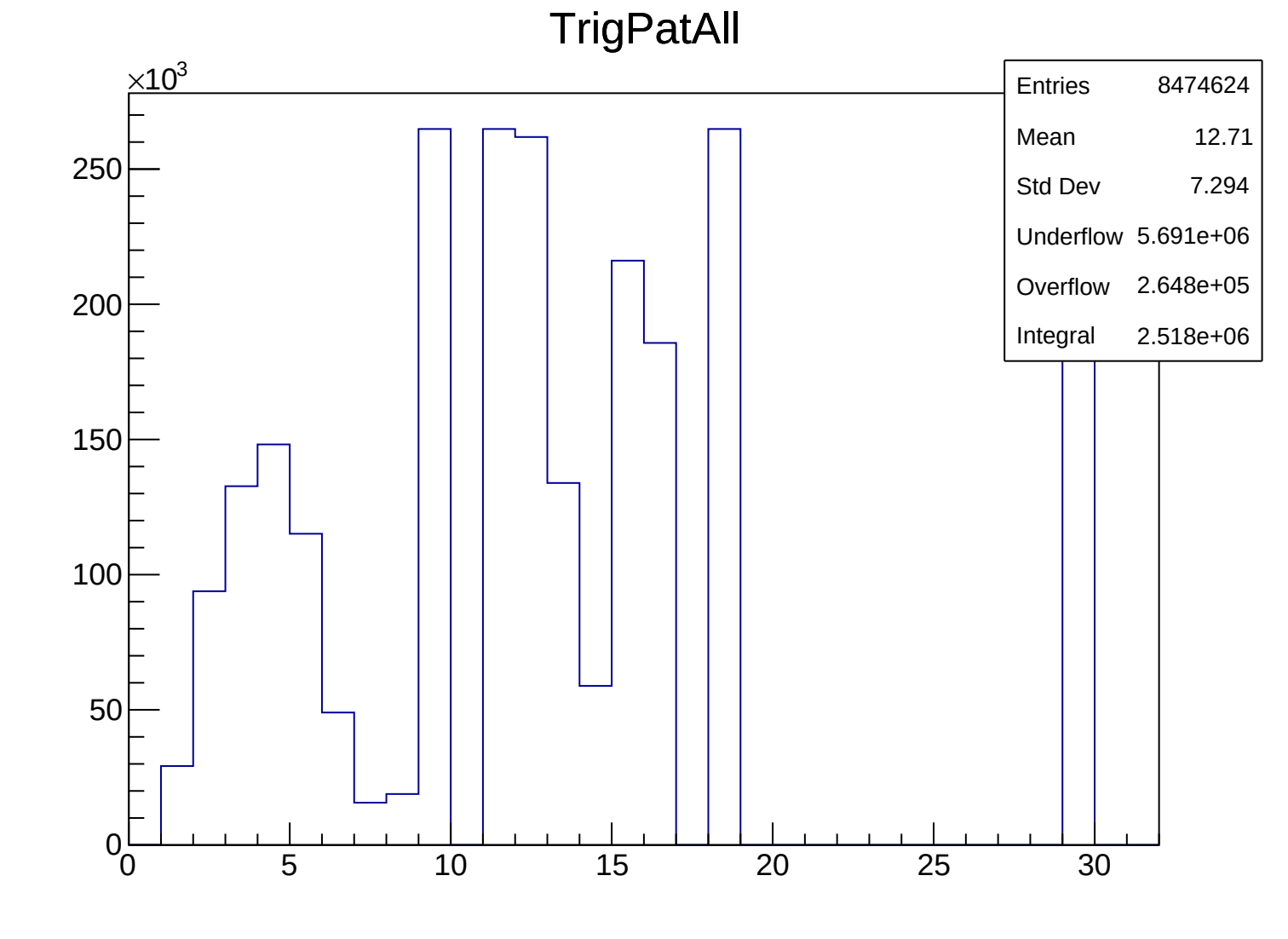
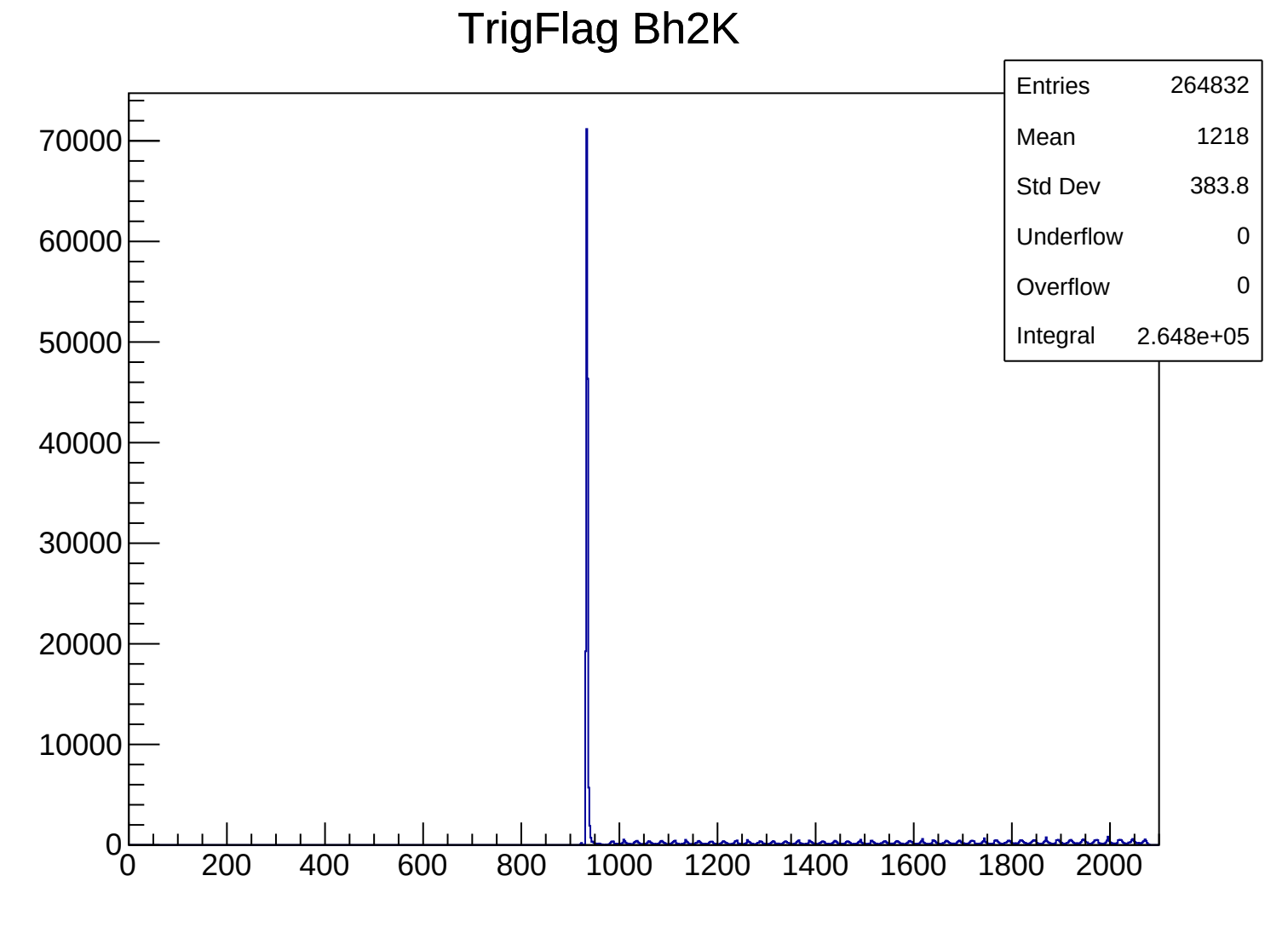
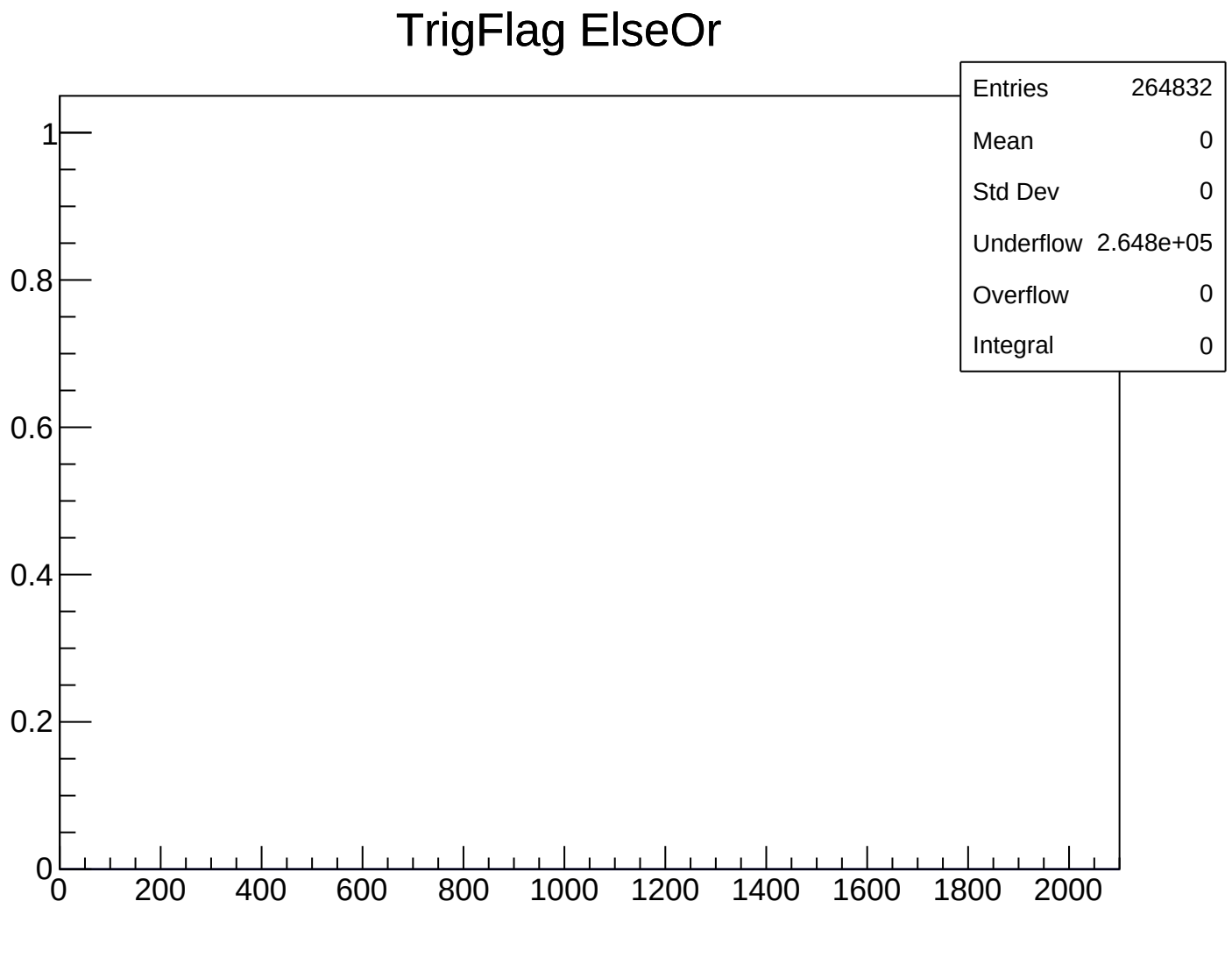
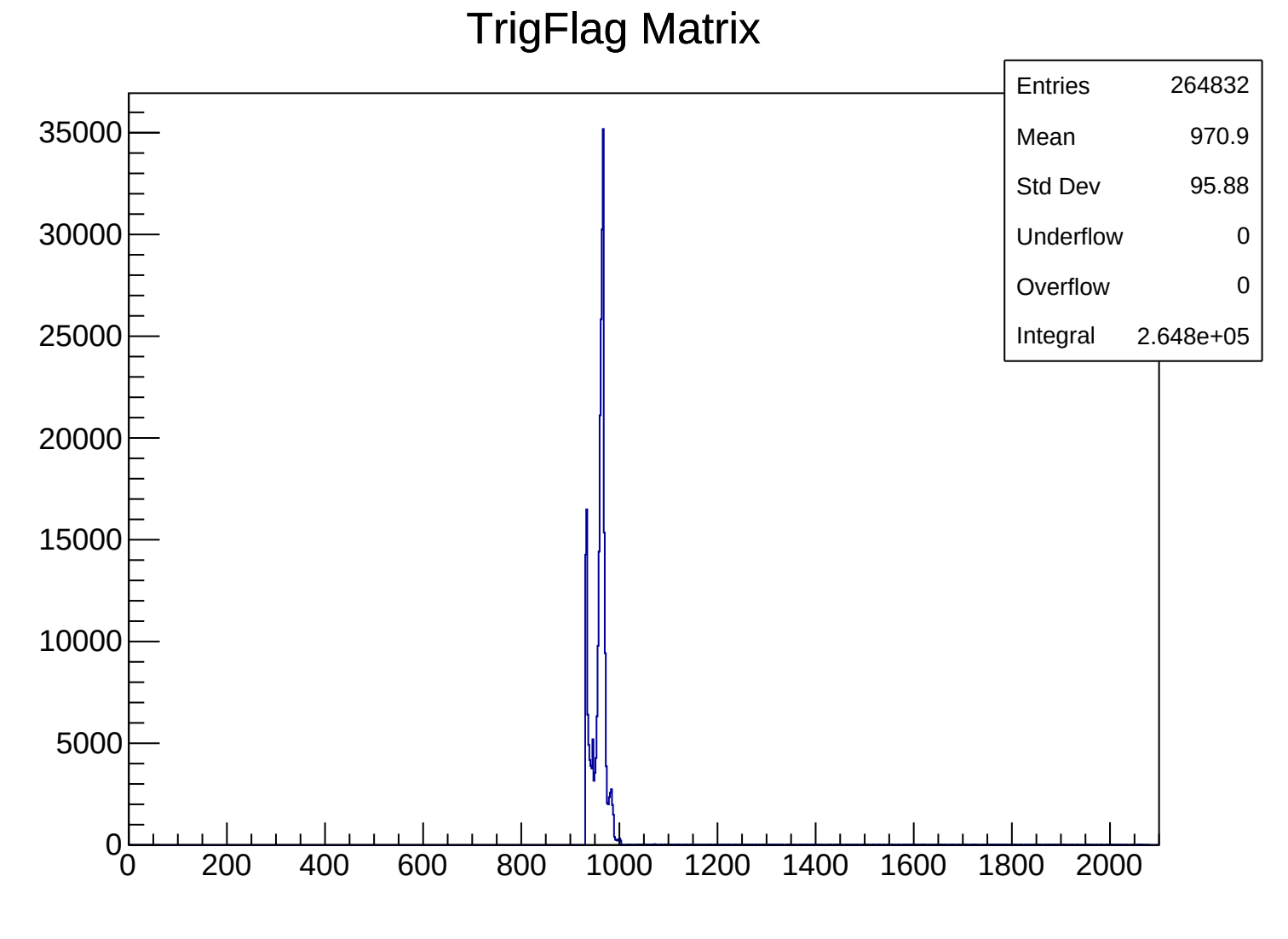

TrigPatAll
×10^3
250
200
150
100
50
0
0
5
10
15
20
25
30
Entries 8474624
Mean 12.71
Std Dev 7.294
Underflow 5.691e+06
Overflow 2.648e+05
Integral 2.518e+06


TrigFlag Bh2K
Entries 264832
Mean 1218
Std Dev 383.8
Underflow 0
Overflow 0
Integral 2.648e+05
70000
60000
50000
40000
30000
20000
10000
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000


TrigFlag ElseOr
Entries 264832
Mean 0
Std Dev 0
Underflow 2.648e+05
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 264832
Mean 970.9
Std Dev 95.88
Underflow 0
Overflow 0
Integral 2.648e+05
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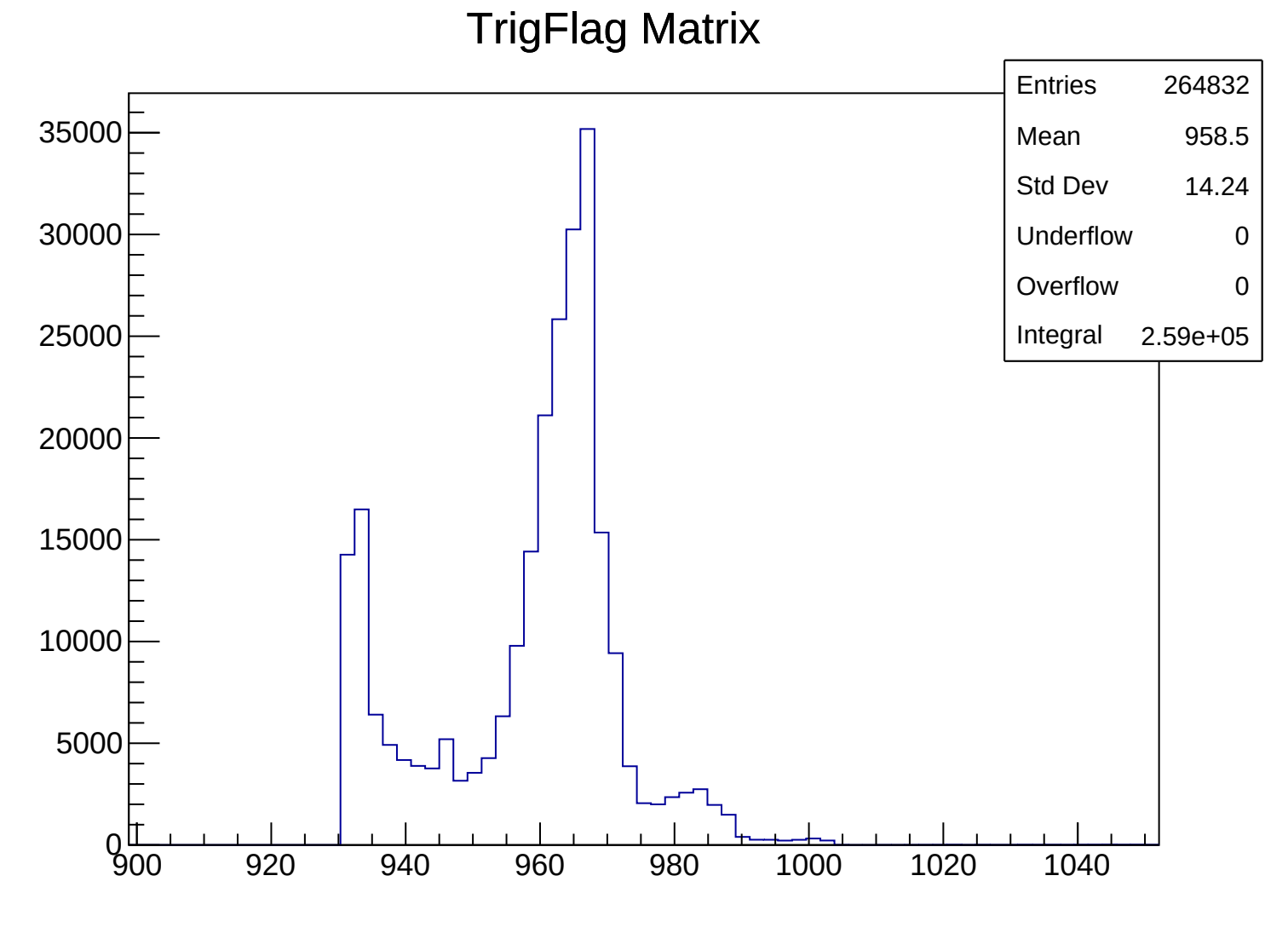
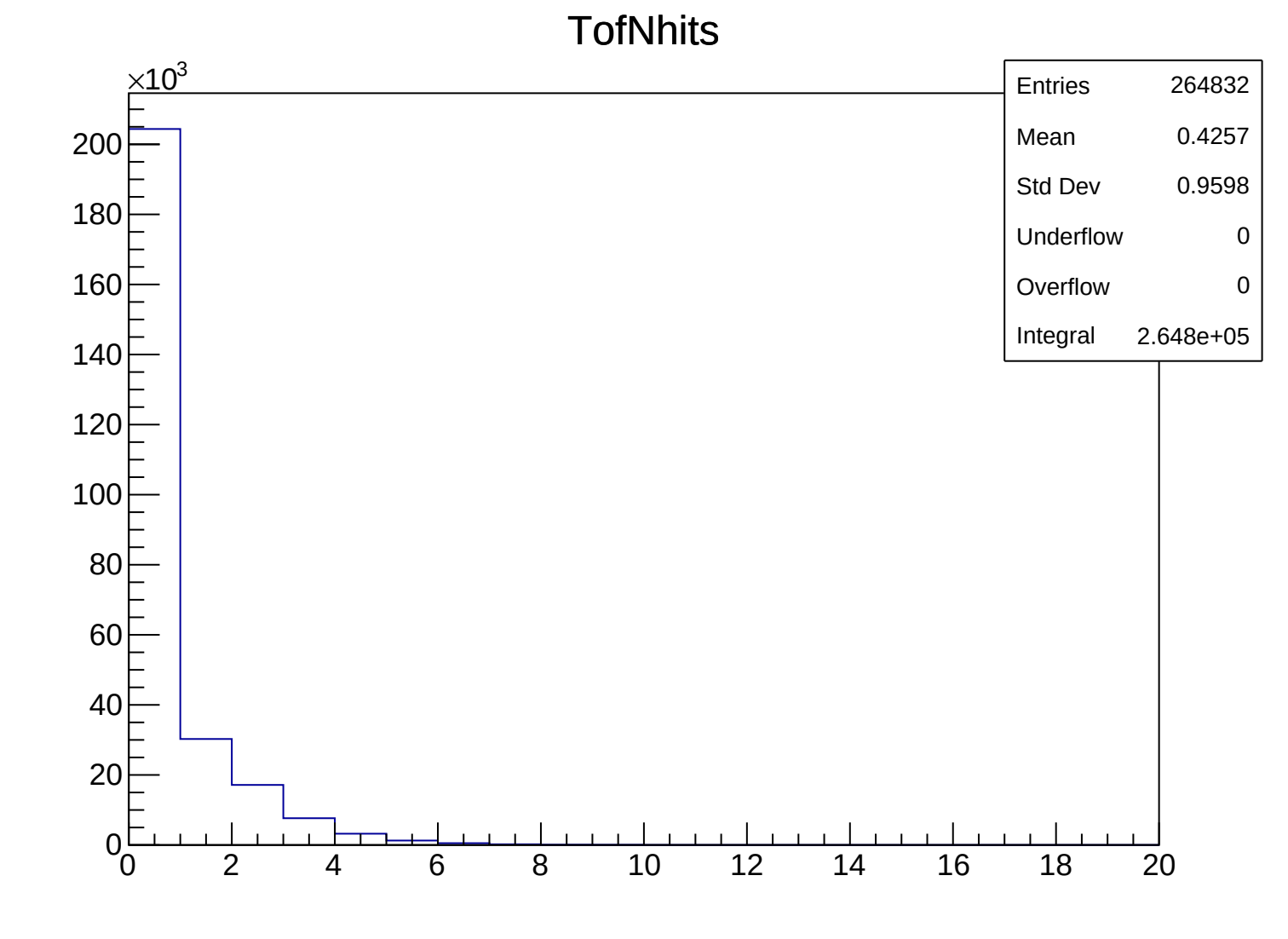
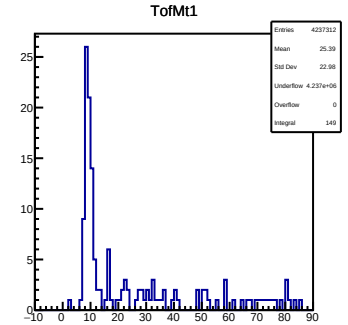
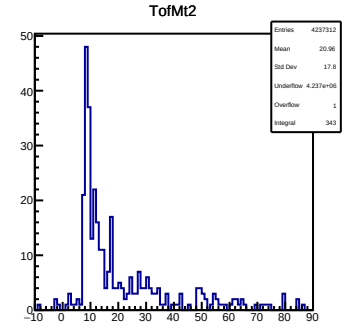
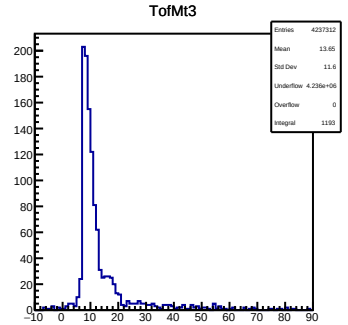
30000
25000
20000
15000
10000
5000
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000

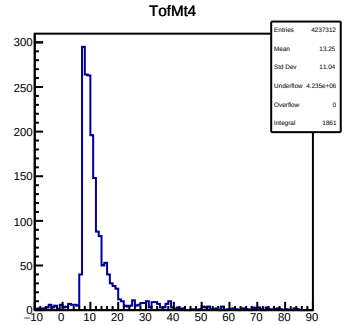

TrigFlag Matrix
Entries 264832
Mean 958.5
Std Dev 14.24
Underflow 0
Overflow 0
Integral 2.59e+05
35000
30000
25000
20000
15000
10000
5000
0
900
920
940
960
980
1000
1020
1040

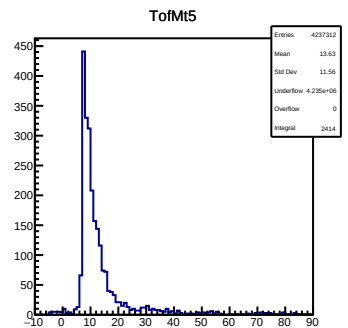

TofNhits
×10^3
200
180
160
140
120
100
80
60
40
20
0
0
2
4
6
8
10
12
14
16
18
20
Entries 264832
Mean 0.4257
Std Dev 0.9598
Underflow 0
Overflow 0
Integral 2.648e+05

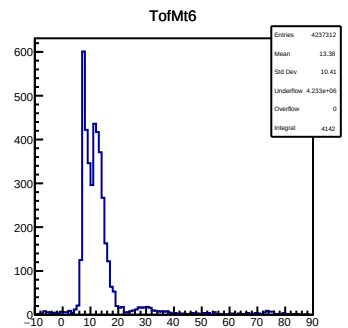

TofMt1
Entries 4237312
Mean 25.39
Std Dev 22.98
Underflow 4.237e+06
Overflow 0
Integral 149

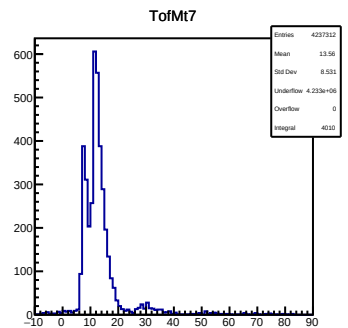

TofMt2
Entries 4237312
Mean 20.96
Std Dev 17.8
Underflow 4.237e+06
Overflow 1
Integral 343

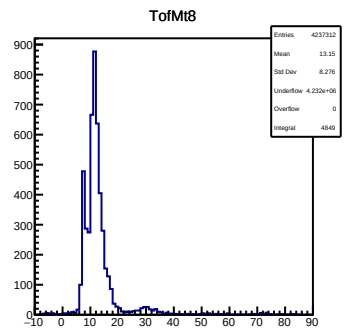

TofMt3
Entries 4237312
Mean 13.65
Std Dev 11.6
Underflow 4.236e+06
Overflow 0
Integral 1193

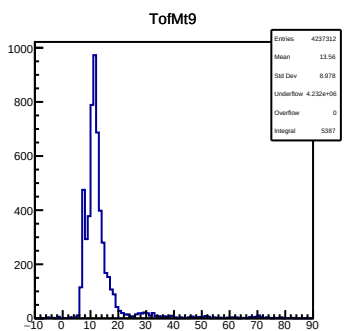

TofMt4
Entries 4237312
Mean 13.25
Std Dev 11.04
Underflow 4.235e+06
Overflow 0
Integral 1861

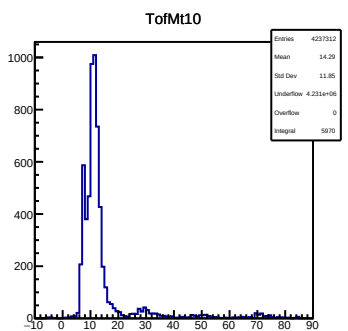

TofMt5
Entries 4237312
Mean 13.63
Std Dev 11.56
Underflow 4.235e+06
Overflow 0
Integral 2414

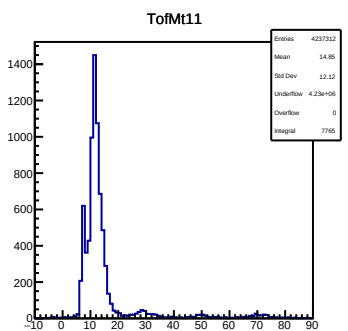

TofMt6
Entries 4237312
Mean 13.38
Std Dev 10.41
Underflow 4.233e+06
Overflow 0
Integral 4142

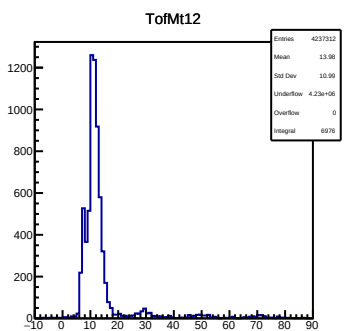

TofMt7
Entries 4237312
Mean 13.56
Std Dev 8.531
Underflow 4.233e+06
Overflow 0
Integral 4010

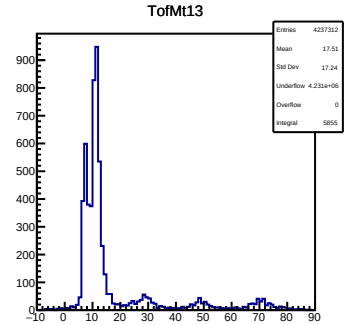

TofMt8
Entries 4237312
Mean 13.15
Std Dev 8.276
Underflow 4.232e+06
Overflow 0
Integral 4840

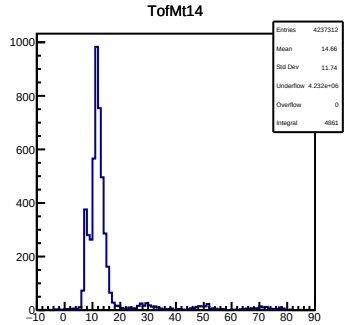

TofMt9
Entries 4237312
Mean 13.56
Std Dev 8.978
Underflow 4.232e+06
Overflow 0
Integral 5387

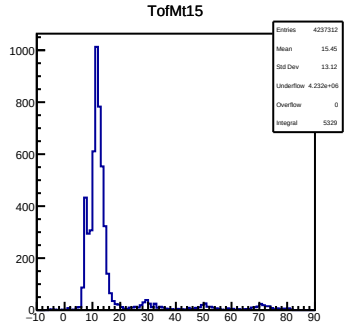

TofMt10
Entries 4237312
Mean 14.29
Std Dev 11.85
Underflow 4.231e+06
Overflow 0
Integral 5970

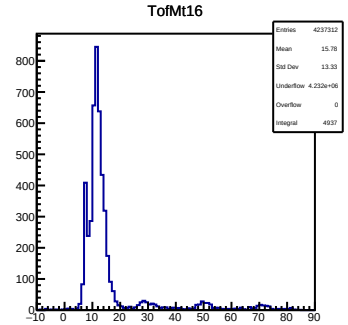

TofMt11
Entries 4237312
Mean 14.85
Std Dev 12.12
Underflow 4.23e+06
Overflow 0
Integral 7765

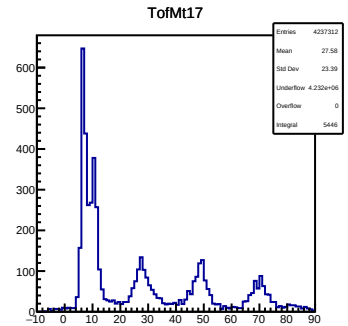

TofMt12
Entries 4237312
Mean 13.98
Std Dev 10.99
Underflow 4.23e+06
Overflow 0
Integral 6976

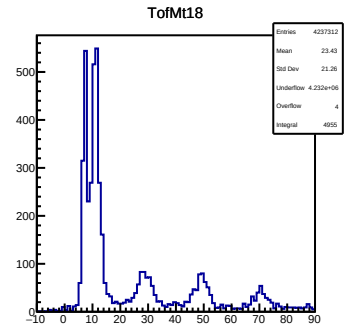

TofMt13
Entries 4237312
Mean 17.51
Std Dev 17.24
Underflow 4.231e+06
Overflow 0
Integral 5855

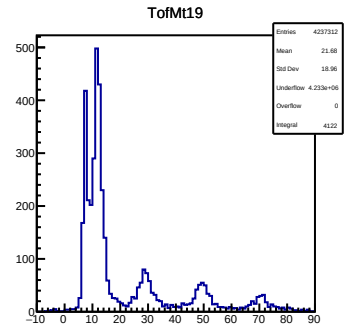

TofMt14
Entries 4237312
Mean 14.66
Std Dev 11.74
Underflow 4.232e+06
Overflow 0
Integral 4861

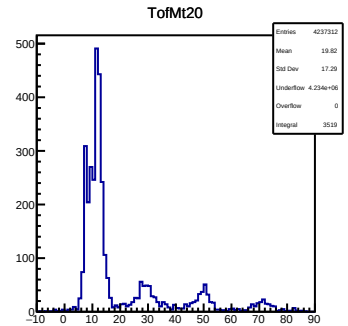

TofMt15
Entries 4237312
Mean 15.45
Std Dev 13.12
Underflow 4.232e+06
Overflow 0
Integral 5329

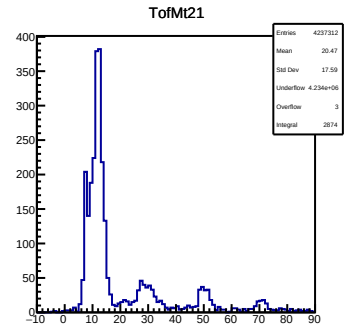

TofMt16
Entries 4237312
Mean 15.78
Std Dev 13.33
Underflow 4.232e+06
Overflow 0
Integral 4937

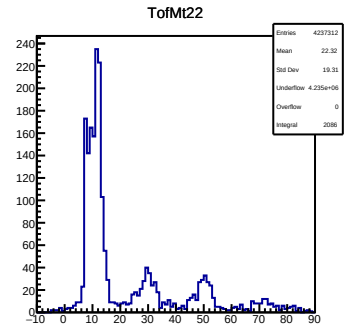

TofMt17
Entries 4237312
Mean 27.58
Std Dev 23.39
Underflow 4.232e+06
Overflow 0
Integral 5446

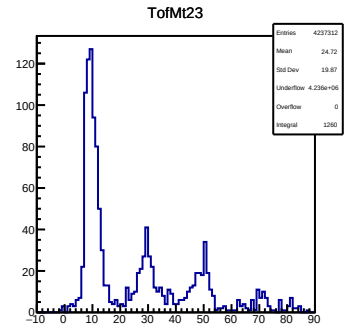

TofMt18
Entries 4237312
Mean 23.43
Std Dev 21.26
Underflow 4.232e+06
Overflow 4
Integral 4955

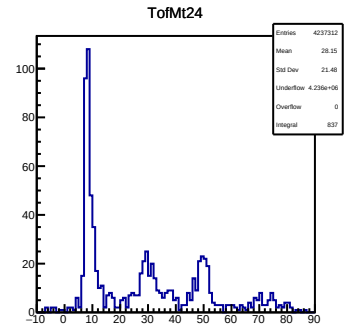

TofMt19
Entries 4237312
Mean 21.68
Std Dev 18.96
Underflow 4.233e+06
Overflow 0
Integral 4122

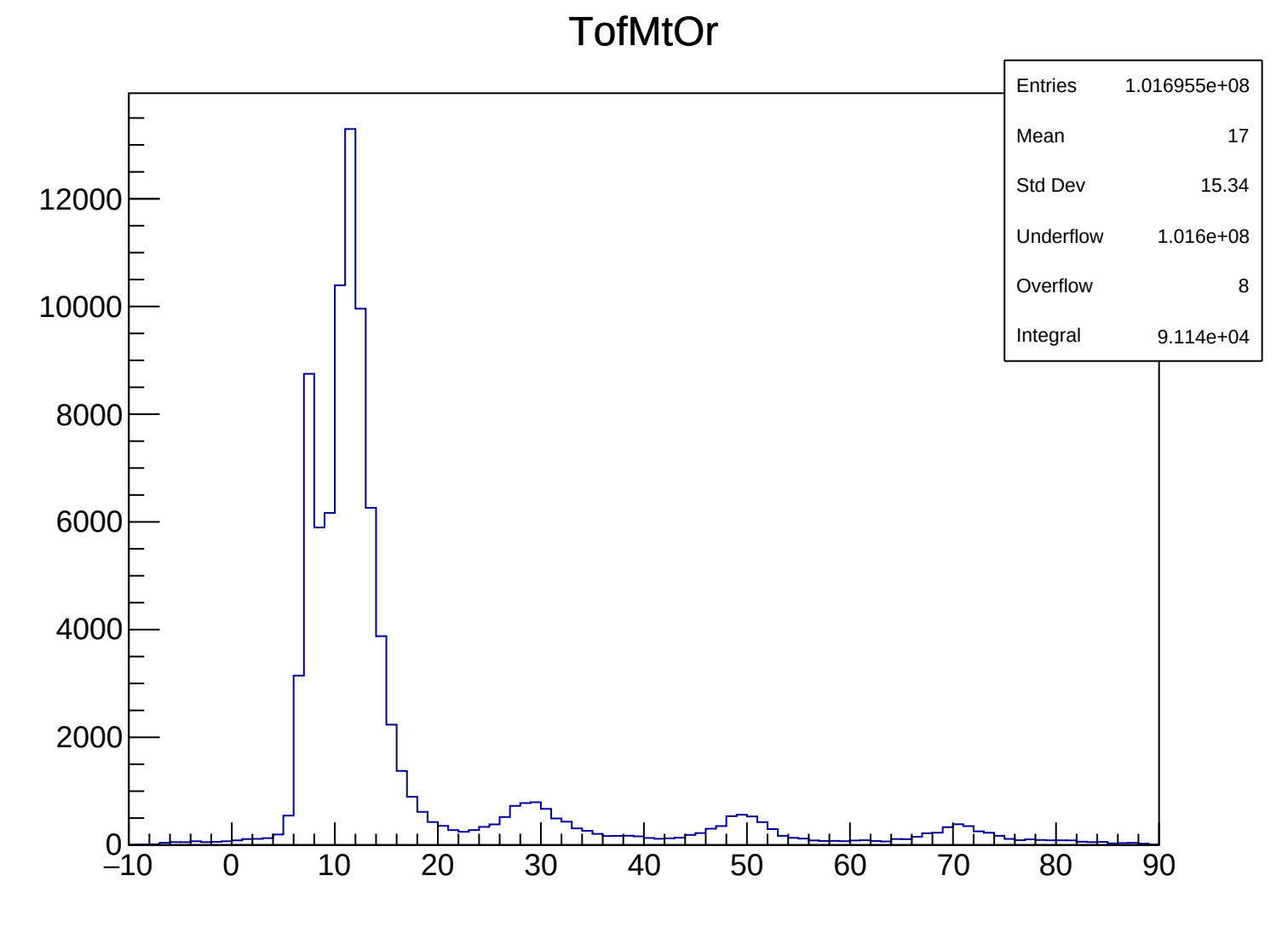

TofMt20
Entries 4237312
Mean 19.82
Std Dev 17.29
Underflow 4.234e+06
Overflow 0
Integral 3519

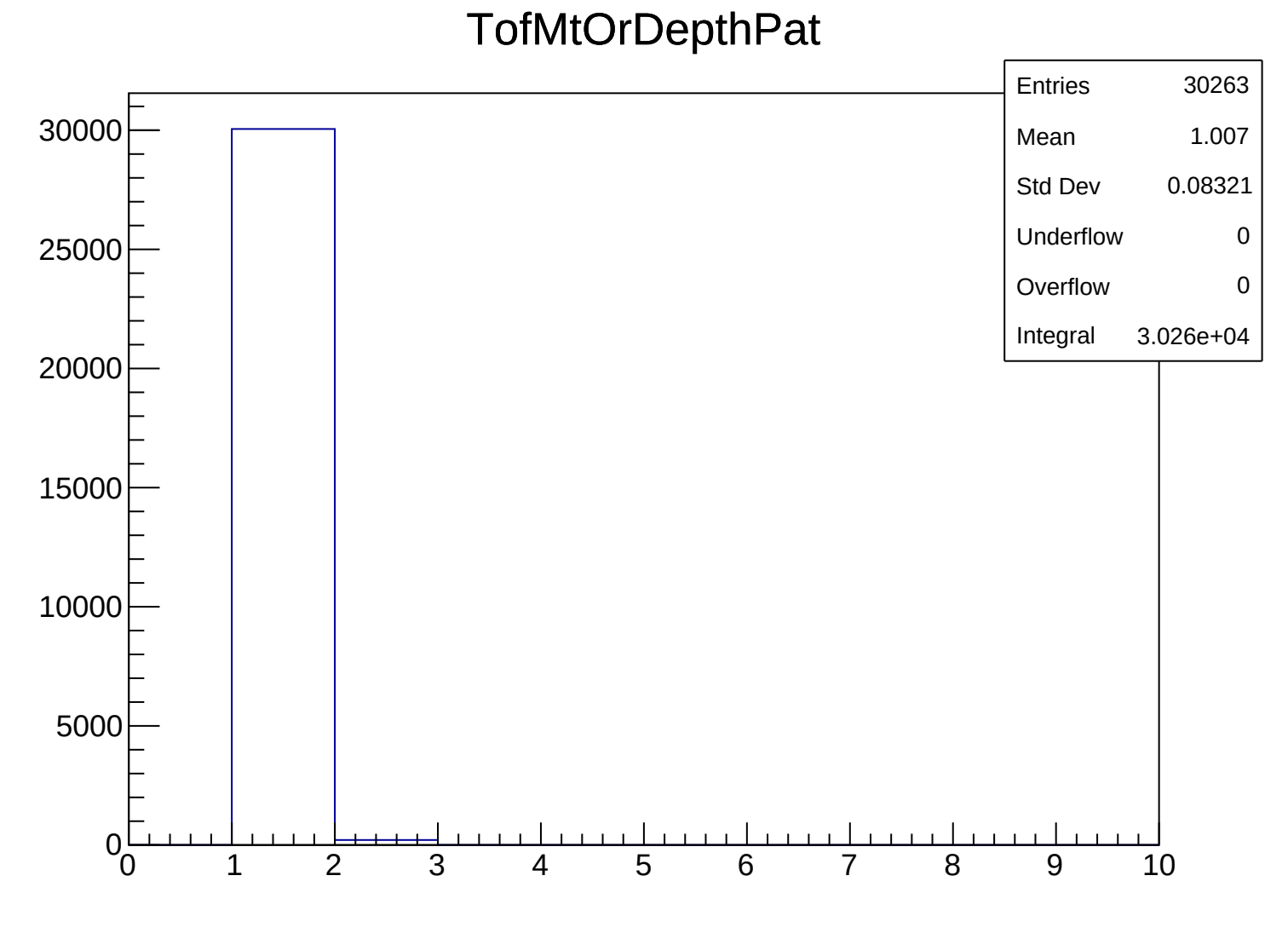

TofMt21
Entries 4237312
Mean 20.47
Std Dev 17.59
Underflow 4.234e+06
Overflow 3
Integral 2874

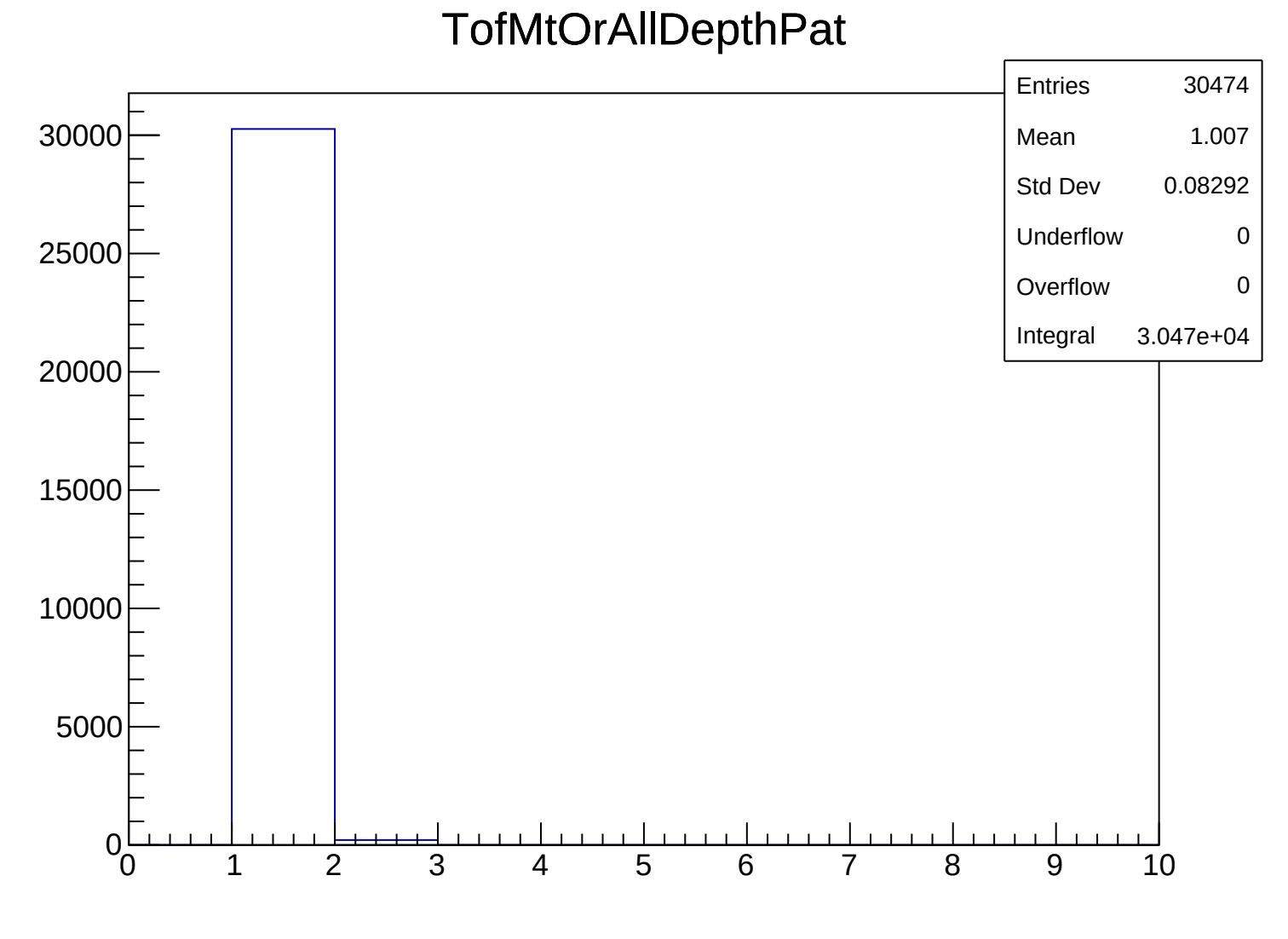

TofMt22
Entries 4237312
Mean 22.32
Std Dev 19.31
Underflow 4.235e+06
Overflow 0
Integral 2086


TofMt23
Entries 4237312
Mean 24.72
Std Dev 19.87
Underflow 4.236e+06
Overflow 0
Integral 1260


TofMt24
Entries 4237312
Mean 28.15
Std Dev 21.48
Underflow 4.236e+06
Overflow 0
Integral 837


TofMtOr
Entries 1.016955e+08
Mean 17
Std Dev 15.34
Underflow 1.016e+08
Overflow 8
Integral 9.114e+04
12000
10000
8000
6000
4000
2000
0
−10
0
10
20
30
40
50
60
70
80
90


TofMtOrDepthPat
Entries 30263
Mean 1.007
Std Dev 0.08321
Underflow 0
Overflow 0
Integral 3.026e+04
30000
25000
20000
15000
10000
5000
0
0
1
2
3
4
5
6
7
8
9
10


TofMtOrAllDepthPat
Entries 30474
Mean 1.007
Std Dev 0.08292
Underflow 0
Overflow 0
Integral 3.047e+04
30000
25000
20000
15000
10000
5000
0
0
1
2
3
4
5
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7
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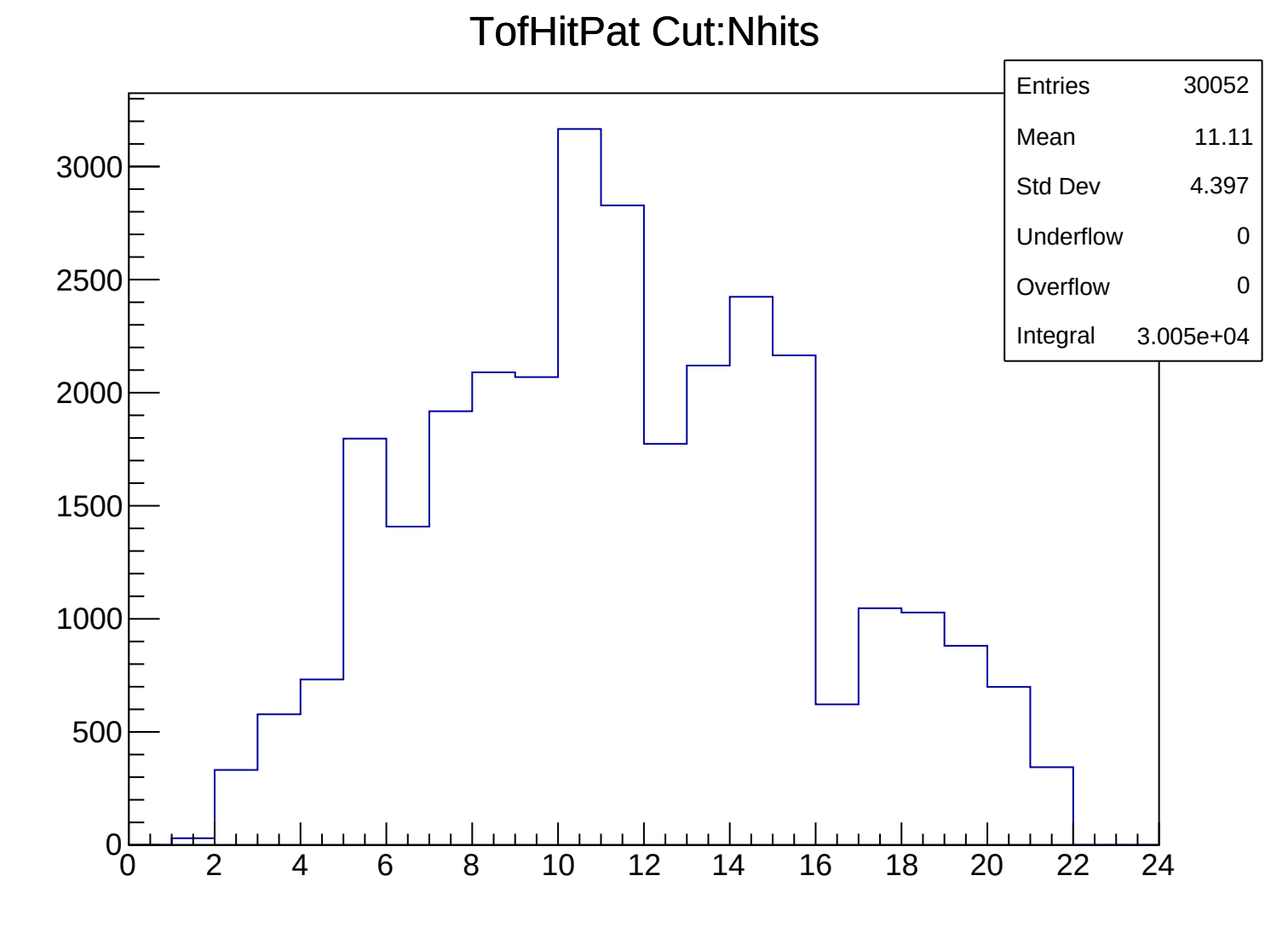
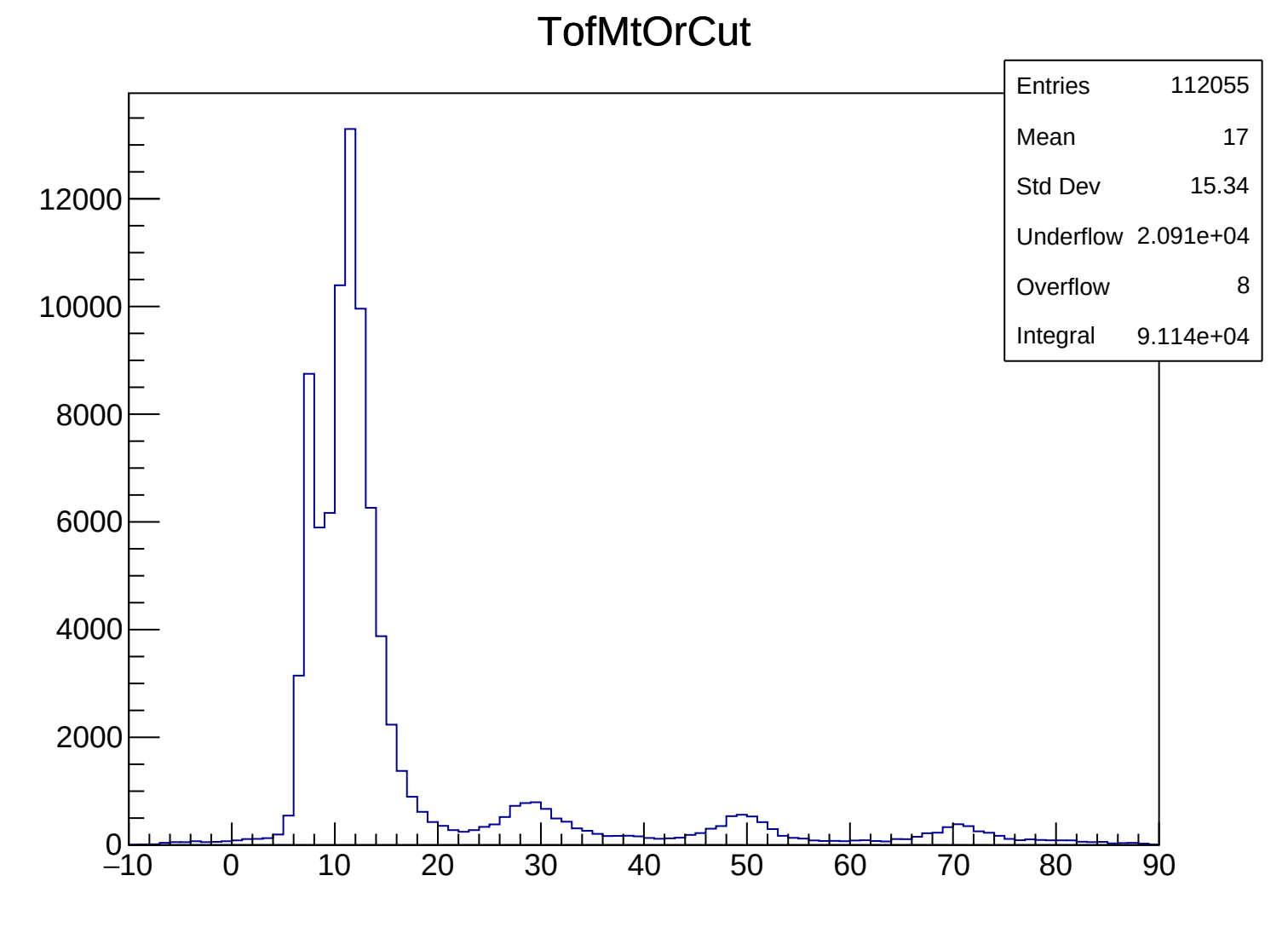
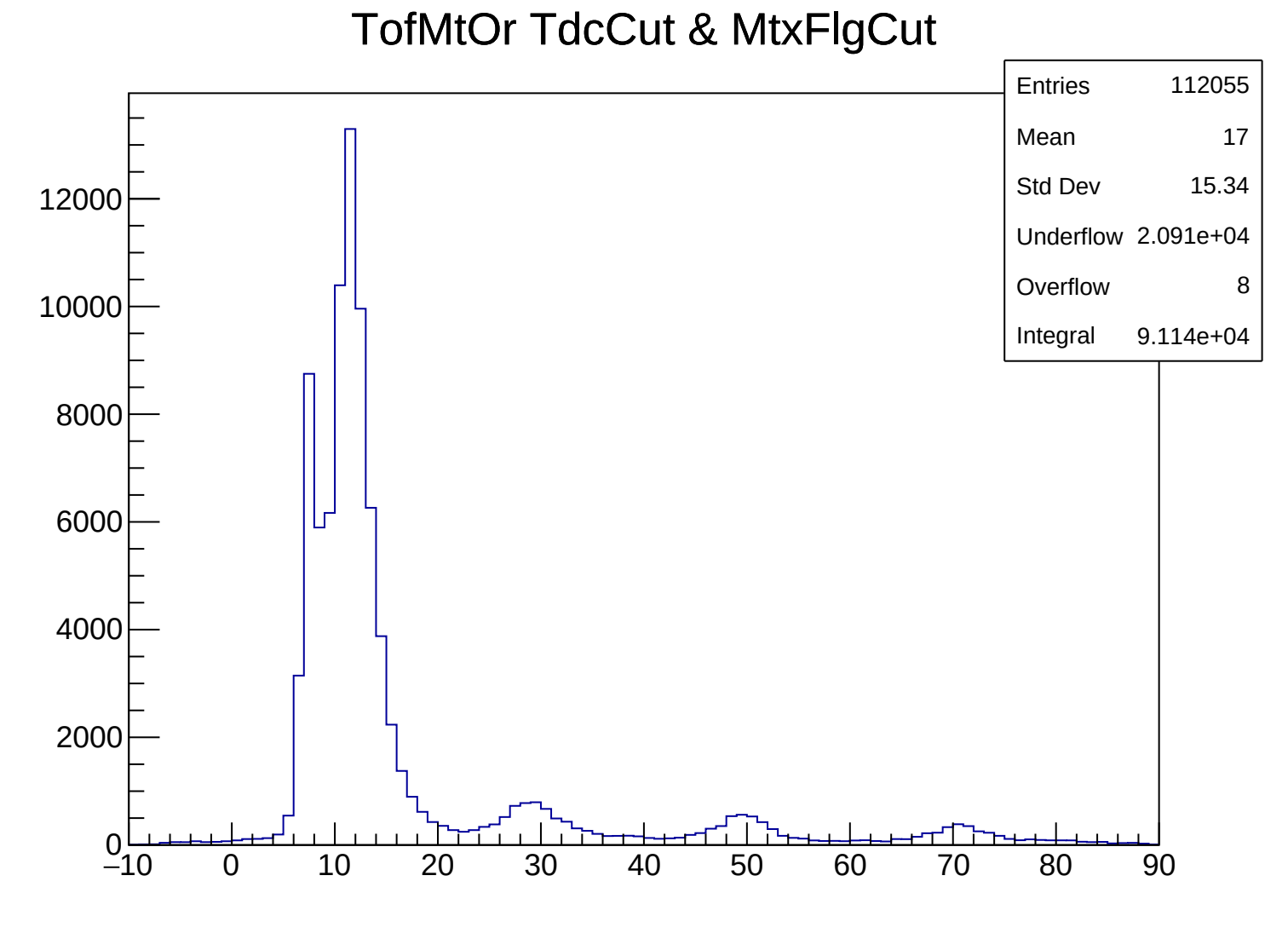
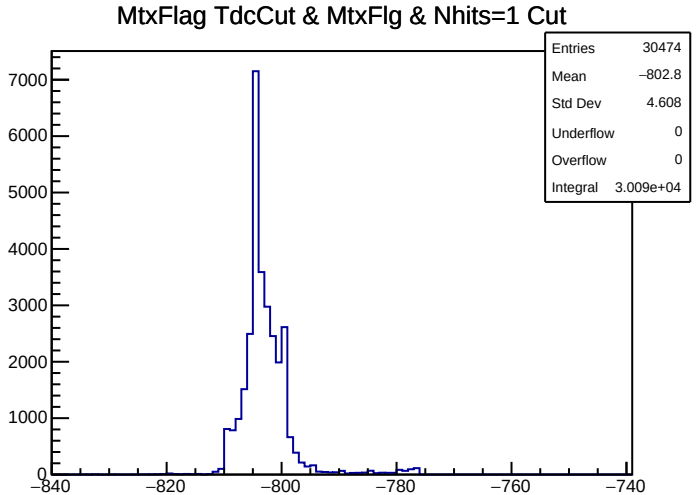
9
10


TofHitPat Cut:Nhits
Entries 30052
Mean 11.11
Std Dev 4.397
Underflow 0
Overflow 0
Integral 3.005e+04
3000
2500
2000
1500
1000
500
0
0
2
4
6
8
10
12
14
16
18
20
22
24


TofMtOrCut
Entries 112055
Mean 17
Std Dev 15.34
Underflow 2.091e+04
Overflow 8
Integral 9.114e+04
12000
10000
8000
6000
4000
2000
0
−10
0
10
20
30
40
50
60
70
80
90


TofMtOr TdcCut & MtxFlgCut
Entries 112055
Mean 17
Std Dev 15.34
Underflow 2.091e+04
Overflow 8
Integral 9.114e+04
12000
10000
8000
6000
4000
2000
0
−10
0
10
20
30
40
50
60
70
80
90


MtxFlag TdcCut & MtxFlg & Nhits=1 Cut
Entries 30474
Mean −802.8
Std Dev 4.608
Underflow 0
Overflow 0
Integral 3.009e+04
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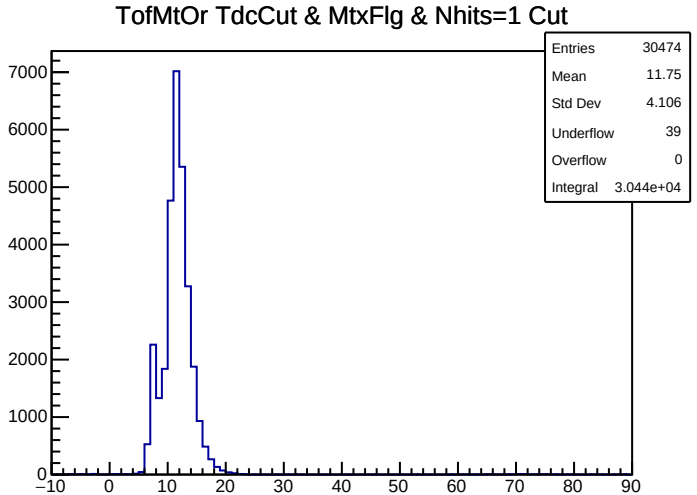
6000
5000
4000
3000
2000
1000
0
−840
−820
−800
−780
−760
−740


TofMtOr TdcCut & MtxFlg & Nhits=1 Cut
Entries 30474
Mean 11.75
Std Dev 4.106
Underflow 39
Overflow 0
Integral 3.044e+04
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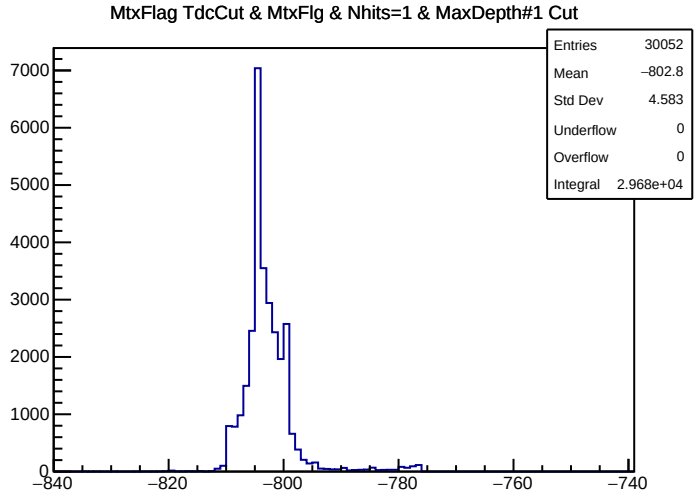
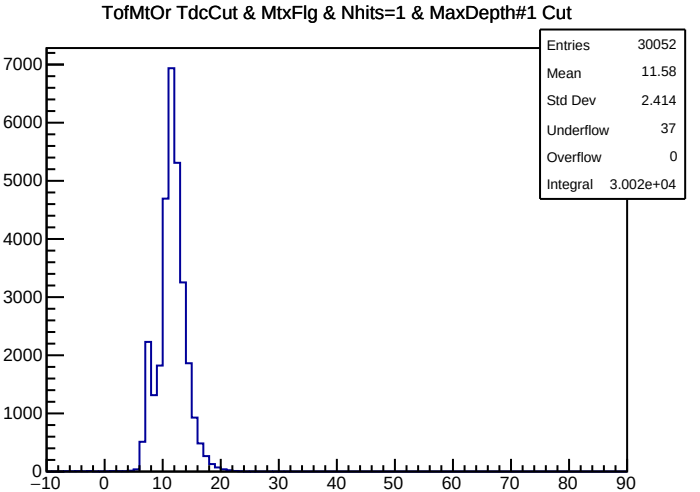
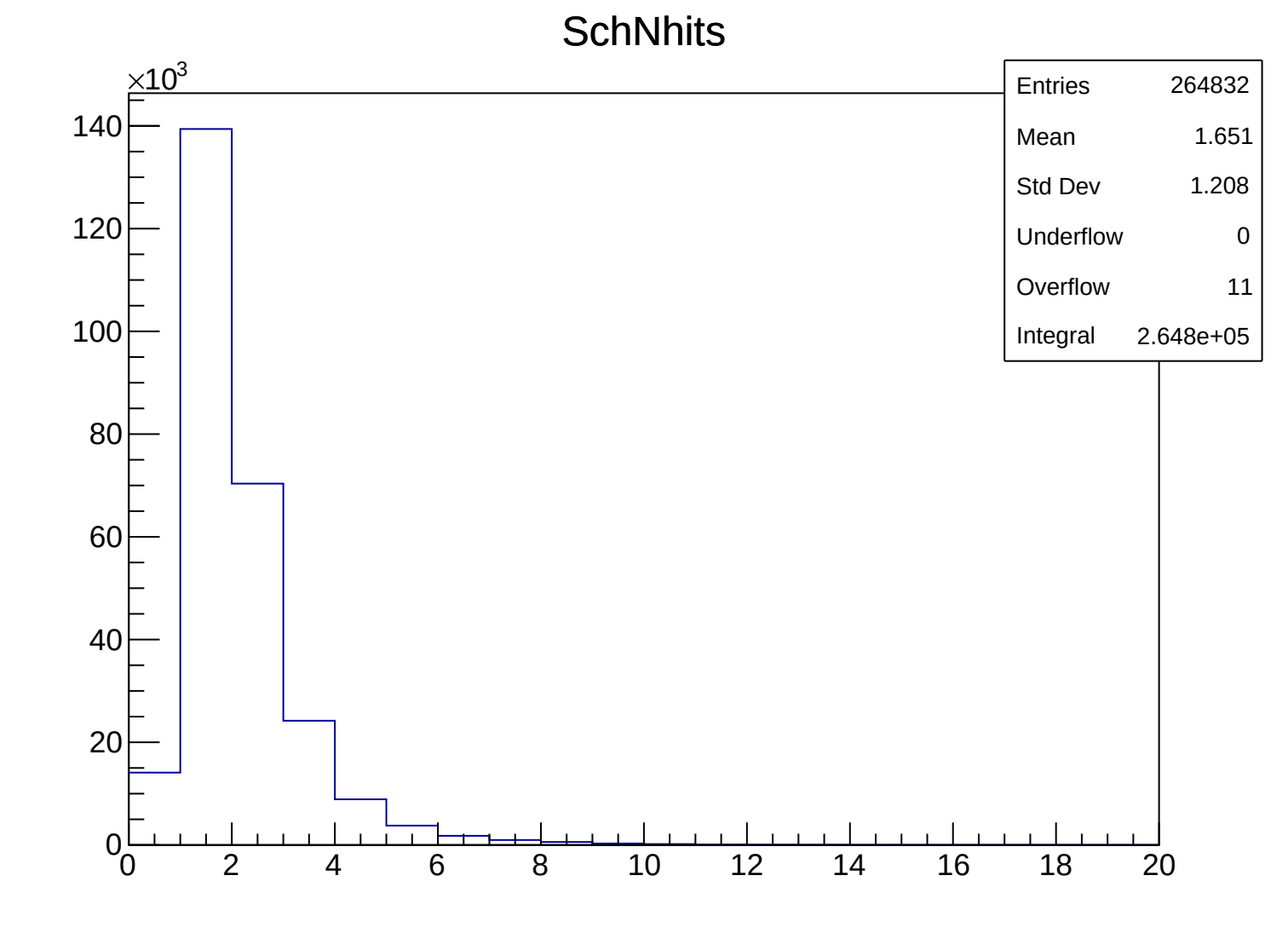
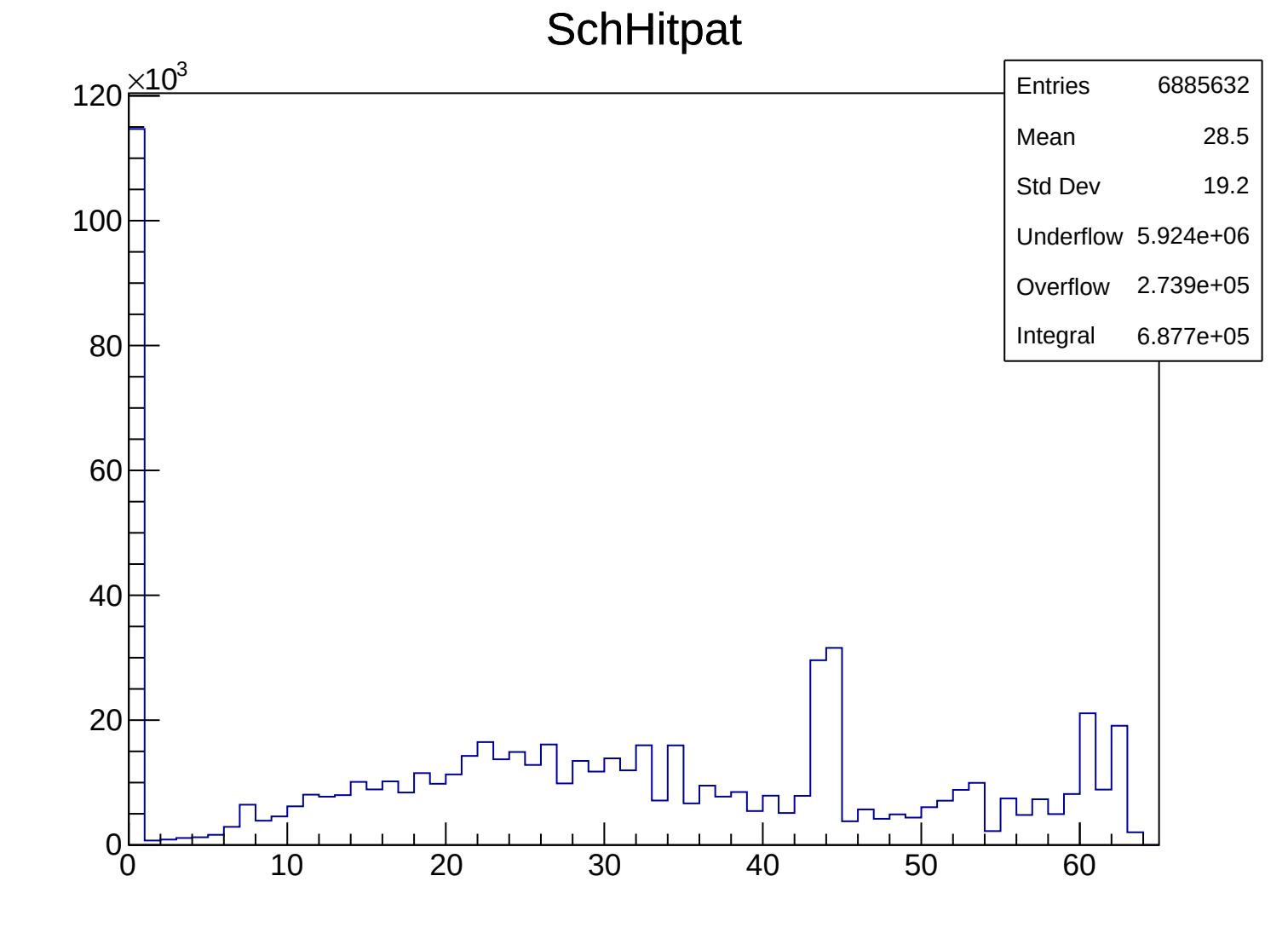
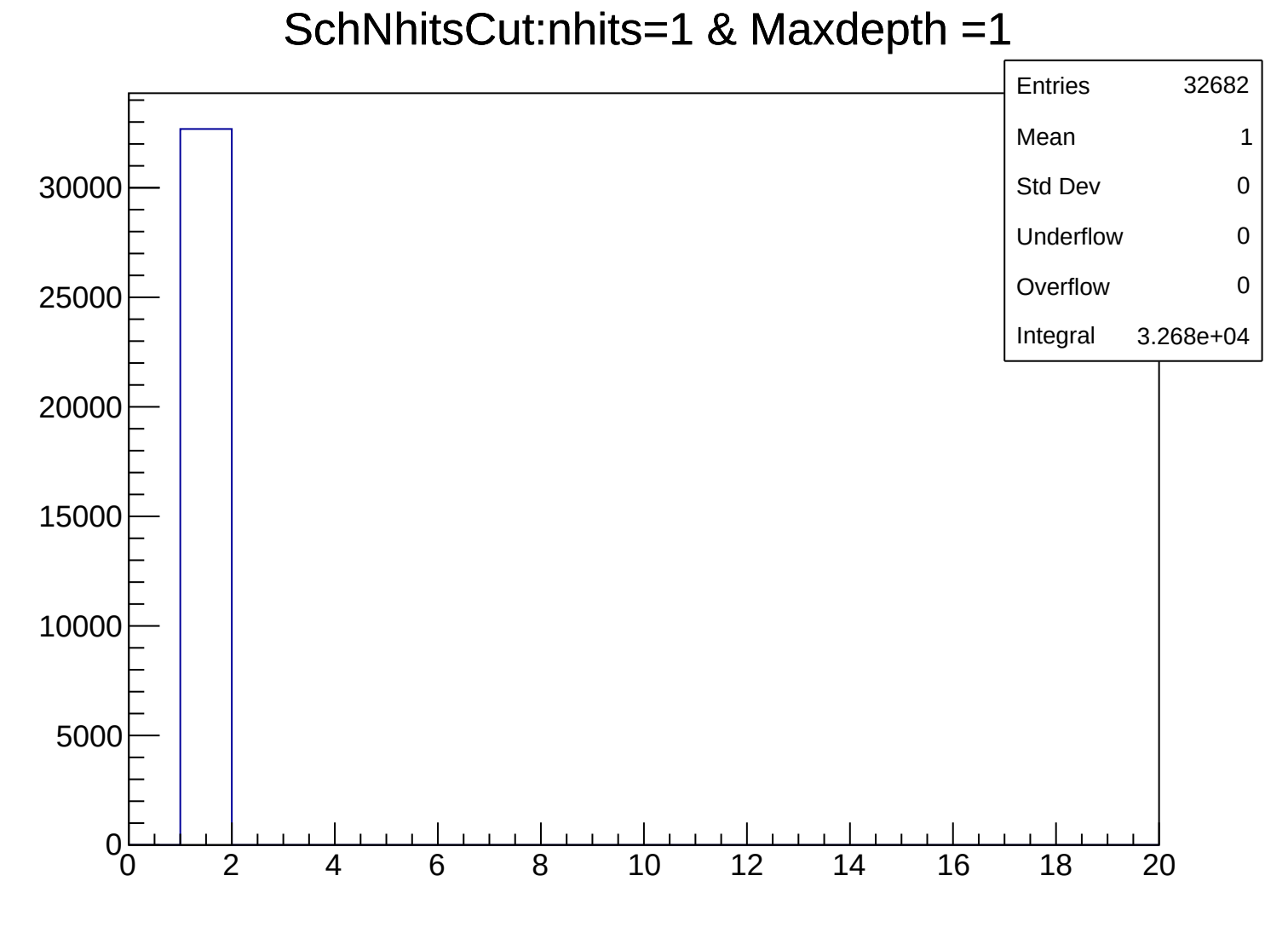
6000
5000
4000
3000
2000
1000
0
−10
0
10
20
30
40
50
60
70
80
90

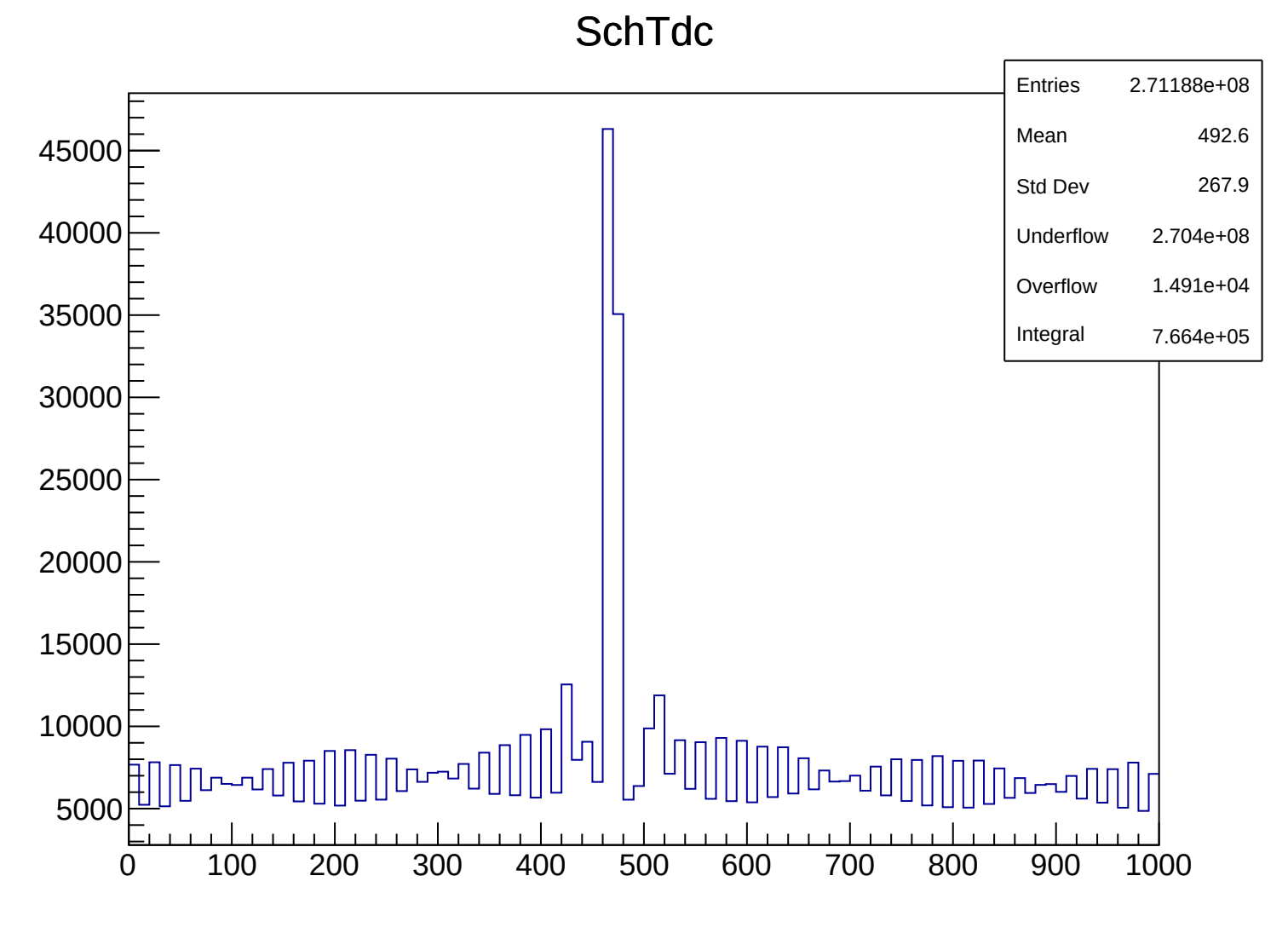

MtxFlag TdcCut & MtxFlg & Nhits=1 & MaxDepth#1 Cut
Entries 30052
Mean −802.8
Std Dev 4.583
Underflow 0
Overflow 0
Integral 2.968e+04
7000
6000
5000
4000
3000
2000
1000
0
−840
−820
−800
−780
−760
−740

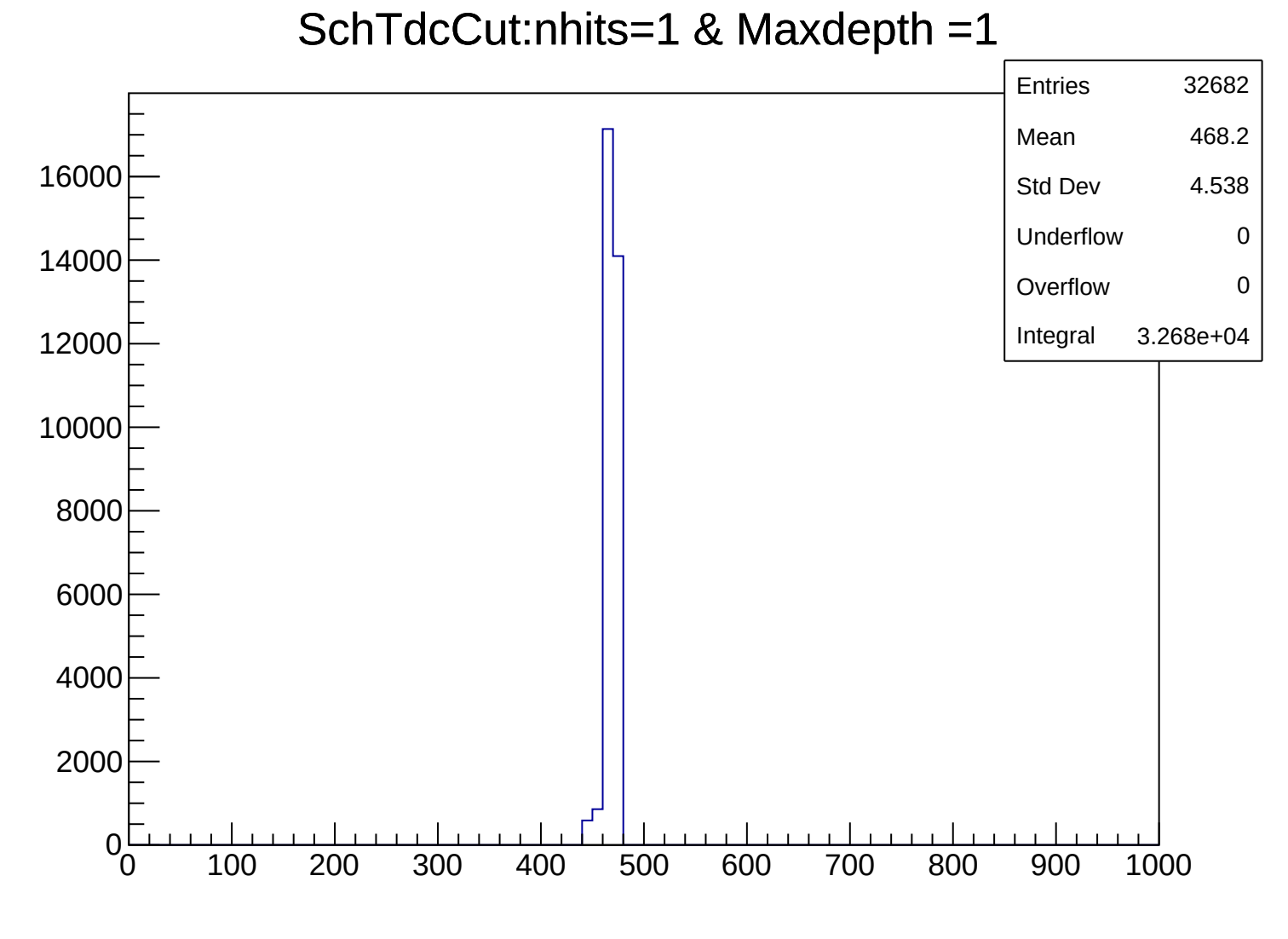

TofMtOr TdcCut & MtxFlg & Nhits=1 & MaxDepth#1 Cut
Entries 30052
Mean 11.58
Std Dev 2.414
Underflow 37
Overflow 0
Integral 3.002e+04
7000
6000
5000
4000
3000
2000
1000
0
−10
0
10
20
30
40
50
60
70
80
90

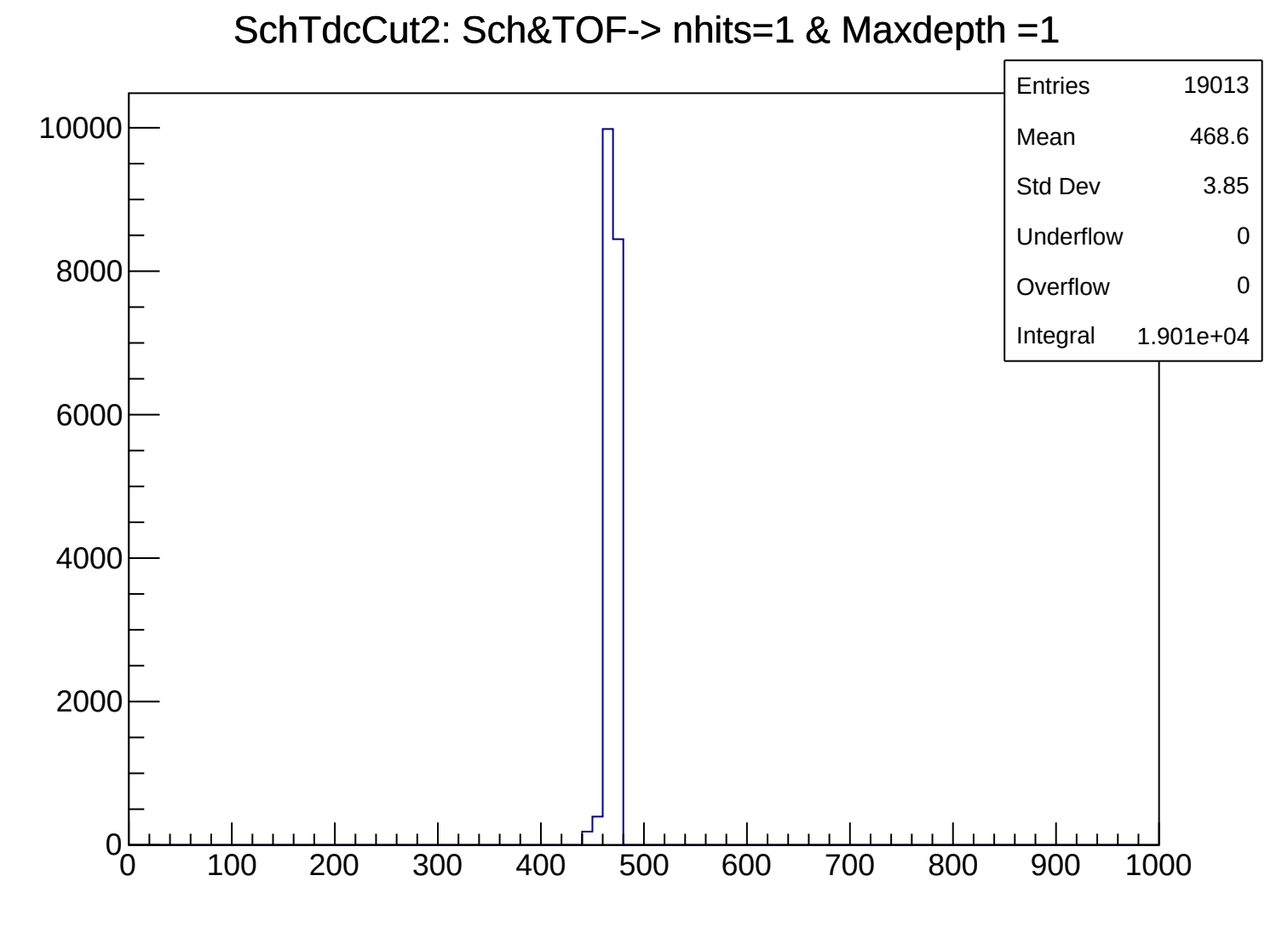

SchNhits
×10^3
140
120
100
80
60
40
20
0
0
2
4
6
8
10
12
14
16
18
20
Entries 264832
Mean 1.651
Std Dev 1.208
Underflow 0
Overflow 11
Integral 2.648e+05

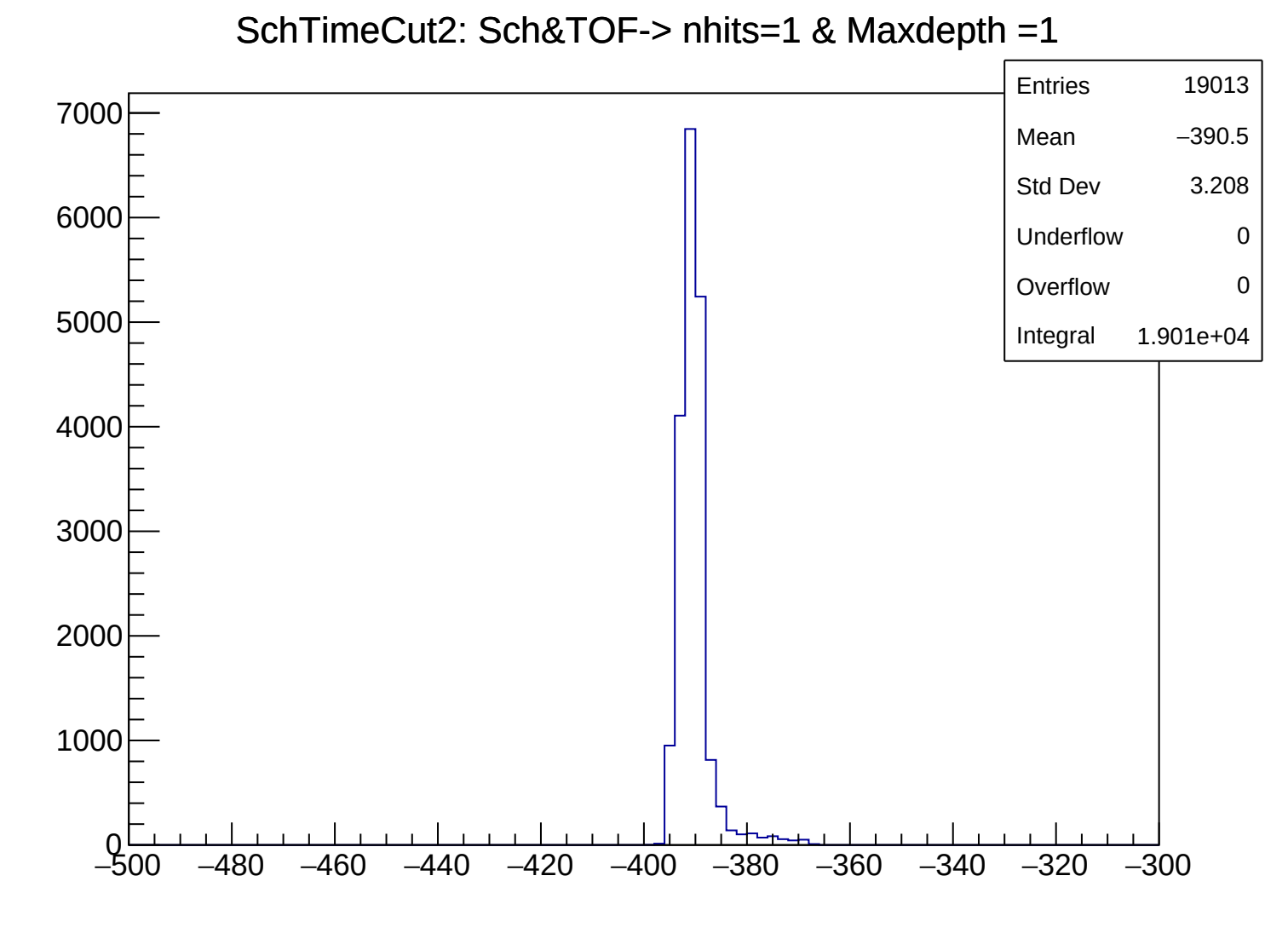

SchHitpat
×10^3
120
100
80
60
40
20
0
0
10
20
30
40
50
60
Entries 6885632
Mean 28.5
Std Dev 19.2
Underflow 5.924e+06
Overflow 2.739e+05
Integral 6.877e+05

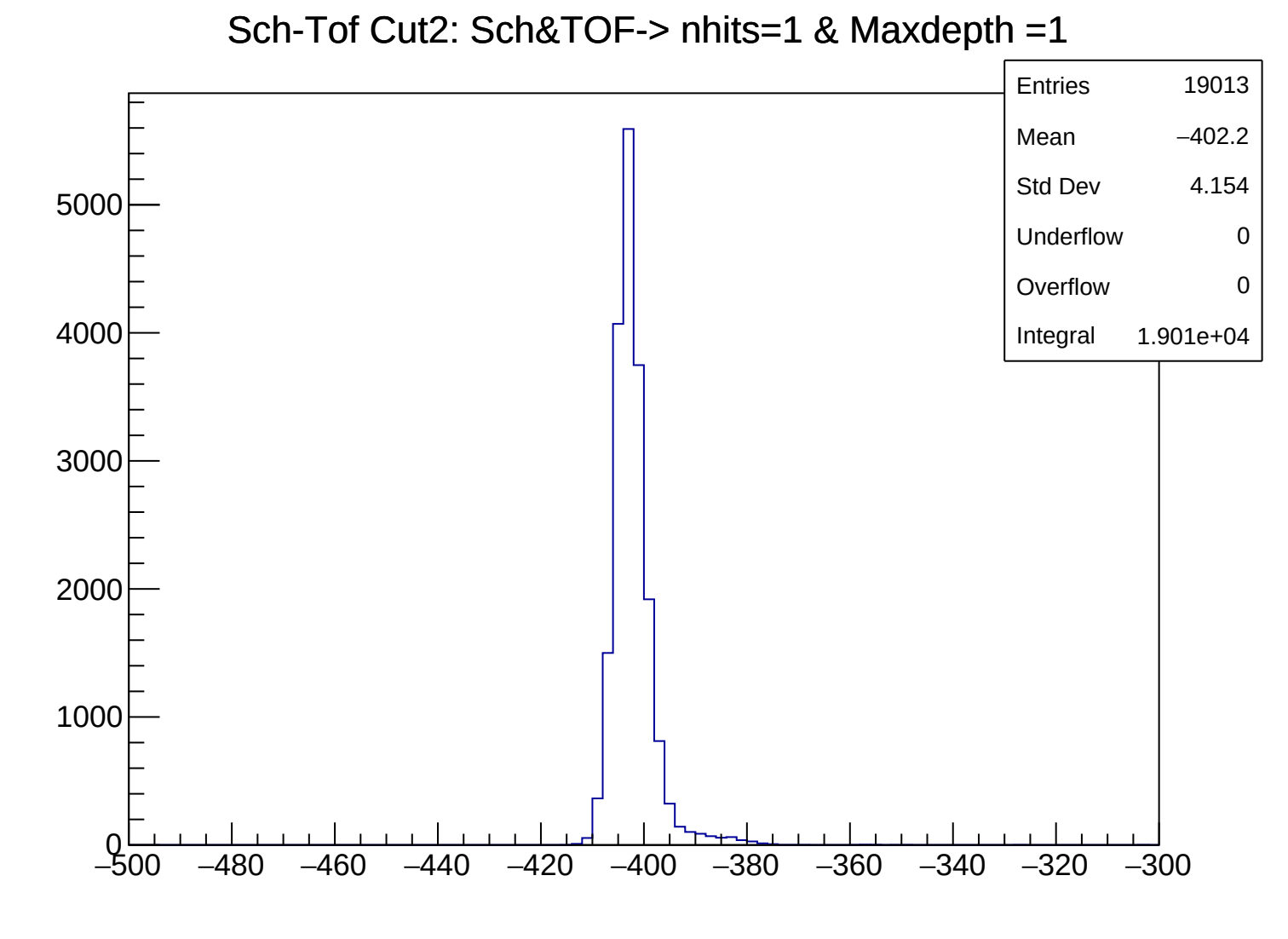

SchNhitsCut:nhits=1 & Maxdepth =1
Entries 32682
Mean 1
Std Dev 0
Underflow 0
Overflow 0
Integral 3.268e+04
30000
25000
20000
15000
10000
5000
0
0
2
4
6
8
10
12
14
16
18
20

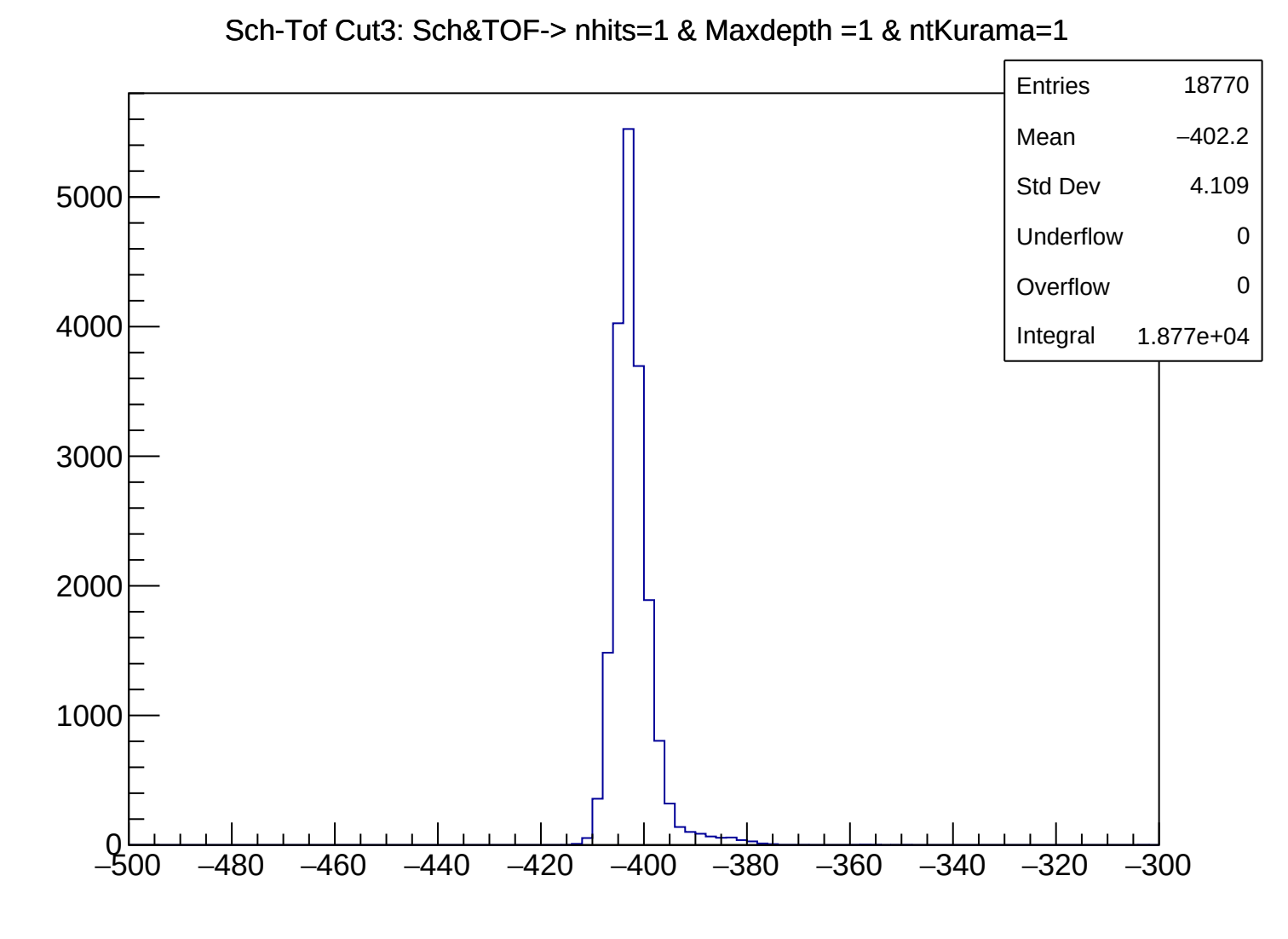

SchTdc
Entries 2.71188e+08
Mean 492.6
Std Dev 267.9
Underflow 2.704e+08
Overflow 1.491e+04
Integral 7.664e+05
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
100
200
300
400
500
600
700
800
900
1000

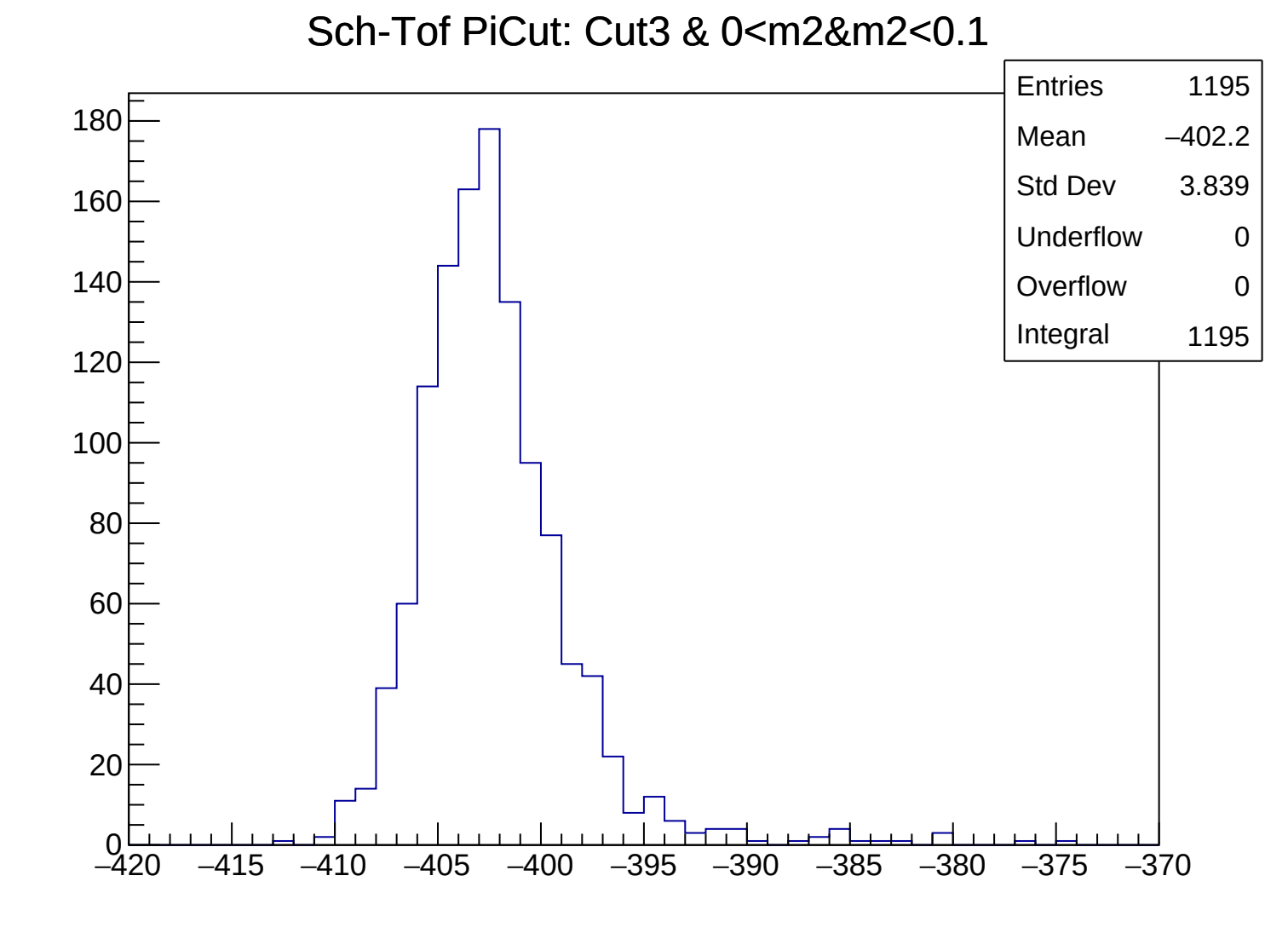

SchTdcCut:nhits=1 & Maxdepth =1
Entries 32682
Mean 468.2
Std Dev 4.538
Underflow 0
Overflow 0
Integral 3.268e+04
16000
14000
12000
10000
8000
6000
4000
2000
0
0
100
200
300
400
500
600
700
800
900
1000

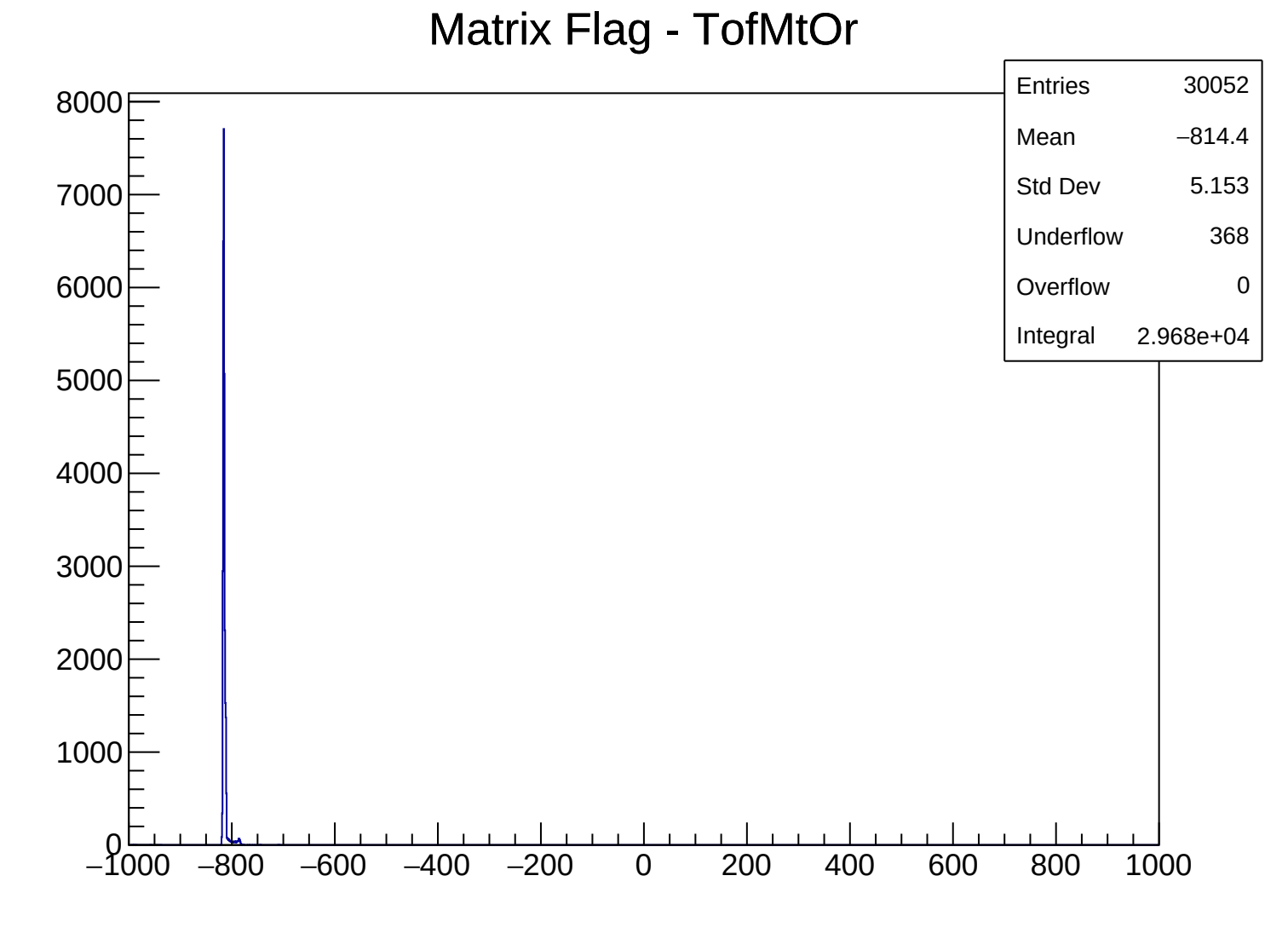

SchTdcCut2: Sch&TOF-> nhits=1 & Maxdepth =1
Entries 19013
Mean 468.6
Std Dev 3.85
Underflow 0
Overflow 0
Integral 1.901e+04
10000
8000
6000
4000
2000
0
0
100
200
300
400
500
600
700
800
900
1000

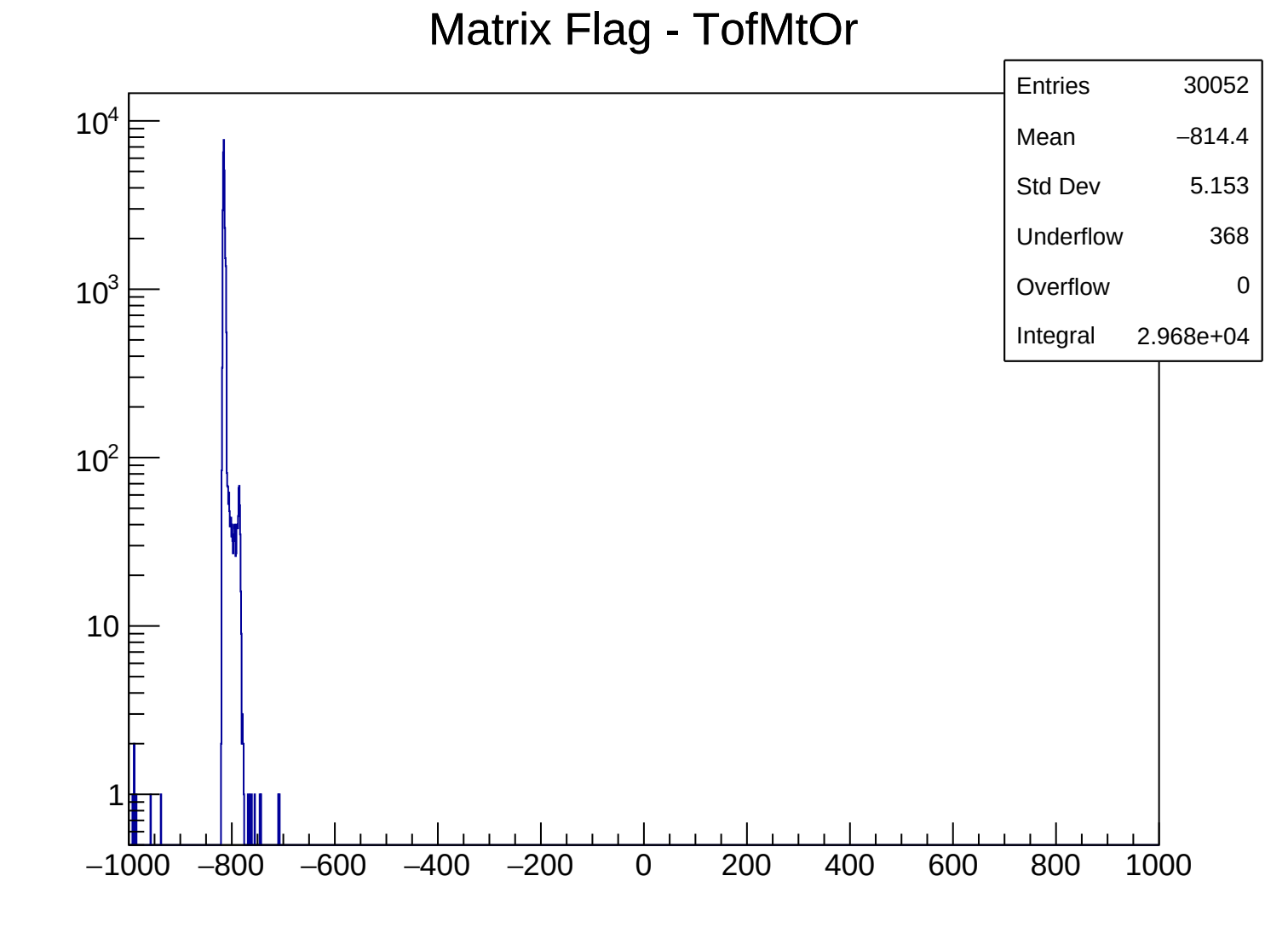

SchTimeCut2: Sch&TOF-> nhits=1 & Maxdepth =1
Entries 19013
Mean −390.5
Std Dev 3.208
Underflow 0
Overflow 0
Integral 1.901e+04
7000
6000
5000
4000
3000
2000
1000
0
−500
−480
−460
−440
−420
−400
−380
−360
−340
−320
−300

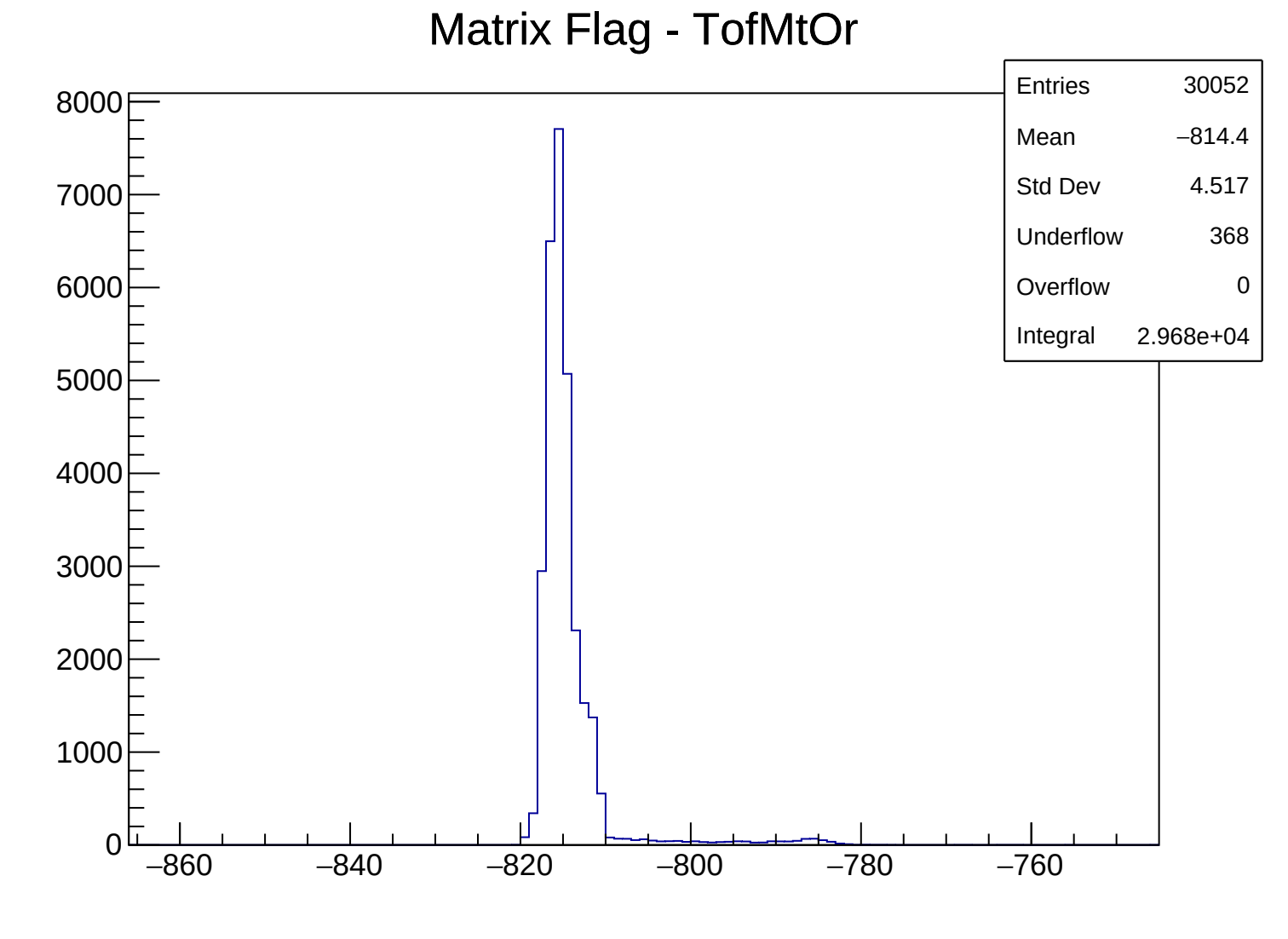

Sch-Tof Cut2: Sch&TOF-> nhits=1 & Maxdepth =1
Entries 19013
Mean −402.2
Std Dev 4.154
Underflow 0
Overflow 0
Integral 1.901e+04
5000
4000
3000
2000
1000
0
−500
−480
−460
−440
−420
−400
−380
−360
−340
−320
−300

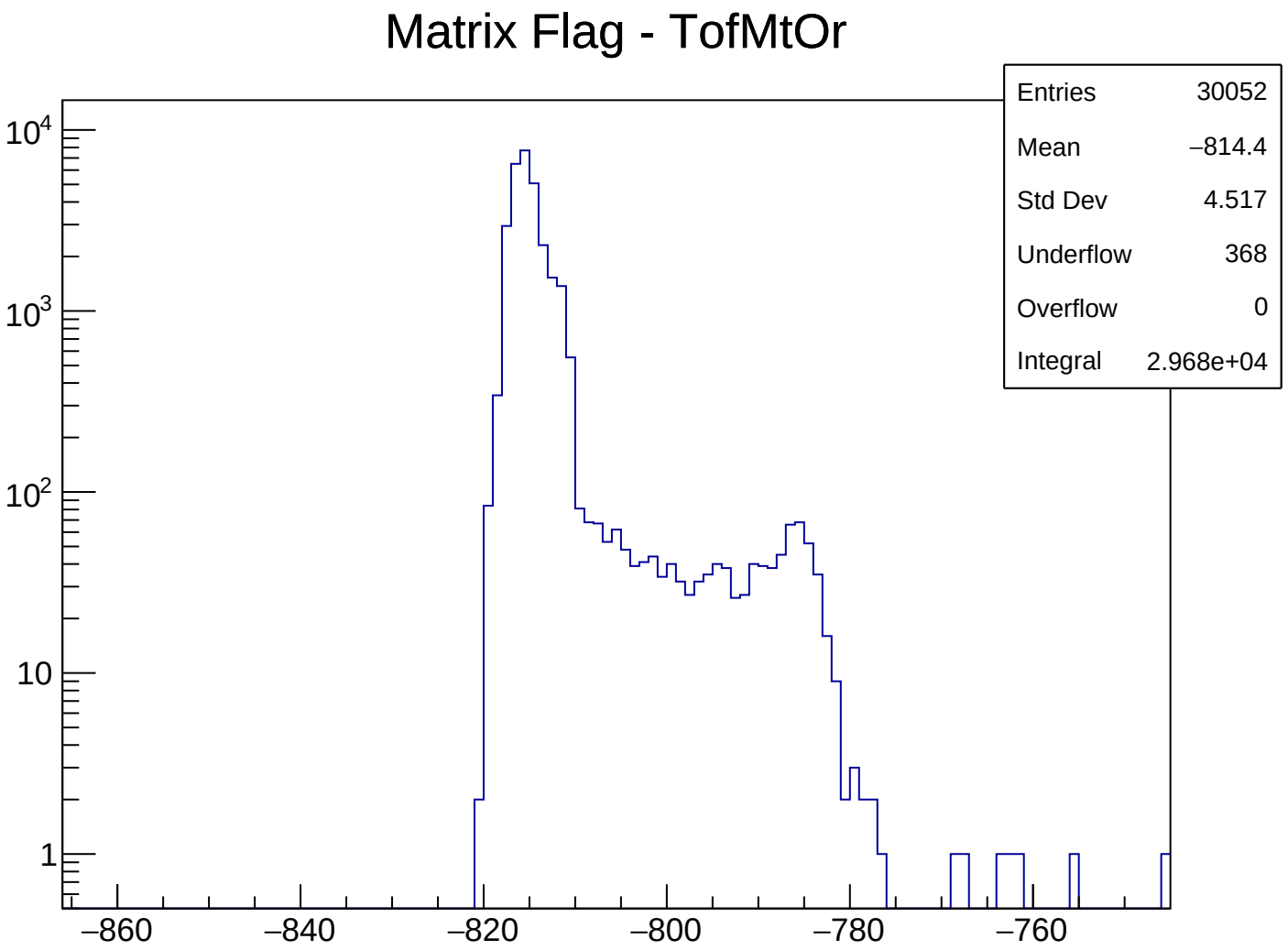

Sch-Tof Cut3: Sch&TOF-> nhits=1 & Maxdepth =1 & ntKurama=1
Entries 18770
Mean −402.2
Std Dev 4.109
Underflow 0
Overflow 0
Integral 1.877e+04
5000
4000
3000
2000
1000
0
−500
−480
−460
−440
−420
−400
−380
−360
−340
−320
−300

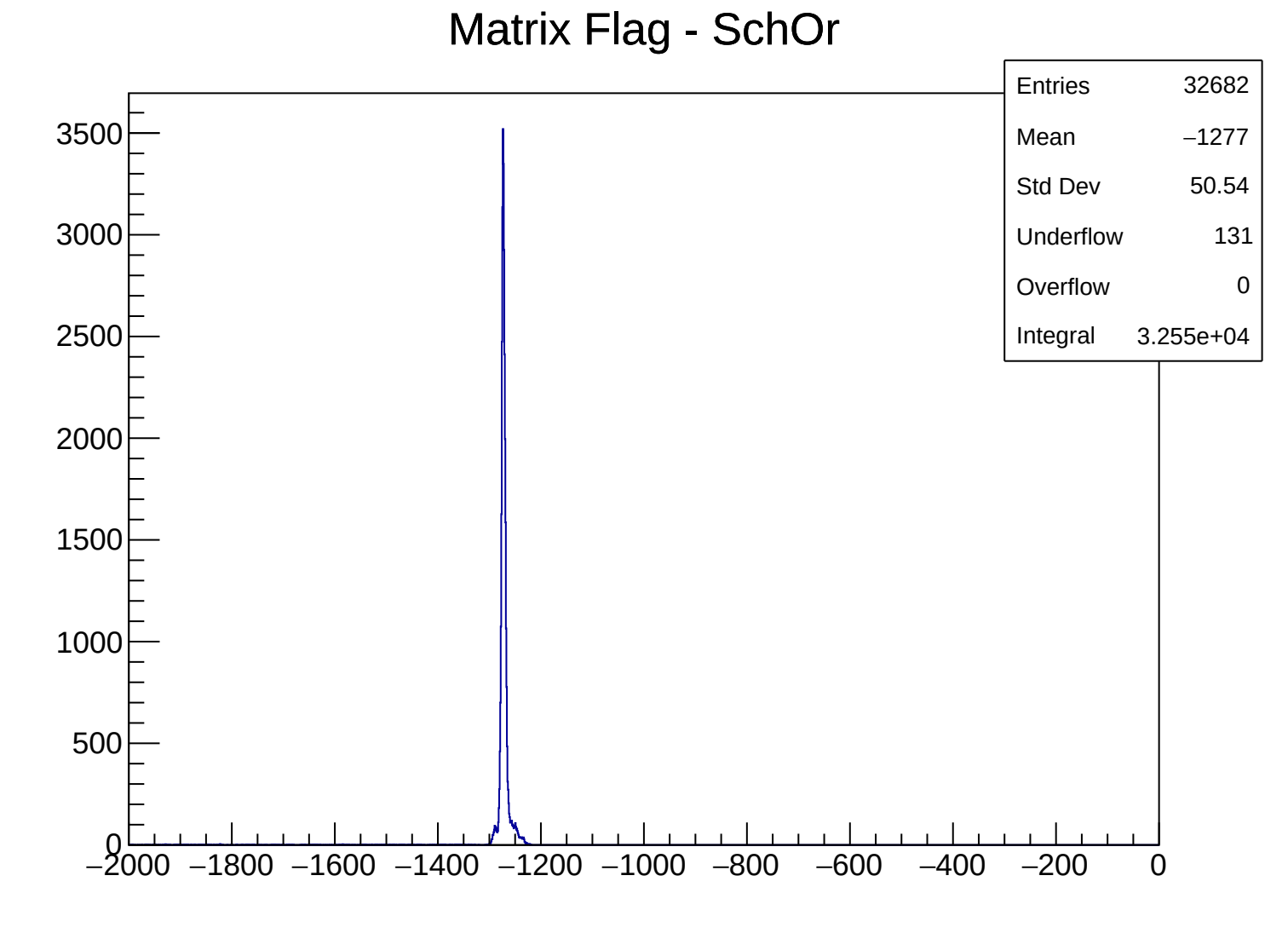

Sch-Tof PiCut: Cut3 & 0<m2&m2<0.1
Entries 1195
Mean –402.2
Std Dev 3.839
Underflow 0
Overflow 0
Integral 1195
180
160
140
120
100
80
60
40
20
0
–420
–415
–410
–405
–400
–395
–390
–385
–380
–375
–370

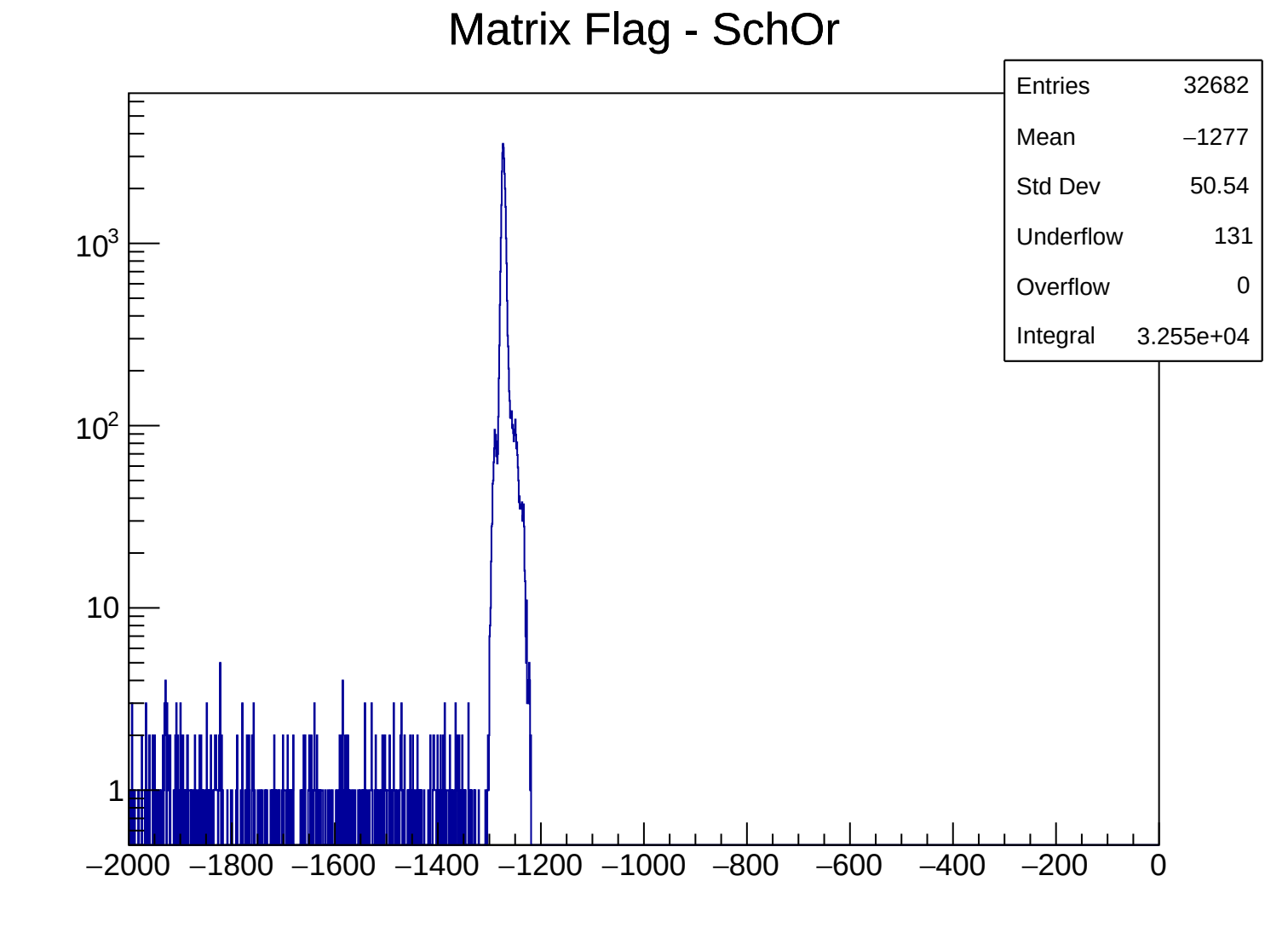

Matrix Flag - TofMtOr
Entries 30052
Mean −814.4
Std Dev 5.153
Underflow 368
Overflow 0
Integral 2.968e+04
8000
7000
6000
5000
4000
3000
2000
1000
0
−1000
−800
−600
−400
−200
0
200
400
600
800
1000

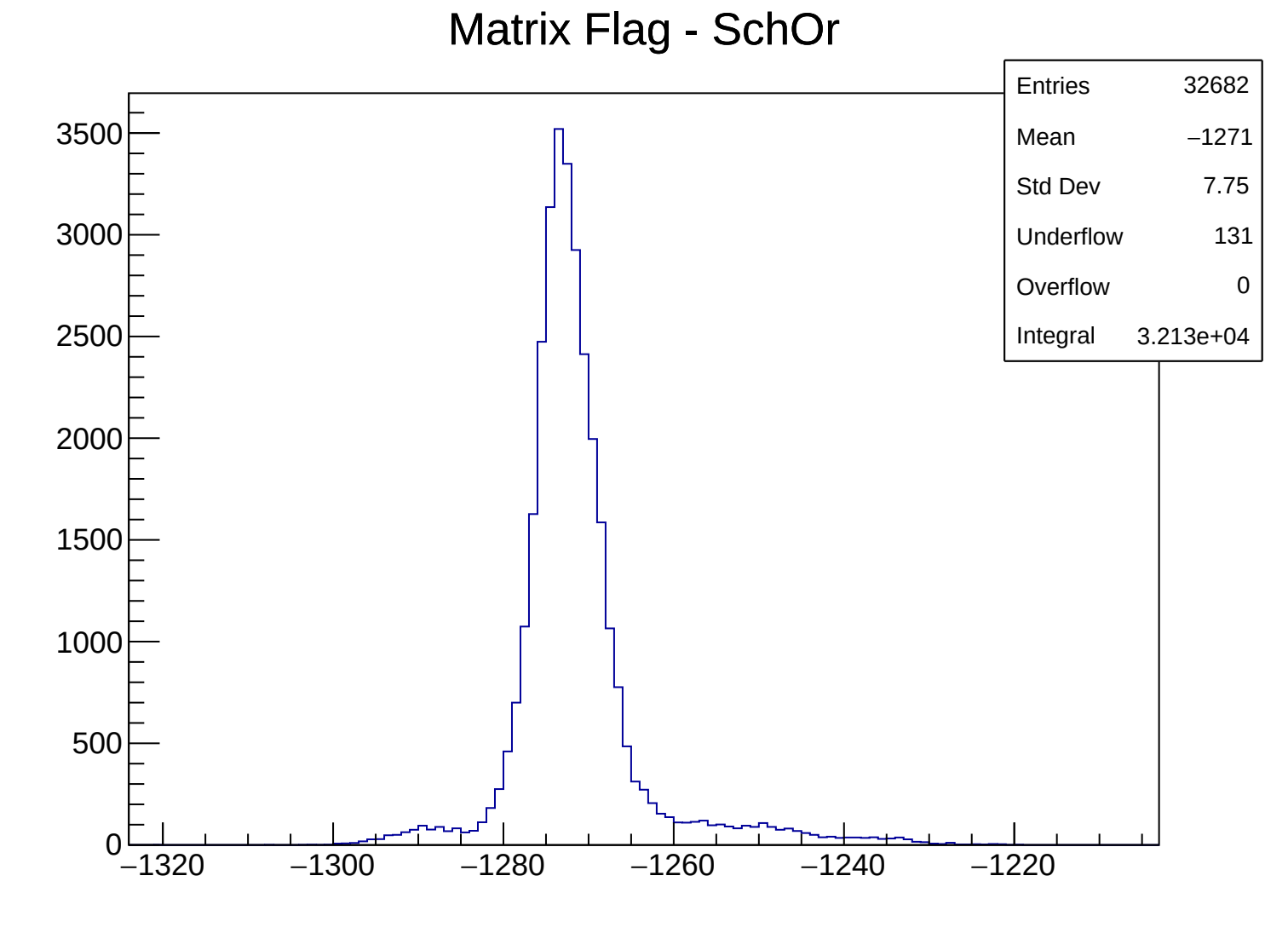

Matrix Flag - TofMtOr
Entries 30052
Mean −814.4
Std Dev 5.153
Underflow 368
Overflow 0
Integral 2.968e+04
10^4
10^3
10^2
10
1
−1000
−800
−600
−400
−200
0
200
400
600
800
1000

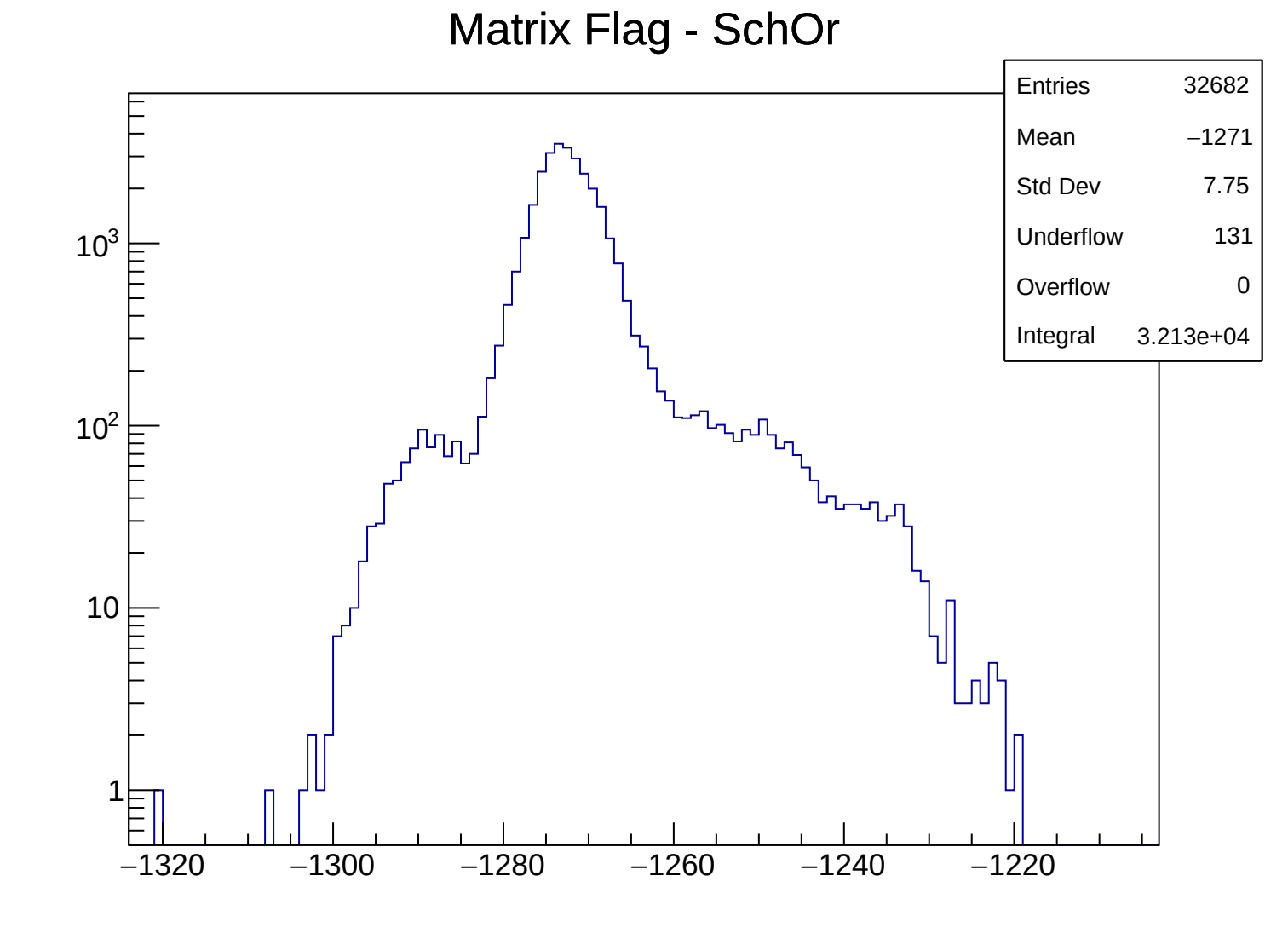

Matrix Flag - TofMtOr
Entries 30052
Mean −814.4
Std Dev 4.517
Underflow 368
Overflow 0
Integral 2.968e+04
8000
7000
6000
5000
4000
3000
2000
1000
0
−860
−840
−820
−800
−780
−760

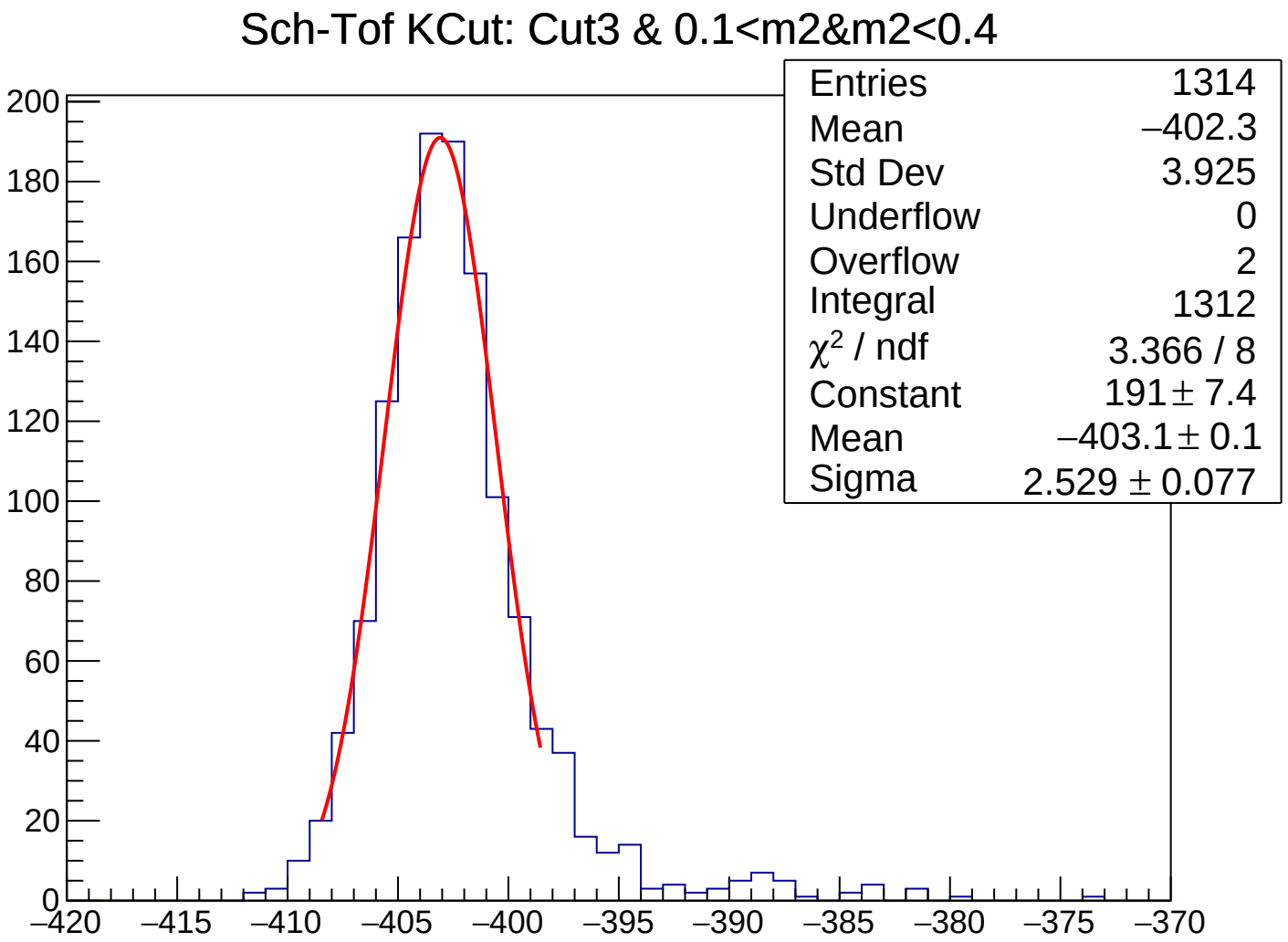

Matrix Flag - TofMtOr
Entries 30052
Mean −814.4
Std Dev 4.517
Underflow 368
Overflow 0
Integral 2.968e+04
10^4
10^3
10^2
10
1
−860
−840
−820
−800
−780
−760

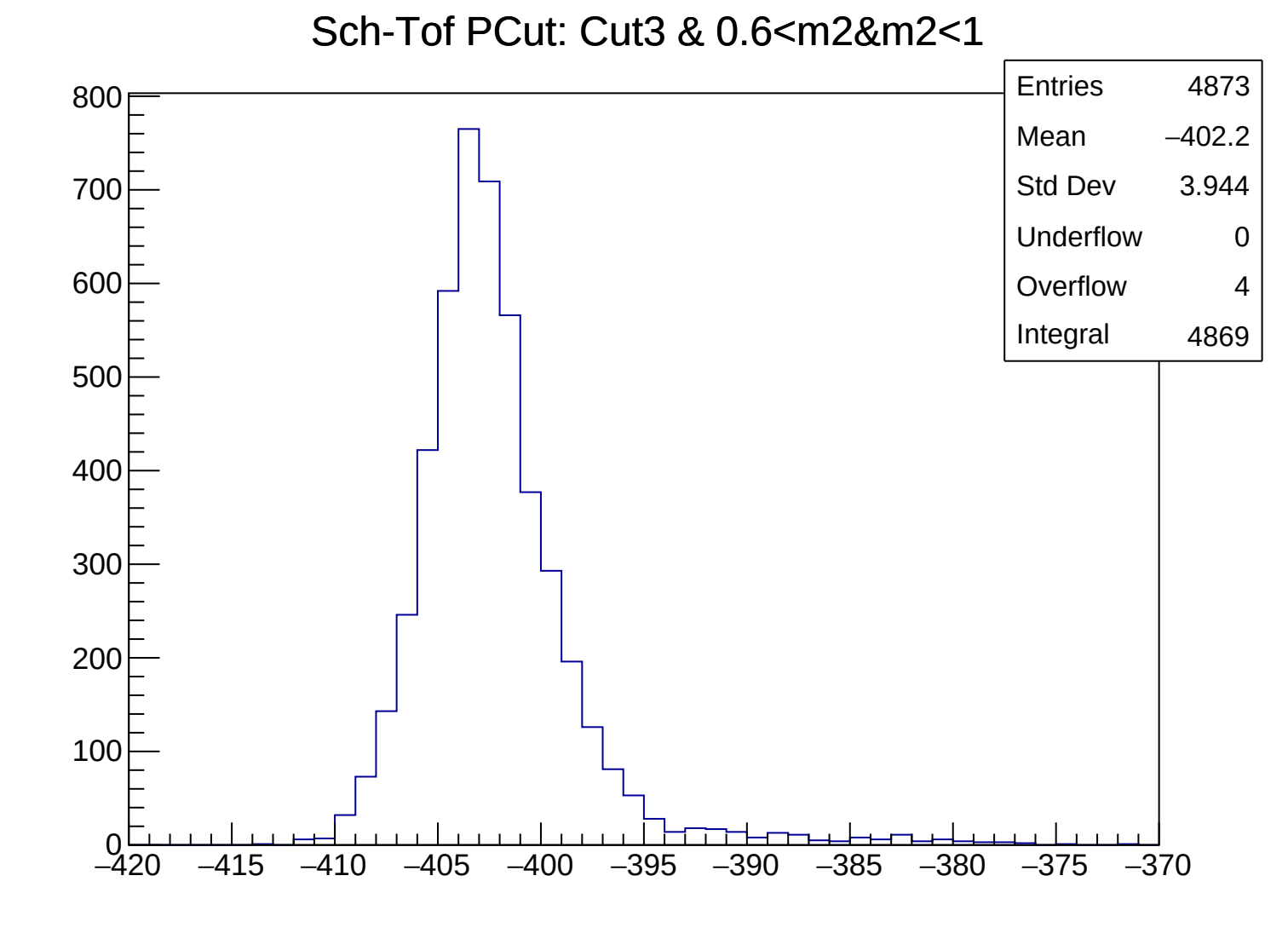

Matrix Flag - SchOr
Entries 32682
Mean −1277
Std Dev 50.54
Underflow 131
Overflow 0
Integral 3.255e+04
3500
3000
2500
2000
1500
1000
500
0
−2000 −1800 −1600 −1400 −1200 −1000 −800 −600 −400 −200 0

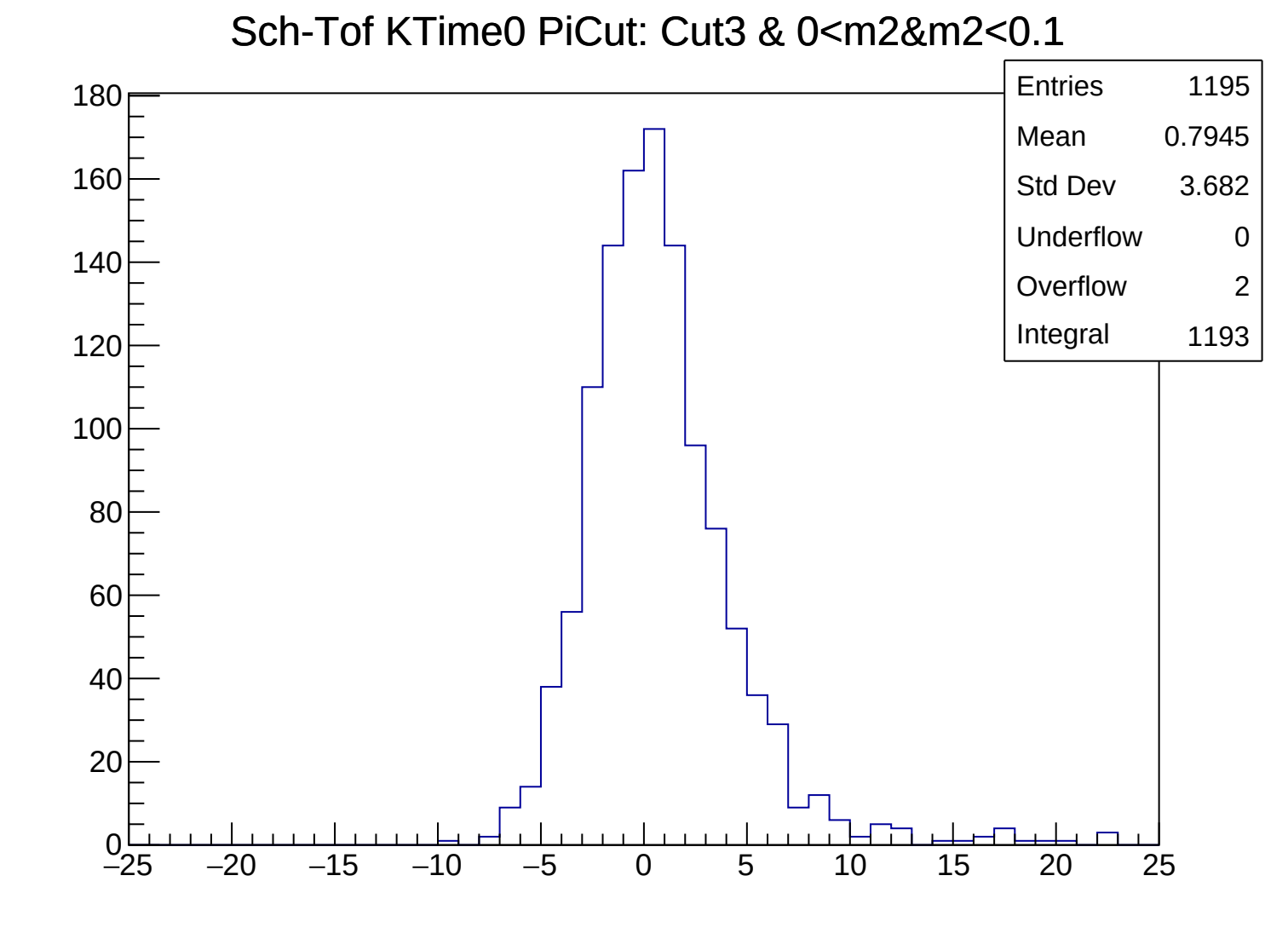

Matrix Flag - SchOr
Entries 32682
Mean −1277
Std Dev 50.54
Underflow 131
Overflow 0
Integral 3.255e+04
10^3
10^2
10
1
−2000 −1800 −1600 −1400 −1200 −1000 −800 −600 −400 −200 0

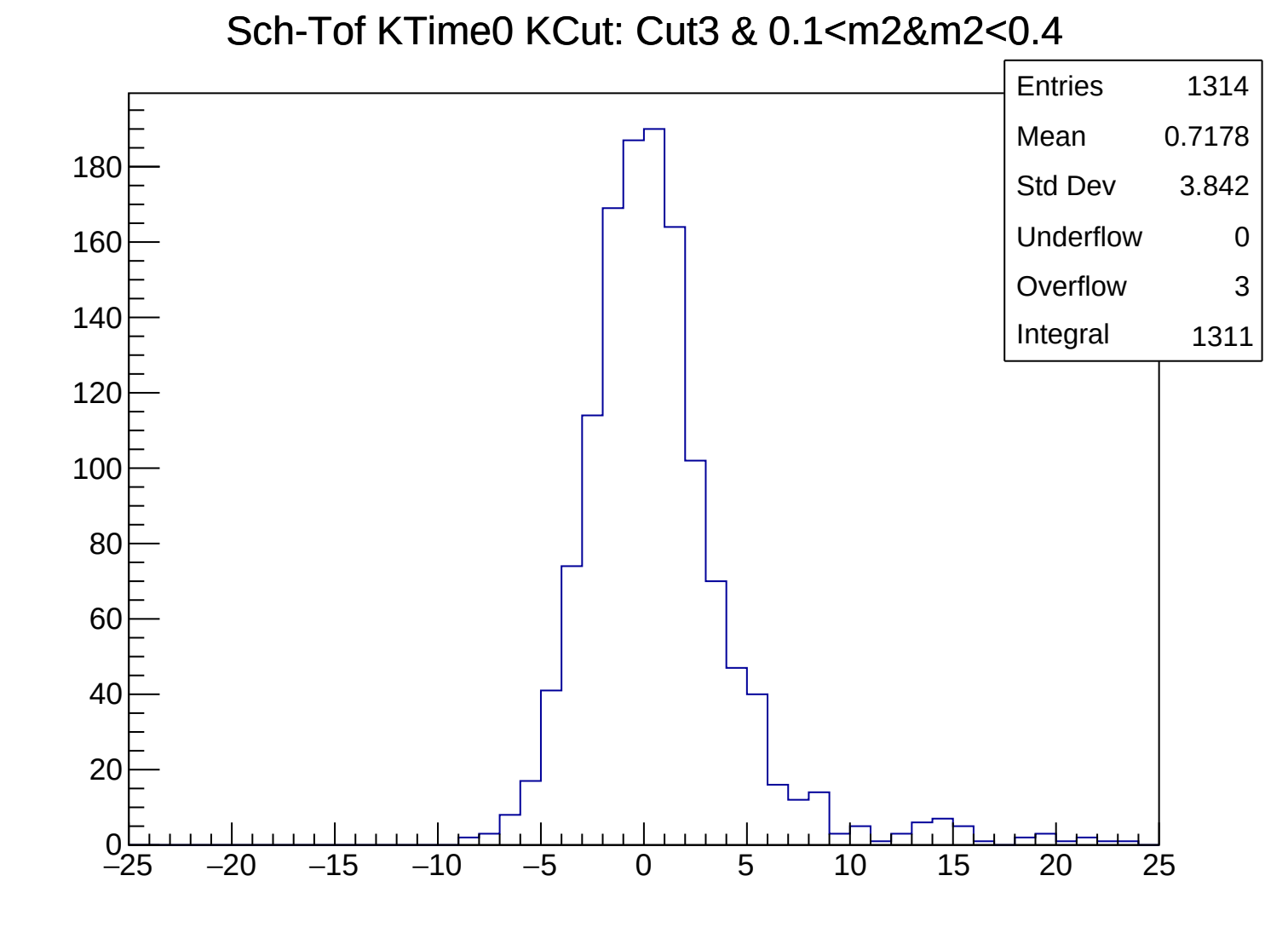

Matrix Flag - SchOr
Entries 32682
Mean −1271
Std Dev 7.75
Underflow 131
Overflow 0
Integral 3.213e+04
3500
3000
2500
2000
1500
1000
500
0
−1320
−1300
−1280
−1260
−1240
−1220

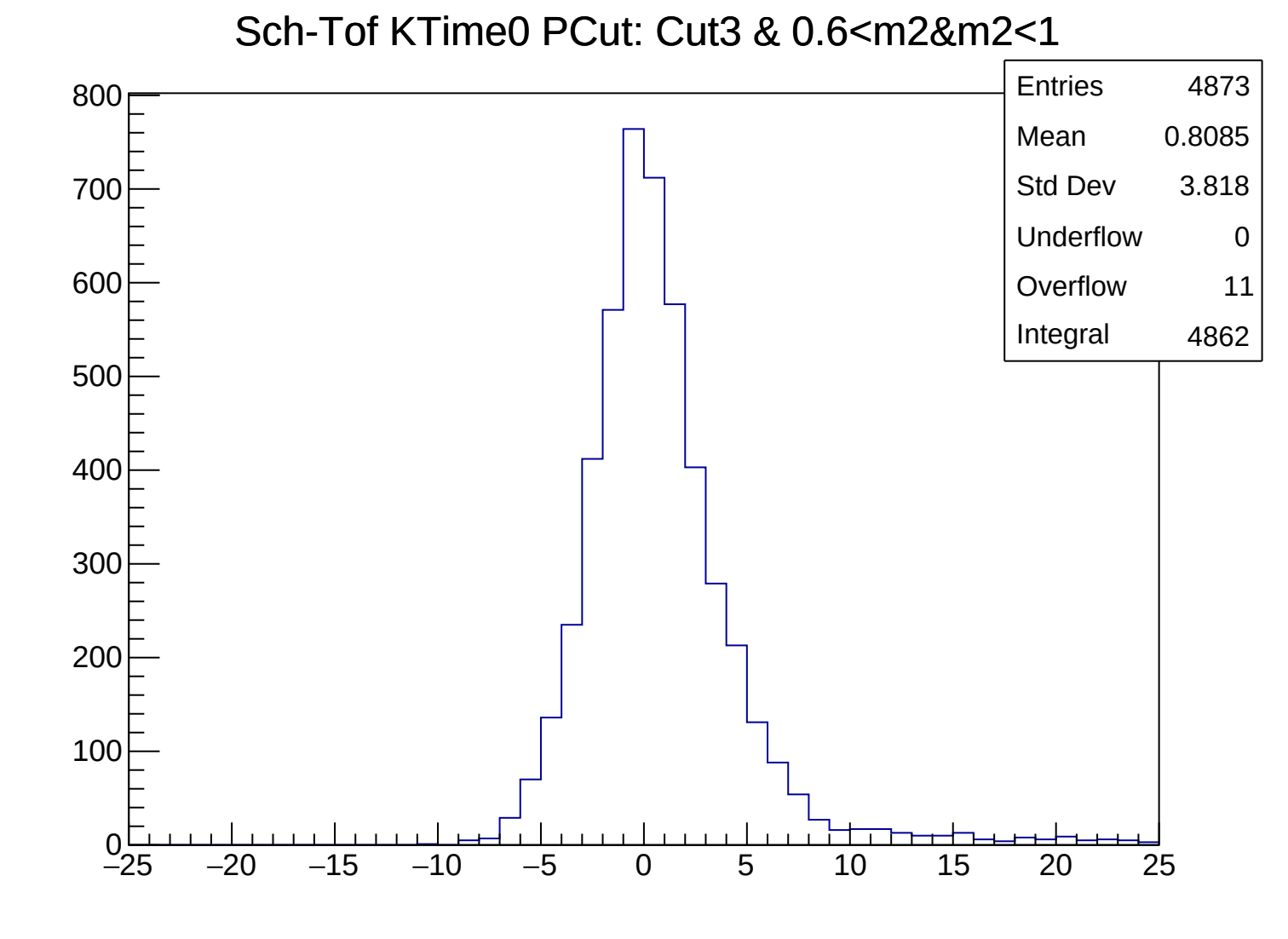

Matrix Flag - SchOr
Entries 32682
Mean −1271
Std Dev 7.75
Underflow 131
Overflow 0
Integral 3.213e+04
10^3
10^2
10
1
−1320
−1300
−1280
−1260
−1240
−1220

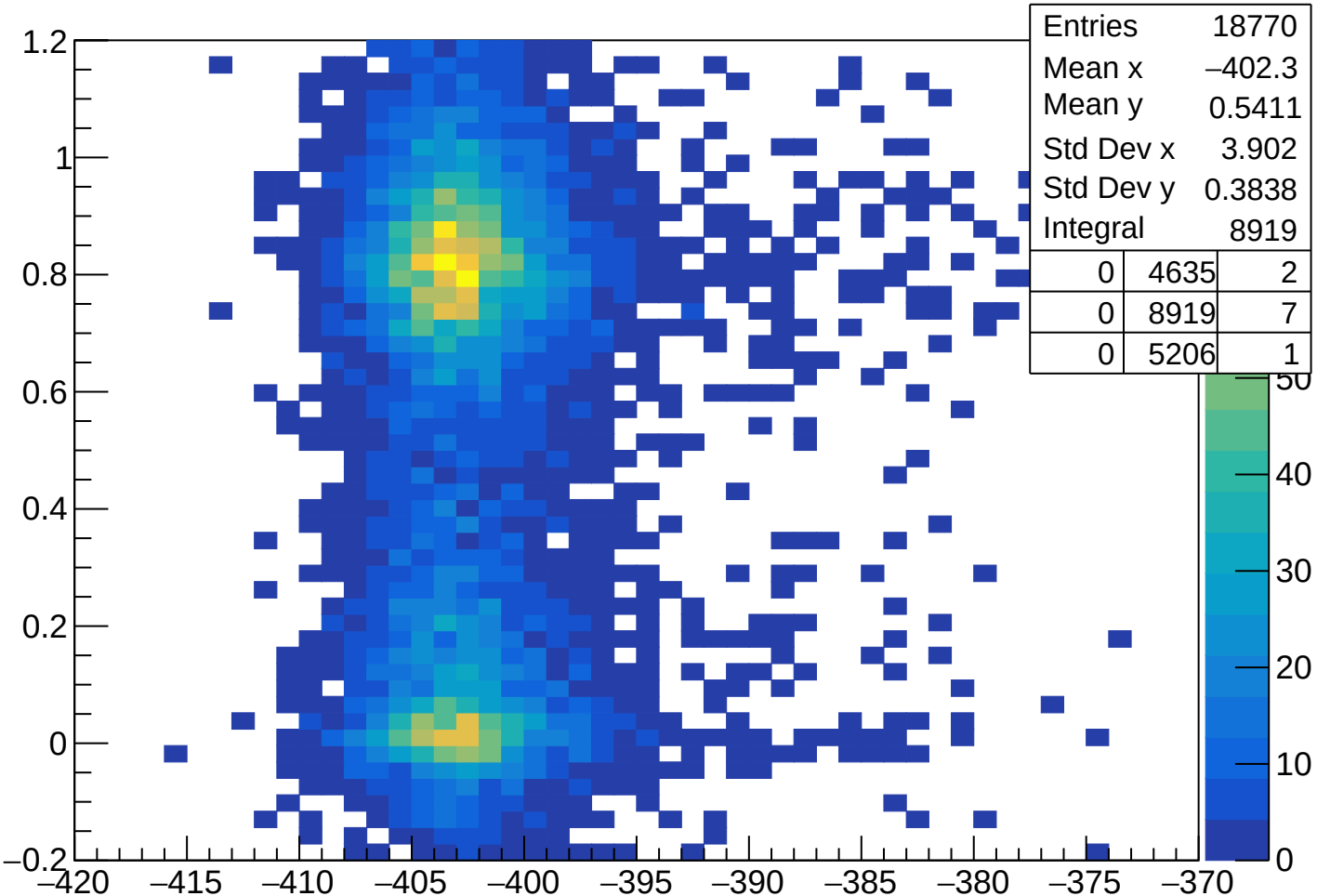

Sch-Tof KCut: Cut3 & 0.1<m2&m2<0.4
Entries 1314
Mean –402.3
Std Dev 3.925
Underflow 0
Overflow 2
Integral 1312
χ² / ndf 3.366 / 8
Constant 191 ± 7.4
Mean –403.1 ± 0.1
Sigma 2.529 ± 0.077
200
180
160
140
120
100
80
60
40
20
0
–420
–415
–410
–405
–400
–395
–390
–385
–380
–375
–370

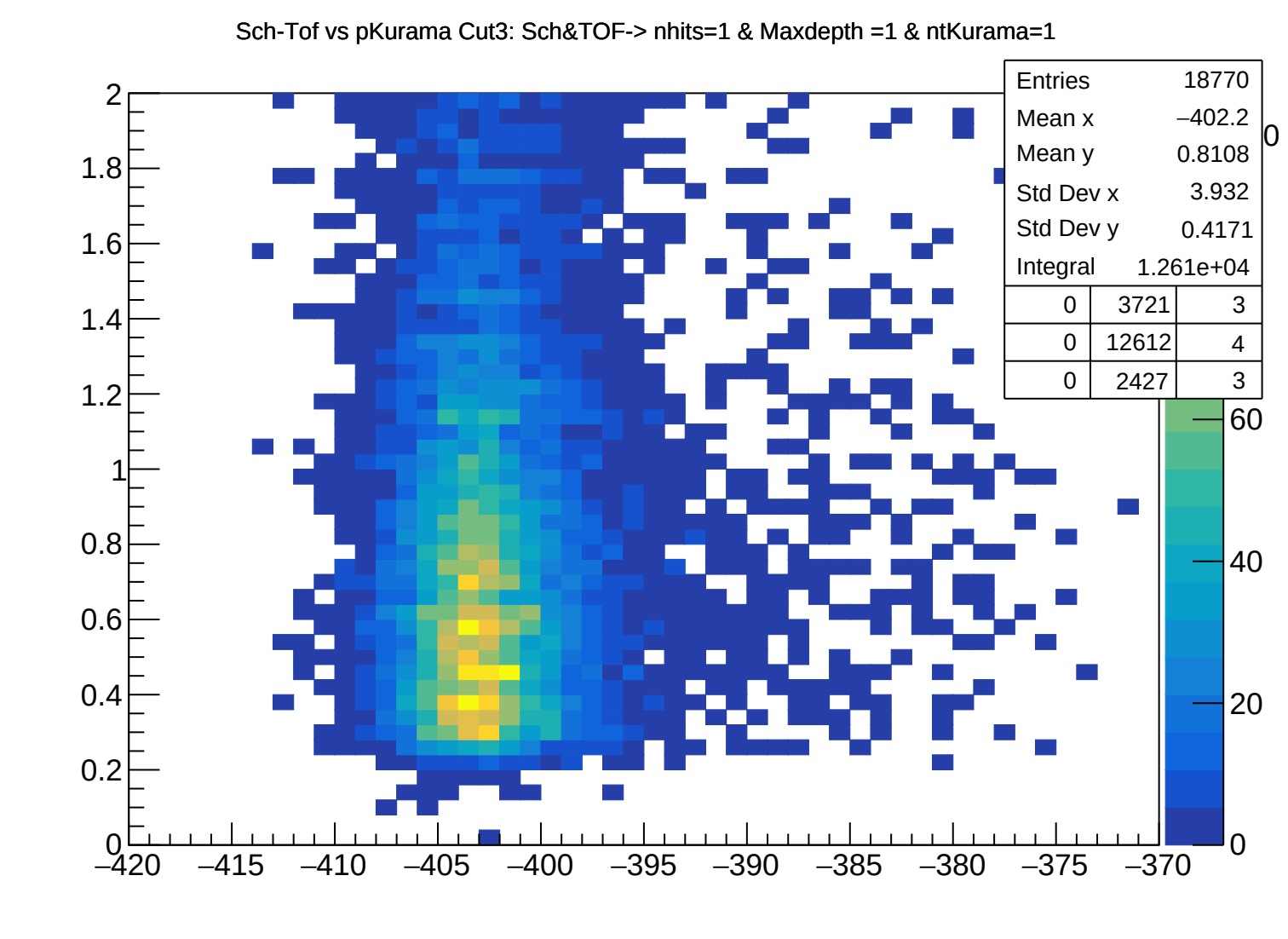

Sch-Tof PCut: Cut3 & 0.6<m2&m2<1
Entries 4873
Mean –402.2
Std Dev 3.944
Underflow 0
Overflow 4
Integral 4869
800
700
600
500
400
300
200
100
0
–420
–415
–410
–405
–400
–395
–390
–385
–380
–375
–370

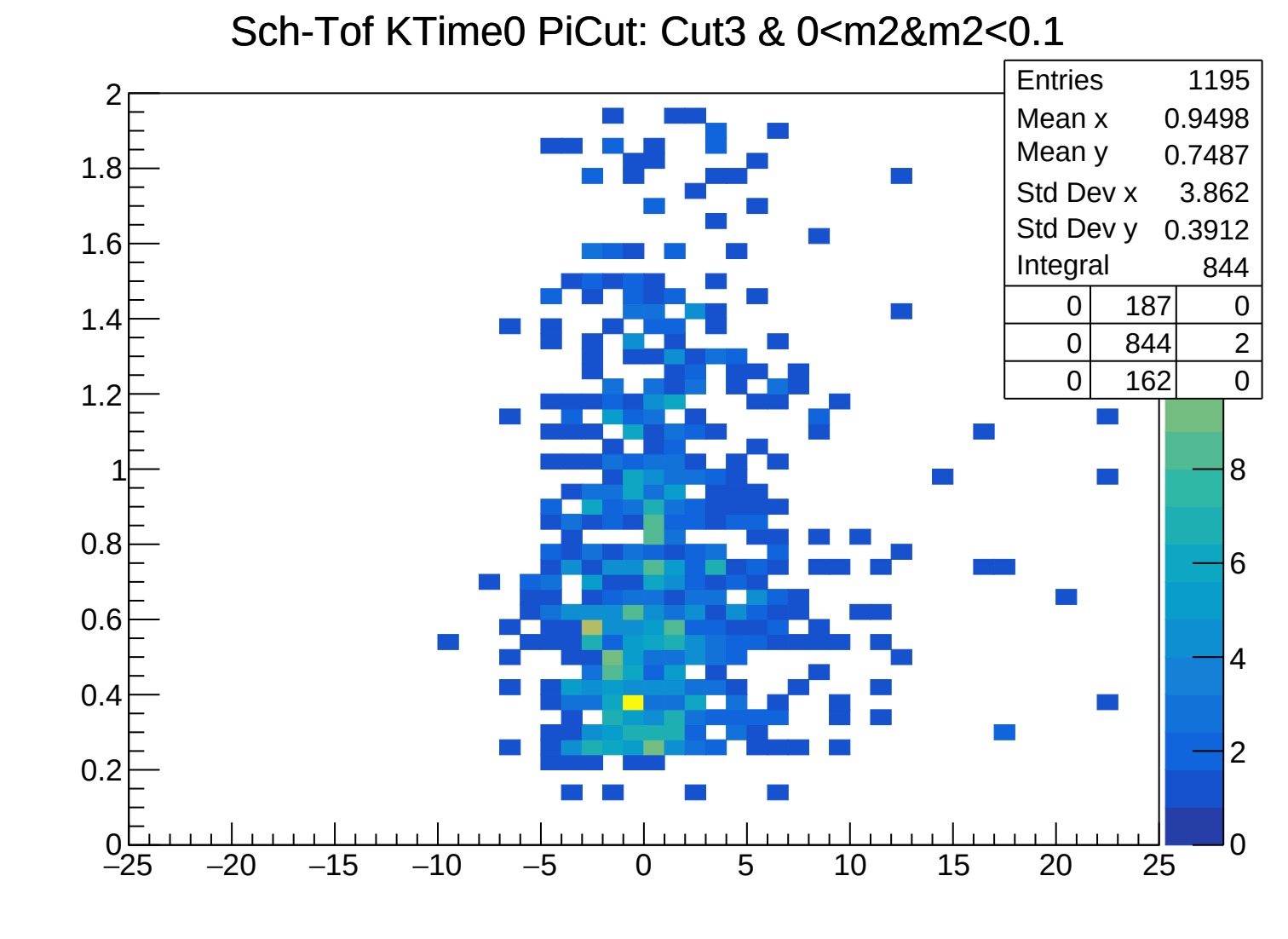

Sch-Tof KTime0 PiCut: Cut3 & 0<m2&m2<0.1
Entries 1195
Mean 0.7945
Std Dev 3.682
Underflow 0
Overflow 2
Integral 1193
180
160
140
120
100
80
60
40
20
0
–25
–20
–15
–10
–5
0
5
10
15
20
25

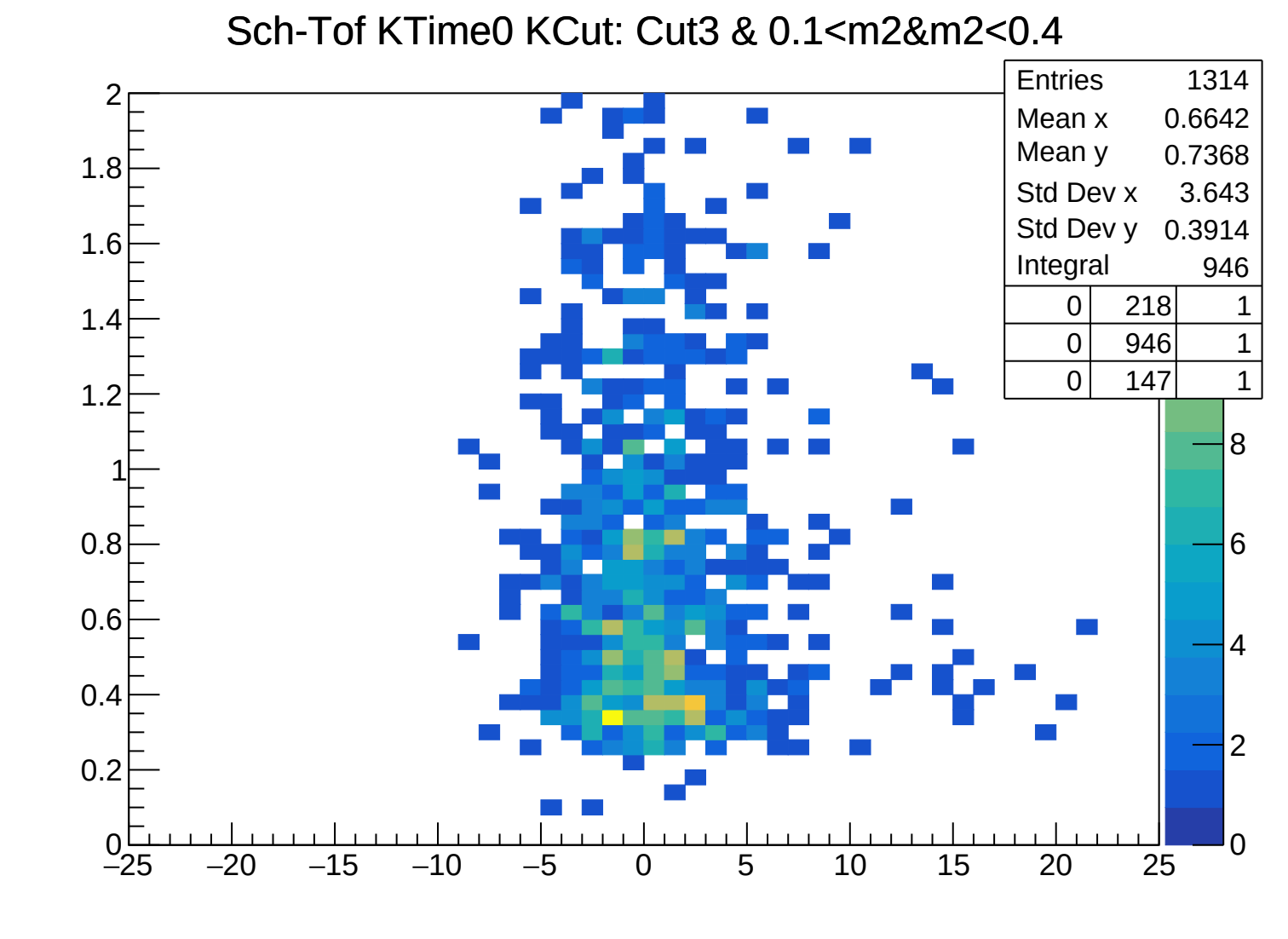

Sch-Tof KTime0 KCut: Cut3 & 0.1<m2&m2<0.4
Entries 1314
Mean 0.7178
Std Dev 3.842
Underflow 0
Overflow 3
Integral 1311
180
160
140
120
100
80
60
40
20
0
–25
–20
–15
–10
–5
0
5
10
15
20
25

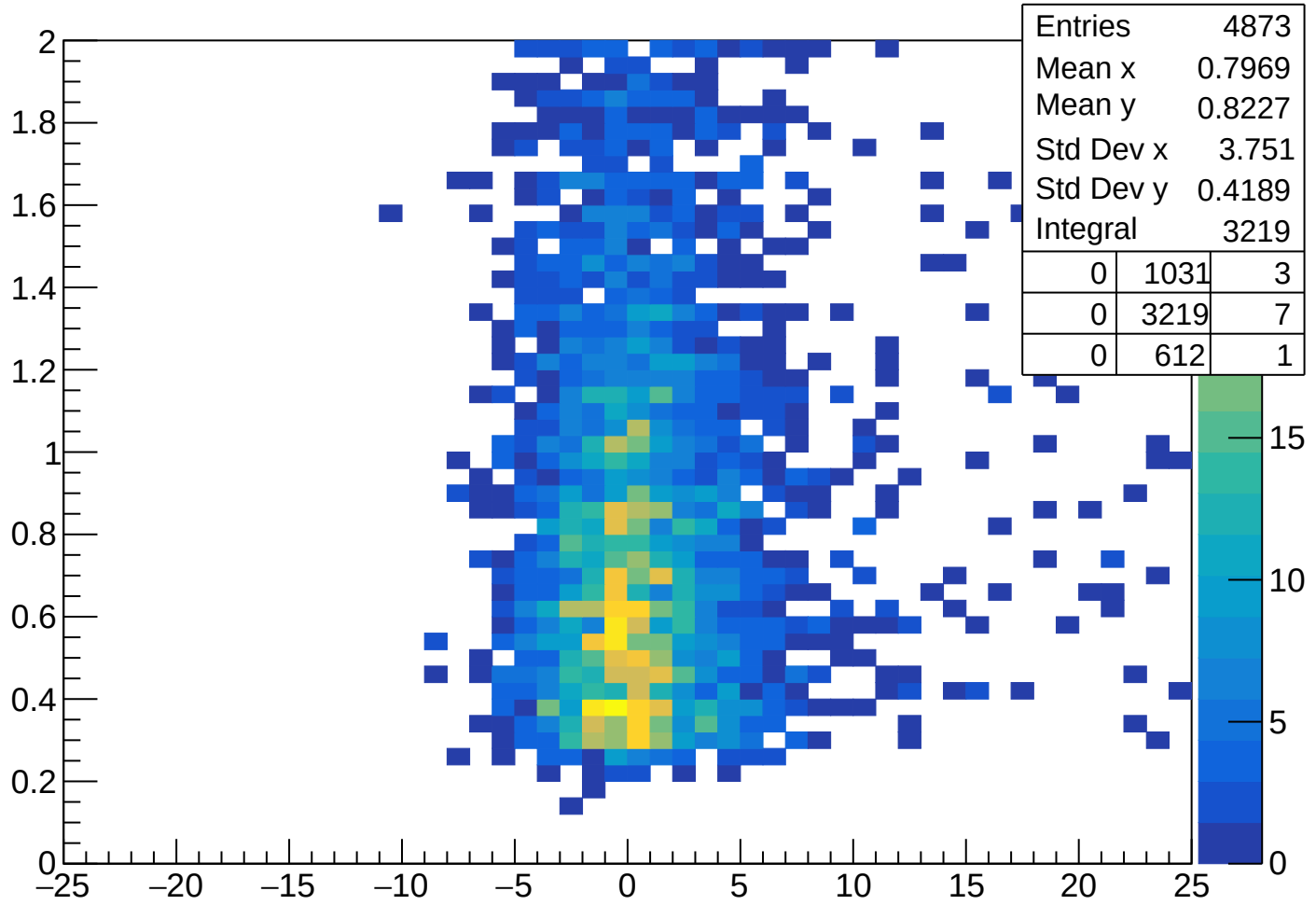

Sch-Tof KTime0 PCut: Cut3 & 0.6<m2&m2<1
Entries 4873
Mean 0.8085
Std Dev 3.818
Underflow 0
Overflow 11
Integral 4862
800
700
600
500
400
300
200
100
0
−25
−20
−15
−10
−5
0
5
10
15
20
25

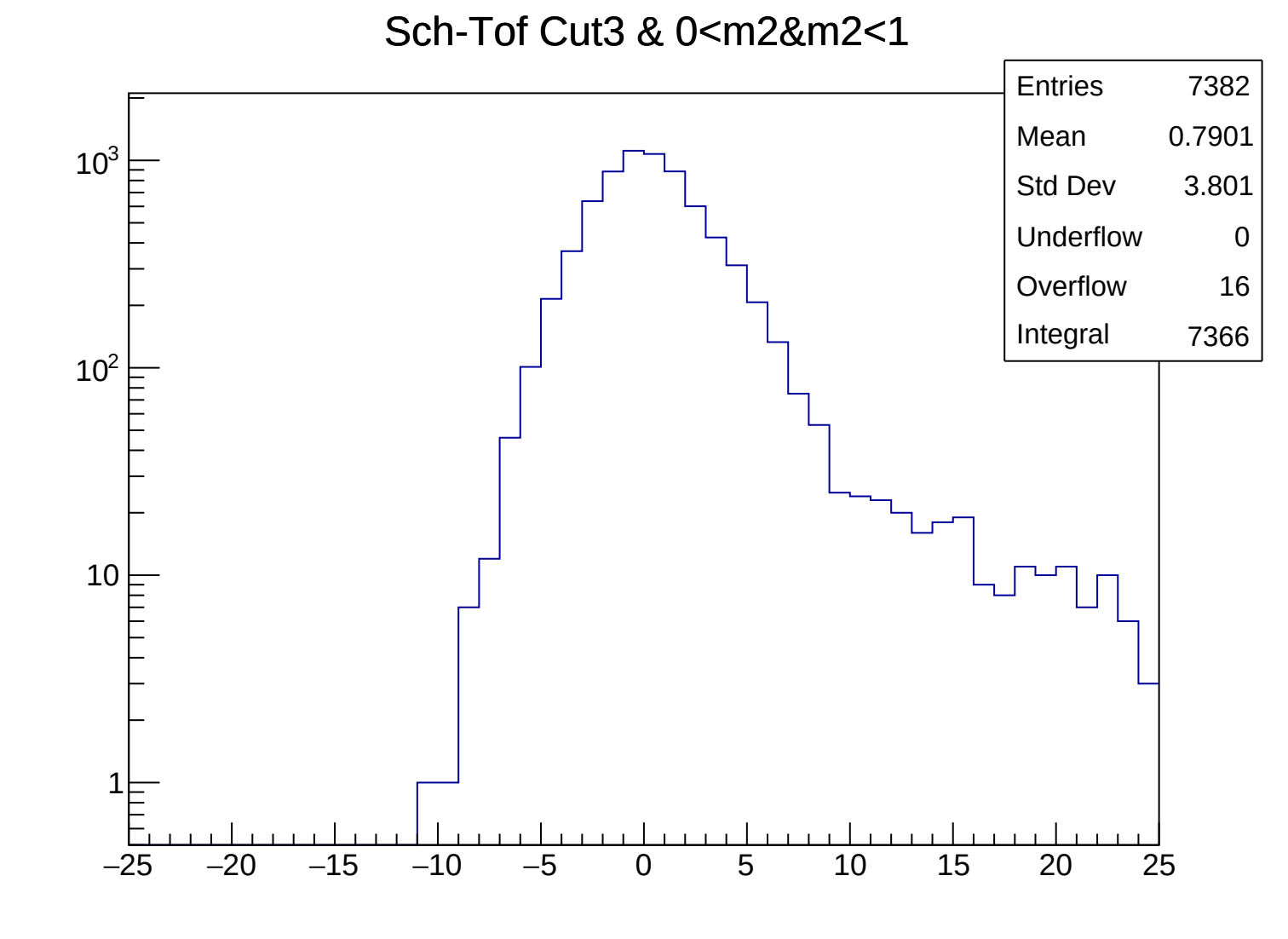

Sch-Tof vs m2 Cut3: Sch&TOF-> nhits=1 & Maxdepth =1 & ntKurama=1
Entries 18770
Mean x −402.3
Mean y 0.5411
Std Dev x 3.902
Std Dev y 0.3838
Integral 8919
0 4635 2
0 8919 7
0 5206 1
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−420
−415
−410
−405
−400
−395
−390
−385
−380
−375
−370
50
40
30
20
10
0

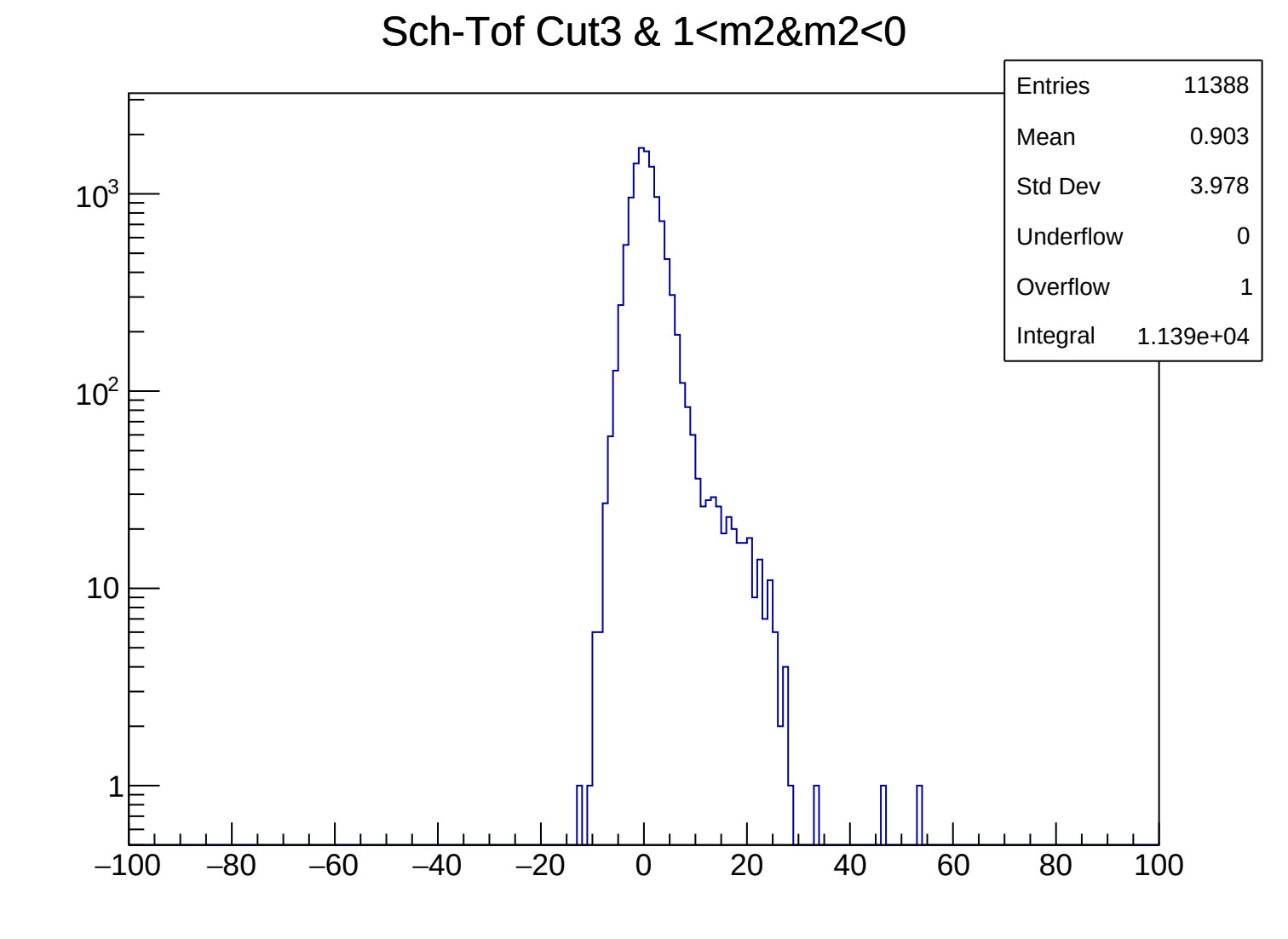

Sch-Tof vs pKurama Cut3: Sch&TOF-> nhits=1 & Maxdepth =1 & ntKurama=1
Entries 18770
Mean x −402.2
Mean y 0.8108
Std Dev x 3.932
Std Dev y 0.4171
Integral 1.261e+04
0 3721 3
0 12612 4
0 2427 3
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−420
−415
−410
−405
−400
−395
−390
−385
−380
−375
−370
60
40
20
0

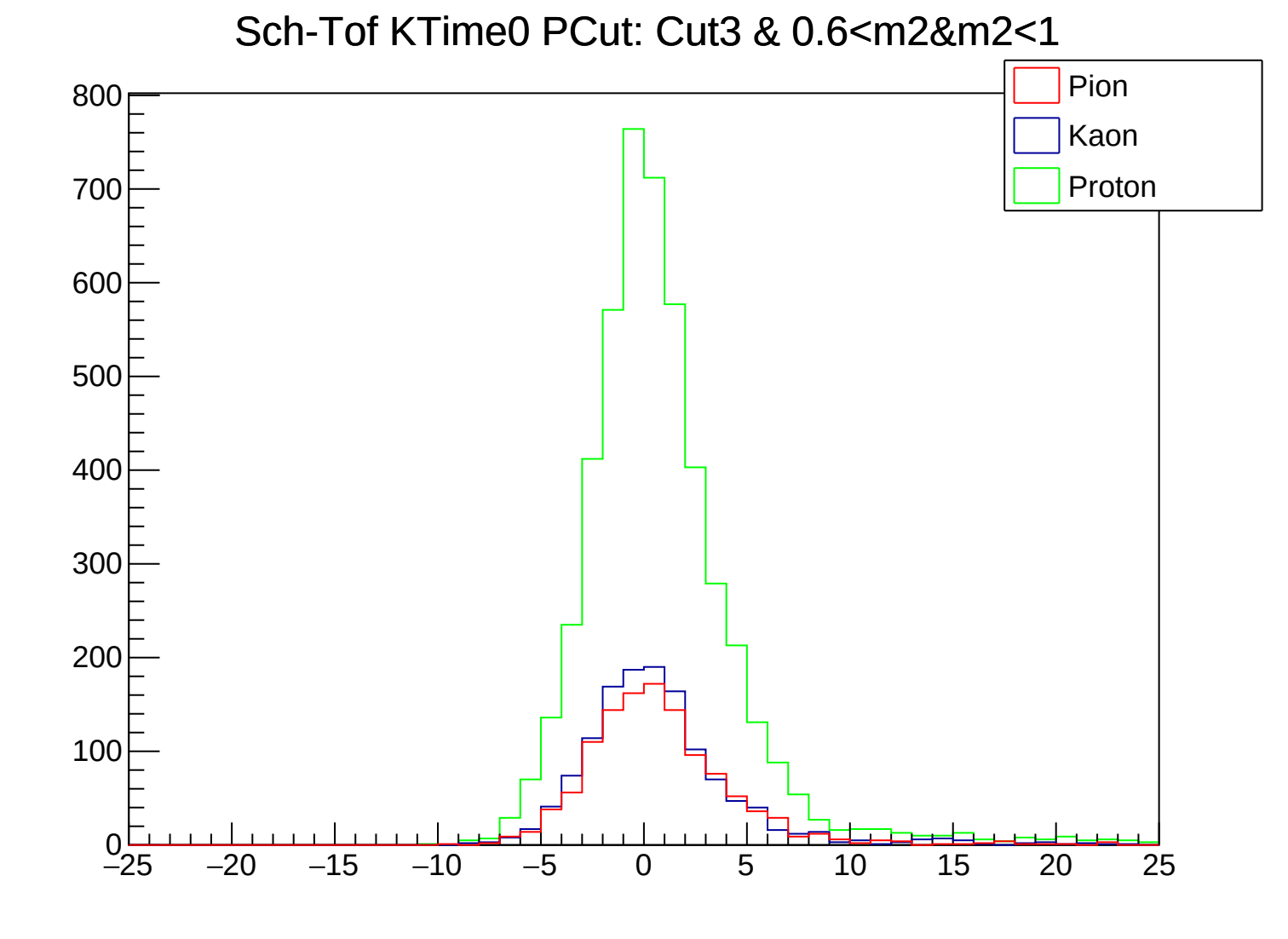

Sch-Tof KTime0 PiCut: Cut3 & 0<m2&m2<0.1
Entries 1195
Mean x 0.9498
Mean y 0.7487
Std Dev x 3.862
Std Dev y 0.3912
Integral 844
0 187 0
0 844 2
0 162 0
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
–25
–20
–15
–10
–5
0
5
10
15
20
25
8
6
4
2
0


Sch-Tof KTime0 KCut: Cut3 & 0.1<m2&m2<0.4
Entries 1314
Mean x 0.6642
Mean y 0.7368
Std Dev x 3.643
Std Dev y 0.3914
Integral 946
0 218 1
0 946 1
0 147 1
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
8
6
4
2
0


Sch-Tof KTime0 PCut: Cut3 & 0.6<m2&m2<1
Entries 4873
Mean x 0.7969
Mean y 0.8227
Std Dev x 3.751
Std Dev y 0.4189
Integral 3219
0 1031 3
0 3219 7
0 612 1
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
15
10
5
0


Sch-Tof Cut3 & 0<m2&m2<1
Entries 7382
Mean 0.7901
Std Dev 3.801
Underflow 0
Overflow 16
Integral 7366
10^3
10^2
10
1
–25
–20
–15
–10
–5
0
5
10
15
20
25


Sch-Tof Cut3 & 1<m2&m2<0
Entries 11388
Mean 0.903
Std Dev 3.978
Underflow 0
Overflow 1
Integral 1.139e+04
10^3
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
800
700
600
500
400
300
200
100
0
–25
–20
–15
–10
–5
0
5
10
15
20
25