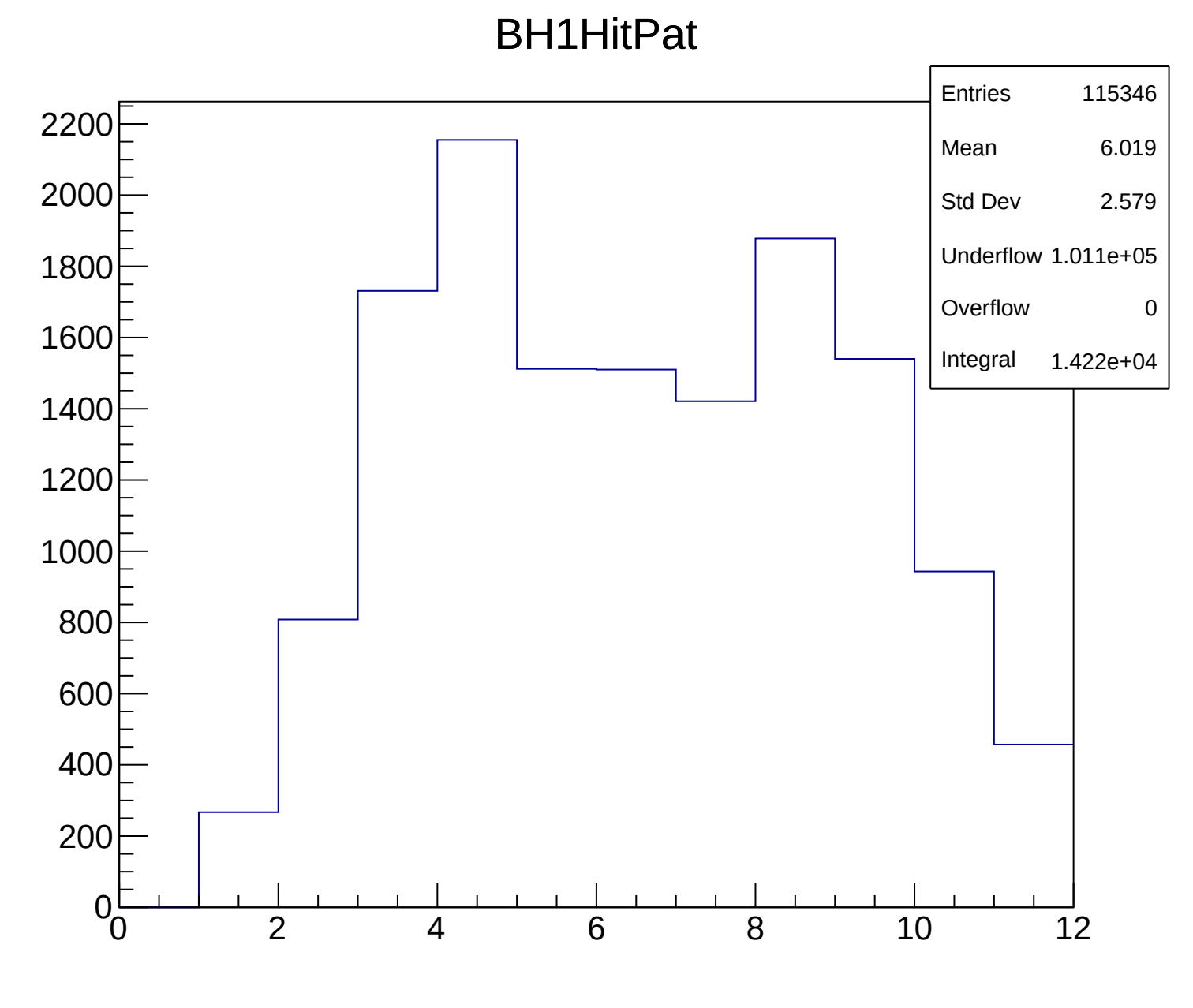
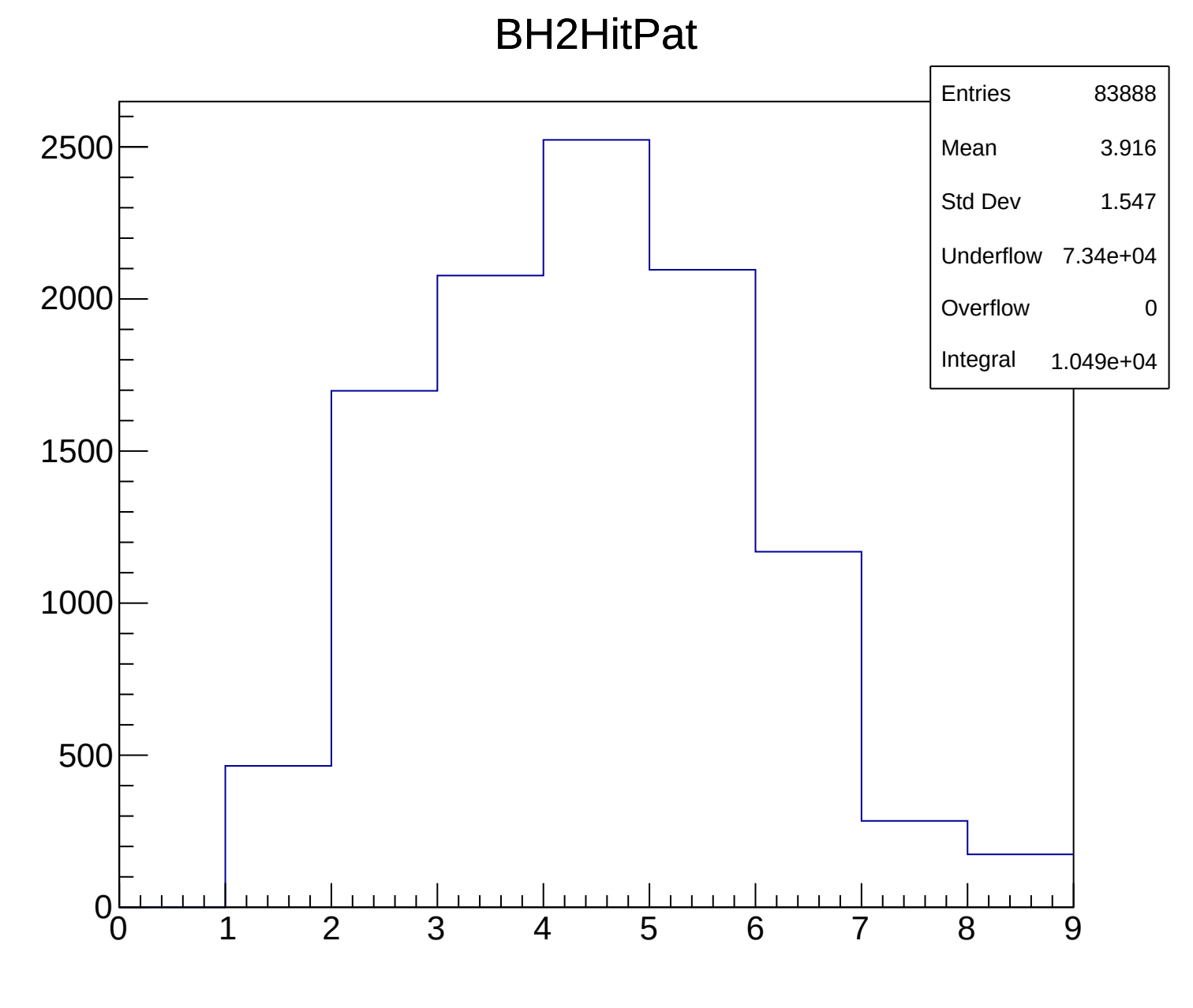
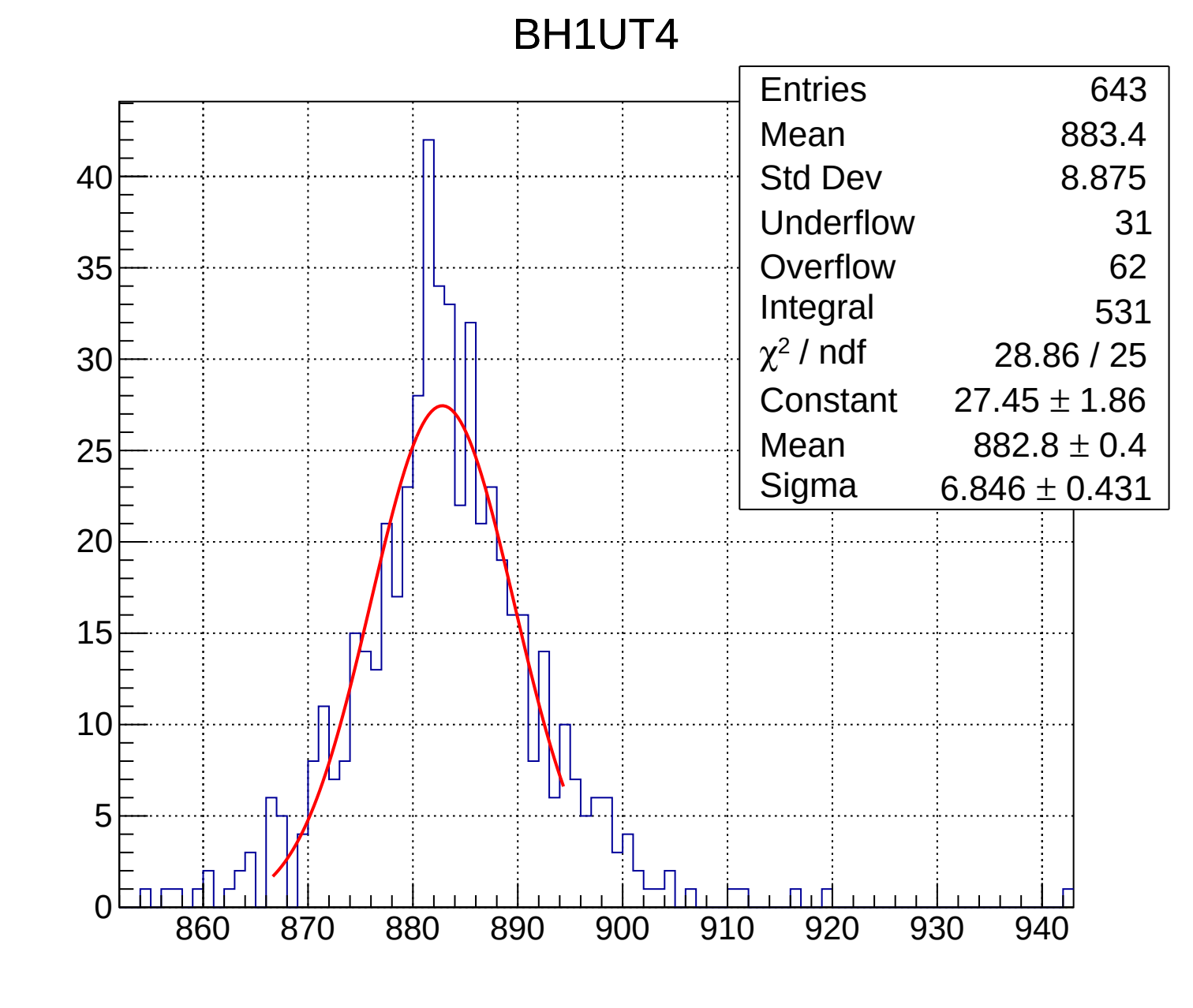
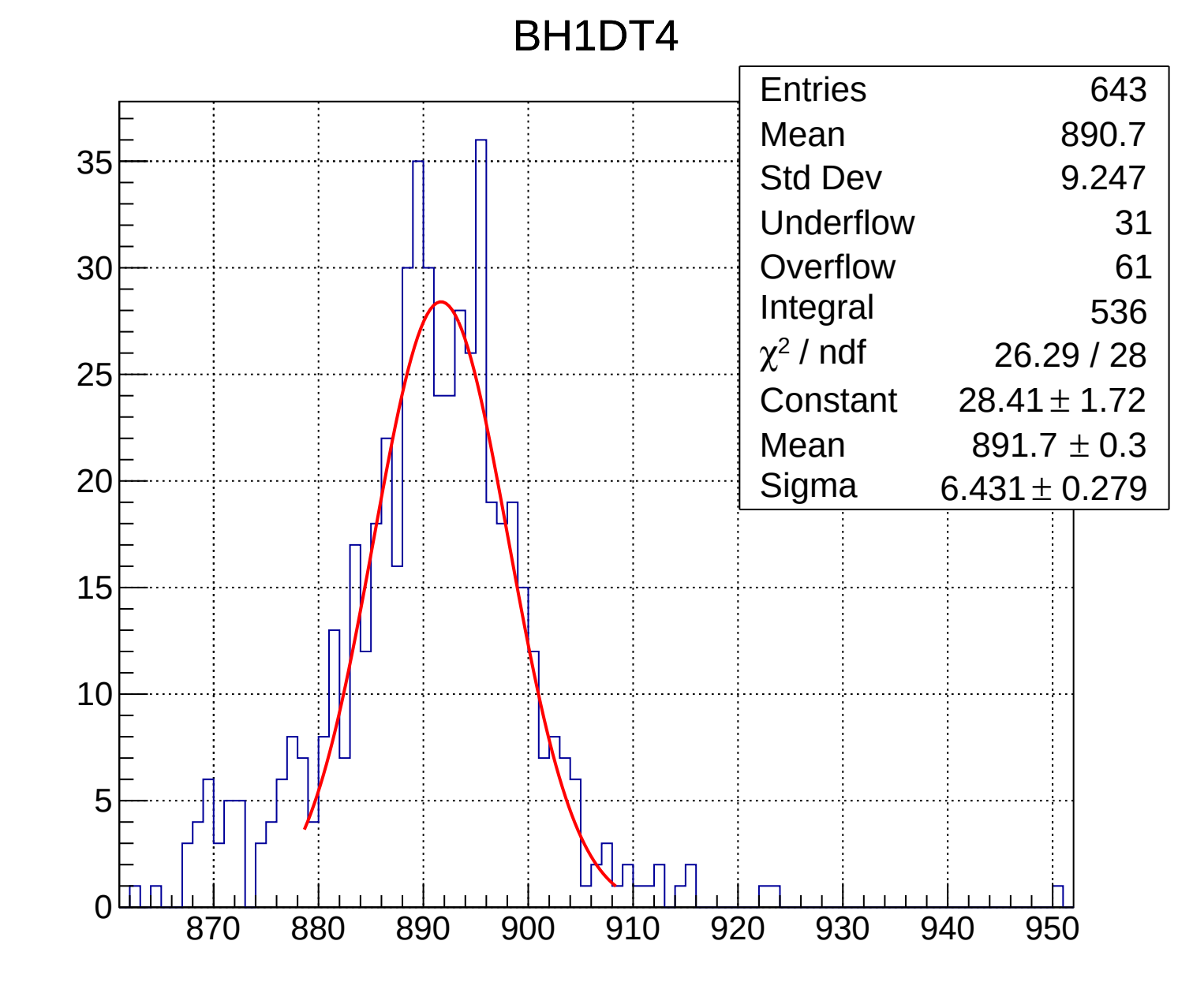
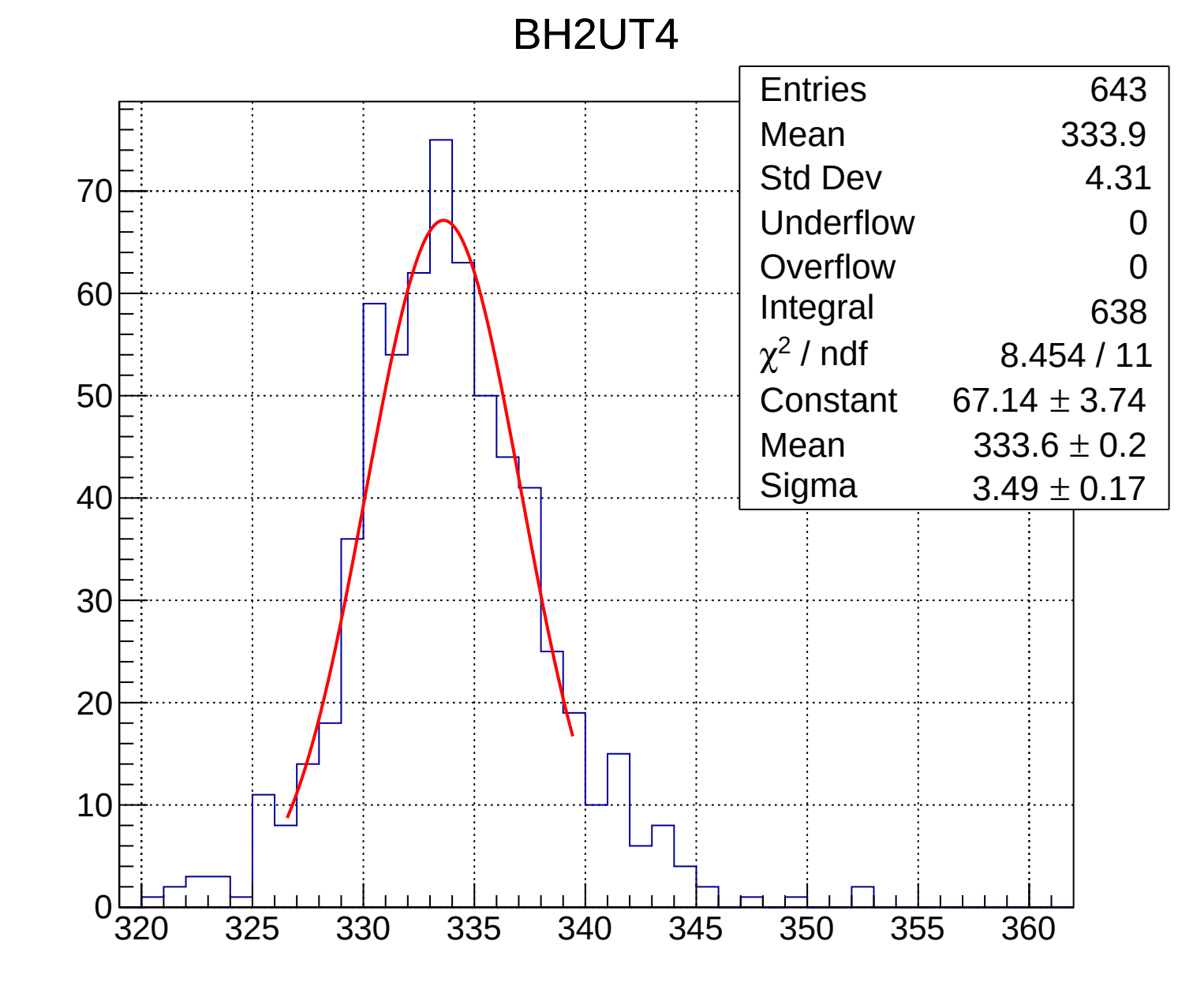
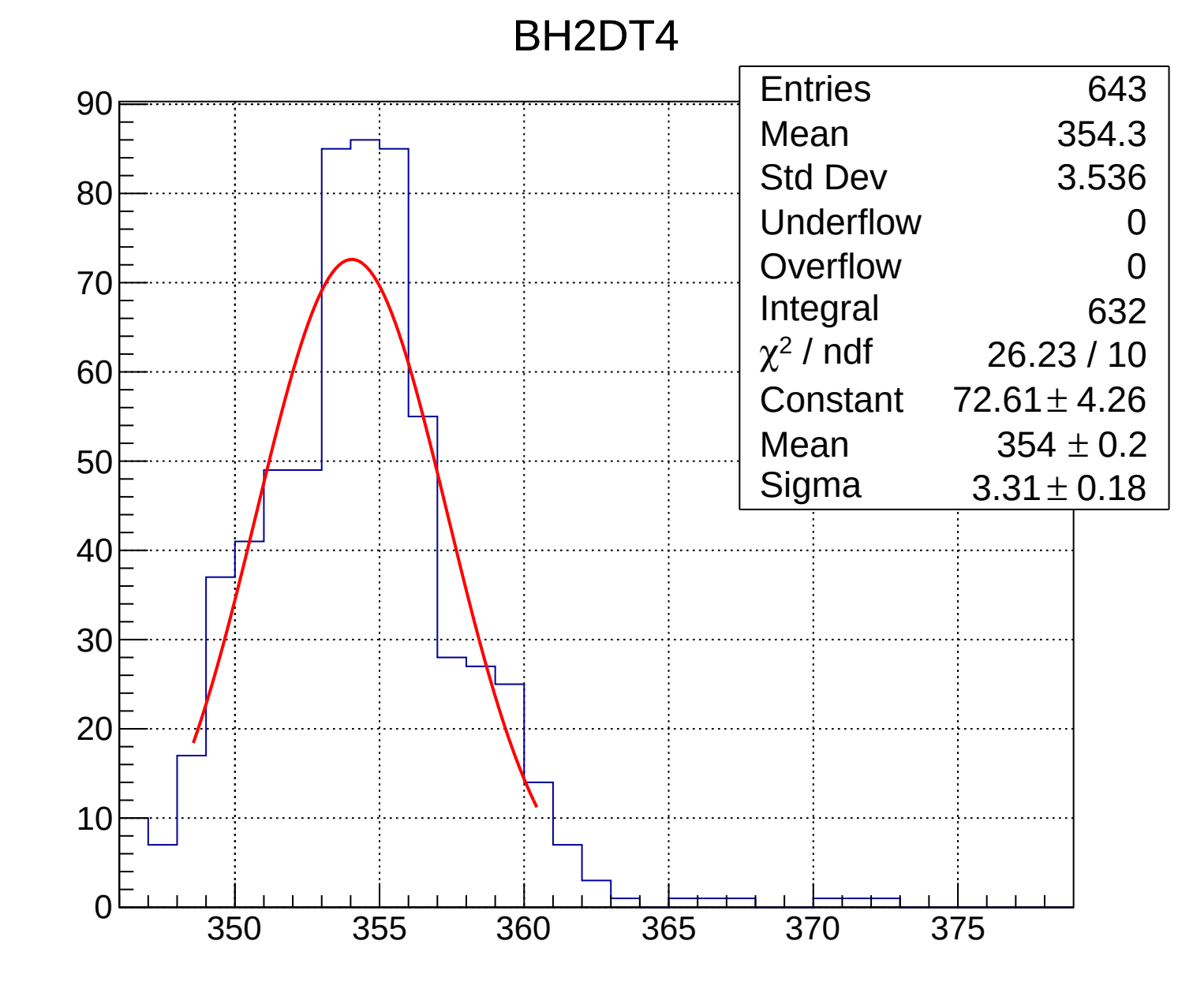

BH1HitPat
Entries 115346
Mean 6.019
Std Dev 2.579
Underflow 1.011e+05
Overflow 0
Integral 1.422e+04
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12

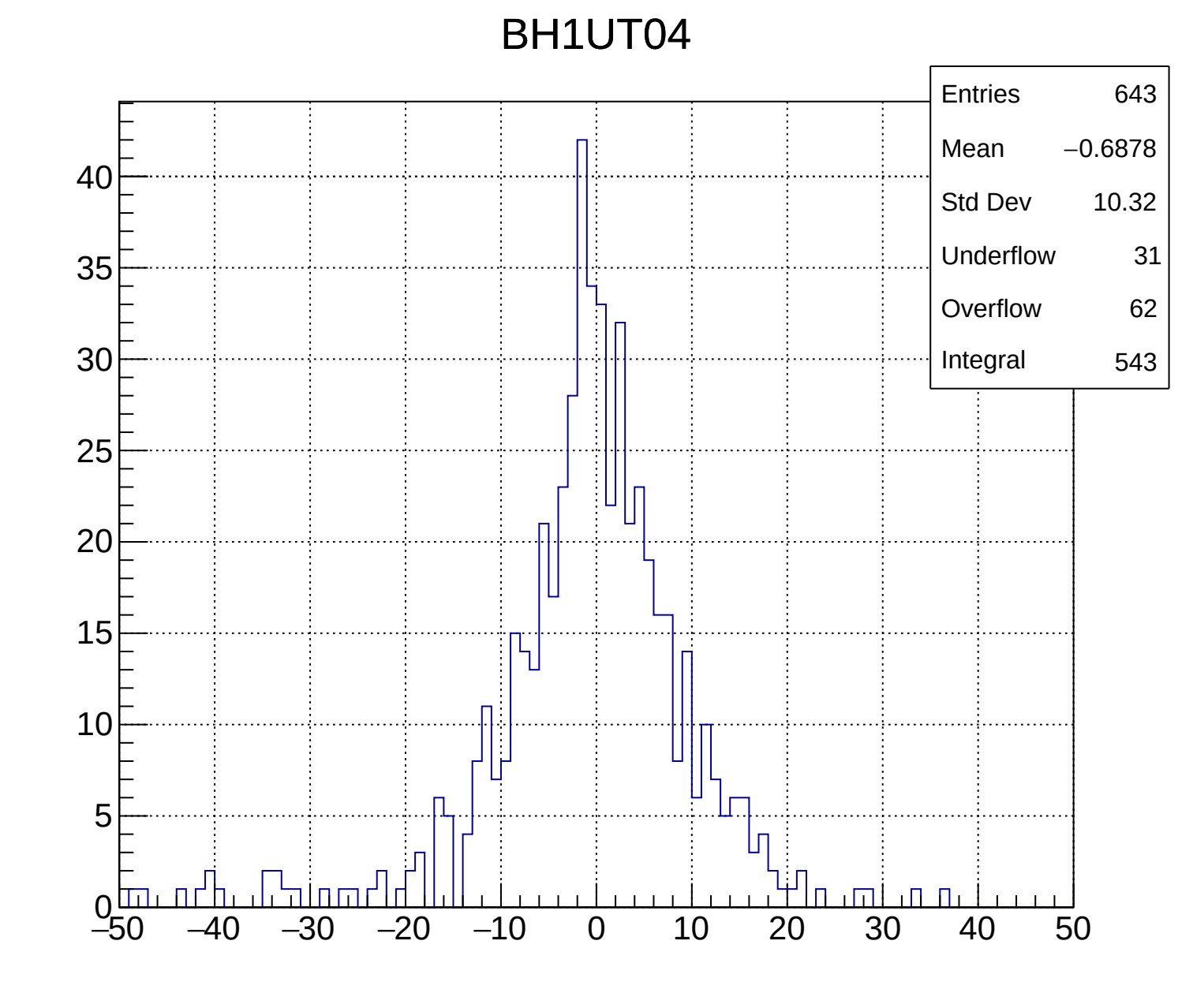

BH2HitPat
Entries 83888
Mean 3.916
Std Dev 1.547
Underflow 7.34e+04
Overflow 0
Integral 1.049e+04
2500
2000
1500
1000
500
0
0
1
2
3
4
5
6
7
8
9

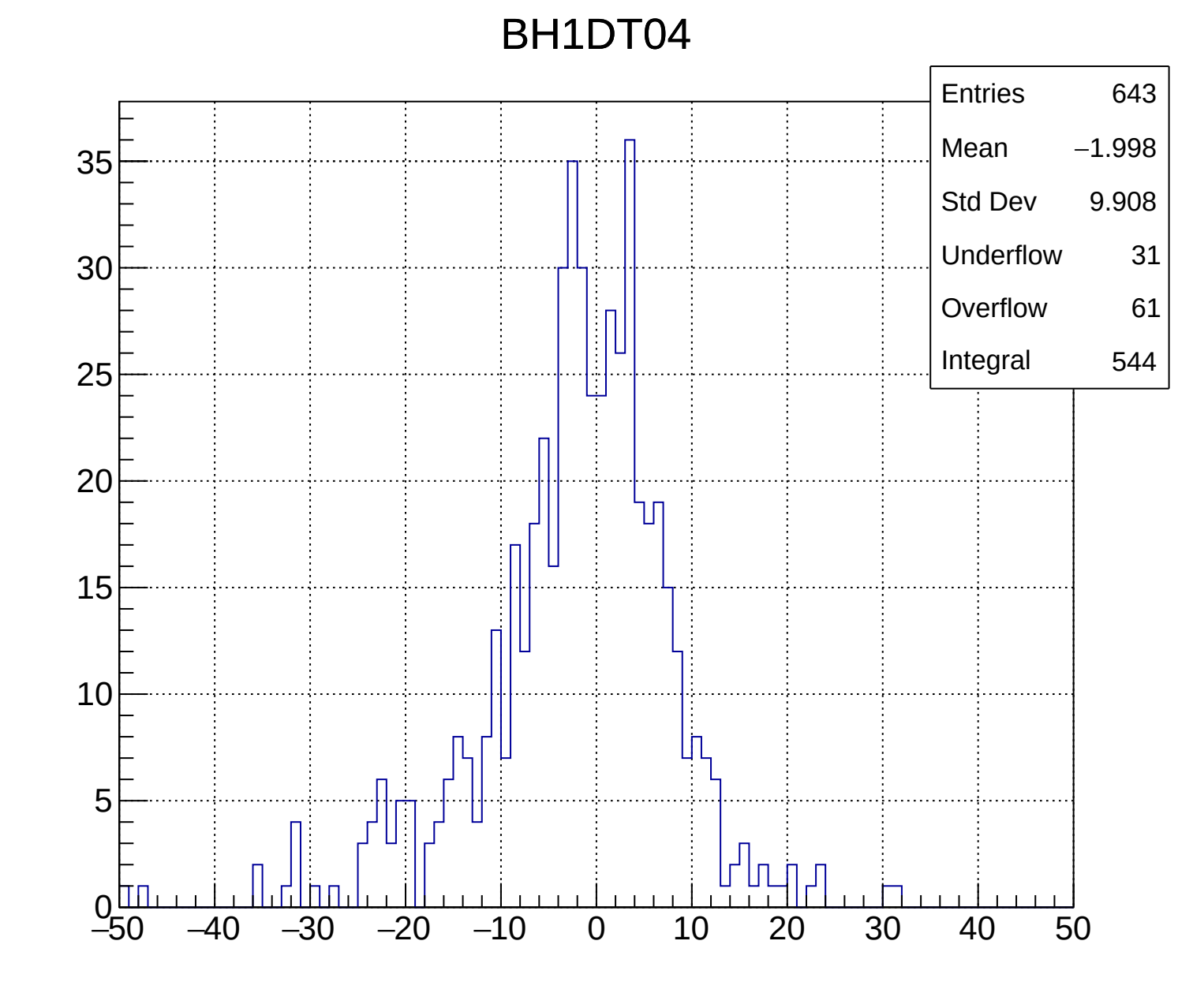

BH1UT4
Entries 643
Mean 883.4
Std Dev 8.875
Underflow 31
Overflow 62
Integral 531
χ² / ndf 28.86 / 25
Constant 27.45 ± 1.86
Mean 882.8 ± 0.4
Sigma 6.846 ± 0.431
0
5
10
15
20
25
30
35
40
860
870
880
890
900
910
920
930
940

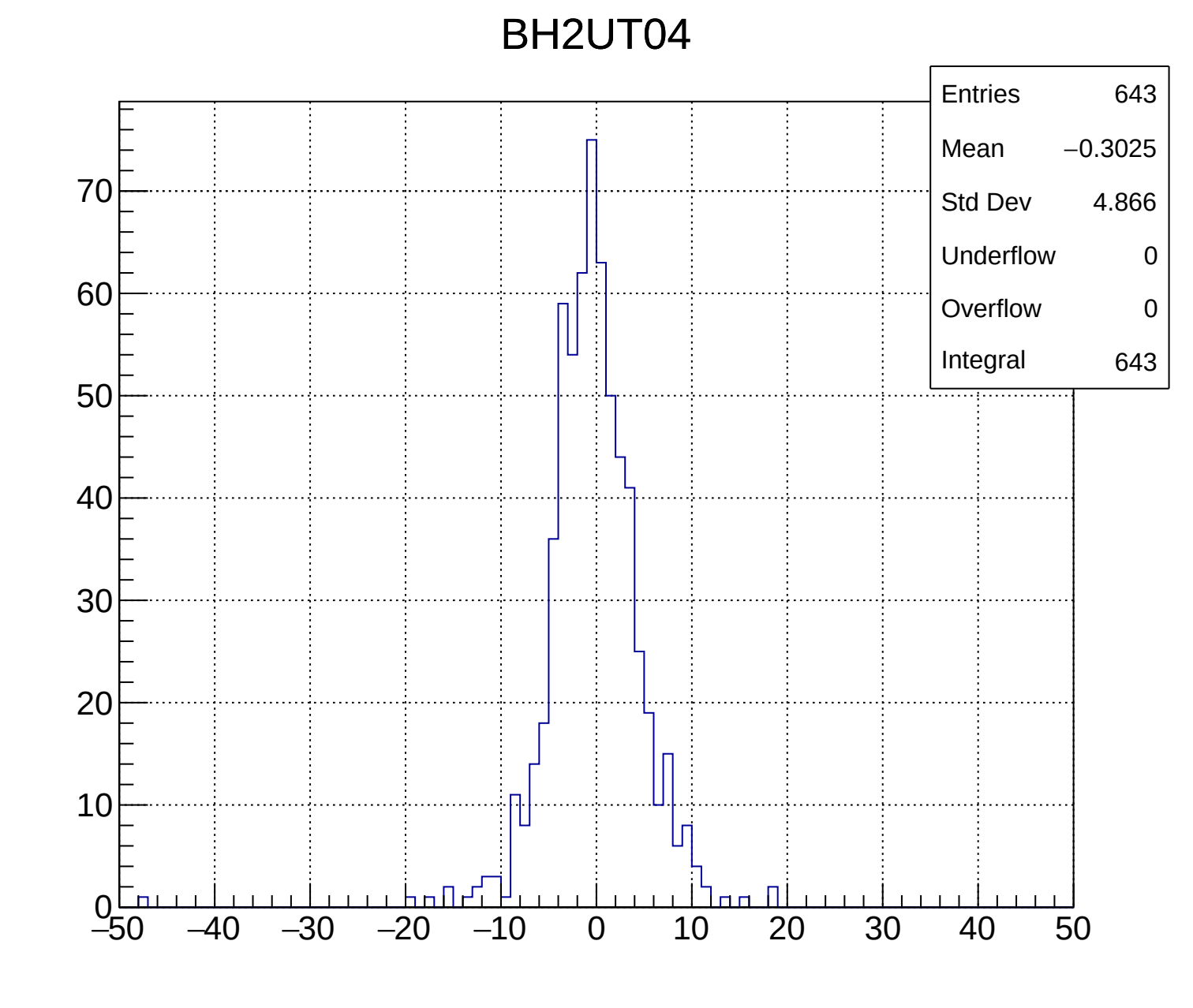

BH1DT4
Entries 643
Mean 890.7
Std Dev 9.247
Underflow 31
Overflow 61
Integral 536
χ² / ndf 26.29 / 28
Constant 28.41 ± 1.72
Mean 891.7 ± 0.3
Sigma 6.431 ± 0.279
0
5
10
15
20
25
30
35
870
880
890
900
910
920
930
940
950

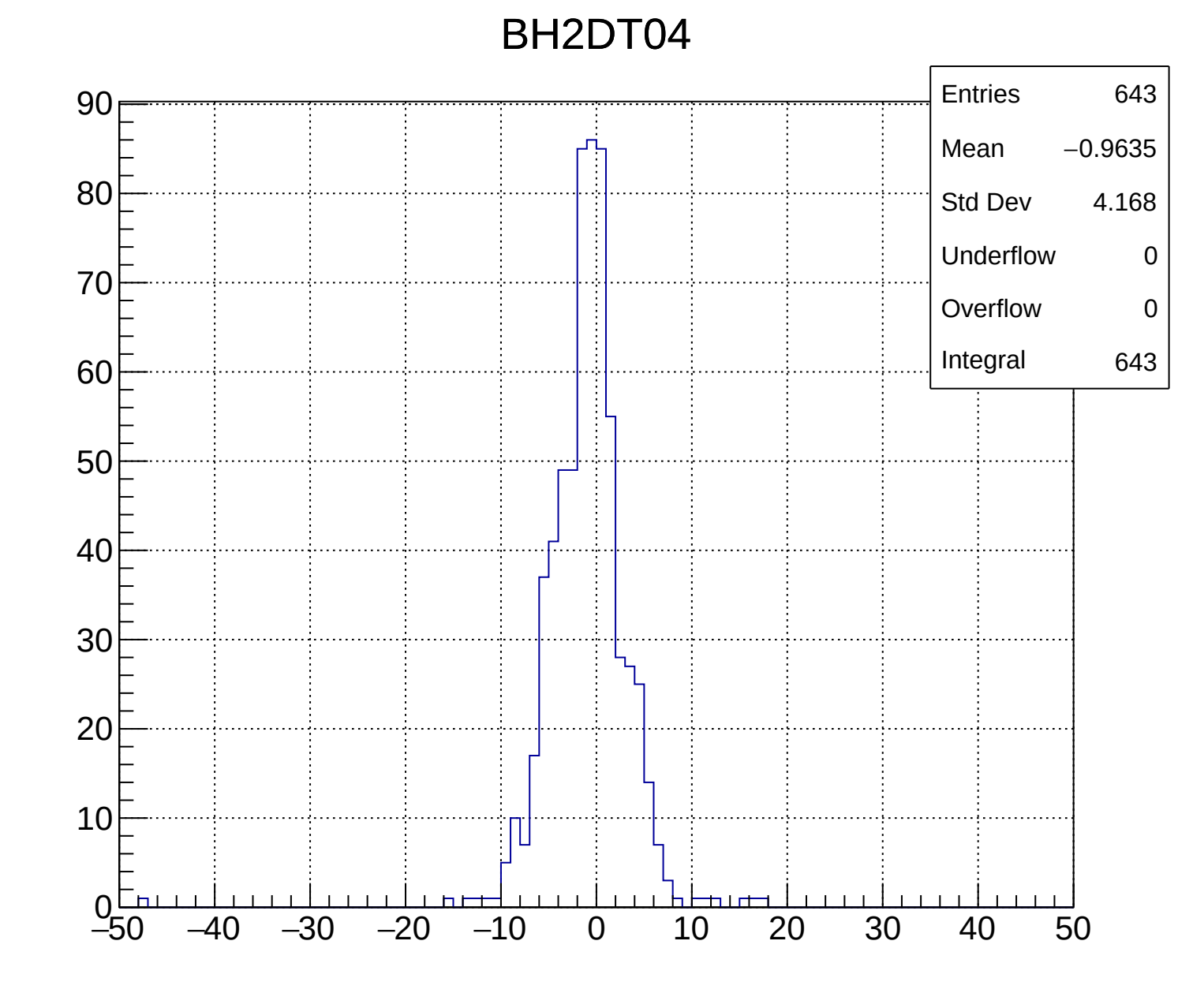

BH2UT4
Entries 643
Mean 333.9
Std Dev 4.31
Underflow 0
Overflow 0
Integral 638
χ2 / ndf 8.454 / 11
Constant 67.14 ± 3.74
Mean 333.6 ± 0.2
Sigma 3.49 ± 0.17
0
10
20
30
40
50
60
70
320
325
330
335
340
345
350
355
360

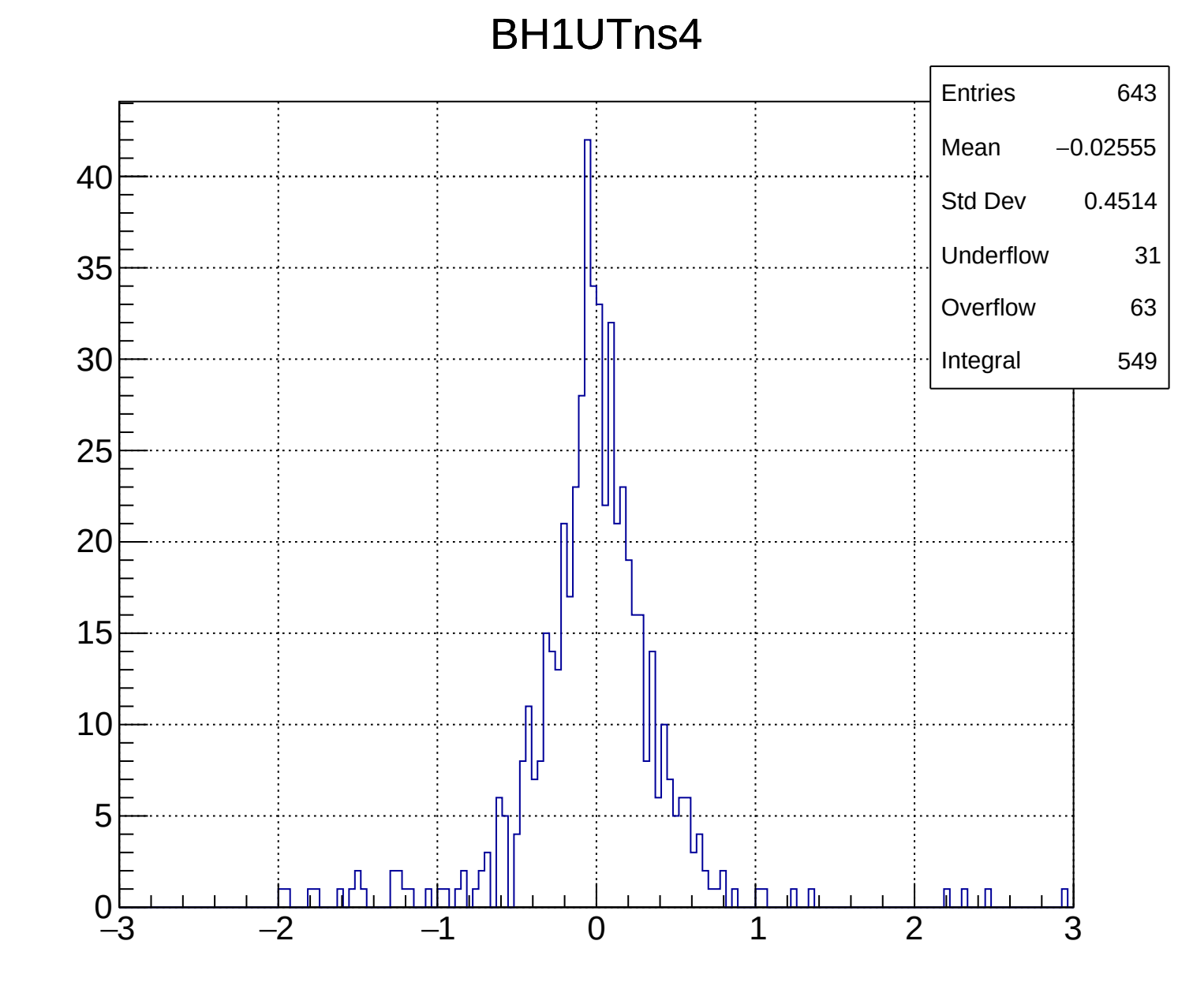

BH2DT4
Entries 643
Mean 354.3
Std Dev 3.536
Underflow 0
Overflow 0
Integral 632
χ² / ndf 26.23 / 10
Constant 72.61 ± 4.26
Mean 354 ± 0.2
Sigma 3.31 ± 0.18
90
80
70
60
50
40
30
20
10
0
350
355
360
365
370
375

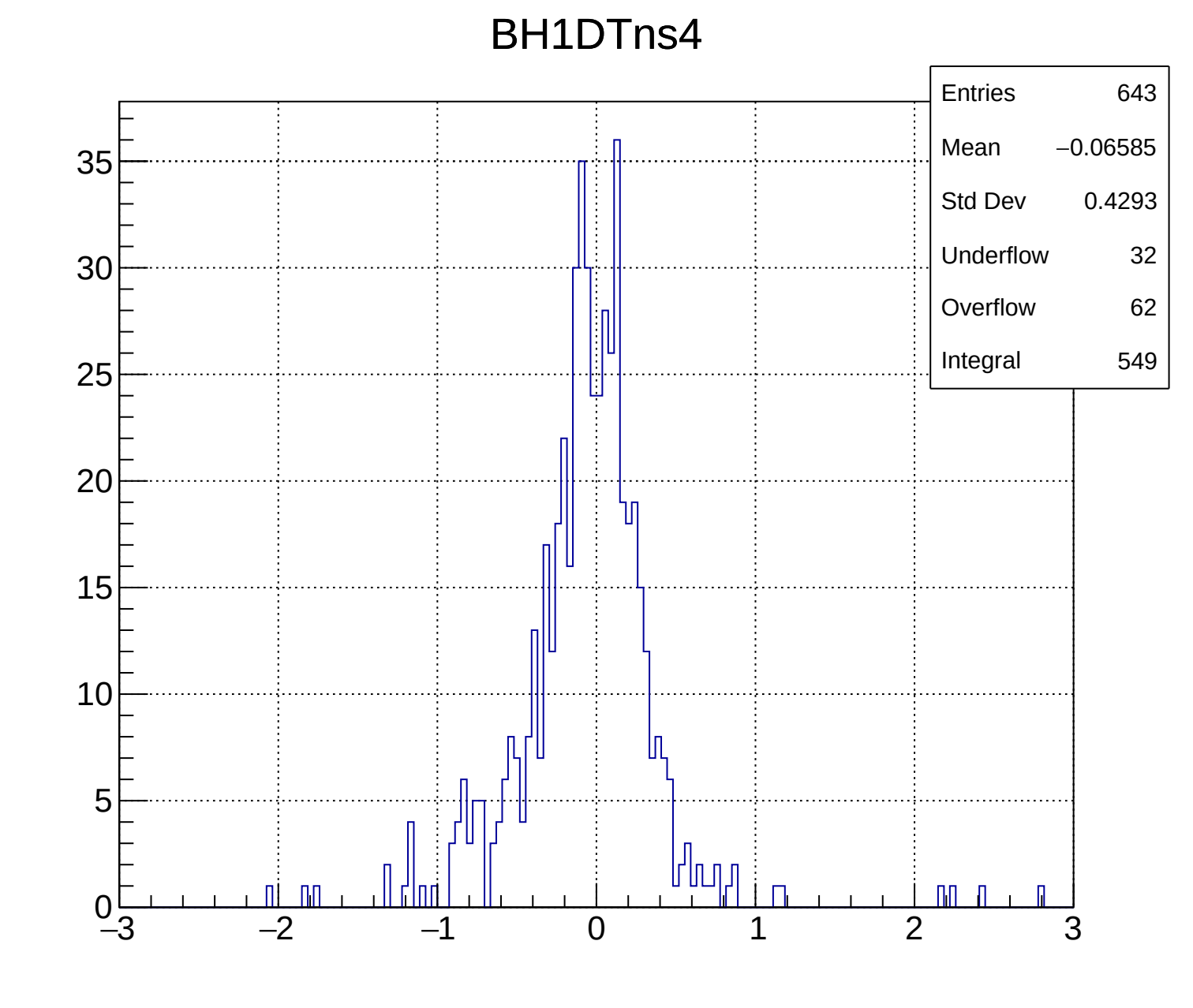

BH1UT04
Entries 643
Mean −0.6878
Std Dev 10.32
Underflow 31
Overflow 62
Integral 543
40
35
30
25
20
15
10
5
0
−50
−40
−30
−20
−10
0
10
20
30
40
50

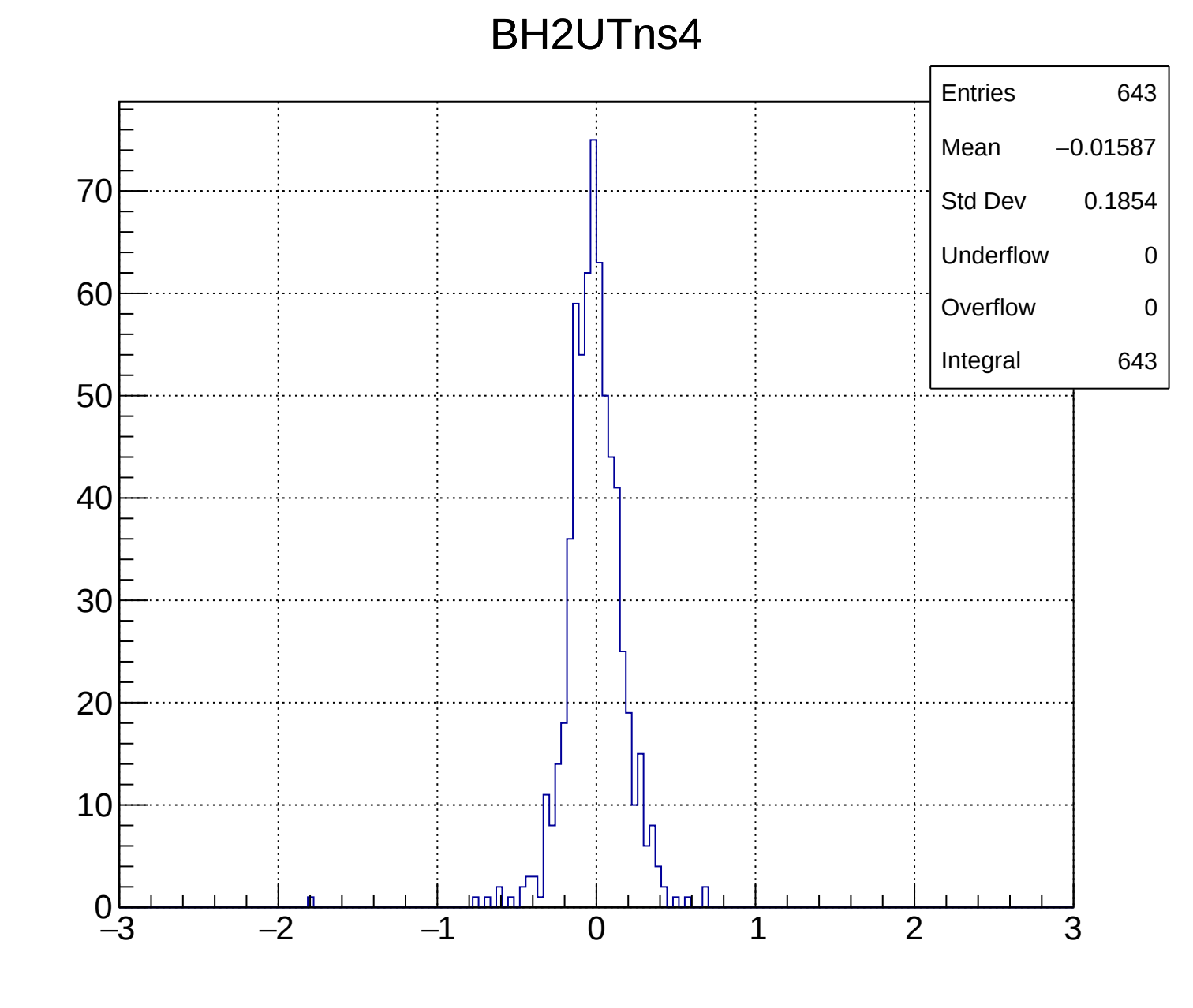

BH1DT04
Entries 643
Mean –1.998
Std Dev 9.908
Underflow 31
Overflow 61
Integral 544
35
30
25
20
15
10
5
0
–50
–40
–30
–20
–10
0
10
20
30
40
50

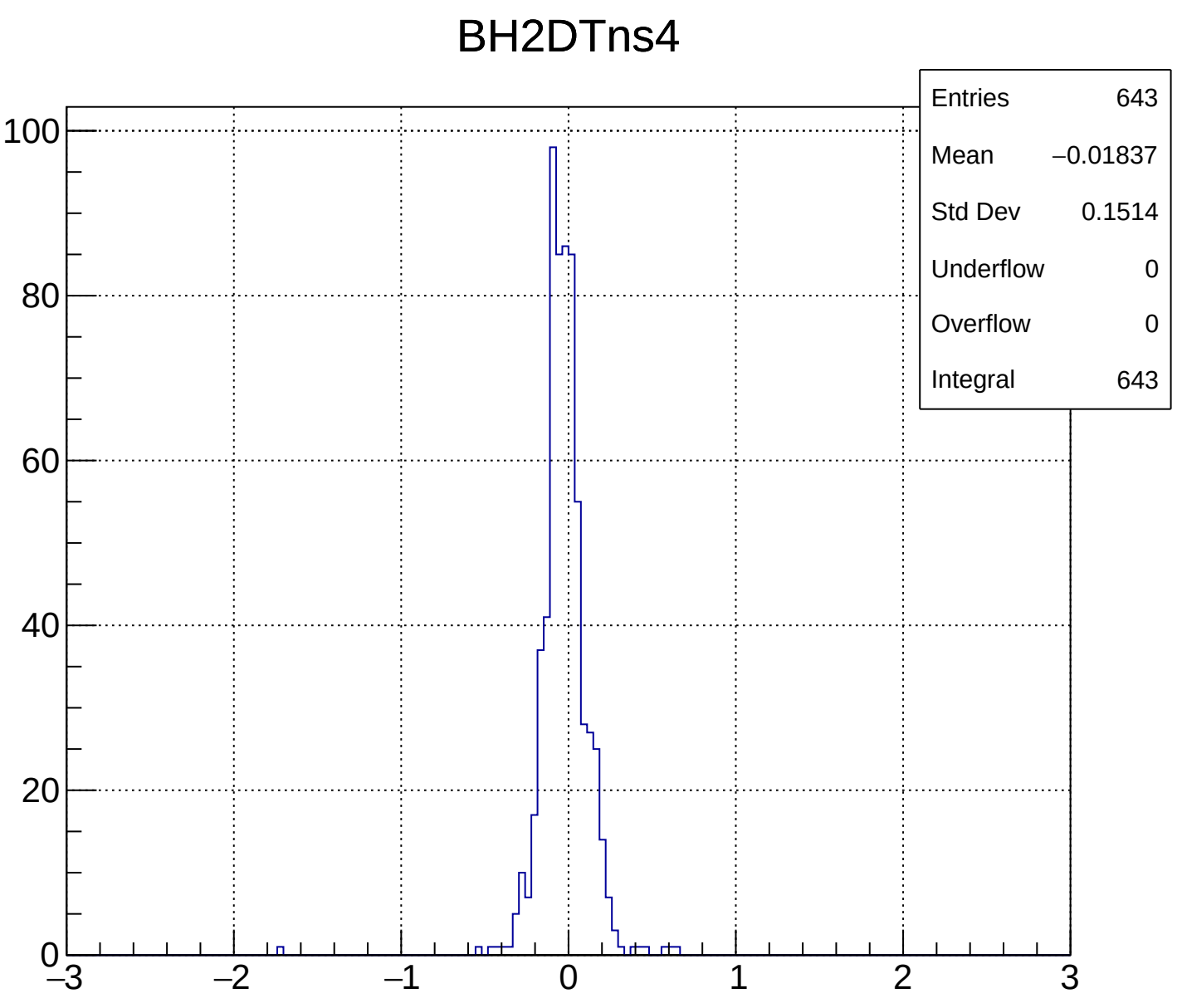

BH2UT04
Entries 643
Mean −0.3025
Std Dev 4.866
Underflow 0
Overflow 0
Integral 643
70
60
50
40
30
20
10
0
−50
−40
−30
−20
−10
0
10
20
30
40
50

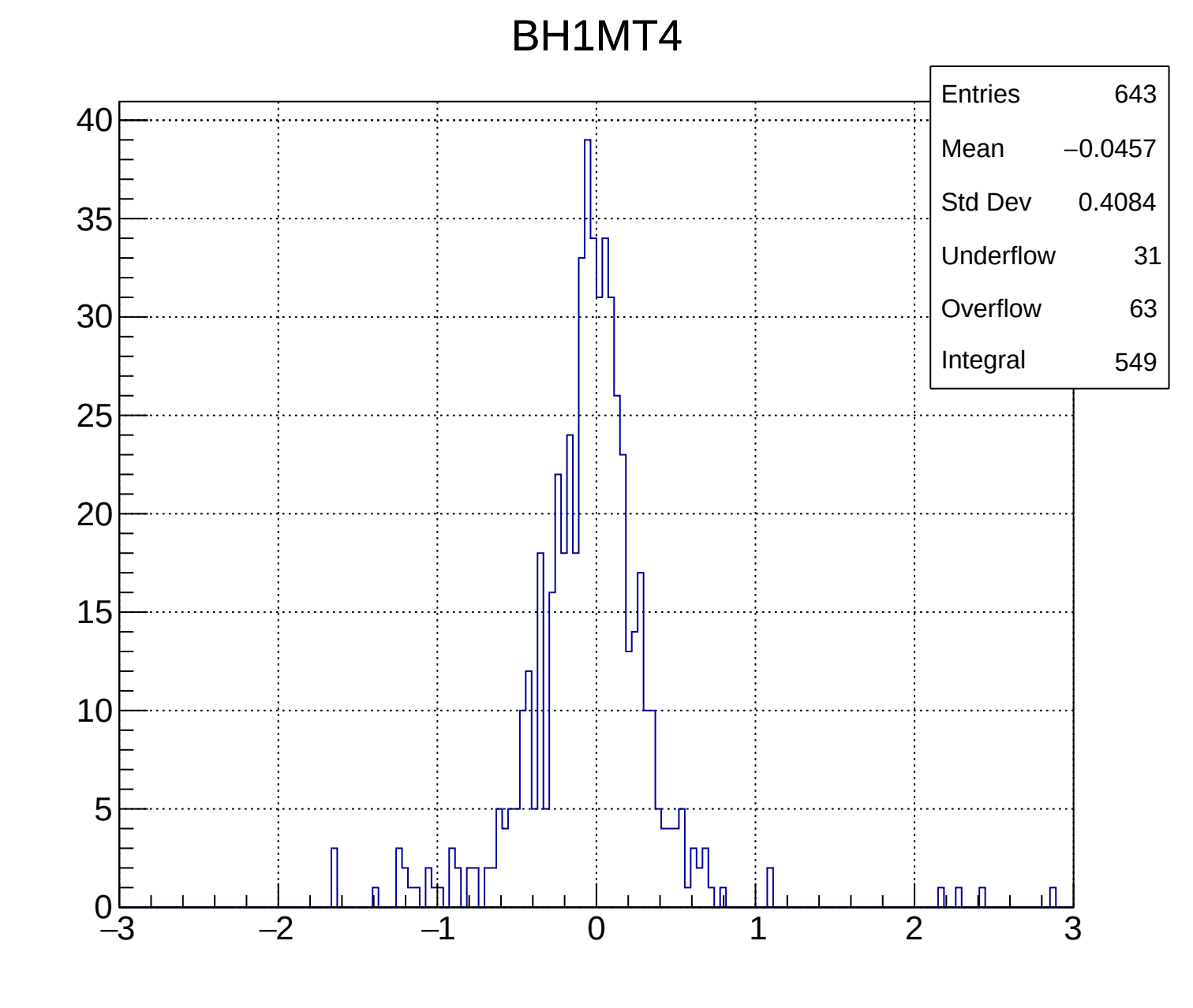

BH2DT04
Entries 643
Mean −0.9635
Std Dev 4.168
Underflow 0
Overflow 0
Integral 643
90
80
70
60
50
40
30
20
10
0
−50
−40
−30
−20
−10
0
10
20
30
40
50

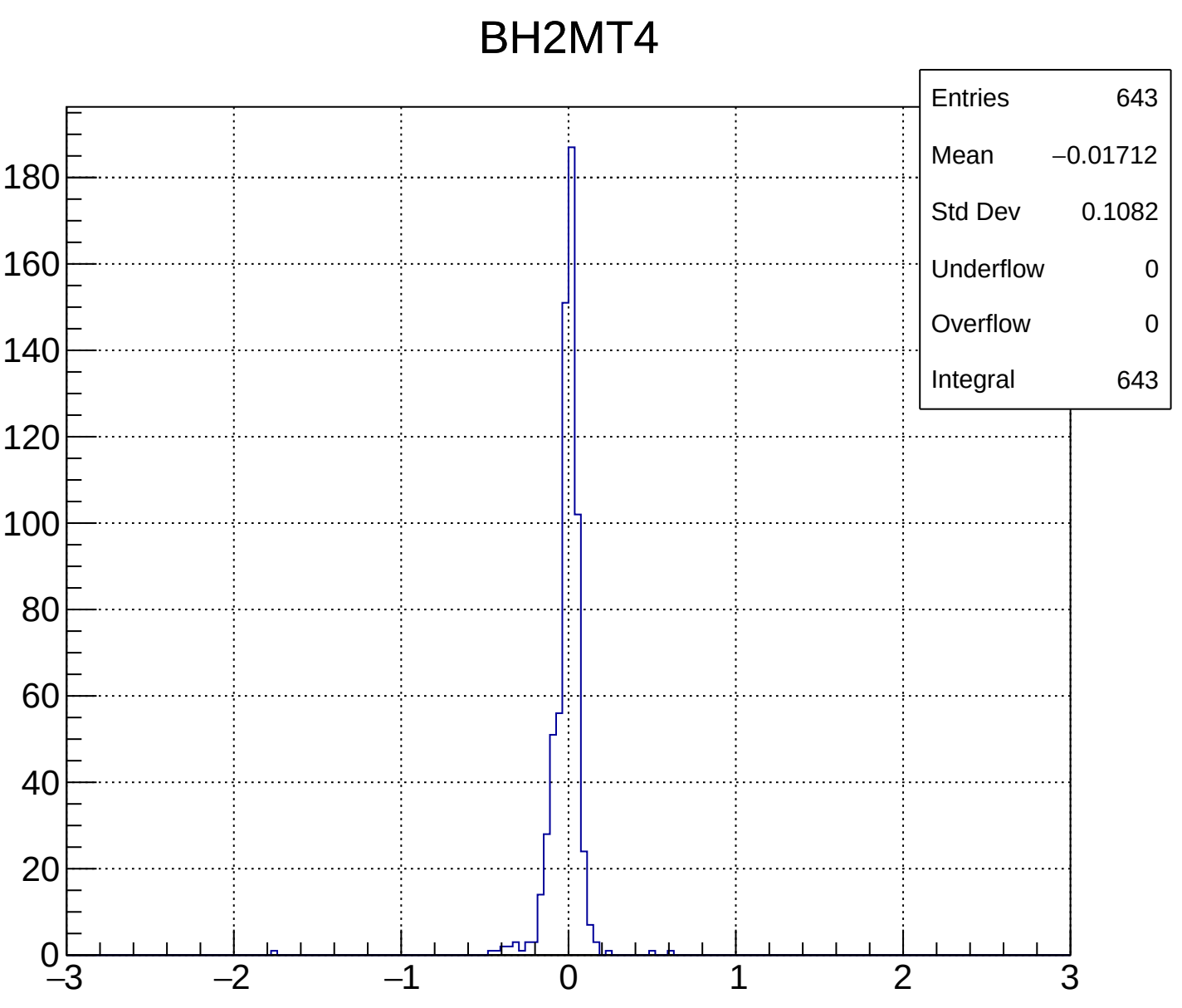

BH1UTns4
Entries 643
Mean −0.02555
Std Dev 0.4514
Underflow 31
Overflow 63
Integral 549
40
35
30
25
20
15
10
5
0
−3
−2
−1
0
1
2
3

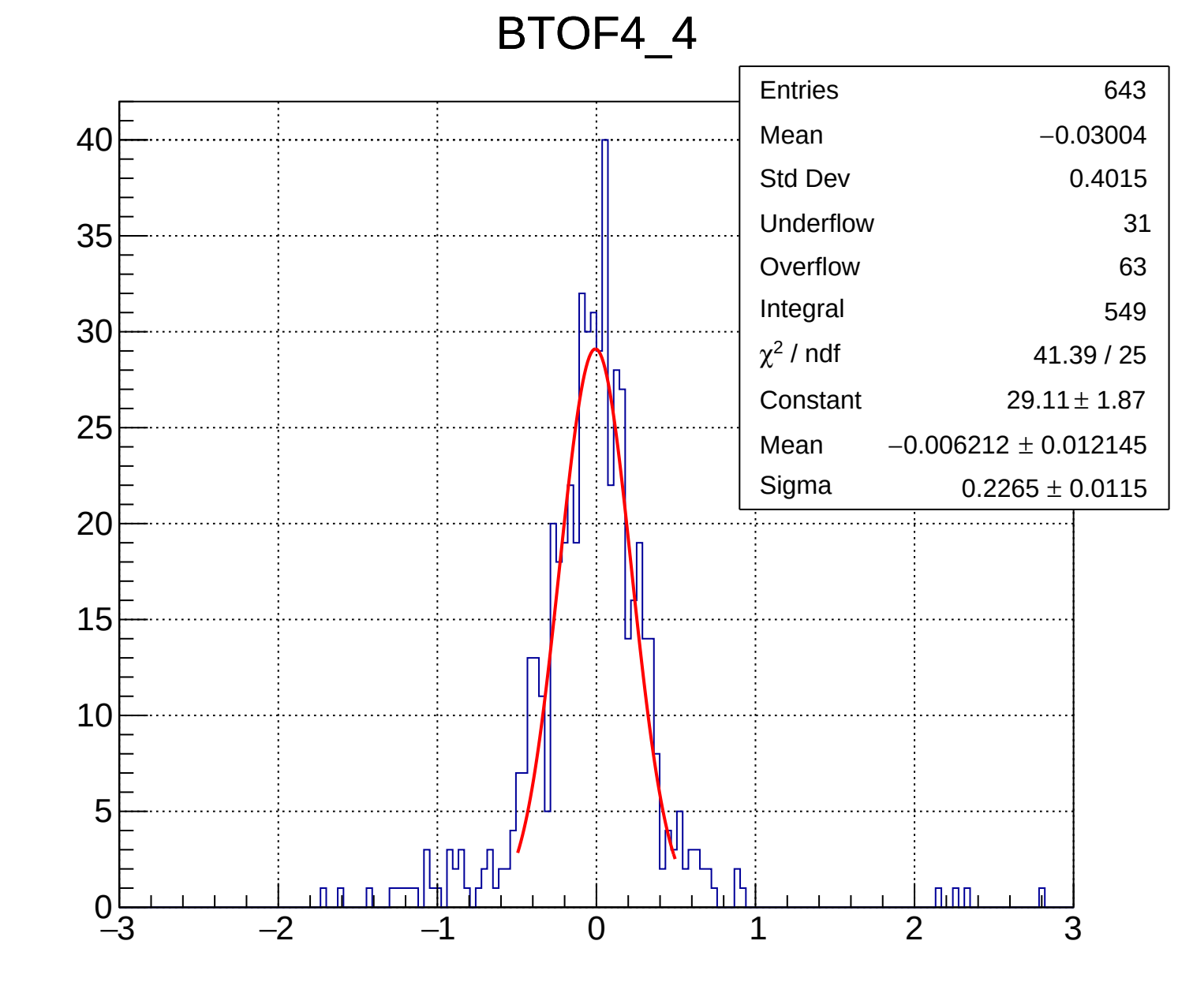

BH1DTns4
Entries 643
Mean −0.06585
Std Dev 0.4293
Underflow 32
Overflow 62
Integral 549
35
30
25
20
15
10
5
0
−3
−2
−1
0
1
2
3

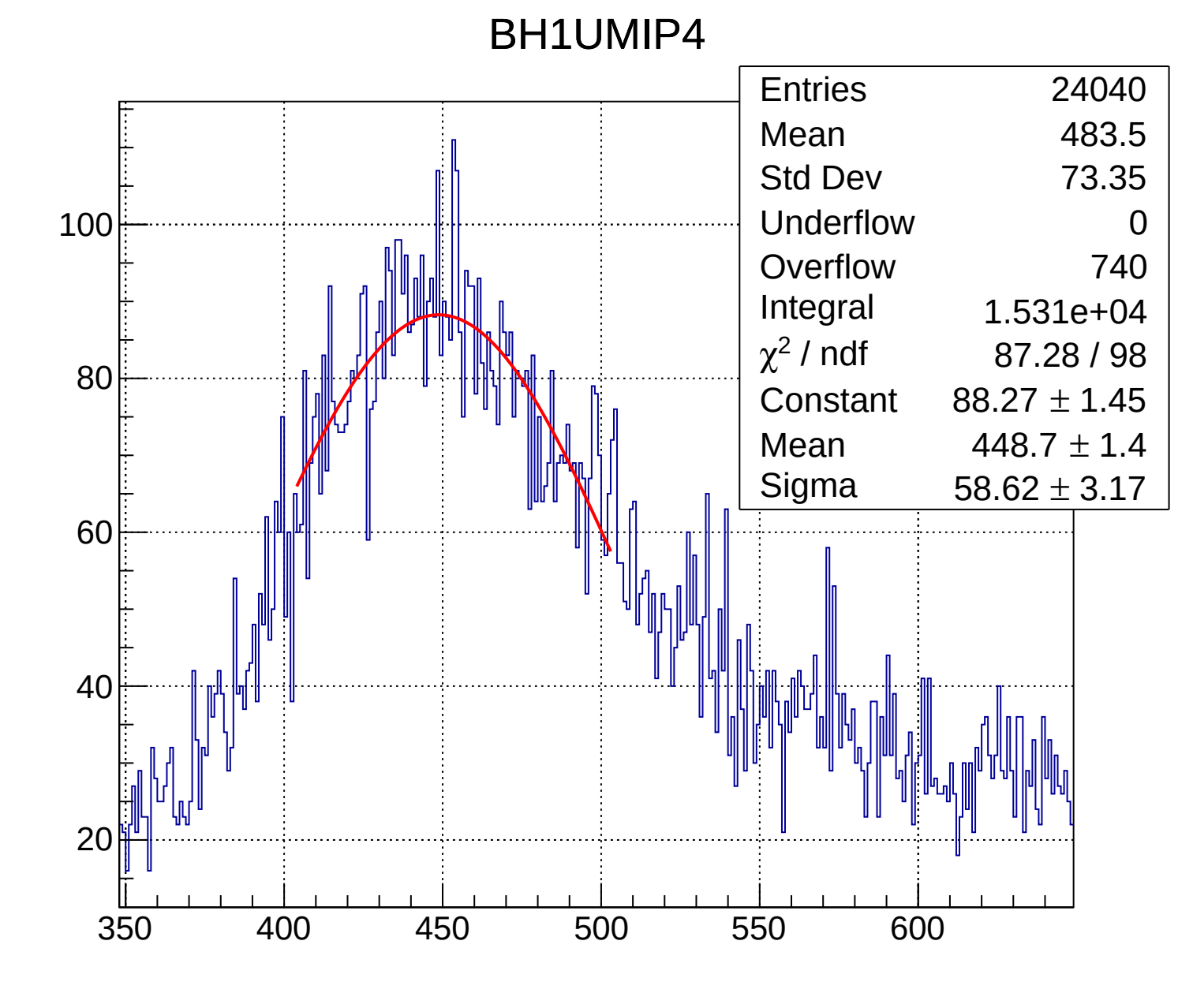

BH2UTns4
Entries 643
Mean −0.01587
Std Dev 0.1854
Underflow 0
Overflow 0
Integral 643
70
60
50
40
30
20
10
0
−3
−2
−1
0
1
2
3

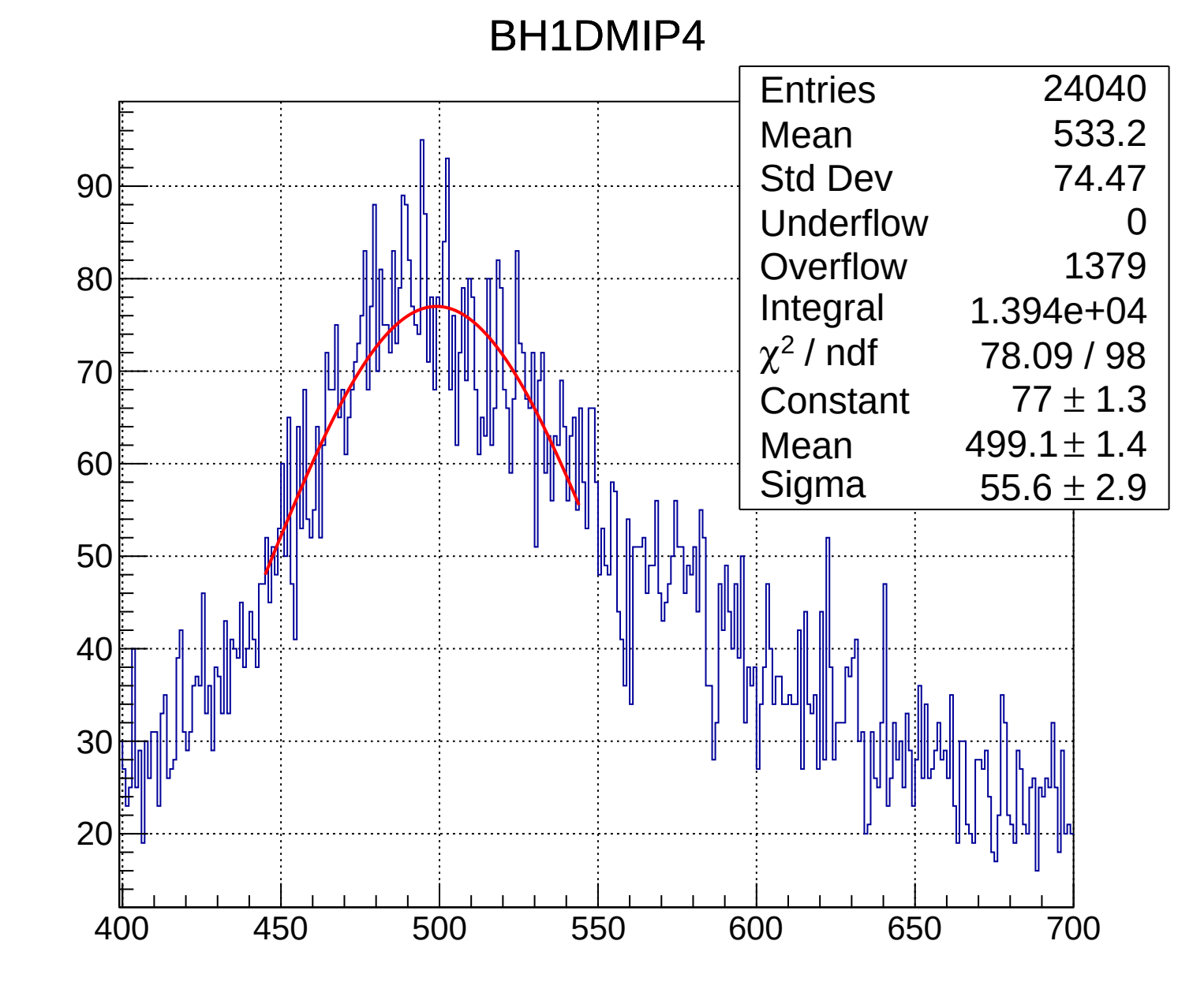

BH2DTns4
Entries 643
Mean −0.01837
Std Dev 0.1514
Underflow 0
Overflow 0
Integral 643
100
80
60
40
20
0
−3
−2
−1
0
1
2
3

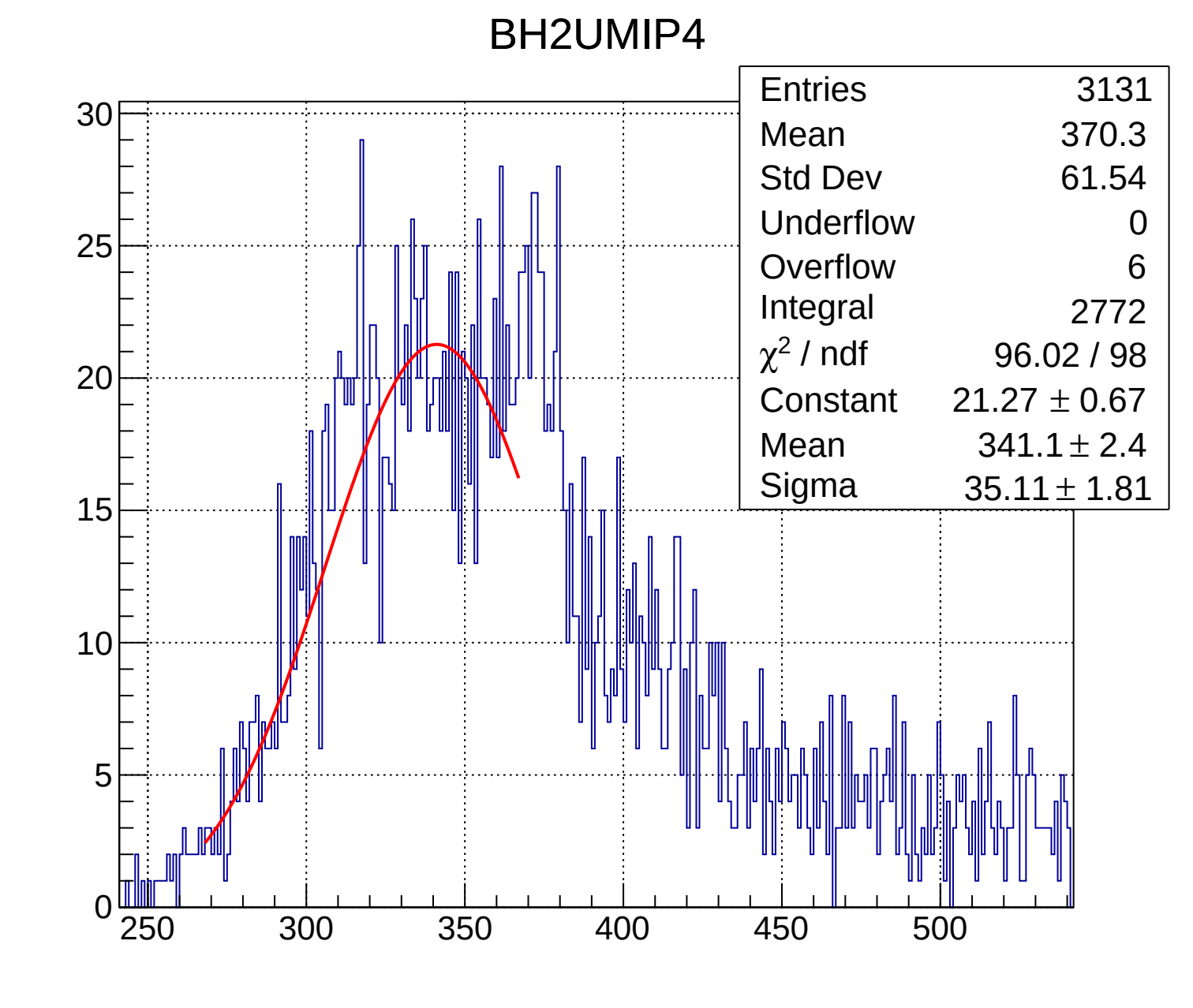

BH1MT4
Entries 643
Mean −0.0457
Std Dev 0.4084
Underflow 31
Overflow 63
Integral 549
40
35
30
25
20
15
10
5
0
−3
−2
−1
0
1
2
3

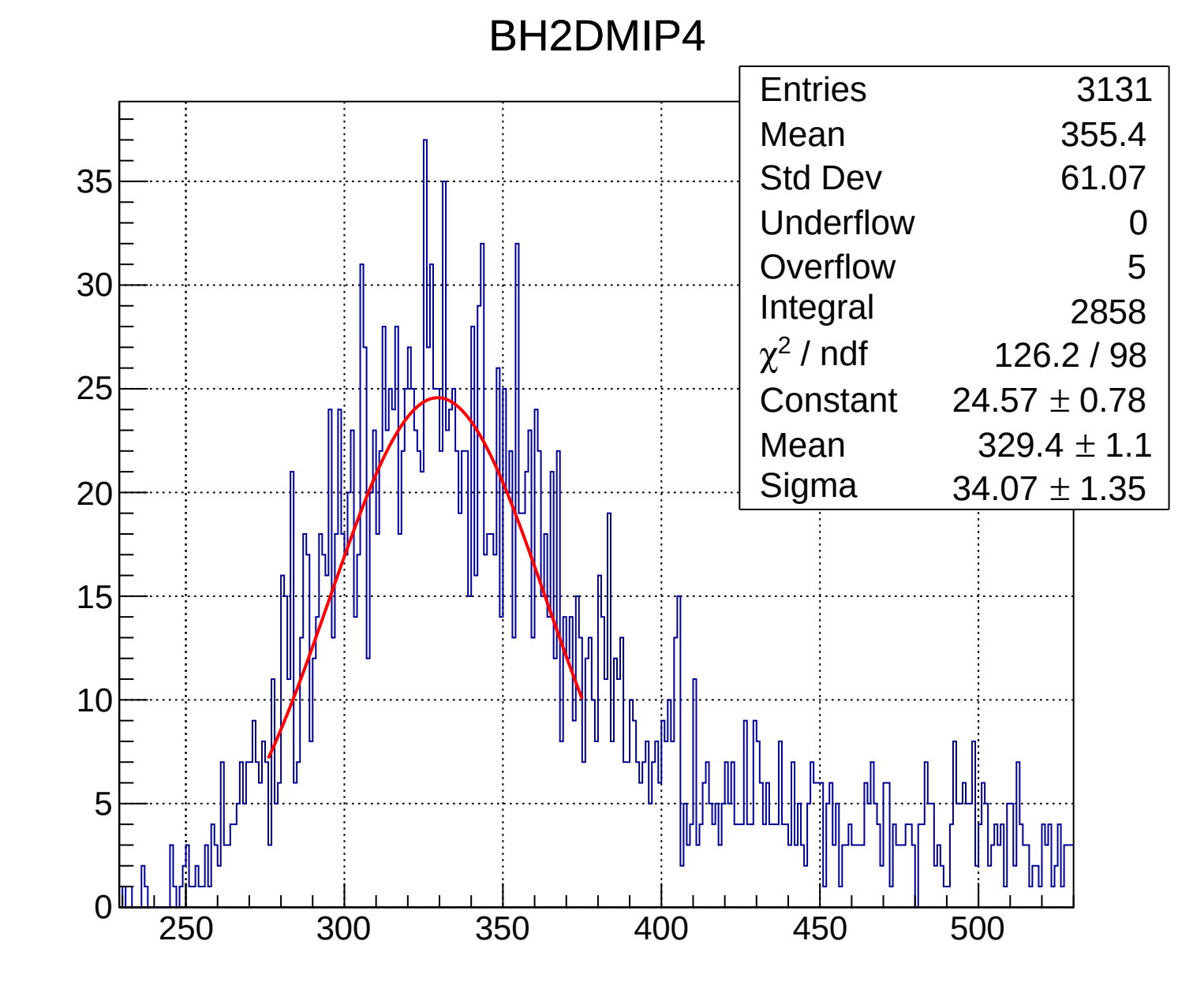

BH2MT4
Entries 643
Mean −0.01712
Std Dev 0.1082
Underflow 0
Overflow 0
Integral 643
180
160
140
120
100
80
60
40
20
0
−3
−2
−1
0
1
2
3

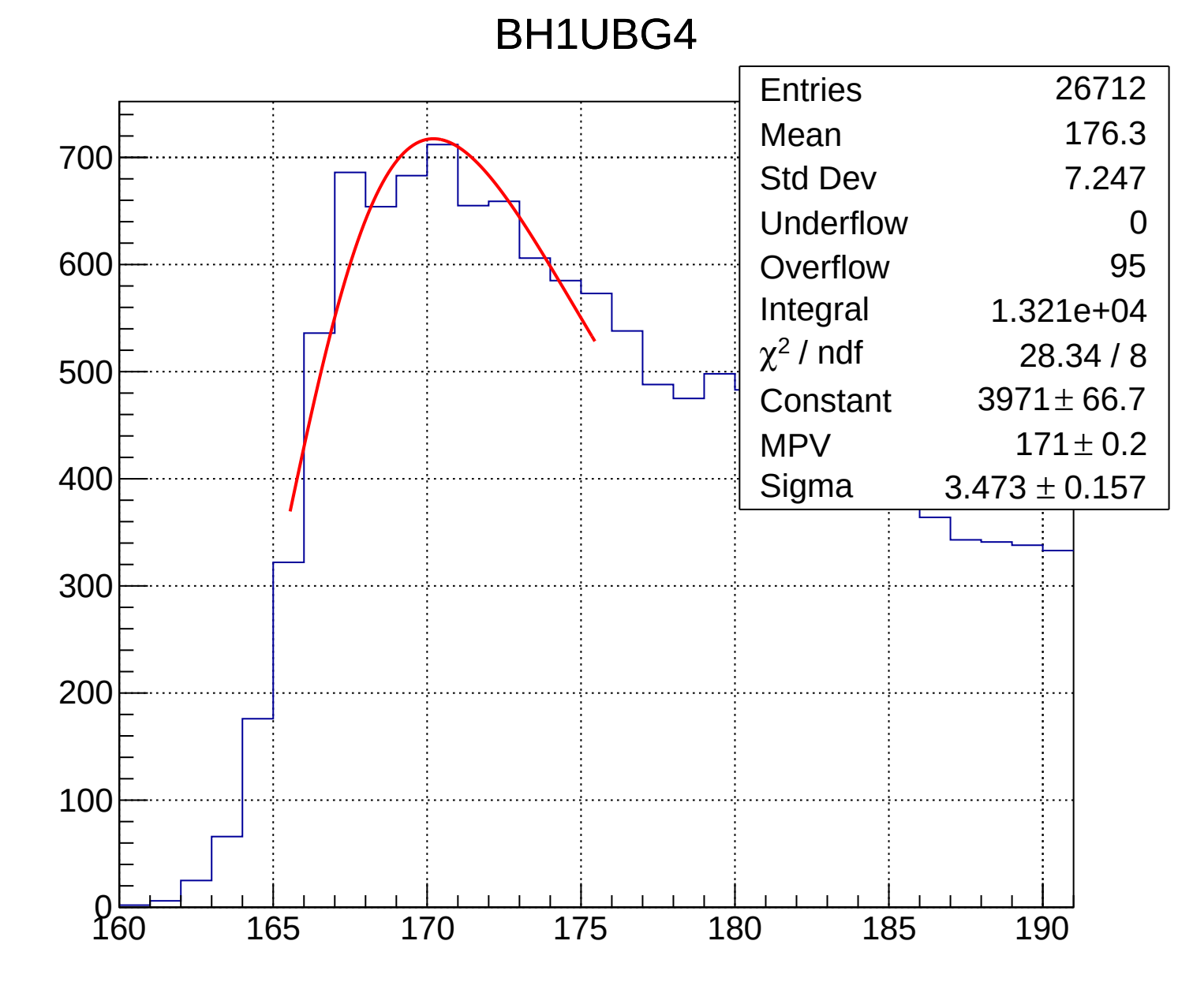

BTOF4_4
Entries 643
Mean −0.03004
Std Dev 0.4015
Underflow 31
Overflow 63
Integral 549
χ² / ndf 41.39 / 25
Constant 29.11 ± 1.87
Mean −0.006212 ± 0.012145
Sigma 0.2265 ± 0.0115
40
35
30
25
20
15
10
5
0
−3
−2
−1
0
1
2
3

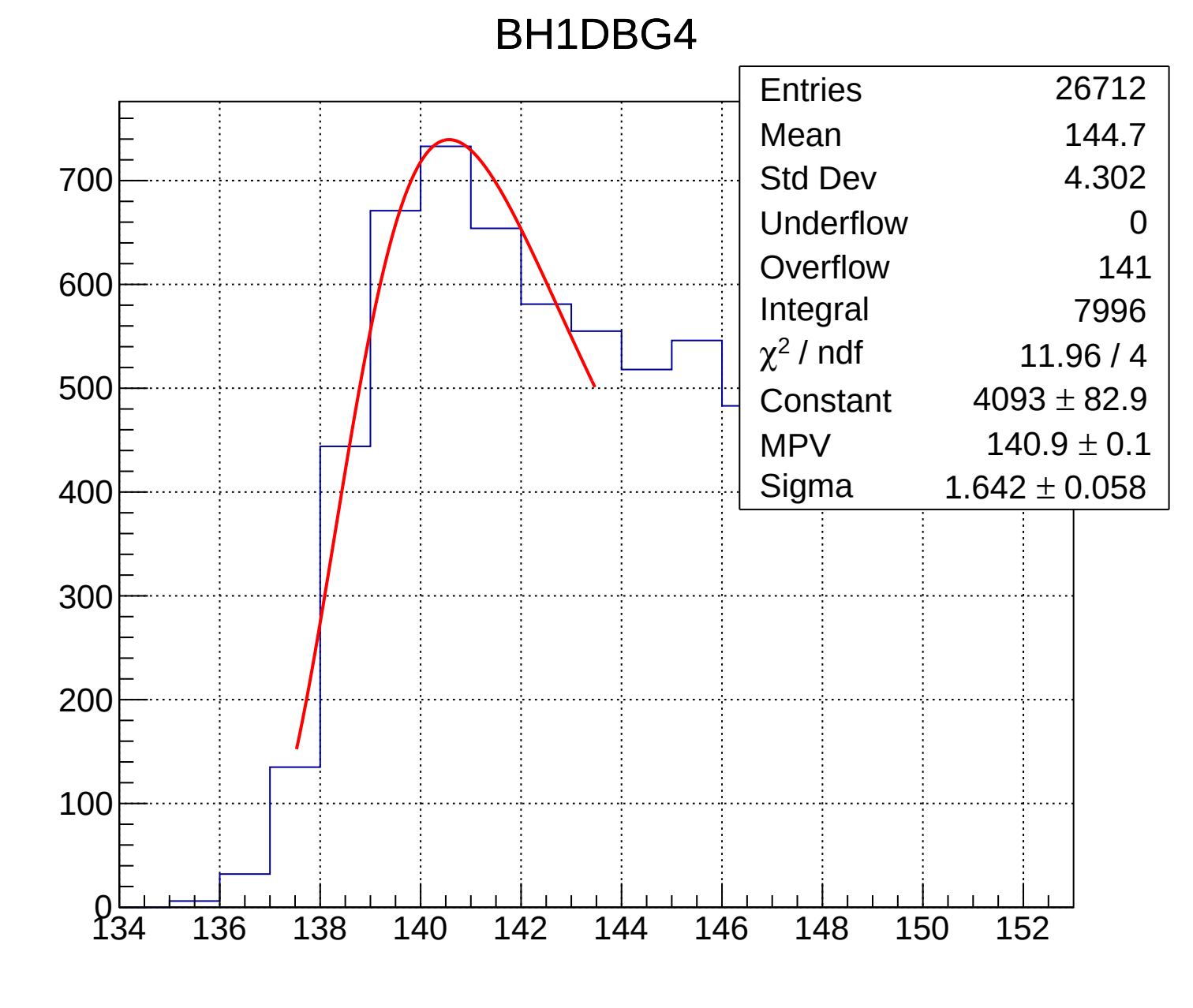

BH1UMIP4
Entries 24040
Mean 483.5
Std Dev 73.35
Underflow 0
Overflow 740
Integral 1.531e+04
χ² / ndf 87.28 / 98
Constant 88.27 ± 1.45
Mean 448.7 ± 1.4
Sigma 58.62 ± 3.17
100
80
60
40
20
350
400
450
500
550
600

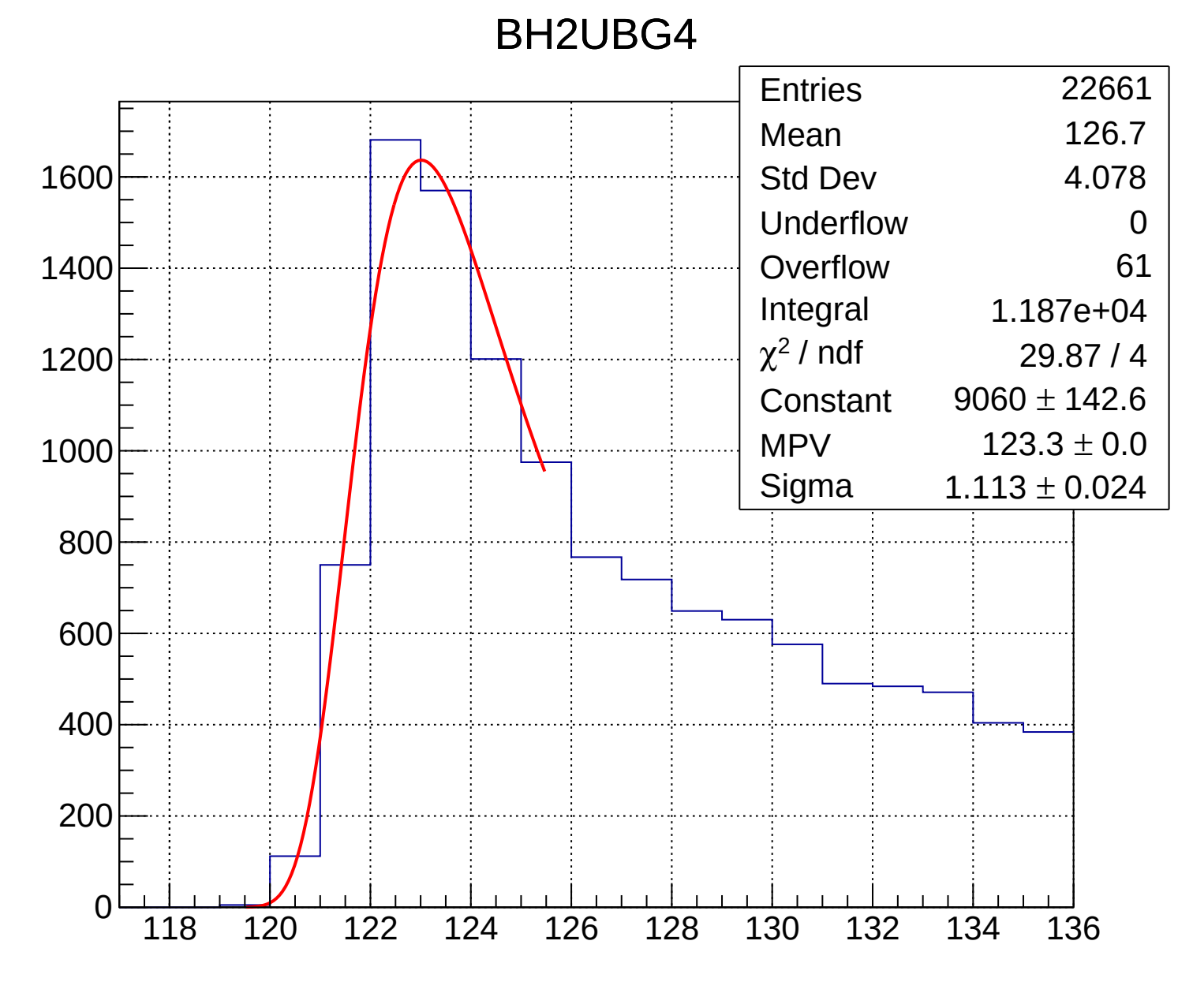

BH1DMIP4
Entries 24040
Mean 533.2
Std Dev 74.47
Underflow 0
Overflow 1379
Integral 1.394e+04
χ² / ndf 78.09 / 98
Constant 77 ± 1.3
Mean 499.1 ± 1.4
Sigma 55.6 ± 2.9
90
80
70
60
50
40
30
20
400
450
500
550
600
650
700

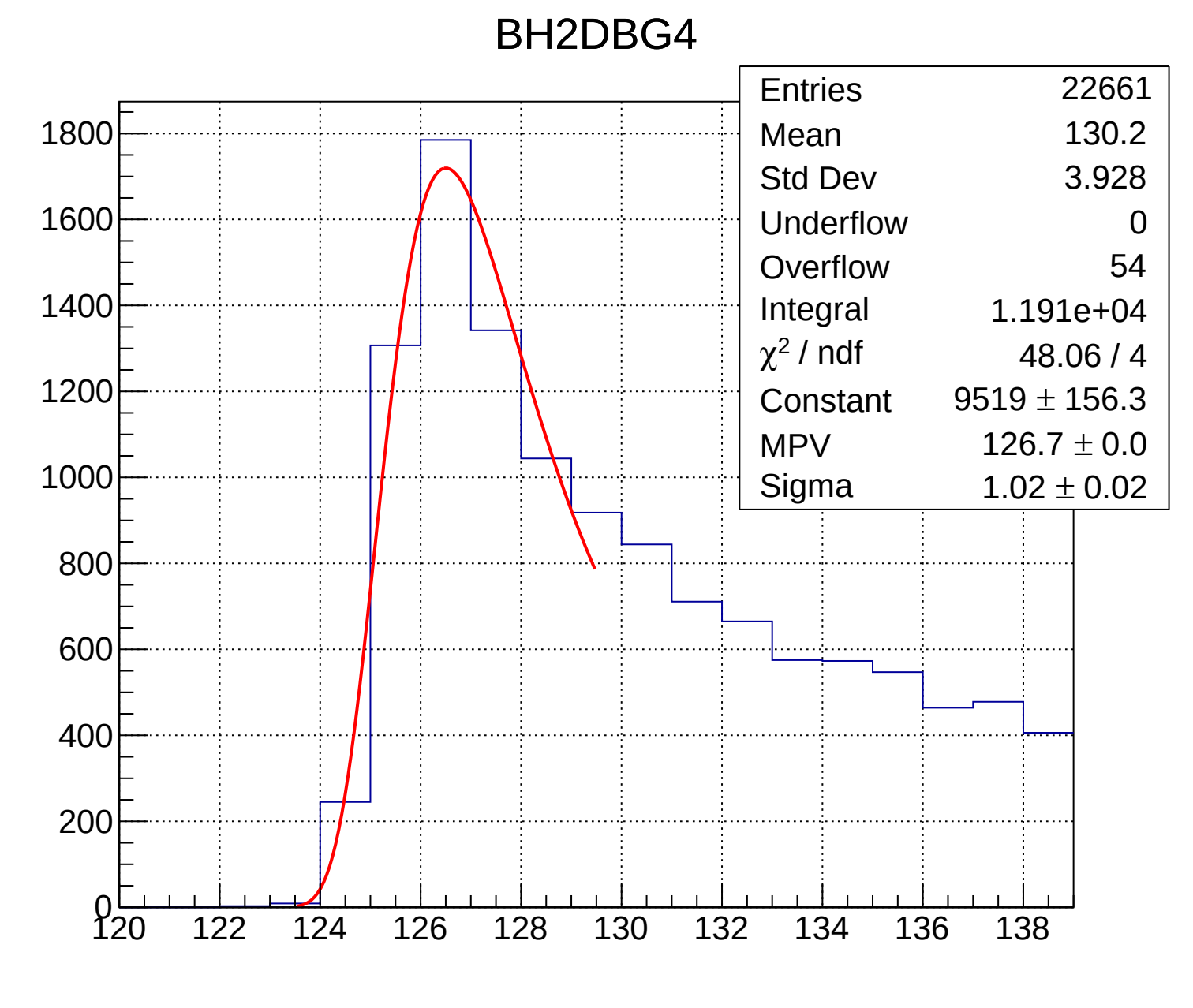

BH2UMIP4
Entries 3131
Mean 370.3
Std Dev 61.54
Underflow 0
Overflow 6
Integral 2772
χ2 / ndf 96.02 / 98
Constant 21.27 ± 0.67
Mean 341.1 ± 2.4
Sigma 35.11 ± 1.81
30
25
20
15
10
5
0
250
300
350
400
450
500

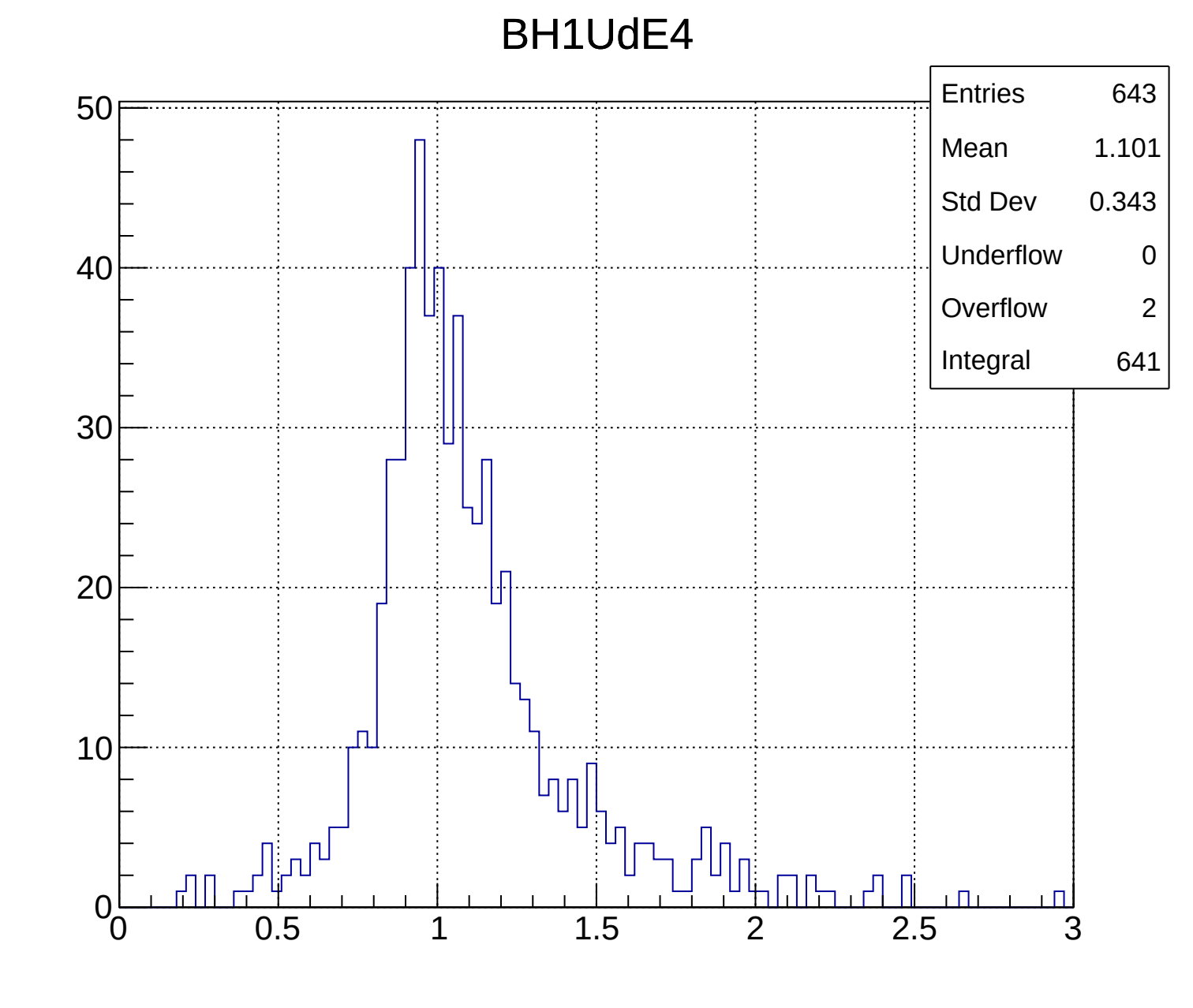

BH2DMIP4
Entries 3131
Mean 355.4
Std Dev 61.07
Underflow 0
Overflow 5
Integral 2858
χ² / ndf 126.2 / 98
Constant 24.57 ± 0.78
Mean 329.4 ± 1.1
Sigma 34.07 ± 1.35
0
5
10
15
20
25
30
35
250
300
350
400
450
500

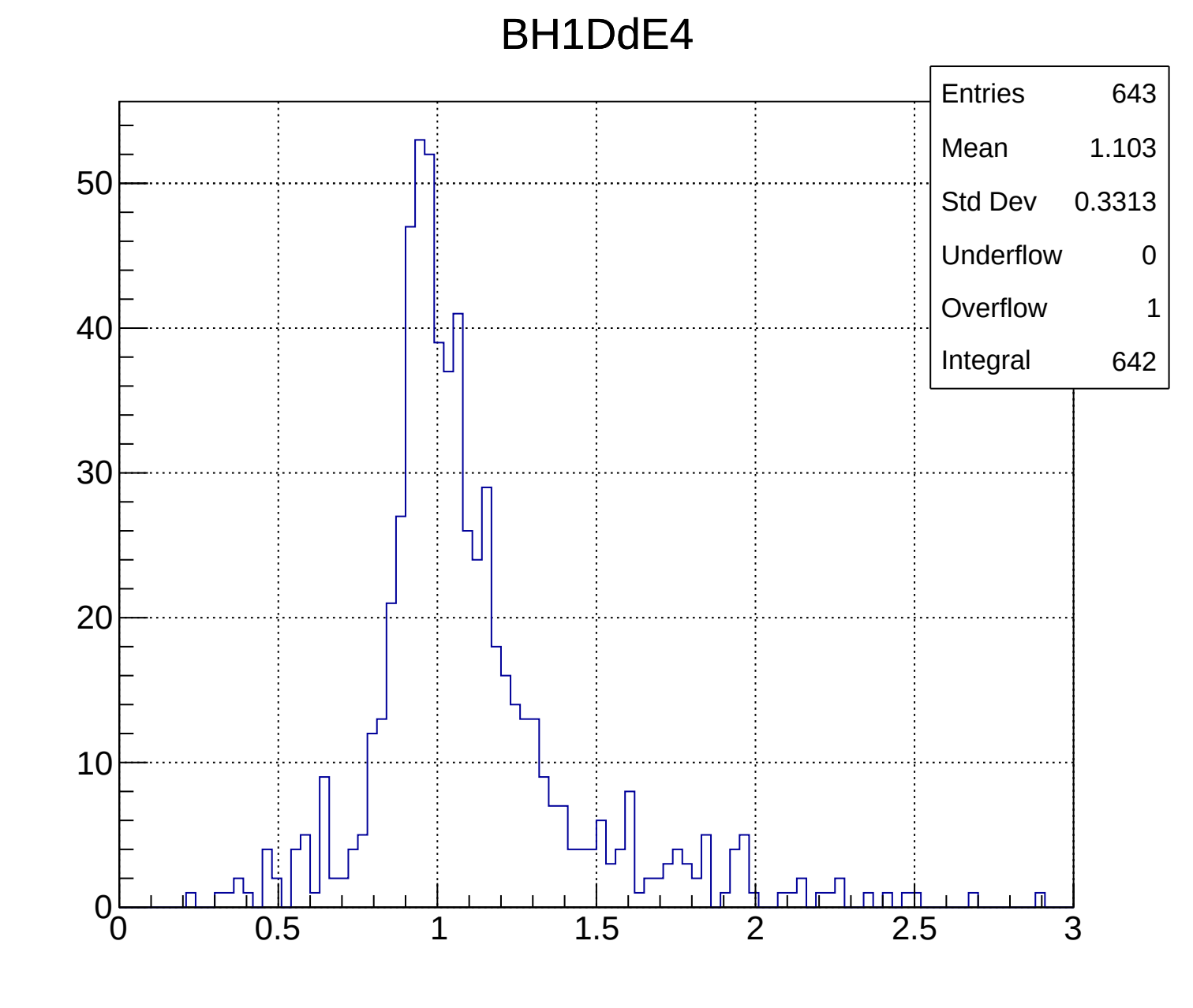

BH1UBG4
Entries 26712
Mean 176.3
Std Dev 7.247
Underflow 0
Overflow 95
Integral 1.321e+04
χ² / ndf 28.34 / 8
Constant 3971 ± 66.7
MPV 171 ± 0.2
Sigma 3.473 ± 0.157
0
100
200
300
400
500
600
700
160
165
170
175
180
185
190

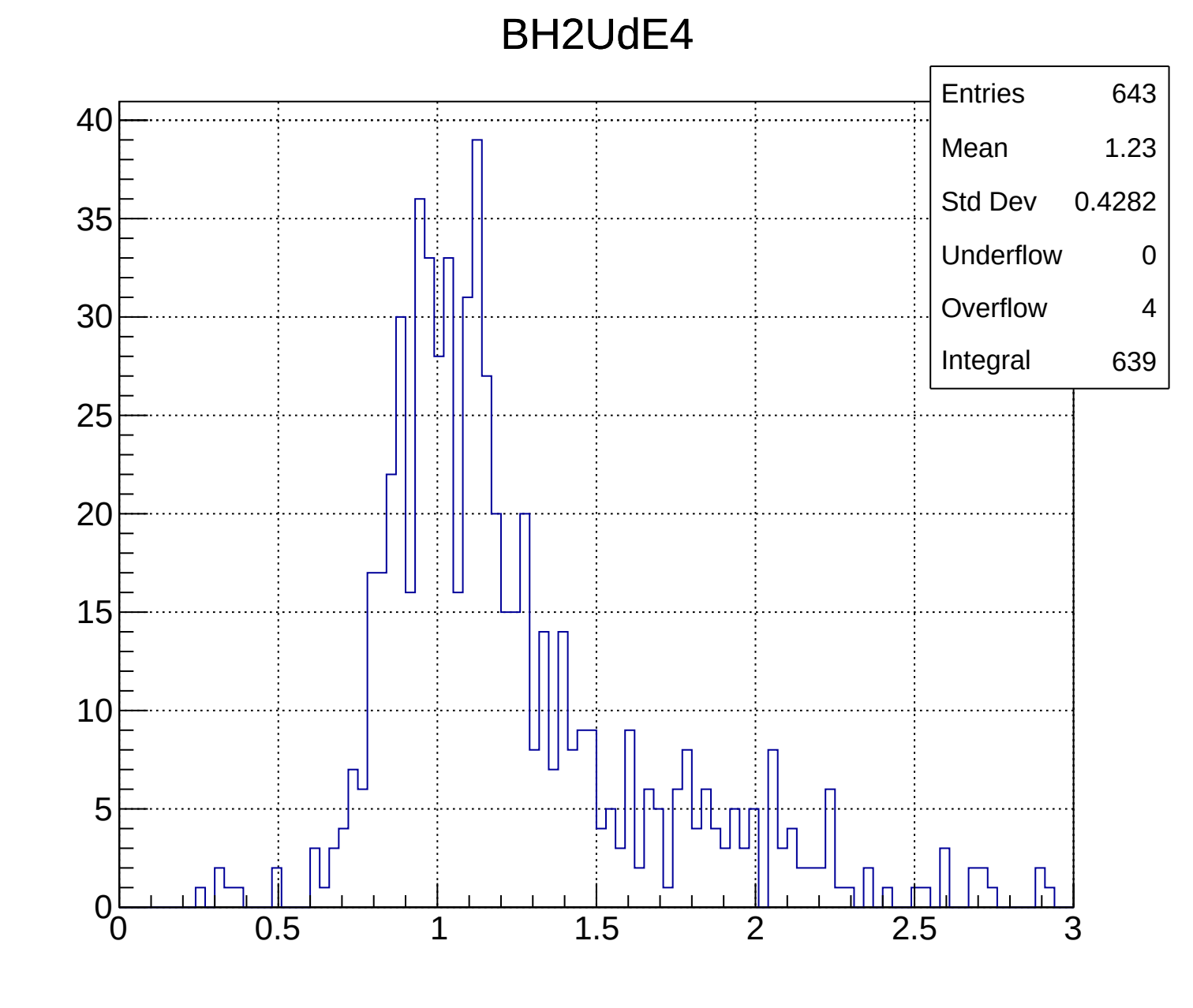

BH1DBG4
Entries 26712
Mean 144.7
Std Dev 4.302
Underflow 0
Overflow 141
Integral 7996
χ² / ndf 11.96 / 4
Constant 4093 ± 82.9
MPV 140.9 ± 0.1
Sigma 1.642 ± 0.058
0
100
200
300
400
500
600
700
134
136
138
140
142
144
146
148
150
152

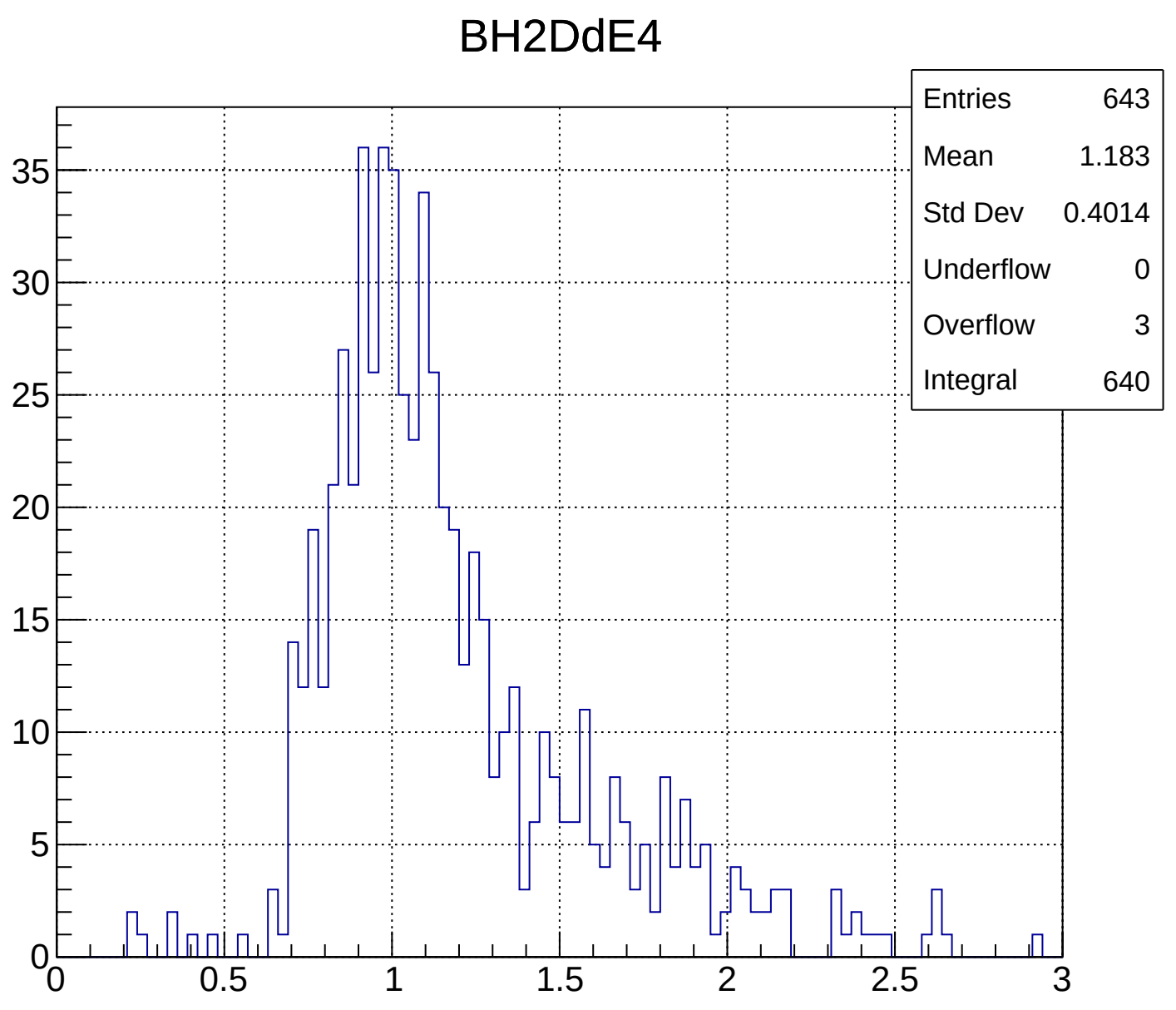

BH2UBG4
Entries 22661
Mean 126.7
Std Dev 4.078
Underflow 0
Overflow 61
Integral 1.187e+04
χ² / ndf 29.87 / 4
Constant 9060 ± 142.6
MPV 123.3 ± 0.0
Sigma 1.113 ± 0.024
0
200
400
600
800
1000
1200
1400
1600
118
120
122
124
126
128
130
132
134
136

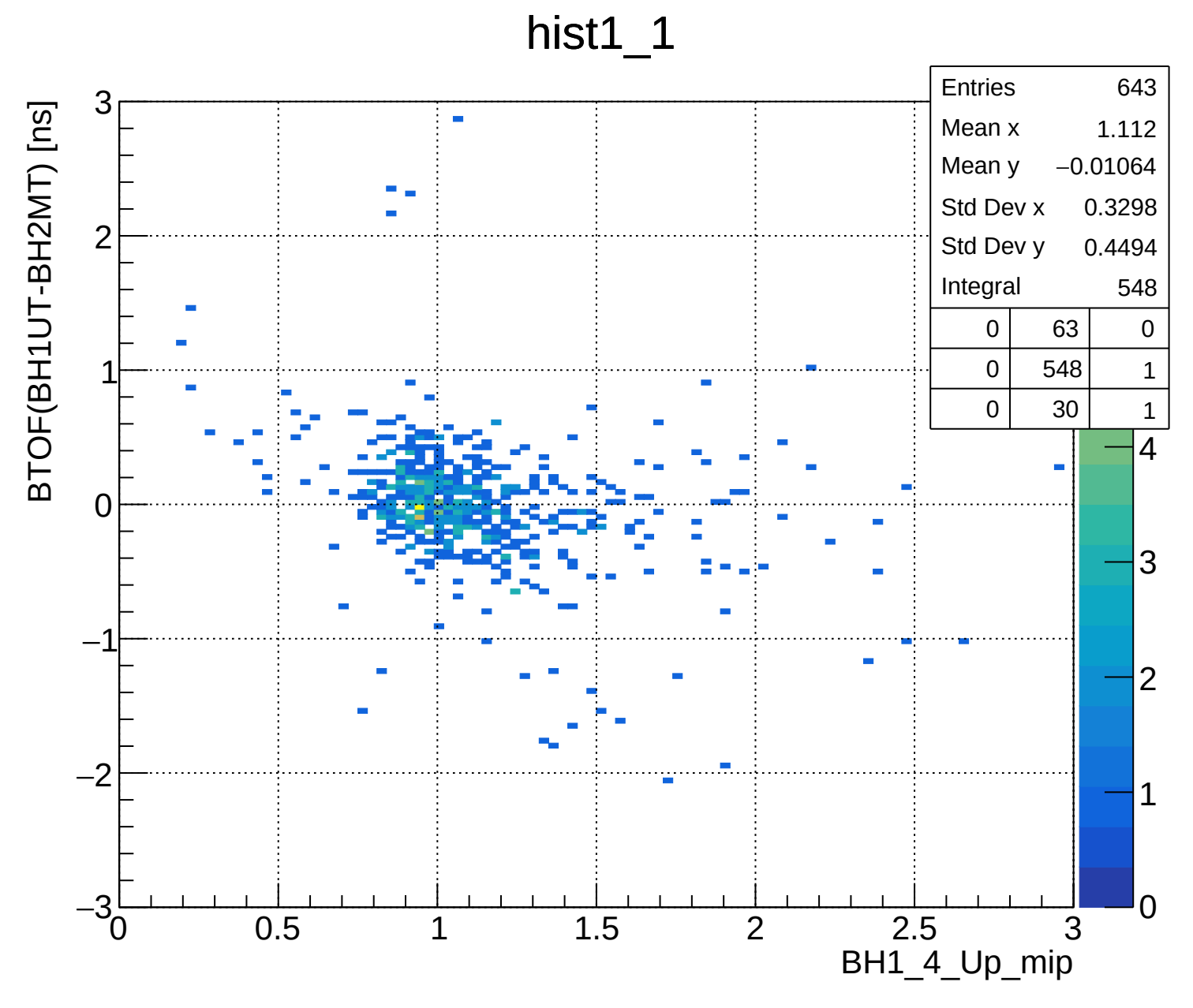

BH2DBG4
Entries 22661
Mean 130.2
Std Dev 3.928
Underflow 0
Overflow 54
Integral 1.191e+04
χ² / ndf 48.06 / 4
Constant 9519 ± 156.3
MPV 126.7 ± 0.0
Sigma 1.02 ± 0.02
1800
1600
1400
1200
1000
800
600
400
200
0
120
122
124
126
128
130
132
134
136
138

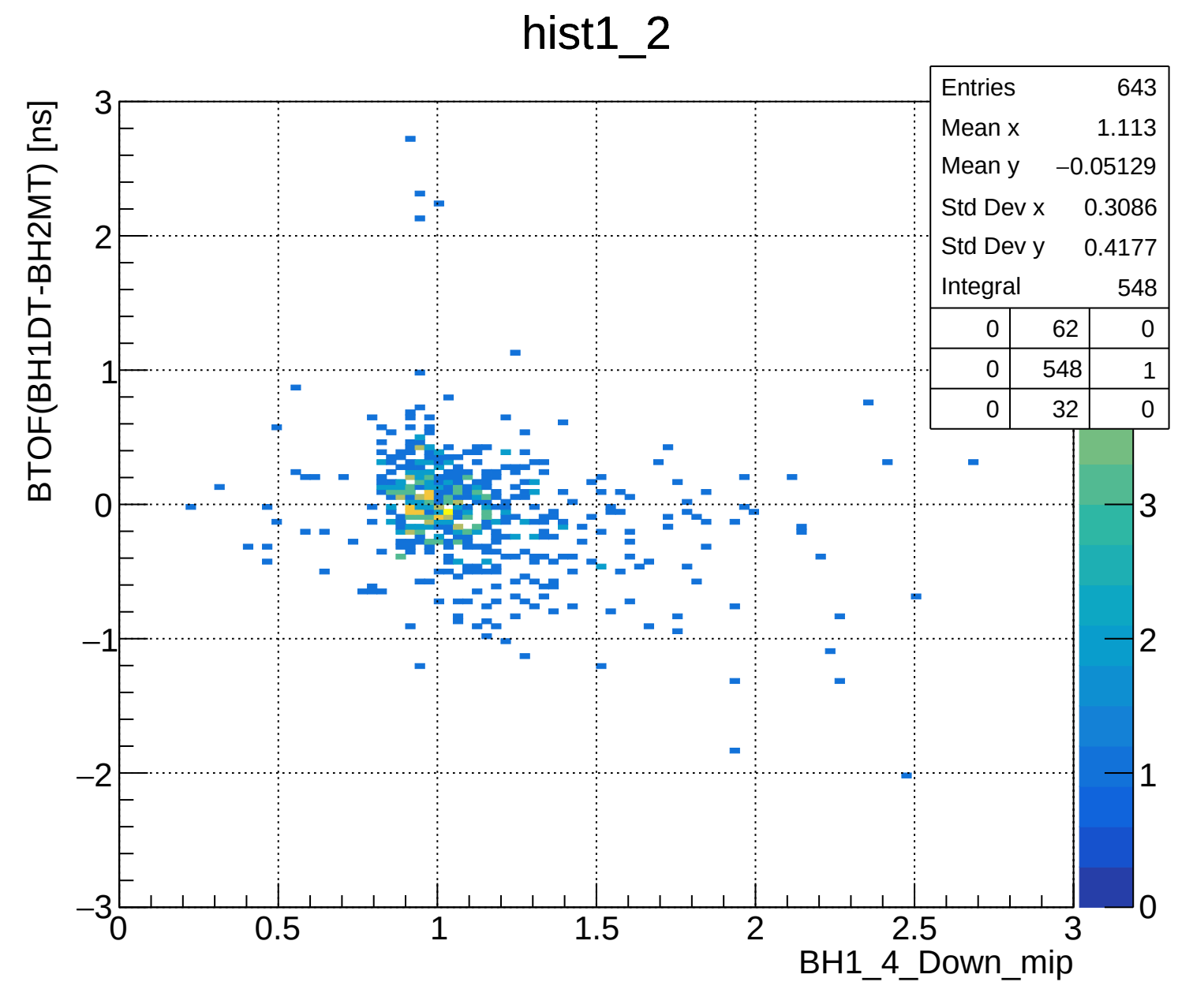

BH1UdE4
Entries 643
Mean 1.101
Std Dev 0.343
Underflow 0
Overflow 2
Integral 641
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5
3

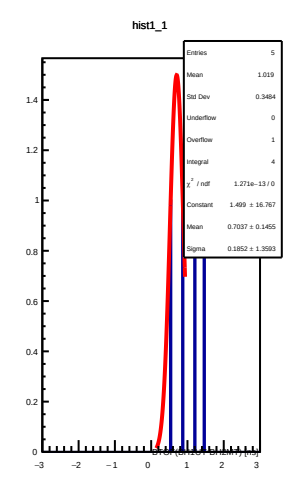

BH1DdE4
Entries 643
Mean 1.103
Std Dev 0.3313
Underflow 0
Overflow 1
Integral 642
0
10
20
30
40
50
0
0.5
1
1.5
2
2.5
3

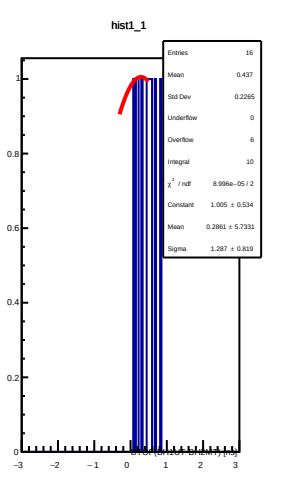

BH2UdE4
Entries 643
Mean 1.23
Std Dev 0.4282
Underflow 0
Overflow 4
Integral 639
40
35
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5
3

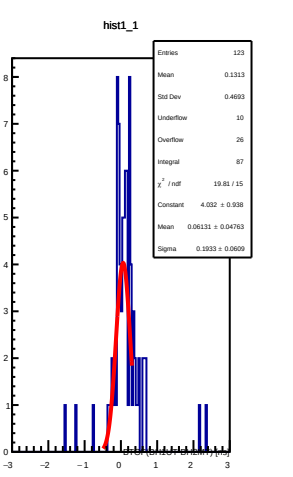

BH2DdE4
Entries 643
Mean 1.183
Std Dev 0.4014
Underflow 0
Overflow 3
Integral 640
0
5
10
15
20
25
30
35
0
0.5
1
1.5
2
2.5
3

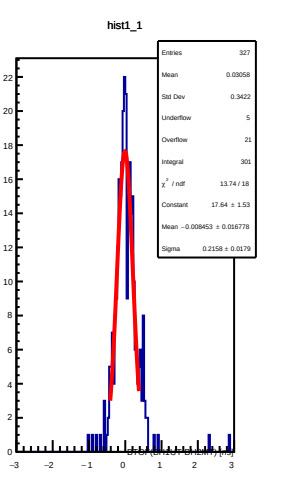

hist1_1
Entries 643
Mean x 1.112
Mean y −0.01064
Std Dev x 0.3298
Std Dev y 0.4494
Integral 548
0 63 0
0 548 1
0 30 1
BTOF(BH1UT-BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
4
3
2
1
0

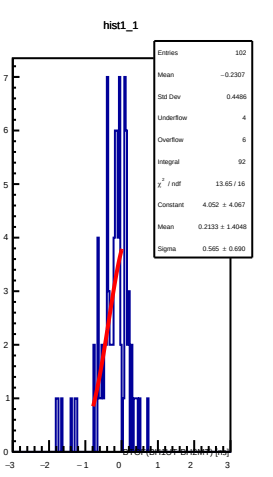

hist1_2
Entries 643
Mean x 1.113
Mean y −0.05129
Std Dev x 0.3086
Std Dev y 0.4177
Integral 548
0 62 0
0 548 1
0 32 0
BTOF(BH1DT-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3

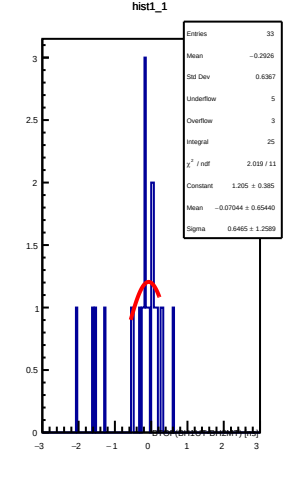

hist1_1
Entries 5
Mean 1.019
Std Dev 0.3484
Underflow 0
Overflow 1
Integral 4
χ² / ndf 1.271e−13 / 0
Constant 1.499 ± 16.767
Mean 0.7037 ± 0.1455
Sigma 0.1852 ± 1.3593

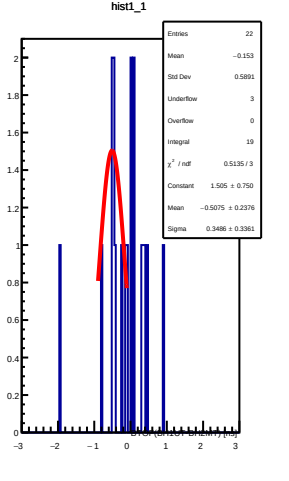

hist1_1
Entries 16
Mean 0.437
Std Dev 0.2265
Underflow 0
Overflow 6
Integral 10
χ² / ndf 8.996e−05 / 2
Constant 1.005 ± 0.534
Mean 0.2861 ± 5.7331
Sigma 1.287 ± 0.819

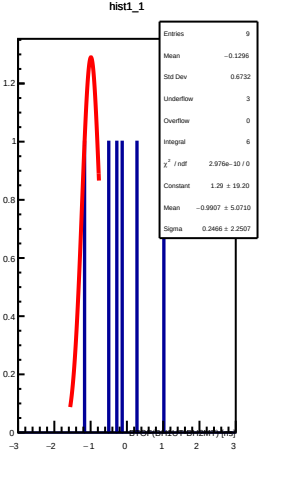

hist1_1
Entries 123
Mean 0.1313
Std Dev 0.4693
Underflow 10
Overflow 26
Integral 87
χ² / ndf 19.81 / 15
Constant 4.032 ± 0.938
Mean 0.06131 ± 0.04763
Sigma 0.1933 ± 0.0609

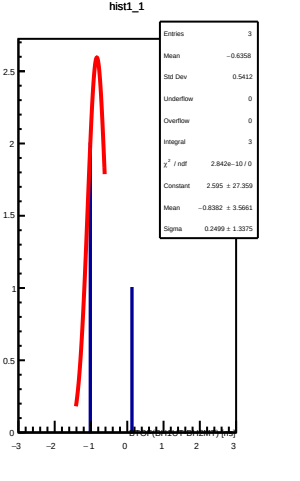

hist1_1
Entries 327
Mean 0.03058
Std Dev 0.3422
Underflow 5
Overflow 21
Integral 301
χ² / ndf 13.74 / 18
Constant 17.64 ± 1.53
Mean −0.008453 ± 0.016778
Sigma 0.2158 ± 0.0179

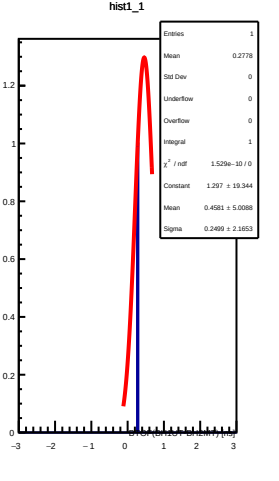

hist1_1
Entries 102
Mean −0.2307
Std Dev 0.4488
Underflow 4
Overflow 6
Integral 92
χ² / ndf 13.65 / 16
Constant 4.052 ± 4.067
Mean 0.2133 ± 1.4048
Sigma 0.565 ± 0.690

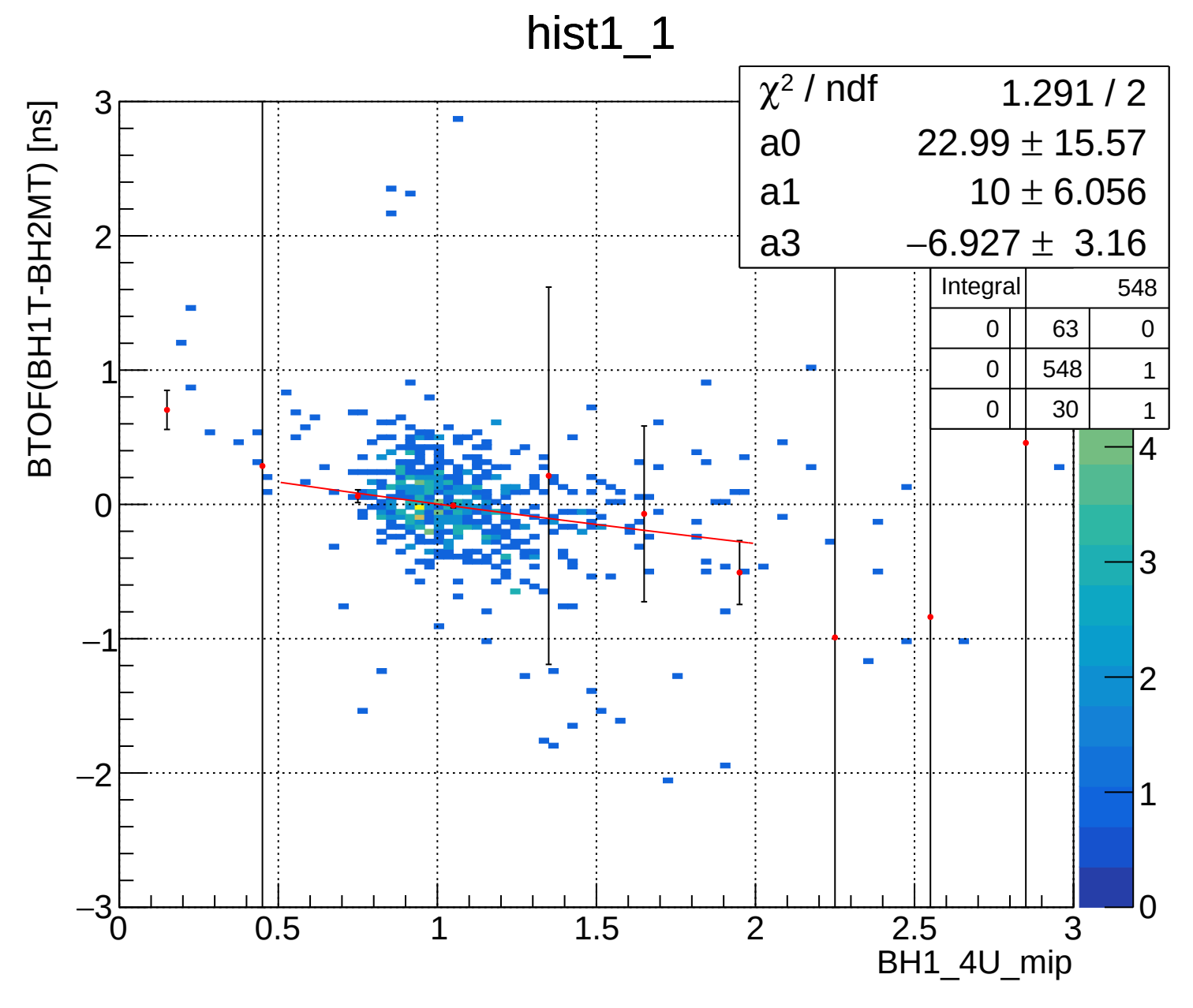

hist1_1
Entries 33
Mean −0.2926
Std Dev 0.6367
Underflow 5
Overflow 3
Integral 25
χ² / ndf 2.019 / 11
Constant 1.205 ± 0.385
Mean −0.07044 ± 0.65440
Sigma 0.6465 ± 1.2589

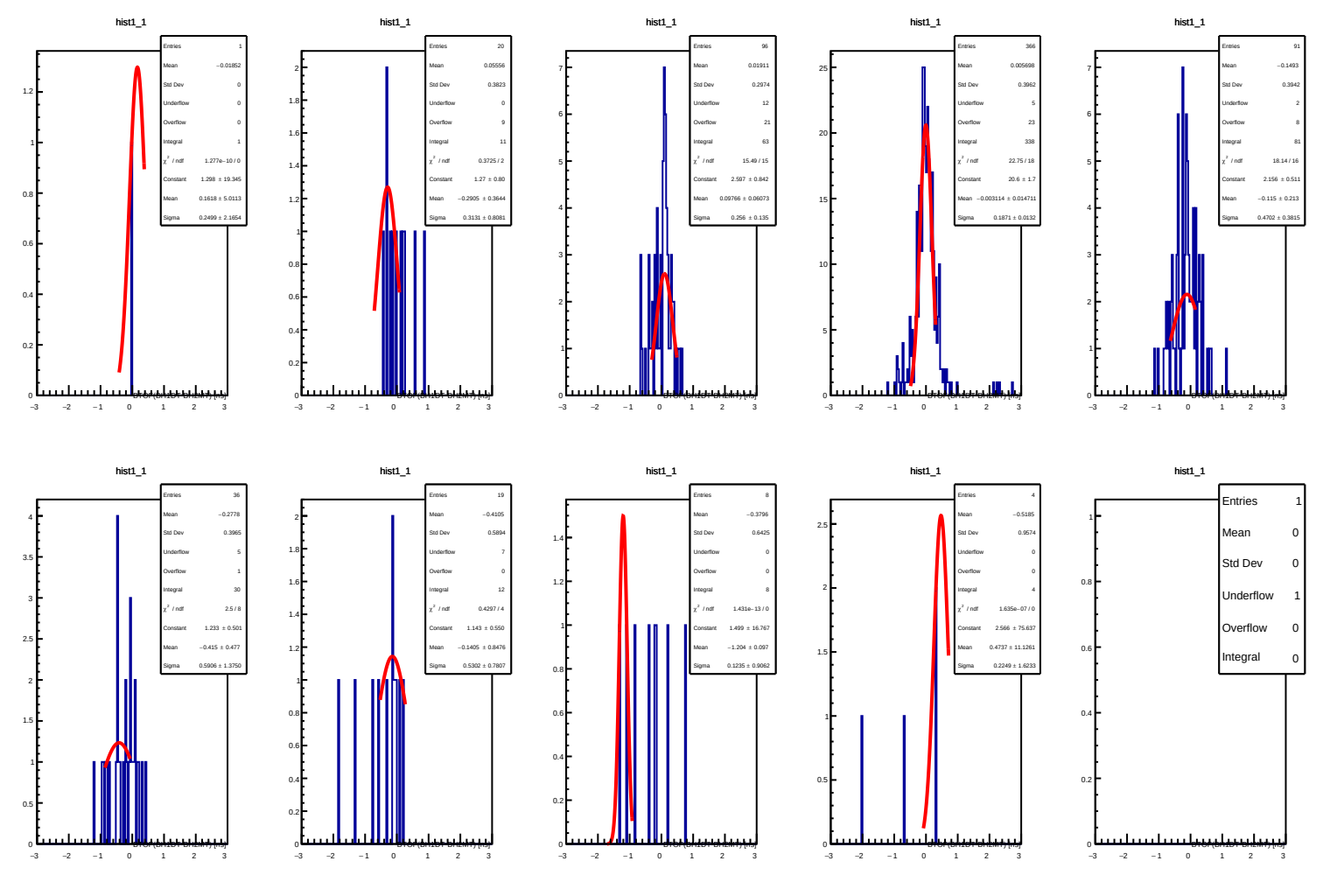

hist1_1
Entries 22
Mean −0.153
Std Dev 0.5891
Underflow 3
Overflow 0
Integral 19
χ² / ndf 0.5135 / 3
Constant 1.505 ± 0.750
Mean −0.5075 ± 0.2376
Sigma 0.3486 ± 0.3361

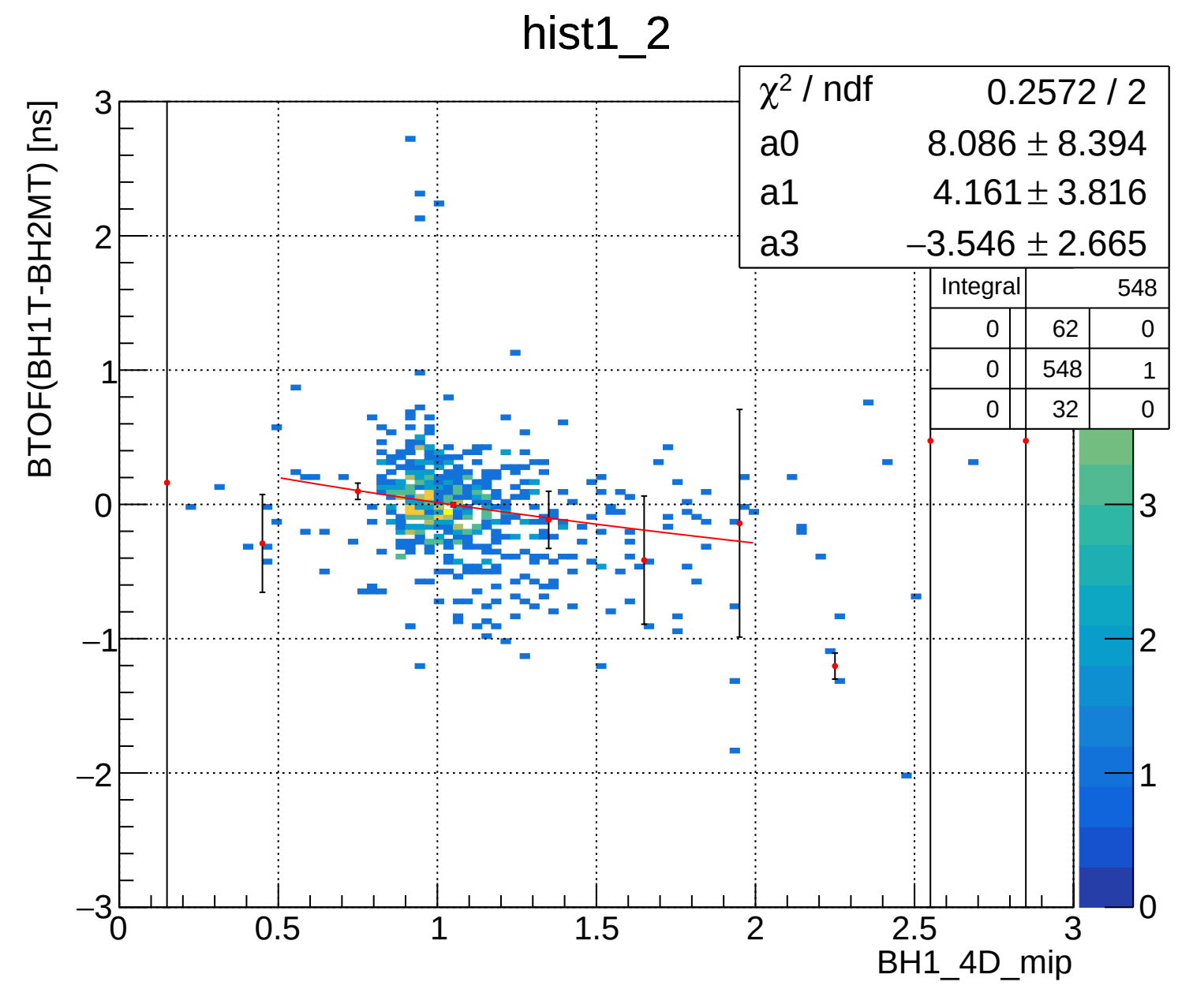

hist1_1
Entries 9
Mean −0.1296
Std Dev 0.6732
Underflow 3
Overflow 0
Integral 6
χ² / ndf 2.976e−10 / 0
Constant 1.29 ± 19.20
Mean −0.9907 ± 5.0710
Sigma 0.2466 ± 2.2507

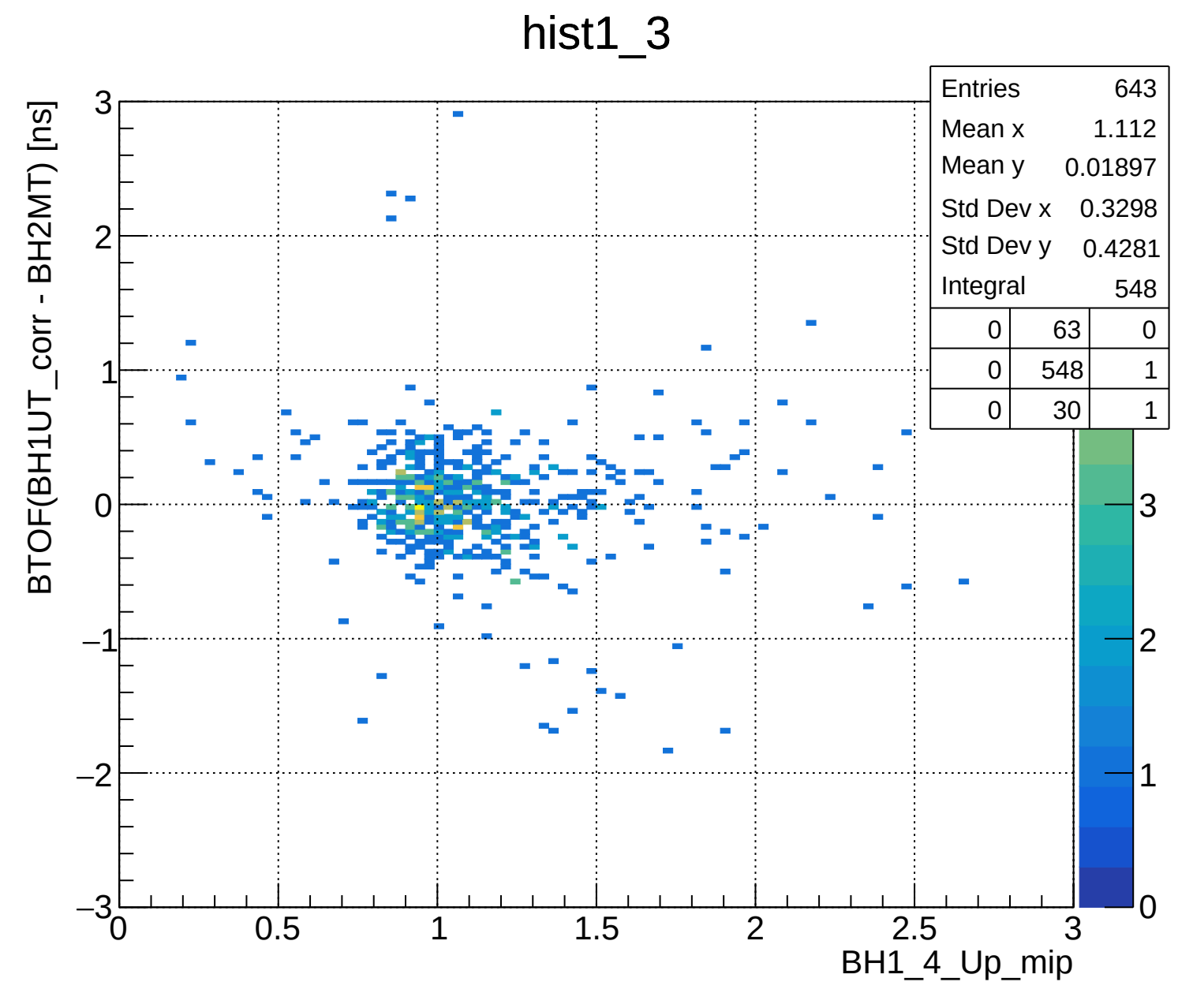

hist1_1
Entries 3
Mean −0.6358
Std Dev 0.5412
Underflow 0
Overflow 0
Integral 3
χ² / ndf 2.842e−10 / 0
Constant 2.595 ± 27.359
Mean −0.8382 ± 3.5661
Sigma 0.2499 ± 1.3375

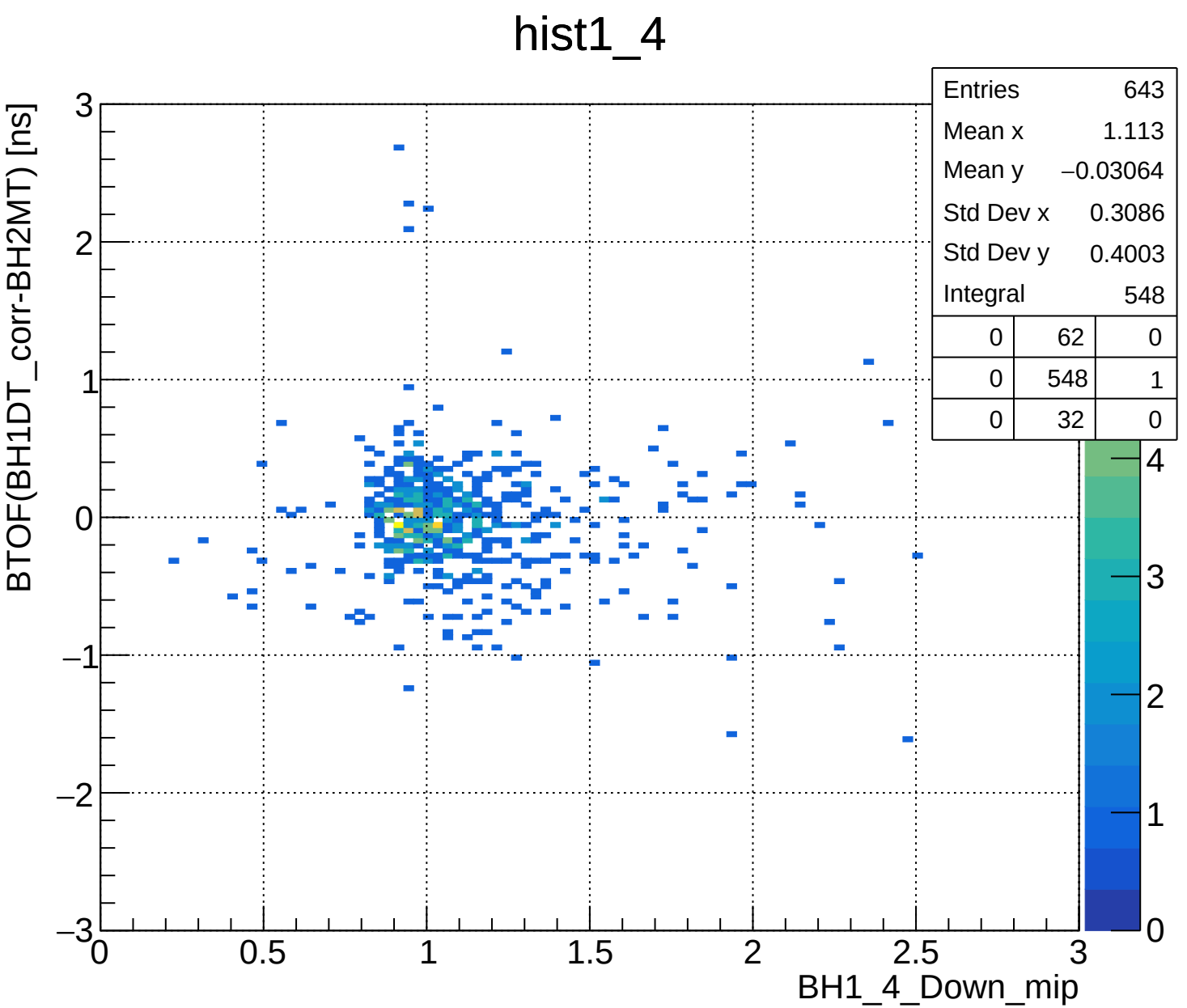

hist1_1
Entries 1
Mean 0.2778
Std Dev 0
Underflow 0
Overflow 0
Integral 1
χ² / ndf 1.529e−10 / 0
Constant 1.297 ± 19.344
Mean 0.4581 ± 5.0088
Sigma 0.2499 ± 2.1653

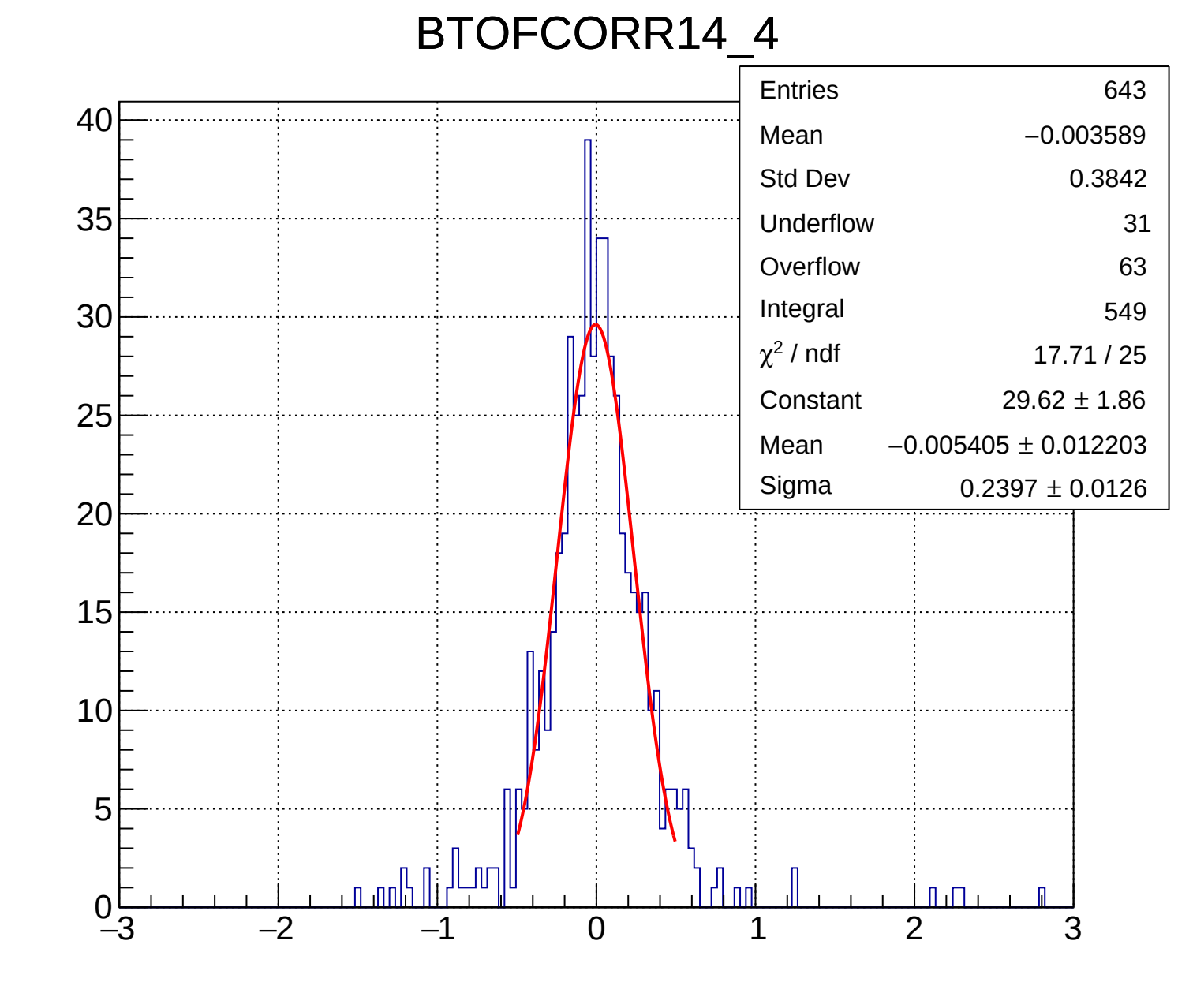

hist1_1
χ² / ndf 1.291 / 2
a0 22.99 ± 15.57
a1 10 ± 6.056
a3 −6.927 ± 3.16
Integral 548
0 63 0
0 548 1
0 30 1
BTOF(BH1T-BH2MT) [ns]
BH1_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
4
3
2
1
0

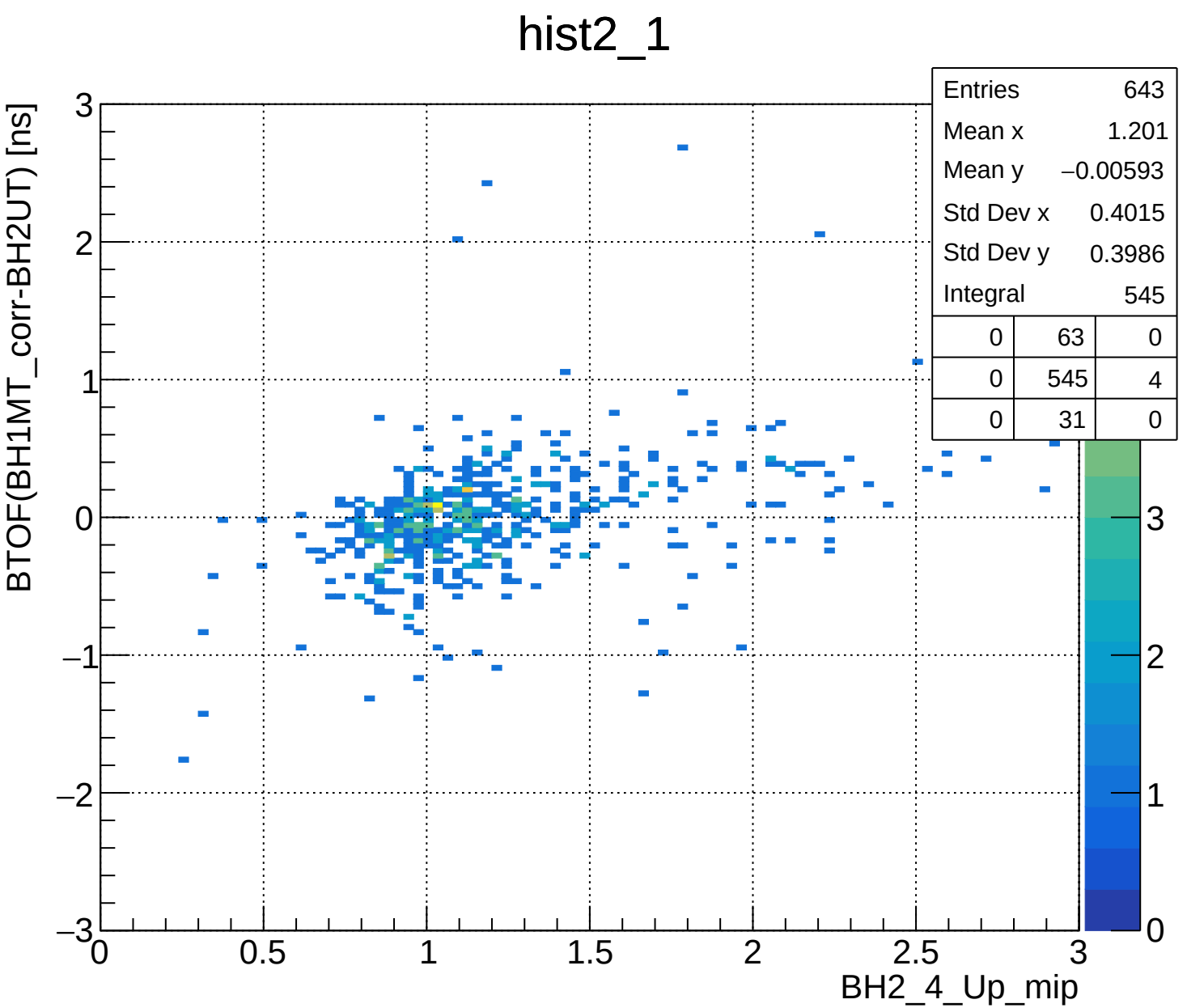

hist1_1
Entries 1
Mean −0.01852
Std Dev 0
Underflow 0
Overflow 0
Integral 1
χ² / ndf 1.277e−10 / 0
Constant 1.298 ± 19.345
Mean 0.1618 ± 5.0113
Sigma 0.2499 ± 2.1654
hist1_1
Entries 20
Mean 0.05556
Std Dev 0.3823
Underflow 0
Overflow 9
Integral 11
χ² / ndf 0.3725 / 2
Constant 1.27 ± 0.80
Mean −0.2905 ± 0.3644
Sigma 0.3131 ± 0.8081
hist1_1
Entries 96
Mean 0.01911
Std Dev 0.2974
Underflow 12
Overflow 21
Integral 63
χ² / ndf 15.49 / 15
Constant 2.597 ± 0.842
Mean 0.09766 ± 0.06073
Sigma 0.256 ± 0.135
hist1_1
Entries 366
Mean 0.005698
Std Dev 0.3962
Underflow 5
Overflow 23
Integral 338
χ² / ndf 22.75 / 18
Constant 20.6 ± 1.7
Mean −0.003114 ± 0.014711
Sigma 0.1871 ± 0.0132
hist1_1
Entries 91
Mean −0.1493
Std Dev 0.3942
Underflow 2
Overflow 8
Integral 81
χ² / ndf 18.14 / 16
Constant 2.156 ± 0.511
Mean −0.115 ± 0.213
Sigma 0.4702 ± 0.3815
hist1_1
Entries 36
Mean −0.2778
Std Dev 0.3965
Underflow 5
Overflow 1
Integral 30
χ² / ndf 2.5 / 8
Constant 1.233 ± 0.501
Mean −0.415 ± 0.477
Sigma 0.5906 ± 1.3750
hist1_1
Entries 19
Mean −0.4105
Std Dev 0.5894
Underflow 7
Overflow 0
Integral 12
χ² / ndf 0.4297 / 4
Constant 1.143 ± 0.550
Mean −0.1405 ± 0.8476
Sigma 0.5302 ± 0.7807
hist1_1
Entries 8
Mean −0.3796
Std Dev 0.6425
Underflow 0
Overflow 0
Integral 8
χ² / ndf 1.431e−13 / 0
Constant 1.499 ± 16.767
Mean −1.204 ± 0.097
Sigma 0.1235 ± 0.9062
hist1_1
Entries 4
Mean −0.5185
Std Dev 0.9574
Underflow 0
Overflow 0
Integral 4
χ² / ndf 1.635e−07 / 0
Constant 2.566 ± 75.637
Mean 0.4737 ± 11.1261
Sigma 0.2249 ± 1.6233
hist1_1
Entries 1
Mean 0
Std Dev 0
Underflow 1
Overflow 0
Integral 0

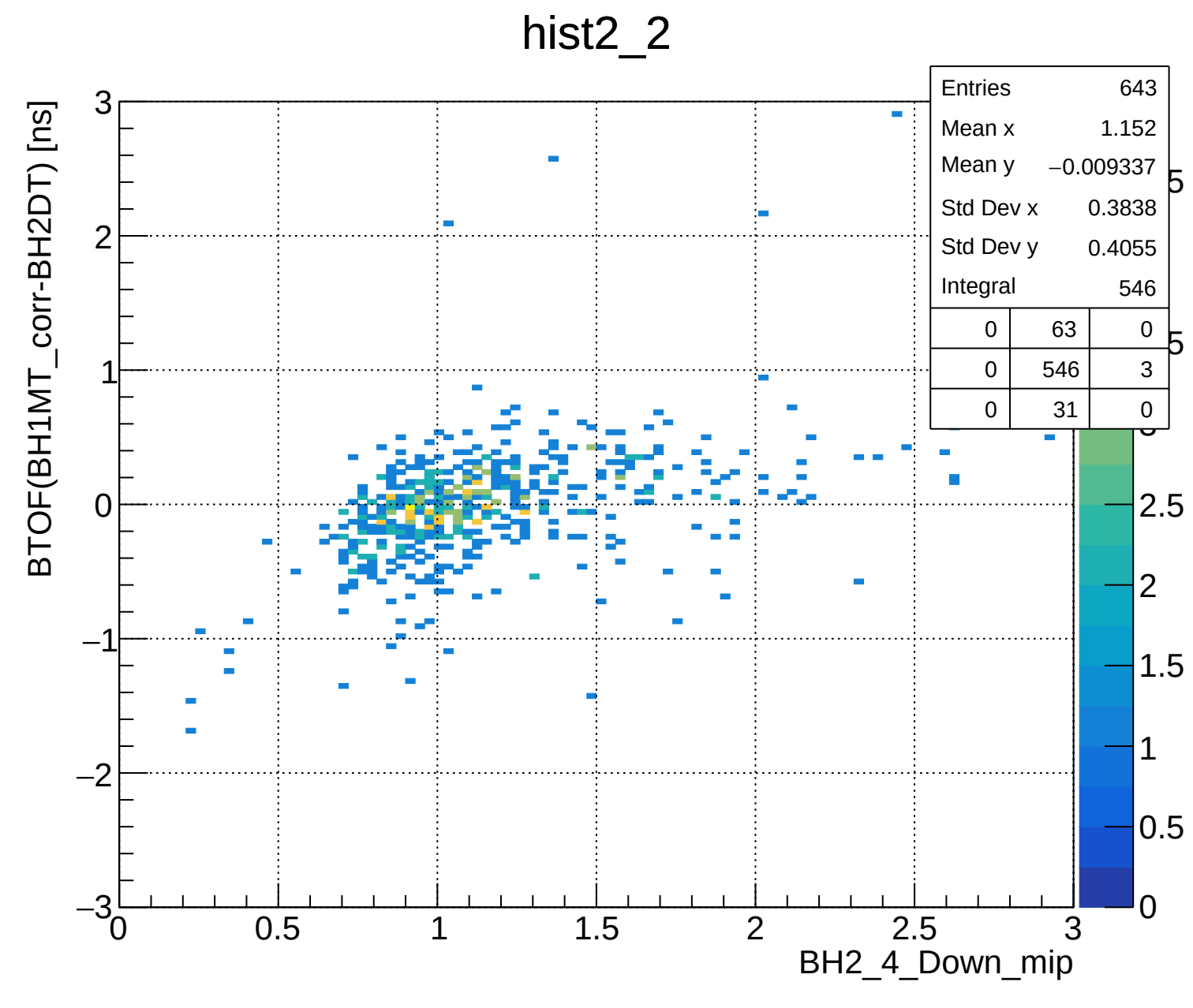

hist1_2
χ² / ndf 0.2572 / 2
a0 8.086 ± 8.394
a1 4.161 ± 3.816
a3 −3.546 ± 2.665
Integral 548
0 62 0
0 548 1
0 32 0
BTOF(BH1T-BH2MT) [ns]
BH1_4D_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3

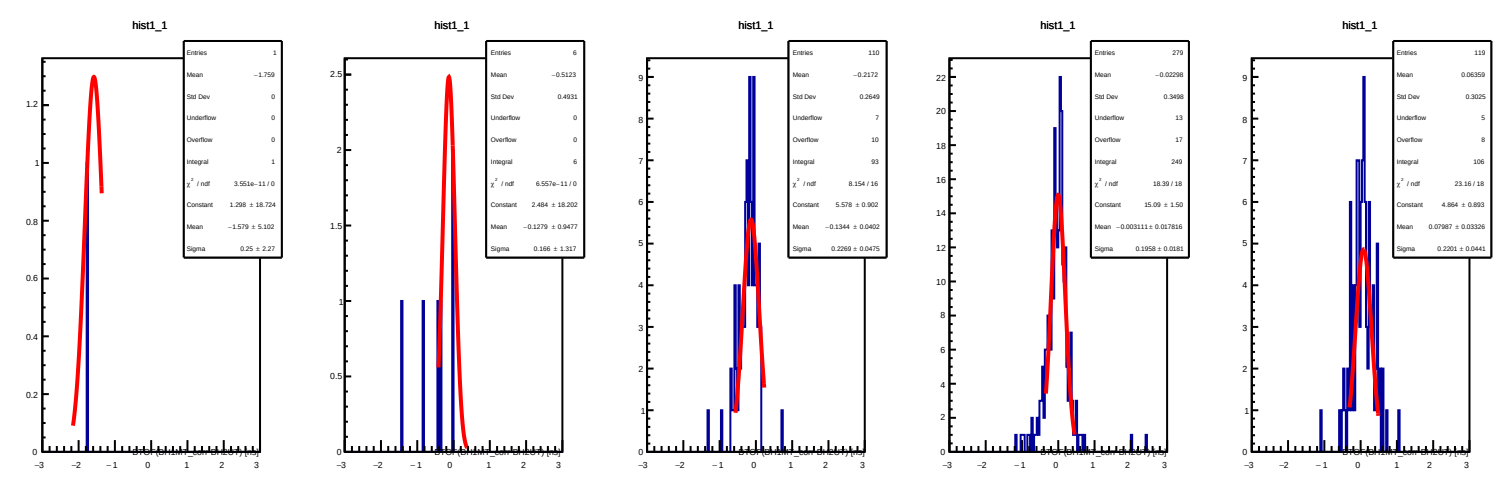

hist1_3
Entries 643
Mean x 1.112
Mean y 0.01897
Std Dev x 0.3298
Std Dev y 0.4281
Integral 548
0 63 0
0 548 1
0 30 1
BTOF(BH1UT_corr - BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3

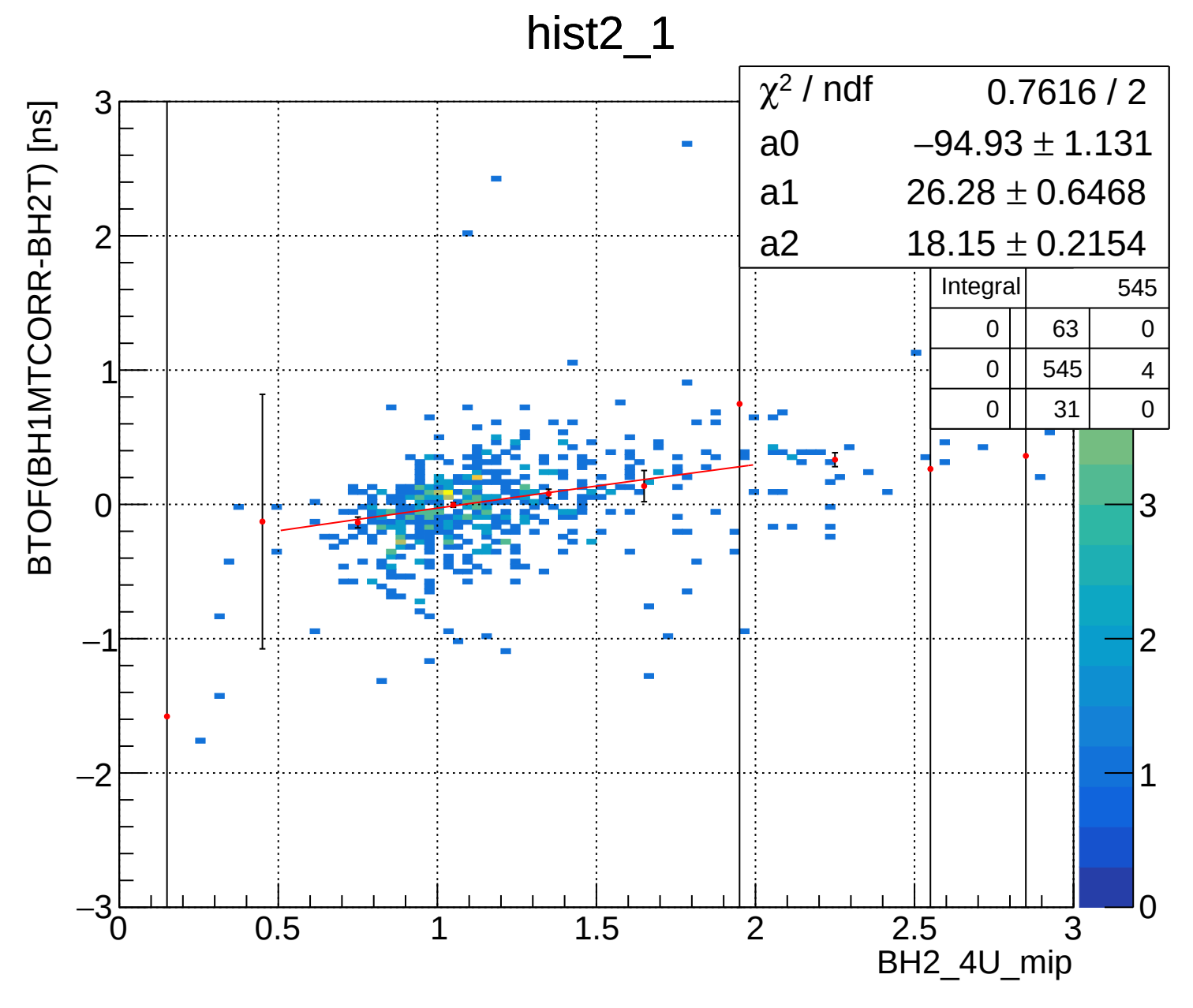

hist1_4
Entries 643
Mean x 1.113
Mean y −0.03064
Std Dev x 0.3086
Std Dev y 0.4003
Integral 548
0 62 0
0 548 1
0 32 0
BTOF(BH1DT_corr-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
4
3
2
1
0

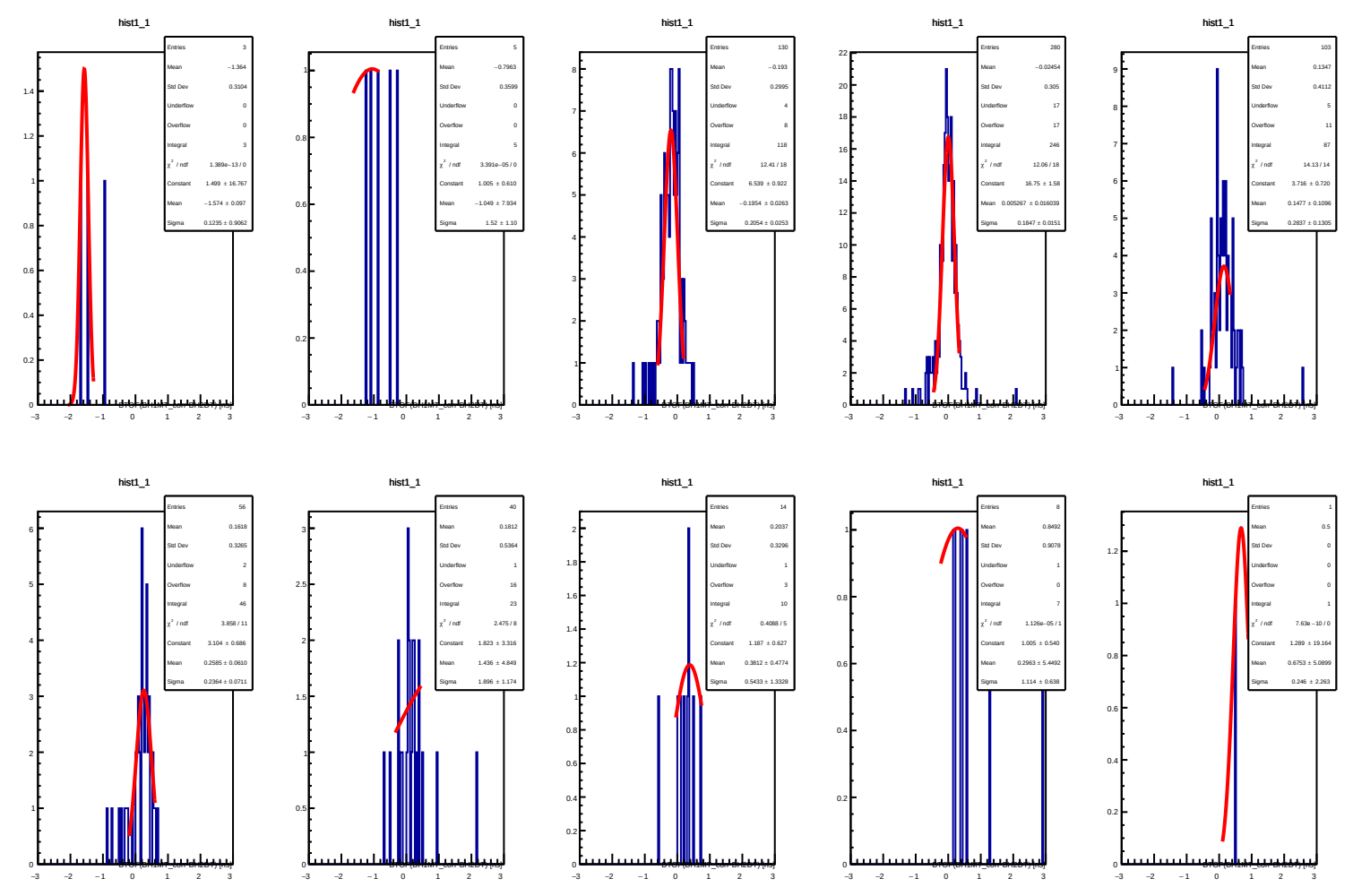

BTOFCORR14_4
Entries 643
Mean −0.003589
Std Dev 0.3842
Underflow 31
Overflow 63
Integral 549
χ² / ndf 17.71 / 25
Constant 29.62 ± 1.86
Mean −0.005405 ± 0.012203
Sigma 0.2397 ± 0.0126
40
35
30
25
20
15
10
5
0
−3
−2
−1
0
1
2
3

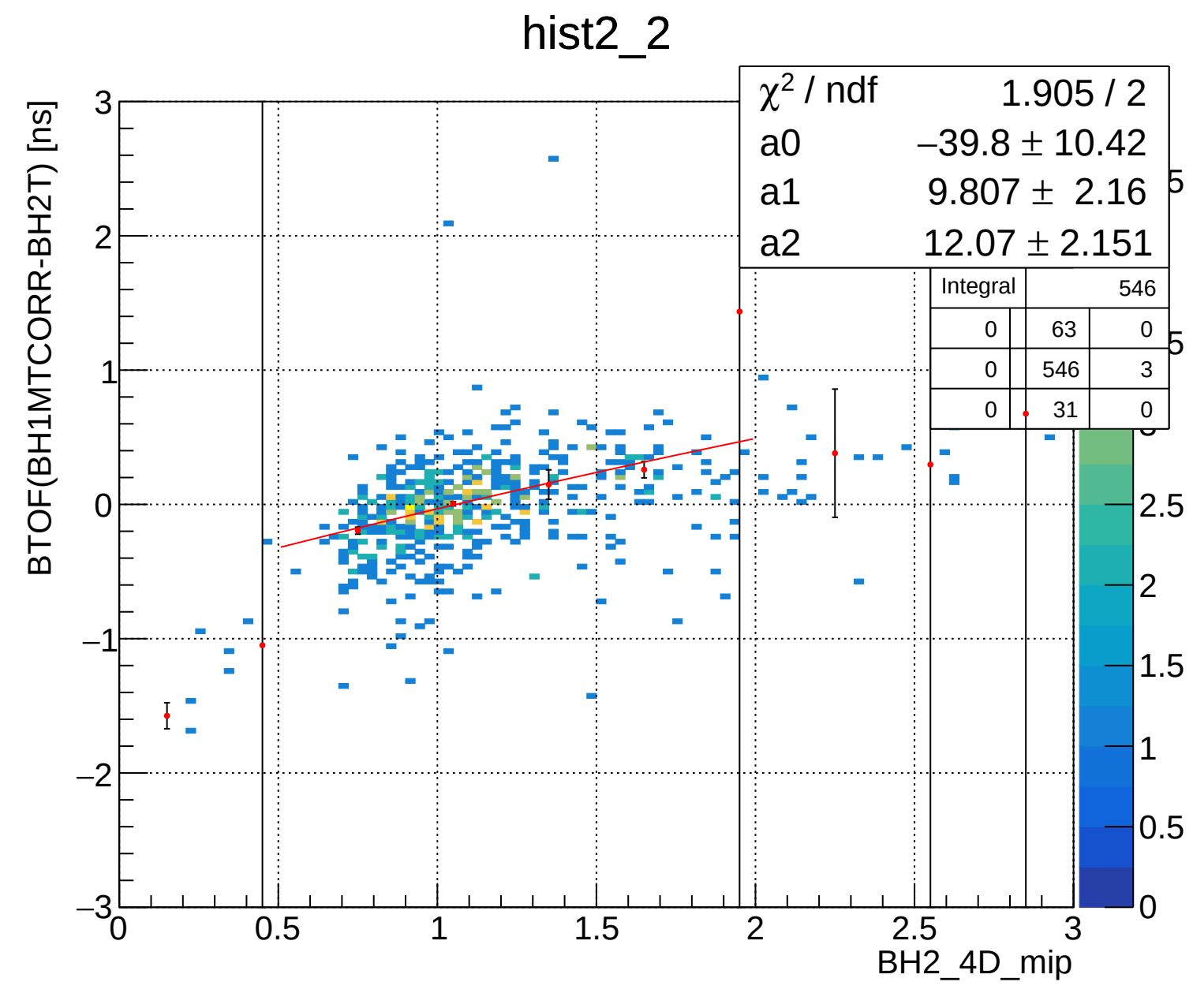

hist2_1
Entries 643
Mean x 1.201
Mean y −0.00593
Std Dev x 0.4015
Std Dev y 0.3986
Integral 545
0 63 0
0 545 4
0 31 0
BTOF(BH1MT_corr-BH2UT) [ns]
BH2_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3

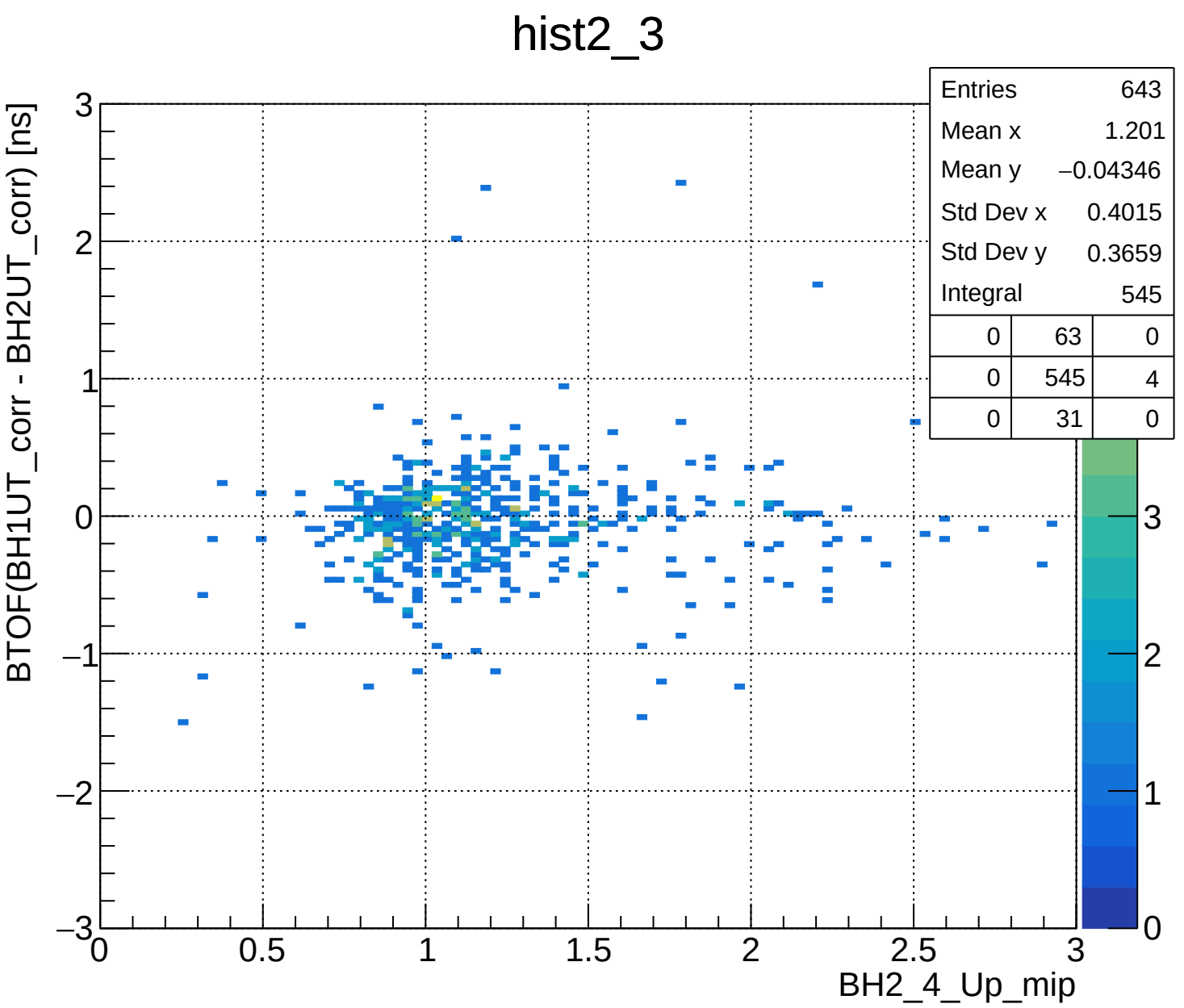

hist2_2
Entries 643
Mean x 1.152
Mean y −0.009337
Std Dev x 0.3838
Std Dev y 0.4055
Integral 546
0 63 0
0 546 3
0 31 0
BTOF(BH1MT_corr-BH2DT) [ns]
BH2_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
2.5
2
1.5
1
0.5
0

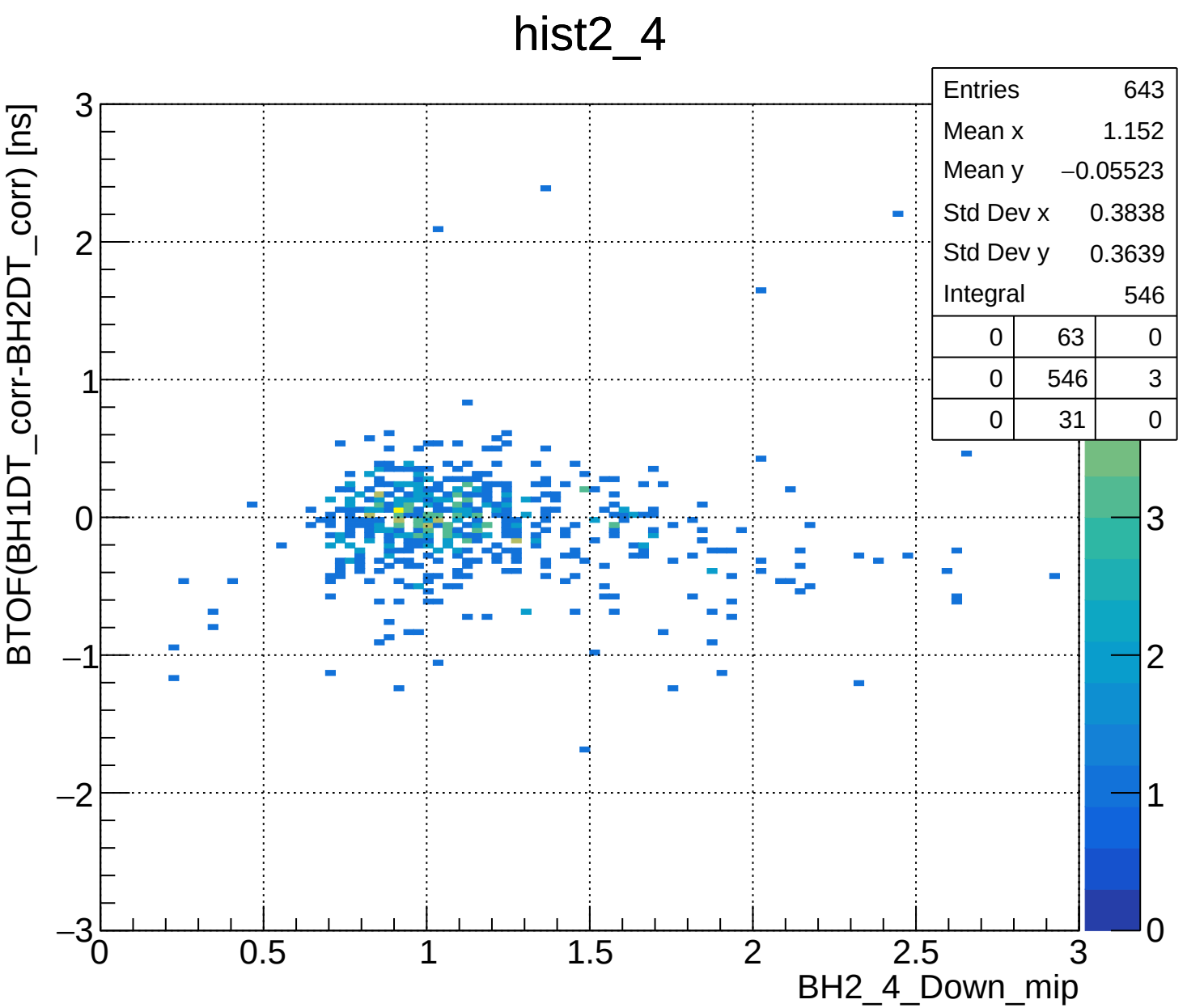

hist1_1
Entries 1
Mean −1.759
Std Dev 0
Underflow 0
Overflow 0
Integral 1
χ² / ndf 3.551e−11 / 0
Constant 1.298 ± 18.724
Mean −1.579 ± 5.102
Sigma 0.25 ± 2.27
hist1_1
Entries 6
Mean −0.5123
Std Dev 0.4931
Underflow 0
Overflow 0
Integral 6
χ² / ndf 6.557e−11 / 0
Constant 2.484 ± 18.202
Mean −0.1279 ± 0.9477
Sigma 0.166 ± 1.317
hist1_1
Entries 110
Mean −0.2172
Std Dev 0.2649
Underflow 7
Overflow 10
Integral 93
χ² / ndf 8.154 / 16
Constant 5.578 ± 0.902
Mean −0.1344 ± 0.0402
Sigma 0.2269 ± 0.0475
hist1_1
Entries 279
Mean −0.02298
Std Dev 0.3498
Underflow 13
Overflow 17
Integral 249
χ² / ndf 18.39 / 18
Constant 15.09 ± 1.50
Mean −0.003111 ± 0.017816
Sigma 0.1958 ± 0.0181
hist1_1
Entries 119
Mean 0.06359
Std Dev 0.3025
Underflow 5
Overflow 8
Integral 106
χ² / ndf 23.16 / 18
Constant 4.864 ± 0.893
Mean 0.07987 ± 0.03326
Sigma 0.2201 ± 0.0441
hist1_1
Entries 49
Mean 0.1468
Std Dev 0.5747
Underflow 2
Overflow 6
Integral 41
χ² / ndf 6.046 / 13
Constant 2.135 ± 0.618
Mean 0.1362 ± 0.1162
Sigma 0.2889 ± 0.1754
hist1_1
Entries 41
Mean 0.2253
Std Dev 0.4029
Underflow 4
Overflow 13
Integral 24
χ² / ndf 2.334 / 5
Constant 1.993 ± 1.035
Mean 0.7484 ± 5.4521
Sigma 1.933 ± 1.150
hist1_1
Entries 20
Mean 0.3125
Std Dev 0.4991
Underflow 0
Overflow 4
Integral 16
χ² / ndf 0.9703 / 4
Constant 1.986 ± 0.958
Mean 0.333 ± 0.052
Sigma 0.109 ± 0.077
hist1_1
Entries 8
Mean 0.4704
Std Dev 0.3509
Underflow 0
Overflow 3
Integral 5
χ² / ndf 7.29e−05 / 1
Constant 1.006 ± 0.540
Mean 0.2642 ± 6.7495
Sigma 1.336 ± 0.774
hist1_1
Entries 6
Mean 0.5926
Std Dev 0.3727
Underflow 0
Overflow 2
Integral 4
χ² / ndf 2.673e−05 / 0
Constant 1.005 ± 0.611
Mean 0.3614 ± 7.8773
Sigma 1.385 ± 0.933

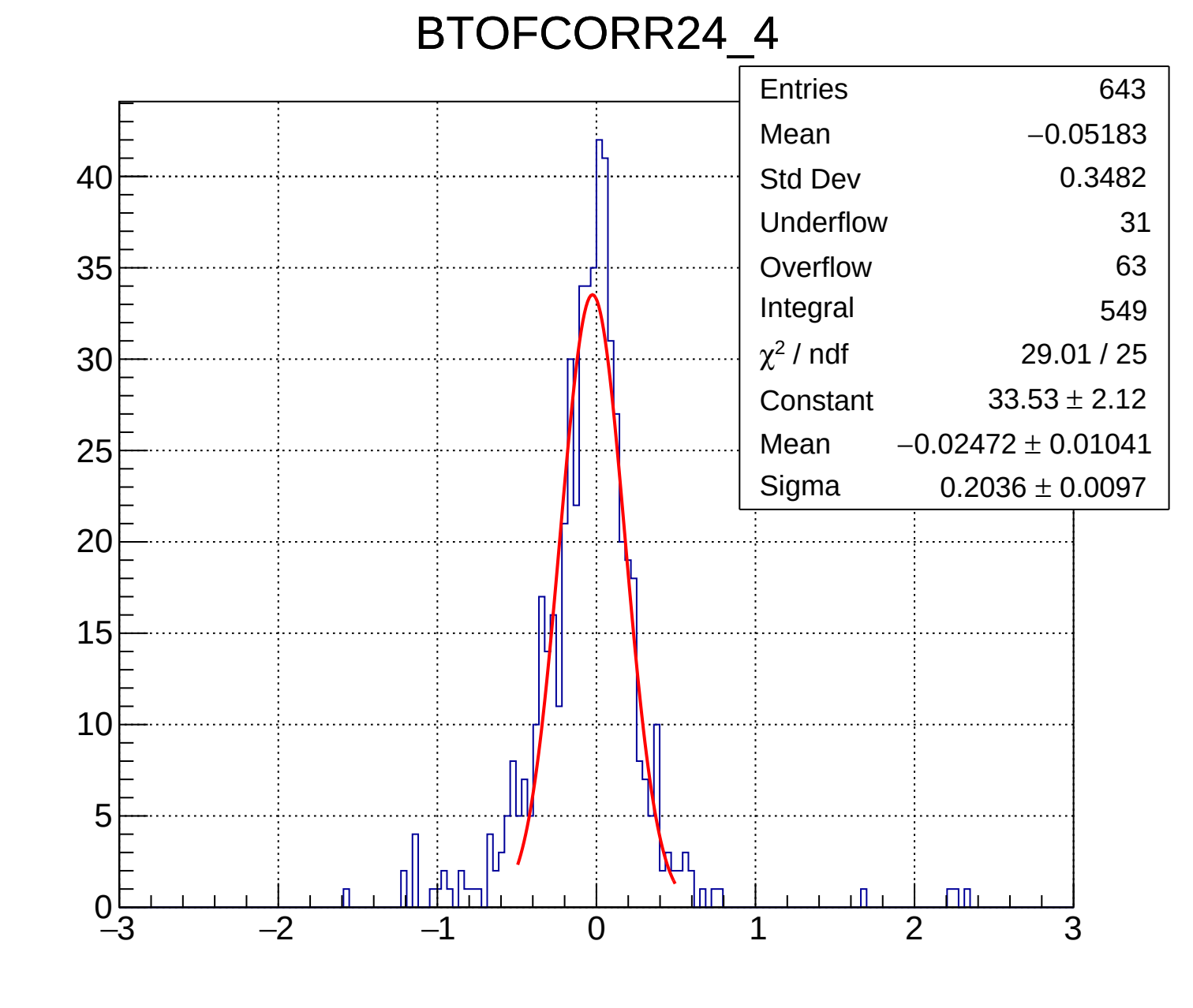

hist2_1
χ² / ndf 0.7616 / 2
a0 –94.93 ± 1.131
a1 26.28 ± 0.6468
a2 18.15 ± 0.2154
Integral 545
0 63 0
0 545 4
0 31 0
BTOF(BH1MTCORR-BH2T) [ns]
BH2_4U_mip
3
2
1
0
–1
–2
–3
0
0.5
1
1.5
2
2.5
3

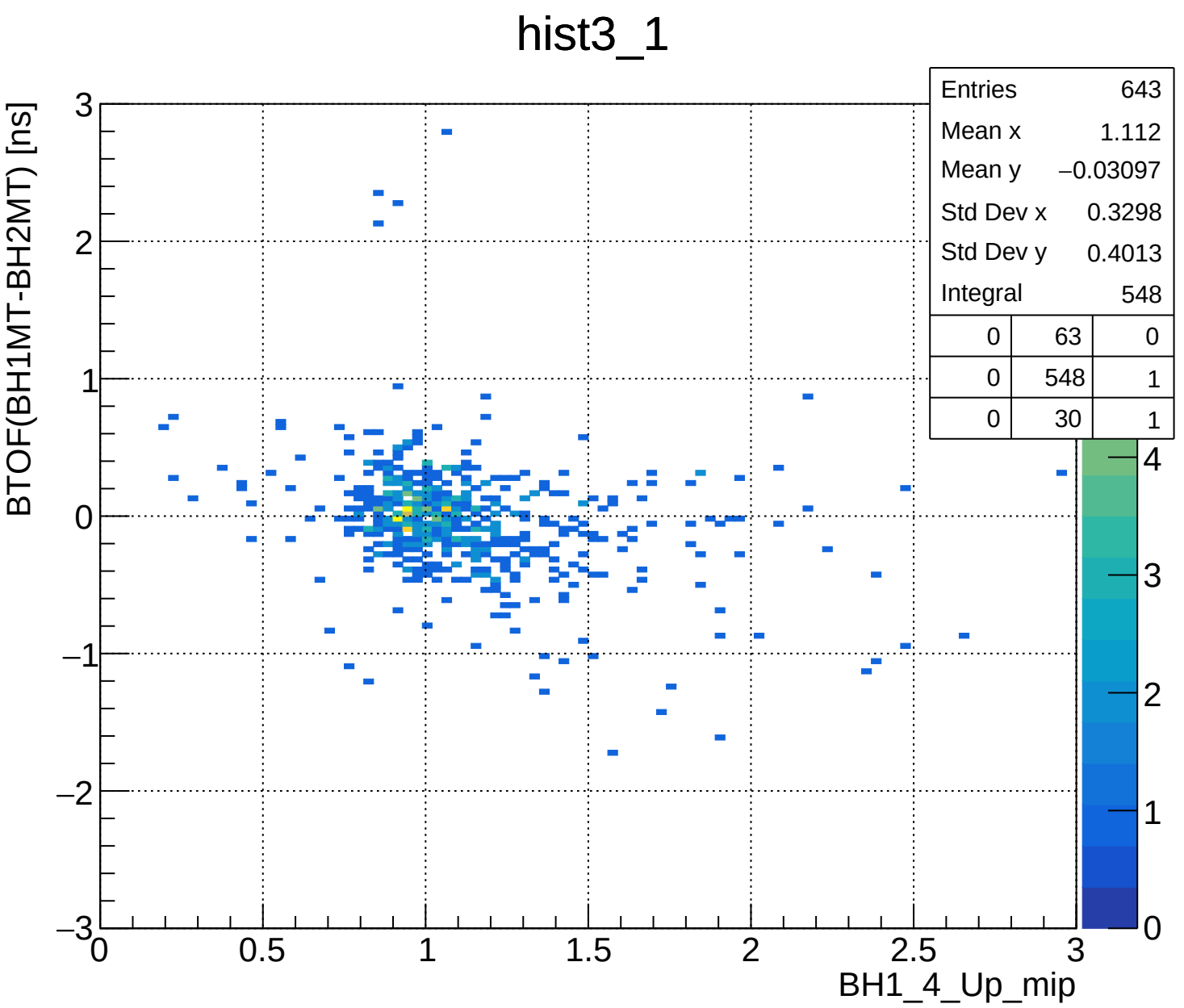

hist1_1
Entries 3
Mean −1.364
Std Dev 0.3104
Underflow 0
Overflow 0
Integral 3
χ² / ndf 1.389e−13 / 0
Constant 1.499 ± 16.767
Mean −1.574 ± 0.097
Sigma 0.1235 ± 0.9062
hist1_1
Entries 5
Mean −0.7963
Std Dev 0.3599
Underflow 0
Overflow 0
Integral 5
χ² / ndf 3.391e−05 / 0
Constant 1.005 ± 0.610
Mean −1.049 ± 7.934
Sigma 1.52 ± 1.10
hist1_1
Entries 130
Mean −0.193
Std Dev 0.2995
Underflow 4
Overflow 8
Integral 118
χ² / ndf 12.41 / 18
Constant 6.539 ± 0.922
Mean −0.1954 ± 0.0263
Sigma 0.2054 ± 0.0253
hist1_1
Entries 280
Mean −0.02454
Std Dev 0.305
Underflow 17
Overflow 17
Integral 246
χ² / ndf 12.06 / 18
Constant 16.75 ± 1.58
Mean 0.005267 ± 0.016039
Sigma 0.1847 ± 0.0151
hist1_1
Entries 103
Mean 0.1347
Std Dev 0.4112
Underflow 5
Overflow 11
Integral 87
χ² / ndf 14.13 / 14
Constant 3.716 ± 0.720
Mean 0.1477 ± 0.1096
Sigma 0.2837 ± 0.1305
hist1_1
Entries 56
Mean 0.1618
Std Dev 0.3265
Underflow 2
Overflow 8
Integral 46
χ² / ndf 3.858 / 11
Constant 3.104 ± 0.686
Mean 0.2585 ± 0.0610
Sigma 0.2364 ± 0.0711
hist1_1
Entries 40
Mean 0.1812
Std Dev 0.5364
Underflow 1
Overflow 16
Integral 23
χ² / ndf 2.475 / 8
Constant 1.823 ± 3.316
Mean 1.436 ± 4.849
Sigma 1.896 ± 1.174
hist1_1
Entries 14
Mean 0.2037
Std Dev 0.3296
Underflow 1
Overflow 3
Integral 10
χ² / ndf 0.4088 / 5
Constant 1.187 ± 0.627
Mean 0.3812 ± 0.4774
Sigma 0.5433 ± 1.3328
hist1_1
Entries 8
Mean 0.8492
Std Dev 0.9078
Underflow 1
Overflow 0
Integral 7
χ² / ndf 1.126e−05 / 1
Constant 1.005 ± 0.540
Mean 0.2963 ± 5.4492
Sigma 1.114 ± 0.638
hist1_1
Entries 1
Mean 0.5
Std Dev 0
Underflow 0
Overflow 0
Integral 1
χ² / ndf 7.63e−10 / 0
Constant 1.289 ± 19.164
Mean 0.6753 ± 5.0899
Sigma 0.246 ± 2.263

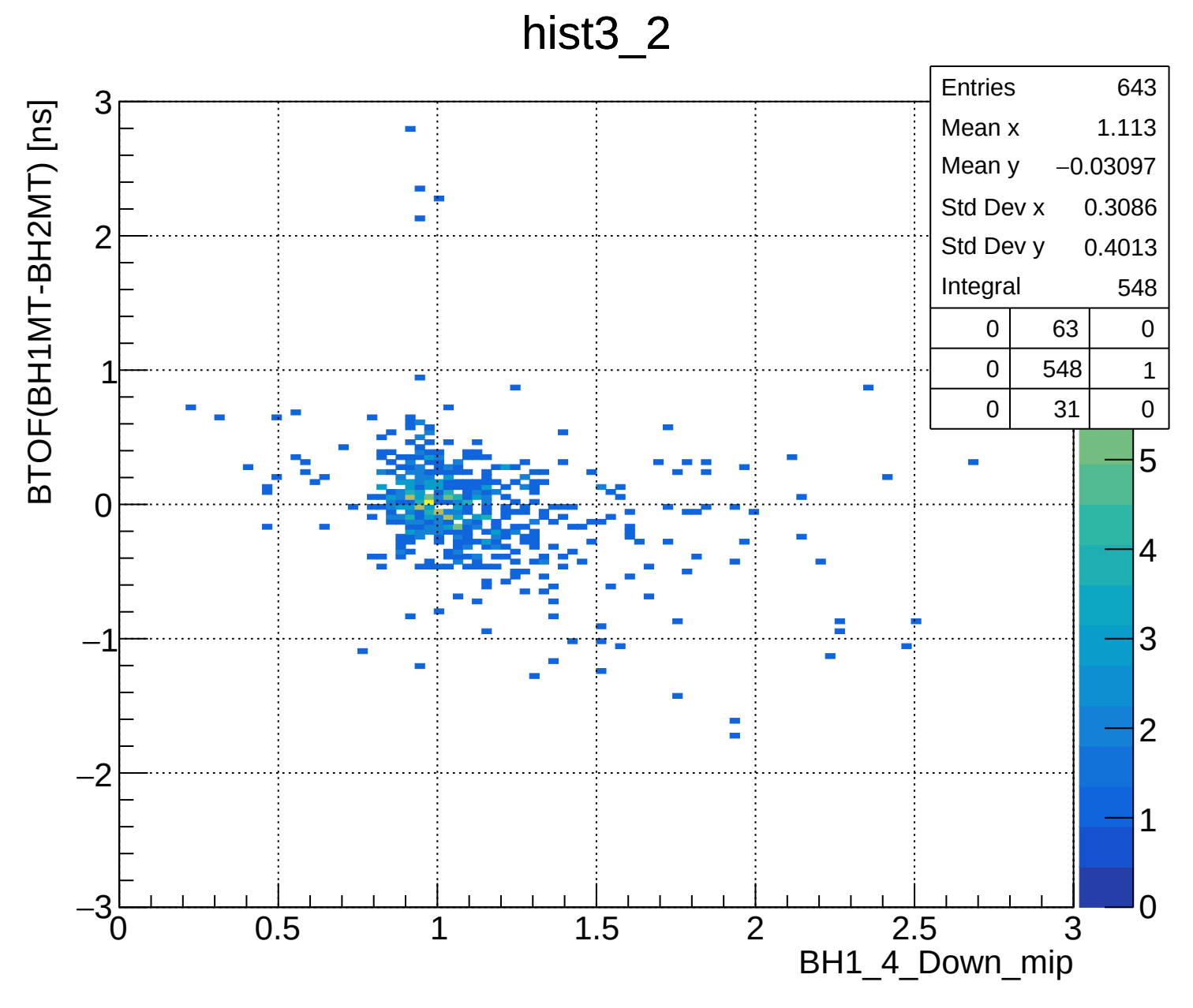

hist2_2
χ² / ndf 1.905 / 2
a0 −39.8 ± 10.42
a1 9.807 ± 2.16
a2 12.07 ± 2.151
Integral 546
0 63 0
0 546 3
0 31 0
BTOF(BH1MTCORR-BH2T) [ns]
BH2_4D_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
2.5
2
1.5
1
0.5
0

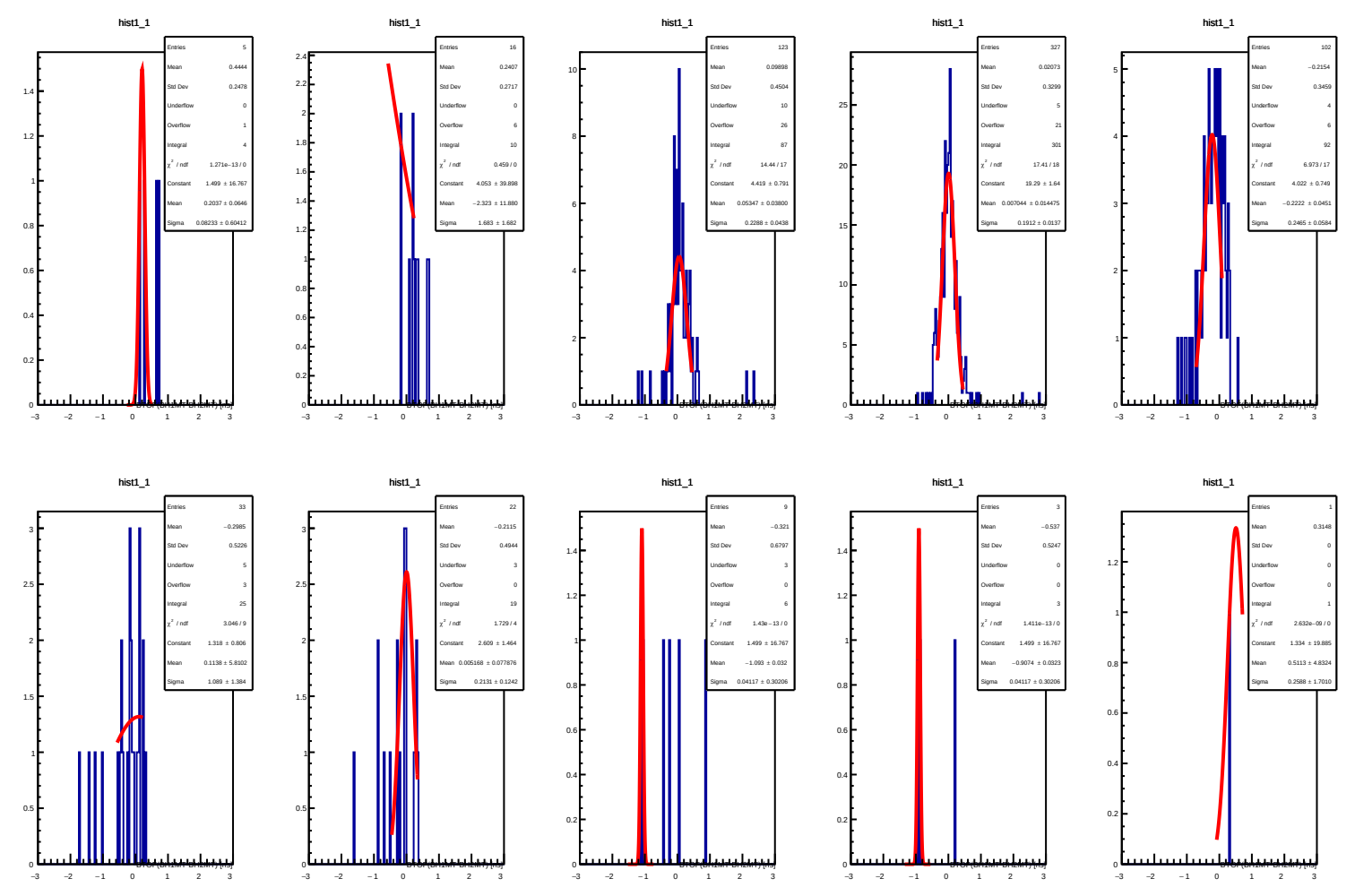

hist2_3
Entries 643
Mean x 1.201
Mean y −0.04346
Std Dev x 0.4015
Std Dev y 0.3659
Integral 545
0 63 0
0 545 4
0 31 0
BTOF(BH1UT_corr - BH2UT_corr) [ns]
BH2_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3

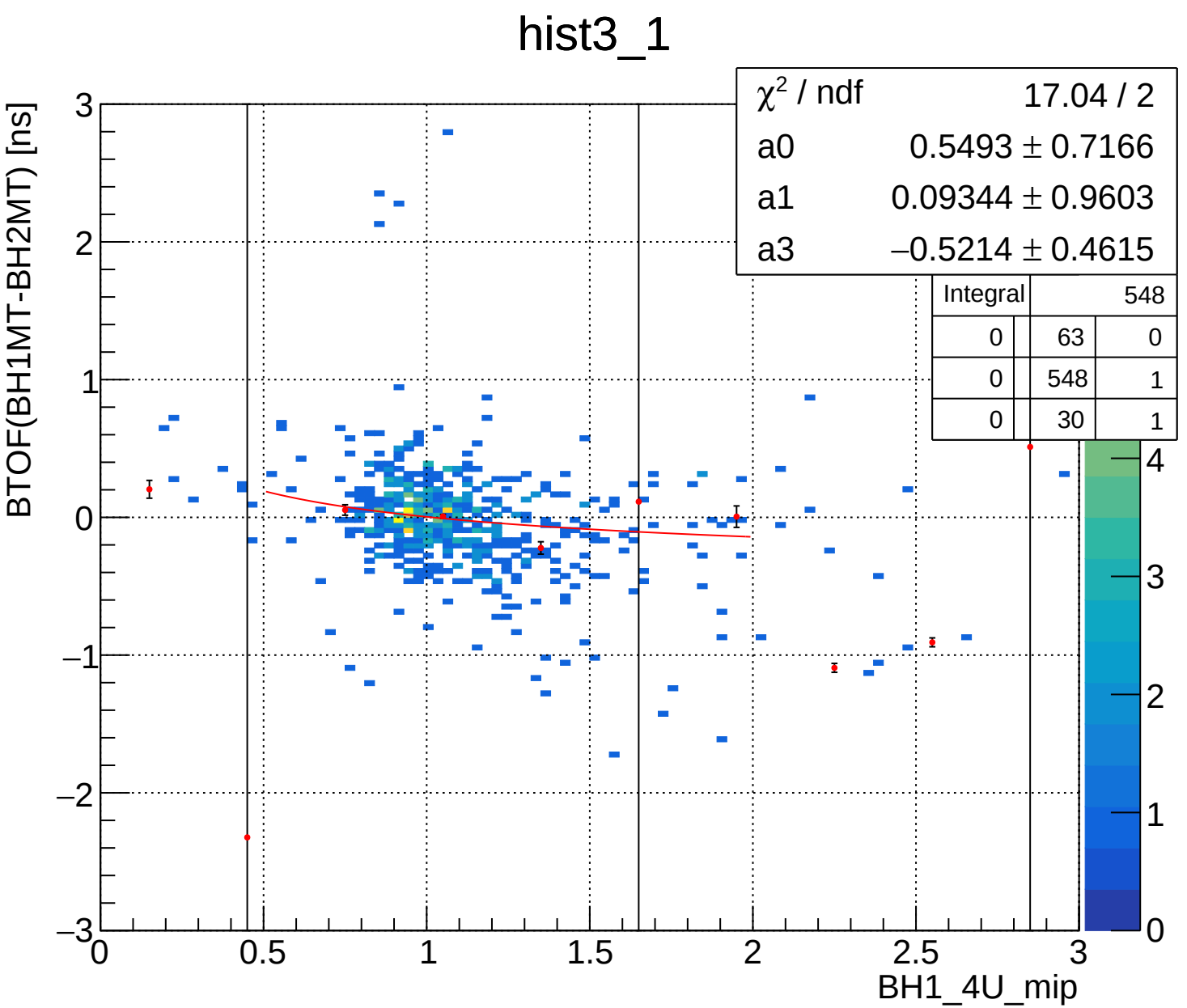

hist2_4
Entries 643
Mean x 1.152
Mean y −0.05523
Std Dev x 0.3838
Std Dev y 0.3639
Integral 546
0 63 0
0 546 3
0 31 0
BTOF(BH1DT_corr-BH2DT_corr) [ns]
BH2_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3

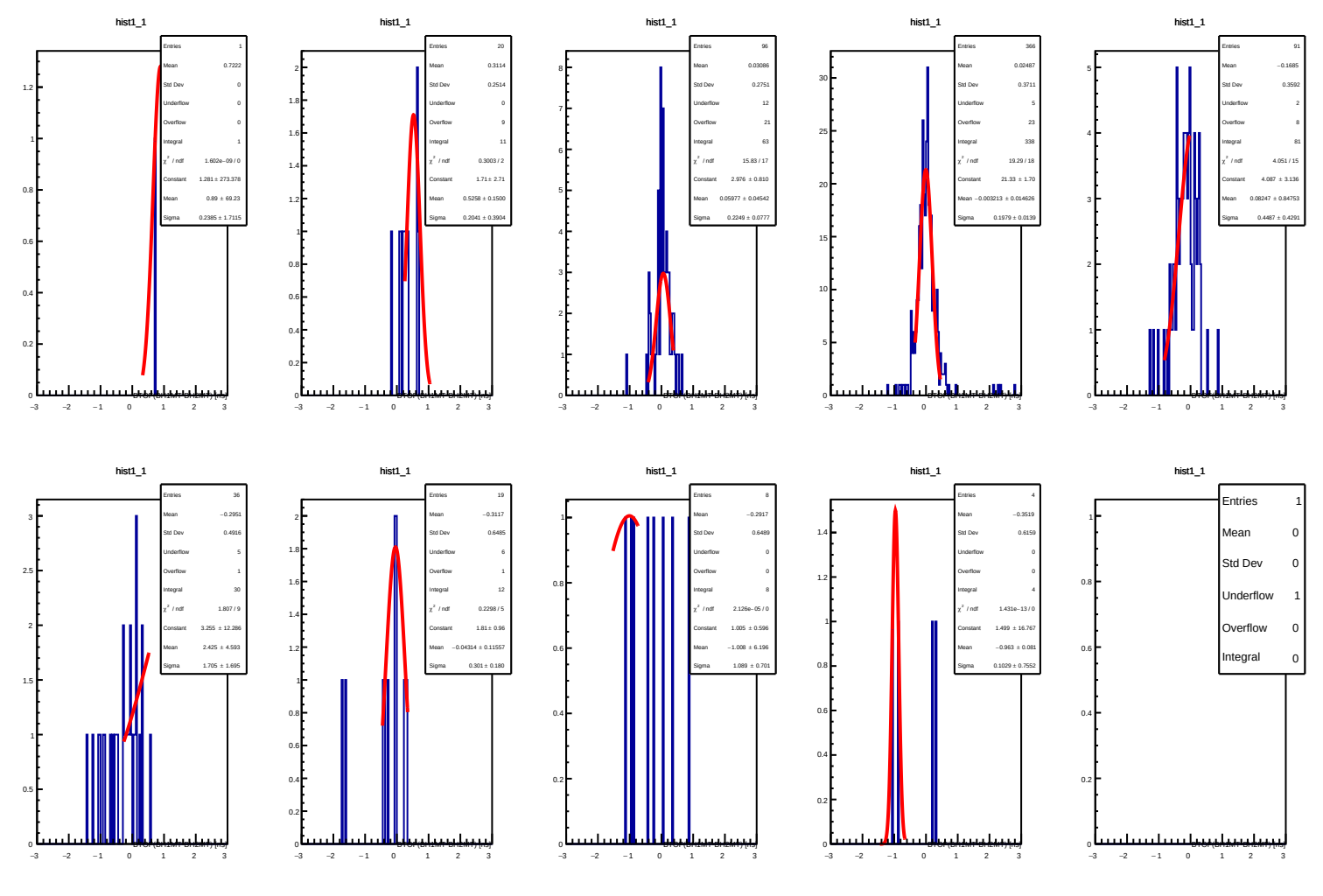

BTOFCORR24_4
Entries 643
Mean −0.05183
Std Dev 0.3482
Underflow 31
Overflow 63
Integral 549
χ² / ndf 29.01 / 25
Constant 33.53 ± 2.12
Mean −0.02472 ± 0.01041
Sigma 0.2036 ± 0.0097
40
35
30
25
20
15
10
5
0
−3
−2
−1
0
1
2
3

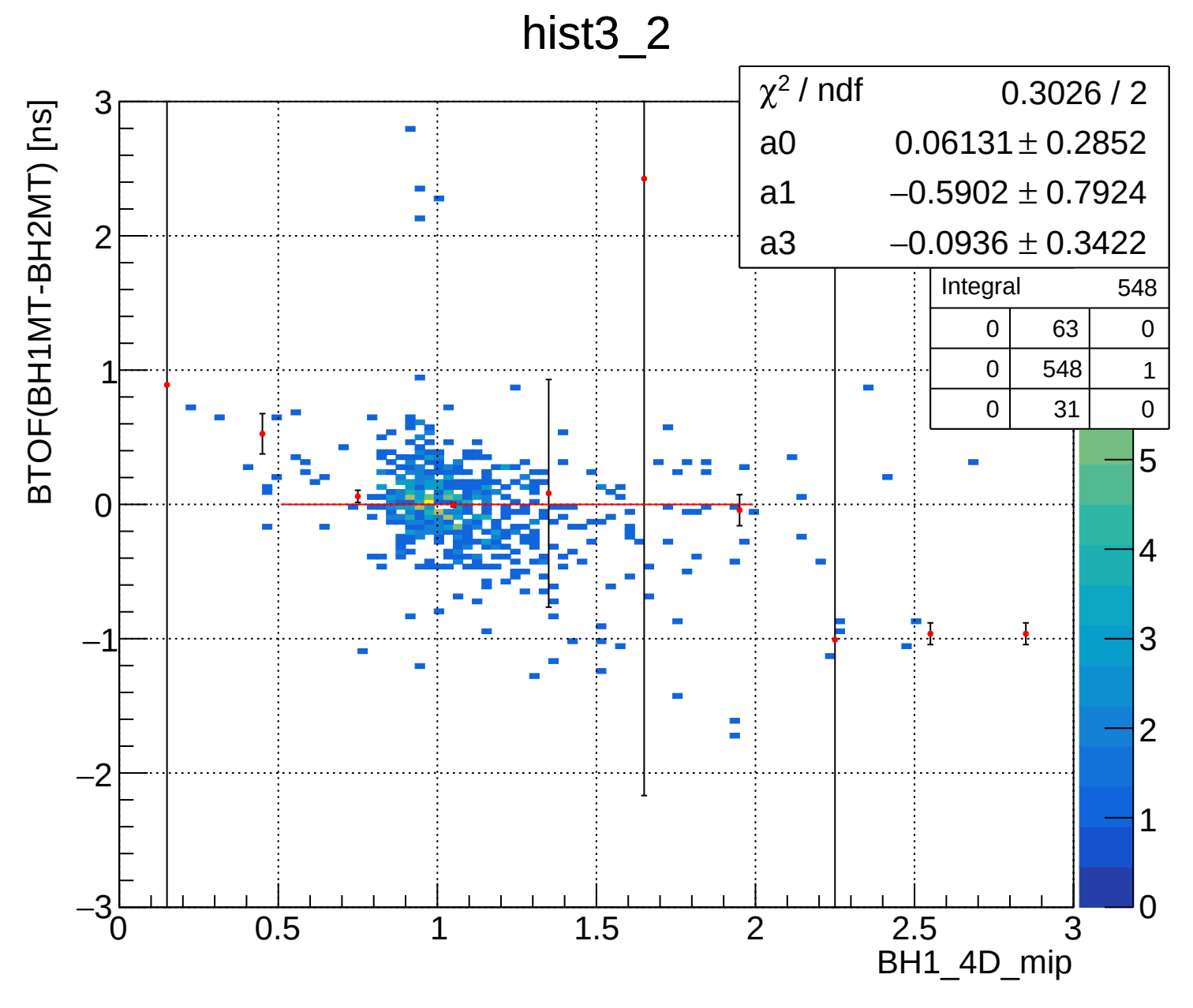

hist3_1
Entries 643
Mean x 1.112
Mean y −0.03097
Std Dev x 0.3298
Std Dev y 0.4013
Integral 548
0 63 0
0 548 1
0 30 1
BTOF(BH1MT-BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
4
3
2
1
0

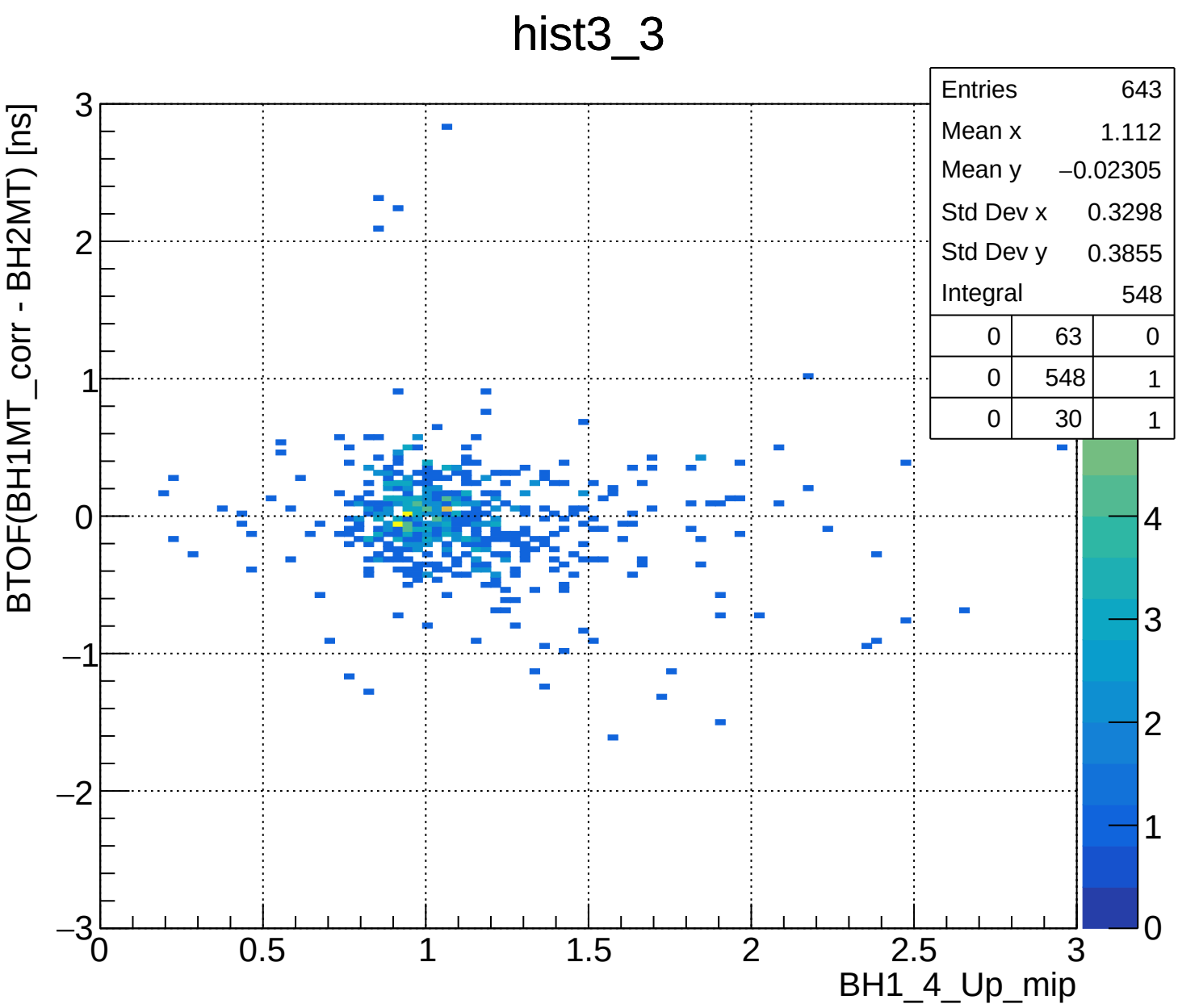

hist3_2
Entries 643
Mean x 1.113
Mean y −0.03097
Std Dev x 0.3086
Std Dev y 0.4013
Integral 548
0 63 0
0 548 1
0 31 0
BTOF(BH1MT-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
5
4
3
2
1
0

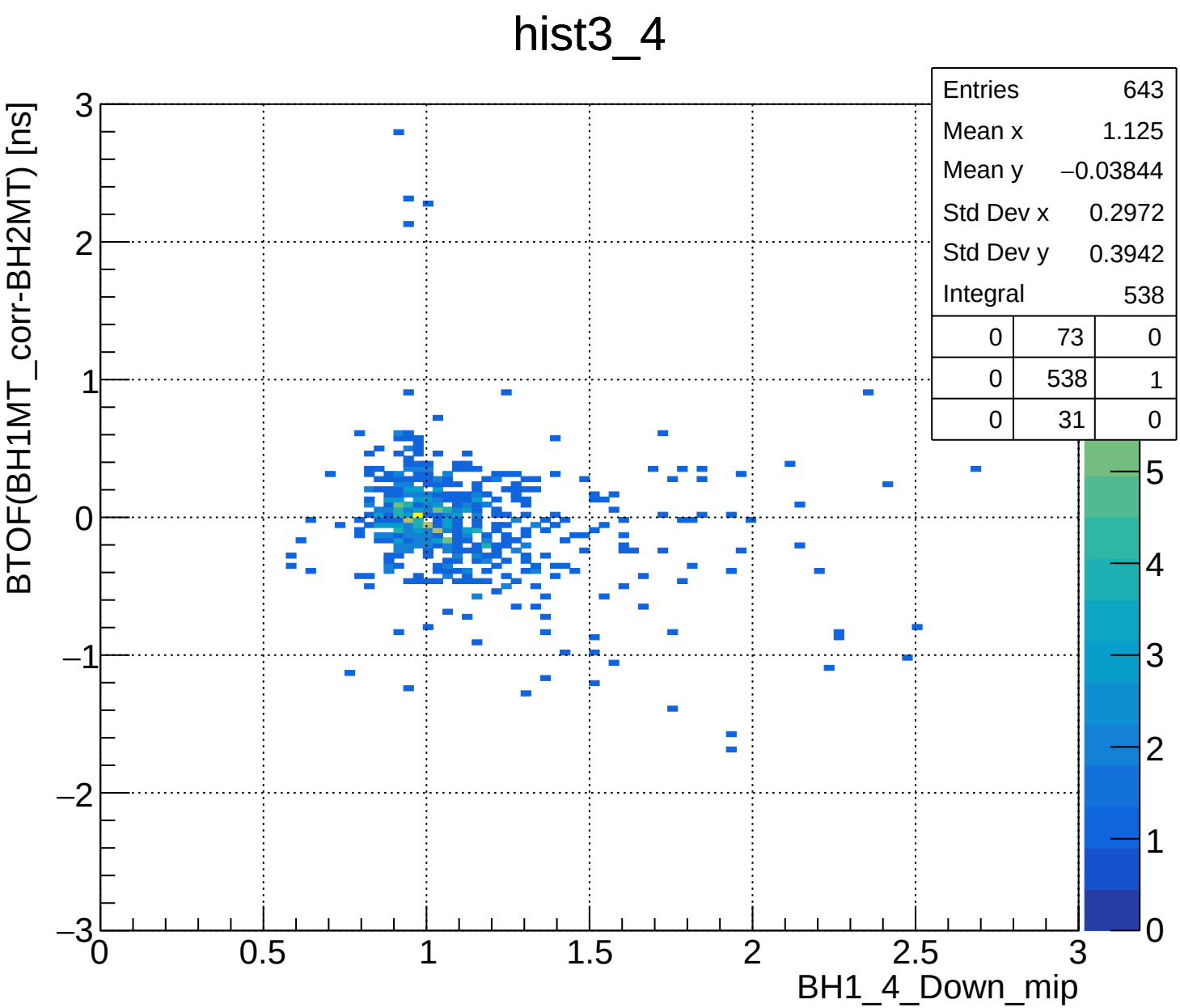

hist1_1
Entries 5
Mean 0.4444
Std Dev 0.2478
Underflow 0
Overflow 1
Integral 4
χ² / ndf 1.271e−13 / 0
Constant 1.499 ± 16.767
Mean 0.2037 ± 0.0646
Sigma 0.08233 ± 0.60412
hist1_1
Entries 16
Mean 0.2407
Std Dev 0.2717
Underflow 0
Overflow 6
Integral 10
χ² / ndf 0.459 / 0
Constant 4.053 ± 39.898
Mean −2.323 ± 11.880
Sigma 1.683 ± 1.682
hist1_1
Entries 123
Mean 0.09898
Std Dev 0.4504
Underflow 10
Overflow 26
Integral 87
χ² / ndf 14.44 / 17
Constant 4.419 ± 0.791
Mean 0.05347 ± 0.03800
Sigma 0.2288 ± 0.0438
hist1_1
Entries 327
Mean 0.02073
Std Dev 0.3299
Underflow 5
Overflow 21
Integral 301
χ² / ndf 17.41 / 18
Constant 19.29 ± 1.64
Mean 0.007044 ± 0.014475
Sigma 0.1912 ± 0.0137
hist1_1
Entries 102
Mean −0.2154
Std Dev 0.3459
Underflow 4
Overflow 6
Integral 92
χ² / ndf 6.973 / 17
Constant 4.022 ± 0.749
Mean −0.2222 ± 0.0451
Sigma 0.2465 ± 0.0584
hist1_1
Entries 33
Mean −0.2985
Std Dev 0.5226
Underflow 5
Overflow 3
Integral 25
χ² / ndf 3.046 / 9
Constant 1.318 ± 0.806
Mean 0.1138 ± 5.8102
Sigma 1.089 ± 1.384
hist1_1
Entries 22
Mean −0.2115
Std Dev 0.4944
Underflow 3
Overflow 0
Integral 19
χ² / ndf 1.729 / 4
Constant 2.609 ± 1.464
Mean 0.005168 ± 0.077876
Sigma 0.2131 ± 0.1242
hist1_1
Entries 9
Mean −0.321
Std Dev 0.6797
Underflow 3
Overflow 0
Integral 6
χ² / ndf 1.43e−13 / 0
Constant 1.499 ± 16.767
Mean −1.093 ± 0.032
Sigma 0.04117 ± 0.30206
hist1_1
Entries 3
Mean −0.537
Std Dev 0.5247
Underflow 0
Overflow 0
Integral 3
χ² / ndf 1.411e−13 / 0
Constant 1.499 ± 16.767
Mean −0.9074 ± 0.0323
Sigma 0.04117 ± 0.30206
hist1_1
Entries 1
Mean 0.3148
Std Dev 0
Underflow 0
Overflow 0
Integral 1
χ² / ndf 2.632e−09 / 0
Constant 1.334 ± 19.885
Mean 0.5113 ± 4.8324
Sigma 0.2588 ± 1.7010

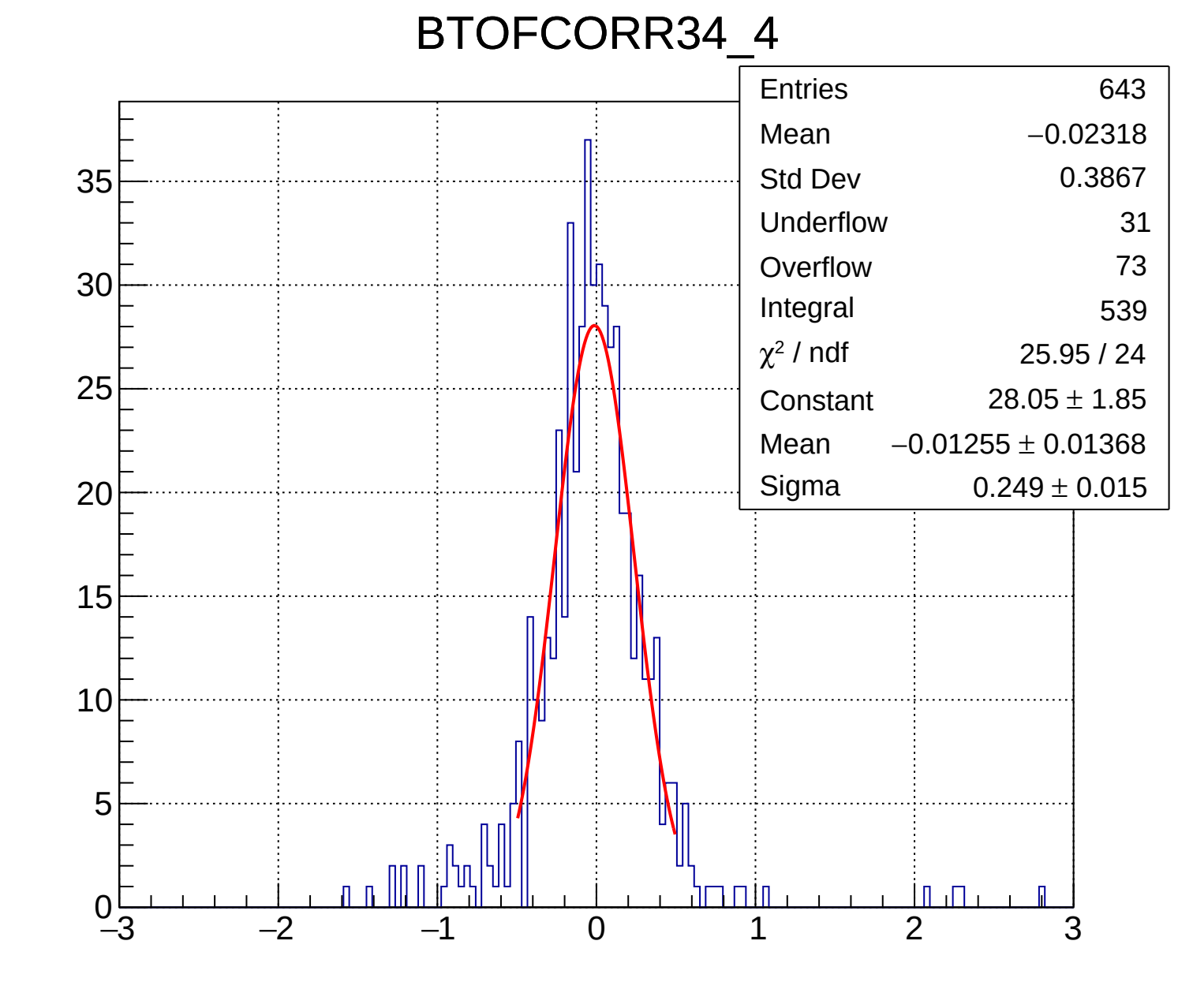

hist3_1
χ² / ndf 17.04 / 2
a0 0.5493 ± 0.7166
a1 0.09344 ± 0.9603
a3 −0.5214 ± 0.4615
Integral 548
0 63 0
0 548 1
0 30 1
BTOF(BH1MT-BH2MT) [ns]
BH1_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
4
3
2
1
0

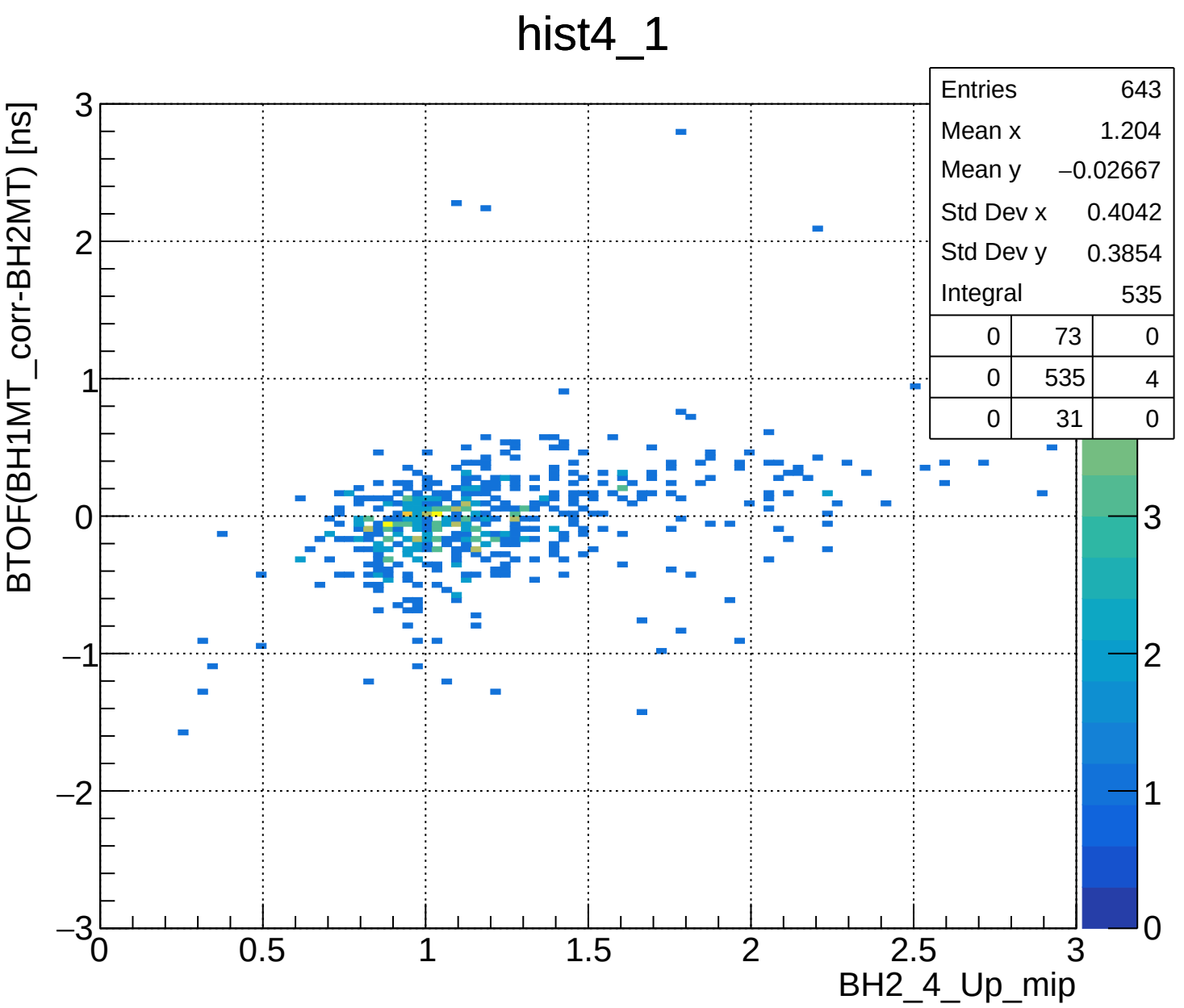

hist1_1
Entries 1
Mean 0.7222
Std Dev 0
Underflow 0
Overflow 0
Integral 1
χ² / ndf 1.602e−09 / 0
Constant 1.281 ± 273.378
Mean 0.89 ± 69.23
Sigma 0.2385 ± 1.7115
hist1_1
Entries 20
Mean 0.3114
Std Dev 0.2514
Underflow 0
Overflow 9
Integral 11
χ² / ndf 0.3003 / 2
Constant 1.71 ± 2.71
Mean 0.5258 ± 0.1500
Sigma 0.2041 ± 0.3904
hist1_1
Entries 96
Mean 0.03086
Std Dev 0.2751
Underflow 12
Overflow 21
Integral 63
χ² / ndf 15.83 / 17
Constant 2.976 ± 0.810
Mean 0.05977 ± 0.04542
Sigma 0.2249 ± 0.0777
hist1_1
Entries 366
Mean 0.02487
Std Dev 0.3711
Underflow 5
Overflow 23
Integral 338
χ² / ndf 19.29 / 18
Constant 21.33 ± 1.70
Mean −0.003213 ± 0.014626
Sigma 0.1979 ± 0.0139
hist1_1
Entries 91
Mean −0.1685
Std Dev 0.3592
Underflow 2
Overflow 8
Integral 81
χ² / ndf 4.051 / 15
Constant 4.087 ± 3.136
Mean 0.08247 ± 0.84753
Sigma 0.4487 ± 0.4291
hist1_1
Entries 36
Mean −0.2951
Std Dev 0.4916
Underflow 5
Overflow 1
Integral 30
χ² / ndf 1.807 / 9
Constant 3.255 ± 12.286
Mean 2.425 ± 4.593
Sigma 1.705 ± 1.695
hist1_1
Entries 19
Mean −0.3117
Std Dev 0.6485
Underflow 6
Overflow 1
Integral 12
χ² / ndf 0.2298 / 5
Constant 1.81 ± 0.96
Mean −0.04314 ± 0.11557
Sigma 0.301 ± 0.180
hist1_1
Entries 8
Mean −0.2917
Std Dev 0.6489
Underflow 0
Overflow 0
Integral 8
χ² / ndf 2.126e−05 / 0
Constant 1.005 ± 0.596
Mean −1.008 ± 6.196
Sigma 1.089 ± 0.701
hist1_1
Entries 4
Mean −0.3519
Std Dev 0.6159
Underflow 0
Overflow 0
Integral 4
χ² / ndf 1.431e−13 / 0
Constant 1.499 ± 16.767
Mean −0.963 ± 0.081
Sigma 0.1029 ± 0.7552
hist1_1
Entries 1
Mean 0
Std Dev 0
Underflow 1
Overflow 0
Integral 0

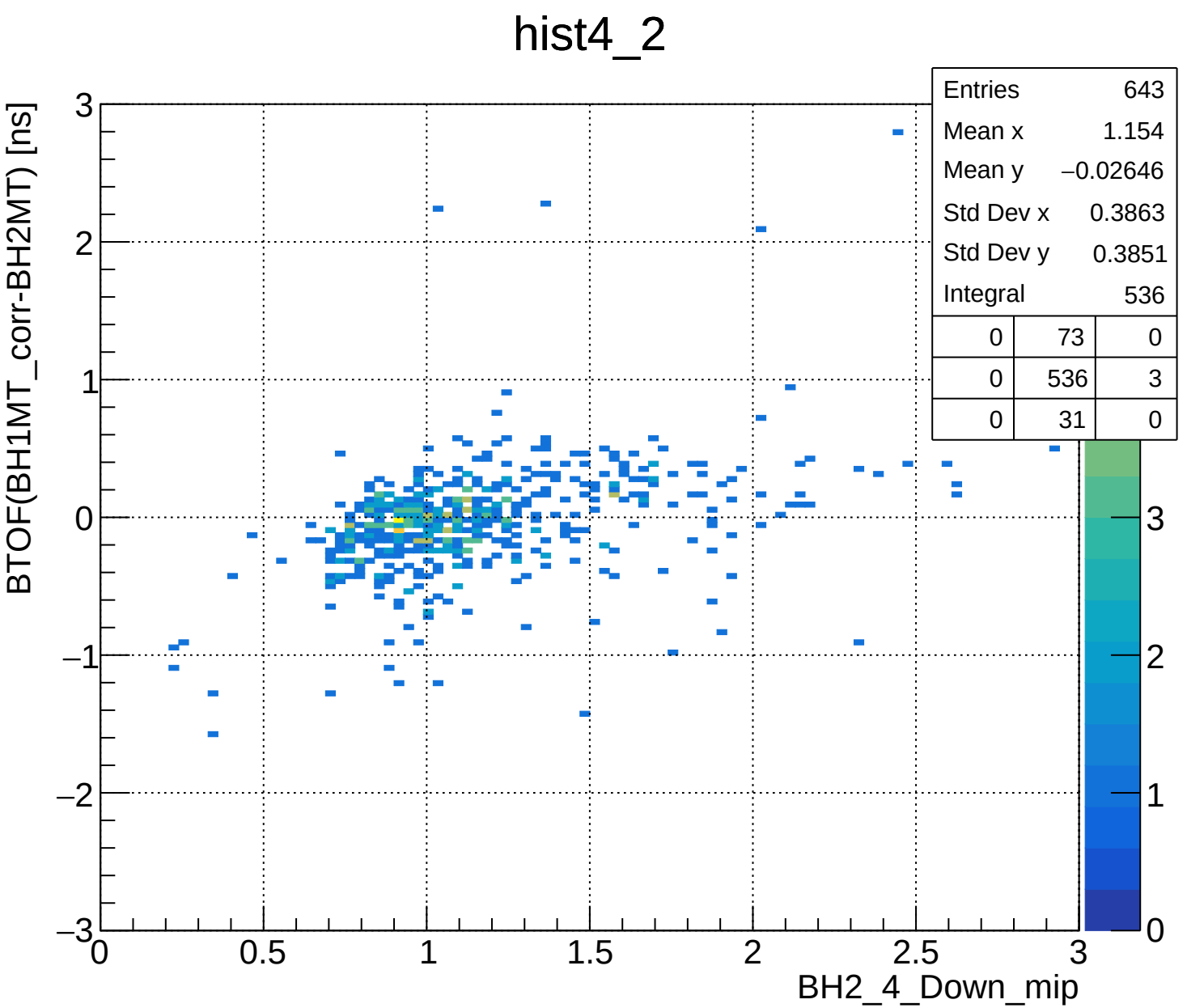

hist3_2
χ² / ndf 0.3026 / 2
a0 0.06131 ± 0.2852
a1 −0.5902 ± 0.7924
a3 −0.0936 ± 0.3422
Integral 548
0 63 0
0 548 1
0 31 0
BTOF(BH1MT-BH2MT) [ns]
BH1_4D_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
5
4
3
2
1
0

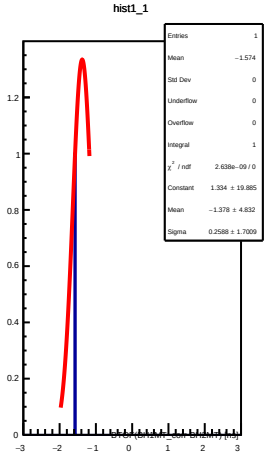

hist3_3
Entries 643
Mean x 1.112
Mean y −0.02305
Std Dev x 0.3298
Std Dev y 0.3855
Integral 548
0 63 0
0 548 1
0 30 1
BTOF(BH1MT_corr - BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
4
3
2
1
0

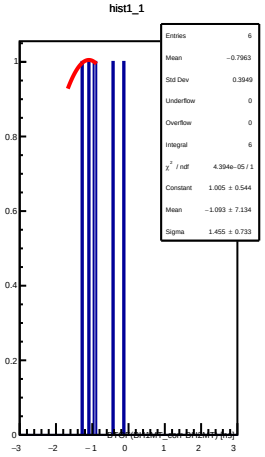

hist3_4
Entries 643
Mean x 1.125
Mean y −0.03844
Std Dev x 0.2972
Std Dev y 0.3942
Integral 538
0 73 0
0 538 1
0 31 0
BTOF(BH1MT_corr-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
5
4
3
2
1
0

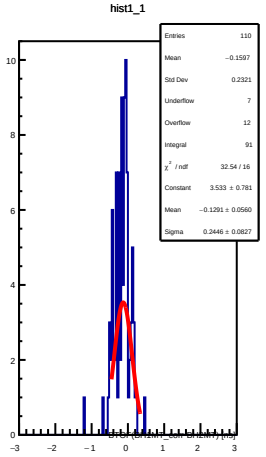

BTOFCORR34_4
Entries 643
Mean −0.02318
Std Dev 0.3867
Underflow 31
Overflow 73
Integral 539
χ² / ndf 25.95 / 24
Constant 28.05 ± 1.85
Mean −0.01255 ± 0.01368
Sigma 0.249 ± 0.015
35
30
25
20
15
10
5
0
−3
−2
−1
0
1
2
3

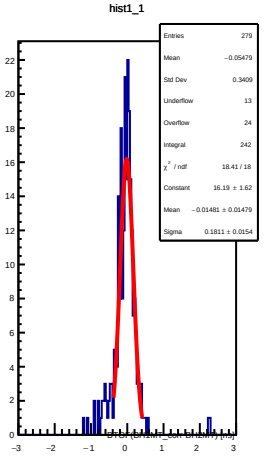

hist4_1
Entries 643
Mean x 1.204
Mean y −0.02667
Std Dev x 0.4042
Std Dev y 0.3854
Integral 535
0 73 0
0 535 4
0 31 0
BTOF(BH1MT_corr-BH2MT) [ns]
BH2_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3

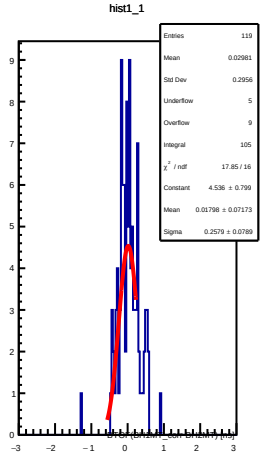

hist4_2
Entries 643
Mean x 1.154
Mean y −0.02646
Std Dev x 0.3863
Std Dev y 0.3851
Integral 536
0 73 0
0 536 3
0 31 0
BTOF(BH1MT_corr-BH2MT) [ns]
BH2_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3

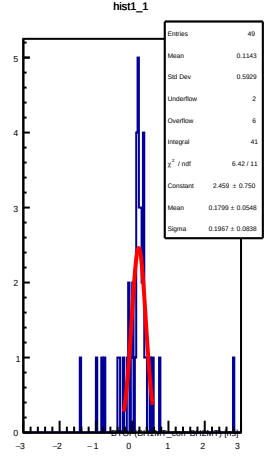

hist1_1
Entries 1
Mean −1.574
Std Dev 0
Underflow 0
Overflow 0
Integral 1
χ² / ndf 2.638e−09 / 0
Constant 1.334 ± 19.885
Mean −1.378 ± 4.832
Sigma 0.2588 ± 1.7009
BTOF(BM2MF_Con BM2MF) [ns]

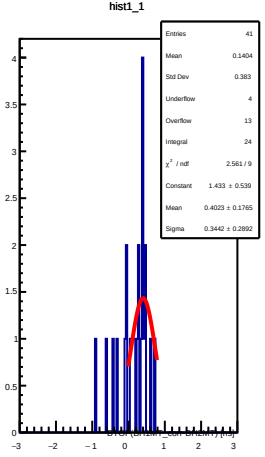

hist1_1
Entries 6
Mean −0.7963
Std Dev 0.3949
Underflow 0
Overflow 0
Integral 6
χ² / ndf 4.394e−05 / 1
Constant 1.005 ± 0.544
Mean −1.093 ± 7.134
Sigma 1.455 ± 0.733
BTOF(BM2MF_Con BM2MF) [ns]

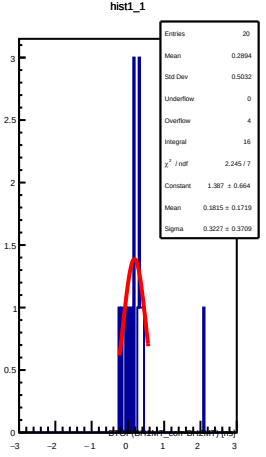

hist1_1
Entries 110
Mean −0.1597
Std Dev 0.2321
Underflow 7
Overflow 12
Integral 91
χ² / ndf 32.54 / 16
Constant 3.533 ± 0.781
Mean −0.1291 ± 0.0560
Sigma 0.2446 ± 0.0827
BTOF(BM2MF_Con BM2MF) [ns]

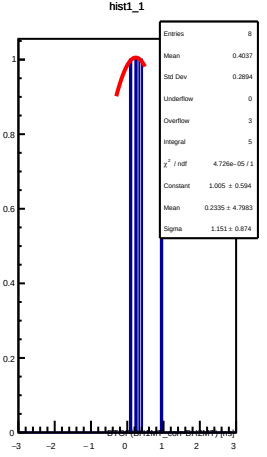

hist1_1
Entries 279
Mean −0.05479
Std Dev 0.3409
Underflow 13
Overflow 24
Integral 242
χ² / ndf 18.41 / 18
Constant 16.19 ± 1.62
Mean −0.01481 ± 0.01479
Sigma 0.1811 ± 0.0154
BTOF(BM2MF_Con BM2MF) [ns]

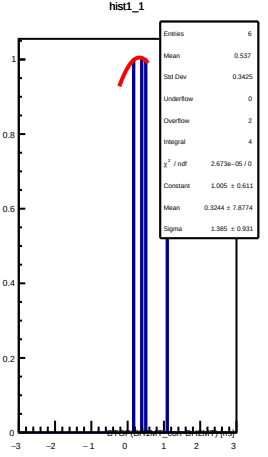

hist1_1
Entries 119
Mean 0.02981
Std Dev 0.2956
Underflow 5
Overflow 9
Integral 105
χ² / ndf 17.85 / 16
Constant 4.536 ± 0.799
Mean 0.01798 ± 0.07173
Sigma 0.2579 ± 0.0789
BTOF(BM2MF_Con BM2MF) [ns]

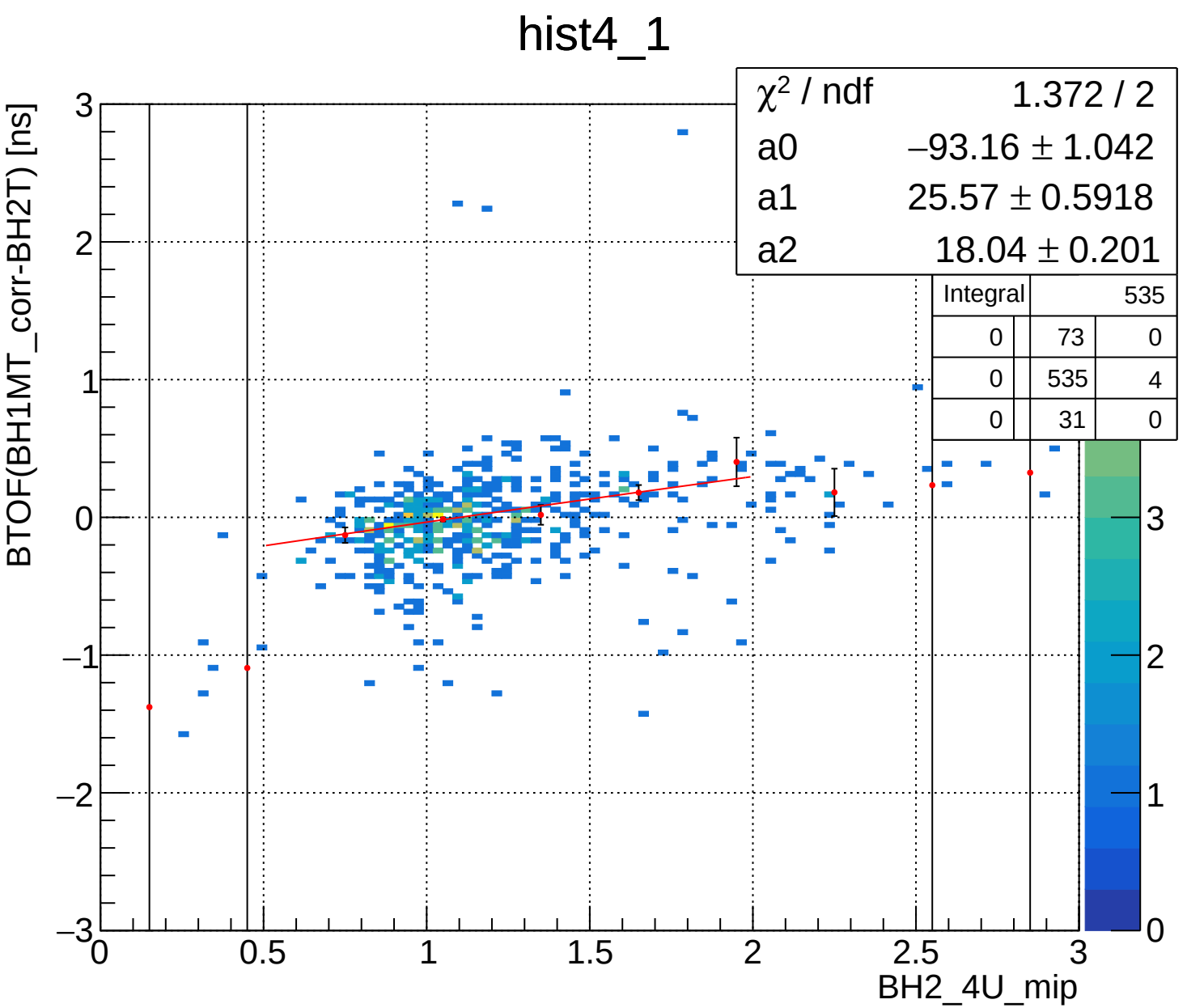

hist1_1
Entries 49
Mean 0.1143
Std Dev 0.5929
Underflow 2
Overflow 6
Integral 41
χ² / ndf 6.42 / 11
Constant 2.459 ± 0.750
Mean 0.1799 ± 0.0548
Sigma 0.1967 ± 0.0838
BTOF(BM2MF_Con BM2MF) [ns]

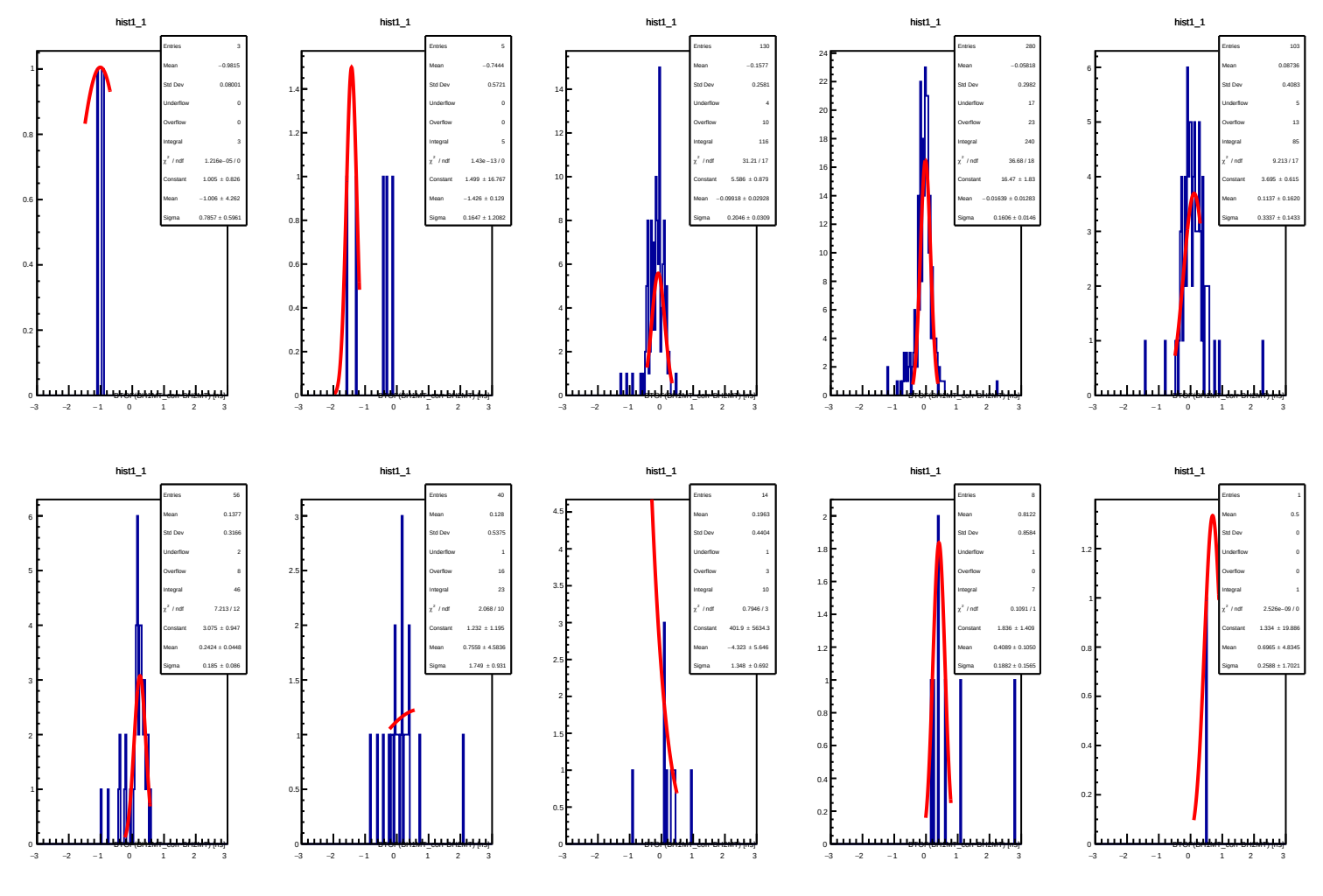

hist1_1
Entries 41
Mean 0.1404
Std Dev 0.383
Underflow 4
Overflow 13
Integral 24
χ² / ndf 2.561 / 9
Constant 1.433 ± 0.539
Mean 0.4023 ± 0.1765
Sigma 0.3442 ± 0.2892
BTOF(BM2MF_Con BM2MF) [ns]

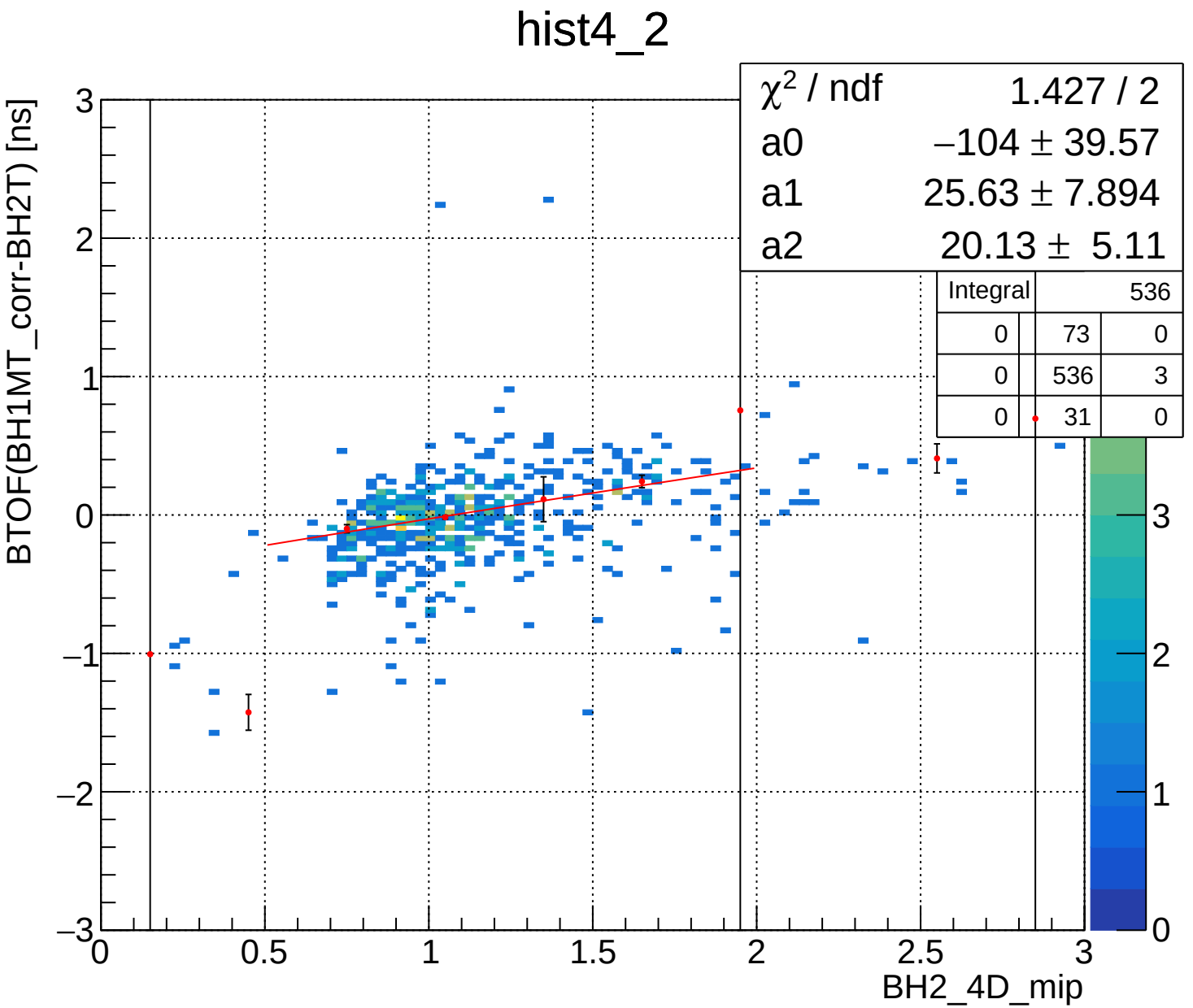

hist1_1
Entries 20
Mean 0.2894
Std Dev 0.5032
Underflow 0
Overflow 4
Integral 16
χ² / ndf 2.245 / 7
Constant 1.387 ± 0.664
Mean 0.1815 ± 0.1719
Sigma 0.3227 ± 0.3709
BTOF(BM2MF_Con BM2MF) [ns]

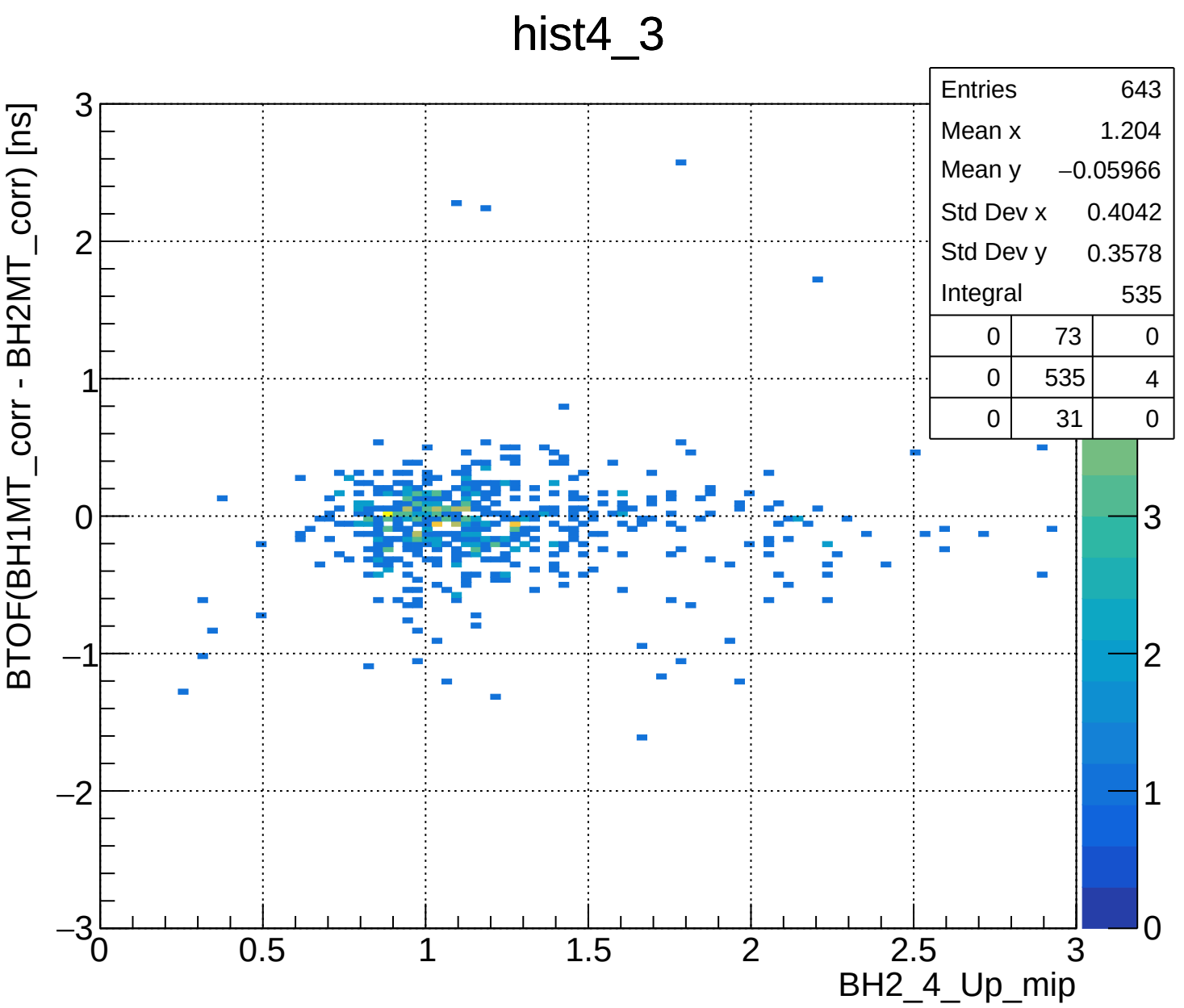

hist1_1
Entries 8
Mean 0.4037
Std Dev 0.2894
Underflow 0
Overflow 3
Integral 5
χ² / ndf 4.726e−05 / 1
Constant 1.005 ± 0.594
Mean 0.2335 ± 4.7983
Sigma 1.151 ± 0.874
BTOF(BM2MF_Con BM2MF) [ns]

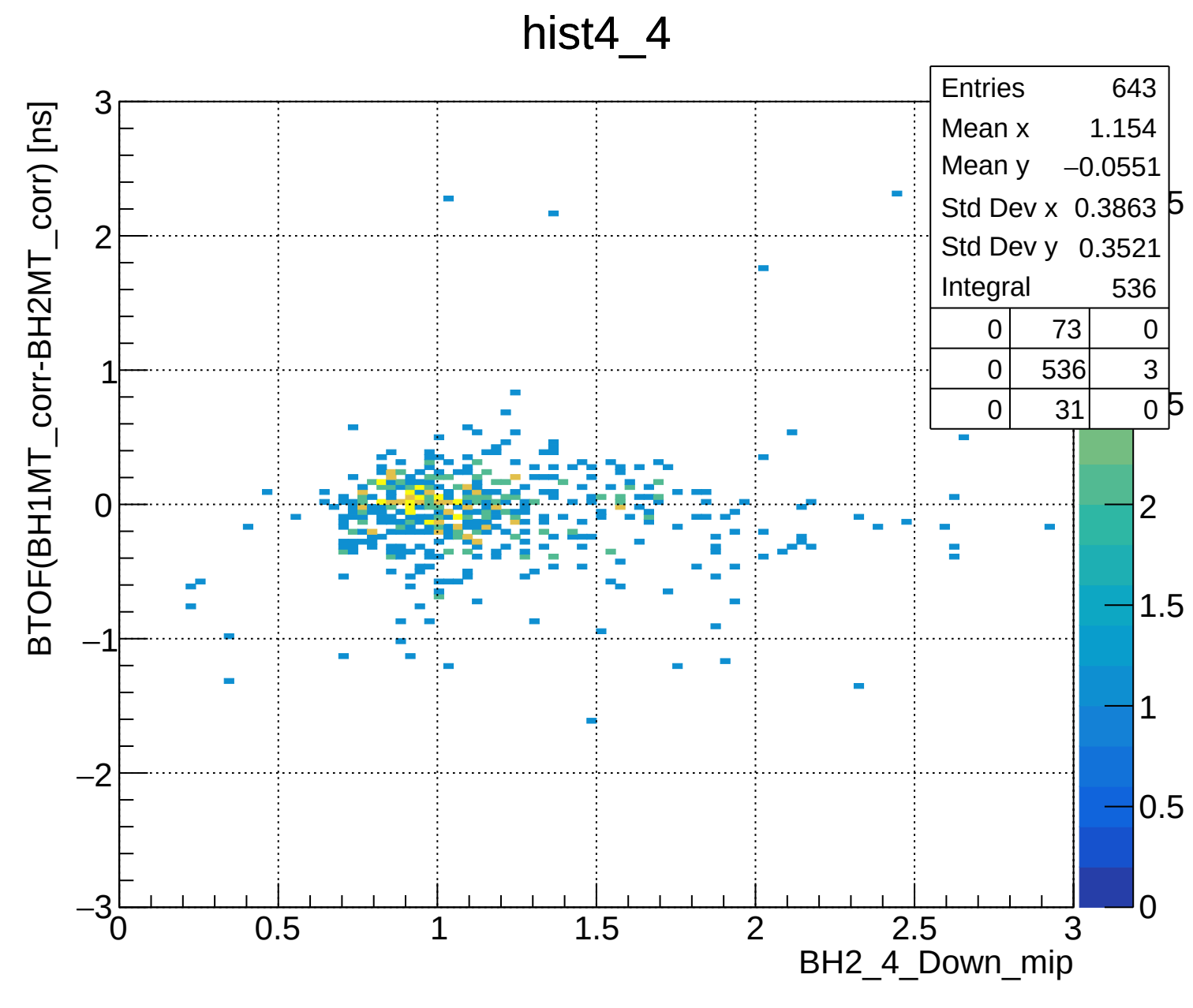

hist1_1
Entries 6
Mean 0.537
Std Dev 0.3425
Underflow 0
Overflow 2
Integral 4
χ² / ndf 2.673e−05 / 0
Constant 1.005 ± 0.611
Mean 0.3244 ± 7.8774
Sigma 1.385 ± 0.931
BTOF(BM2MF_Con BM2MF) [ns]

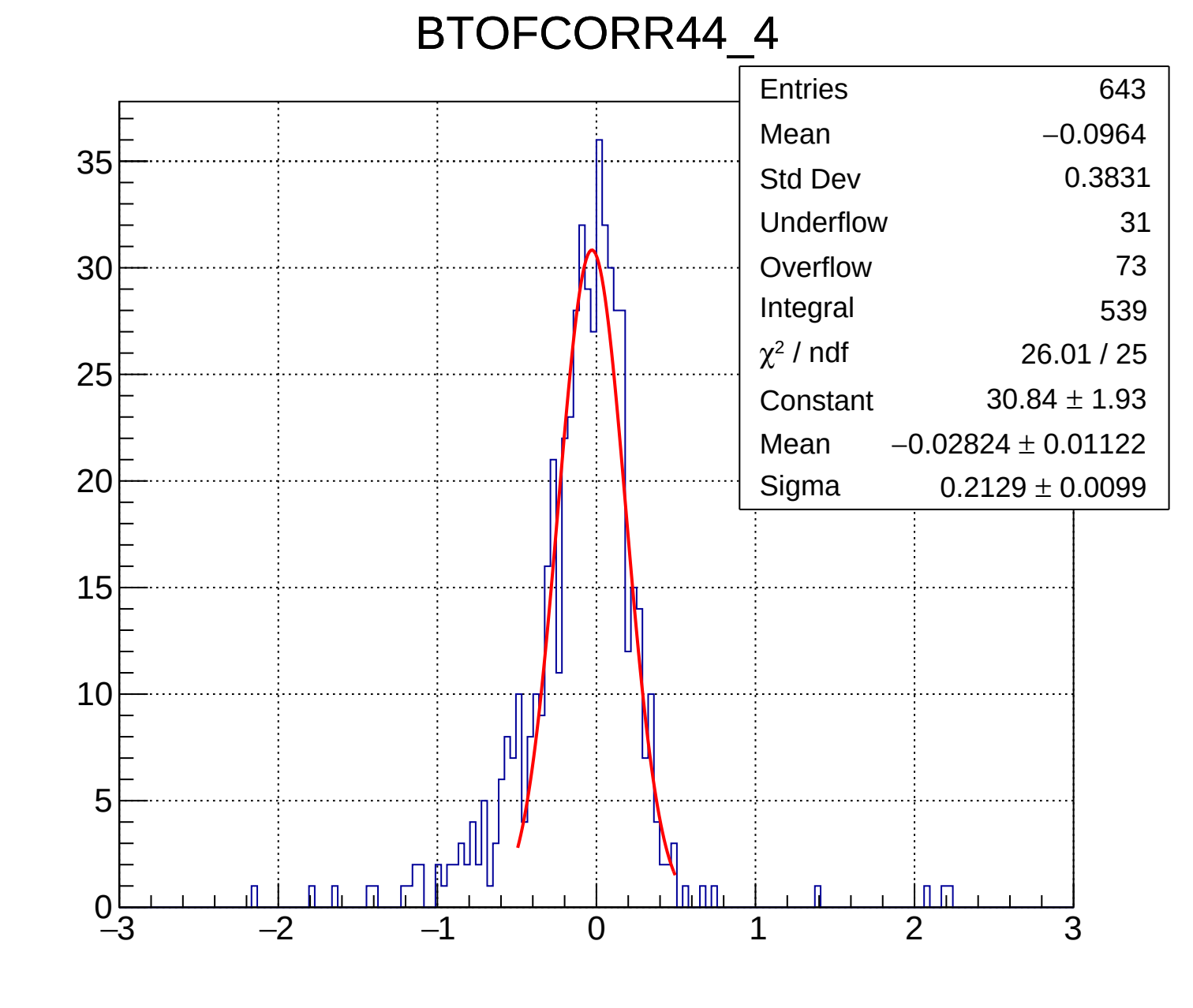

hist4_1
χ² / ndf 1.372 / 2
a0 −93.16 ± 1.042
a1 25.57 ± 0.5918
a2 18.04 ± 0.201
Integral 535
0 73 0
0 535 4
0 31 0
BTOF(BH1MT_corr-BH2T) [ns]
BH2_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3


hist1_1
Entries 3
Mean −0.9815
Std Dev 0.08001
Underflow 0
Overflow 0
Integral 3
χ² / ndf 1.216e−05 / 0
Constant 1.005 ± 0.826
Mean −1.006 ± 4.262
Sigma 0.7857 ± 0.5961
hist1_1
Entries 5
Mean −0.7444
Std Dev 0.5721
Underflow 0
Overflow 0
Integral 5
χ² / ndf 1.43e−13 / 0
Constant 1.499 ± 16.767
Mean −1.426 ± 0.129
Sigma 0.1647 ± 1.2082
hist1_1
Entries 130
Mean −0.1577
Std Dev 0.2581
Underflow 4
Overflow 10
Integral 116
χ² / ndf 31.21 / 17
Constant 5.586 ± 0.879
Mean −0.09918 ± 0.02928
Sigma 0.2046 ± 0.0309
hist1_1
Entries 280
Mean −0.05818
Std Dev 0.2982
Underflow 17
Overflow 23
Integral 240
χ² / ndf 36.68 / 18
Constant 16.47 ± 1.83
Mean −0.01639 ± 0.01283
Sigma 0.1606 ± 0.0146
hist1_1
Entries 103
Mean 0.08736
Std Dev 0.4083
Underflow 5
Overflow 13
Integral 85
χ² / ndf 9.213 / 17
Constant 3.695 ± 0.615
Mean 0.1137 ± 0.1620
Sigma 0.3337 ± 0.1433
hist1_1
Entries 56
Mean 0.1377
Std Dev 0.3166
Underflow 2
Overflow 8
Integral 46
χ² / ndf 7.213 / 12
Constant 3.075 ± 0.947
Mean 0.2424 ± 0.0448
Sigma 0.185 ± 0.086
hist1_1
Entries 40
Mean 0.128
Std Dev 0.5375
Underflow 1
Overflow 16
Integral 23
χ² / ndf 2.068 / 10
Constant 1.232 ± 1.195
Mean 0.7559 ± 4.5836
Sigma 1.749 ± 0.931
hist1_1
Entries 14
Mean 0.1963
Std Dev 0.4404
Underflow 1
Overflow 3
Integral 10
χ² / ndf 0.7946 / 3
Constant 401.9 ± 5634.3
Mean −4.323 ± 5.646
Sigma 1.348 ± 0.692
hist1_1
Entries 8
Mean 0.8122
Std Dev 0.8584
Underflow 1
Overflow 0
Integral 7
χ² / ndf 0.1091 / 1
Constant 1.836 ± 1.469
Mean 0.4089 ± 0.1050
Sigma 0.1882 ± 0.1565
hist1_1
Entries 1
Mean 0.5
Std Dev 0
Underflow 0
Overflow 0
Integral 1
χ² / ndf 2.526e−09 / 0
Constant 1.334 ± 19.886
Mean 0.6965 ± 4.8345
Sigma 0.2588 ± 1.7021


hist4_2
χ² / ndf 1.427 / 2
a0 −104 ± 39.57
a1 25.63 ± 7.894
a2 20.13 ± 5.11
Integral 536
0 73 0
0 536 3
0 31 0
BTOF(BH1MT_corr-BH2T) [ns]
BH2_4D_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3


hist4_3
Entries 643
Mean x 1.204
Mean y −0.05966
Std Dev x 0.4042
Std Dev y 0.3578
Integral 535
0 73 0
0 535 4
0 31 0
BTOF(BH1MT_corr - BH2MT_corr) [ns]
BH2_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3


hist4_4
Entries 643
Mean x 1.154
Mean y −0.0551
Std Dev x 0.3863
Std Dev y 0.3521
Integral 536
0 73 0
0 536 3
0 31 0
BTOF(BH1MT_corr-BH2MT_corr) [ns]
BH2_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
2
1.5
1
0.5
0


BTOFCORR44_4
Entries 643
Mean −0.0964
Std Dev 0.3831
Underflow 31
Overflow 73
Integral 539
χ² / ndf 26.01 / 25
Constant 30.84 ± 1.93
Mean −0.02824 ± 0.01122
Sigma 0.2129 ± 0.0099
35
30
25
20
15
10
5
0
−3
−2
−1
0
1
2
3