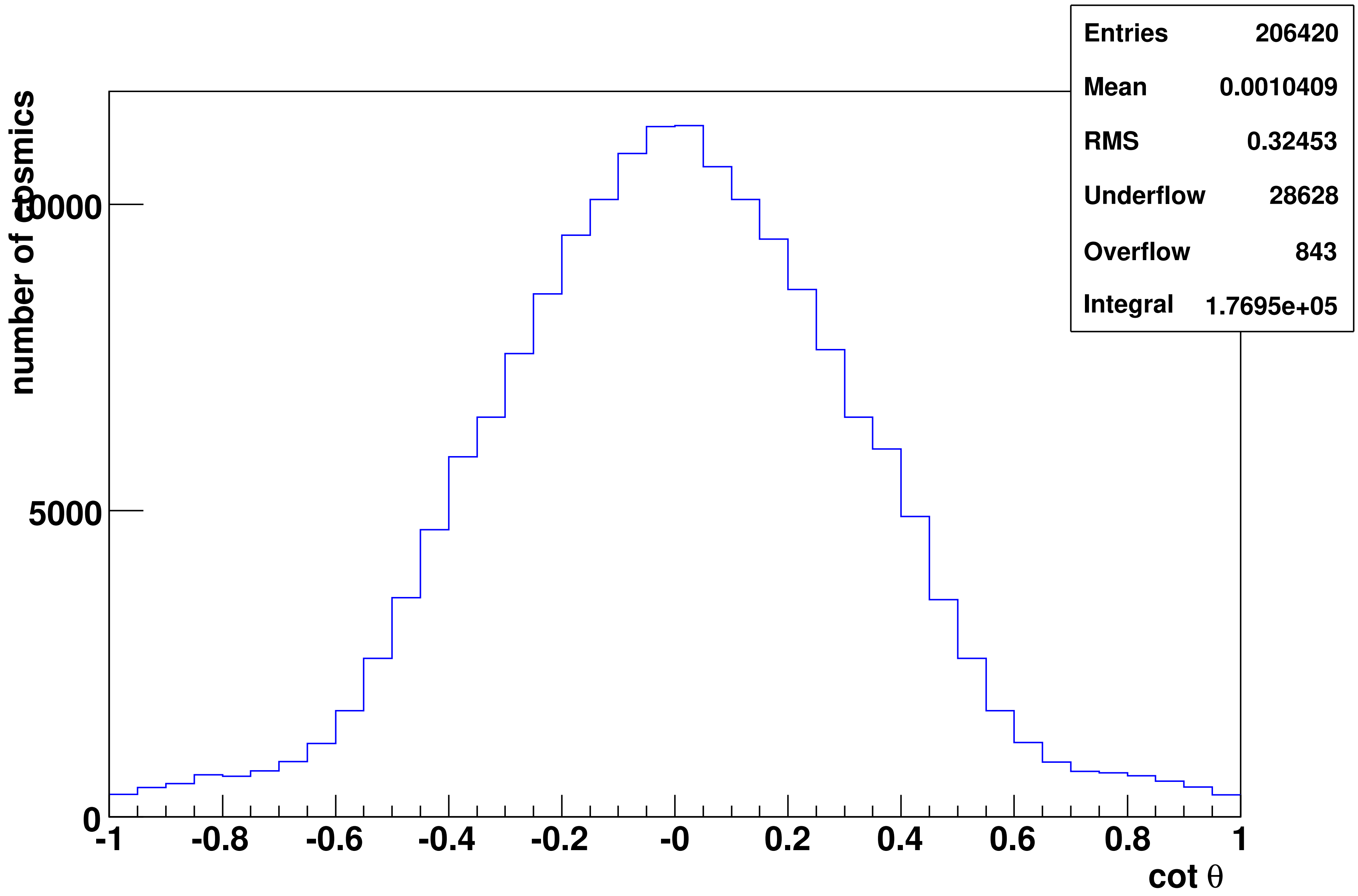


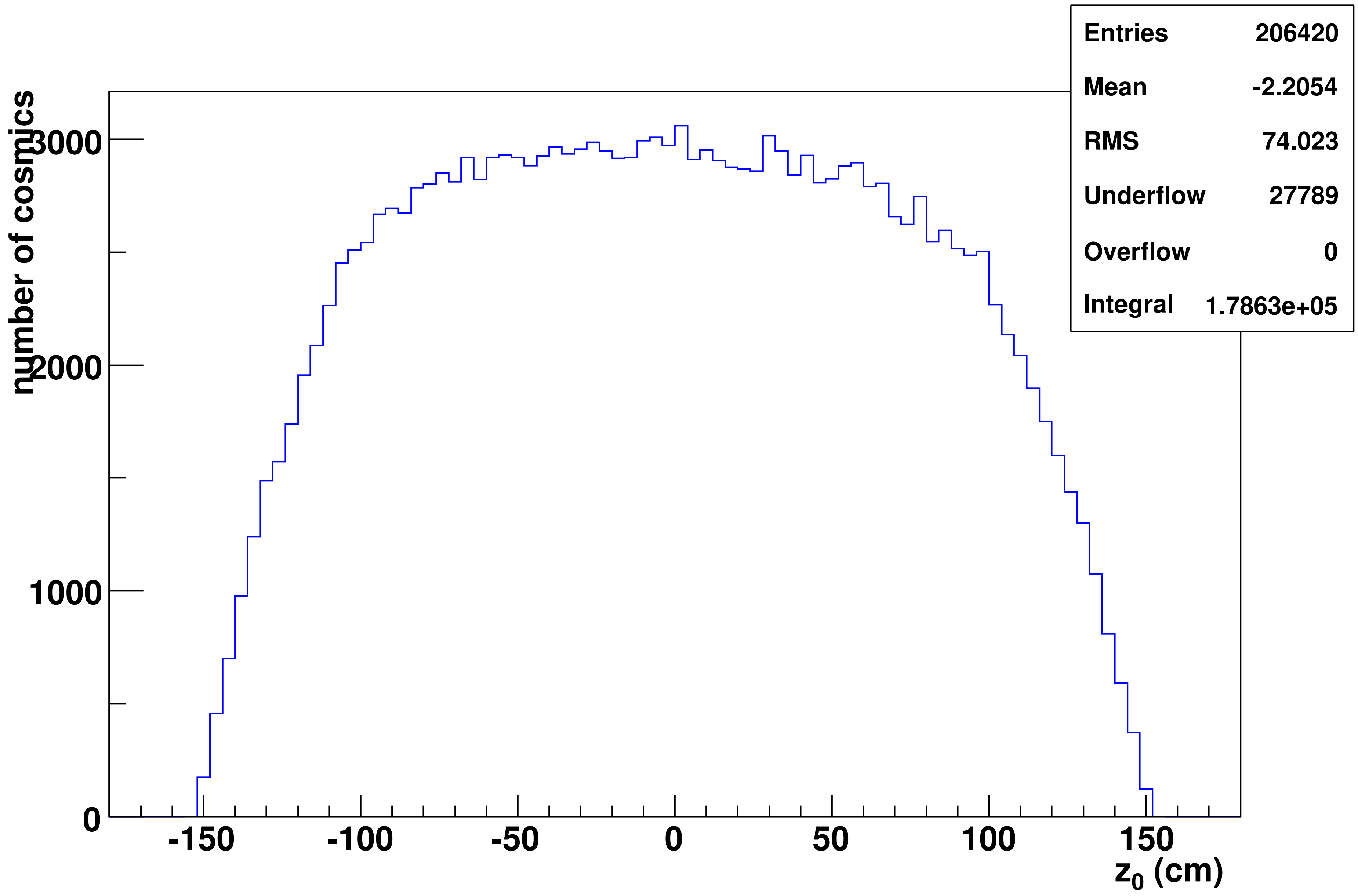
Entries 206590
Mean 0
RMS 0
Underflow 0
Overflow 2.0659e+05
Integral 0
CPR clusters
1
0.5
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
Δx_{CPR}


Entries 206420
Mean -0.014227
RMS 1.4654
Underflow 27808
Overflow 10
Integral 1.786e+05
number of cosmics
5000
0
-6
-4
-2
0
2
4
6
d0 (cm)

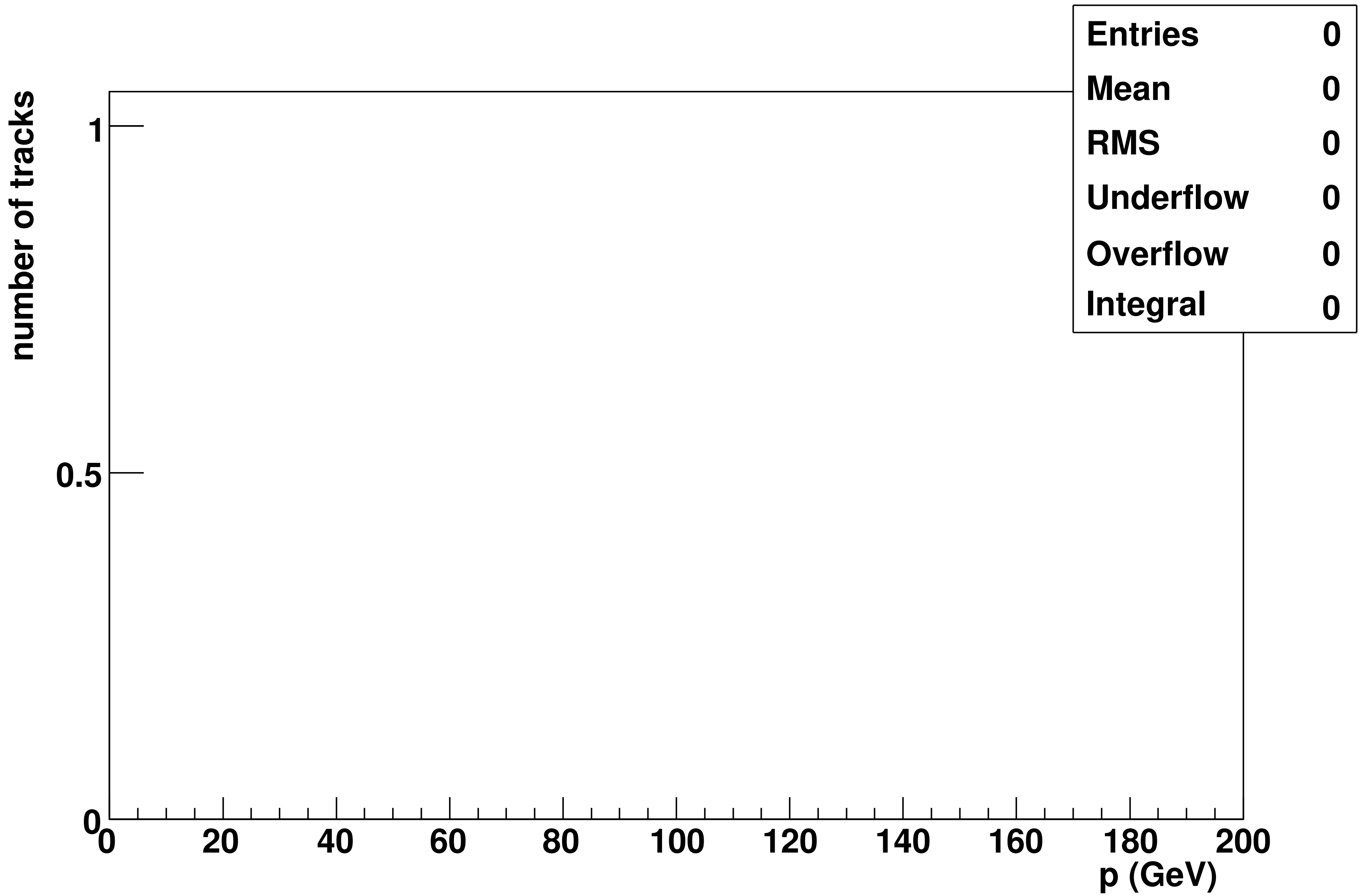


Entries 206420
Mean 1.7789
RMS 9.0364
Underflow 27880
Overflow 43
Integral 1.785e+05
number of cosmics
10000
5000
0
-30
-20
-10
0
10
20
30
t_0 (ns)

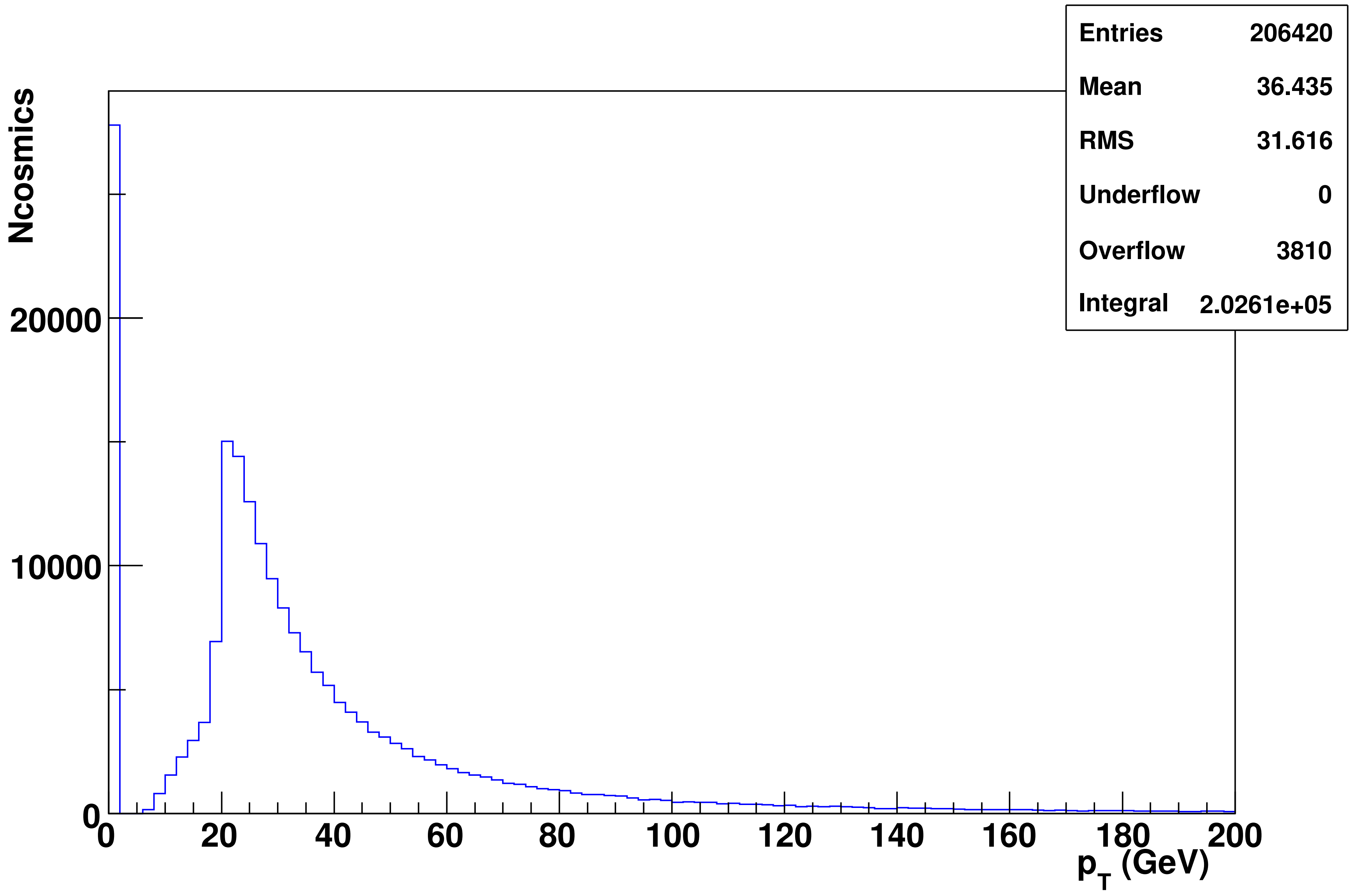

Entries 206420
Mean 0.0010409
RMS 0.32453
Underflow 28628
Overflow 843
Integral 1.7695e+05
number of cosmics
10000
5000
0
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
cot θ



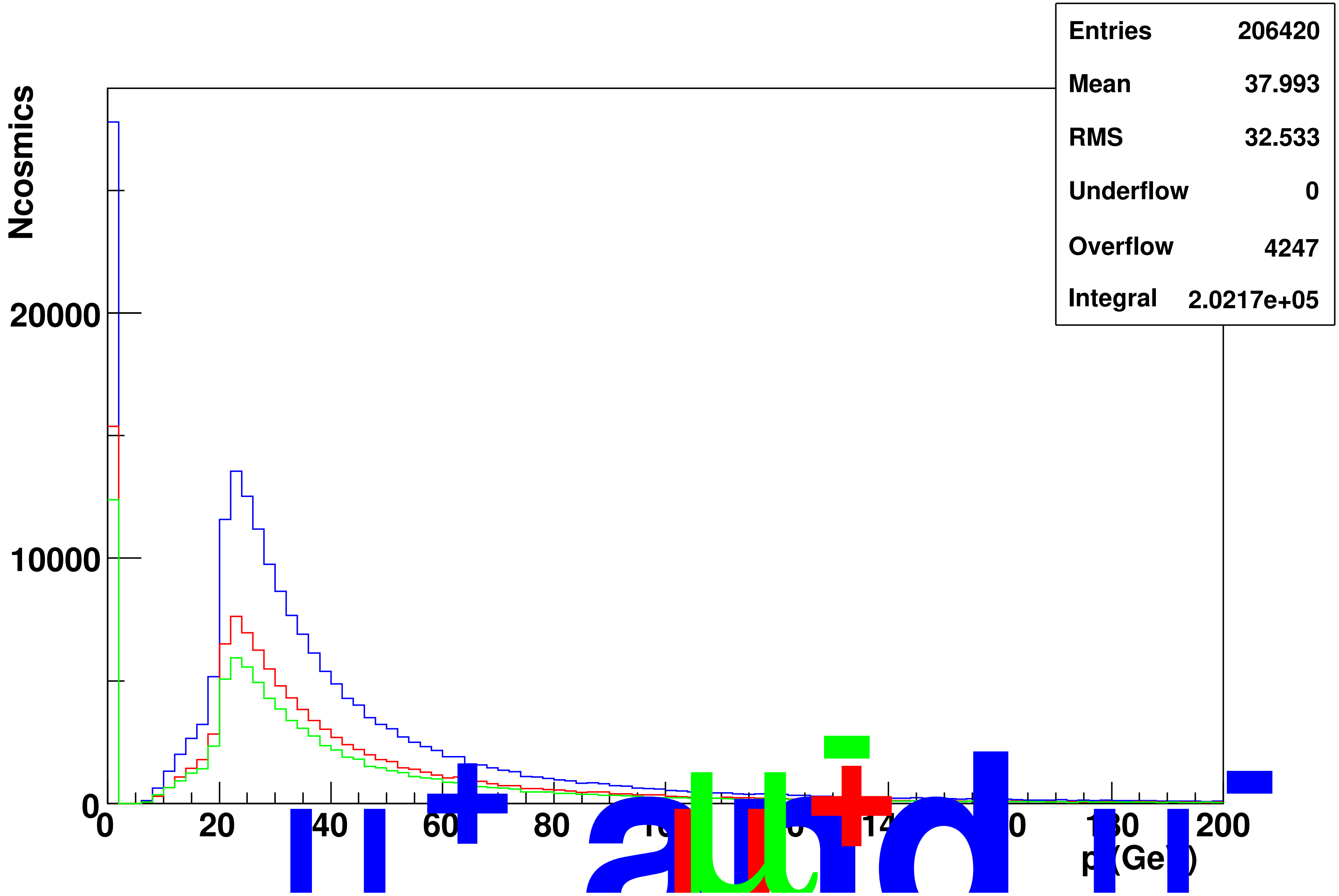
Entries 206420
Mean -2.2054
RMS 74.023
Underflow 27789
Overflow 0
Integral 1.7863e+05
number of cosmics
3000
2000
1000
0
-150
-100
-50
0
50
100
150
z_0 (cm)



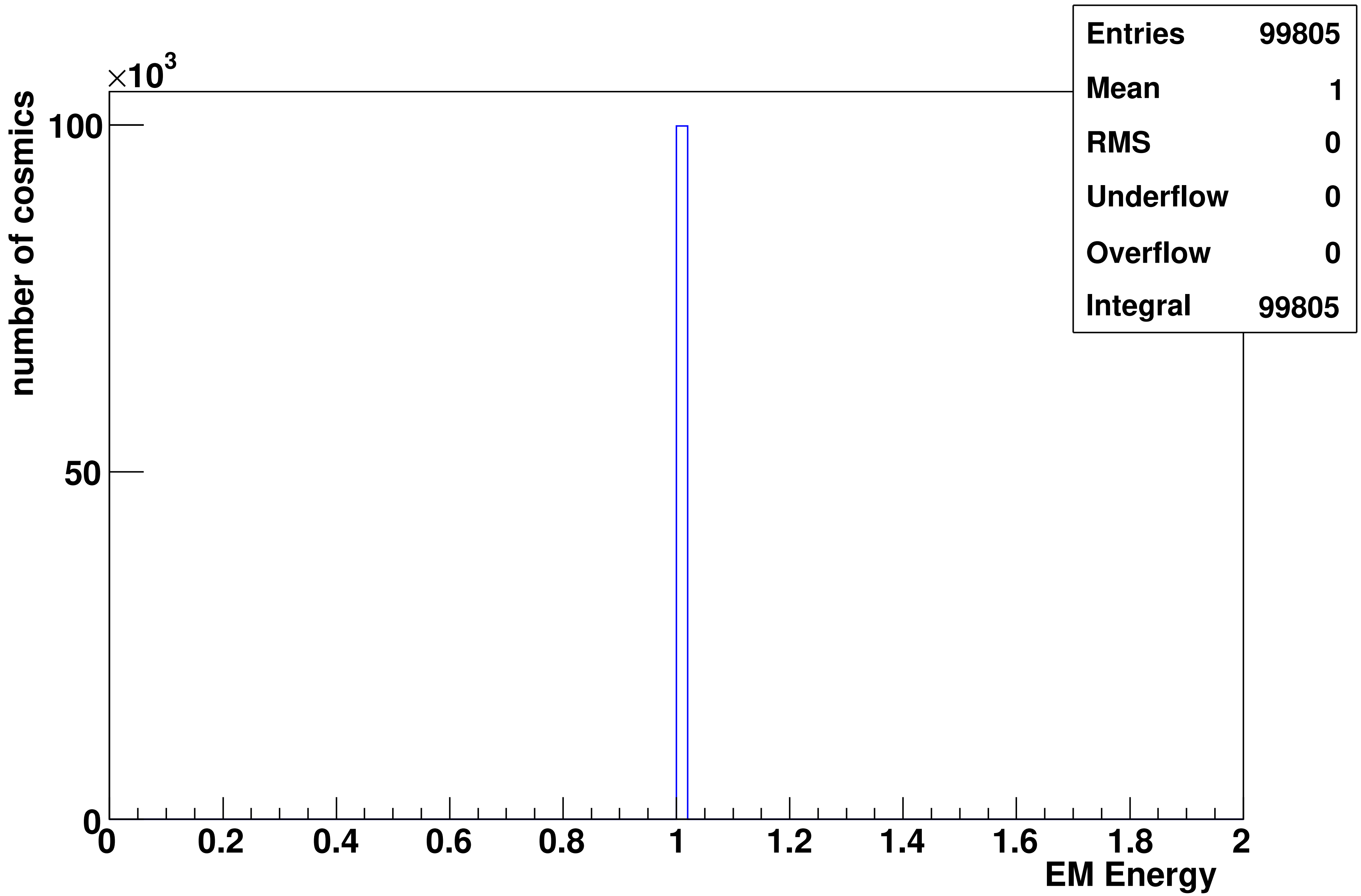
Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Integral 0
number of tracks
1
0.5
0
0
20
40
60
80
100
120
140
160
180
200
p (GeV)



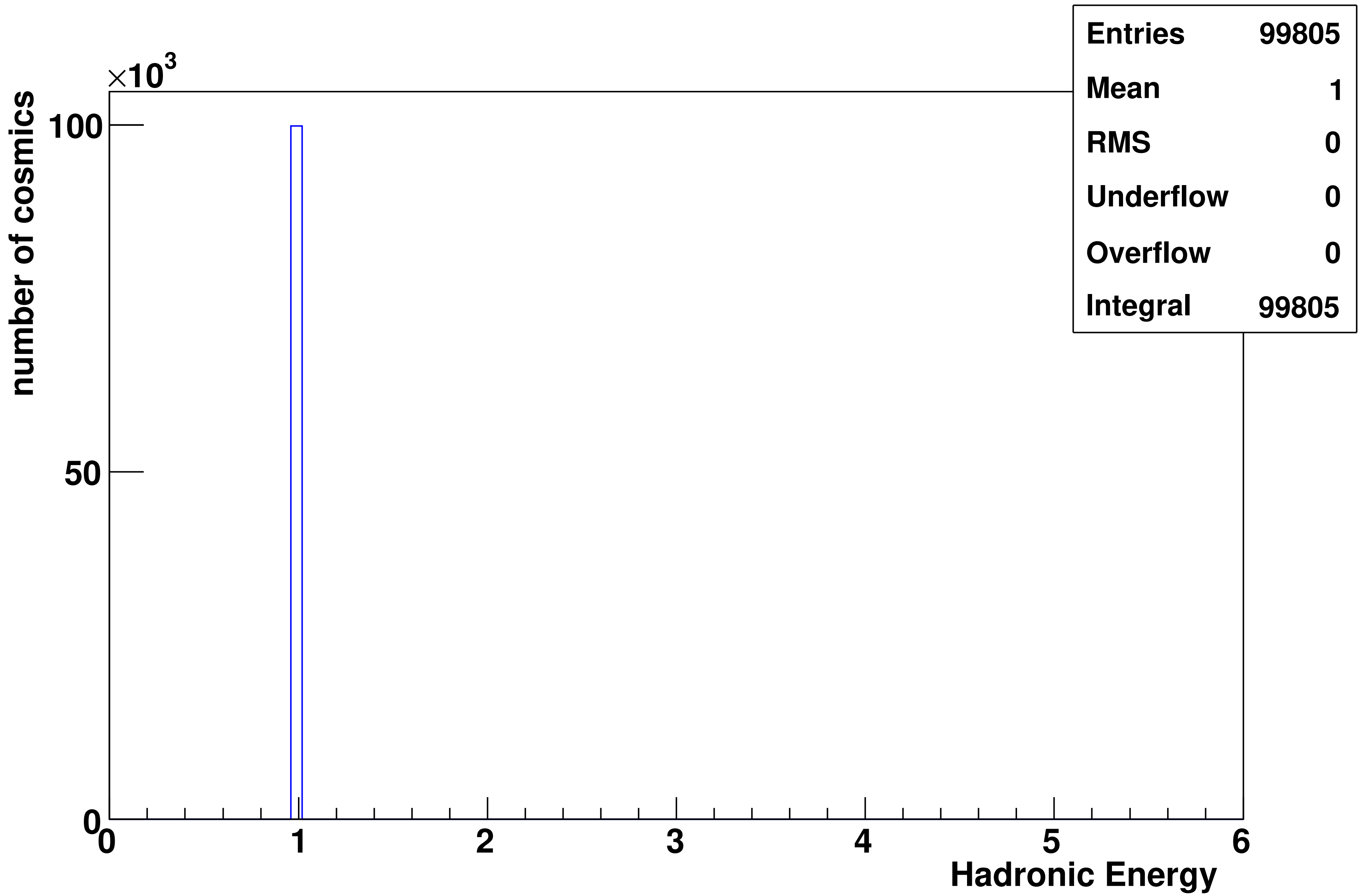
Entries 206420
Mean 36.435
RMS 31.616
Underflow 0
Overflow 3810
Integral 2.0261e+05
Ncosmics
20000
10000
0
0
20
40
60
80
100
120
140
160
180
200
p_T (GeV)

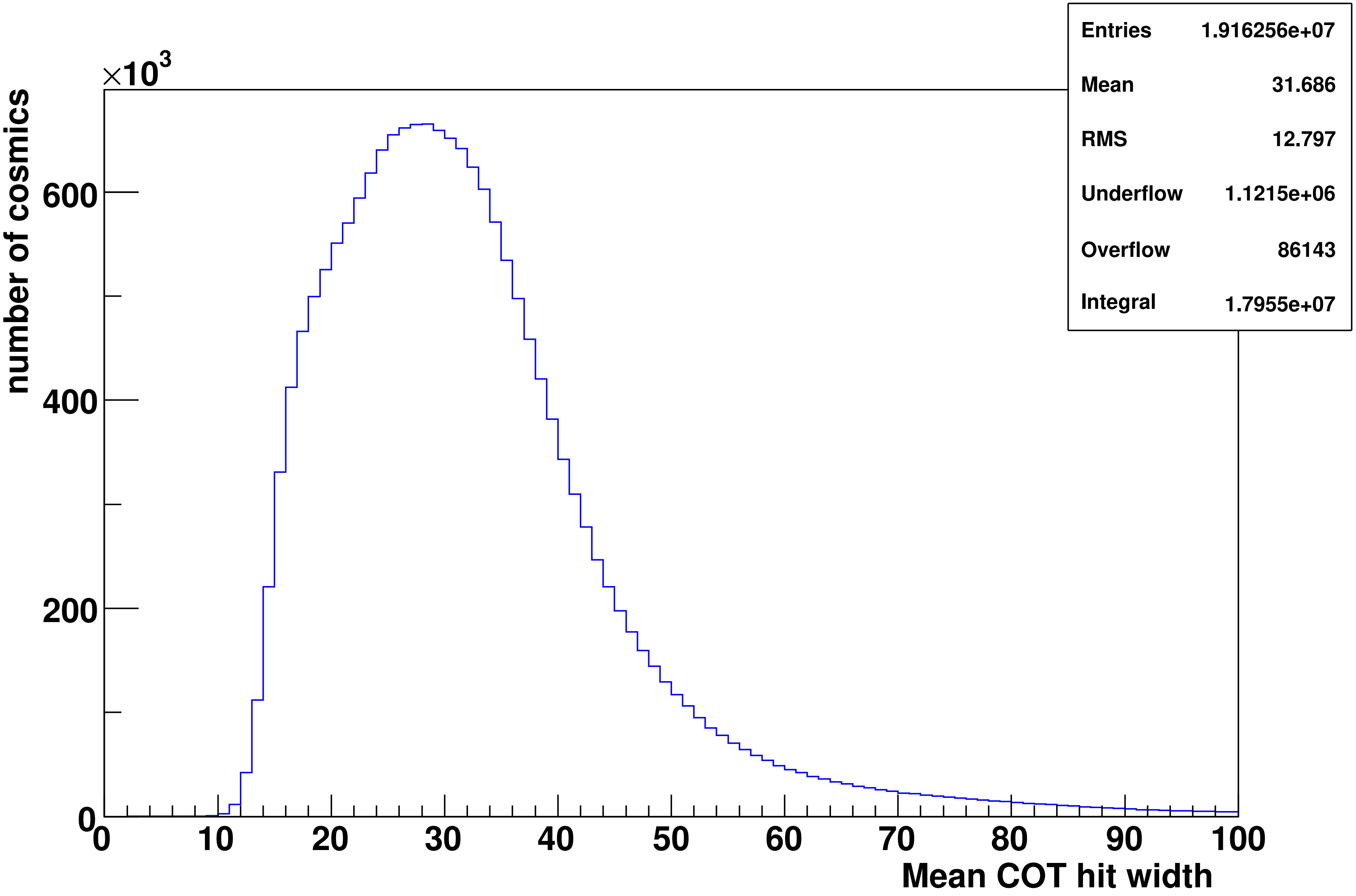


Entries 206420
Mean 37.993
RMS 32.533
Underflow 0
Overflow 4247
Integral 2.0217e+05
Ncosmics
20000
10000
0
0
20
40
60
80
200

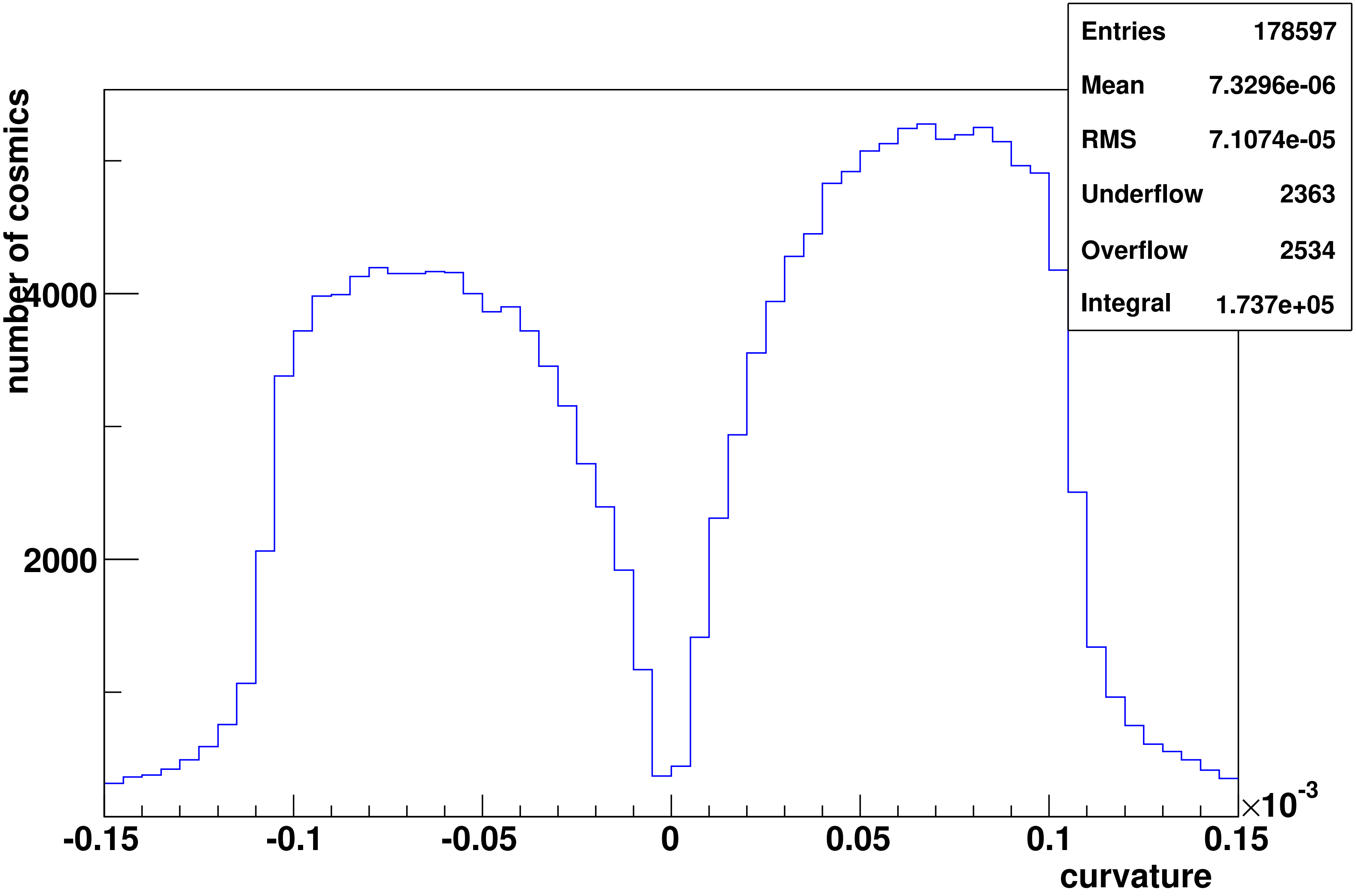


Entries 99805
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 99805
×10^3
number of cosmics
100
50
0
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
EM Energy

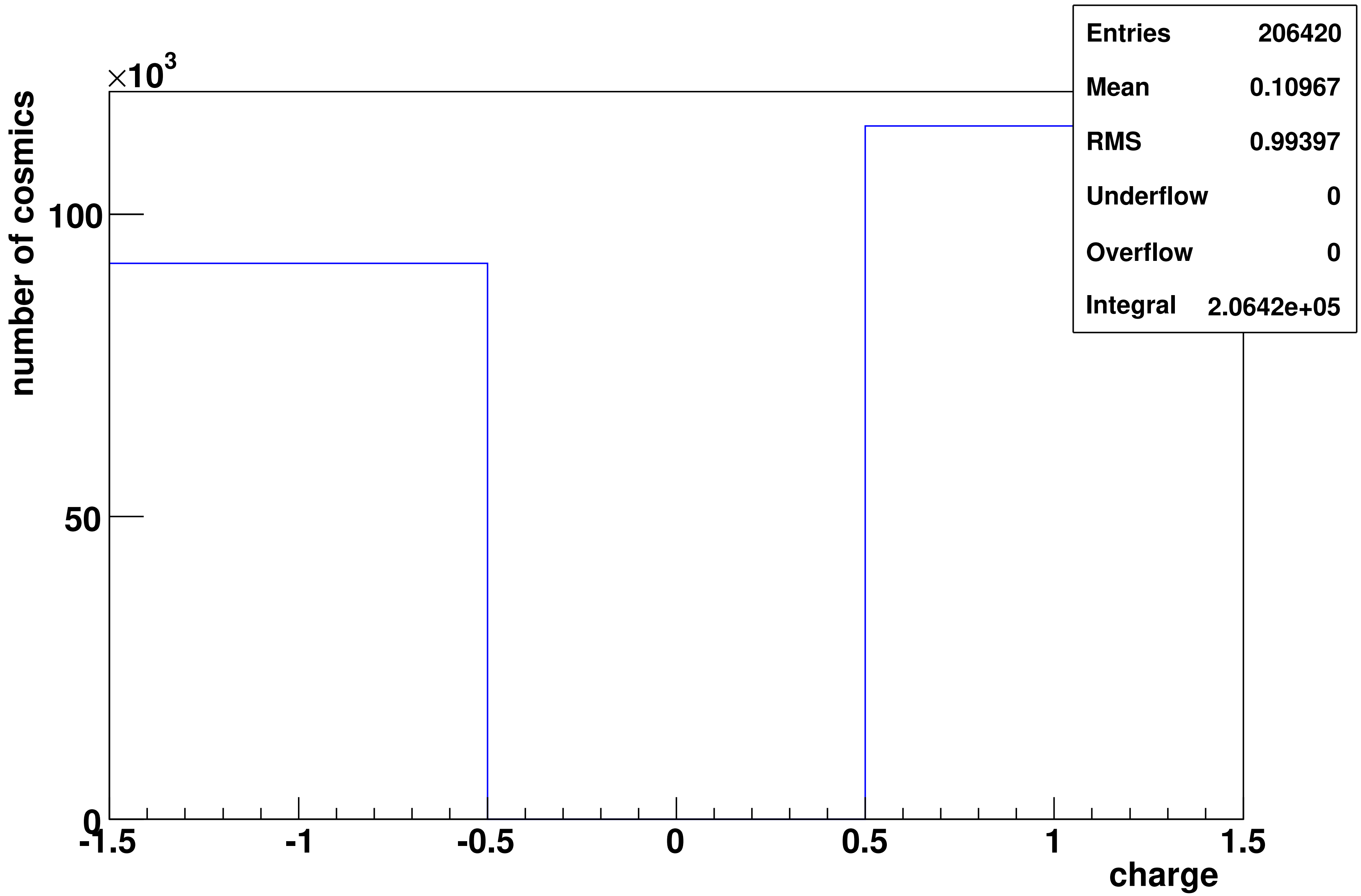

Entries 99805
Mean 1
RMS 0
Underflow 0
Overflow 0
Integral 99805
$\times 10^3$
number of cosmics
100
50
0
0
1
2
3
4
5
6
Hadronic Energy

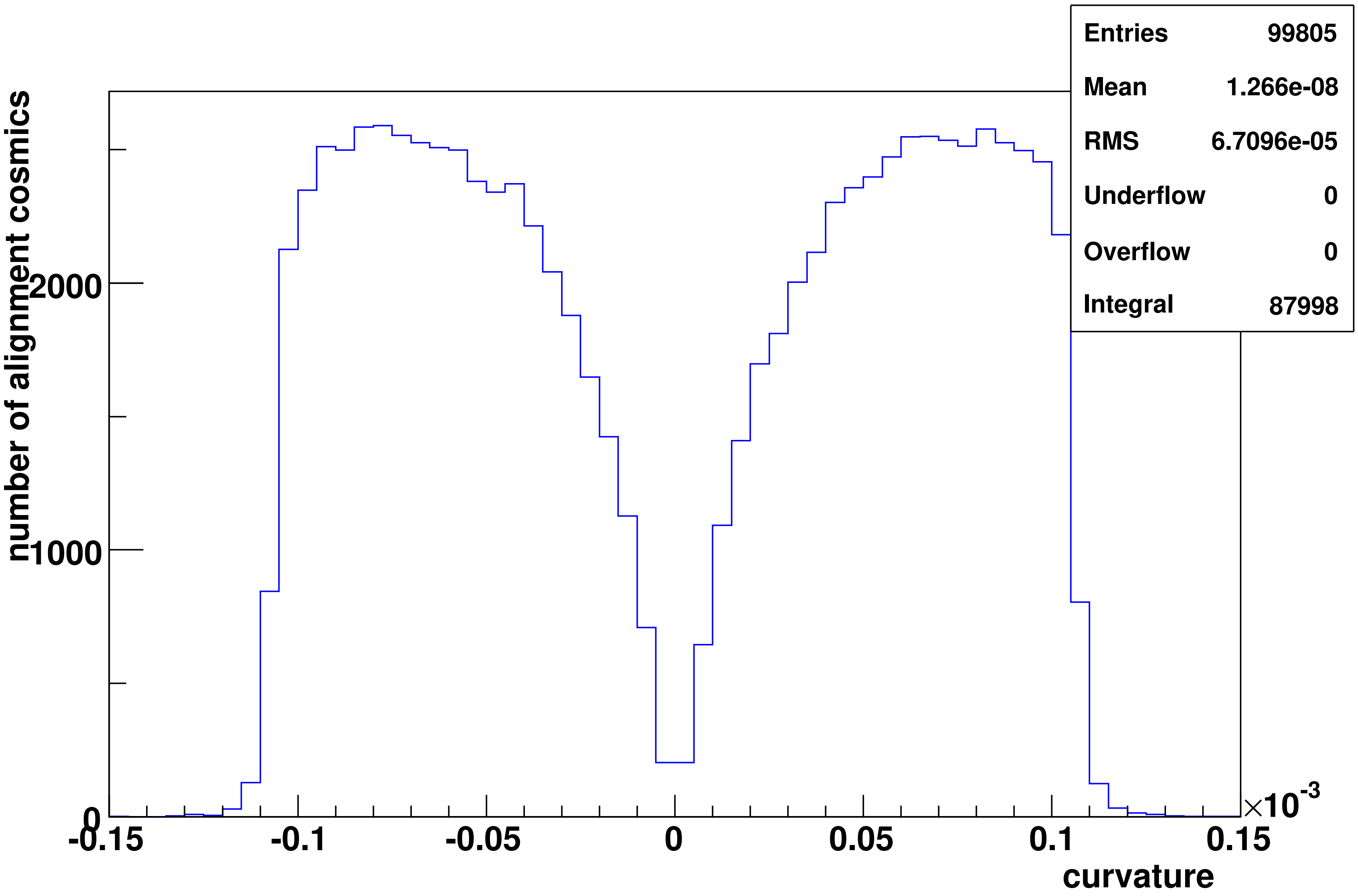


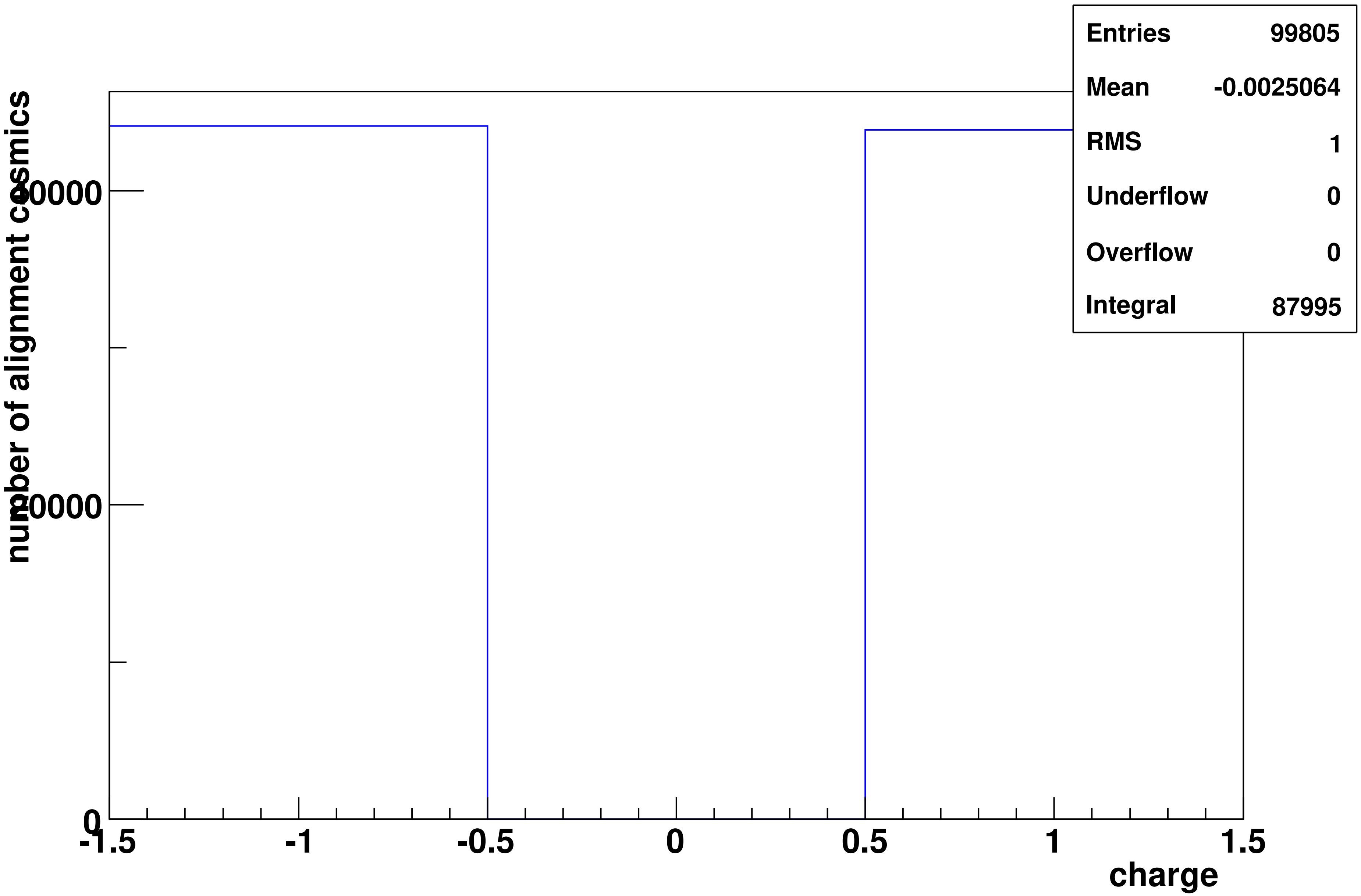
×10^3
number of cosmics
600
400
200
0
0
10
20
30
40
50
60
70
80
90
100
Mean COT hit width
Entries 1.916256e+07
Mean 31.686
RMS 12.797
Underflow 1.1215e+06
Overflow 86143
Integral 1.7955e+07

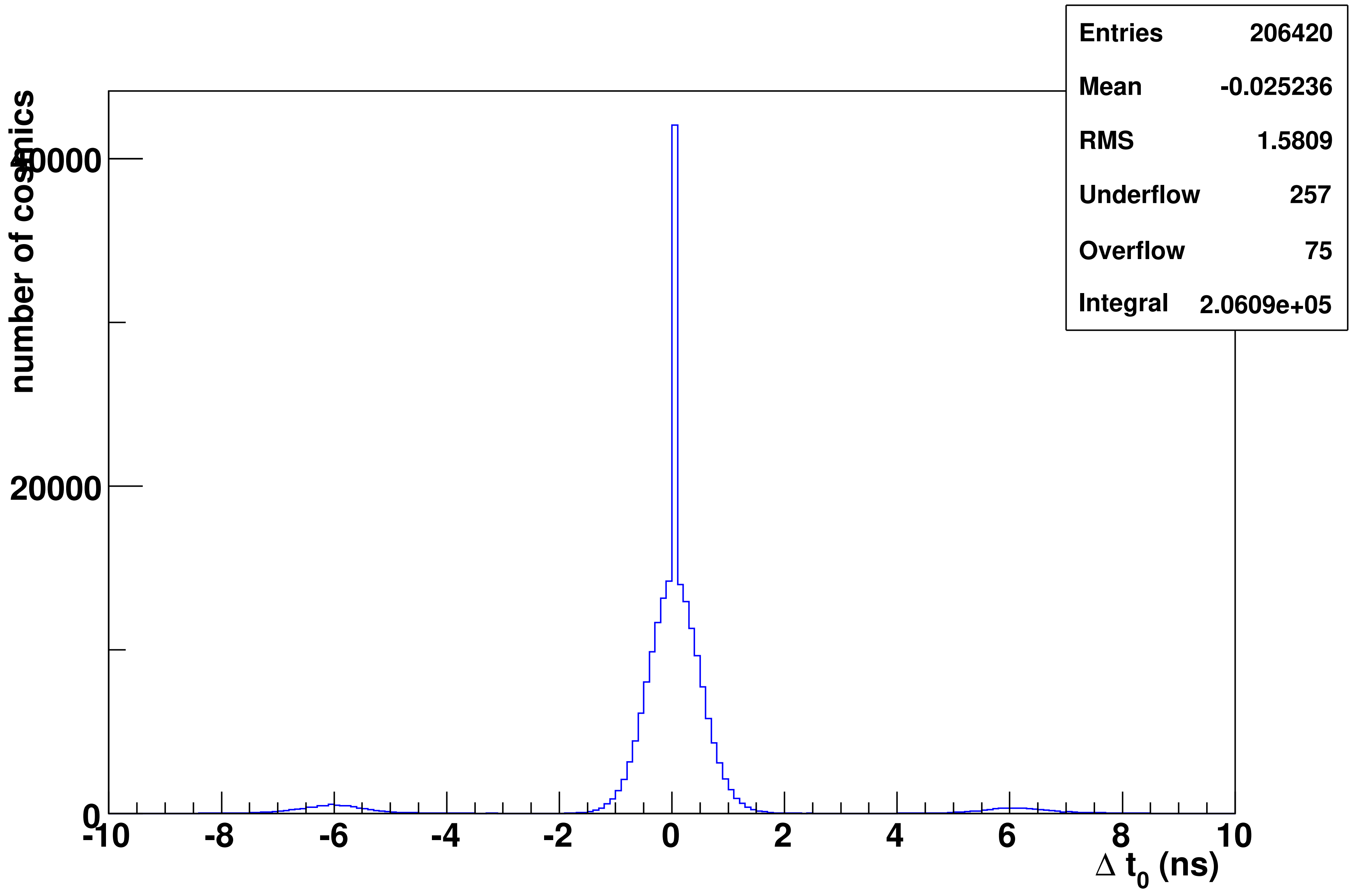


Entries 178597
Mean 7.3296e-06
RMS 7.1074e-05
Underflow 2363
Overflow 2534
Integral 1.737e+05
number of cosmics
4000
2000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

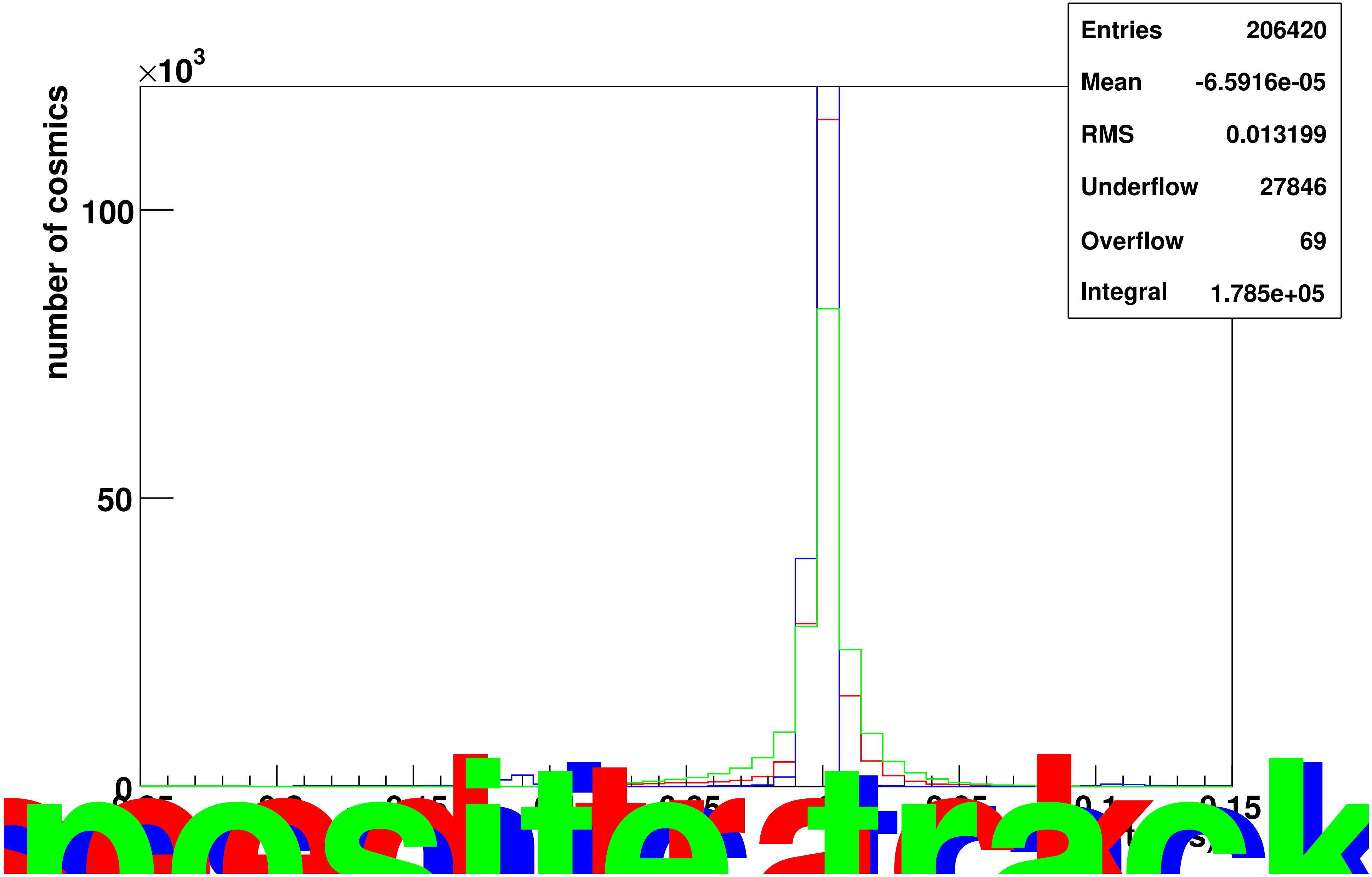

Entries 206420
Mean 0.10967
RMS 0.99397
Underflow 0
Overflow 0
Integral 2.0642e+05
$\times 10^3$
number of cosmics
100
50
0
-1.5
-1
-0.5
0
0.5
1
1.5
charge


Entries 99805
Mean 1.266e-08
RMS 6.7096e-05
Underflow 0
Overflow 0
Integral 87998
number of alignment cosmics
0
1000
2000
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
×10^-3
curvature

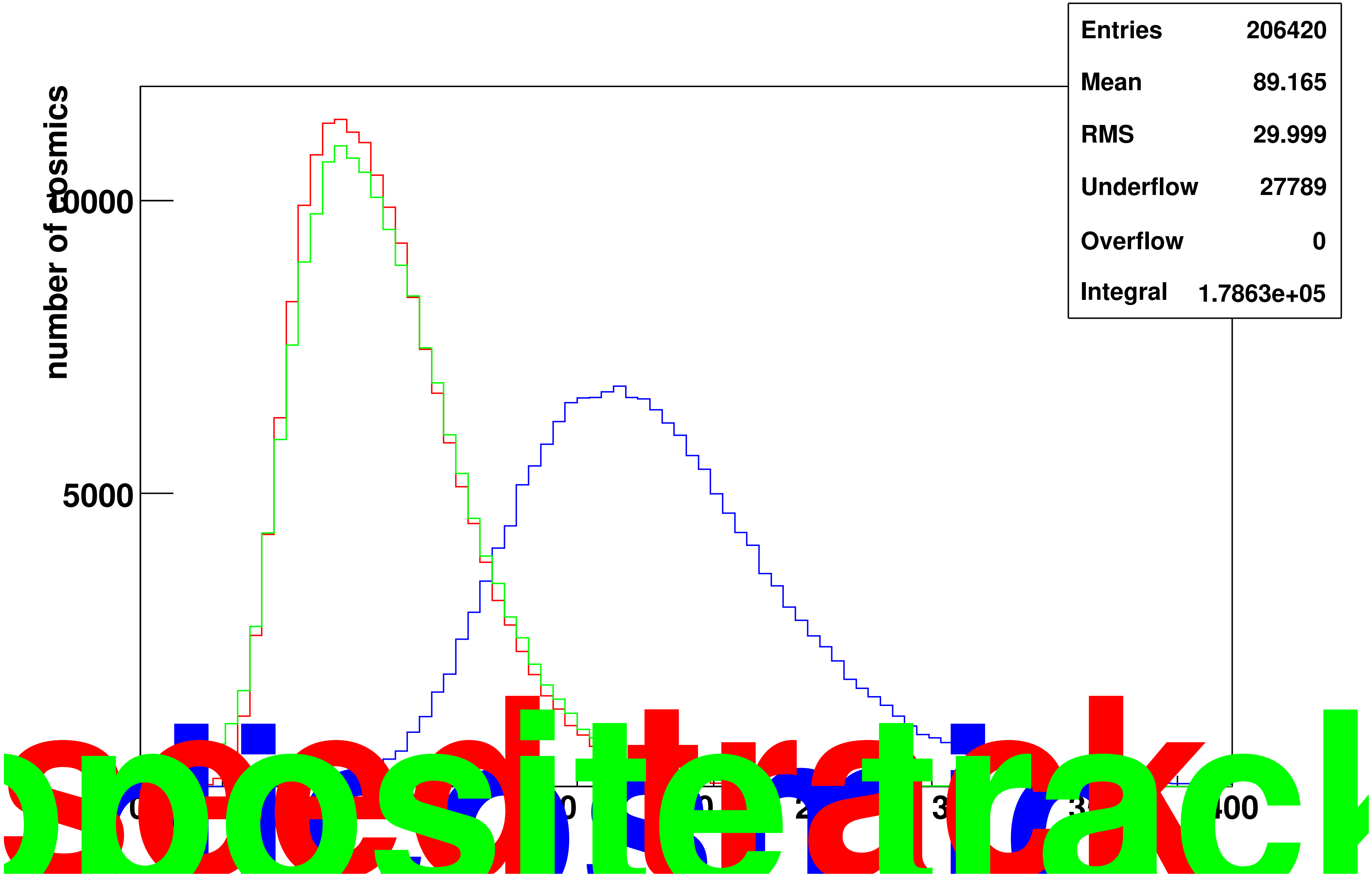

Entries 99805
Mean -0.0025064
RMS 1
Underflow 0
Overflow 0
Integral 87995
number of alignment cosmics
charge
-1.5
-1
-0.5
0
0.5
1
1.5



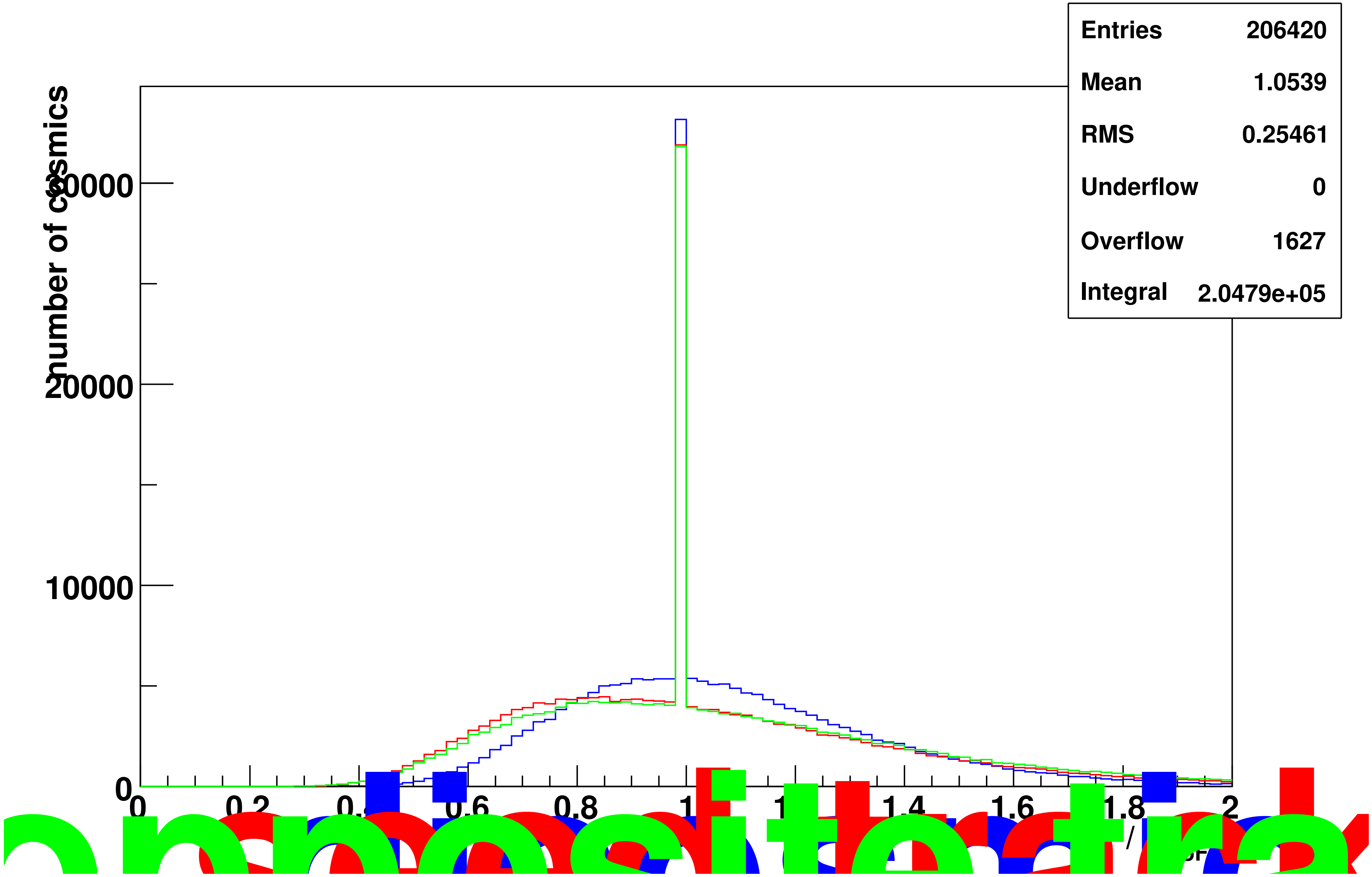
Entries 206420
Mean -0.025236
RMS 1.5809
Underflow 257
Overflow 75
Integral 2.0609e+05
number of cosmics
40000
20000
0
-10
-8
-6
-4
-2
0
2
4
6
8
10
Δt_0 (ns)

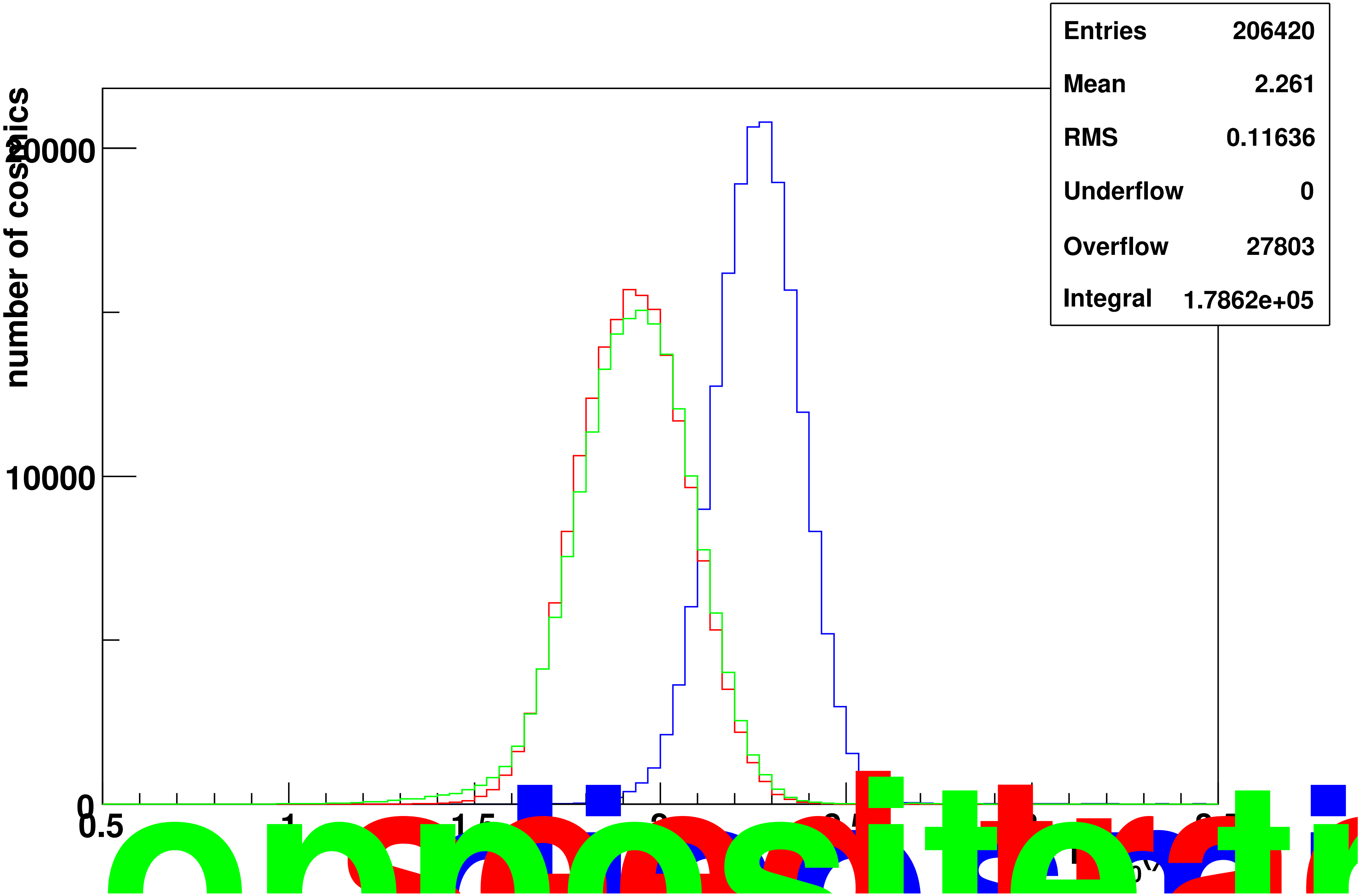


Entries 206420
Mean -6.5916e-05
RMS 0.013199
Underflow 27846
Overflow 69
Integral 1.785e+05
number of cosmics
×10^3
100
50
0
0.15

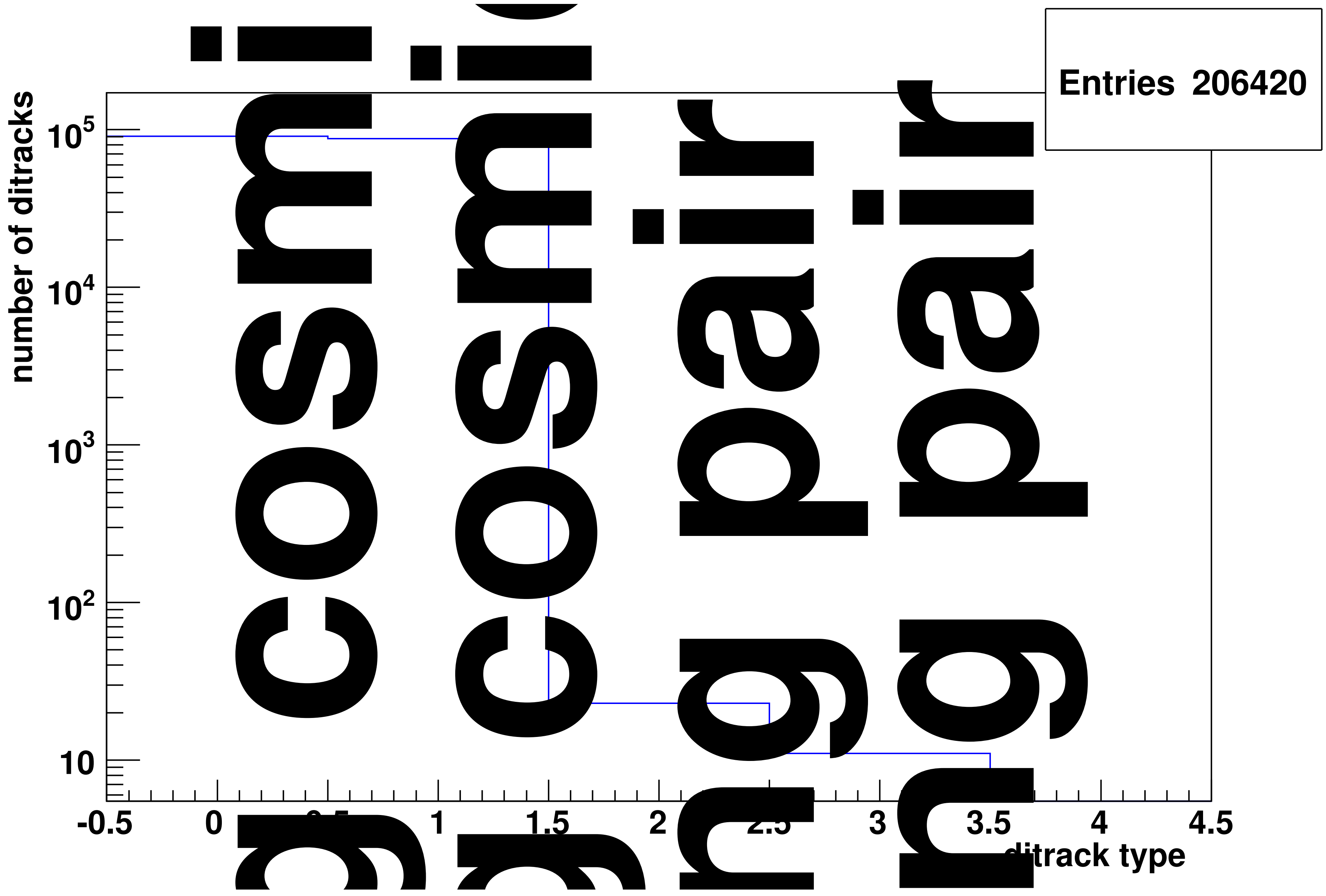


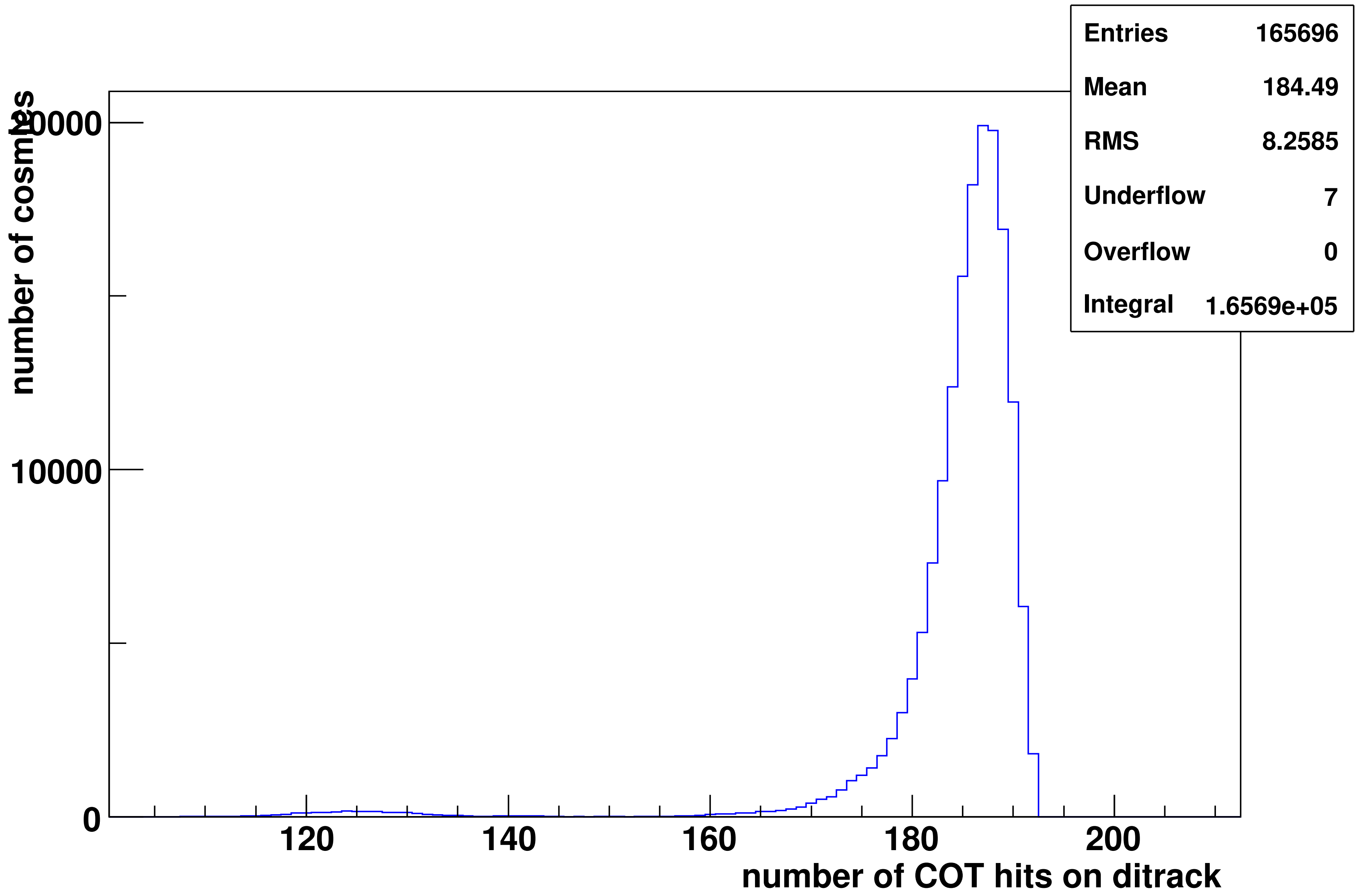
Entries 206420
Mean 89.165
RMS 29.999
Underflow 27789
Overflow 0
Integral 1.7863e+05
number of cosmics
10000
5000
400


Entries 206420
Mean 1.0539
RMS 0.25461
Underflow 0
Overflow 1627
Integral 2.0479e+05
number of cosmics
10000
20000
0
0
0.2
0.6
0.8
1
1.4
1.6
1.8
2

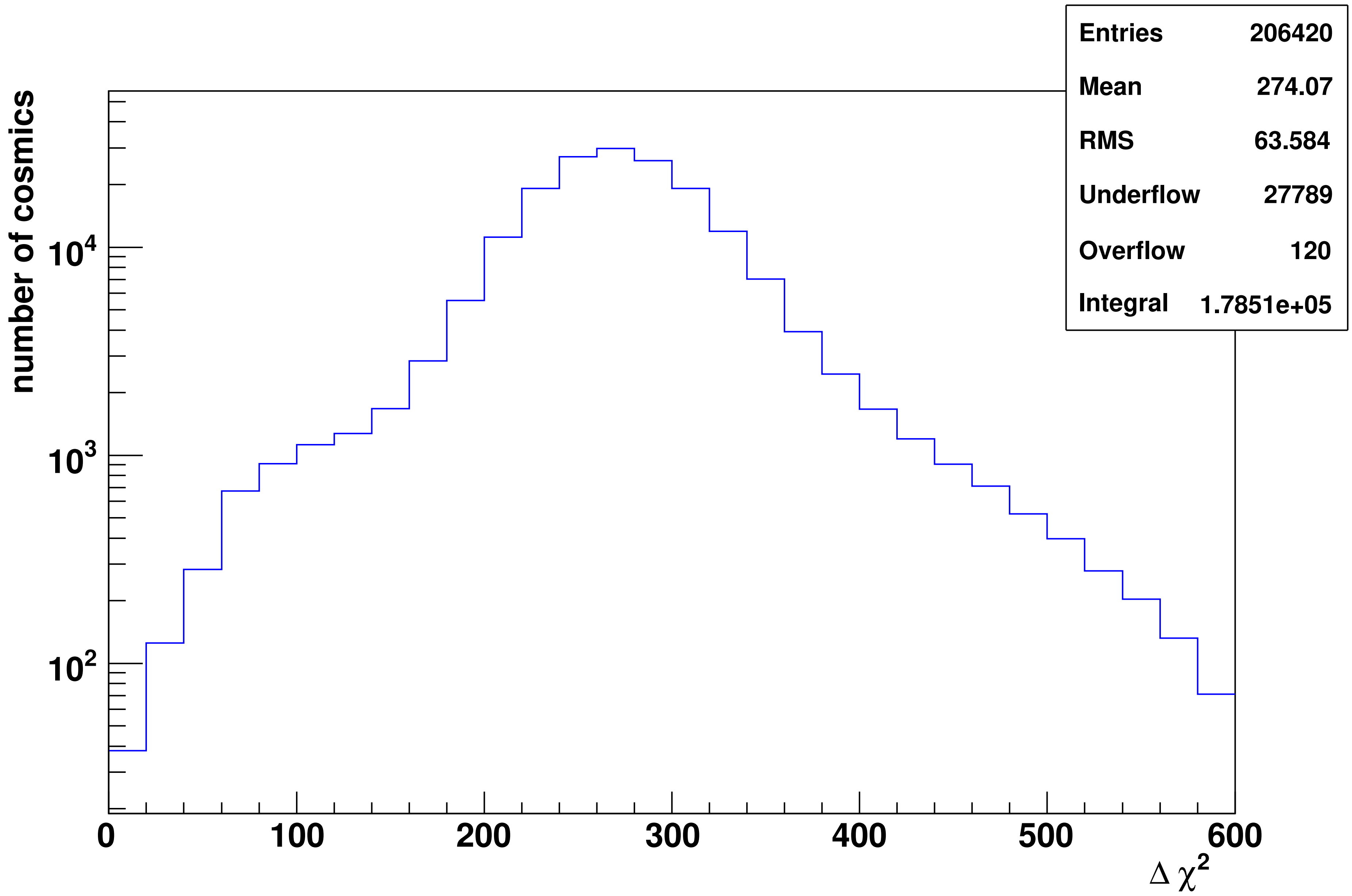


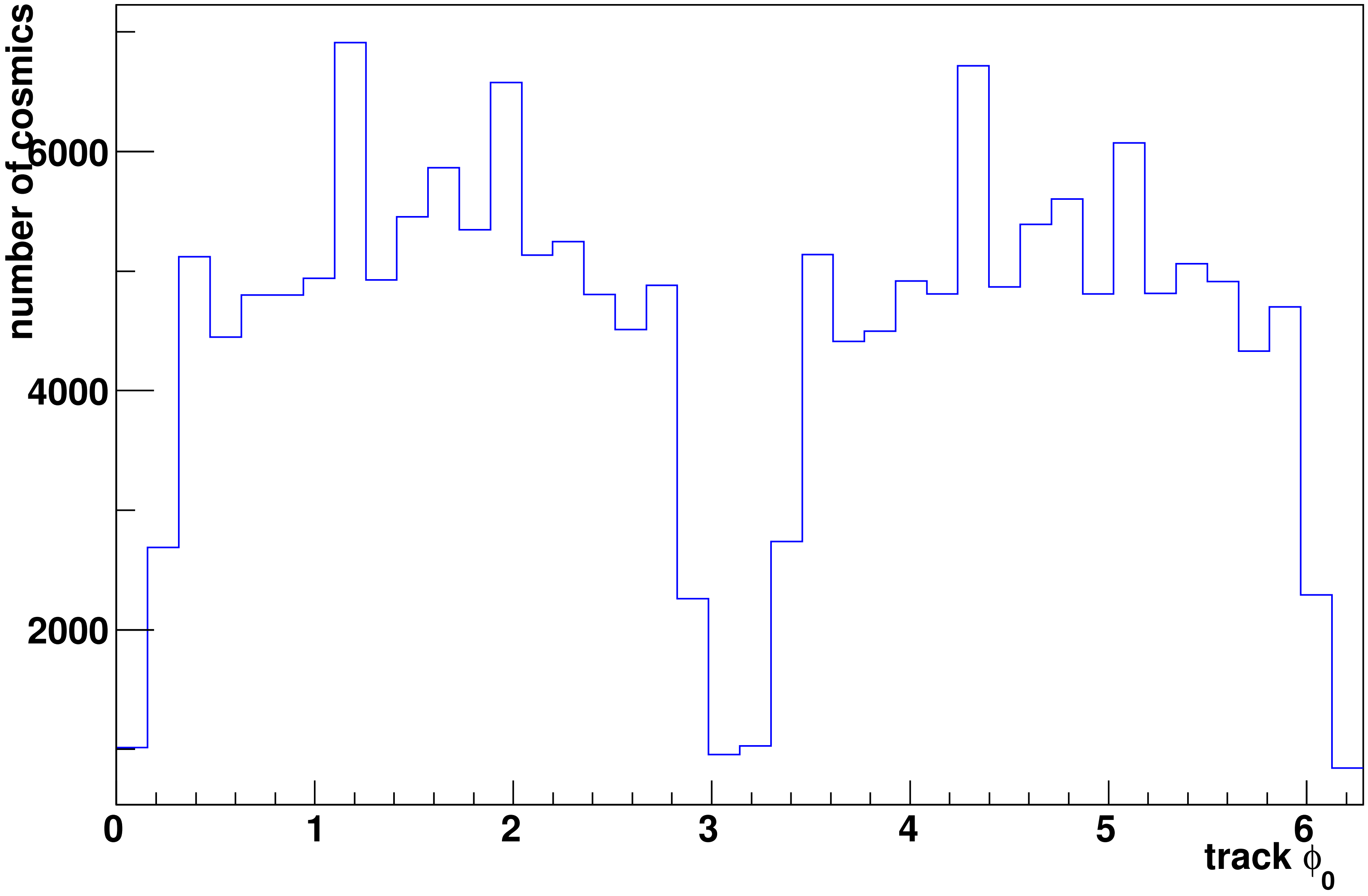
Entries 206420
Mean 2.261
RMS 0.11636
Underflow 0
Overflow 27803
Integral 1.7862e+05
number of cosmics
20000
10000
0
0.5

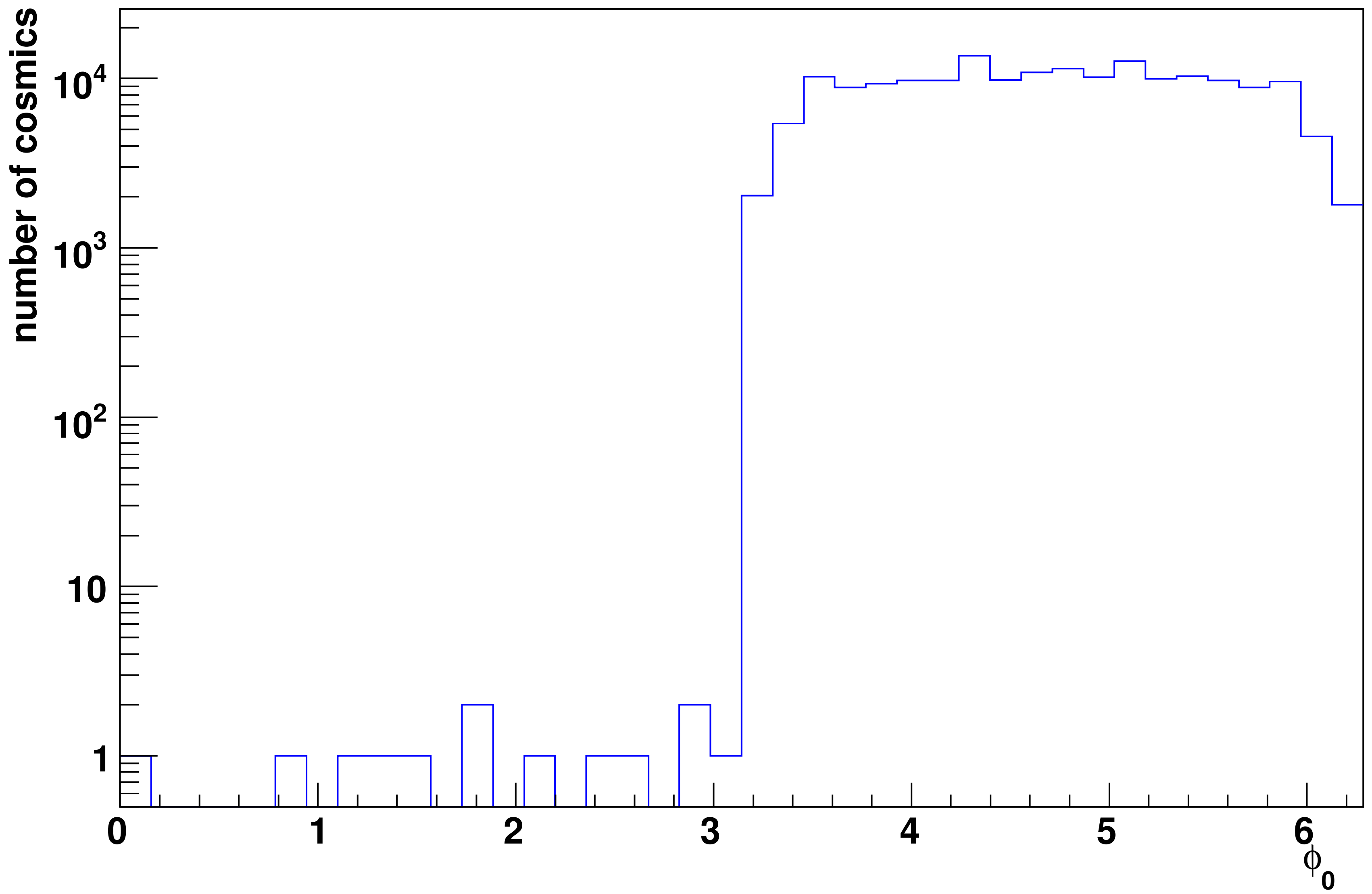

Entries 206420
number of ditracks
10^5
10^4
10^3
10^2
10
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
ditrack type



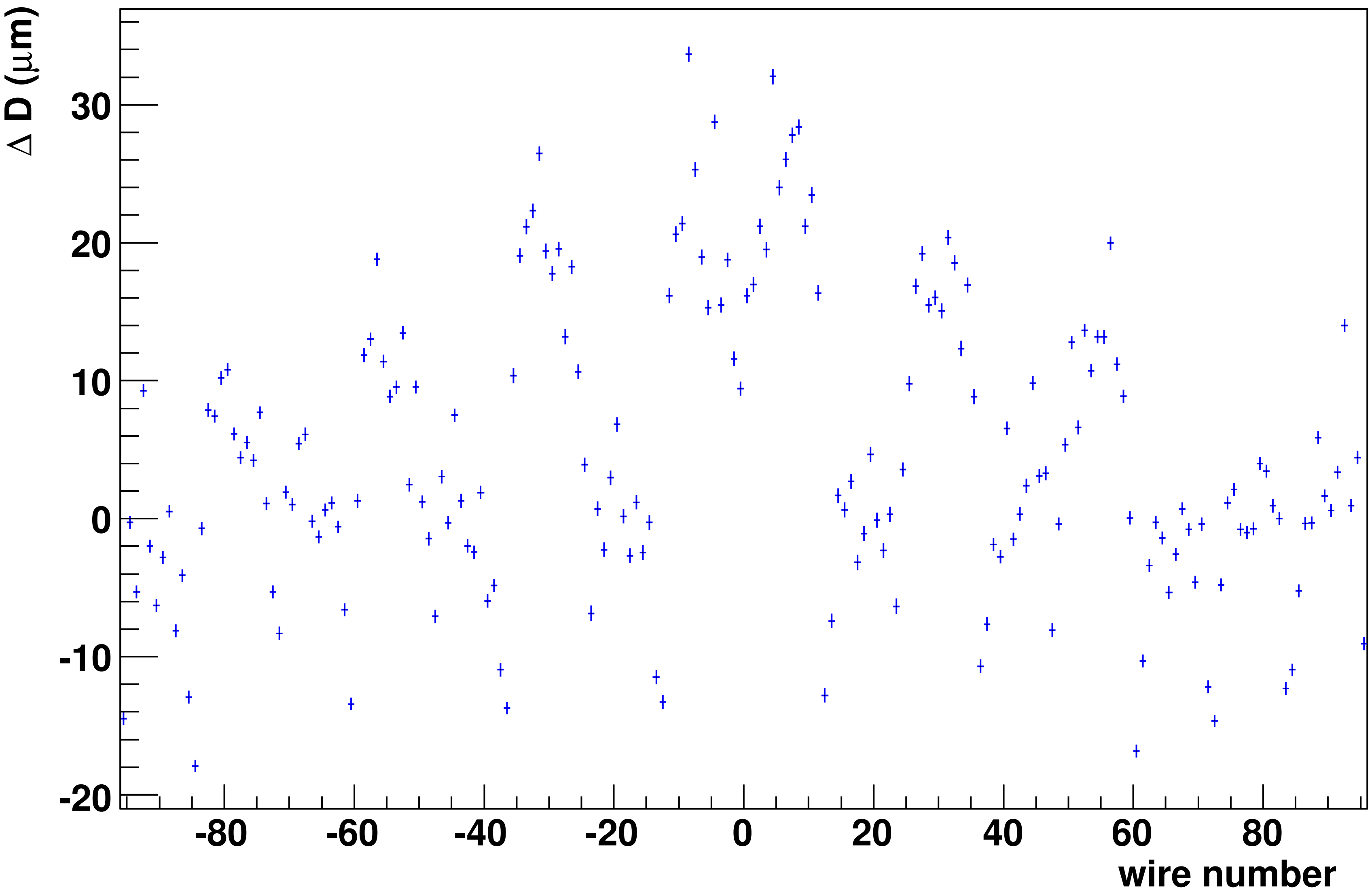
Entries 165696
Mean 184.49
RMS 8.2585
Underflow 7
Overflow 0
Integral 1.6569e+05
number of cosmics
20000
10000
0
120
140
160
180
200
number of COT hits on ditrack


Entries 206420
Mean 274.07
RMS 63.584
Underflow 27789
Overflow 120
Integral 1.7851e+05
number of cosmics
10^4
10^3
10^2
0
100
200
300
400
500
600
$\Delta\chi^2$

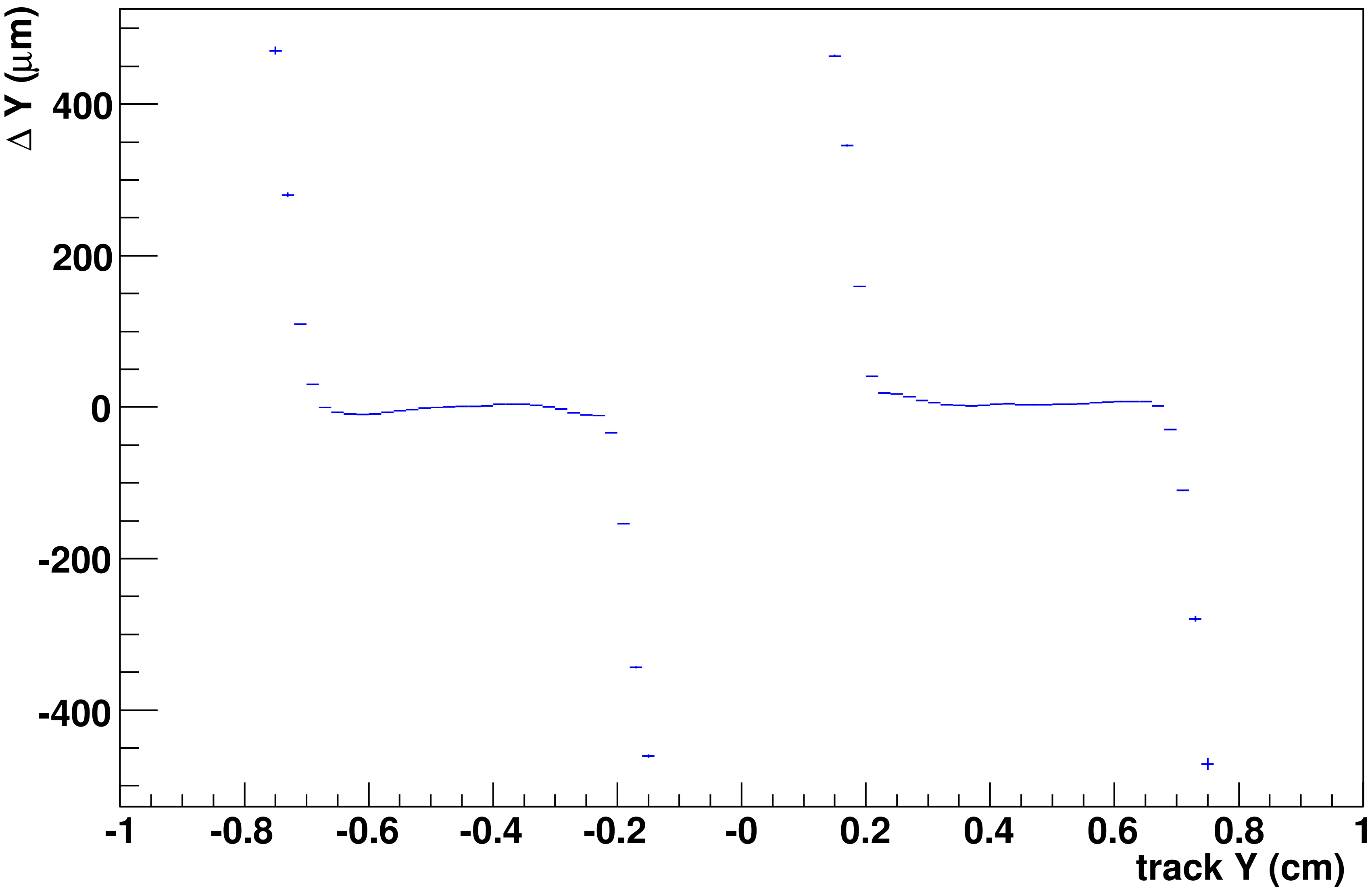

number of cosmics
6000
4000
2000
0
1
2
3
4
5
6
track ϕ_0



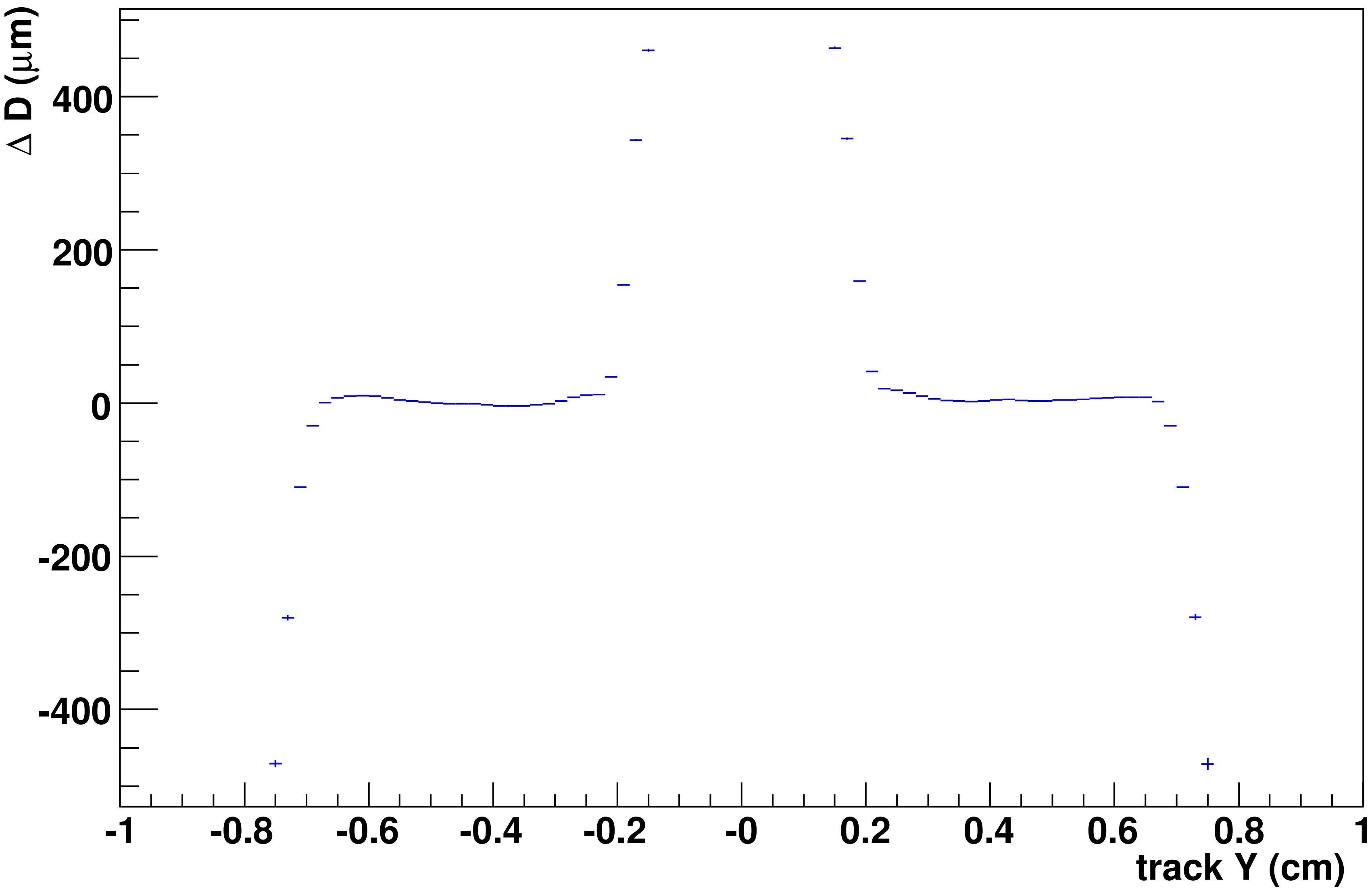
number of cosmics
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
ϕ_0



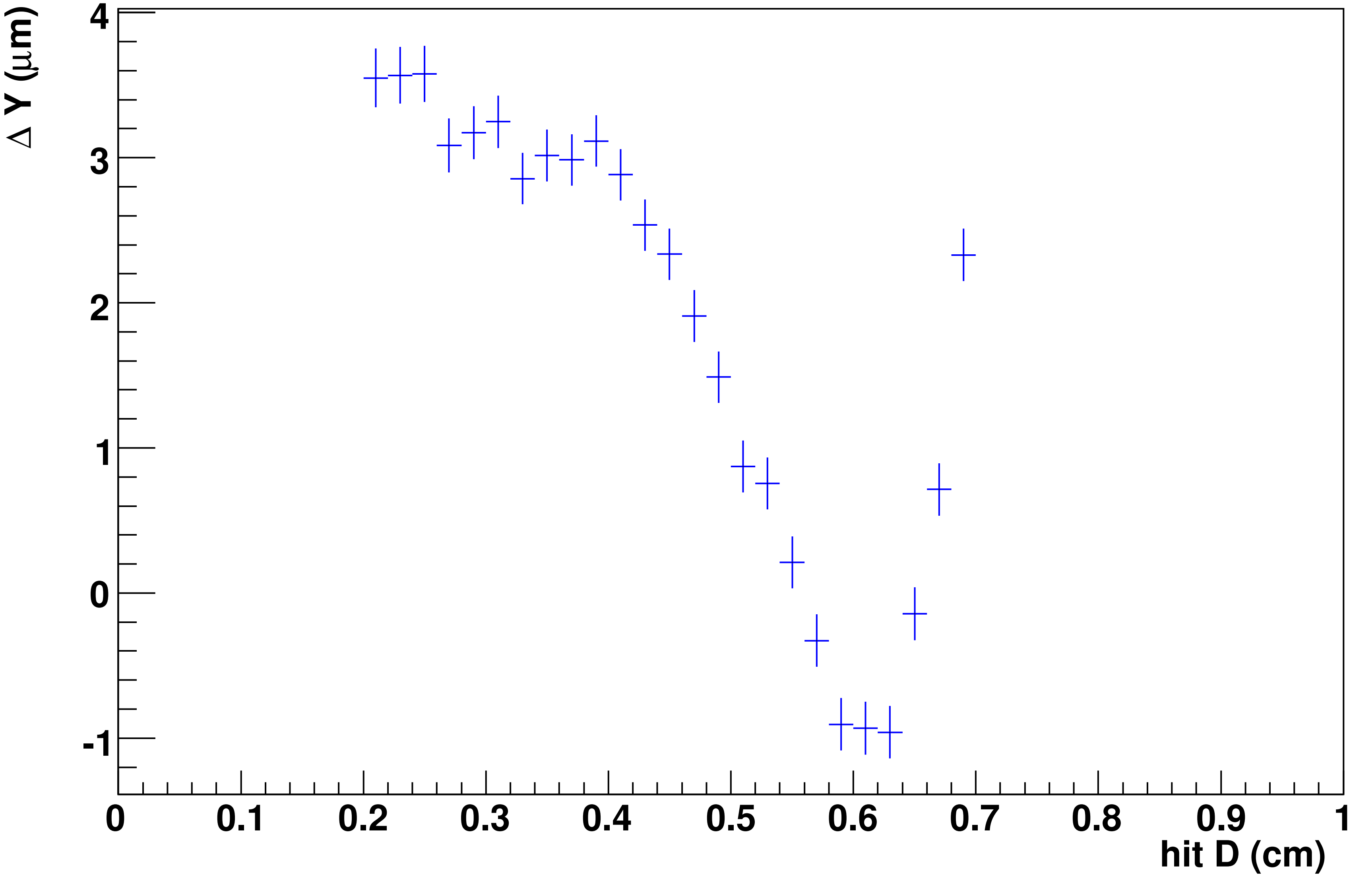
Δ D (μm)
30
20
10
0
-10
-20
-80
-60
-40
-20
0
20
40
60
80
wire number



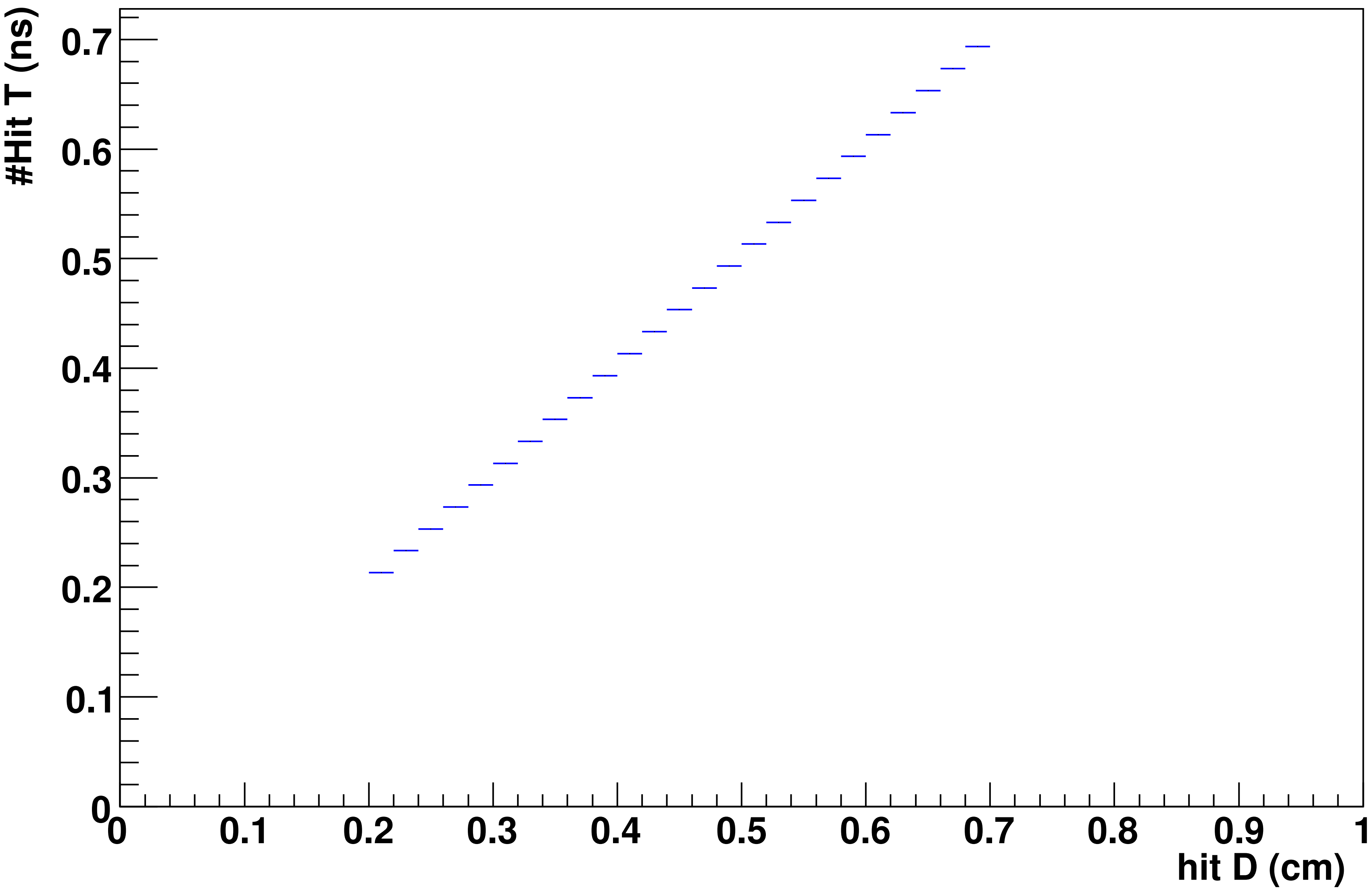
Δ Y (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

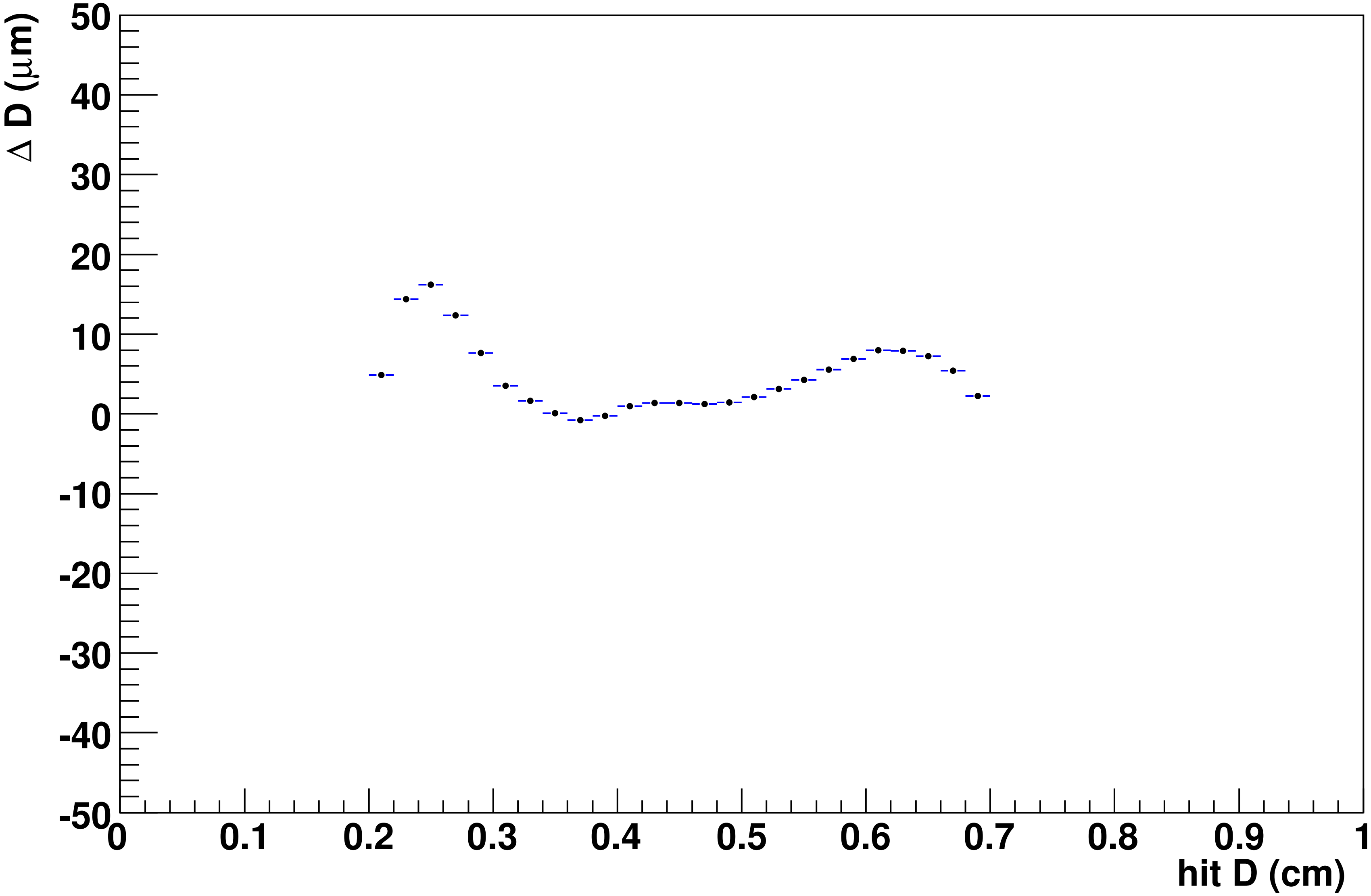


Δ D (μm)
400
200
0
-200
-400
-1
-0.8
-0.6
-0.4
-0.2
-0
0.2
0.4
0.6
0.8
1
track Y (cm)

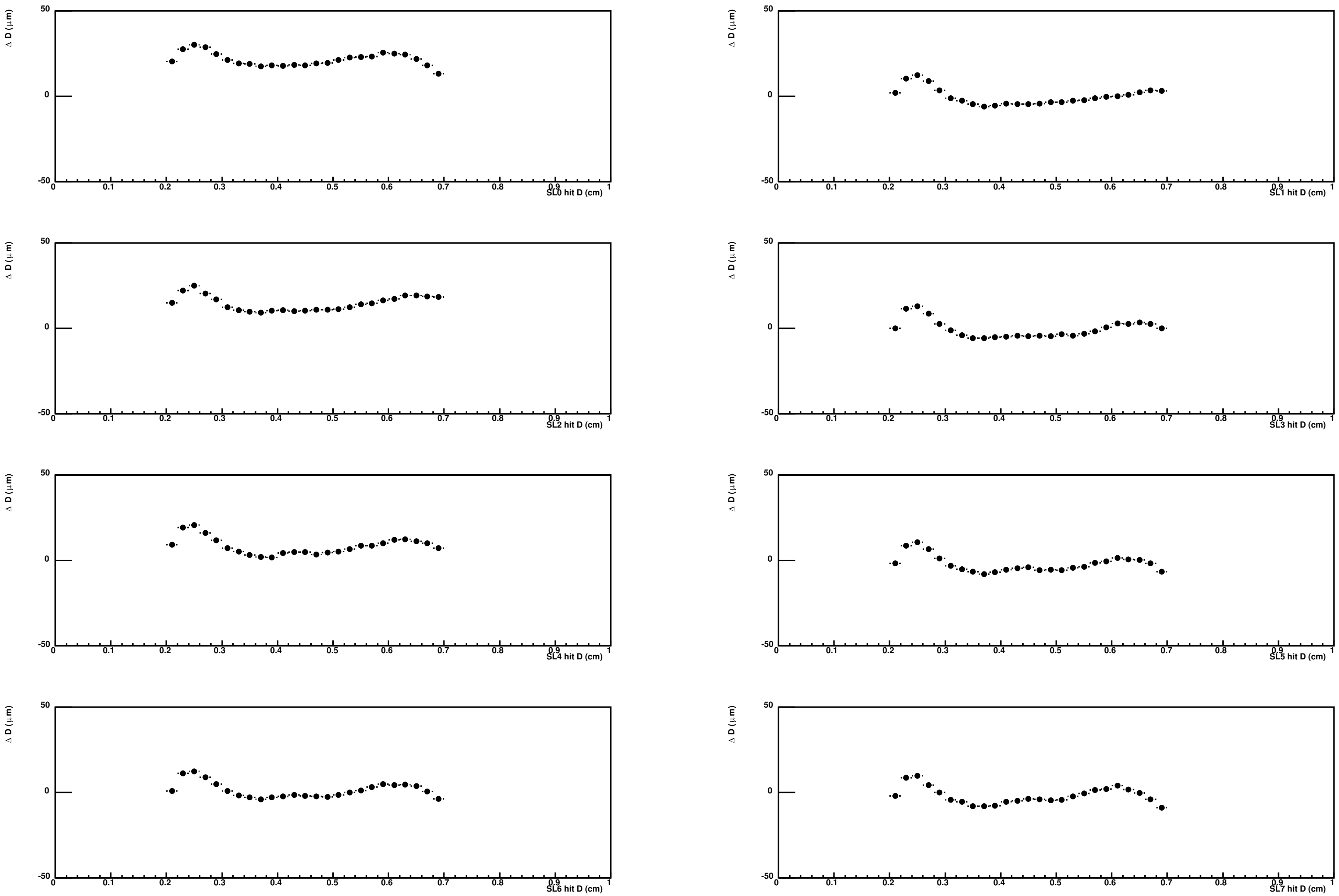


Δ Y (μm)
4
3
2
1
0
-1
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)

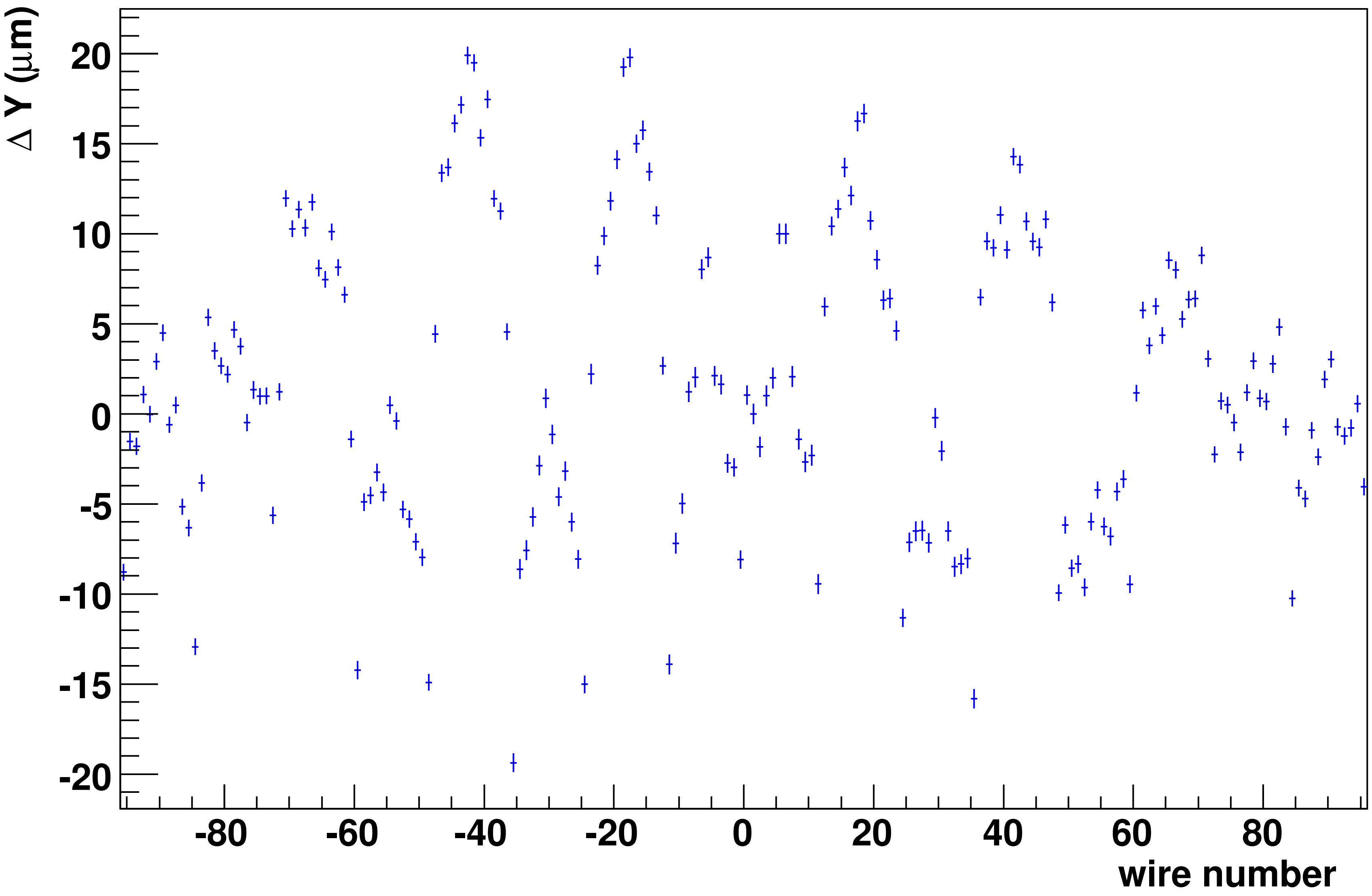

#Hit T (ns)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)



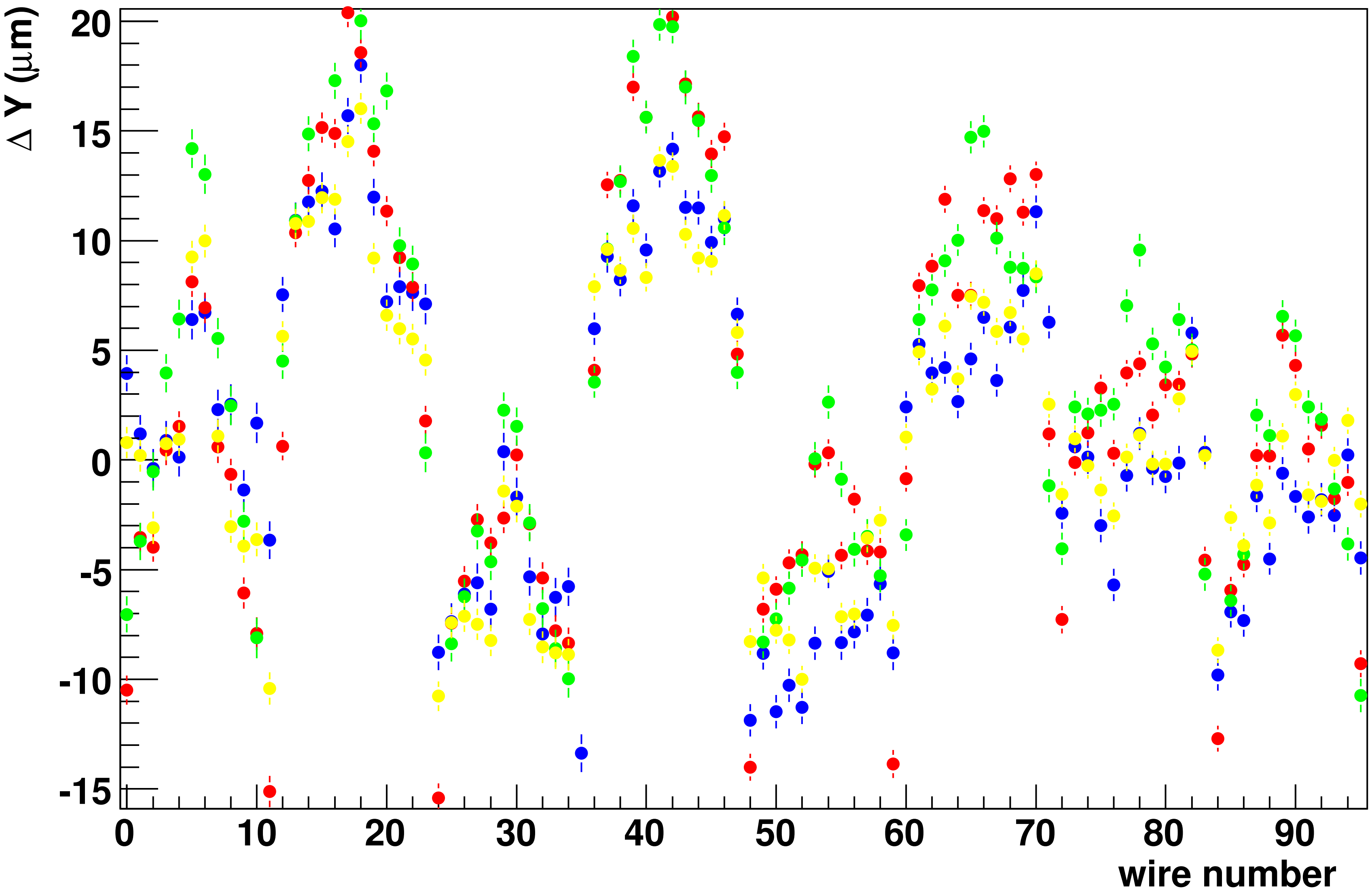
Δ D (μm)
50
40
30
20
10
0
-10
-20
-30
-40
-50
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
hit D (cm)



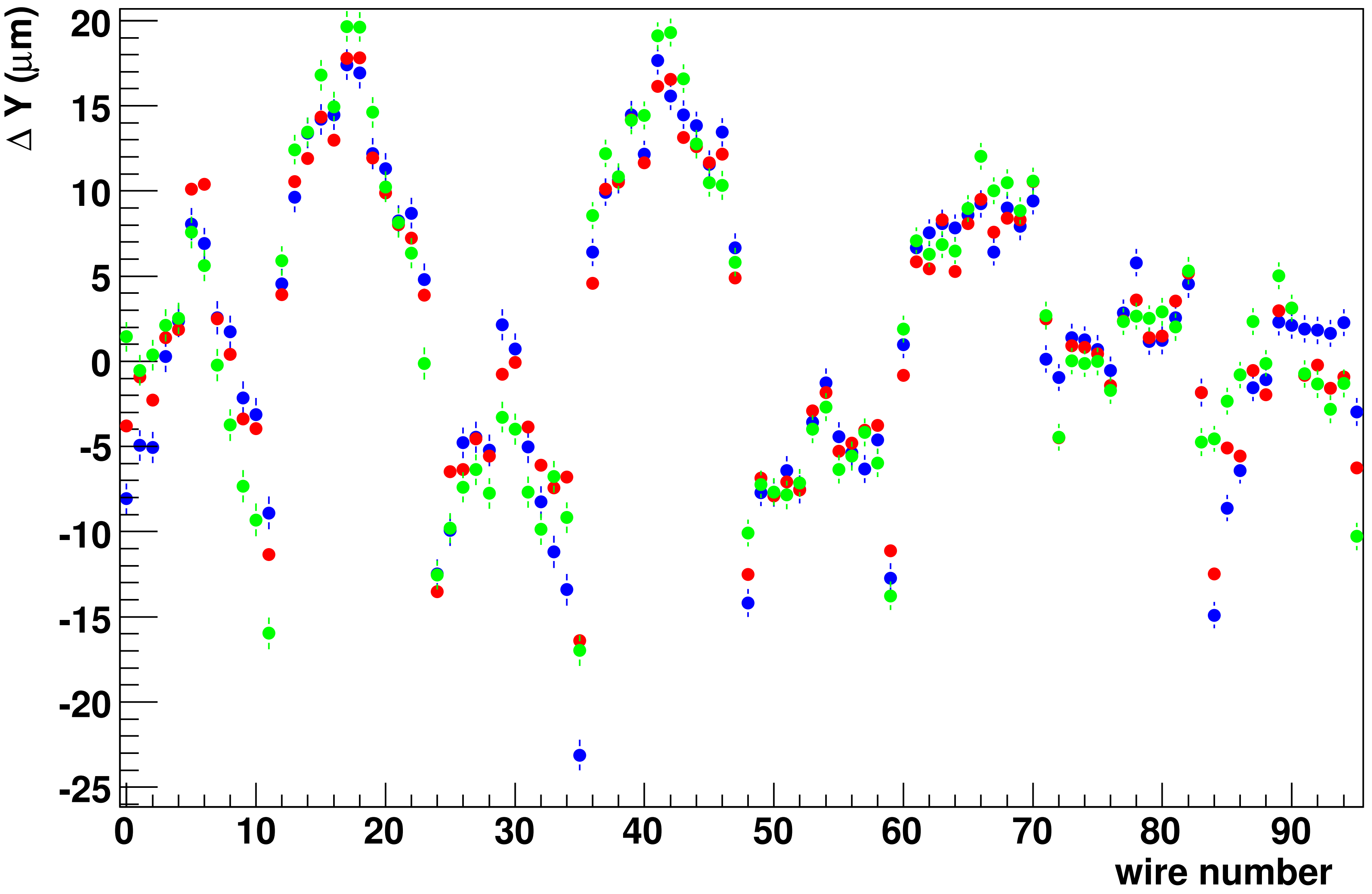
Δ D (μm)
SL0 hit D (cm)
SL1 hit D (cm)
SL2 hit D (cm)
SL3 hit D (cm)
SL4 hit D (cm)
SL5 hit D (cm)
SL6 hit D (cm)
SL7 hit D (cm)



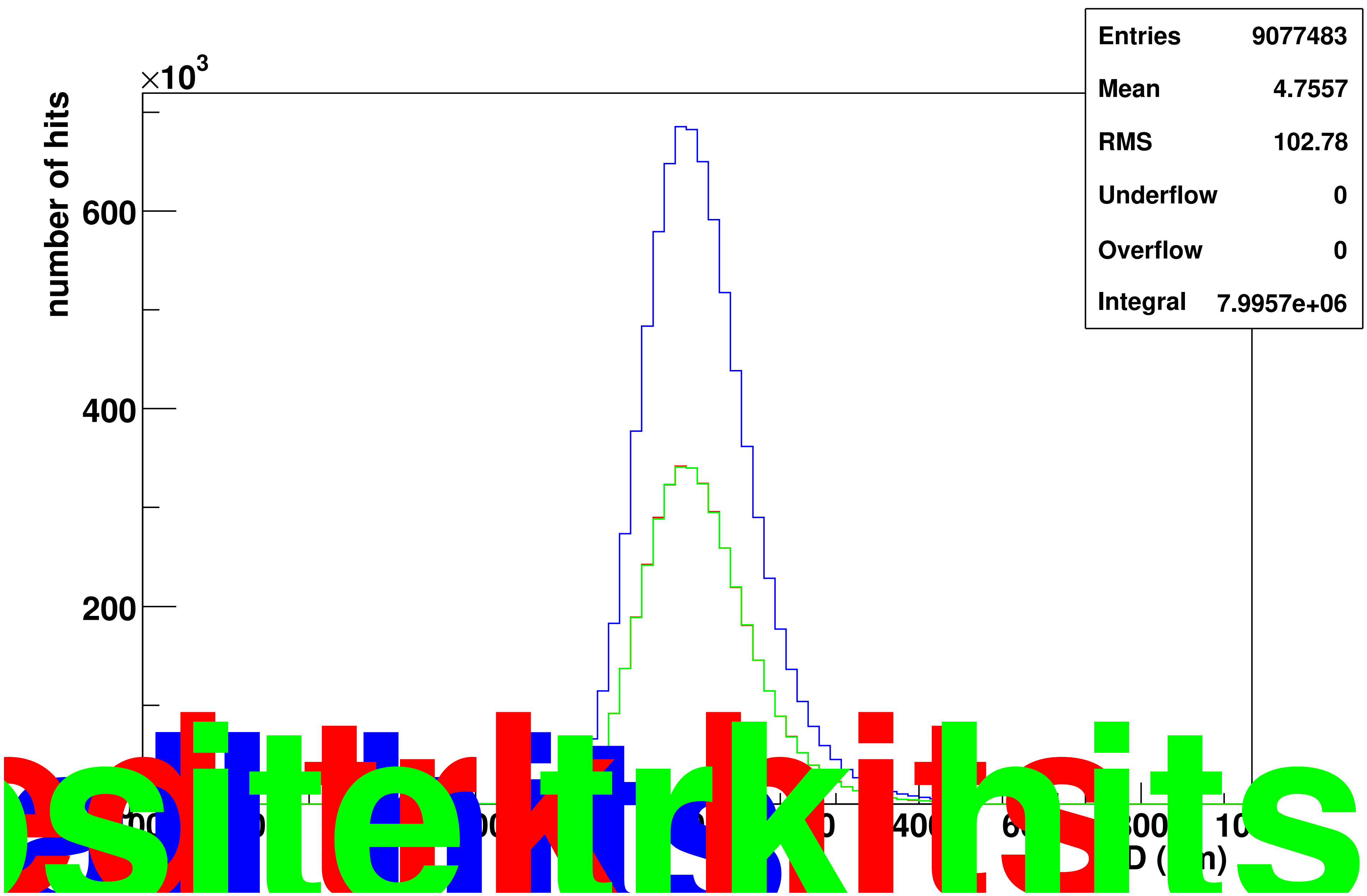
Δ Y (μm)
20
15
10
5
0
-5
-10
-15
-20
-80
-60
-40
-20
0
20
40
60
80
wire number

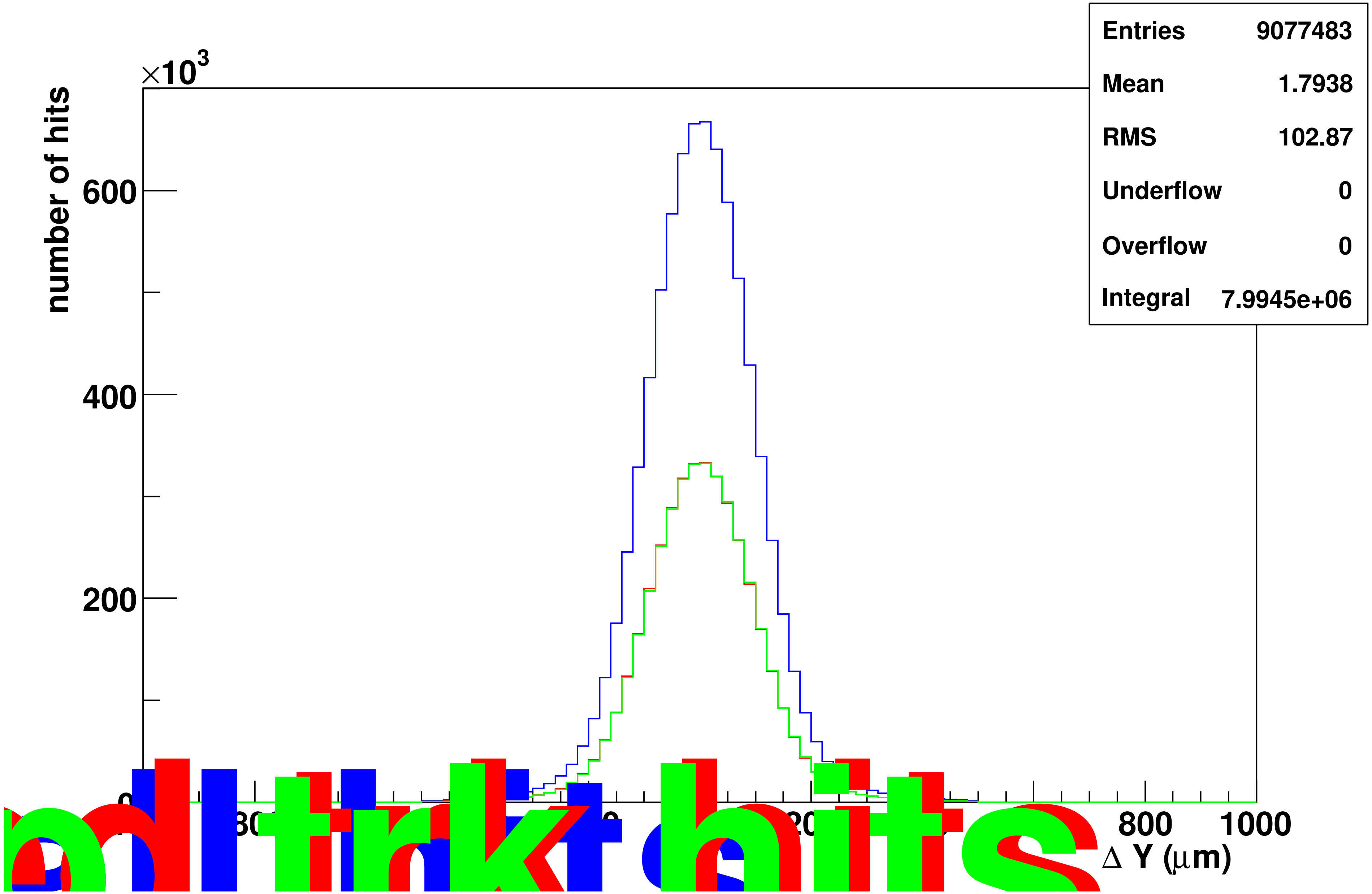


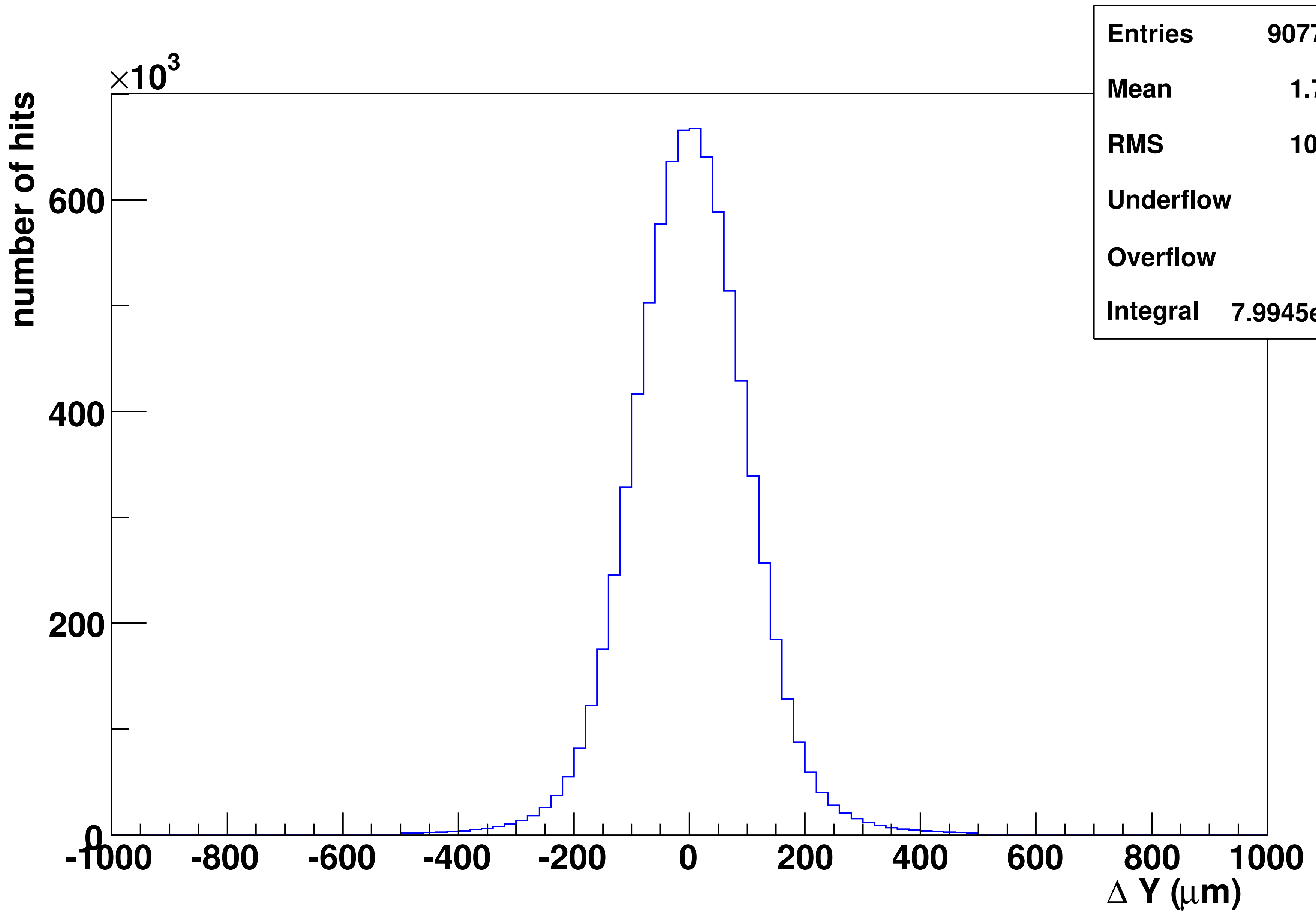
Δ Y (μm)
20
15
10
5
0
-5
-10
-15
0
10
20
30
40
50
60
70
80
90
wire number



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


Entries 9077483
Mean 4.7557
RMS 102.78
Underflow 0
Overflow 0
Integral 7.9957e+06
×10^3
number of hits
600
400
200


Entries 9077483
Mean 1.7938
RMS 102.87
Underflow 0
Overflow 0
Integral 7.9945e+06
×10^3
number of hits
600
400
200
0
800
1000
Δ Y (μm)



Entries 9077483
Mean 1.7938
RMS 102.87
Underflow 0
Overflow 0
Integral 7.9945e+06
×10^3
number of hits
0
200
400
600
-1000
-800
-600
-400
-200
0
200
400
600
800
1000
Δ Y (μm)