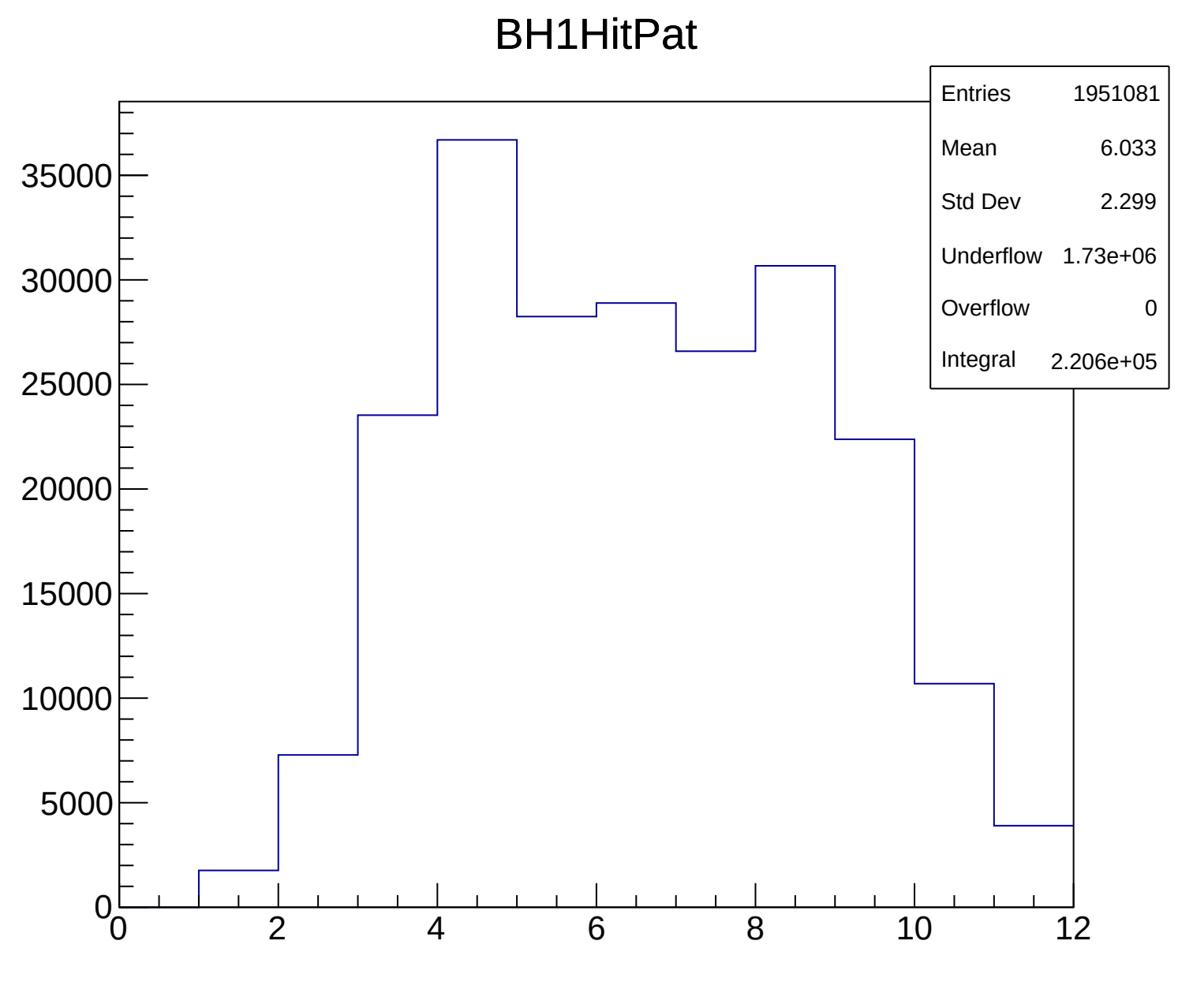
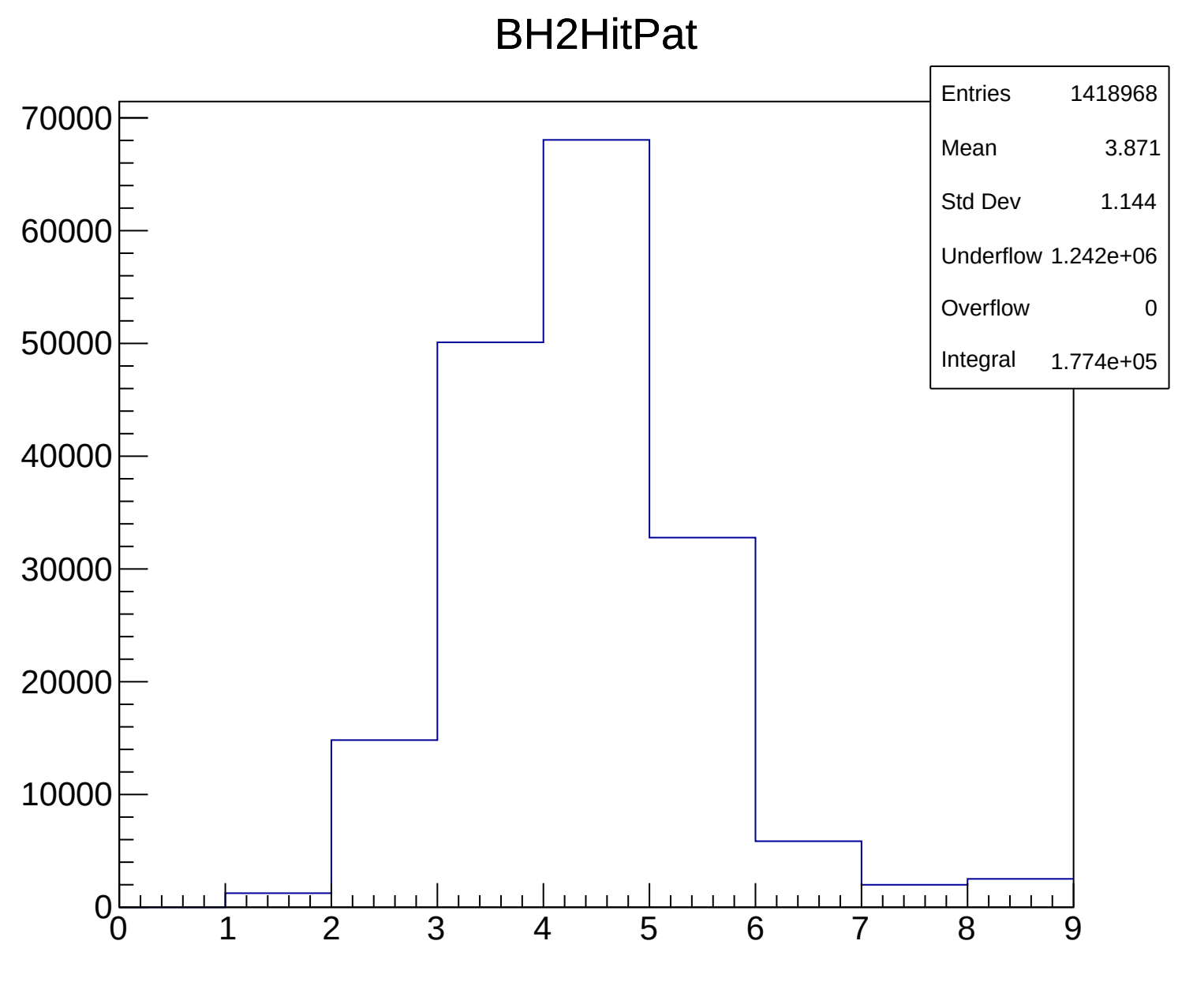
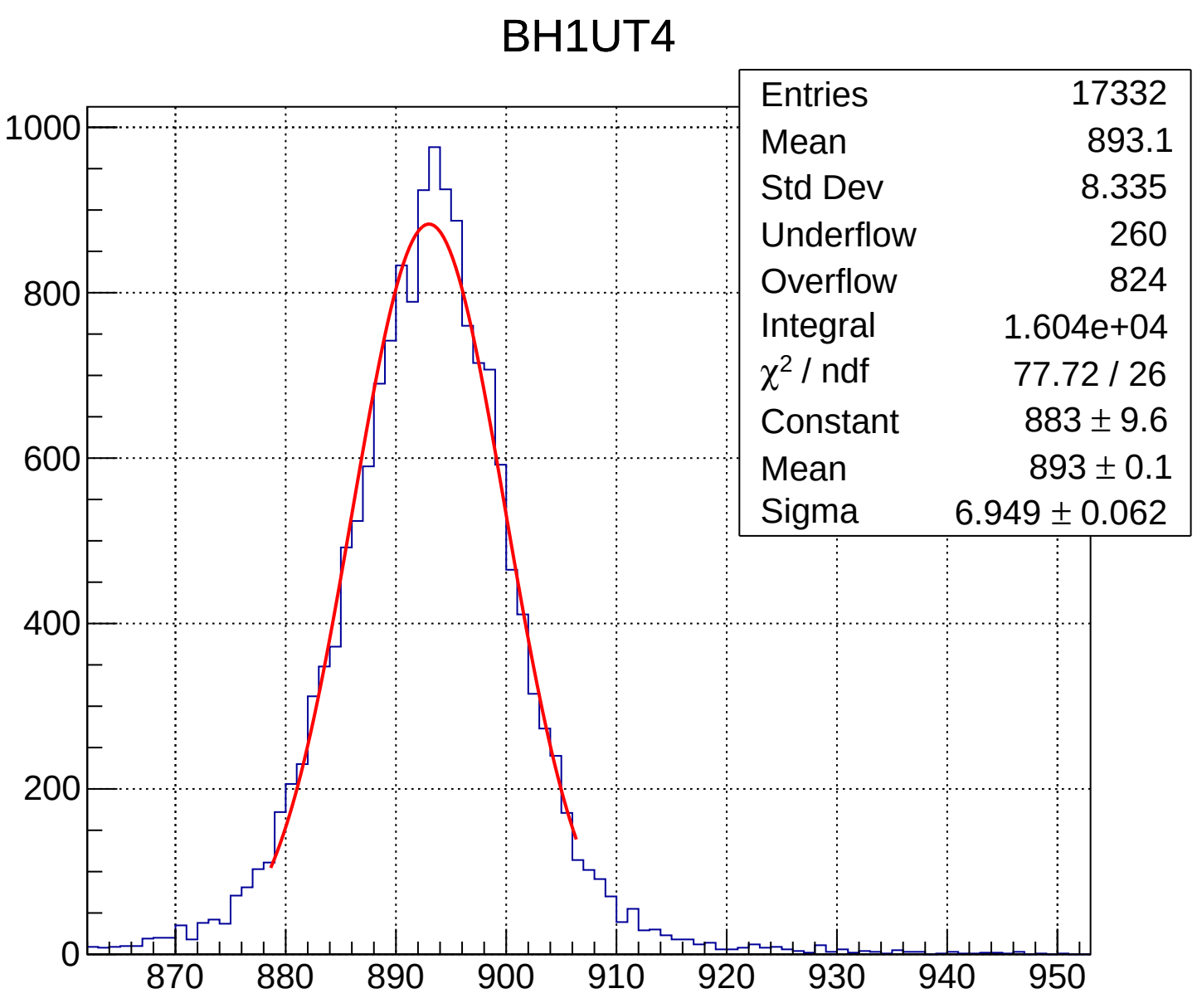
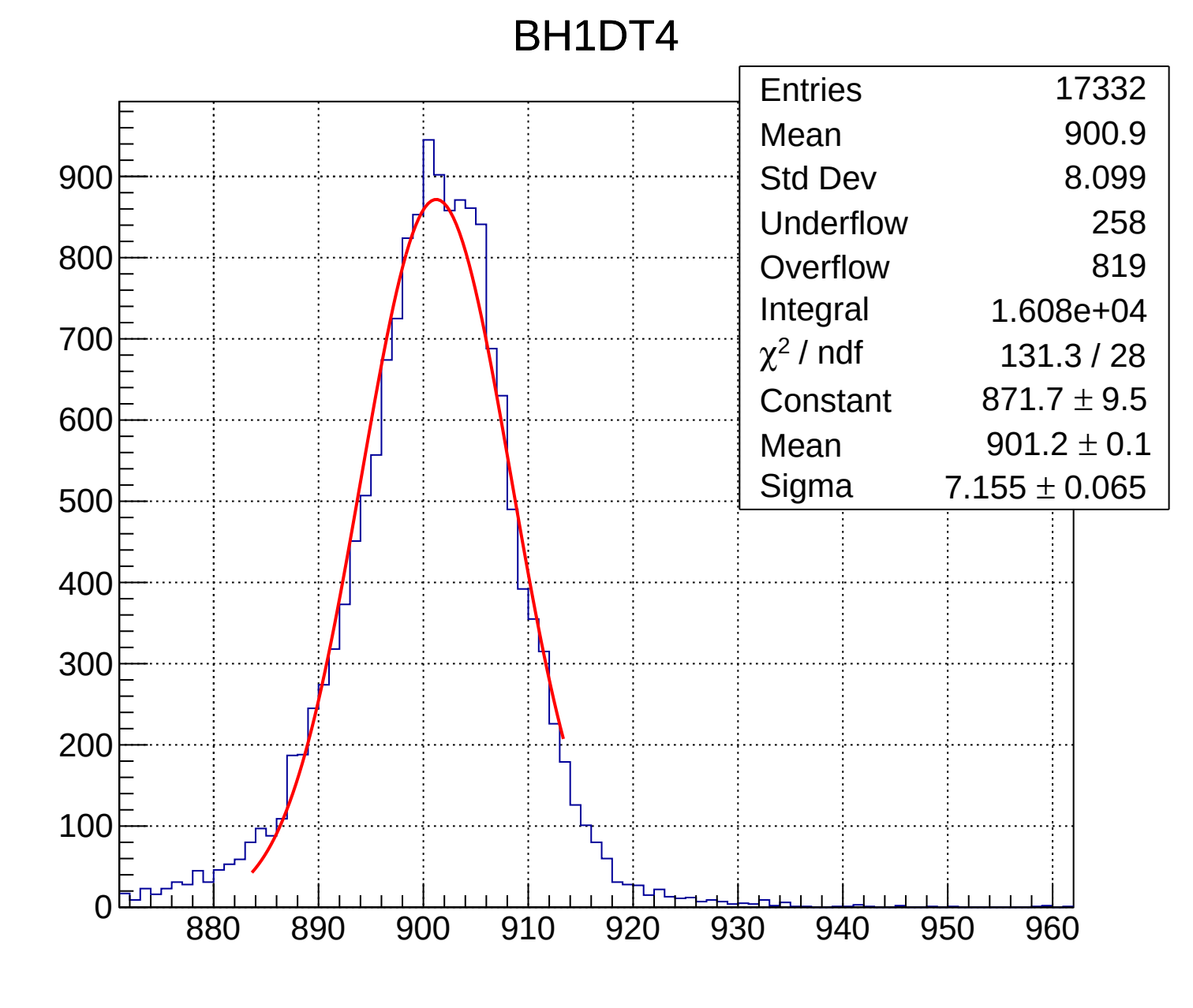
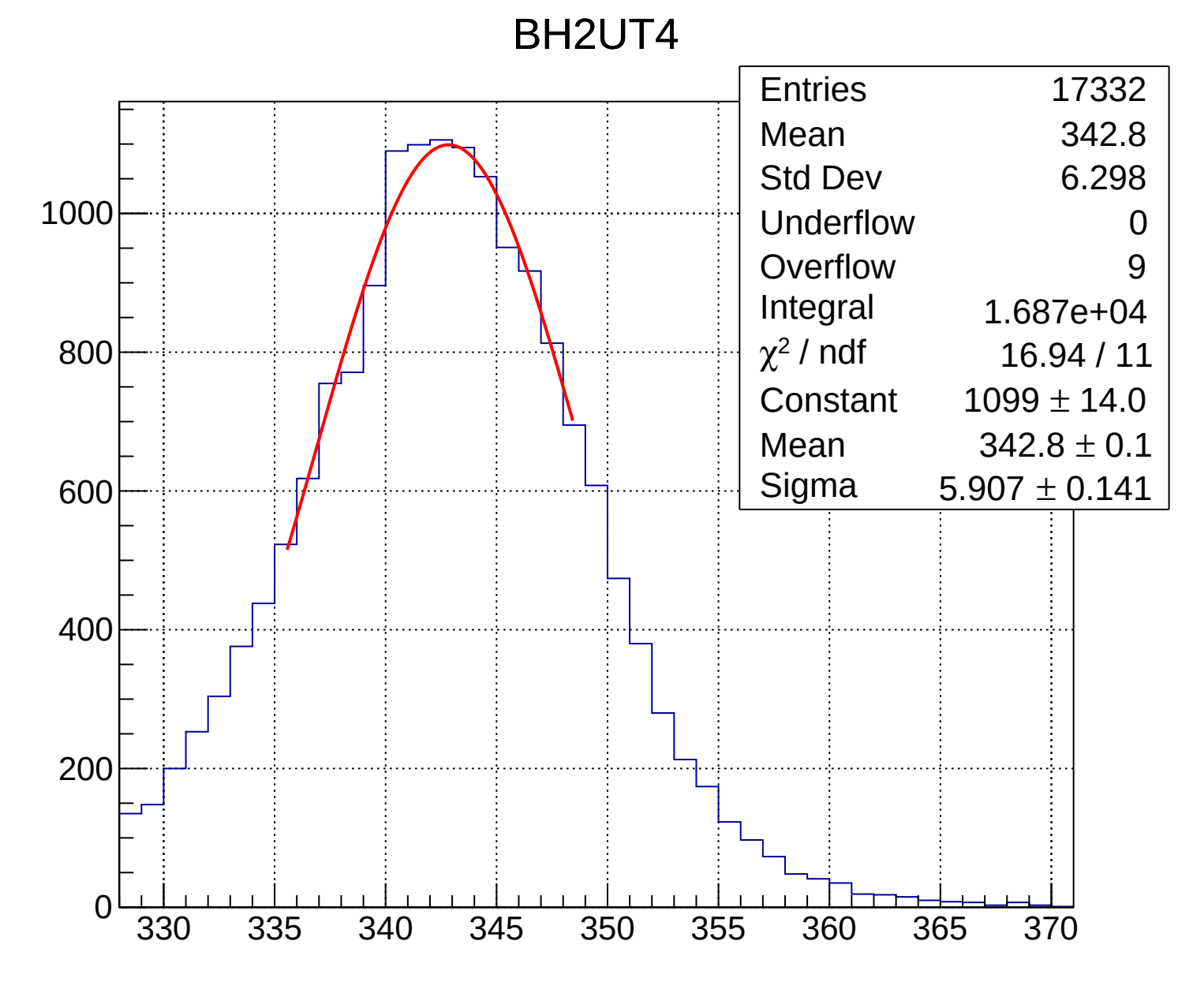
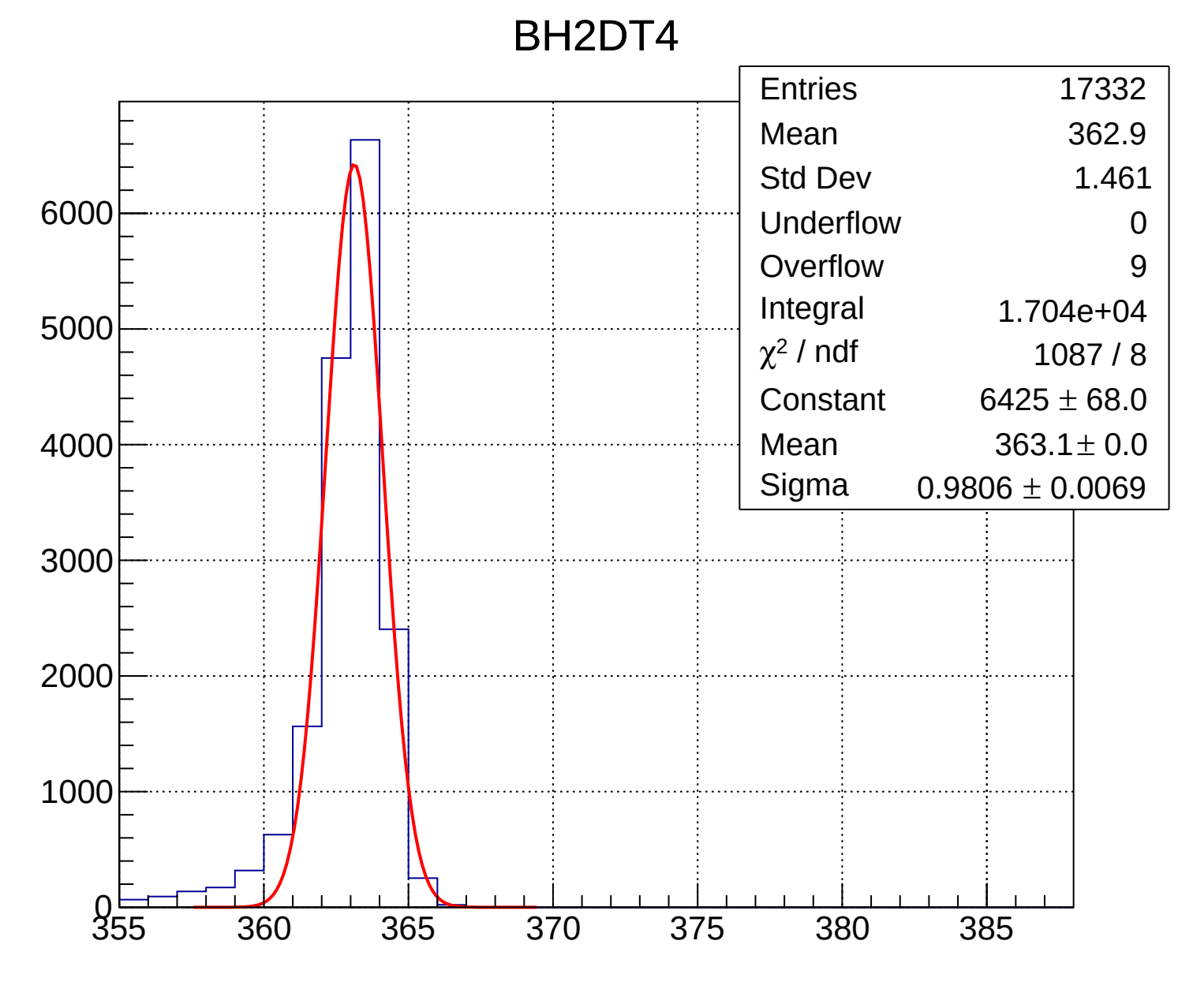

BH1HitPat
Entries 1951081
Mean 6.033
Std Dev 2.299
Underflow 1.73e+06
Overflow 0
Integral 2.206e+05
35000
30000
25000
20000
15000
10000
5000
0
0
2
4
6
8
10
12

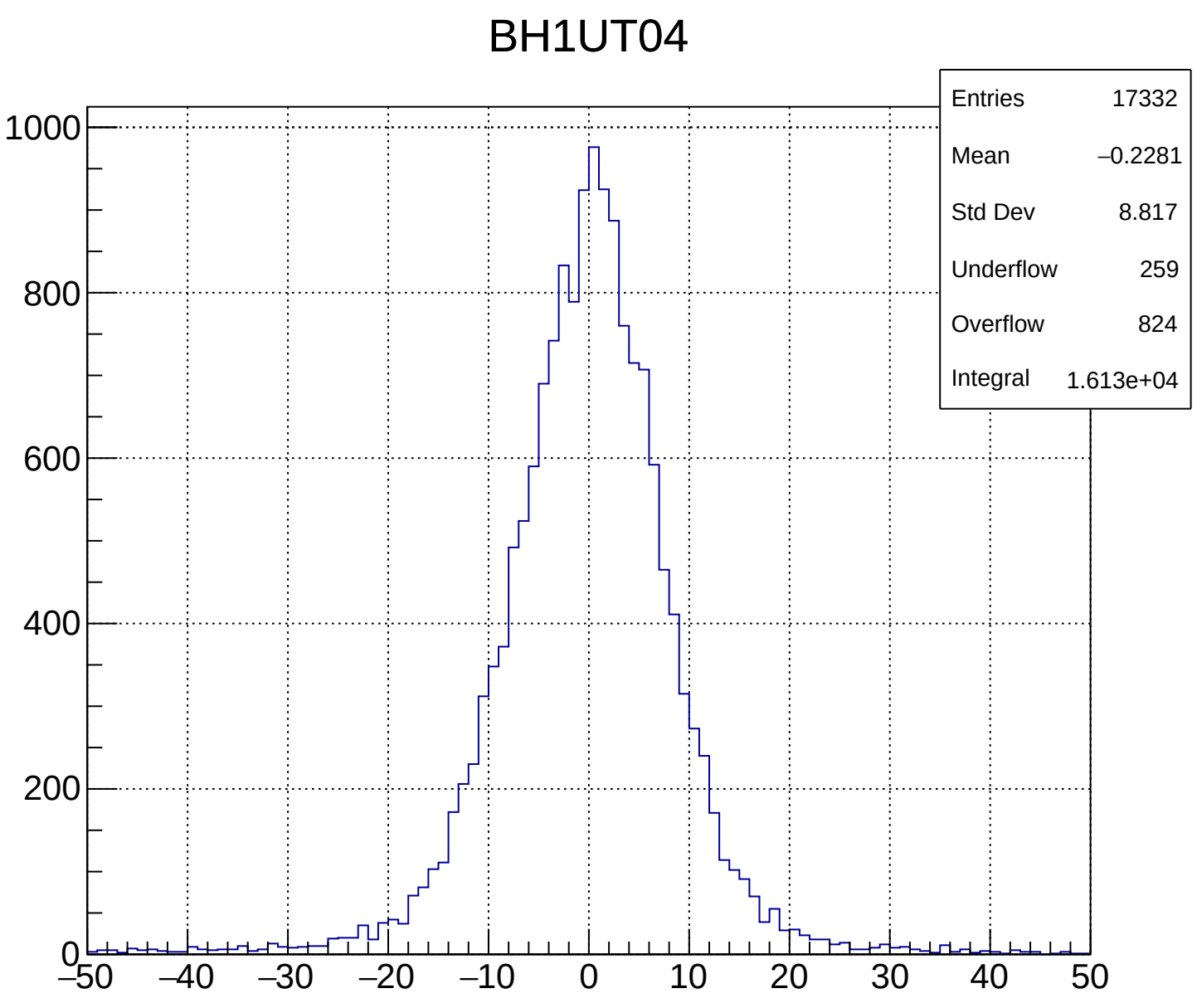

BH2HitPat
Entries 1418968
Mean 3.871
Std Dev 1.144
Underflow 1.242e+06
Overflow 0
Integral 1.774e+05
70000
60000
50000
40000
30000
20000
10000
0
0
1
2
3
4
5
6
7
8
9

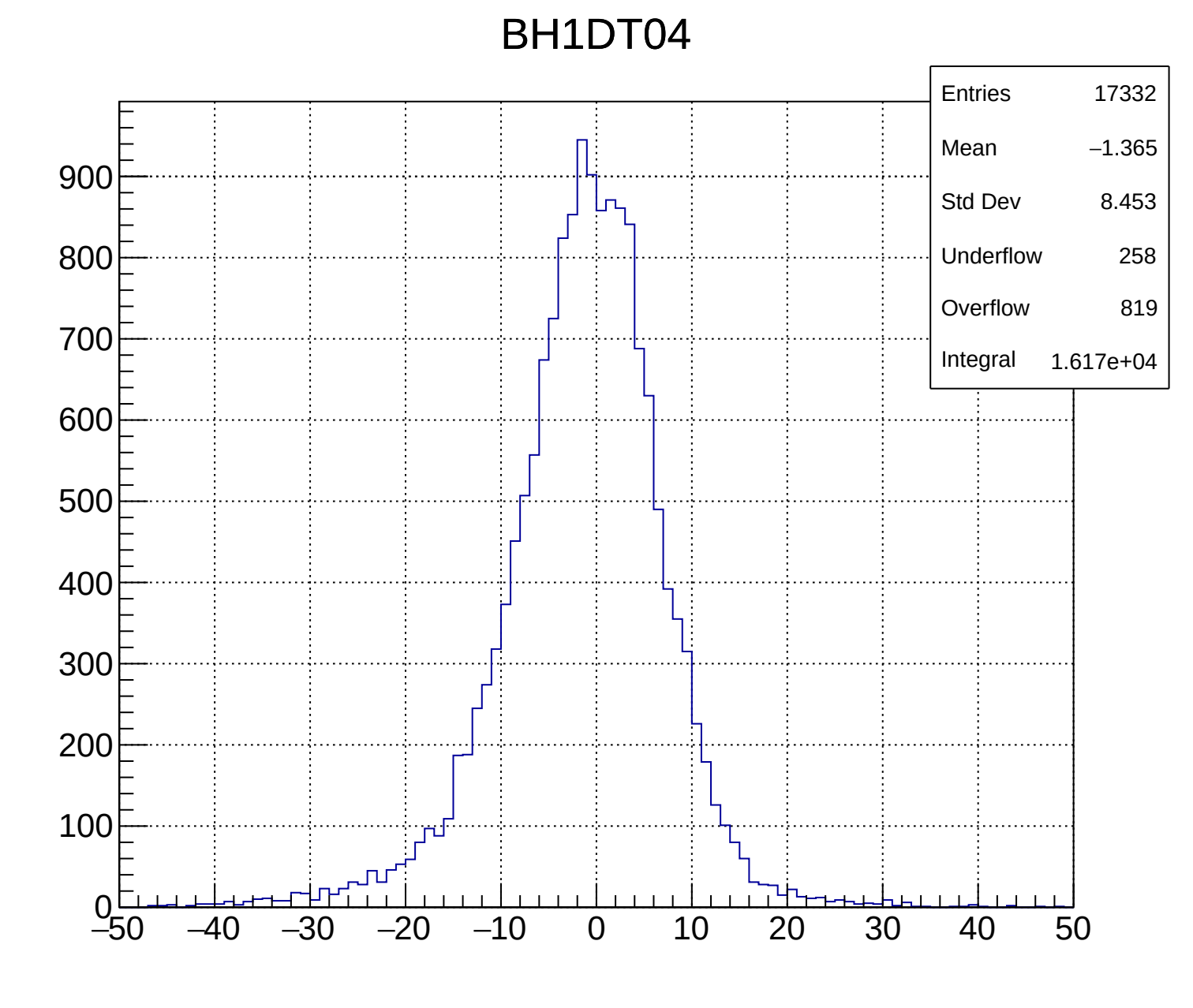

BH1UT4
Entries 17332
Mean 893.1
Std Dev 8.335
Underflow 260
Overflow 824
Integral 1.604e+04
χ² / ndf 77.72 / 26
Constant 883 ± 9.6
Mean 893 ± 0.1
Sigma 6.949 ± 0.062
1000
800
600
400
200
0
870
880
890
900
910
920
930
940
950

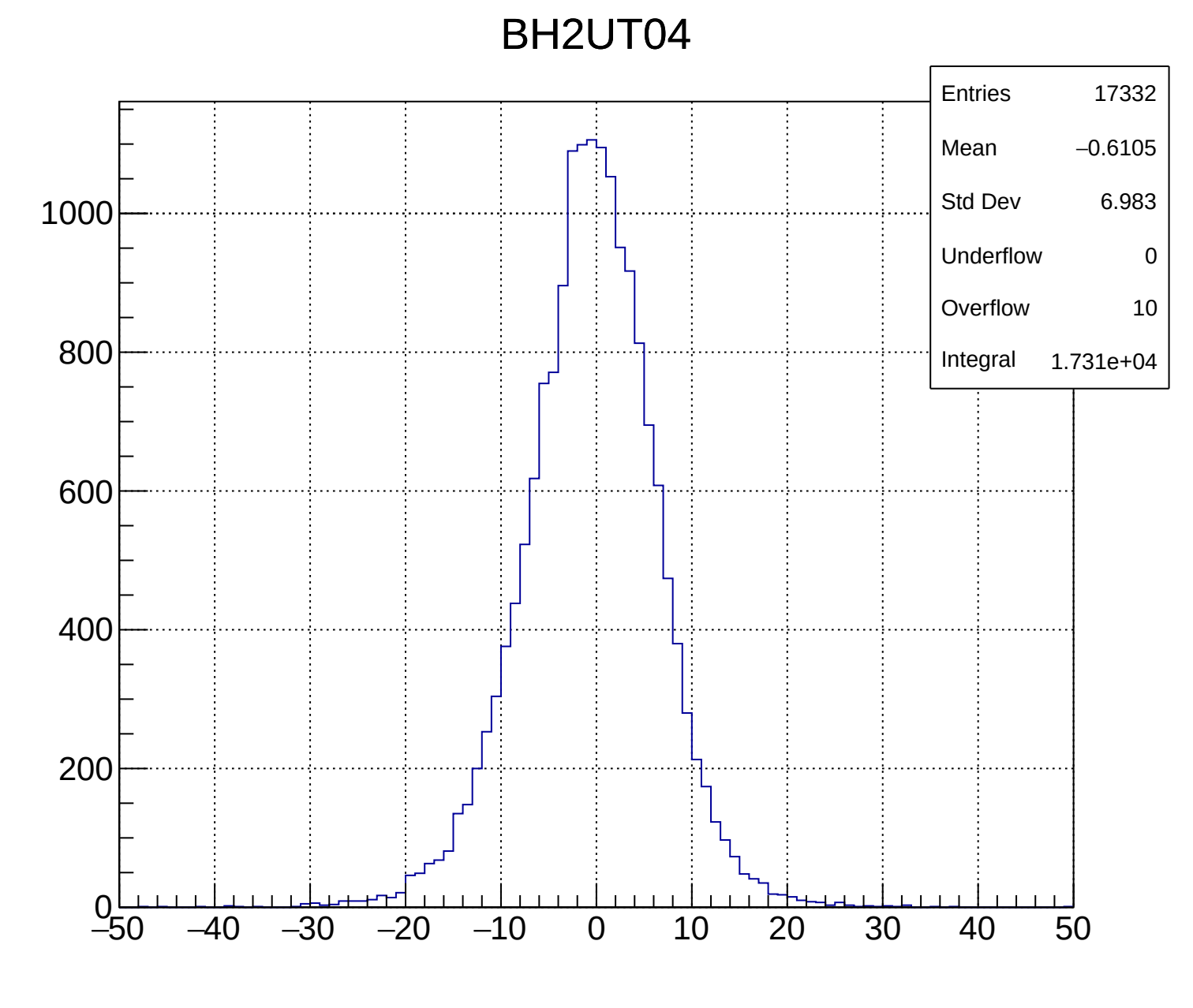

BH1DT4
Entries 17332
Mean 900.9
Std Dev 8.099
Underflow 258
Overflow 819
Integral 1.608e+04
χ² / ndf 131.3 / 28
Constant 871.7 ± 9.5
Mean 901.2 ± 0.1
Sigma 7.155 ± 0.065
0
100
200
300
400
500
600
700
800
900
880
890
900
910
920
930
940
950
960

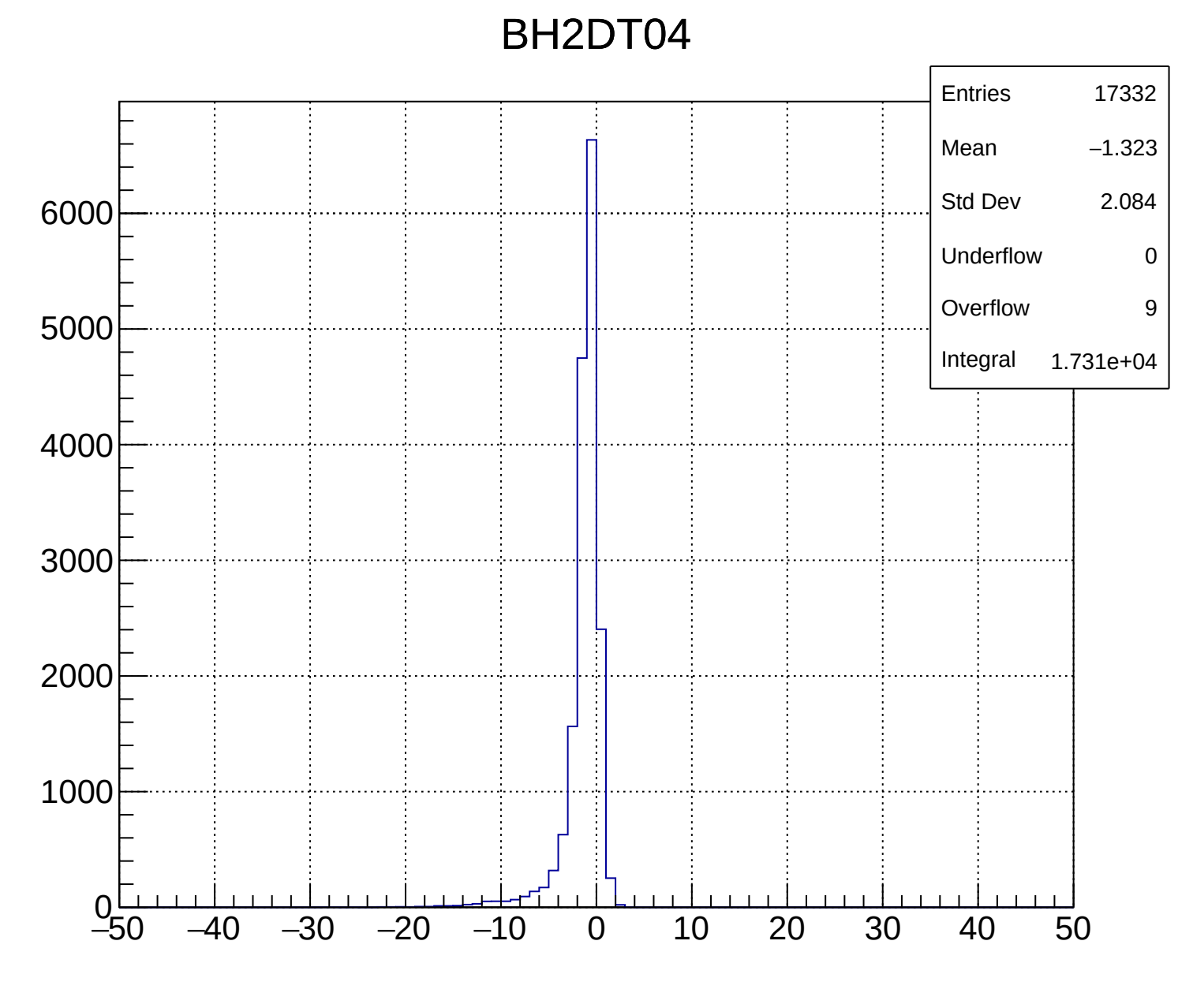

BH2UT4
Entries 17332
Mean 342.8
Std Dev 6.298
Underflow 0
Overflow 9
Integral 1.687e+04
χ² / ndf 16.94 / 11
Constant 1099 ± 14.0
Mean 342.8 ± 0.1
Sigma 5.907 ± 0.141
1000
800
600
400
200
0
330
335
340
345
350
355
360
365
370

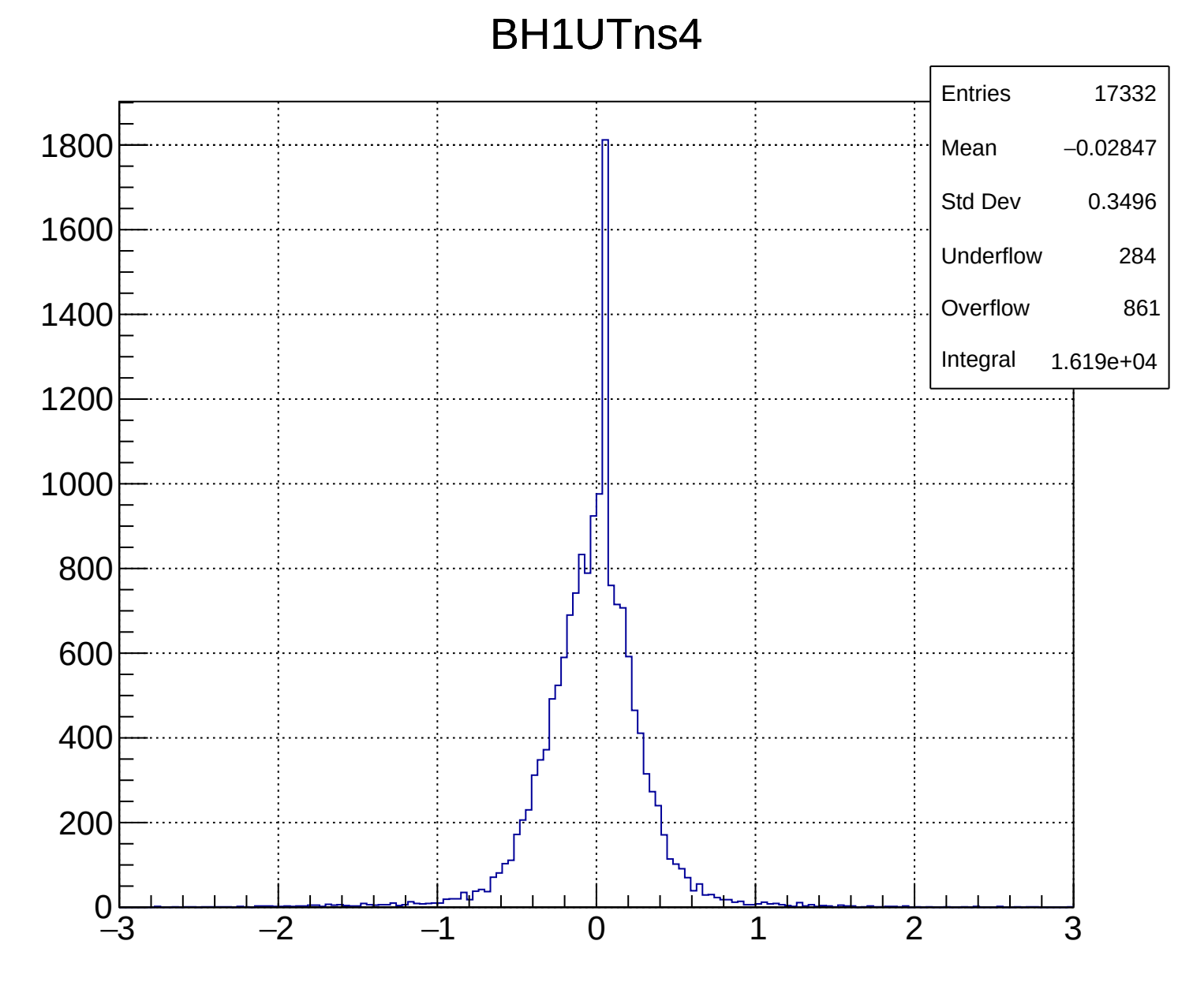

BH2DT4
Entries 17332
Mean 362.9
Std Dev 1.461
Underflow 0
Overflow 9
Integral 1.704e+04
χ² / ndf 1087 / 8
Constant 6425 ± 68.0
Mean 363.1 ± 0.0
Sigma 0.9806 ± 0.0069
6000
5000
4000
3000
2000
1000
0
355
360
365
370
375
380
385

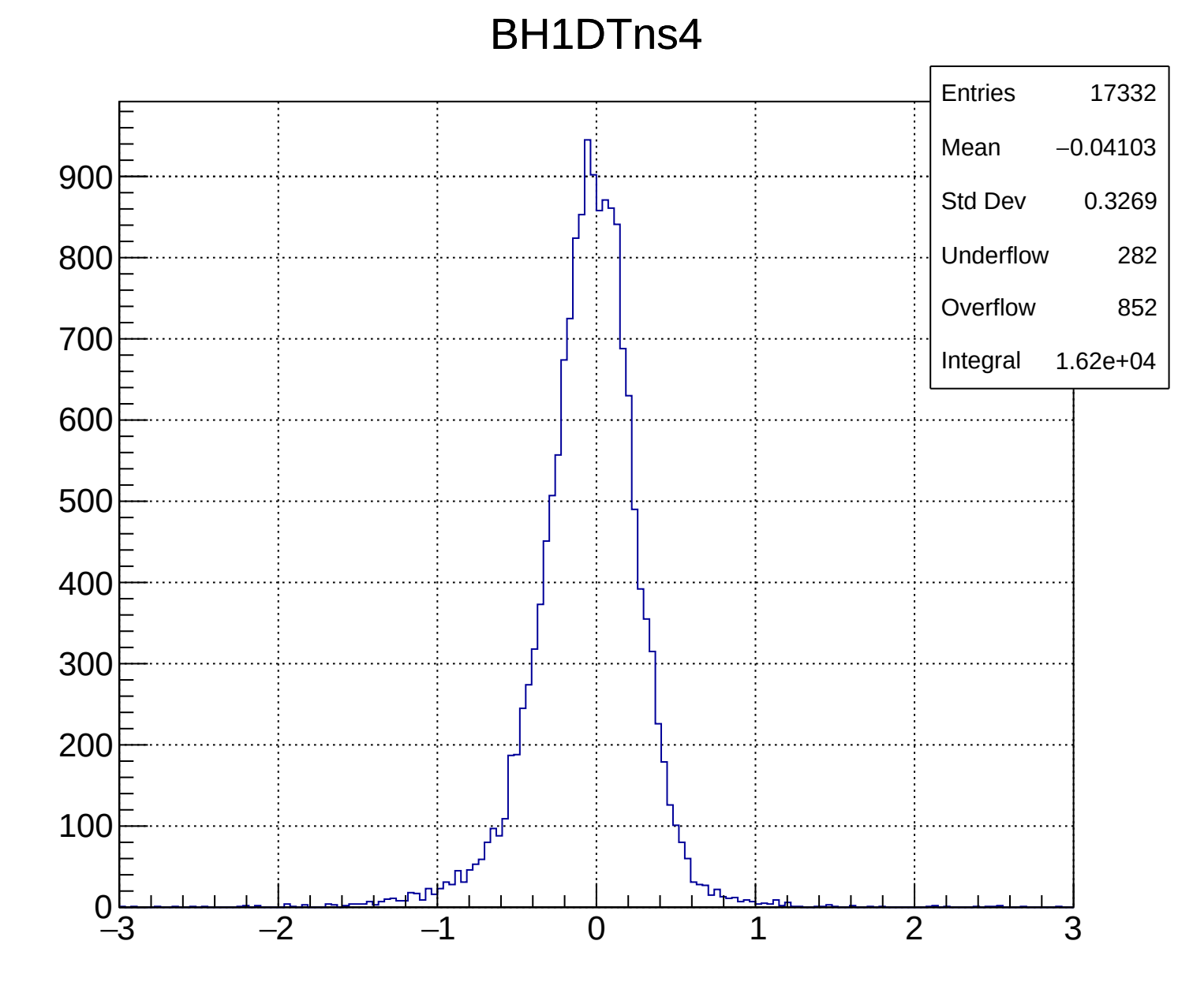

BH1UT04
Entries 17332
Mean –0.2281
Std Dev 8.817
Underflow 259
Overflow 824
Integral 1.613e+04
1000
800
600
400
200
0
–50
–40
–30
–20
–10
0
10
20
30
40
50

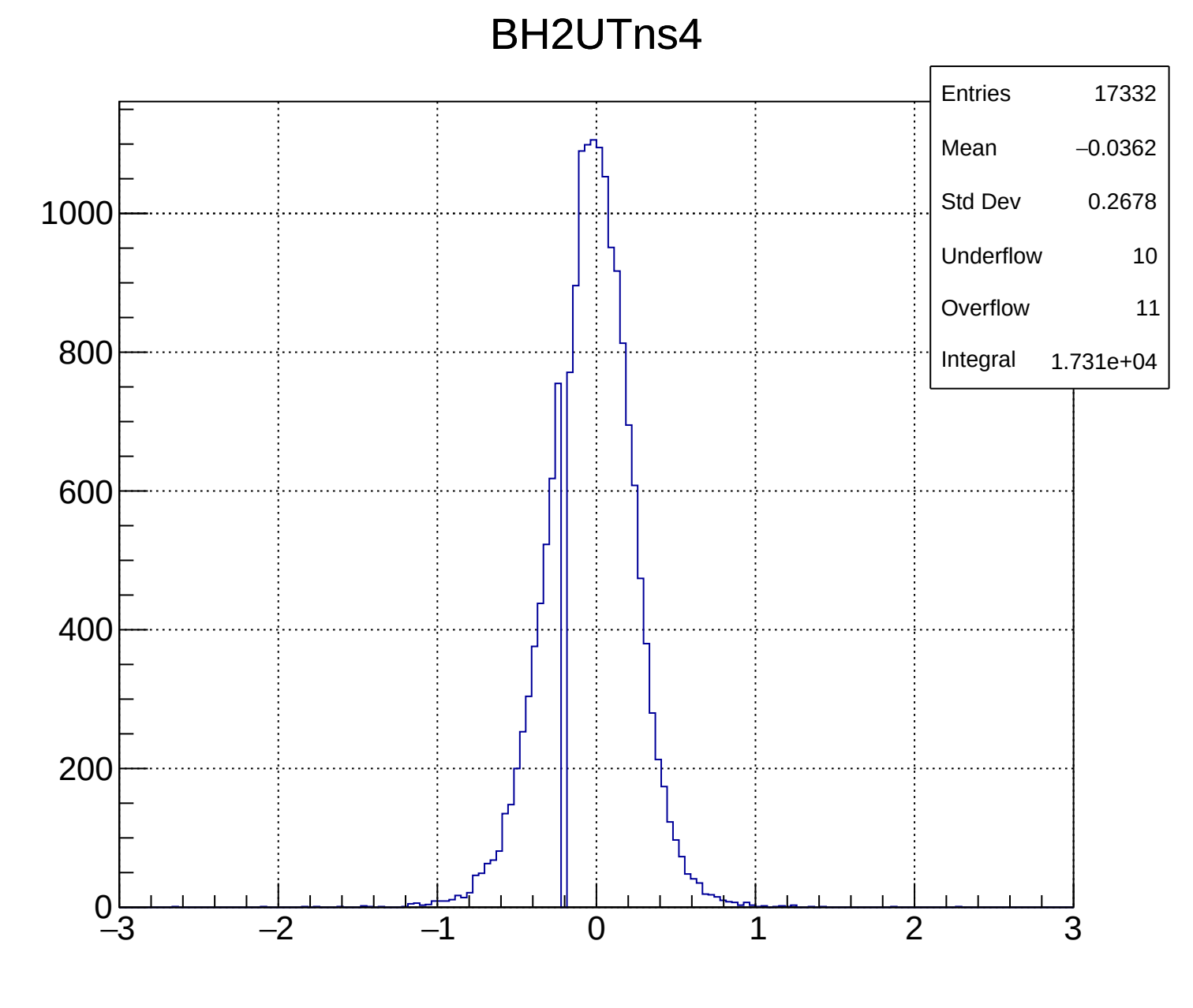

BH1DT04
Entries 17332
Mean –1.365
Std Dev 8.453
Underflow 258
Overflow 819
Integral 1.617e+04
900
800
700
600
500
400
300
200
100
0
–50
–40
–30
–20
–10
0
10
20
30
40
50

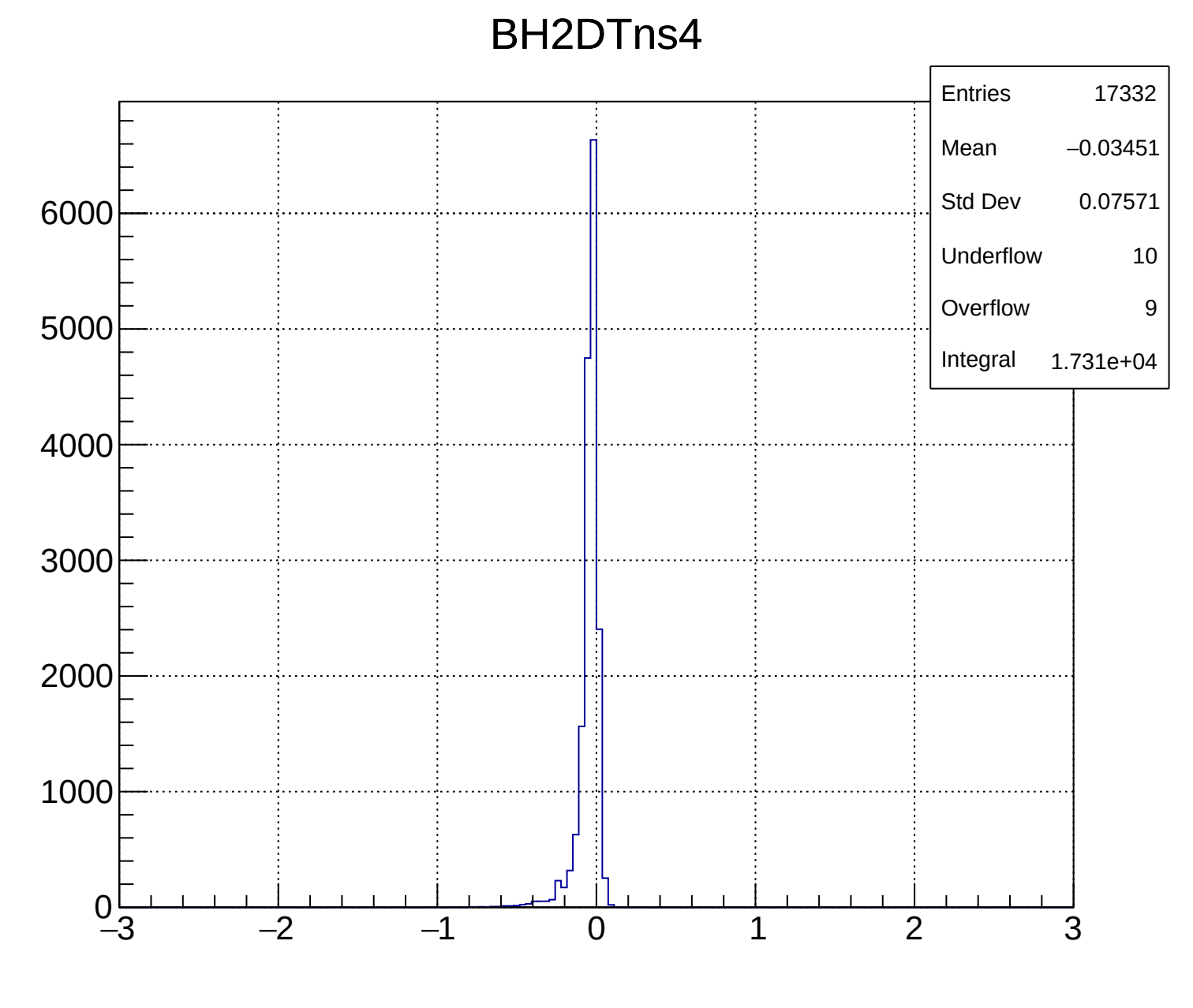

BH2UT04
Entries 17332
Mean –0.6105
Std Dev 6.983
Underflow 0
Overflow 10
Integral 1.731e+04
1000
800
600
400
200
0
–50
–40
–30
–20
–10
0
10
20
30
40
50

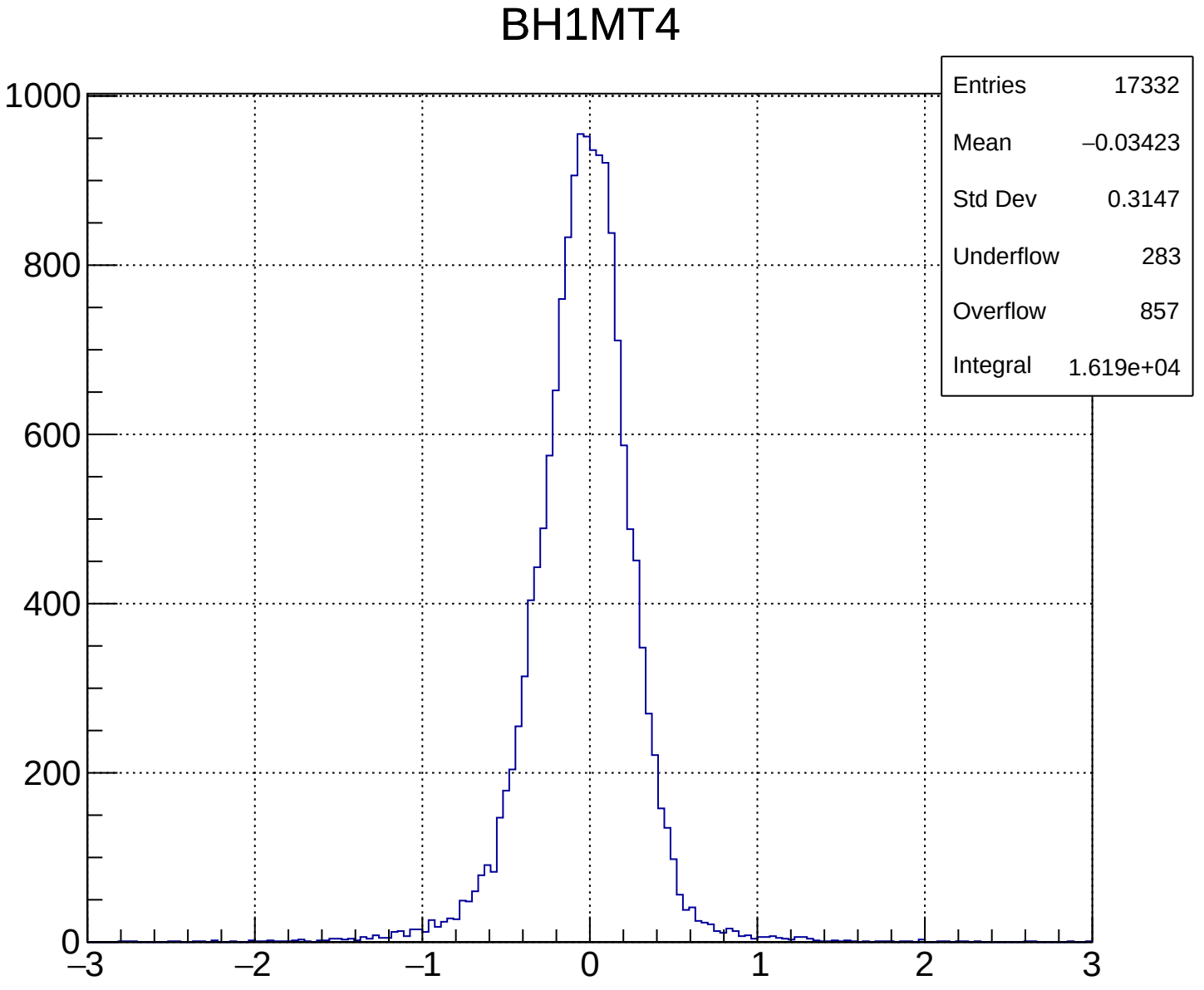

BH2DT04
Entries 17332
Mean –1.323
Std Dev 2.084
Underflow 0
Overflow 9
Integral 1.731e+04
6000
5000
4000
3000
2000
1000
0
–50
–40
–30
–20
–10
0
10
20
30
40
50

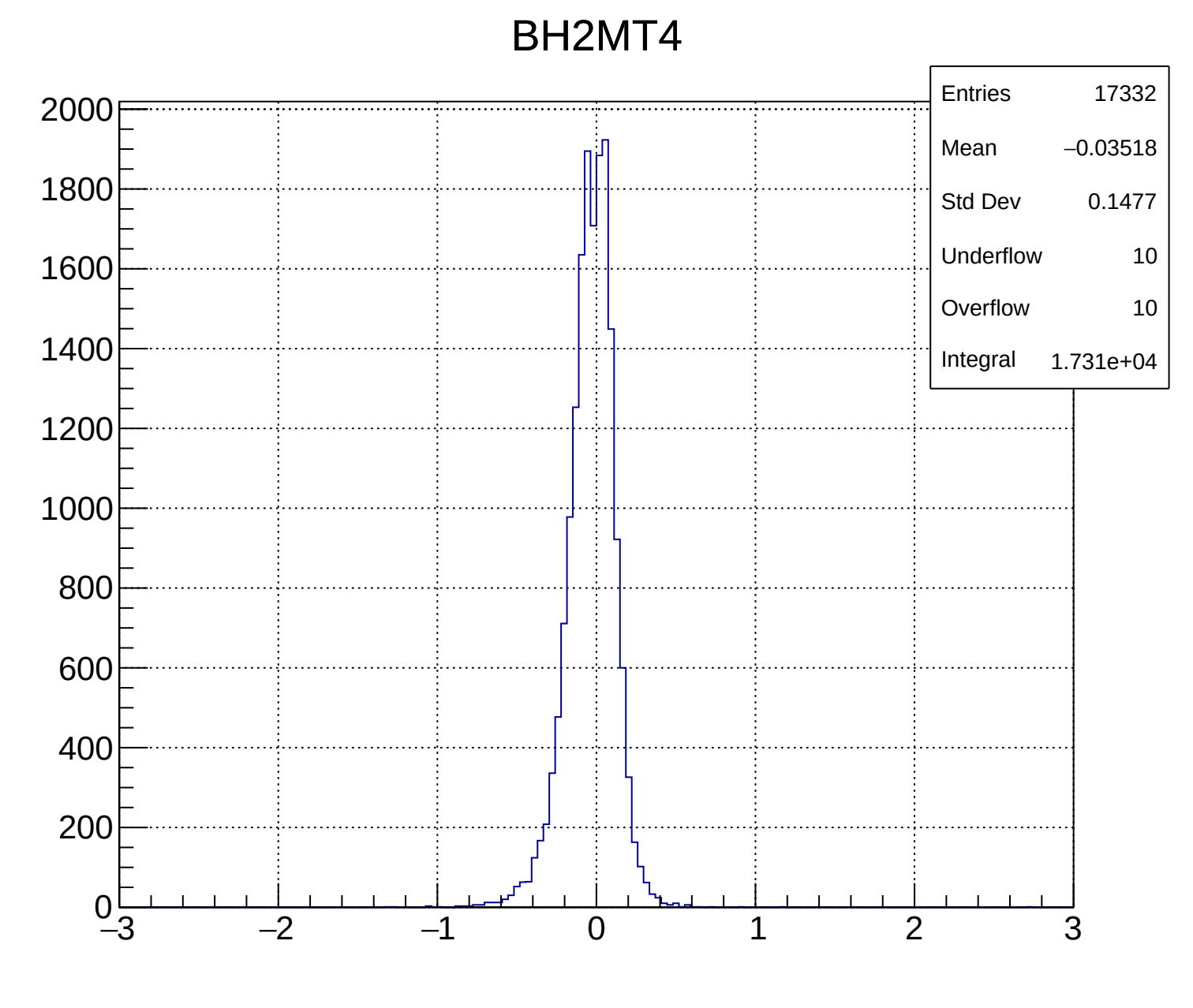

BH1UTns4
Entries 17332
Mean −0.02847
Std Dev 0.3496
Underflow 284
Overflow 861
Integral 1.619e+04
1800
1600
1400
1200
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

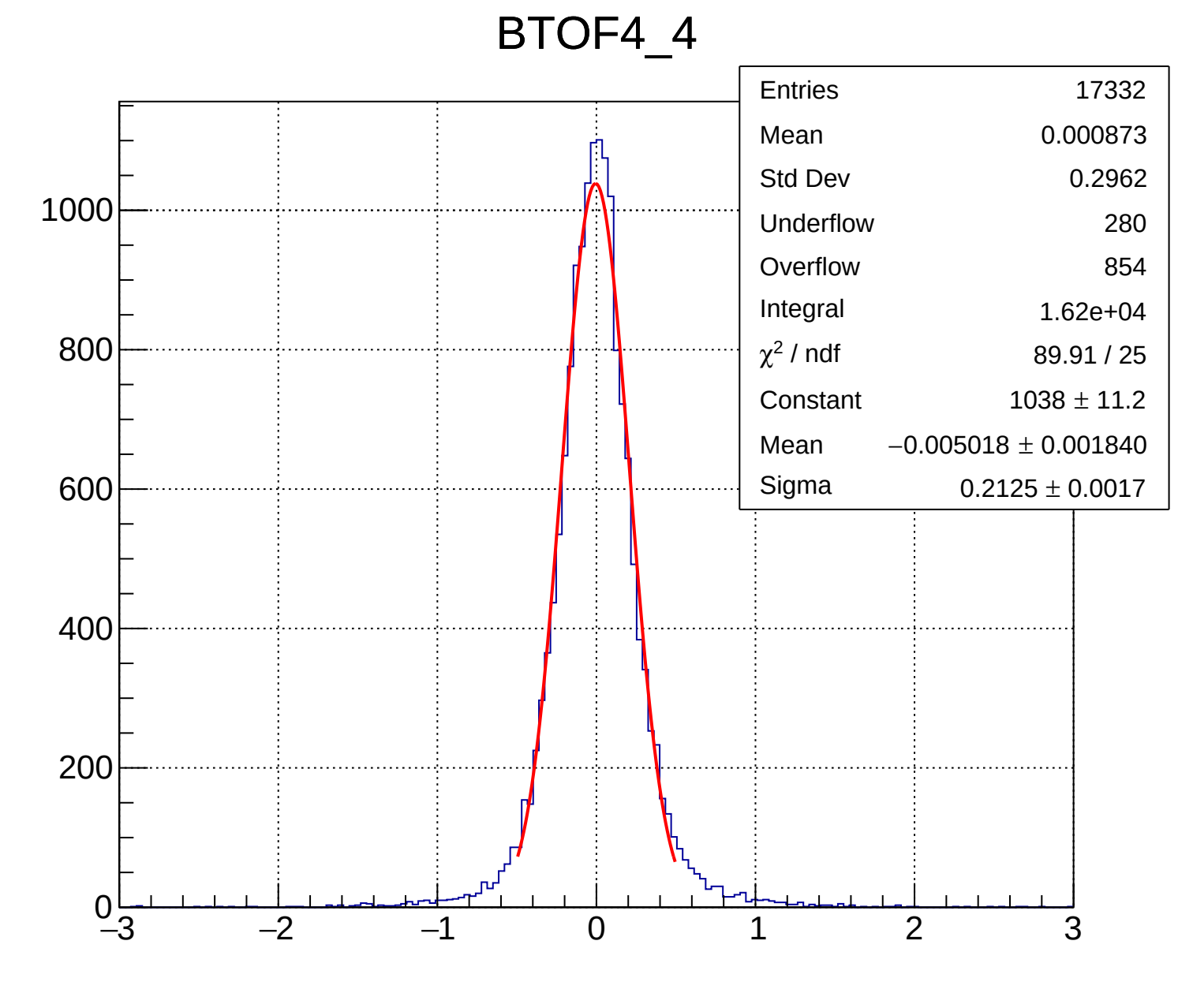

BH1DTns4
Entries 17332
Mean −0.04103
Std Dev 0.3269
Underflow 282
Overflow 852
Integral 1.62e+04
900
800
700
600
500
400
300
200
100
0
−3
−2
−1
0
1
2
3

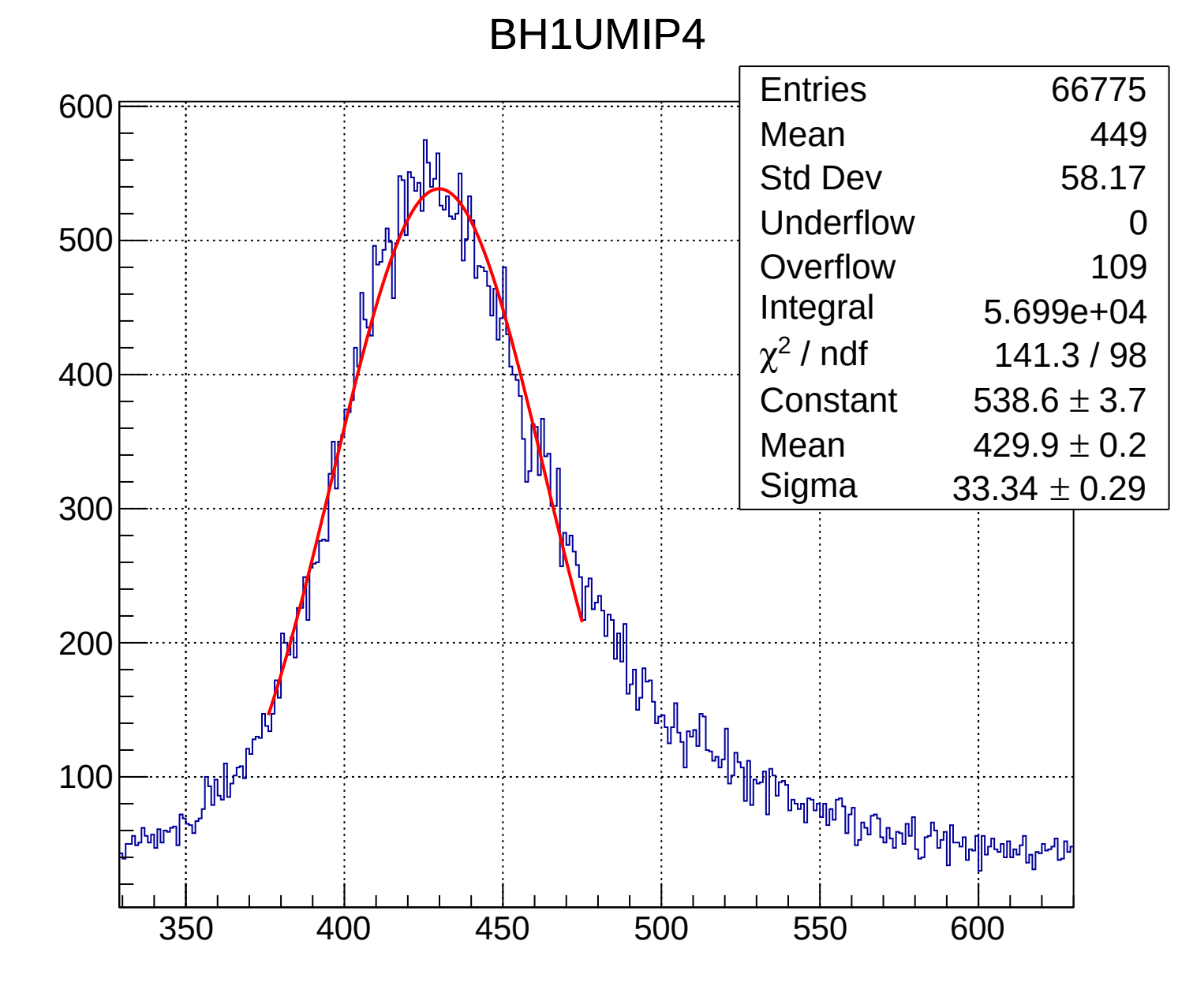

BH2UTns4
Entries 17332
Mean –0.0362
Std Dev 0.2678
Underflow 10
Overflow 11
Integral 1.731e+04
1000
800
600
400
200
0
–3
–2
–1
0
1
2
3

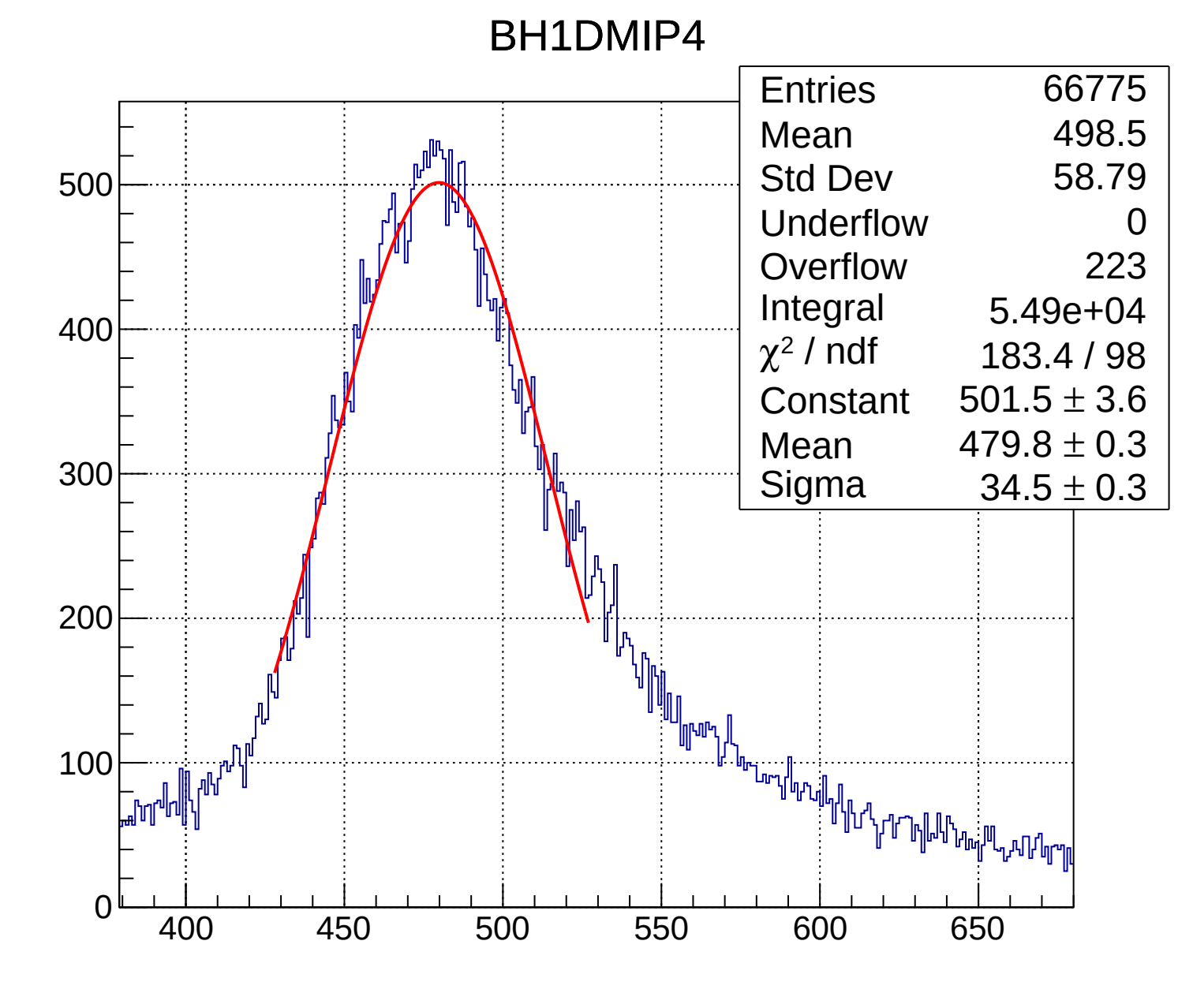

BH2DTns4
Entries 17332
Mean −0.03451
Std Dev 0.07571
Underflow 10
Overflow 9
Integral 1.731e+04
6000
5000
4000
3000
2000
1000
0
−3
−2
−1
0
1
2
3

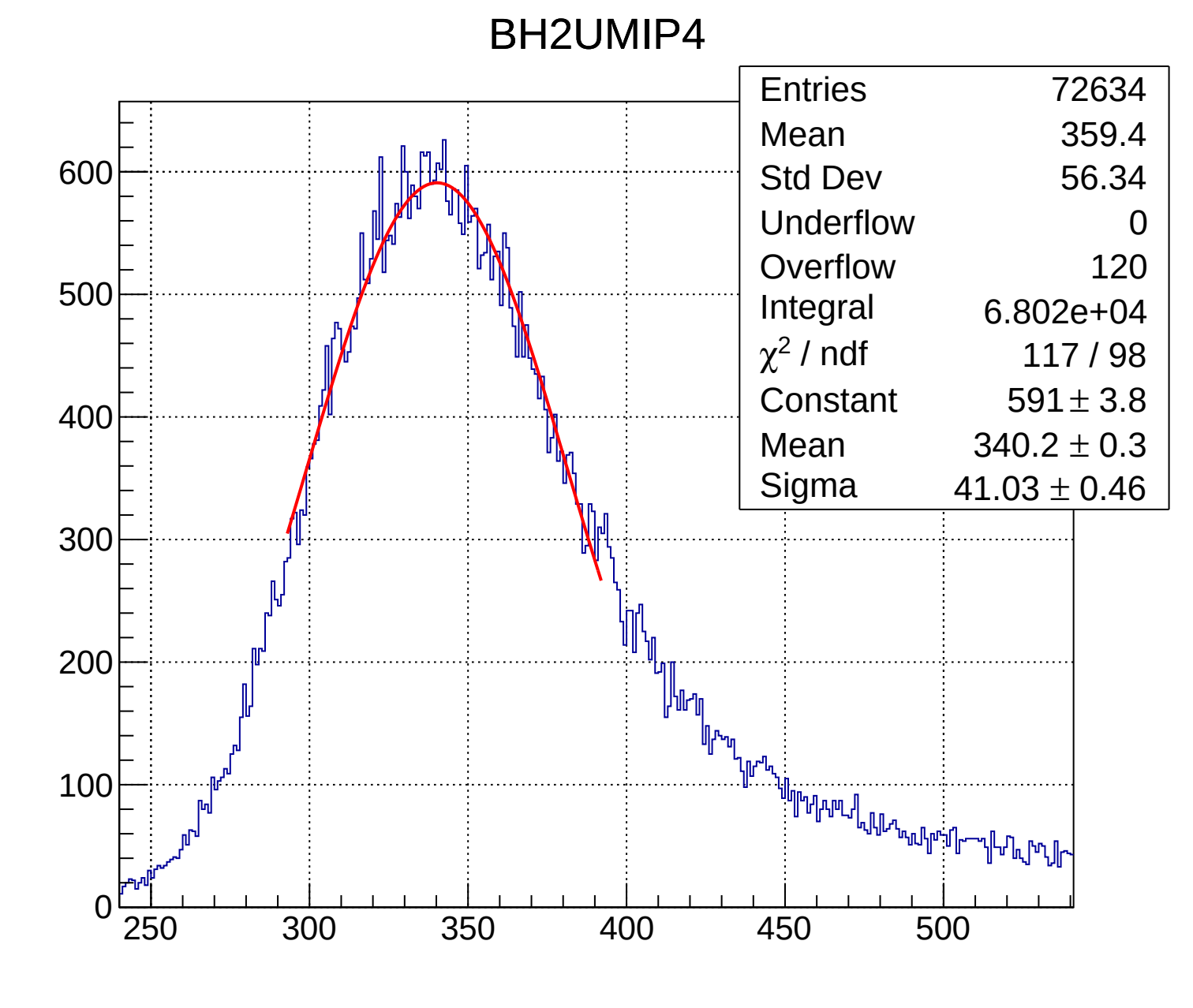

BH1MT4
Entries 17332
Mean −0.03423
Std Dev 0.3147
Underflow 283
Overflow 857
Integral 1.619e+04
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

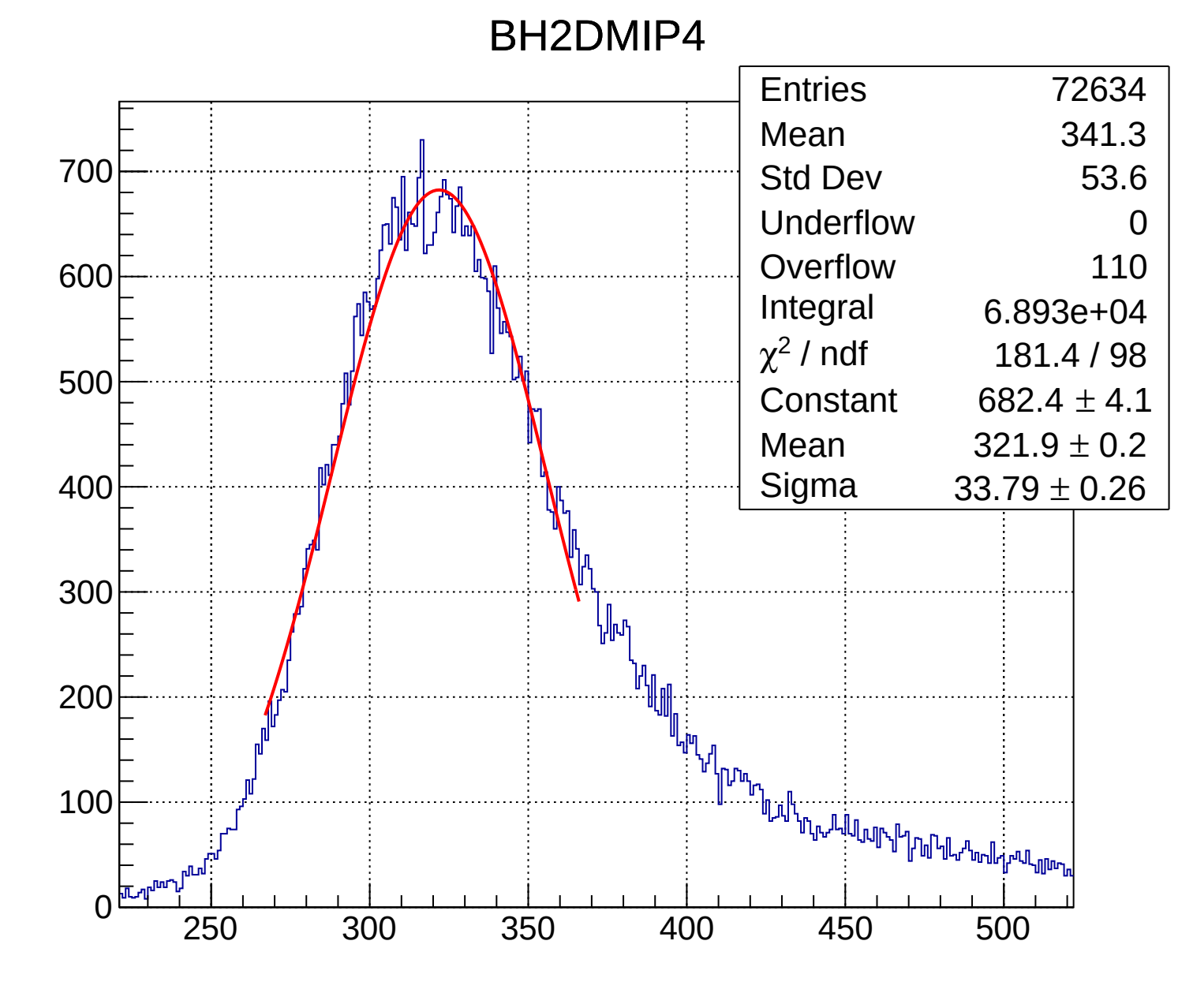

BH2MT4
Entries 17332
Mean −0.03518
Std Dev 0.1477
Underflow 10
Overflow 10
Integral 1.731e+04
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

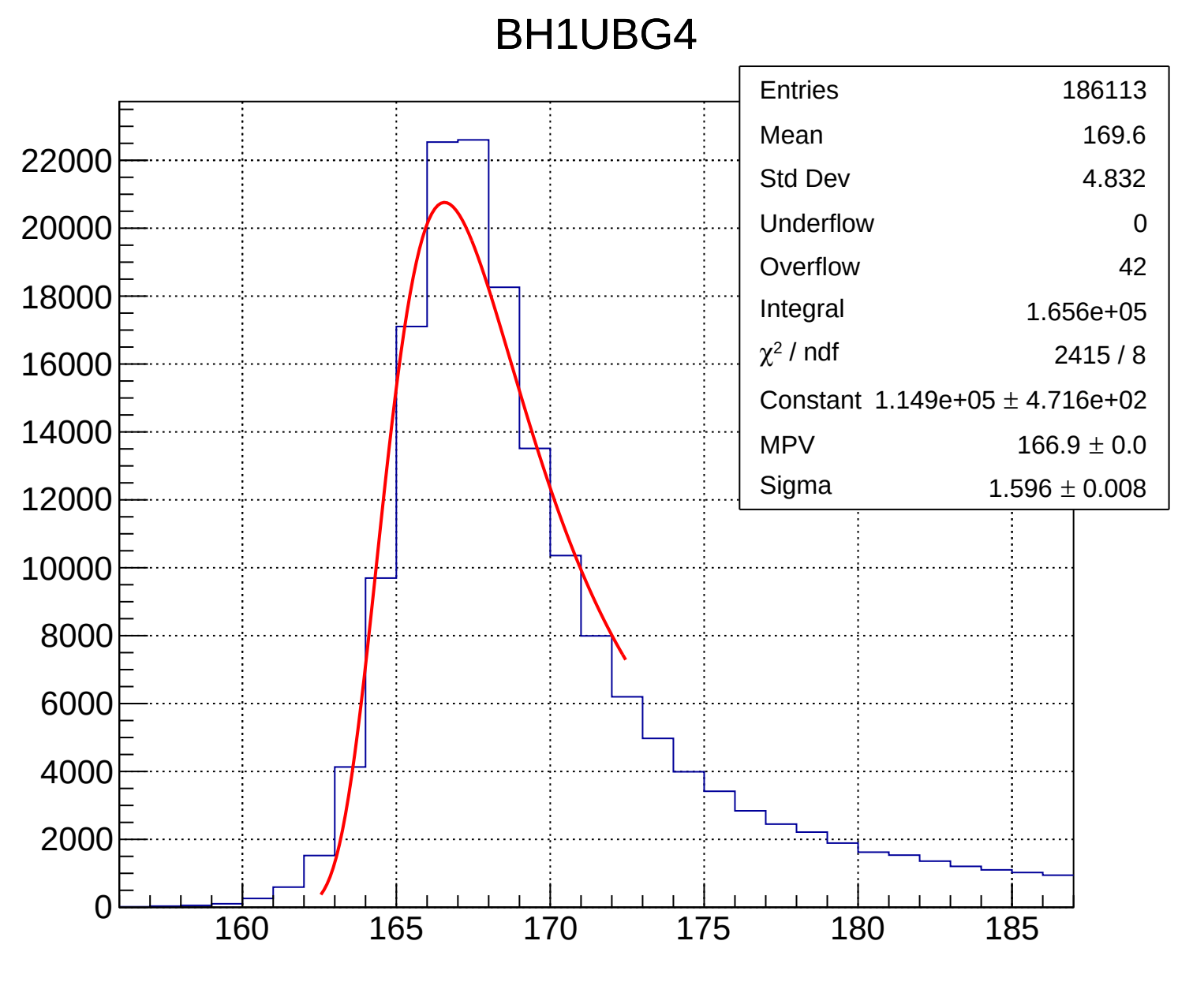

BTOF4_4
Entries 17332
Mean 0.000873
Std Dev 0.2962
Underflow 280
Overflow 854
Integral 1.62e+04
χ² / ndf 89.91 / 25
Constant 1038 ± 11.2
Mean −0.005018 ± 0.001840
Sigma 0.2125 ± 0.0017
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

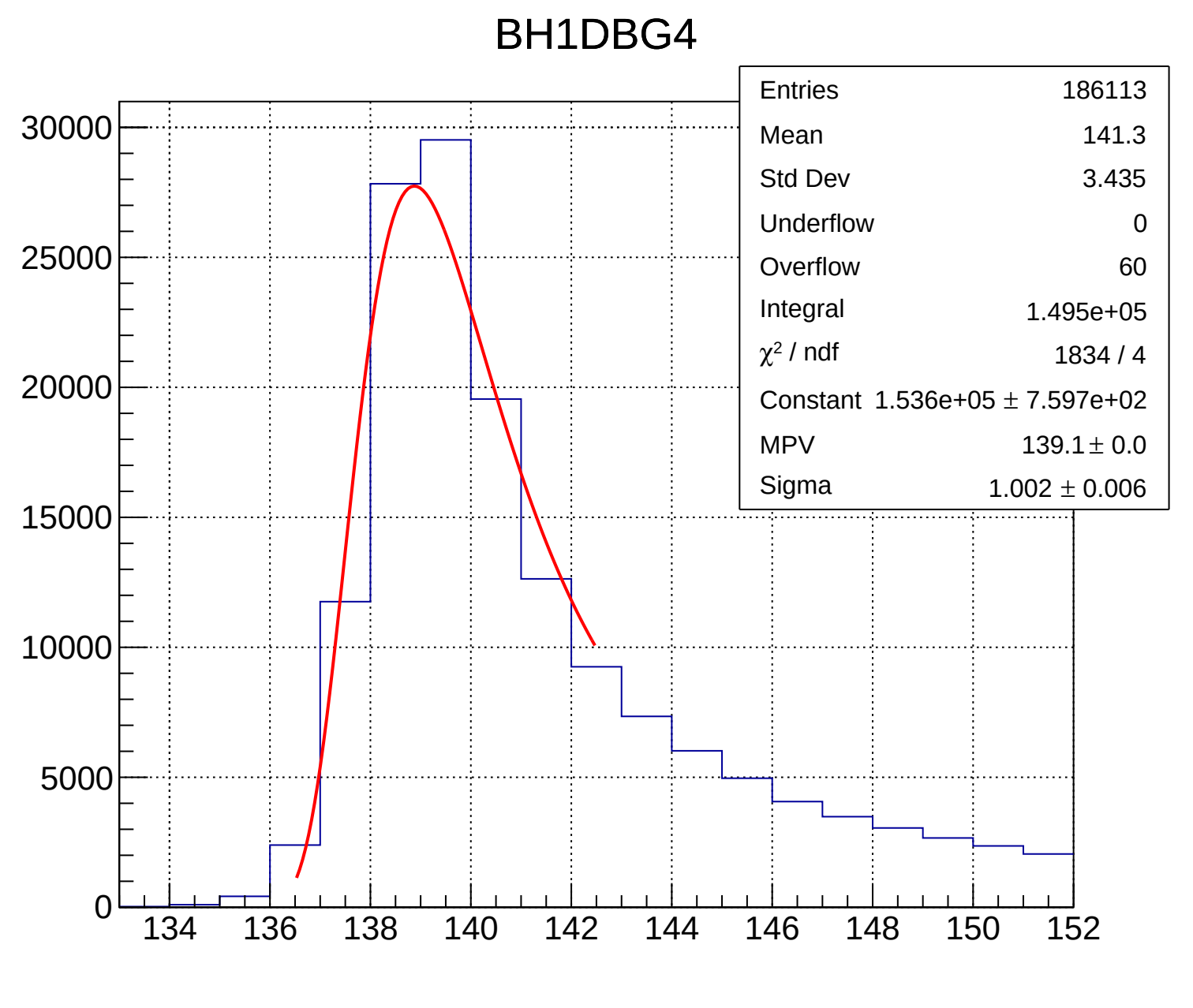

BH1UMIP4
Entries 66775
Mean 449
Std Dev 58.17
Underflow 0
Overflow 109
Integral 5.699e+04
χ² / ndf 141.3 / 98
Constant 538.6 ± 3.7
Mean 429.9 ± 0.2
Sigma 33.34 ± 0.29
600
500
400
300
200
100
350
400
450
500
550
600

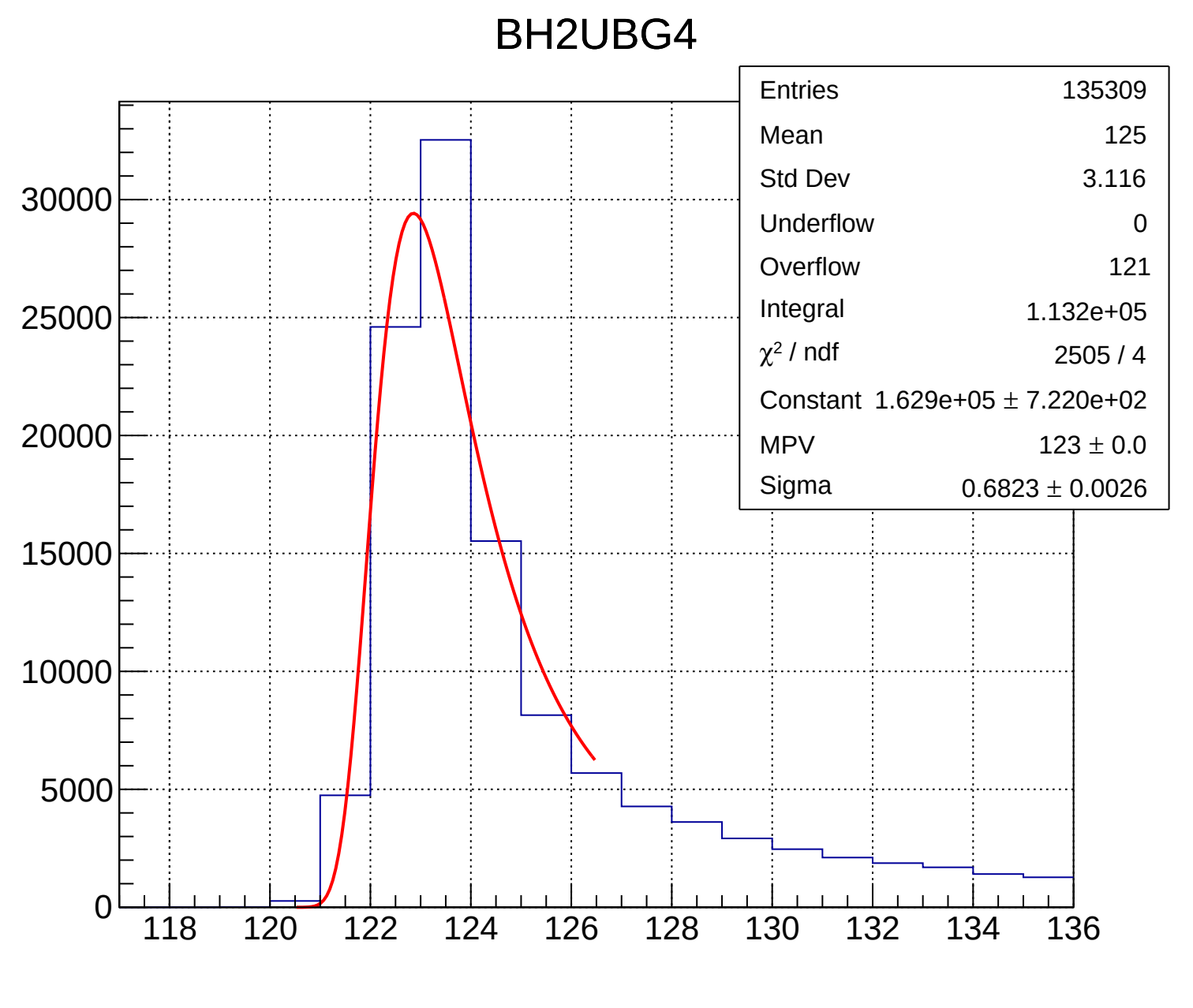

BH1DMIP4
Entries 66775
Mean 498.5
Std Dev 58.79
Underflow 0
Overflow 223
Integral 5.49e+04
χ² / ndf 183.4 / 98
Constant 501.5 ± 3.6
Mean 479.8 ± 0.3
Sigma 34.5 ± 0.3
0
100
200
300
400
500
400
450
500
550
600
650

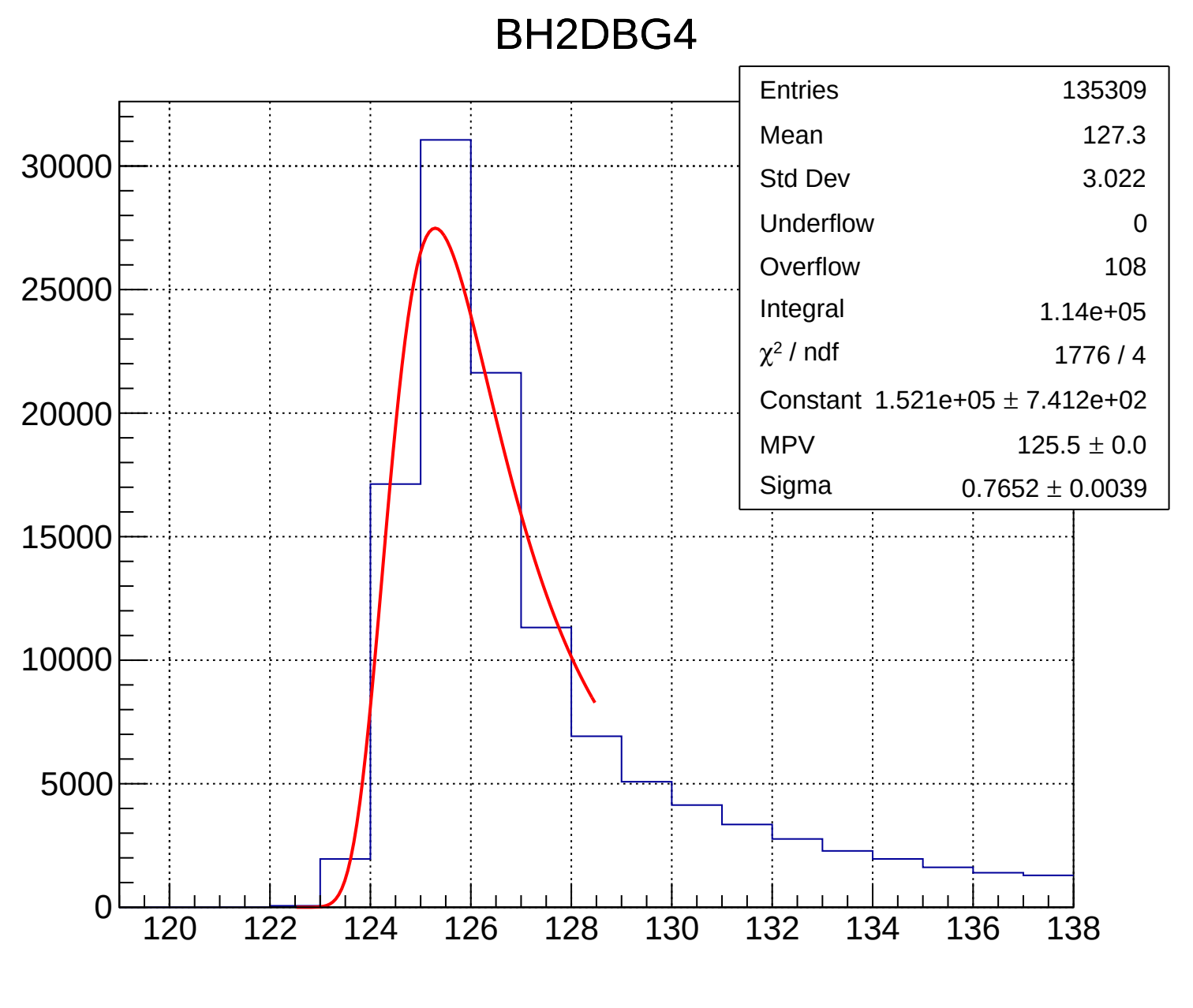

BH2UMIP4
Entries 72634
Mean 359.4
Std Dev 56.34
Underflow 0
Overflow 120
Integral 6.802e+04
χ² / ndf 117 / 98
Constant 591 ± 3.8
Mean 340.2 ± 0.3
Sigma 41.03 ± 0.46
600
500
400
300
200
100
0
250
300
350
400
450
500

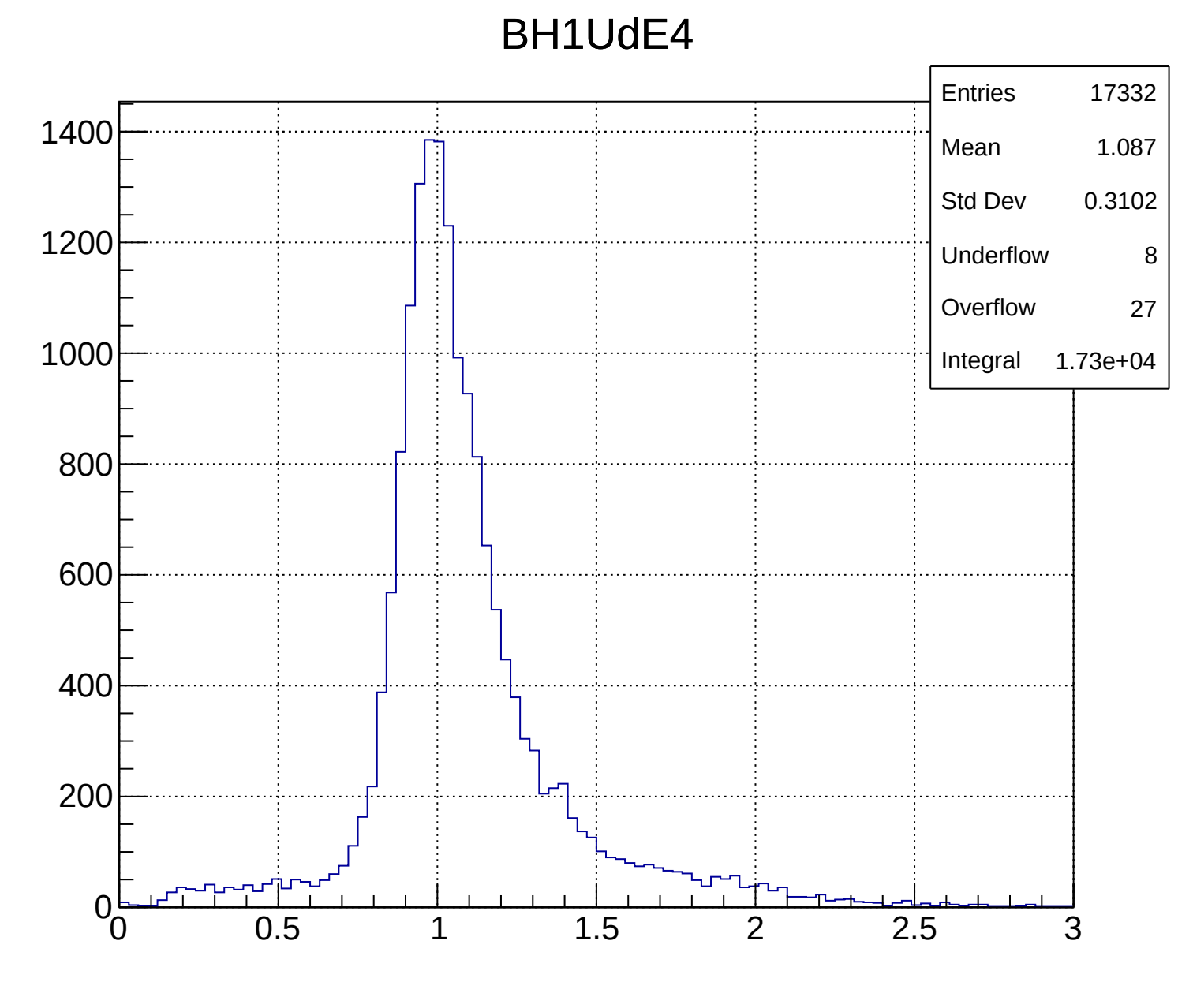

BH2DMIP4
Entries 72634
Mean 341.3
Std Dev 53.6
Underflow 0
Overflow 110
Integral 6.893e+04
χ² / ndf 181.4 / 98
Constant 682.4 ± 4.1
Mean 321.9 ± 0.2
Sigma 33.79 ± 0.26
0
100
200
300
400
500
600
700
250
300
350
400
450
500

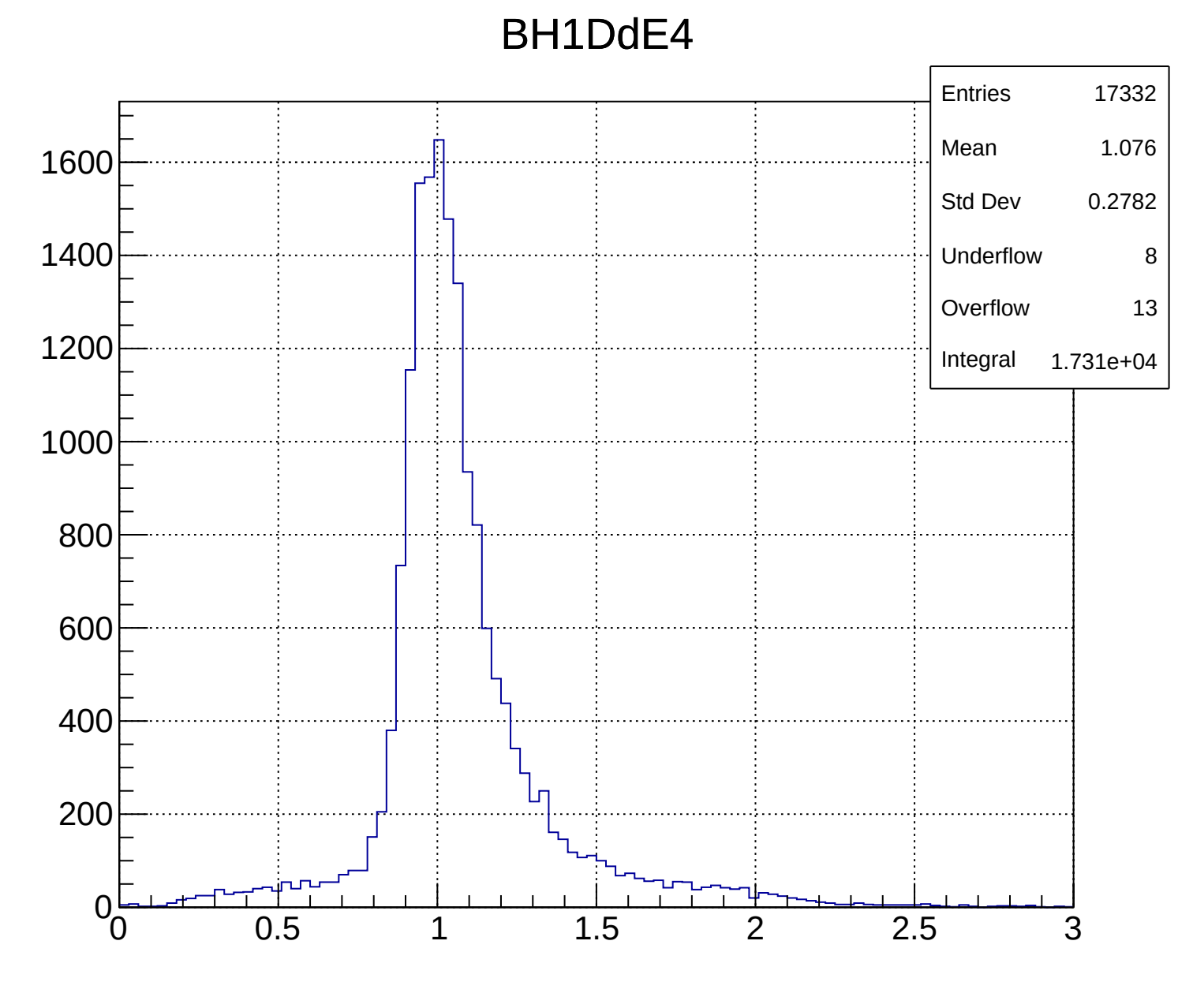

BH1UBG4
Entries 186113
Mean 169.6
Std Dev 4.832
Underflow 0
Overflow 42
Integral 1.656e+05
χ² / ndf 2415 / 8
Constant 1.149e+05 ± 4.716e+02
MPV 166.9 ± 0.0
Sigma 1.596 ± 0.008
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
160
165
170
175
180
185

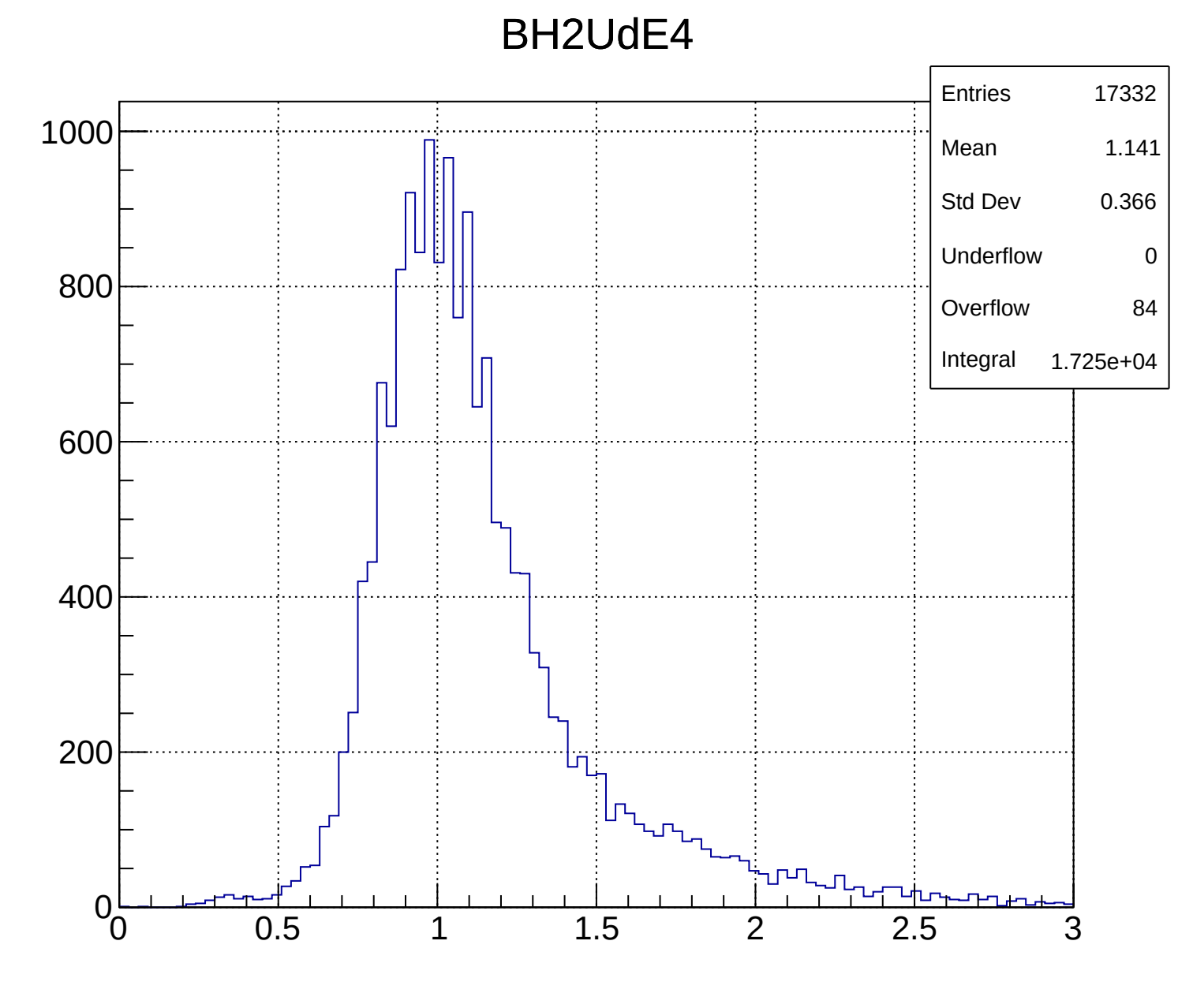

BH1DBG4
Entries 186113
Mean 141.3
Std Dev 3.435
Underflow 0
Overflow 60
Integral 1.495e+05
χ² / ndf 1834 / 4
Constant 1.536e+05 ± 7.597e+02
MPV 139.1 ± 0.0
Sigma 1.002 ± 0.006
30000
25000
20000
15000
10000
5000
0
134
136
138
140
142
144
146
148
150
152

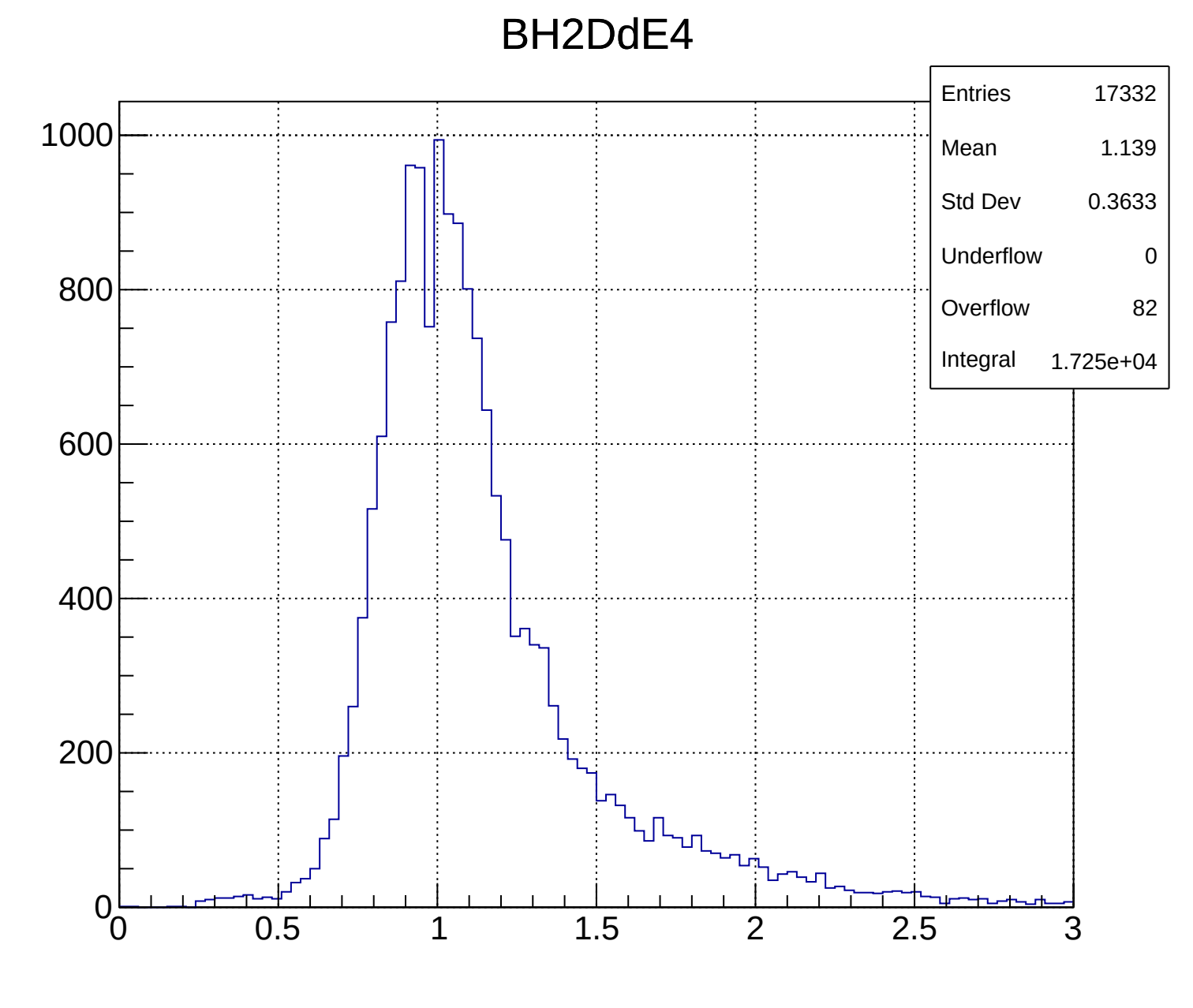

BH2UBG4
Entries 135309
Mean 125
Std Dev 3.116
Underflow 0
Overflow 121
Integral 1.132e+05
χ² / ndf 2505 / 4
Constant 1.629e+05 ± 7.220e+02
MPV 123 ± 0.0
Sigma 0.6823 ± 0.0026
30000
25000
20000
15000
10000
5000
0
118
120
122
124
126
128
130
132
134
136

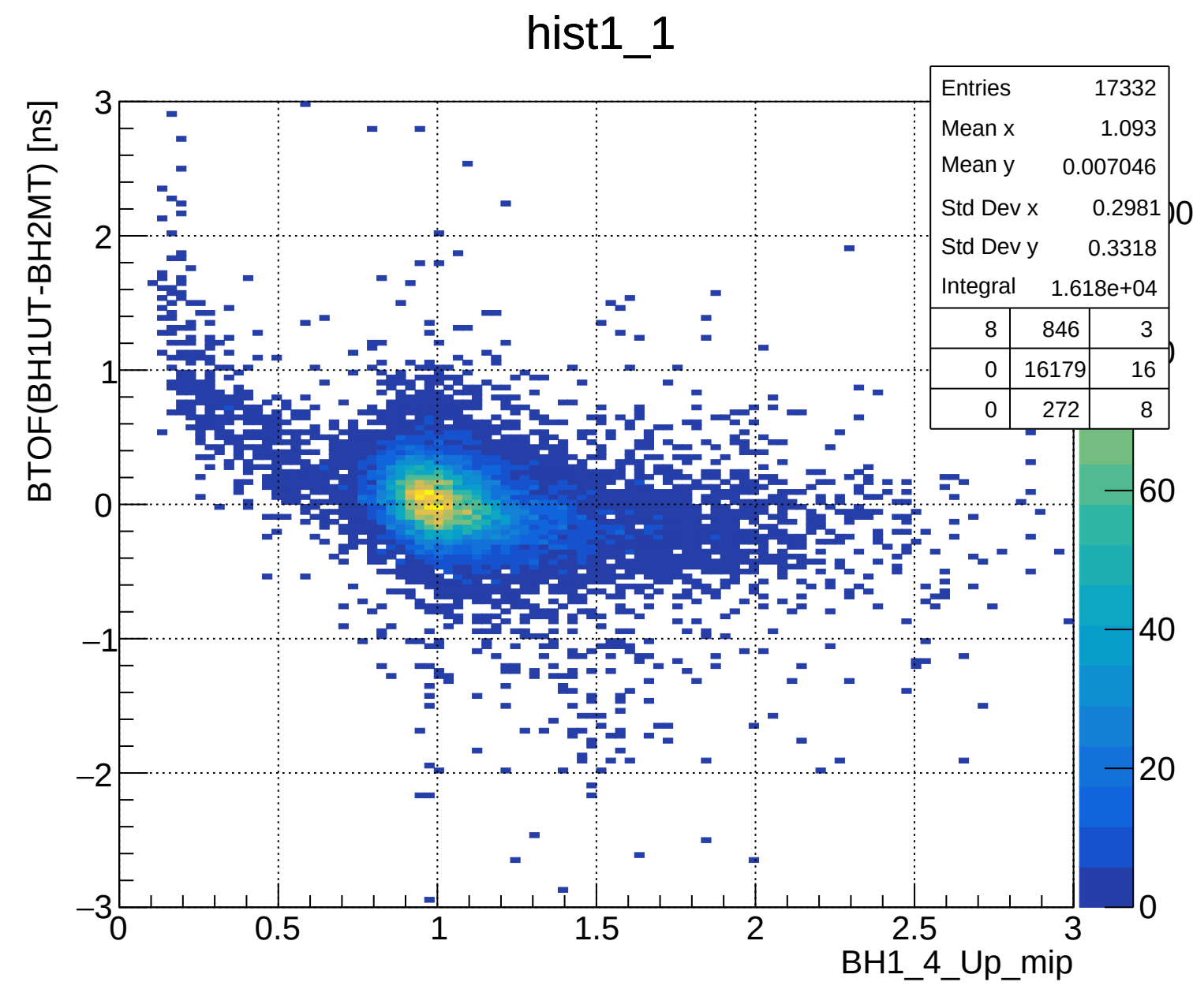

BH2DBG4
Entries 135309
Mean 127.3
Std Dev 3.022
Underflow 0
Overflow 108
Integral 1.14e+05
χ² / ndf 1776 / 4
Constant 1.521e+05 ± 7.412e+02
MPV 125.5 ± 0.0
Sigma 0.7652 ± 0.0039
30000
25000
20000
15000
10000
5000
0
120
122
124
126
128
130
132
134
136
138

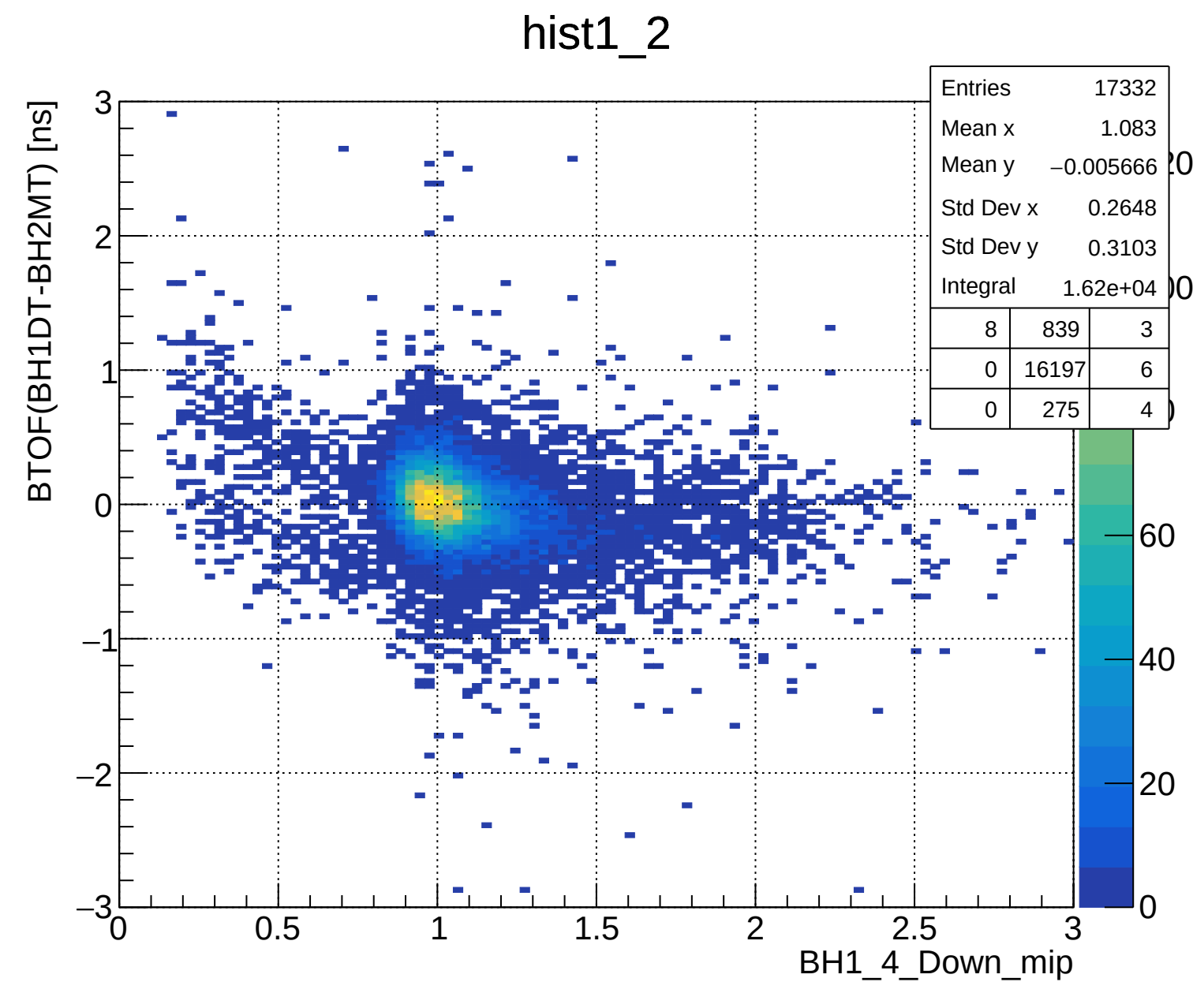

BH1UdE4
Entries 17332
Mean 1.087
Std Dev 0.3102
Underflow 8
Overflow 27
Integral 1.73e+04
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5
3

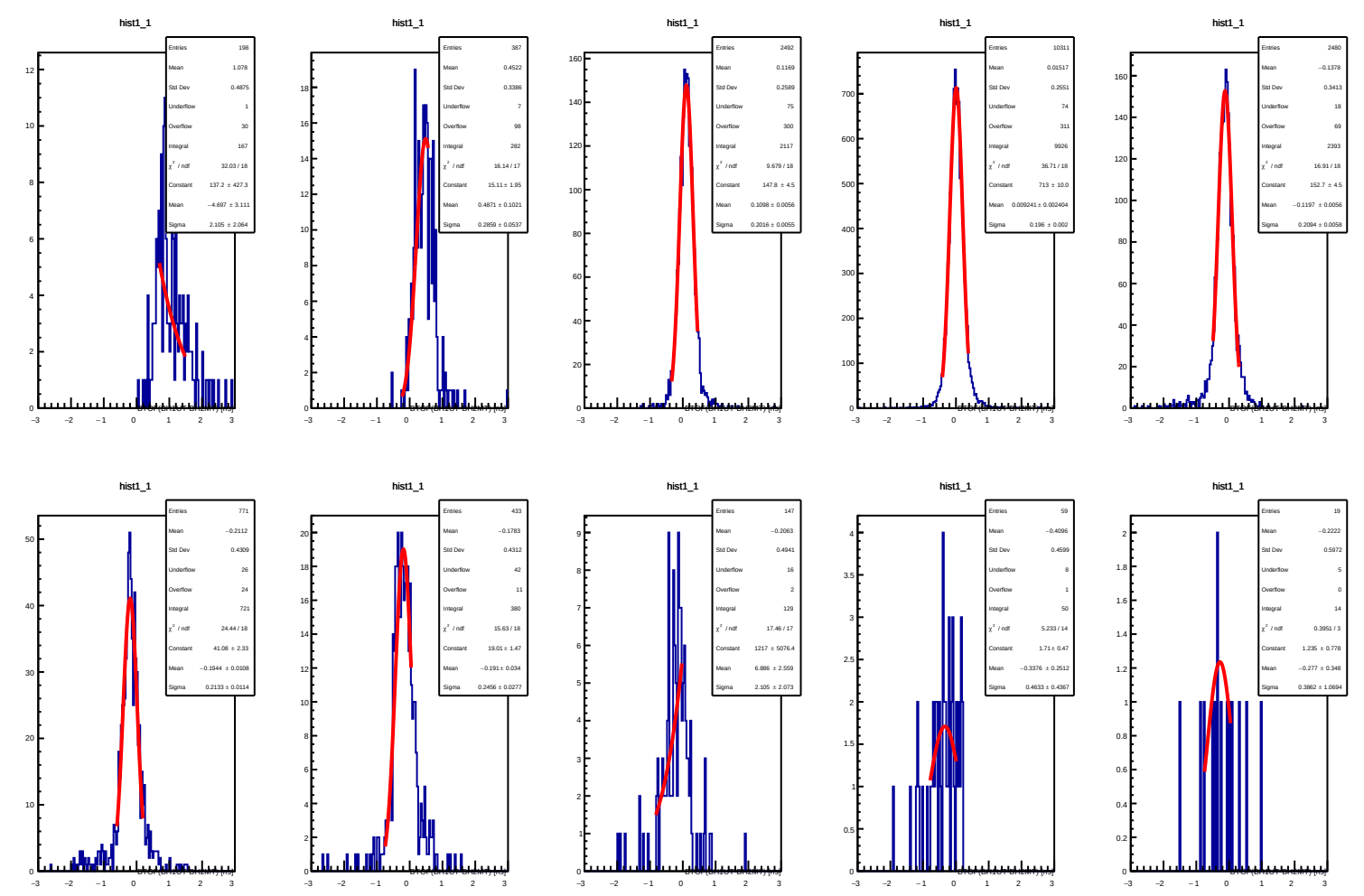

BH1DdE4
Entries 17332
Mean 1.076
Std Dev 0.2782
Underflow 8
Overflow 13
Integral 1.731e+04
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5
3

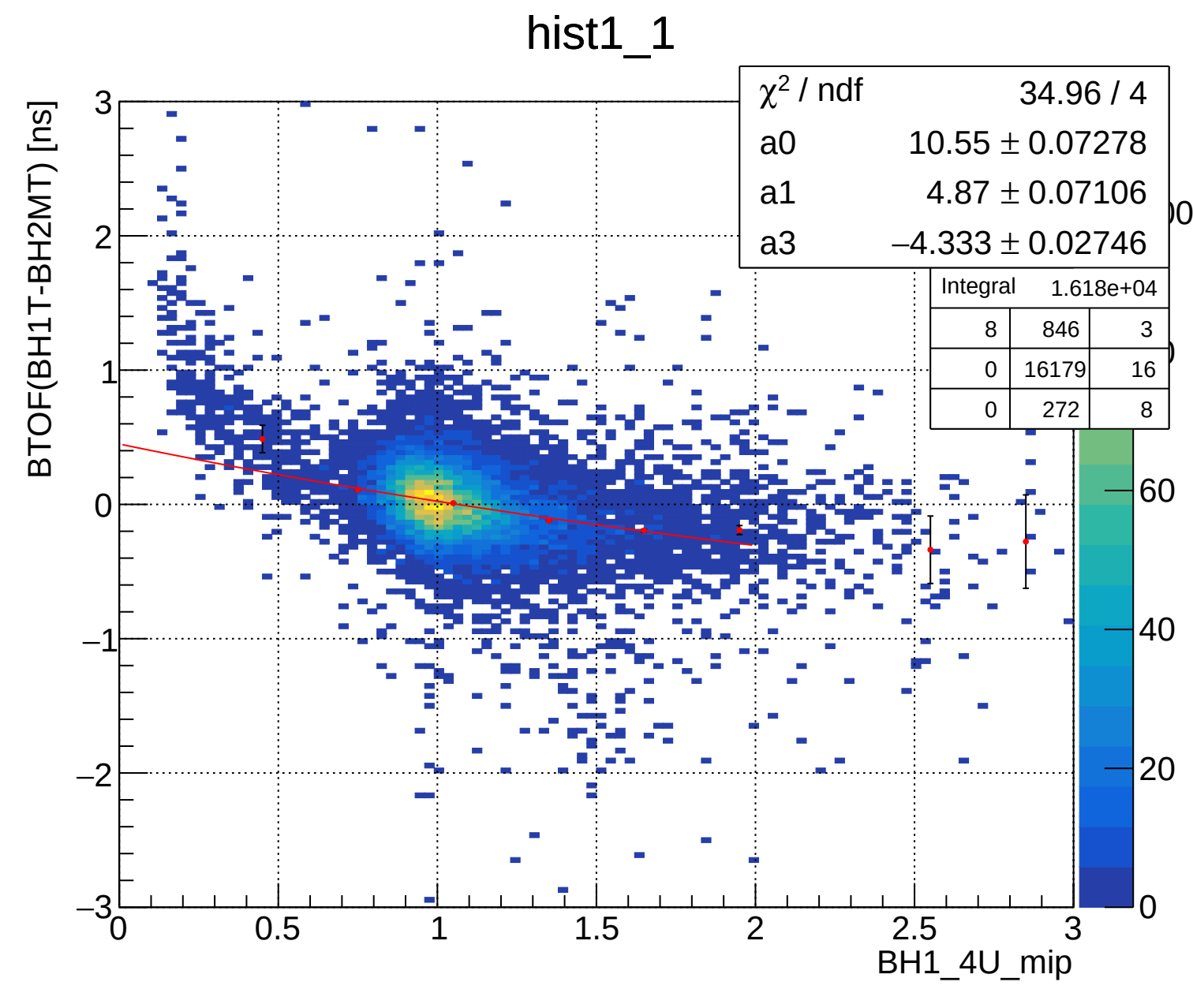

BH2UdE4
Entries 17332
Mean 1.141
Std Dev 0.366
Underflow 0
Overflow 84
Integral 1.725e+04
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5
3

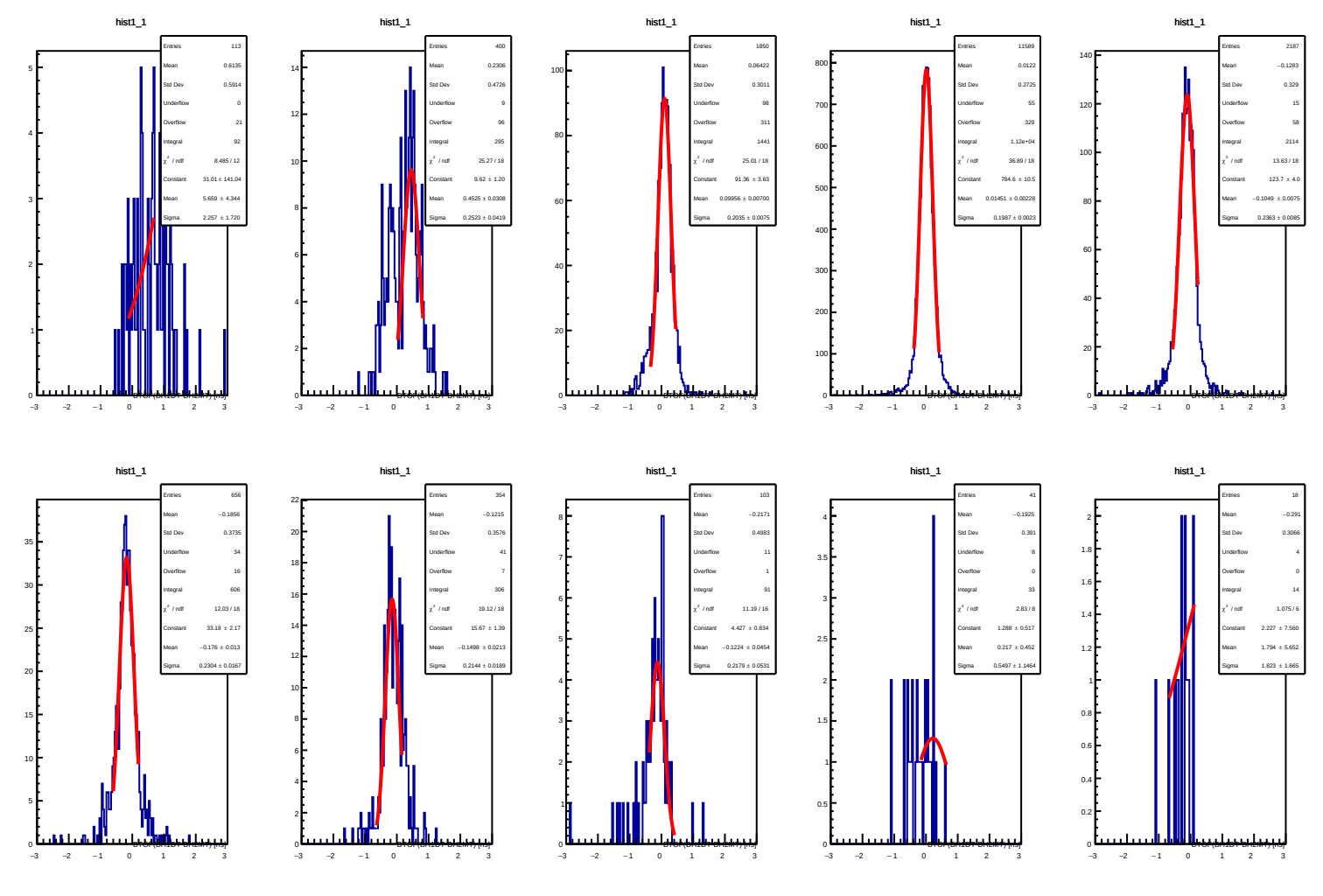

BH2DdE4
Entries 17332
Mean 1.139
Std Dev 0.3633
Underflow 0
Overflow 82
Integral 1.725e+04
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5
3

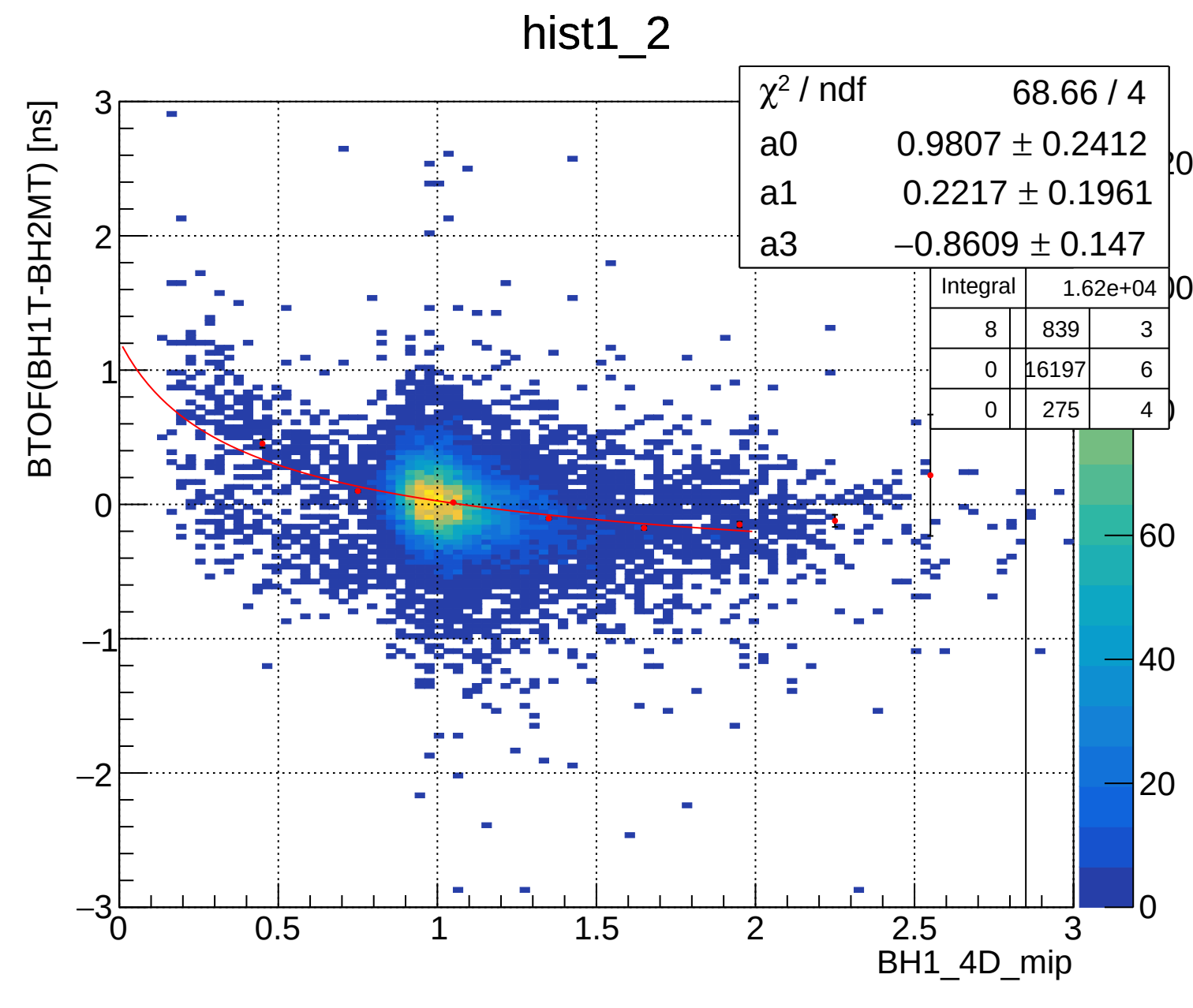

hist1_1
Entries 17332
Mean x 1.093
Mean y 0.007046
Std Dev x 0.2981
Std Dev y 0.3318
Integral 1.618e+04
8 846 3
0 16179 16
0 272 8
BTOF(BH1UT-BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

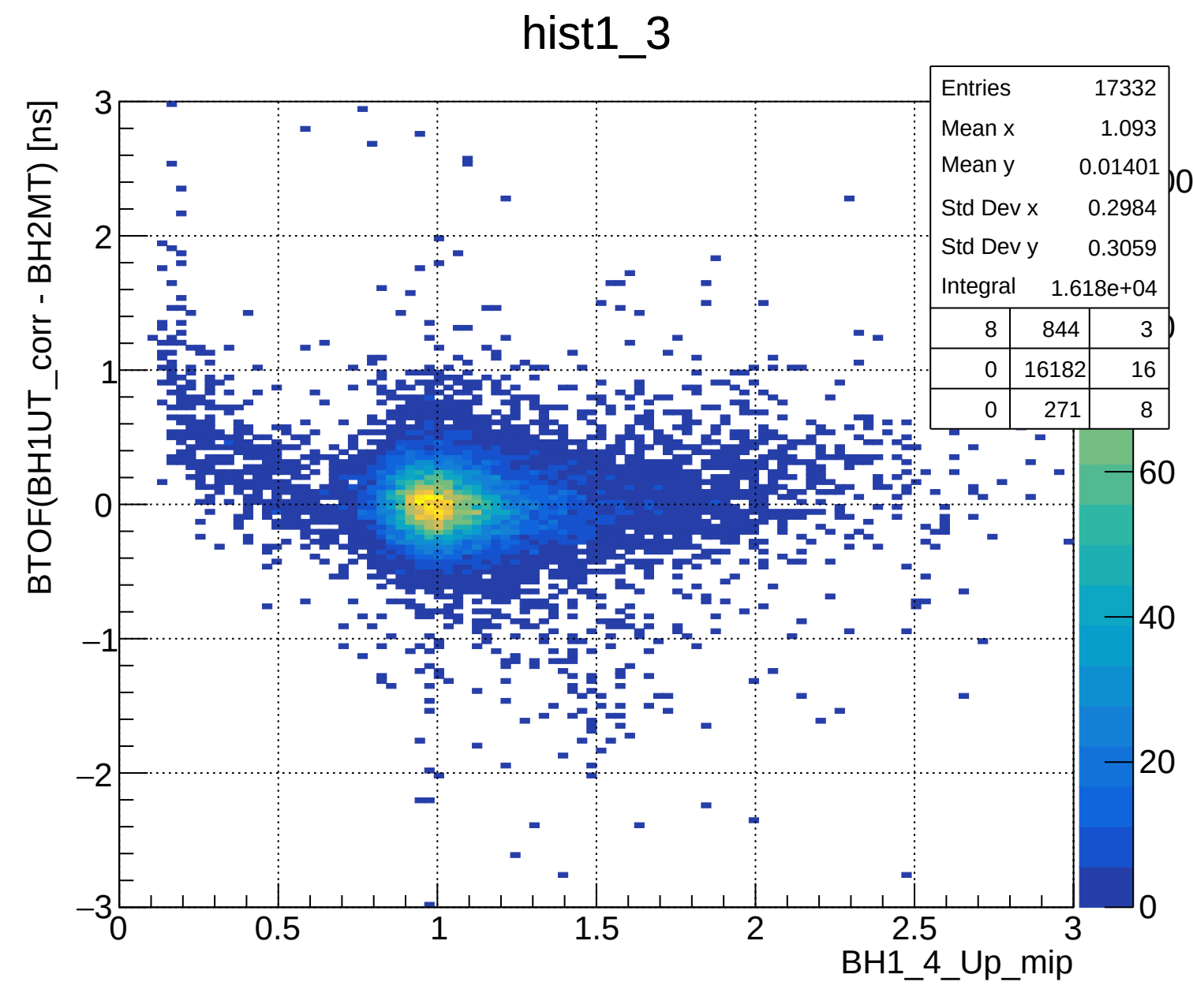

hist1_2
Entries 17332
Mean x 1.083
Mean y −0.005666
Std Dev x 0.2648
Std Dev y 0.3103
Integral 1.62e+04
8 839 3
0 16197 6
0 275 4
BTOF(BH1DT-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

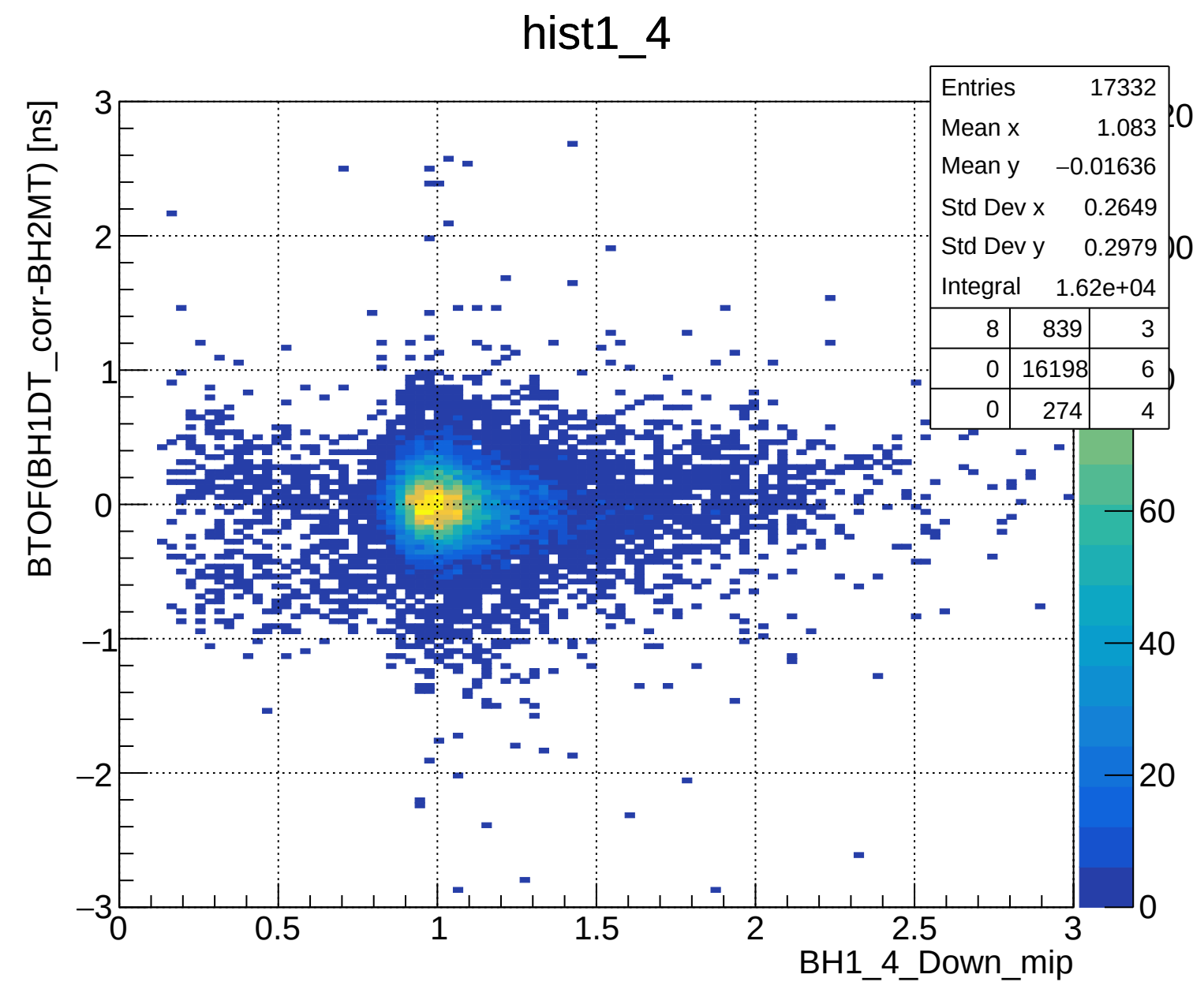

hist1_1
Entries 198
Mean 1.078
Std Dev 0.4875
Underflow 1
Overflow 30
Integral 167
χ² / ndf 32.03 / 18
Constant 137.2 ± 427.3
Mean −4.697 ± 3.111
Sigma 2.105 ± 2.064
hist1_1
Entries 387
Mean 0.4522
Std Dev 0.3386
Underflow 7
Overflow 98
Integral 282
χ² / ndf 16.14 / 17
Constant 15.11 ± 1.95
Mean 0.4871 ± 0.1021
Sigma 0.2859 ± 0.0537
hist1_1
Entries 2492
Mean 0.1169
Std Dev 0.2589
Underflow 75
Overflow 300
Integral 2117
χ² / ndf 9.679 / 18
Constant 147.8 ± 4.5
Mean 0.1098 ± 0.0056
Sigma 0.2016 ± 0.0055
hist1_1
Entries 10311
Mean 0.01517
Std Dev 0.2551
Underflow 74
Overflow 311
Integral 9926
χ² / ndf 36.71 / 18
Constant 713 ± 10.0
Mean 0.009241 ± 0.002404
Sigma 0.196 ± 0.002
hist1_1
Entries 2480
Mean −0.1378
Std Dev 0.3413
Underflow 18
Overflow 69
Integral 2393
χ² / ndf 16.91 / 18
Constant 152.7 ± 4.5
Mean −0.1197 ± 0.0056
Sigma 0.2094 ± 0.0058
hist1_1
Entries 771
Mean −0.2112
Std Dev 0.4309
Underflow 26
Overflow 24
Integral 721
χ² / ndf 24.44 / 18
Constant 41.08 ± 2.33
Mean −0.1944 ± 0.0108
Sigma 0.2133 ± 0.0114
hist1_1
Entries 433
Mean −0.1783
Std Dev 0.4312
Underflow 42
Overflow 11
Integral 380
χ² / ndf 15.63 / 18
Constant 19.01 ± 1.47
Mean −0.191 ± 0.034
Sigma 0.2456 ± 0.0277
hist1_1
Entries 147
Mean −0.2063
Std Dev 0.4941
Underflow 16
Overflow 2
Integral 129
χ² / ndf 17.46 / 17
Constant 1217 ± 5076.4
Mean 6.886 ± 2.559
Sigma 2.105 ± 2.073
hist1_1
Entries 59
Mean −0.4096
Std Dev 0.4599
Underflow 8
Overflow 1
Integral 50
χ² / ndf 5.233 / 14
Constant 1.71 ± 0.47
Mean −0.3376 ± 0.2512
Sigma 0.4633 ± 0.4367
hist1_1
Entries 19
Mean −0.2222
Std Dev 0.5972
Underflow 5
Overflow 0
Integral 14
χ² / ndf 0.3951 / 3
Constant 1.235 ± 0.778
Mean −0.277 ± 0.348
Sigma 0.3862 ± 1.0694

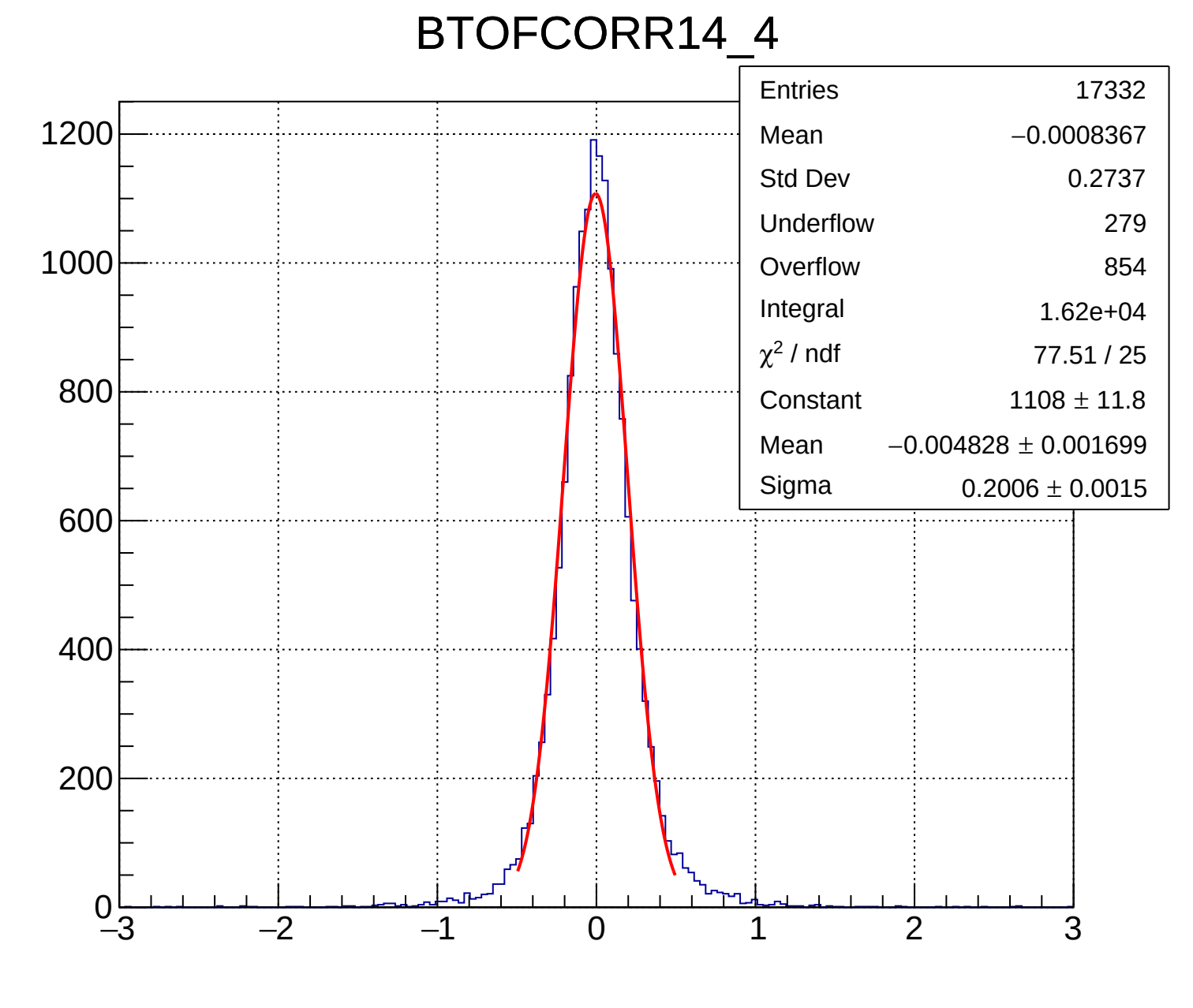

hist1_1
χ² / ndf 34.96 / 4
a0 10.55 ± 0.07278
a1 4.87 ± 0.07106
a3 −4.333 ± 0.02746
Integral 1.618e+04
8 846 3
0 16179 16
0 272 8
BTOF(BH1T-BH2MT) [ns]
BH1_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

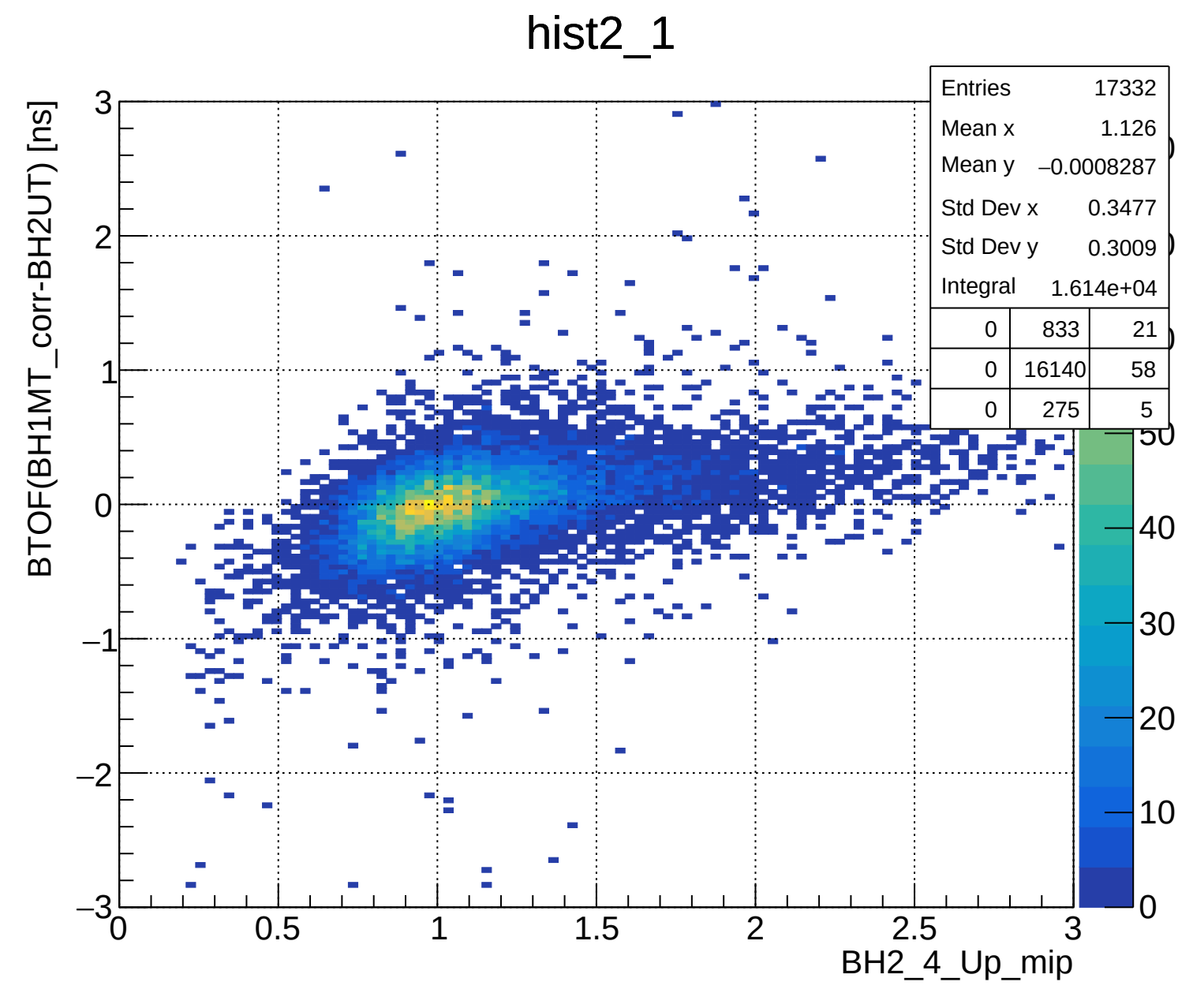

hist1_1
Entries 113
Mean 0.6135
Std Dev 0.5914
Underflow 0
Overflow 21
Integral 92
χ² / ndf 8.485 / 12
Constant 31.01 ± 141.04
Mean 5.659 ± 4.344
Sigma 2.257 ± 1.720
hist1_1
Entries 400
Mean 0.2306
Std Dev 0.4726
Underflow 9
Overflow 96
Integral 295
χ² / ndf 25.27 / 18
Constant 9.62 ± 1.20
Mean 0.4525 ± 0.0308
Sigma 0.2523 ± 0.0419
hist1_1
Entries 1850
Mean 0.06422
Std Dev 0.3011
Underflow 98
Overflow 311
Integral 1441
χ² / ndf 25.01 / 18
Constant 91.36 ± 3.63
Mean 0.09956 ± 0.00700
Sigma 0.2035 ± 0.0075
hist1_1
Entries 11589
Mean 0.0122
Std Dev 0.2725
Underflow 55
Overflow 329
Integral 1.12e+04
χ² / ndf 36.89 / 18
Constant 784.6 ± 10.5
Mean 0.01451 ± 0.00228
Sigma 0.1987 ± 0.0023
hist1_1
Entries 2187
Mean −0.1283
Std Dev 0.329
Underflow 15
Overflow 58
Integral 2114
χ² / ndf 13.63 / 18
Constant 123.7 ± 4.0
Mean −0.1049 ± 0.0075
Sigma 0.2363 ± 0.0085
hist1_1
Entries 656
Mean −0.1856
Std Dev 0.3735
Underflow 34
Overflow 16
Integral 606
χ² / ndf 12.03 / 18
Constant 33.18 ± 2.17
Mean −0.176 ± 0.013
Sigma 0.2304 ± 0.0167
hist1_1
Entries 354
Mean −0.1215
Std Dev 0.3576
Underflow 41
Overflow 7
Integral 306
χ² / ndf 19.12 / 18
Constant 15.67 ± 1.39
Mean −0.1498 ± 0.0213
Sigma 0.2144 ± 0.0189
hist1_1
Entries 103
Mean −0.2171
Std Dev 0.4983
Underflow 11
Overflow 1
Integral 91
χ² / ndf 11.19 / 16
Constant 4.427 ± 0.834
Mean −0.1224 ± 0.0454
Sigma 0.2179 ± 0.0531
hist1_1
Entries 41
Mean −0.1925
Std Dev 0.391
Underflow 8
Overflow 0
Integral 33
χ² / ndf 2.83 / 8
Constant 1.288 ± 0.517
Mean 0.217 ± 0.452
Sigma 0.5497 ± 1.1464
hist1_1
Entries 18
Mean −0.291
Std Dev 0.3066
Underflow 4
Overflow 0
Integral 14
χ² / ndf 1.075 / 6
Constant 2.227 ± 7.560
Mean 1.794 ± 5.652
Sigma 1.823 ± 1.665

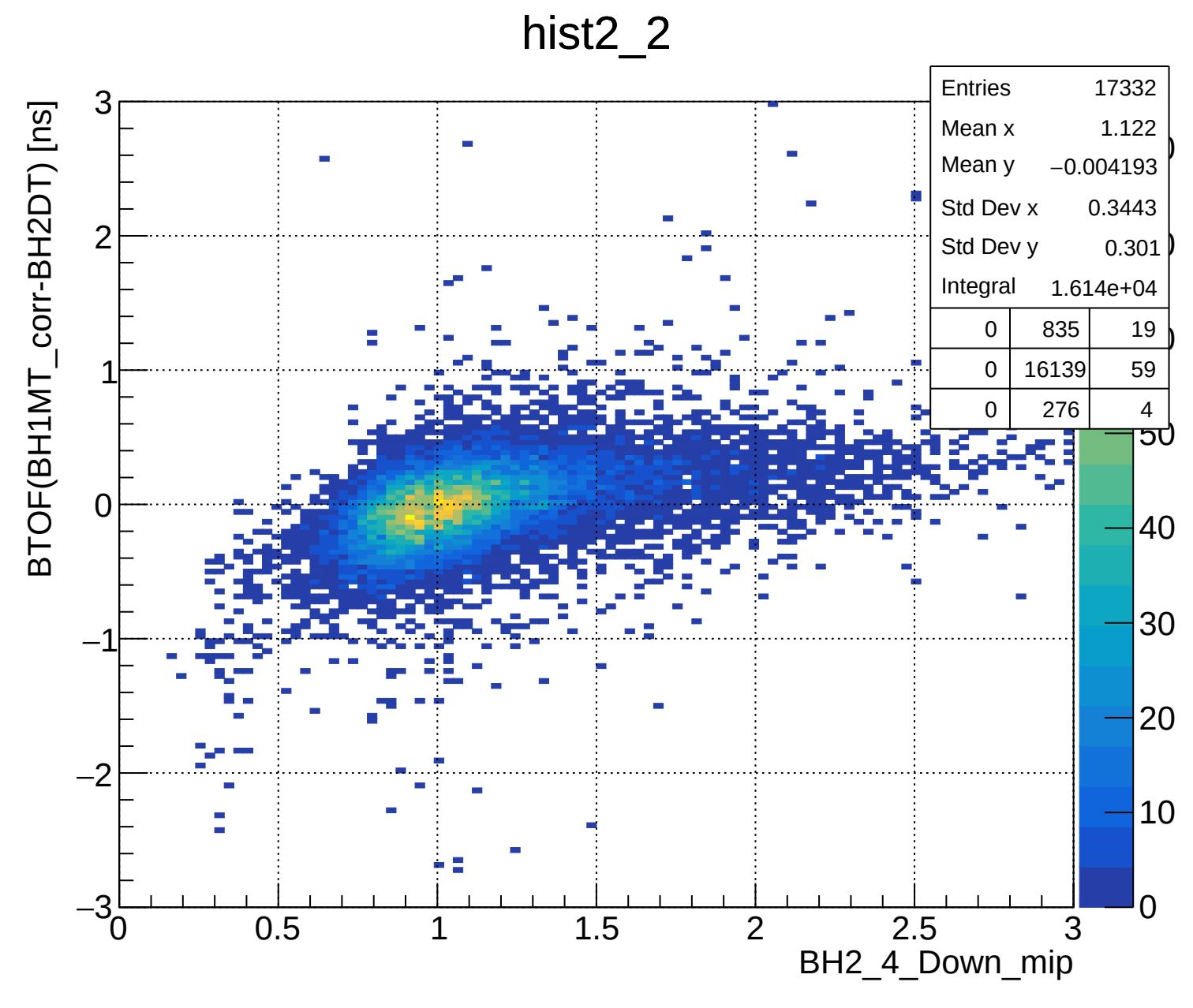

hist1_2
χ² / ndf 68.66 / 4
a0 0.9807 ± 0.2412
a1 0.2217 ± 0.1961
a3 −0.8609 ± 0.147
Integral 1.62e+04
8 839 3
0 16197 6
0 275 4
BTOF(BH1T-BH2MT) [ns]
BH1_4D_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

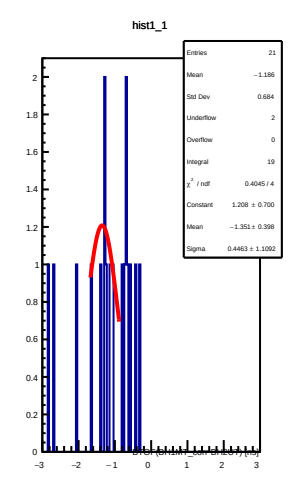

hist1_3
Entries 17332
Mean x 1.093
Mean y 0.01401
Std Dev x 0.2984
Std Dev y 0.3059
Integral 1.618e+04
8 844 3
0 16182 16
0 271 8
BTOF(BH1UT_corr - BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

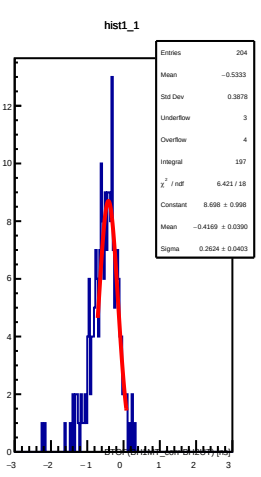

hist1_4
Entries 17332
Mean x 1.083
Mean y −0.01636
Std Dev x 0.2649
Std Dev y 0.2979
Integral 1.62e+04
8 839 3
0 16198 6
0 274 4
BTOF(BH1DT_corr-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

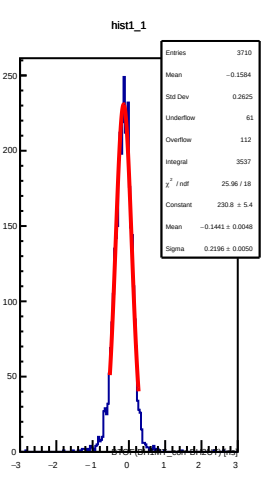

BTOFCORR14_4
Entries 17332
Mean −0.0008367
Std Dev 0.2737
Underflow 279
Overflow 854
Integral 1.62e+04
χ² / ndf 77.51 / 25
Constant 1108 ± 11.8
Mean −0.004828 ± 0.001699
Sigma 0.2006 ± 0.0015
1200
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

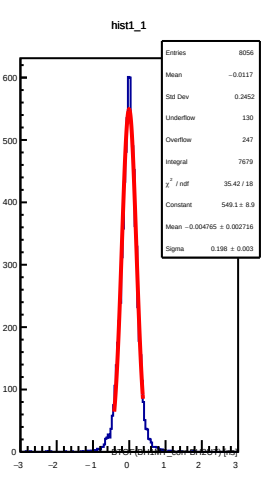

hist2_1
Entries 17332
Mean x 1.126
Mean y −0.0008287
Std Dev x 0.3477
Std Dev y 0.3009
Integral 1.614e+04
0 833 21
0 16140 58
0 275 5
BTOF(BH1MT_corr-BH2UT) [ns]
BH2_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

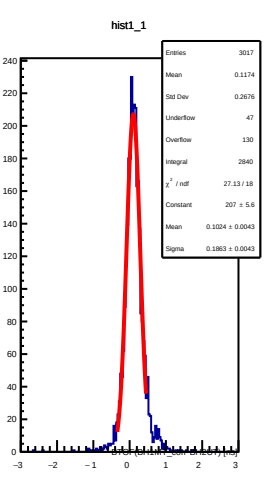

hist2_2
Entries 17332
Mean x 1.122
Mean y −0.004193
Std Dev x 0.3443
Std Dev y 0.301
Integral 1.614e+04
0 835 19
0 16139 59
0 276 4
BTOF(BH1MT_corr-BH2DT) [ns]
BH2_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

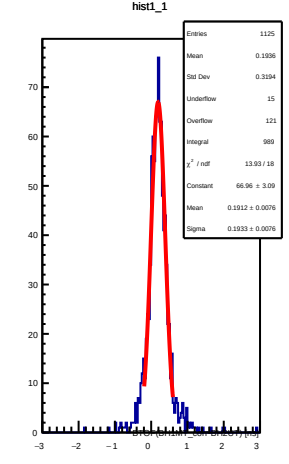

hist1_1
Entries 21
Mean −1.186
Std Dev 0.684
Underflow 2
Overflow 0
Integral 19
χ² / ndf 0.4045 / 4
Constant 1.208 ± 0.700
Mean −1.351 ± 0.398
Sigma 0.4463 ± 1.1092

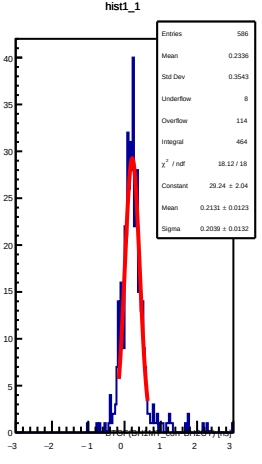

hist1_1
Entries 204
Mean −0.5333
Std Dev 0.3878
Underflow 3
Overflow 4
Integral 197
χ² / ndf 6.421 / 18
Constant 8.698 ± 0.998
Mean −0.4169 ± 0.0390
Sigma 0.2624 ± 0.0403

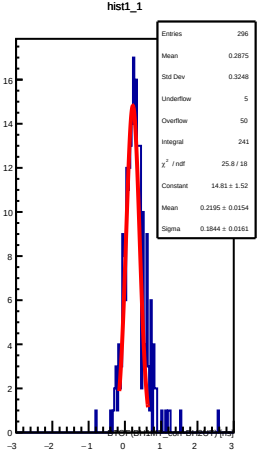

hist1_1
Entries 3710
Mean −0.1584
Std Dev 0.2625
Underflow 61
Overflow 112
Integral 3537
χ² / ndf 25.96 / 18
Constant 230.8 ± 5.4
Mean −0.1441 ± 0.0048
Sigma 0.2196 ± 0.0050

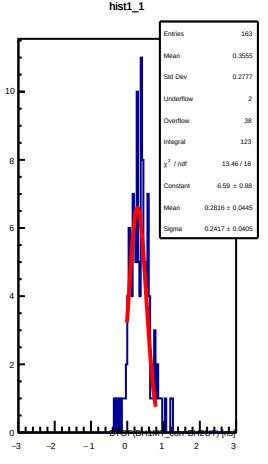

hist1_1
Entries 8056
Mean −0.0117
Std Dev 0.2452
Underflow 130
Overflow 247
Integral 7679
χ² / ndf 35.42 / 18
Constant 549.1 ± 8.9
Mean −0.004765 ± 0.002716
Sigma 0.198 ± 0.003

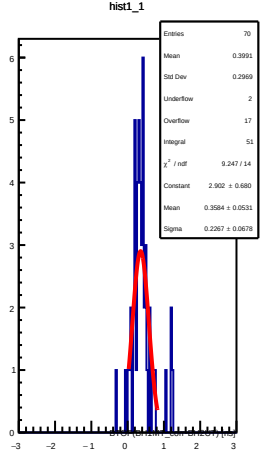

hist1_1
Entries 3017
Mean 0.1174
Std Dev 0.2676
Underflow 47
Overflow 130
Integral 2840
χ² / ndf 27.13 / 18
Constant 207 ± 5.6
Mean 0.1024 ± 0.0043
Sigma 0.1863 ± 0.0043

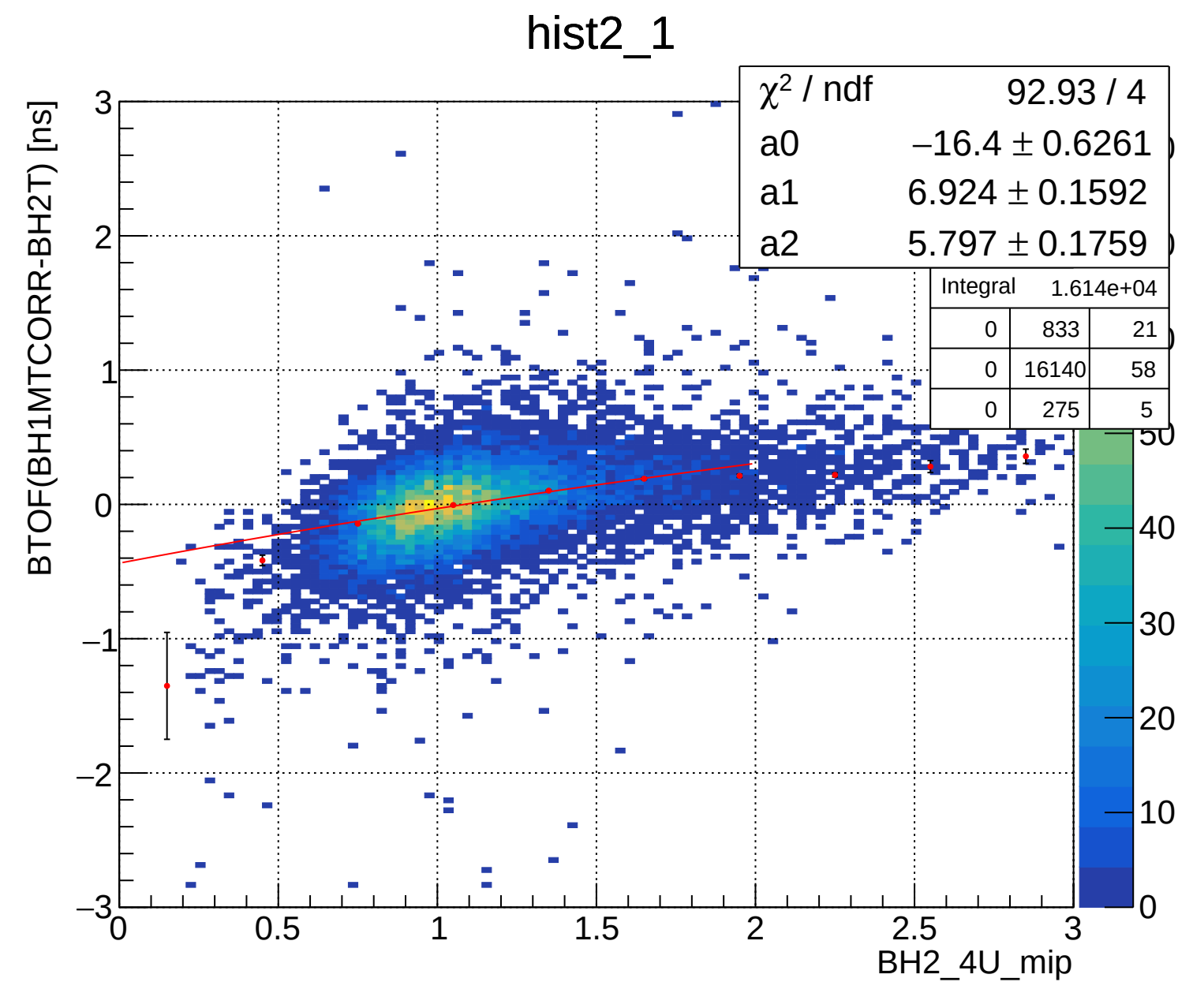

hist1_1
Entries 1125
Mean 0.1936
Std Dev 0.3194
Underflow 15
Overflow 121
Integral 989
χ² / ndf 13.93 / 18
Constant 66.96 ± 3.09
Mean 0.1912 ± 0.0076
Sigma 0.1933 ± 0.0076

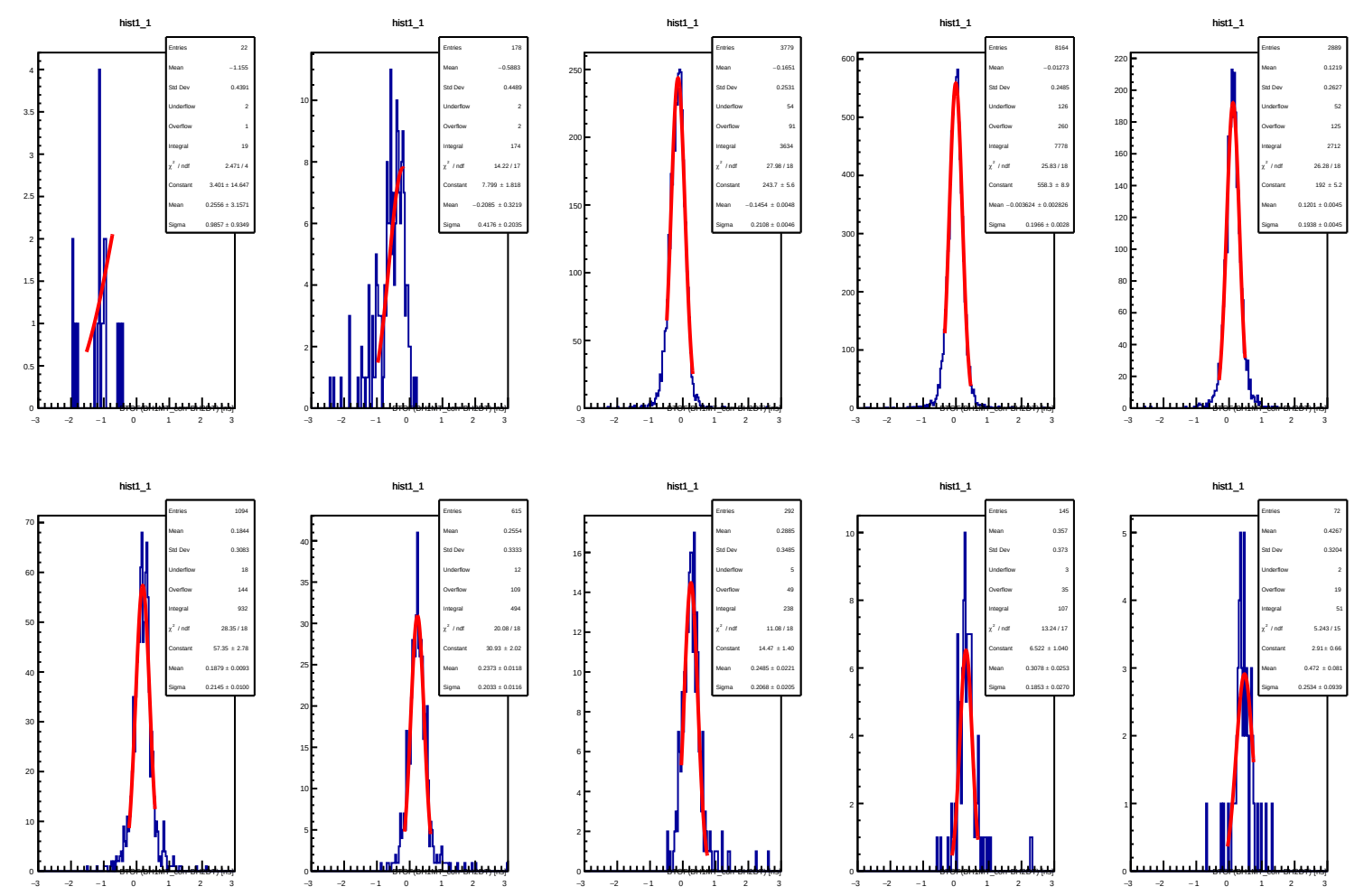

hist1_1
Entries 586
Mean 0.2336
Std Dev 0.3543
Underflow 8
Overflow 114
Integral 464
χ² / ndf 18.12 / 18
Constant 29.24 ± 2.04
Mean 0.2131 ± 0.0123
Sigma 0.2039 ± 0.0132

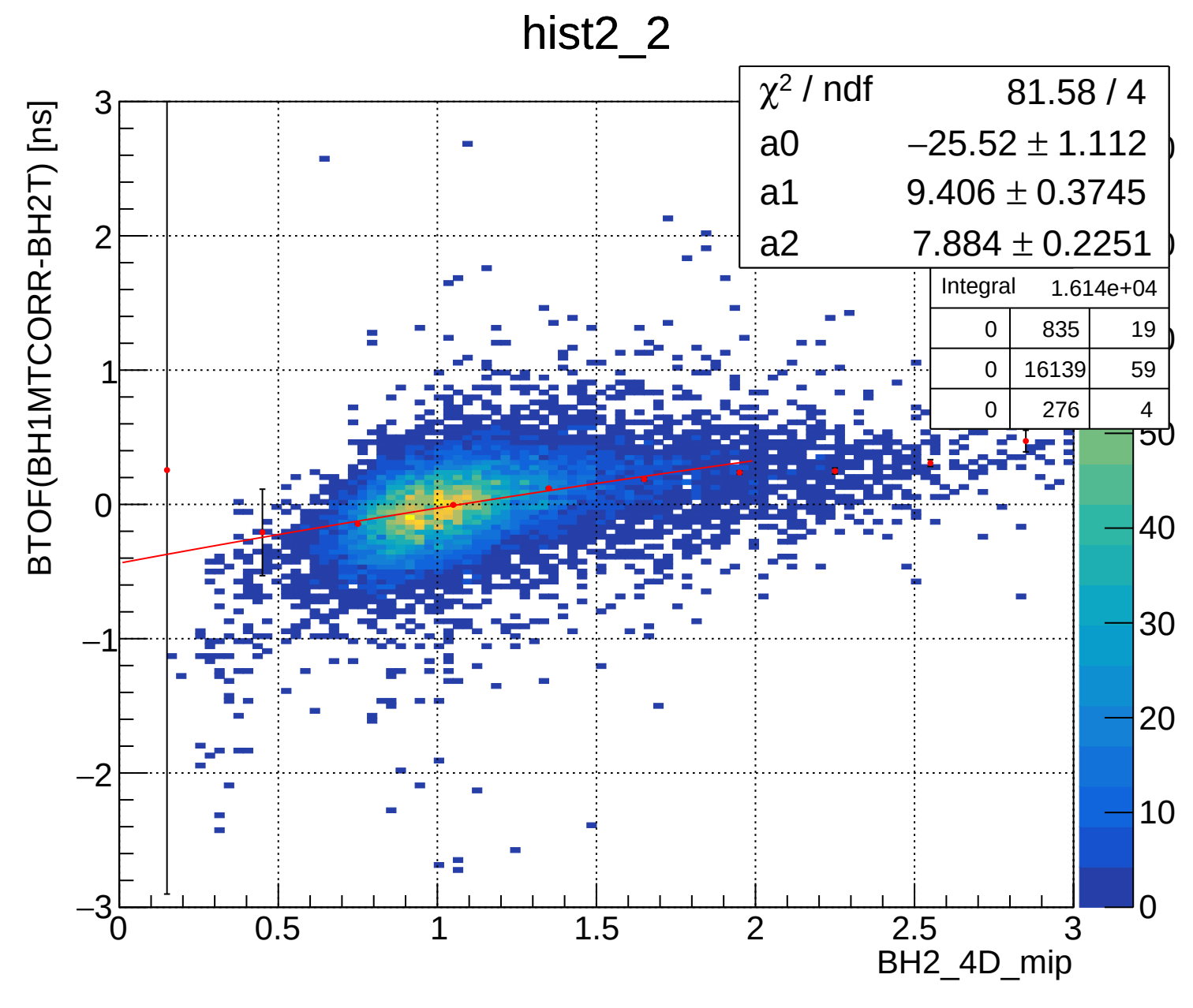

hist1_1
Entries 296
Mean 0.2875
Std Dev 0.3248
Underflow 5
Overflow 50
Integral 241
χ² / ndf 25.8 / 18
Constant 14.81 ± 1.52
Mean 0.2195 ± 0.0154
Sigma 0.1844 ± 0.0161

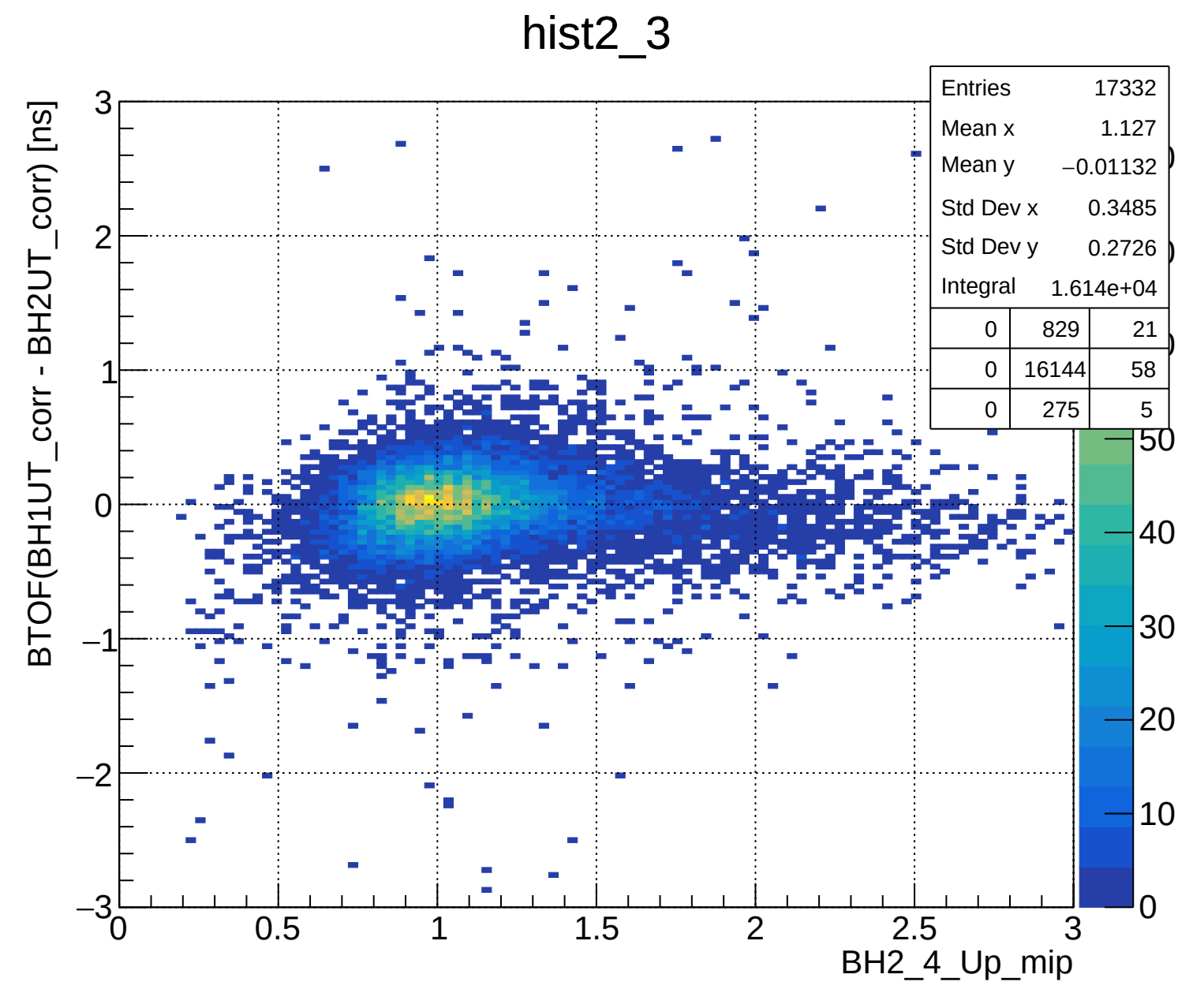

hist1_1
Entries 163
Mean 0.3555
Std Dev 0.2777
Underflow 2
Overflow 38
Integral 123
χ² / ndf 13.46 / 18
Constant 6.59 ± 0.88
Mean 0.2816 ± 0.0445
Sigma 0.2417 ± 0.0405

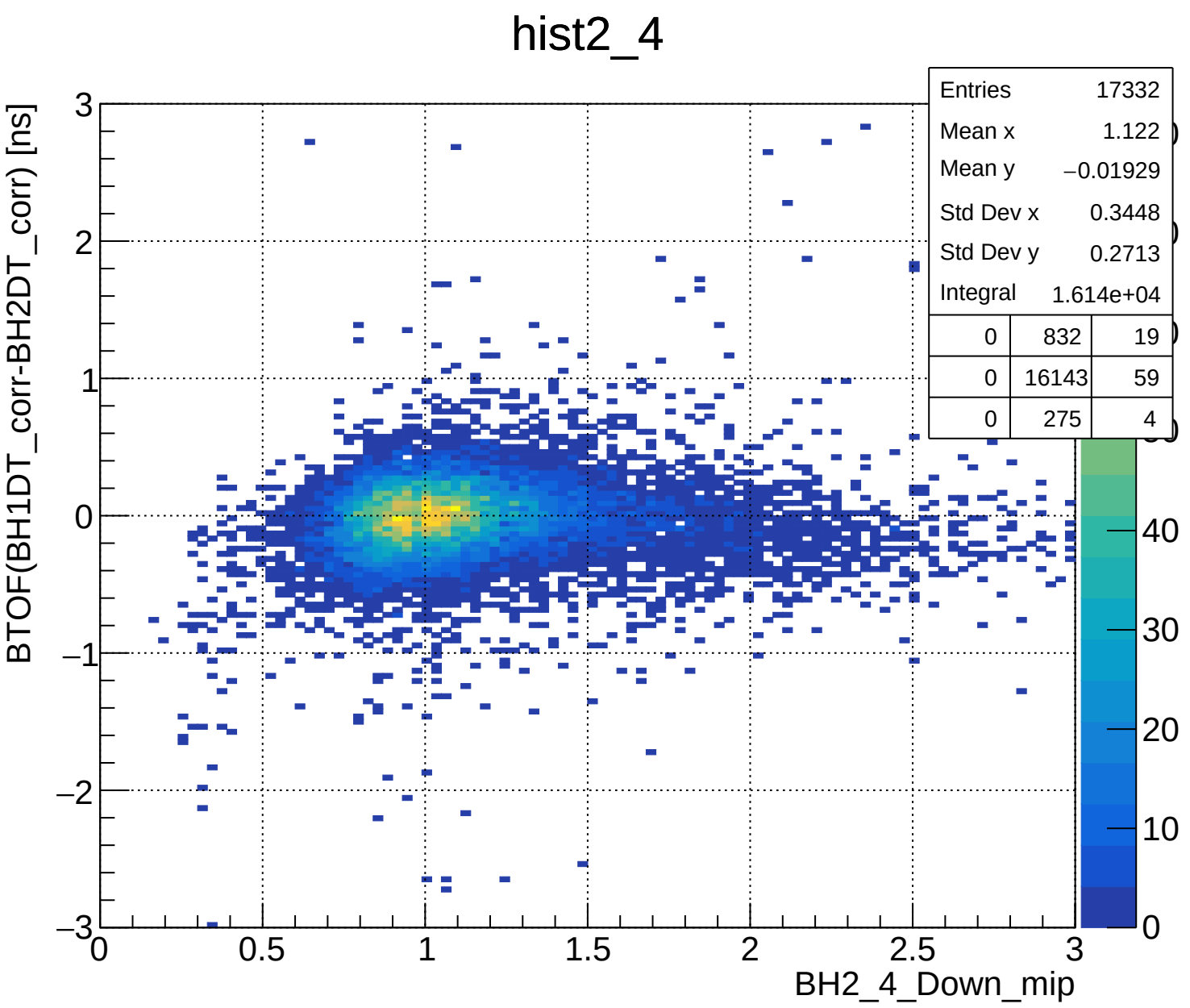

hist1_1
Entries 70
Mean 0.3991
Std Dev 0.2969
Underflow 2
Overflow 17
Integral 51
χ² / ndf 9.247 / 14
Constant 2.902 ± 0.680
Mean 0.3584 ± 0.0531
Sigma 0.2267 ± 0.0678

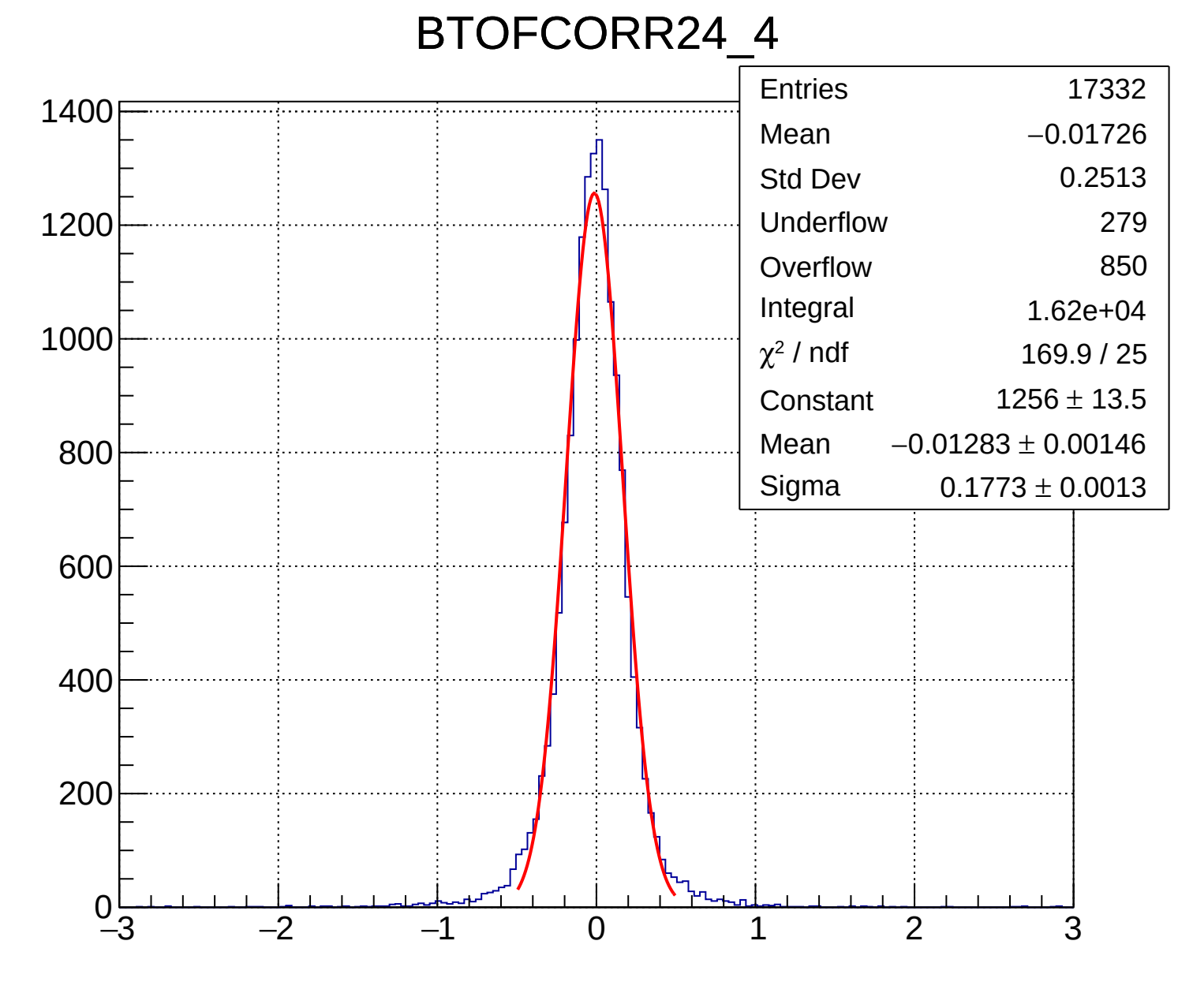

hist2_1
χ² / ndf 92.93 / 4
a0 −16.4 ± 0.6261
a1 6.924 ± 0.1592
a2 5.797 ± 0.1759
Integral 1.614e+04
0 833 21
0 16140 58
0 275 5
BTOF(BH1MTCORR-BH2T) [ns]
BH2_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

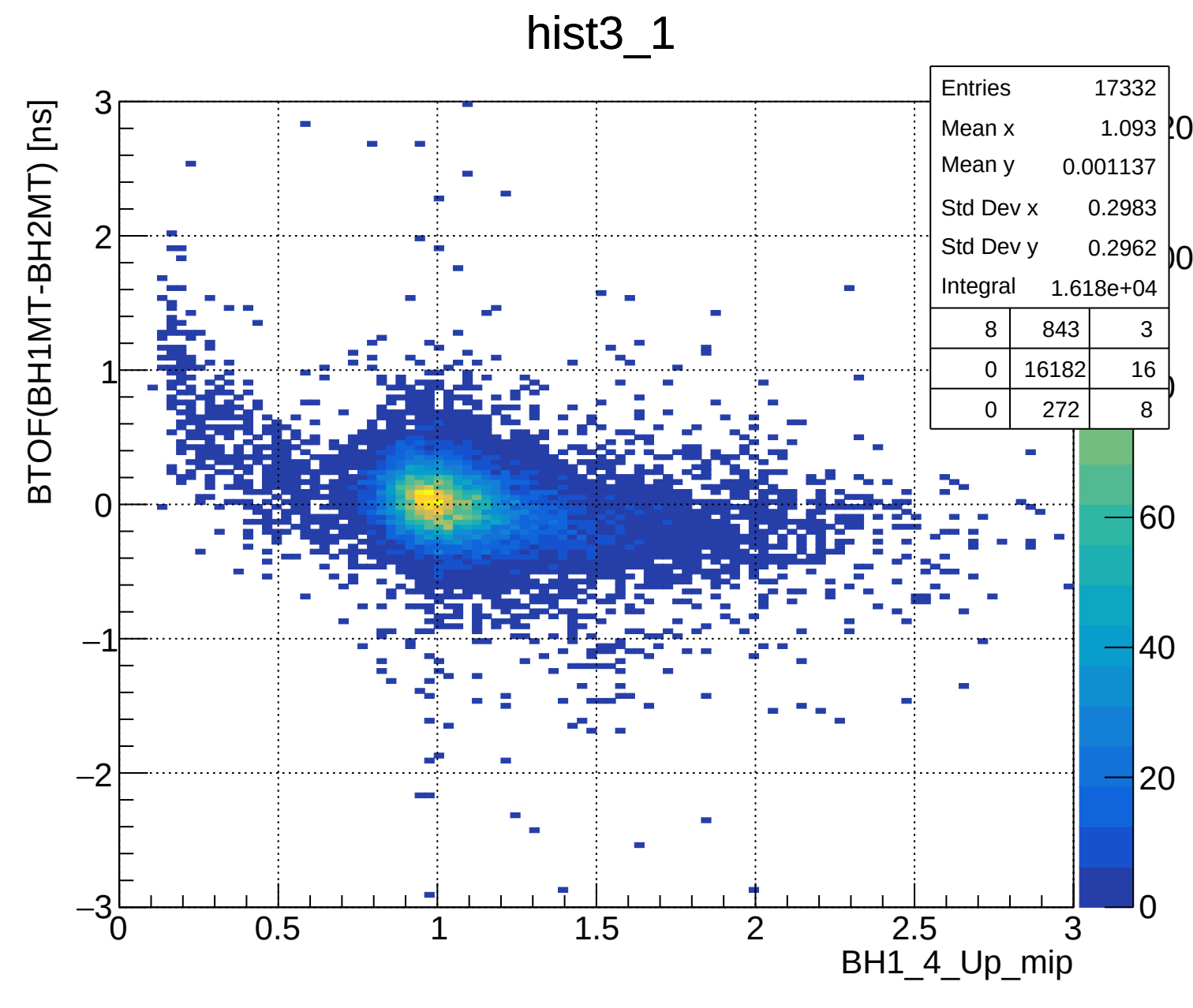

hist1_1
Entries 22
Mean −1.155
Std Dev 0.4391
Underflow 2
Overflow 1
Integral 19
χ² / ndf 2.471 / 4
Constant 3.401 ± 14.647
Mean 0.2556 ± 3.1571
Sigma 0.9857 ± 0.9349
hist1_1
Entries 178
Mean −0.5883
Std Dev 0.4489
Underflow 2
Overflow 2
Integral 174
χ² / ndf 14.22 / 17
Constant 7.799 ± 1.818
Mean −0.2085 ± 0.3219
Sigma 0.4176 ± 0.2035
hist1_1
Entries 3779
Mean −0.1651
Std Dev 0.2531
Underflow 54
Overflow 91
Integral 3634
χ² / ndf 27.98 / 18
Constant 243.7 ± 5.6
Mean −0.1454 ± 0.0048
Sigma 0.2108 ± 0.0046
hist1_1
Entries 8164
Mean −0.01273
Std Dev 0.2485
Underflow 126
Overflow 260
Integral 7778
χ² / ndf 25.83 / 18
Constant 558.3 ± 8.9
Mean −0.003624 ± 0.002826
Sigma 0.1966 ± 0.0028
hist1_1
Entries 2889
Mean 0.1219
Std Dev 0.2627
Underflow 52
Overflow 125
Integral 2712
χ² / ndf 26.28 / 18
Constant 192 ± 5.2
Mean 0.1201 ± 0.0045
Sigma 0.1938 ± 0.0045
hist1_1
Entries 1094
Mean 0.1844
Std Dev 0.3083
Underflow 18
Overflow 144
Integral 932
χ² / ndf 28.35 / 18
Constant 57.35 ± 2.78
Mean 0.1879 ± 0.0093
Sigma 0.2145 ± 0.0100
hist1_1
Entries 615
Mean 0.2554
Std Dev 0.3333
Underflow 12
Overflow 109
Integral 494
χ² / ndf 20.08 / 18
Constant 30.93 ± 2.02
Mean 0.2373 ± 0.0118
Sigma 0.2033 ± 0.0116
hist1_1
Entries 292
Mean 0.2885
Std Dev 0.3485
Underflow 5
Overflow 49
Integral 238
χ² / ndf 11.08 / 18
Constant 14.47 ± 1.40
Mean 0.2485 ± 0.0221
Sigma 0.2068 ± 0.0205
hist1_1
Entries 145
Mean 0.357
Std Dev 0.373
Underflow 3
Overflow 35
Integral 107
χ² / ndf 13.24 / 17
Constant 6.522 ± 1.040
Mean 0.3078 ± 0.0253
Sigma 0.1853 ± 0.0270
hist1_1
Entries 72
Mean 0.4267
Std Dev 0.3204
Underflow 2
Overflow 19
Integral 51
χ² / ndf 5.243 / 15
Constant 2.91 ± 0.66
Mean 0.472 ± 0.081
Sigma 0.2534 ± 0.0939

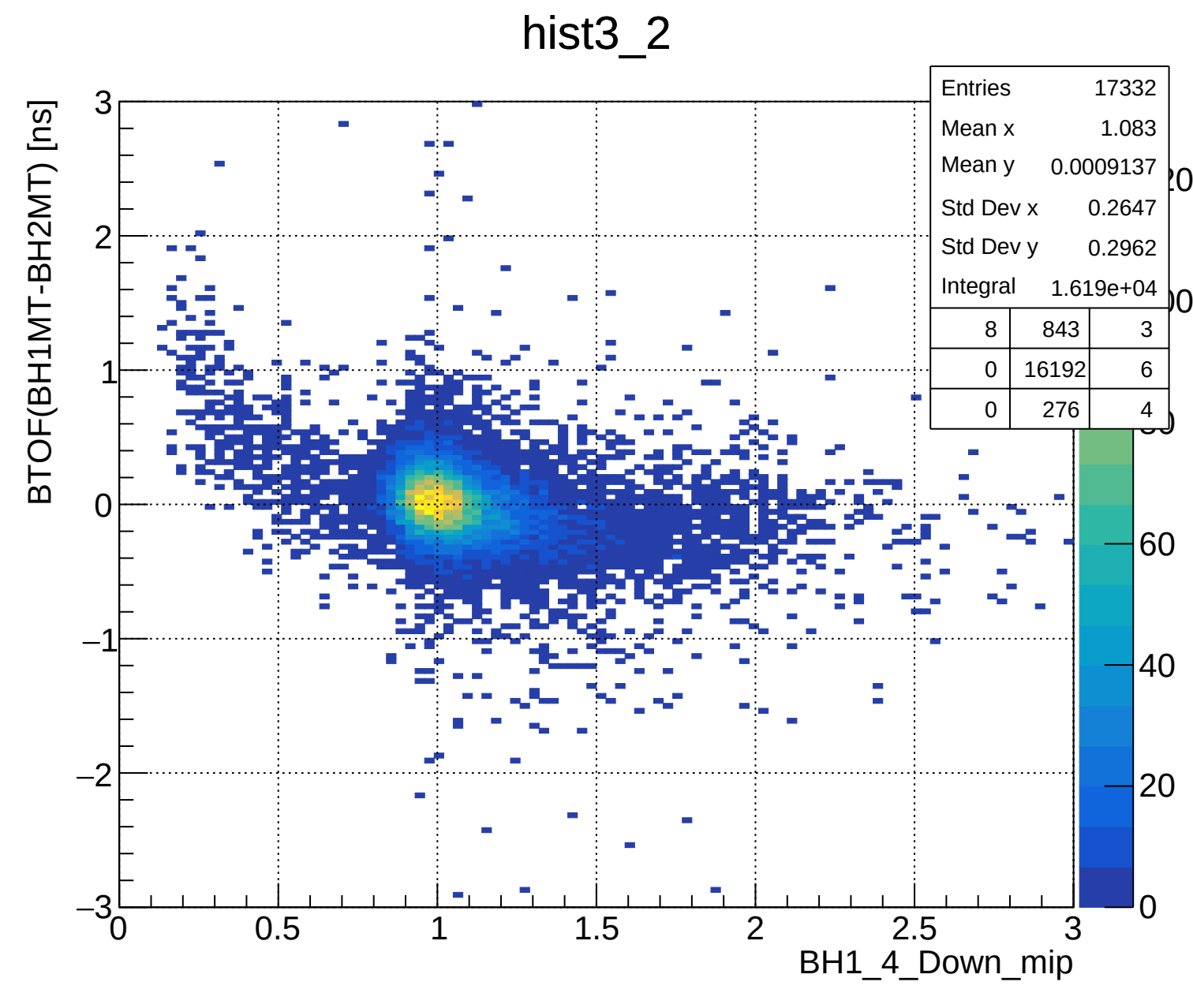

hist2_2
χ² / ndf 81.58 / 4
a0 −25.52 ± 1.112
a1 9.406 ± 0.3745
a2 7.884 ± 0.2251
Integral 1.614e+04
0 835 19
0 16139 59
0 276 4
BTOF(BH1MTCORR-BH2T) [ns]
BH2_4D_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

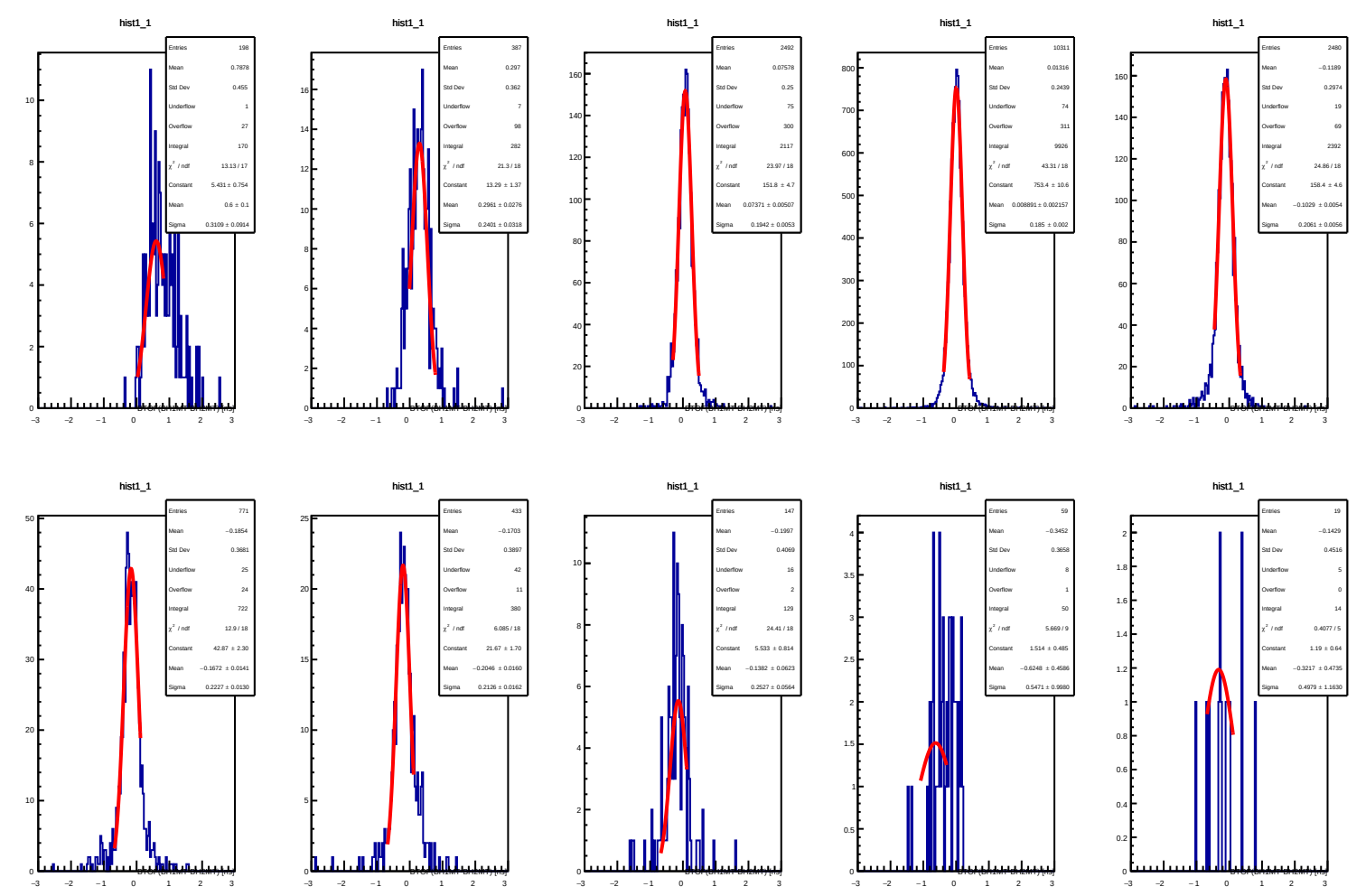

hist2_3
Entries 17332
Mean x 1.127
Mean y −0.01132
Std Dev x 0.3485
Std Dev y 0.2726
Integral 1.614e+04
0 829 21
0 16144 58
0 275 5
BTOF(BH1UT_corr - BH2UT_corr) [ns]
BH2_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

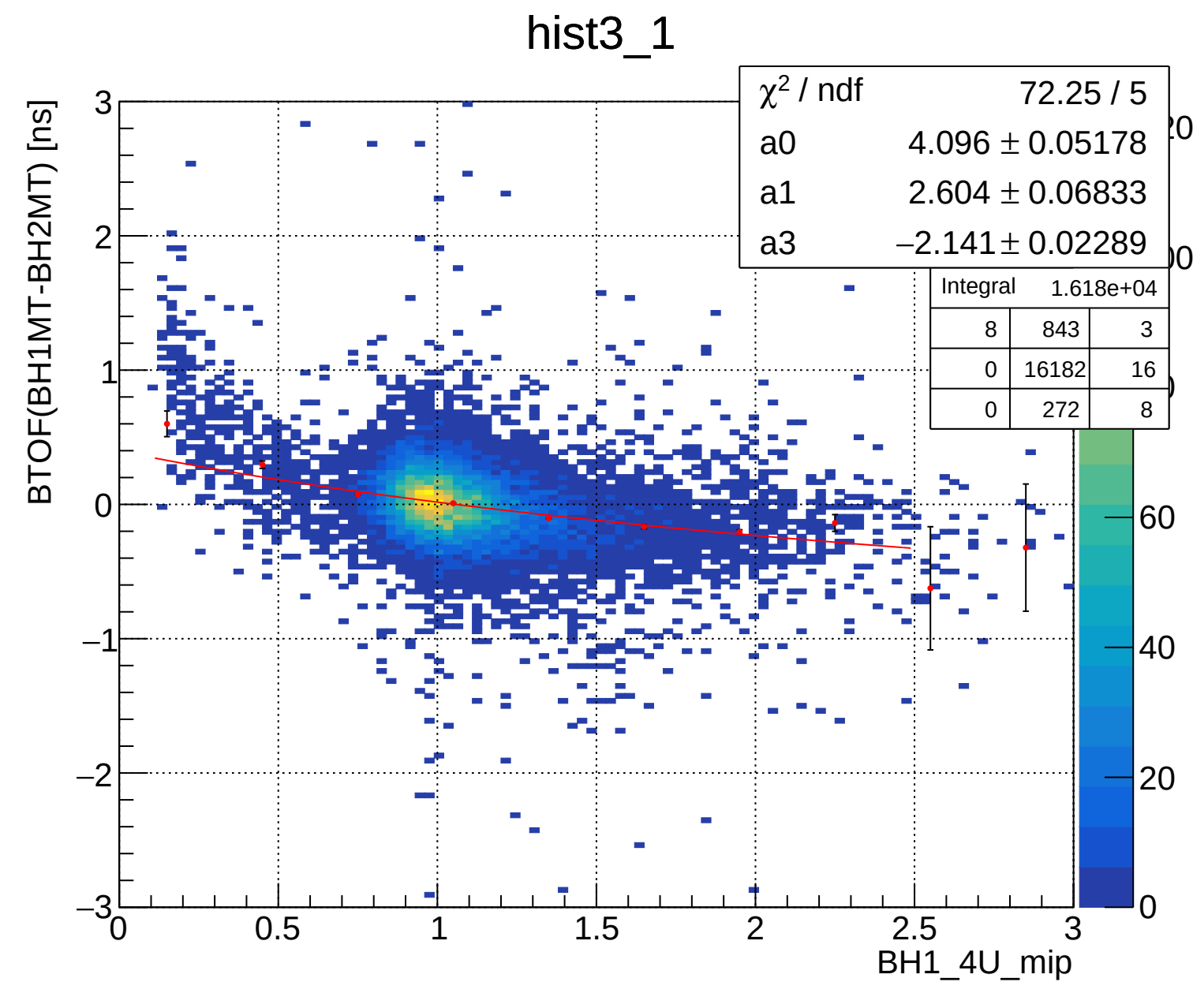

hist2_4
Entries 17332
Mean x 1.122
Mean y −0.01929
Std Dev x 0.3448
Std Dev y 0.2713
Integral 1.614e+04
0 832 19
0 16143 59
0 275 4
BTOF(BH1DT_corr-BH2DT_corr) [ns]
BH2_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
40
30
20
10
0

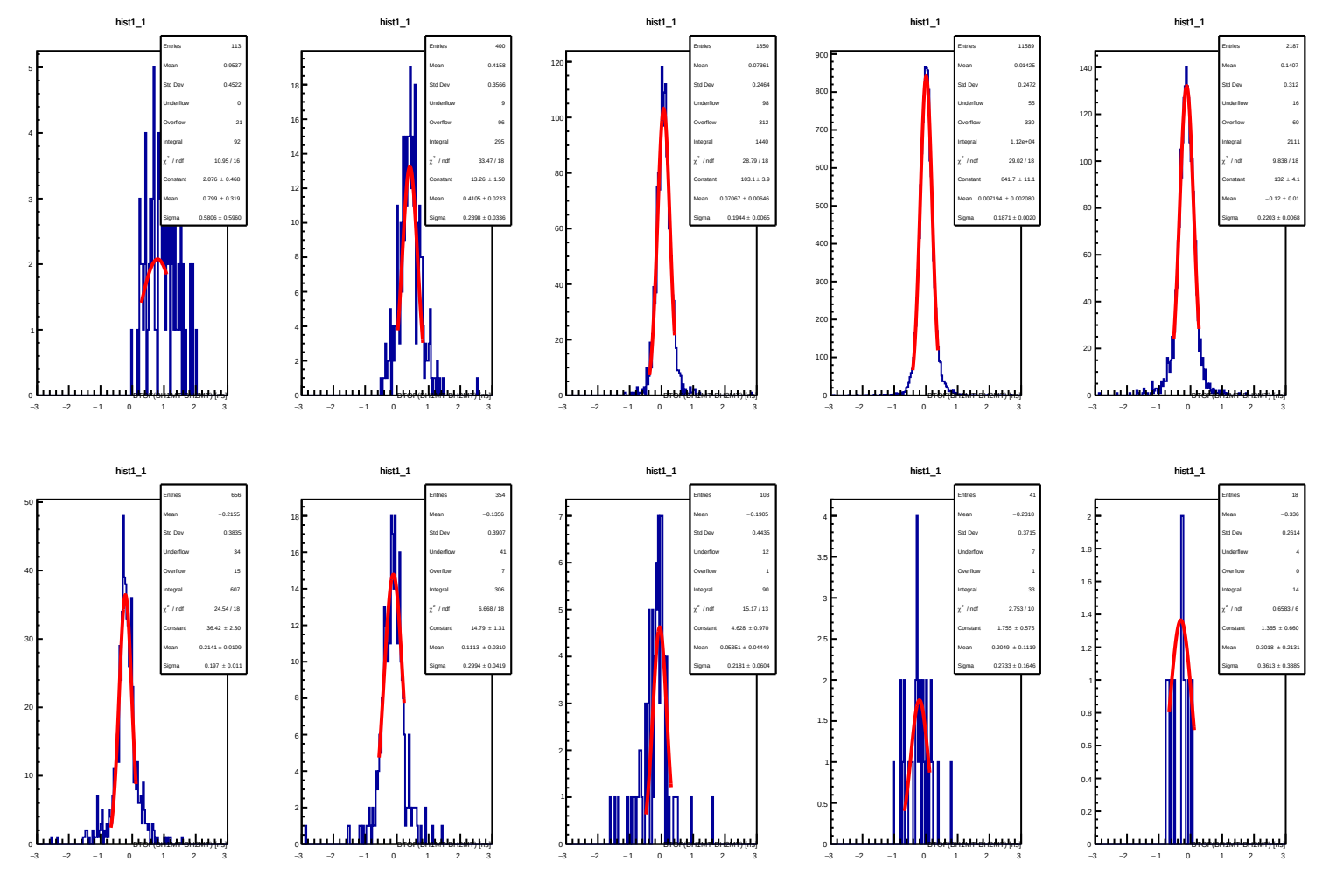

BTOFCORR24_4
Entries 17332
Mean −0.01726
Std Dev 0.2513
Underflow 279
Overflow 850
Integral 1.62e+04
χ² / ndf 169.9 / 25
Constant 1256 ± 13.5
Mean −0.01283 ± 0.00146
Sigma 0.1773 ± 0.0013
1400
1200
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

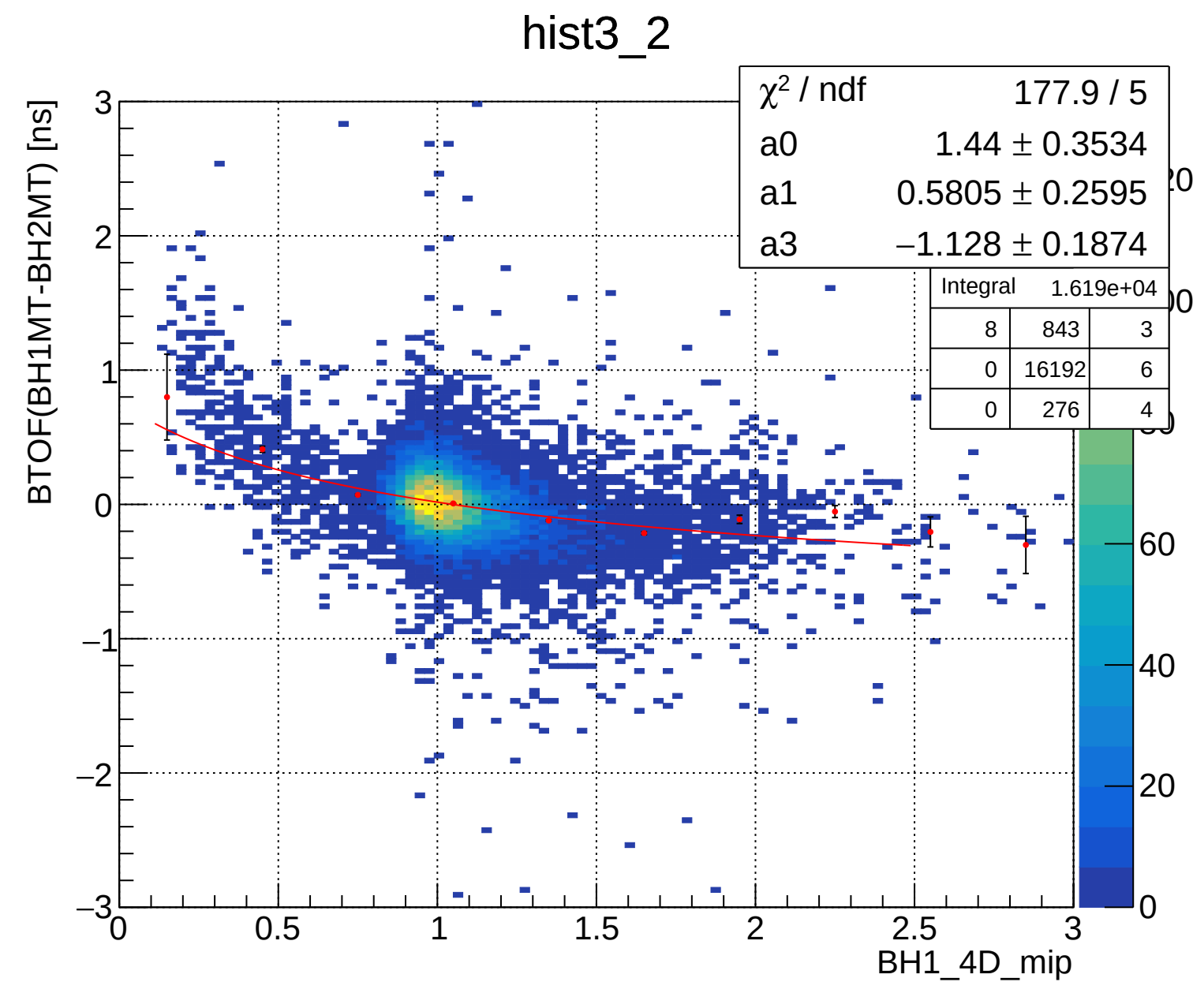

hist3_1
Entries 17332
Mean x 1.093
Mean y 0.001137
Std Dev x 0.2983
Std Dev y 0.2962
Integral 1.618e+04
8 843 3
0 16182 16
0 272 8
BTOF(BH1MT-BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

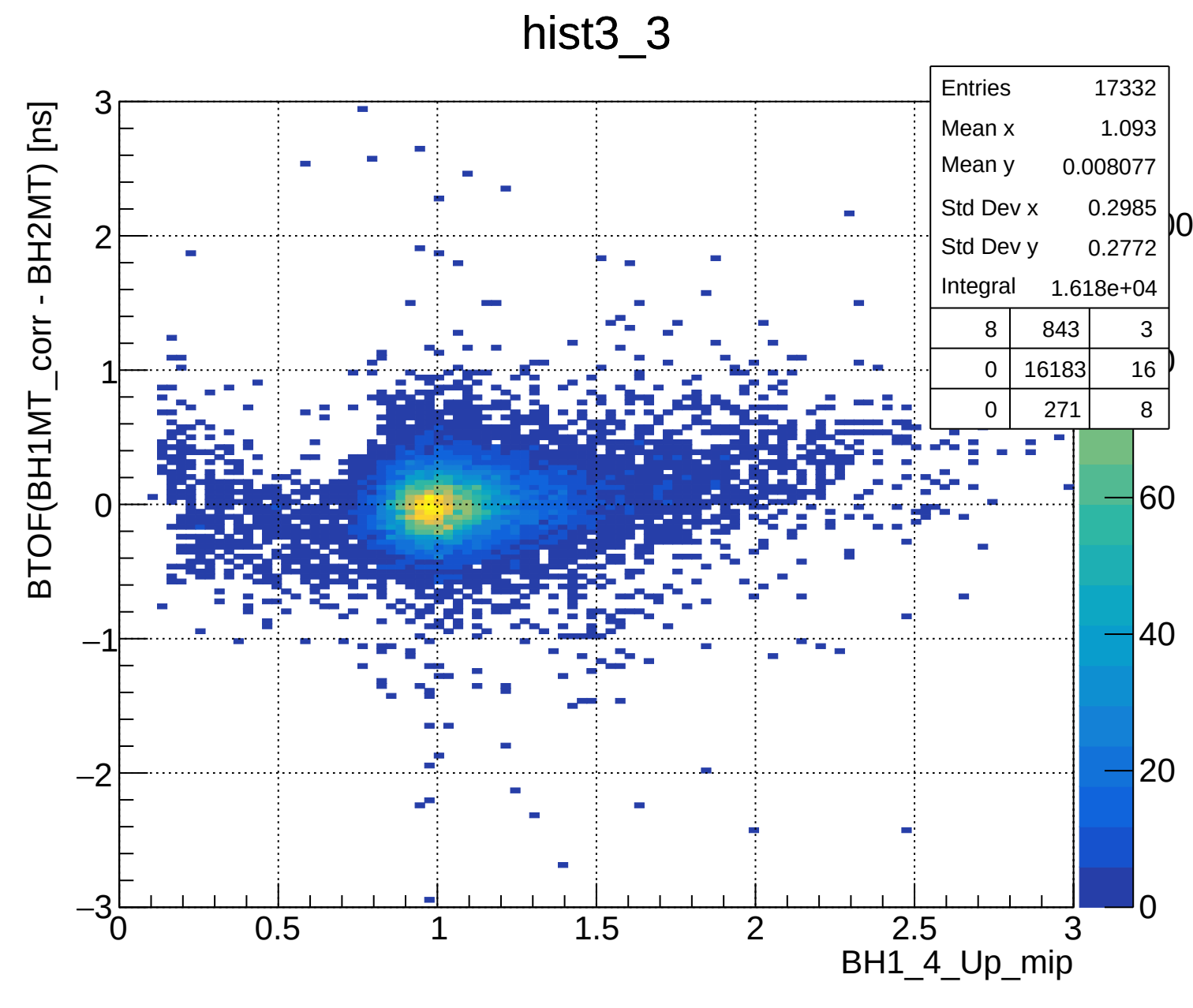

hist3_2
Entries 17332
Mean x 1.083
Mean y 0.0009137
Std Dev x 0.2647
Std Dev y 0.2962
Integral 1.619e+04
8 843 3
0 16192 6
0 276 4
BTOF(BH1MT-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

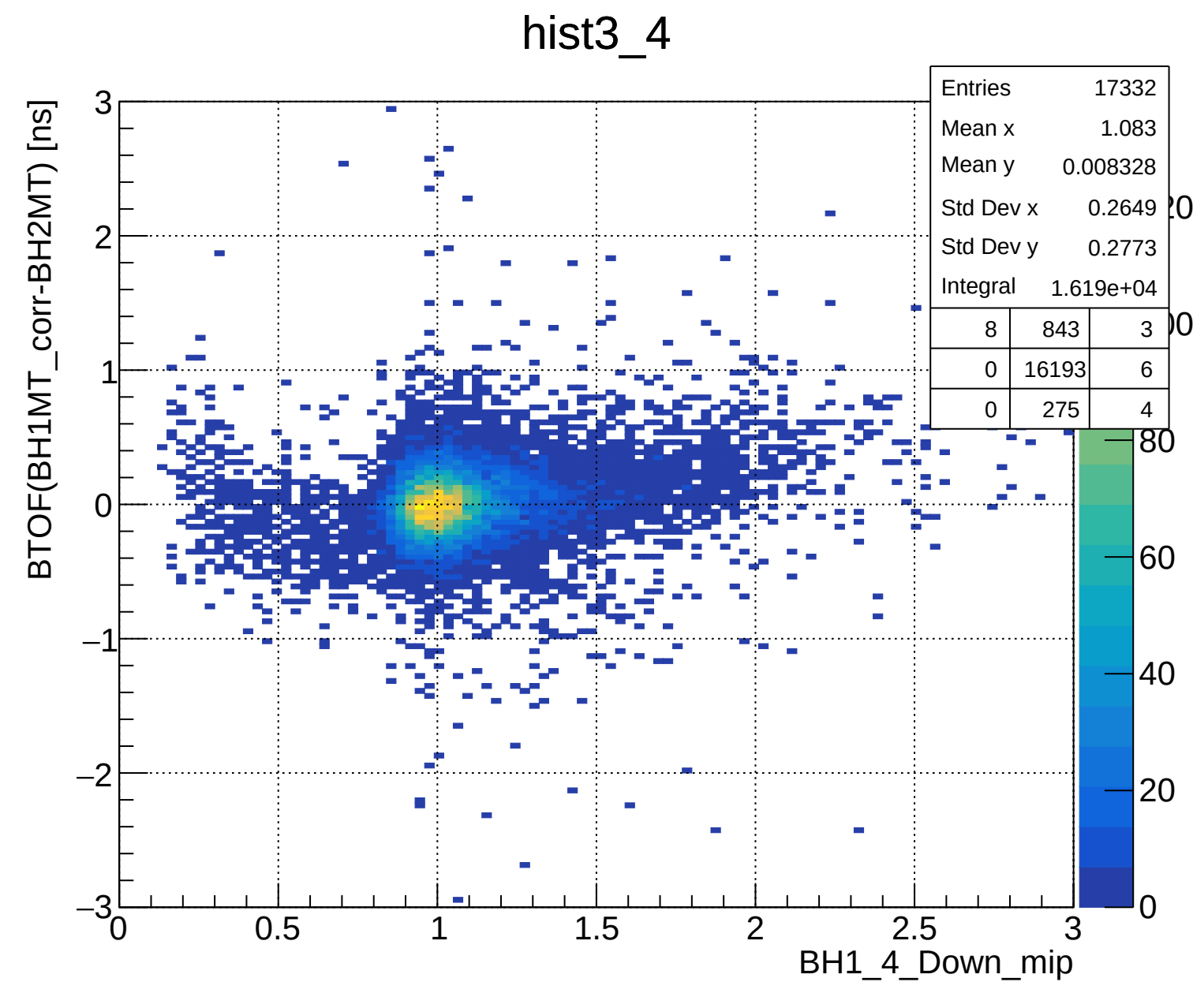

hist1_1
Entries 198
Mean 0.7878
Std Dev 0.455
Underflow 1
Overflow 27
Integral 170
χ² / ndf 13.13 / 17
Constant 5.431 ± 0.754
Mean 0.6 ± 0.1
Sigma 0.3109 ± 0.0914
hist1_1
Entries 387
Mean 0.297
Std Dev 0.362
Underflow 7
Overflow 98
Integral 282
χ² / ndf 21.3 / 18
Constant 13.29 ± 1.37
Mean 0.2961 ± 0.0276
Sigma 0.2401 ± 0.0318
hist1_1
Entries 2492
Mean 0.07578
Std Dev 0.25
Underflow 75
Overflow 300
Integral 2117
χ² / ndf 23.97 / 18
Constant 151.8 ± 4.7
Mean 0.07371 ± 0.00507
Sigma 0.1942 ± 0.0053
hist1_1
Entries 10311
Mean 0.01316
Std Dev 0.2439
Underflow 74
Overflow 311
Integral 9926
χ² / ndf 43.31 / 18
Constant 753.4 ± 10.6
Mean 0.008891 ± 0.002157
Sigma 0.185 ± 0.002
hist1_1
Entries 2480
Mean −0.1189
Std Dev 0.2974
Underflow 19
Overflow 69
Integral 2392
χ² / ndf 24.86 / 18
Constant 158.4 ± 4.6
Mean −0.1029 ± 0.0054
Sigma 0.2061 ± 0.0056
hist1_1
Entries 771
Mean −0.1854
Std Dev 0.3681
Underflow 25
Overflow 24
Integral 722
χ² / ndf 12.9 / 18
Constant 42.87 ± 2.30
Mean −0.1672 ± 0.0141
Sigma 0.2227 ± 0.0130
hist1_1
Entries 433
Mean −0.1703
Std Dev 0.3897
Underflow 42
Overflow 11
Integral 380
χ² / ndf 6.085 / 18
Constant 21.67 ± 1.70
Mean −0.2046 ± 0.0160
Sigma 0.2126 ± 0.0162
hist1_1
Entries 147
Mean −0.1997
Std Dev 0.4069
Underflow 16
Overflow 2
Integral 129
χ² / ndf 24.41 / 18
Constant 5.533 ± 0.814
Mean −0.1382 ± 0.0623
Sigma 0.2527 ± 0.0564
hist1_1
Entries 59
Mean −0.3452
Std Dev 0.3658
Underflow 8
Overflow 1
Integral 50
χ² / ndf 5.669 / 9
Constant 1.514 ± 0.485
Mean −0.6248 ± 0.4586
Sigma 0.5471 ± 0.9980
hist1_1
Entries 19
Mean −0.1429
Std Dev 0.4516
Underflow 5
Overflow 0
Integral 14
χ² / ndf 0.4077 / 5
Constant 1.19 ± 0.64
Mean −0.3217 ± 0.4735
Sigma 0.4979 ± 1.1630

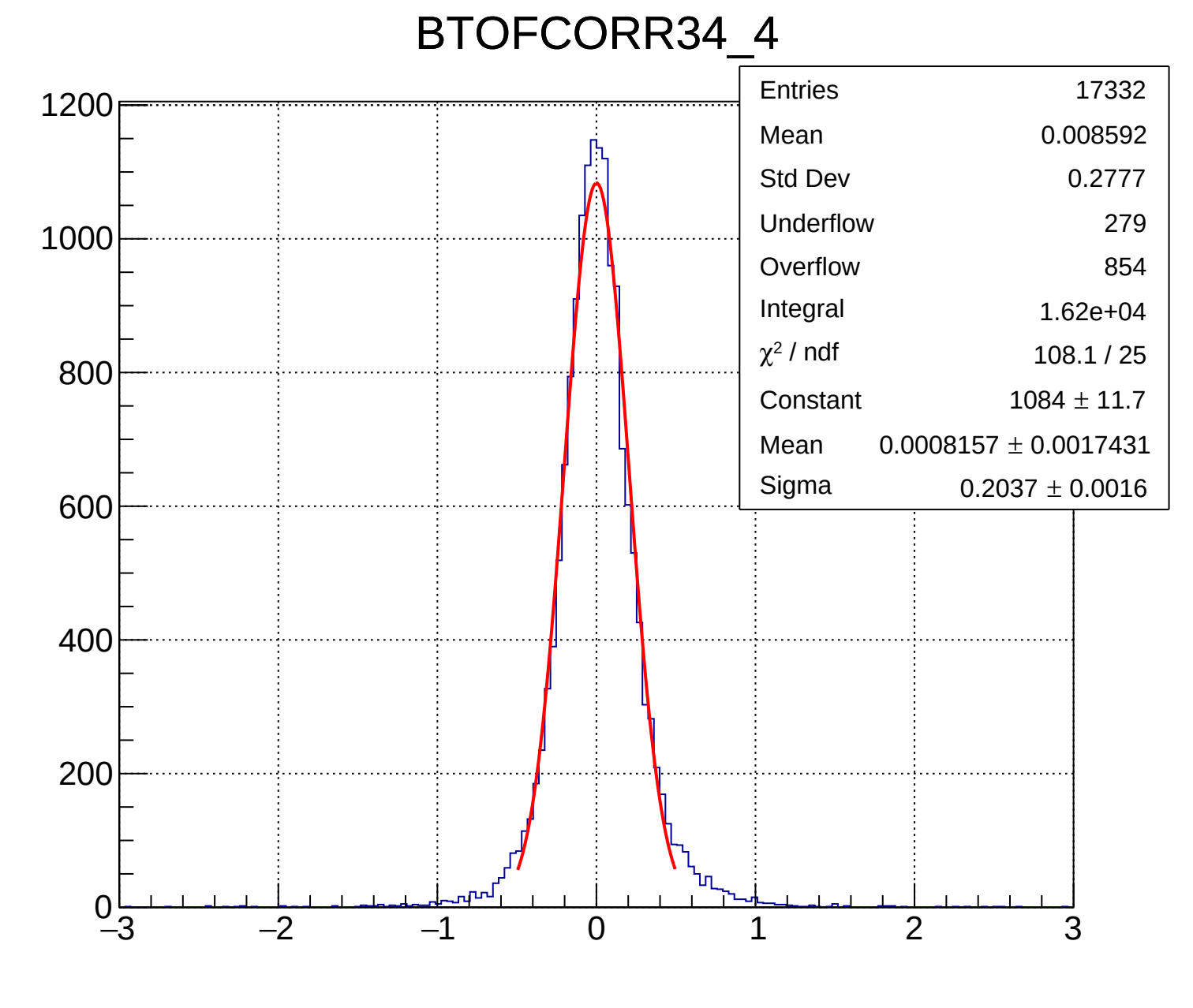

hist3_1
χ² / ndf 72.25 / 5
a0 4.096 ± 0.05178
a1 2.604 ± 0.06833
a3 −2.141 ± 0.02289
Integral 1.618e+04
8 843 3
0 16182 16
0 272 8
BTOF(BH1MT-BH2MT) [ns]
BH1_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

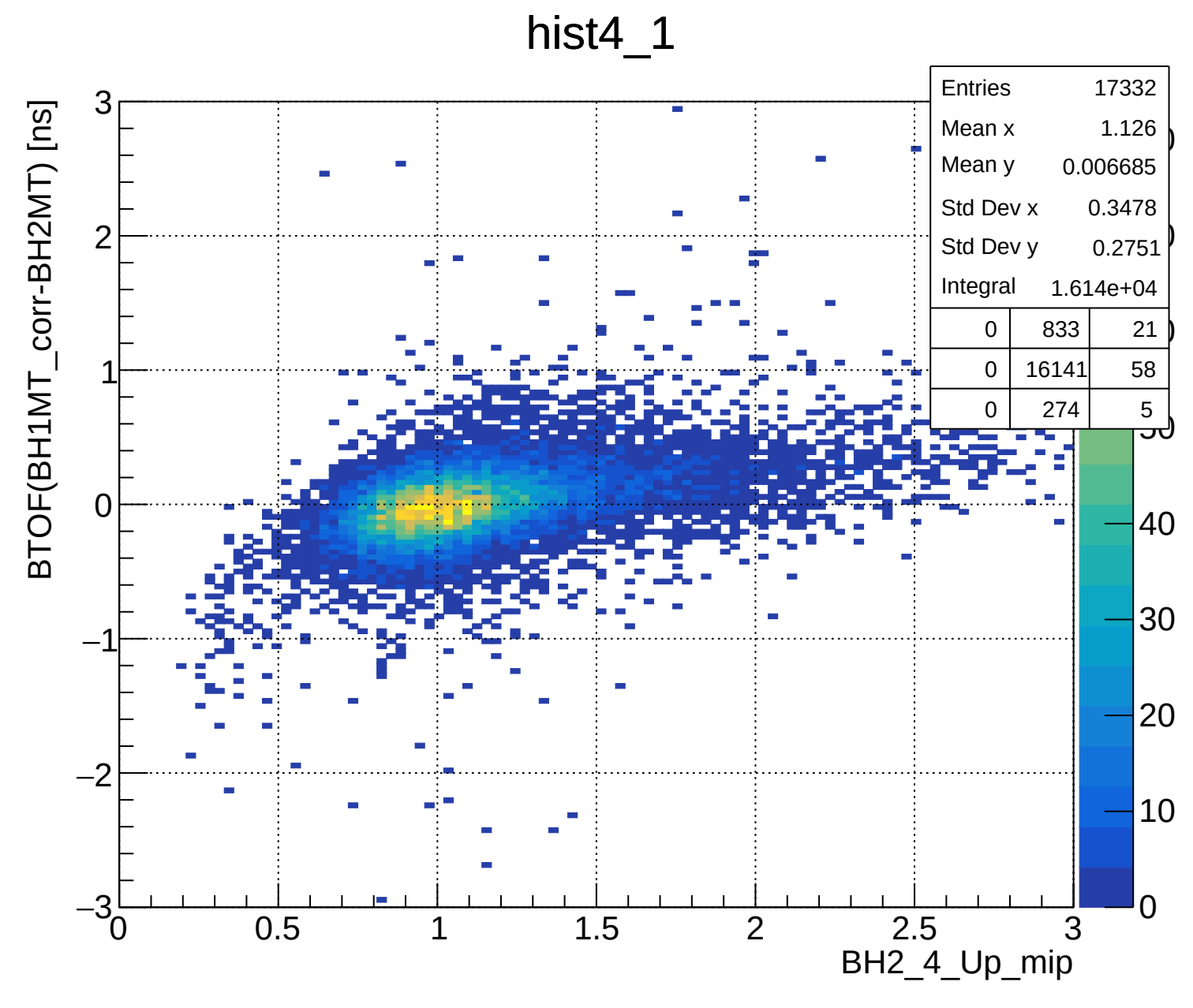

hist1_1
Entries 113
Mean 0.9537
Std Dev 0.4522
Underflow 0
Overflow 21
Integral 92
χ² / ndf 10.95 / 16
Constant 2.076 ± 0.468
Mean 0.799 ± 0.319
Sigma 0.5806 ± 0.5960
hist1_1
Entries 400
Mean 0.4158
Std Dev 0.3566
Underflow 9
Overflow 96
Integral 295
χ² / ndf 33.47 / 18
Constant 13.26 ± 1.50
Mean 0.4105 ± 0.0233
Sigma 0.2398 ± 0.0336
hist1_1
Entries 1850
Mean 0.07361
Std Dev 0.2464
Underflow 98
Overflow 312
Integral 1440
χ² / ndf 28.79 / 18
Constant 103.1 ± 3.9
Mean 0.07067 ± 0.00646
Sigma 0.1944 ± 0.0065
hist1_1
Entries 11589
Mean 0.01425
Std Dev 0.2472
Underflow 55
Overflow 330
Integral 1.12e+04
χ² / ndf 29.02 / 18
Constant 841.7 ± 11.1
Mean 0.007194 ± 0.002080
Sigma 0.1871 ± 0.0020
hist1_1
Entries 2187
Mean −0.1407
Std Dev 0.312
Underflow 16
Overflow 60
Integral 2111
χ² / ndf 9.838 / 18
Constant 132 ± 4.1
Mean −0.12 ± 0.01
Sigma 0.2203 ± 0.0068
hist1_1
Entries 656
Mean −0.2155
Std Dev 0.3835
Underflow 34
Overflow 15
Integral 607
χ² / ndf 24.54 / 18
Constant 36.42 ± 2.30
Mean −0.2141 ± 0.0109
Sigma 0.197 ± 0.011
hist1_1
Entries 354
Mean −0.1356
Std Dev 0.3907
Underflow 41
Overflow 7
Integral 306
χ² / ndf 6.668 / 18
Constant 14.79 ± 1.31
Mean −0.1113 ± 0.0310
Sigma 0.2994 ± 0.0419
hist1_1
Entries 103
Mean −0.1905
Std Dev 0.4435
Underflow 12
Overflow 1
Integral 90
χ² / ndf 15.17 / 13
Constant 4.628 ± 0.970
Mean −0.05351 ± 0.04449
Sigma 0.2181 ± 0.0604
hist1_1
Entries 41
Mean −0.2318
Std Dev 0.3715
Underflow 7
Overflow 1
Integral 33
χ² / ndf 2.753 / 10
Constant 1.755 ± 0.575
Mean −0.2049 ± 0.1119
Sigma 0.2733 ± 0.1646
hist1_1
Entries 18
Mean −0.336
Std Dev 0.2614
Underflow 4
Overflow 0
Integral 14
χ² / ndf 0.6583 / 6
Constant 1.365 ± 0.660
Mean −0.3018 ± 0.2131
Sigma 0.3613 ± 0.3885

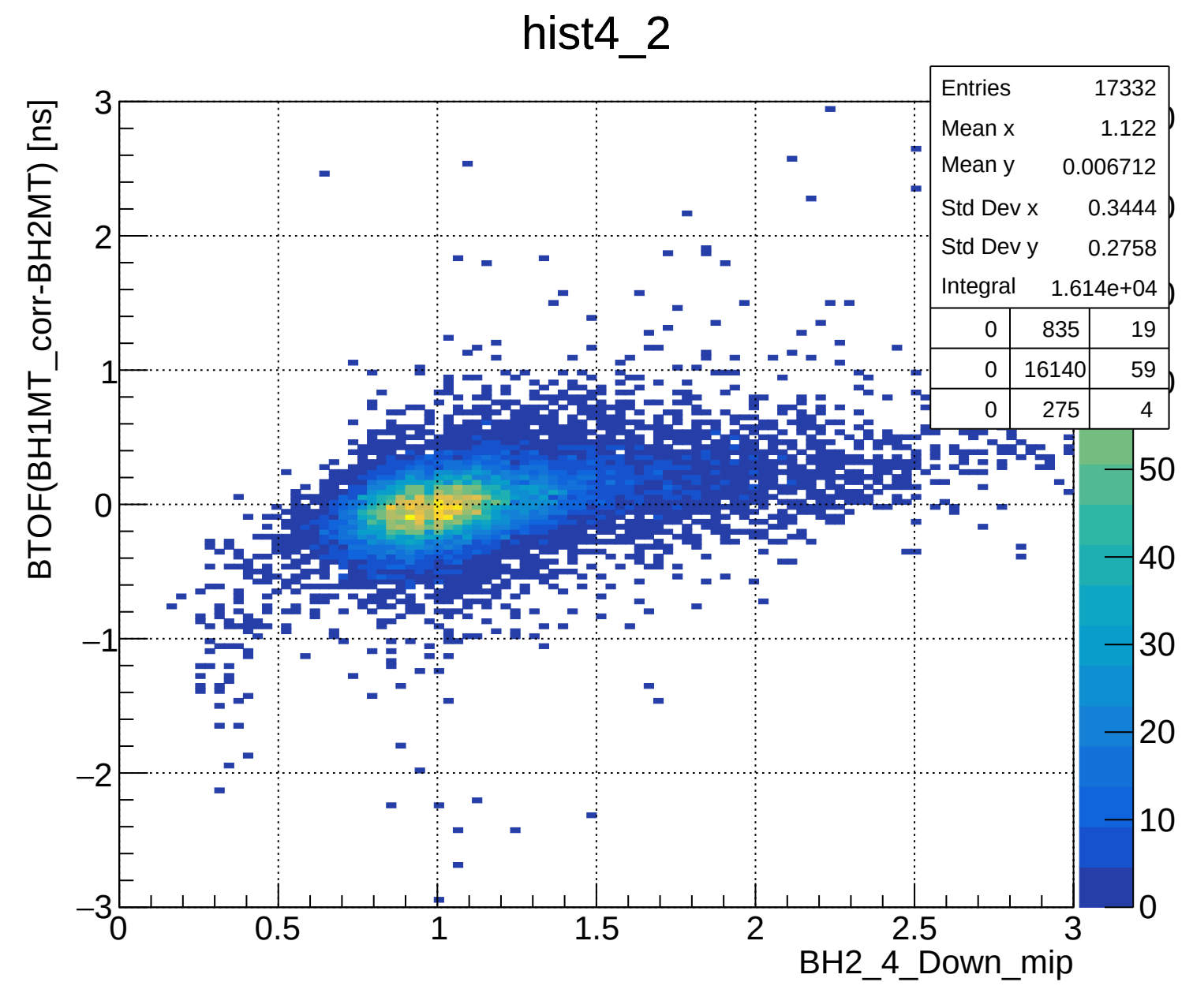

hist3_2
χ² / ndf 177.9 / 5
a0 1.44 ± 0.3534
a1 0.5805 ± 0.2595
a3 −1.128 ± 0.1874
Integral 1.619e+04
8 843 3
0 16192 6
0 276 4
BTOF(BH1MT-BH2MT) [ns]
BH1_4D_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

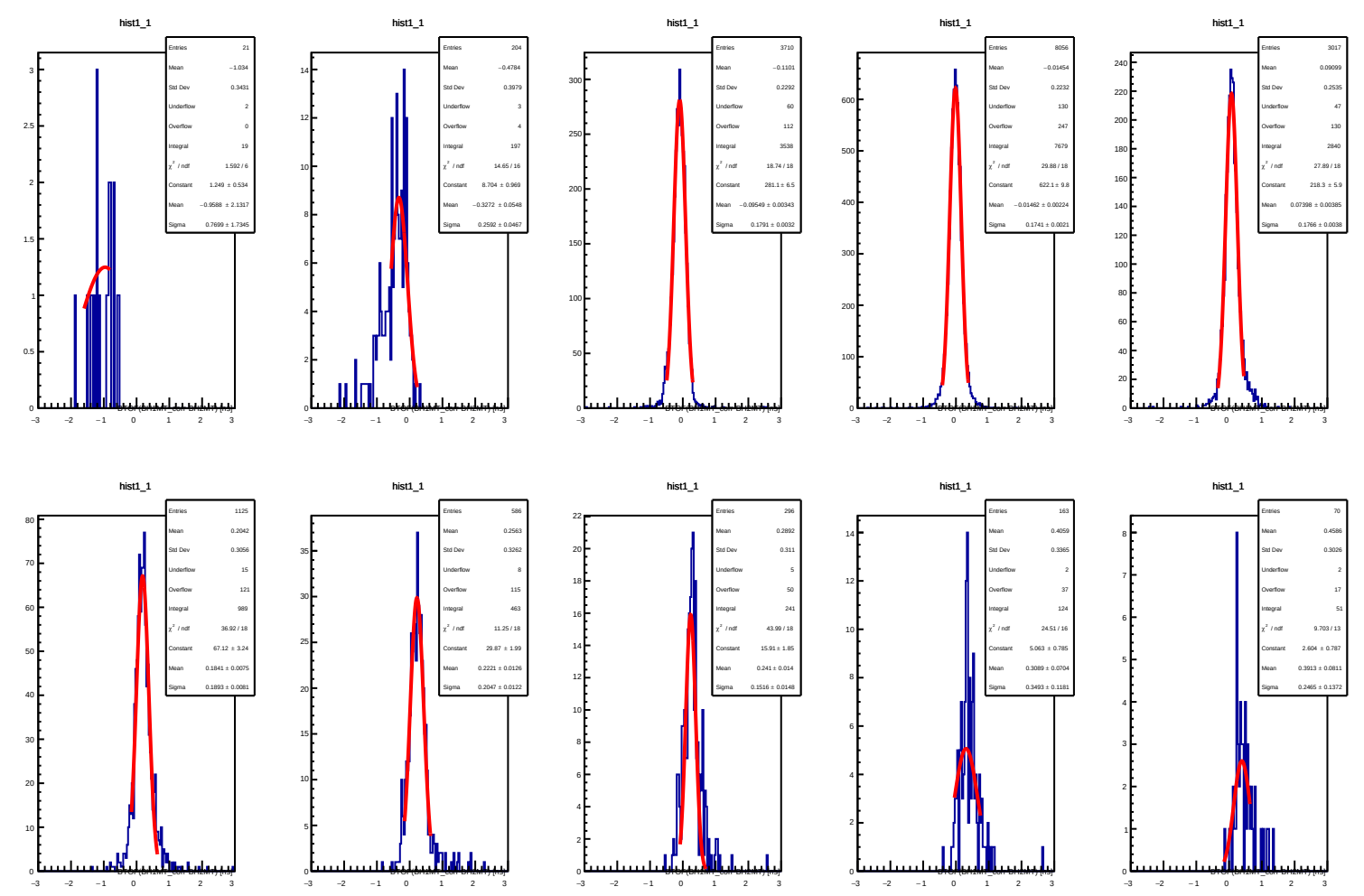

hist3_3
Entries 17332
Mean x 1.093
Mean y 0.008077
Std Dev x 0.2985
Std Dev y 0.2772
Integral 1.618e+04
8 843 3
0 16183 16
0 271 8
BTOF(BH1MT_corr - BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

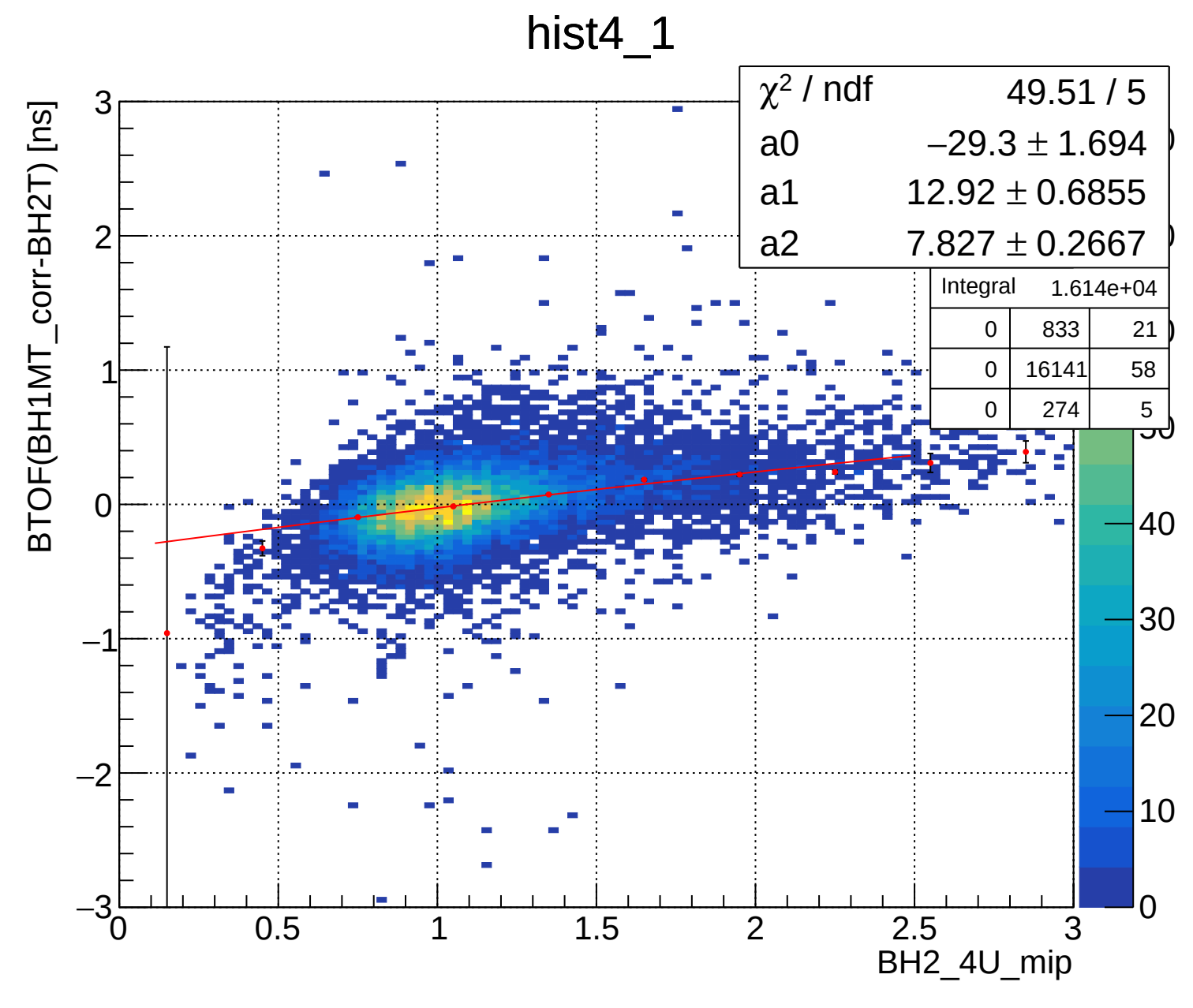

hist3_4
Entries 17332
Mean x 1.083
Mean y 0.008328
Std Dev x 0.2649
Std Dev y 0.2773
Integral 1.619e+04
8 843 3
0 16193 6
0 275 4
BTOF(BH1MT_corr-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
80
60
40
20
0

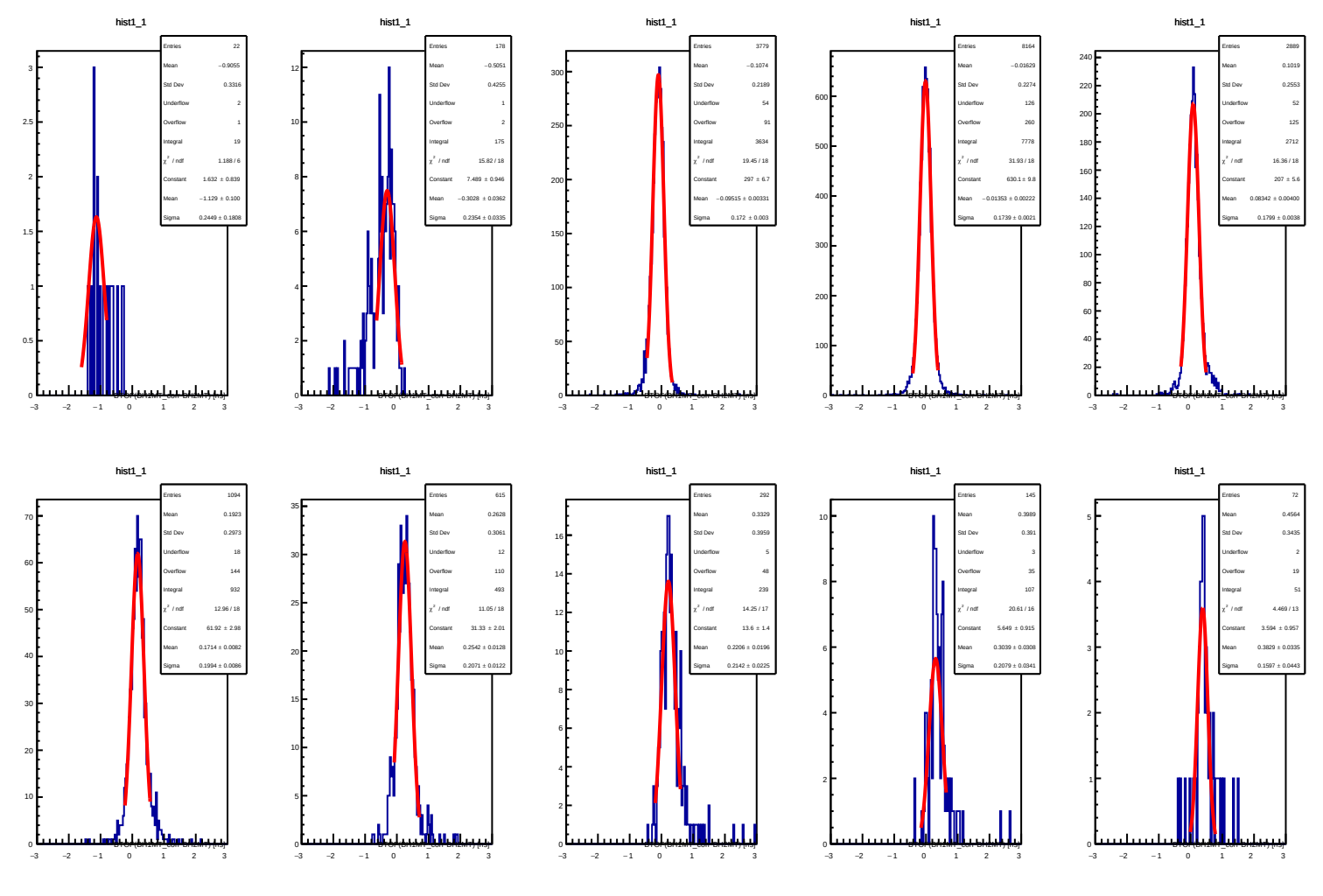

BTOFCORR34_4
Entries 17332
Mean 0.008592
Std Dev 0.2777
Underflow 279
Overflow 854
Integral 1.62e+04
χ² / ndf 108.1 / 25
Constant 1084 ± 11.7
Mean 0.0008157 ± 0.0017431
Sigma 0.2037 ± 0.0016
1200
1000
800
600
400
200
0
–3
–2
–1
0
1
2
3

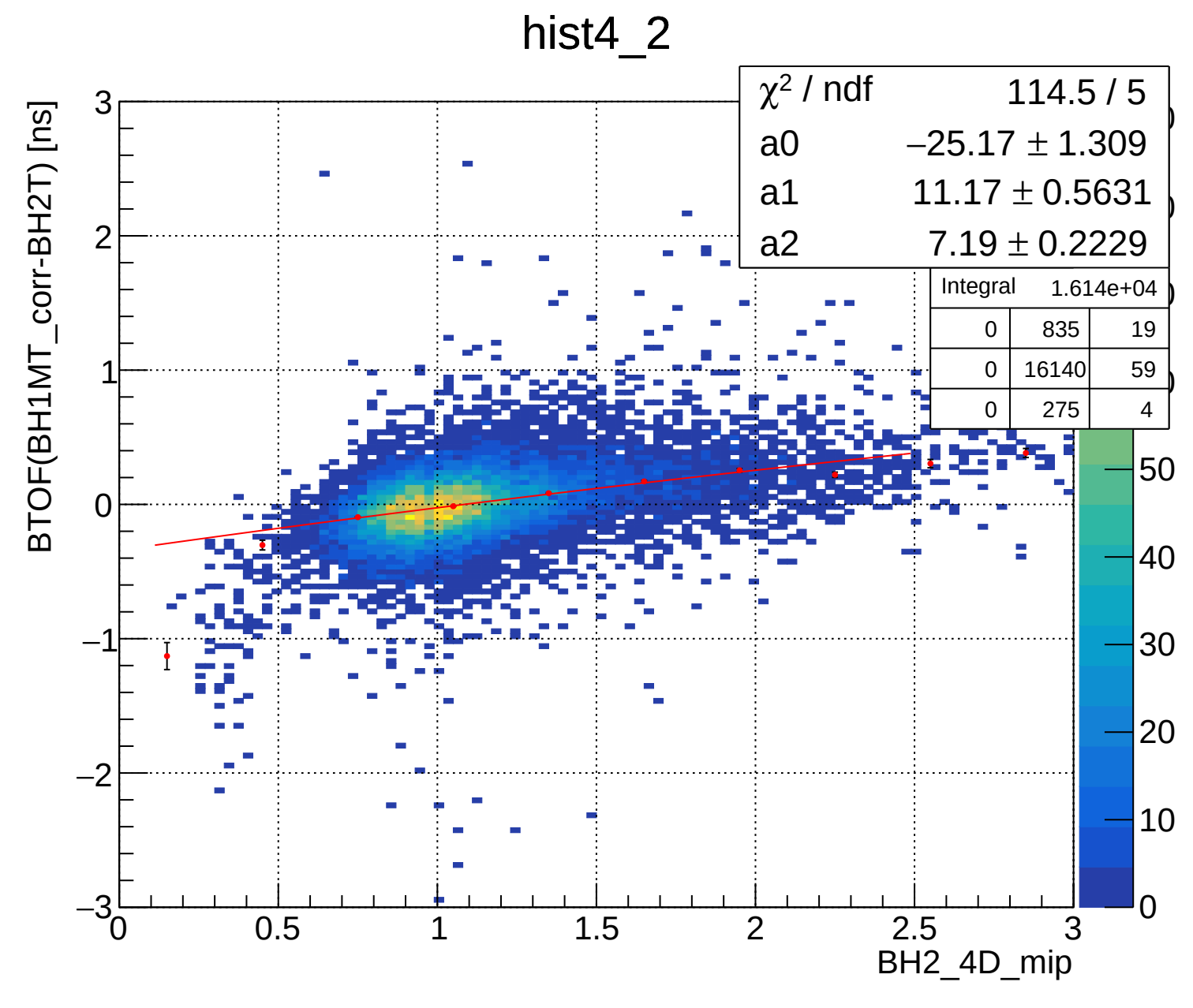

hist4_1
Entries 17332
Mean x 1.126
Mean y 0.006685
Std Dev x 0.3478
Std Dev y 0.2751
Integral 1.614e+04
0 833 21
0 16141 58
0 274 5
BTOF(BH1MT_corr-BH2MT) [ns]
BH2_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

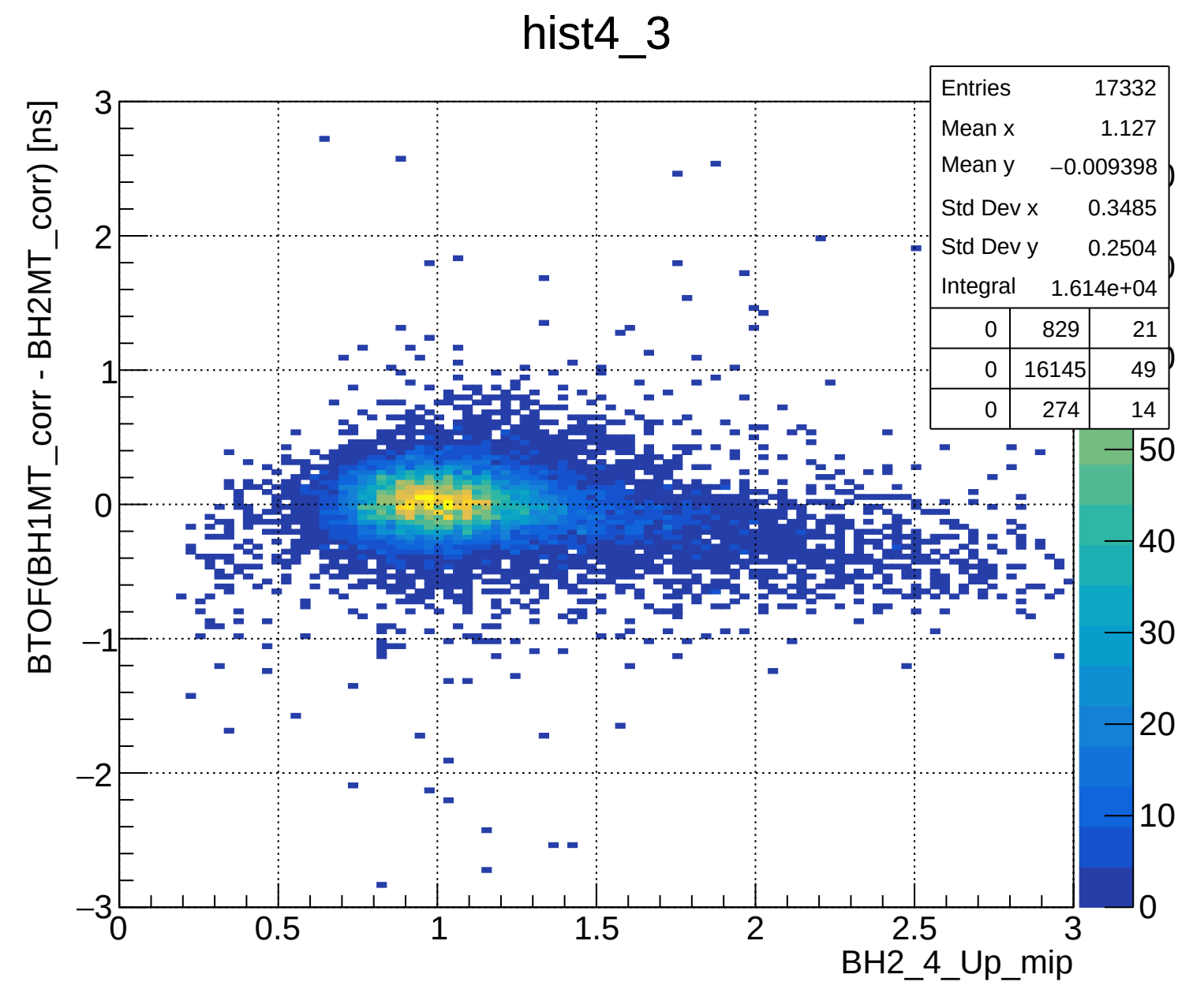

hist4_2
Entries 17332
Mean x 1.122
Mean y 0.006712
Std Dev x 0.3444
Std Dev y 0.2758
Integral 1.614e+04
0 835 19
0 16140 59
0 275 4
BTOF(BH1MT_corr-BH2MT) [ns]
BH2_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

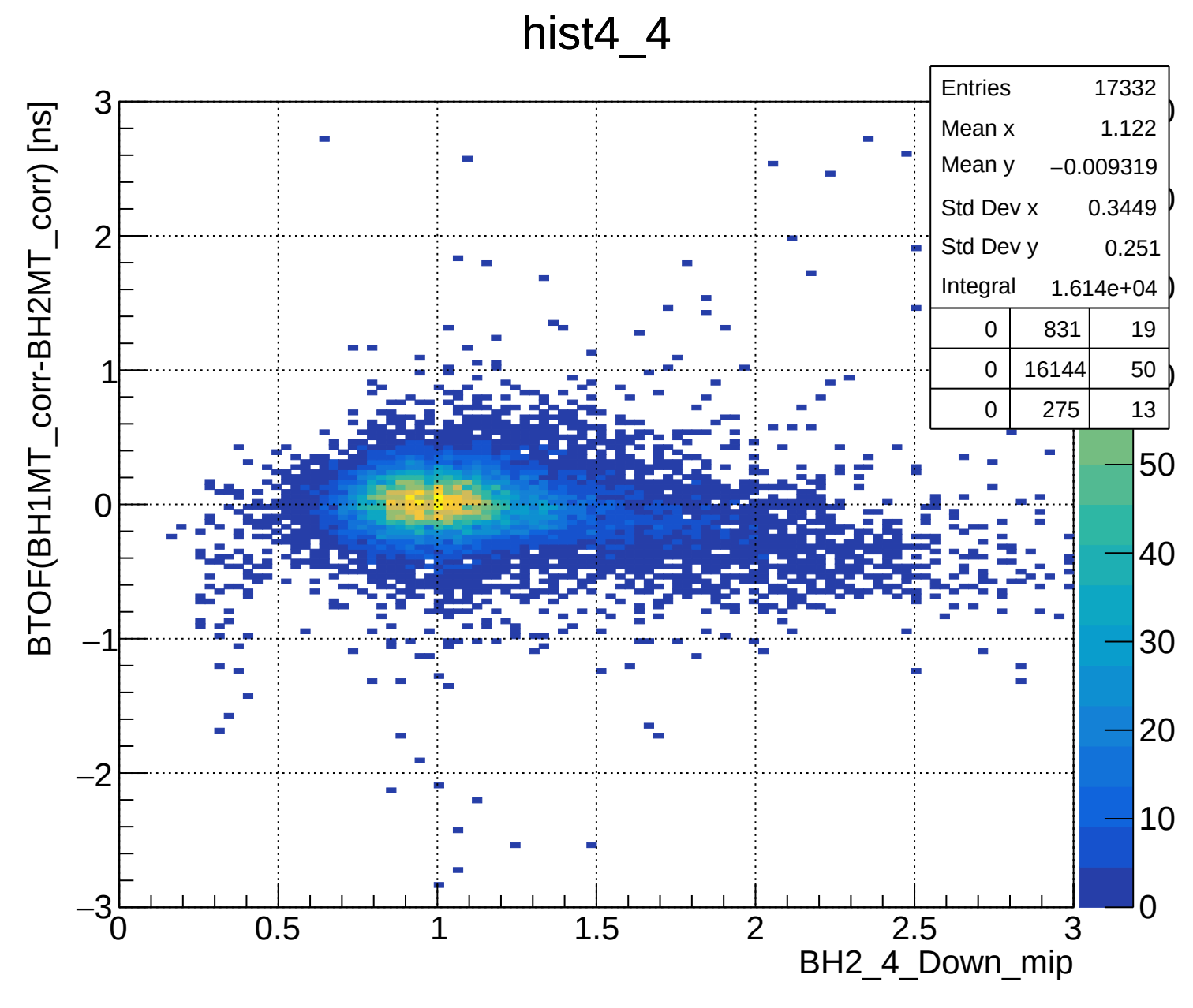

hist1_1
Entries 21
Mean −1.034
Std Dev 0.3431
Underflow 2
Overflow 0
Integral 19
χ² / ndf 1.592 / 6
Constant 1.249 ± 0.534
Mean −0.9588 ± 2.1317
Sigma 0.7699 ± 1.7345
hist1_1
Entries 204
Mean −0.4784
Std Dev 0.3979
Underflow 3
Overflow 4
Integral 197
χ² / ndf 14.65 / 16
Constant 8.704 ± 0.969
Mean −0.3272 ± 0.0548
Sigma 0.2592 ± 0.0467
hist1_1
Entries 3710
Mean −0.1101
Std Dev 0.2292
Underflow 60
Overflow 112
Integral 3538
χ² / ndf 18.74 / 18
Constant 281.1 ± 6.5
Mean −0.09549 ± 0.00343
Sigma 0.1791 ± 0.0032
hist1_1
Entries 8056
Mean −0.01454
Std Dev 0.2232
Underflow 130
Overflow 247
Integral 7679
χ² / ndf 29.88 / 18
Constant 622.1 ± 9.8
Mean −0.01462 ± 0.00224
Sigma 0.1741 ± 0.0021
hist1_1
Entries 3017
Mean 0.09099
Std Dev 0.2535
Underflow 47
Overflow 130
Integral 2840
χ² / ndf 27.89 / 18
Constant 218.3 ± 5.9
Mean 0.07398 ± 0.00385
Sigma 0.1766 ± 0.0038
hist1_1
Entries 1125
Mean 0.2042
Std Dev 0.3056
Underflow 15
Overflow 121
Integral 989
χ² / ndf 36.92 / 18
Constant 67.12 ± 3.24
Mean 0.1841 ± 0.0075
Sigma 0.1893 ± 0.0081
hist1_1
Entries 586
Mean 0.2563
Std Dev 0.3262
Underflow 8
Overflow 115
Integral 463
χ² / ndf 11.25 / 18
Constant 29.87 ± 1.99
Mean 0.2221 ± 0.0126
Sigma 0.2047 ± 0.0122
hist1_1
Entries 296
Mean 0.2892
Std Dev 0.311
Underflow 5
Overflow 50
Integral 241
χ² / ndf 43.99 / 18
Constant 15.91 ± 1.85
Mean 0.241 ± 0.014
Sigma 0.1516 ± 0.0148
hist1_1
Entries 163
Mean 0.4059
Std Dev 0.3365
Underflow 2
Overflow 37
Integral 124
χ² / ndf 24.51 / 16
Constant 5.063 ± 0.785
Mean 0.3089 ± 0.0704
Sigma 0.3493 ± 0.1181
hist1_1
Entries 70
Mean 0.4586
Std Dev 0.3026
Underflow 2
Overflow 17
Integral 51
χ² / ndf 9.703 / 13
Constant 2.604 ± 0.787
Mean 0.3913 ± 0.0811
Sigma 0.2465 ± 0.1372

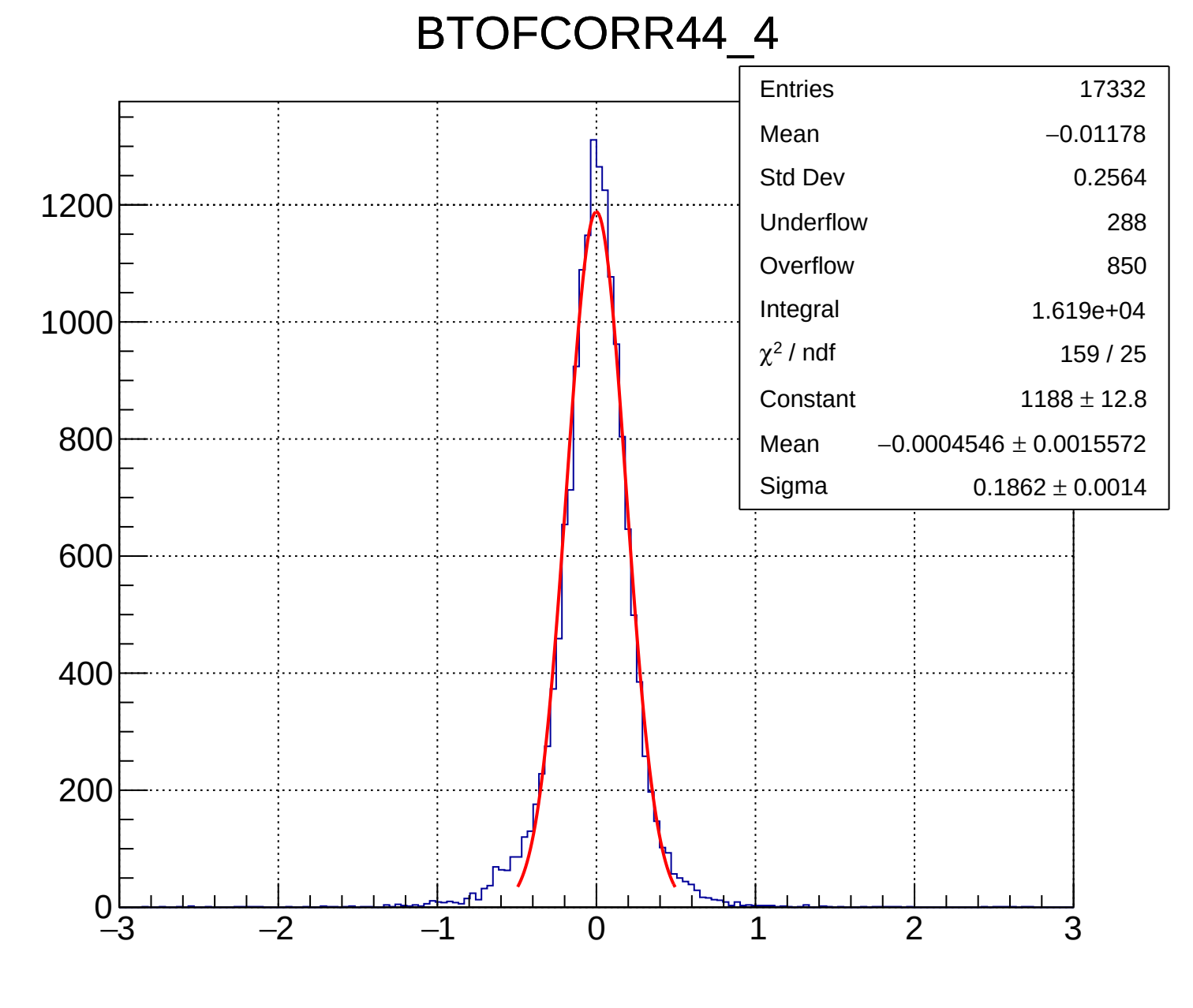

hist4_1
χ² / ndf 49.51 / 5
a0 −29.3 ± 1.694
a1 12.92 ± 0.6855
a2 7.827 ± 0.2667
Integral 1.614e+04
0 833 21
0 16141 58
0 274 5
BTOF(BH1MT_corr-BH2T) [ns]
BH2_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
40
30
20
10
0


hist1_1
Entries 22
Mean −0.9055
Std Dev 0.3316
Underflow 2
Overflow 1
Integral 19
χ² / ndf 1.188 / 6
Constant 1.632 ± 0.839
Mean −1.129 ± 0.100
Sigma 0.2449 ± 0.1808
hist1_1
Entries 178
Mean −0.5051
Std Dev 0.4255
Underflow 1
Overflow 2
Integral 175
χ² / ndf 15.82 / 18
Constant 7.489 ± 0.946
Mean −0.3028 ± 0.0362
Sigma 0.2354 ± 0.0335
hist1_1
Entries 3779
Mean −0.1074
Std Dev 0.2189
Underflow 54
Overflow 91
Integral 3634
χ² / ndf 19.45 / 18
Constant 297 ± 6.7
Mean −0.09515 ± 0.00331
Sigma 0.172 ± 0.003
hist1_1
Entries 8164
Mean −0.01629
Std Dev 0.2274
Underflow 126
Overflow 260
Integral 7778
χ² / ndf 31.93 / 18
Constant 630.1 ± 9.8
Mean −0.01353 ± 0.00222
Sigma 0.1739 ± 0.0021
hist1_1
Entries 2889
Mean 0.1019
Std Dev 0.2553
Underflow 52
Overflow 125
Integral 2712
χ² / ndf 16.36 / 18
Constant 207 ± 5.6
Mean 0.08342 ± 0.00400
Sigma 0.1799 ± 0.0038
hist1_1
Entries 1094
Mean 0.1923
Std Dev 0.2973
Underflow 18
Overflow 144
Integral 932
χ² / ndf 12.96 / 18
Constant 61.92 ± 2.98
Mean 0.1714 ± 0.0082
Sigma 0.1994 ± 0.0086
hist1_1
Entries 615
Mean 0.2628
Std Dev 0.3061
Underflow 12
Overflow 110
Integral 493
χ² / ndf 11.05 / 18
Constant 31.33 ± 2.01
Mean 0.2542 ± 0.0128
Sigma 0.2071 ± 0.0122
hist1_1
Entries 292
Mean 0.3329
Std Dev 0.3959
Underflow 5
Overflow 48
Integral 239
χ² / ndf 14.25 / 17
Constant 13.6 ± 1.4
Mean 0.2206 ± 0.0196
Sigma 0.2142 ± 0.0225
hist1_1
Entries 145
Mean 0.3989
Std Dev 0.391
Underflow 3
Overflow 35
Integral 107
χ² / ndf 20.61 / 16
Constant 5.649 ± 0.915
Mean 0.3039 ± 0.0308
Sigma 0.2079 ± 0.0341
hist1_1
Entries 72
Mean 0.4564
Std Dev 0.3435
Underflow 2
Overflow 19
Integral 51
χ² / ndf 4.469 / 13
Constant 3.594 ± 0.957
Mean 0.3829 ± 0.0335
Sigma 0.1597 ± 0.0443


hist4_2
χ² / ndf 114.5 / 5
a0 −25.17 ± 1.309
a1 11.17 ± 0.5631
a2 7.19 ± 0.2229
Integral 1.614e+04
0 835 19
0 16140 59
0 275 4
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
50
40
30
20
10
0


hist4_3
Entries 17332
Mean x 1.127
Mean y −0.009398
Std Dev x 0.3485
Std Dev y 0.2504
Integral 1.614e+04
0 829 21
0 16145 49
0 274 14
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
50
40
30
20
10
0


hist4_4
Entries 17332
Mean x 1.122
Mean y −0.009319
Std Dev x 0.3449
Std Dev y 0.251
Integral 1.614e+04
0 831 19
0 16144 50
0 275 13
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
50
40
30
20
10
0


BTOFCORR44_4
Entries 17332
Mean −0.01178
Std Dev 0.2564
Underflow 288
Overflow 850
Integral 1.619e+04
χ² / ndf 159 / 25
Constant 1188 ± 12.8
Mean −0.0004546 ± 0.0015572
Sigma 0.1862 ± 0.0014
1200
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3