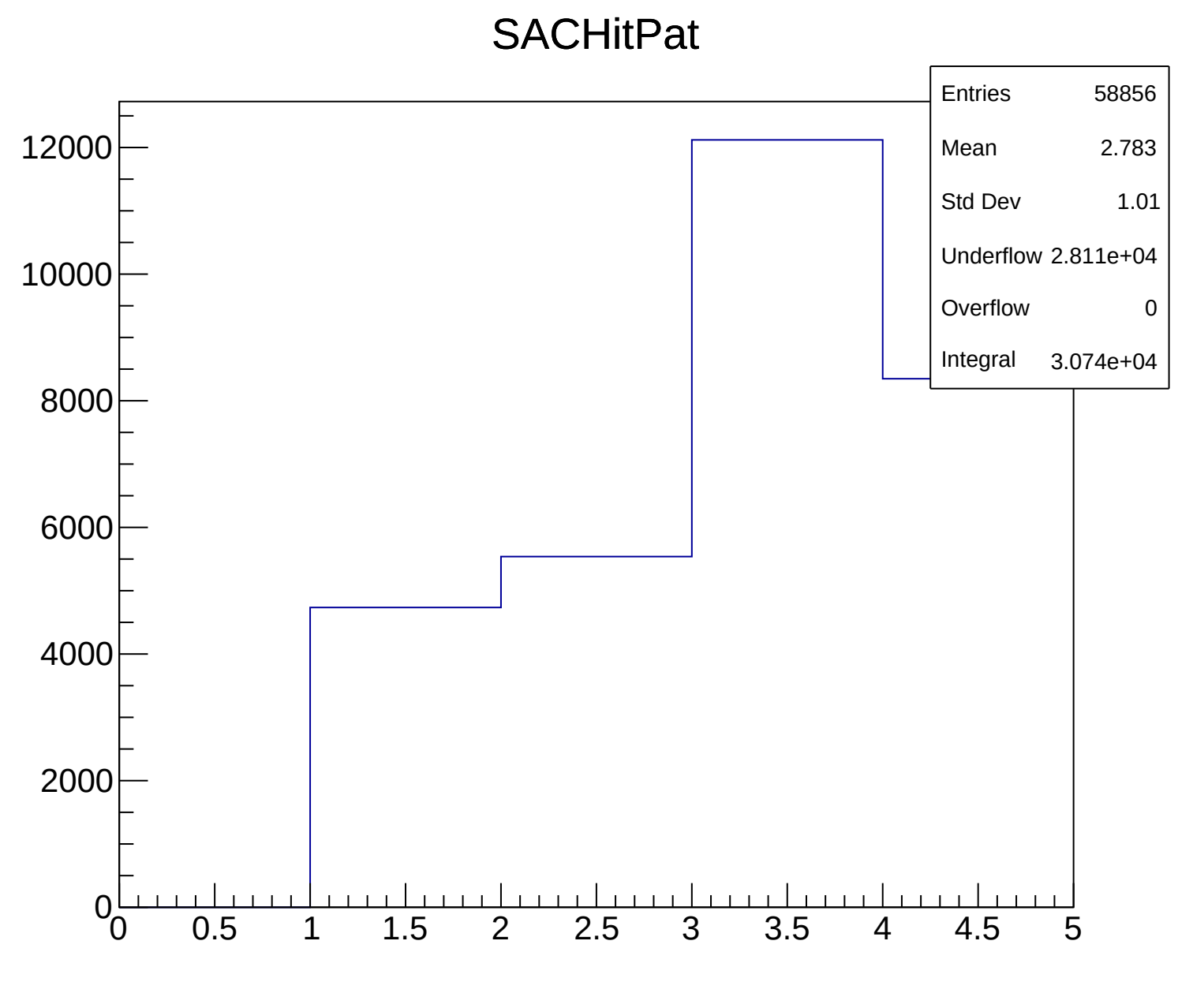
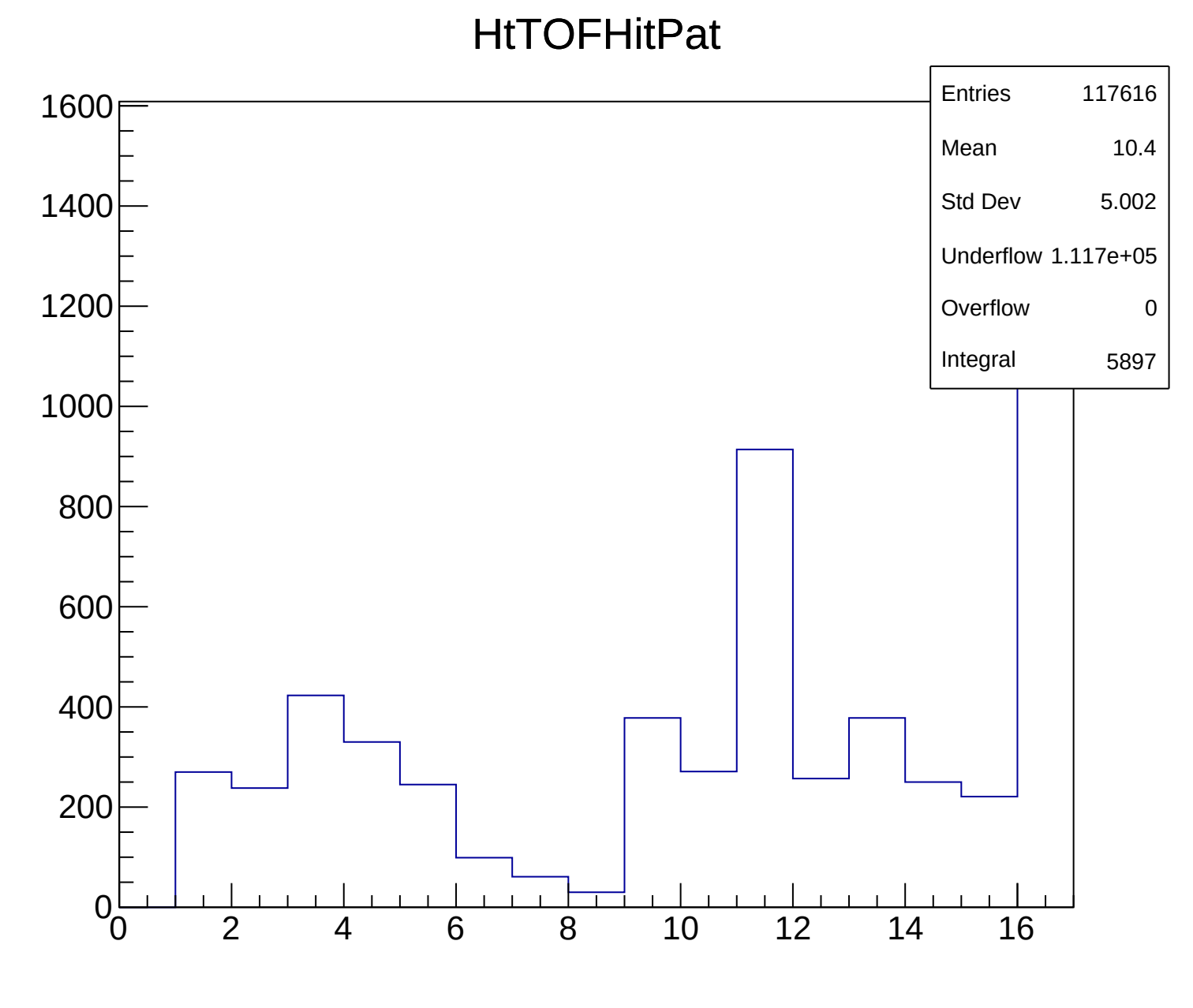

SACHitPat
Entries 58856
Mean 2.783
Std Dev 1.01
Underflow 2.811e+04
Overflow 0
Integral 3.074e+04
12000
10000
8000
6000
4000
2000
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5


HtTOFHitPat
Entries 117616
Mean 10.4
Std Dev 5.002
Underflow 1.117e+05
Overflow 0
Integral 5897
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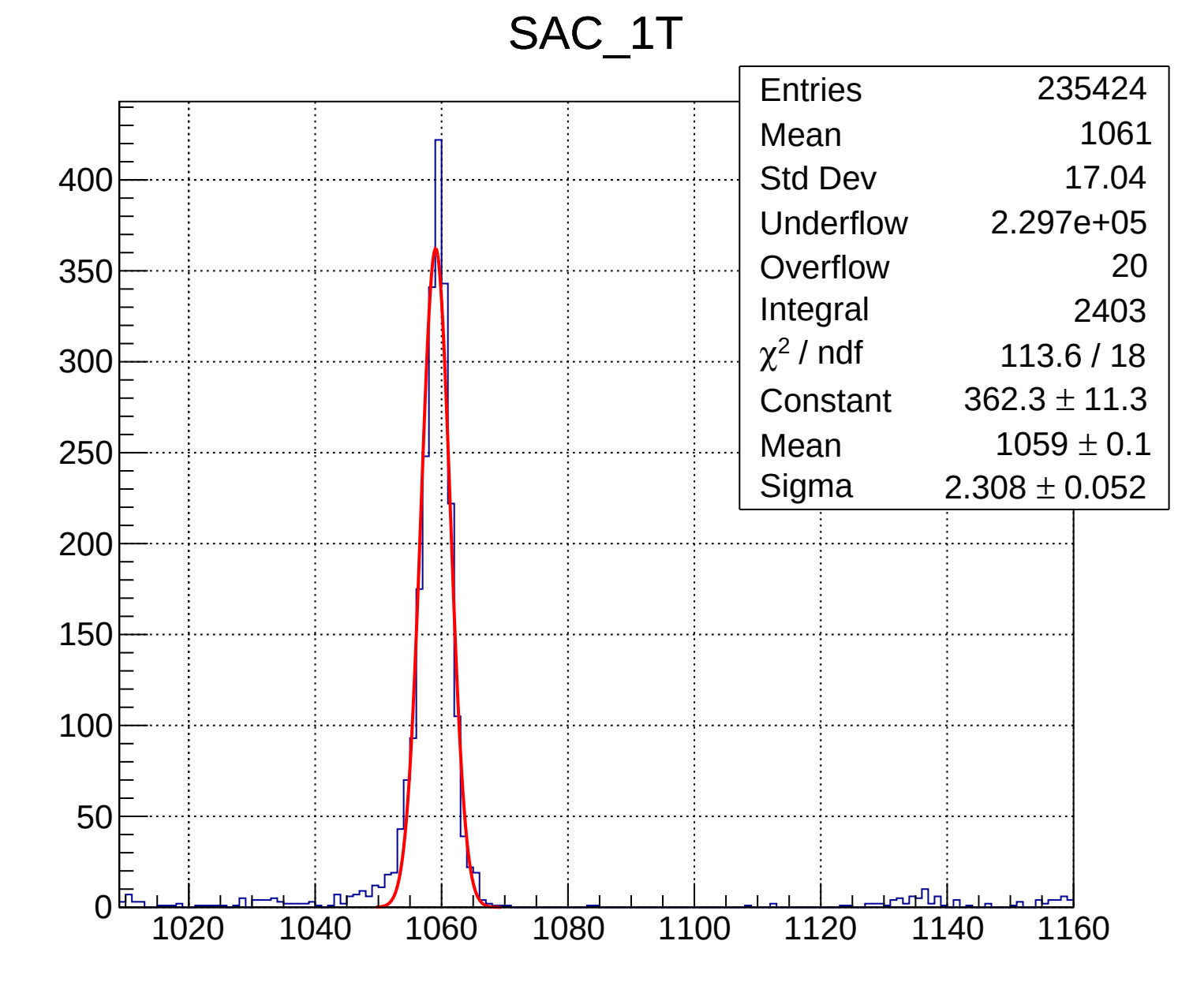
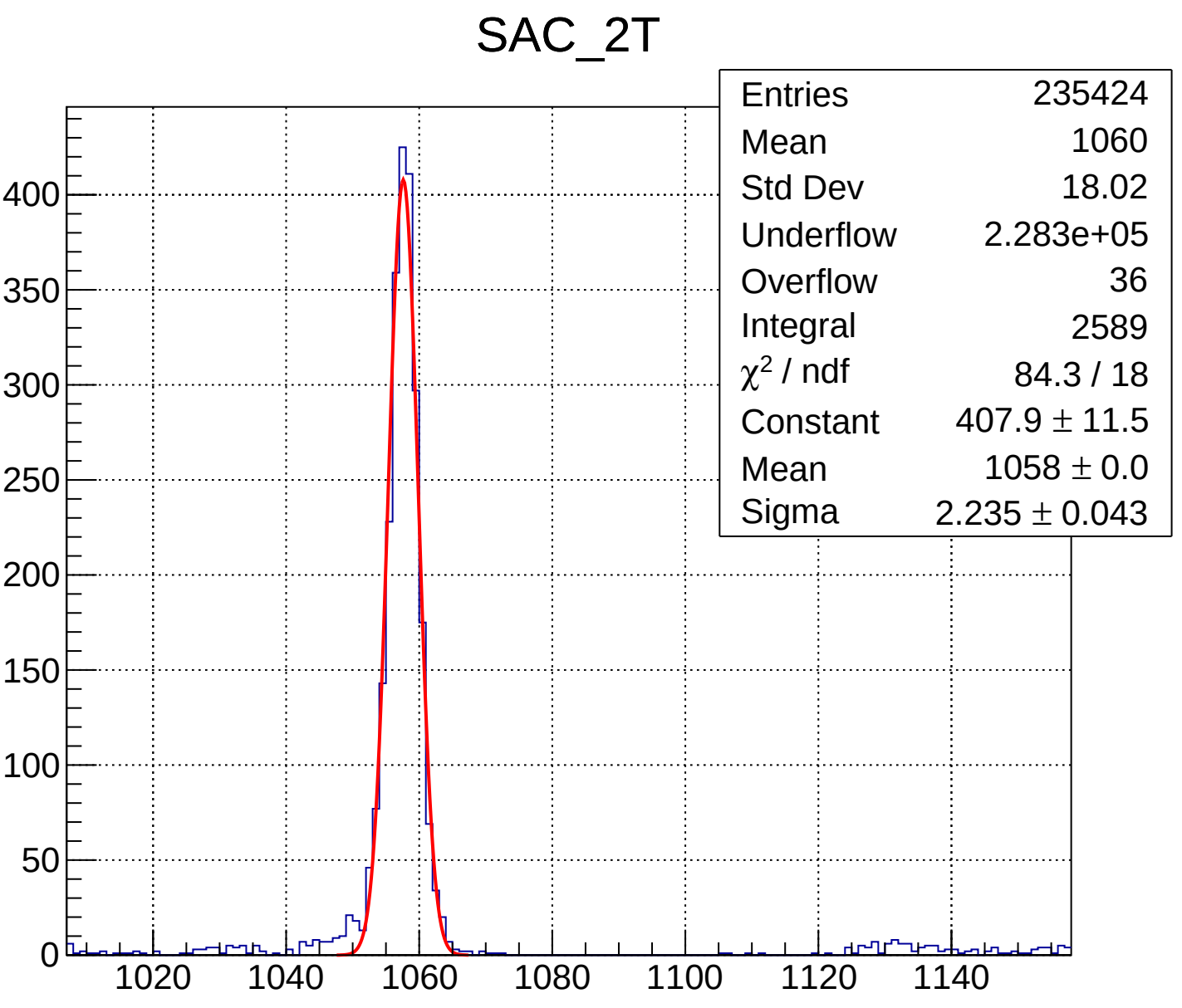
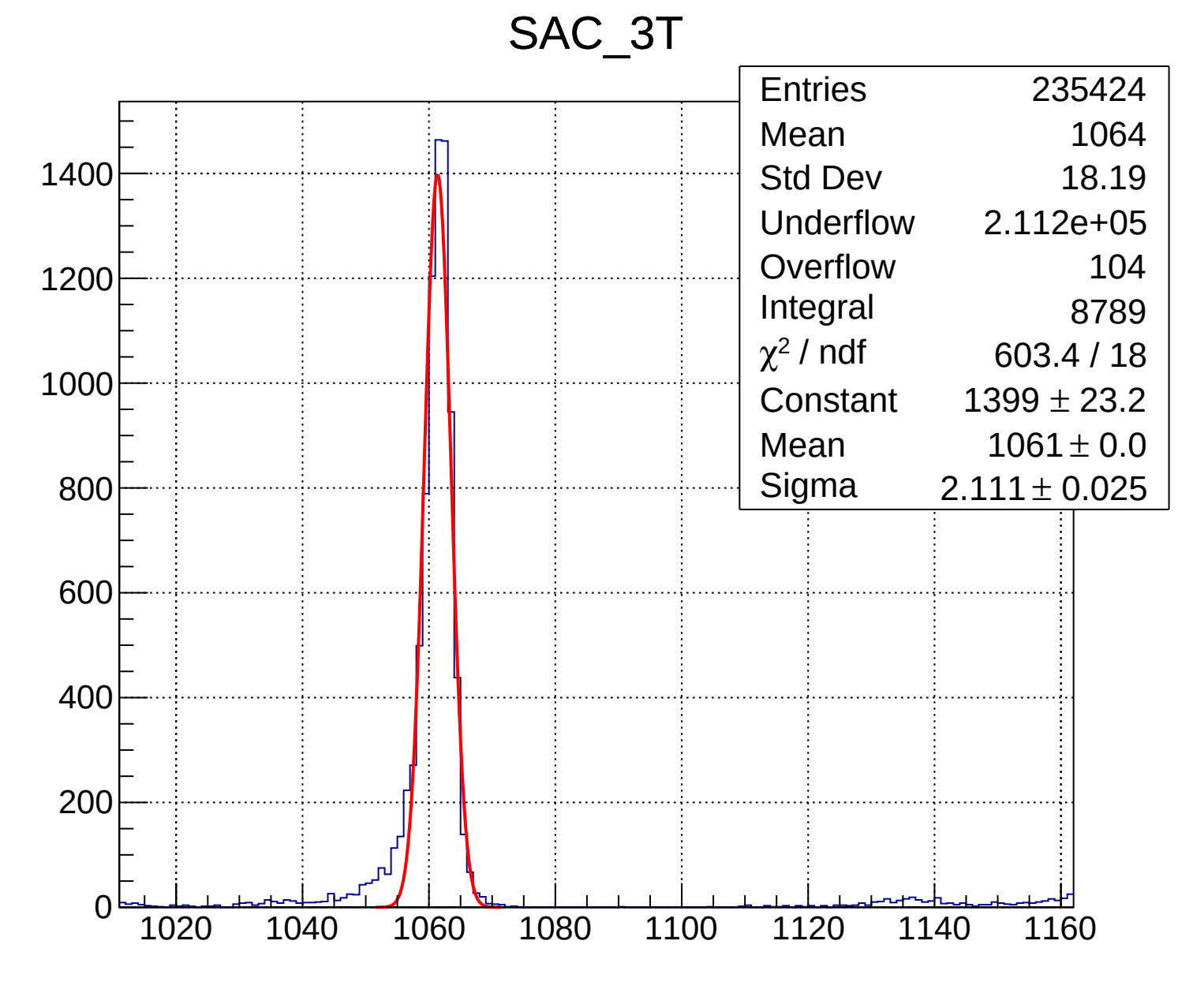
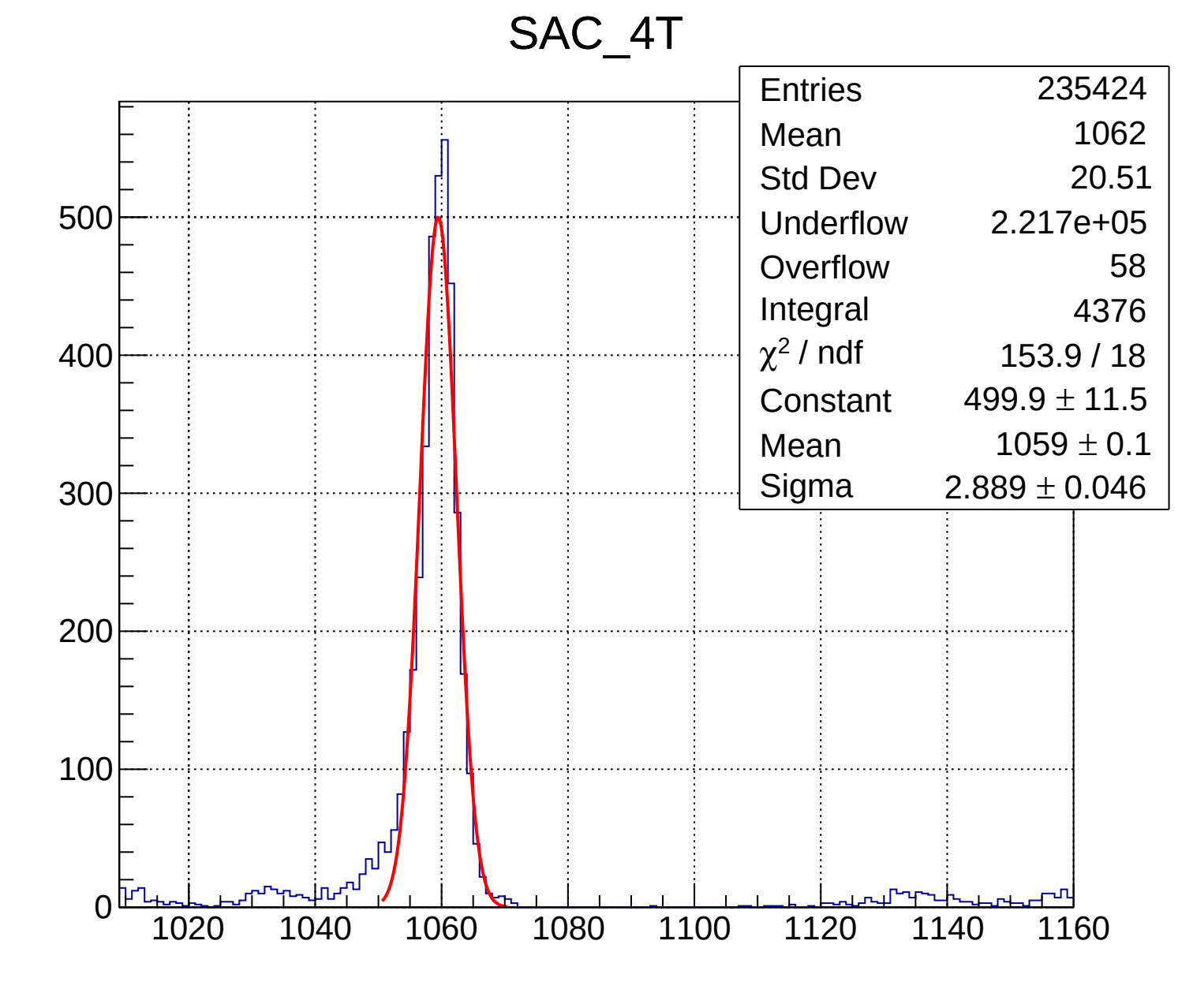
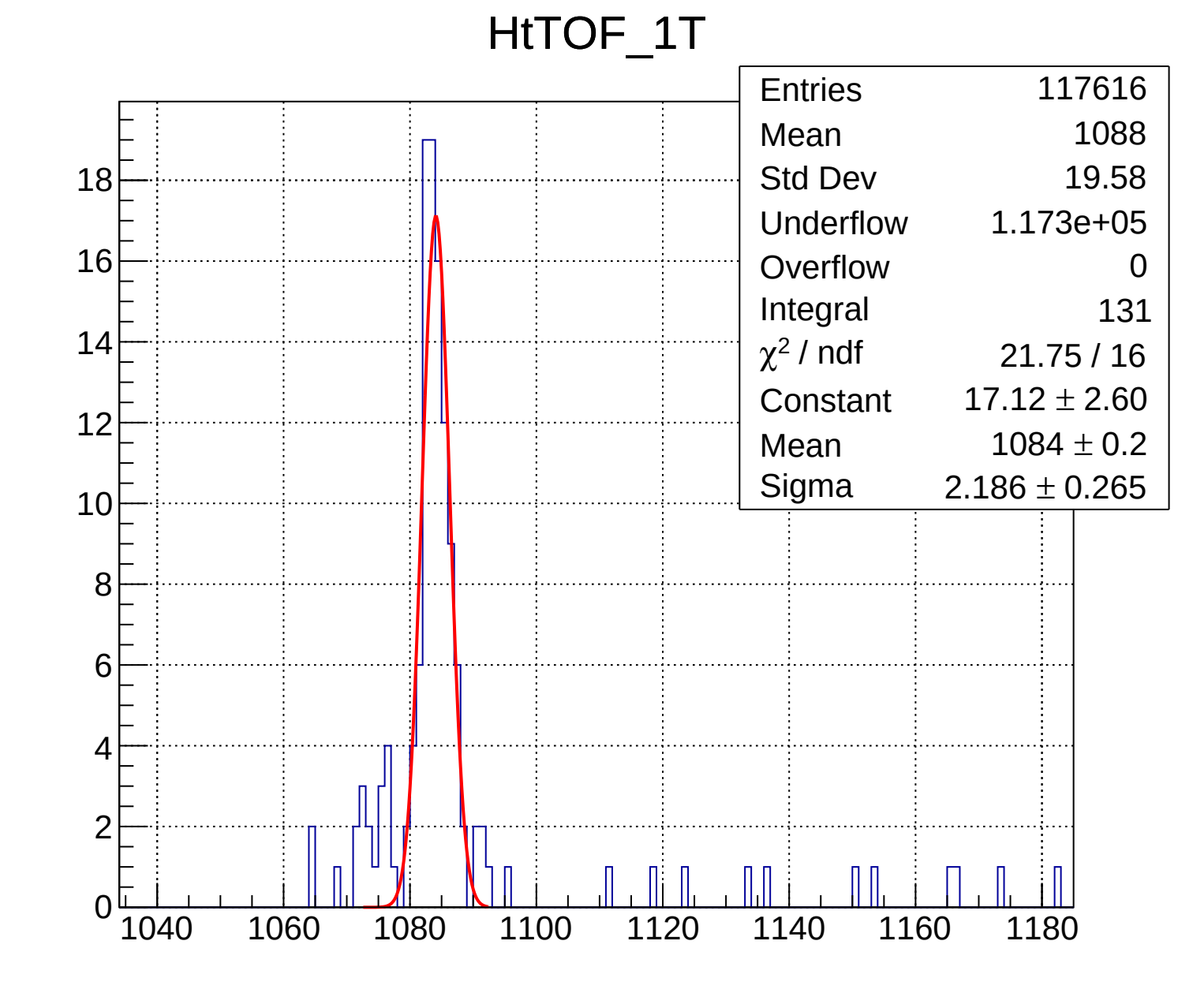
1400
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12
14
16

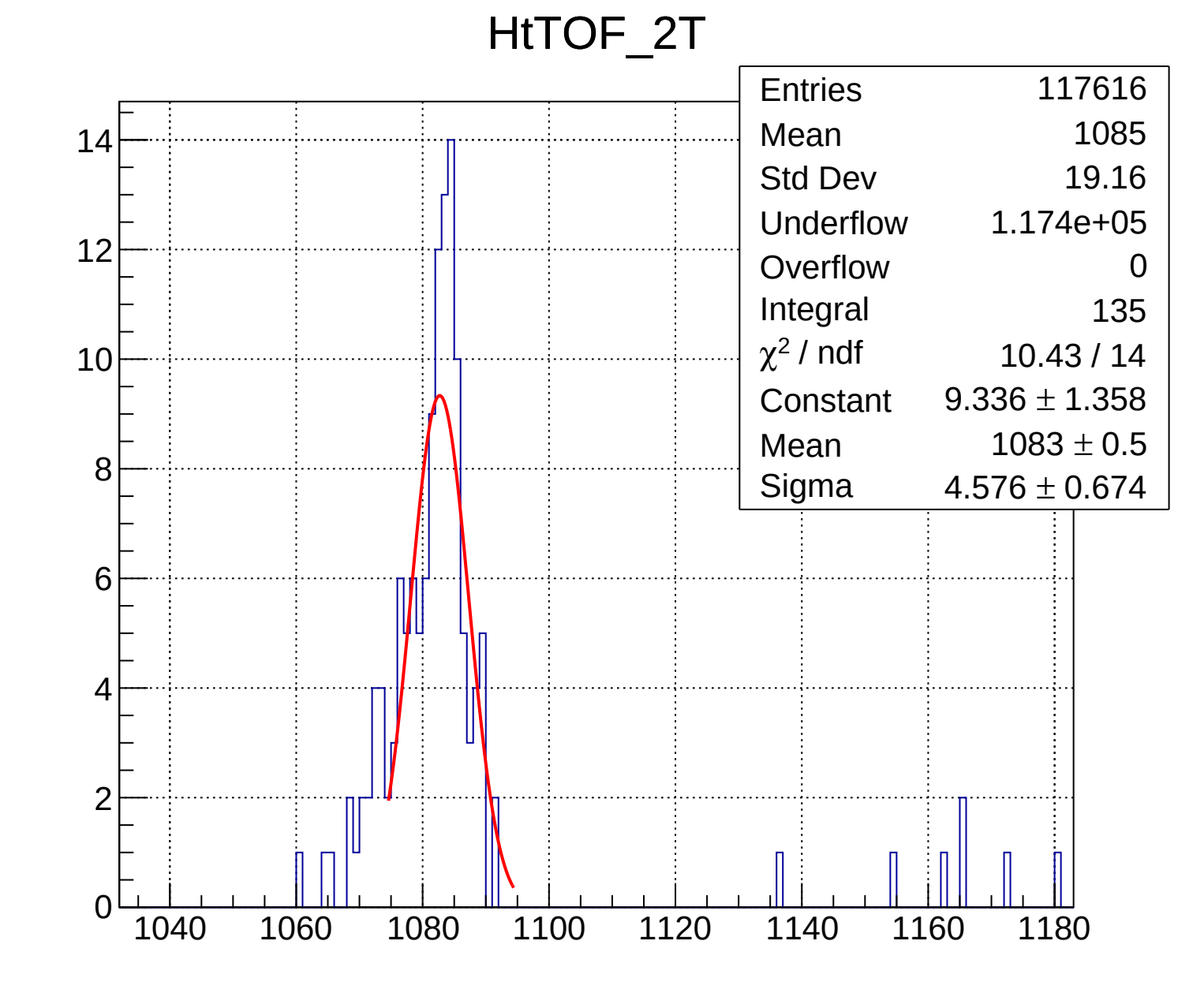

SAC_1T
Entries 235424
Mean 1061
Std Dev 17.04
Underflow 2.297e+05
Overflow 20
Integral 2403
χ² / ndf 113.6 / 18
Constant 362.3 ± 11.3
Mean 1059 ± 0.1
Sigma 2.308 ± 0.052
400
350
300
250
200
150
100
50
0
1020
1040
1060
1080
1100
1120
1140
1160

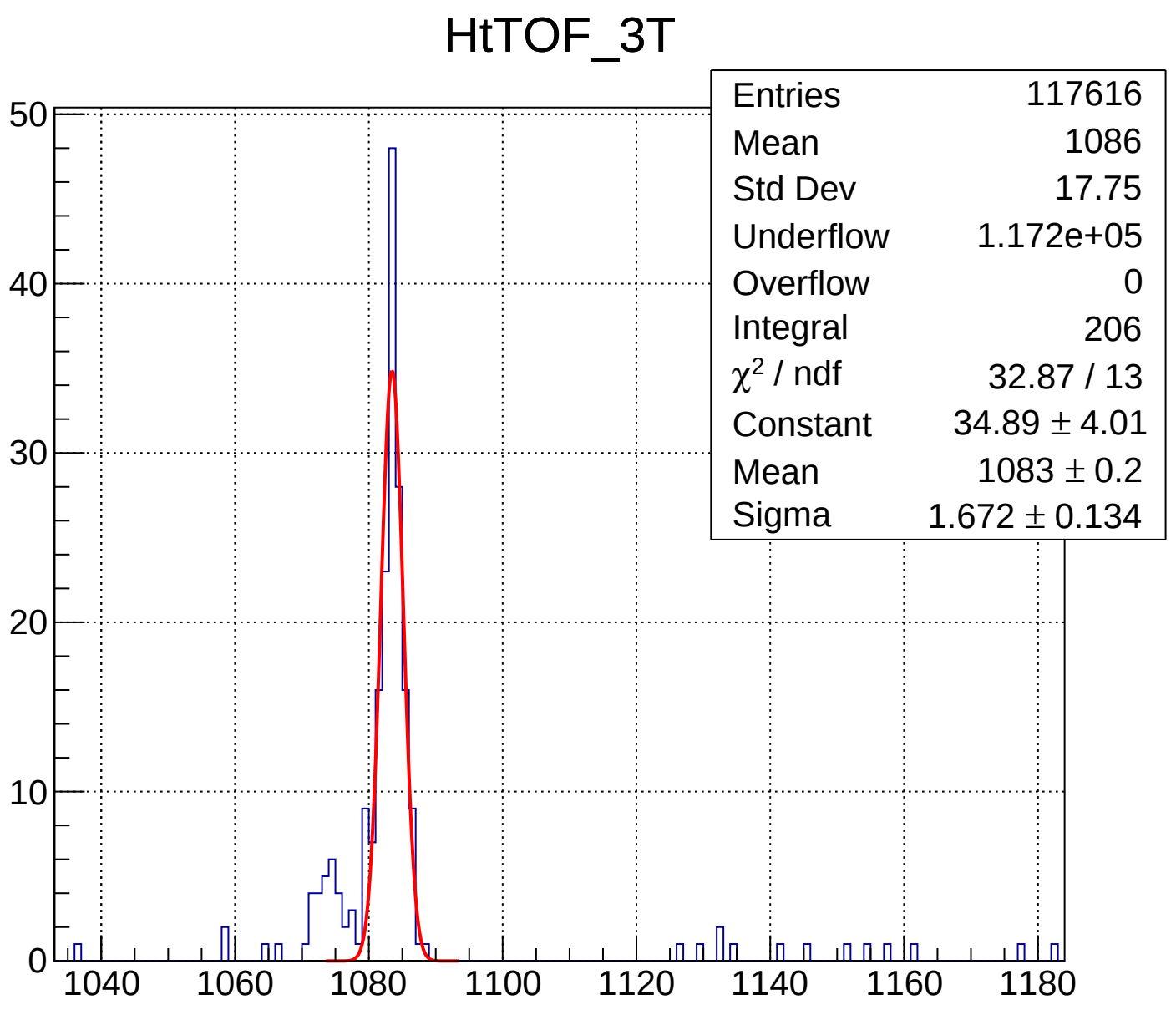

SAC_2T
Entries 235424
Mean 1060
Std Dev 18.02
Underflow 2.283e+05
Overflow 36
Integral 2589
χ² / ndf 84.3 / 18
Constant 407.9 ± 11.5
Mean 1058 ± 0.0
Sigma 2.235 ± 0.043
400
350
300
250
200
150
100
50
0
1020
1040
1060
1080
1100
1120
1140

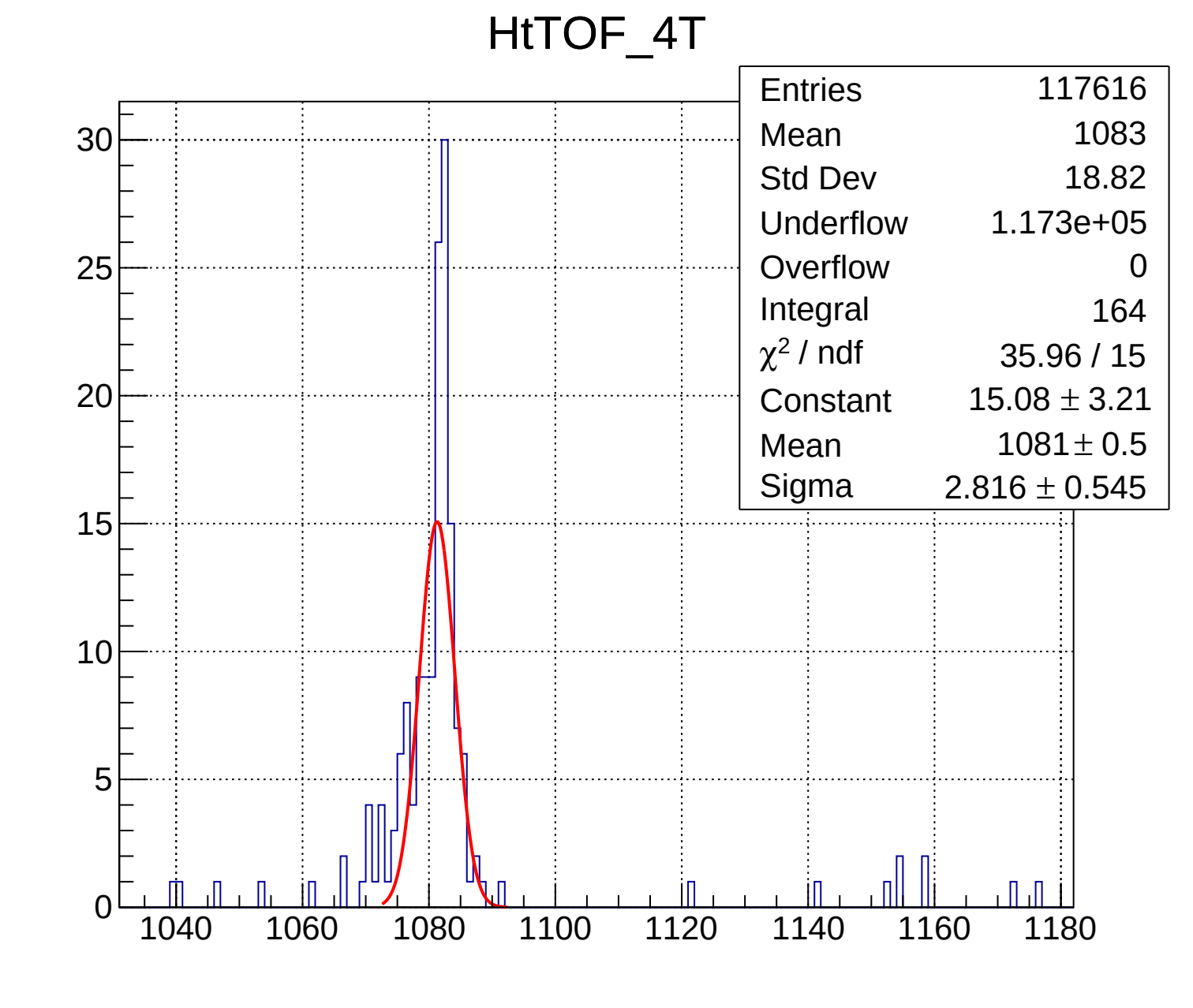

SAC_3T
Entries 235424
Mean 1064
Std Dev 18.19
Underflow 2.112e+05
Overflow 104
Integral 8789
χ² / ndf 603.4 / 18
Constant 1399 ± 23.2
Mean 1061 ± 0.0
Sigma 2.111 ± 0.025
1400
1200
1000
800
600
400
200
0
1020
1040
1060
1080
1100
1120
1140
1160

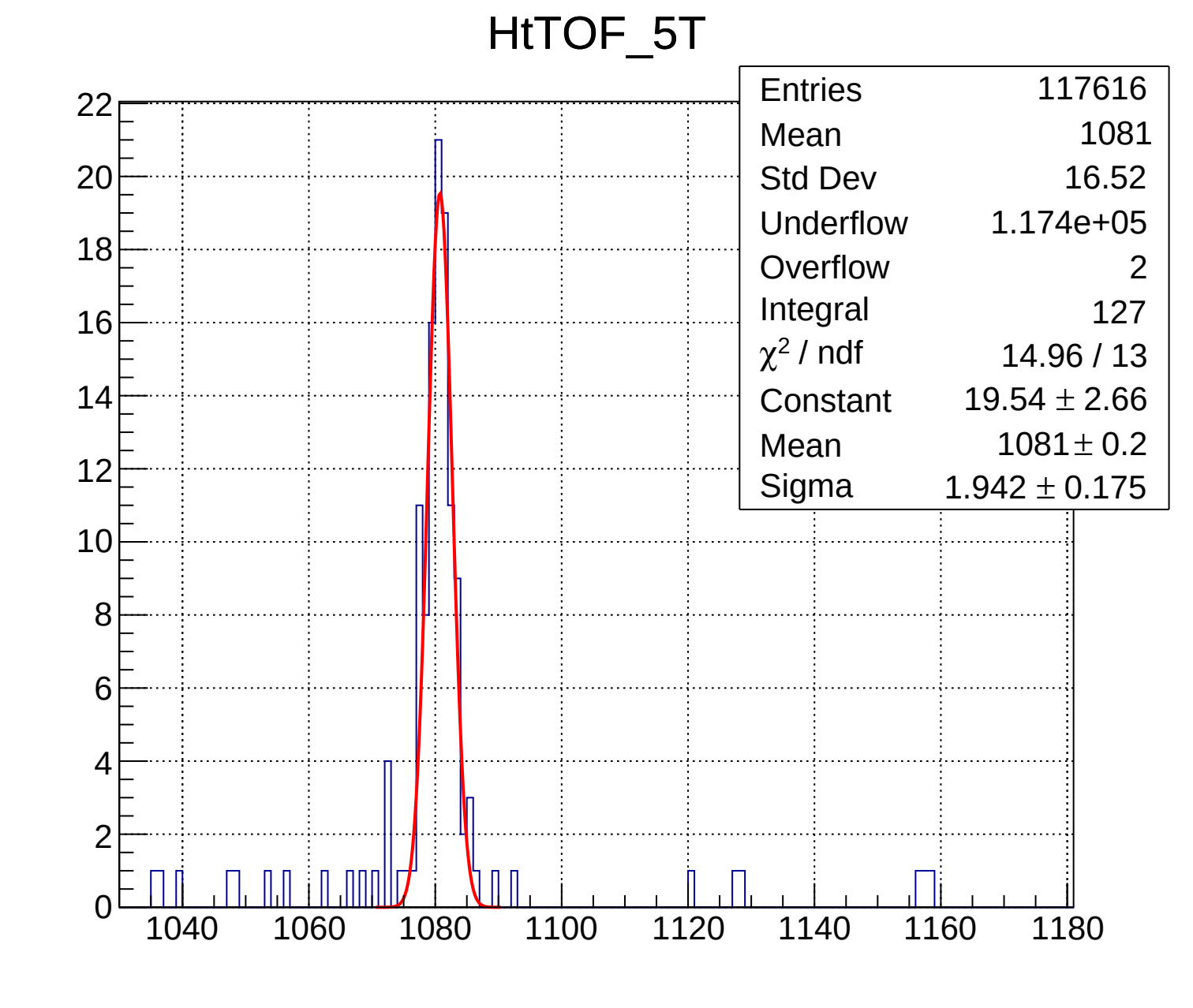

SAC_4T
Entries 235424
Mean 1062
Std Dev 20.51
Underflow 2.217e+05
Overflow 58
Integral 4376
χ² / ndf 153.9 / 18
Constant 499.9 ± 11.5
Mean 1059 ± 0.1
Sigma 2.889 ± 0.046
0
100
200
300
400
500
1020
1040
1060
1080
1100
1120
1140
1160

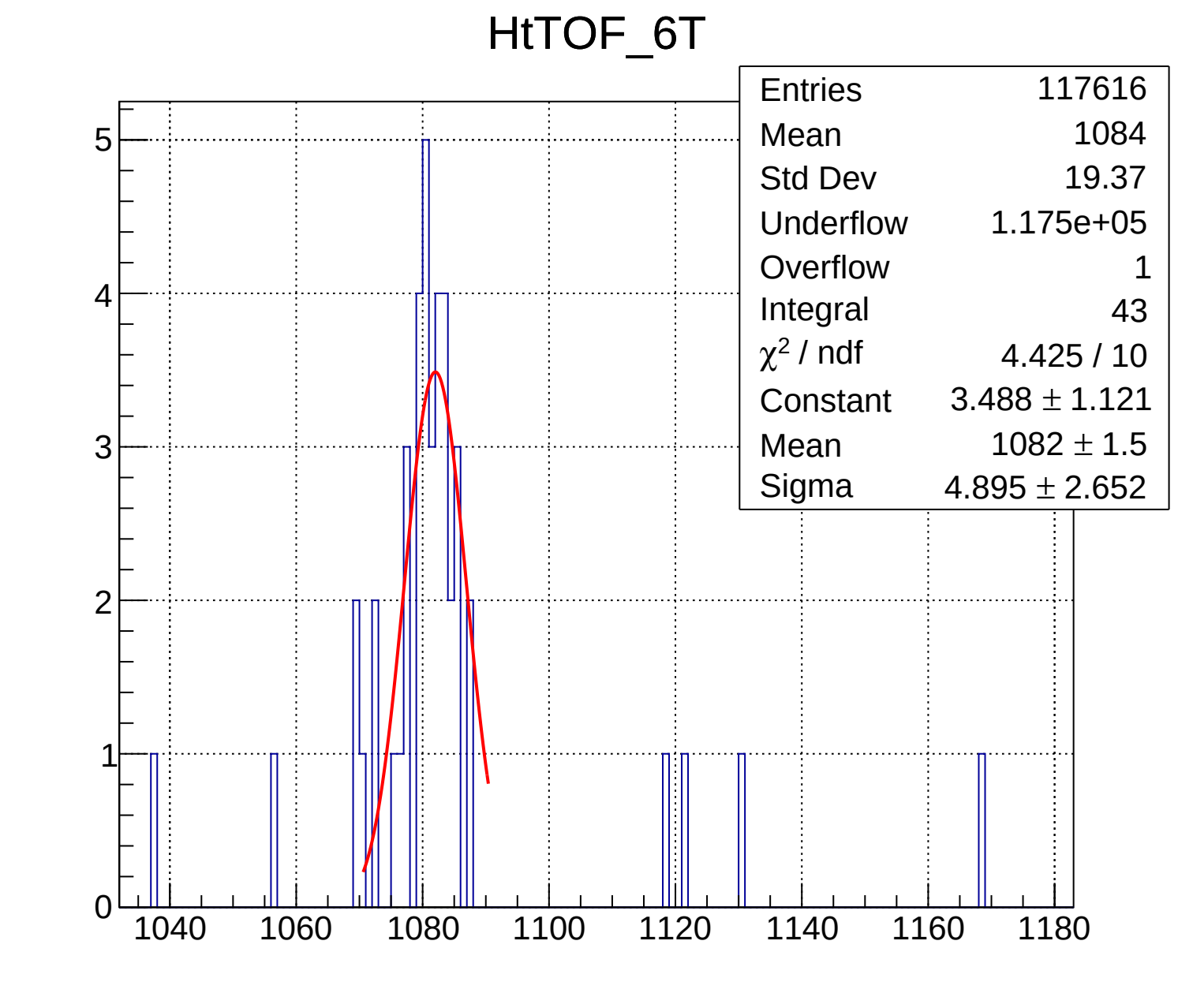

HtTOF_1T
Entries 117616
Mean 1088
Std Dev 19.58
Underflow 1.173e+05
Overflow 0
Integral 131
χ² / ndf 21.75 / 16
Constant 17.12 ± 2.60
Mean 1084 ± 0.2
Sigma 2.186 ± 0.265
0
2
4
6
8
10
12
14
16
18
1040
1060
1080
1100
1120
1140
1160
1180

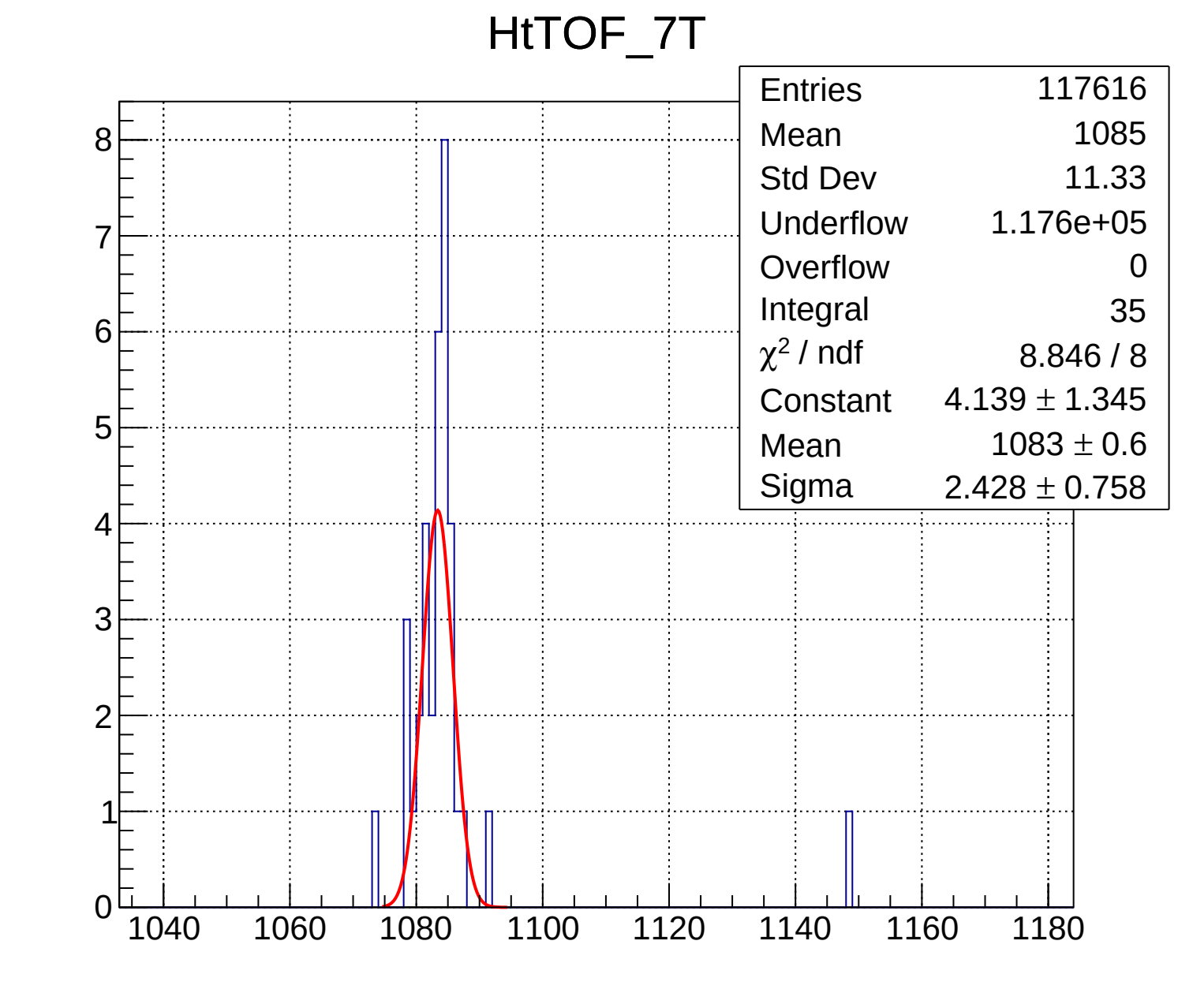

HtTOF_2T
Entries 117616
Mean 1085
Std Dev 19.16
Underflow 1.174e+05
Overflow 0
Integral 135
χ² / ndf 10.43 / 14
Constant 9.336 ± 1.358
Mean 1083 ± 0.5
Sigma 4.576 ± 0.674
0
2
4
6
8
10
12
14
1040
1060
1080
1100
1120
1140
1160
1180

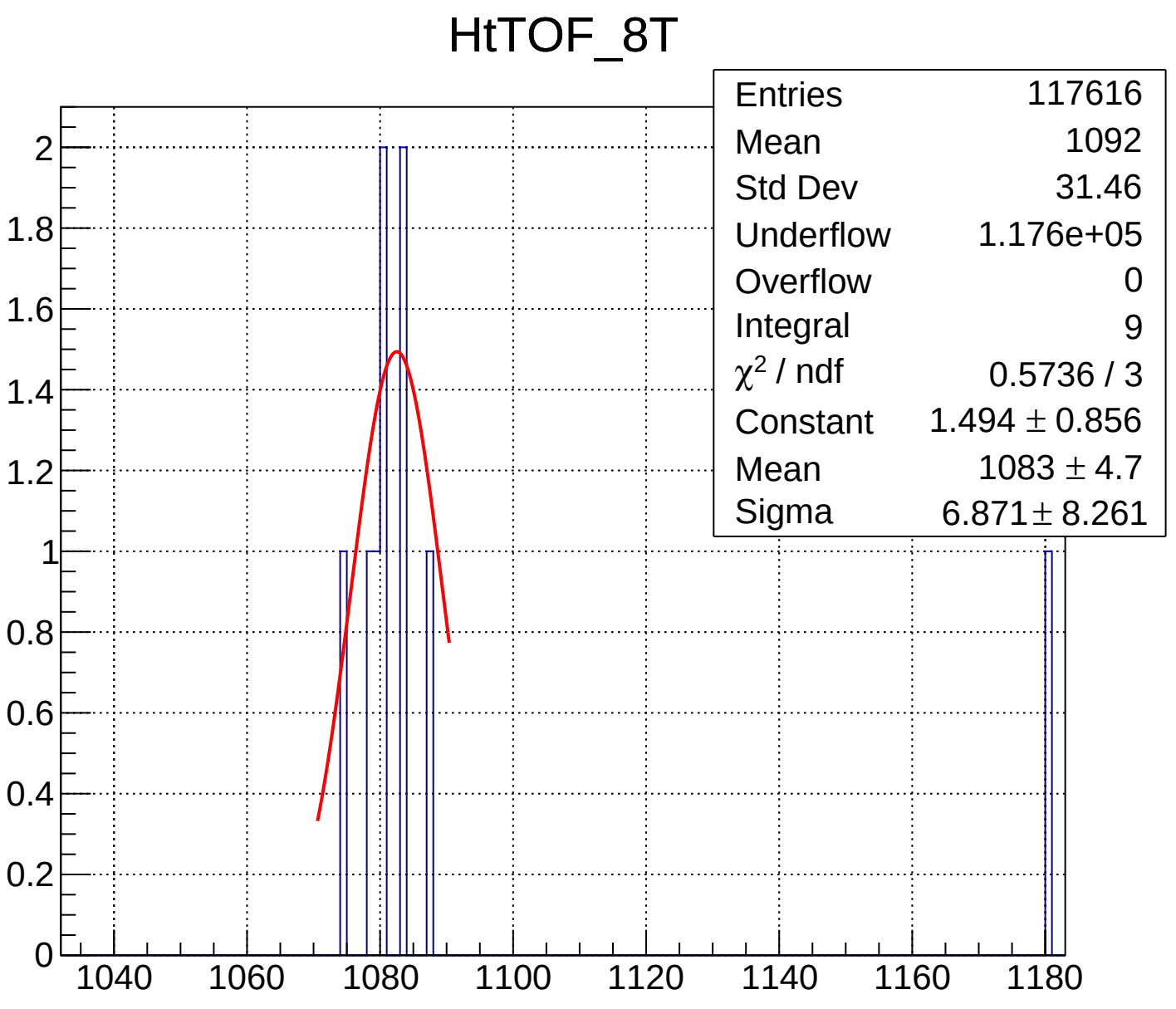

HtTOF_3T
Entries 117616
Mean 1086
Std Dev 17.75
Underflow 1.172e+05
Overflow 0
Integral 206
χ² / ndf 32.87 / 13
Constant 34.89 ± 4.01
Mean 1083 ± 0.2
Sigma 1.672 ± 0.134
50
40
30
20
10
0
1040
1060
1080
1100
1120
1140
1160
1180

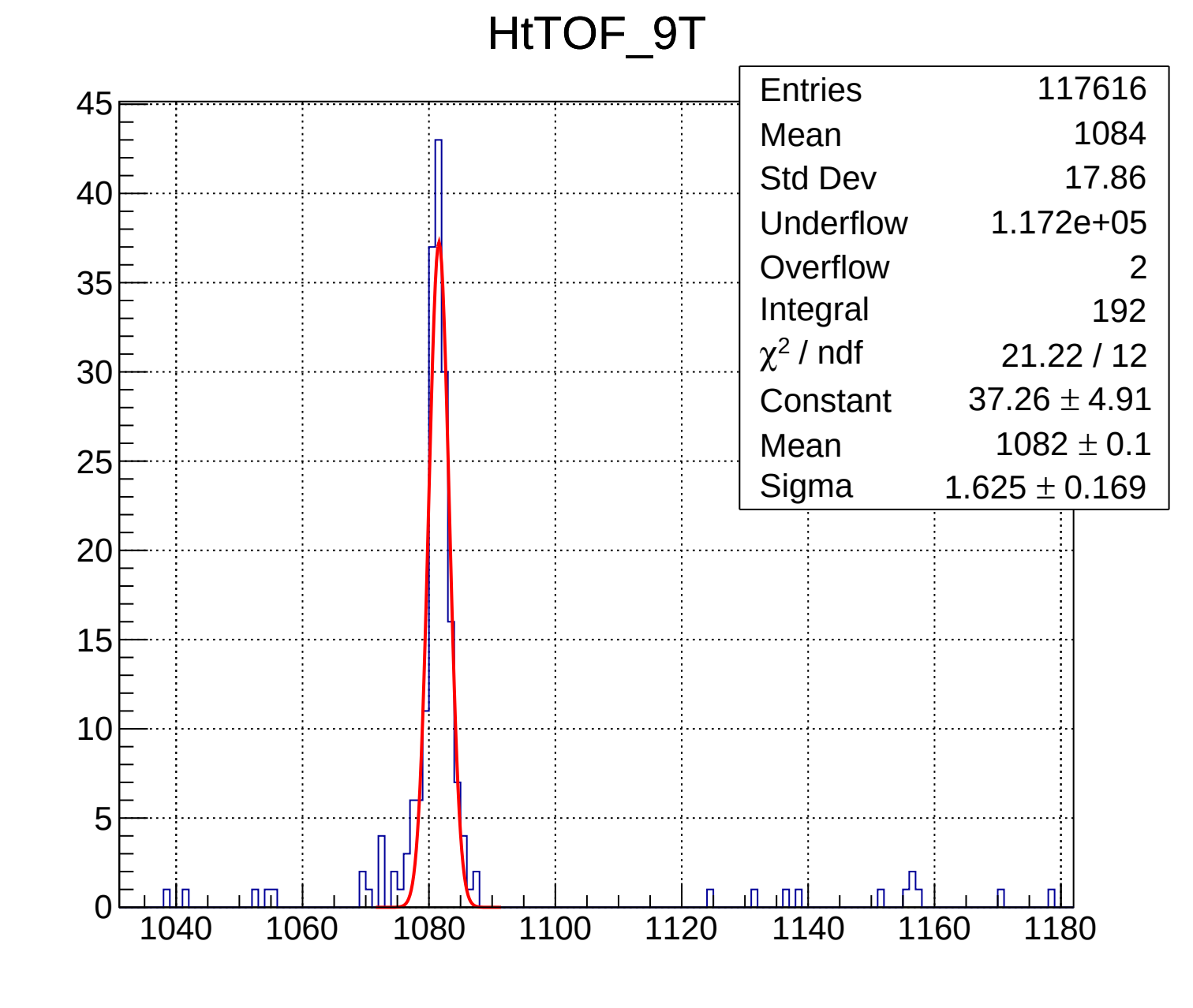

HtTOF_4T
Entries 117616
Mean 1083
Std Dev 18.82
Underflow 1.173e+05
Overflow 0
Integral 164
χ² / ndf 35.96 / 15
Constant 15.08 ± 3.21
Mean 1081 ± 0.5
Sigma 2.816 ± 0.545
0
5
10
15
20
25
30
1040
1060
1080
1100
1120
1140
1160
1180

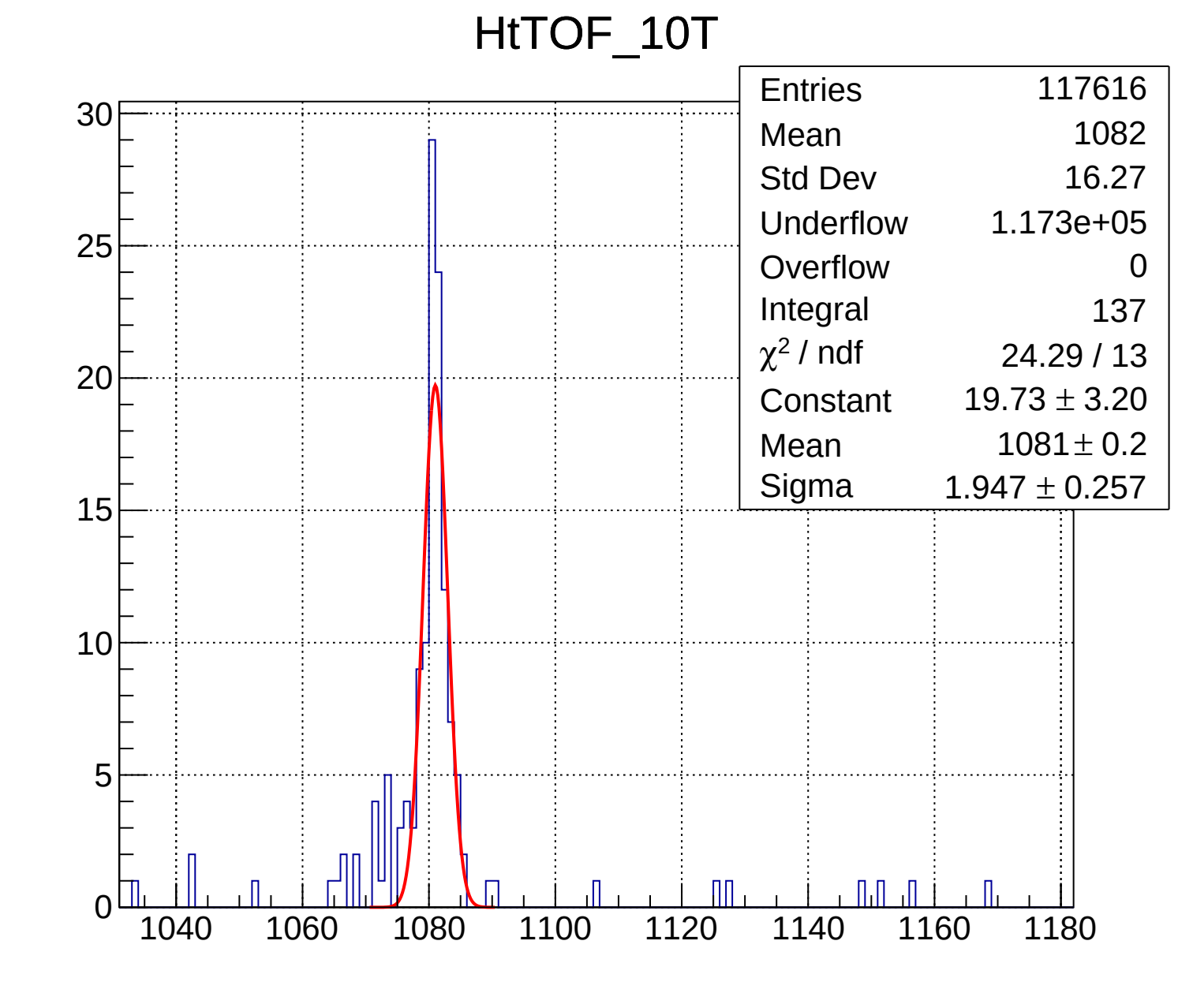

HtTOF_5T
Entries 117616
Mean 1081
Std Dev 16.52
Underflow 1.174e+05
Overflow 2
Integral 127
χ² / ndf 14.96 / 13
Constant 19.54 ± 2.66
Mean 1081 ± 0.2
Sigma 1.942 ± 0.175
0 2 4 6 8 10 12 14 16 18 20 22
1040 1060 1080 1100 1120 1140 1160 1180

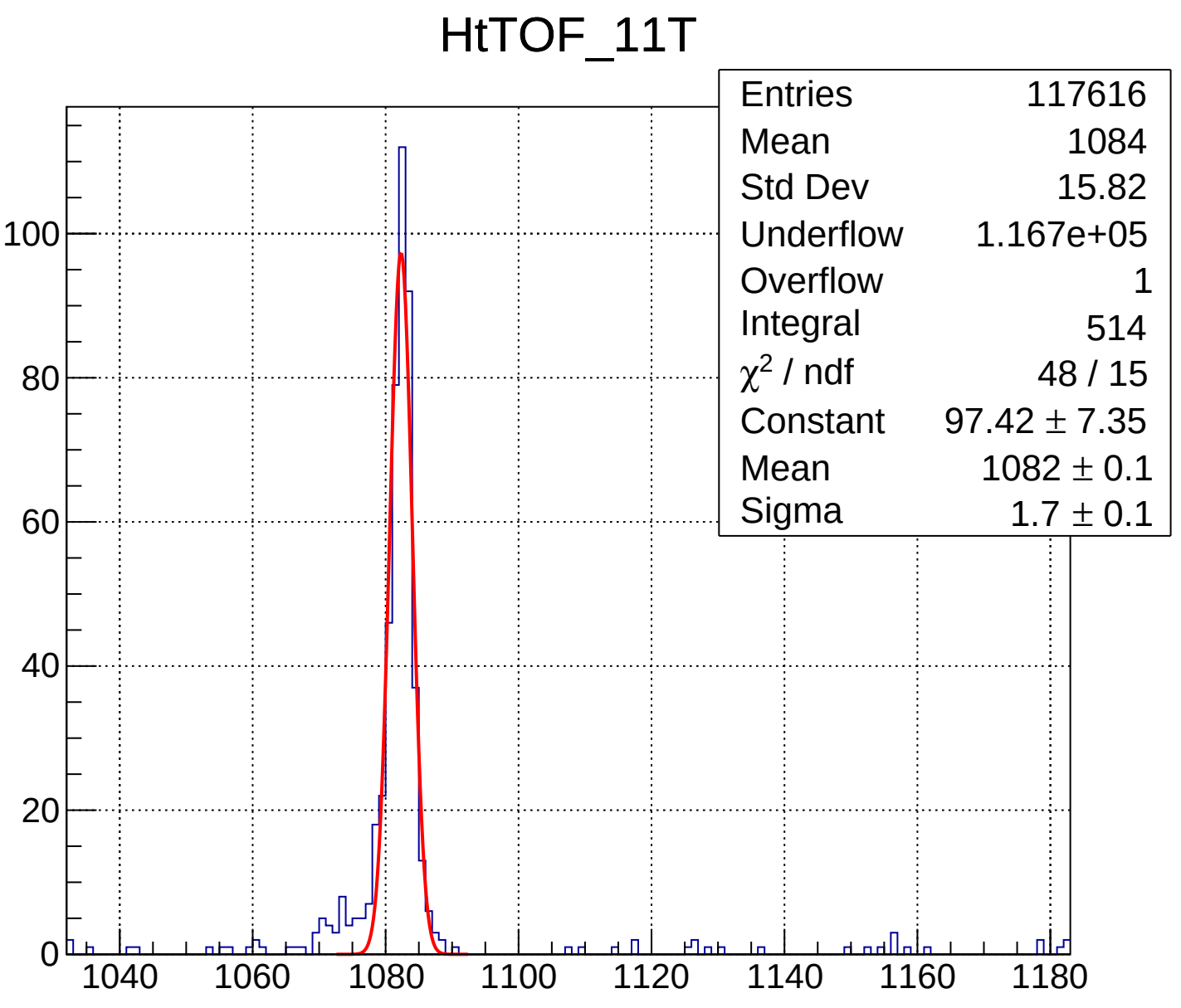

HtTOF_6T
Entries 117616
Mean 1084
Std Dev 19.37
Underflow 1.175e+05
Overflow 1
Integral 43
χ² / ndf 4.425 / 10
Constant 3.488 ± 1.121
Mean 1082 ± 1.5
Sigma 4.895 ± 2.652
0
1
2
3
4
5
1040
1060
1080
1100
1120
1140
1160
1180

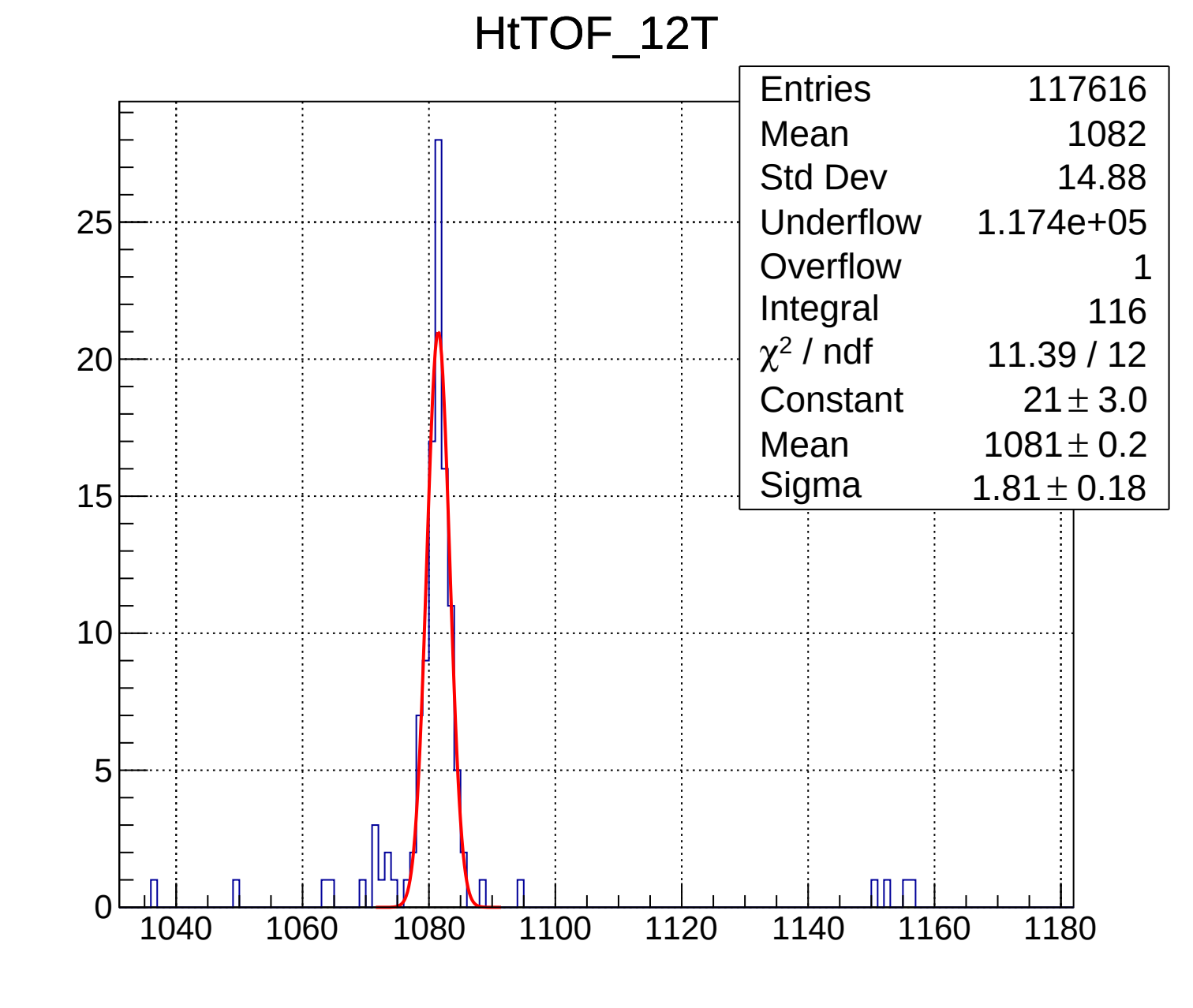

HtTOF_7T
Entries 117616
Mean 1085
Std Dev 11.33
Underflow 1.176e+05
Overflow 0
Integral 35
χ2 / ndf 8.846 / 8
Constant 4.139 ± 1.345
Mean 1083 ± 0.6
Sigma 2.428 ± 0.758
0
1
2
3
4
5
6
7
8
1040
1060
1080
1100
1120
1140
1160
1180

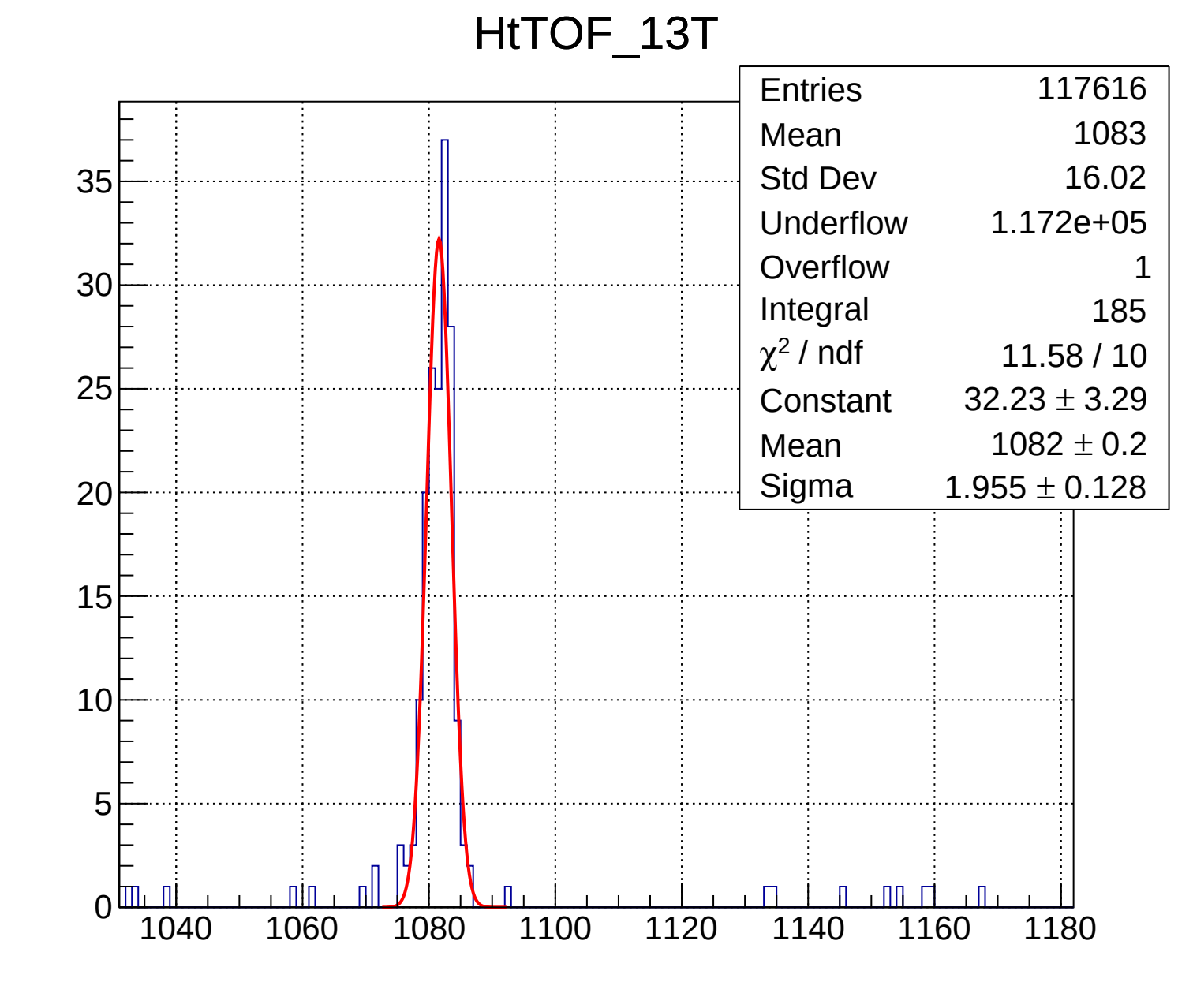

HtTOF_8T
Entries 117616
Mean 1092
Std Dev 31.46
Underflow 1.176e+05
Overflow 0
Integral 9
χ² / ndf 0.5736 / 3
Constant 1.494 ± 0.856
Mean 1083 ± 4.7
Sigma 6.871 ± 8.261
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1040
1060
1080
1100
1120
1140
1160
1180

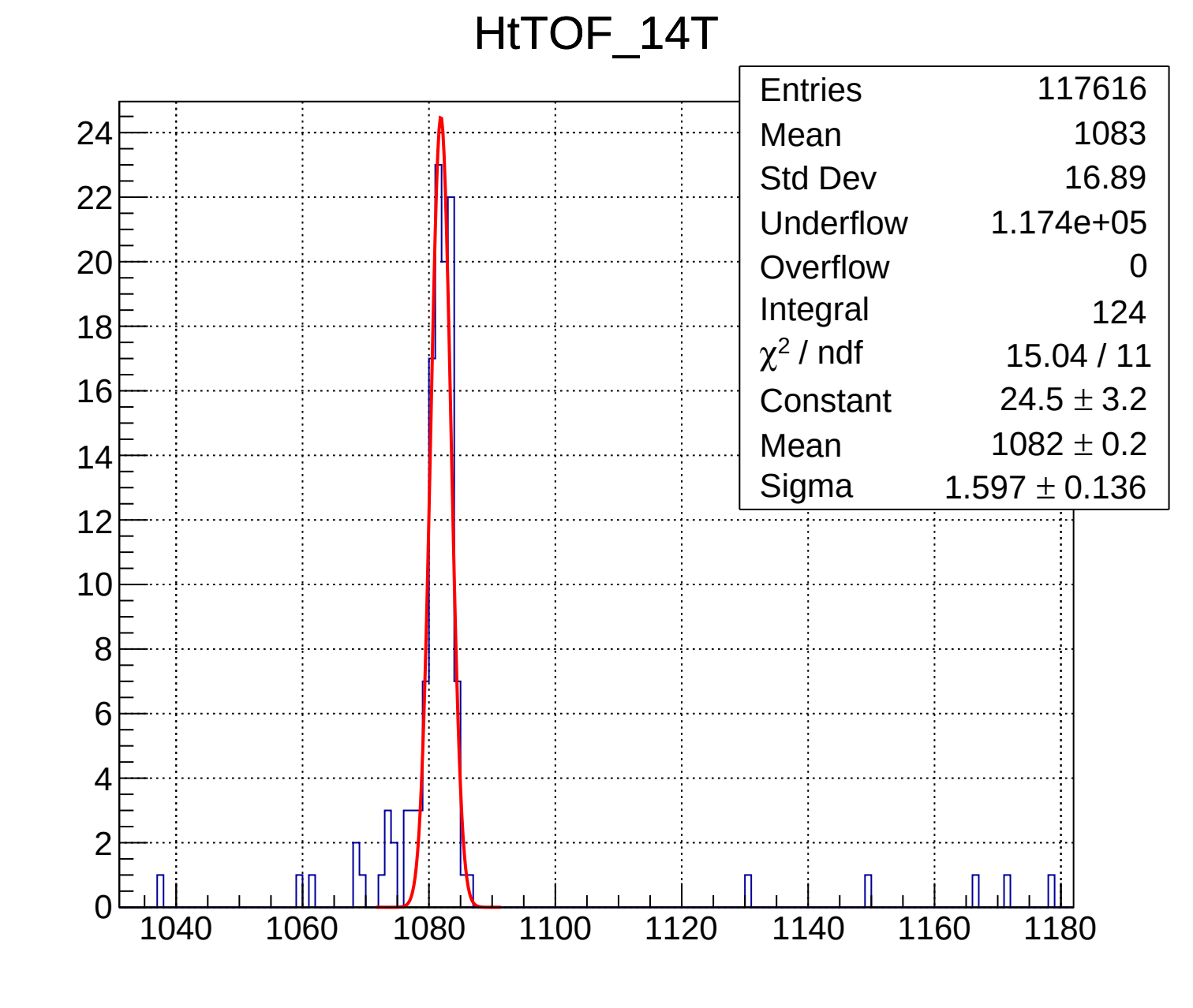

HtTOF_9T
Entries 117616
Mean 1084
Std Dev 17.86
Underflow 1.172e+05
Overflow 2
Integral 192
χ² / ndf 21.22 / 12
Constant 37.26 ± 4.91
Mean 1082 ± 0.1
Sigma 1.625 ± 0.169
45
40
35
30
25
20
15
10
5
0
1040
1060
1080
1100
1120
1140
1160
1180

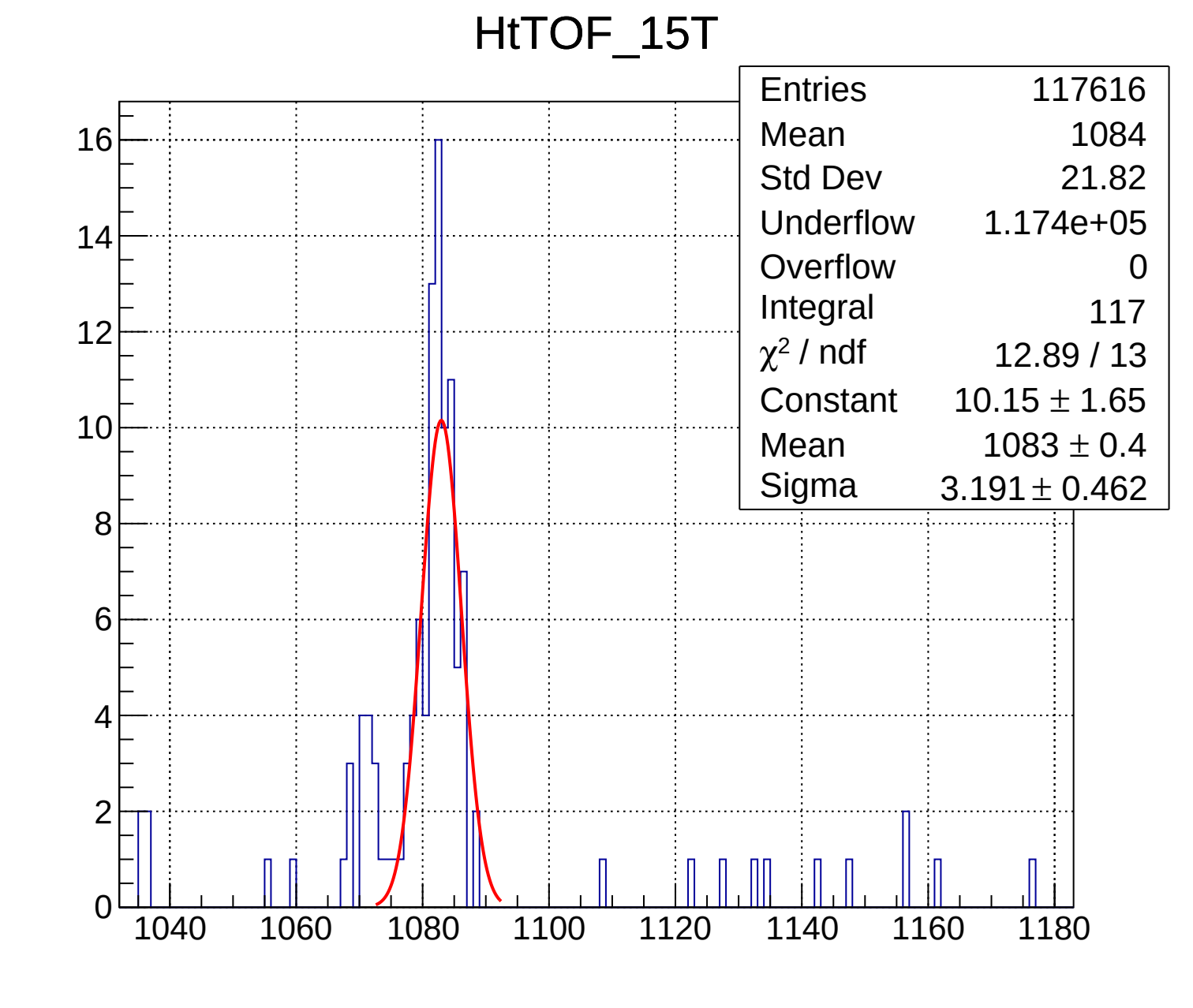

HtTOF_10T
Entries 117616
Mean 1082
Std Dev 16.27
Underflow 1.173e+05
Overflow 0
Integral 137
χ² / ndf 24.29 / 13
Constant 19.73 ± 3.20
Mean 1081 ± 0.2
Sigma 1.947 ± 0.257
30
25
20
15
10
5
0
1040
1060
1080
1100
1120
1140
1160
1180

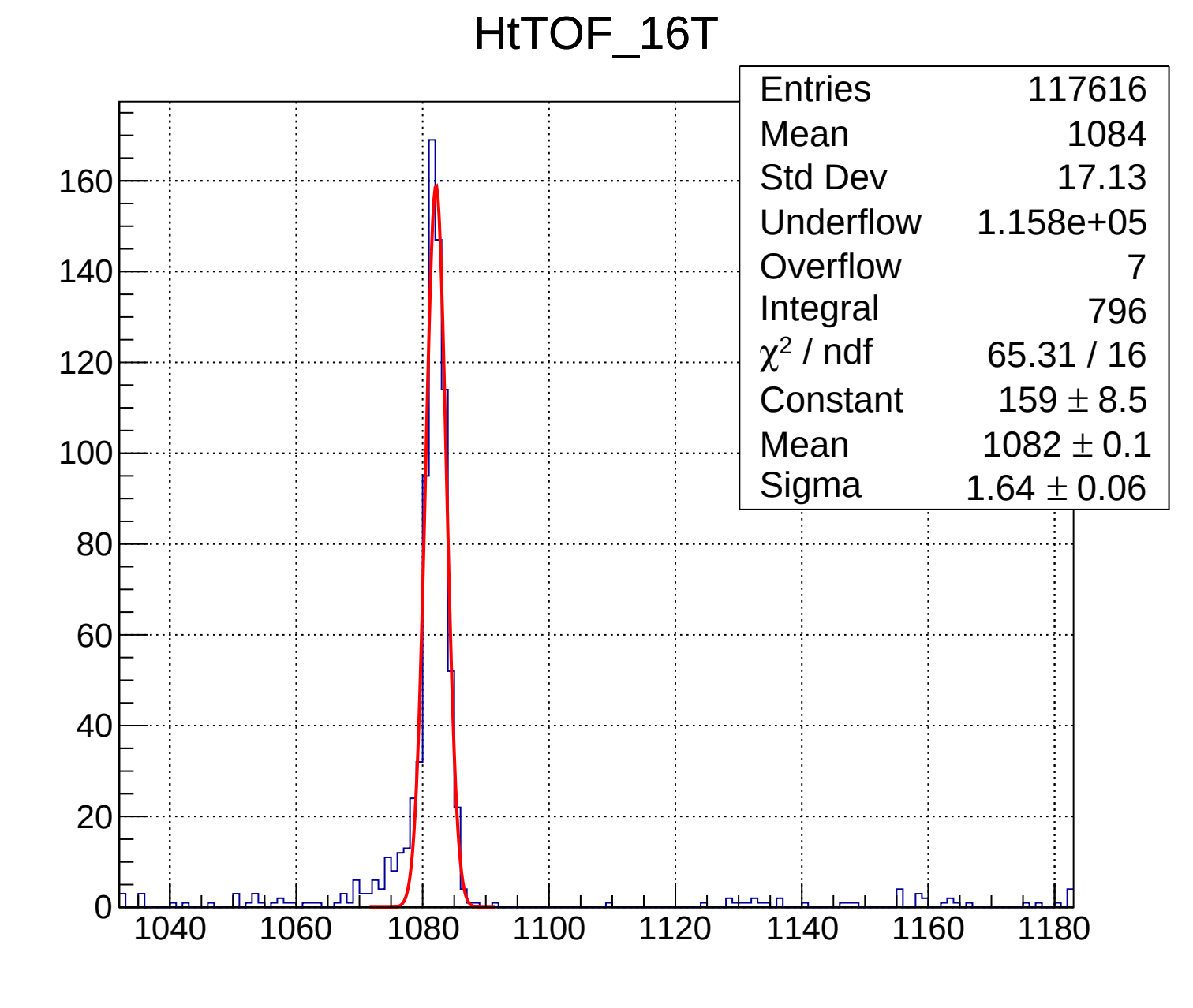

HtTOF_11T
Entries 117616
Mean 1084
Std Dev 15.82
Underflow 1.167e+05
Overflow 1
Integral 514
χ² / ndf 48 / 15
Constant 97.42 ± 7.35
Mean 1082 ± 0.1
Sigma 1.7 ± 0.1
0
20
40
60
80
100
1040
1060
1080
1100
1120
1140
1160
1180

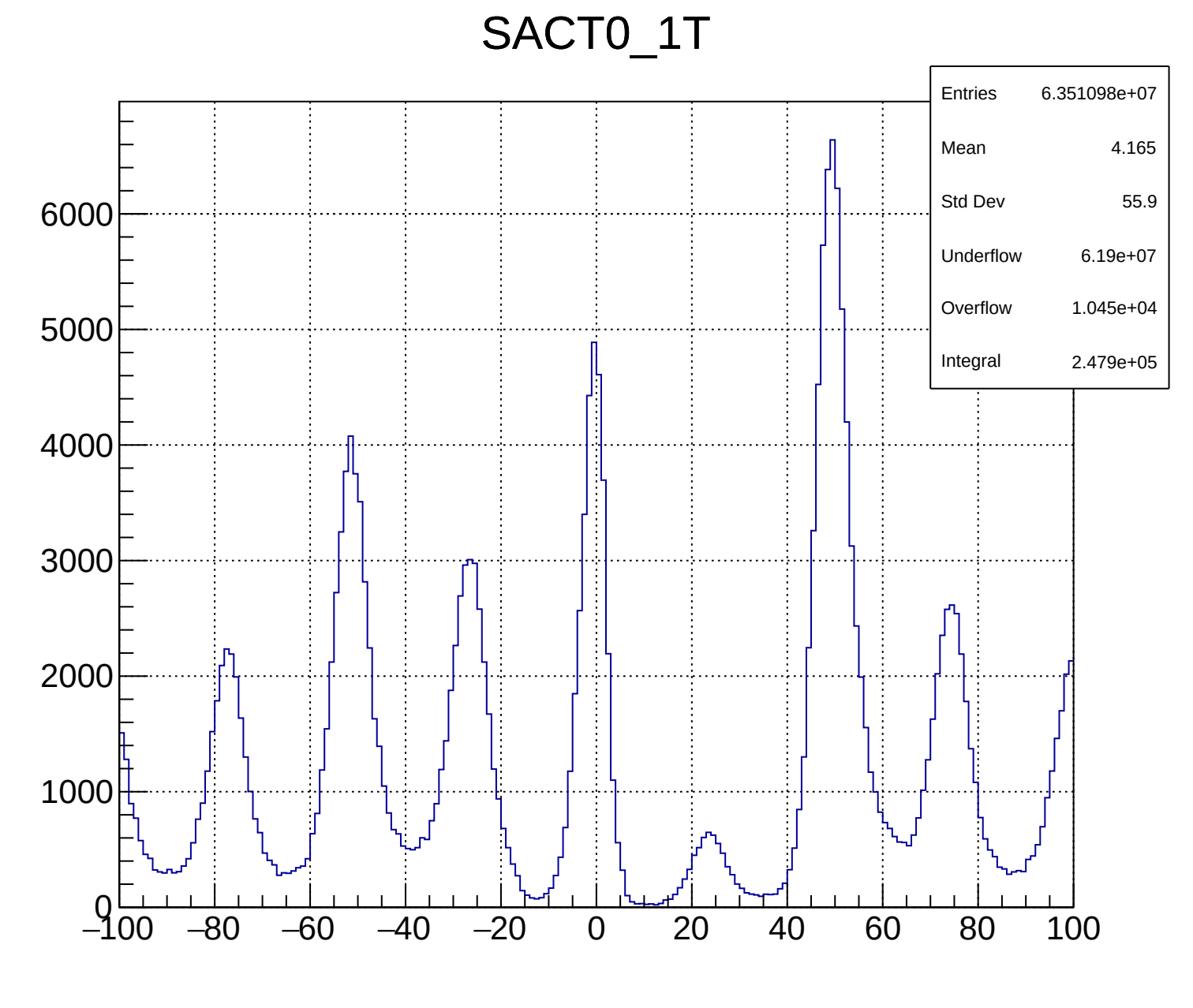

HtTOF_12T
Entries 117616
Mean 1082
Std Dev 14.88
Underflow 1.174e+05
Overflow 1
Integral 116
χ² / ndf 11.39 / 12
Constant 21 ± 3.0
Mean 1081 ± 0.2
Sigma 1.81 ± 0.18
0
5
10
15
20
25
1040
1060
1080
1100
1120
1140
1160
1180

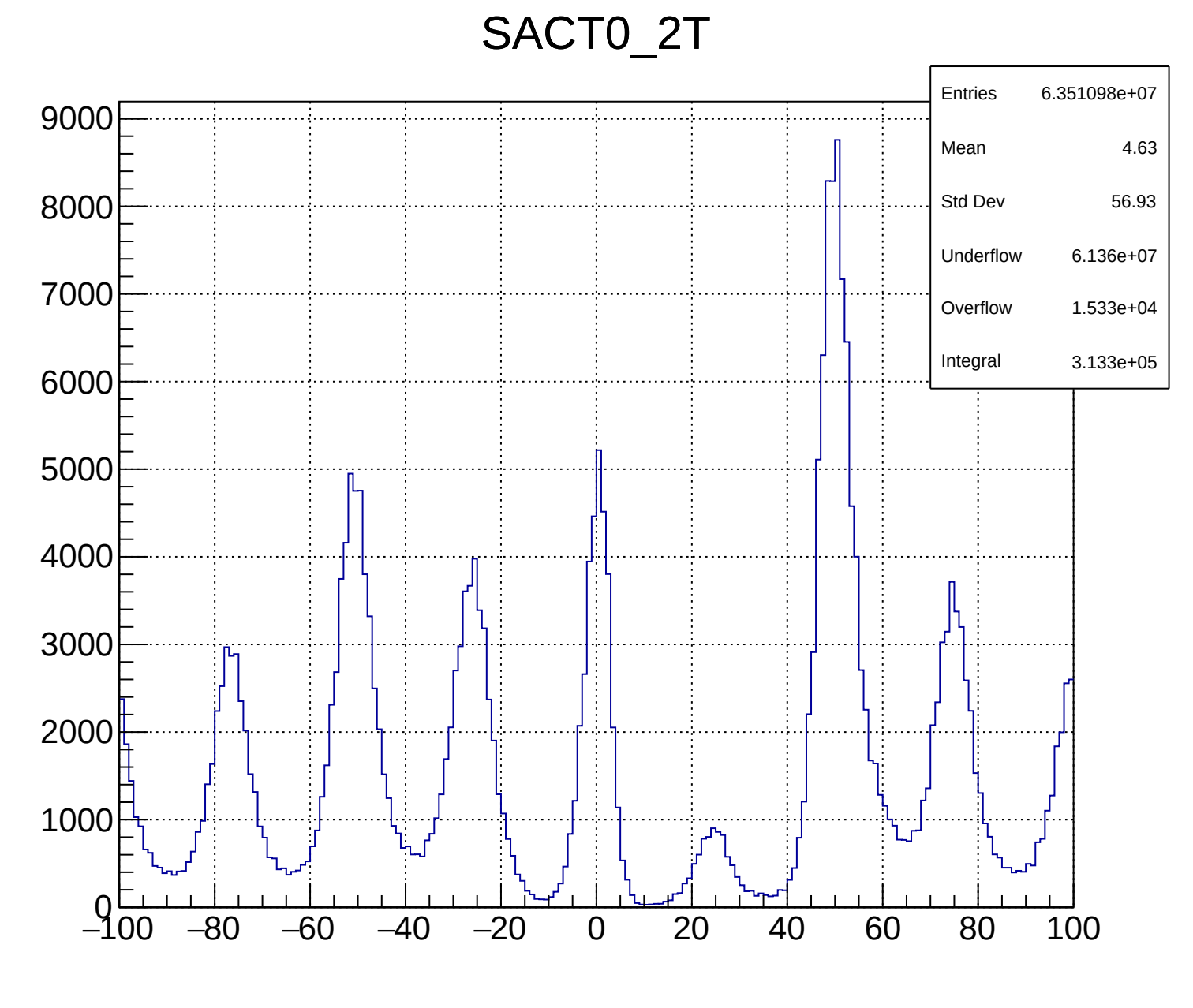

HtTOF_13T
Entries 117616
Mean 1083
Std Dev 16.02
Underflow 1.172e+05
Overflow 1
Integral 185
χ2 / ndf 11.58 / 10
Constant 32.23 ± 3.29
Mean 1082 ± 0.2
Sigma 1.955 ± 0.128
0
5
10
15
20
25
30
35
1040
1060
1080
1100
1120
1140
1160
1180

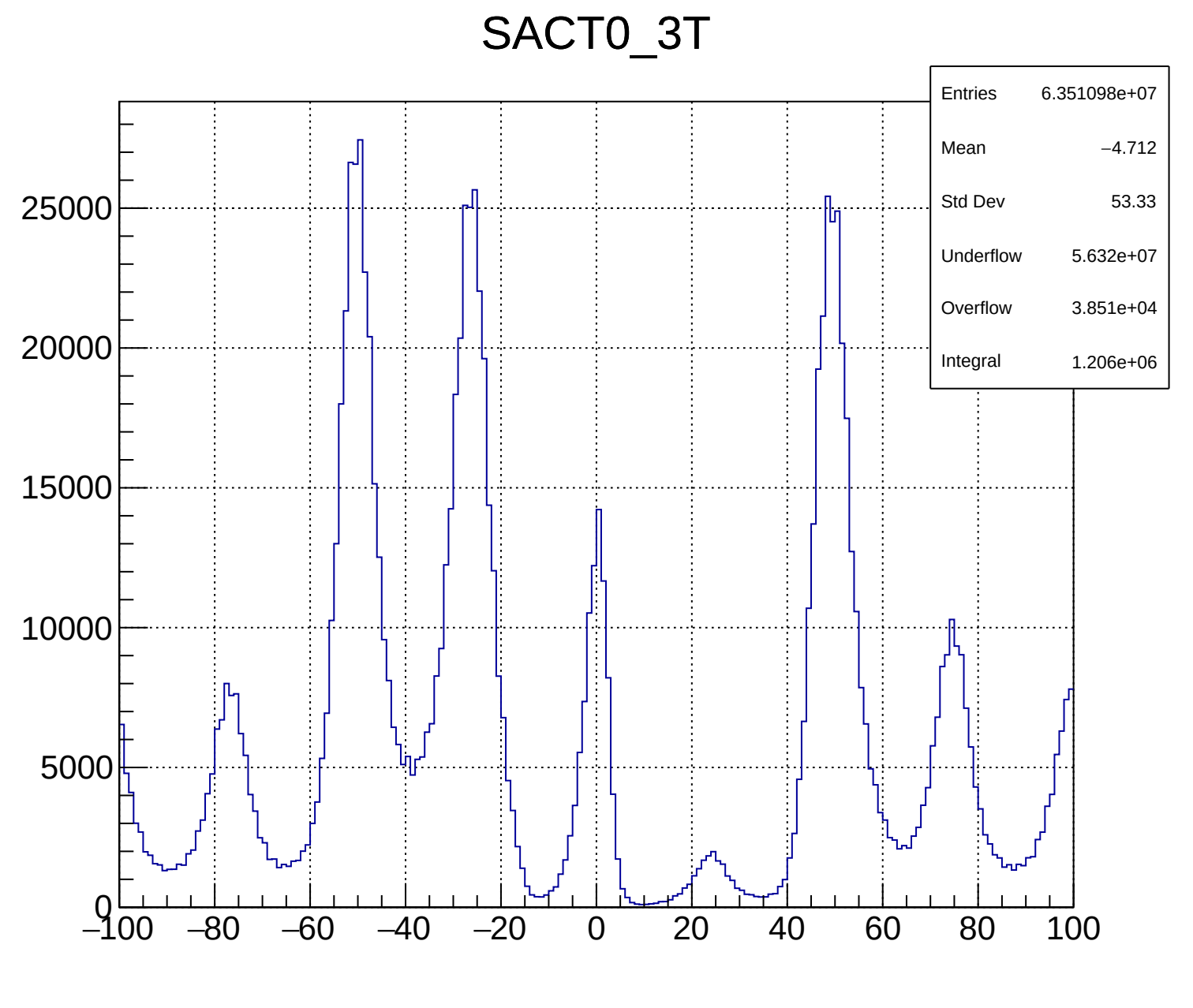

HtTOF_14T
Entries 117616
Mean 1083
Std Dev 16.89
Underflow 1.174e+05
Overflow 0
Integral 124
χ2 / ndf 15.04 / 11
Constant 24.5 ± 3.2
Mean 1082 ± 0.2
Sigma 1.597 ± 0.136
0 2 4 6 8 10 12 14 16 18 20 22 24
1040 1060 1080 1100 1120 1140 1160 1180

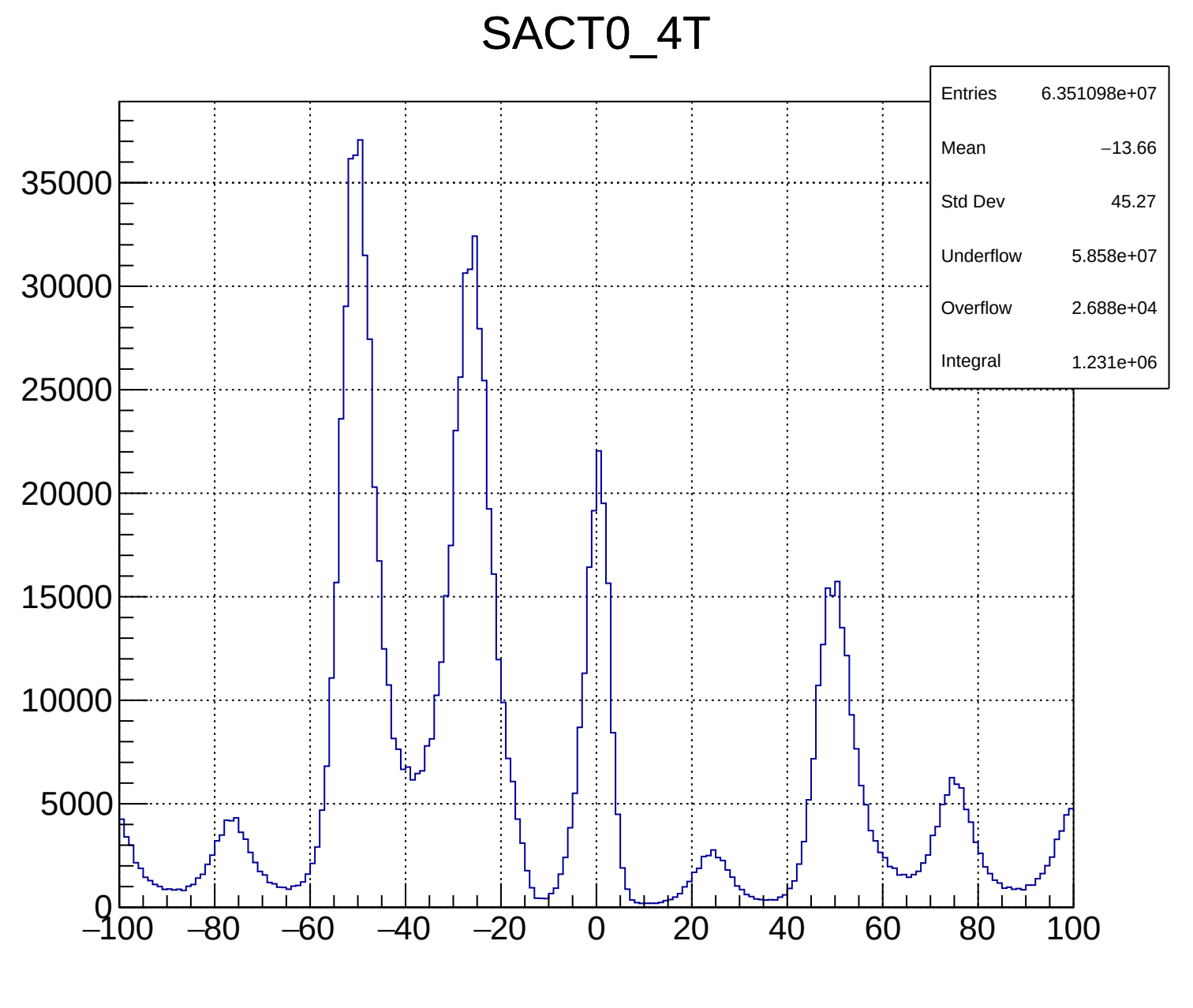

HtTOF_15T
Entries 117616
Mean 1084
Std Dev 21.82
Underflow 1.174e+05
Overflow 0
Integral 117
χ² / ndf 12.89 / 13
Constant 10.15 ± 1.65
Mean 1083 ± 0.4
Sigma 3.191 ± 0.462
0
2
4
6
8
10
12
14
16
1040
1060
1080
1100
1120
1140
1160
1180

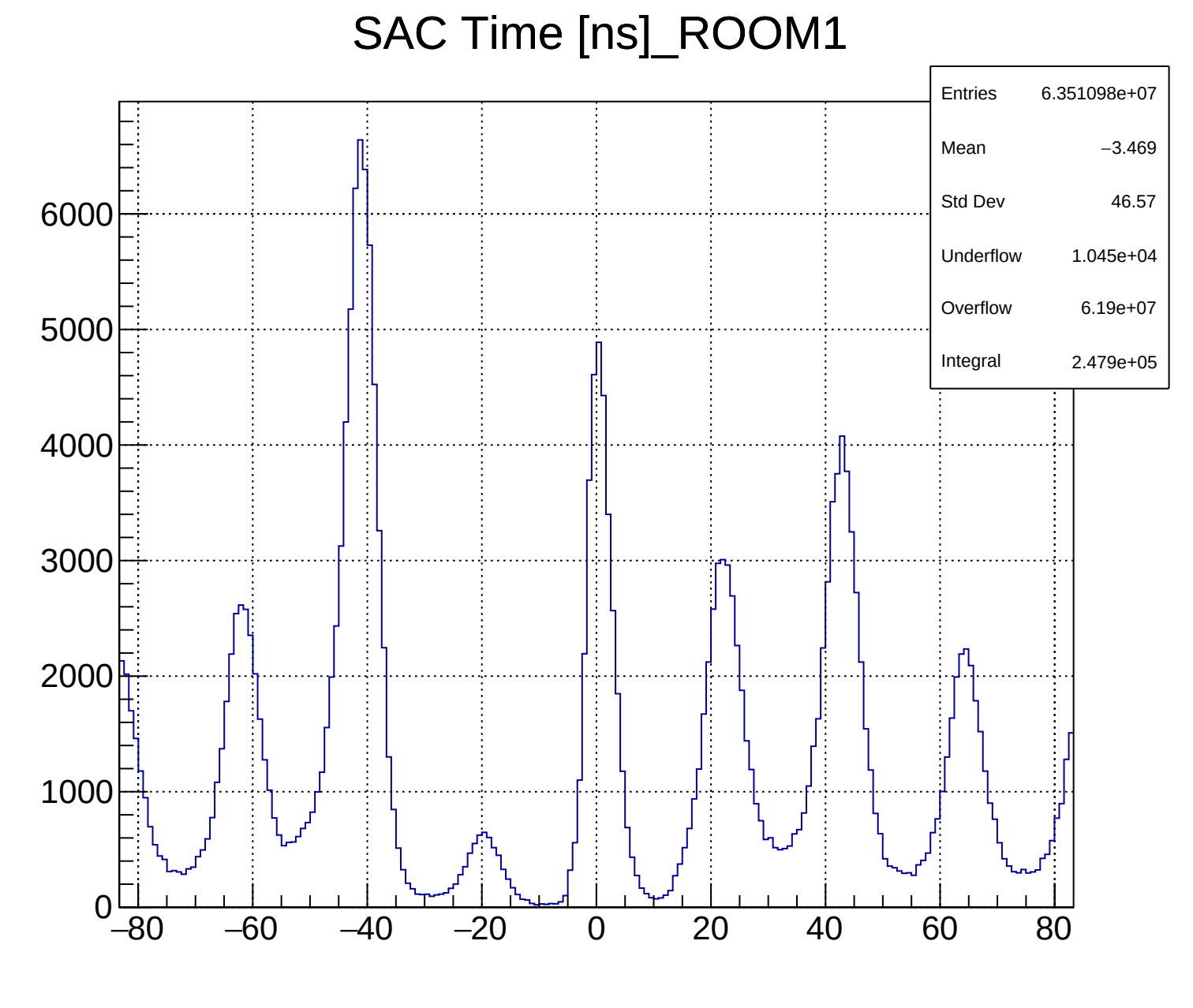

HtTOF_16T
Entries 117616
Mean 1084
Std Dev 17.13
Underflow 1.158e+05
Overflow 7
Integral 796
χ² / ndf 65.31 / 16
Constant 159 ± 8.5
Mean 1082 ± 0.1
Sigma 1.64 ± 0.06
0
20
40
60
80
100
120
140
160
1040
1060
1080
1100
1120
1140
1160
1180

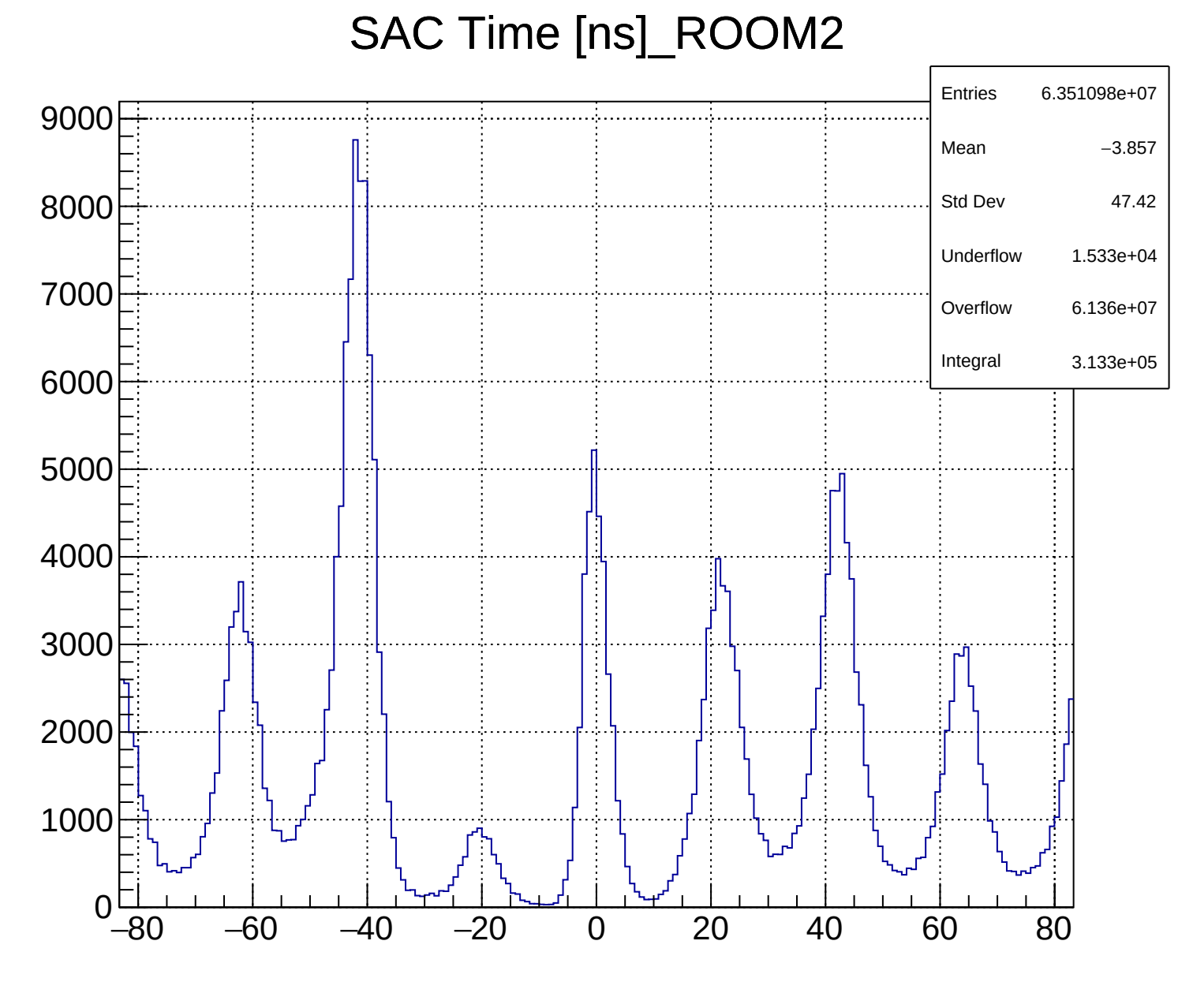

SACT0_1T
Entries 6.351098e+07
Mean 4.165
Std Dev 55.9
Underflow 6.19e+07
Overflow 1.045e+04
Integral 2.479e+05
6000
5000
4000
3000
2000
1000
0
–100
–80
–60
–40
–20
0
20
40
60
80
100

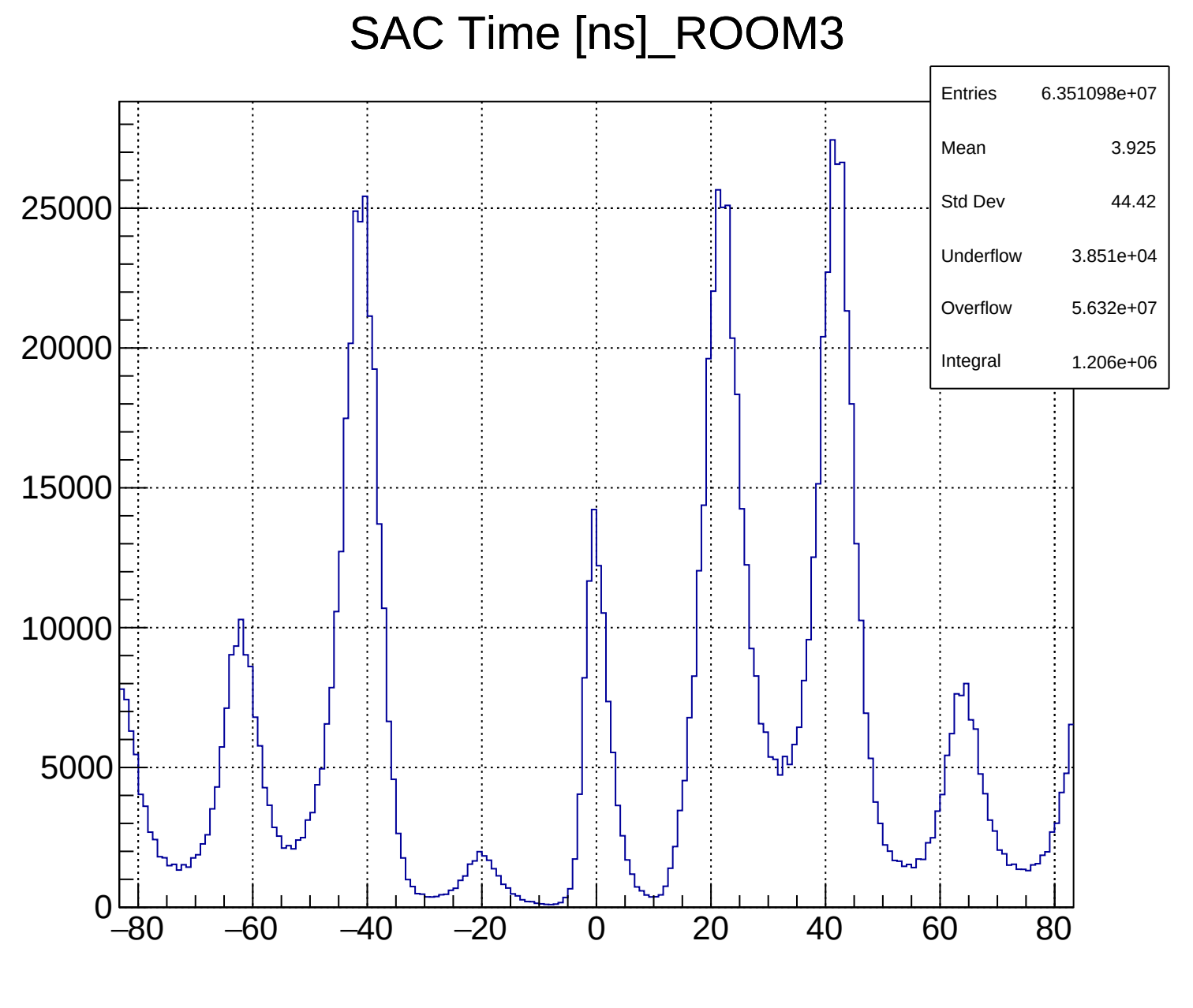

SACT0_2T
Entries 6.351098e+07
Mean 4.63
Std Dev 56.93
Underflow 6.136e+07
Overflow 1.533e+04
Integral 3.133e+05
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
–100
–80
–60
–40
–20
0
20
40
60
80
100

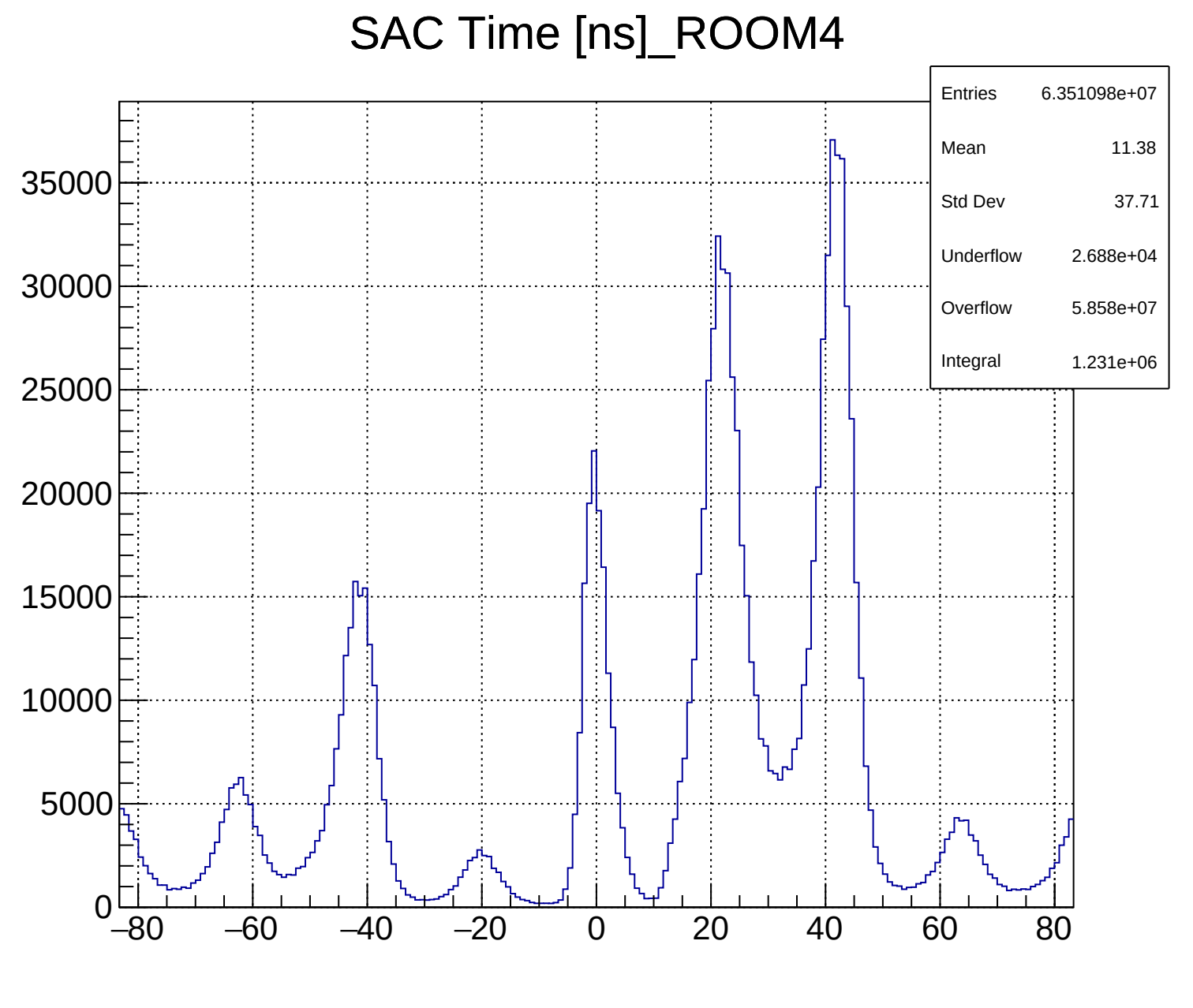

SACT0_3T
Entries 6.351098e+07
Mean −4.712
Std Dev 53.33
Underflow 5.632e+07
Overflow 3.851e+04
Integral 1.206e+06
25000
20000
15000
10000
5000
0
−100
−80
−60
−40
−20
0
20
40
60
80
100

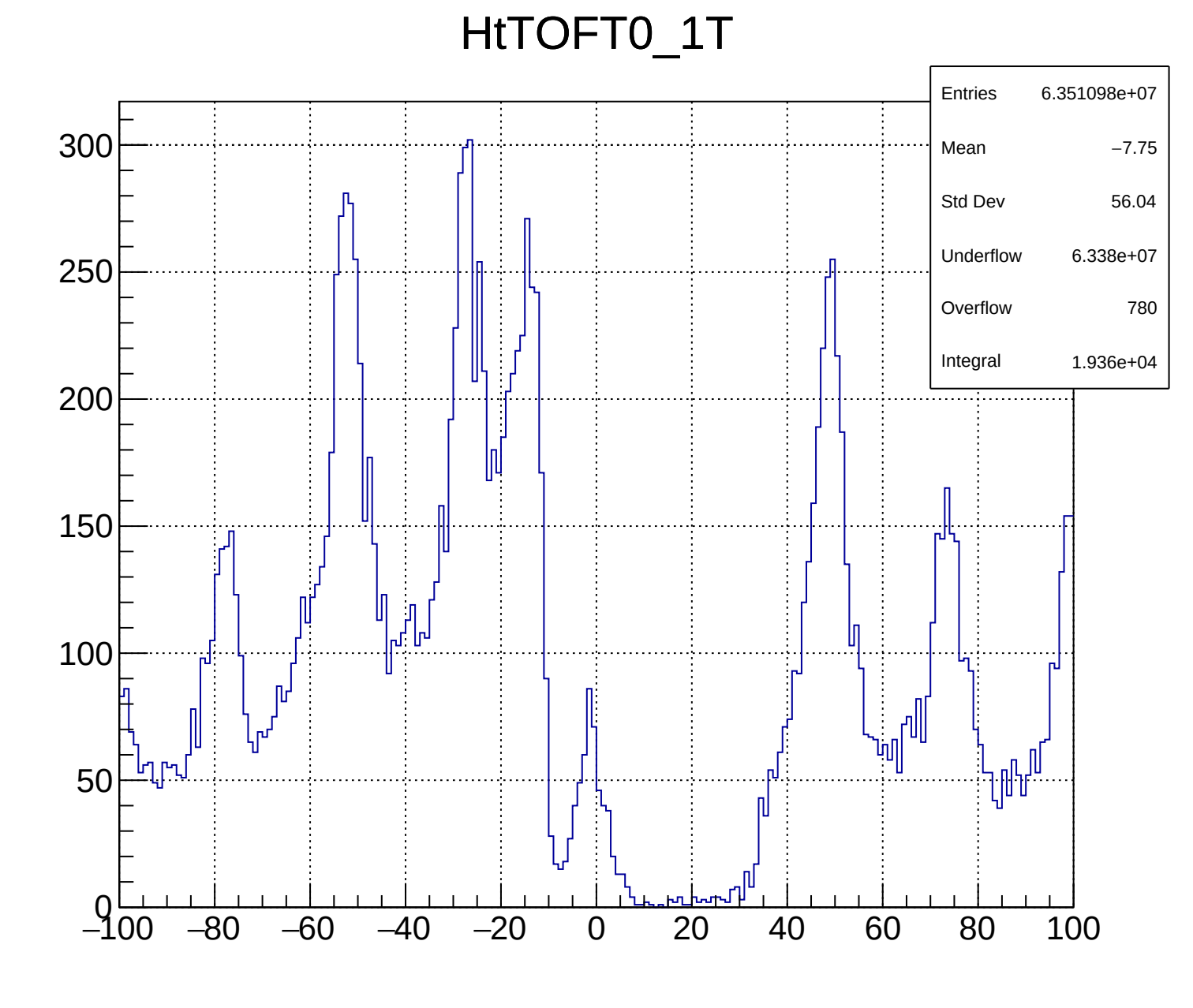

SACT0_4T
Entries 6.351098e+07
Mean −13.66
Std Dev 45.27
Underflow 5.858e+07
Overflow 2.688e+04
Integral 1.231e+06
35000
30000
25000
20000
15000
10000
5000
0
−100
−80
−60
−40
−20
0
20
40
60
80
100


SAC Time [ns]_ROOM1
Entries 6.351098e+07
Mean −3.469
Std Dev 46.57
Underflow 1.045e+04
Overflow 6.19e+07
Integral 2.479e+05
6000
5000
4000
3000
2000
1000
0
−80
−60
−40
−20
0
20
40
60
80


SAC Time [ns]_ROOM2
Entries 6.351098e+07
Mean −3.857
Std Dev 47.42
Underflow 1.533e+04
Overflow 6.136e+07
Integral 3.133e+05
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
−80
−60
−40
−20
0
20
40
60
80


SAC Time [ns]_ROOM3
Entries 6.351098e+07
Mean 3.925
Std Dev 44.42
Underflow 3.851e+04
Overflow 5.632e+07
Integral 1.206e+06
25000
20000
15000
10000
5000
0
–80
–60
–40
–20
0
20
40
60
80


SAC Time [ns]_ROOM4
Entries 6.351098e+07
Mean 11.38
Std Dev 37.71
Underflow 2.688e+04
Overflow 5.858e+07
Integral 1.231e+06
35000
30000
25000
20000
15000
10000
5000
0
–80
–60
–40
–20
0
20
40
60
80


HtTOFT0_1T
Entries 6.351098e+07
Mean −7.75
Std Dev 56.04
Underflow 6.338e+07
Overflow 780
Integral 1.936e+04
300
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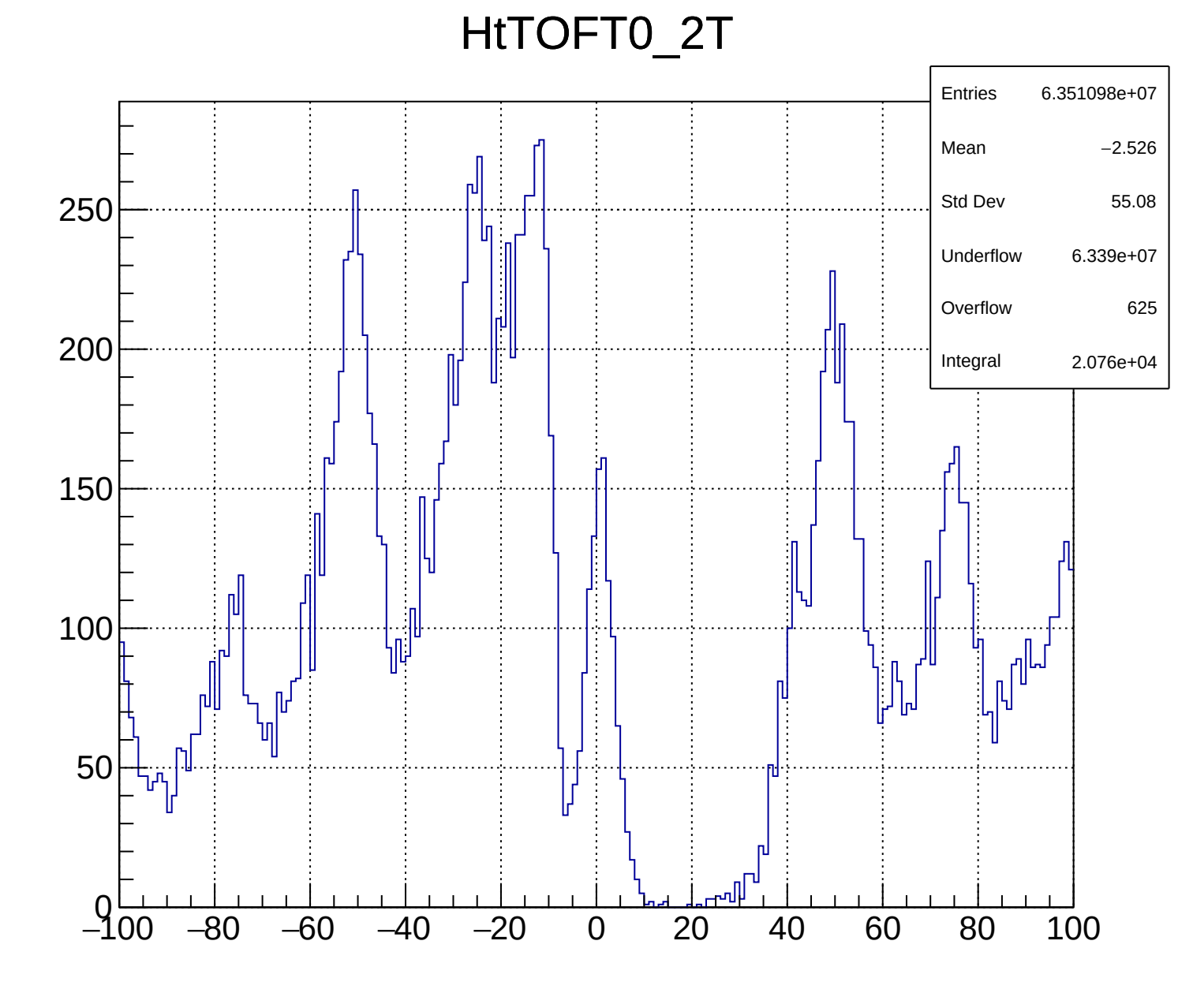
HtTOFT0_2T
Entries 6.351098e+07
Mean −2.526
Std Dev 55.08
Underflow 6.339e+07
Overflow 625
Integral 2.076e+04
250
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100
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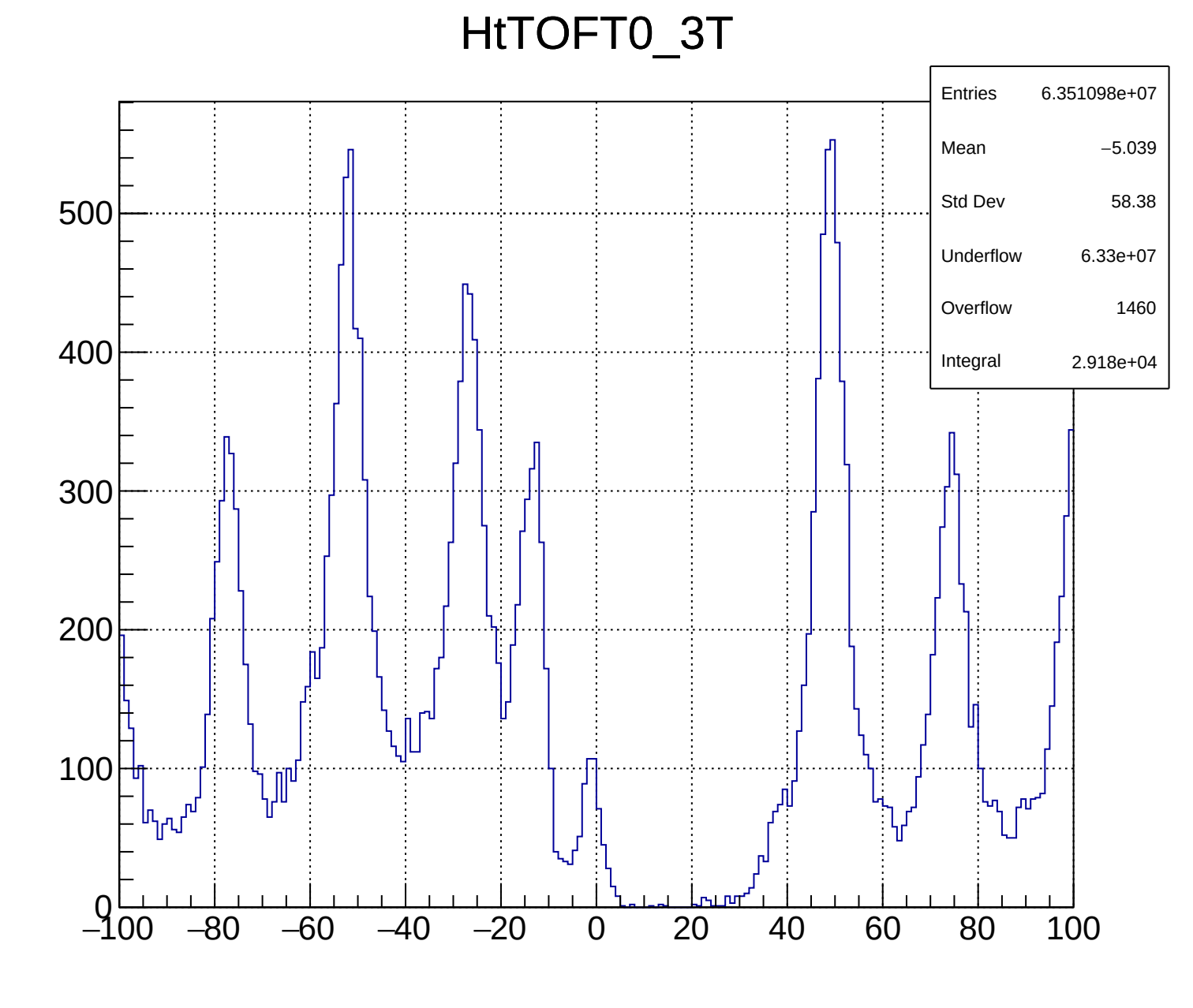
HtTOFT0_3T
Entries 6.351098e+07
Mean −5.039
Std Dev 58.38
Underflow 6.33e+07
Overflow 1460
Integral 2.918e+04
500
400
300
200
100
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−100
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−40
−20
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80
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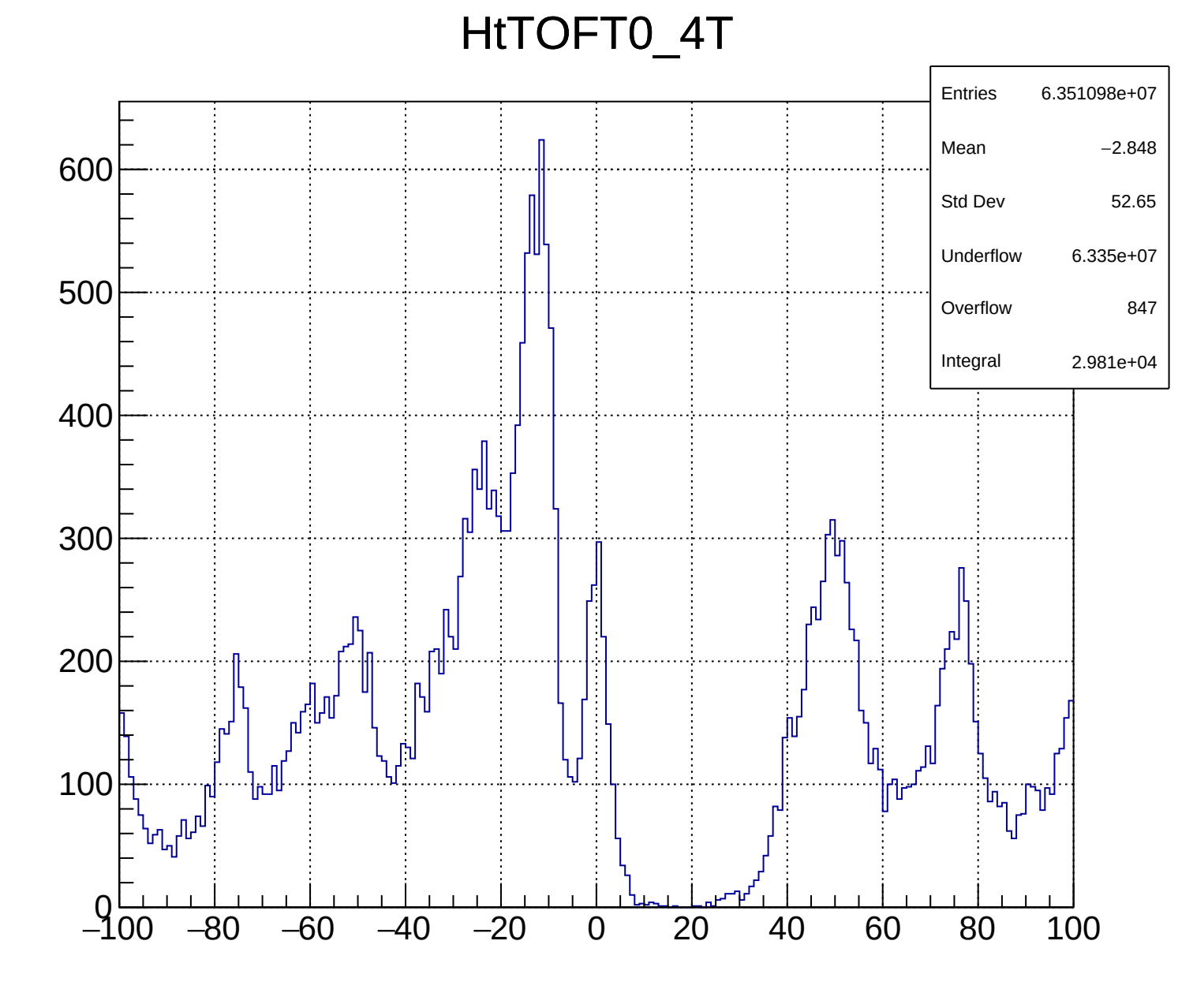
HtTOFT0_4T
Entries 6.351098e+07
Mean −2.848
Std Dev 52.65
Underflow 6.335e+07
Overflow 847
Integral 2.981e+04
600
500
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300
200
100
0
−100
−80
−60
−40
−20
0
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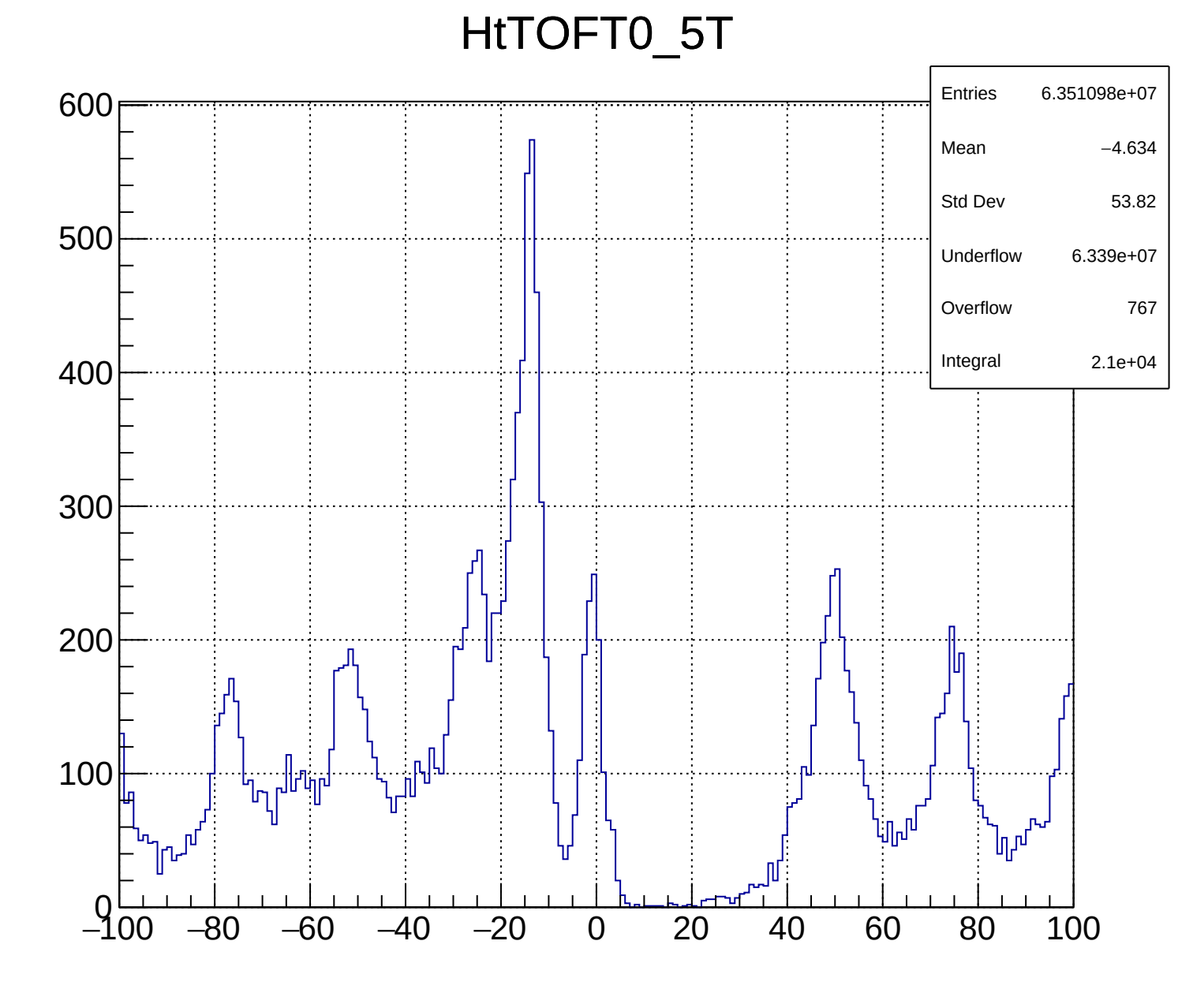
40
60
80
100


HtTOFT0_5T
Entries 6.351098e+07
Mean −4.634
Std Dev 53.82
Underflow 6.339e+07
Overflow 767
Integral 2.1e+04
600
500
400
300
200
100
0
−100
−80
−60
−40
−20
0
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80
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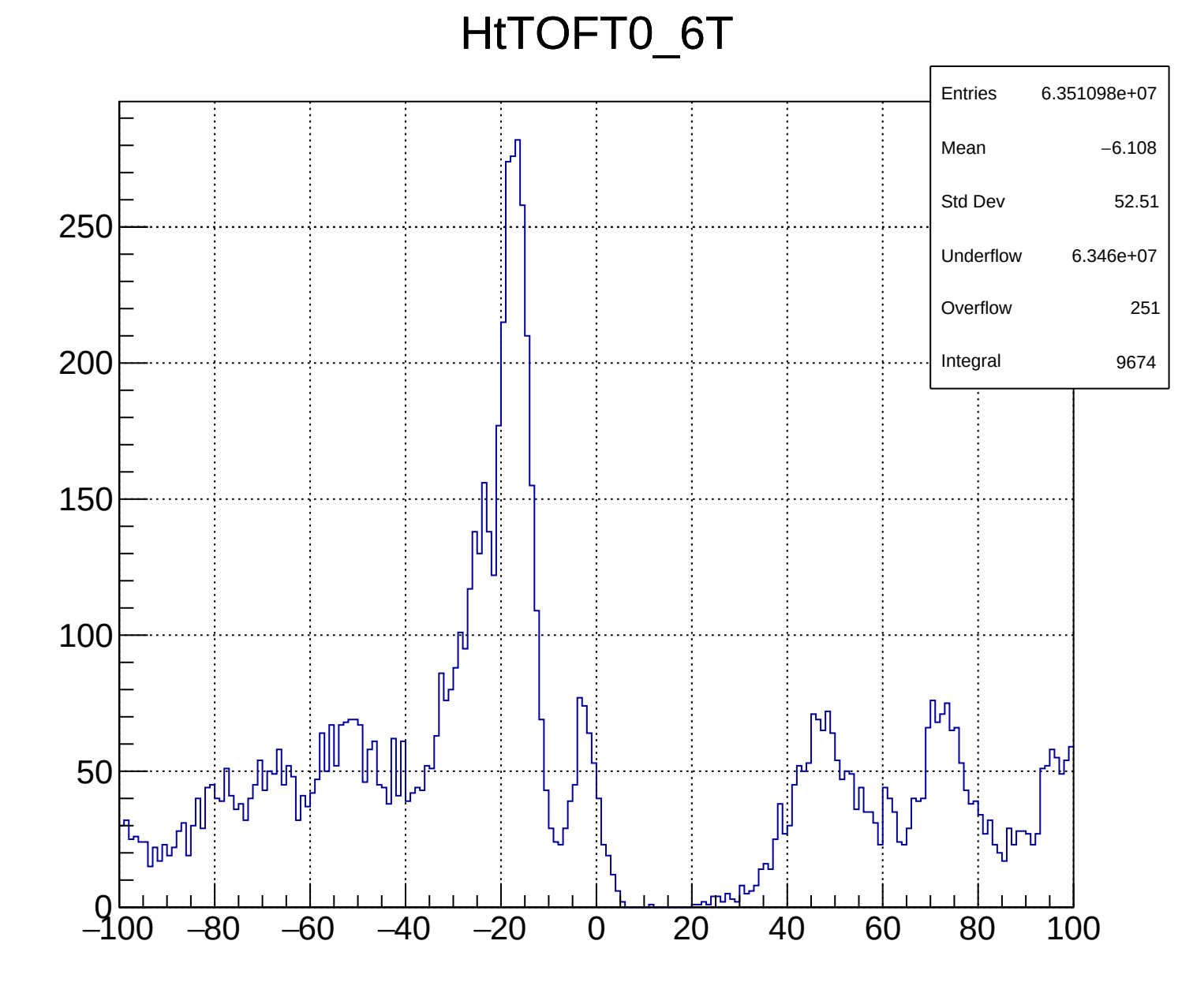
HtTOFT0_6T
Entries 6.351098e+07
Mean −6.108
Std Dev 52.51
Underflow 6.346e+07
Overflow 251
Integral 9674
250
200
150
100
50
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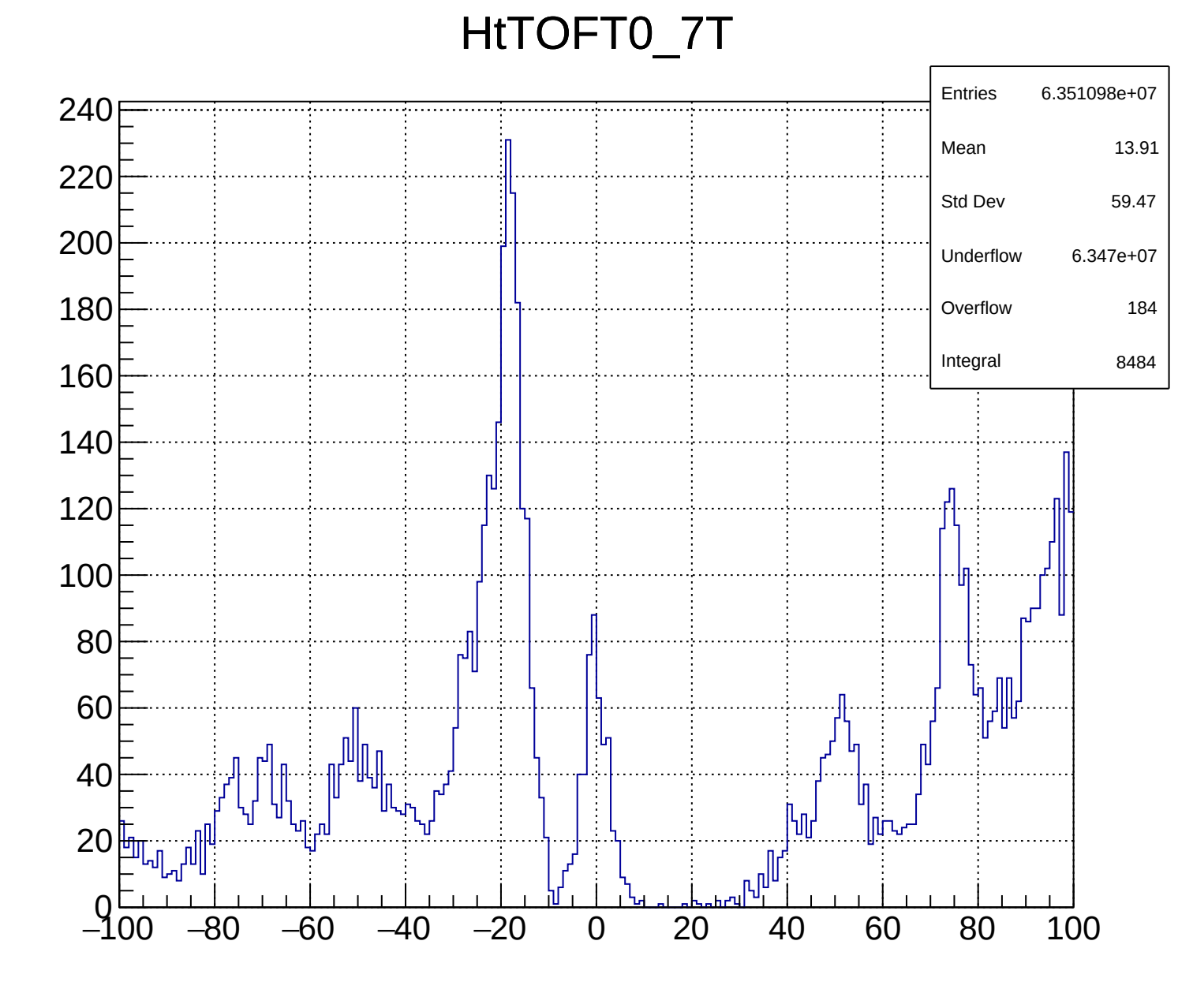
60
80
100


HtTOFT0_7T
Entries 6.351098e+07
Mean 13.91
Std Dev 59.47
Underflow 6.347e+07
Overflow 184
Integral 8484
240
220
200
180
160
140
120
100
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60
40
20
0
–100
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–40
–20
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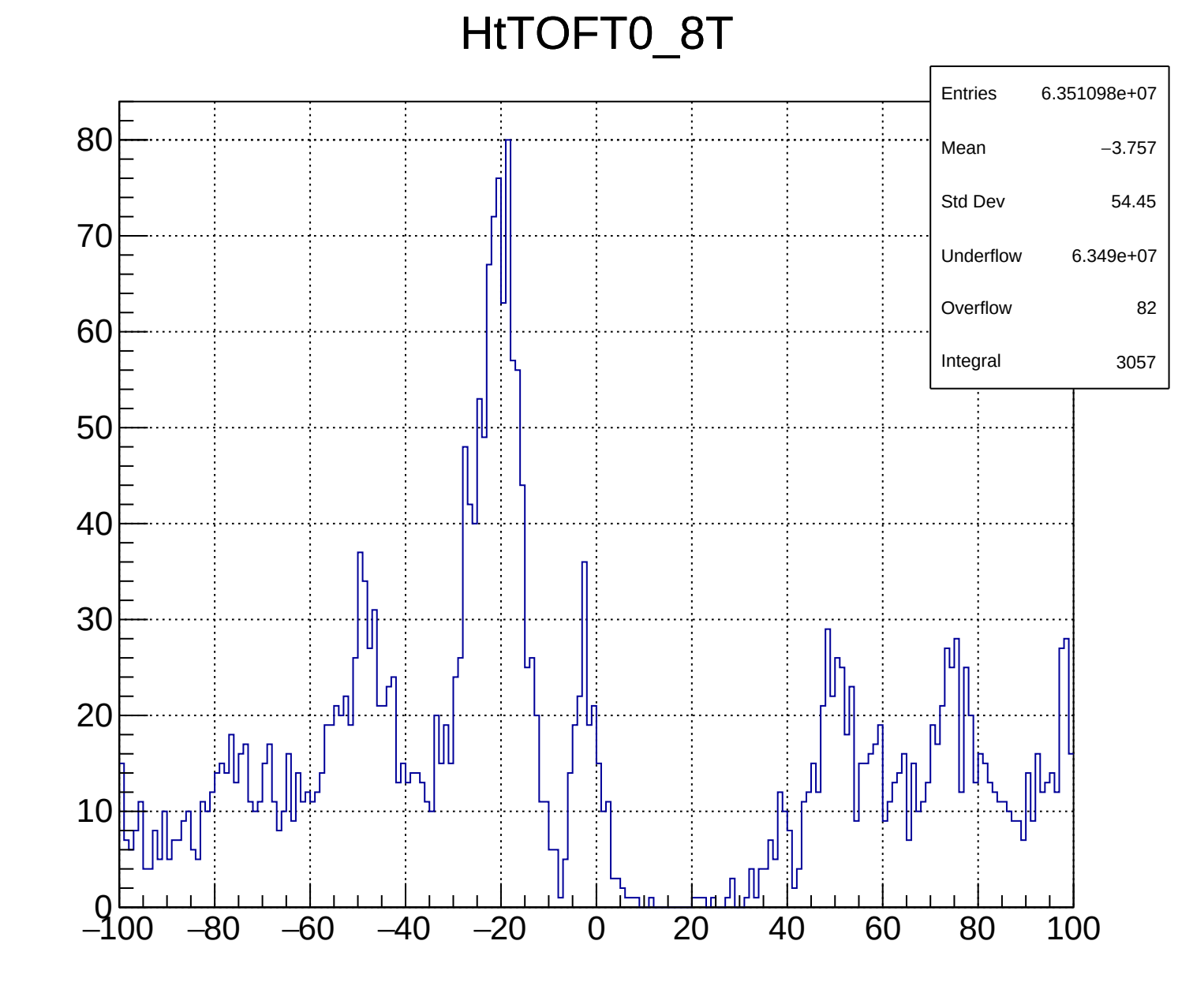
HtTOFT0_8T
Entries 6.351098e+07
Mean −3.757
Std Dev 54.45
Underflow 6.349e+07
Overflow 82
Integral 3057
80
70
60
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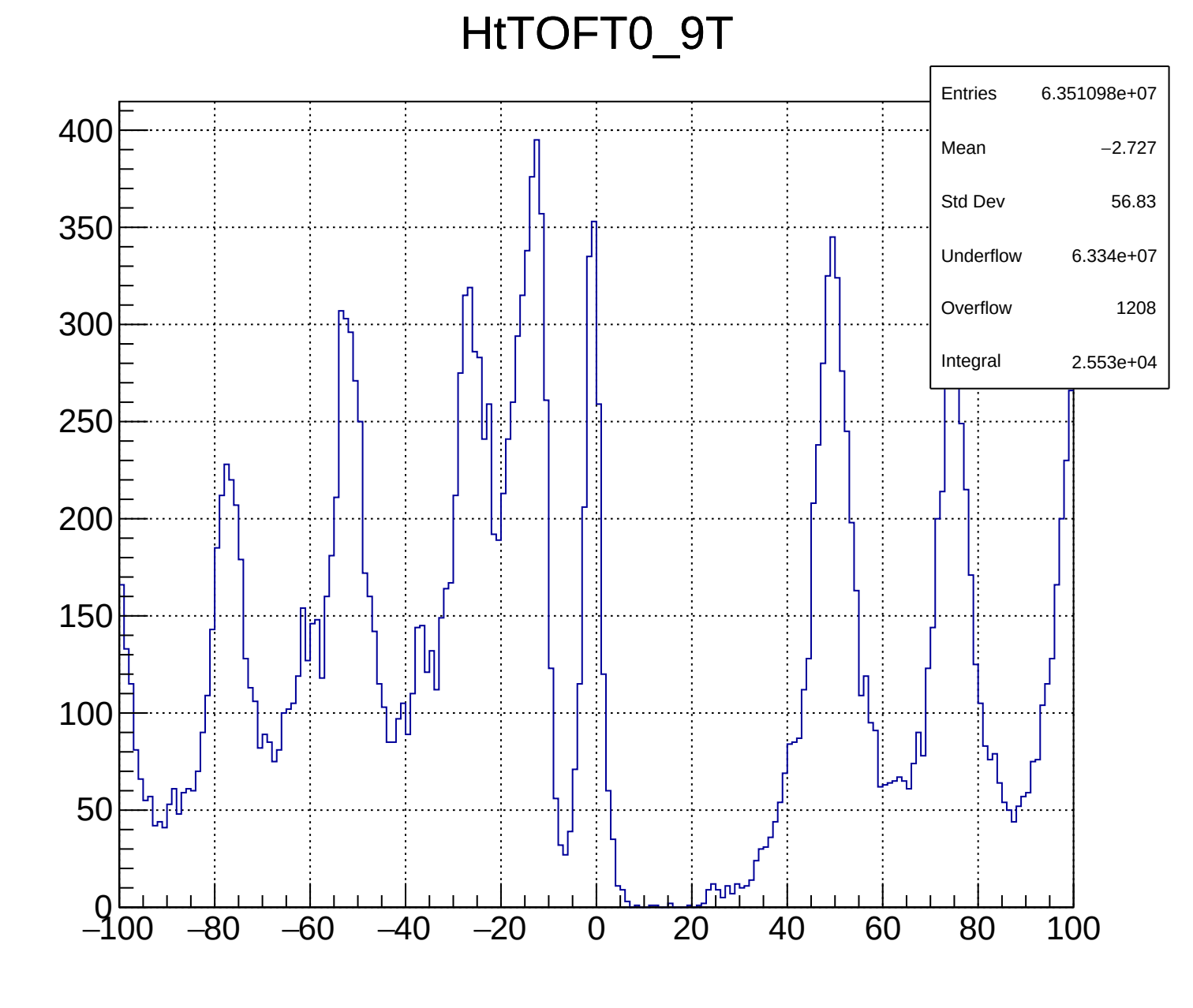
HtTOFT0_9T
Entries 6.351098e+07
Mean −2.727
Std Dev 56.83
Underflow 6.334e+07
Overflow 1208
Integral 2.553e+04
400
350
300
250
200
150
100
50
0
−100
−80
−60
−40
−20
0
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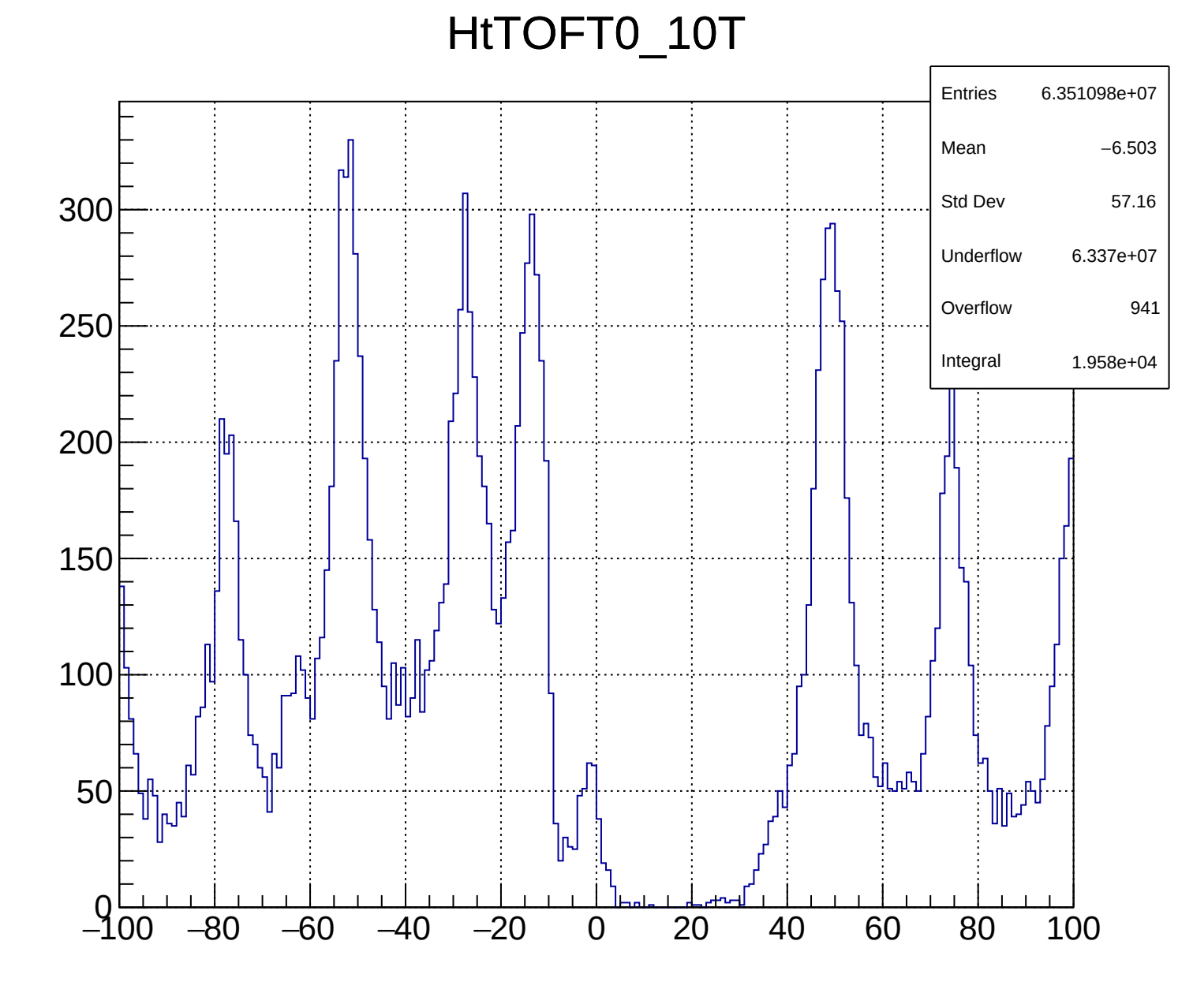
40
60
80
100


HtTOFT0_10T
Entries 6.351098e+07
Mean −6.503
Std Dev 57.16
Underflow 6.337e+07
Overflow 941
Integral 1.958e+04
300
250
200
150
100
50
0
−100
−80
−60
−40
−20
0
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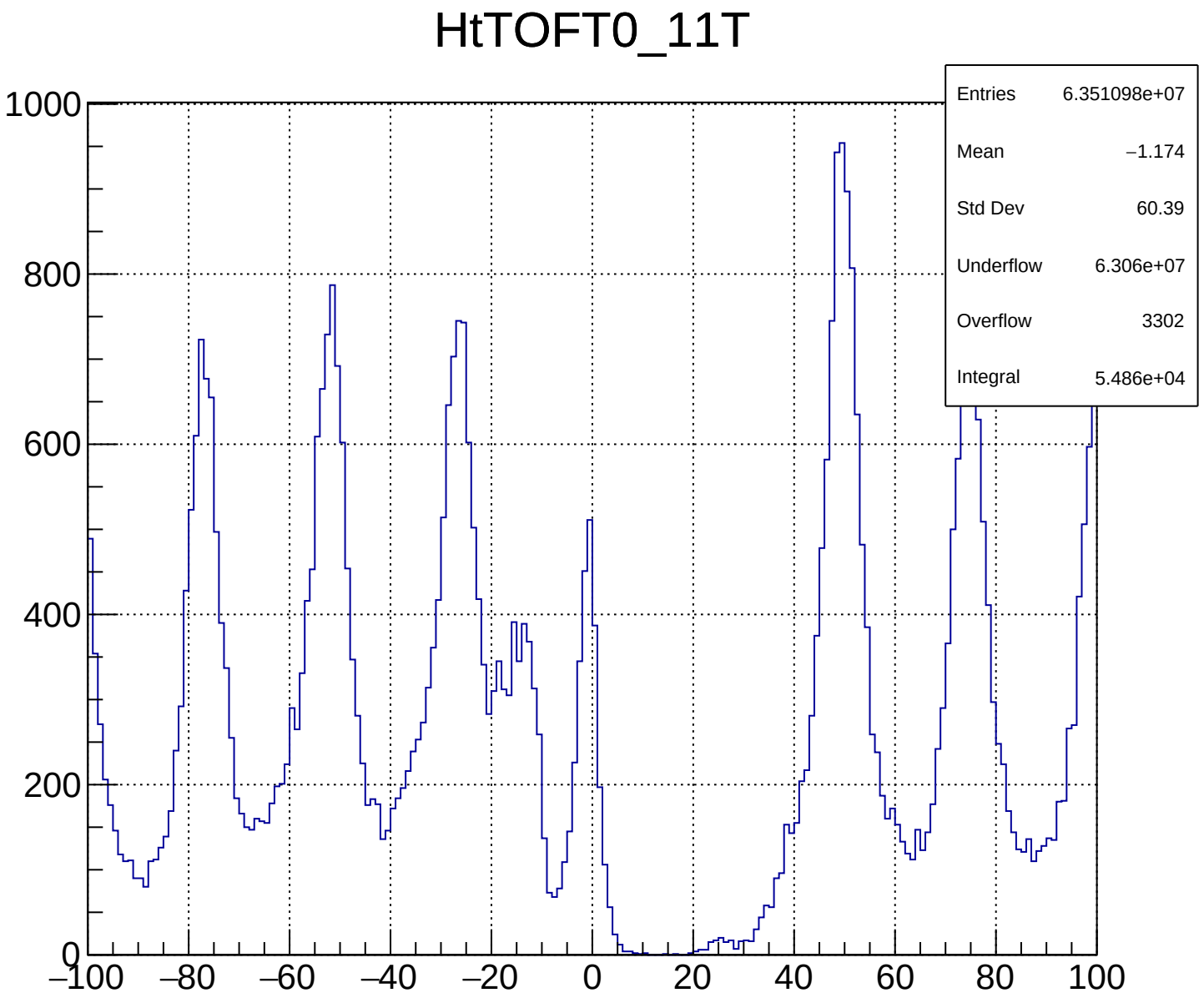
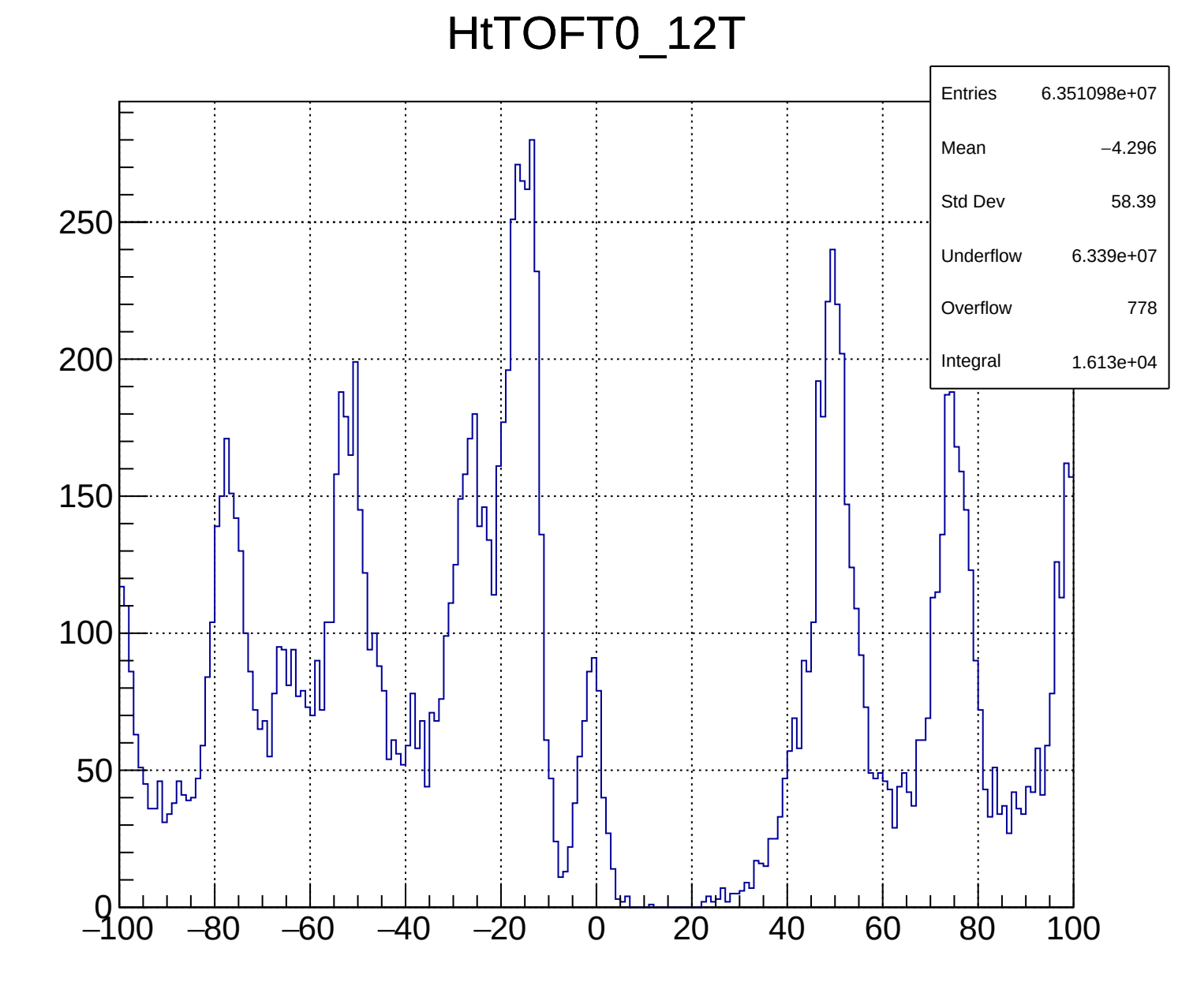
40
60
80
100


HtTOFT0_11T
Entries 6.351098e+07
Mean −1.174
Std Dev 60.39
Underflow 6.306e+07
Overflow 3302
Integral 5.486e+04
1000
800
600
400
200
0
–100
–80
–60
–40
–20
0
20
40
60
80
100


HtTOFT0_12T
Entries 6.351098e+07
Mean −4.296
Std Dev 58.39
Underflow 6.339e+07
Overflow 778
Integral 1.613e+04
250
200
150
100
50
0
−100
−80
−60
−40
−20
0
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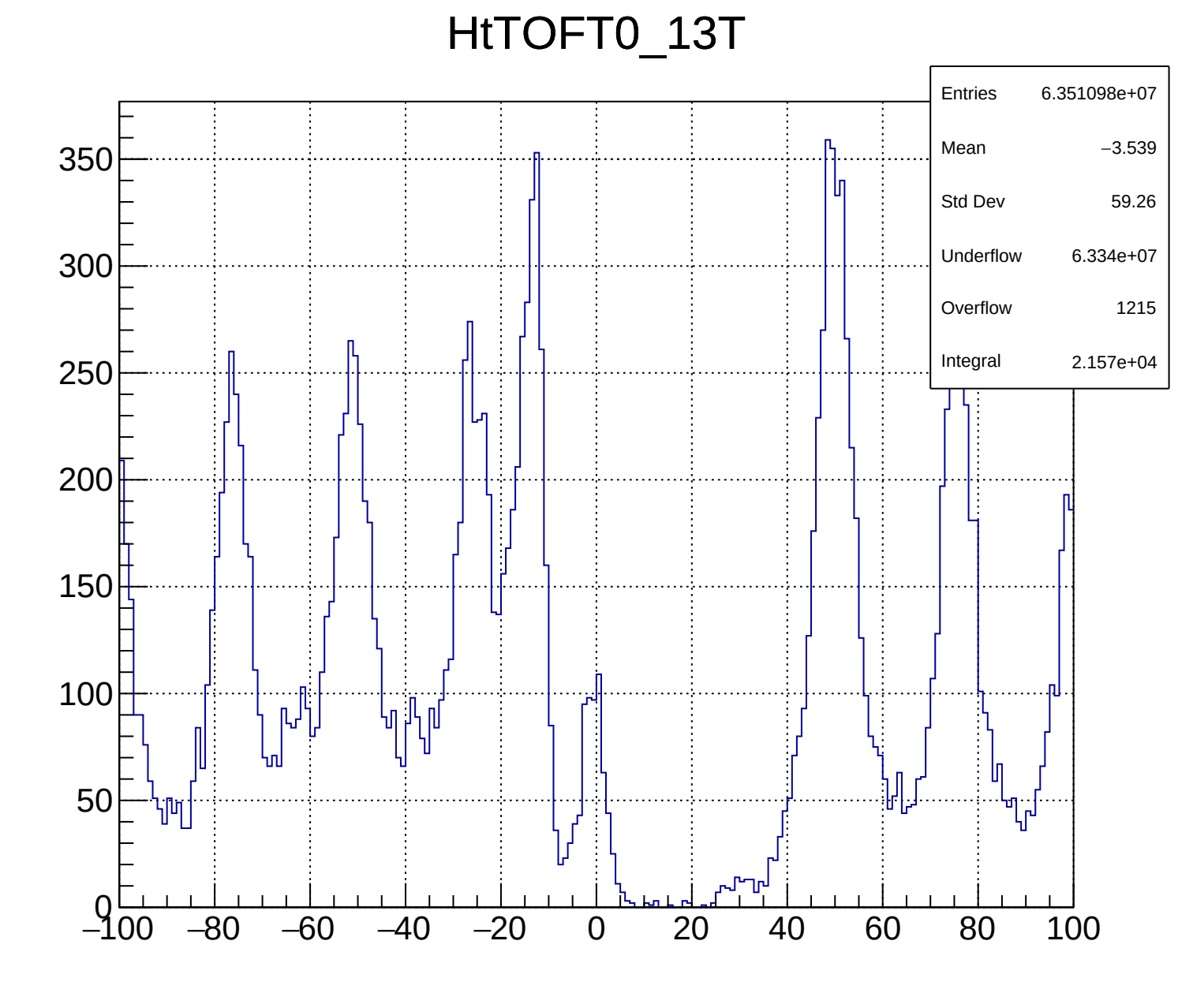
40
60
80
100


HtTOFT0_13T
Entries 6.351098e+07
Mean −3.539
Std Dev 59.26
Underflow 6.334e+07
Overflow 1215
Integral 2.157e+04
350
300
250
200
150
100
50
0
−100
−80
−60
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−20
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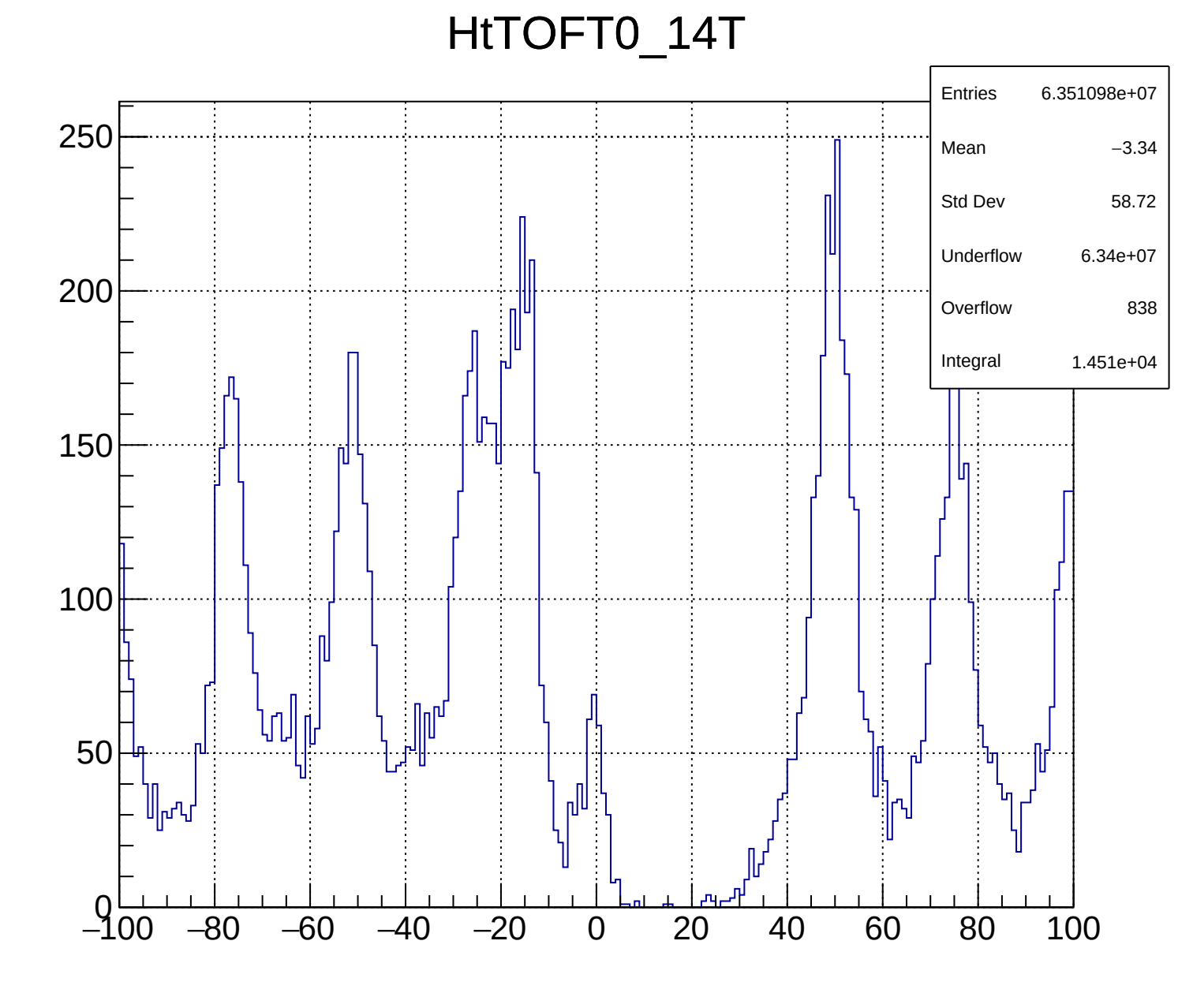
20
40
60
80
100


HtTOFT0_14T
Entries 6.351098e+07
Mean −3.34
Std Dev 58.72
Underflow 6.34e+07
Overflow 838
Integral 1.451e+04
250
200
150
100
50
0
−100
−80
−60
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−20
0
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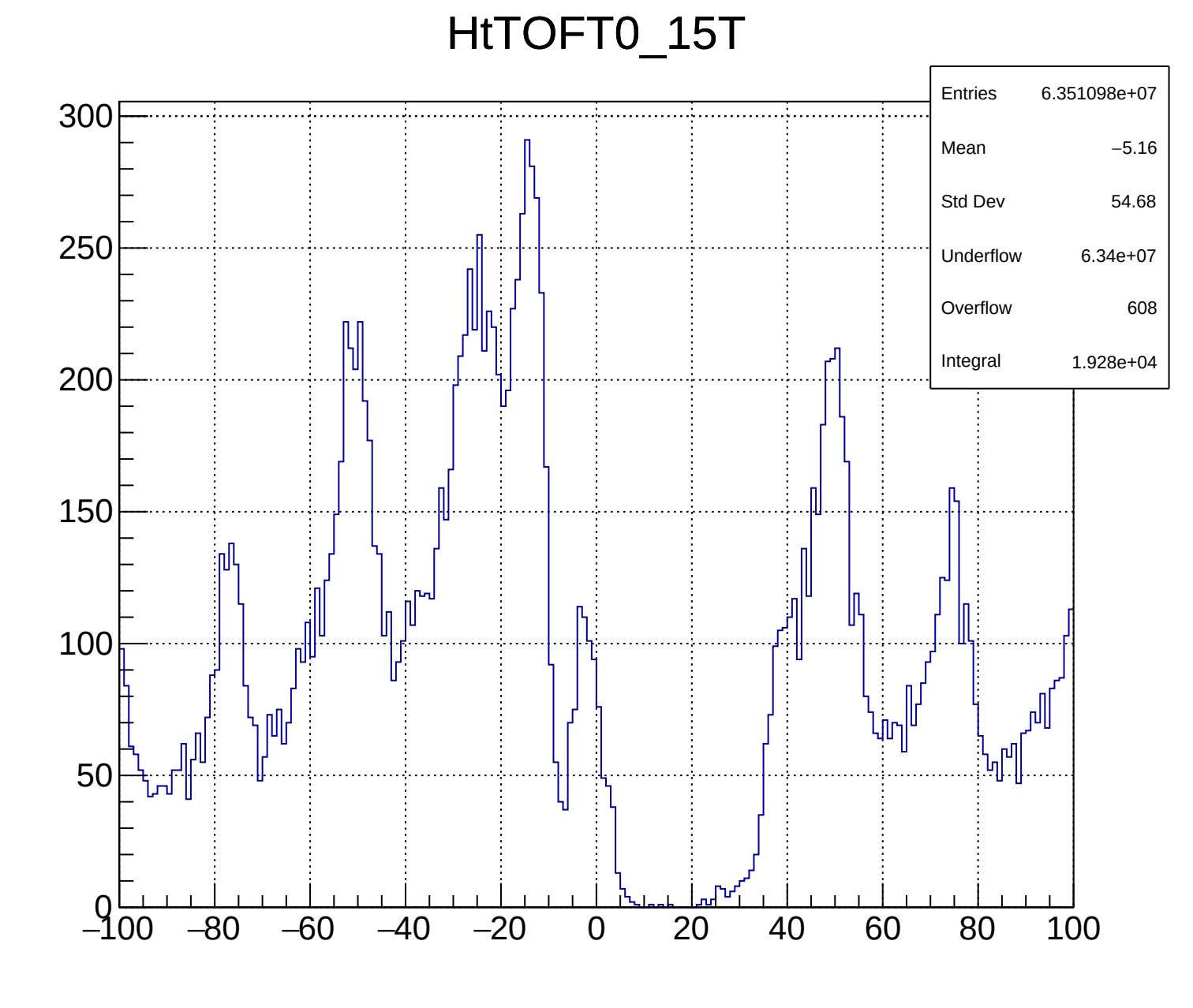
40
60
80
100


HtTOFT0_15T
Entries 6.351098e+07
Mean −5.16
Std Dev 54.68
Underflow 6.34e+07
Overflow 608
Integral 1.928e+04
300
250
200
150
100
50
0
−100
−80
−60
−40
−20
0
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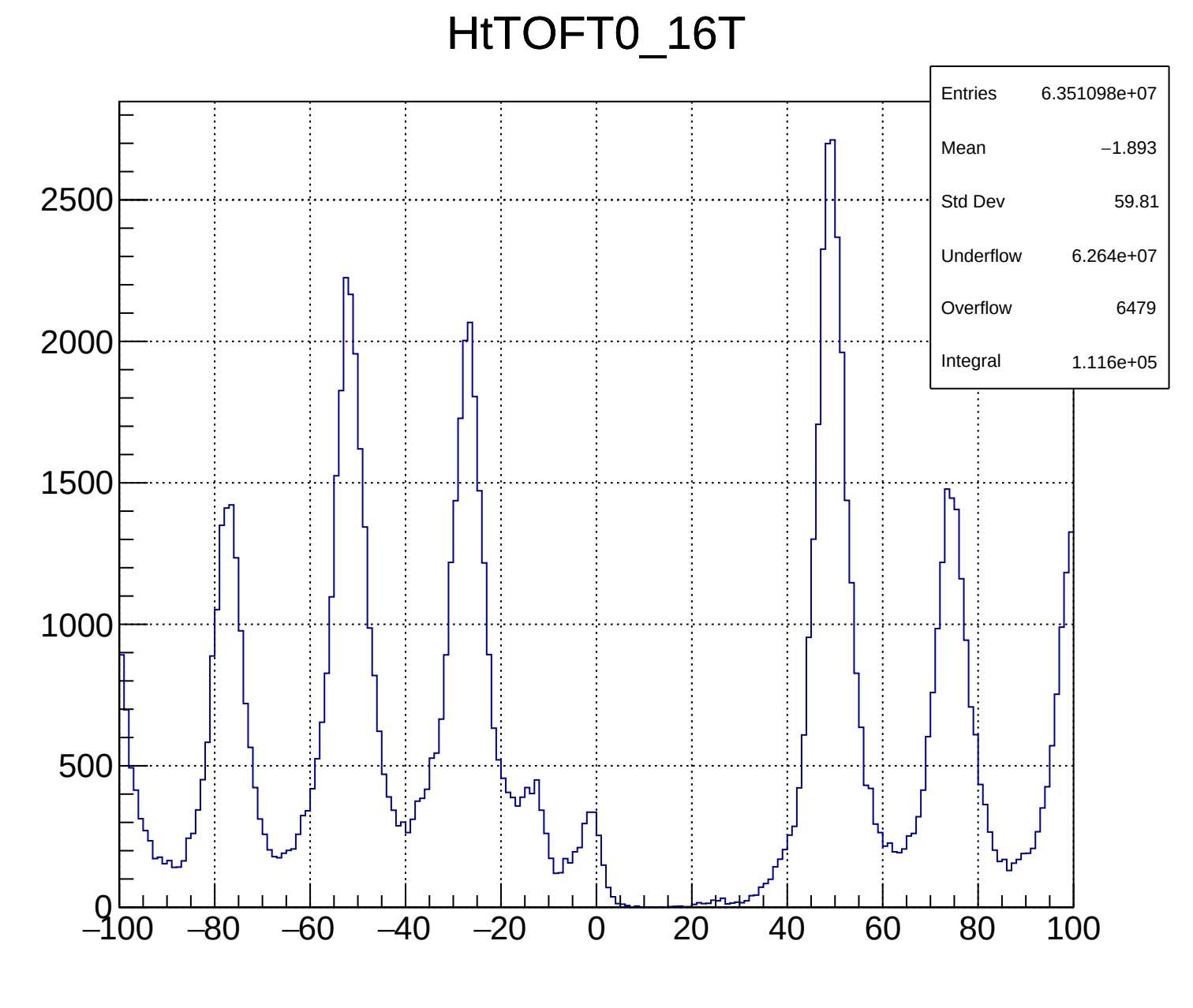
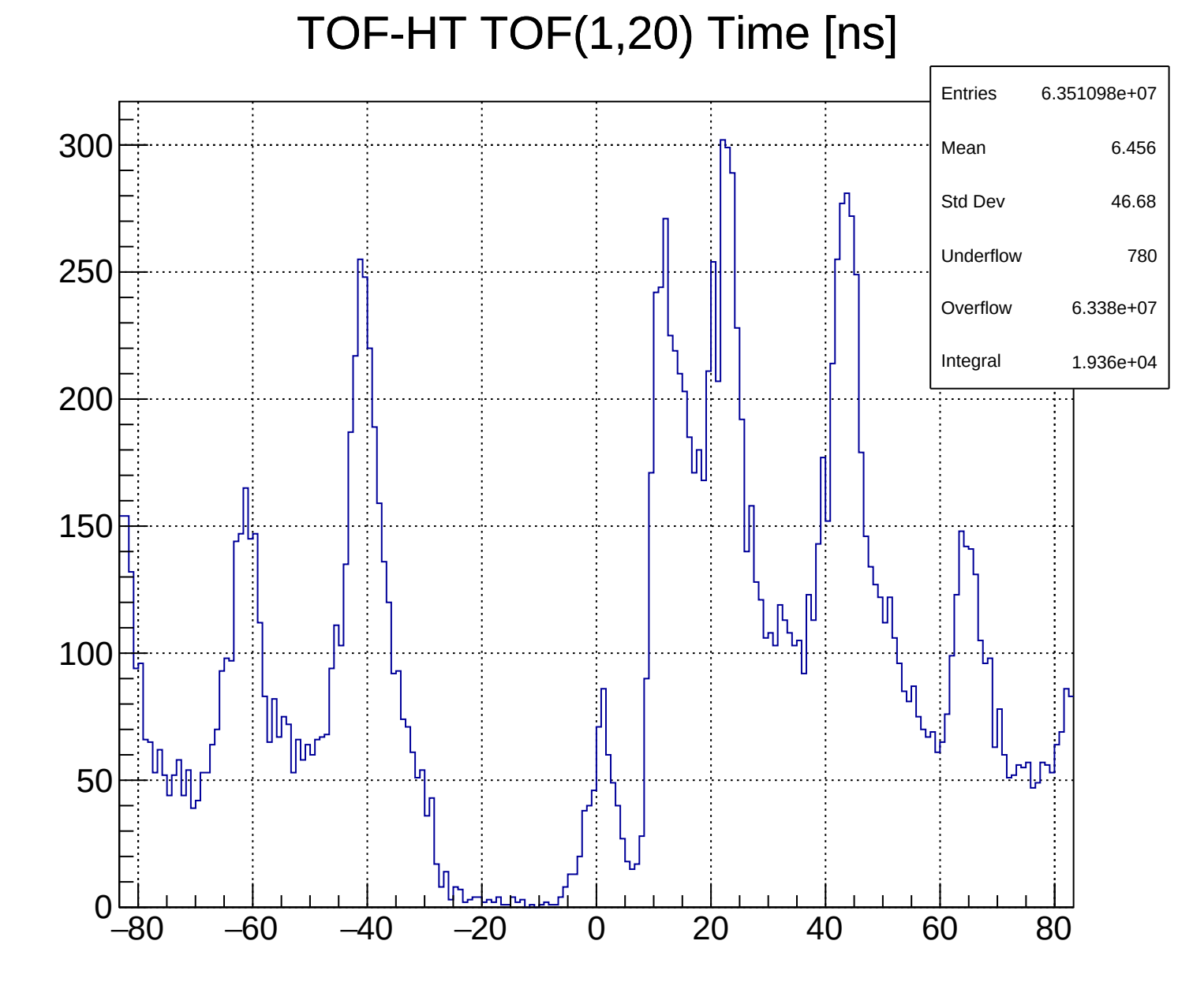
40
60
80
100


HtTOFT0_16T
Entries 6.351098e+07
Mean −1.893
Std Dev 59.81
Underflow 6.264e+07
Overflow 6479
Integral 1.116e+05
2500
2000
1500
1000
500
0
−100
−80
−60
−40
−20
0
20
40
60
80
100


TOF-HT TOF(1,20) Time [ns]
Entries 6.351098e+07
Mean 6.456
Std Dev 46.68
Underflow 780
Overflow 6.338e+07
Integral 1.936e+04
300
250
200
150
100
50
0
–80
–60
–40
–20
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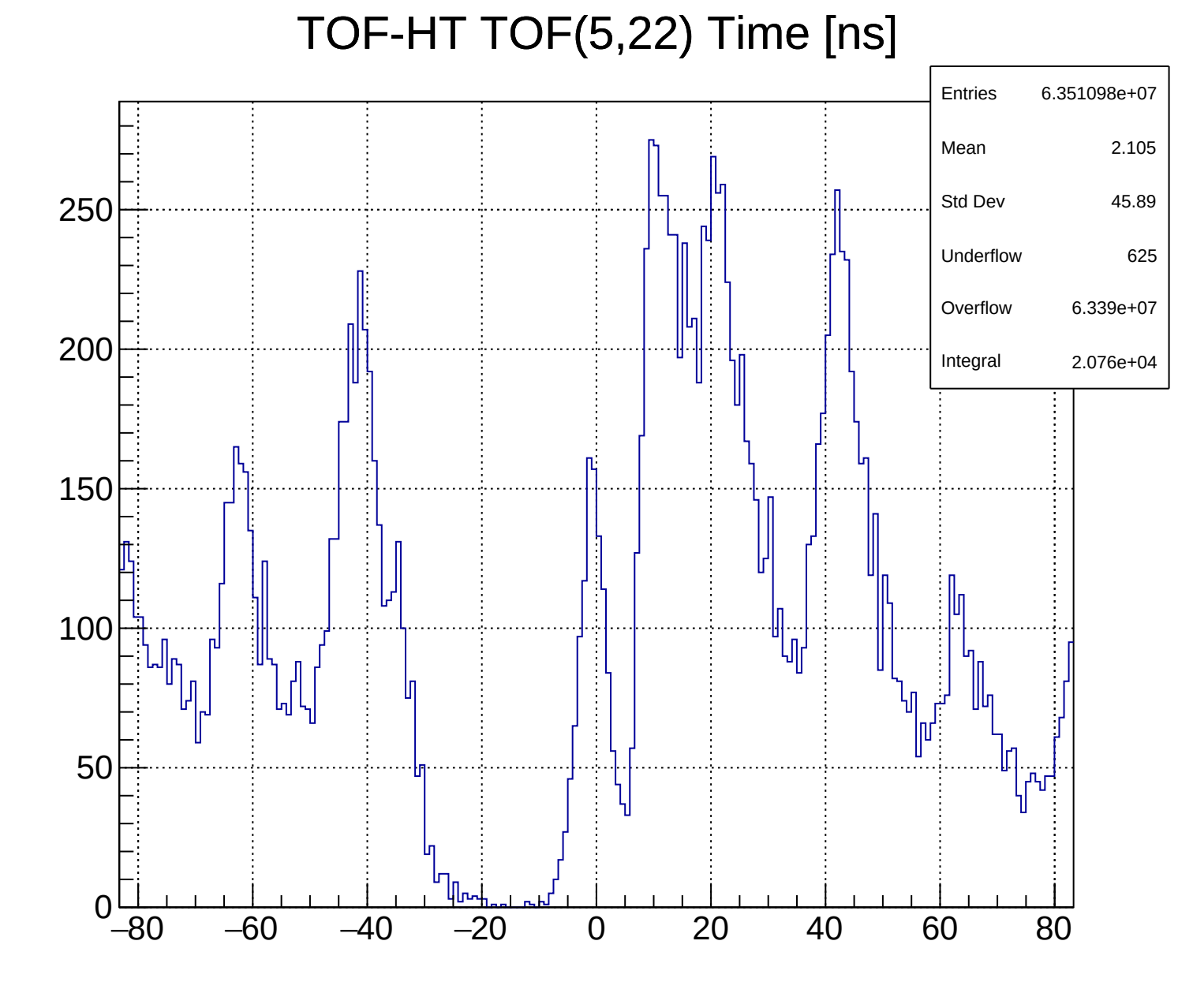
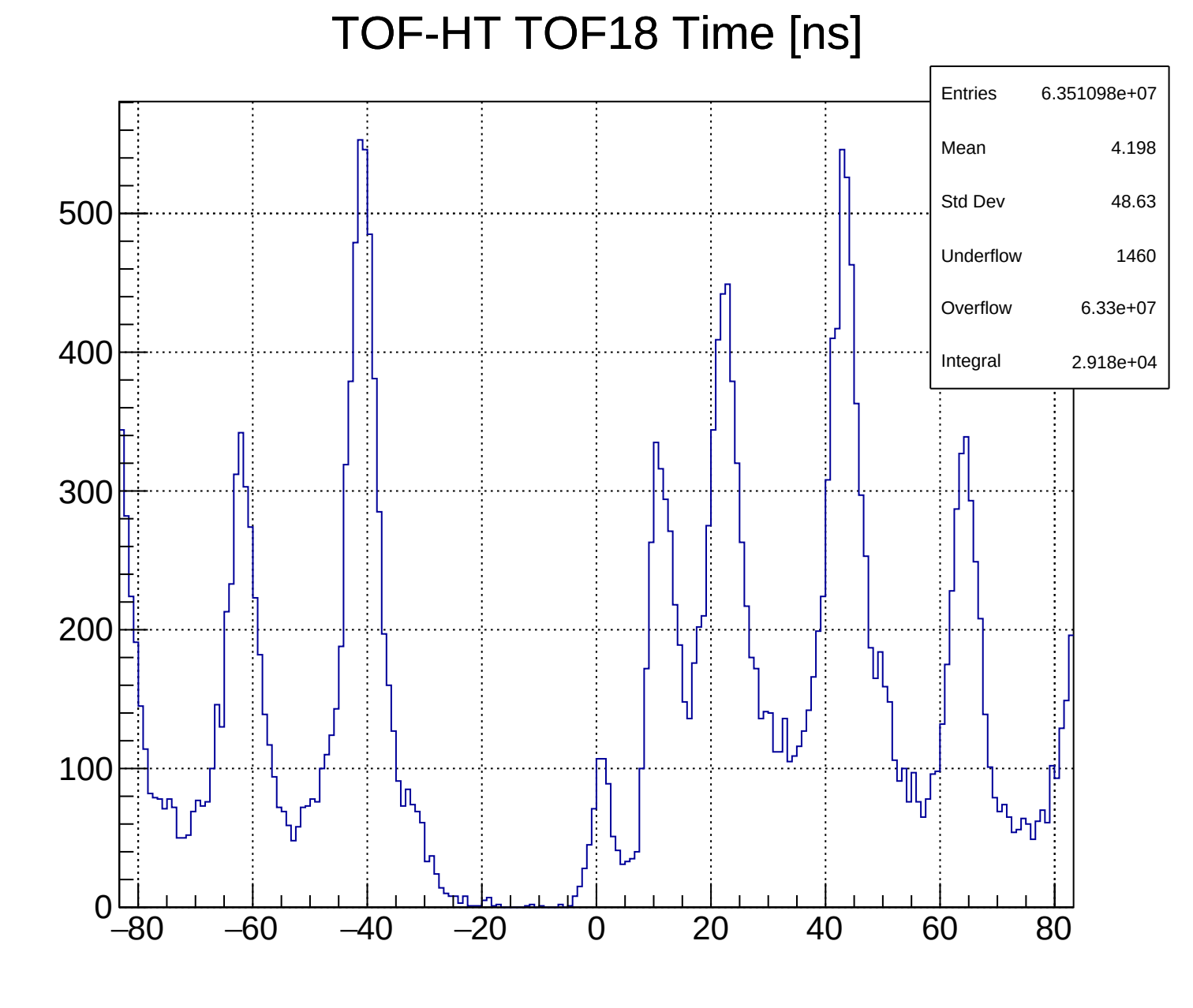
20
40
60
80


TOF-HT TOF(5,22) Time [ns]
Entries 6.351098e+07
Mean 2.105
Std Dev 45.89
Underflow 625
Overflow 6.339e+07
Integral 2.076e+04
250
200
150
100
50
0
–80
–60
–40
–20
0
20
40
60
80


TOF-HT TOF18 Time [ns]
Entries 6.351098e+07
Mean 4.198
Std Dev 48.63
Underflow 1460
Overflow 6.33e+07
Integral 2.918e+04
500
400
300
200
100
0
–80
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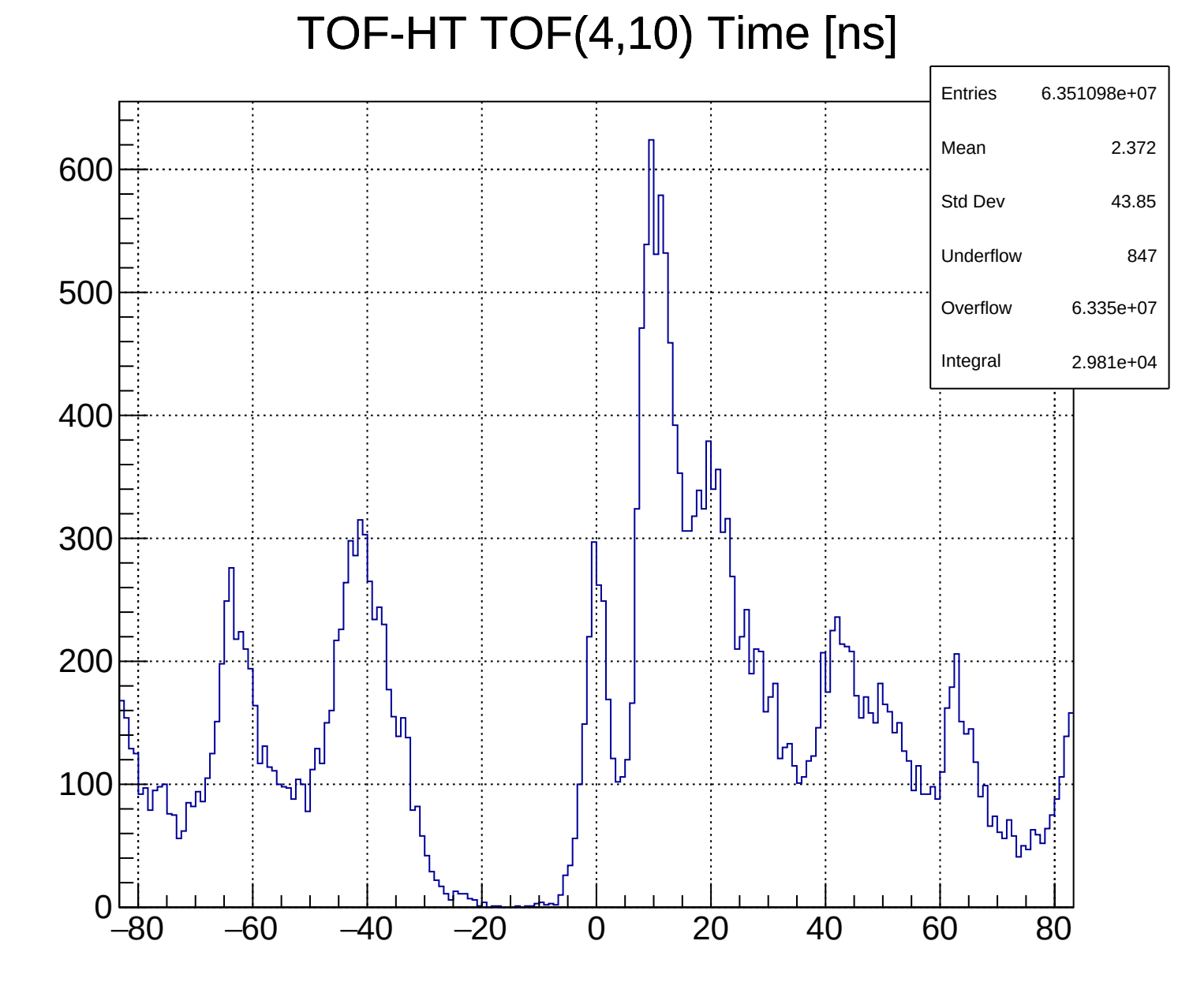
–40
–20
0
20
40
60
80


TOF-HT TOF(4,10) Time [ns]
Entries 6.351098e+07
Mean 2.372
Std Dev 43.85
Underflow 847
Overflow 6.335e+07
Integral 2.981e+04
600
500
400
300
200
100
0
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–20
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20
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60
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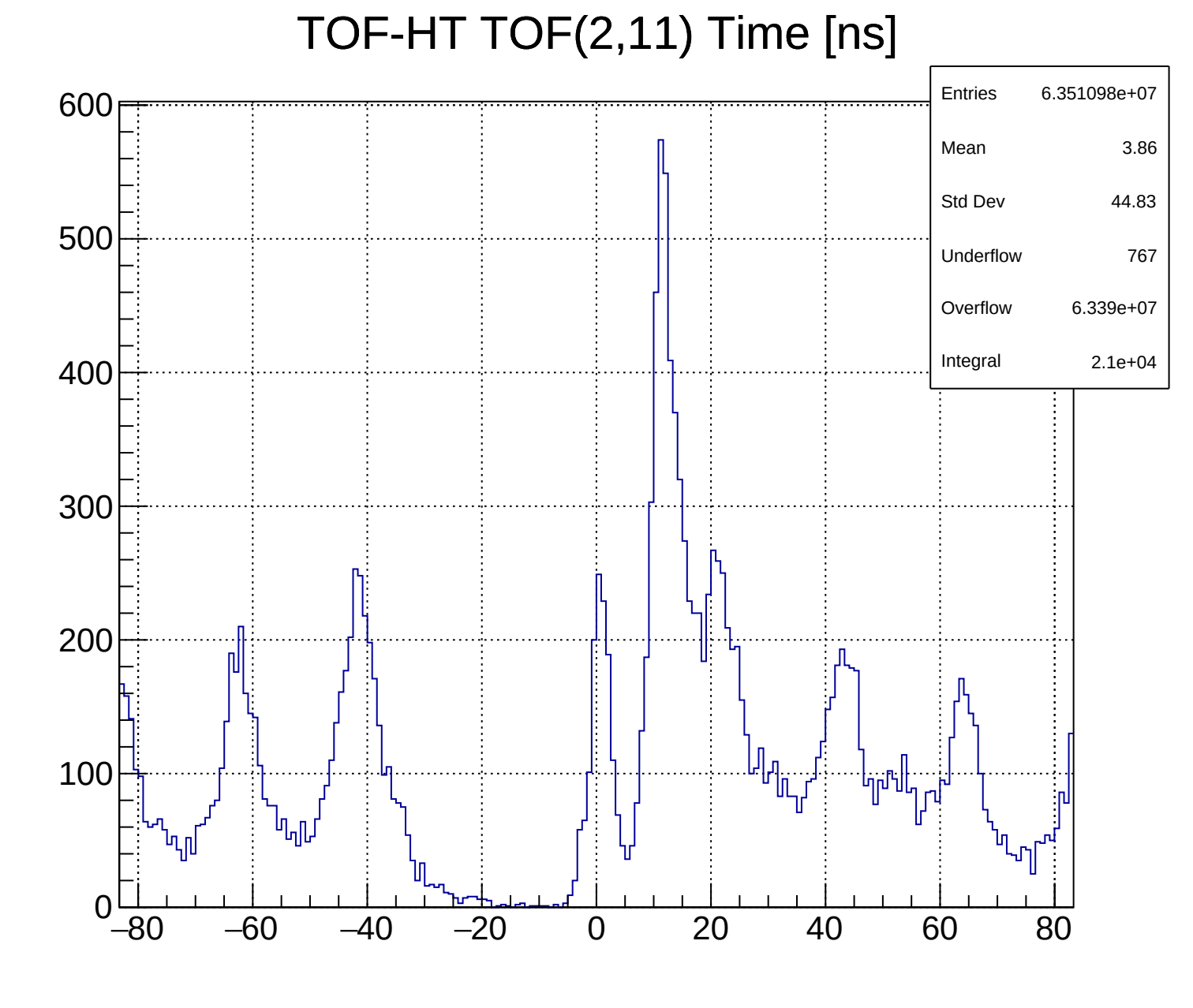
TOF-HT TOF(2,11) Time [ns]
Entries 6.351098e+07
Mean 3.86
Std Dev 44.83
Underflow 767
Overflow 6.339e+07
Integral 2.1e+04
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500
400
300
200
100
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–80
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–40
–20
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20
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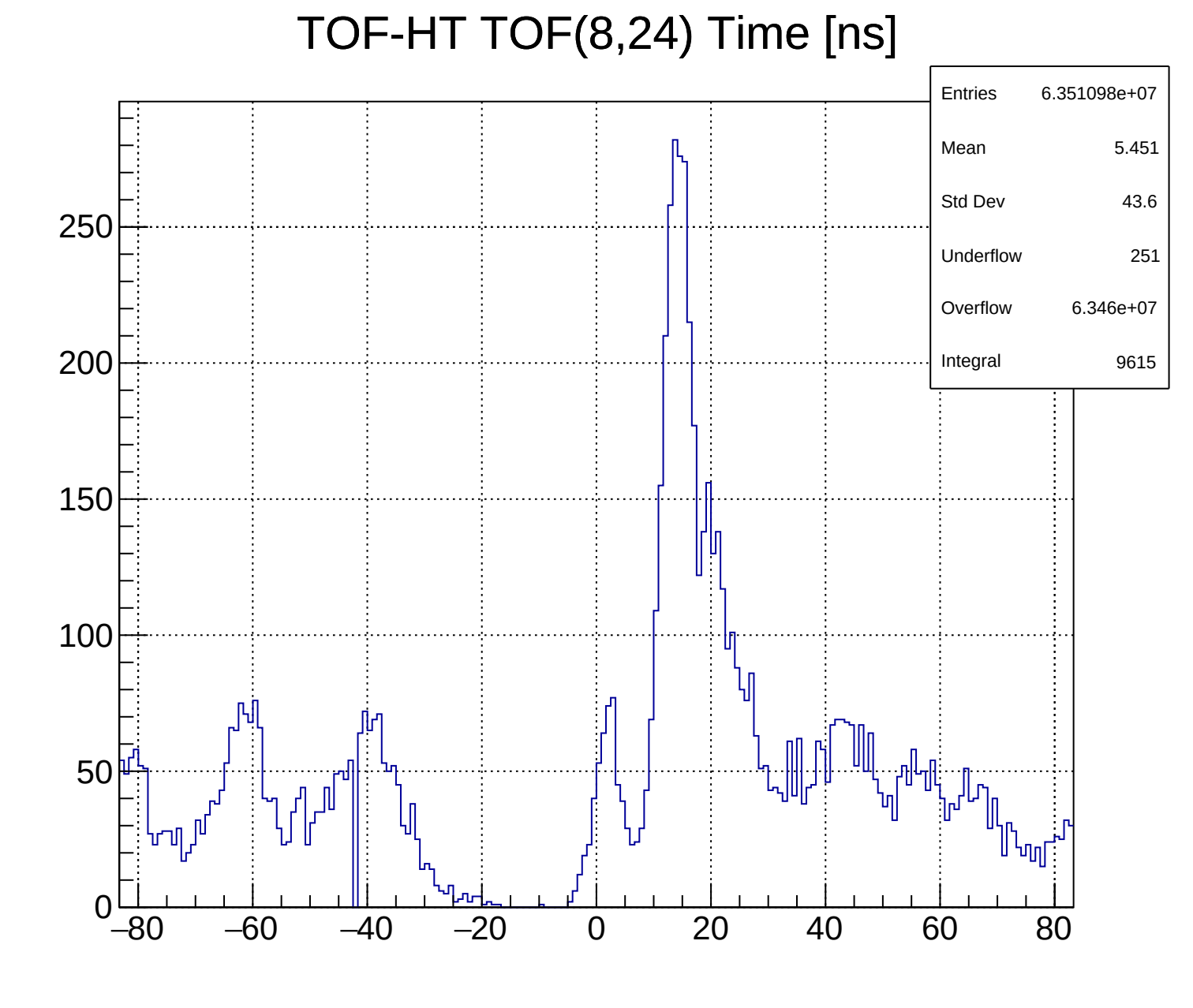
60
80


TOF-HT TOF(8,24) Time [ns]
Entries 6.351098e+07
Mean 5.451
Std Dev 43.6
Underflow 251
Overflow 6.346e+07
Integral 9615
250
200
150
100
50
0
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60
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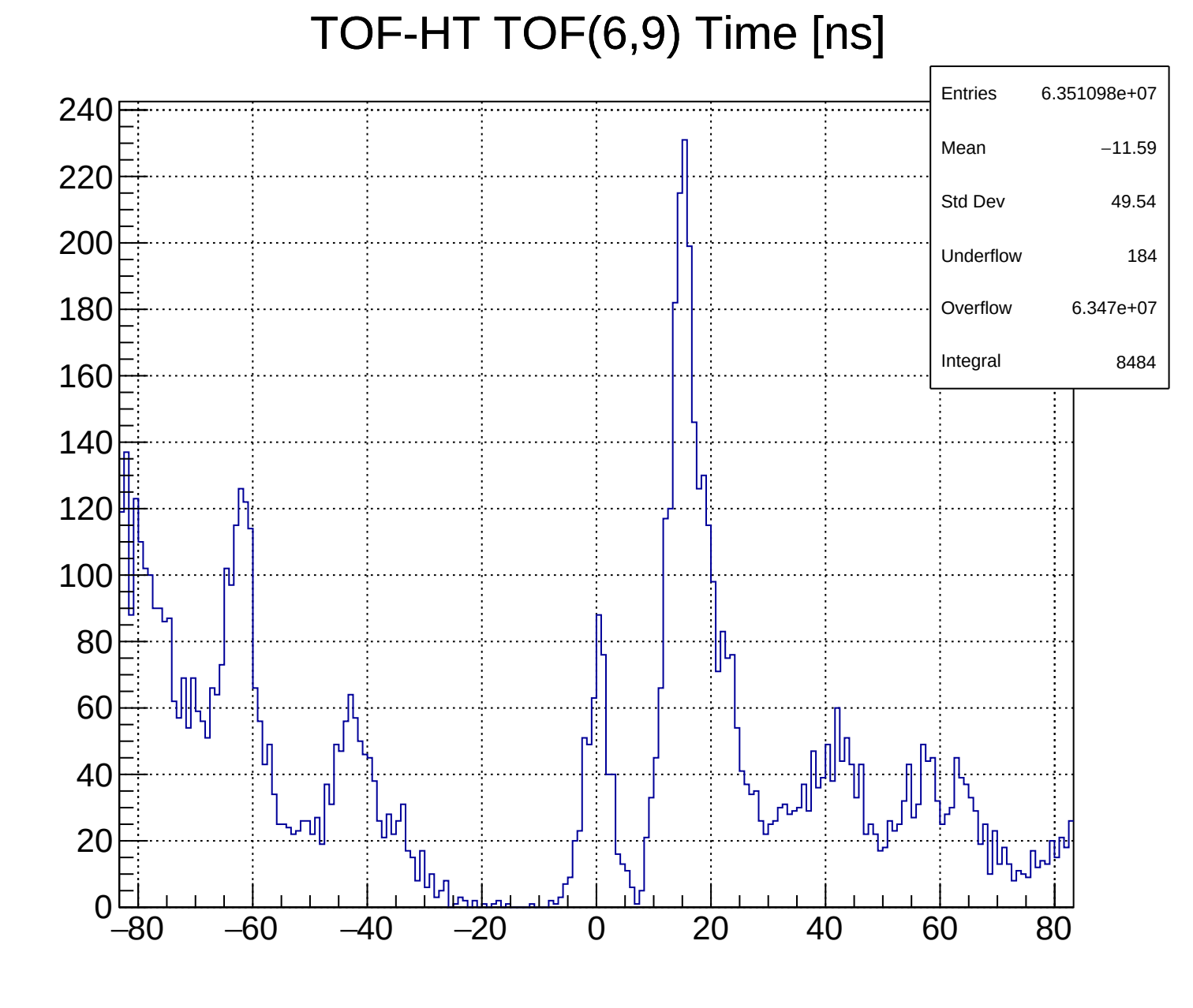
TOF-HT TOF(6,9) Time [ns]
Entries 6.351098e+07
Mean −11.59
Std Dev 49.54
Underflow 184
Overflow 6.347e+07
Integral 8484
240
220
200
180
160
140
120
100
80
60
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20
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20
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60
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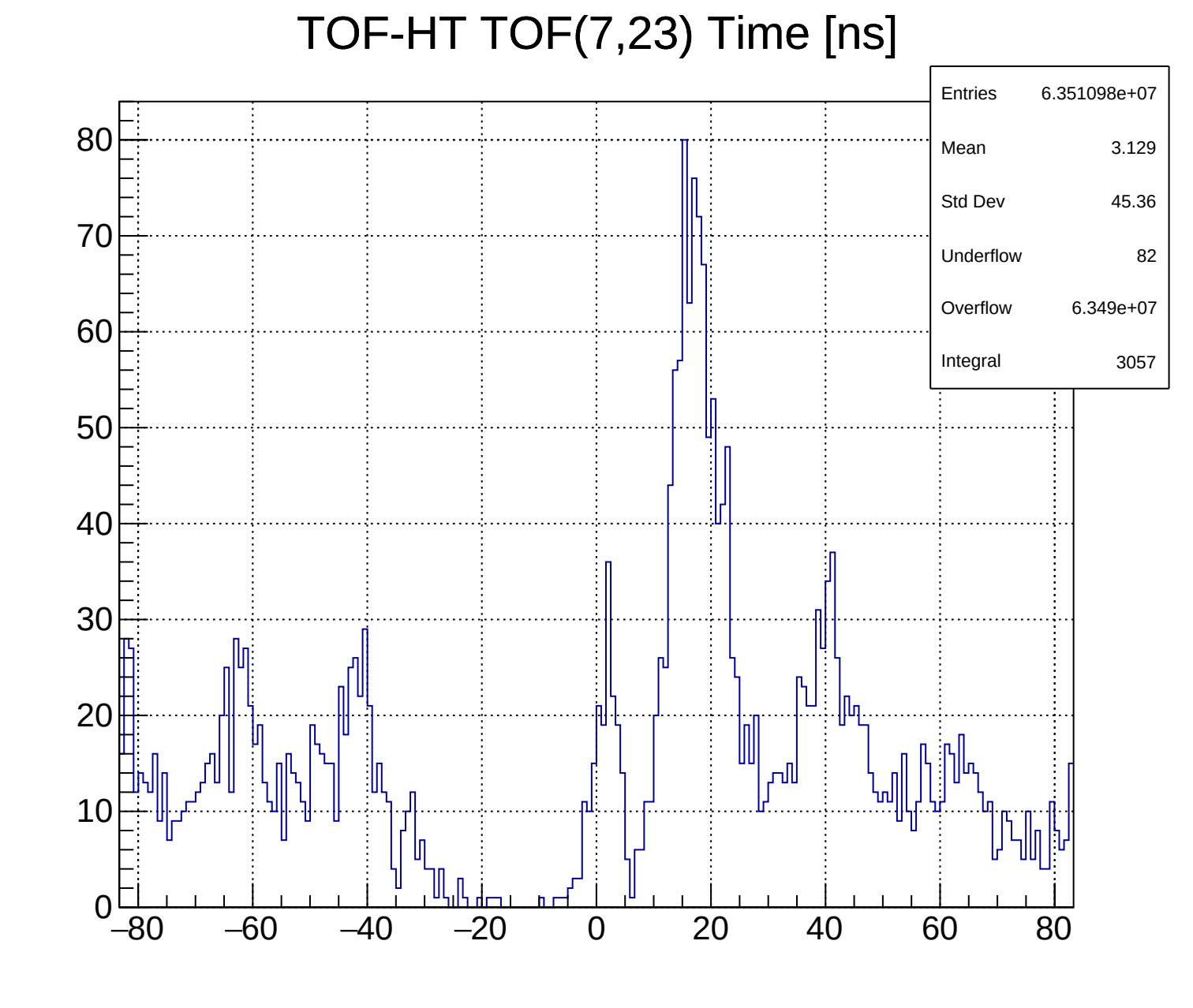
TOF-HT TOF(7,23) Time [ns]
Entries 6.351098e+07
Mean 3.129
Std Dev 45.36
Underflow 82
Overflow 6.349e+07
Integral 3057
80
70
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50
40
30
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–80
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–40
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60
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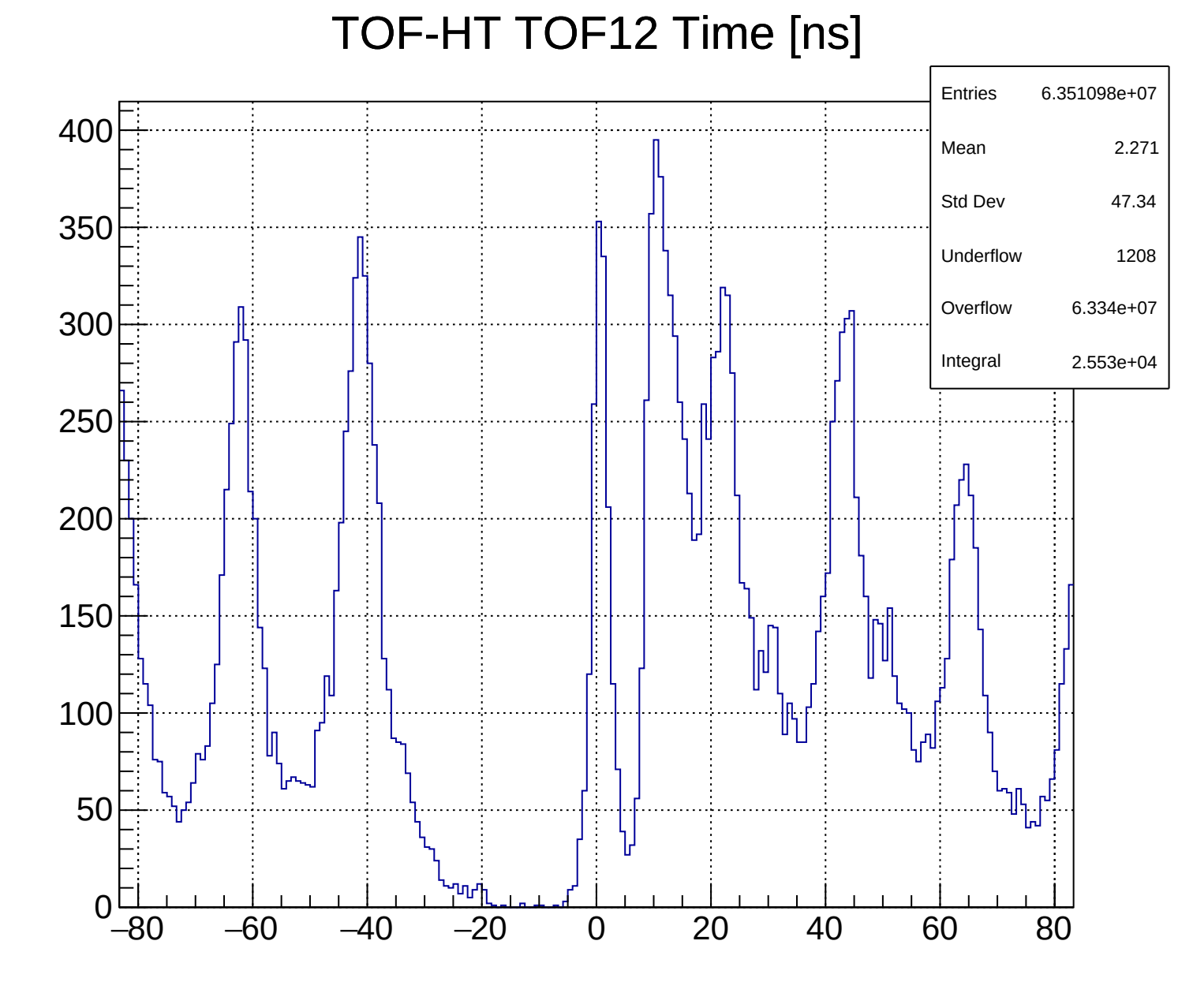
TOF-HT TOF12 Time [ns]
Entries 6.351098e+07
Mean 2.271
Std Dev 47.34
Underflow 1208
Overflow 6.334e+07
Integral 2.553e+04
400
350
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250
200
150
100
50
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60
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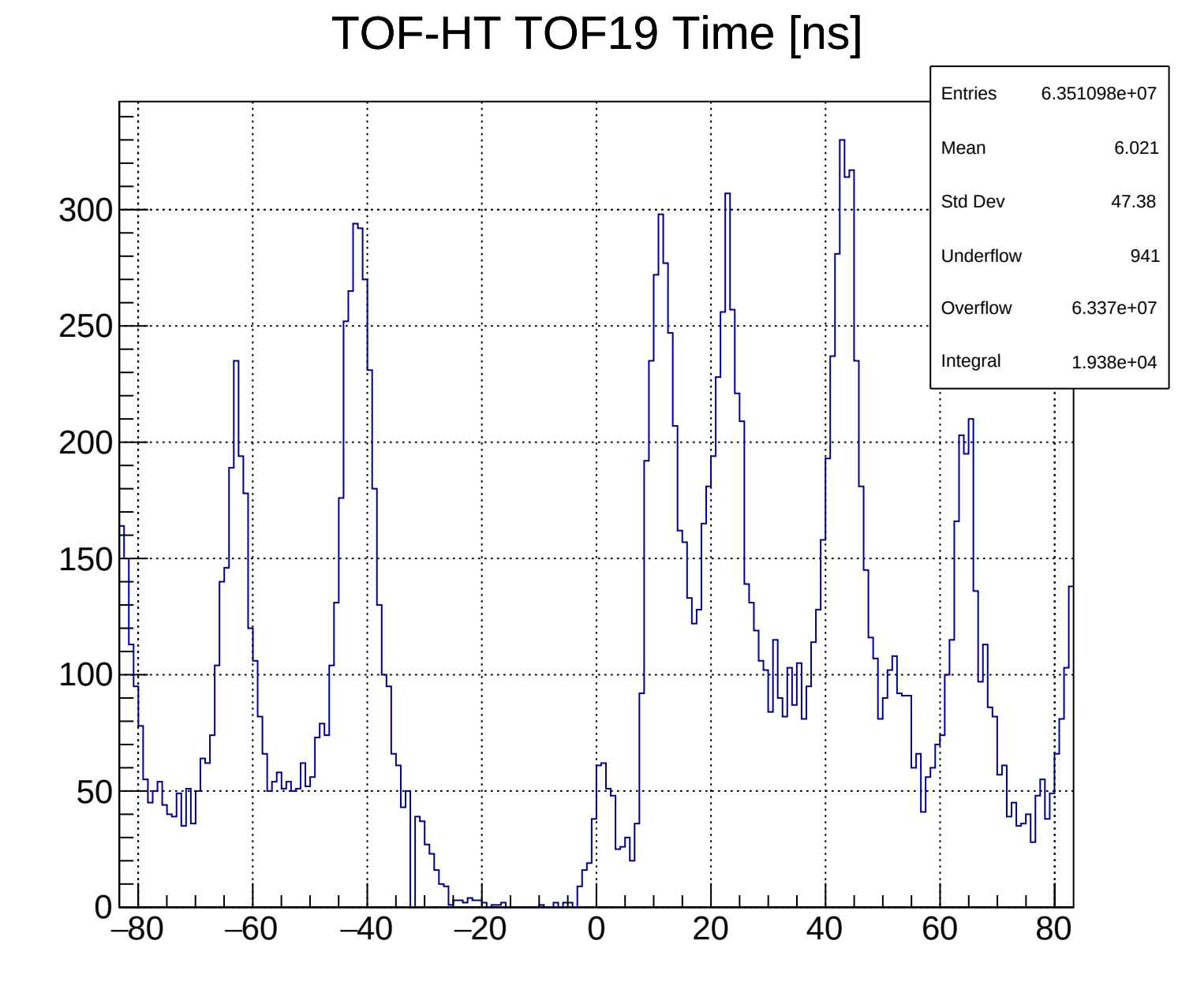
TOF-HT TOF19 Time [ns]
Entries 6.351098e+07
Mean 6.021
Std Dev 47.38
Underflow 941
Overflow 6.337e+07
Integral 1.938e+04
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250
200
150
100
50
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–40
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60
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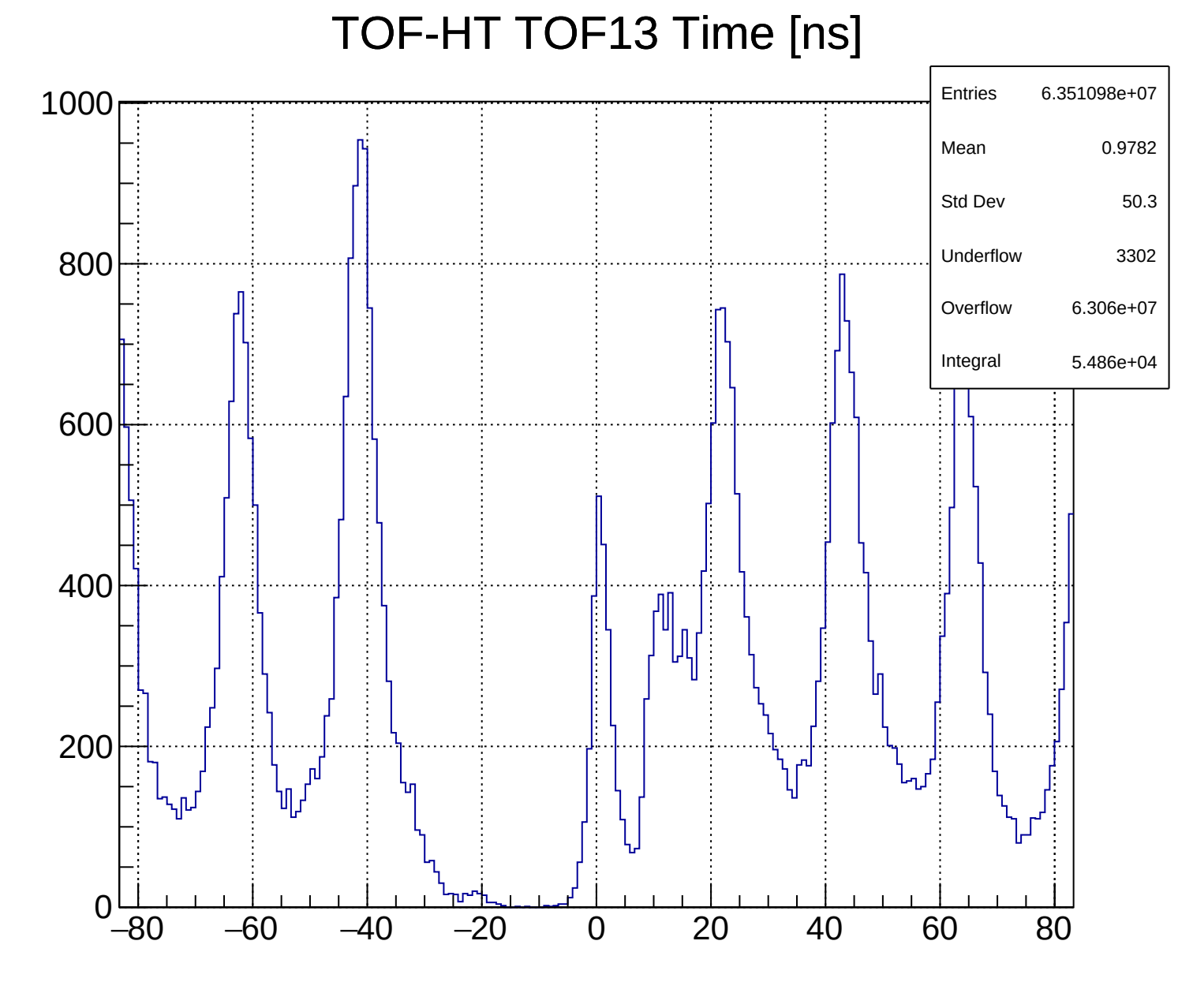
TOF-HT TOF13 Time [ns]
Entries 6.351098e+07
Mean 0.9782
Std Dev 50.3
Underflow 3302
Overflow 6.306e+07
Integral 5.486e+04
1000
800
600
400
200
0
–80
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–40
–20
0
20
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60
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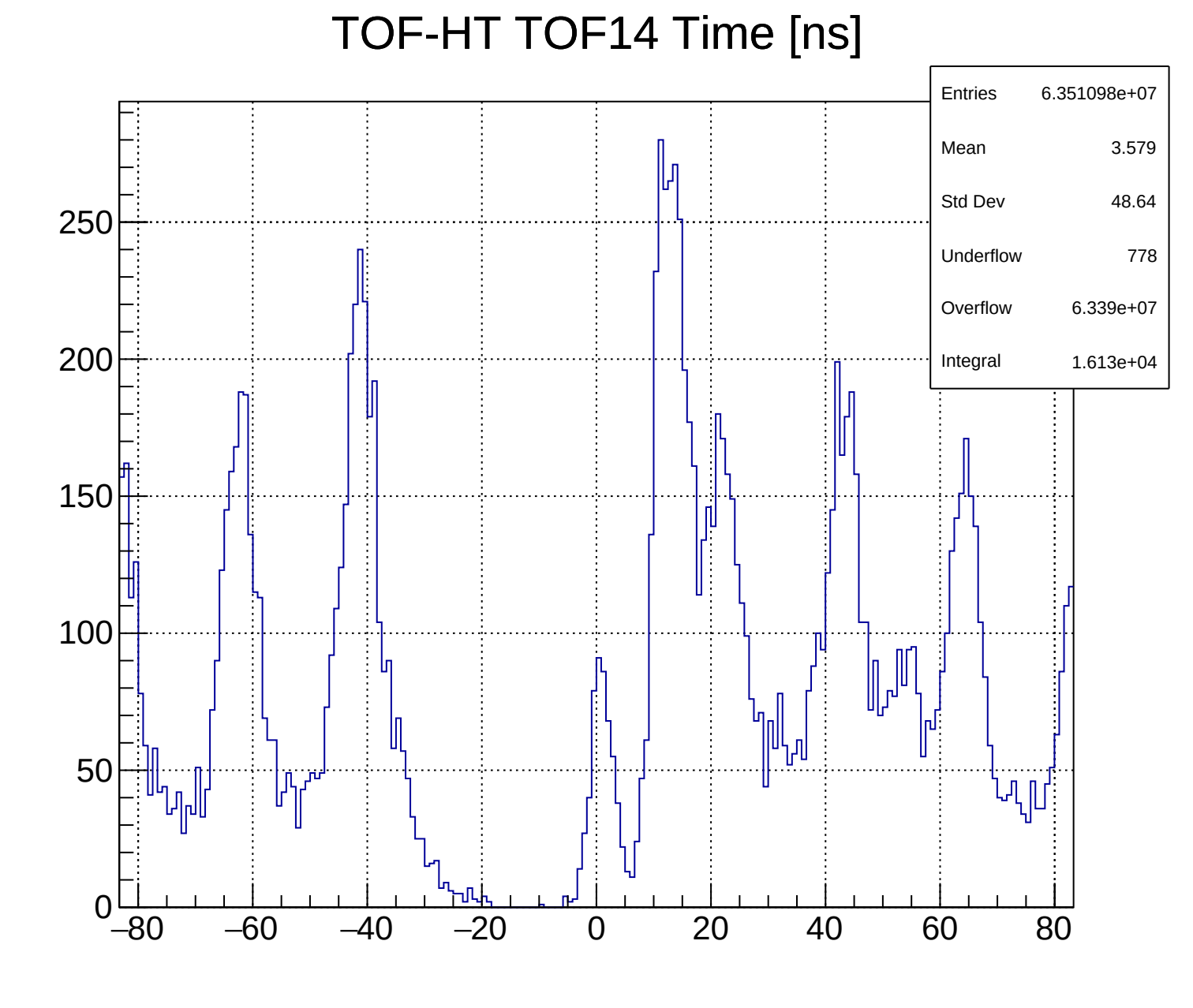
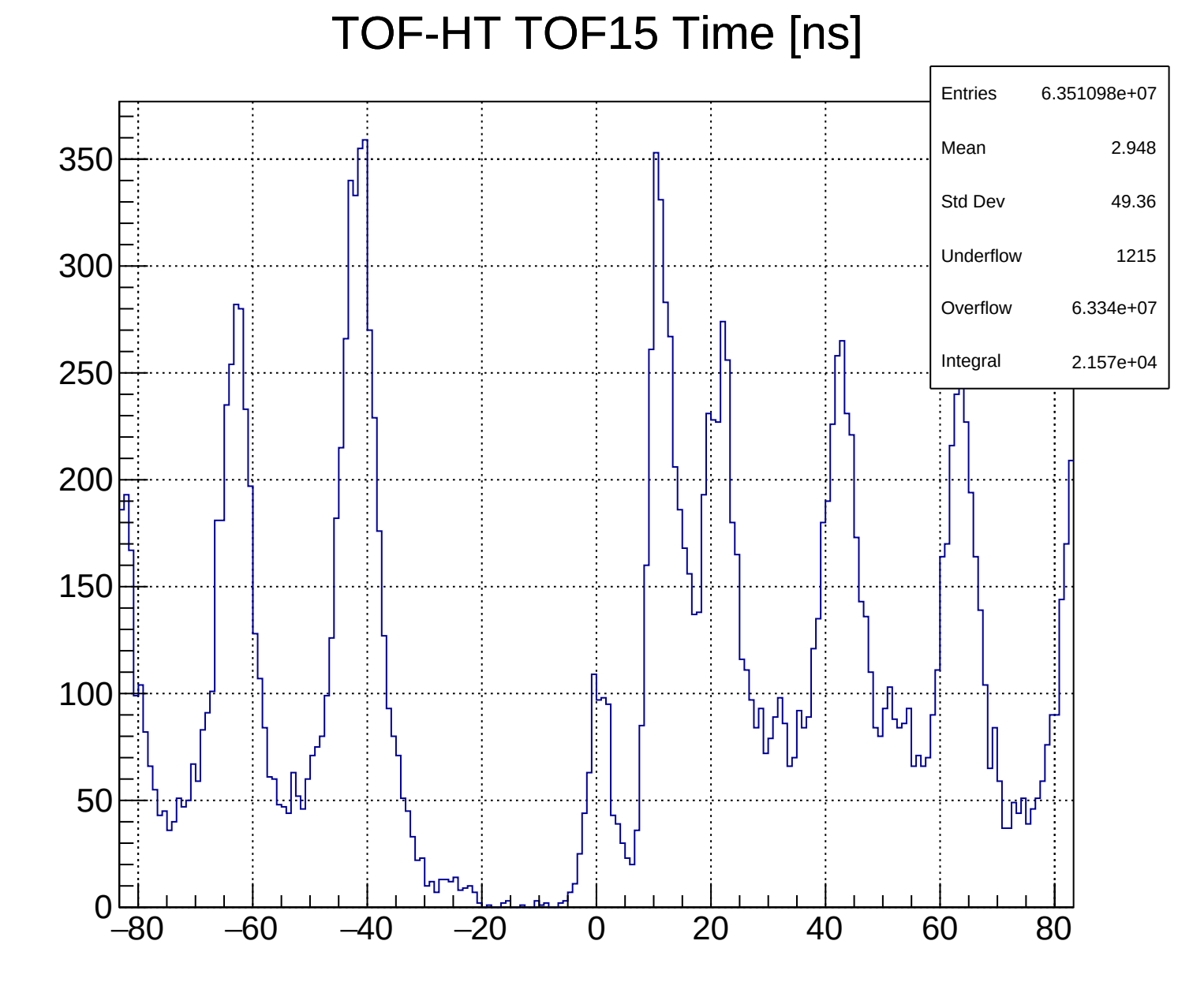

TOF-HT TOF14 Time [ns]
Entries 6.351098e+07
Mean 3.579
Std Dev 48.64
Underflow 778
Overflow 6.339e+07
Integral 1.613e+04
250
200
150
100
50
0
–80
–60
–40
–20
0
20
40
60
80


TOF-HT TOF15 Time [ns]
Entries 6.351098e+07
Mean 2.948
Std Dev 49.36
Underflow 1215
Overflow 6.334e+07
Integral 2.157e+04
350
300
250
200
150
100
50
0
–80
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–40
–20
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20
40
60
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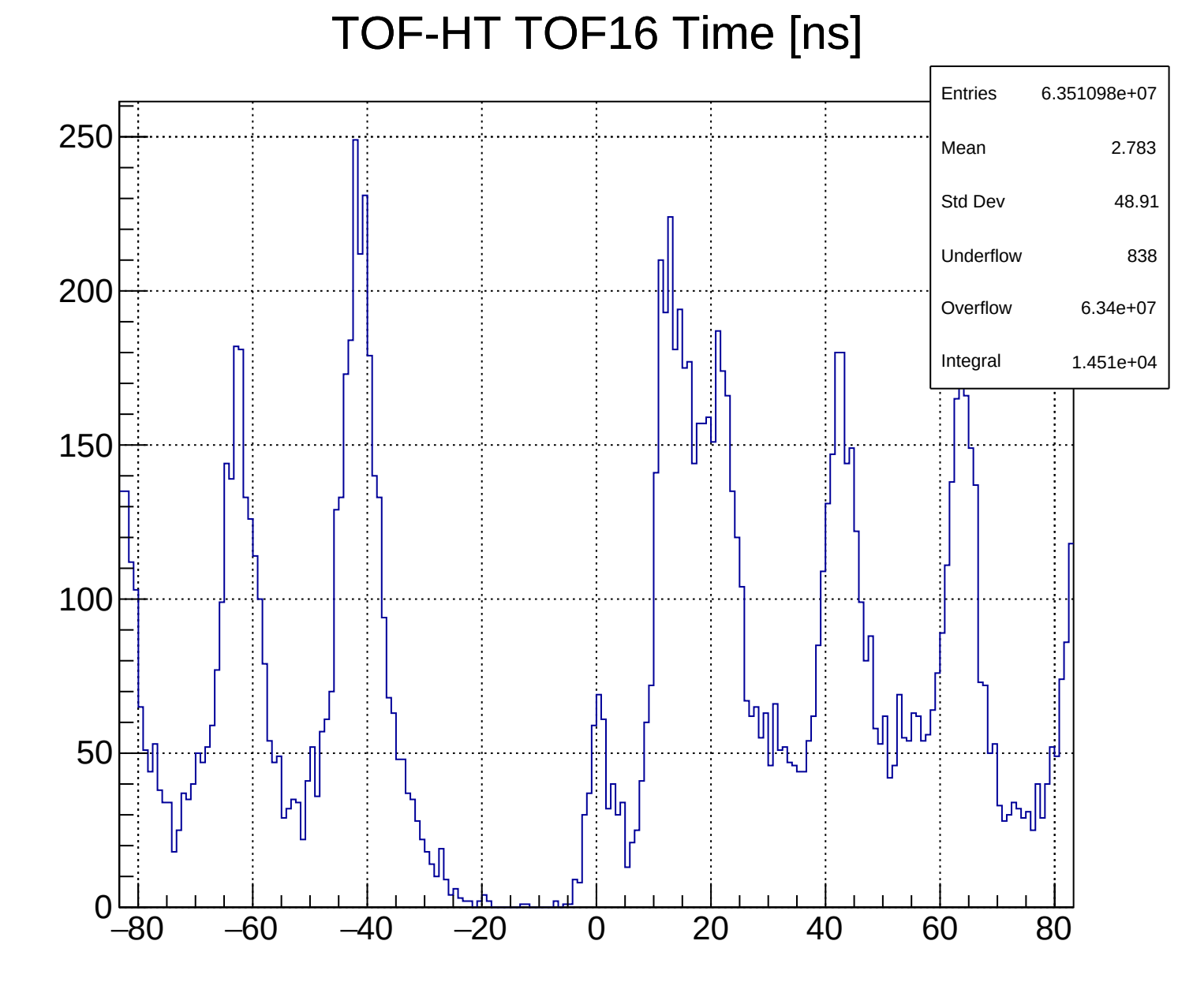
TOF-HT TOF16 Time [ns]
Entries 6.351098e+07
Mean 2.783
Std Dev 48.91
Underflow 838
Overflow 6.34e+07
Integral 1.451e+04
250
200
150
100
50
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–80
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–40
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60
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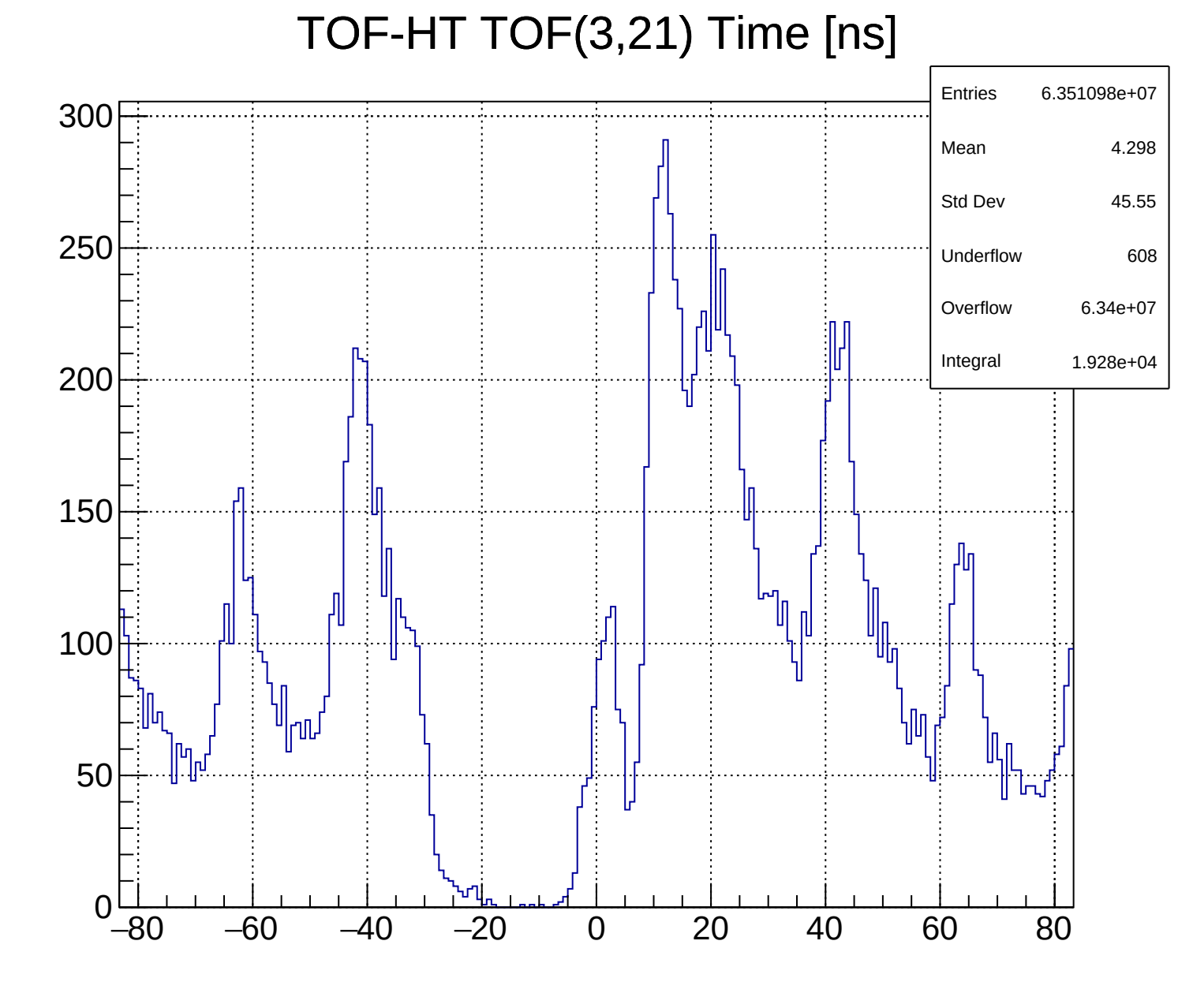
TOF-HT TOF(3,21) Time [ns]
Entries 6.351098e+07
Mean 4.298
Std Dev 45.55
Underflow 608
Overflow 6.34e+07
Integral 1.928e+04
300
250
200
150
100
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–80
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–40
–20
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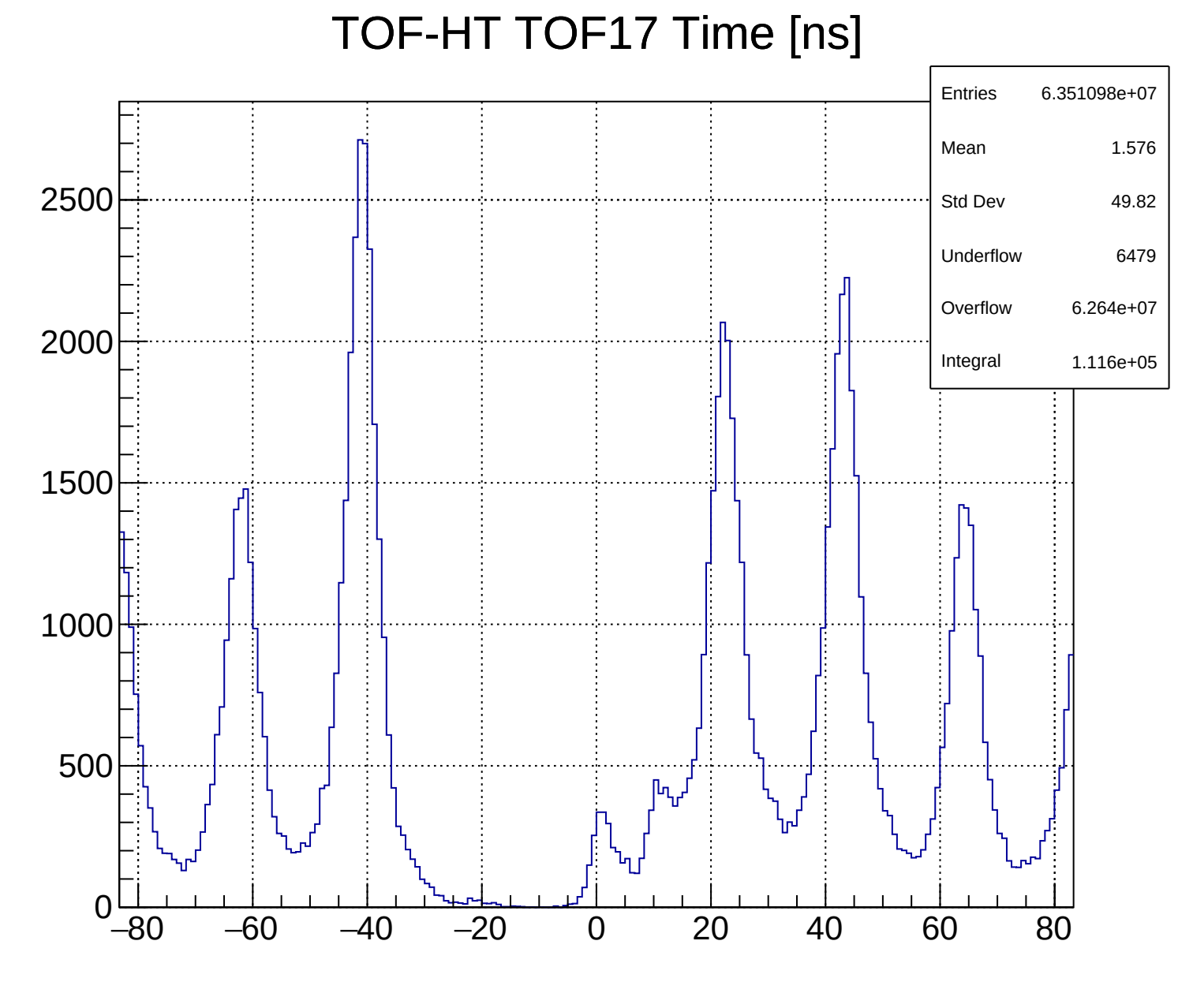
20
40
60
80


TOF-HT TOF17 Time [ns]
Entries 6.351098e+07
Mean 1.576
Std Dev 49.82
Underflow 6479
Overflow 6.264e+07
Integral 1.116e+05
2500
2000
1500
1000
500
0
–80
–60
–40
–20
0
20
40
60
80