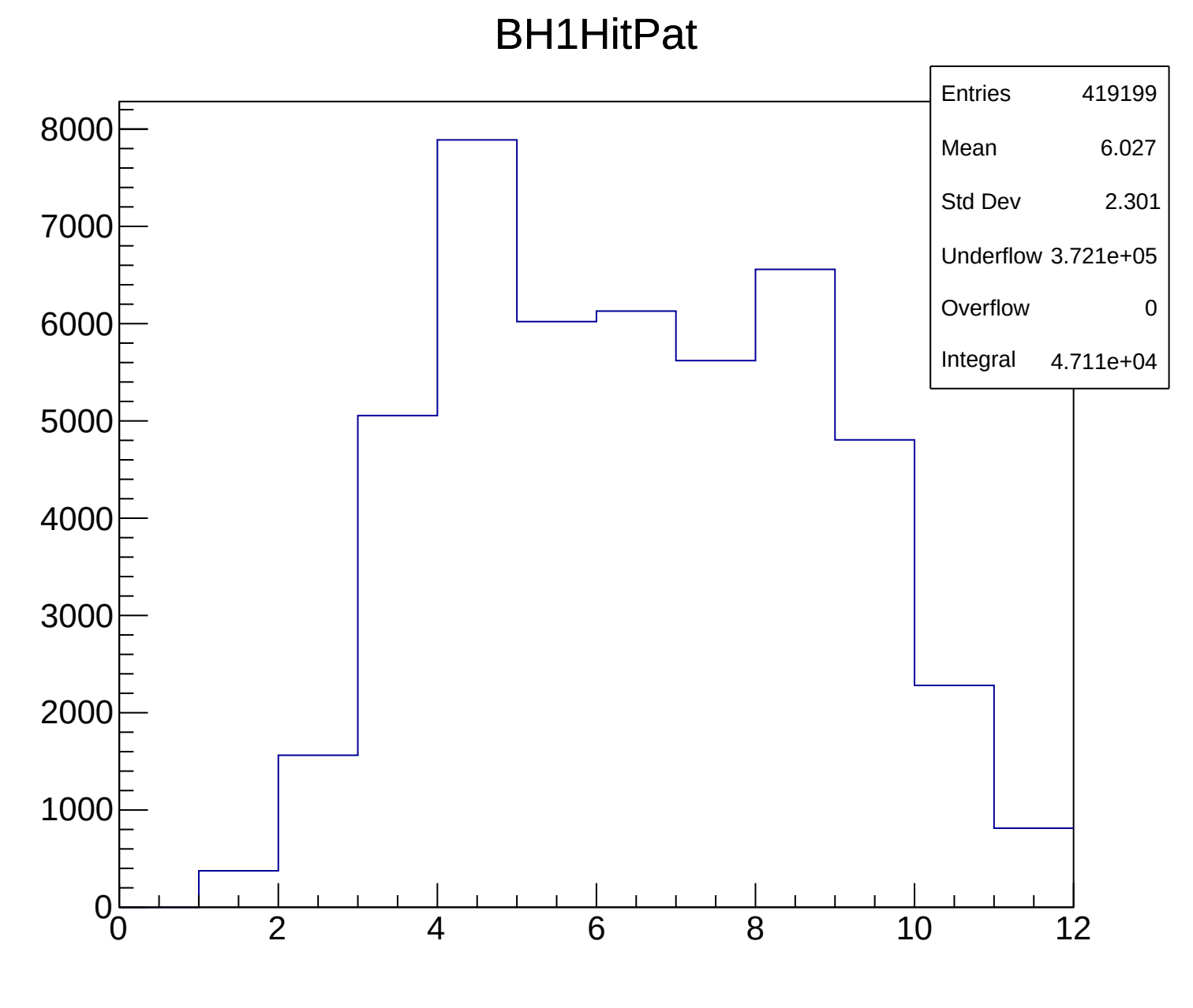
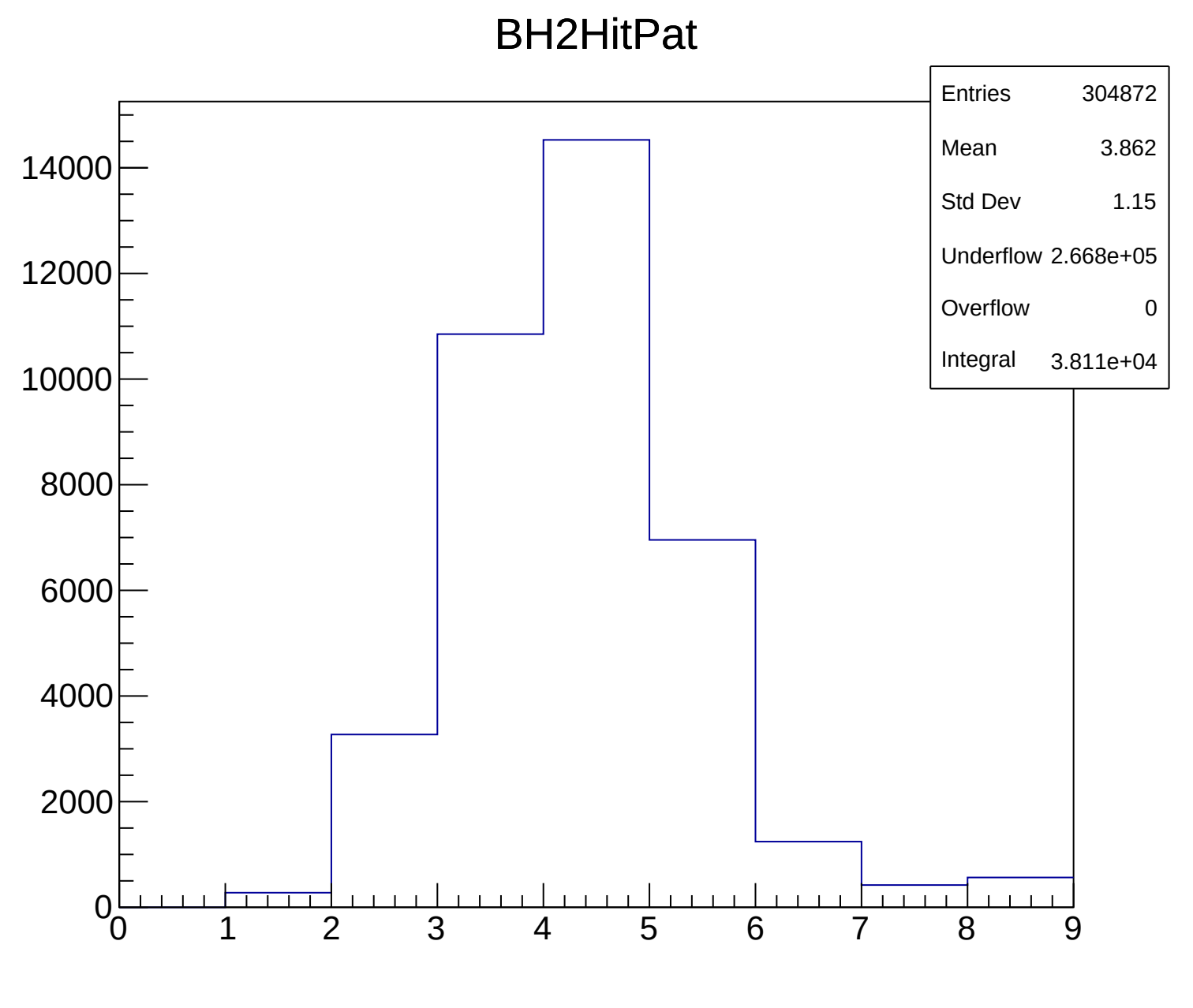
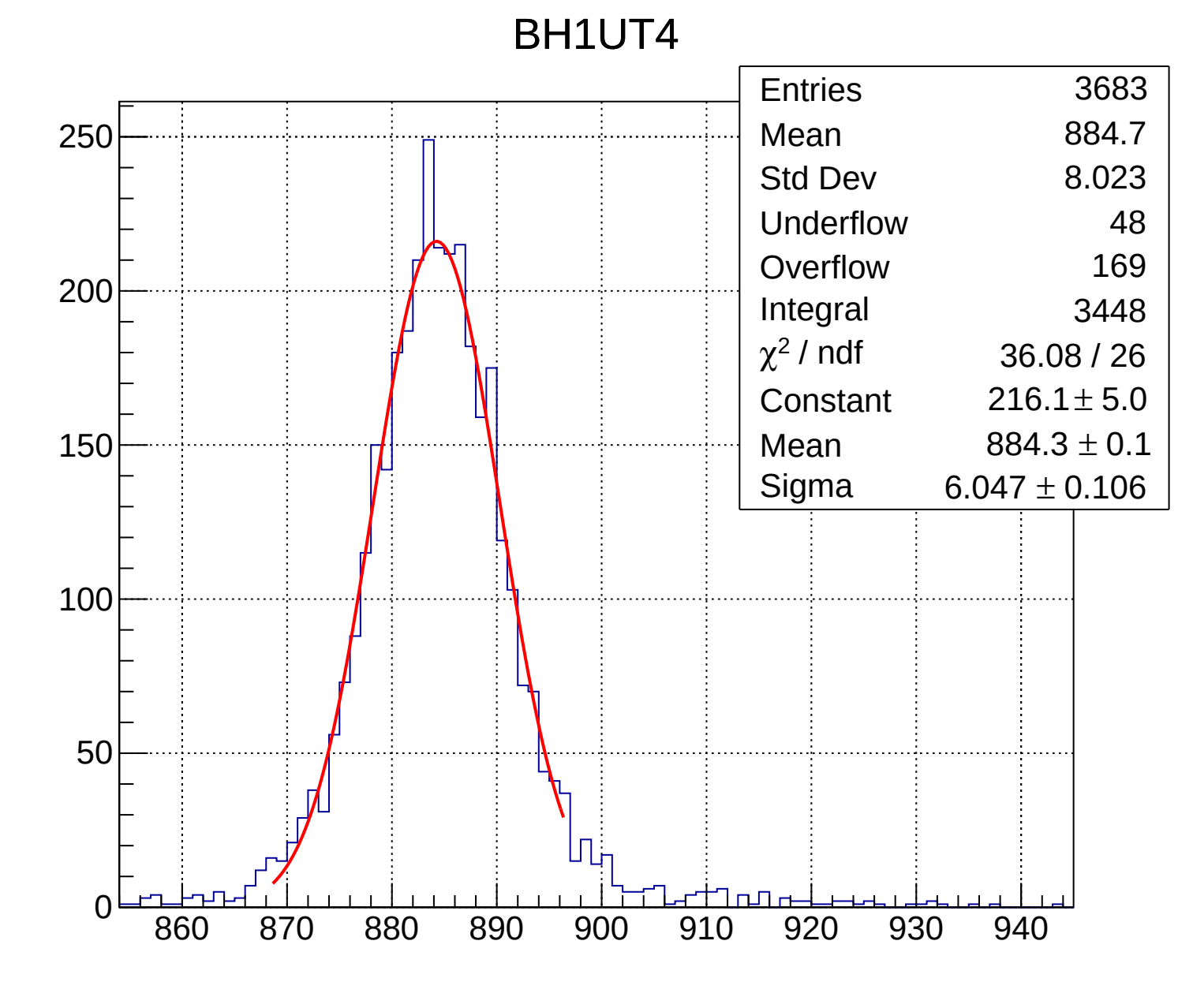
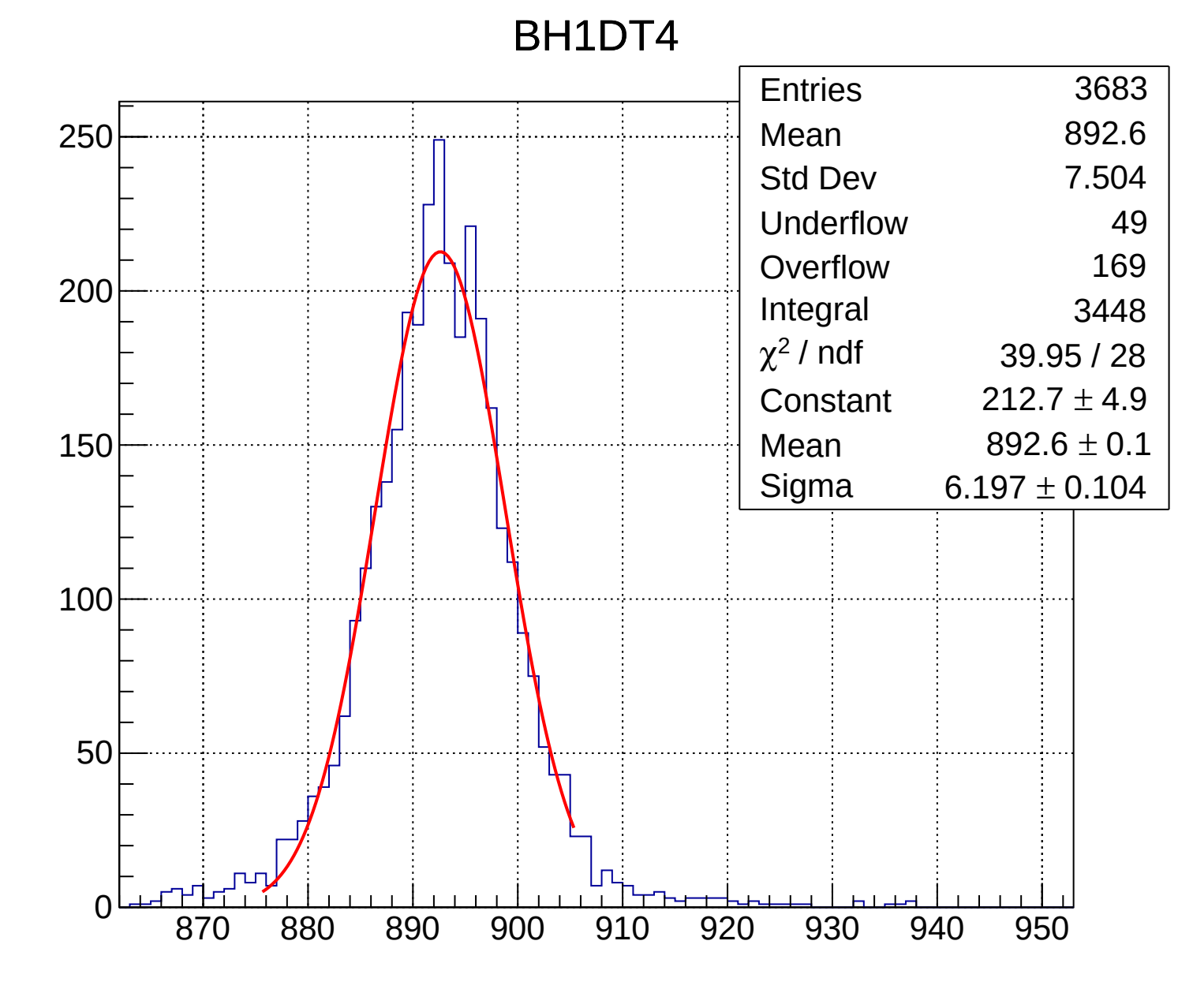
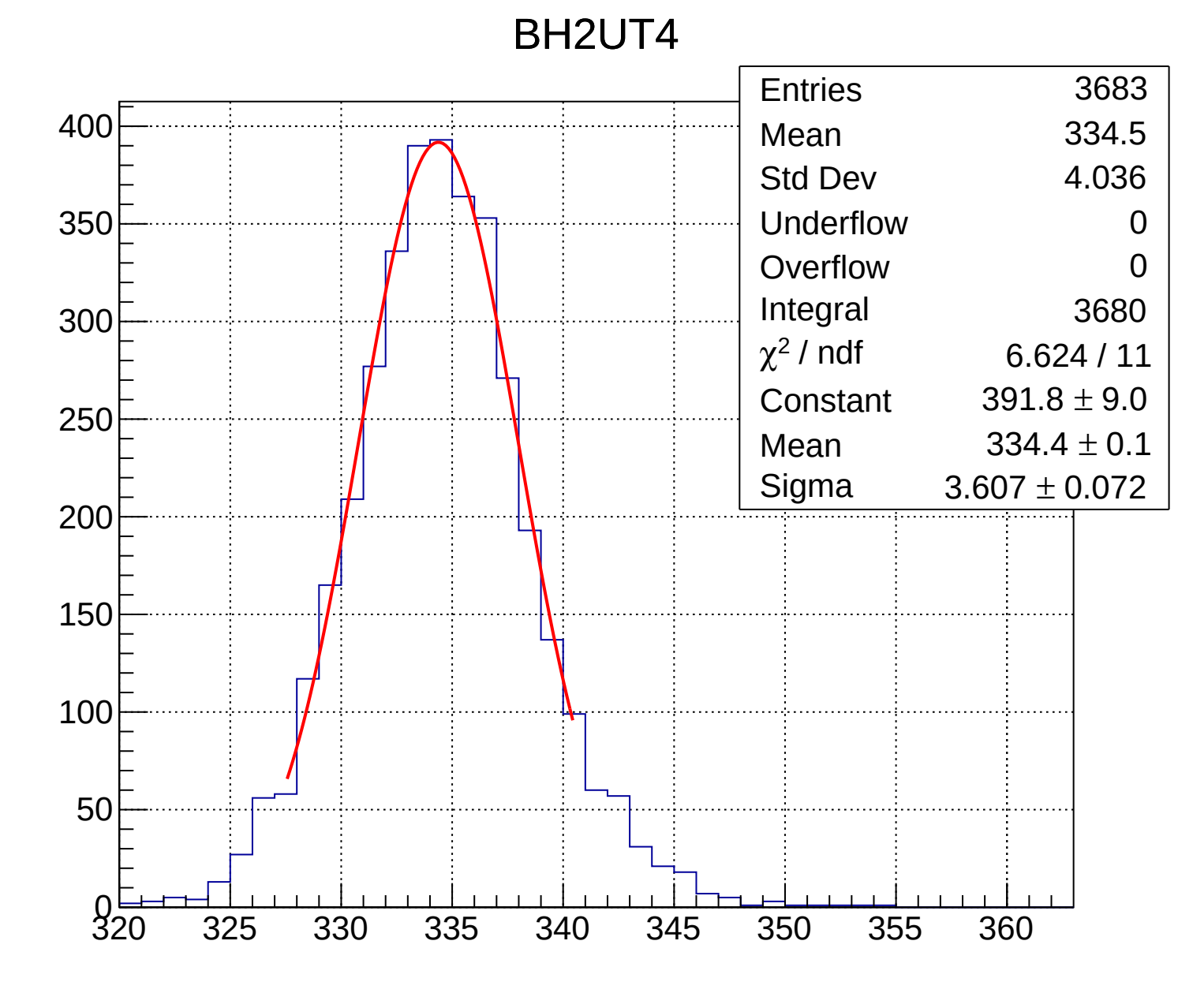
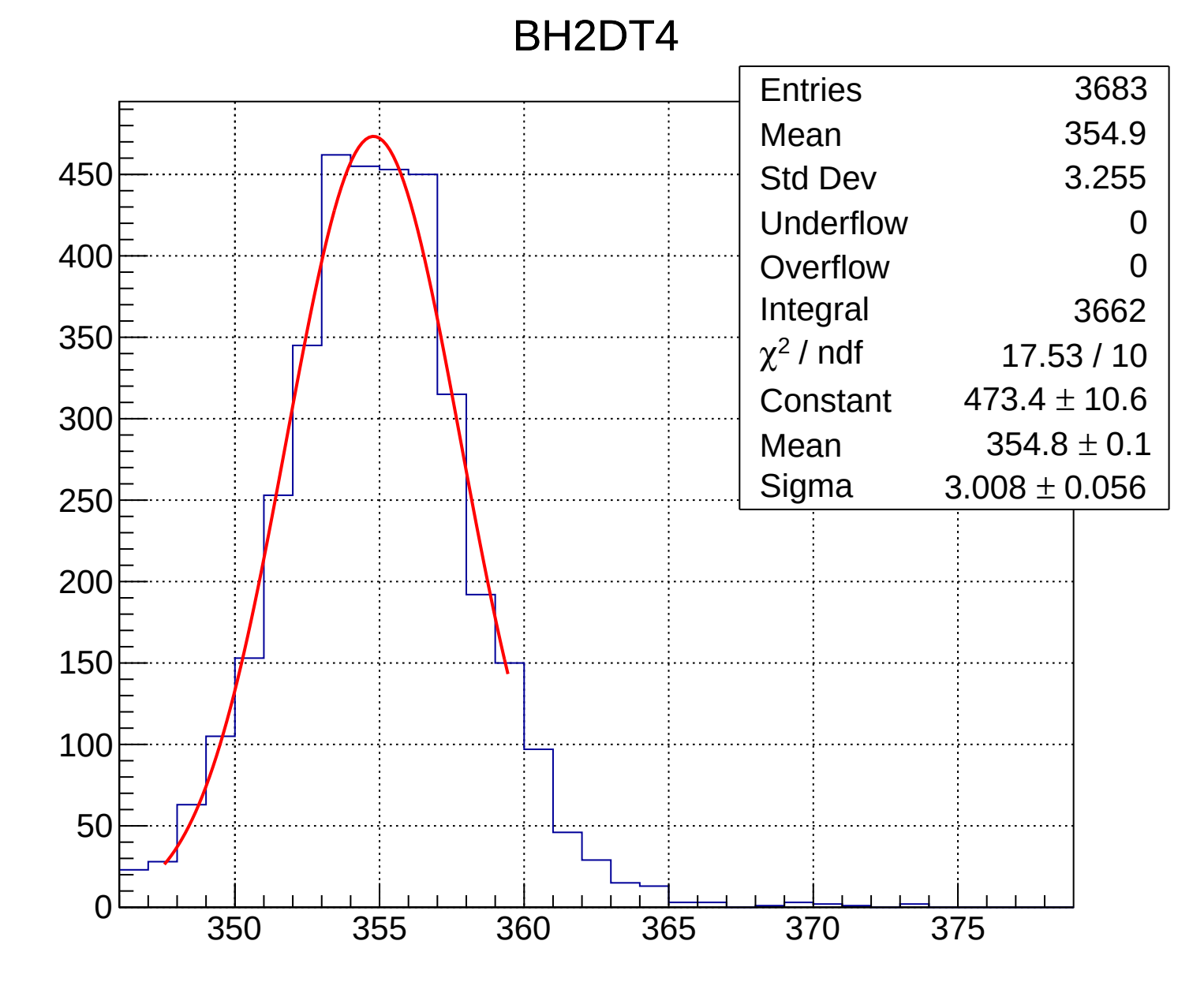

BH1HitPat
Entries 419199
Mean 6.027
Std Dev 2.301
Underflow 3.721e+05
Overflow 0
Integral 4.711e+04
8000
7000
6000
5000
4000
3000
2000
1000
0
0
2
4
6
8
10
12

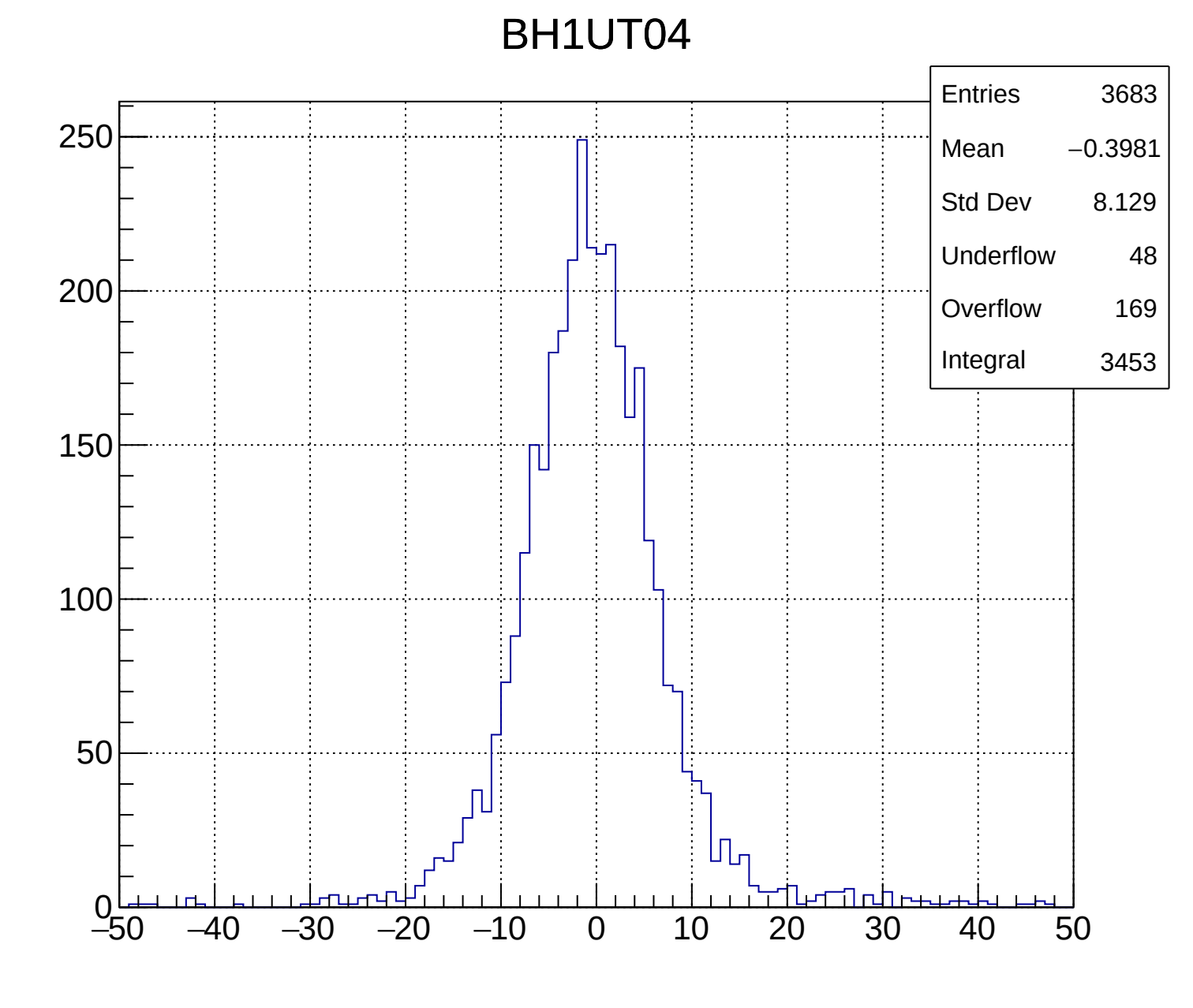

BH2HitPat
Entries 304872
Mean 3.862
Std Dev 1.15
Underflow 2.668e+05
Overflow 0
Integral 3.811e+04
14000
12000
10000
8000
6000
4000
2000
0
0
1
2
3
4
5
6
7
8
9

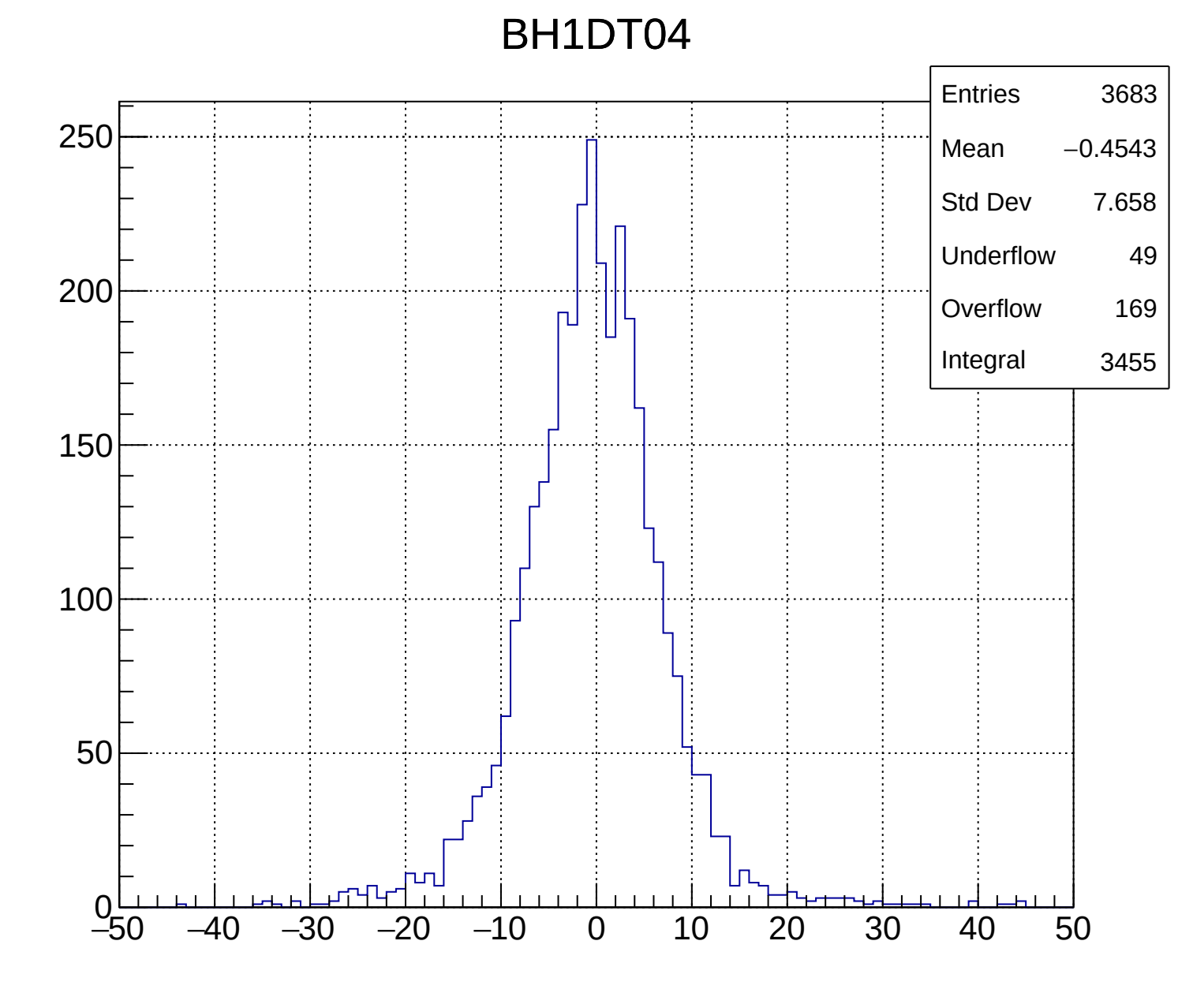

BH1UT4
Entries 3683
Mean 884.7
Std Dev 8.023
Underflow 48
Overflow 169
Integral 3448
χ² / ndf 36.08 / 26
Constant 216.1 ± 5.0
Mean 884.3 ± 0.1
Sigma 6.047 ± 0.106
250
200
150
100
50
0
860
870
880
890
900
910
920
930
940

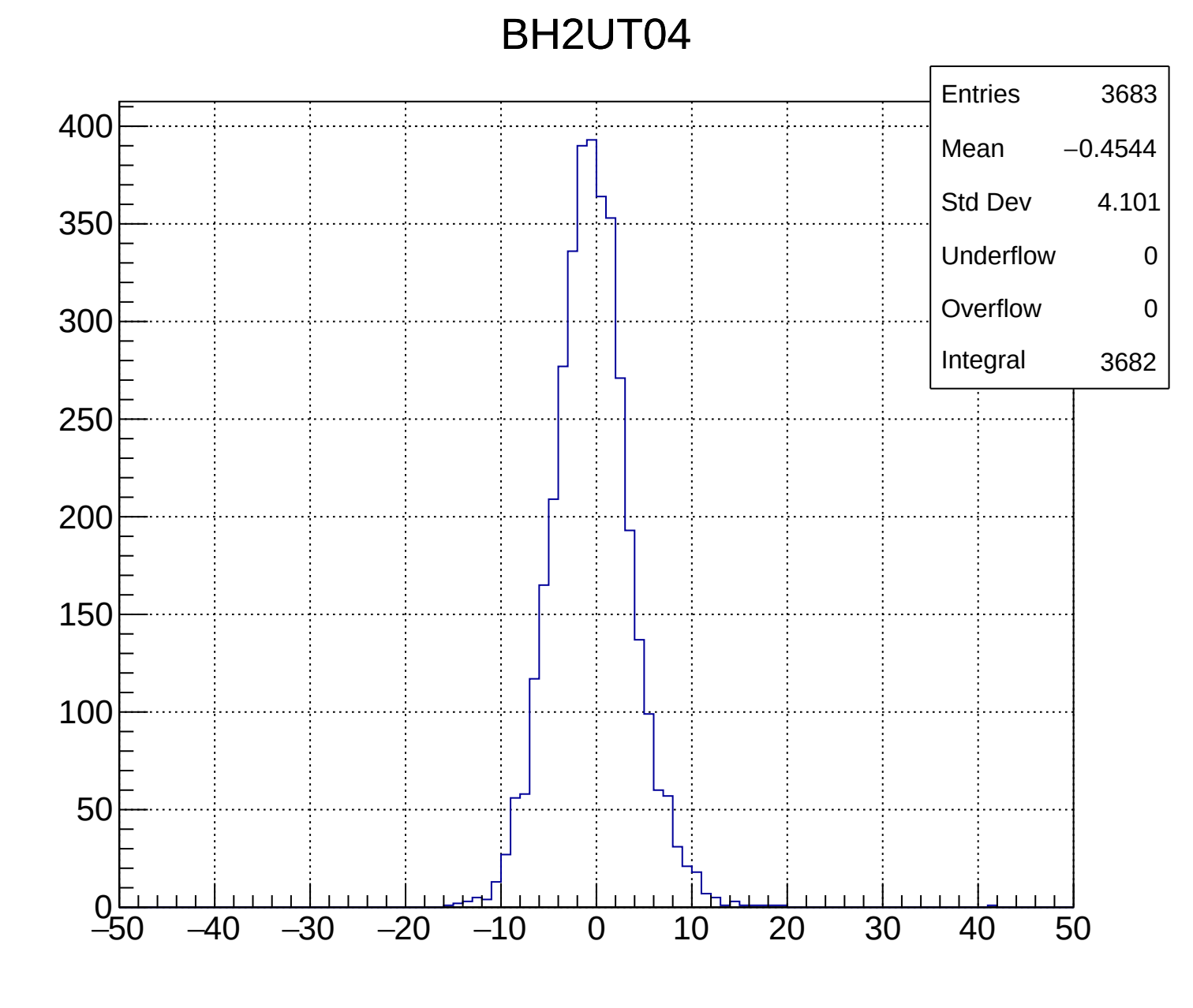

BH1DT4
Entries 3683
Mean 892.6
Std Dev 7.504
Underflow 49
Overflow 169
Integral 3448
χ² / ndf 39.95 / 28
Constant 212.7 ± 4.9
Mean 892.6 ± 0.1
Sigma 6.197 ± 0.104
250
200
150
100
50
0
870
880
890
900
910
920
930
940
950

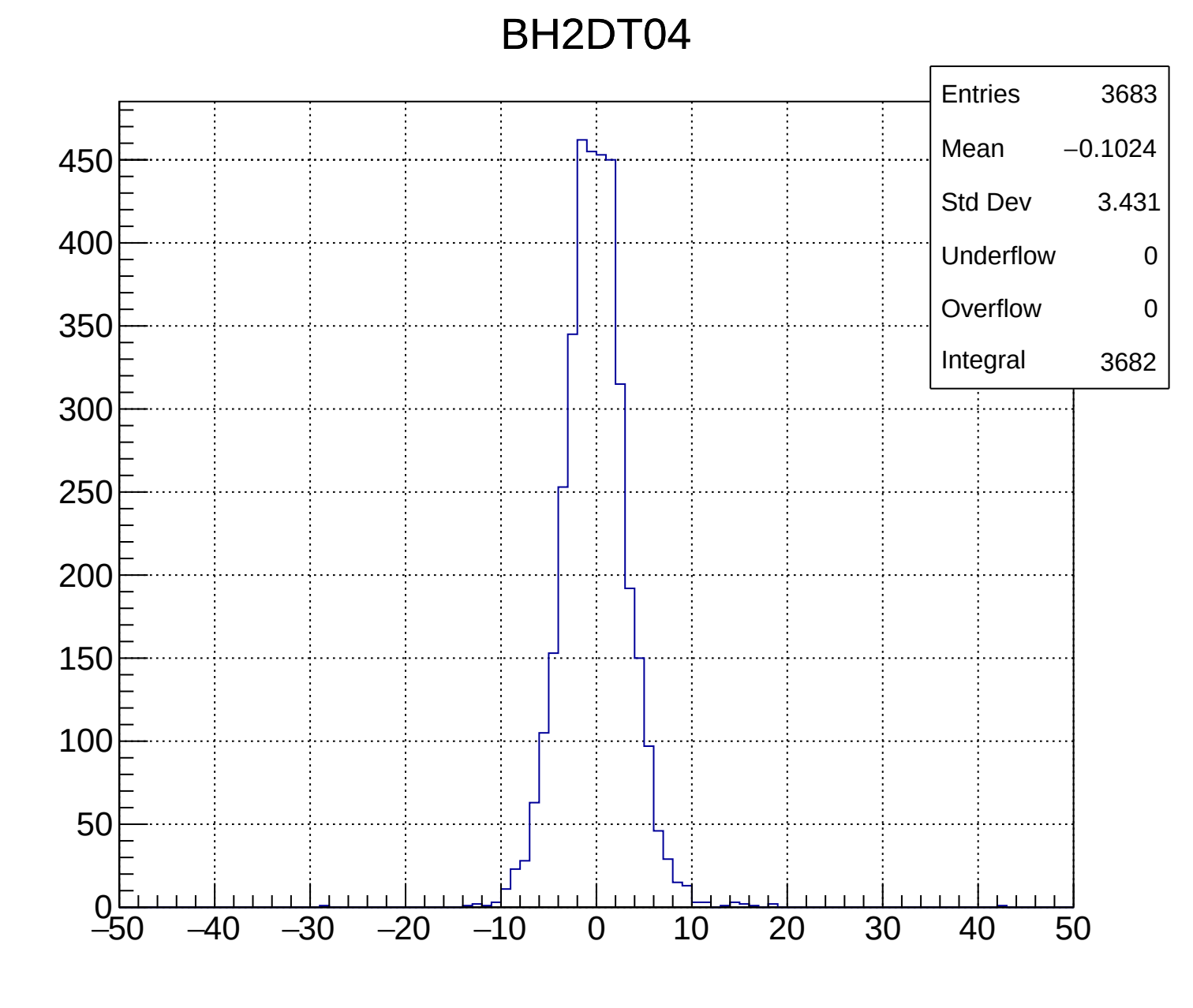

BH2UT4
Entries 3683
Mean 334.5
Std Dev 4.036
Underflow 0
Overflow 0
Integral 3680
χ² / ndf 6.624 / 11
Constant 391.8 ± 9.0
Mean 334.4 ± 0.1
Sigma 3.607 ± 0.072
400
350
300
250
200
150
100
50
0
320
325
330
335
340
345
350
355
360

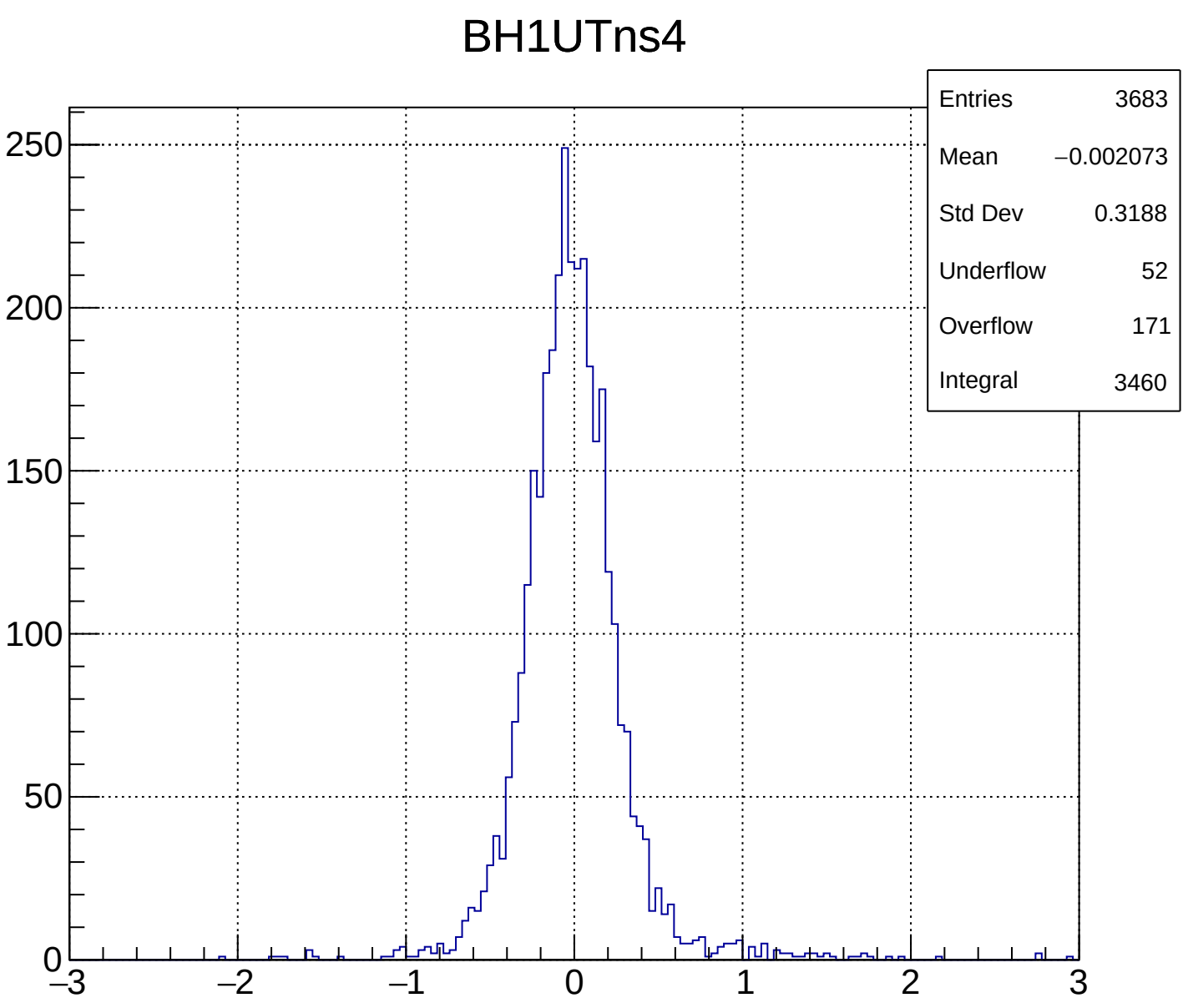

BH2DT4
Entries 3683
Mean 354.9
Std Dev 3.255
Underflow 0
Overflow 0
Integral 3662
χ² / ndf 17.53 / 10
Constant 473.4 ± 10.6
Mean 354.8 ± 0.1
Sigma 3.008 ± 0.056
450
400
350
300
250
200
150
100
50
0
350
355
360
365
370
375

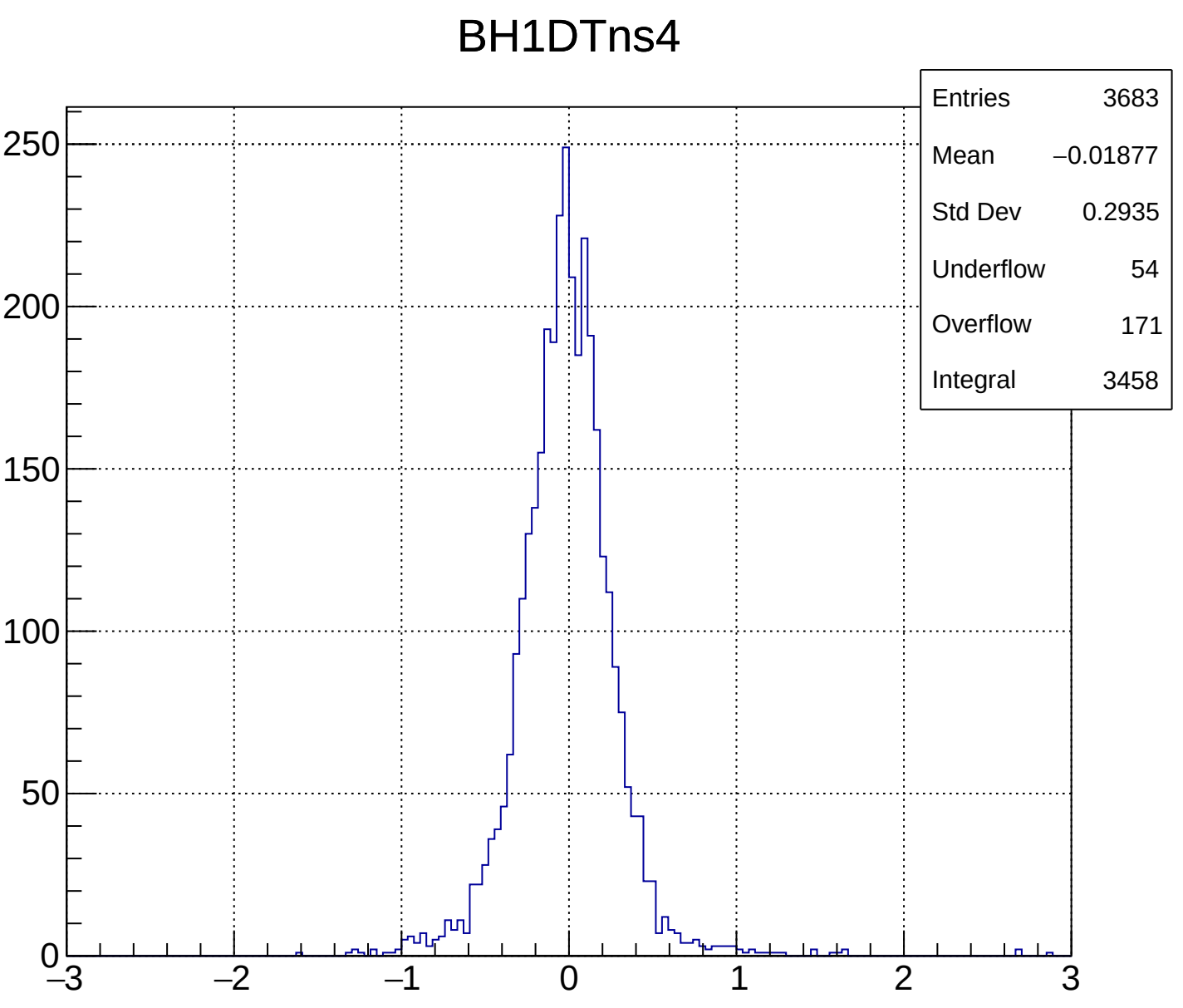

BH1UT04
Entries 3683
Mean −0.3981
Std Dev 8.129
Underflow 48
Overflow 169
Integral 3453
250
200
150
100
50
0
−50
−40
−30
−20
−10
0
10
20
30
40
50

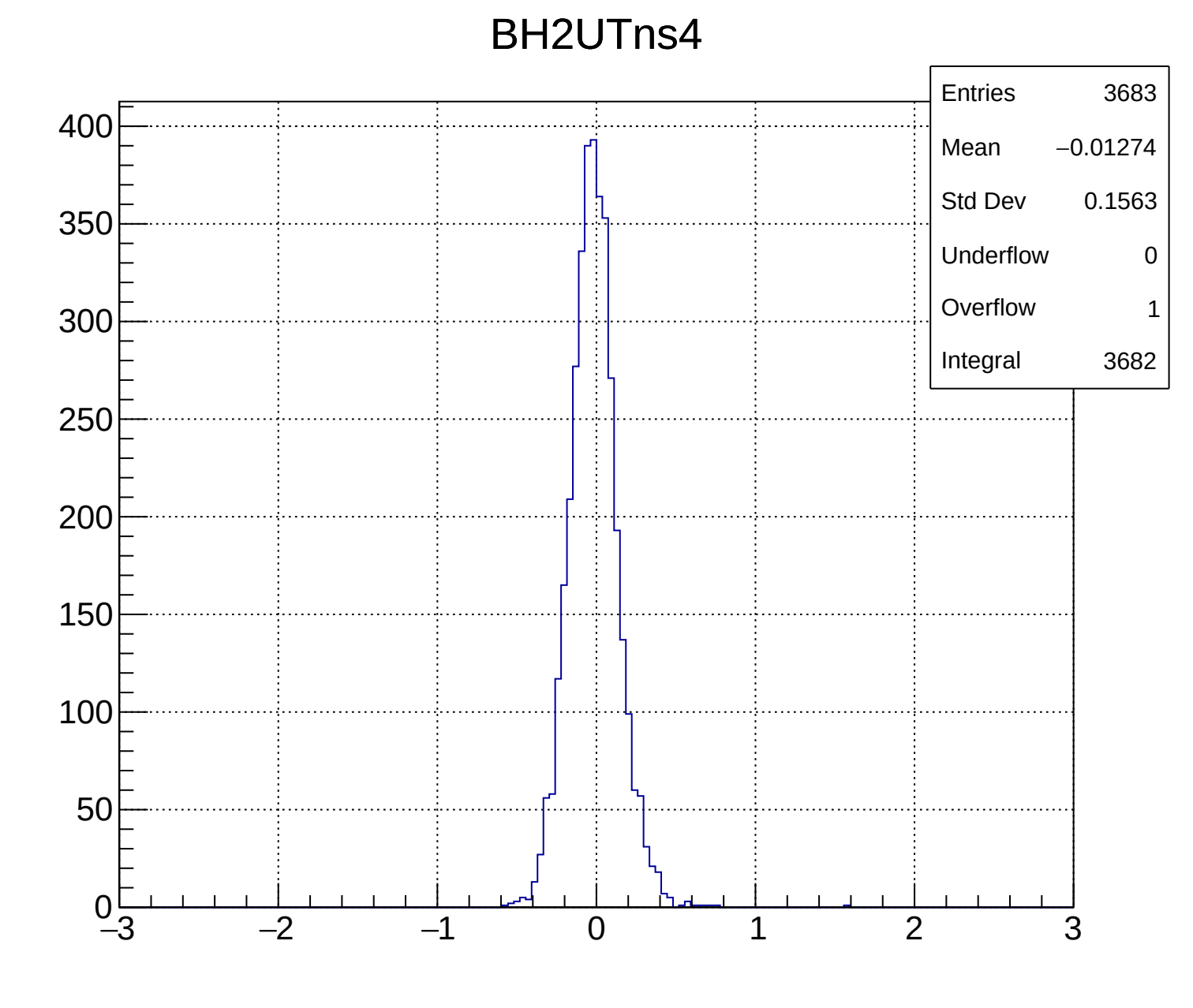

BH1DT04
Entries 3683
Mean −0.4543
Std Dev 7.658
Underflow 49
Overflow 169
Integral 3455
250
200
150
100
50
0
−50
−40
−30
−20
−10
0
10
20
30
40
50

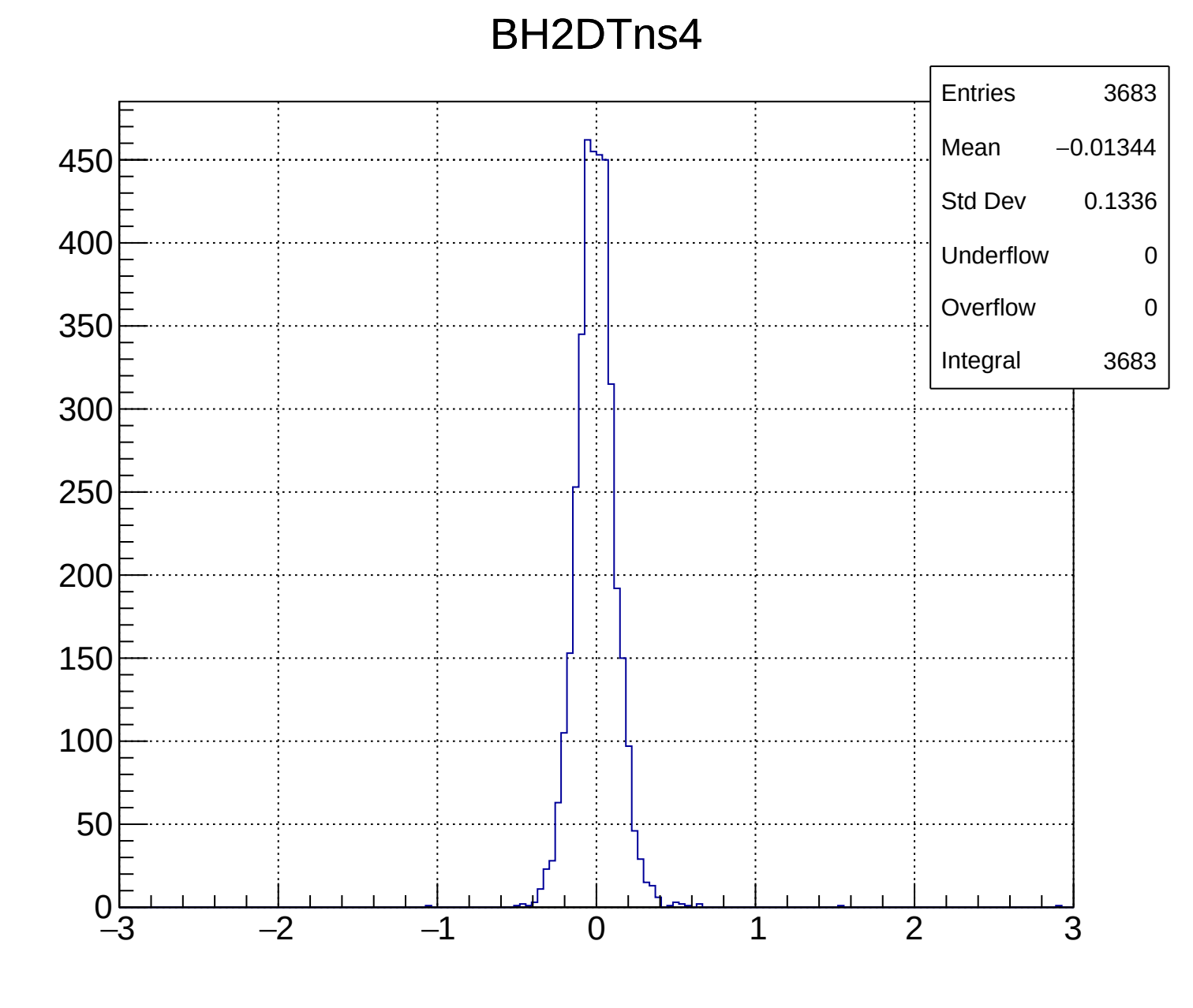

BH2UT04
Entries 3683
Mean −0.4544
Std Dev 4.101
Underflow 0
Overflow 0
Integral 3682
400
350
300
250
200
150
100
50
0
−50
−40
−30
−20
−10
0
10
20
30
40
50

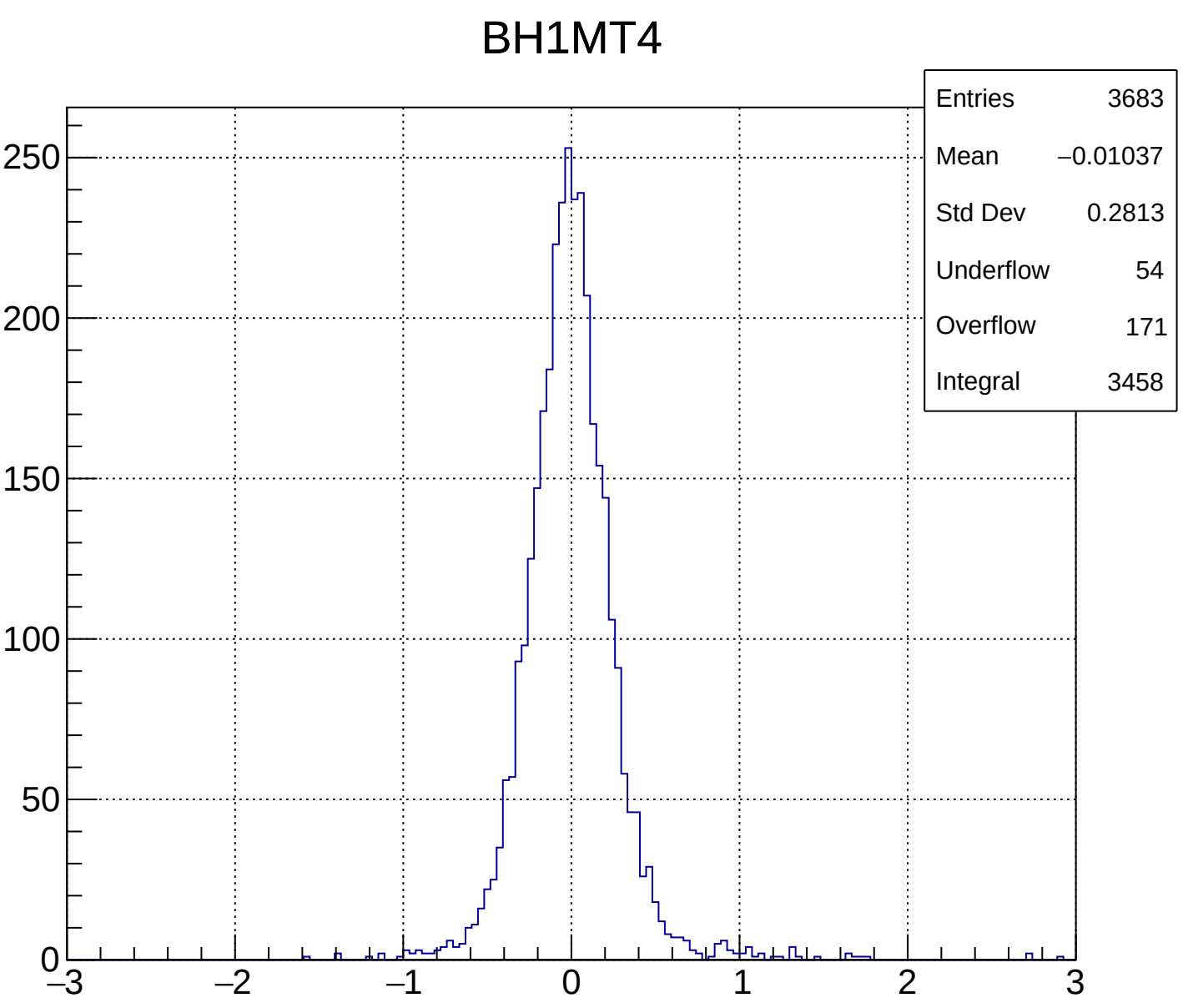

BH2DT04
Entries 3683
Mean −0.1024
Std Dev 3.431
Underflow 0
Overflow 0
Integral 3682
450
400
350
300
250
200
150
100
50
0
−50
−40
−30
−20
−10
0
10
20
30
40
50

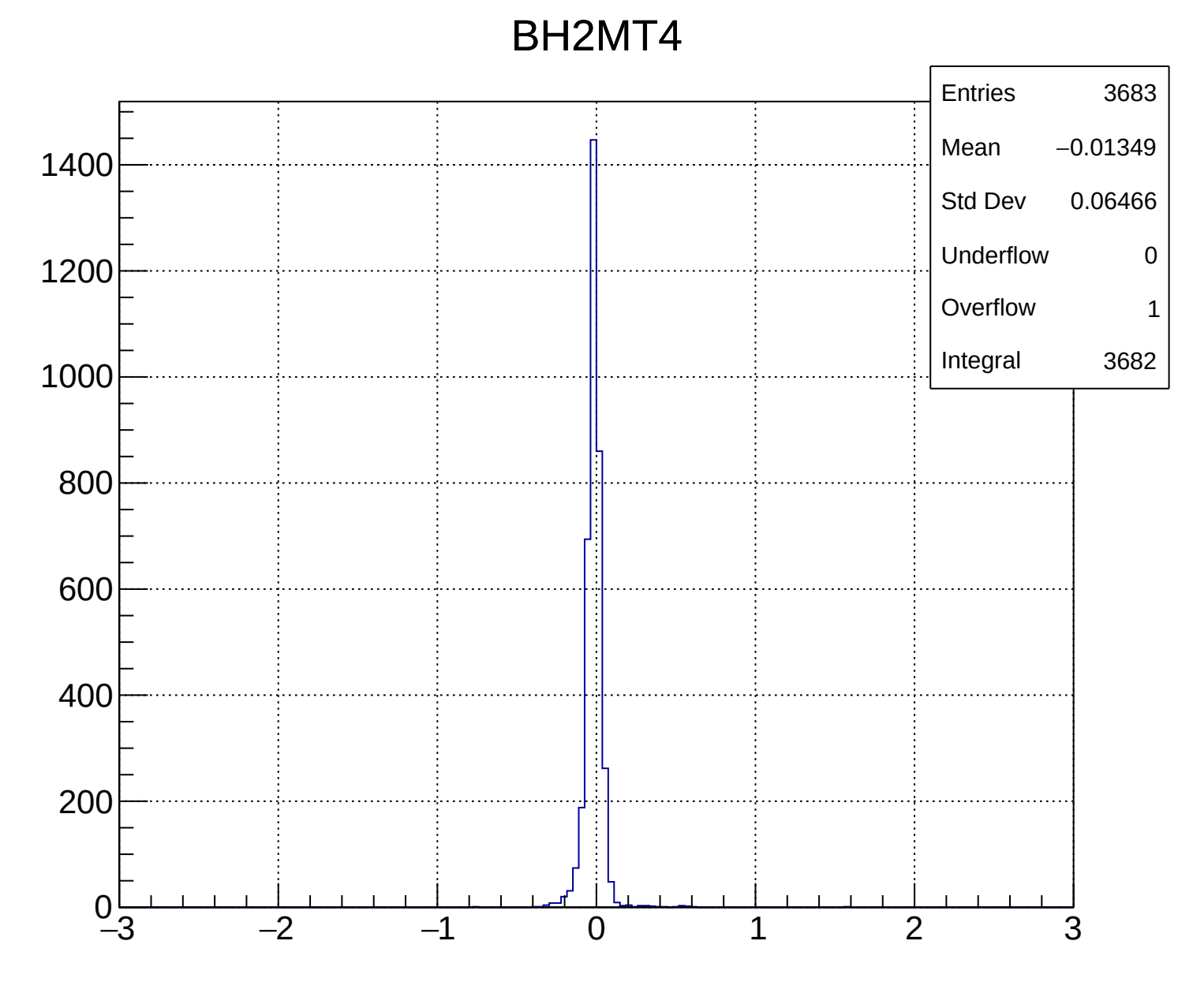

BH1UTns4
Entries 3683
Mean −0.002073
Std Dev 0.3188
Underflow 52
Overflow 171
Integral 3460
250
200
150
100
50
0
−3
−2
−1
0
1
2
3

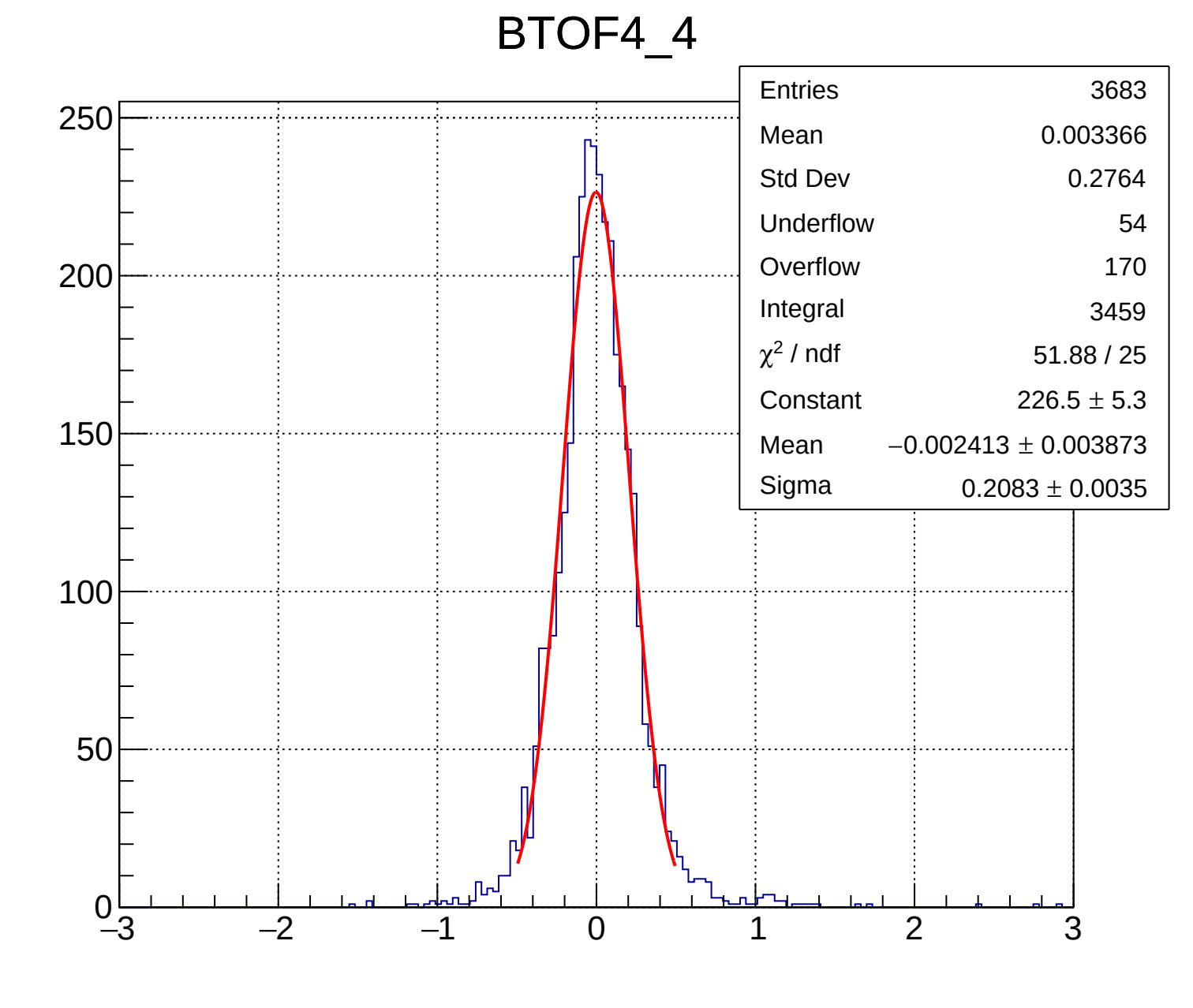

BH1DTns4
Entries 3683
Mean −0.01877
Std Dev 0.2935
Underflow 54
Overflow 171
Integral 3458
250
200
150
100
50
0
−3
−2
−1
0
1
2
3

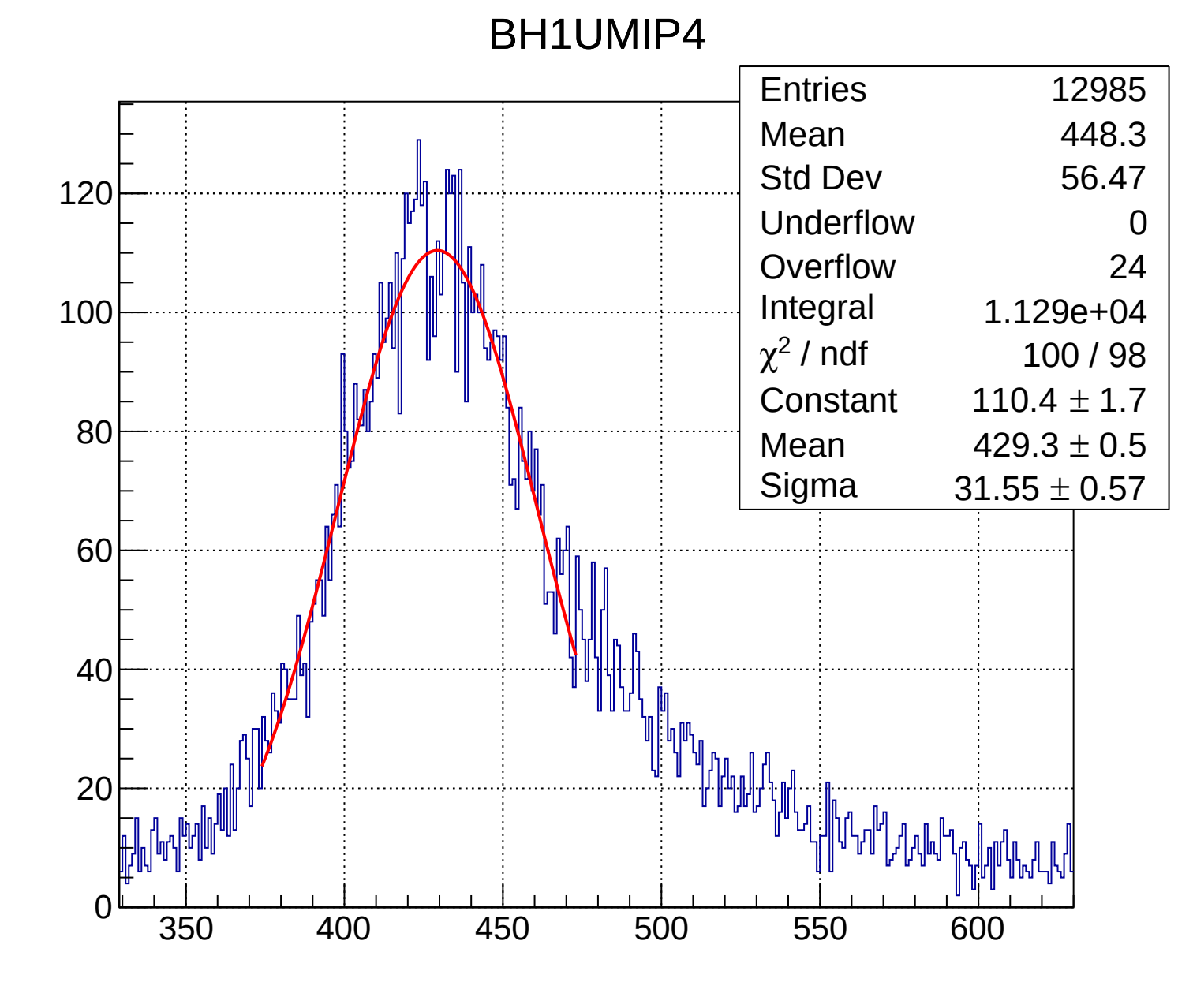

BH2UTns4
Entries 3683
Mean −0.01274
Std Dev 0.1563
Underflow 0
Overflow 1
Integral 3682
400
350
300
250
200
150
100
50
0
−3
−2
−1
0
1
2
3

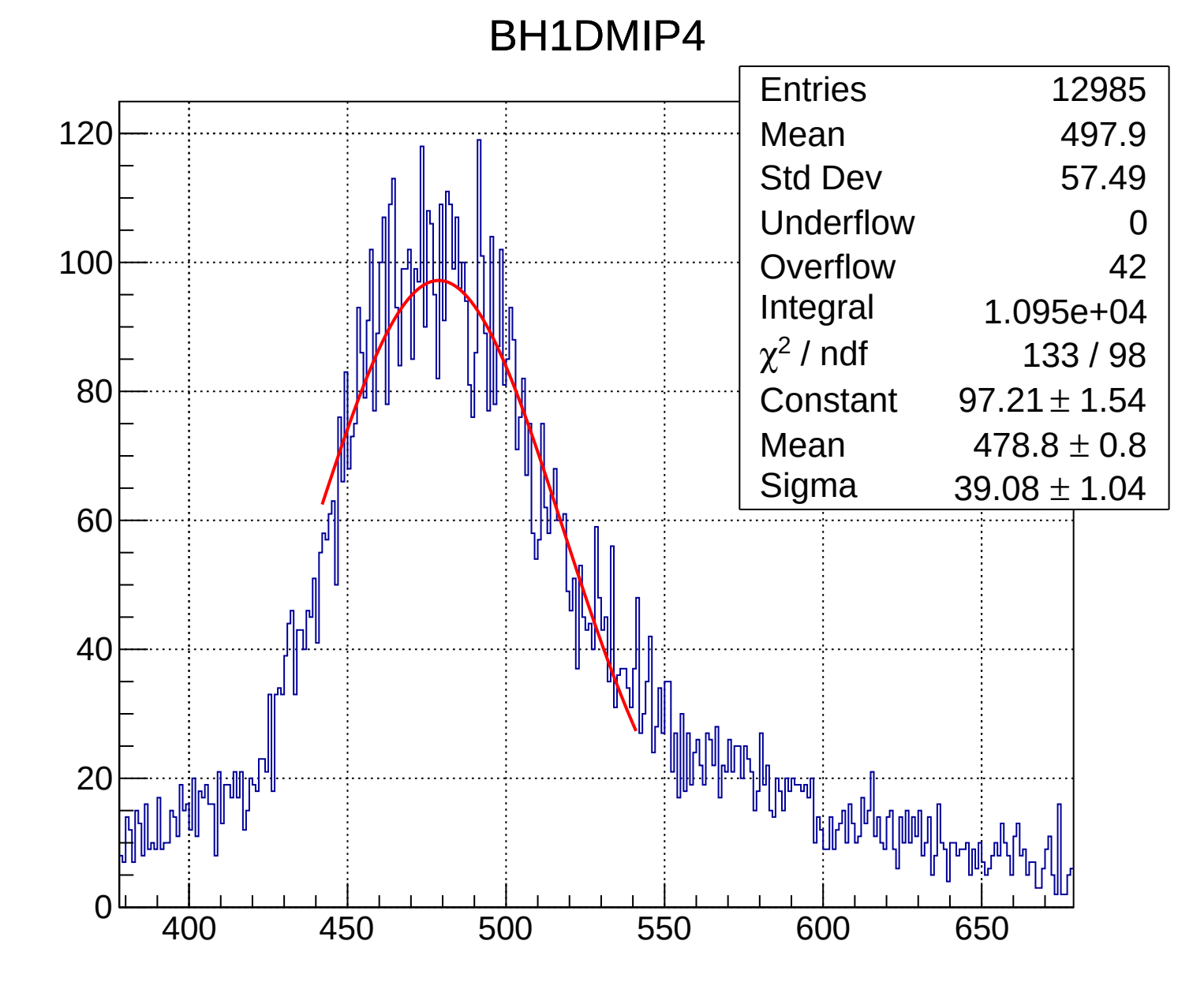

BH2DTns4
Entries 3683
Mean −0.01344
Std Dev 0.1336
Underflow 0
Overflow 0
Integral 3683
450
400
350
300
250
200
150
100
50
0
−3
−2
−1
0
1
2
3

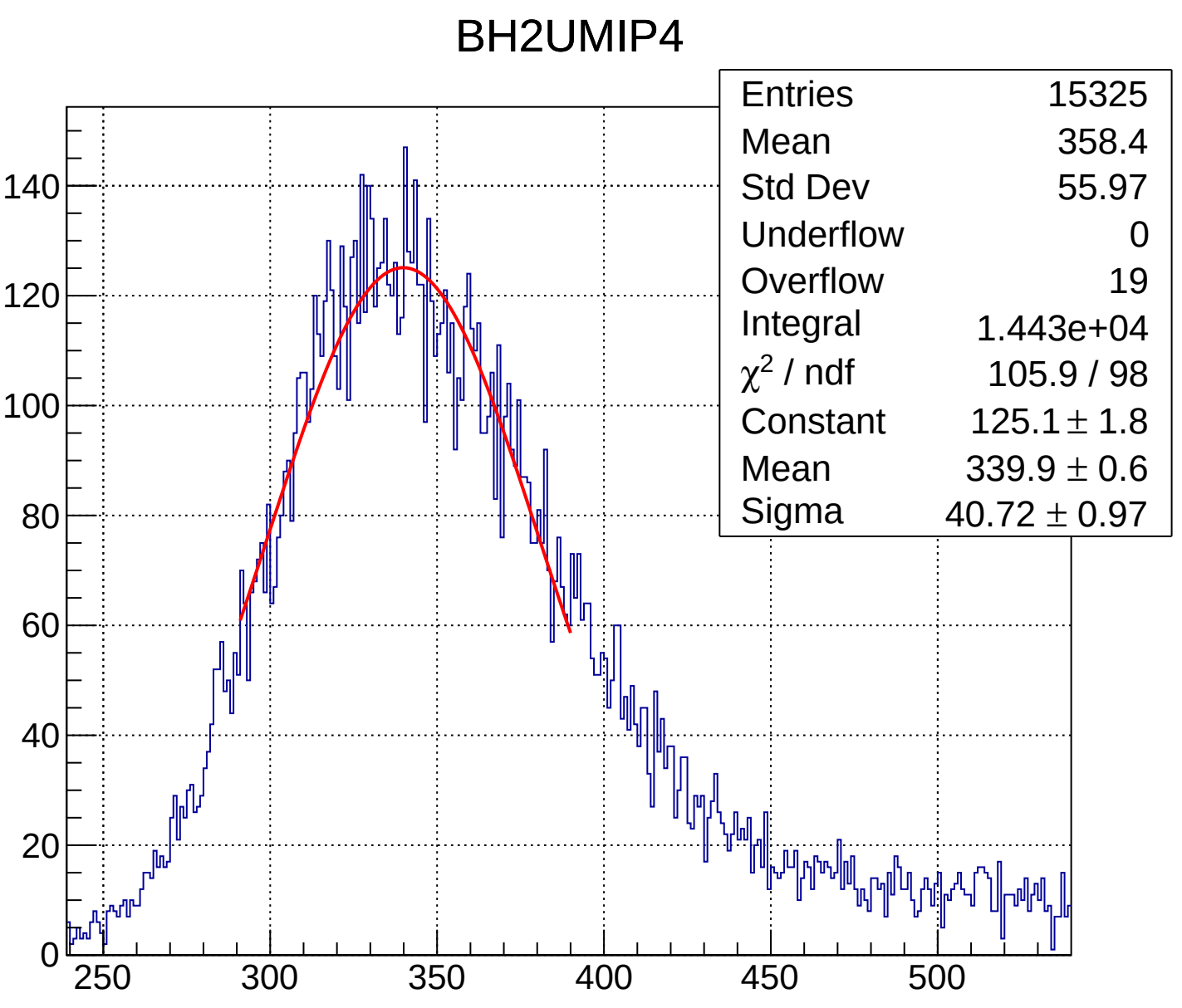

BH1MT4
Entries 3683
Mean −0.01037
Std Dev 0.2813
Underflow 54
Overflow 171
Integral 3458
250
200
150
100
50
0
−3
−2
−1
0
1
2
3

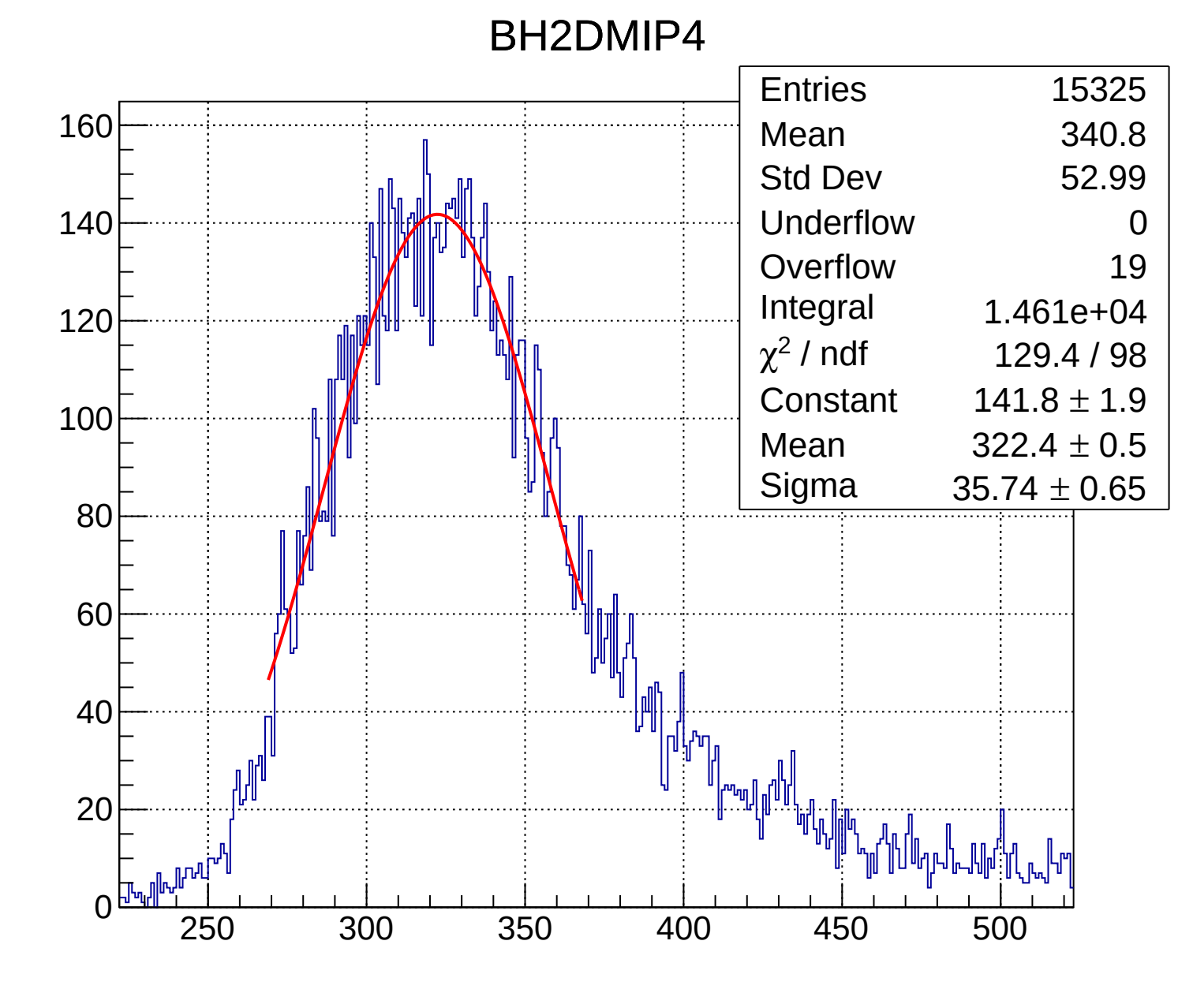

BH2MT4
Entries 3683
Mean −0.01349
Std Dev 0.06466
Underflow 0
Overflow 1
Integral 3682
1400
1200
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

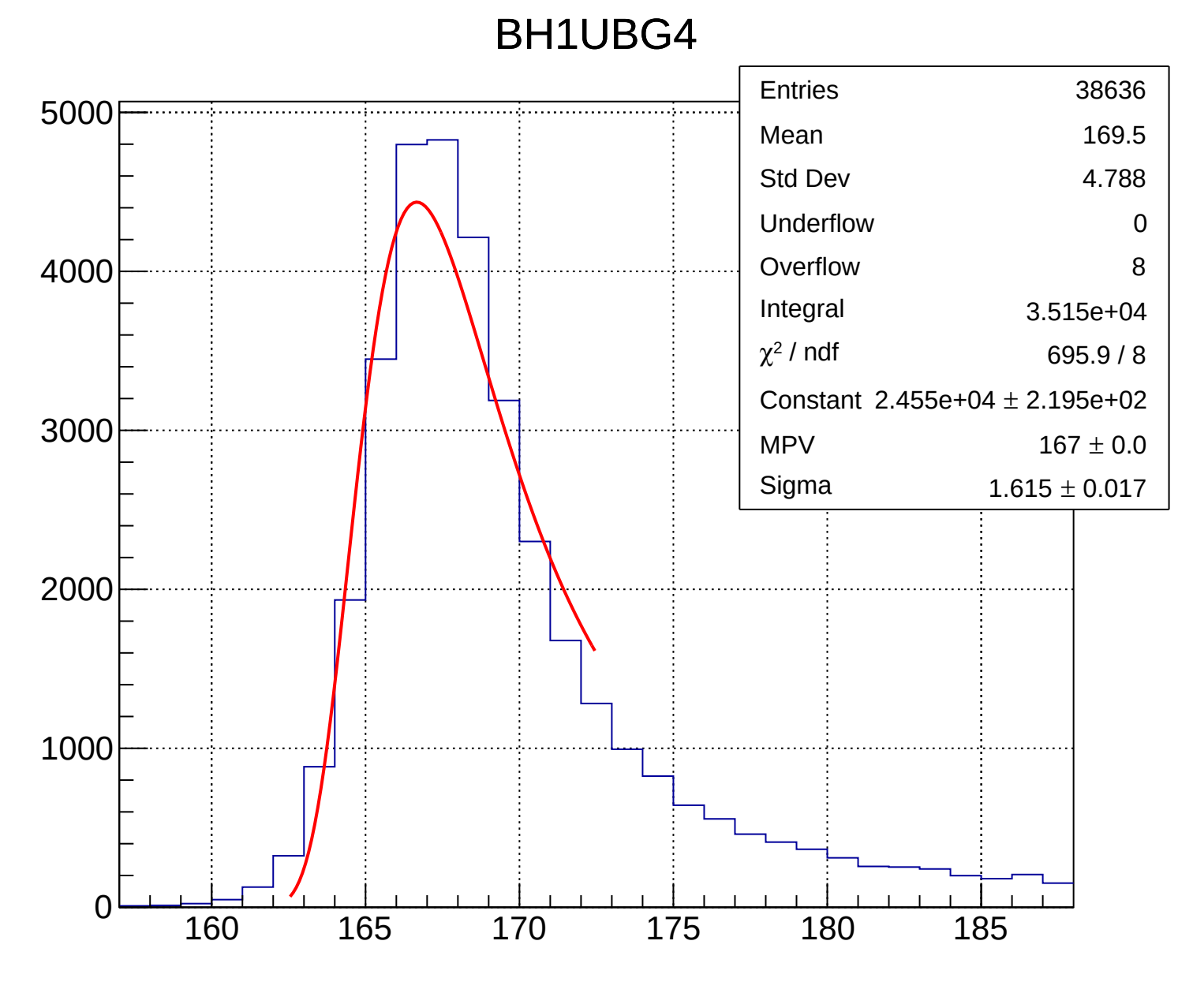

BTOF4_4
Entries 3683
Mean 0.003366
Std Dev 0.2764
Underflow 54
Overflow 170
Integral 3459
χ² / ndf 51.88 / 25
Constant 226.5 ± 5.3
Mean −0.002413 ± 0.003873
Sigma 0.2083 ± 0.0035
250
200
150
100
50
0
−3
−2
−1
0
1
2
3

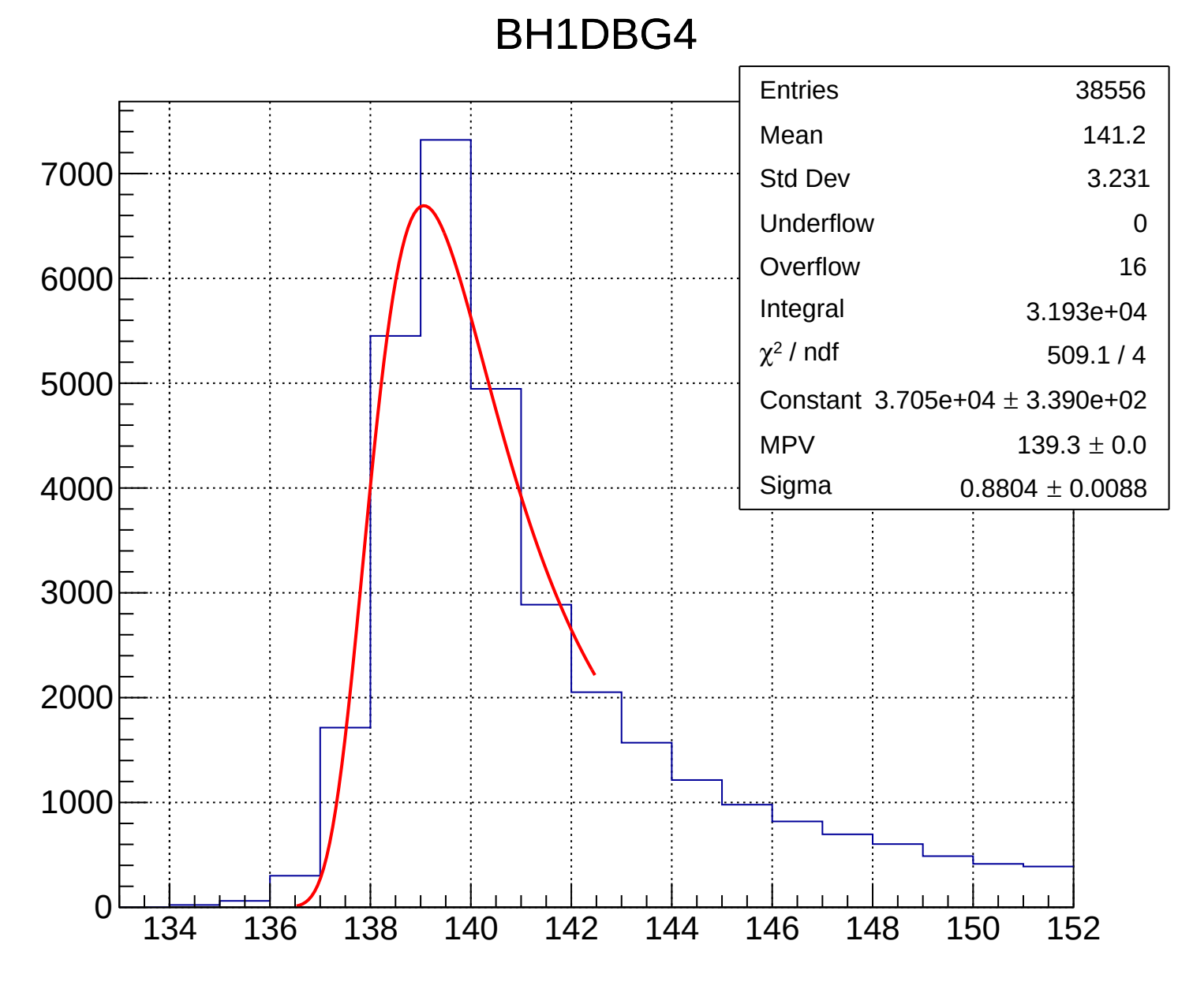

BH1UMIP4
Entries 12985
Mean 448.3
Std Dev 56.47
Underflow 0
Overflow 24
Integral 1.129e+04
χ² / ndf 100 / 98
Constant 110.4 ± 1.7
Mean 429.3 ± 0.5
Sigma 31.55 ± 0.57
0
20
40
60
80
100
120
350
400
450
500
550
600

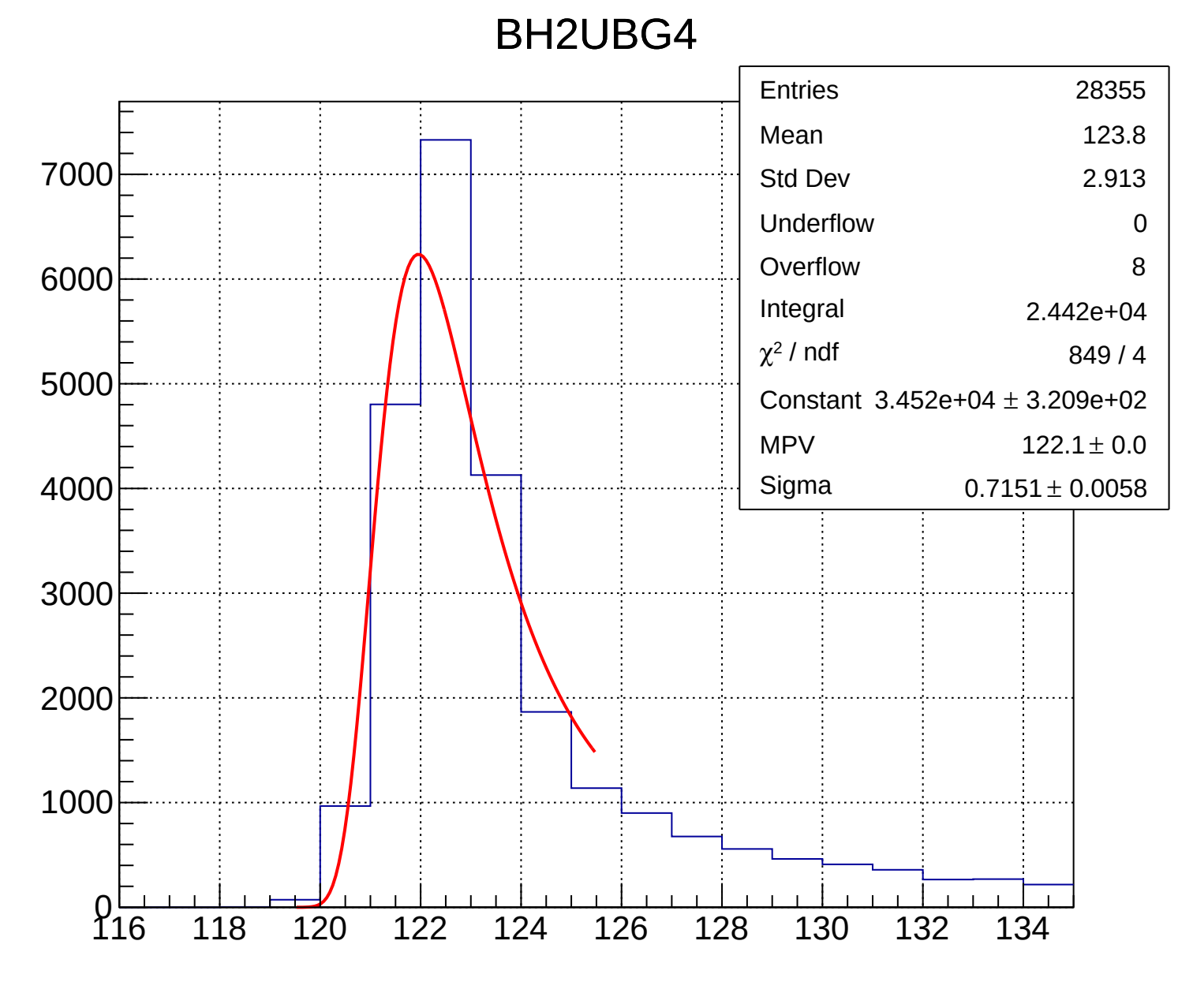

BH1DMIP4
Entries 12985
Mean 497.9
Std Dev 57.49
Underflow 0
Overflow 42
Integral 1.095e+04
χ² / ndf 133 / 98
Constant 97.21 ± 1.54
Mean 478.8 ± 0.8
Sigma 39.08 ± 1.04
120
100
80
60
40
20
0
400
450
500
550
600
650

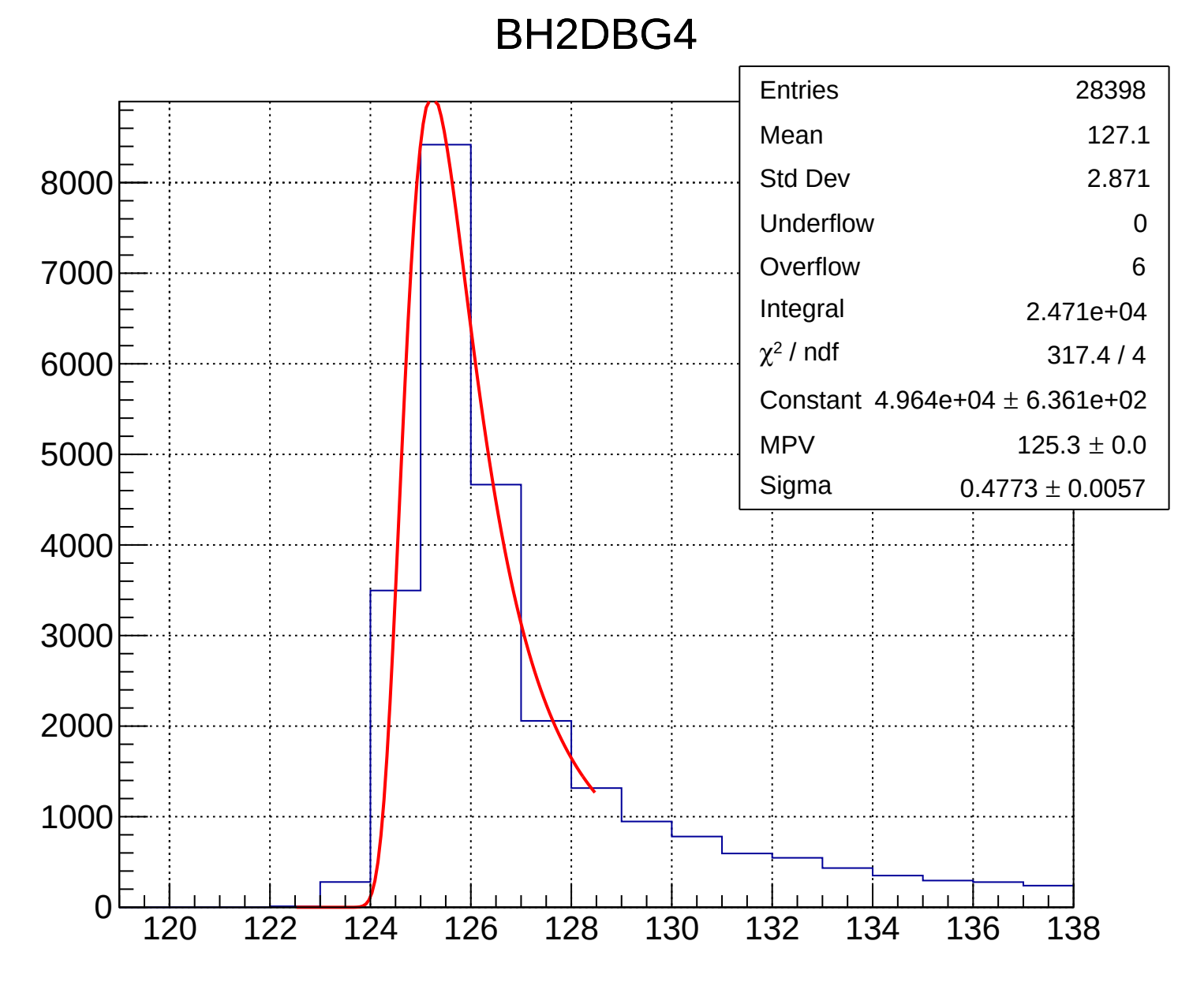

BH2UMIP4
Entries 15325
Mean 358.4
Std Dev 55.97
Underflow 0
Overflow 19
Integral 1.443e+04
χ² / ndf 105.9 / 98
Constant 125.1 ± 1.8
Mean 339.9 ± 0.6
Sigma 40.72 ± 0.97
0
20
40
60
80
100
120
140
250
300
350
400
450
500

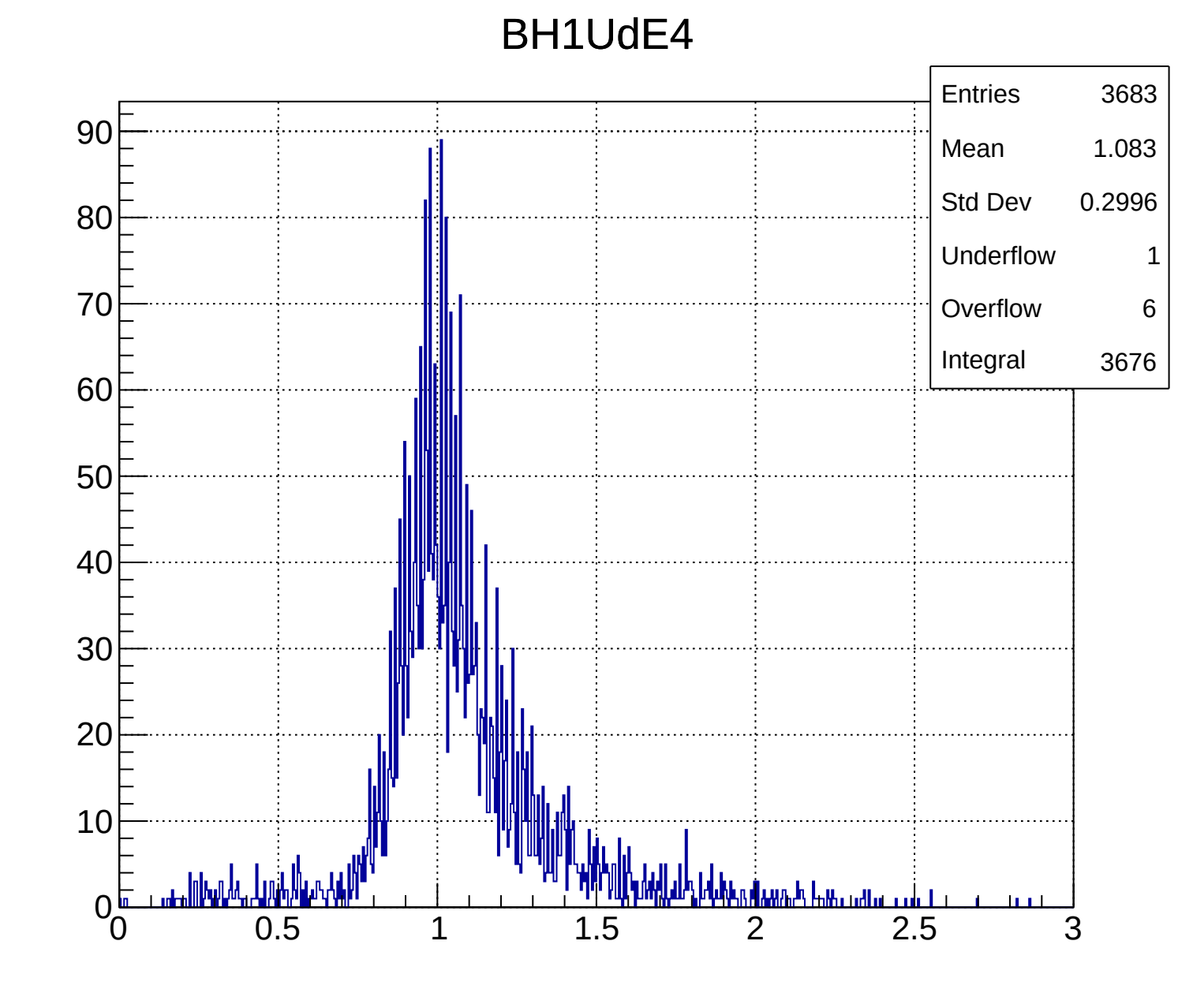

BH2DMIP4
Entries 15325
Mean 340.8
Std Dev 52.99
Underflow 0
Overflow 19
Integral 1.461e+04
χ² / ndf 129.4 / 98
Constant 141.8 ± 1.9
Mean 322.4 ± 0.5
Sigma 35.74 ± 0.65
160
140
120
100
80
60
40
20
0
250
300
350
400
450
500

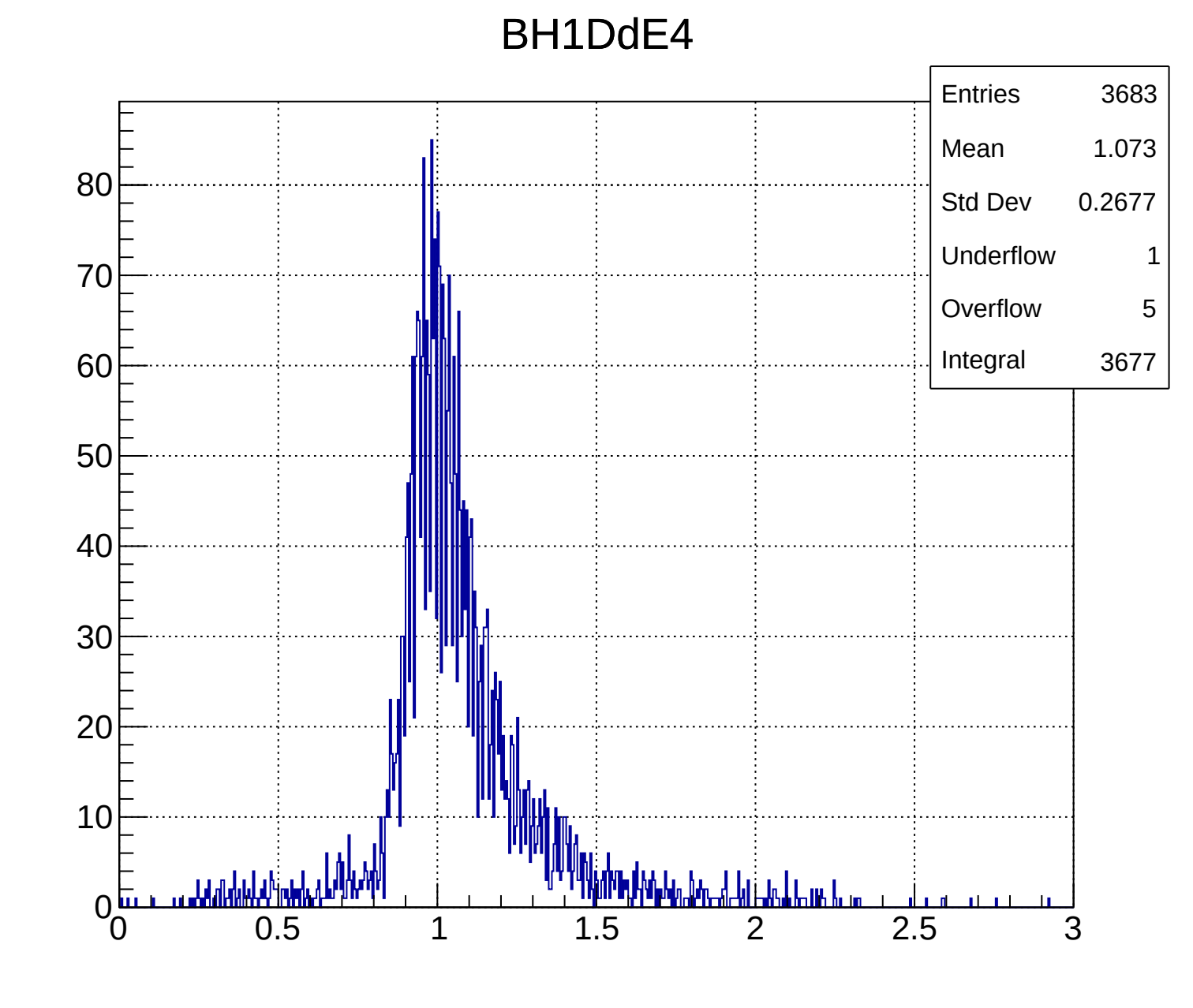

BH1UBG4
Entries 38636
Mean 169.5
Std Dev 4.788
Underflow 0
Overflow 8
Integral 3.515e+04
χ² / ndf 695.9 / 8
Constant 2.455e+04 ± 2.195e+02
MPV 167 ± 0.0
Sigma 1.615 ± 0.017
5000
4000
3000
2000
1000
0
160
165
170
175
180
185

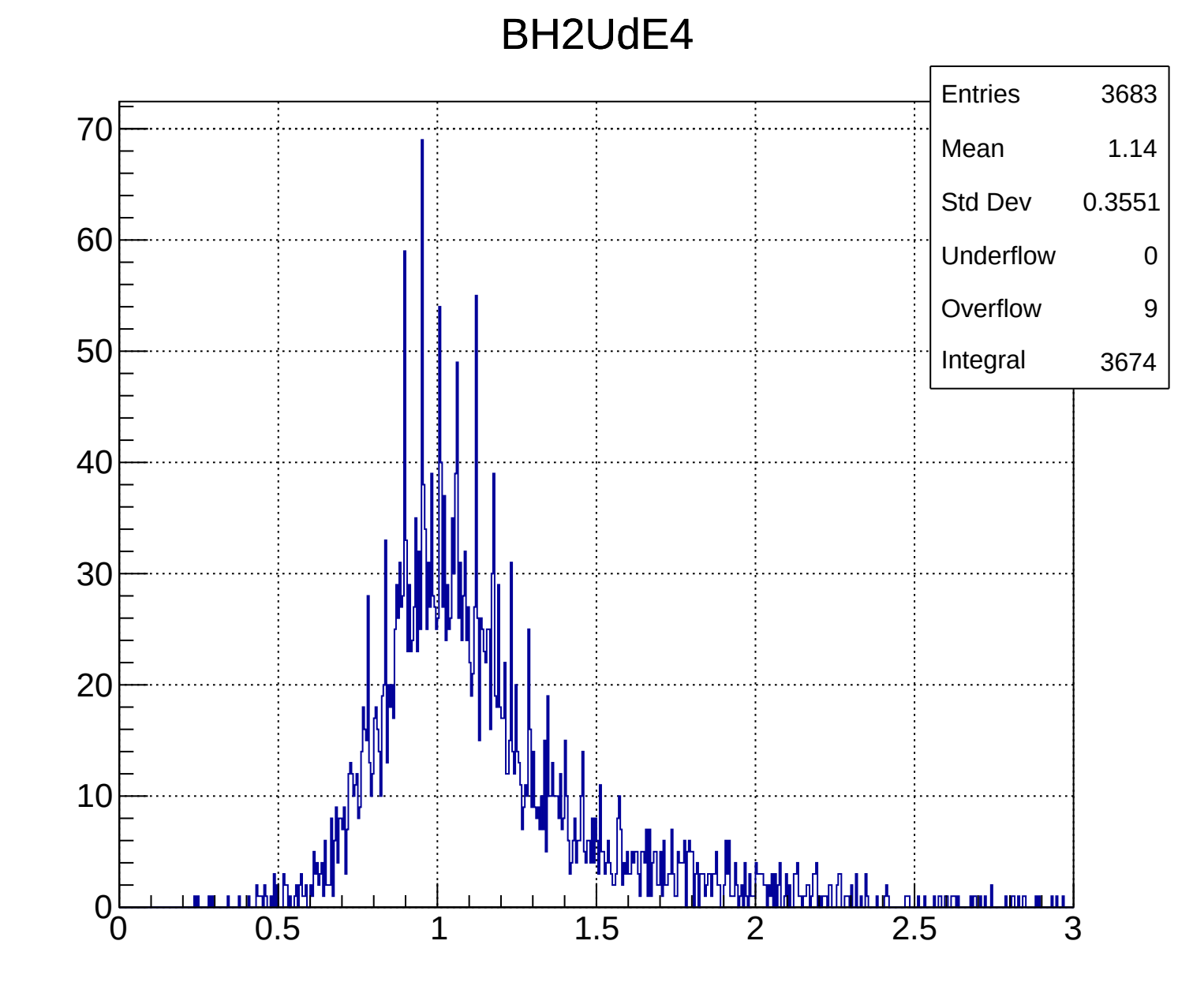

BH1DBG4
Entries 38556
Mean 141.2
Std Dev 3.231
Underflow 0
Overflow 16
Integral 3.193e+04
χ² / ndf 509.1 / 4
Constant 3.705e+04 ± 3.390e+02
MPV 139.3 ± 0.0
Sigma 0.8804 ± 0.0088
7000
6000
5000
4000
3000
2000
1000
0
134
136
138
140
142
144
146
148
150
152

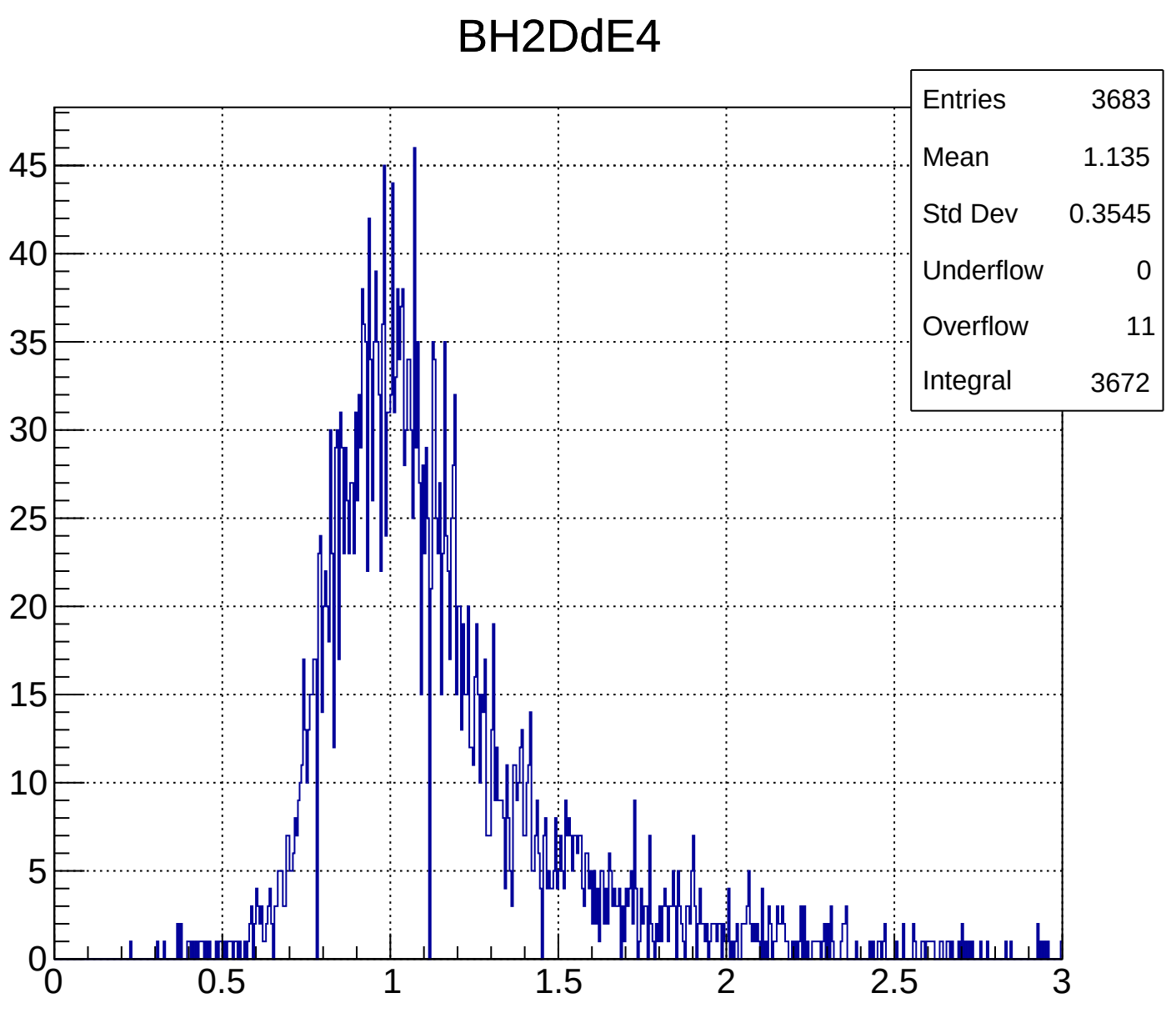

BH2UBG4
Entries 28355
Mean 123.8
Std Dev 2.913
Underflow 0
Overflow 8
Integral 2.442e+04
χ² / ndf 849 / 4
Constant 3.452e+04 ± 3.209e+02
MPV 122.1 ± 0.0
Sigma 0.7151 ± 0.0058
7000
6000
5000
4000
3000
2000
1000
0
116
118
120
122
124
126
128
130
132
134

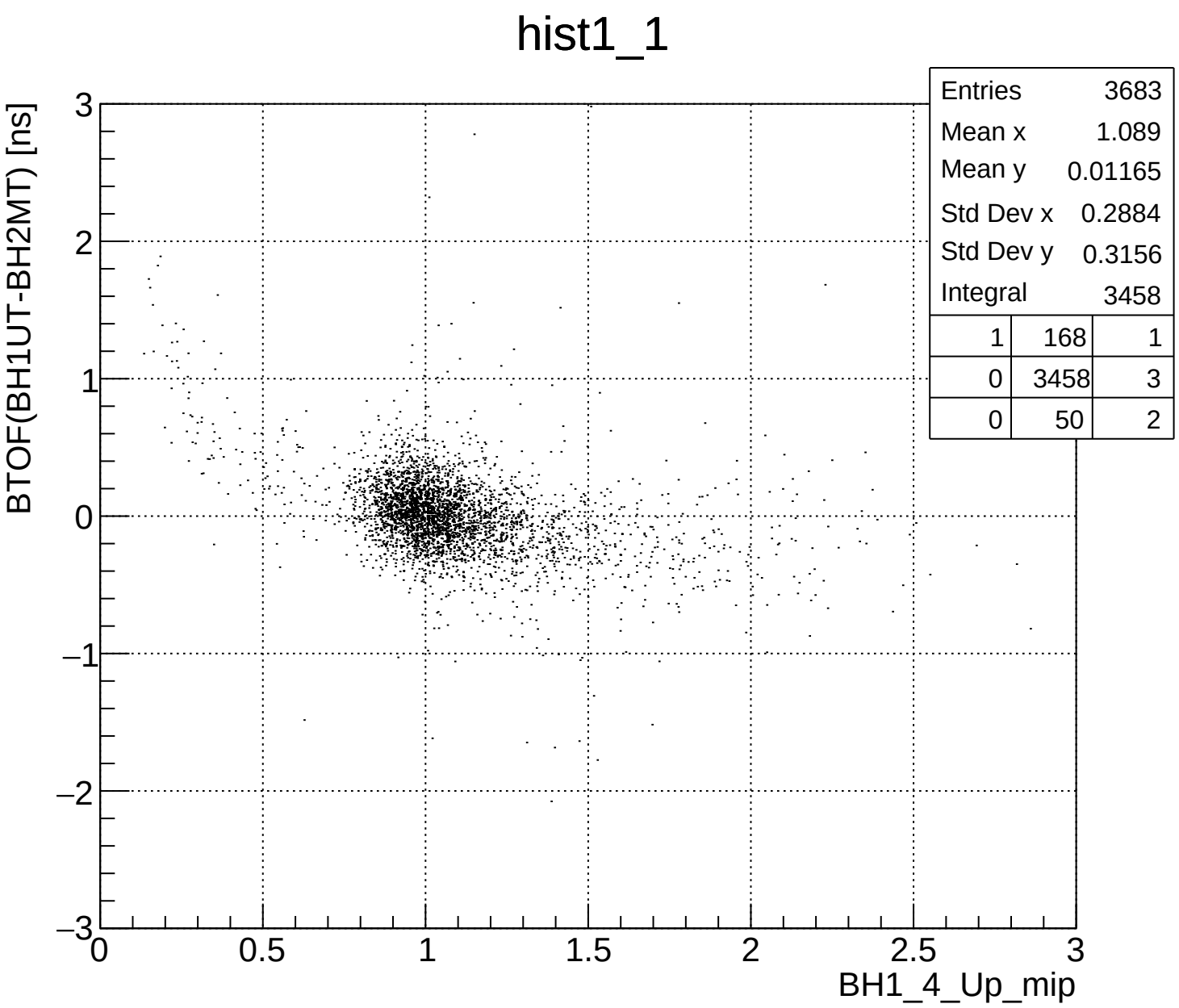

BH2DBG4
Entries 28398
Mean 127.1
Std Dev 2.871
Underflow 0
Overflow 6
Integral 2.471e+04
χ² / ndf 317.4 / 4
Constant 4.964e+04 ± 6.361e+02
MPV 125.3 ± 0.0
Sigma 0.4773 ± 0.0057
8000
7000
6000
5000
4000
3000
2000
1000
0
120
122
124
126
128
130
132
134
136
138

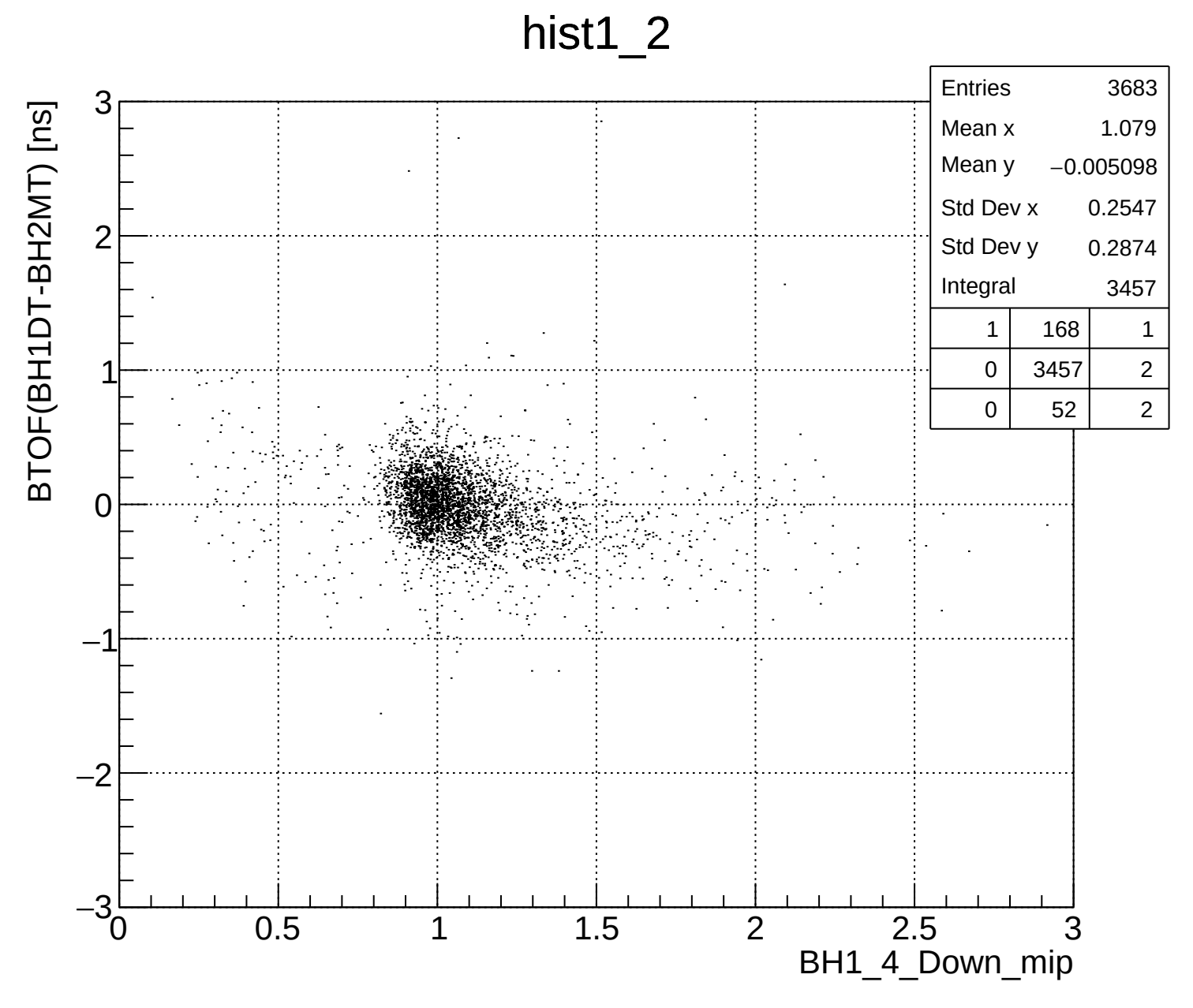

BH1UdE4
Entries 3683
Mean 1.083
Std Dev 0.2996
Underflow 1
Overflow 6
Integral 3676
0
10
20
30
40
50
60
70
80
90
0
0.5
1
1.5
2
2.5
3

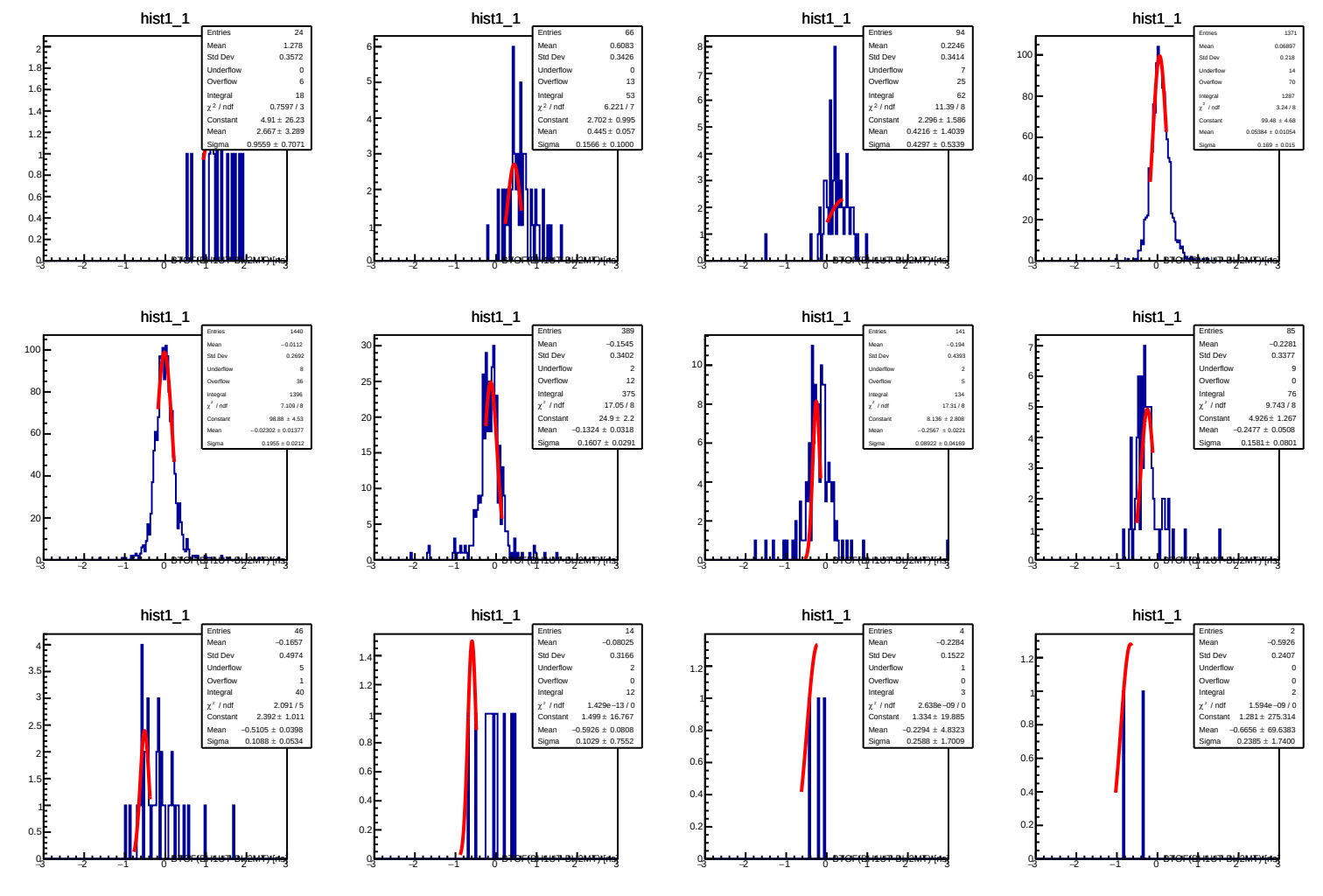

BH1DdE4
Entries 3683
Mean 1.073
Std Dev 0.2677
Underflow 1
Overflow 5
Integral 3677
0
10
20
30
40
50
60
70
80
0
0.5
1
1.5
2
2.5
3

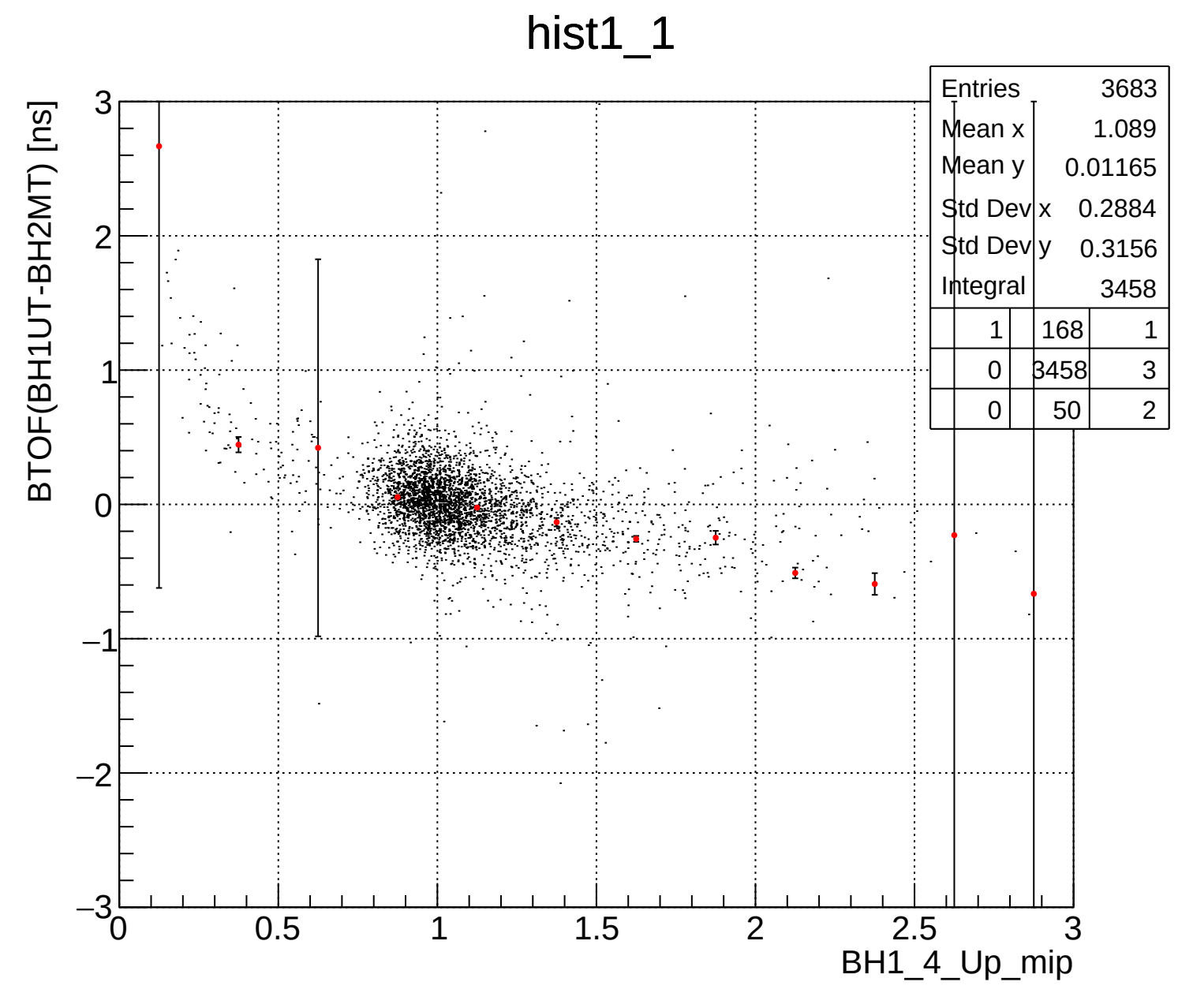

BH2UdE4
Entries 3683
Mean 1.14
Std Dev 0.3551
Underflow 0
Overflow 9
Integral 3674
70
60
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5
3


BH2DdE4
Entries 3683
Mean 1.135
Std Dev 0.3545
Underflow 0
Overflow 11
Integral 3672
0
5
10
15
20
25
30
35
40
45
0
0.5
1
1.5
2
2.5
3


hist1_1
Entries 3683
Mean x 1.089
Mean y 0.01165
Std Dev x 0.2884
Std Dev y 0.3156
Integral 3458
1 168 1
0 3458 3
0 50 2
BTOF(BH1UT-BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3


hist1_2
Entries 3683
Mean x 1.079
Mean y −0.005098
Std Dev x 0.2547
Std Dev y 0.2874
Integral 3457
1 168 1
0 3457 2
0 52 2
BTOF(BH1DT-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3


hist1_1
Entries 24
Mean 1.278
Std Dev 0.3572
Underflow 0
Overflow 6
Integral 18
χ² / ndf 0.7597 / 3
Constant 4.91 ± 26.23
Mean 2.667 ± 3.289
Sigma 0.9559 ± 0.7071
hist1_1
Entries 66
Mean 0.6083
Std Dev 0.3426
Underflow 0
Overflow 13
Integral 53
χ² / ndf 6.221 / 7
Constant 2.702 ± 0.995
Mean 0.445 ± 0.057
Sigma 0.1566 ± 0.1000
hist1_1
Entries 94
Mean 0.2246
Std Dev 0.3414
Underflow 7
Overflow 25
Integral 62
χ² / ndf 11.39 / 8
Constant 2.296 ± 1.586
Mean 0.4216 ± 1.4039
Sigma 0.4297 ± 0.5339
hist1_1
Entries 1371
Mean 0.06897
Std Dev 0.218
Underflow 14
Overflow 70
Integral 1287
χ² / ndf 3.24 / 8
Constant 99.48 ± 4.68
Mean 0.05384 ± 0.01054
Sigma 0.169 ± 0.015
hist1_1
Entries 1440
Mean −0.0112
Std Dev 0.2692
Underflow 8
Overflow 36
Integral 1396
χ² / ndf 7.109 / 8
Constant 98.88 ± 4.53
Mean −0.02302 ± 0.01377
Sigma 0.1955 ± 0.0212
hist1_1
Entries 389
Mean −0.1545
Std Dev 0.3402
Underflow 2
Overflow 12
Integral 375
χ² / ndf 17.05 / 8
Constant 24.9 ± 2.2
Mean −0.1324 ± 0.0318
Sigma 0.1607 ± 0.0291
hist1_1
Entries 141
Mean −0.194
Std Dev 0.4393
Underflow 2
Overflow 5
Integral 134
χ² / ndf 17.31 / 8
Constant 8.136 ± 2.808
Mean −0.2567 ± 0.0221
Sigma 0.08922 ± 0.04169
hist1_1
Entries 85
Mean −0.2281
Std Dev 0.3377
Underflow 9
Overflow 0
Integral 76
χ² / ndf 9.743 / 8
Constant 4.926 ± 1.267
Mean −0.2477 ± 0.0508
Sigma 0.1581 ± 0.0801
hist1_1
Entries 46
Mean −0.1657
Std Dev 0.4974
Underflow 5
Overflow 1
Integral 40
χ² / ndf 2.091 / 5
Constant 2.392 ± 1.011
Mean −0.5105 ± 0.0398
Sigma 0.1088 ± 0.0534
hist1_1
Entries 14
Mean −0.08025
Std Dev 0.3166
Underflow 2
Overflow 0
Integral 12
χ² / ndf 1.429e−13 / 0
Constant 1.499 ± 16.767
Mean −0.5926 ± 0.0808
Sigma 0.1029 ± 0.7552
hist1_1
Entries 4
Mean −0.2284
Std Dev 0.1522
Underflow 1
Overflow 0
Integral 3
χ² / ndf 2.638e−09 / 0
Constant 1.334 ± 19.885
Mean −0.2294 ± 4.8323
Sigma 0.2588 ± 1.7009
hist1_1
Entries 2
Mean −0.5926
Std Dev 0.2407
Underflow 0
Overflow 0
Integral 2
χ² / ndf 1.594e−09 / 0
Constant 1.281 ± 275.314
Mean −0.6656 ± 69.6383
Sigma 0.2385 ± 1.7400


hist1_1
Entries 3683
Mean x 1.089
Mean y 0.01165
Std Dev x 0.2884
Std Dev y 0.3156
Integral 3458
1 168 1
0 3458 3
0 50 2
BTOF(BH1UT-BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3