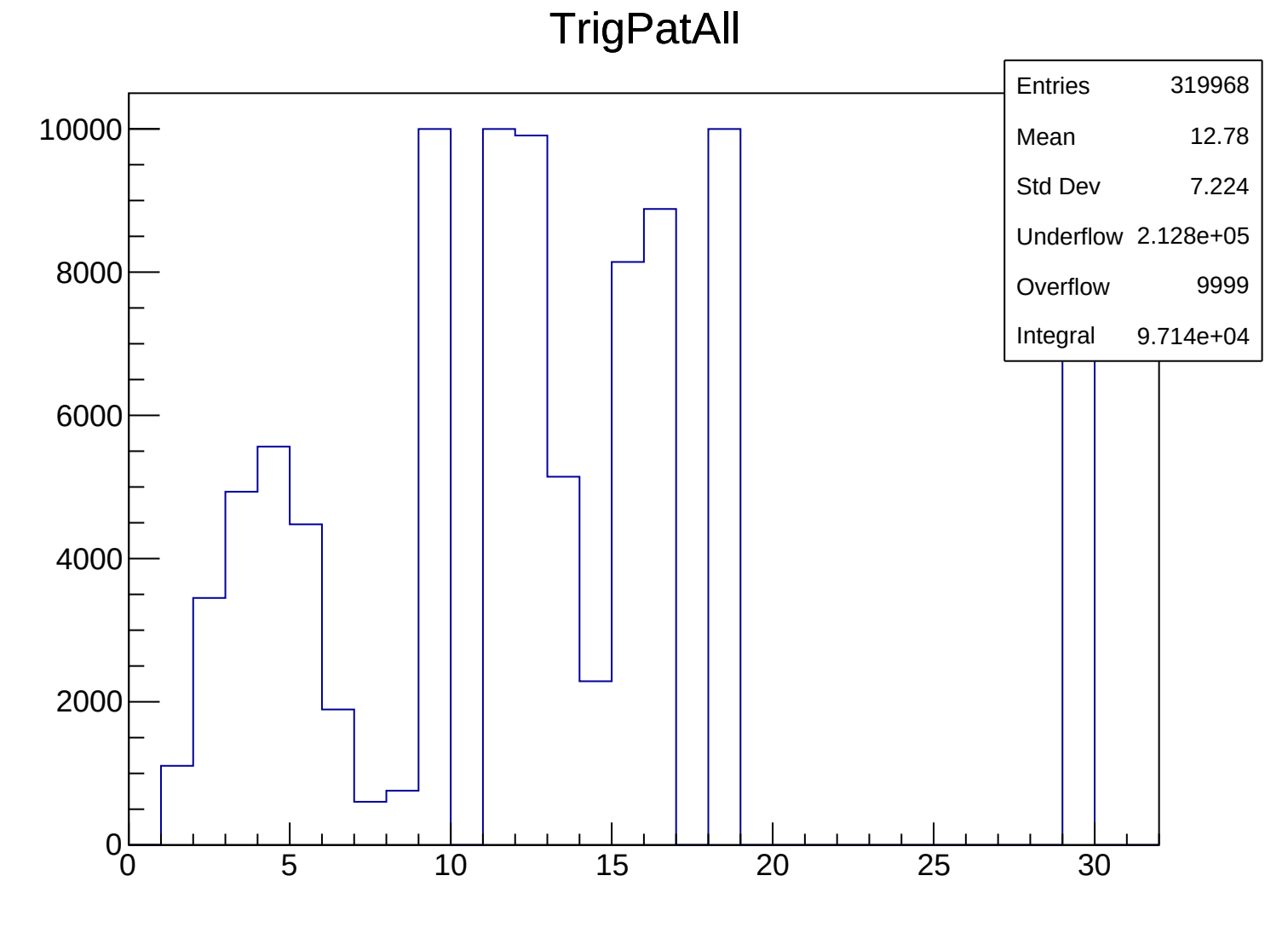
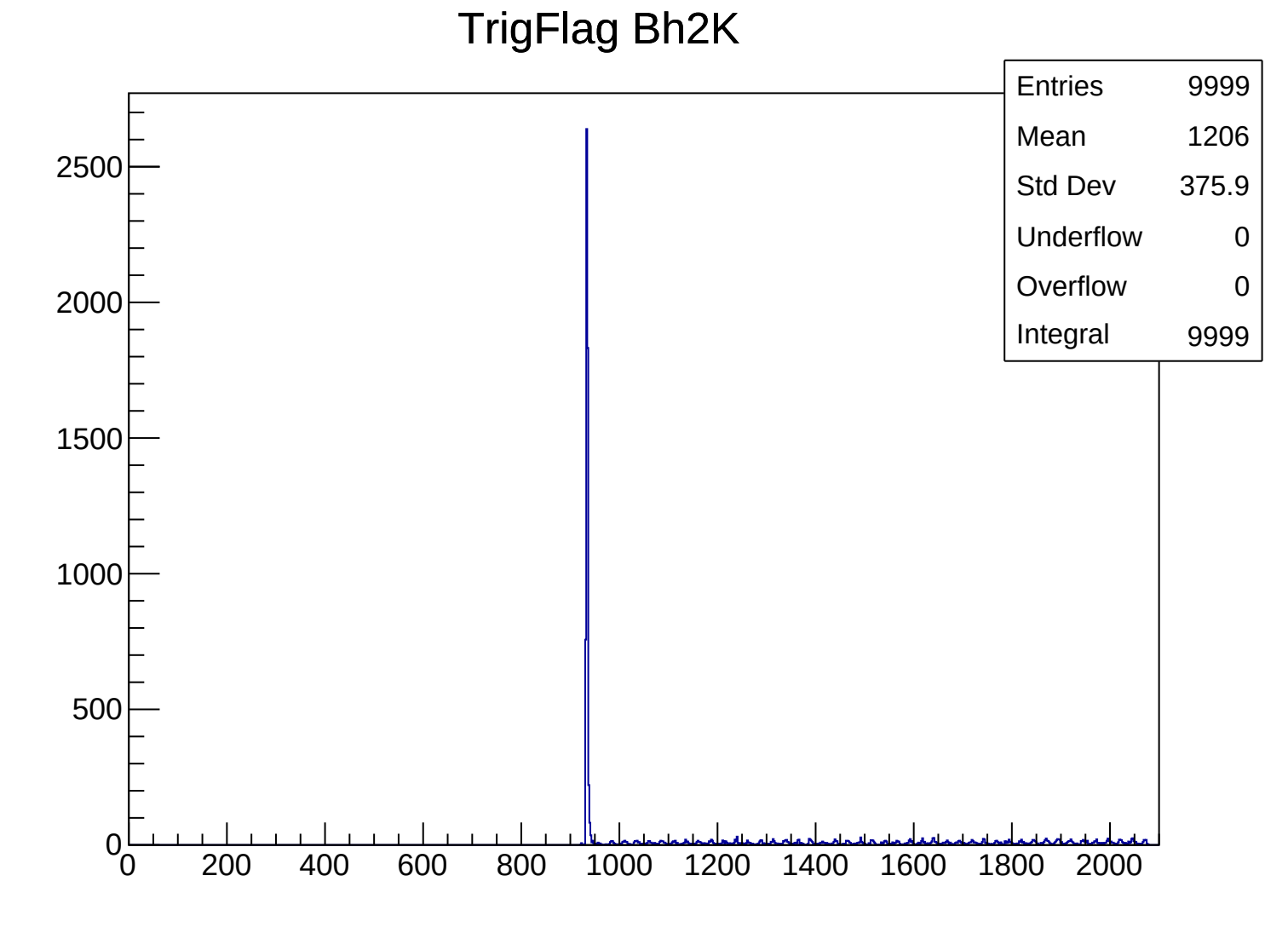
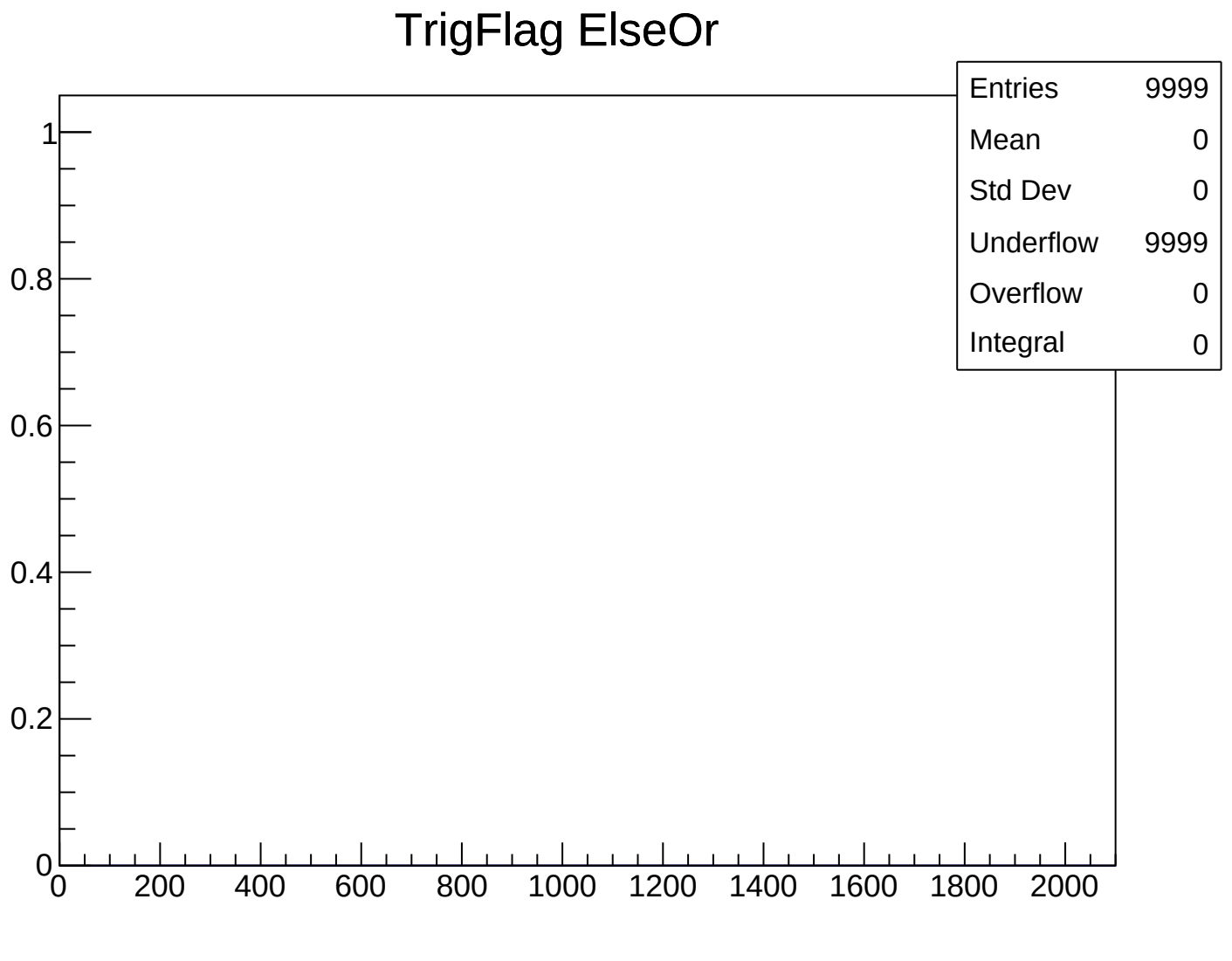
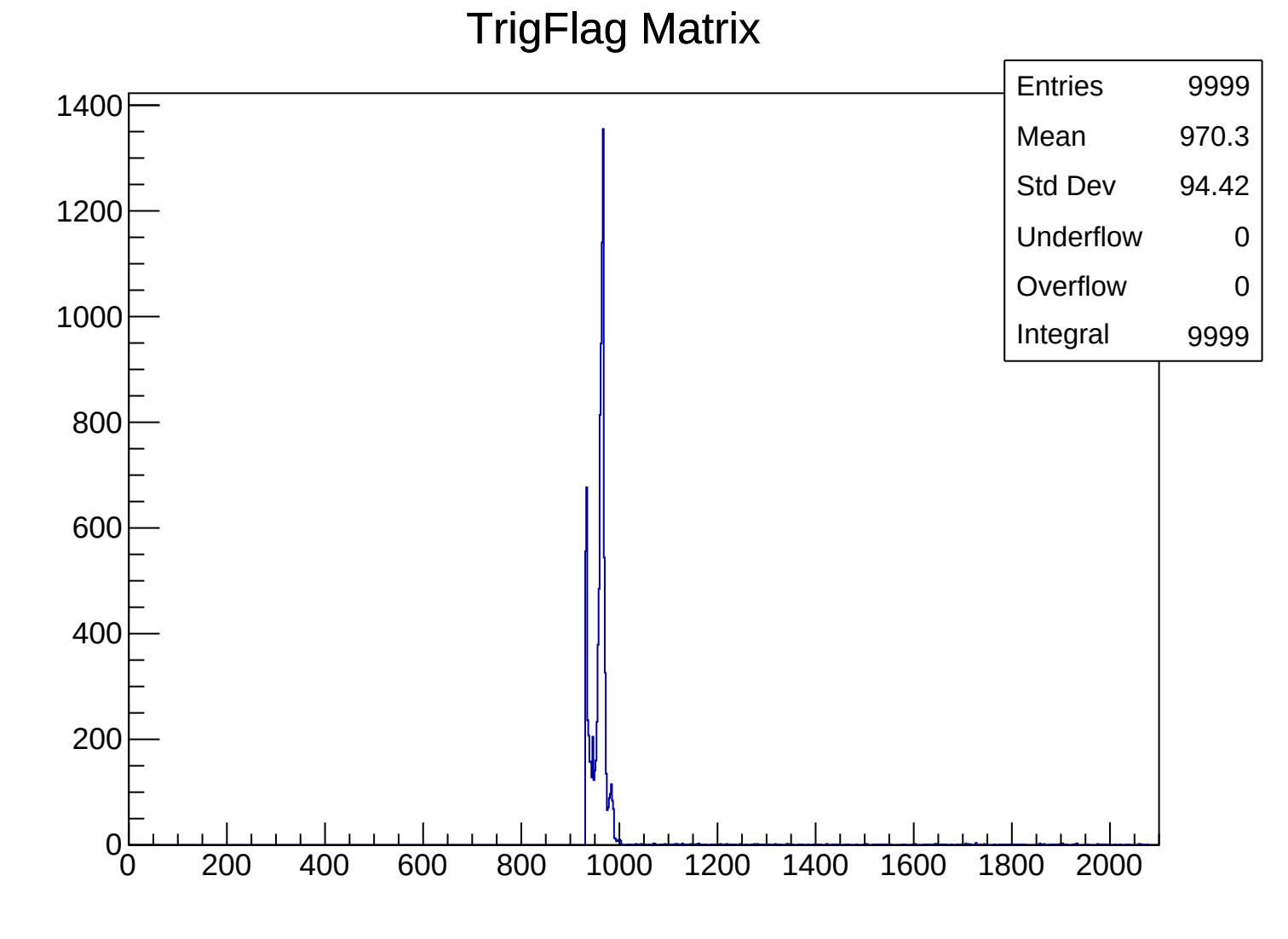
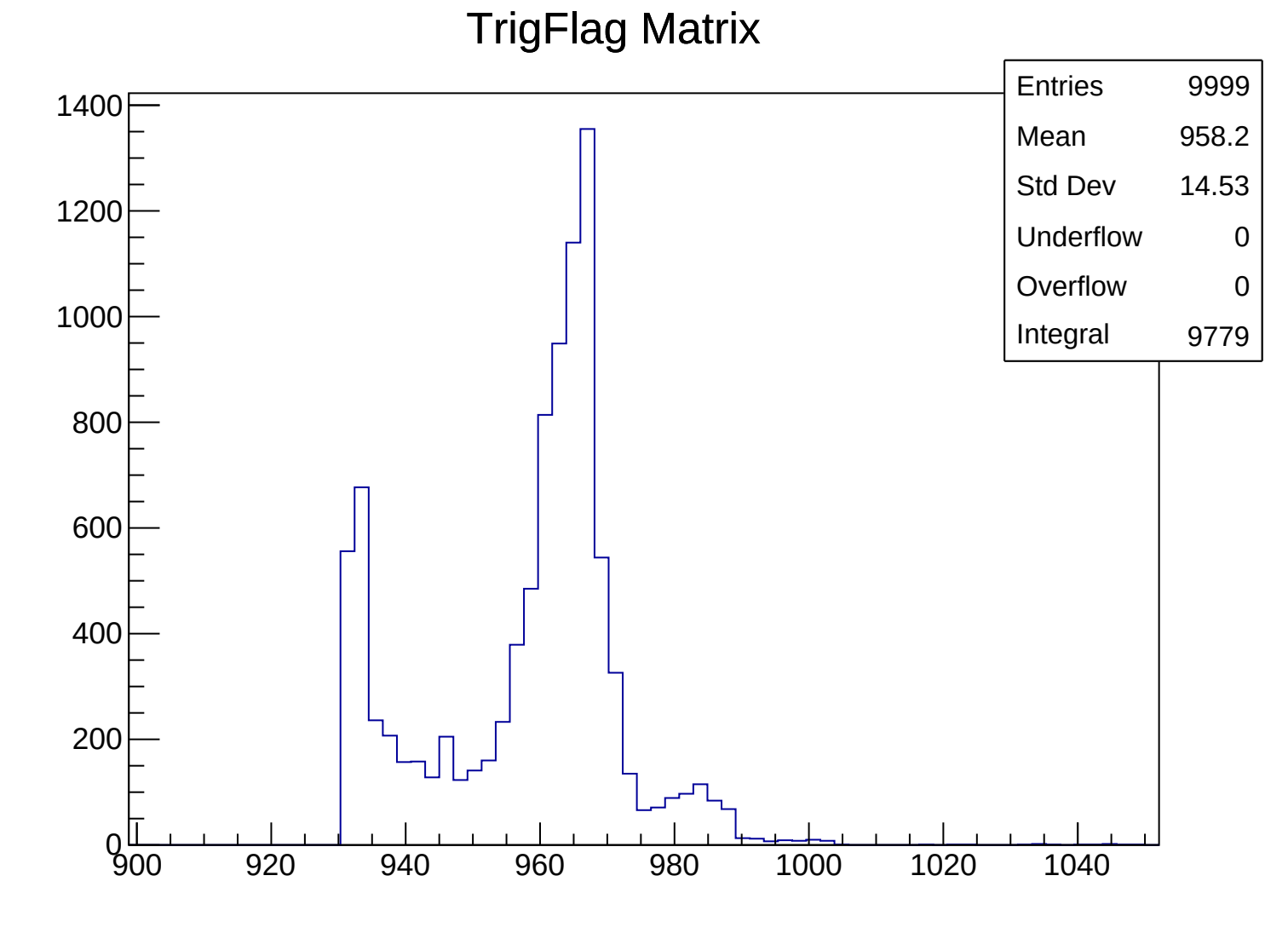
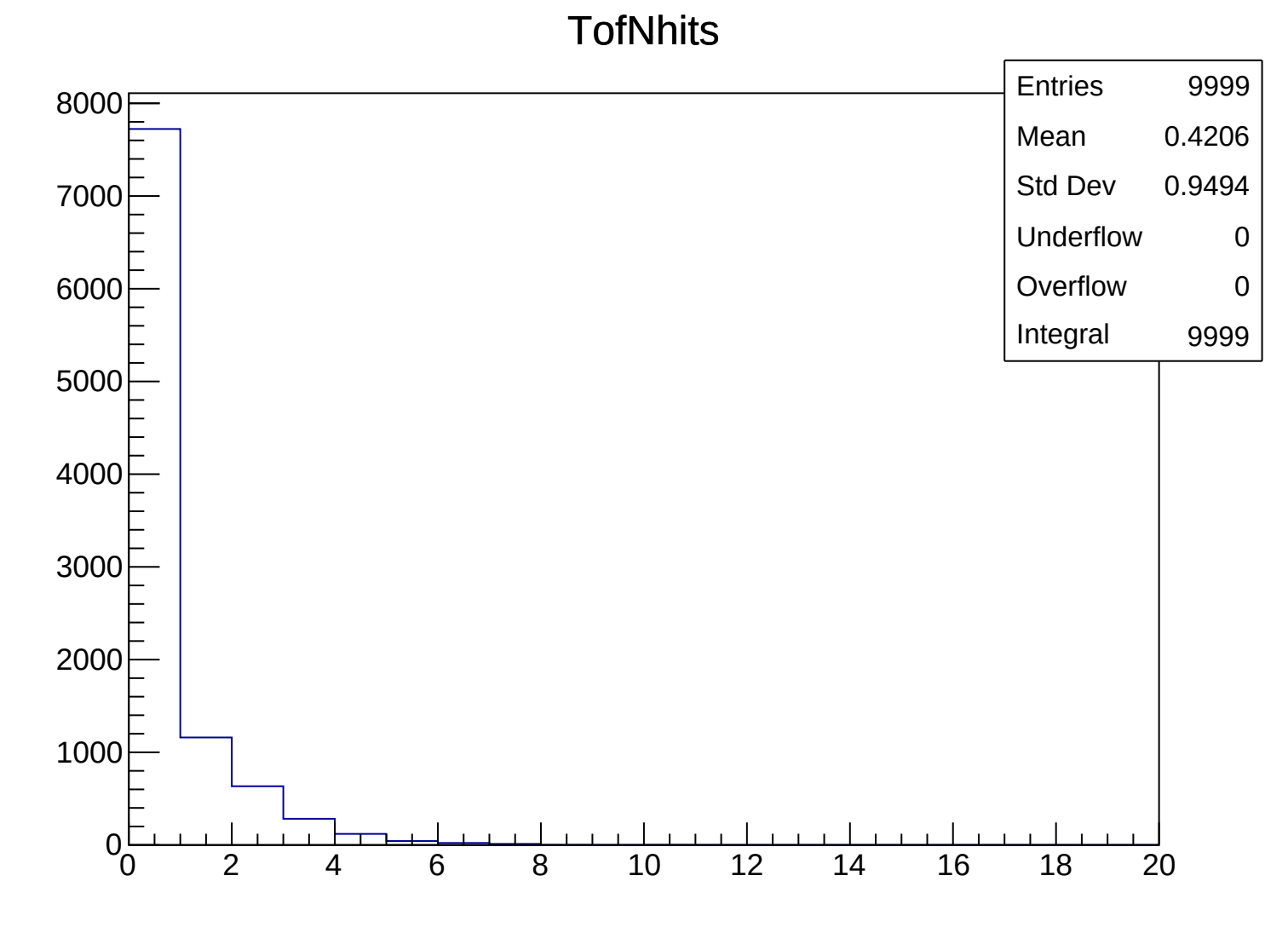

TrigPatAll
Entries 319968
Mean 12.78
Std Dev 7.224
Underflow 2.128e+05
Overflow 9999
Integral 9.714e+04
10000
8000
6000
4000
2000
0
0
5
10
15
20
25
30

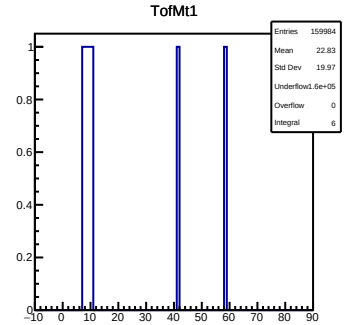

TrigFlag Bh2K
Entries 9999
Mean 1206
Std Dev 375.9
Underflow 0
Overflow 0
Integral 9999
2500
2000
1500
1000
500
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

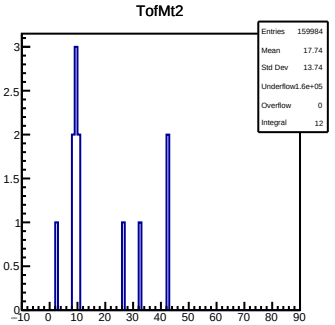

TrigFlag ElseOr
Entries 9999
Mean 0
Std Dev 0
Underflow 9999
Overflow 0
Integral 0
1
0.8
0.6
0.4
0.2
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

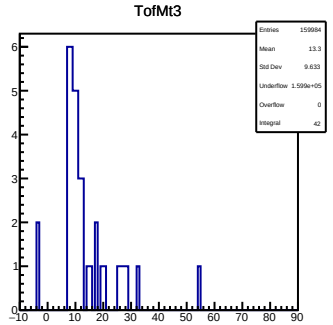

TrigFlag Matrix
Entries 9999
Mean 970.3
Std Dev 94.42
Underflow 0
Overflow 0
Integral 9999
1400
1200
1000
800
600
400
200
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

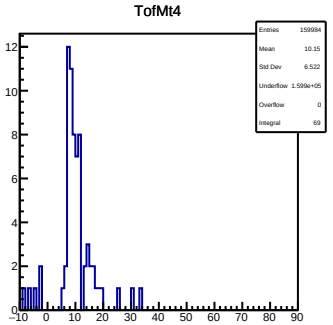

TrigFlag Matrix
Entries 9999
Mean 958.2
Std Dev 14.53
Underflow 0
Overflow 0
Integral 9779
1400
1200
1000
800
600
400
200
0
900
920
940
960
980
1000
1020
1040

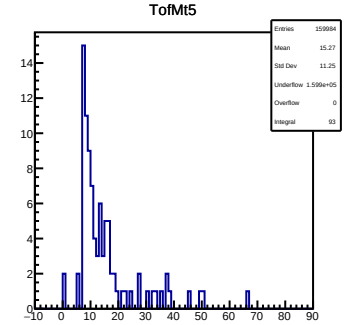

TofNhits
Entries 9999
Mean 0.4206
Std Dev 0.9494
Underflow 0
Overflow 0
Integral 9999
8000
7000
6000
5000
4000
3000
2000
1000
0
0
2
4
6
8
10
12
14
16
18
20

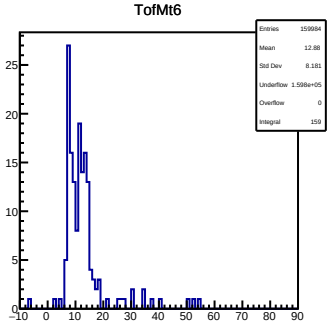

TofMt1
Entries 159984
Mean 22.83
Std Dev 19.97
Underflow 1.6e+05
Overflow 0
Integral 6

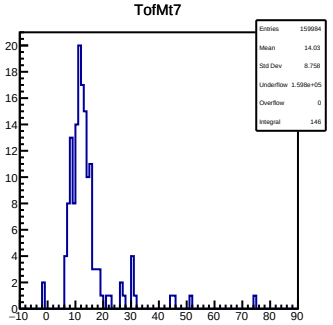

TofMt2
Entries 159984
Mean 17.74
Std Dev 13.74
Underflow 1.6e+05
Overflow 0
Integral 12

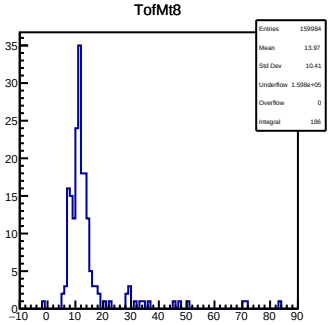

TofMt3
Entries 159984
Mean 13.3
Std Dev 9.633
Underflow 1.599e+05
Overflow 0
Integral 42

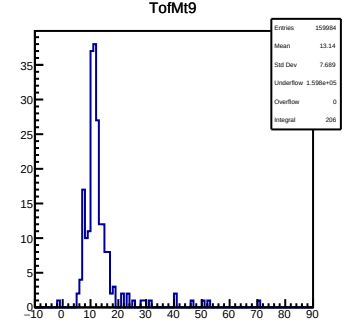

TofMt4
Entries 159984
Mean 10.15
Std Dev 6.522
Underflow 1.599e+05
Overflow 0
Integral 69

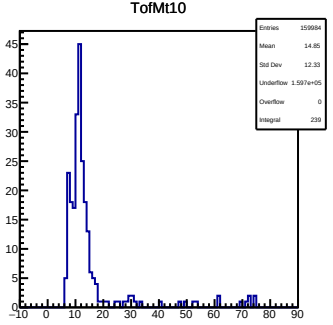

TofMt5
Entries 159984
Mean 15.27
Std Dev 11.25
Underflow 1.599e+05
Overflow 0
Integral 93

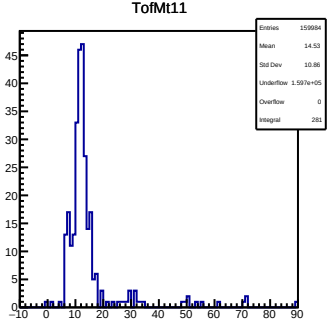

TofMt6
Entries 159984
Mean 12.88
Std Dev 8.181
Underflow 1.598e+05
Overflow 0
Integral 159

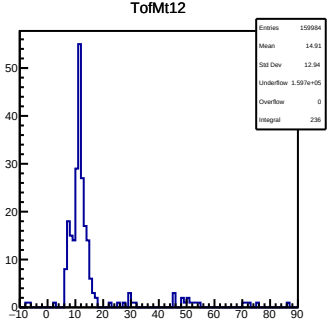

TofMt7
Entries 159984
Mean 14.03
Std Dev 8.758
Underflow 1.598e+05
Overflow 0
Integral 146

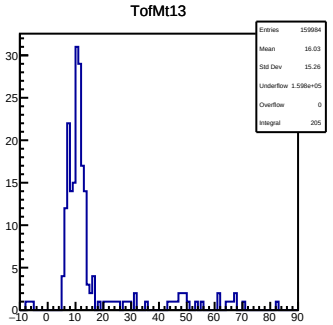

TofMt8
Entries 159984
Mean 13.97
Std Dev 10.41
Underflow 1.598e+05
Overflow 0
Integral 186

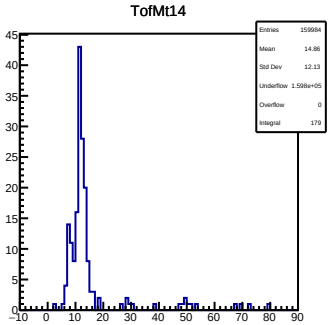

TofMt9
Entries 159984
Mean 13.14
Std Dev 7.689
Underflow 1.598e+05
Overflow 0
Integral 206

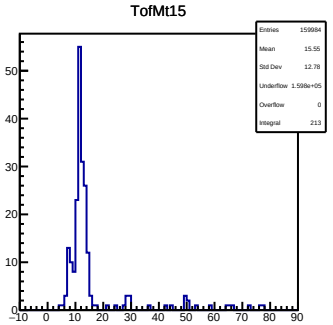

TofMt10
Entries 159984
Mean 14.85
Std Dev 12.33
Underflow 1.597e+05
Overflow 0
Integral 239

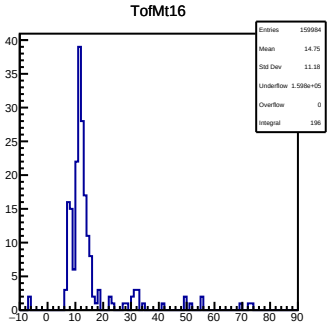

TofMt11
Entries 159984
Mean 14.53
Std Dev 10.86
Underflow 1.597e+05
Overflow 0
Integral 281

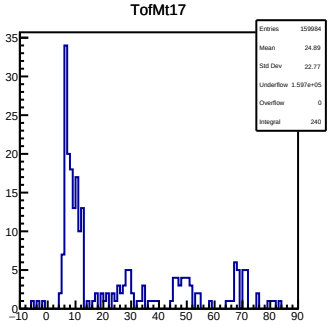

TofMt12
Entries 159984
Mean 14.91
Std Dev 12.94
Underflow 1.597e+05
Overflow 0
Integral 236

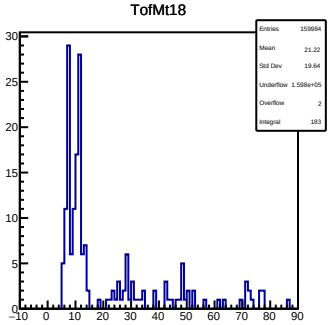

TofMt13
Entries 159984
Mean 16.03
Std Dev 15.26
Underflow 1.598e+05
Overflow 0
Integral 205

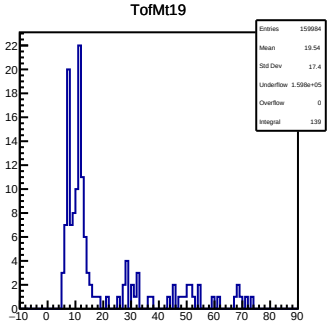

TofMt14
Entries 159984
Mean 14.86
Std Dev 12.13
Underflow 1.598e+05
Overflow 0
Integral 179

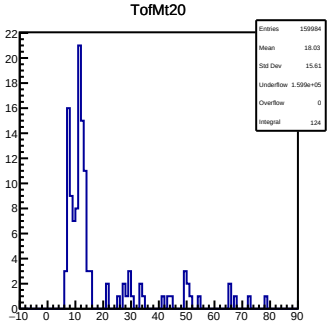

TofMt15
Entries 159984
Mean 15.55
Std Dev 12.78
Underflow 1.598e+05
Overflow 0
Integral 213

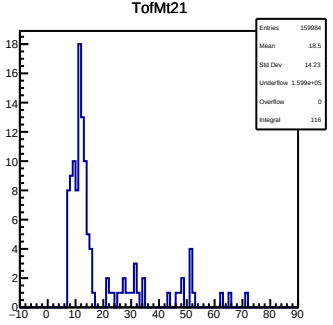

TofMt16
Entries 159984
Mean 14.75
Std Dev 11.18
Underflow 1.598e+05
Overflow 0
Integral 196

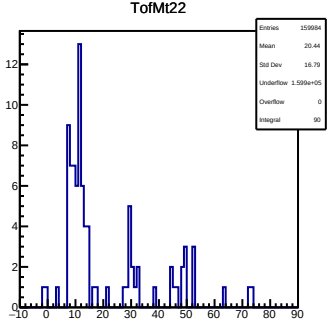

TofMt17
Entries 159984
Mean 24.89
Std Dev 22.77
Underflow 1.597e+05
Overflow 0
Integral 240

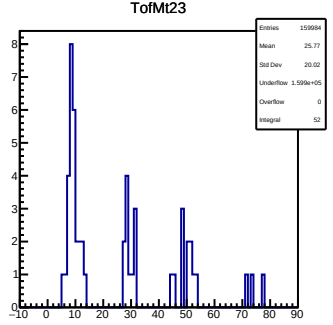

TofMt18
Entries 159984
Mean 21.22
Std Dev 19.64
Underflow 1.598e+05
Overflow 2
Integral 183

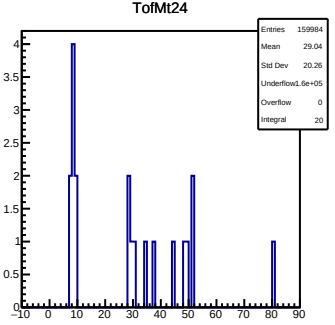

TofMt19
Entries 159984
Mean 19.54
Std Dev 17.4
Underflow 1.598e+05
Overflow 0
Integral 139

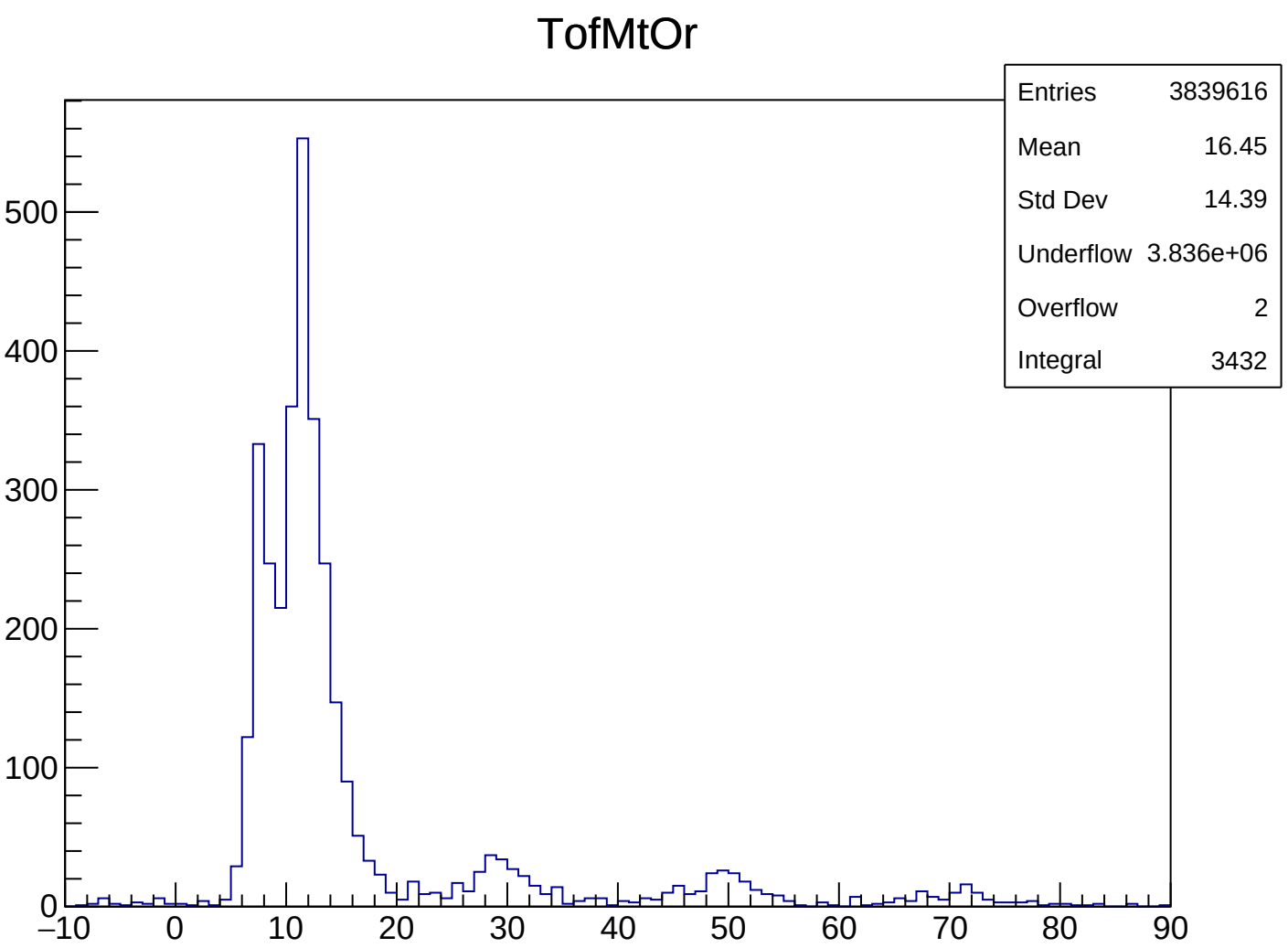

TofMt20
Entries 159984
Mean 18.03
Std Dev 15.61
Underflow 1.599e+05
Overflow 0
Integral 124

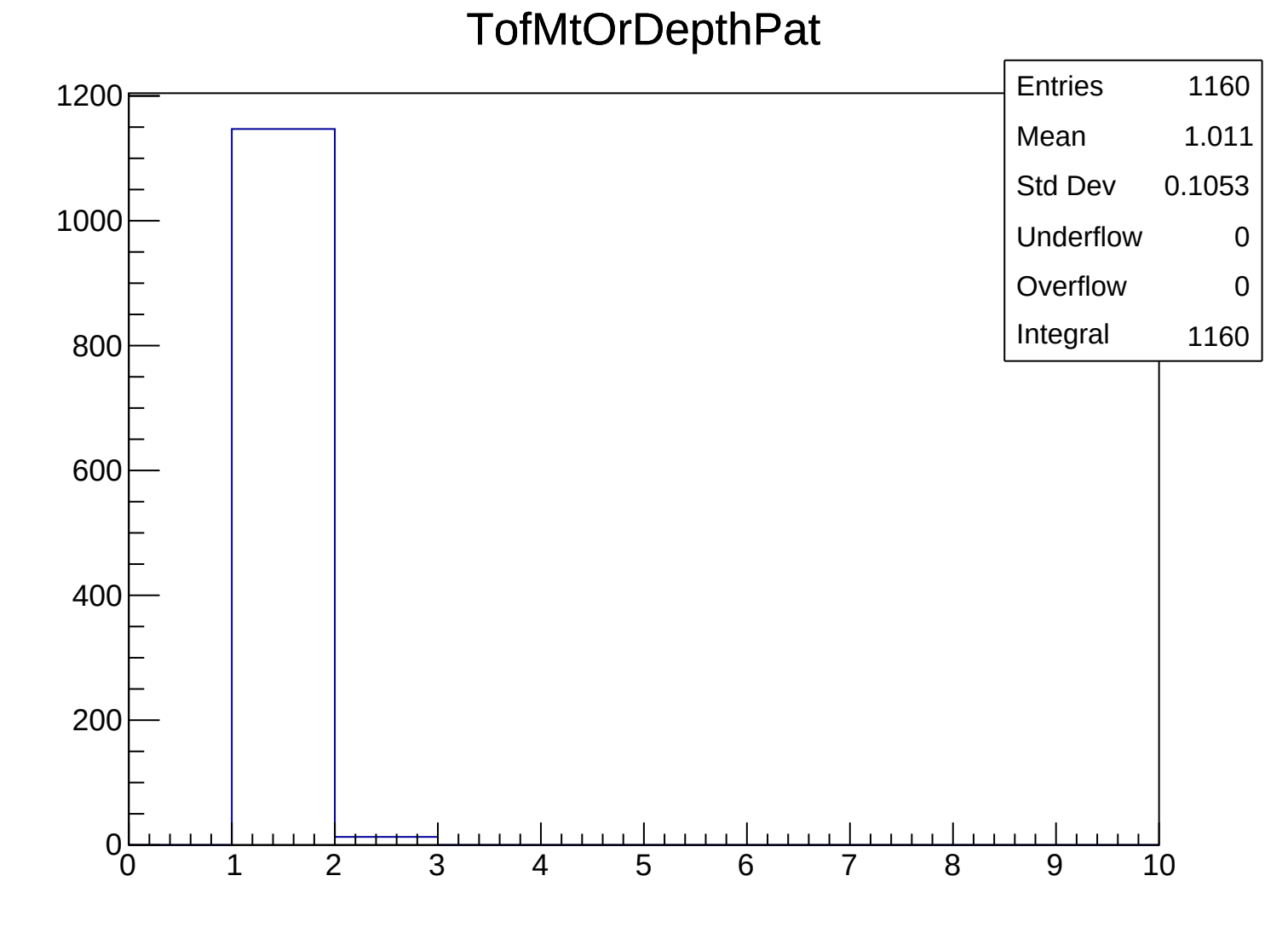

TofMt21
Entries 159984
Mean 18.5
Std Dev 14.23
Underflow 1.599e+05
Overflow 0
Integral 116

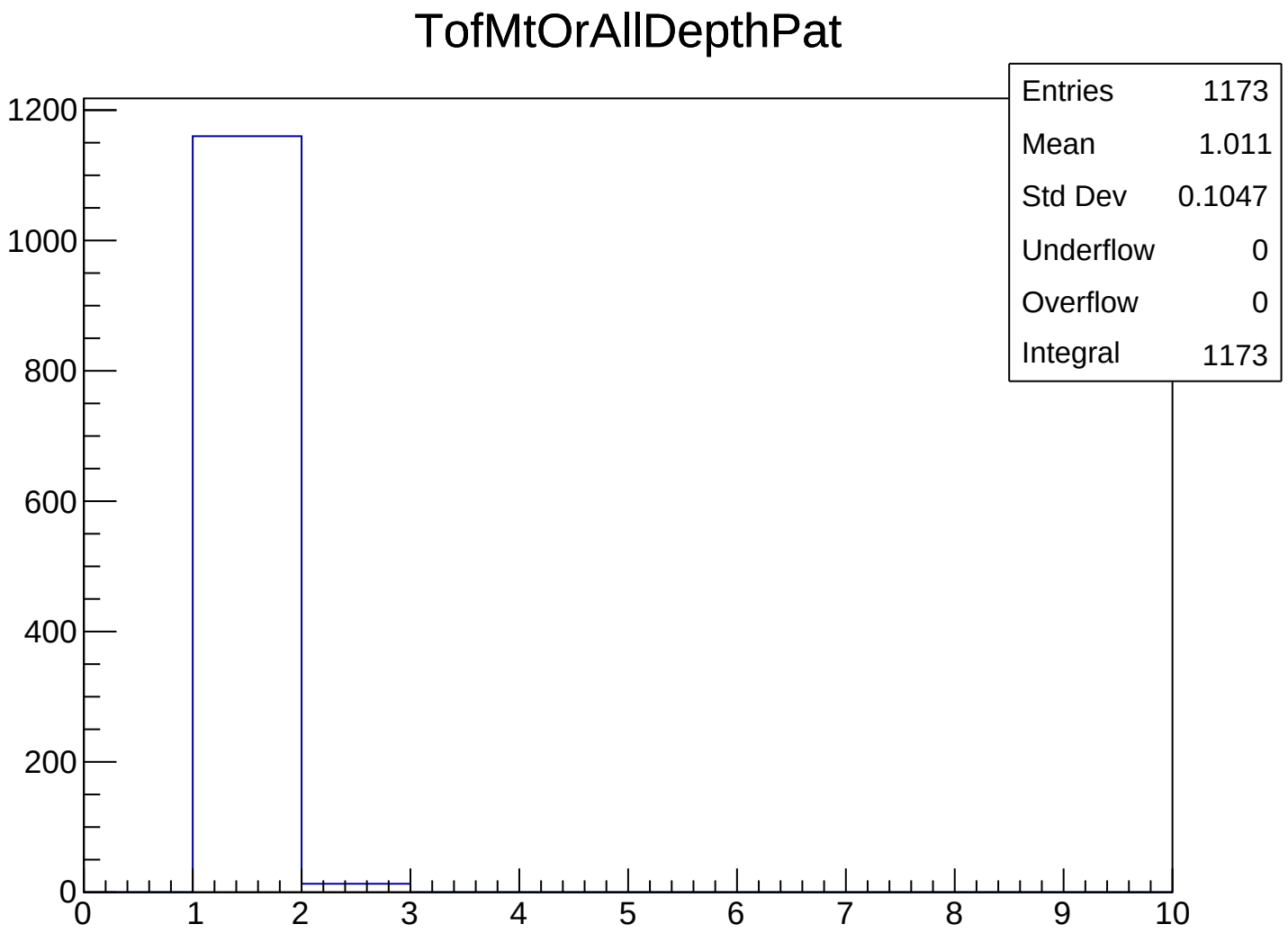

TofMt22
Entries 159984
Mean 20.44
Std Dev 16.79
Underflow 1.599e+05
Overflow 0
Integral 90

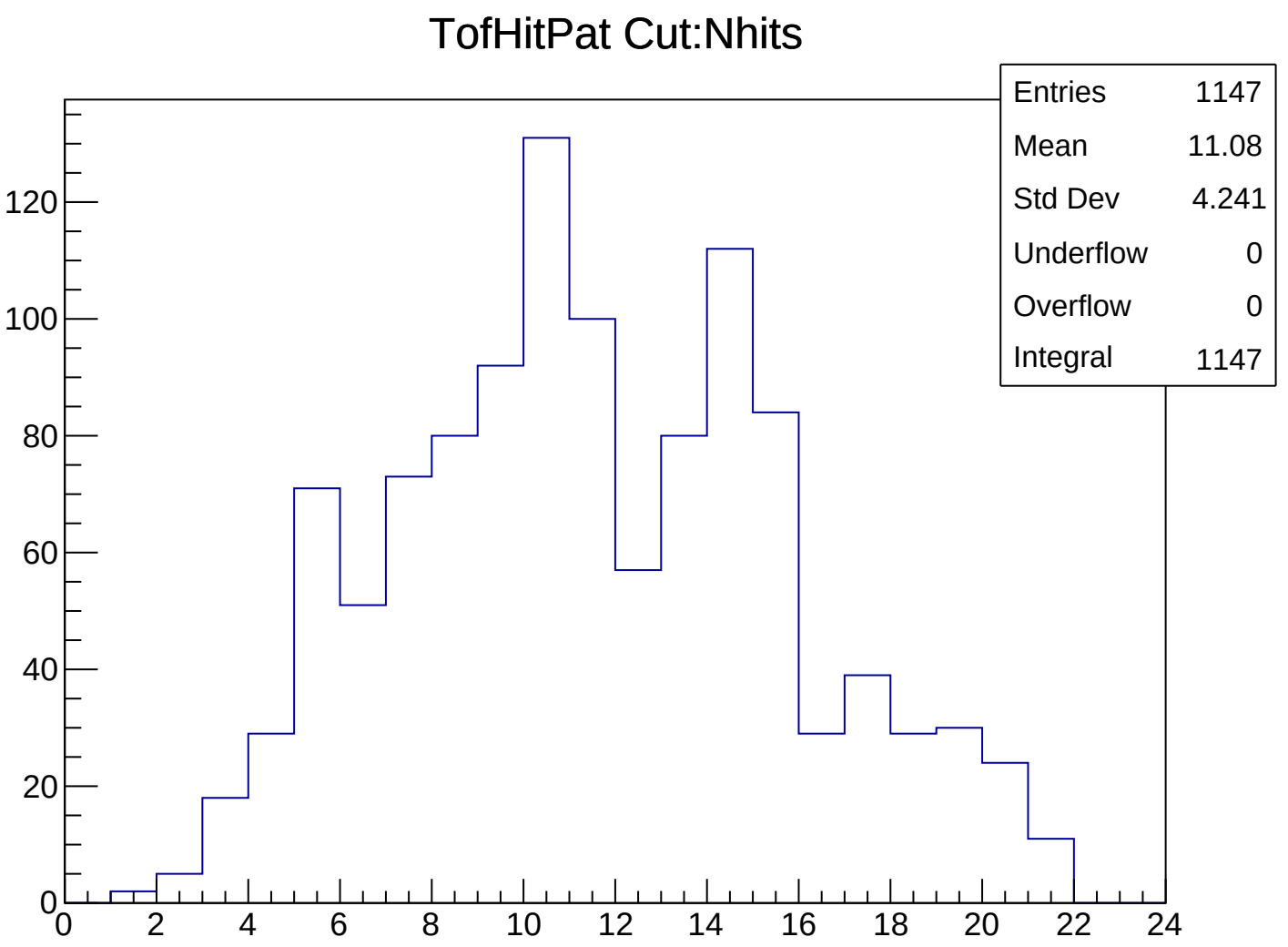

TofMt23
Entries 159984
Mean 25.77
Std Dev 20.02
Underflow 1.599e+05
Overflow 0
Integral 52

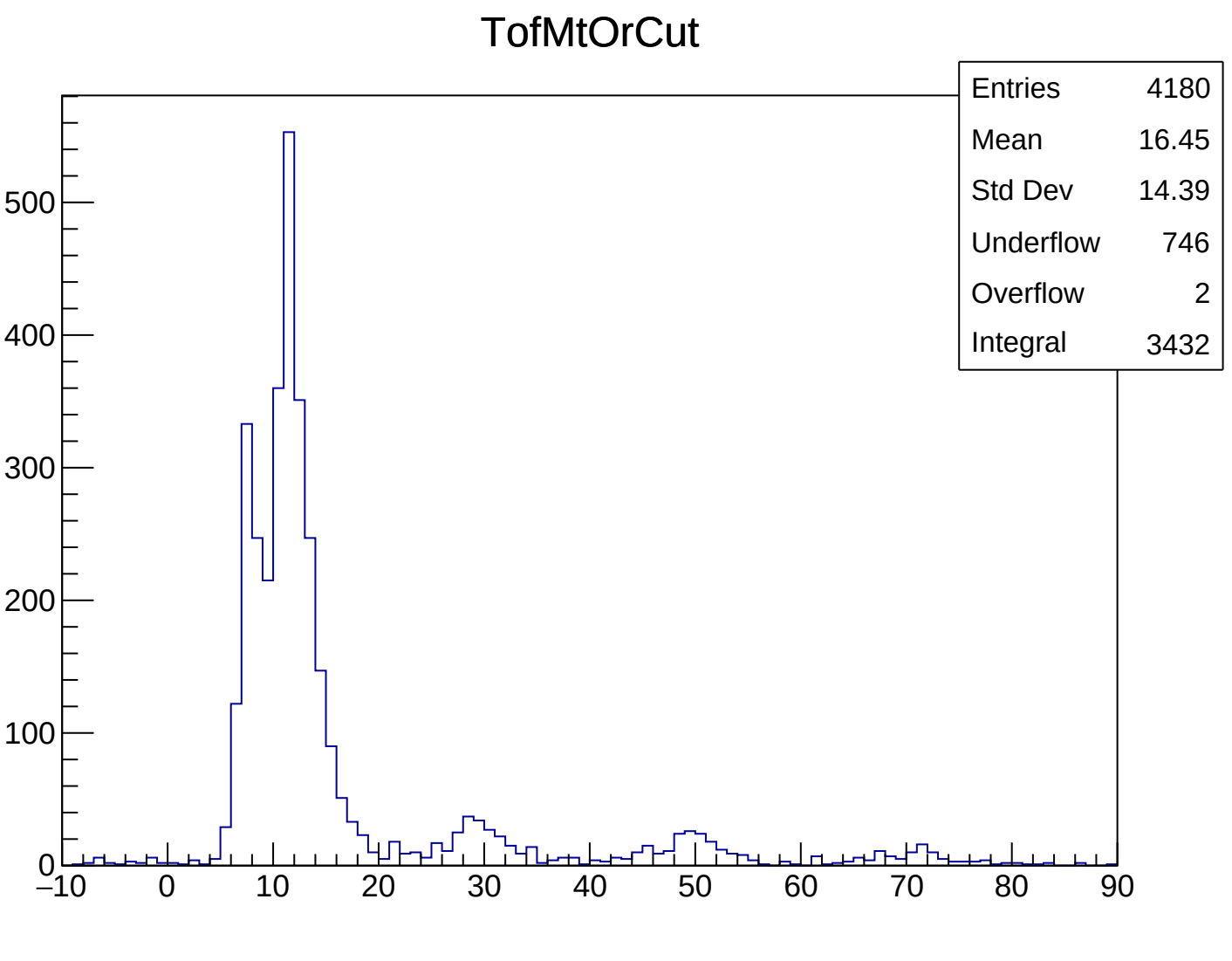

TofMt24
Entries 159984
Mean 29.04
Std Dev 20.26
Underflow1.6e+05
Overflow 0
Integral 20

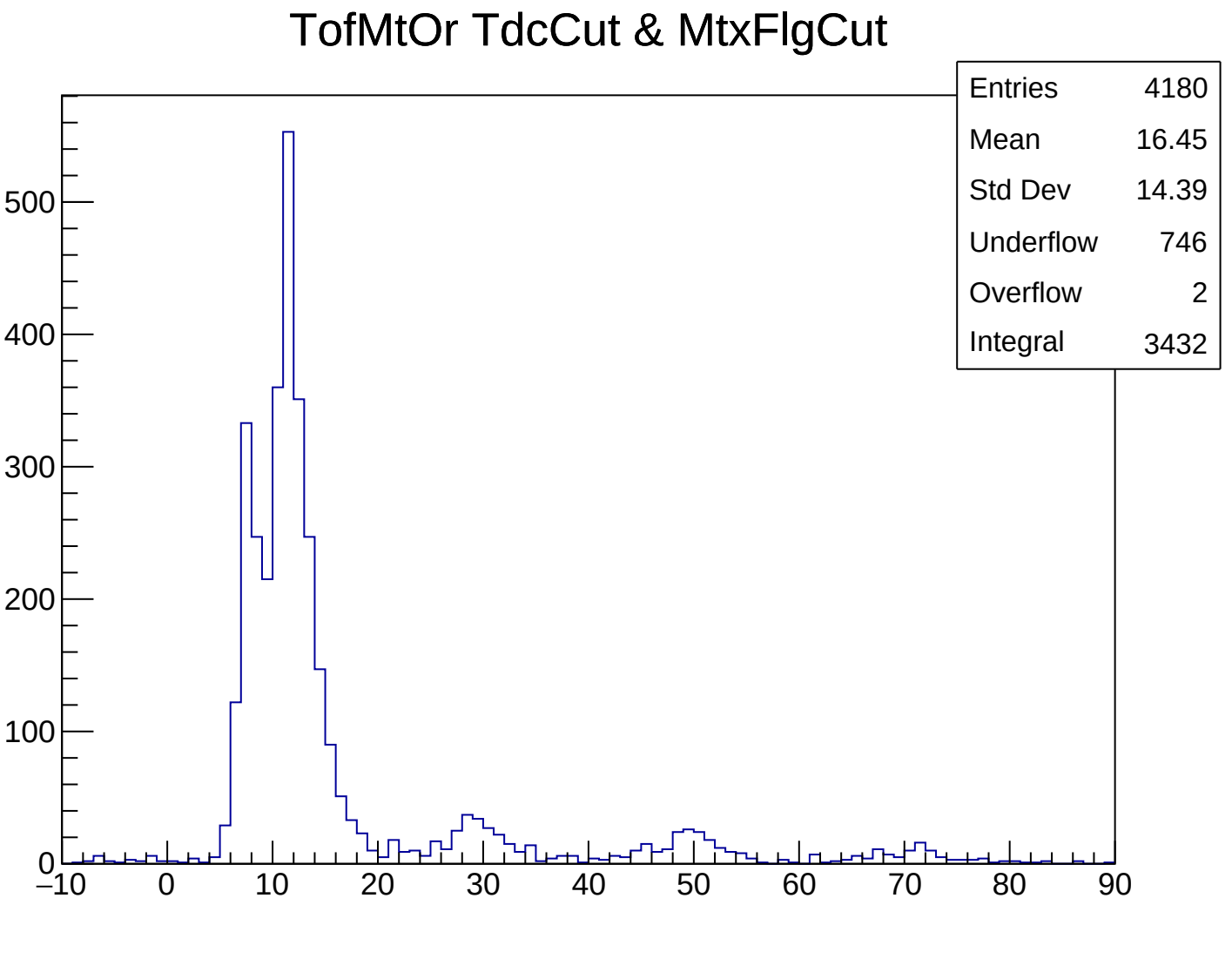

TofMtOr
Entries 3839616
Mean 16.45
Std Dev 14.39
Underflow 3.836e+06
Overflow 2
Integral 3432
500
400
300
200
100
0
−10
0
10
20
30
40
50
60
70
80
90

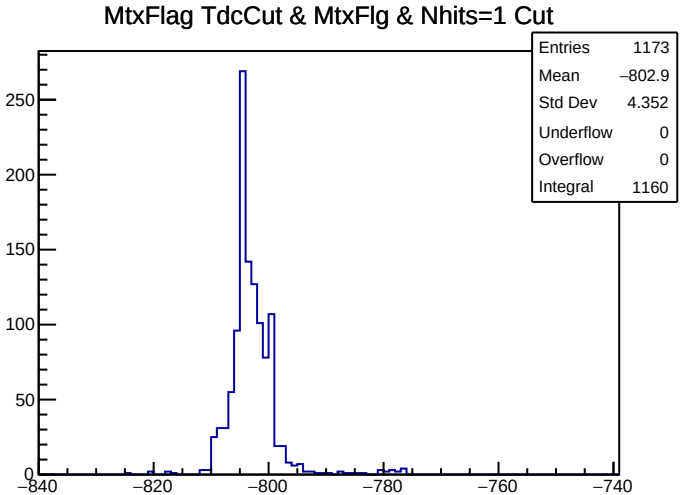

TofMtOrDepthPat
Entries 1160
Mean 1.011
Std Dev 0.1053
Underflow 0
Overflow 0
Integral 1160
1200
1000
800
600
400
200
0
0
1
2
3
4
5
6
7
8
9
10

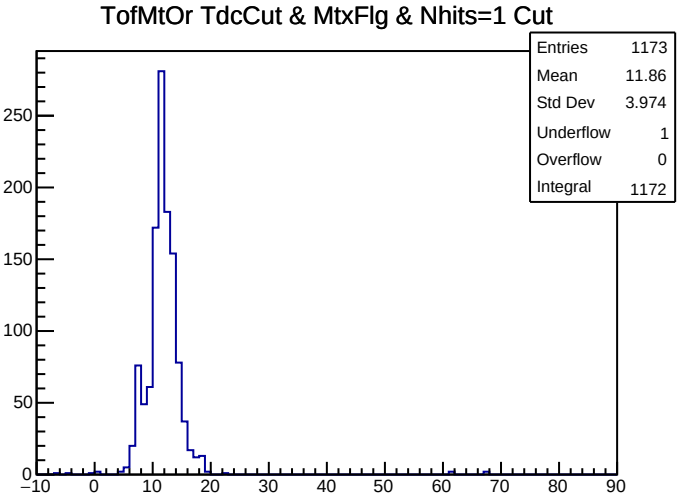

TofMtOrAllDepthPat
Entries 1173
Mean 1.011
Std Dev 0.1047
Underflow 0
Overflow 0
Integral 1173
1200
1000
800
600
400
200
0
0
1
2
3
4
5
6
7
8
9
10

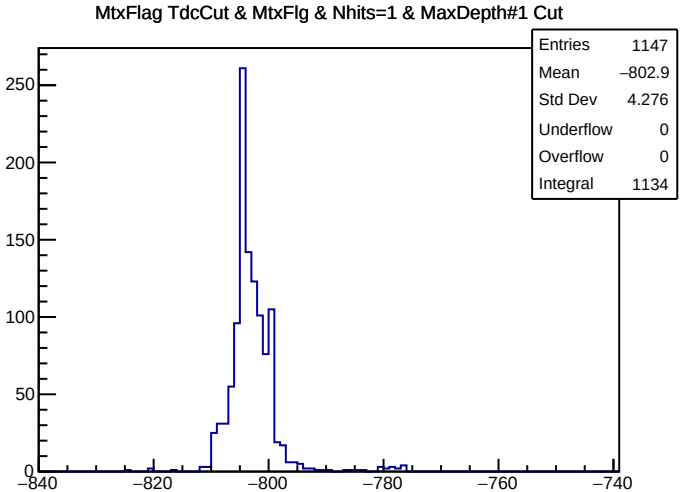

TofHitPat Cut:Nhits
Entries 1147
Mean 11.08
Std Dev 4.241
Underflow 0
Overflow 0
Integral 1147
0
20
40
60
80
100
120
0
2
4
6
8
10
12
14
16
18
20
22
24

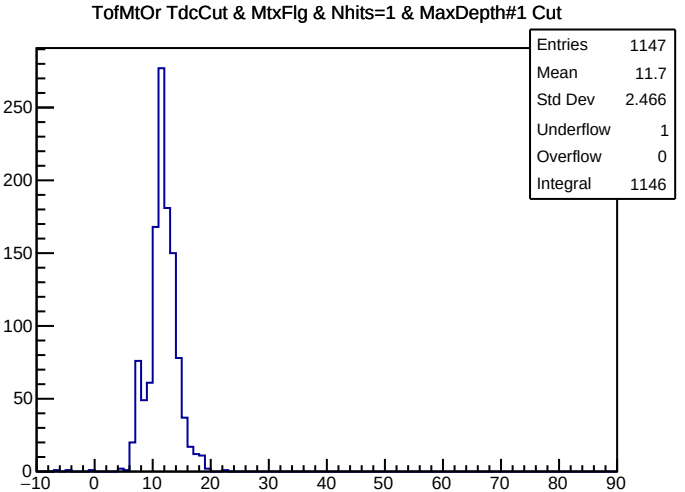

TofMtOrCut
Entries 4180
Mean 16.45
Std Dev 14.39
Underflow 746
Overflow 2
Integral 3432
500
400
300
200
100
0
−10
0
10
20
30
40
50
60
70
80
90

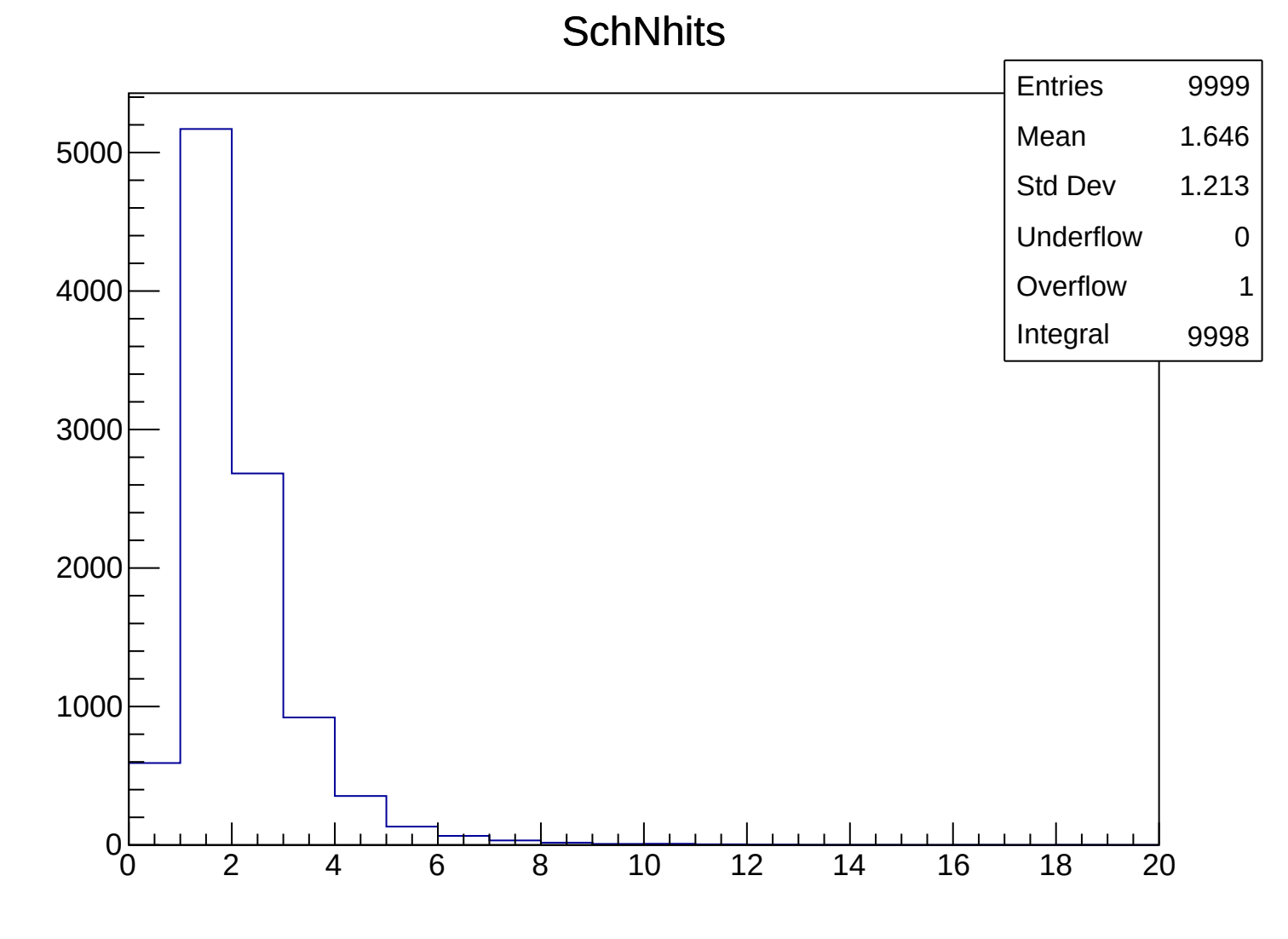

TofMtOr TdcCut & MtxFlgCut
Entries 4180
Mean 16.45
Std Dev 14.39
Underflow 746
Overflow 2
Integral 3432
500
400
300
200
100
0
−10
0
10
20
30
40
50
60
70
80
90

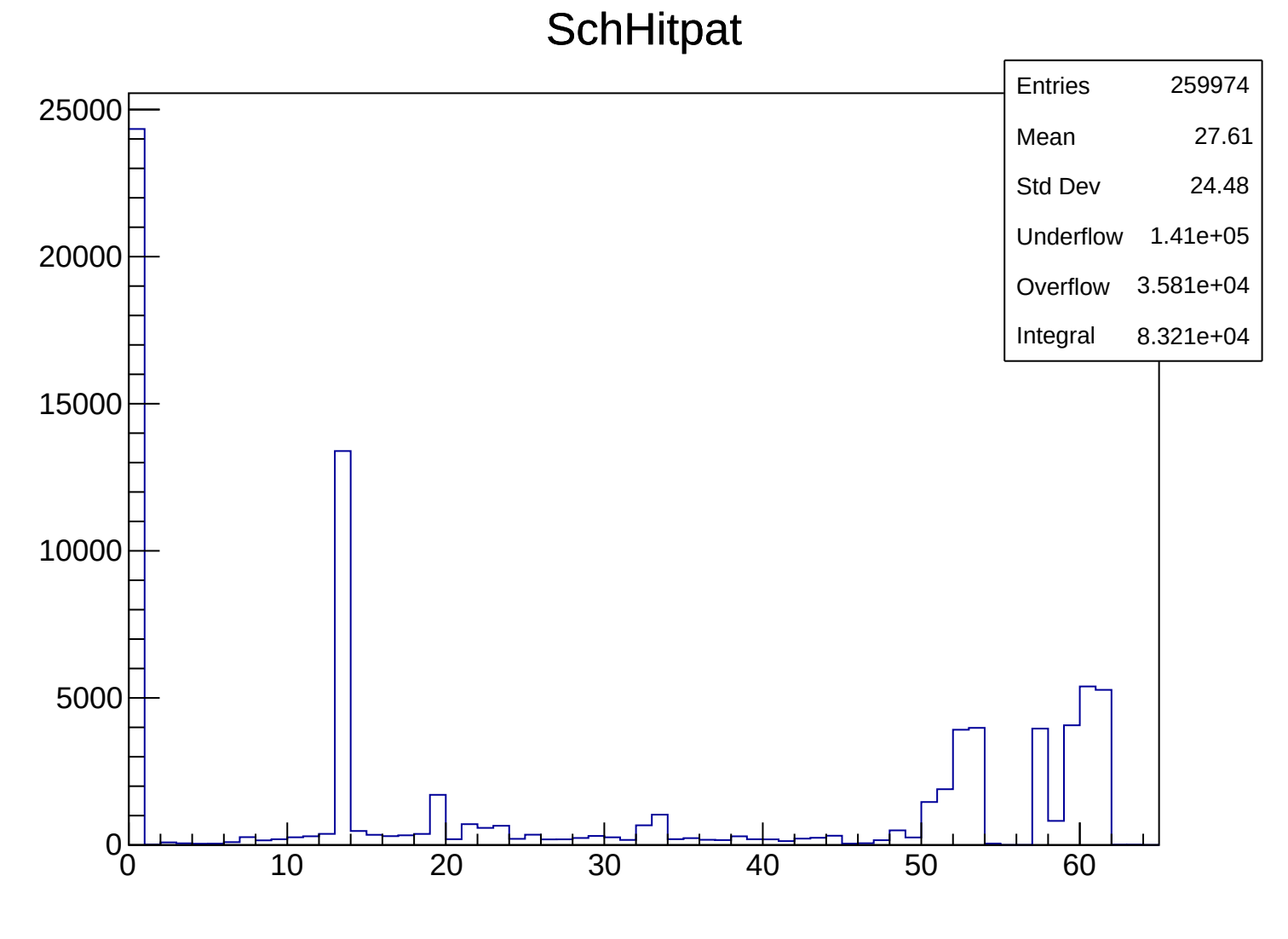

MtxFlag TdcCut & MtxFlg & Nhits=1 Cut
Entries 1173
Mean −802.9
Std Dev 4.352
Underflow 0
Overflow 0
Integral 1160
250
200
150
100
50
0
−840
−820
−800
−780
−760
−740

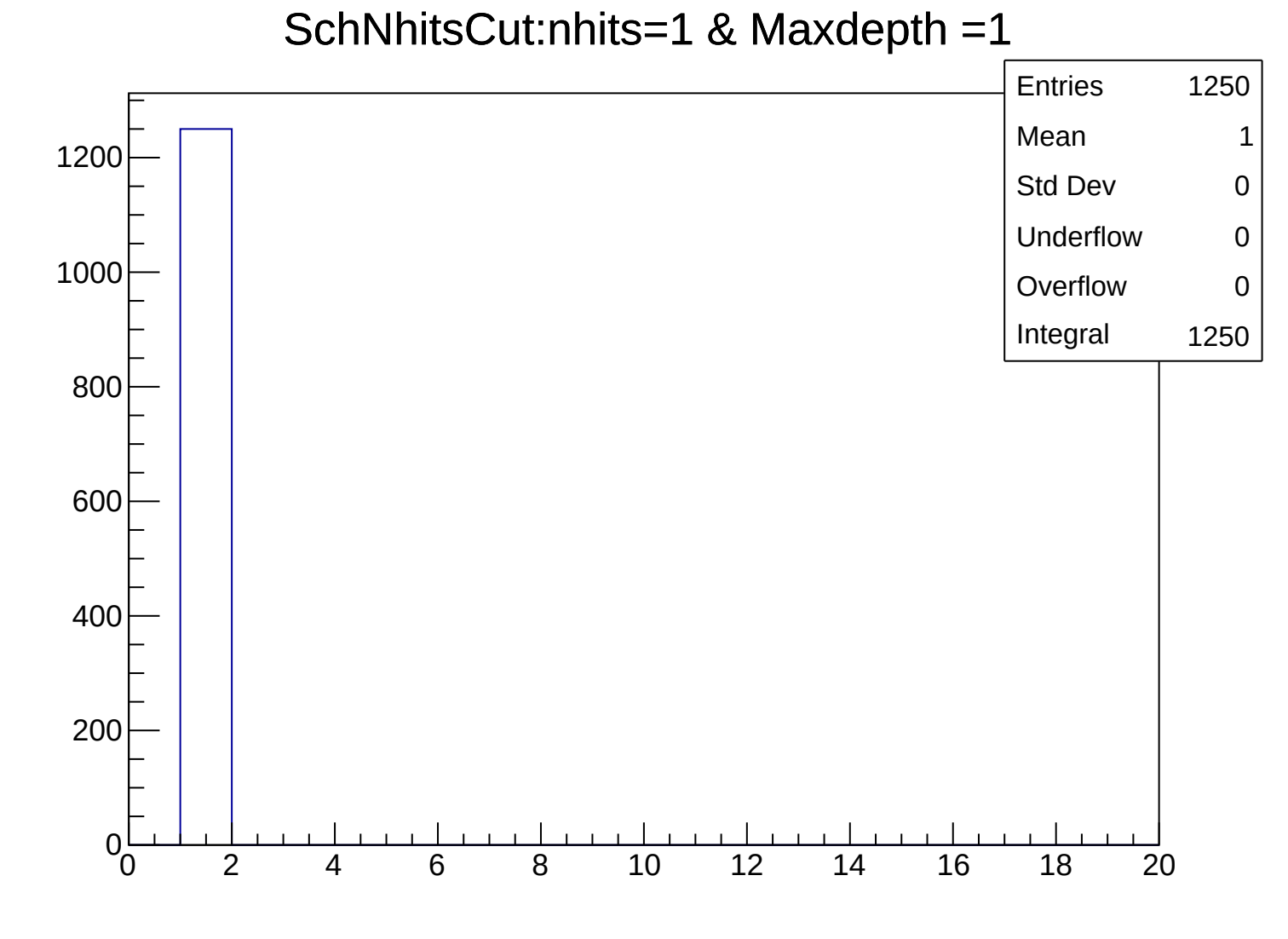

TofMtOr TdcCut & MtxFlg & Nhits=1 Cut
Entries 1173
Mean 11.86
Std Dev 3.974
Underflow 1
Overflow 0
Integral 1172
250
200
150
100
50
0
−10
0
10
20
30
40
50
60
70
80
90

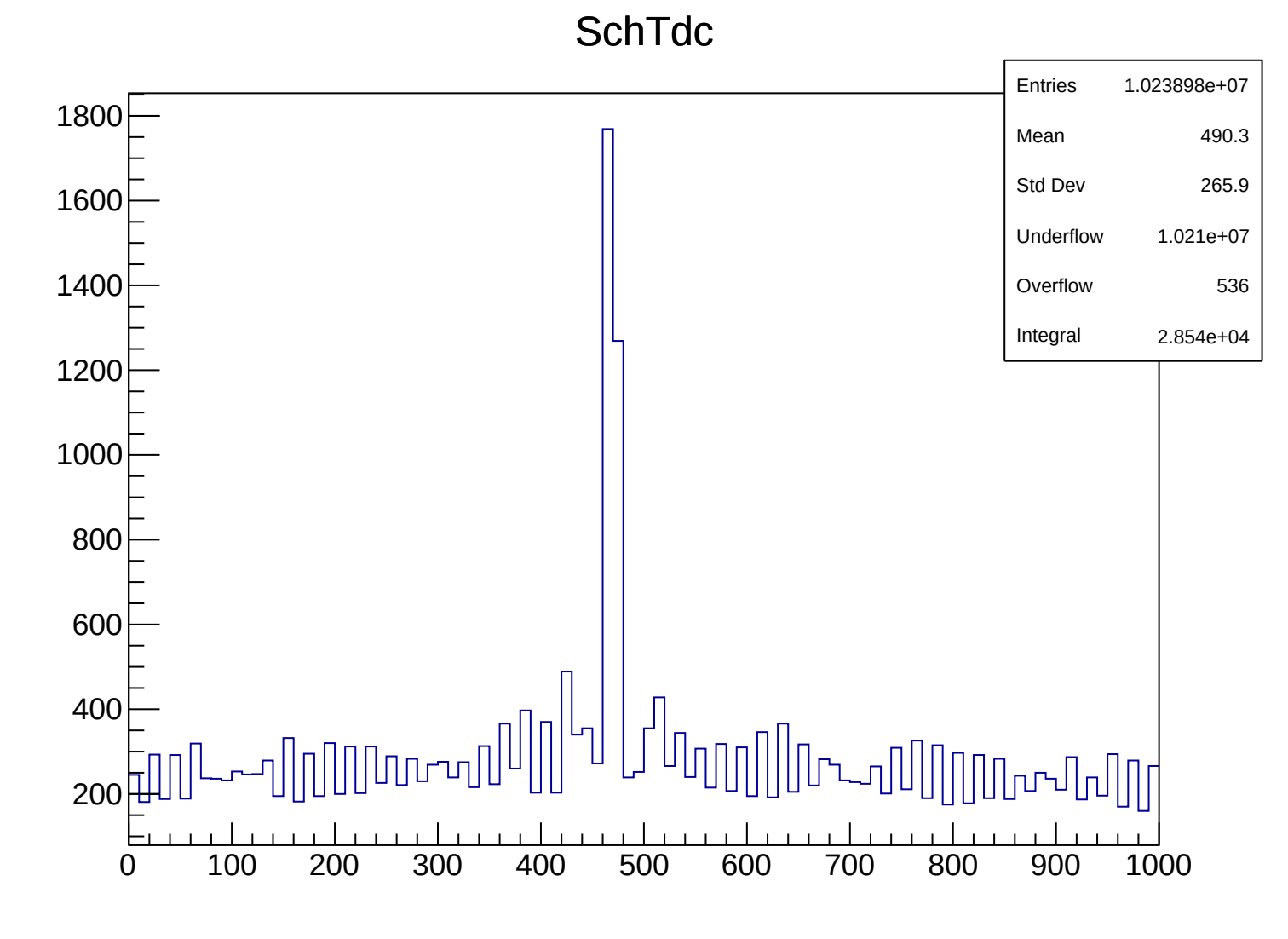

MtxFlag TdcCut & MtxFlg & Nhits=1 & MaxDepth#1 Cut
Entries 1147
Mean −802.9
Std Dev 4.276
Underflow 0
Overflow 0
Integral 1134
250
200
150
100
50
0
−840
−820
−800
−780
−760
−740

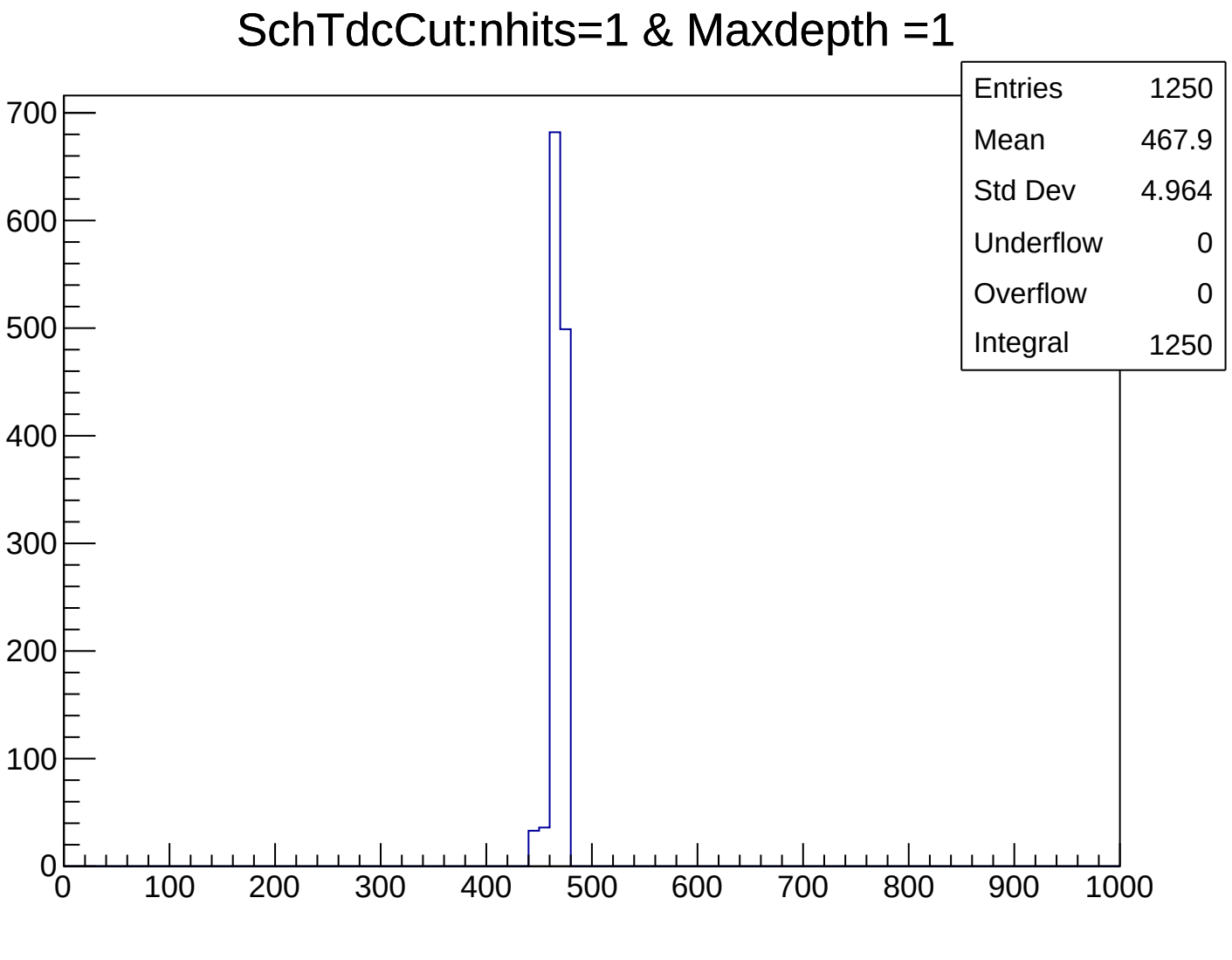

TofMtOr TdcCut & MtxFlg & Nhits=1 & MaxDepth#1 Cut
Entries 1147
Mean 11.7
Std Dev 2.466
Underflow 1
Overflow 0
Integral 1146
250
200
150
100
50
0
−10
0
10
20
30
40
50
60
70
80
90

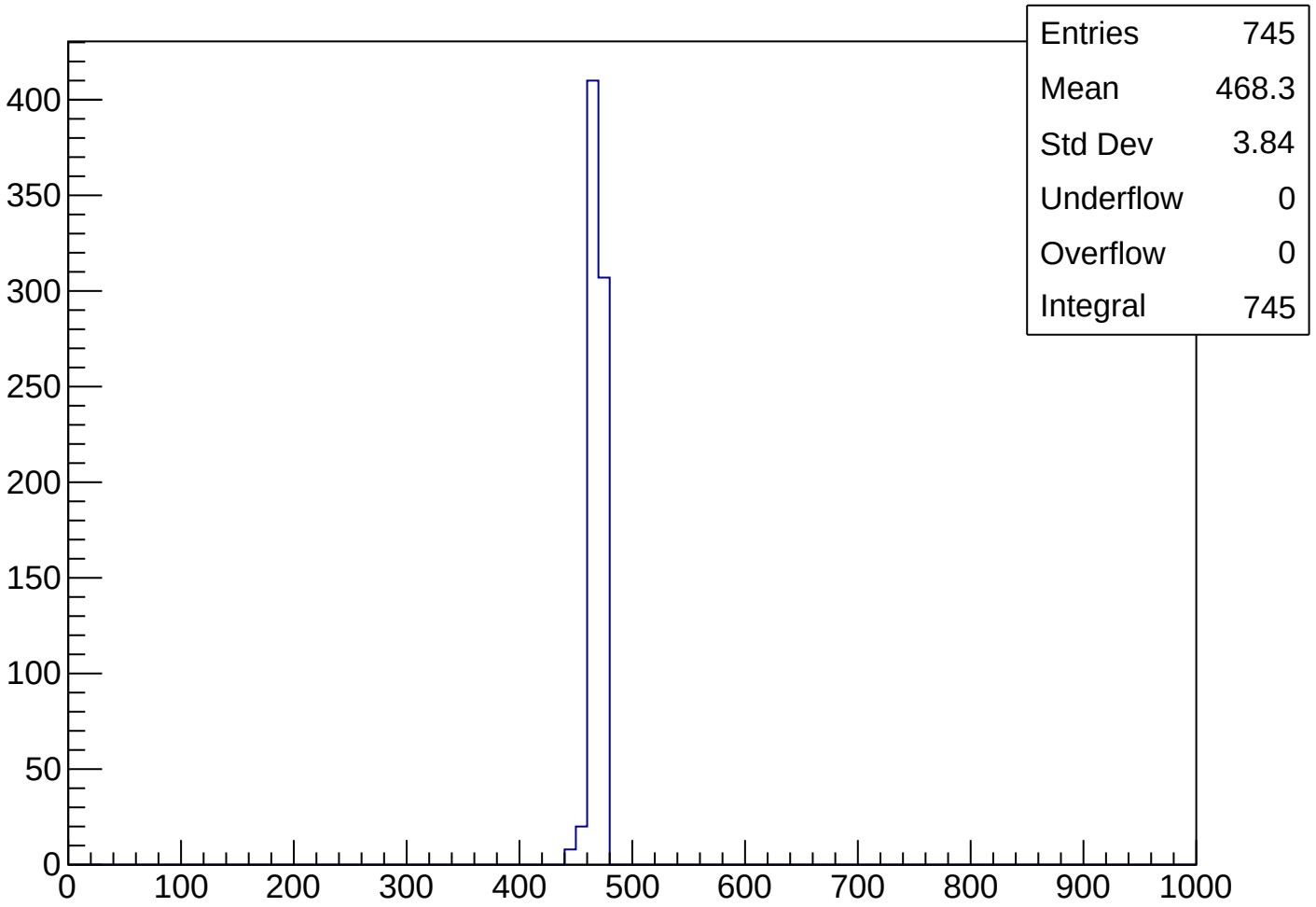

SchNhits
Entries 9999
Mean 1.646
Std Dev 1.213
Underflow 0
Overflow 1
Integral 9998
5000
4000
3000
2000
1000
0
0
2
4
6
8
10
12
14
16
18
20

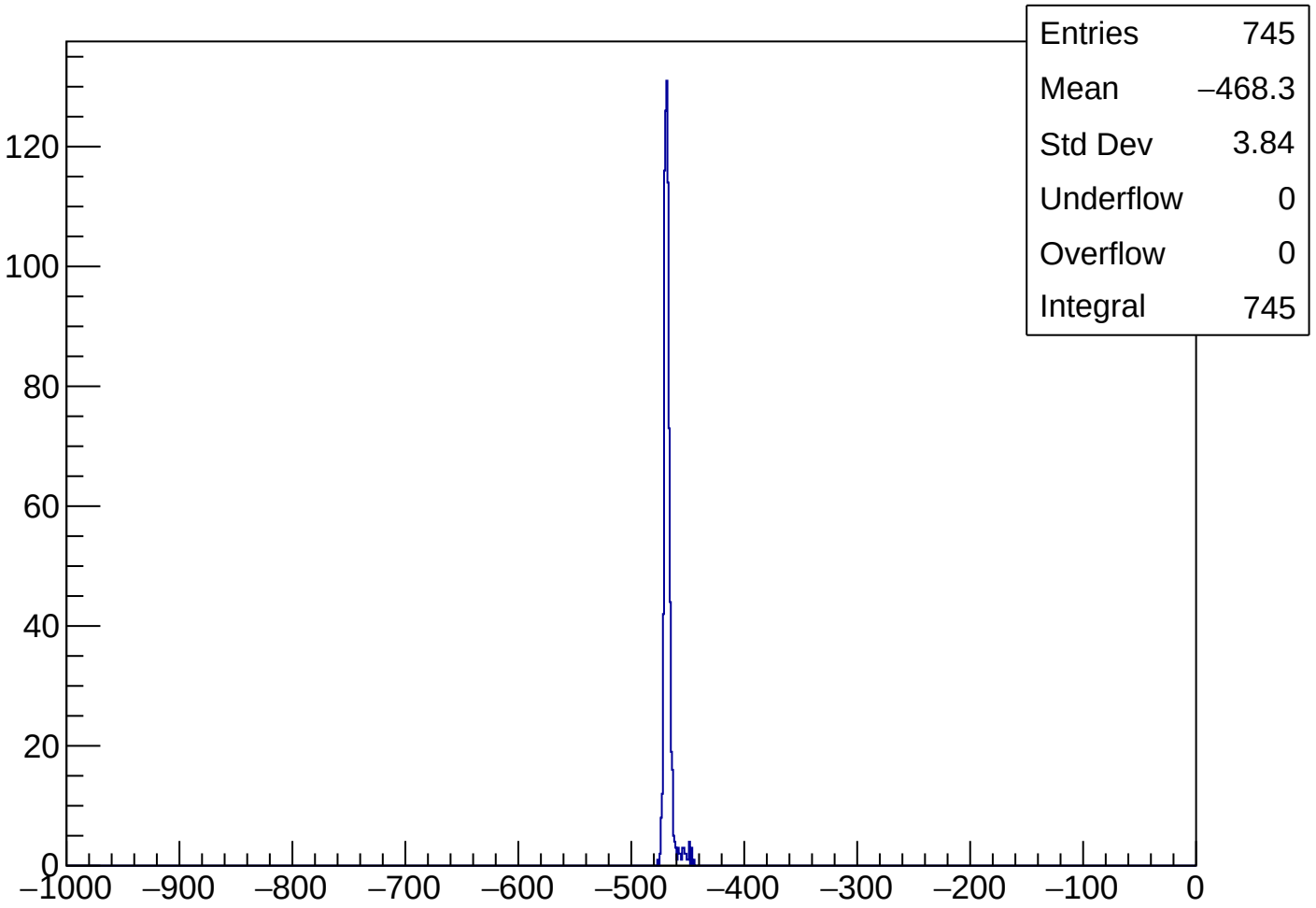

SchHitpat
Entries 259974
Mean 27.61
Std Dev 24.48
Underflow 1.41e+05
Overflow 3.581e+04
Integral 8.321e+04
25000
20000
15000
10000
5000
0
0
10
20
30
40
50
60

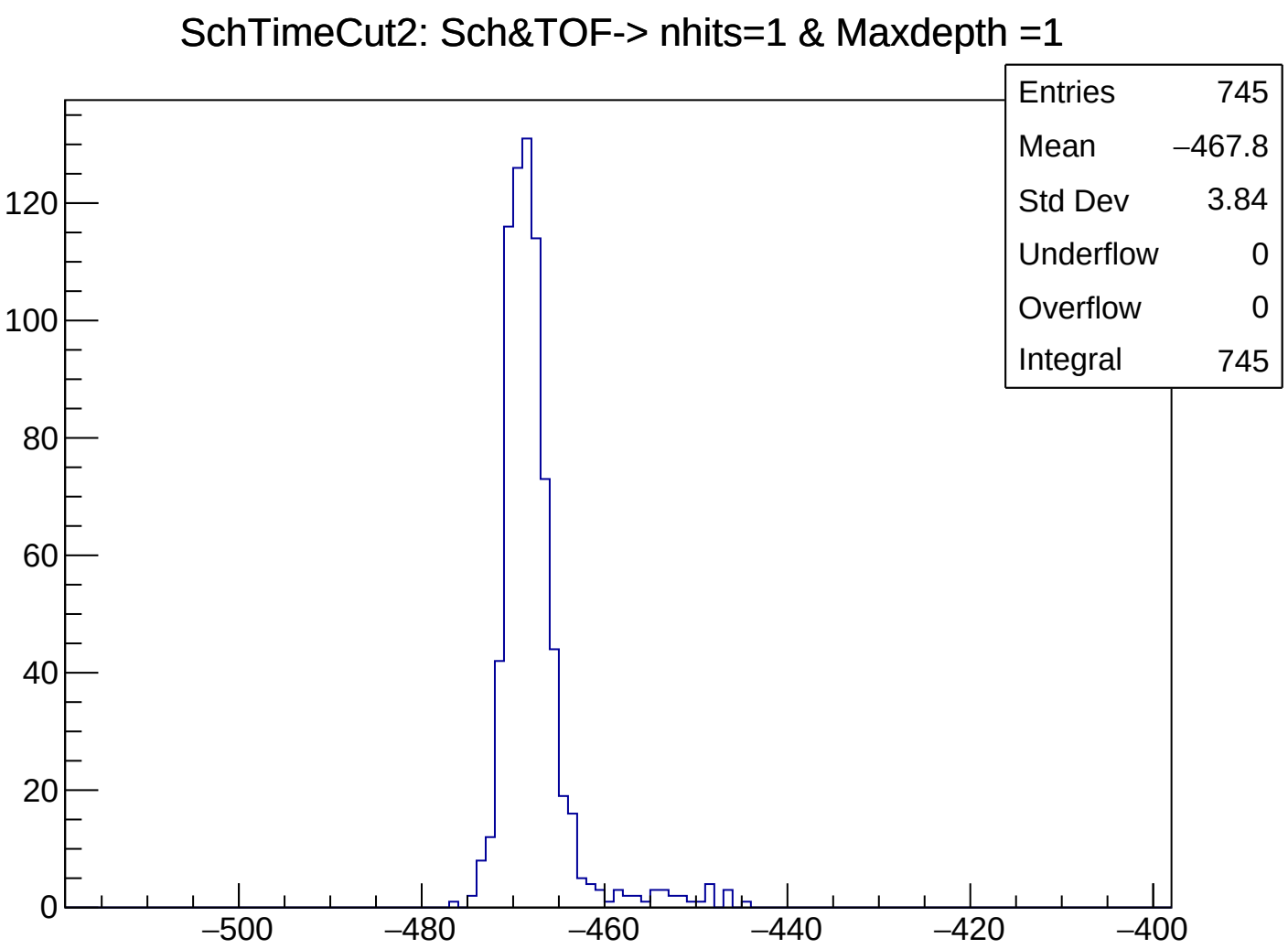

SchNhitsCut:nhits=1 & Maxdepth =1
Entries 1250
Mean 1
Std Dev 0
Underflow 0
Overflow 0
Integral 1250
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12
14
16
18
20

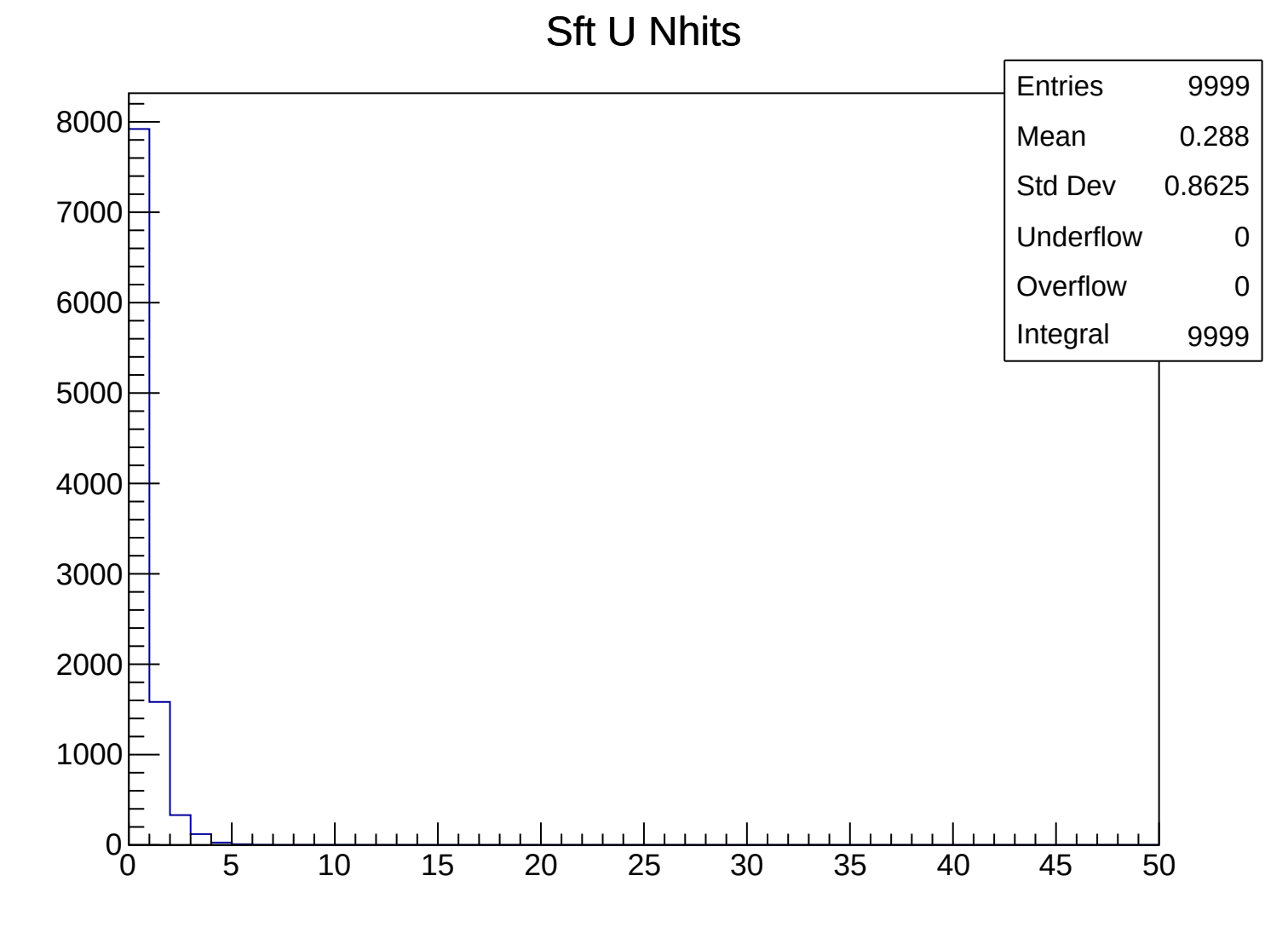

SchTdc
Entries 1.023898e+07
Mean 490.3
Std Dev 265.9
Underflow 1.021e+07
Overflow 536
Integral 2.854e+04
1800
1600
1400
1200
1000
800
600
400
200
0
100
200
300
400
500
600
700
800
900
1000

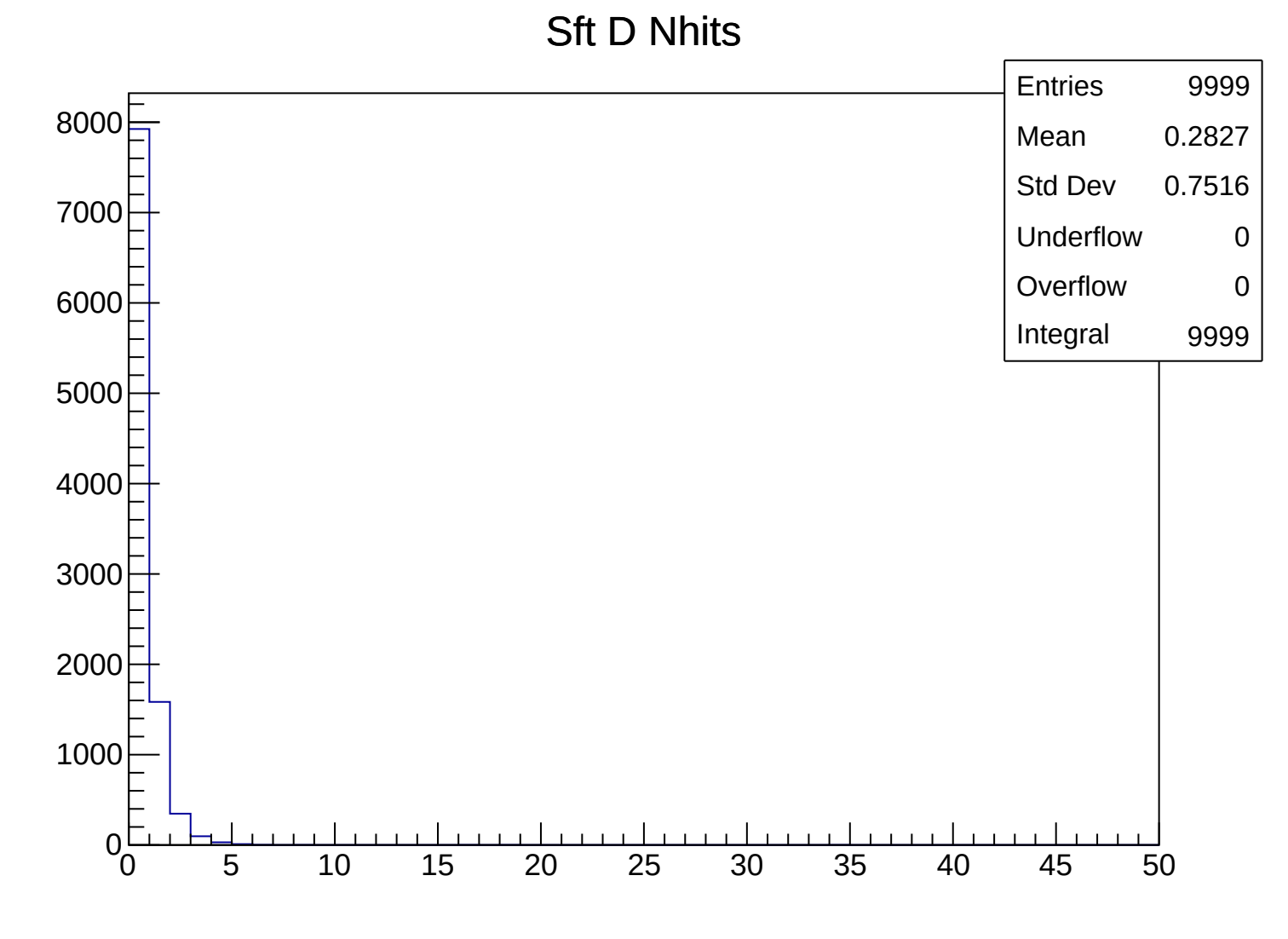

SchTdcCut:nhits=1 & Maxdepth =1
Entries 1250
Mean 467.9
Std Dev 4.964
Underflow 0
Overflow 0
Integral 1250
700
600
500
400
300
200
100
0
0
100
200
300
400
500
600
700
800
900
1000

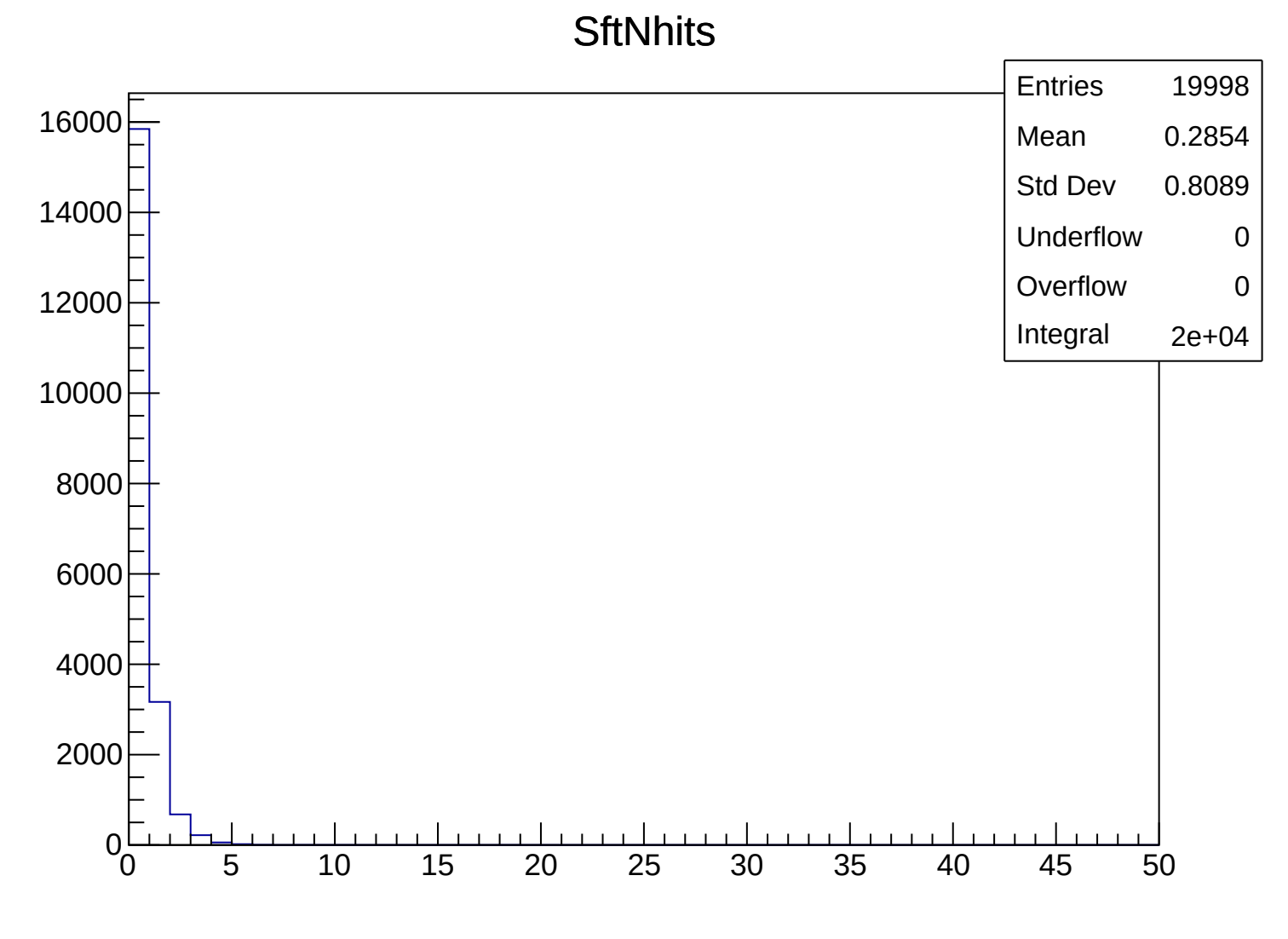

SchTdcCut2: Sch&TOF-> nhits=1 & Maxdepth =1
Entries 745
Mean 468.3
Std Dev 3.84
Underflow 0
Overflow 0
Integral 745
400
350
300
250
200
150
100
50
0
0
100
200
300
400
500
600
700
800
900
1000


SchTimeCut2: Sch&TOF-> nhits=1 & Maxdepth =1
Entries 745
Mean −468.3
Std Dev 3.84
Underflow 0
Overflow 0
Integral 745
120
100
80
60
40
20
0
−1000
−900
−800
−700
−600
−500
−400
−300
−200
−100
0

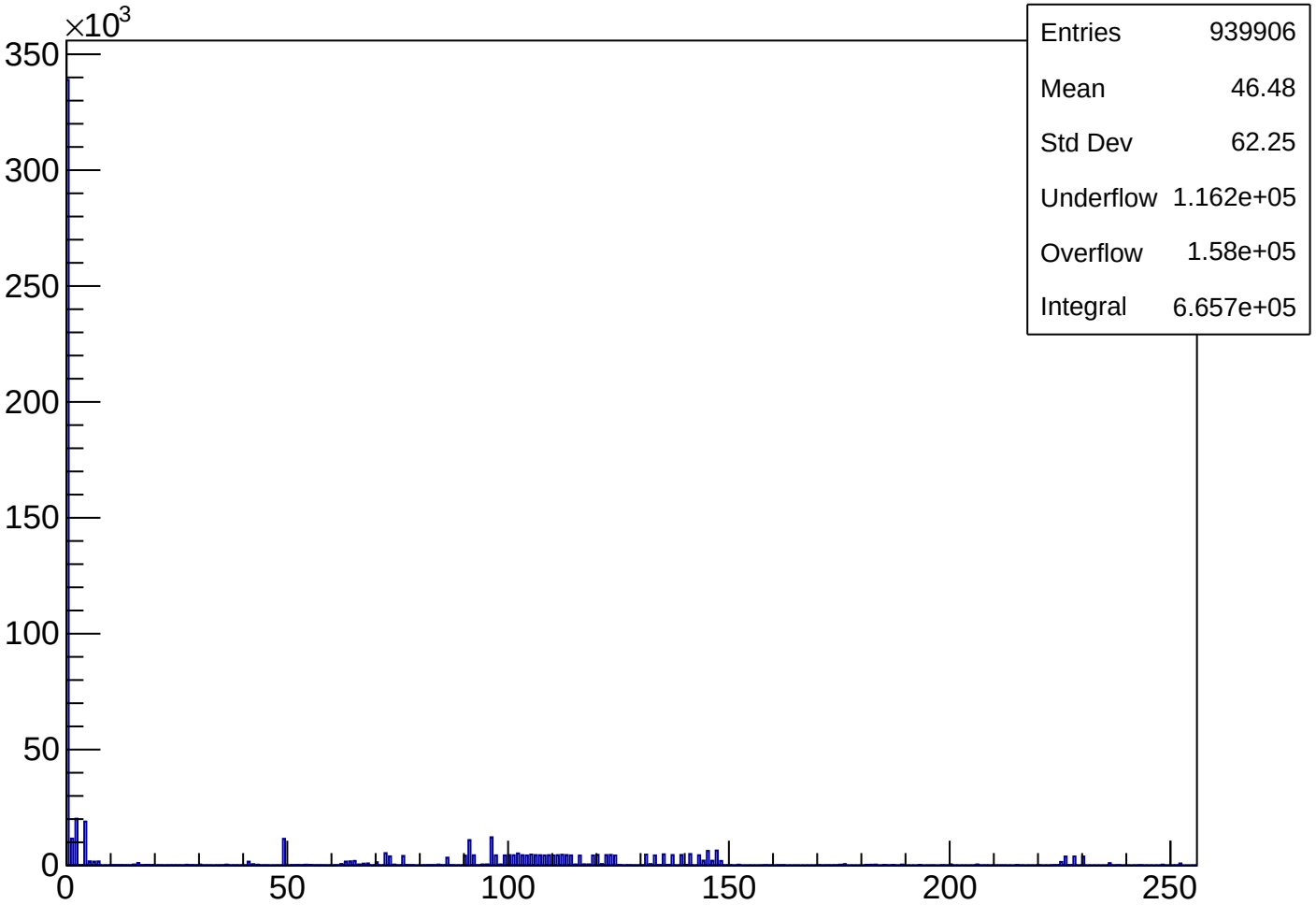

SchTimeCut2: Sch&TOF-> nhits=1 & Maxdepth =1
Entries 745
Mean −467.8
Std Dev 3.84
Underflow 0
Overflow 0
Integral 745
120
100
80
60
40
20
0
−500
−480
−460
−440
−420
−400

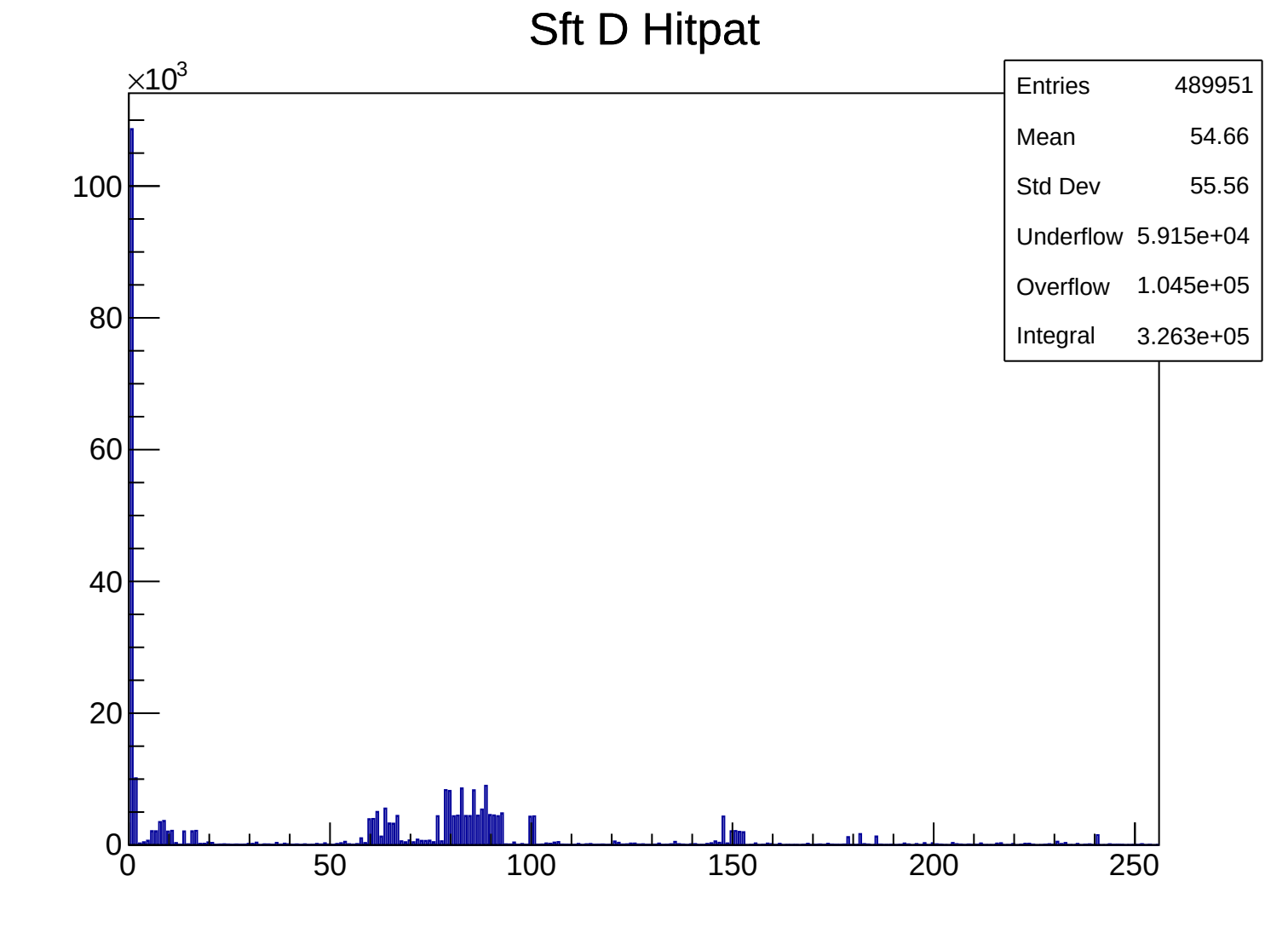

Sft U Nhits
Entries 9999
Mean 0.288
Std Dev 0.8625
Underflow 0
Overflow 0
Integral 9999
8000
7000
6000
5000
4000
3000
2000
1000
0
0
5
10
15
20
25
30
35
40
45
50

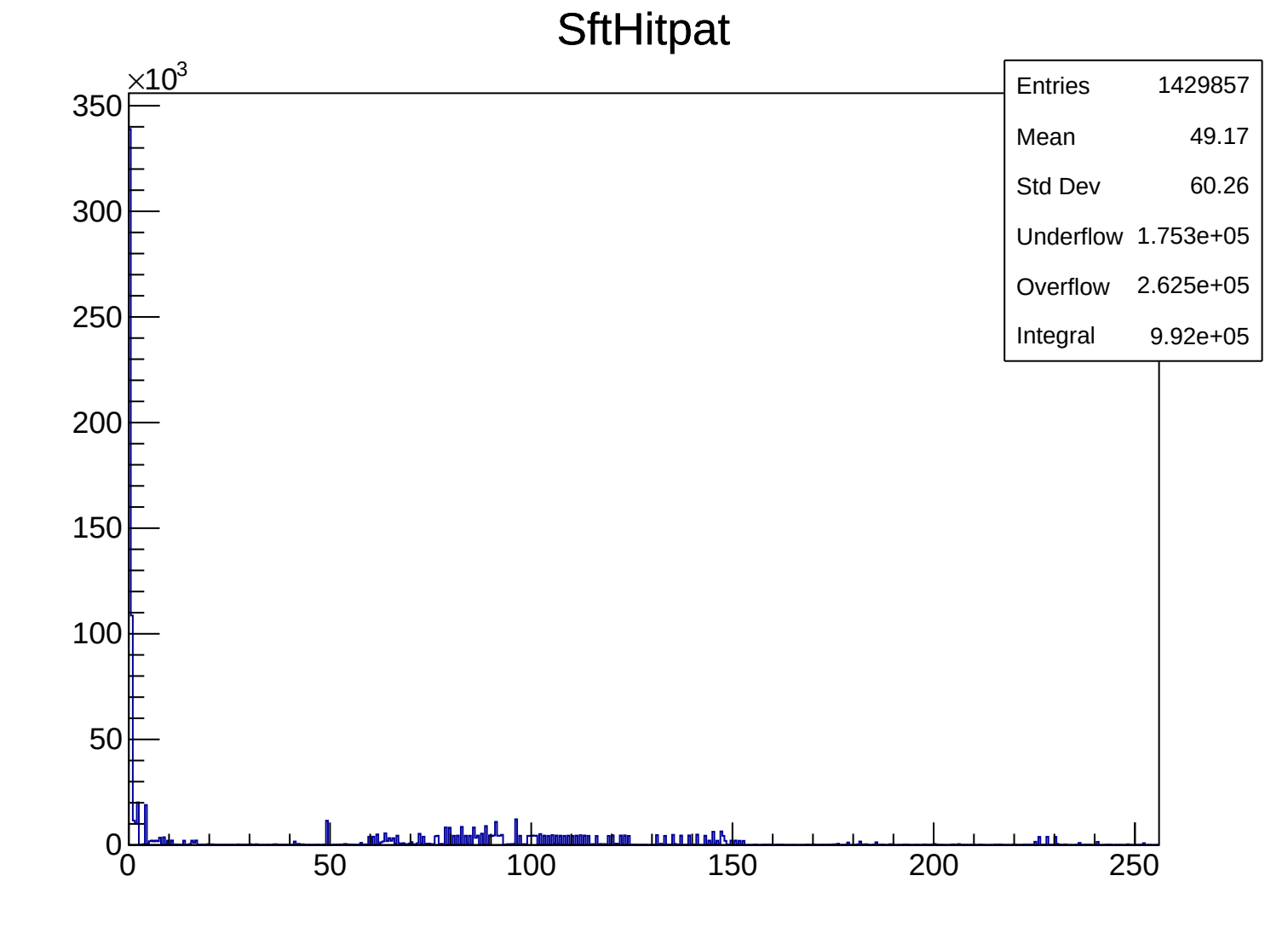

Sft D Nhits
Entries 9999
Mean 0.2827
Std Dev 0.7516
Underflow 0
Overflow 0
Integral 9999
8000
7000
6000
5000
4000
3000
2000
1000
0
0
5
10
15
20
25
30
35
40
45
50

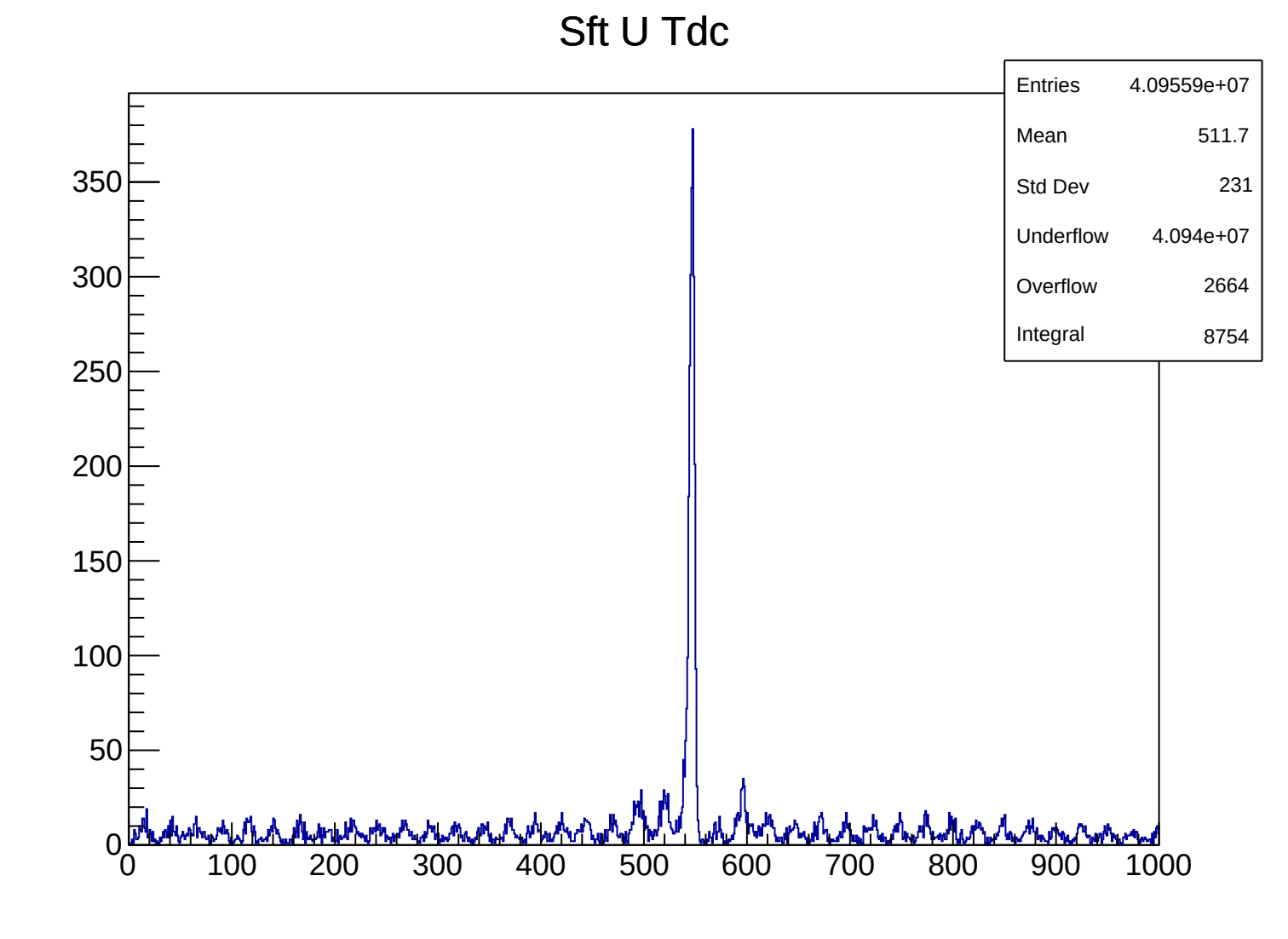

SftNhits
Entries 19998
Mean 0.2854
Std Dev 0.8089
Underflow 0
Overflow 0
Integral 2e+04
16000
14000
12000
10000
8000
6000
4000
2000
0
0
5
10
15
20
25
30
35
40
45
50

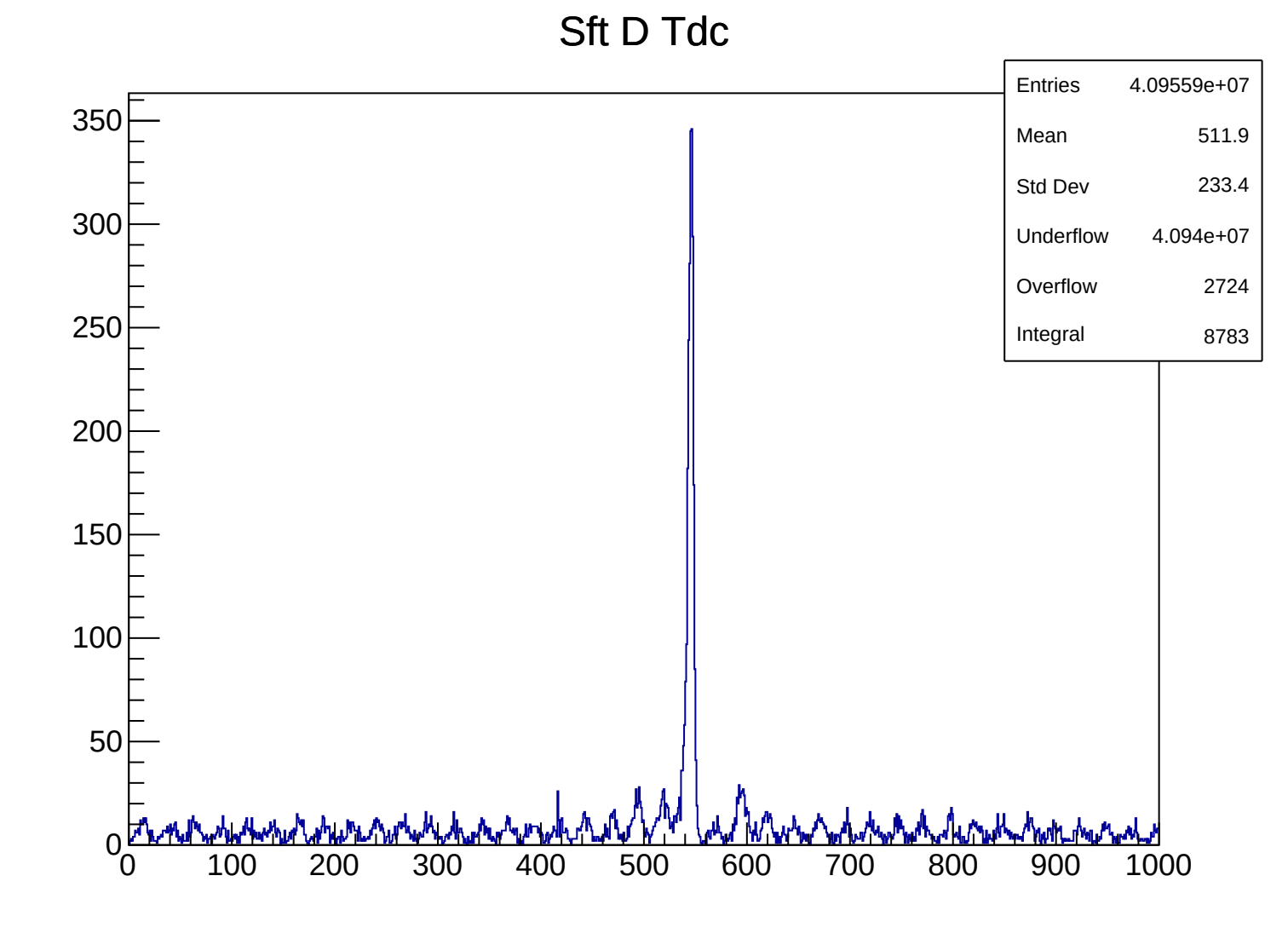
Sft U Hitpat

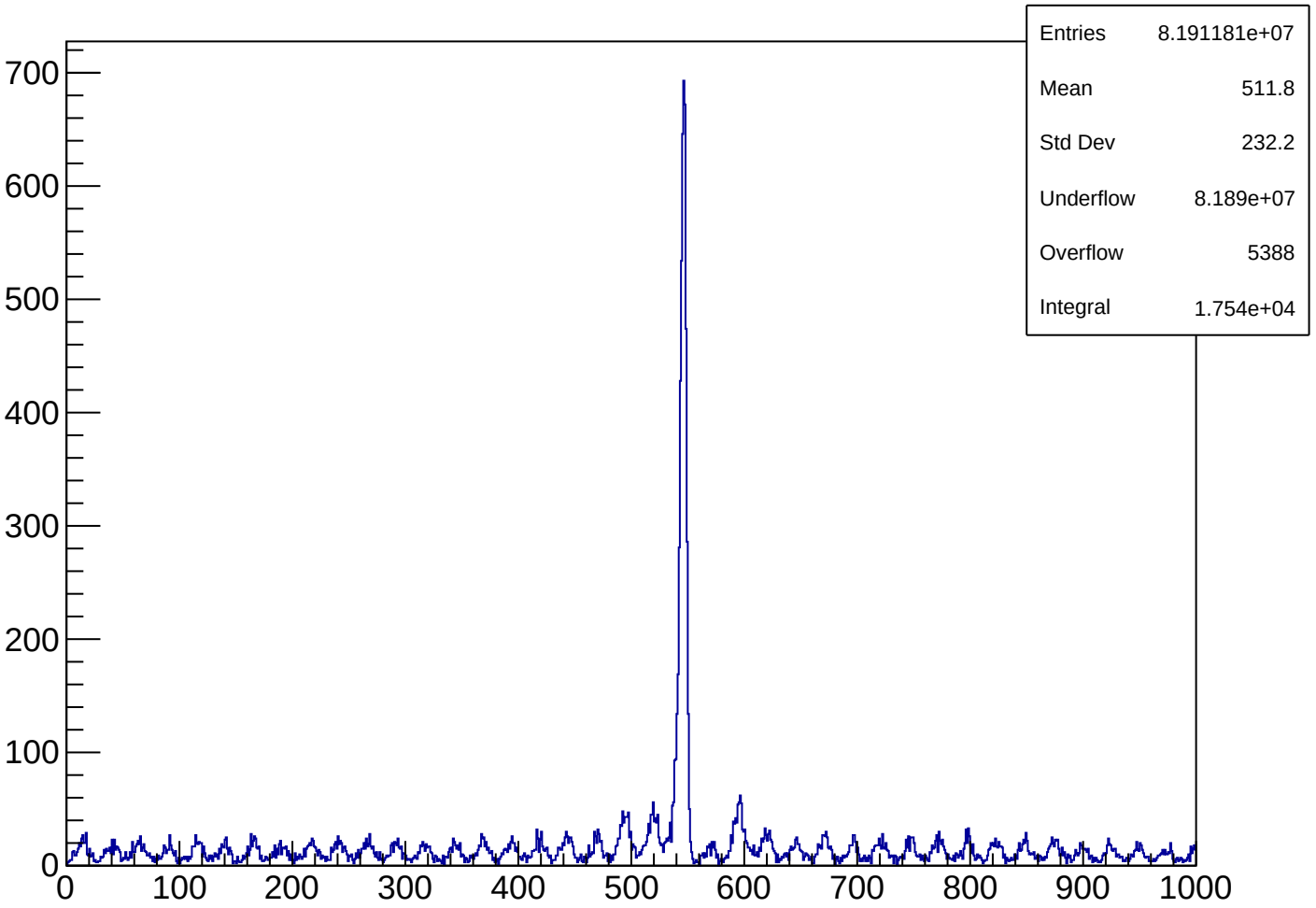

×10^3
350
300
250
200
150
100
50
0
0
50
100
150
200
250
Entries 939906
Mean 46.48
Std Dev 62.25
Underflow 1.162e+05
Overflow 1.58e+05
Integral 6.657e+05

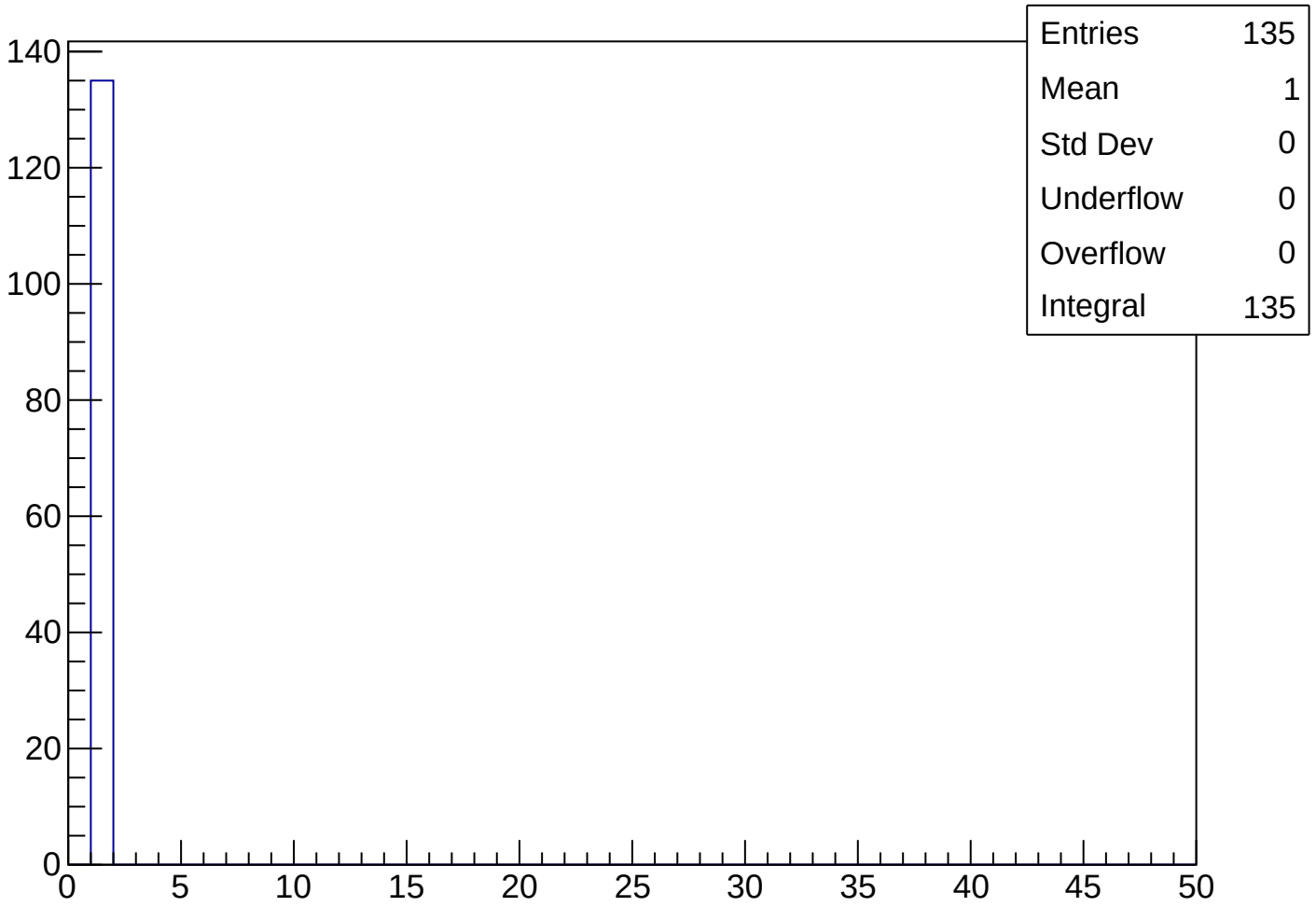

Sft D Hitpat
×10^3
100
80
60
40
20
0
0
50
100
150
200
250
Entries 489951
Mean 54.66
Std Dev 55.56
Underflow 5.915e+04
Overflow 1.045e+05
Integral 3.263e+05

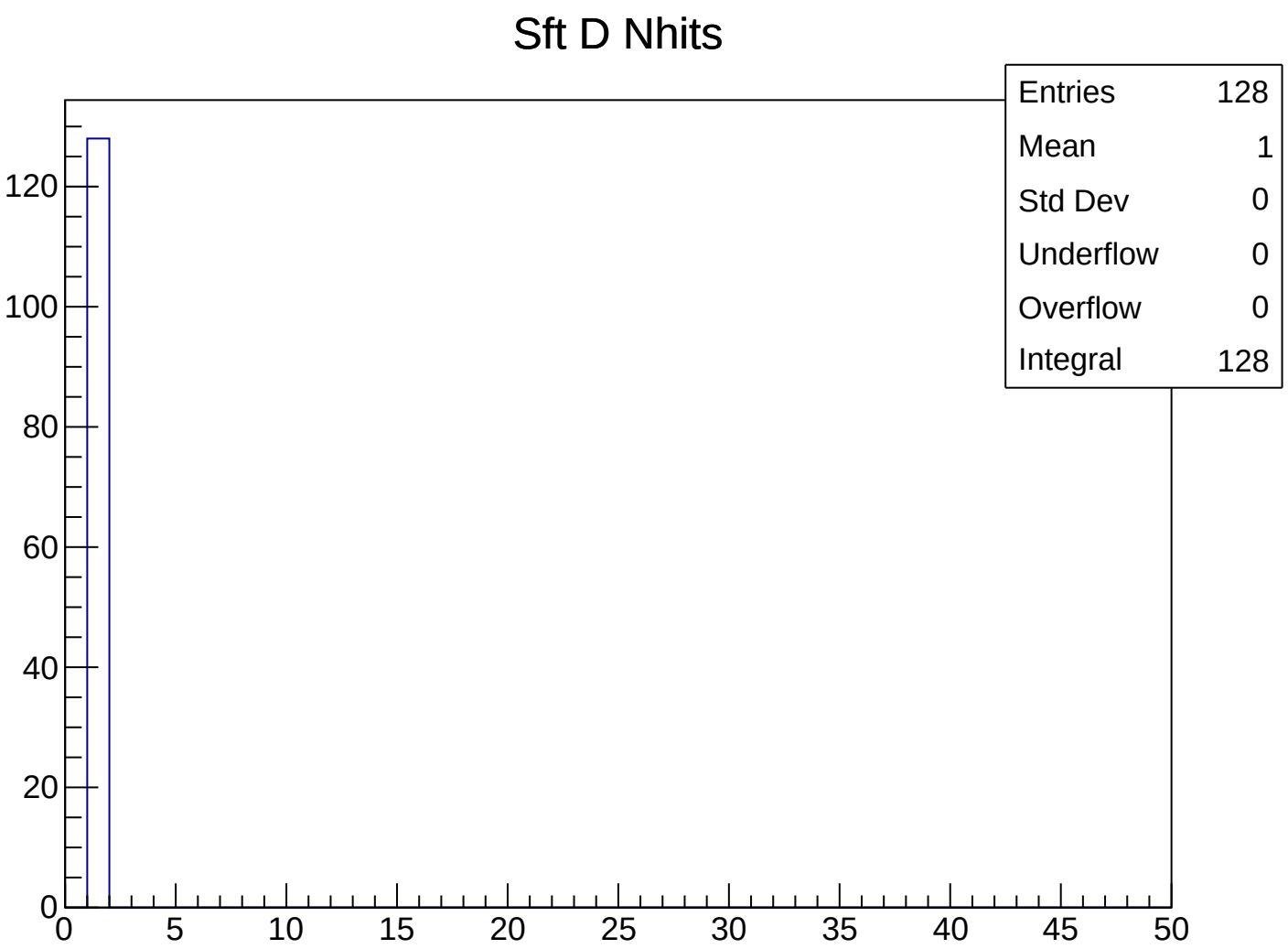

SftHitpat
×10^3
350
300
250
200
150
100
50
0
0
50
100
150
200
250
Entries 1429857
Mean 49.17
Std Dev 60.26
Underflow 1.753e+05
Overflow 2.625e+05
Integral 9.92e+05

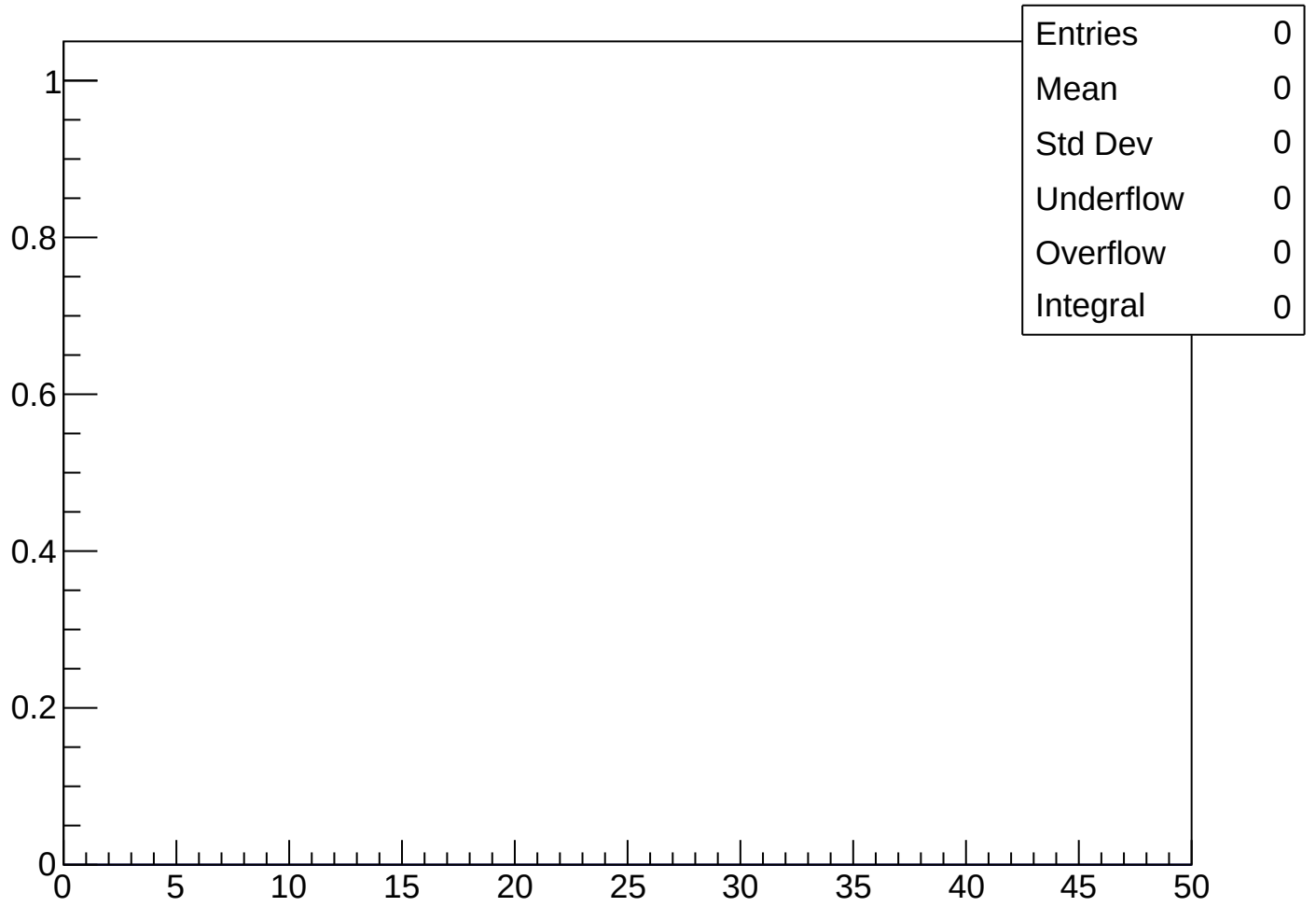

Sft U Tdc
Entries 4.09559e+07
Mean 511.7
Std Dev 231
Underflow 4.094e+07
Overflow 2664
Integral 8754
350
300
250
200
150
100
50
0
0
100
200
300
400
500
600
700
800
900
1000

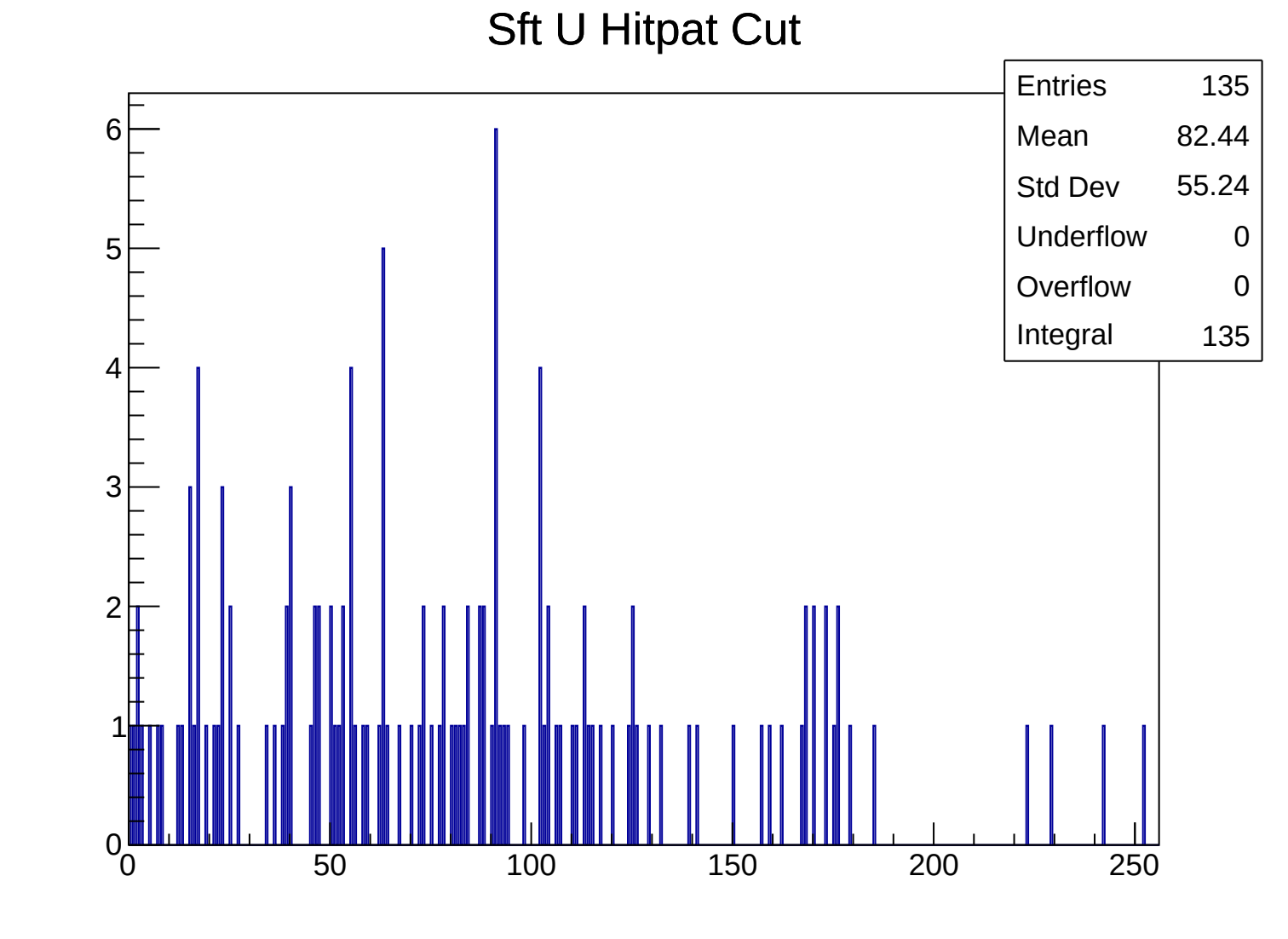

Sft D Tdc
Entries 4.09559e+07
Mean 511.9
Std Dev 233.4
Underflow 4.094e+07
Overflow 2724
Integral 8783
350
300
250
200
150
100
50
0
0
100
200
300
400
500
600
700
800
900
1000

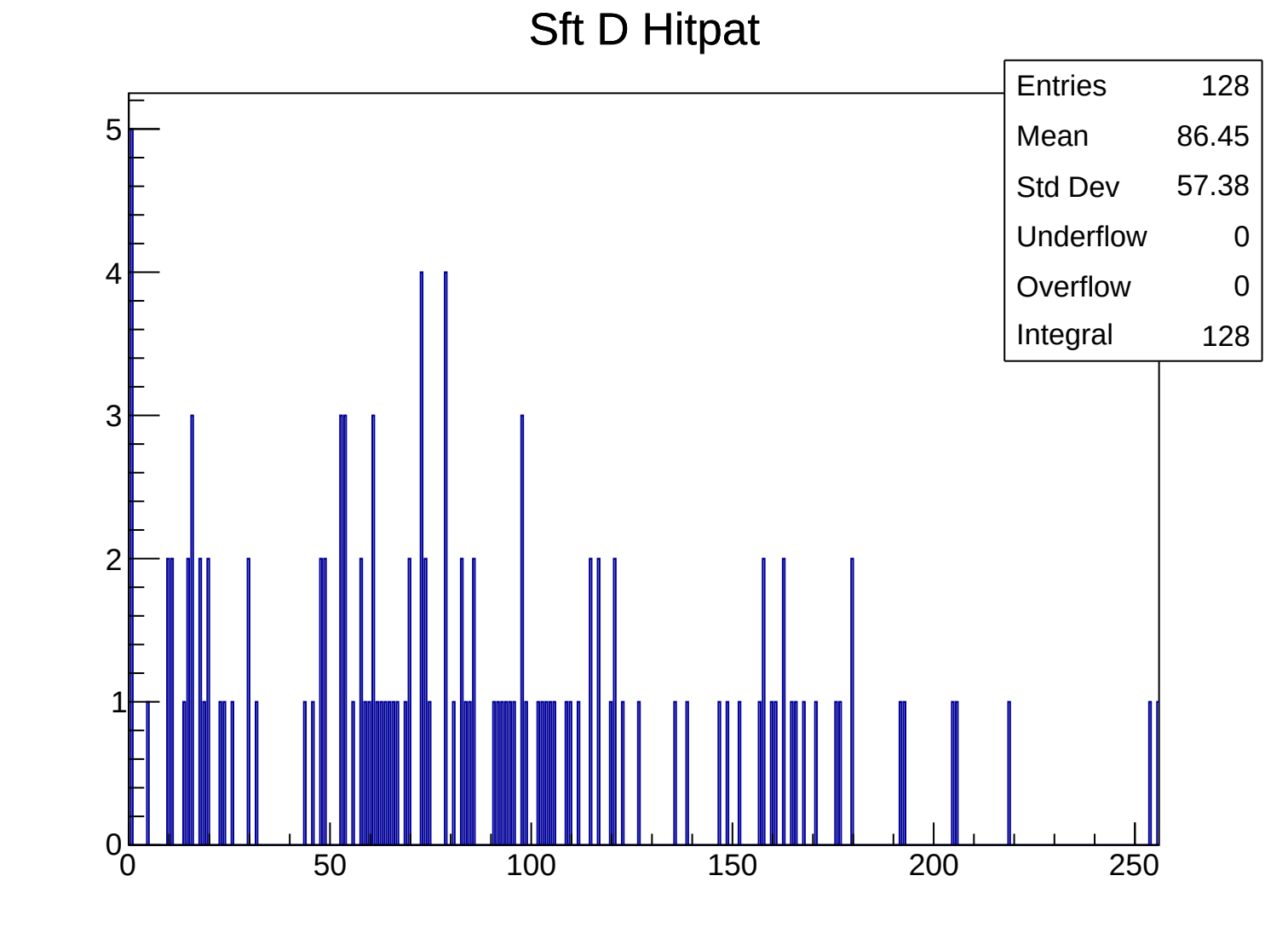

SftTdc
Entries 8.191181e+07
Mean 511.8
Std Dev 232.2
Underflow 8.189e+07
Overflow 5388
Integral 1.754e+04
700
600
500
400
300
200
100
0
0
100
200
300
400
500
600
700
800
900
1000

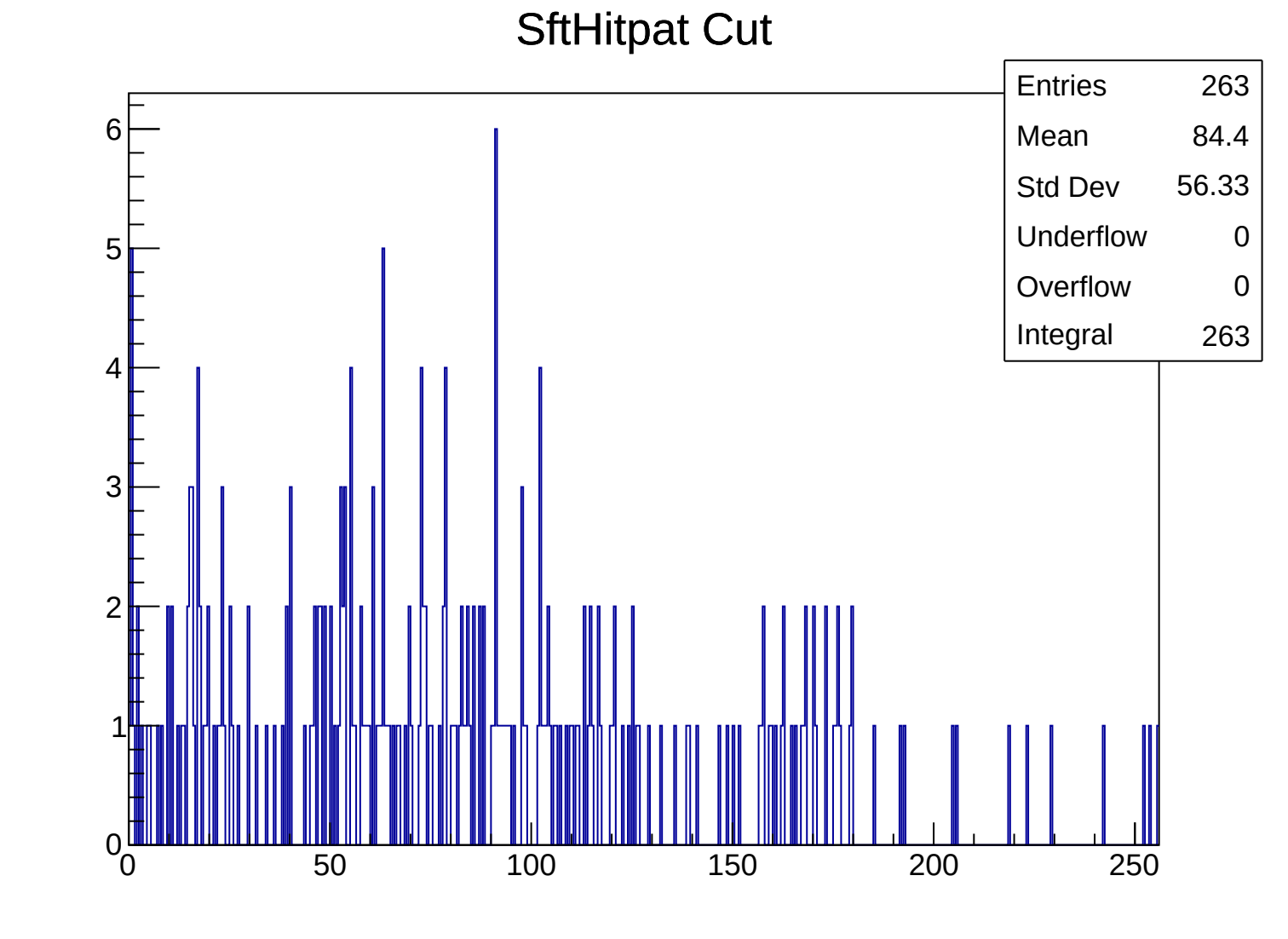

Sft U Nhits Cut
Entries 135
Mean 1
Std Dev 0
Underflow 0
Overflow 0
Integral 135
140
120
100
80
60
40
20
0
0
5
10
15
20
25
30
35
40
45
50

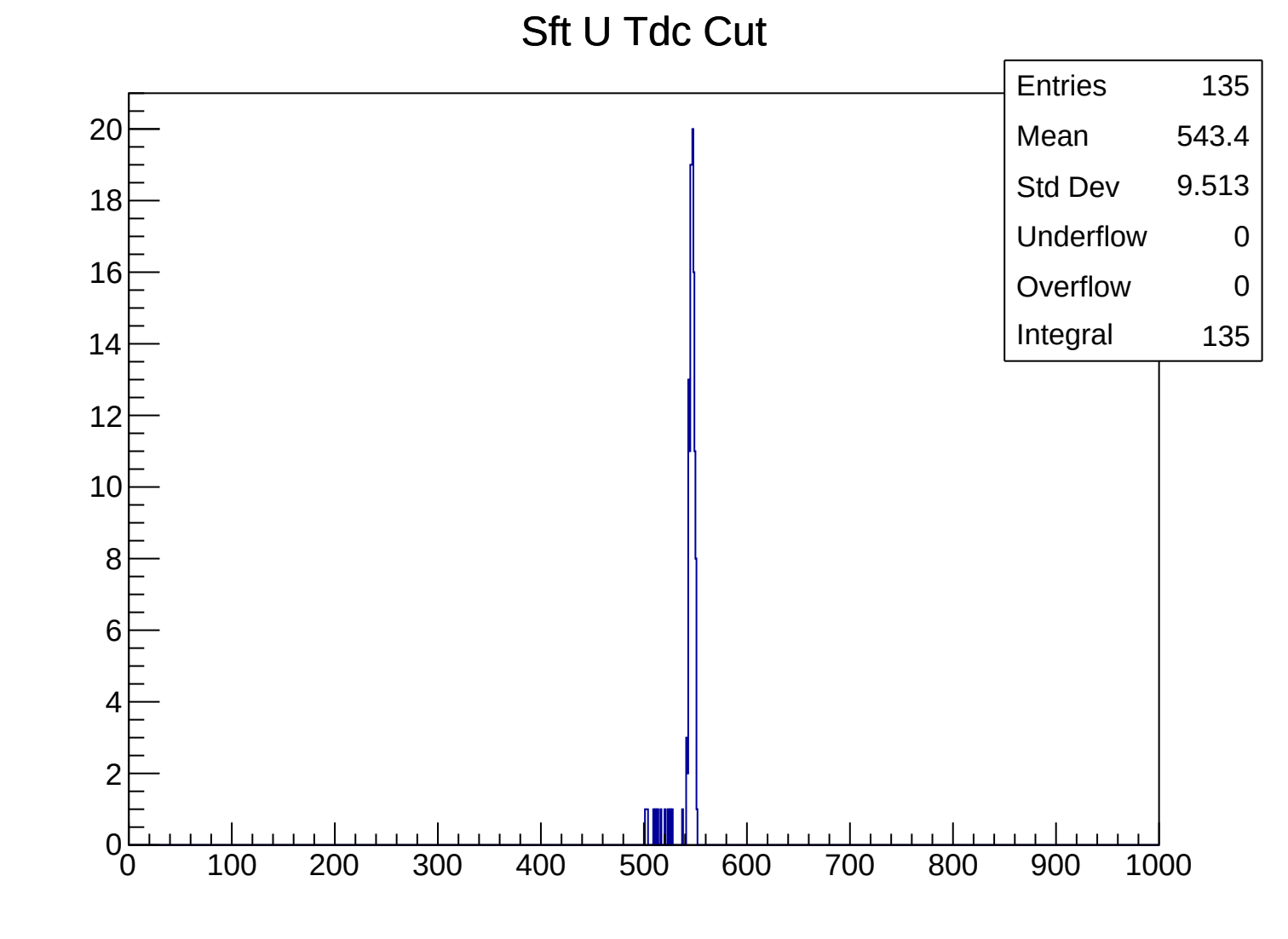

Sft D Nhits
Entries 128
Mean 1
Std Dev 0
Underflow 0
Overflow 0
Integral 128
120
100
80
60
40
20
0
0
5
10
15
20
25
30
35
40
45
50

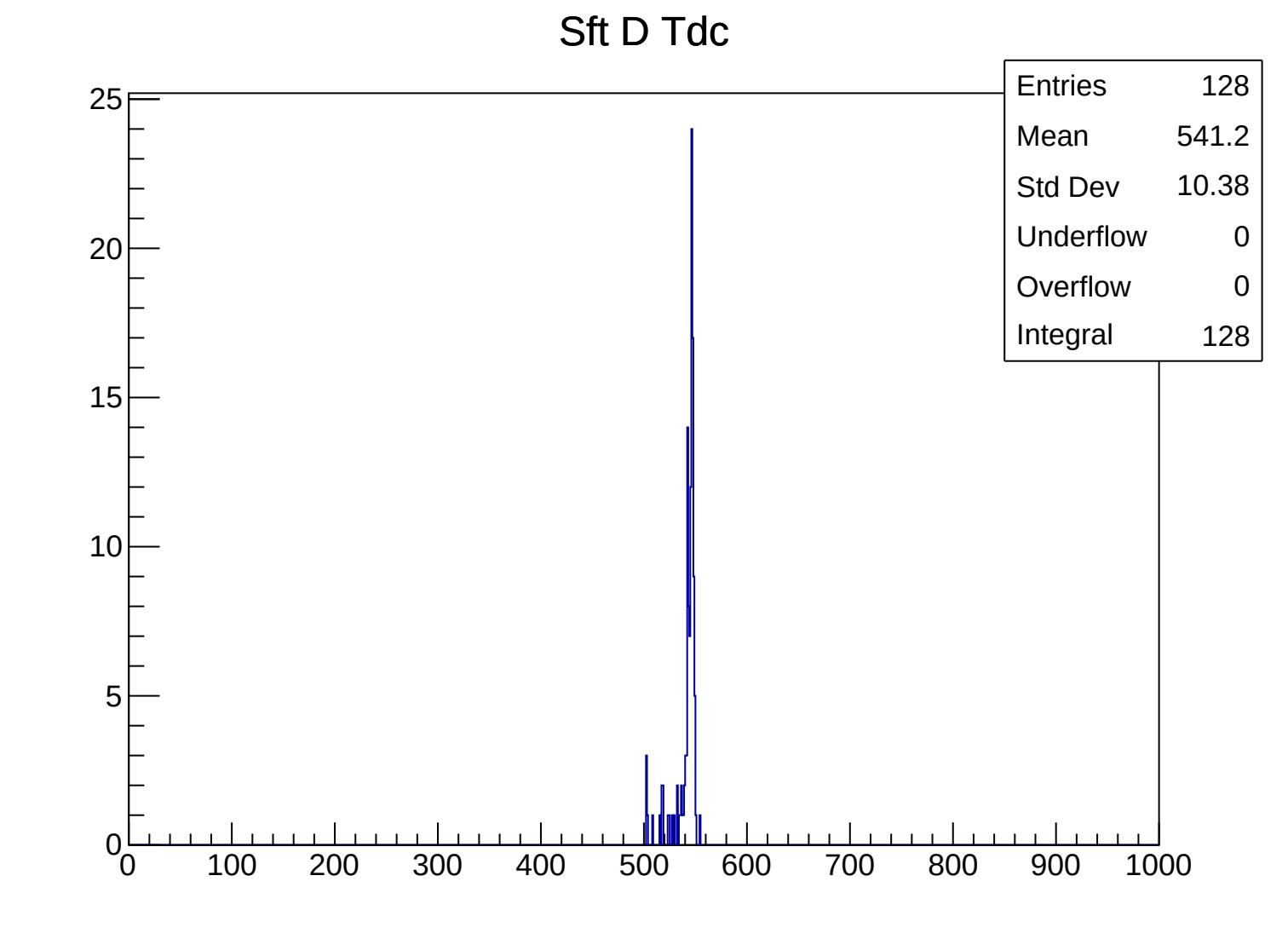

SftNhits Cut
Entries 0
Mean 0
Std Dev 0
Underflow 0
Overflow 0
Integral 0
1
0.8
0.6
0.4
0.2
0
0
5
10
15
20
25
30
35
40
45
50

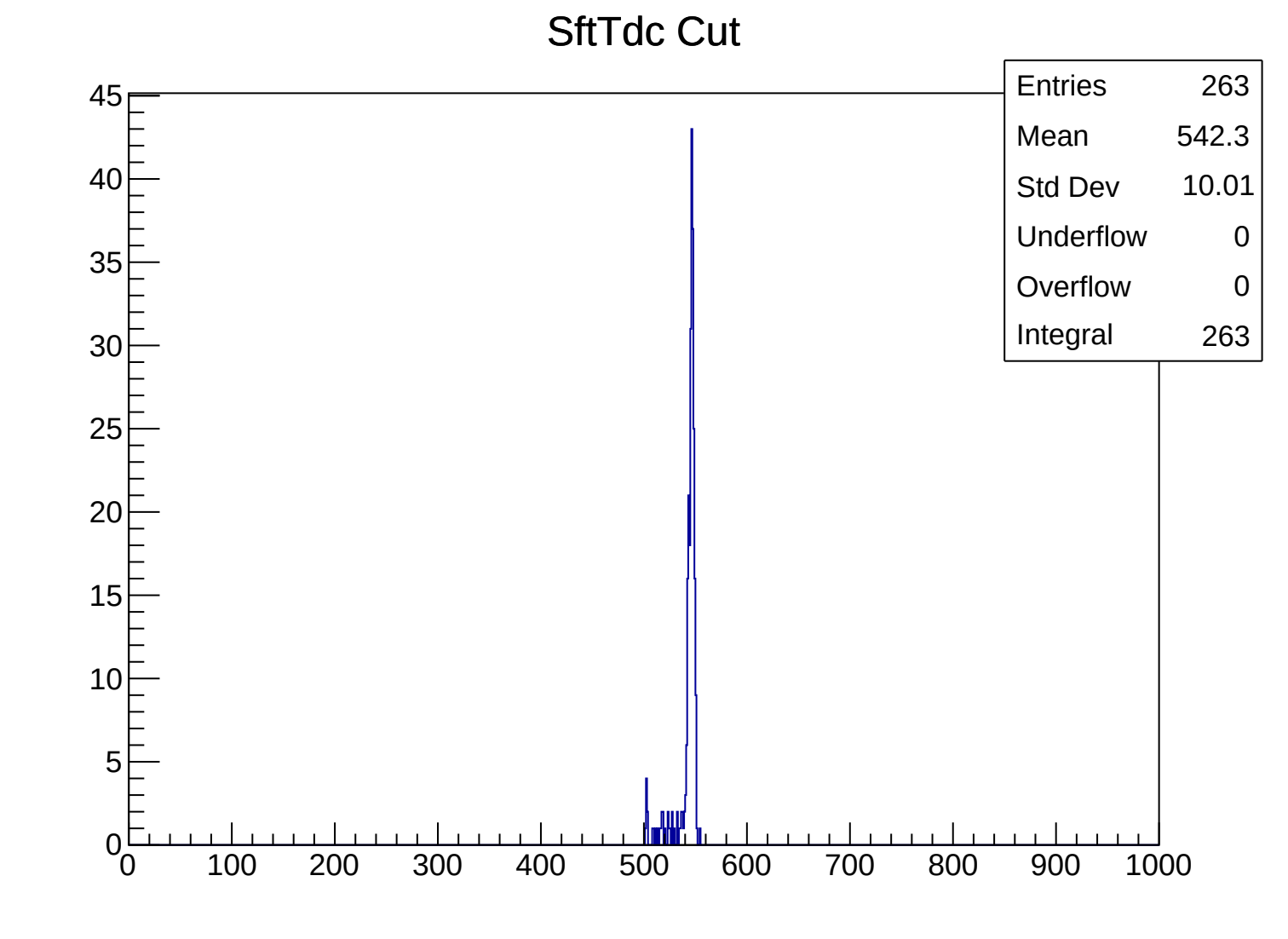

Sft U Hitpat Cut
Entries 135
Mean 82.44
Std Dev 55.24
Underflow 0
Overflow 0
Integral 135
0
1
2
3
4
5
6
0
50
100
150
200
250

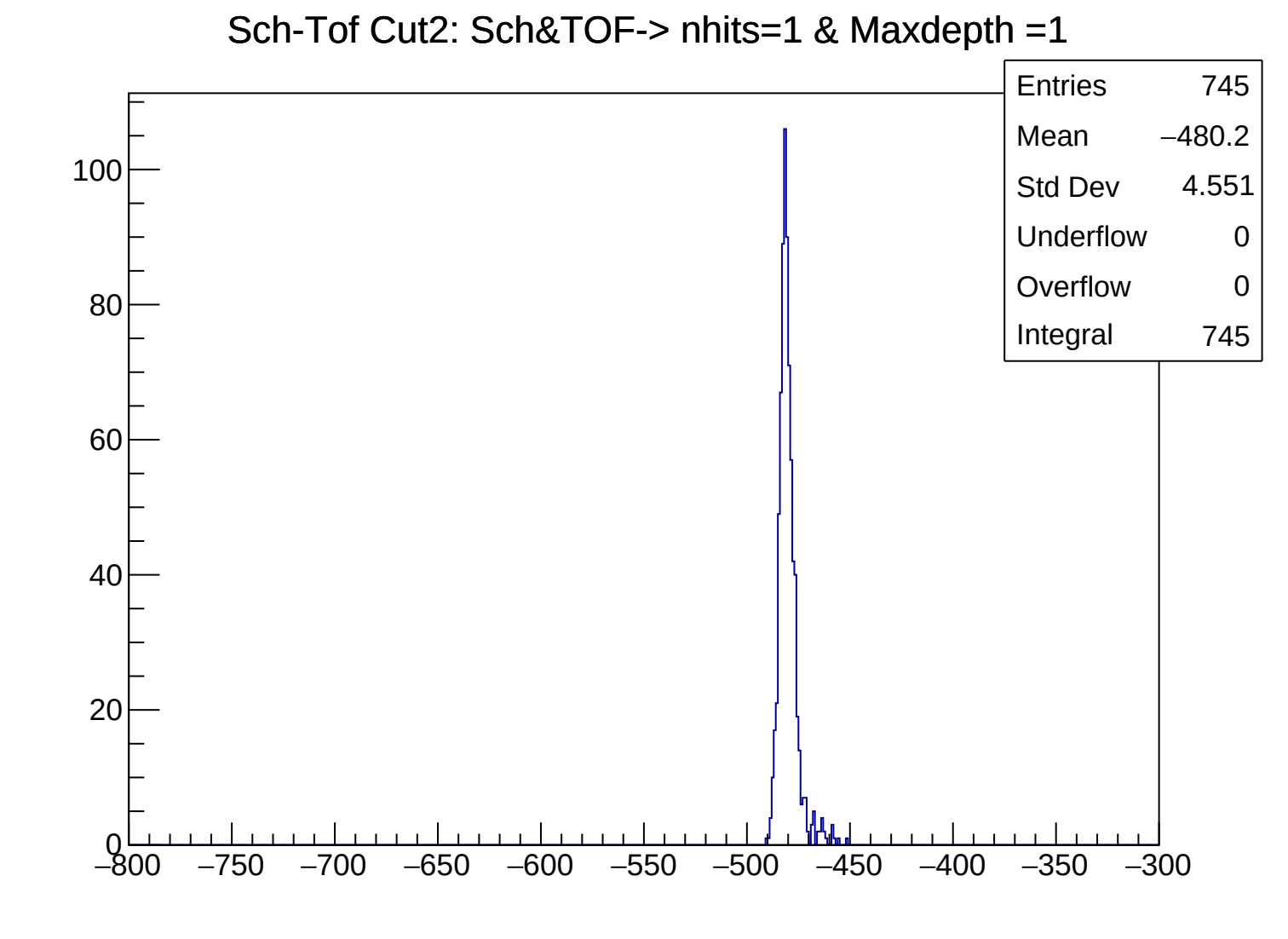

Sft D Hitpat
Entries 128
Mean 86.45
Std Dev 57.38
Underflow 0
Overflow 0
Integral 128
0
1
2
3
4
5
0
50
100
150
200
250

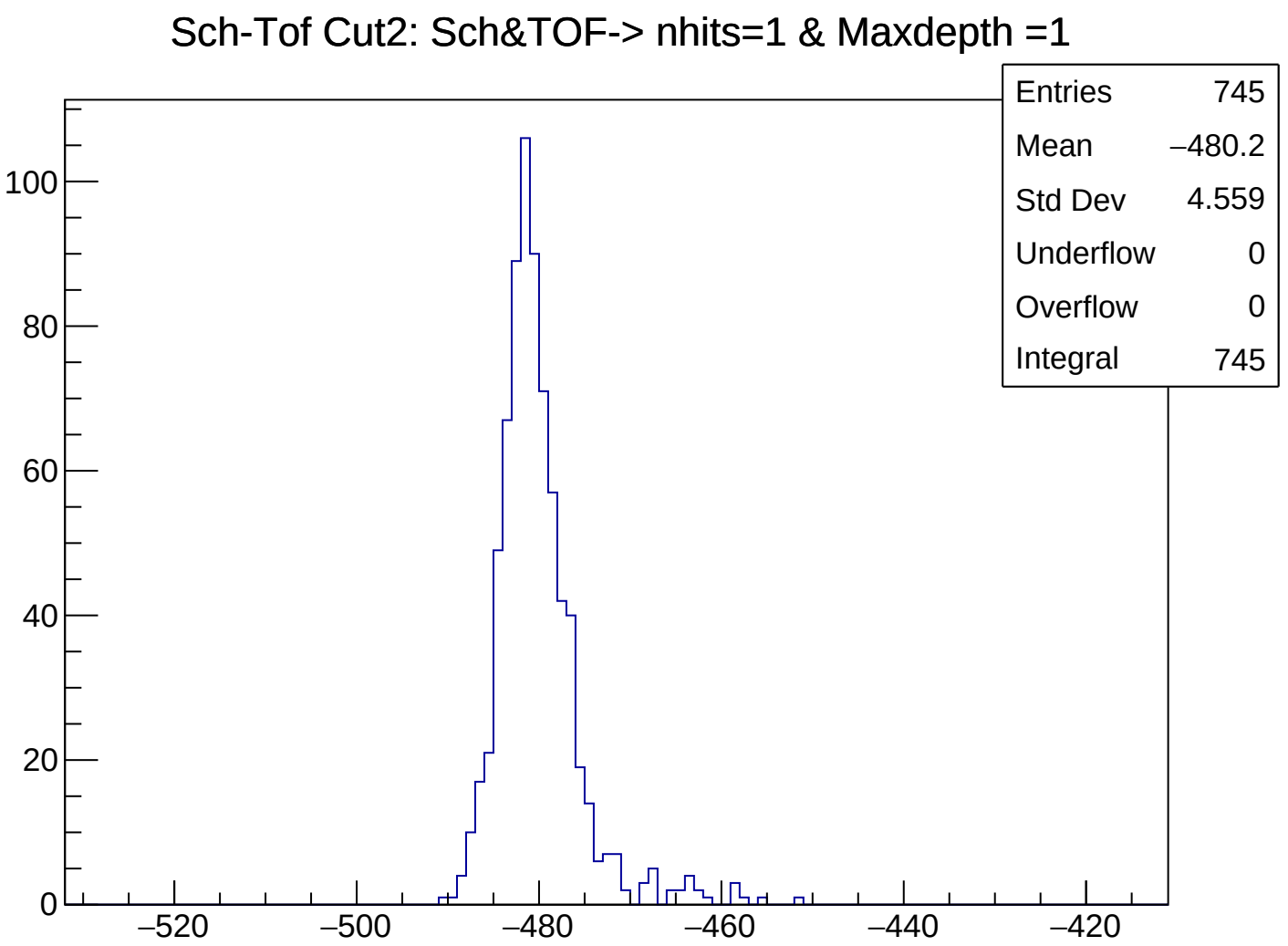

SftHitpat Cut
Entries 263
Mean 84.4
Std Dev 56.33
Underflow 0
Overflow 0
Integral 263
0
1
2
3
4
5
6
0
50
100
150
200
250

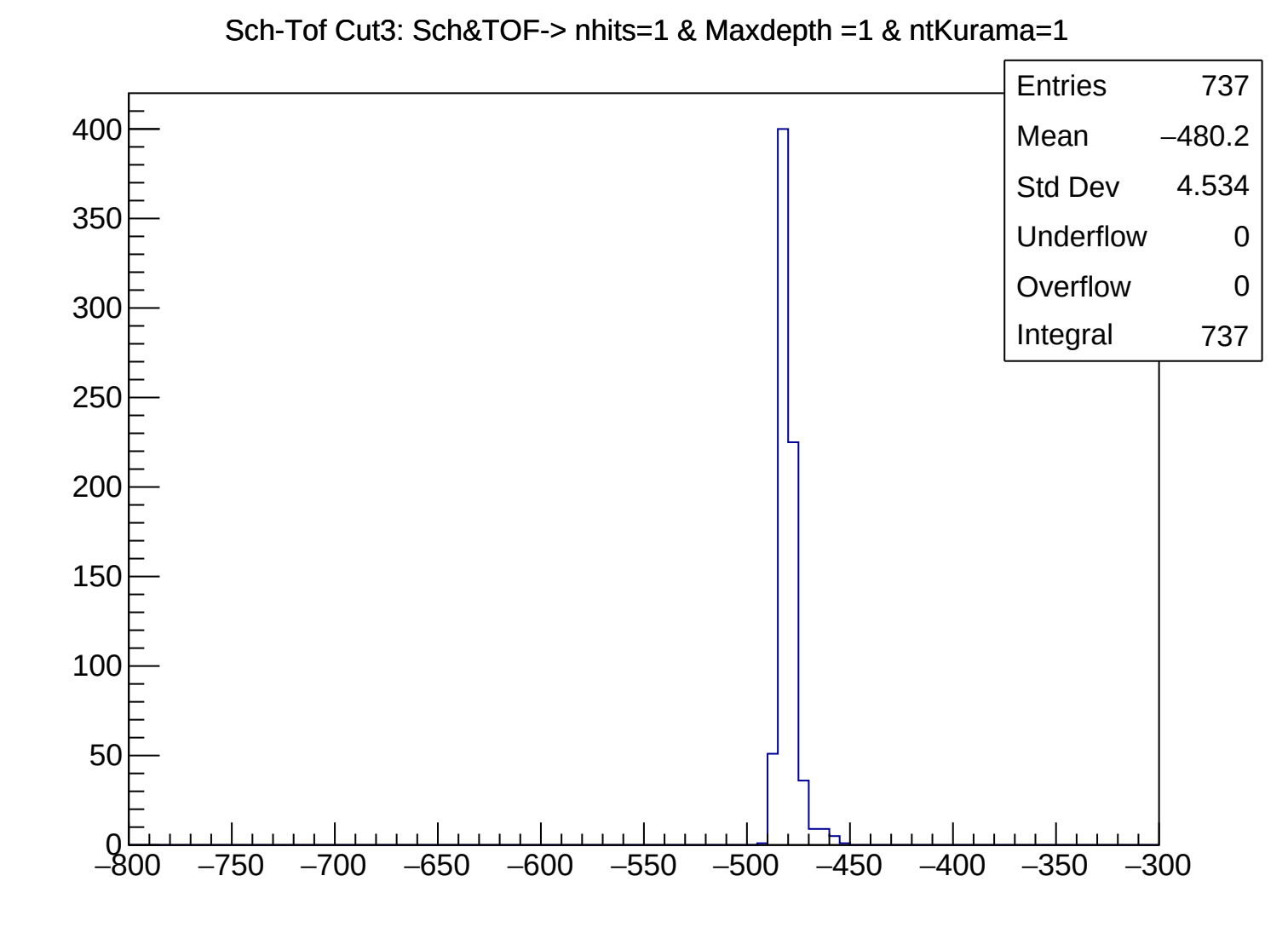

Sft U Tdc Cut
Entries 135
Mean 543.4
Std Dev 9.513
Underflow 0
Overflow 0
Integral 135
0
2
4
6
8
10
12
14
16
18
20
0
100
200
300
400
500
600
700
800
900
1000

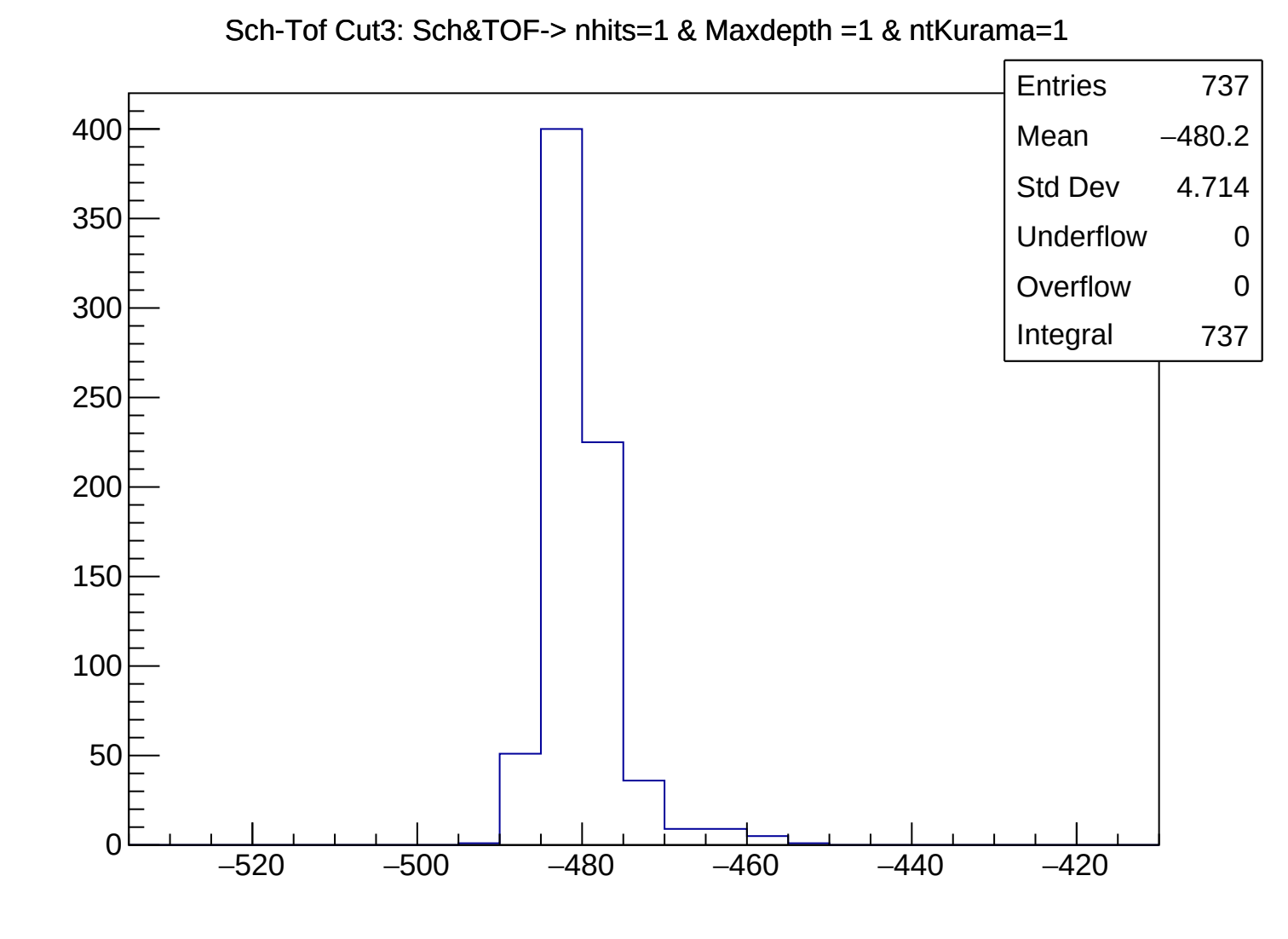

Sft D Tdc
Entries 128
Mean 541.2
Std Dev 10.38
Underflow 0
Overflow 0
Integral 128
25
20
15
10
5
0
0
100
200
300
400
500
600
700
800
900
1000

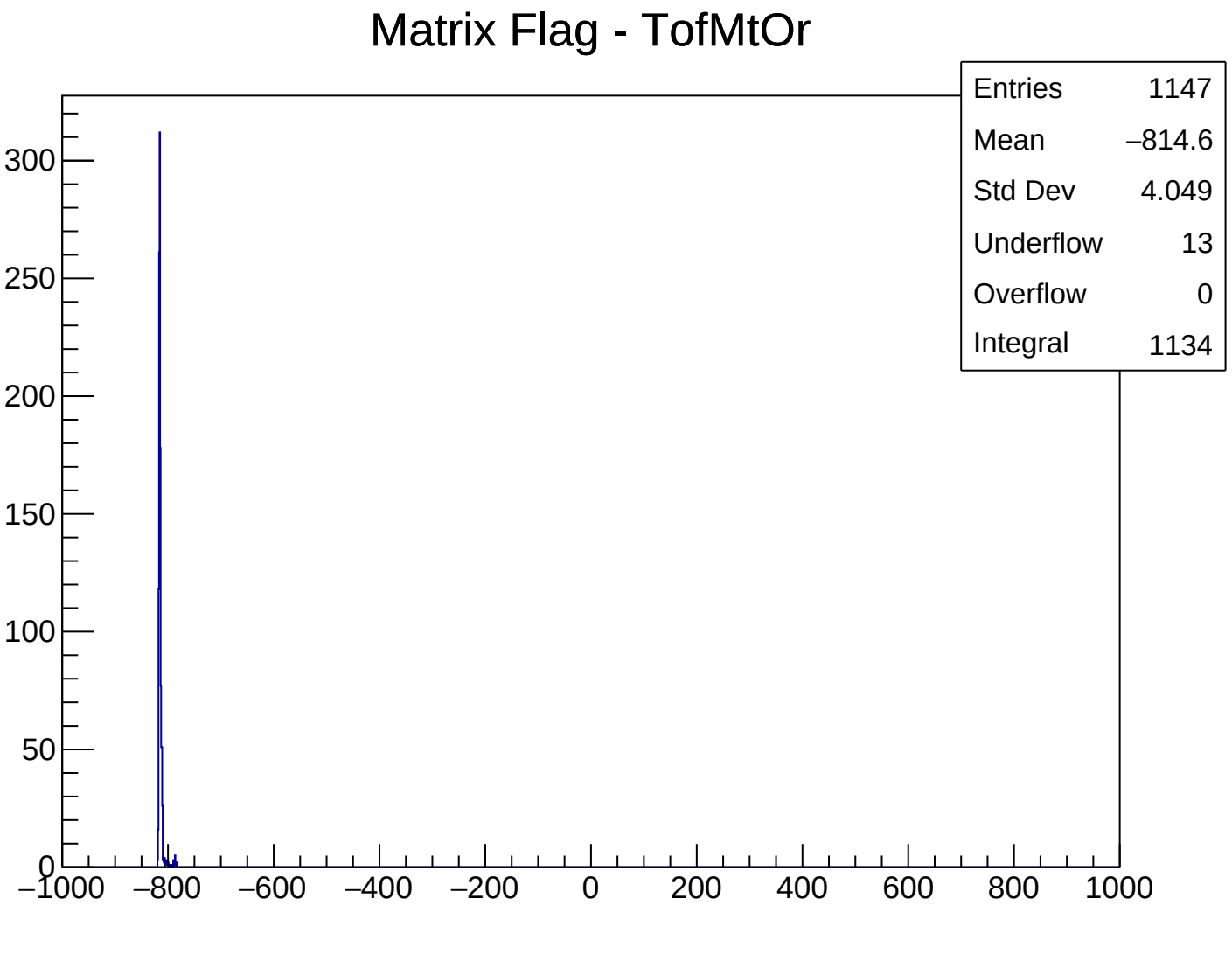

SftTdc Cut
Entries 263
Mean 542.3
Std Dev 10.01
Underflow 0
Overflow 0
Integral 263
45
40
35
30
25
20
15
10
5
0
0
100
200
300
400
500
600
700
800
900
1000

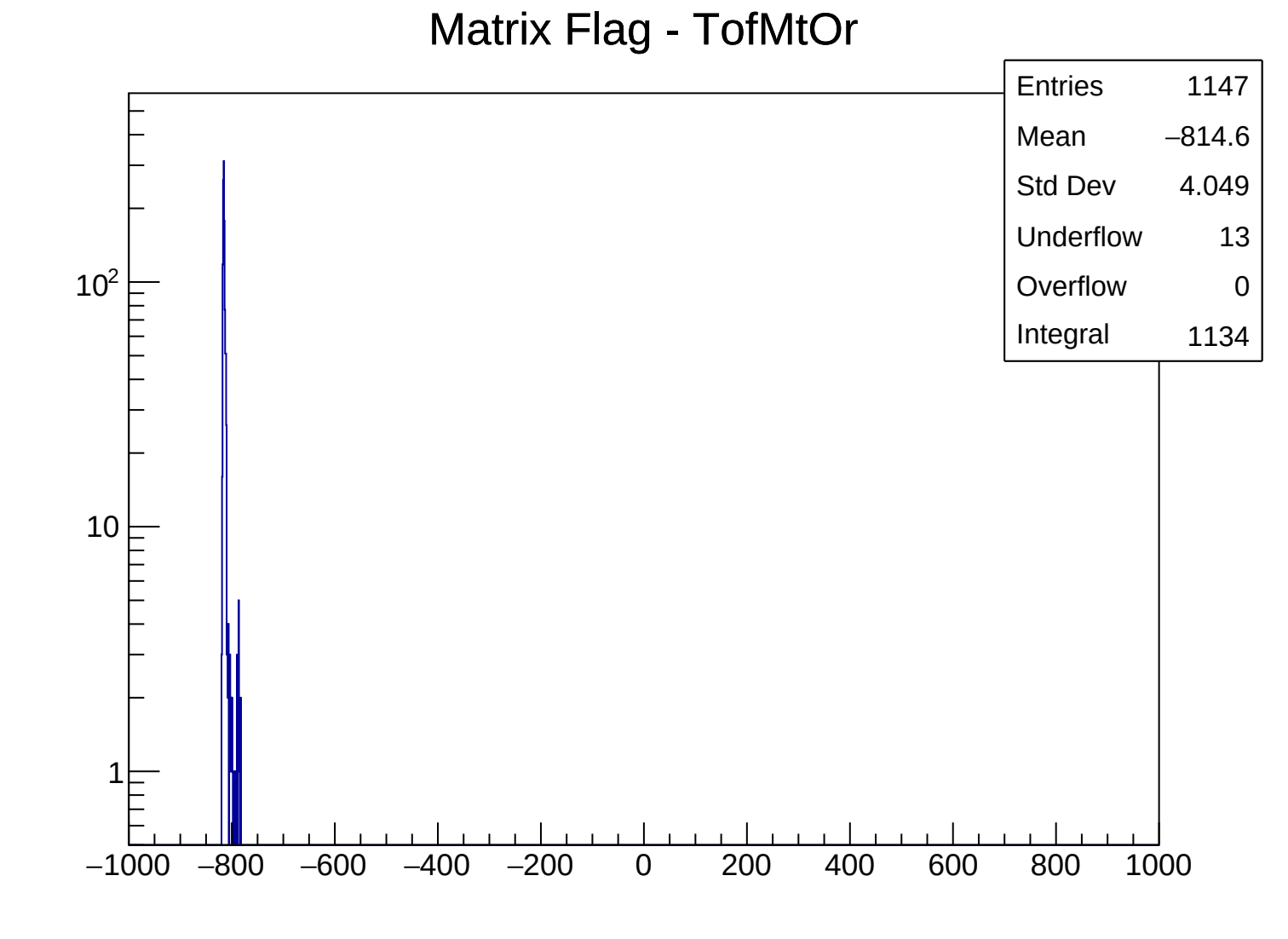

Sch-Tof Cut2: Sch&TOF-> nhits=1 & Maxdepth =1
Entries 745
Mean −480.2
Std Dev 4.551
Underflow 0
Overflow 0
Integral 745
100
80
60
40
20
0
−800
−750
−700
−650
−600
−550
−500
−450
−400
−350
−300

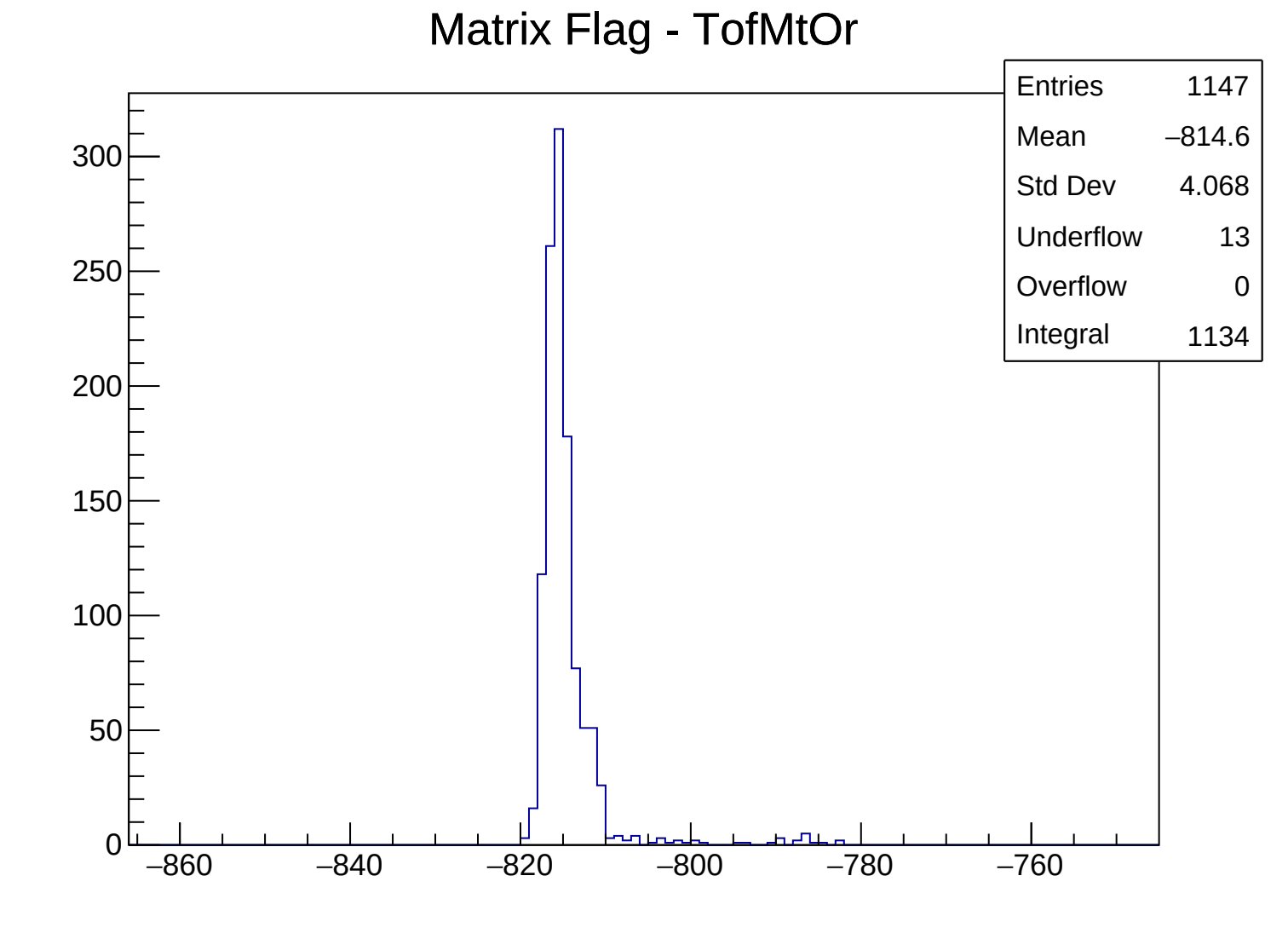

Sch-Tof Cut2: Sch&TOF-> nhits=1 & Maxdepth =1
Entries 745
Mean –480.2
Std Dev 4.559
Underflow 0
Overflow 0
Integral 745
100
80
60
40
20
0
–520
–500
–480
–460
–440
–420

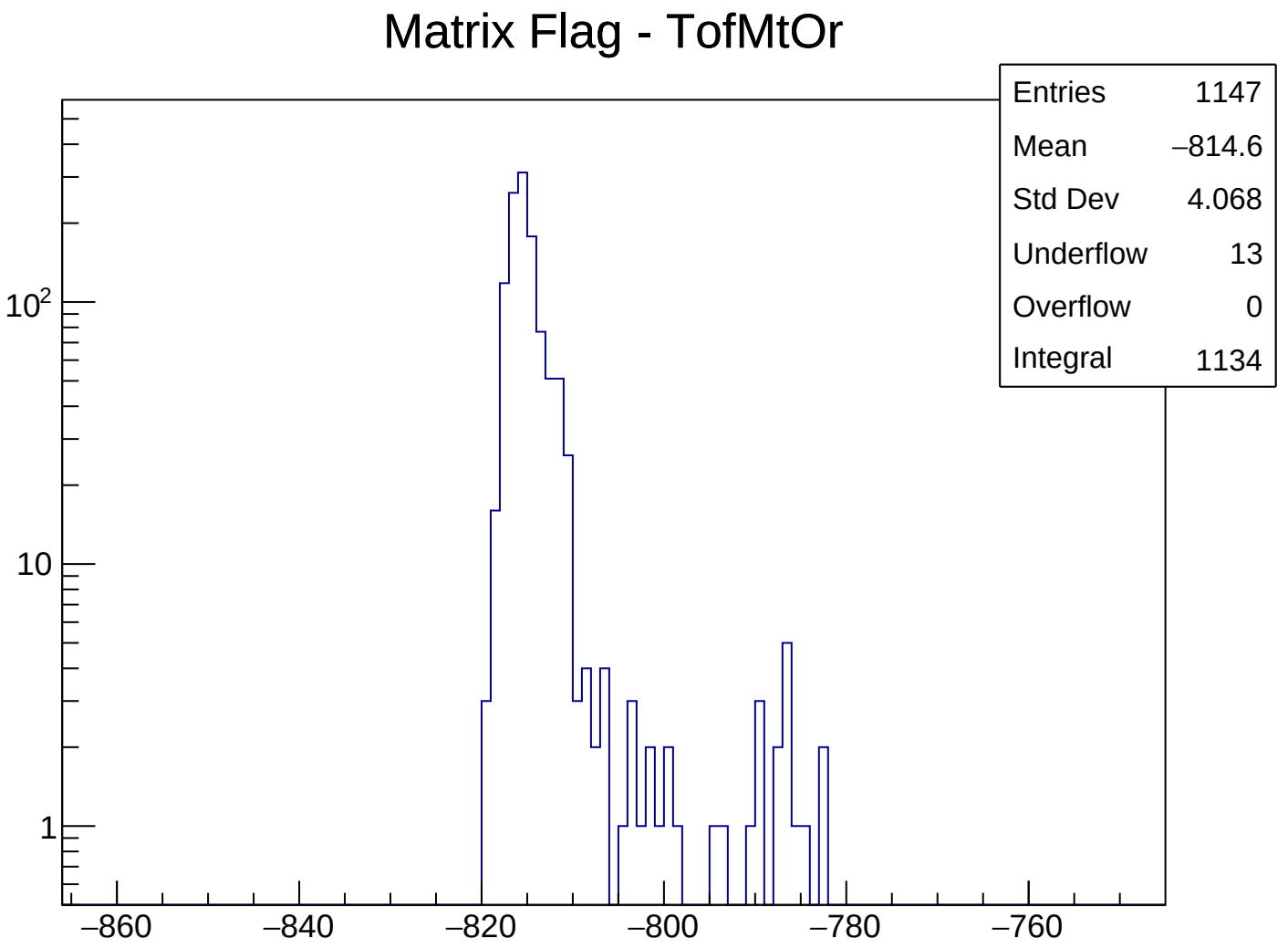

Sch-Tof Cut3: Sch&TOF-> nhits=1 & Maxdepth =1 & ntKurama=1
Entries 737
Mean −480.2
Std Dev 4.534
Underflow 0
Overflow 0
Integral 737
400
350
300
250
200
150
100
50
0
−800
−750
−700
−650
−600
−550
−500
−450
−400
−350
−300

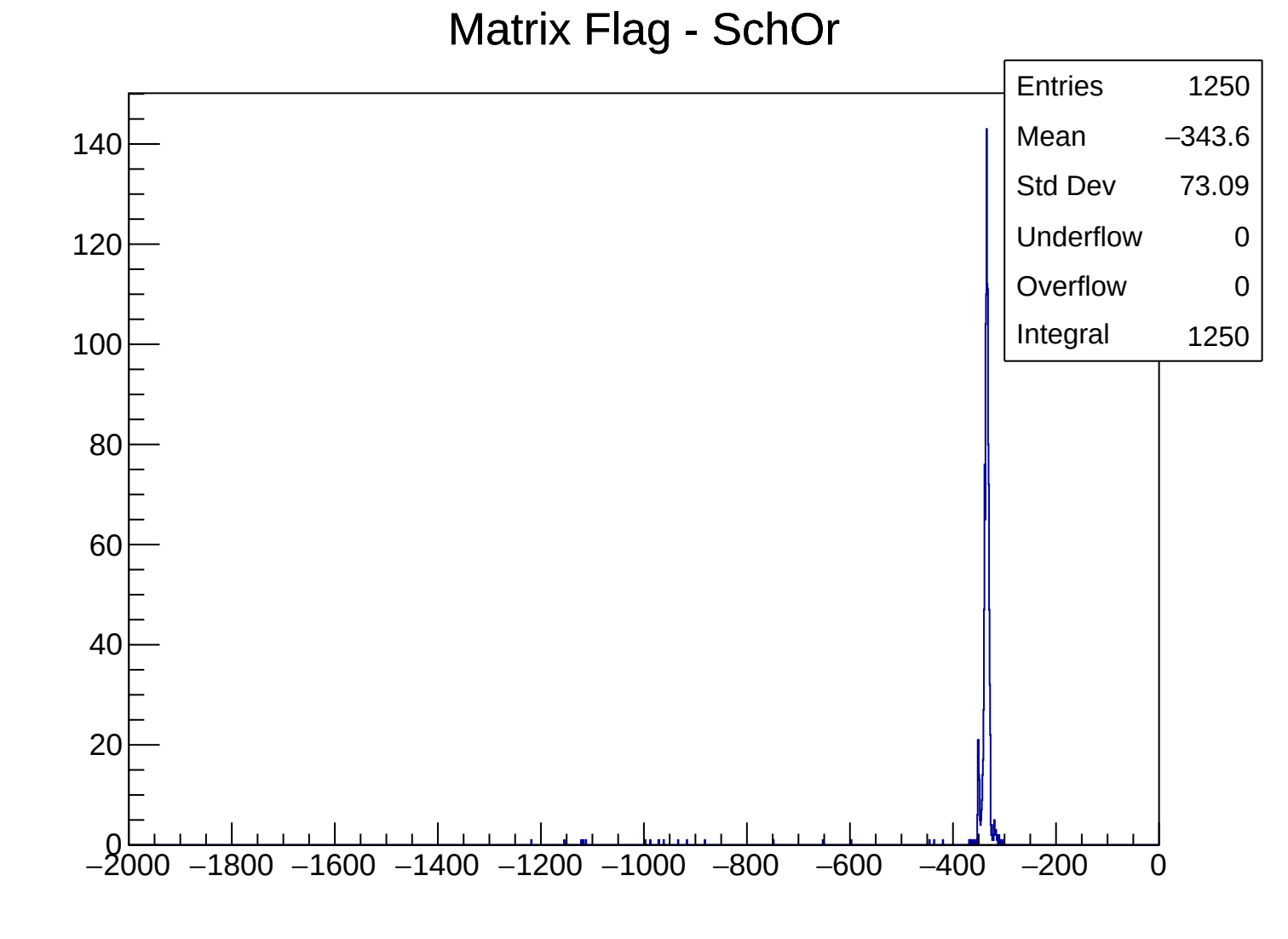

Sch-Tof Cut3: Sch&TOF-> nhits=1 & Maxdepth =1 & ntKurama=1
Entries 737
Mean −480.2
Std Dev 4.714
Underflow 0
Overflow 0
Integral 737
400
350
300
250
200
150
100
50
0
−520
−500
−480
−460
−440
−420

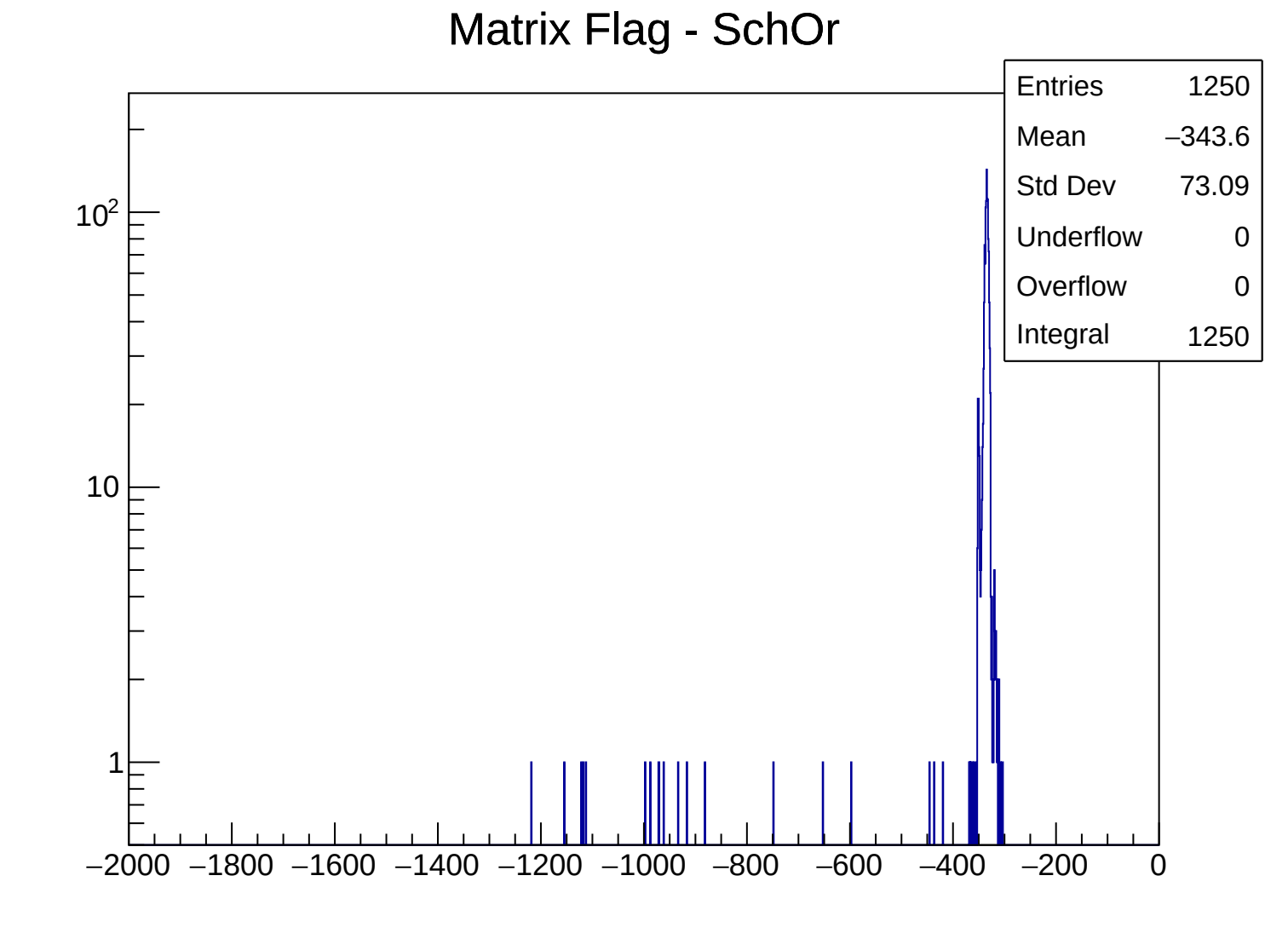

Matrix Flag - TofMtOr
Entries 1147
Mean –814.6
Std Dev 4.049
Underflow 13
Overflow 0
Integral 1134
300
250
200
150
100
50
0
–1000
–800
–600
–400
–200
0
200
400
600
800
1000

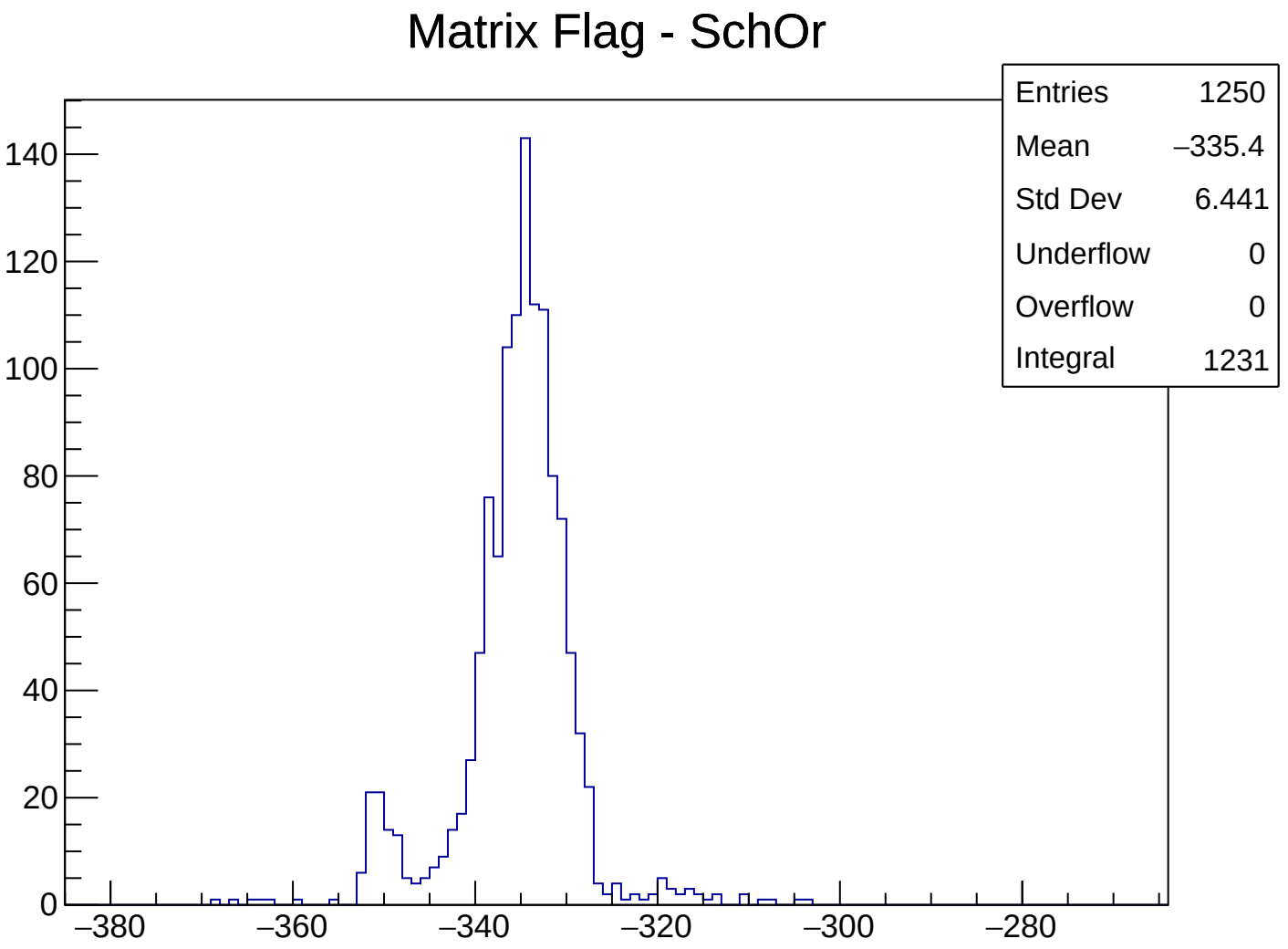

Matrix Flag - TofMtOr
Entries 1147
Mean –814.6
Std Dev 4.049
Underflow 13
Overflow 0
Integral 1134
10^2
10
1
–1000
–800
–600
–400
–200
0
200
400
600
800
1000

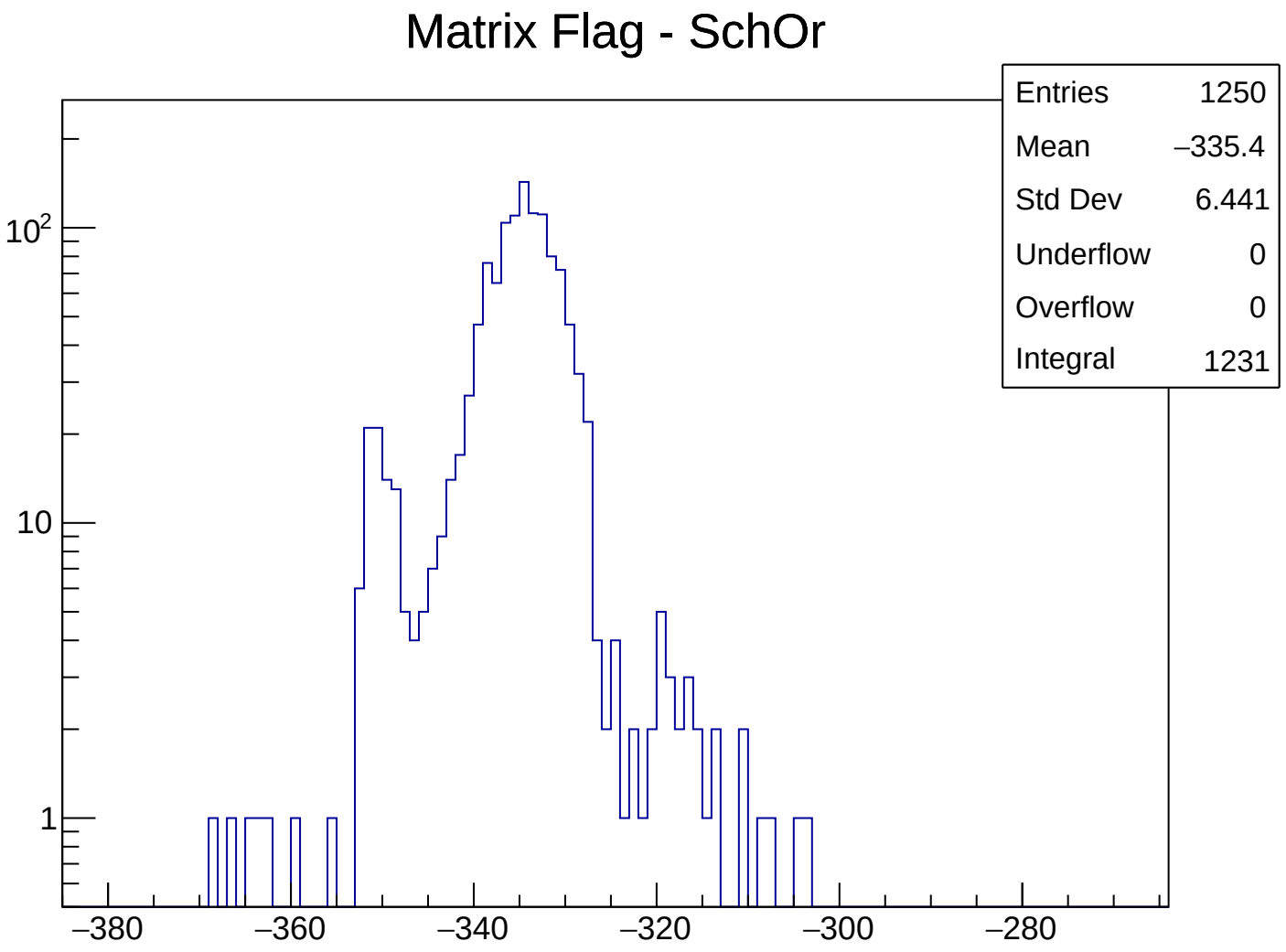

Matrix Flag - TofMtOr
Entries 1147
Mean –814.6
Std Dev 4.068
Underflow 13
Overflow 0
Integral 1134
300
250
200
150
100
50
0
–860
–840
–820
–800
–780
–760

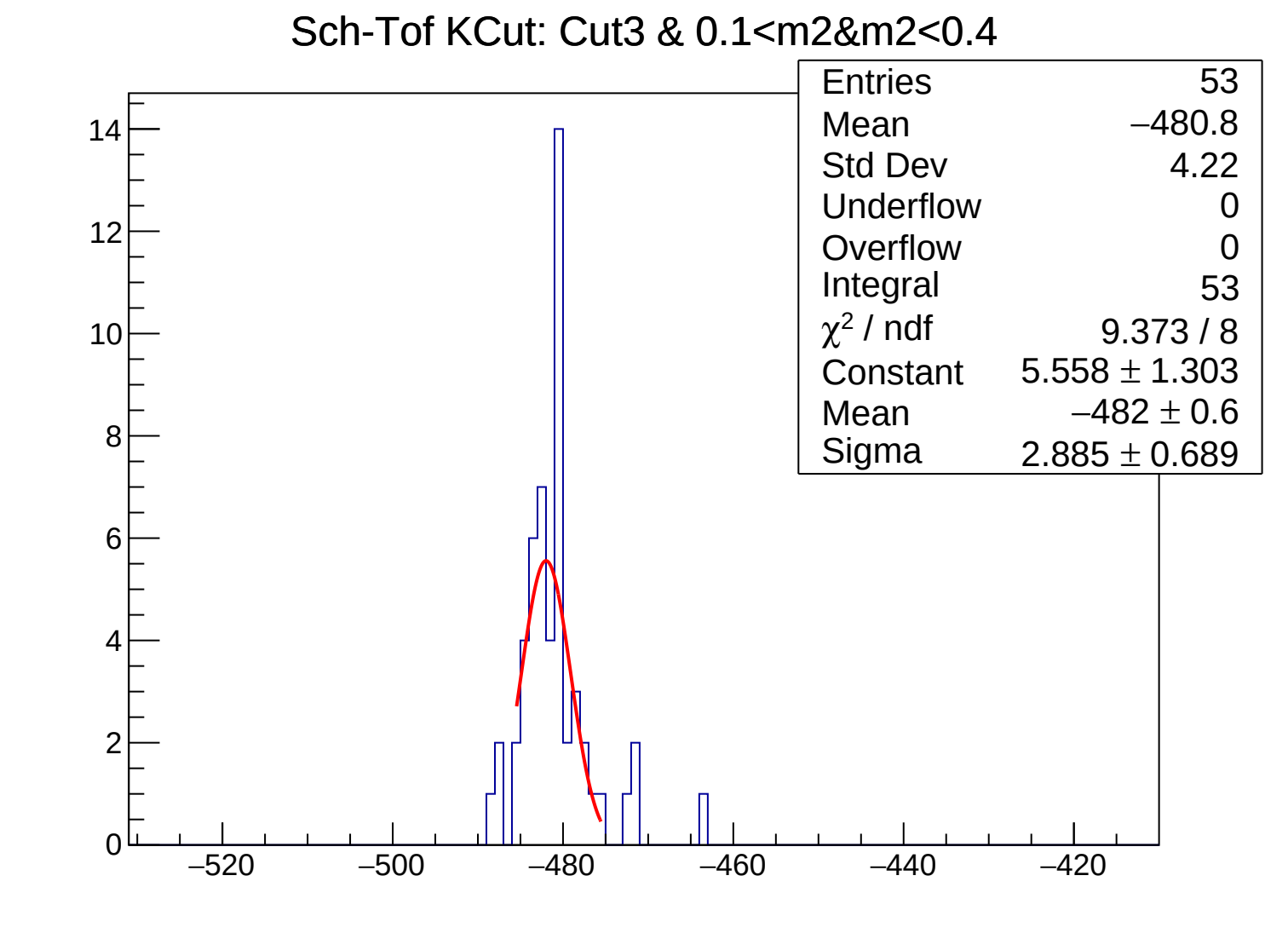

Matrix Flag - TofMtOr
Entries 1147
Mean −814.6
Std Dev 4.068
Underflow 13
Overflow 0
Integral 1134
10^2
10
1
−860
−840
−820
−800
−780
−760

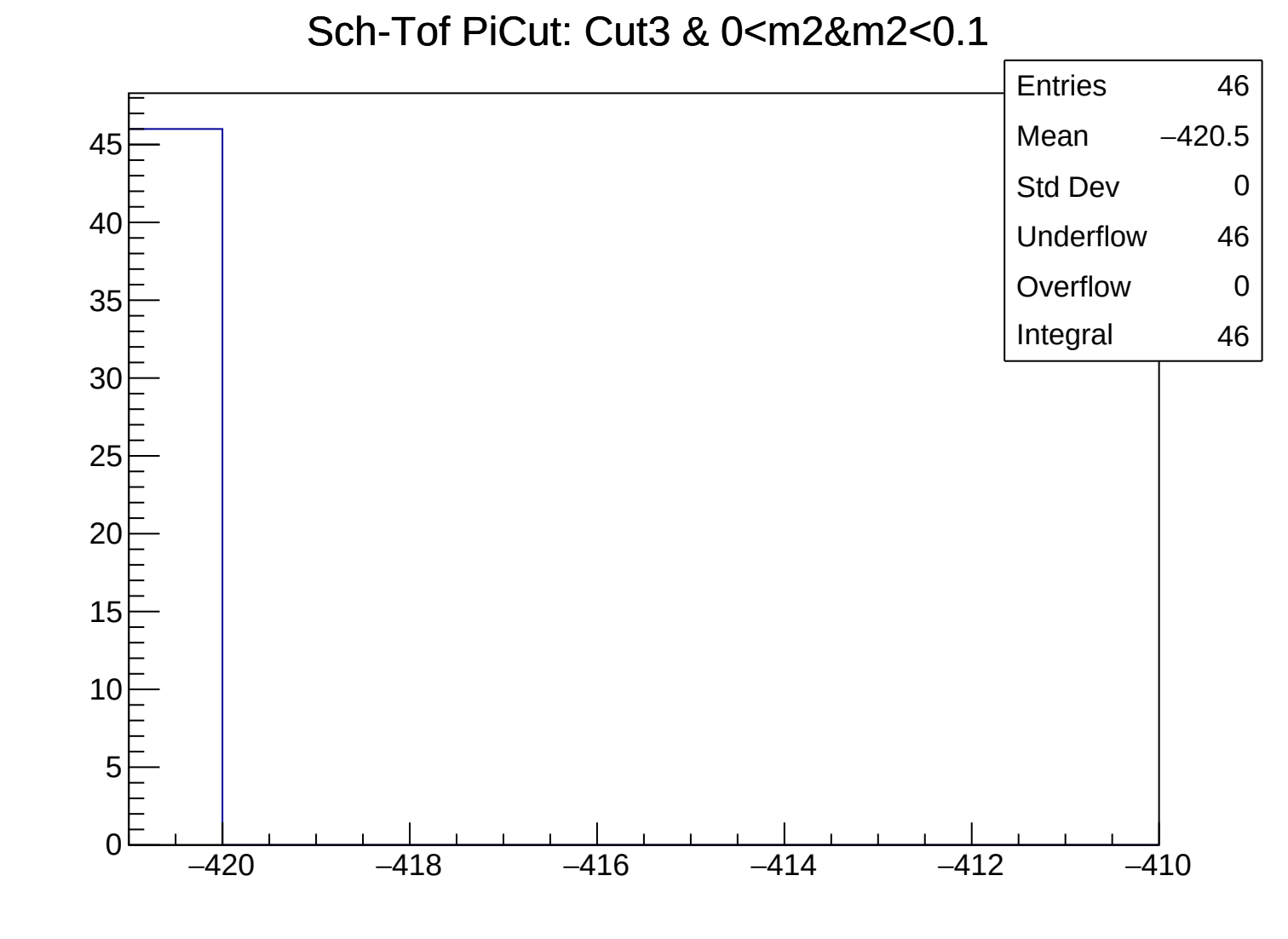

Matrix Flag - SchOr
Entries 1250
Mean −343.6
Std Dev 73.09
Underflow 0
Overflow 0
Integral 1250
140
120
100
80
60
40
20
0
−2000
−1800
−1600
−1400
−1200
−1000
−800
−600
−400
−200
0

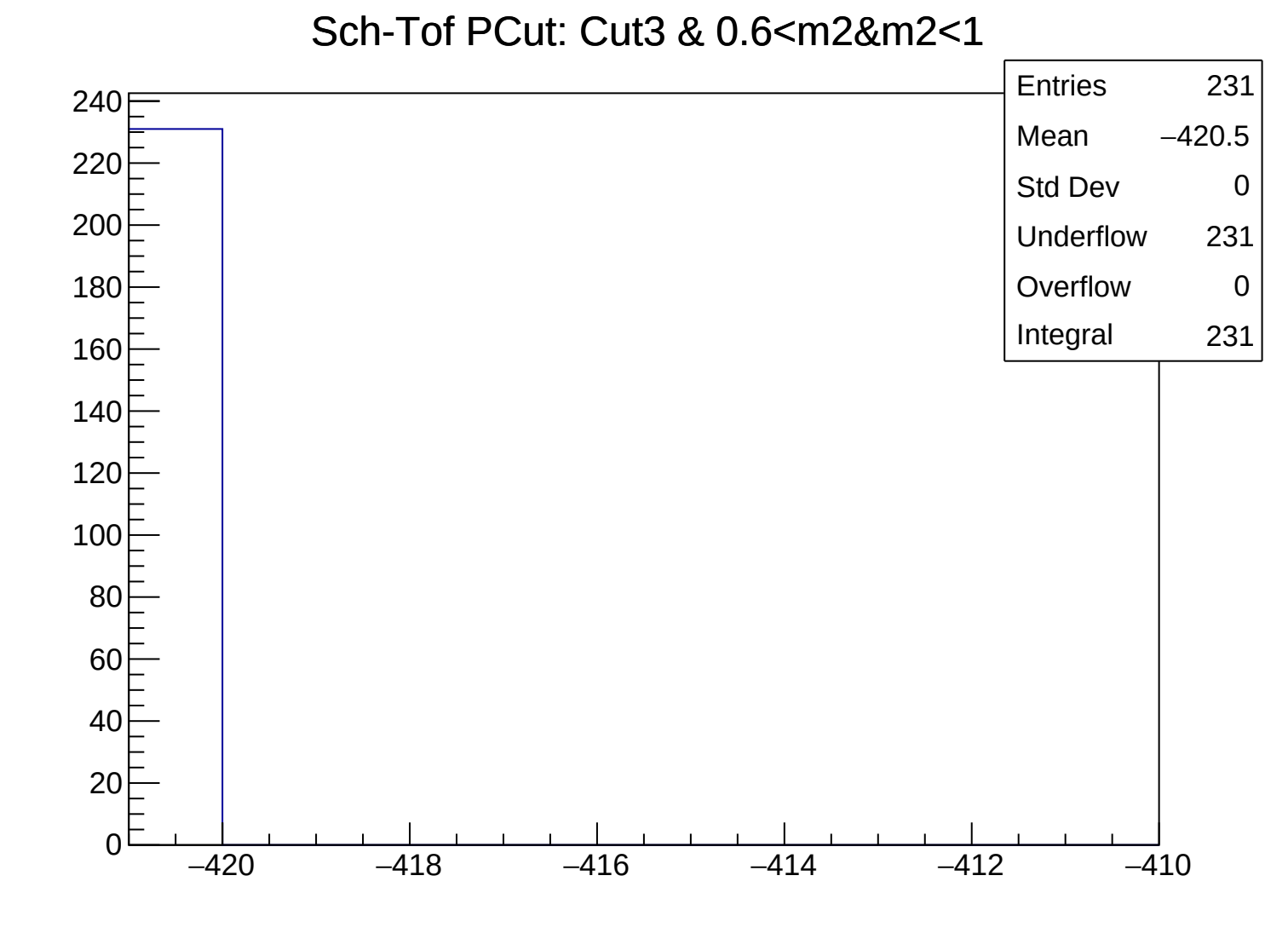

Matrix Flag - SchOr
Entries 1250
Mean −343.6
Std Dev 73.09
Underflow 0
Overflow 0
Integral 1250
10^2
10
1
−2000 −1800 −1600 −1400 −1200 −1000 −800 −600 −400 −200 0

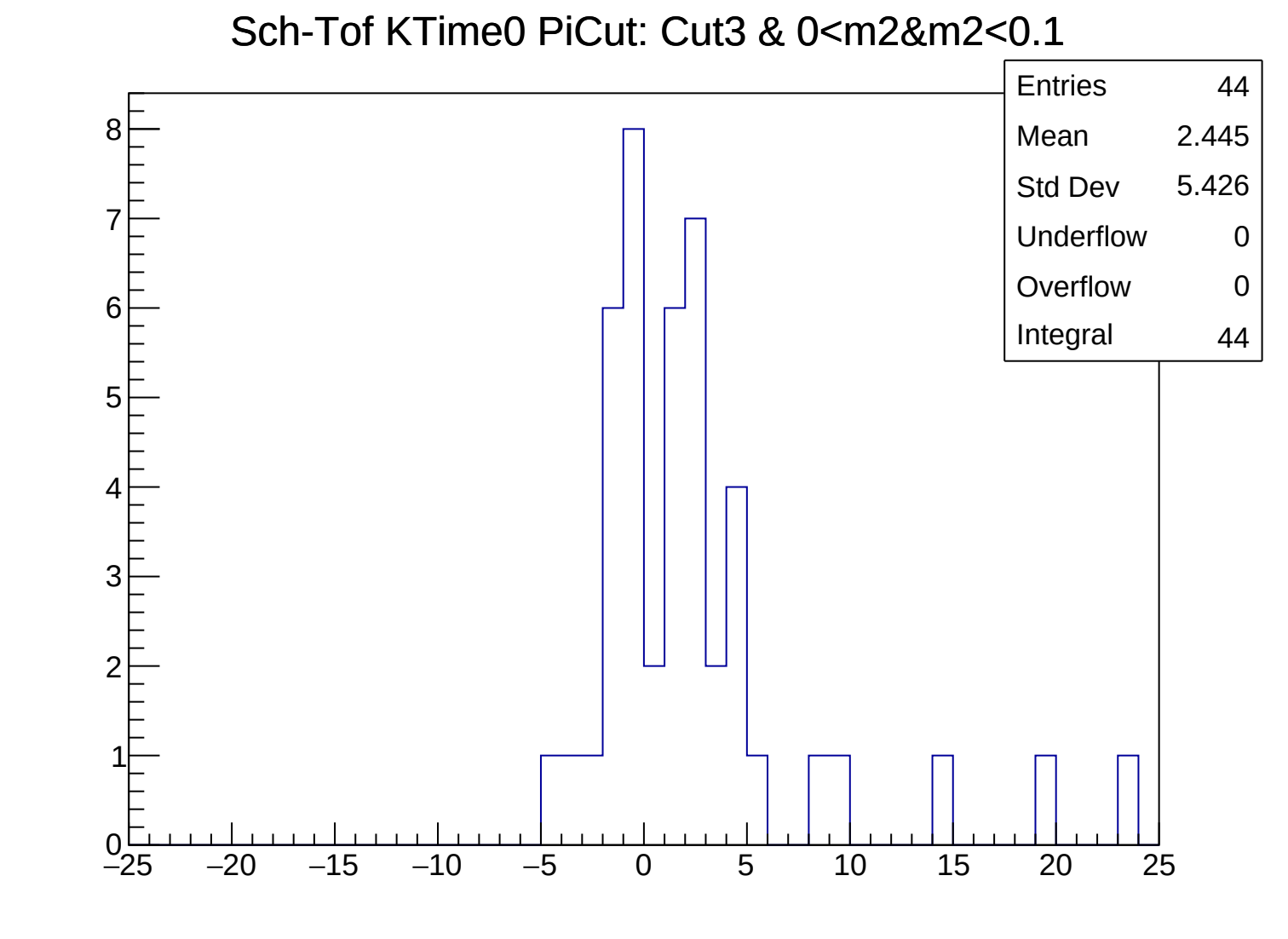

Matrix Flag - SchOr
Entries 1250
Mean −335.4
Std Dev 6.441
Underflow 0
Overflow 0
Integral 1231
140
120
100
80
60
40
20
0
−380
−360
−340
−320
−300
−280

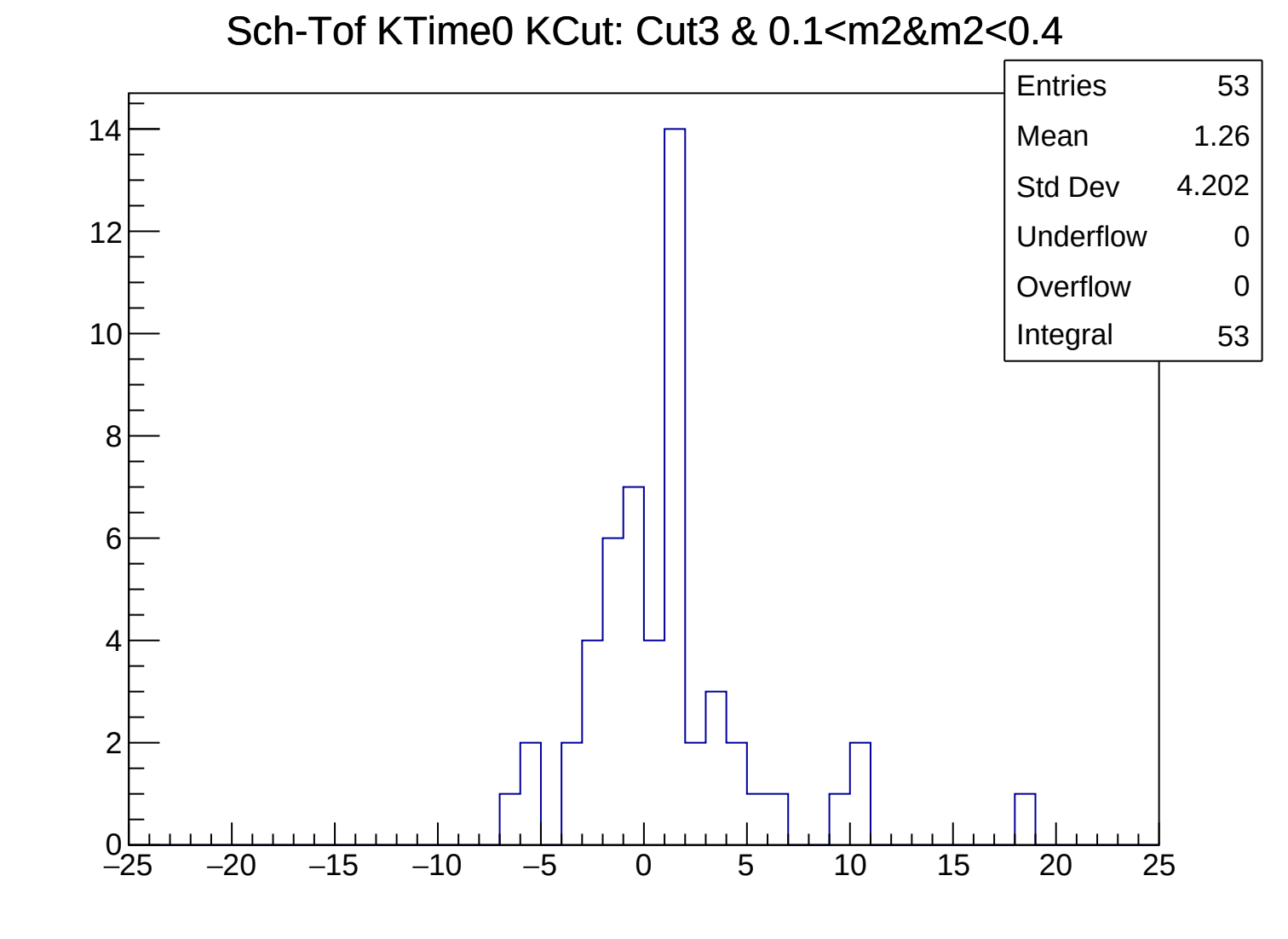

Matrix Flag - SchOr
Entries 1250
Mean −335.4
Std Dev 6.441
Underflow 0
Overflow 0
Integral 1231
10^2
10
1
−380
−360
−340
−320
−300
−280

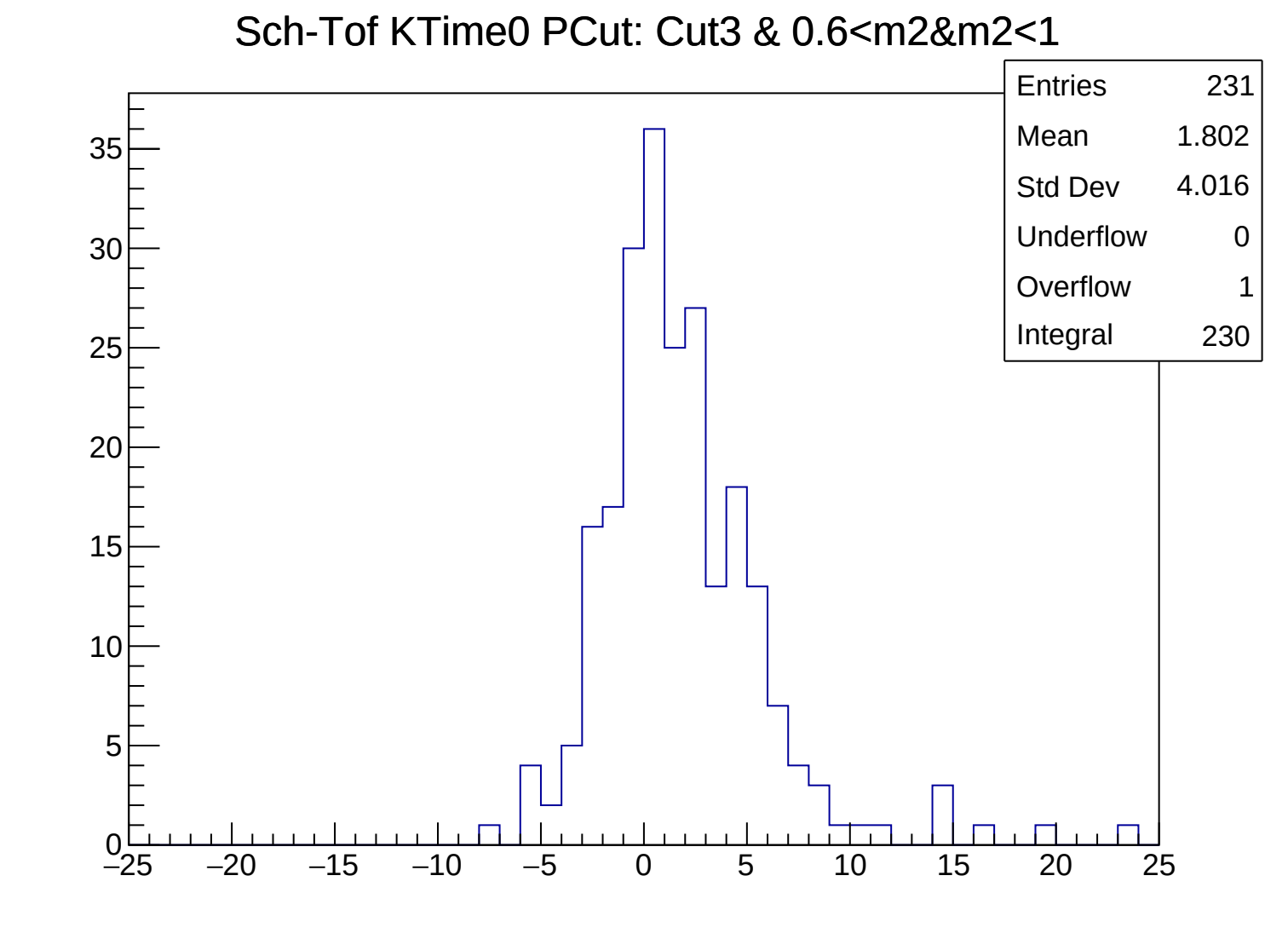

Sch-Tof KCut: Cut3 & 0.1<m2&m2<0.4
Entries 53
Mean –480.8
Std Dev 4.22
Underflow 0
Overflow 0
Integral 53
χ2 / ndf 9.373 / 8
Constant 5.558 ± 1.303
Mean –482 ± 0.6
Sigma 2.885 ± 0.689
14
12
10
8
6
4
2
0
–520
–500
–480
–460
–440
–420

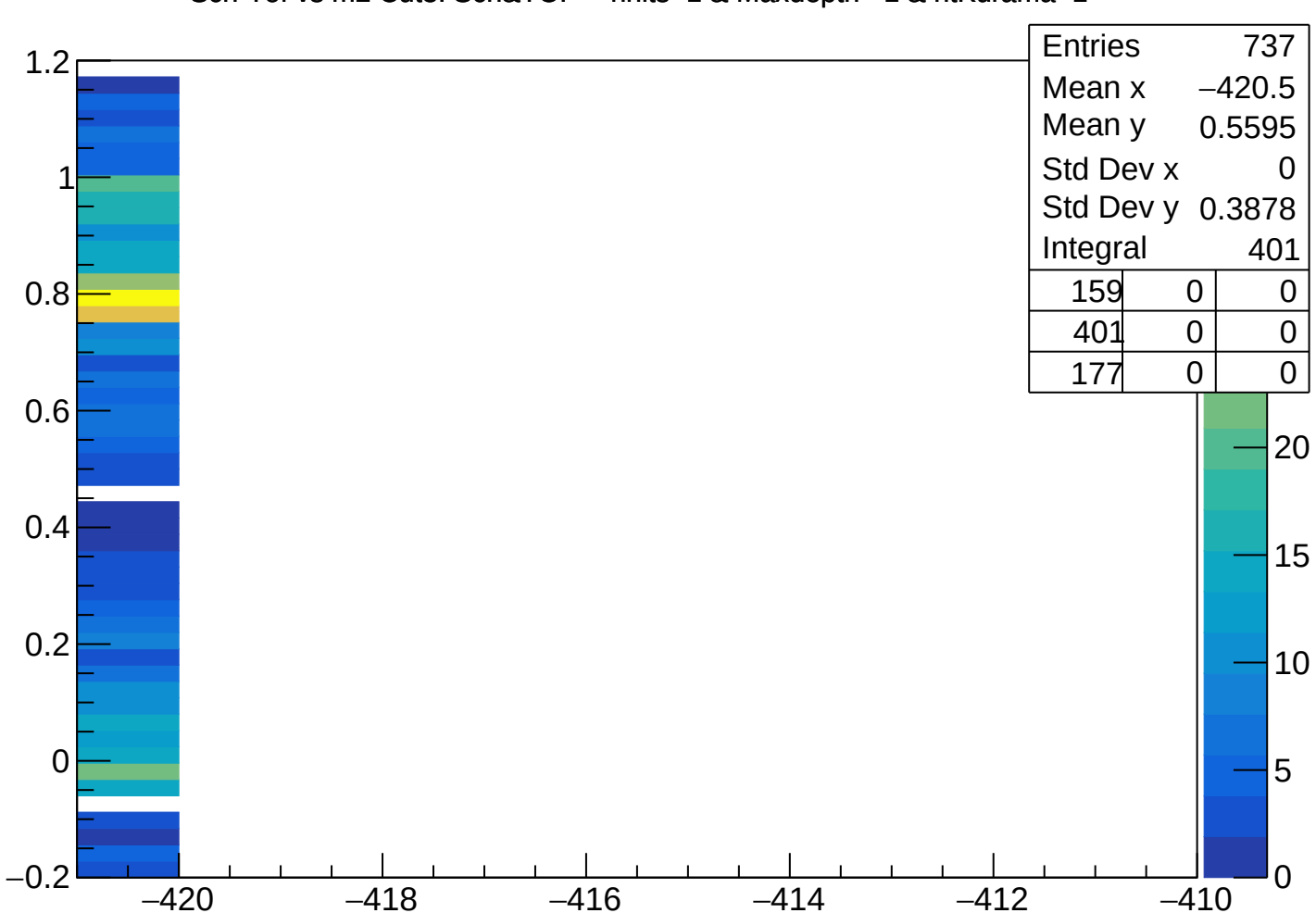

Sch-Tof PiCut: Cut3 & 0<m2&m2<0.1
Entries 46
Mean –420.5
Std Dev 0
Underflow 46
Overflow 0
Integral 46
45
40
35
30
25
20
15
10
5
0
–420
–418
–416
–414
–412
–410

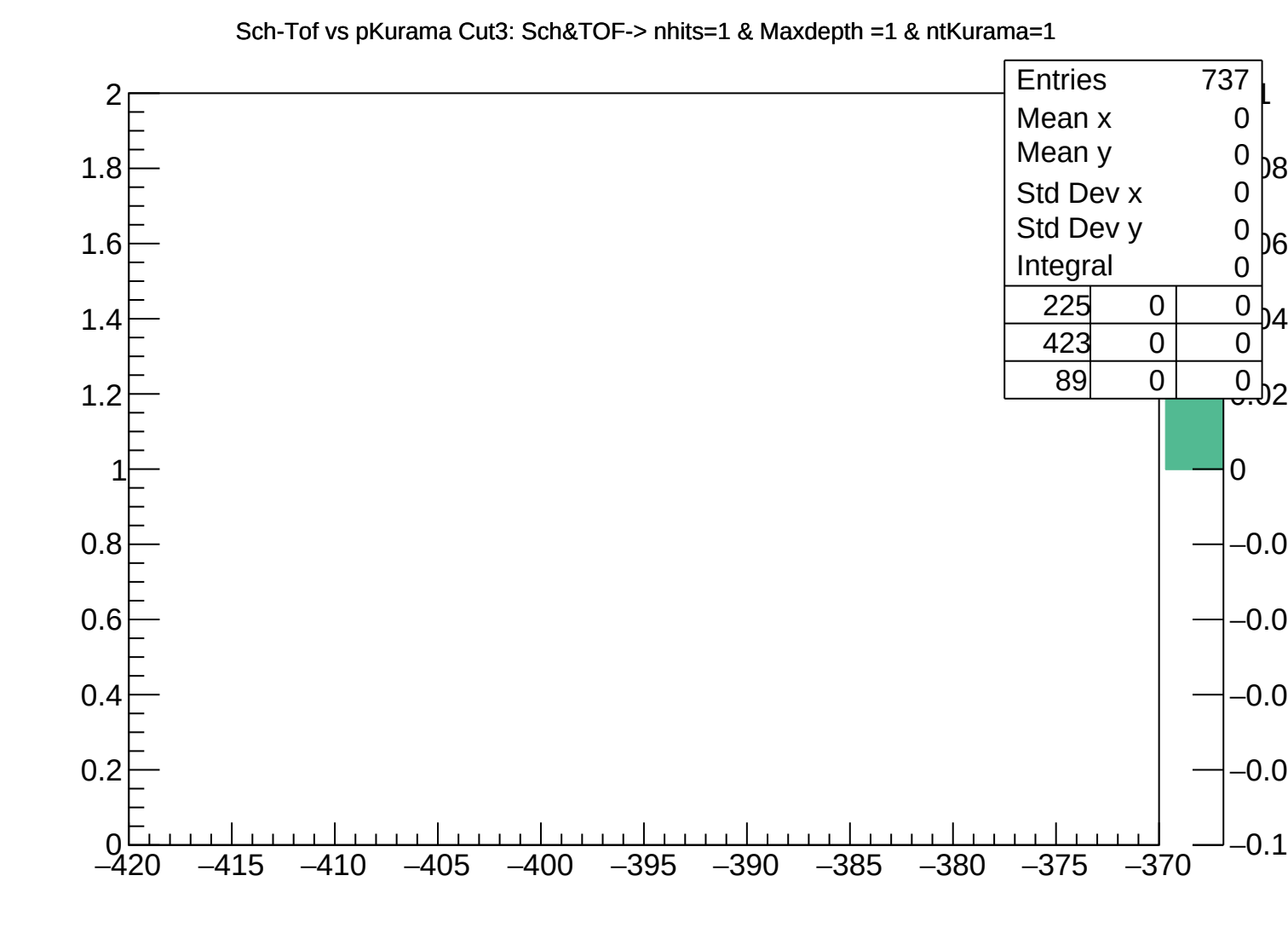

Sch-Tof PCut: Cut3 & 0.6<m2&m2<1
Entries 231
Mean −420.5
Std Dev 0
Underflow 231
Overflow 0
Integral 231
240
220
200
180
160
140
120
100
80
60
40
20
0
−420
−418
−416
−414
−412
−410

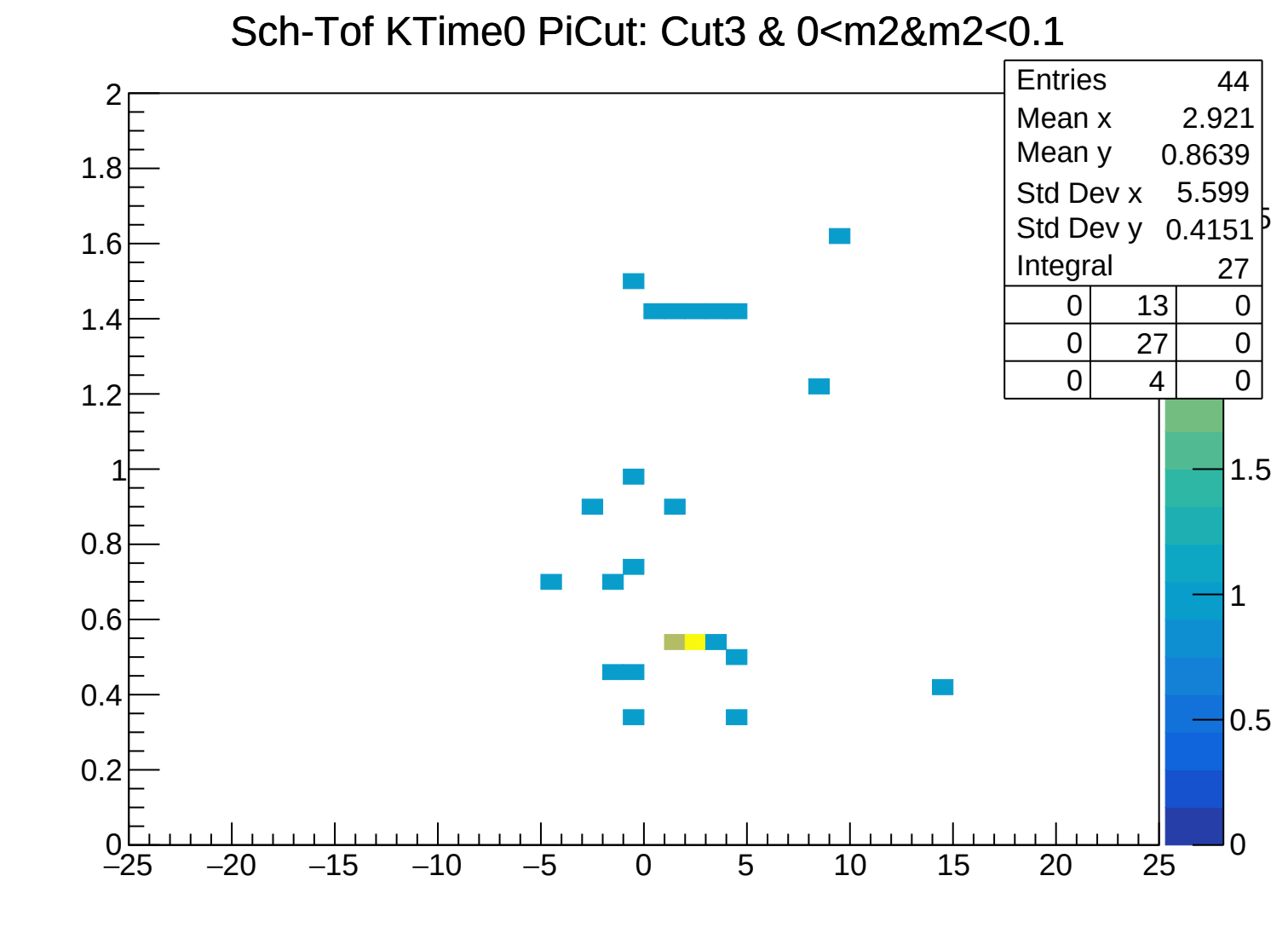

Sch-Tof KTime0 PiCut: Cut3 & 0<m2&m2<0.1
Entries 44
Mean 2.445
Std Dev 5.426
Underflow 0
Overflow 0
Integral 44
0
1
2
3
4
5
6
7
8
–25
–20
–15
–10
–5
0
5
10
15
20
25

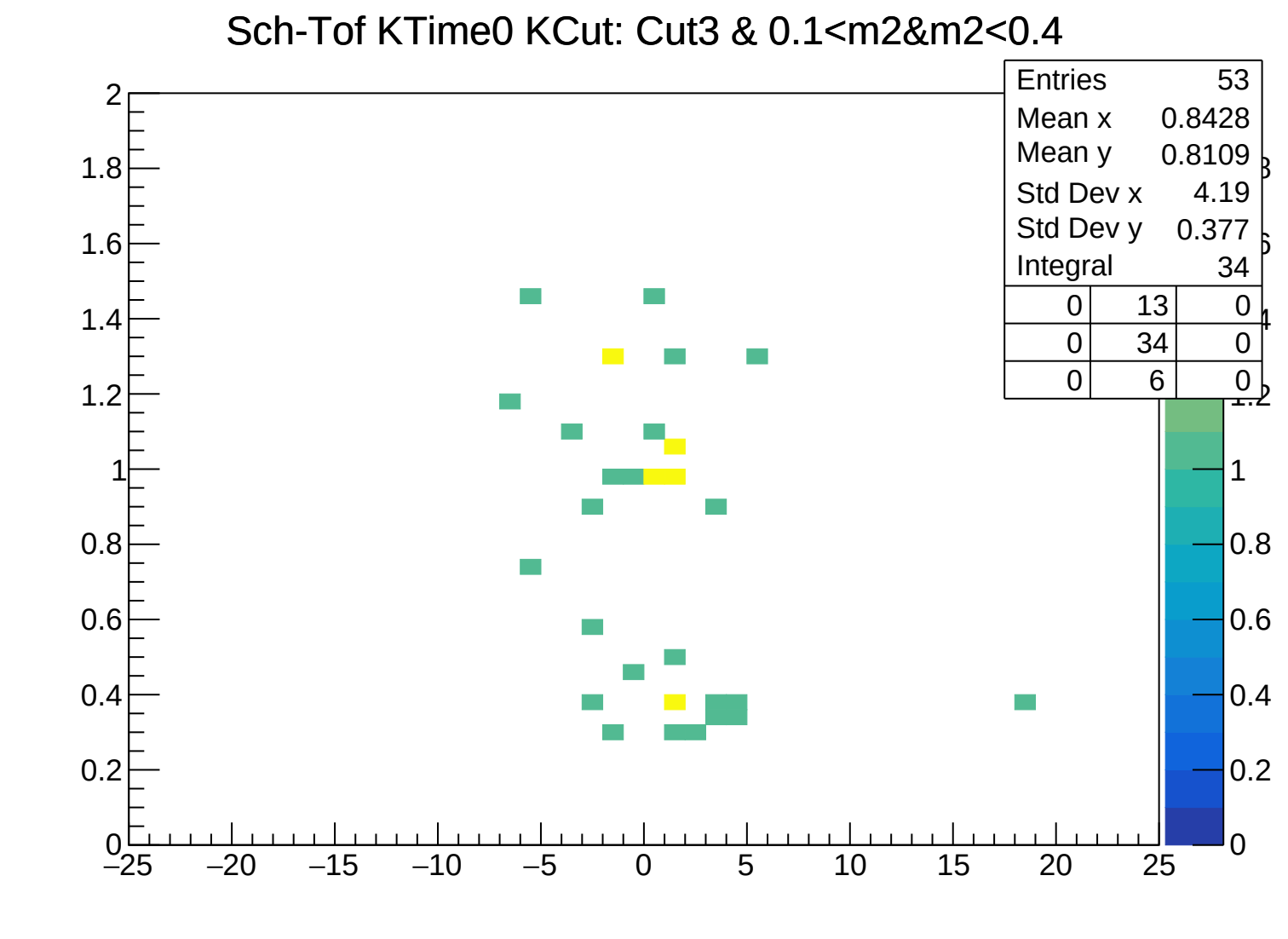

Sch-Tof KTime0 KCut: Cut3 & 0.1<m2&m2<0.4
Entries 53
Mean 1.26
Std Dev 4.202
Underflow 0
Overflow 0
Integral 53
14
12
10
8
6
4
2
0
–25
–20
–15
–10
–5
0
5
10
15
20
25

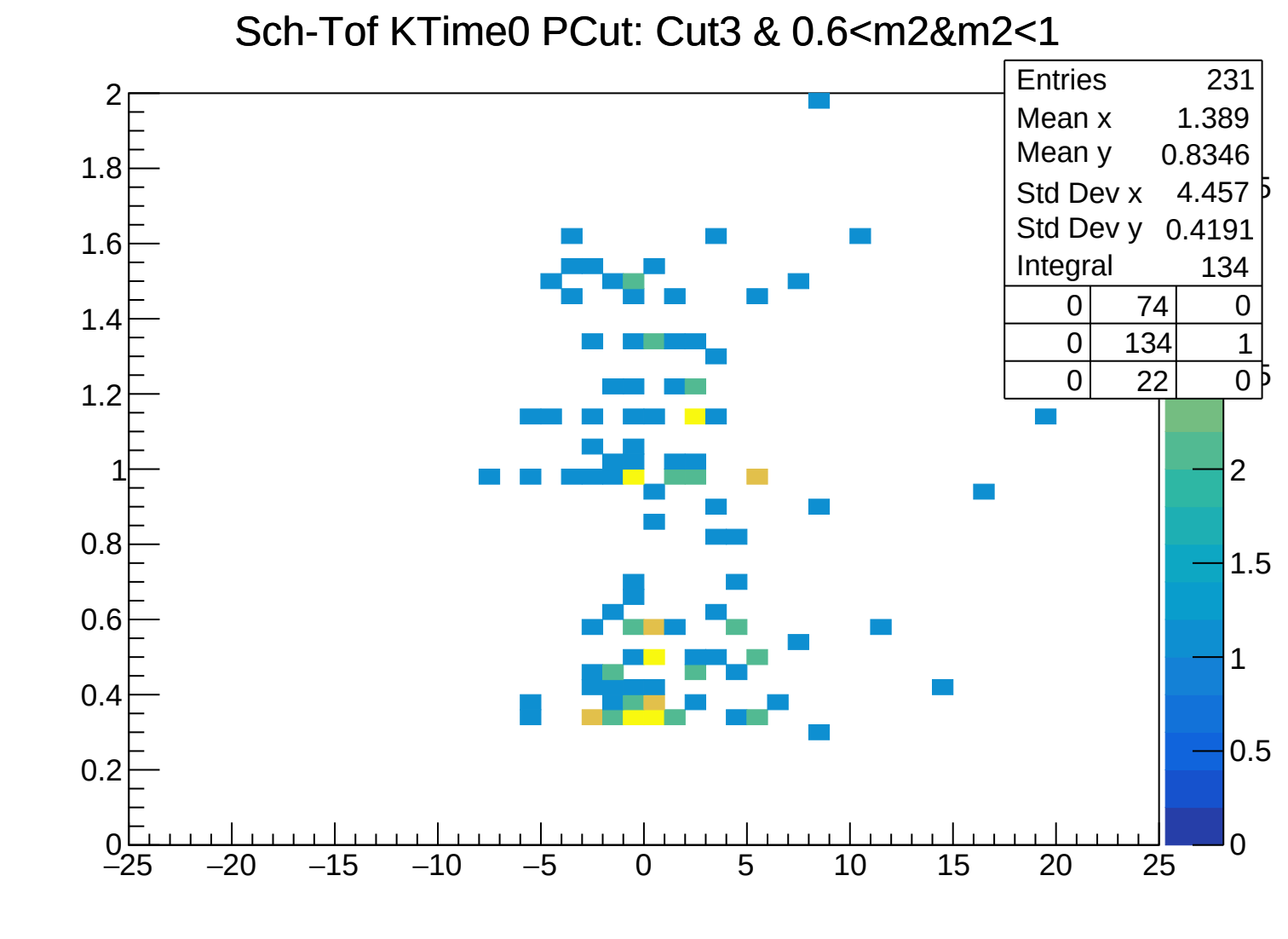

Sch-Tof KTime0 PCut: Cut3 & 0.6<m2&m2<1
Entries 231
Mean 1.802
Std Dev 4.016
Underflow 0
Overflow 1
Integral 230
35
30
25
20
15
10
5
0
–25
–20
–15
–10
–5
0
5
10
15
20
25

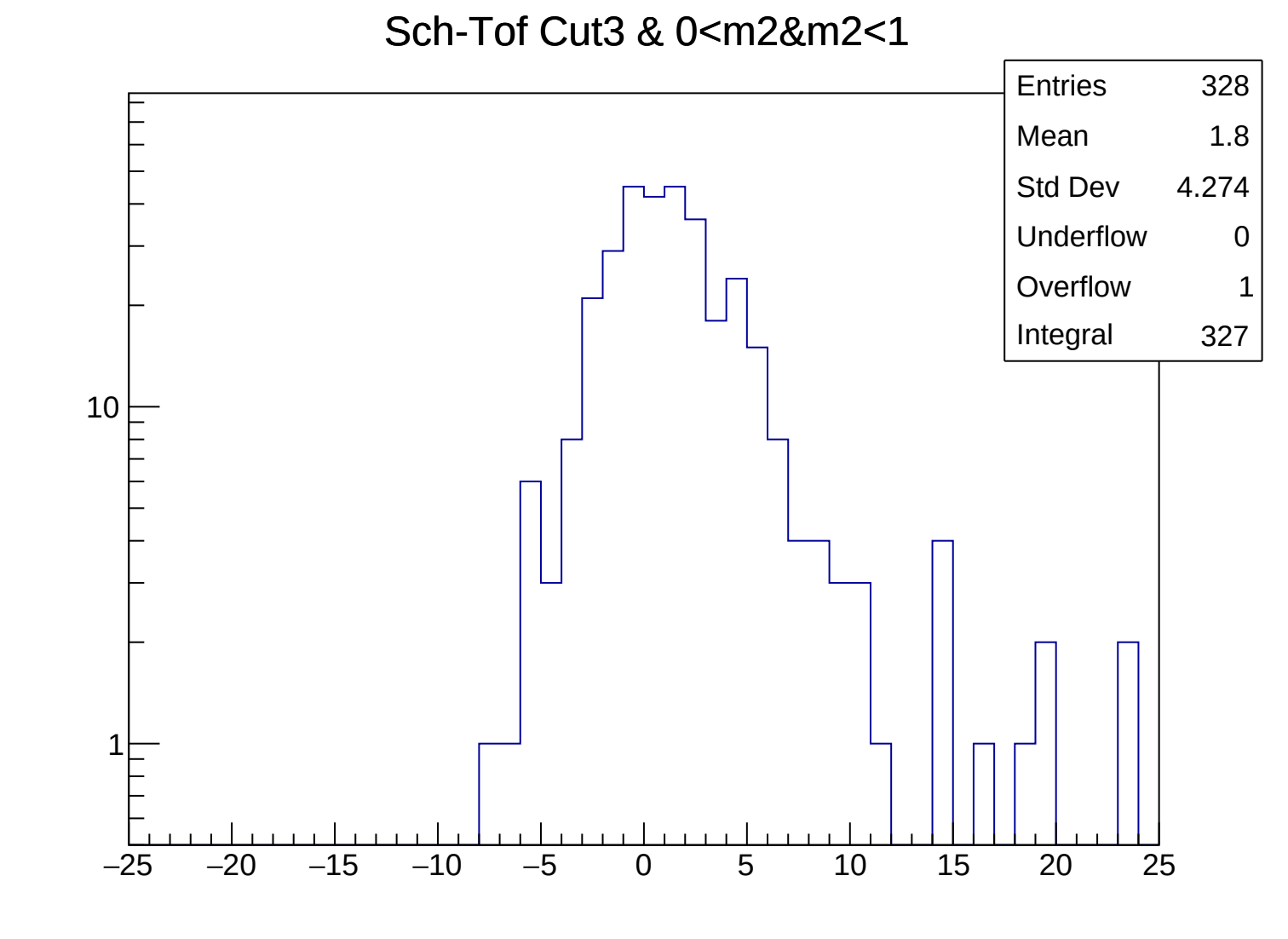

Sch-Tof vs m2 Cut3: Sch&TOF-> nhits=1 & Maxdepth =1 & ntKurama=1
Entries 737
Mean x −420.5
Mean y 0.5595
Std Dev x 0
Std Dev y 0.3878
Integral 401
159 0 0
401 0 0
177 0 0
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−420
−418
−416
−414
−412
−410
20
15
10
5
0

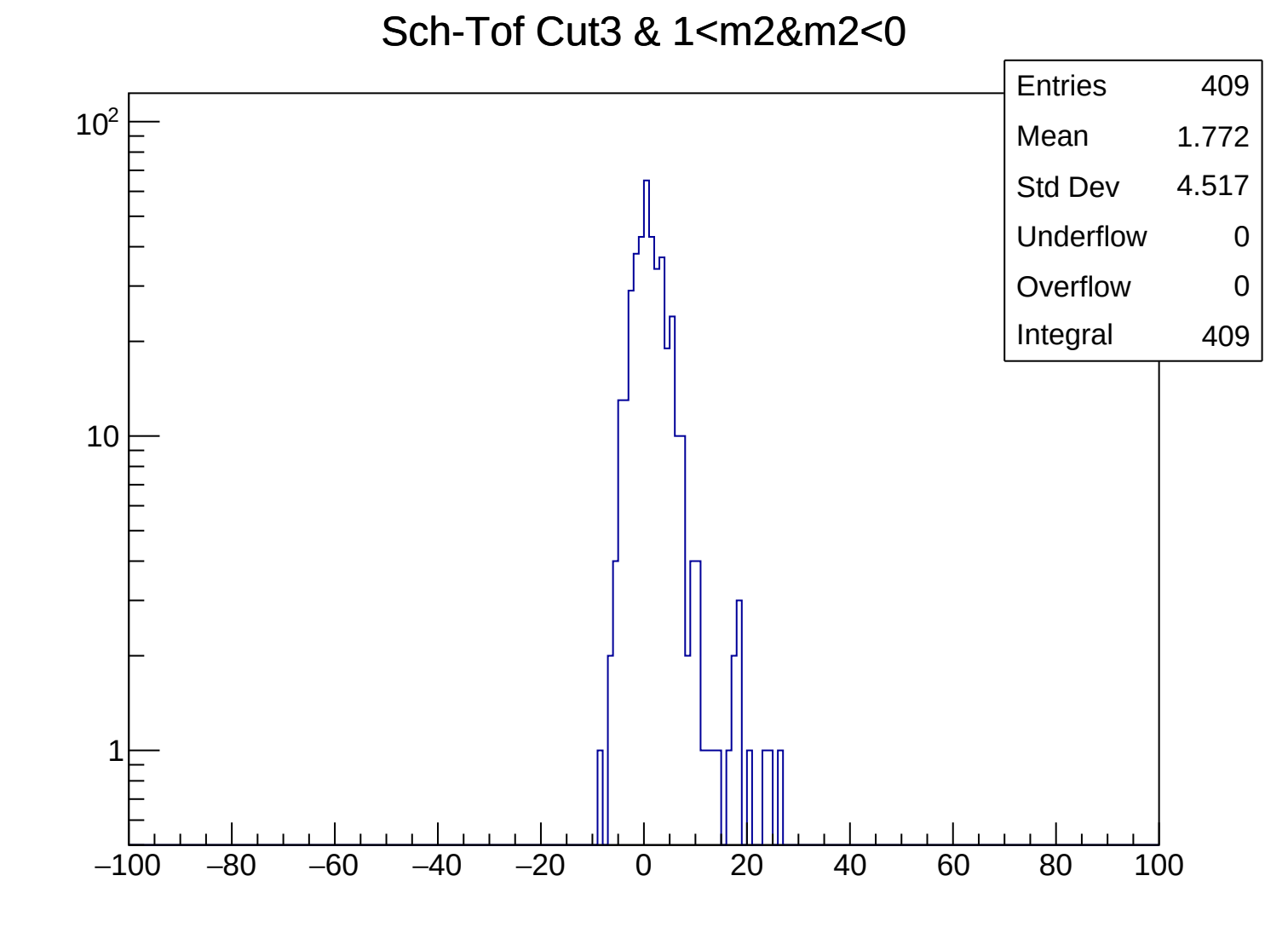

Sch-Tof vs pKurama Cut3: Sch&TOF-> nhits=1 & Maxdepth =1 & ntKurama=1
Entries 737
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
Integral 0
225 0 0
423 0 0
89 0 0
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
–420
–415
–410
–405
–400
–395
–390
–385
–380
–375
–370
0
–0.0
–0.0
–0.0
–0.0
–0.1

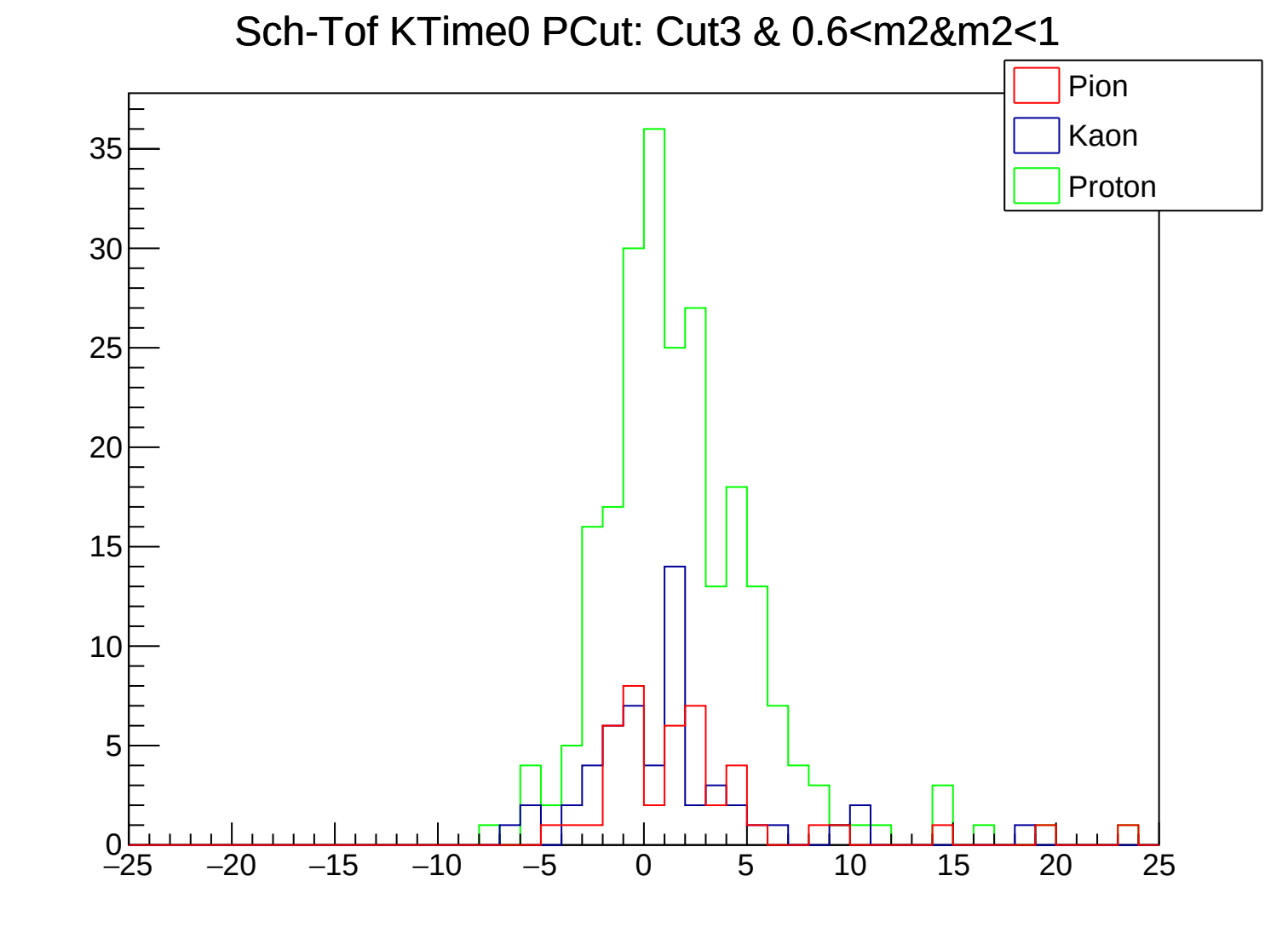

Sch-Tof KTime0 PiCut: Cut3 & 0<m2&m2<0.1
Entries 44
Mean x 2.921
Mean y 0.8639
Std Dev x 5.599
Std Dev y 0.4151
Integral 27
0 13 0
0 27 0
0 4 0
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−25
−20
−15
−10
−5
0
5
10
15
20
25
1.5
1
0.5
0


Sch-Tof KTime0 KCut: Cut3 & 0.1<m2&m2<0.4
Entries 53
Mean x 0.8428
Mean y 0.8109
Std Dev x 4.19
Std Dev y 0.377
Integral 34
0 13 0
0 34 0
0 6 0
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
–25
–20
–15
–10
–5
0
5
10
15
20
25


Sch-Tof KTime0 PCut: Cut3 & 0.6<m2&m2<1
Entries 231
Mean x 1.389
Mean y 0.8346
Std Dev x 4.457
Std Dev y 0.4191
Integral 134
0 74 0
0 134 1
0 22 0
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
–25
–20
–15
–10
–5
0
5
10
15
20
25
2
1.5
1
0.5
0


Sch-Tof Cut3 & 0<m2&m2<1
Entries 328
Mean 1.8
Std Dev 4.274
Underflow 0
Overflow 1
Integral 327
10
1
–25
–20
–15
–10
–5
0
5
10
15
20
25


Sch-Tof Cut3 & 1<m2&m2<0
Entries 409
Mean 1.772
Std Dev 4.517
Underflow 0
Overflow 0
Integral 409
10^2
10
1
–100
–80
–60
–40
–20
0
20
40
60
80
100


Sch-Tof KTime0 PCut: Cut3 & 0.6<m2&m2<1
Pion
Kaon
Proton
35
30
25
20
15
10
5
0
–25
–20
–15
–10
–5
0
5
10
15
20
25