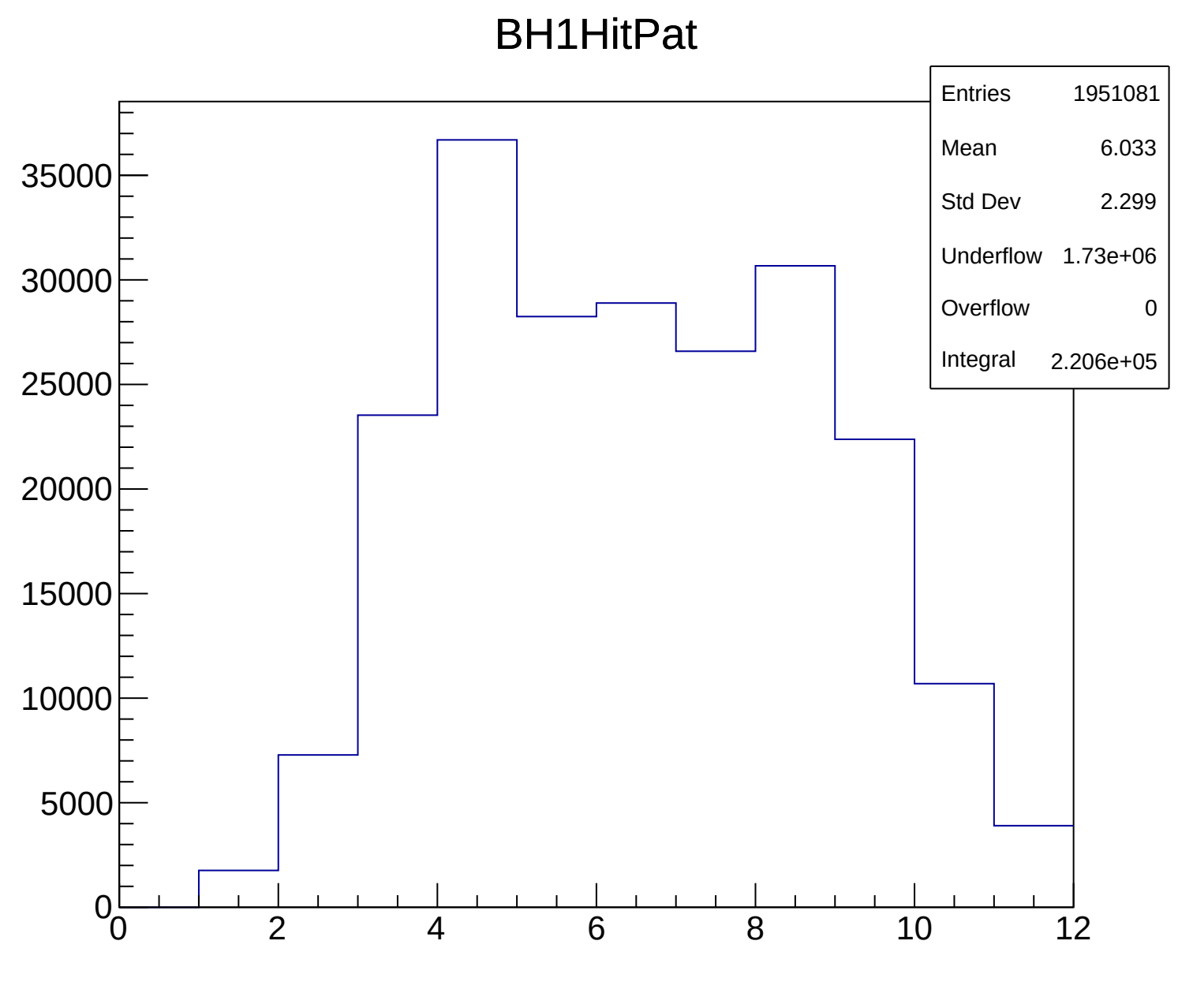
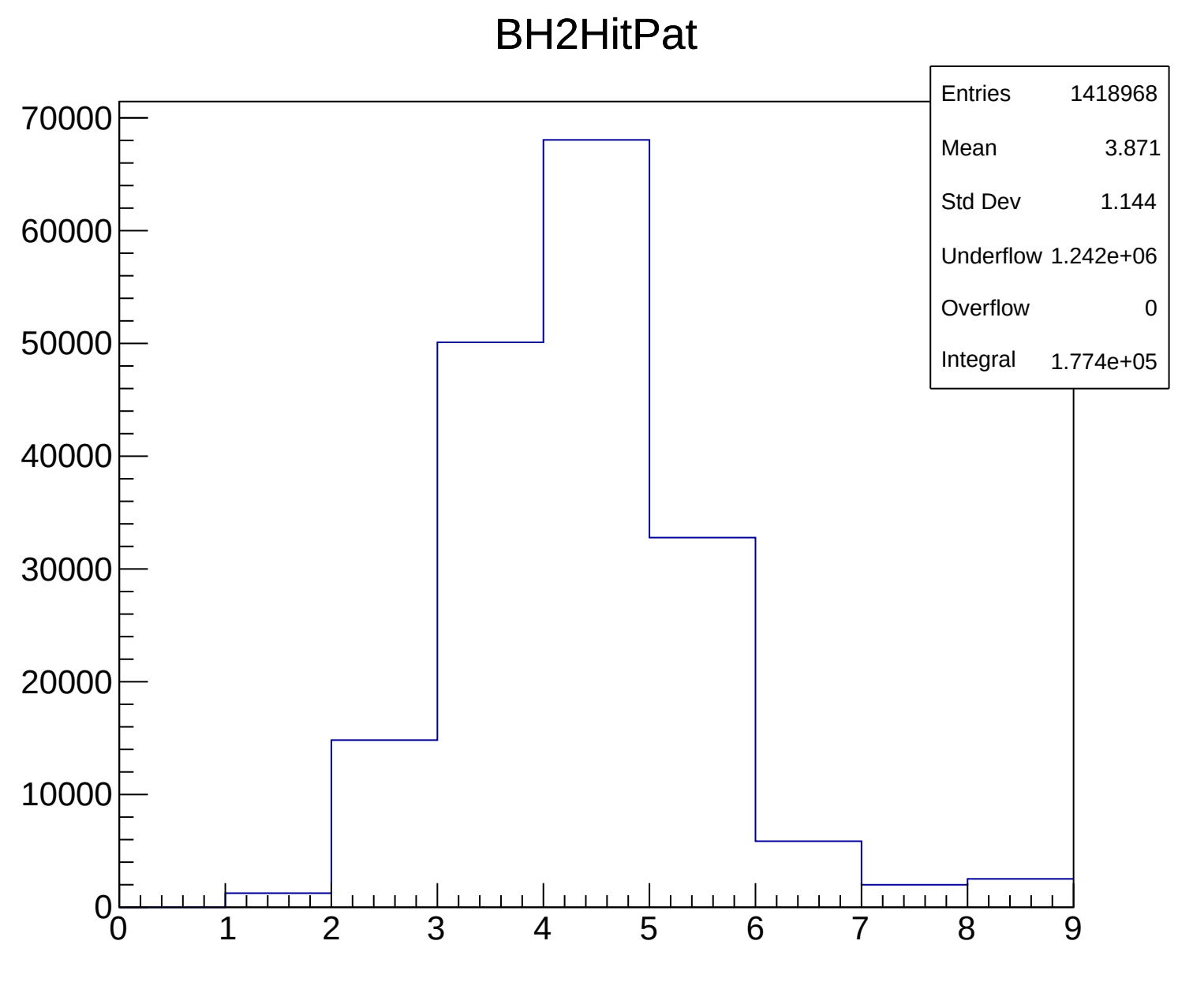
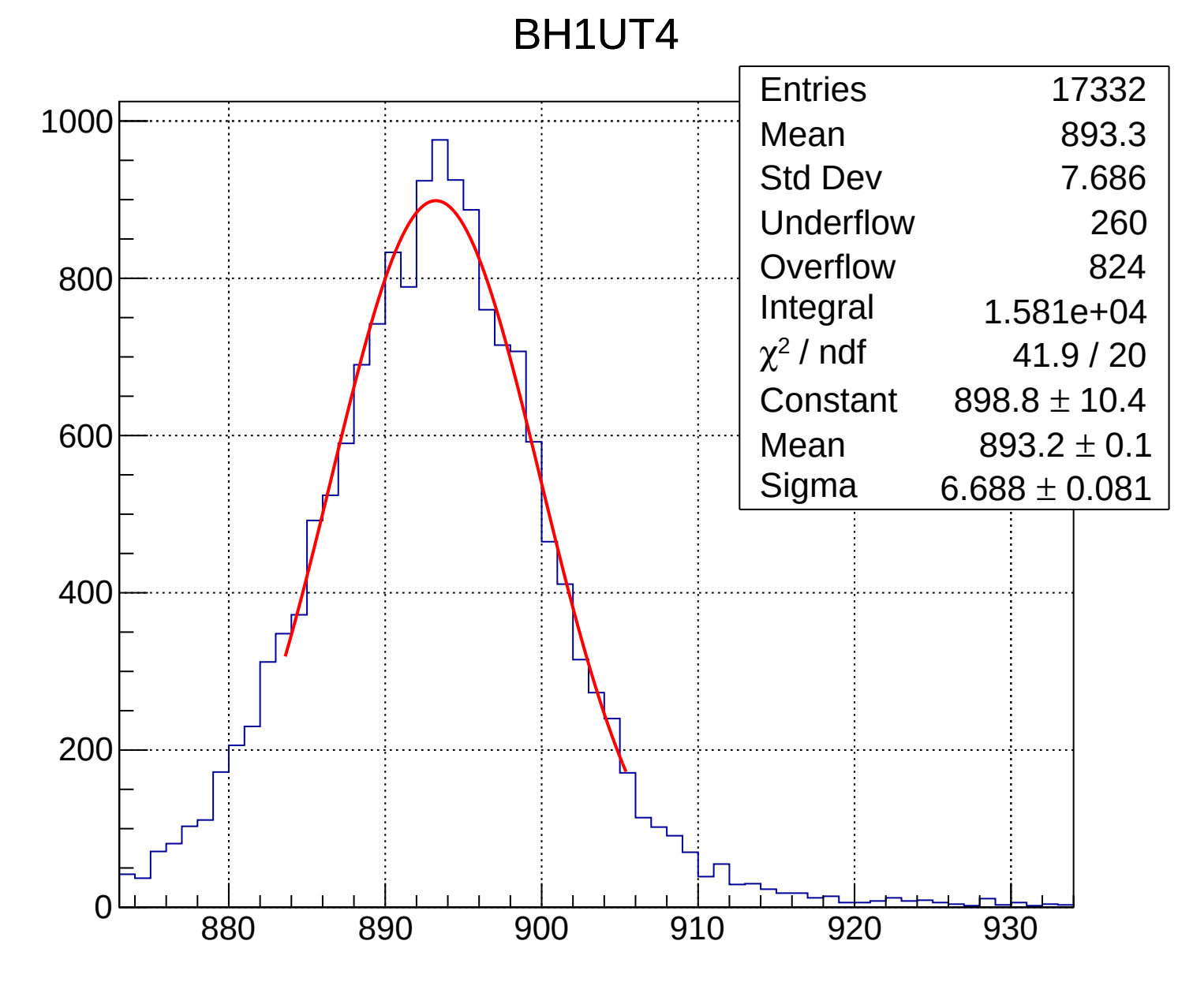
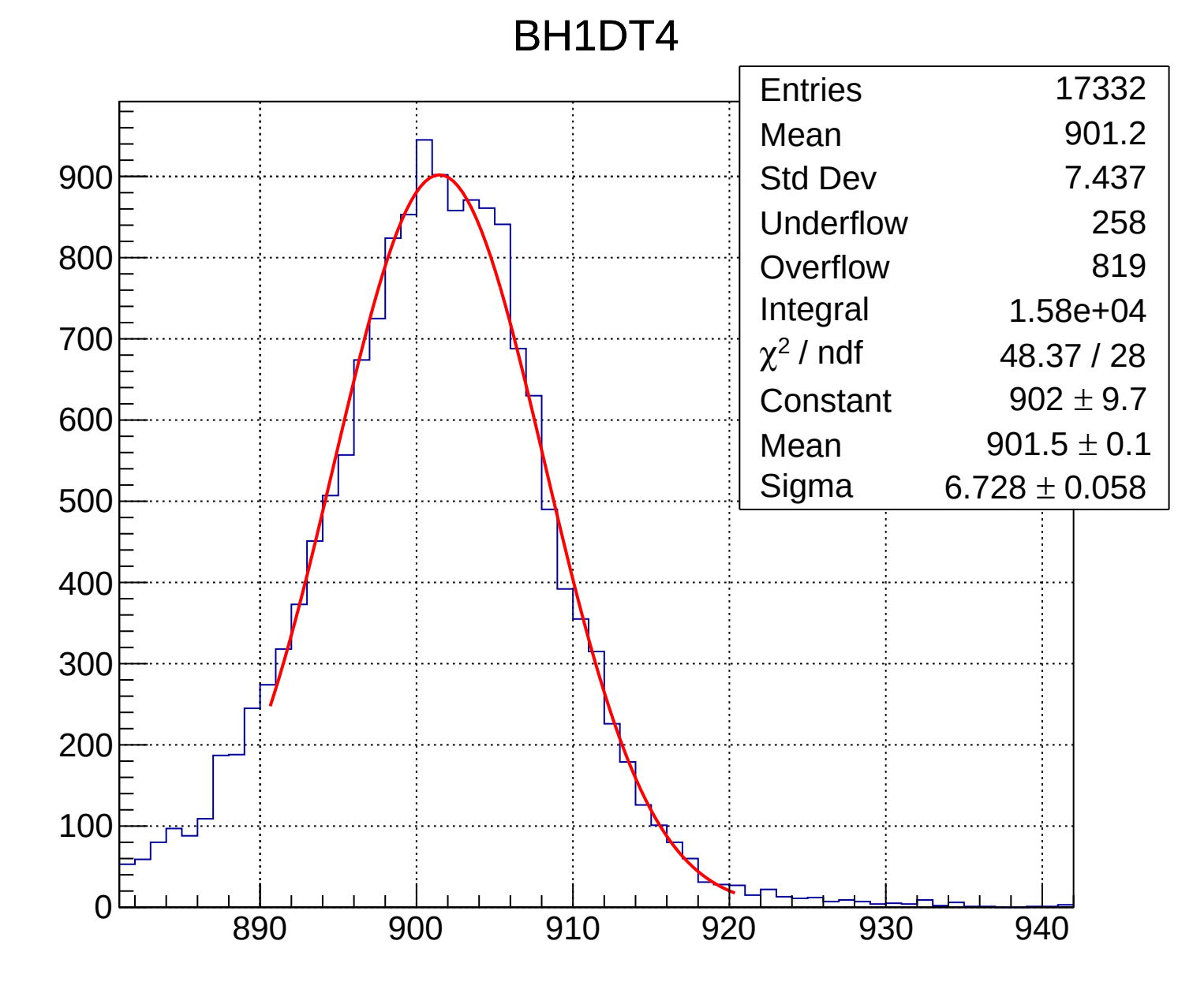
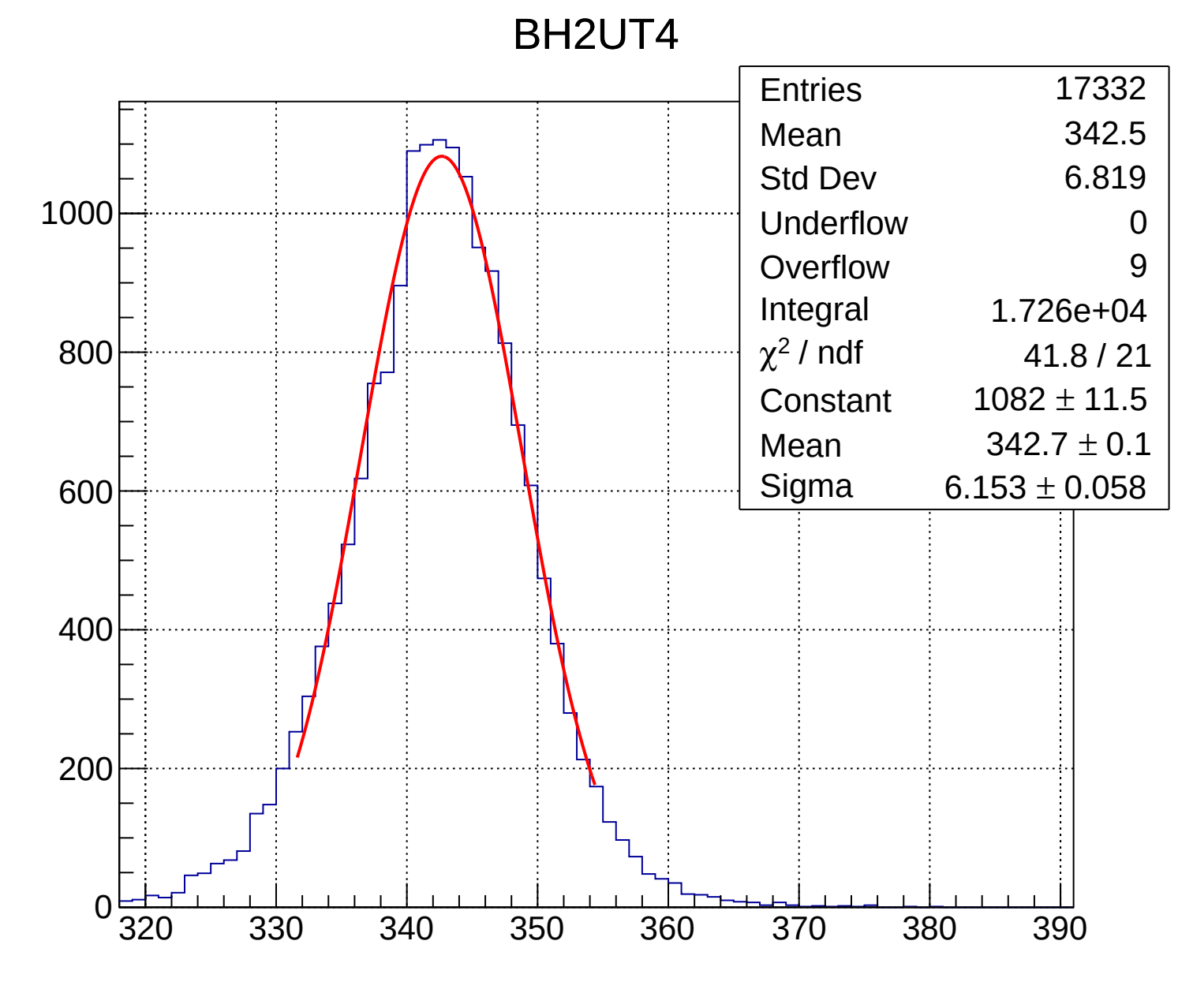
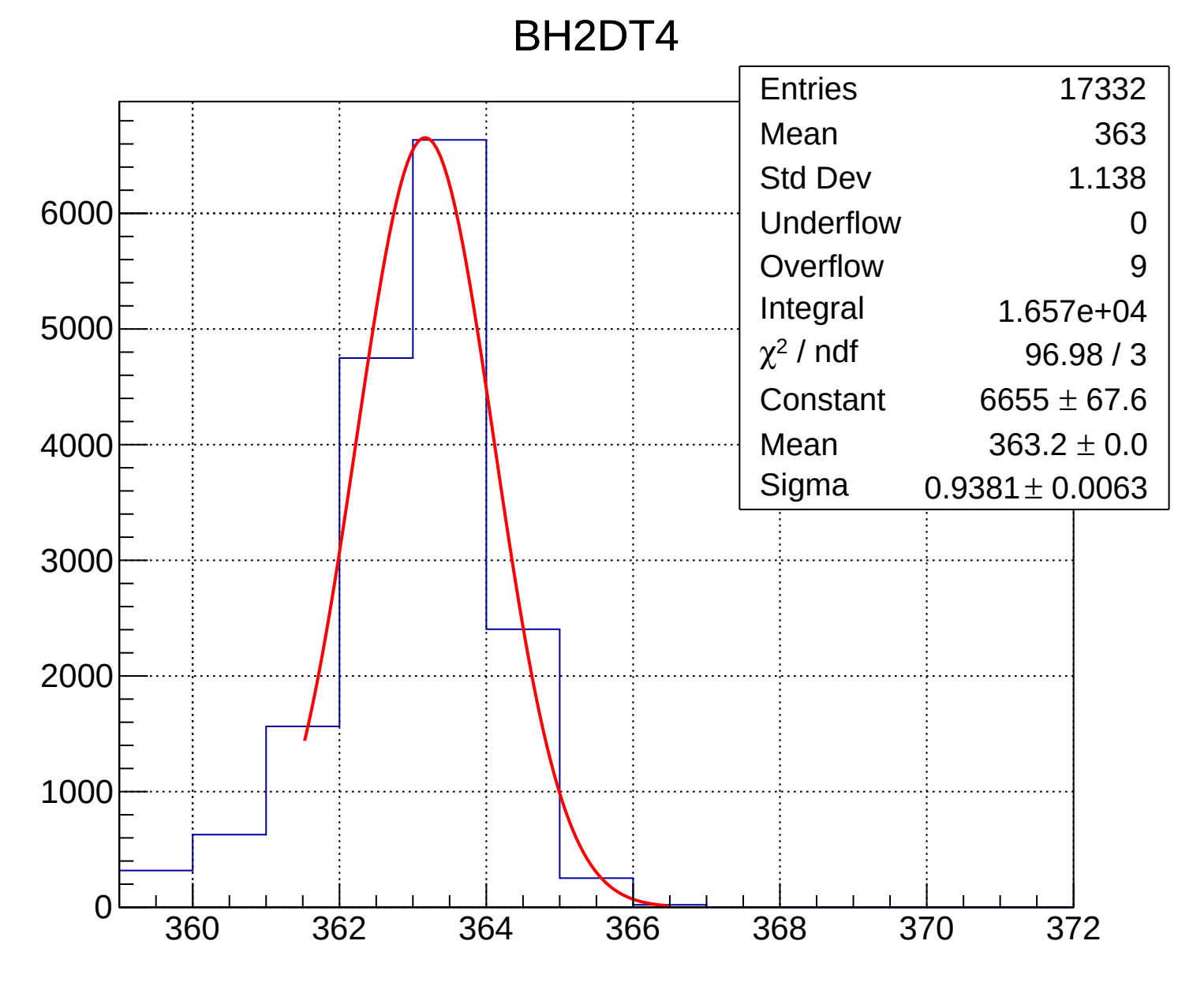

BH1HitPat
Entries 1951081
Mean 6.033
Std Dev 2.299
Underflow 1.73e+06
Overflow 0
Integral 2.206e+05
35000
30000
25000
20000
15000
10000
5000
0
0
2
4
6
8
10
12

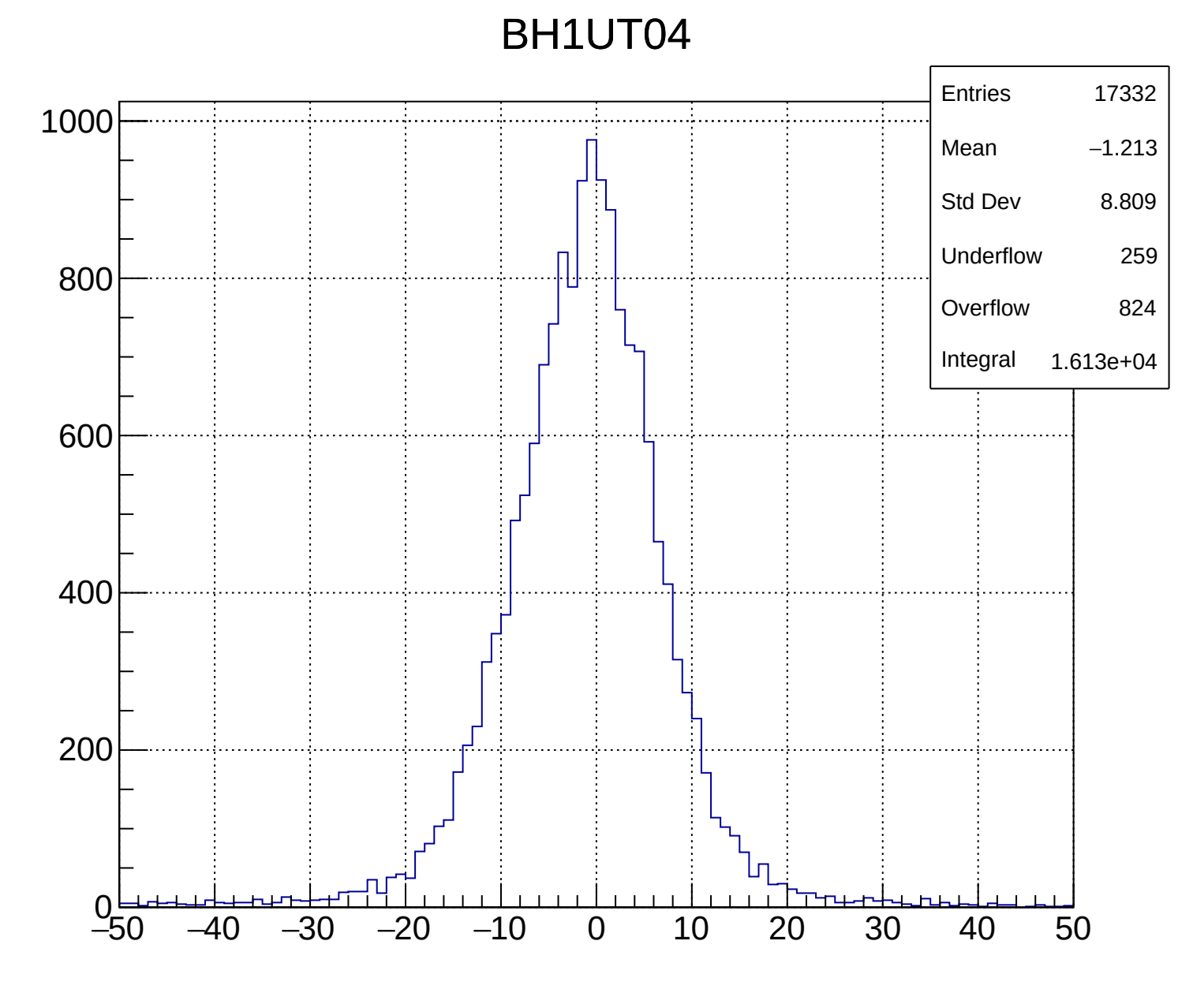

BH2HitPat
Entries 1418968
Mean 3.871
Std Dev 1.144
Underflow 1.242e+06
Overflow 0
Integral 1.774e+05
70000
60000
50000
40000
30000
20000
10000
0
0
1
2
3
4
5
6
7
8
9

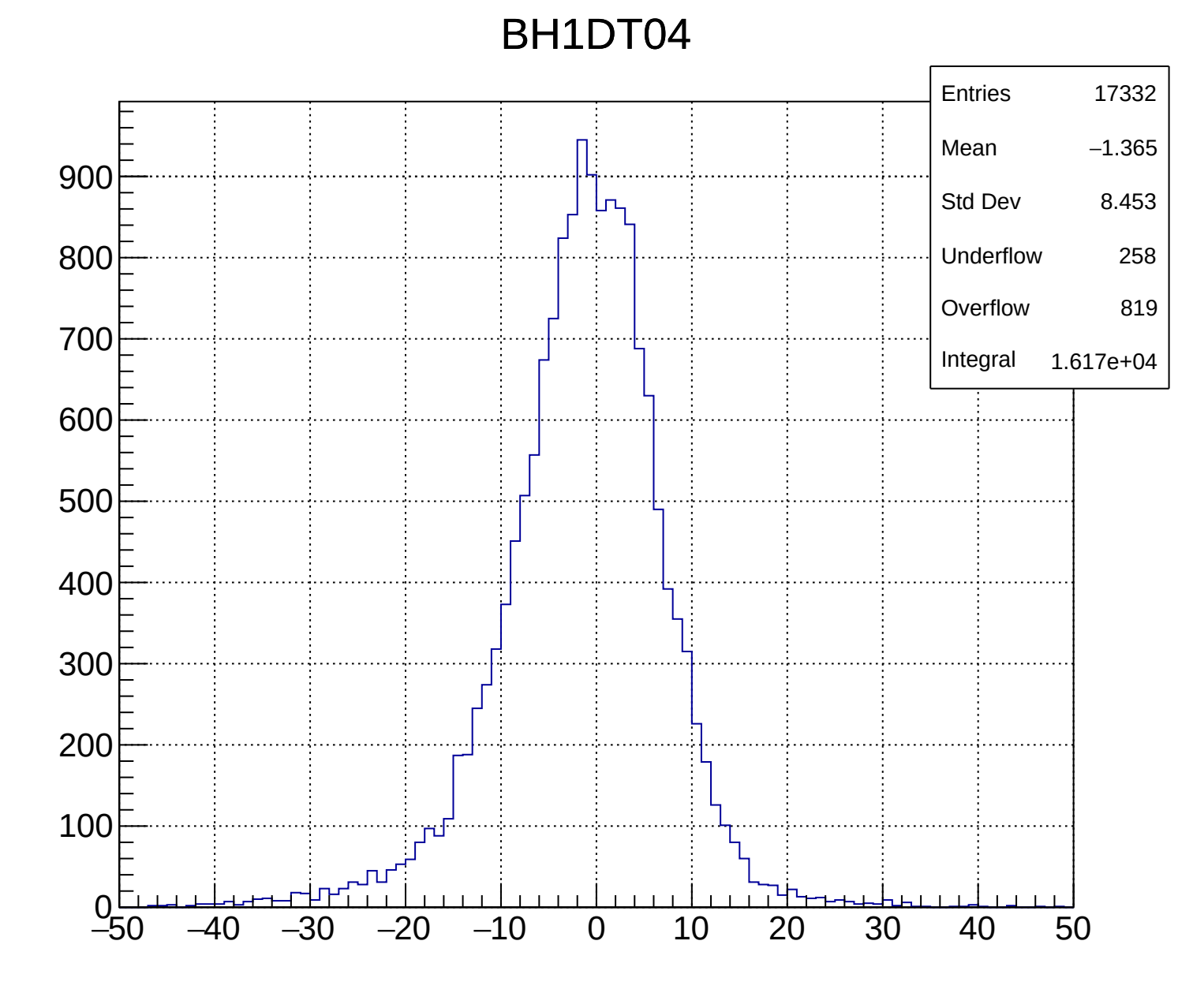

BH1UT4
Entries 17332
Mean 893.3
Std Dev 7.686
Underflow 260
Overflow 824
Integral 1.581e+04
χ² / ndf 41.9 / 20
Constant 898.8 ± 10.4
Mean 893.2 ± 0.1
Sigma 6.688 ± 0.081
1000
800
600
400
200
0
880
890
900
910
920
930

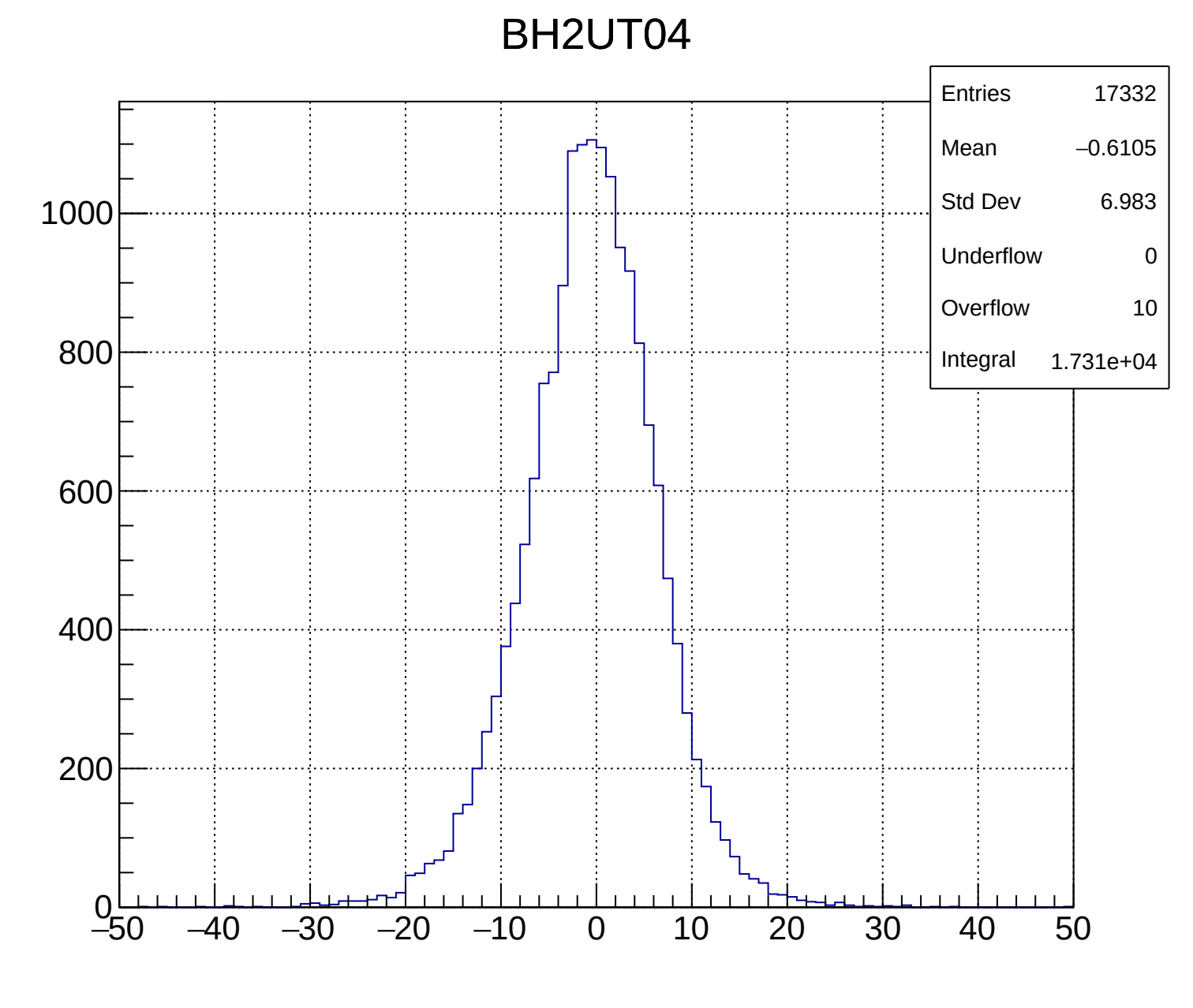

BH1DT4
Entries 17332
Mean 901.2
Std Dev 7.437
Underflow 258
Overflow 819
Integral 1.58e+04
χ² / ndf 48.37 / 28
Constant 902 ± 9.7
Mean 901.5 ± 0.1
Sigma 6.728 ± 0.058
0
100
200
300
400
500
600
700
800
900
890
900
910
920
930
940

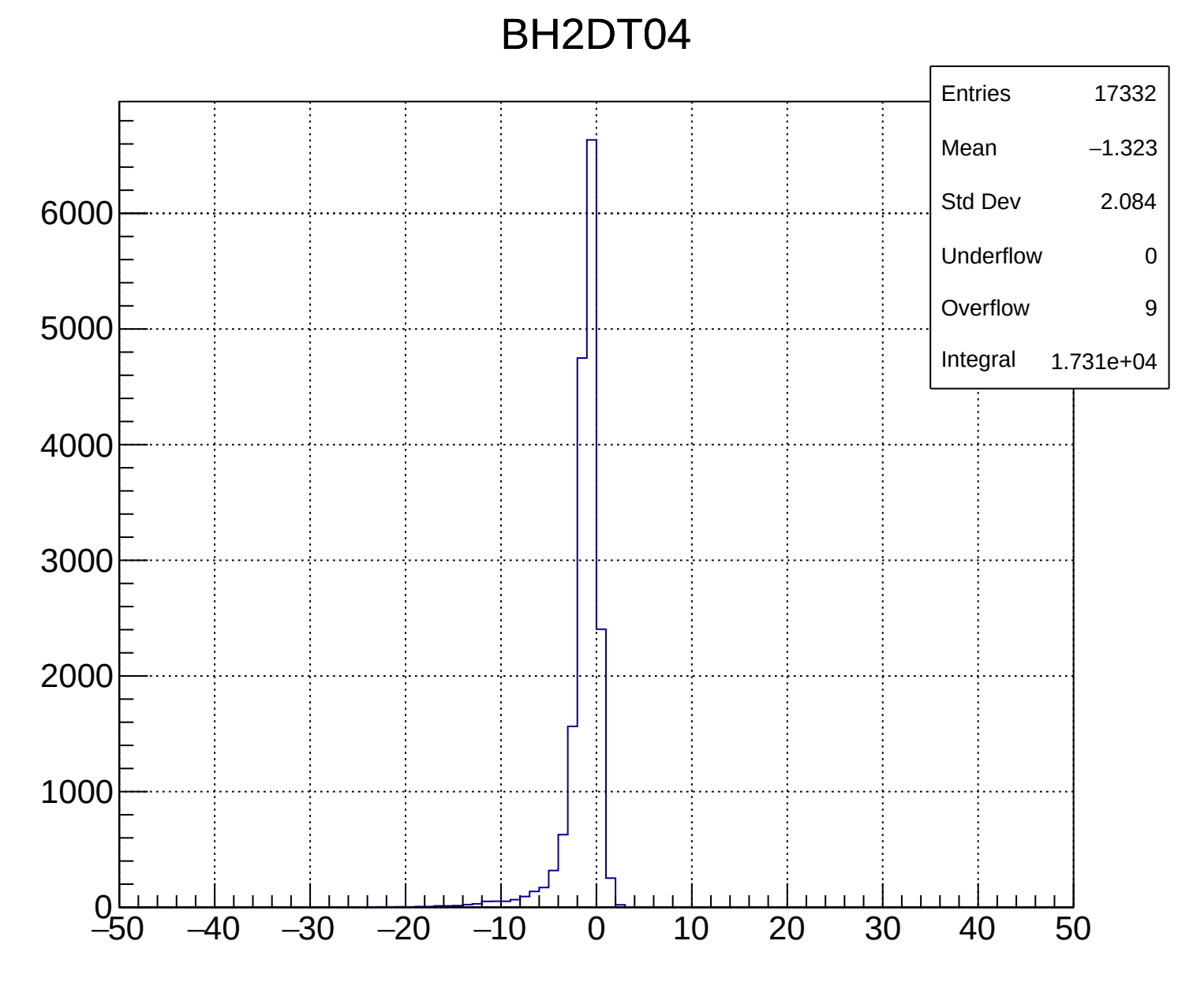

BH2UT4
Entries 17332
Mean 342.5
Std Dev 6.819
Underflow 0
Overflow 9
Integral 1.726e+04
χ² / ndf 41.8 / 21
Constant 1082 ± 11.5
Mean 342.7 ± 0.1
Sigma 6.153 ± 0.058
0
200
400
600
800
1000
320
330
340
350
360
370
380
390

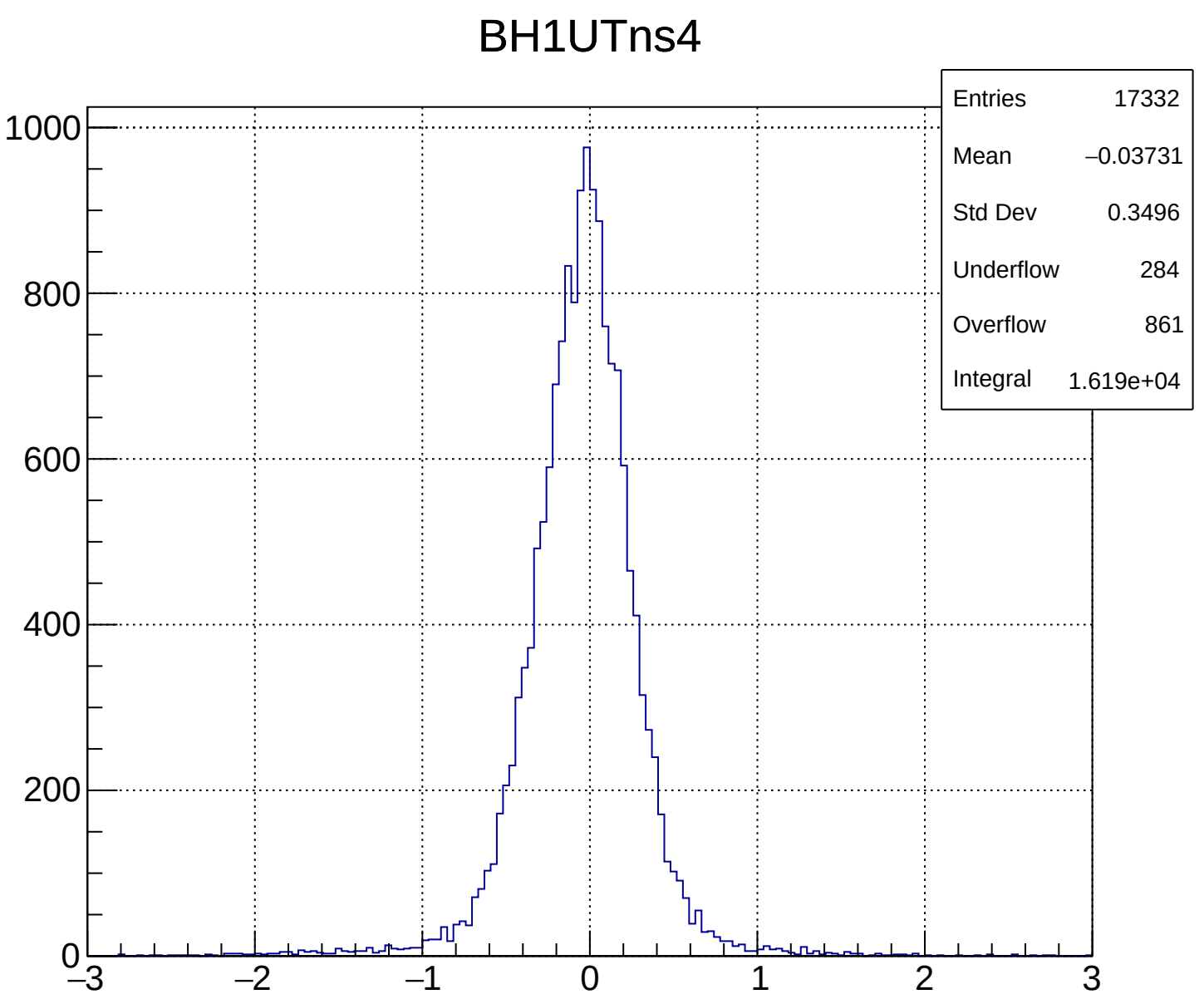

BH2DT4
Entries 17332
Mean 363
Std Dev 1.138
Underflow 0
Overflow 9
Integral 1.657e+04
χ² / ndf 96.98 / 3
Constant 6655 ± 67.6
Mean 363.2 ± 0.0
Sigma 0.9381 ± 0.0063
6000
5000
4000
3000
2000
1000
0
360
362
364
366
368
370
372

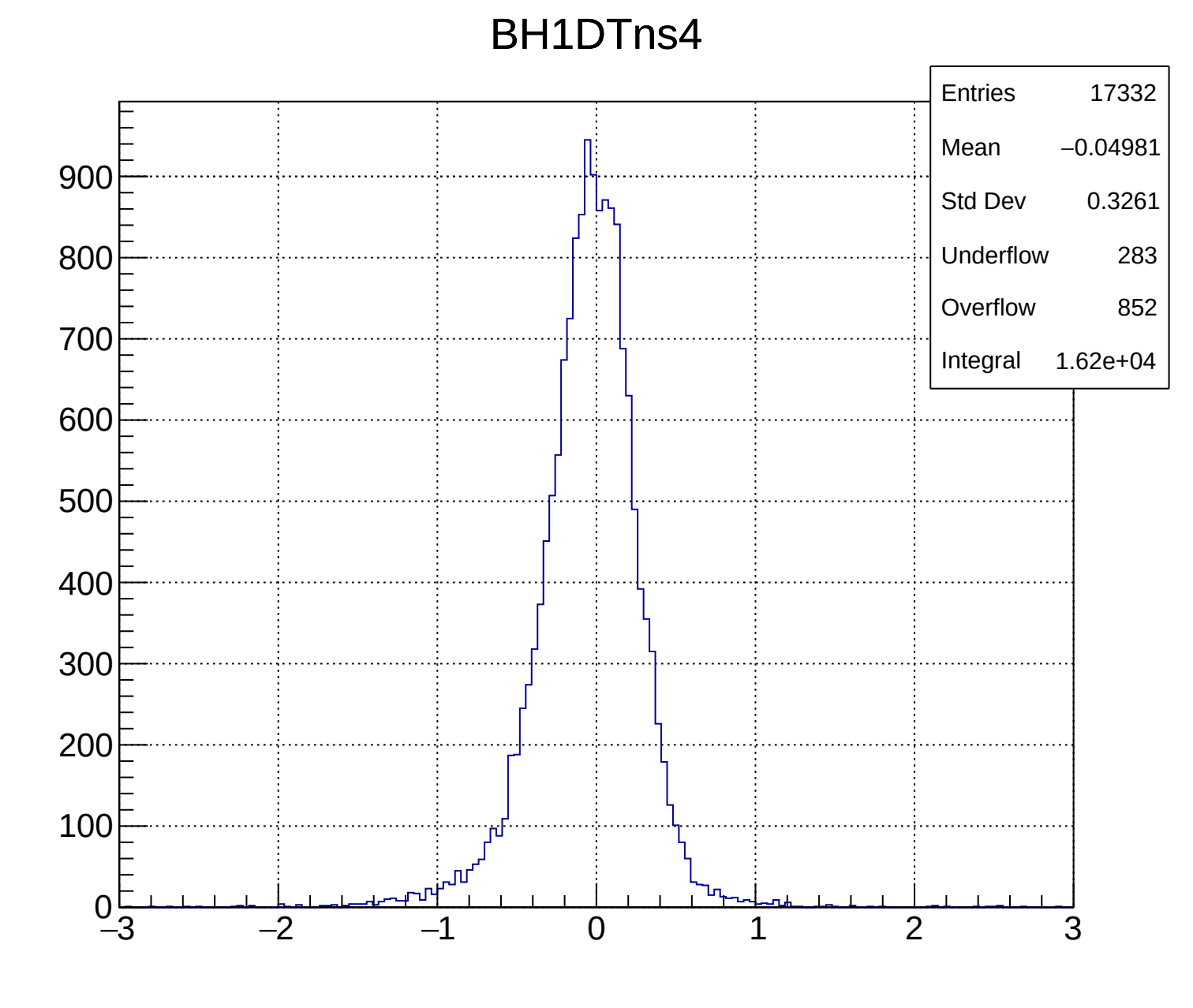

BH1UT04
Entries 17332
Mean –1.213
Std Dev 8.809
Underflow 259
Overflow 824
Integral 1.613e+04
1000
800
600
400
200
0
–50
–40
–30
–20
–10
0
10
20
30
40
50

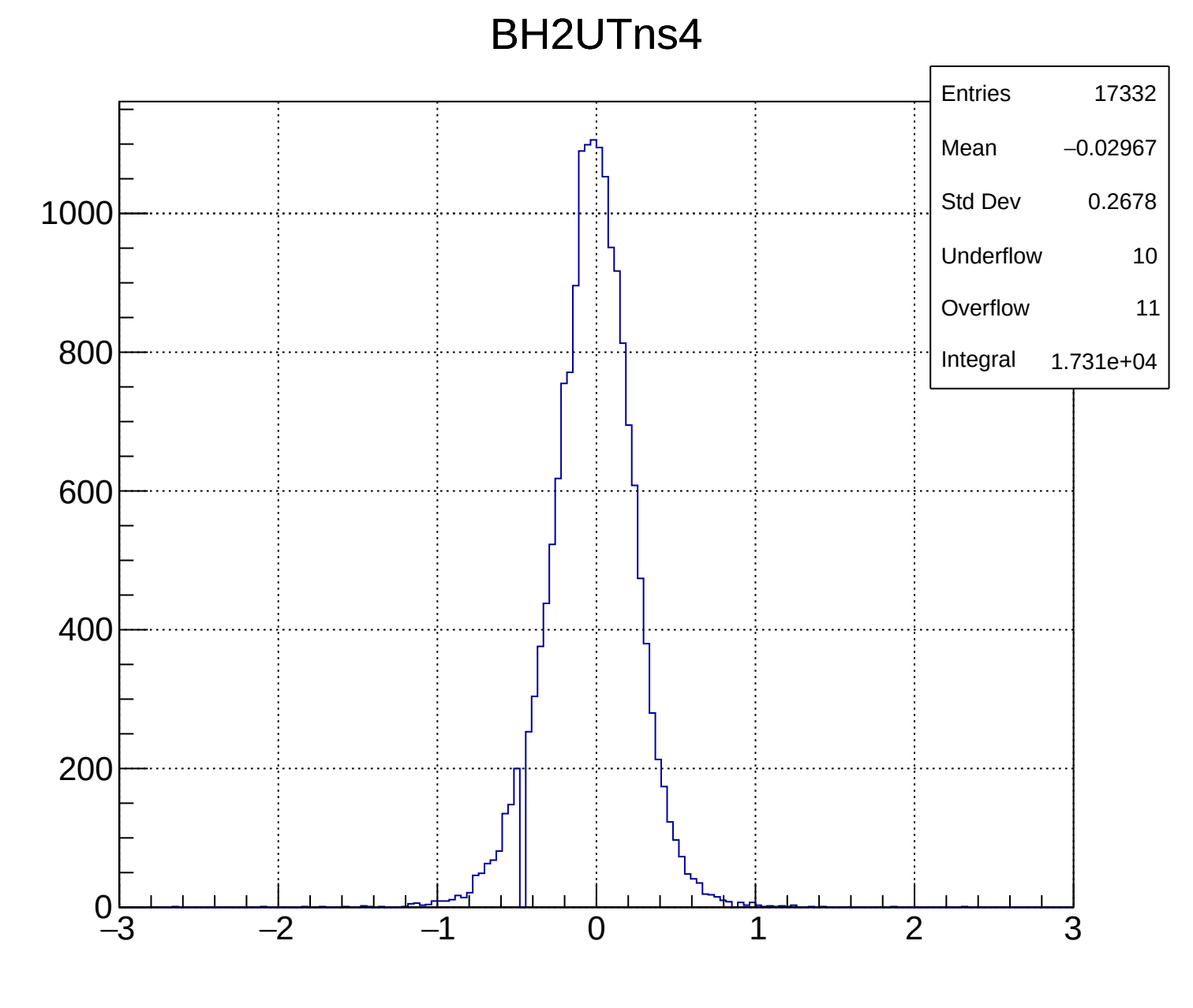

BH1DT04
Entries 17332
Mean –1.365
Std Dev 8.453
Underflow 258
Overflow 819
Integral 1.617e+04
900
800
700
600
500
400
300
200
100
0
–50
–40
–30
–20
–10
0
10
20
30
40
50

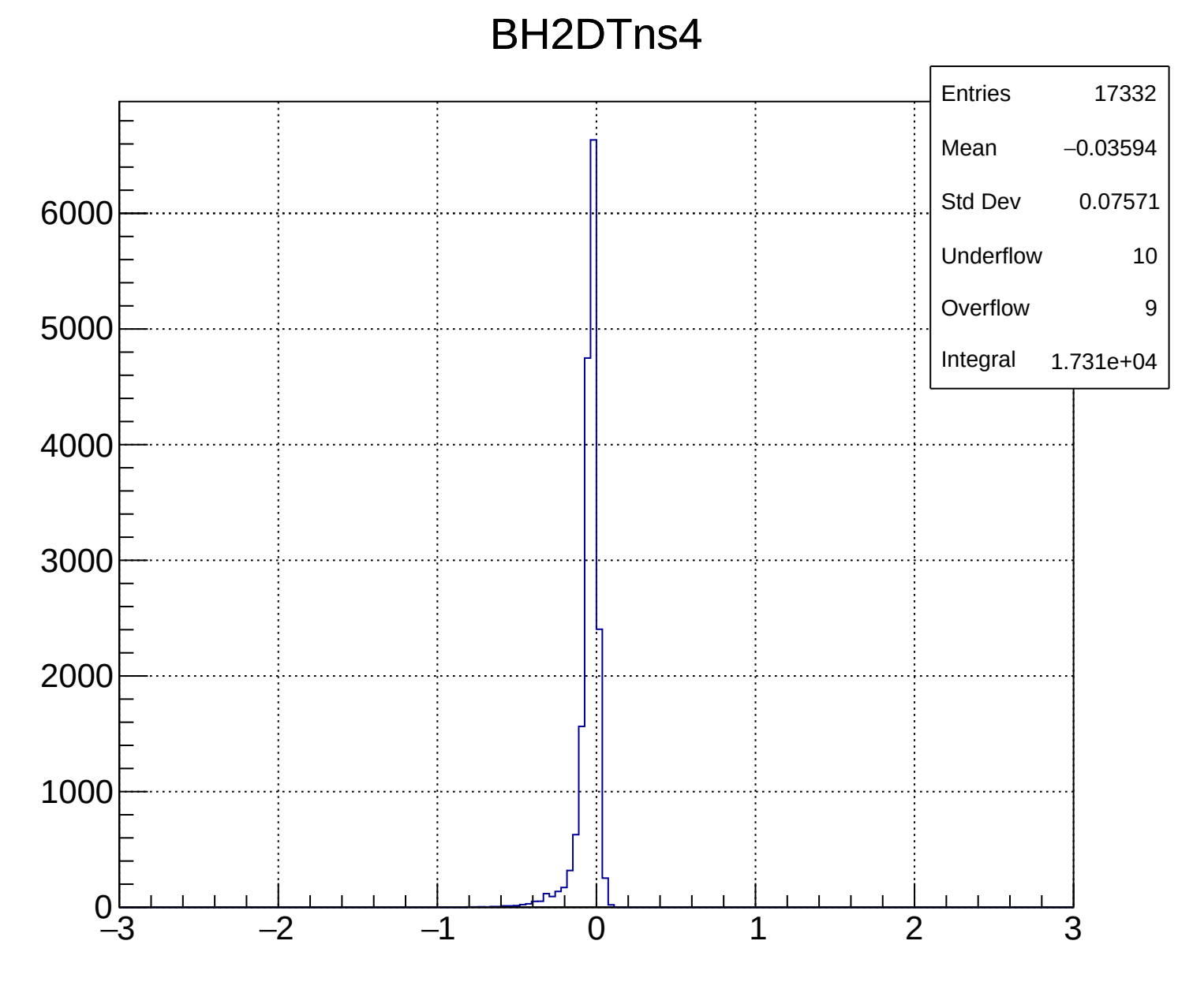

BH2UT04
Entries 17332
Mean –0.6105
Std Dev 6.983
Underflow 0
Overflow 10
Integral 1.731e+04
1000
800
600
400
200
0
–50
–40
–30
–20
–10
0
10
20
30
40
50

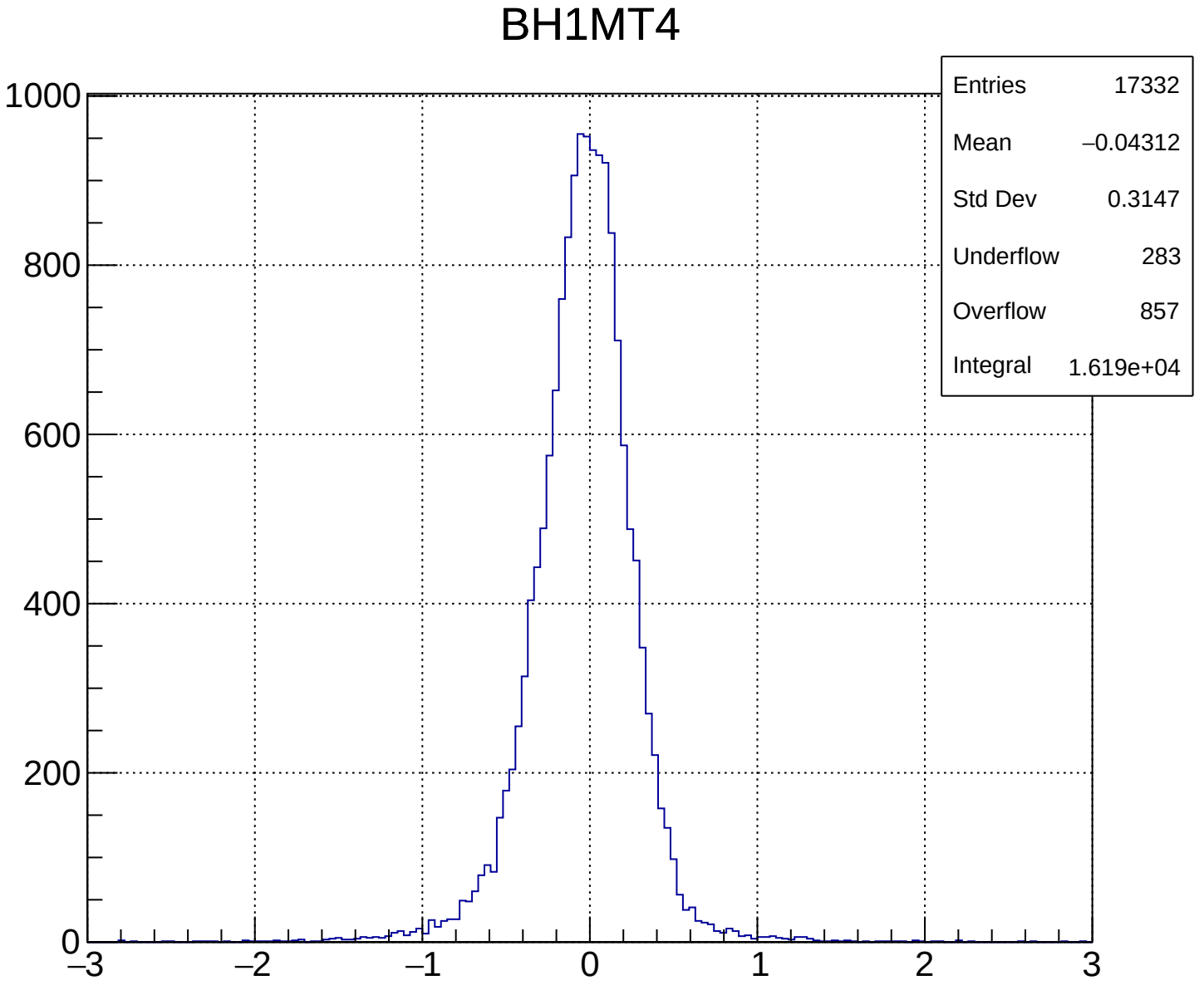

BH2DT04
Entries 17332
Mean –1.323
Std Dev 2.084
Underflow 0
Overflow 9
Integral 1.731e+04
6000
5000
4000
3000
2000
1000
0
–50
–40
–30
–20
–10
0
10
20
30
40
50

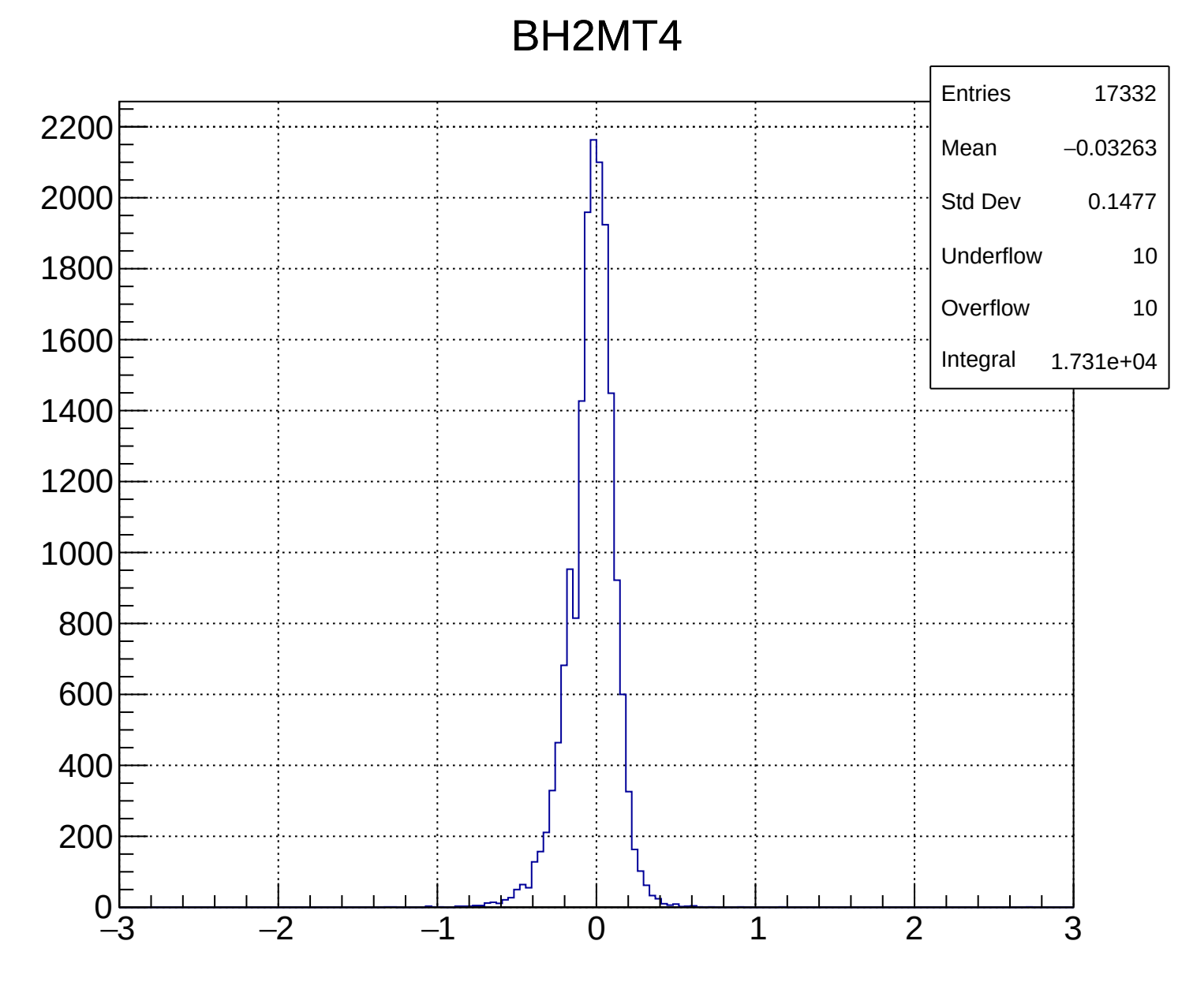

BH1UTns4
Entries 17332
Mean −0.03731
Std Dev 0.3496
Underflow 284
Overflow 861
Integral 1.619e+04
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

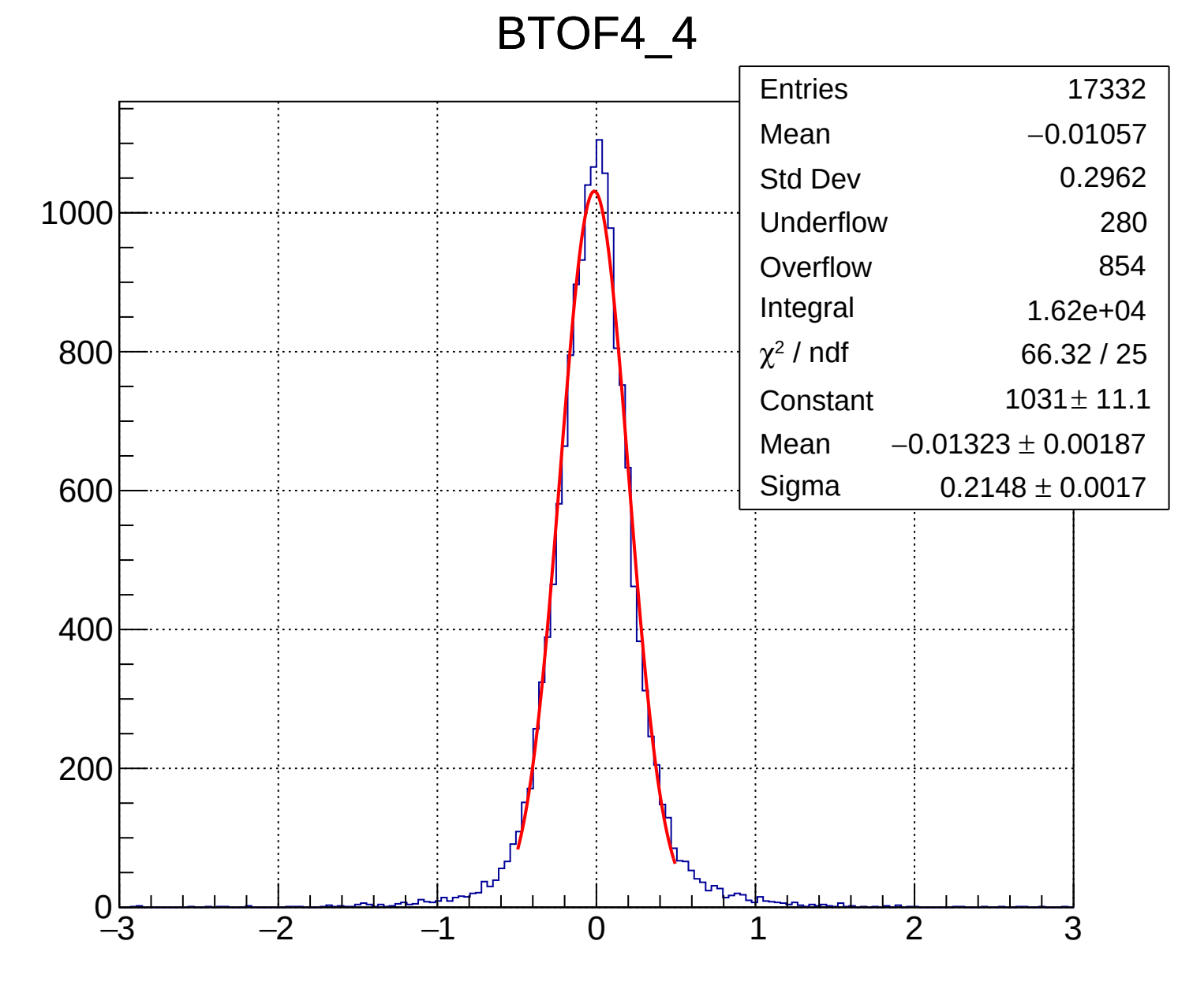

BH1DTns4
Entries 17332
Mean −0.04981
Std Dev 0.3261
Underflow 283
Overflow 852
Integral 1.62e+04
900
800
700
600
500
400
300
200
100
0
−3
−2
−1
0
1
2
3

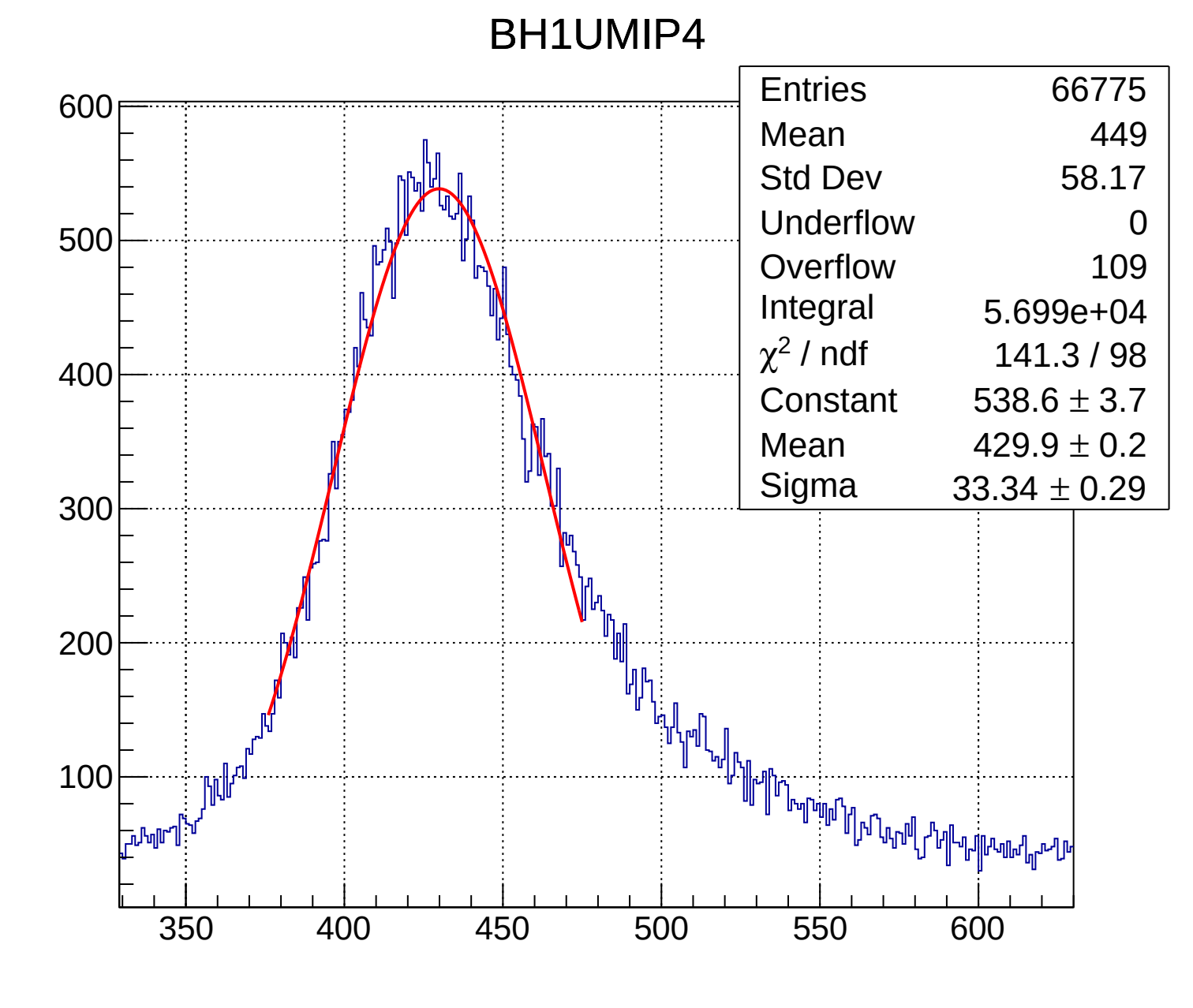

BH2UTns4
Entries 17332
Mean −0.02967
Std Dev 0.2678
Underflow 10
Overflow 11
Integral 1.731e+04
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

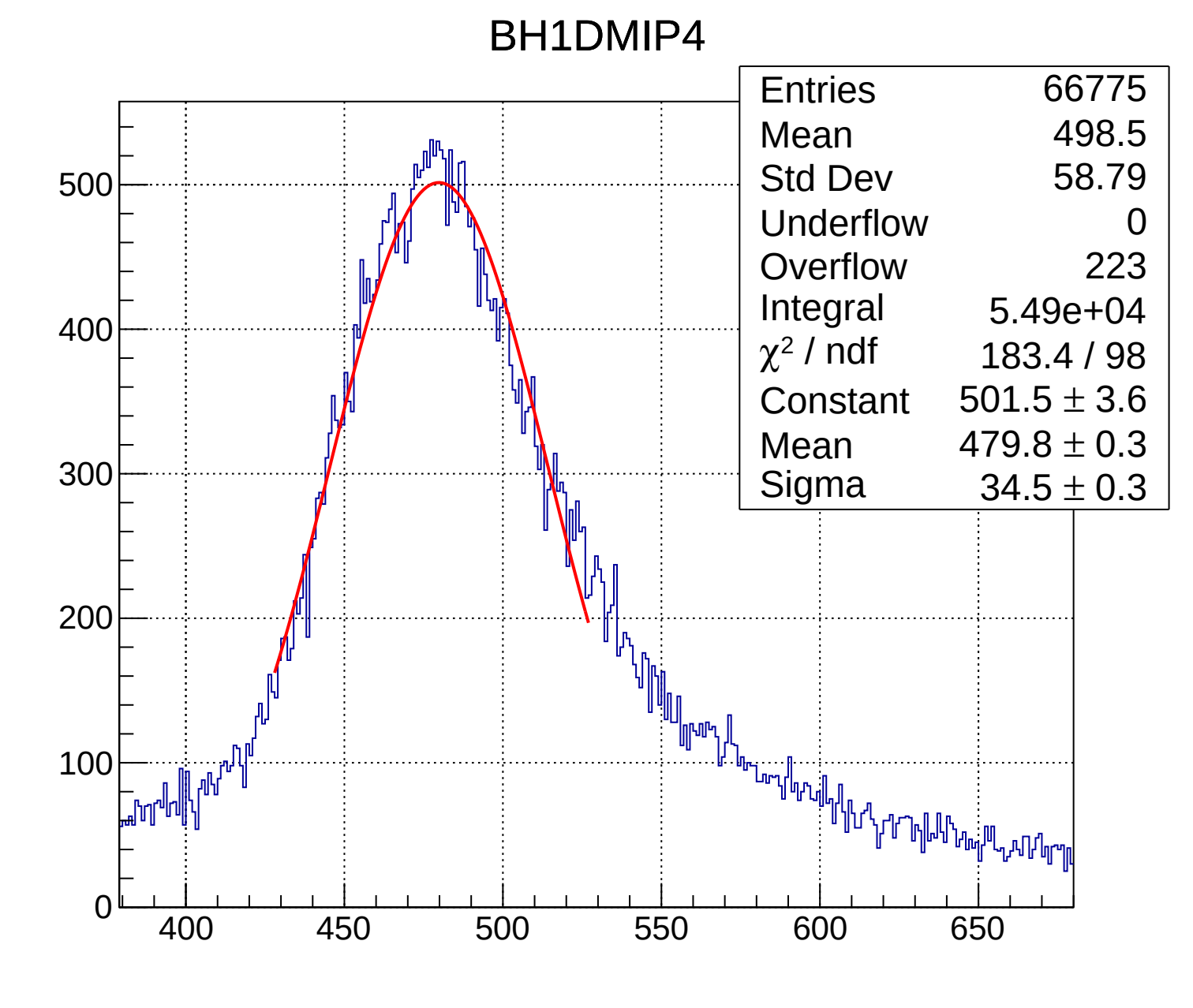

BH2DTns4
Entries 17332
Mean −0.03594
Std Dev 0.07571
Underflow 10
Overflow 9
Integral 1.731e+04
6000
5000
4000
3000
2000
1000
0
−3
−2
−1
0
1
2
3

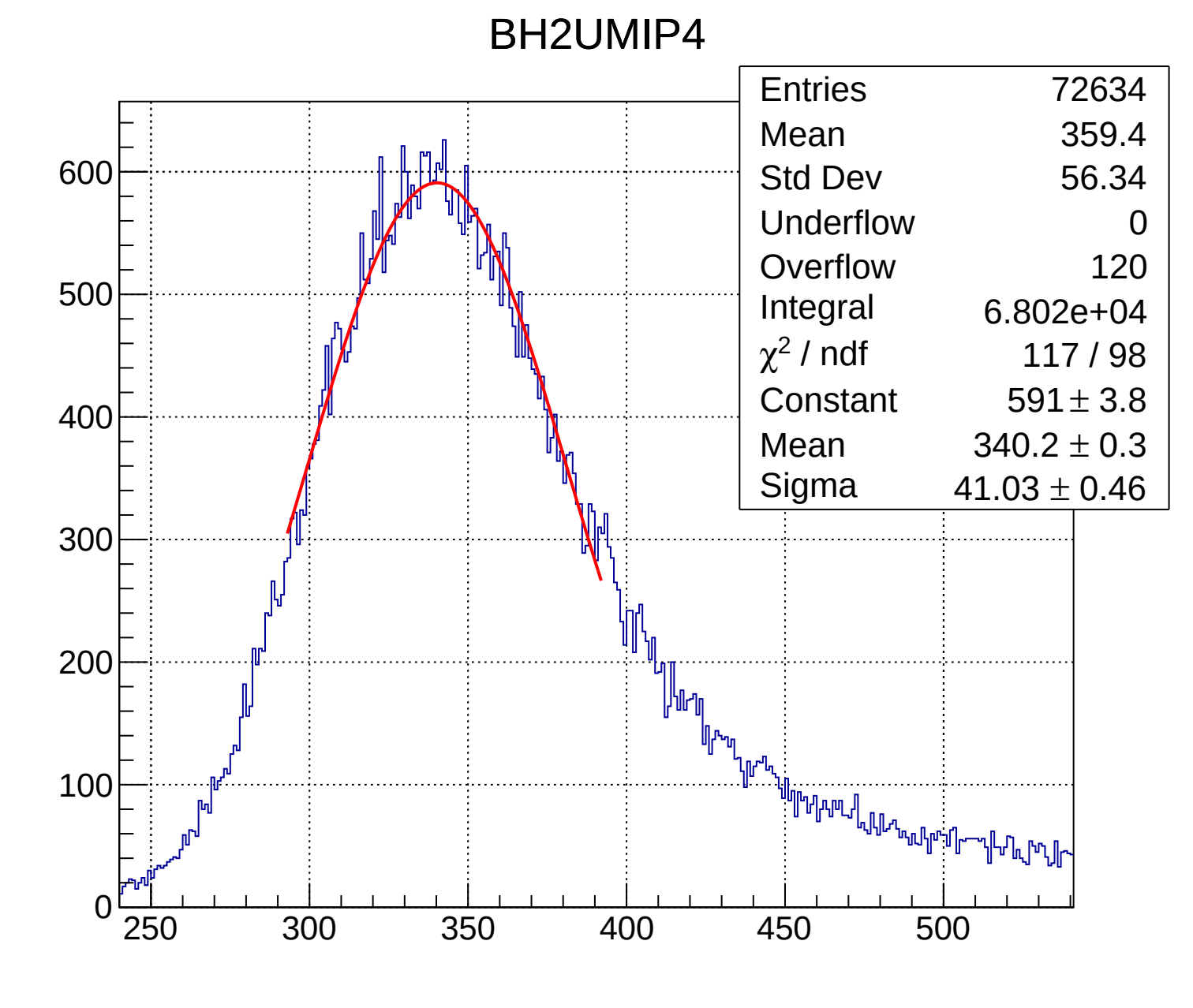

BH1MT4
Entries 17332
Mean –0.04312
Std Dev 0.3147
Underflow 283
Overflow 857
Integral 1.619e+04
1000
800
600
400
200
0
–3
–2
–1
0
1
2
3

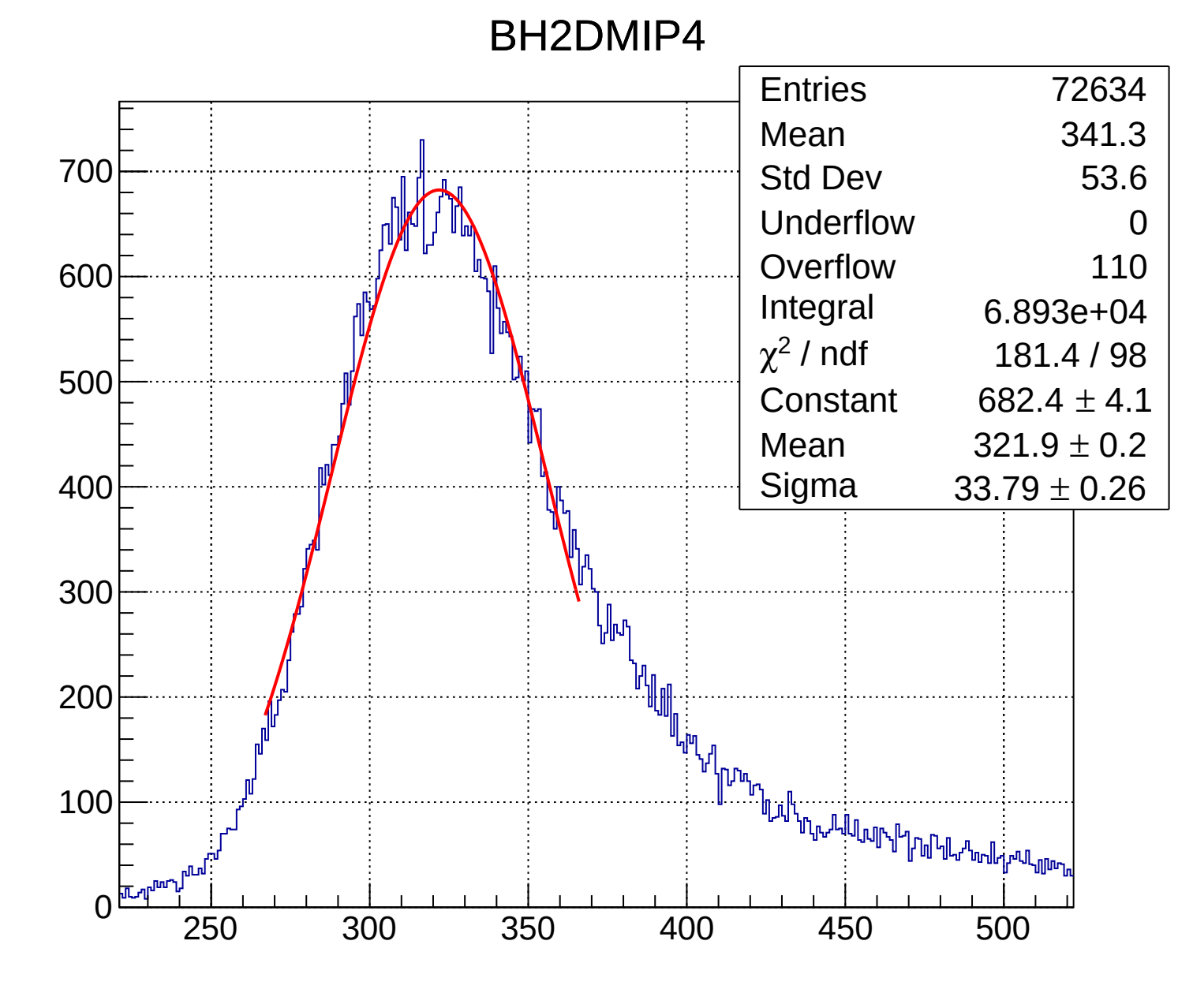

BH2MT4
Entries 17332
Mean −0.03263
Std Dev 0.1477
Underflow 10
Overflow 10
Integral 1.731e+04
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

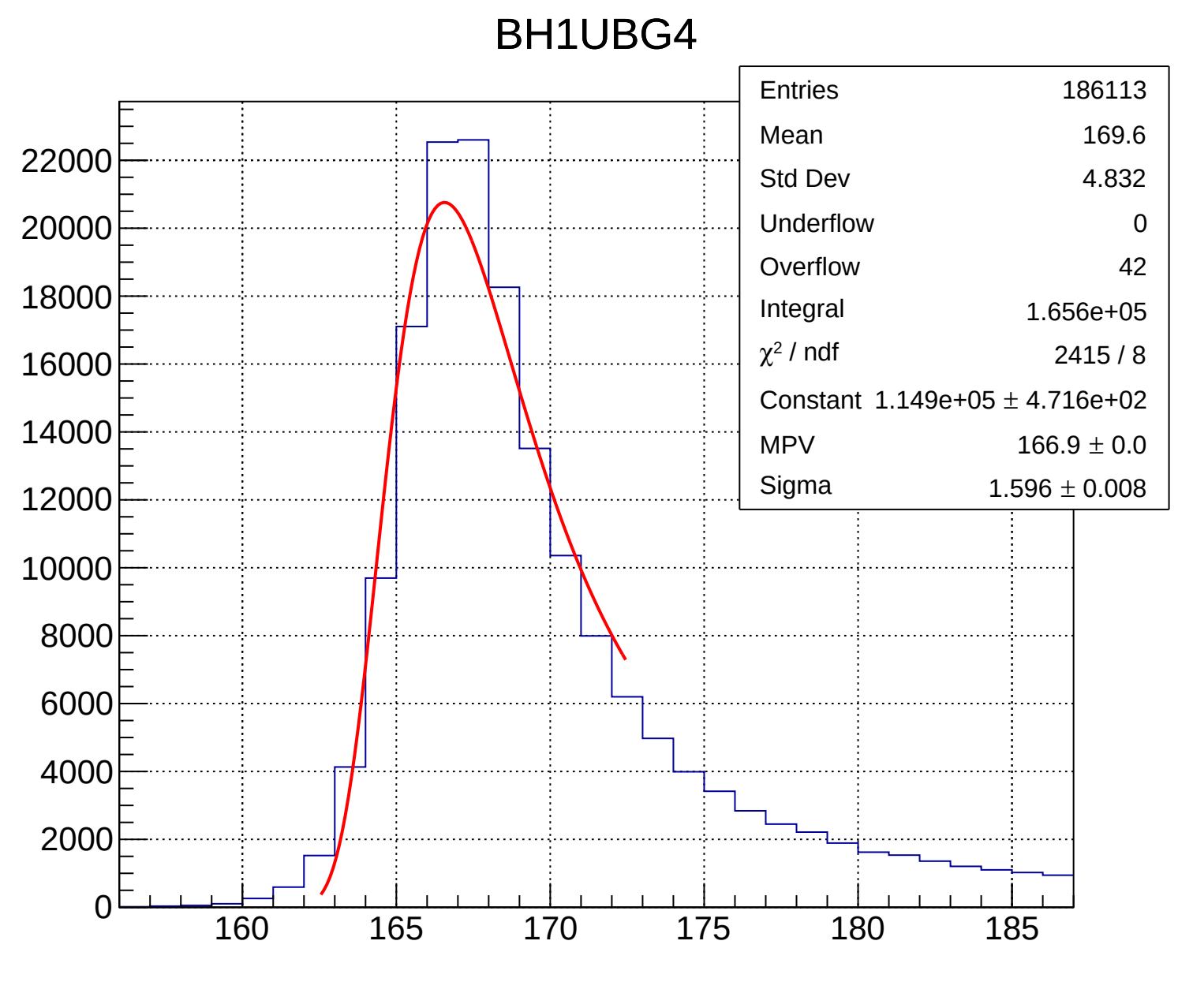

BTOF4_4
Entries 17332
Mean −0.01057
Std Dev 0.2962
Underflow 280
Overflow 854
Integral 1.62e+04
χ² / ndf 66.32 / 25
Constant 1031 ± 11.1
Mean −0.01323 ± 0.00187
Sigma 0.2148 ± 0.0017
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

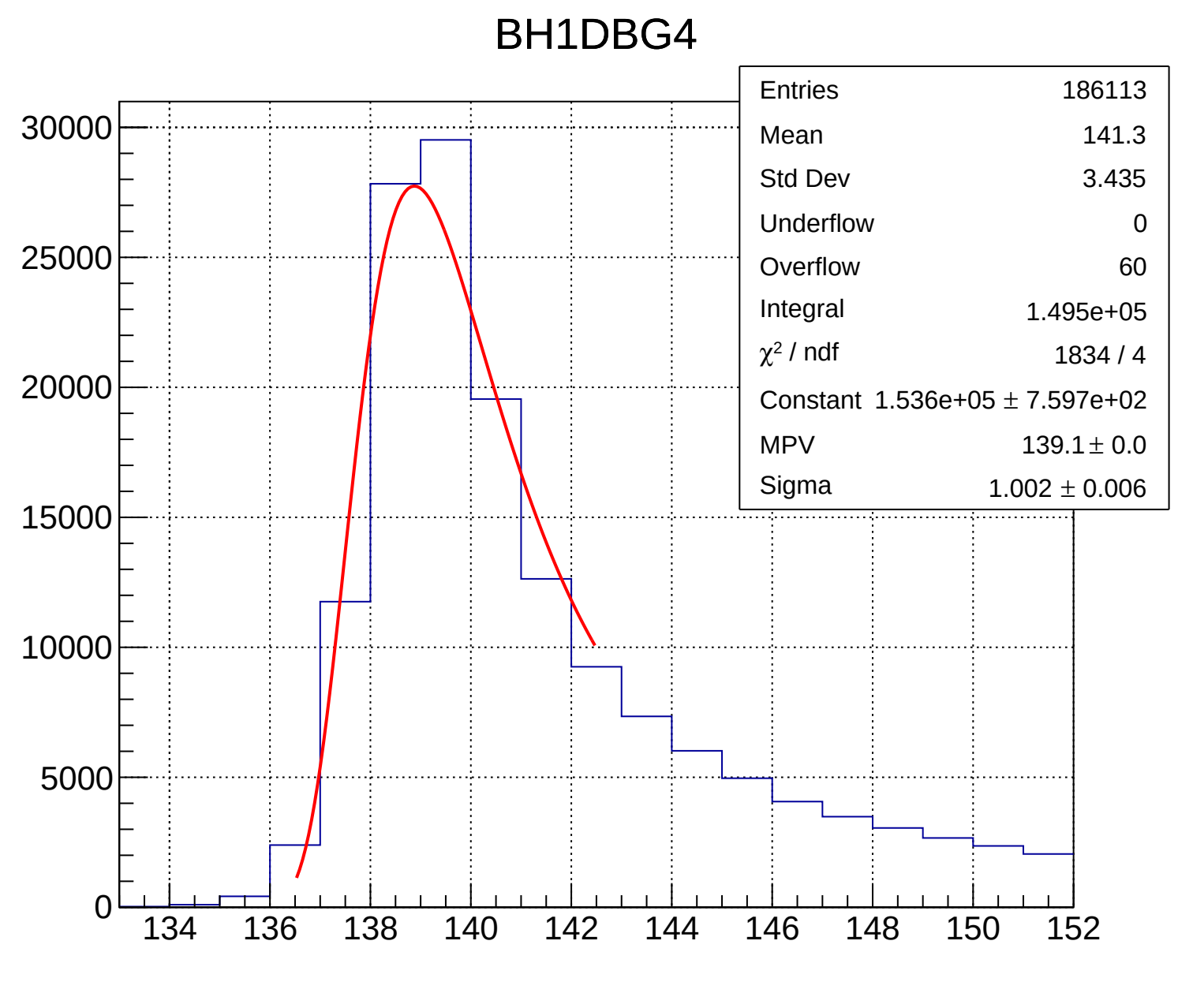

BH1UMIP4
Entries 66775
Mean 449
Std Dev 58.17
Underflow 0
Overflow 109
Integral 5.699e+04
χ² / ndf 141.3 / 98
Constant 538.6 ± 3.7
Mean 429.9 ± 0.2
Sigma 33.34 ± 0.29
600
500
400
300
200
100
350
400
450
500
550
600

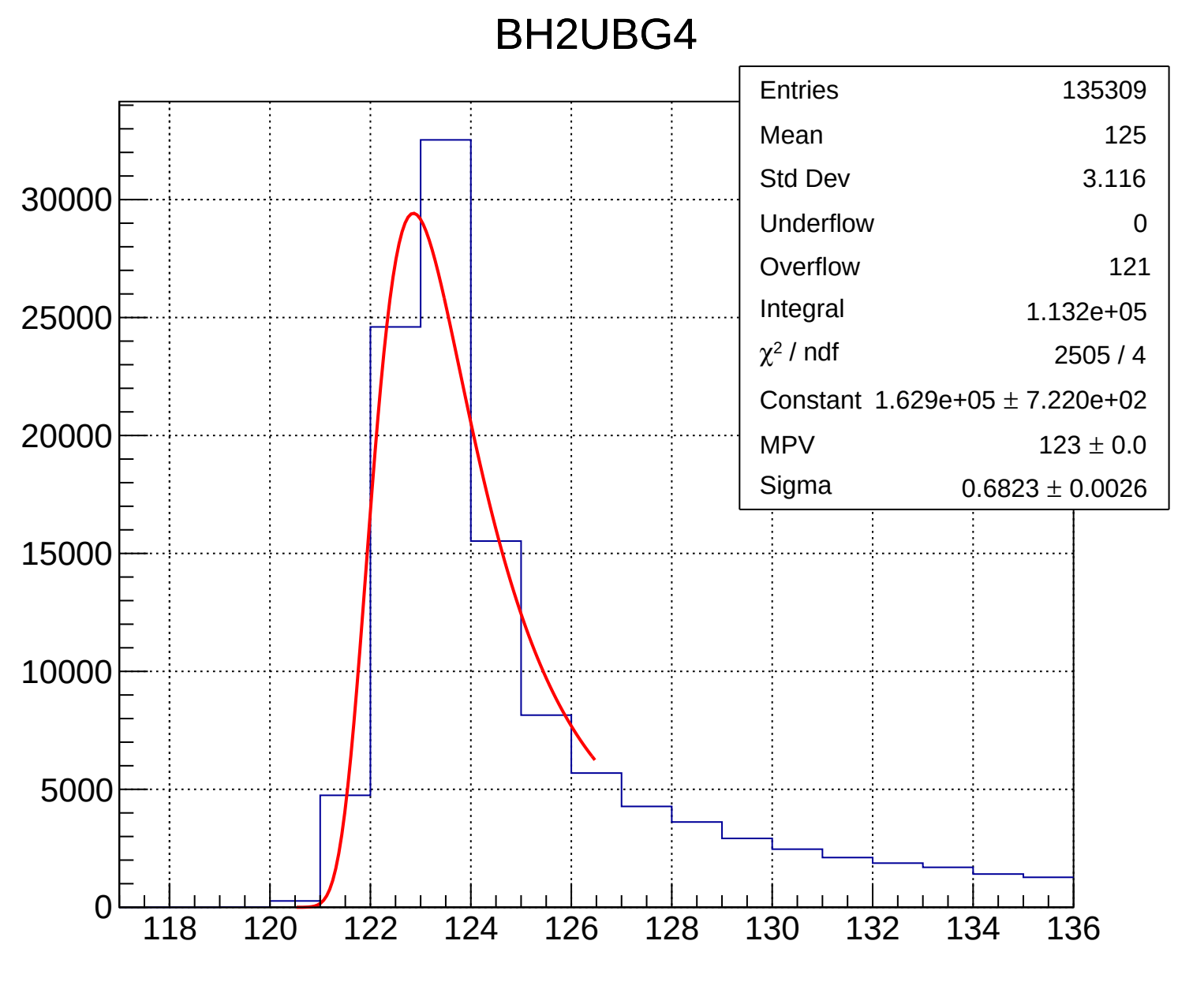

BH1DMIP4
Entries 66775
Mean 498.5
Std Dev 58.79
Underflow 0
Overflow 223
Integral 5.49e+04
χ² / ndf 183.4 / 98
Constant 501.5 ± 3.6
Mean 479.8 ± 0.3
Sigma 34.5 ± 0.3
0
100
200
300
400
500
400
450
500
550
600
650

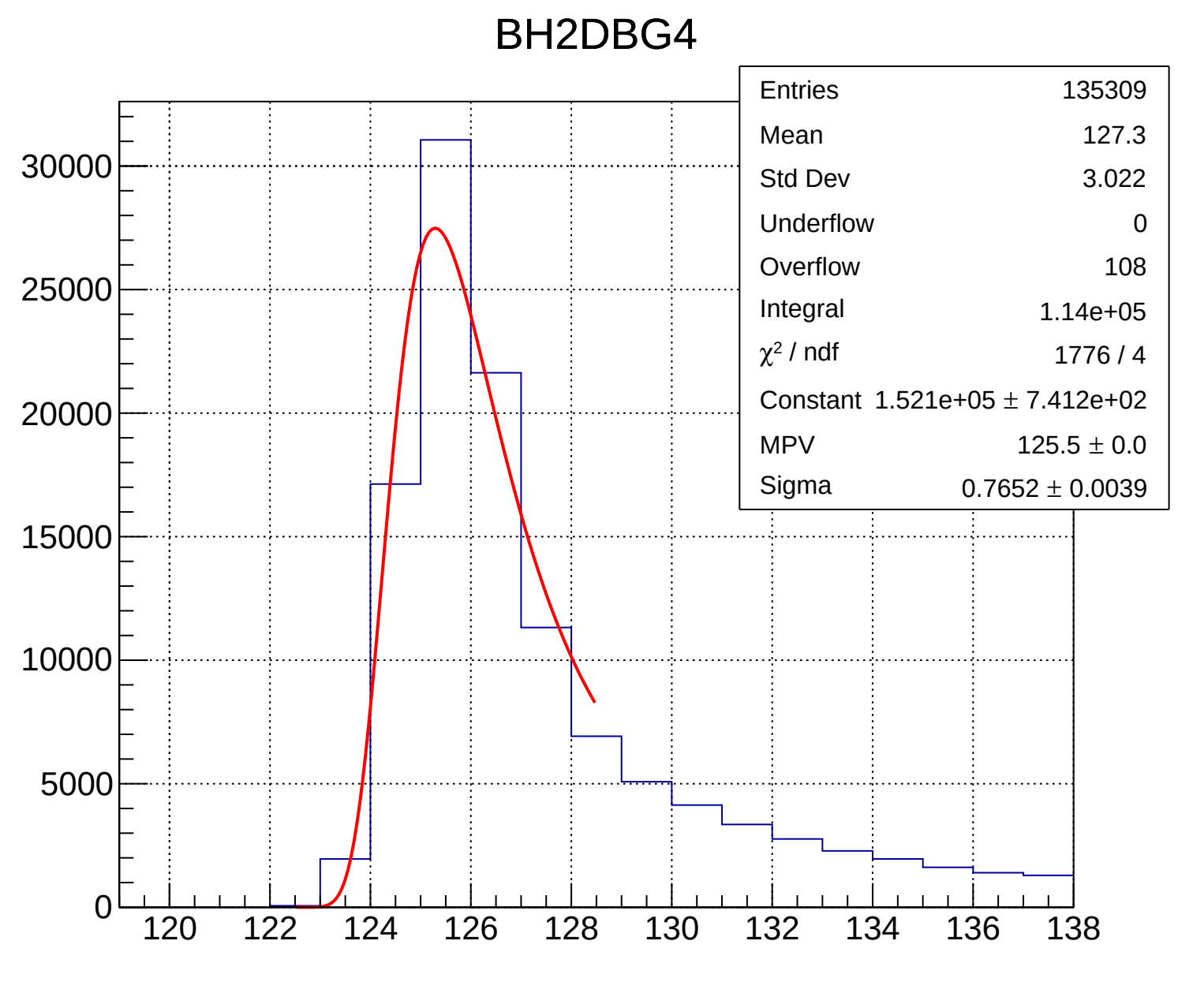

BH2UMIP4
Entries 72634
Mean 359.4
Std Dev 56.34
Underflow 0
Overflow 120
Integral 6.802e+04
χ² / ndf 117 / 98
Constant 591 ± 3.8
Mean 340.2 ± 0.3
Sigma 41.03 ± 0.46
600
500
400
300
200
100
0
250
300
350
400
450
500

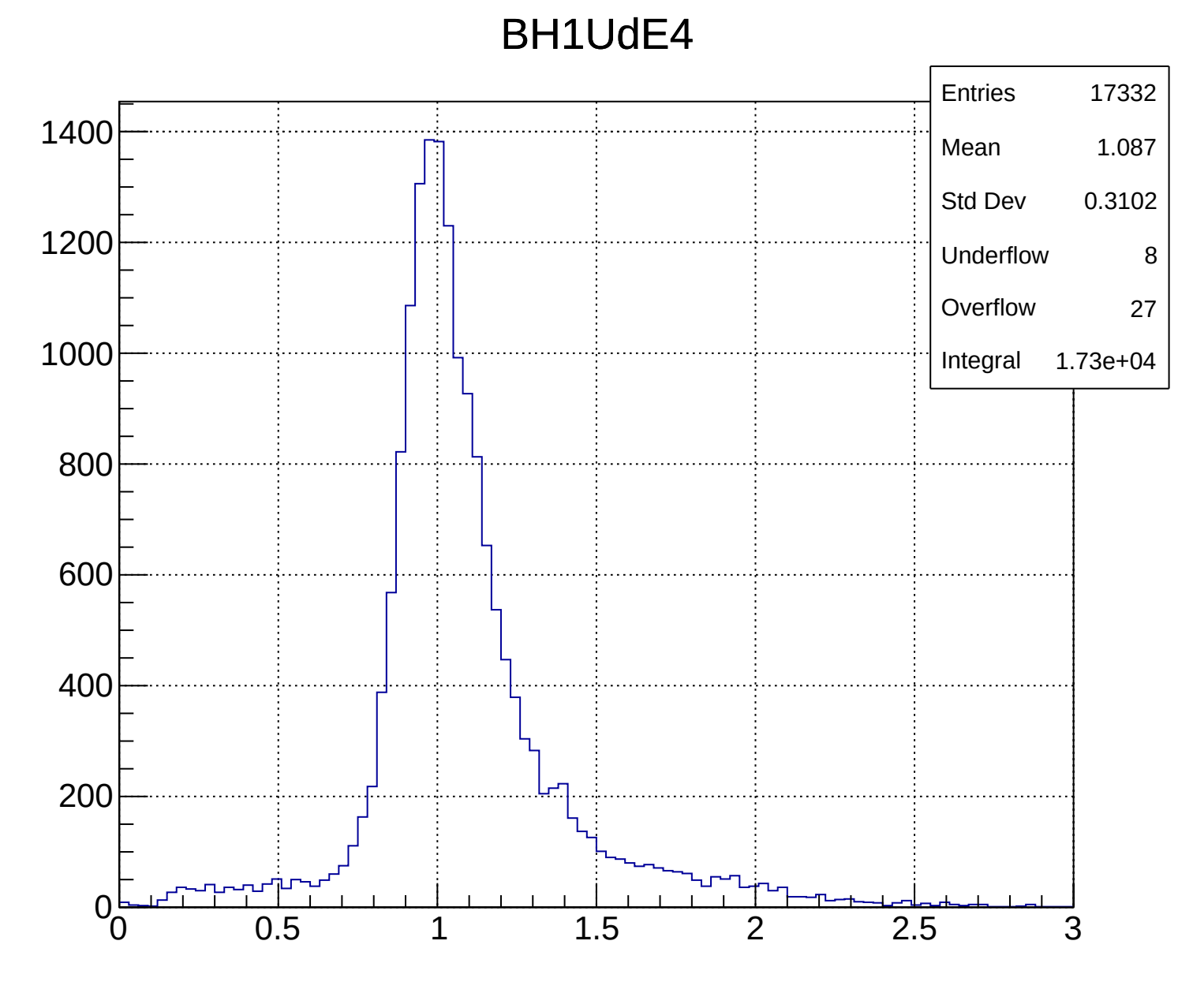

BH2DMIP4
Entries 72634
Mean 341.3
Std Dev 53.6
Underflow 0
Overflow 110
Integral 6.893e+04
χ² / ndf 181.4 / 98
Constant 682.4 ± 4.1
Mean 321.9 ± 0.2
Sigma 33.79 ± 0.26
0
100
200
300
400
500
600
700
250
300
350
400
450
500

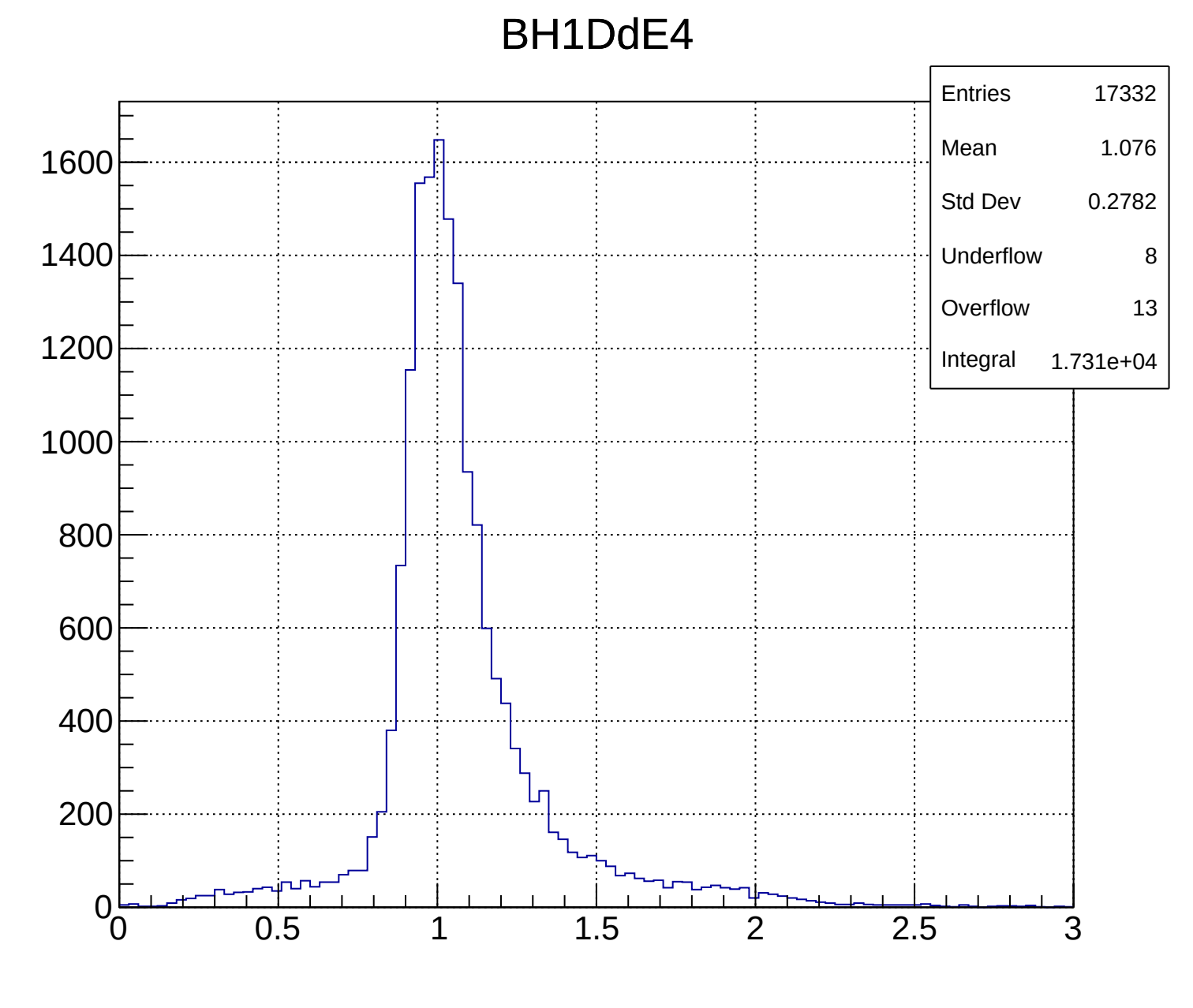

BH1UBG4
Entries 186113
Mean 169.6
Std Dev 4.832
Underflow 0
Overflow 42
Integral 1.656e+05
χ² / ndf 2415 / 8
Constant 1.149e+05 ± 4.716e+02
MPV 166.9 ± 0.0
Sigma 1.596 ± 0.008
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
160
165
170
175
180
185

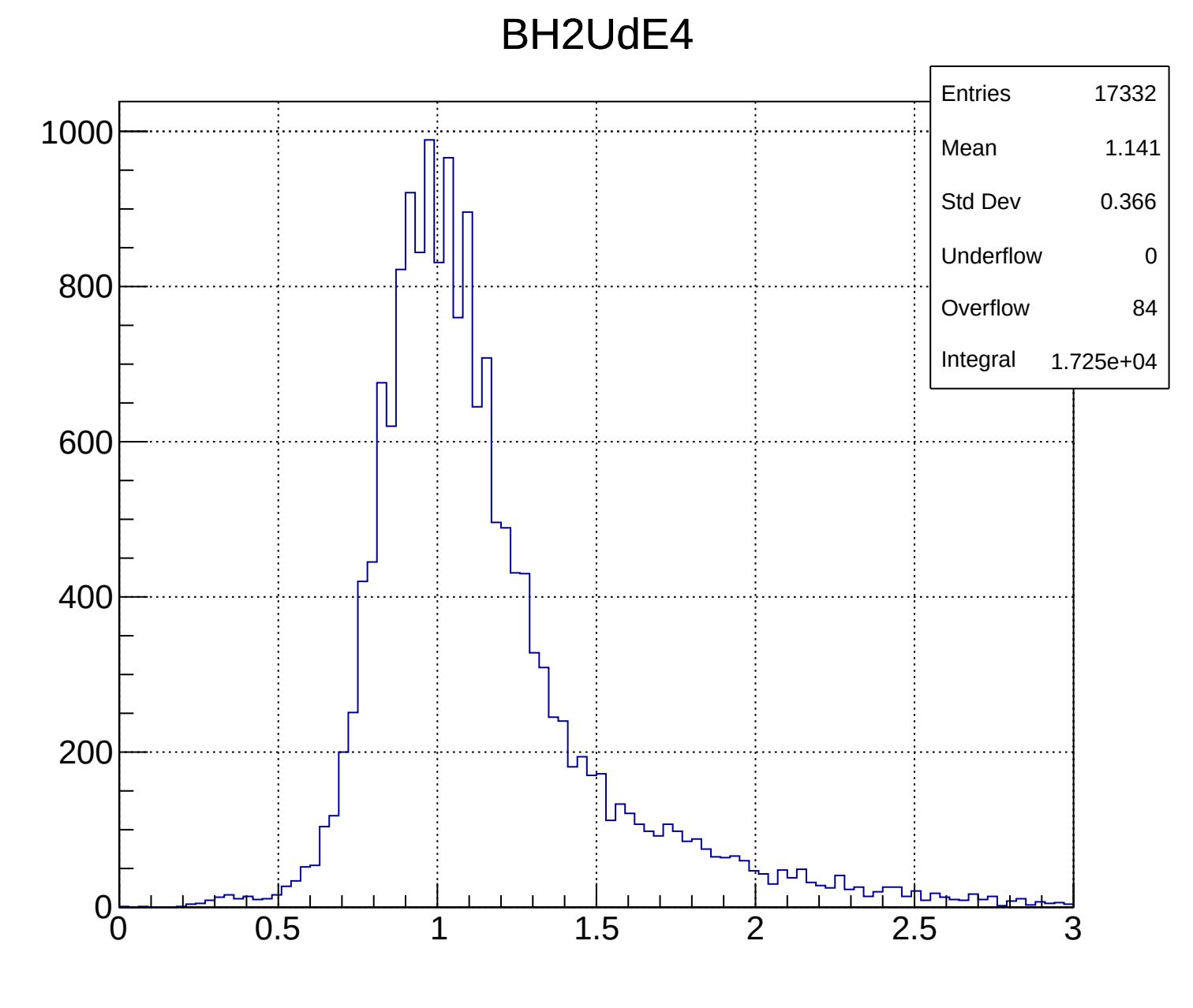

BH1DBG4
Entries 186113
Mean 141.3
Std Dev 3.435
Underflow 0
Overflow 60
Integral 1.495e+05
χ² / ndf 1834 / 4
Constant 1.536e+05 ± 7.597e+02
MPV 139.1 ± 0.0
Sigma 1.002 ± 0.006
30000
25000
20000
15000
10000
5000
0
134
136
138
140
142
144
146
148
150
152

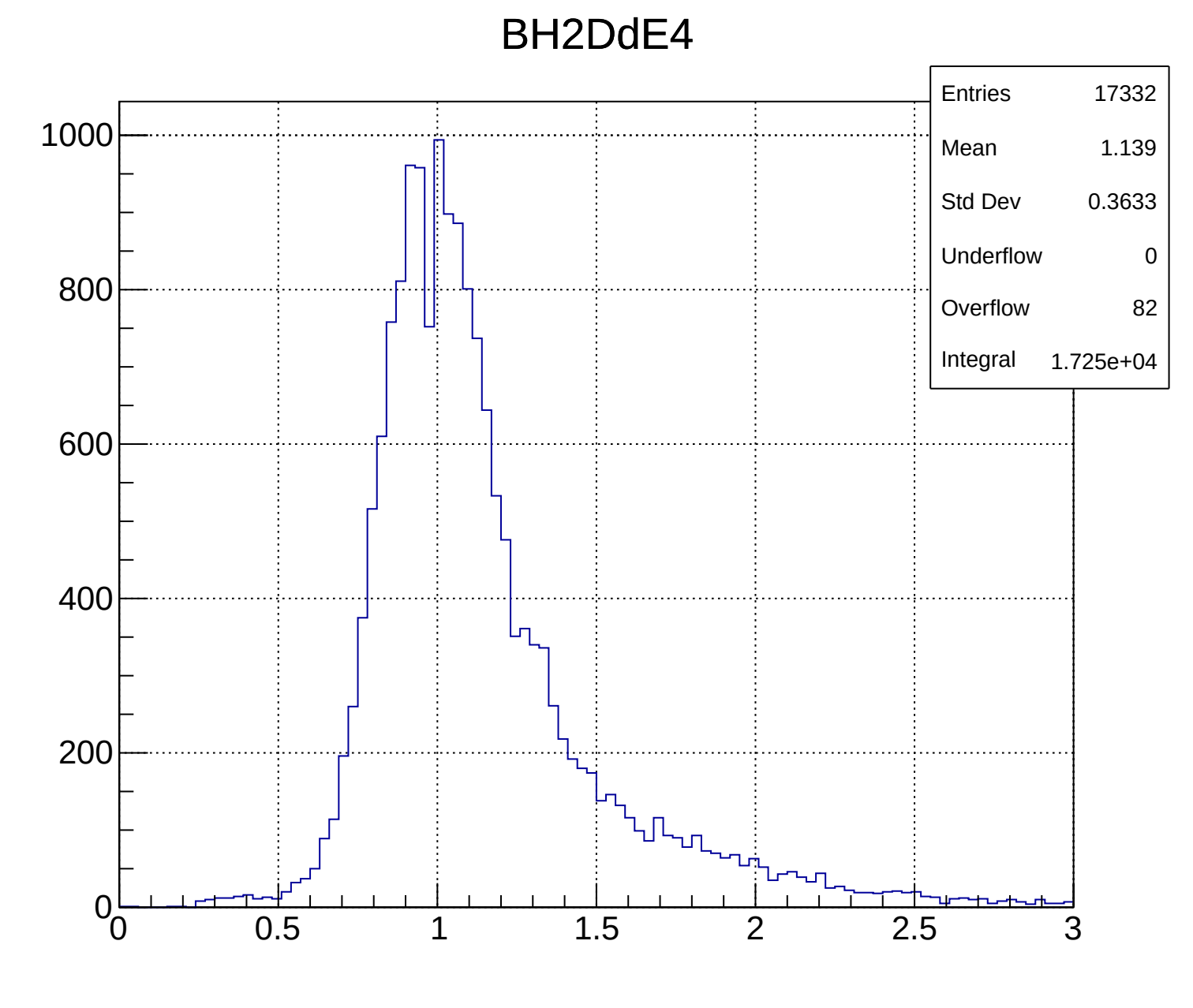

BH2UBG4
Entries 135309
Mean 125
Std Dev 3.116
Underflow 0
Overflow 121
Integral 1.132e+05
χ² / ndf 2505 / 4
Constant 1.629e+05 ± 7.220e+02
MPV 123 ± 0.0
Sigma 0.6823 ± 0.0026
30000
25000
20000
15000
10000
5000
0
118
120
122
124
126
128
130
132
134
136

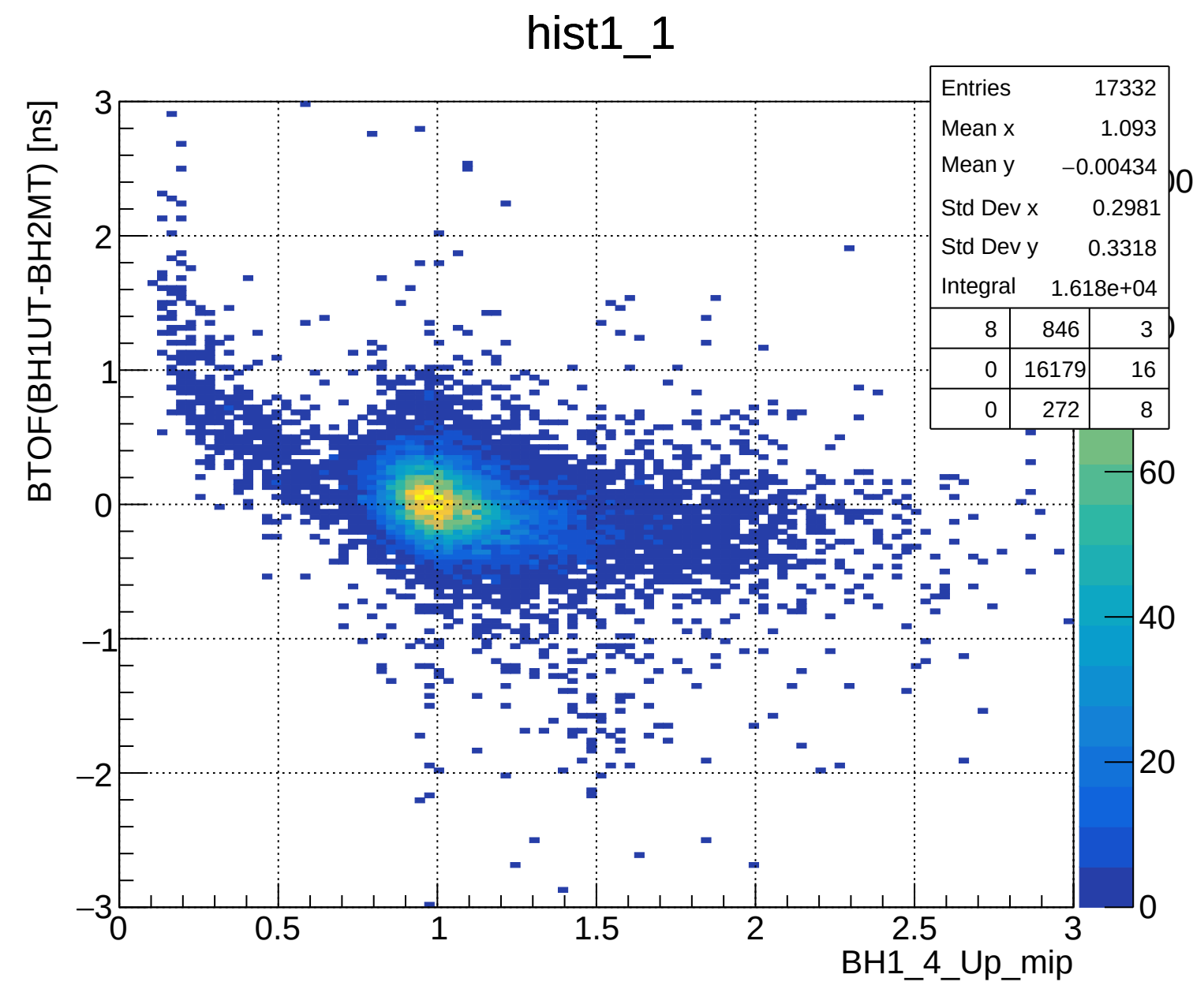

BH2DBG4
Entries 135309
Mean 127.3
Std Dev 3.022
Underflow 0
Overflow 108
Integral 1.14e+05
χ² / ndf 1776 / 4
Constant 1.521e+05 ± 7.412e+02
MPV 125.5 ± 0.0
Sigma 0.7652 ± 0.0039
30000
25000
20000
15000
10000
5000
0
120
122
124
126
128
130
132
134
136
138

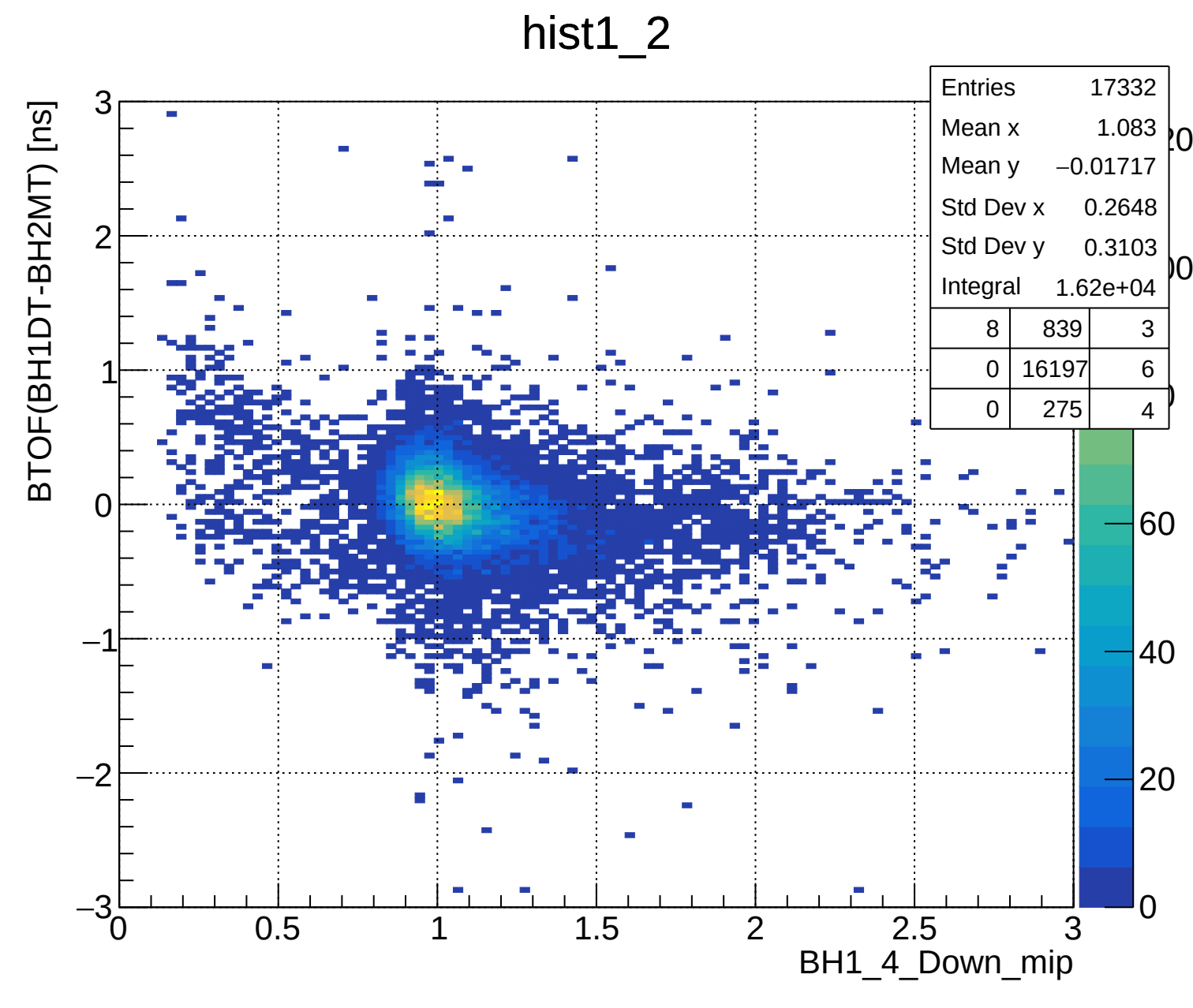

BH1UdE4
Entries 17332
Mean 1.087
Std Dev 0.3102
Underflow 8
Overflow 27
Integral 1.73e+04
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5
3

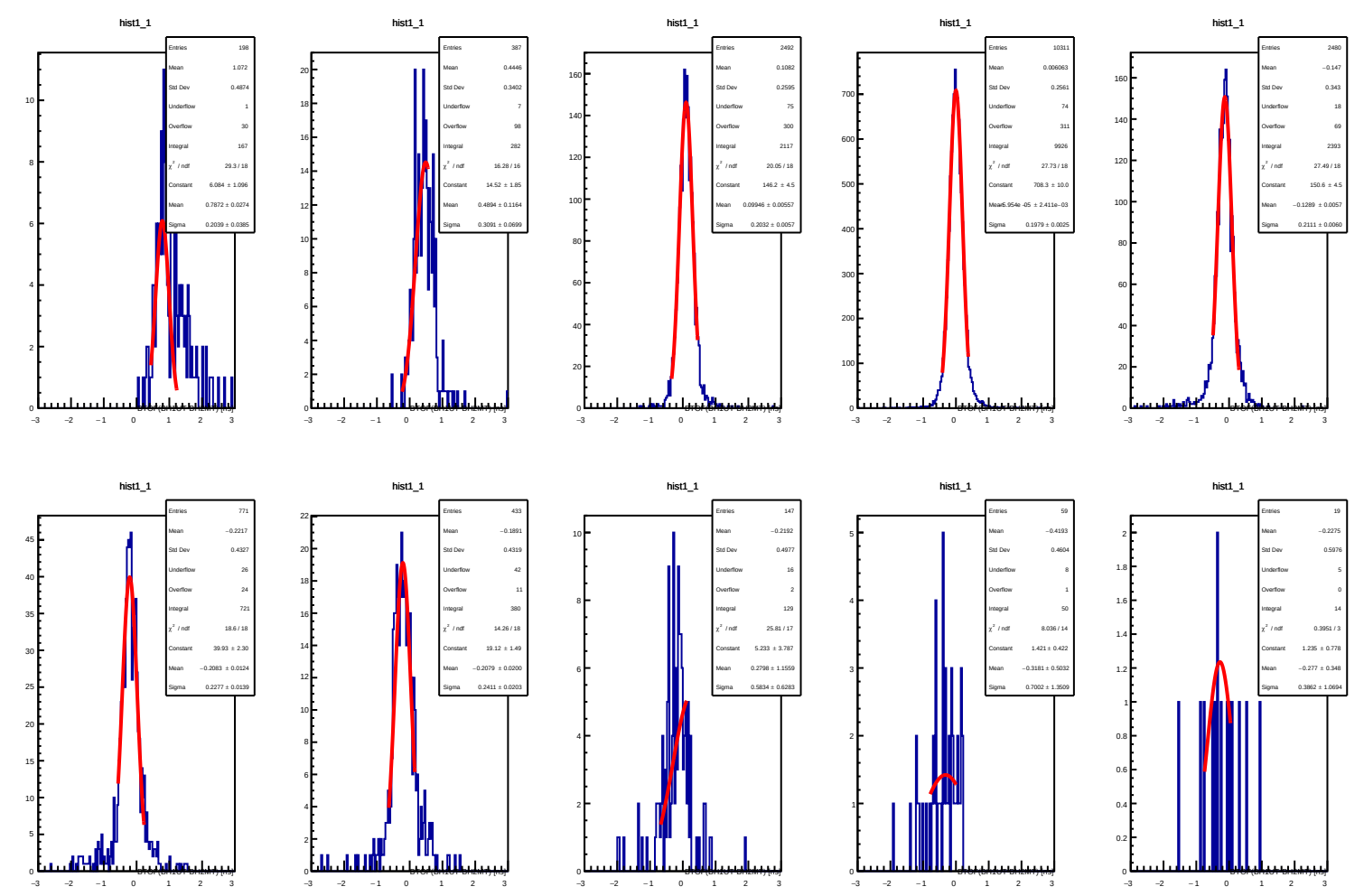

BH1DdE4
Entries 17332
Mean 1.076
Std Dev 0.2782
Underflow 8
Overflow 13
Integral 1.731e+04
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5
3

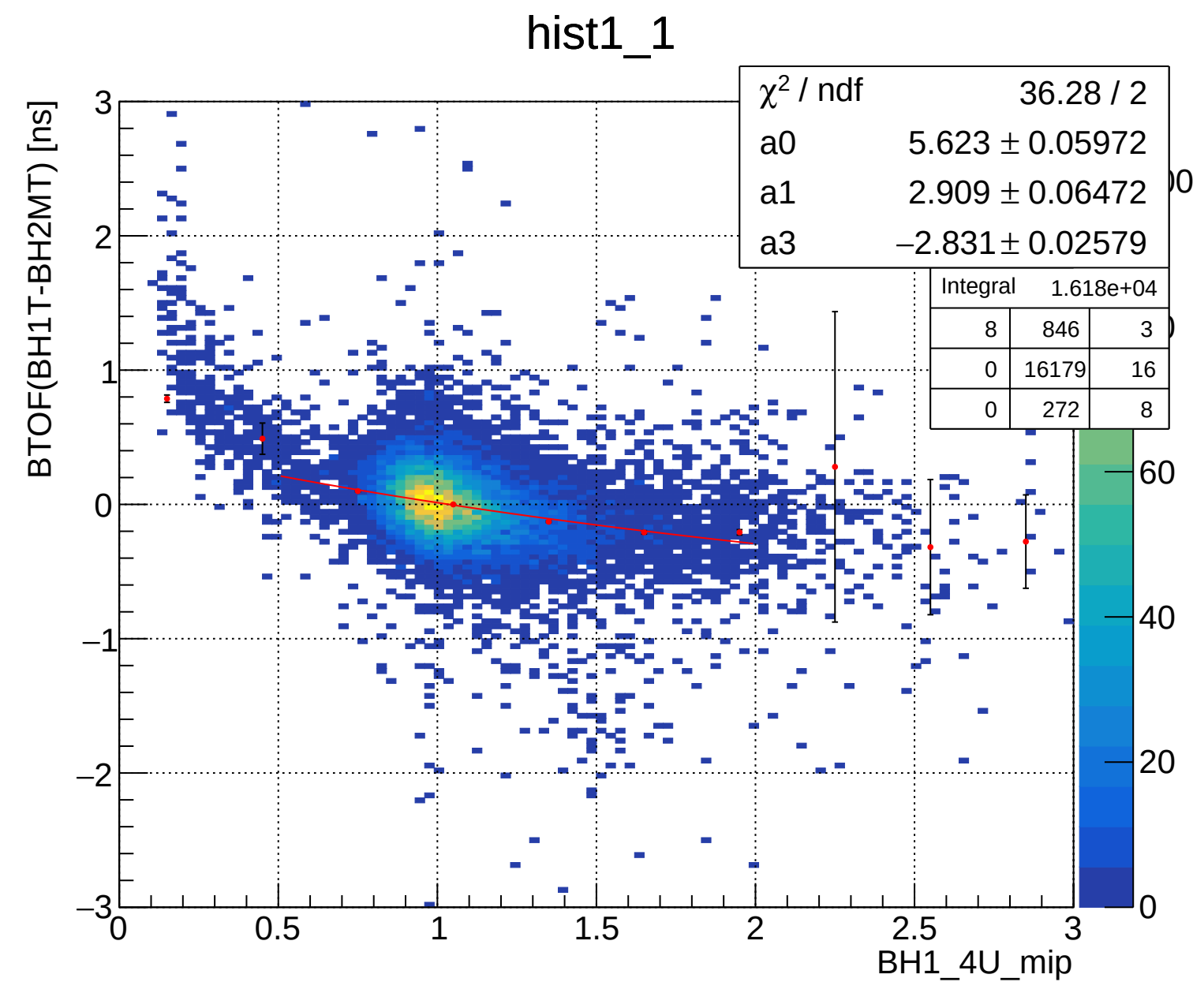

BH2UdE4
Entries 17332
Mean 1.141
Std Dev 0.366
Underflow 0
Overflow 84
Integral 1.725e+04
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5
3

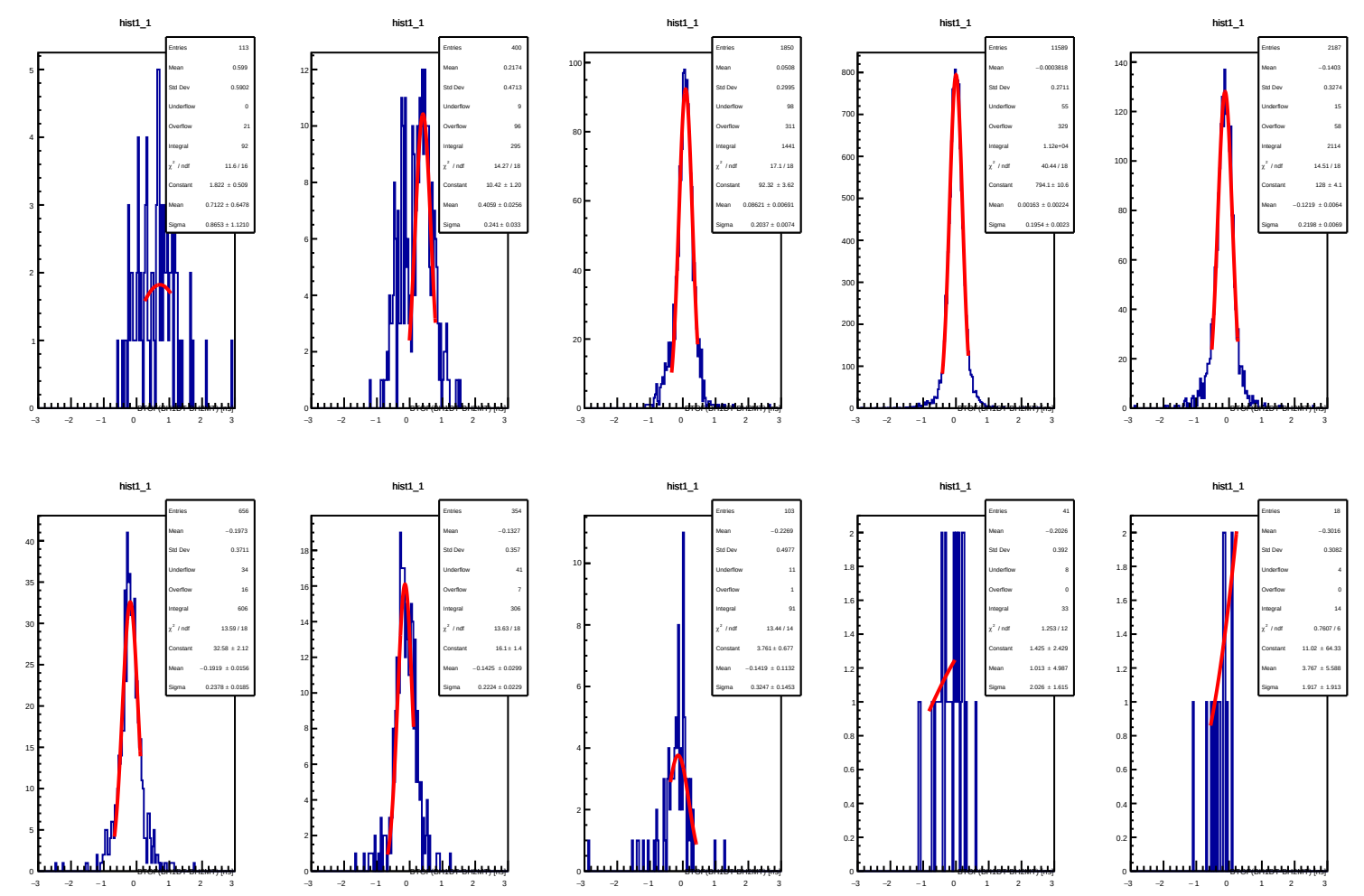

BH2DdE4
Entries 17332
Mean 1.139
Std Dev 0.3633
Underflow 0
Overflow 82
Integral 1.725e+04
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5
3

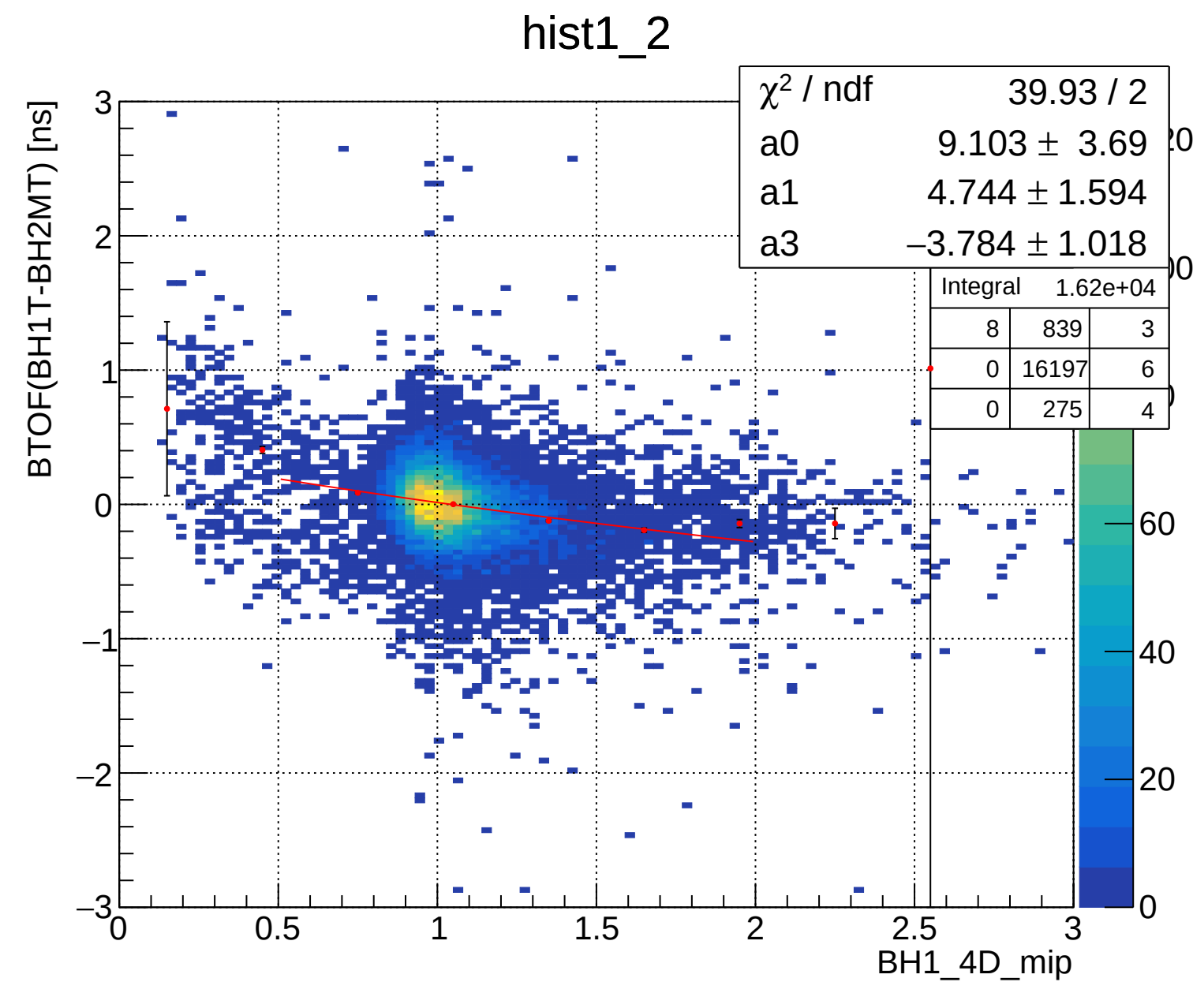

hist1_1
Entries 17332
Mean x 1.093
Mean y −0.00434
Std Dev x 0.2981
Std Dev y 0.3318
Integral 1.618e+04
8 846 3
0 16179 16
0 272 8
BTOF(BH1UT-BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

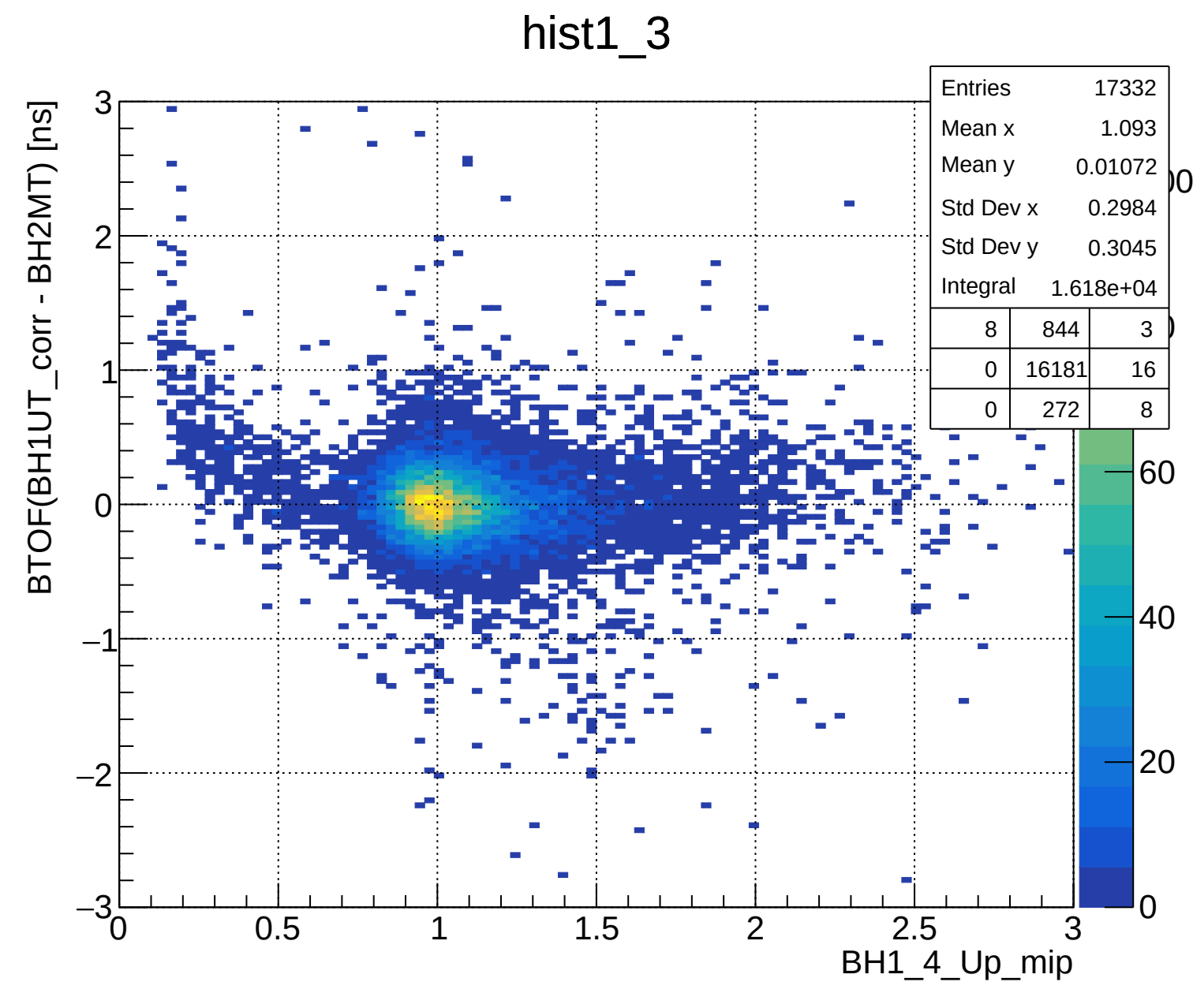

hist1_2
Entries 17332
Mean x 1.083
Mean y −0.01717
Std Dev x 0.2648
Std Dev y 0.3103
Integral 1.62e+04
8 839 3
0 16197 6
0 275 4
BTOF(BH1DT-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

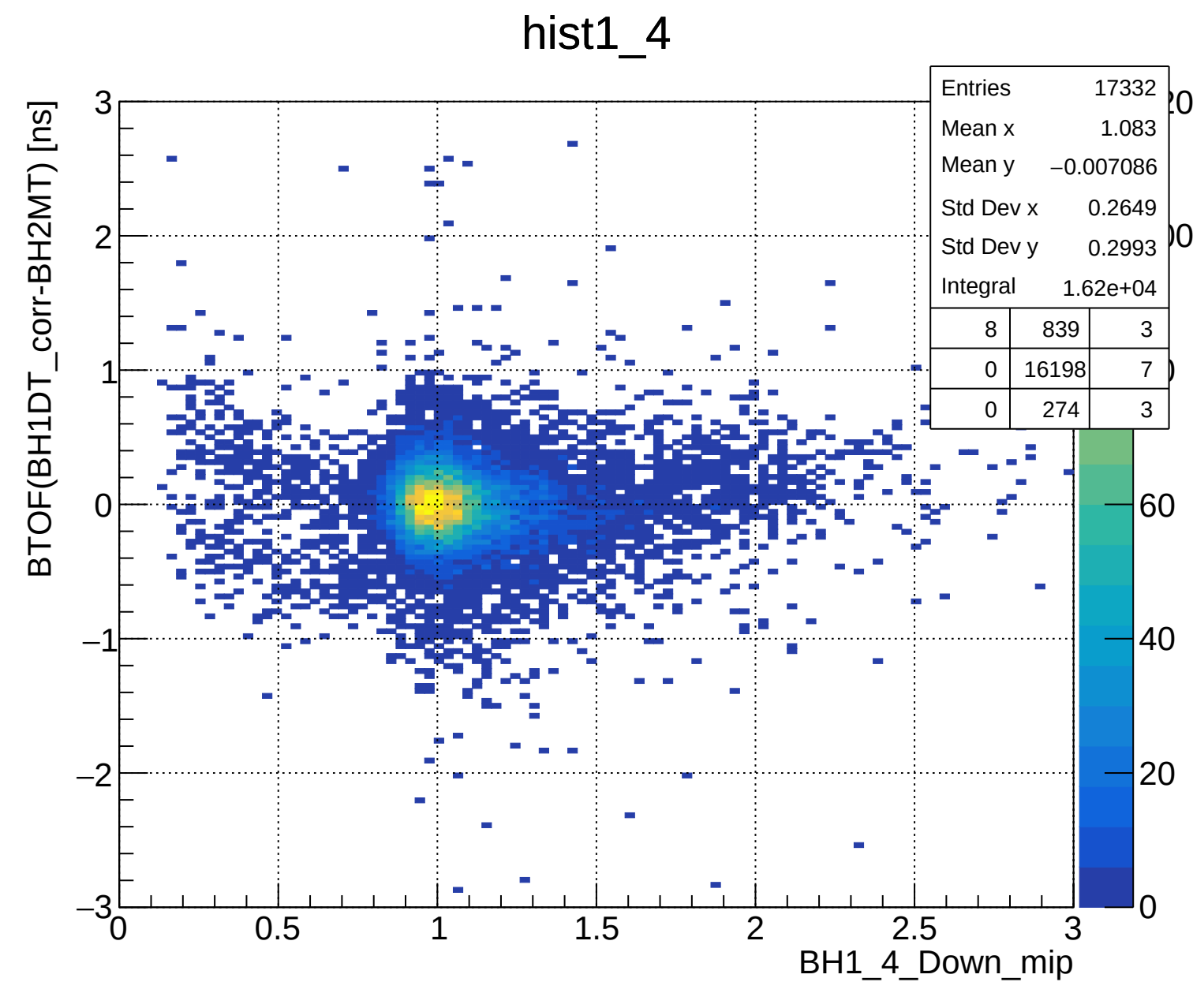

hist1_1
Entries 198
Mean 1.072
Std Dev 0.4874
Underflow 1
Overflow 30
Integral 167
χ² / ndf 29.3 / 18
Constant 6.084 ± 1.096
Mean 0.7872 ± 0.0274
Sigma 0.2039 ± 0.0385
hist1_1
Entries 387
Mean 0.4446
Std Dev 0.3402
Underflow 7
Overflow 98
Integral 282
χ² / ndf 16.28 / 16
Constant 14.52 ± 1.85
Mean 0.4894 ± 0.1164
Sigma 0.3091 ± 0.0699
hist1_1
Entries 2492
Mean 0.1082
Std Dev 0.2595
Underflow 75
Overflow 300
Integral 2117
χ² / ndf 20.05 / 18
Constant 146.2 ± 4.5
Mean 0.09946 ± 0.00557
Sigma 0.2032 ± 0.0057
hist1_1
Entries 10311
Mean 0.006063
Std Dev 0.2561
Underflow 74
Overflow 311
Integral 9926
χ² / ndf 27.73 / 18
Constant 708.3 ± 10.0
Mean 5.954e-05 ± 2.411e-03
Sigma 0.1979 ± 0.0025
hist1_1
Entries 2480
Mean −0.147
Std Dev 0.343
Underflow 18
Overflow 69
Integral 2393
χ² / ndf 27.49 / 18
Constant 150.6 ± 4.5
Mean −0.1289 ± 0.0057
Sigma 0.2111 ± 0.0060
hist1_1
Entries 771
Mean −0.2217
Std Dev 0.4327
Underflow 26
Overflow 24
Integral 721
χ² / ndf 18.6 / 18
Constant 39.93 ± 2.30
Mean −0.2083 ± 0.0124
Sigma 0.2277 ± 0.0139
hist1_1
Entries 433
Mean −0.1891
Std Dev 0.4319
Underflow 42
Overflow 11
Integral 380
χ² / ndf 14.26 / 18
Constant 19.12 ± 1.49
Mean −0.2079 ± 0.0200
Sigma 0.2411 ± 0.0203
hist1_1
Entries 147
Mean −0.2192
Std Dev 0.4977
Underflow 16
Overflow 2
Integral 129
χ² / ndf 25.81 / 17
Constant 5.233 ± 3.787
Mean 0.2798 ± 1.1559
Sigma 0.5834 ± 0.6283
hist1_1
Entries 59
Mean −0.4193
Std Dev 0.4604
Underflow 8
Overflow 1
Integral 50
χ² / ndf 8.036 / 14
Constant 1.421 ± 0.422
Mean −0.3181 ± 0.5032
Sigma 0.7002 ± 1.3509
hist1_1
Entries 19
Mean −0.2275
Std Dev 0.5976
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

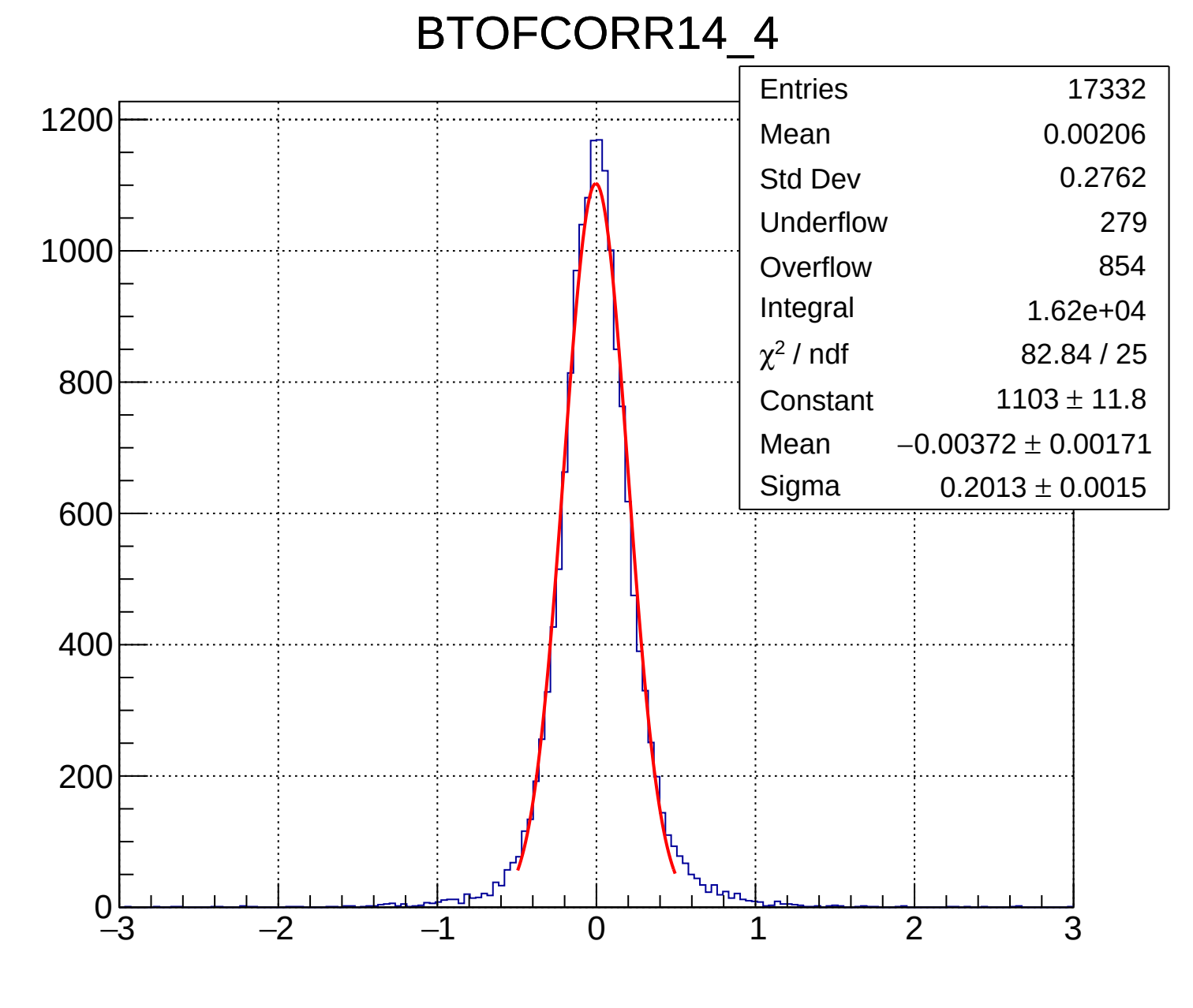

hist1_1
χ² / ndf 36.28 / 2
a0 5.623 ± 0.05972
a1 2.909 ± 0.06472
a3 −2.831 ± 0.02579
Integral 1.618e+04
8 846 3
0 16179 16
0 272 8
BTOF(BH1T-BH2MT) [ns]
BH1_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

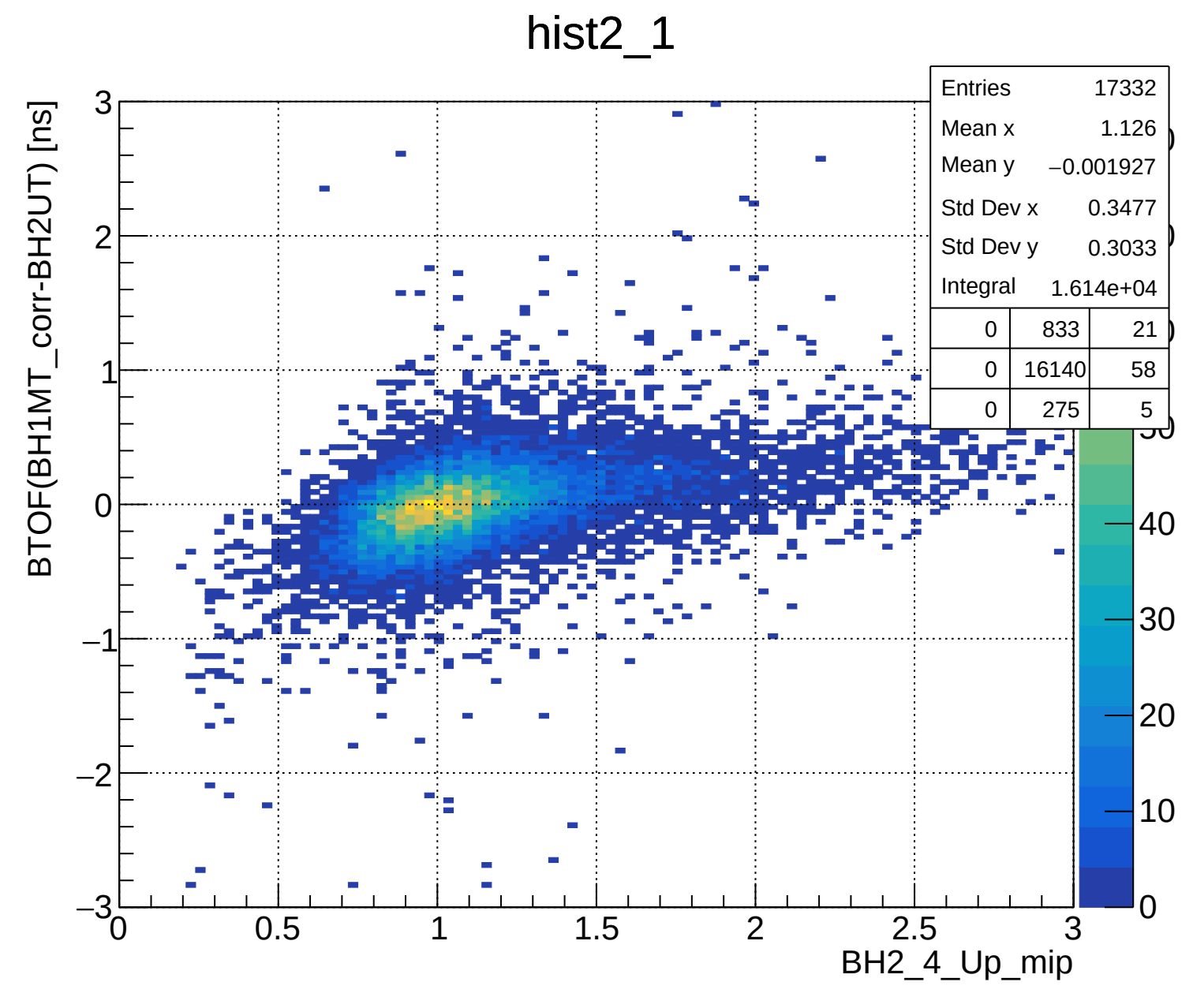

hist1_1
Entries 113
Mean 0.599
Std Dev 0.5902
Underflow 0
Overflow 21
Integral 92
χ² / ndf 11.6 / 16
Constant 1.822 ± 0.509
Mean 0.7122 ± 0.6478
Sigma 0.8653 ± 1.1210
hist1_1
Entries 400
Mean 0.2174
Std Dev 0.4713
Underflow 9
Overflow 96
Integral 295
χ² / ndf 14.27 / 18
Constant 10.42 ± 1.20
Mean 0.4059 ± 0.0256
Sigma 0.241 ± 0.033
hist1_1
Entries 1850
Mean 0.0508
Std Dev 0.2995
Underflow 98
Overflow 311
Integral 1441
χ² / ndf 17.1 / 18
Constant 92.32 ± 3.62
Mean 0.08621 ± 0.00691
Sigma 0.2037 ± 0.0074
hist1_1
Entries 11589
Mean −0.0003818
Std Dev 0.2711
Underflow 55
Overflow 329
Integral 1.12e+04
χ² / ndf 40.44 / 18
Constant 794.1 ± 10.6
Mean 0.00163 ± 0.00224
Sigma 0.1954 ± 0.0023
hist1_1
Entries 2187
Mean −0.1403
Std Dev 0.3274
Underflow 15
Overflow 58
Integral 2114
χ² / ndf 14.51 / 18
Constant 128 ± 4.1
Mean −0.1219 ± 0.0064
Sigma 0.2198 ± 0.0069
hist1_1
Entries 656
Mean −0.1973
Std Dev 0.3711
Underflow 34
Overflow 16
Integral 606
χ² / ndf 13.59 / 18
Constant 32.58 ± 2.12
Mean −0.1919 ± 0.0156
Sigma 0.2378 ± 0.0185
hist1_1
Entries 354
Mean −0.1327
Std Dev 0.357
Underflow 41
Overflow 7
Integral 306
χ² / ndf 13.63 / 18
Constant 16.1 ± 1.4
Mean −0.1425 ± 0.0299
Sigma 0.2224 ± 0.0229
hist1_1
Entries 103
Mean −0.2269
Std Dev 0.4977
Underflow 11
Overflow 1
Integral 91
χ² / ndf 13.44 / 14
Constant 3.761 ± 0.677
Mean −0.1419 ± 0.1132
Sigma 0.3247 ± 0.1453
hist1_1
Entries 41
Mean −0.2026
Std Dev 0.392
Underflow 8
Overflow 0
Integral 33
χ² / ndf 1.253 / 12
Constant 1.425 ± 2.429
Mean 1.013 ± 4.987
Sigma 2.026 ± 1.615
hist1_1
Entries 18
Mean −0.3016
Std Dev 0.3082
Underflow 4
Overflow 0
Integral 14
χ² / ndf 0.7607 / 6
Constant 11.02 ± 64.33
Mean 3.767 ± 5.588
Sigma 1.917 ± 1.913

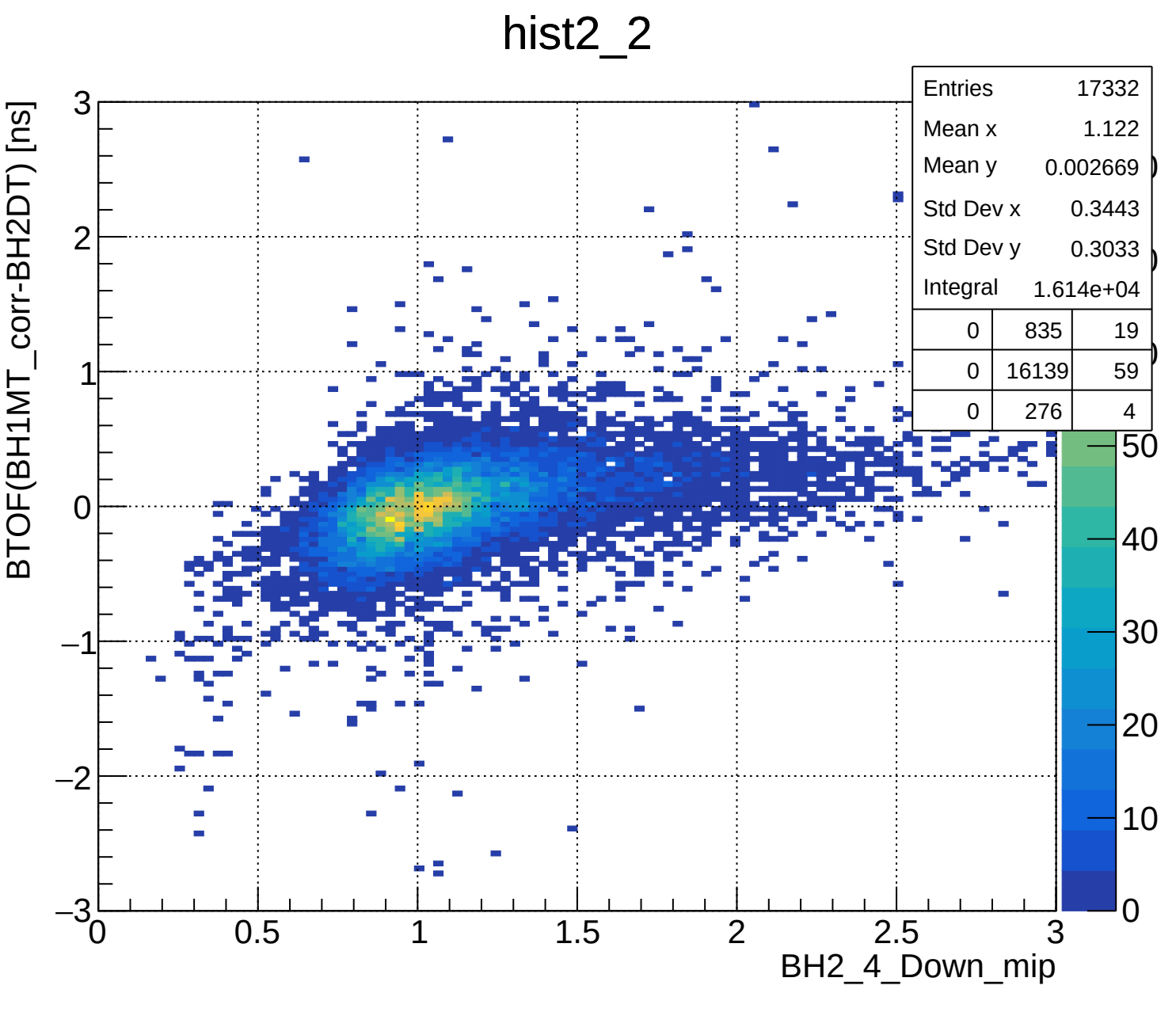

hist1_2
χ² / ndf 39.93 / 2
a0 9.103 ± 3.69
a1 4.744 ± 1.594
a3 −3.784 ± 1.018
Integral 1.62e+04
8 839 3
0 16197 6
0 275 4
BTOF(BH1T-BH2MT) [ns]
BH1_4D_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

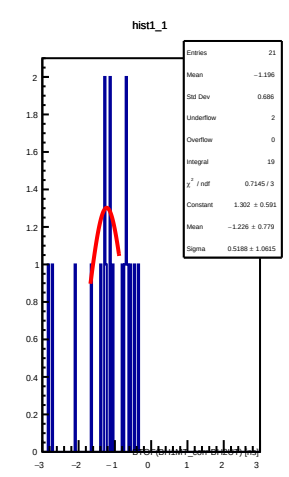

hist1_3
Entries 17332
Mean x 1.093
Mean y 0.01072
Std Dev x 0.2984
Std Dev y 0.3045
Integral 1.618e+04
8 844 3
0 16181 16
0 272 8
BTOF(BH1UT_corr - BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

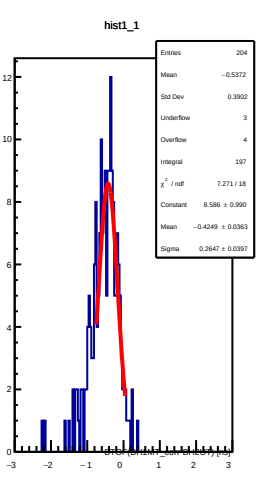

hist1_4
Entries 17332
Mean x 1.083
Mean y −0.007086
Std Dev x 0.2649
Std Dev y 0.2993
Integral 1.62e+04
8 839 3
0 16198 7
0 274 3
BTOF(BH1DT_corr-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

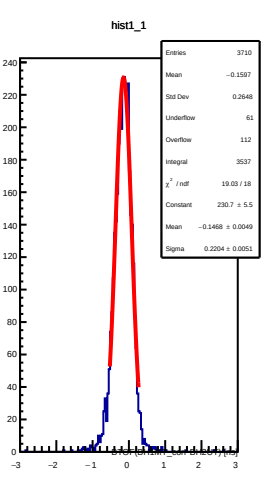

BTOFCORR14_4
Entries 17332
Mean 0.00206
Std Dev 0.2762
Underflow 279
Overflow 854
Integral 1.62e+04
χ² / ndf 82.84 / 25
Constant 1103 ± 11.8
Mean −0.00372 ± 0.00171
Sigma 0.2013 ± 0.0015
1200
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

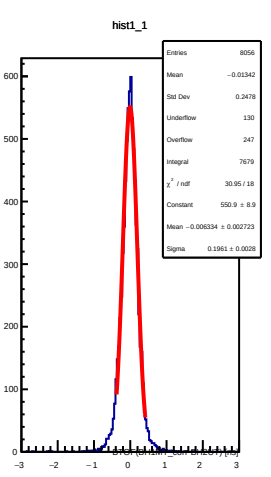

hist2_1
Entries 17332
Mean x 1.126
Mean y −0.001927
Std Dev x 0.3477
Std Dev y 0.3033
Integral 1.614e+04
0 833 21
0 16140 58
0 275 5
BTOF(BH1MT_corr-BH2UT) [ns]
BH2_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

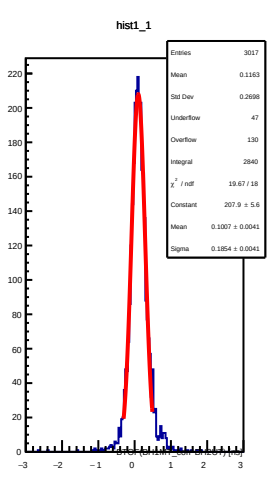

hist2_2
Entries 17332
Mean x 1.122
Mean y 0.002669
Std Dev x 0.3443
Std Dev y 0.3033
Integral 1.614e+04
0 835 19
0 16139 59
0 276 4
BTOF(BH1MT_corr-BH2DT) [ns]
BH2_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

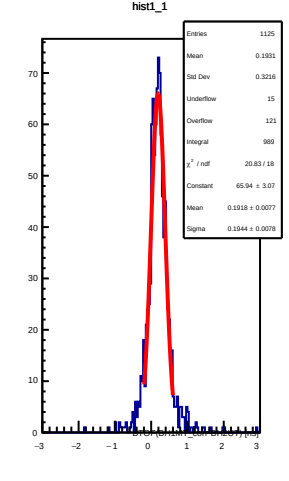

hist1_1
Entries 21
Mean −1.196
Std Dev 0.686
Underflow 2
Overflow 0
Integral 19
χ² / ndf 0.7145 / 3
Constant 1.302 ± 0.591
Mean −1.226 ± 0.779
Sigma 0.5188 ± 1.0615

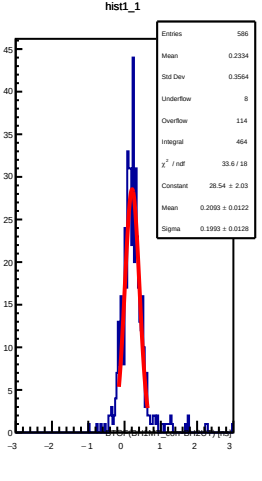

hist1_1
Entries 204
Mean −0.5372
Std Dev 0.3902
Underflow 3
Overflow 4
Integral 197
χ² / ndf 7.271 / 18
Constant 8.586 ± 0.990
Mean −0.4249 ± 0.0363
Sigma 0.2647 ± 0.0397

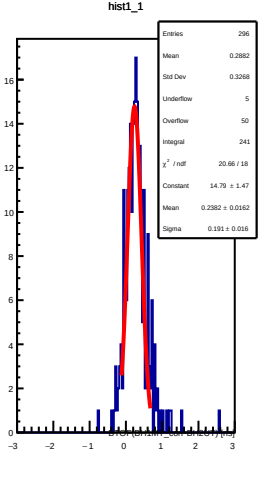

hist1_1
Entries 3710
Mean −0.1597
Std Dev 0.2648
Underflow 61
Overflow 112
Integral 3537
χ² / ndf 19.03 / 18
Constant 230.7 ± 5.5
Mean −0.1468 ± 0.0049
Sigma 0.2204 ± 0.0051

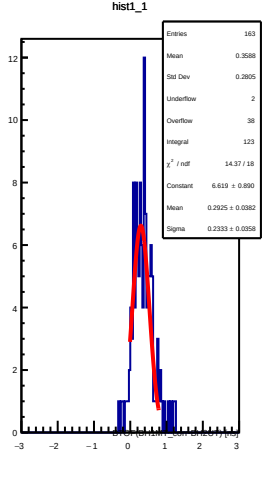

hist1_1
Entries 8056
Mean −0.01342
Std Dev 0.2478
Underflow 130
Overflow 247
Integral 7679
χ² / ndf 30.95 / 18
Constant 550.9 ± 8.9
Mean −0.006334 ± 0.002723
Sigma 0.1961 ± 0.0028

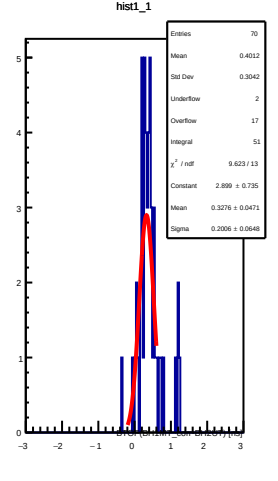

hist1_1
Entries 3017
Mean 0.1163
Std Dev 0.2698
Underflow 47
Overflow 130
Integral 2840
χ² / ndf 19.67 / 18
Constant 207.9 ± 5.6
Mean 0.1007 ± 0.0041
Sigma 0.1854 ± 0.0041

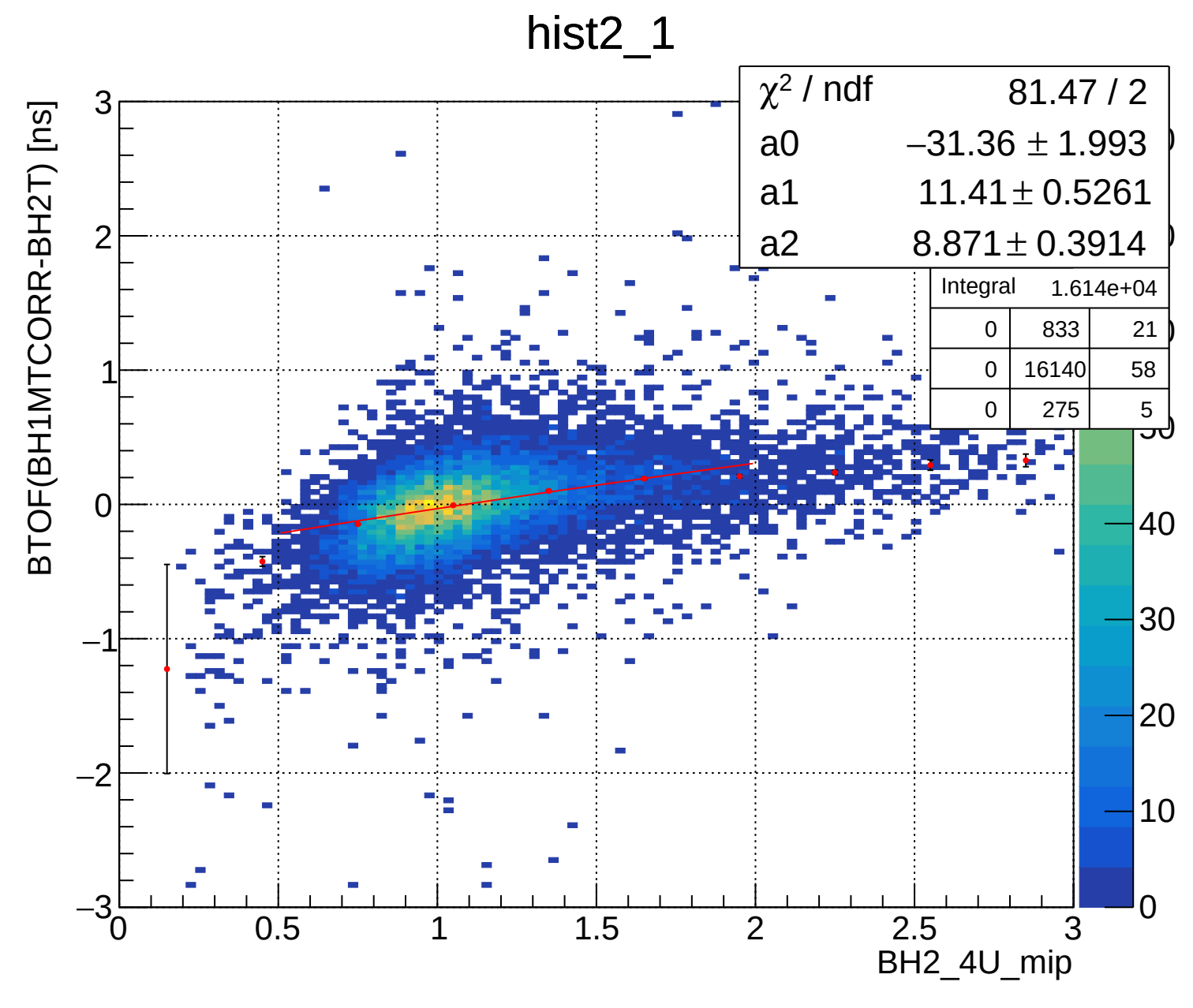

hist1_1
Entries 1125
Mean 0.1931
Std Dev 0.3216
Underflow 15
Overflow 121
Integral 989
χ² / ndf 20.83 / 18
Constant 65.94 ± 3.07
Mean 0.1918 ± 0.0077
Sigma 0.1944 ± 0.0078

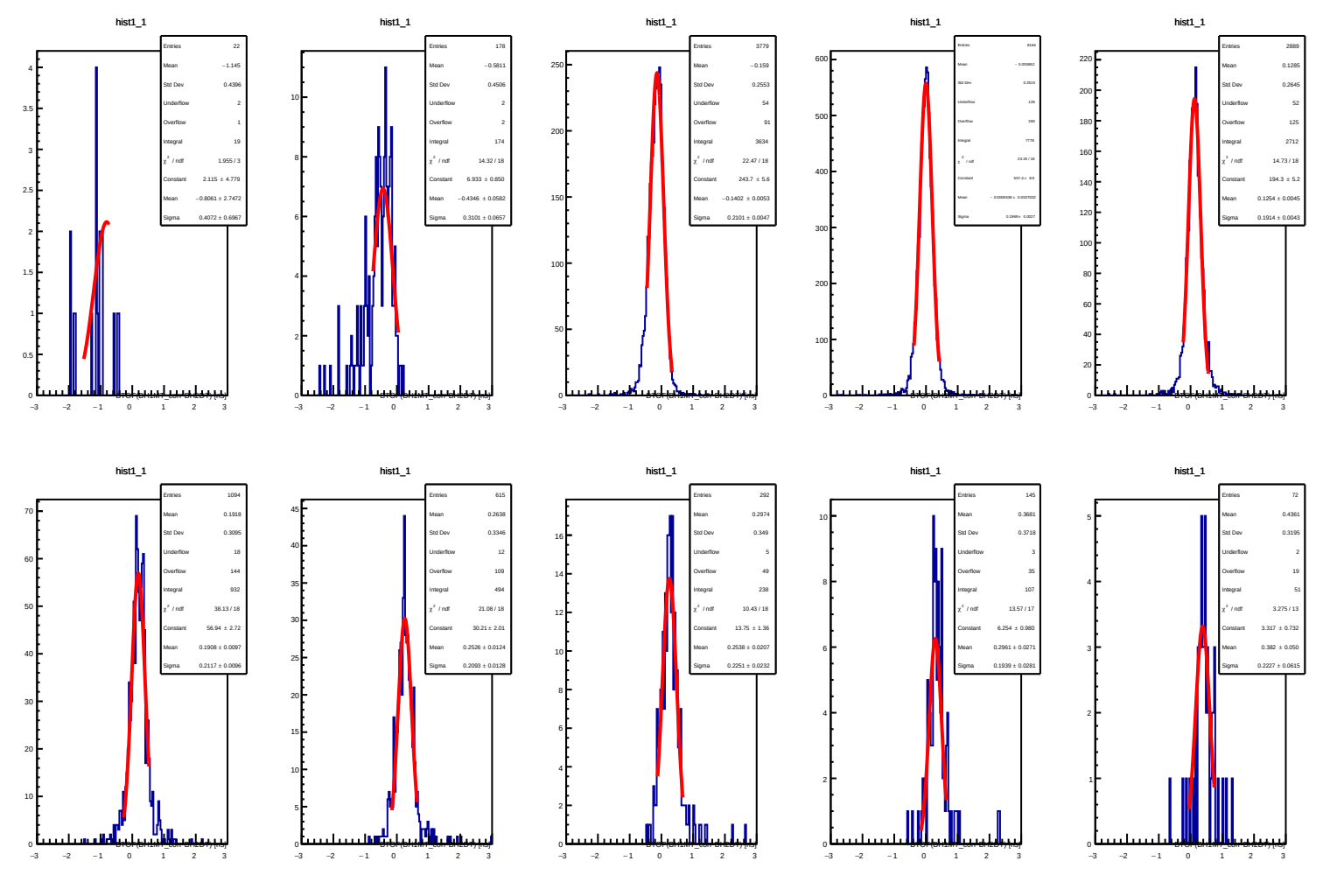

hist1_1
Entries 586
Mean 0.2334
Std Dev 0.3564
Underflow 8
Overflow 114
Integral 464
χ² / ndf 33.6 / 18
Constant 28.54 ± 2.03
Mean 0.2093 ± 0.0122
Sigma 0.1993 ± 0.0128

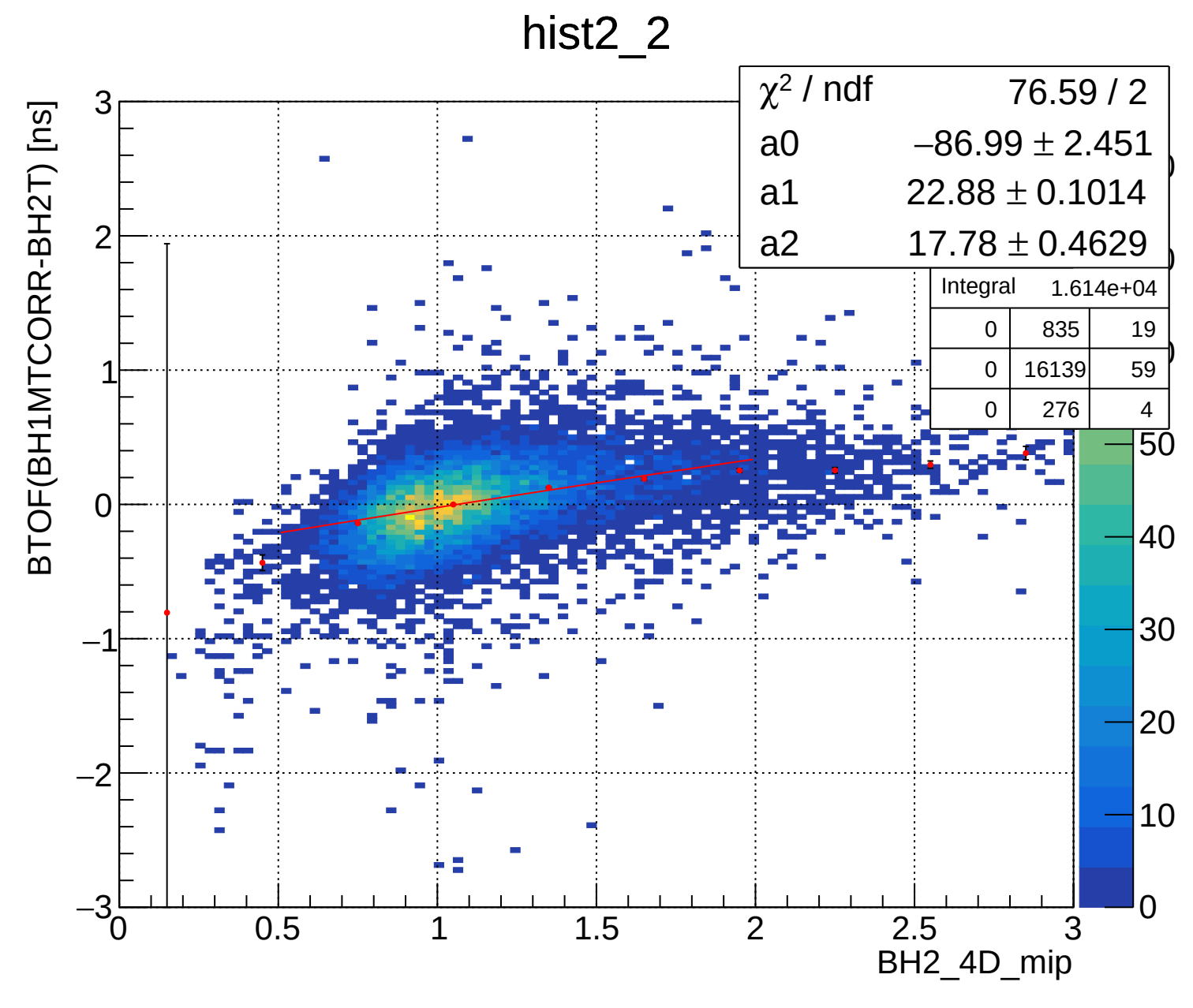

hist1_1
Entries 296
Mean 0.2882
Std Dev 0.3268
Underflow 5
Overflow 50
Integral 241
χ² / ndf 20.66 / 18
Constant 14.79 ± 1.47
Mean 0.2382 ± 0.0162
Sigma 0.191 ± 0.016

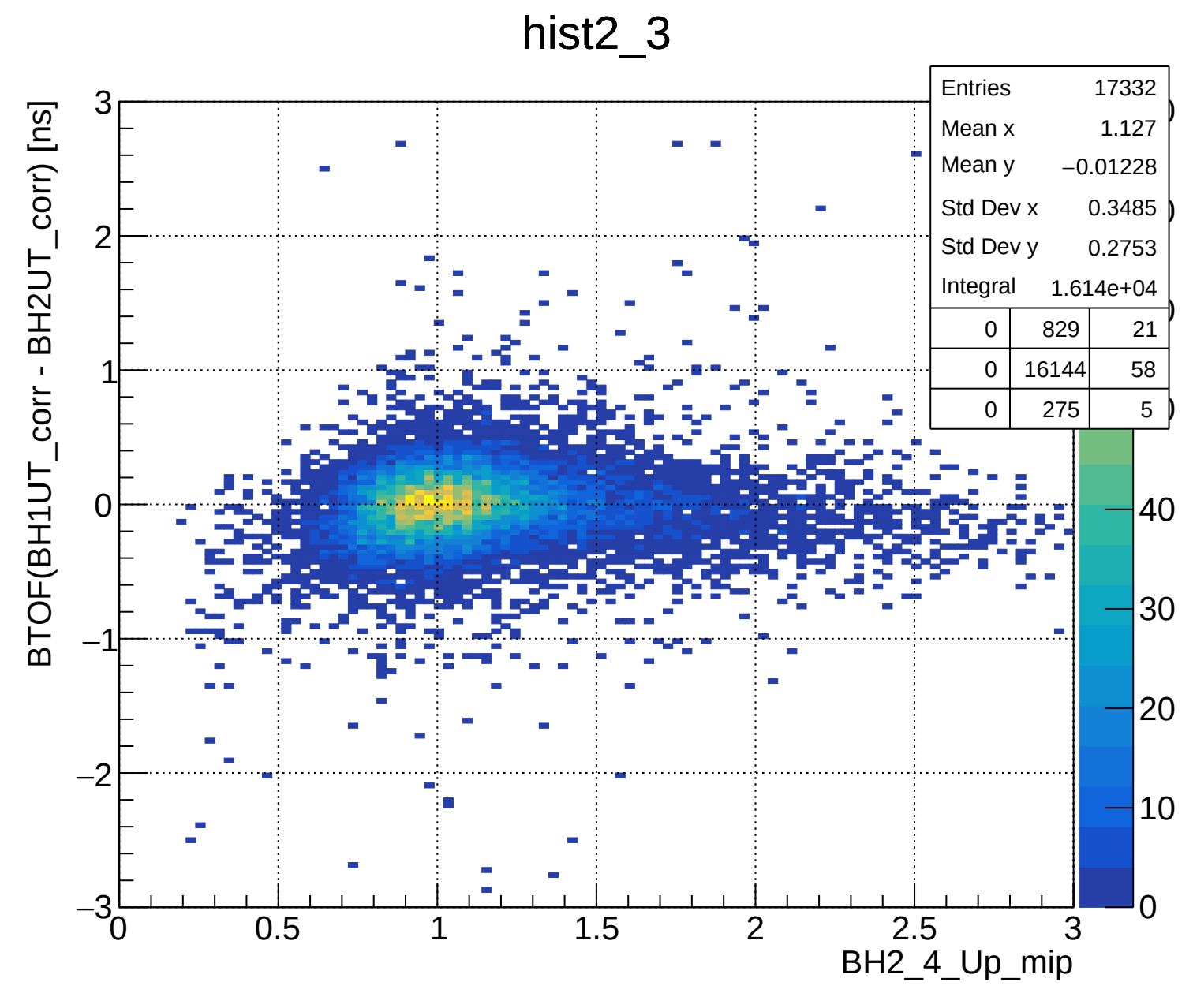

hist1_1
Entries 163
Mean 0.3588
Std Dev 0.2805
Underflow 2
Overflow 38
Integral 123
χ² / ndf 14.37 / 18
Constant 6.619 ± 0.890
Mean 0.2925 ± 0.0382
Sigma 0.2333 ± 0.0358

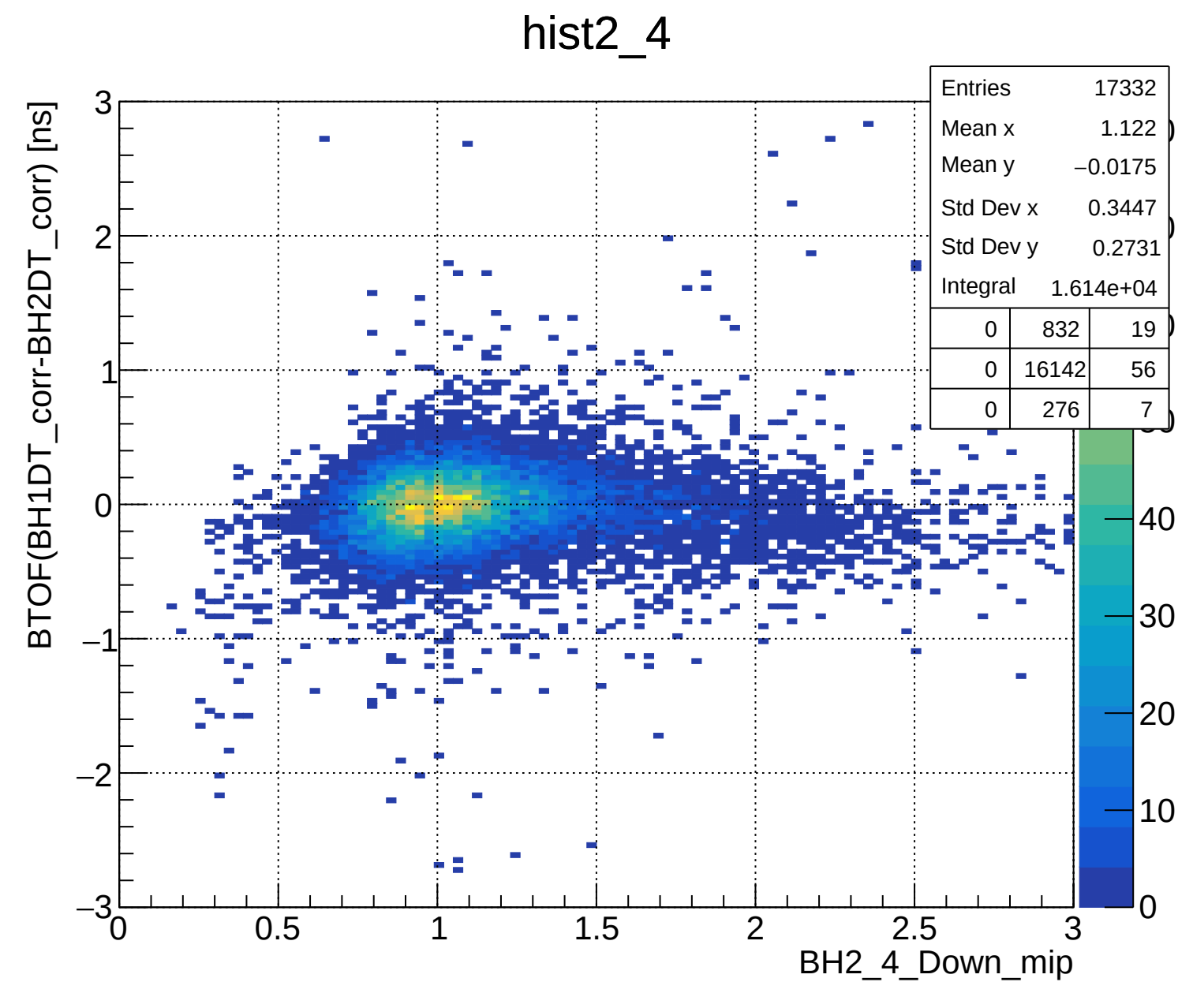

hist1_1
Entries 70
Mean 0.4012
Std Dev 0.3042
Underflow 2
Overflow 17
Integral 51
χ² / ndf 9.623 / 13
Constant 2.899 ± 0.735
Mean 0.3276 ± 0.0471
Sigma 0.2006 ± 0.0648

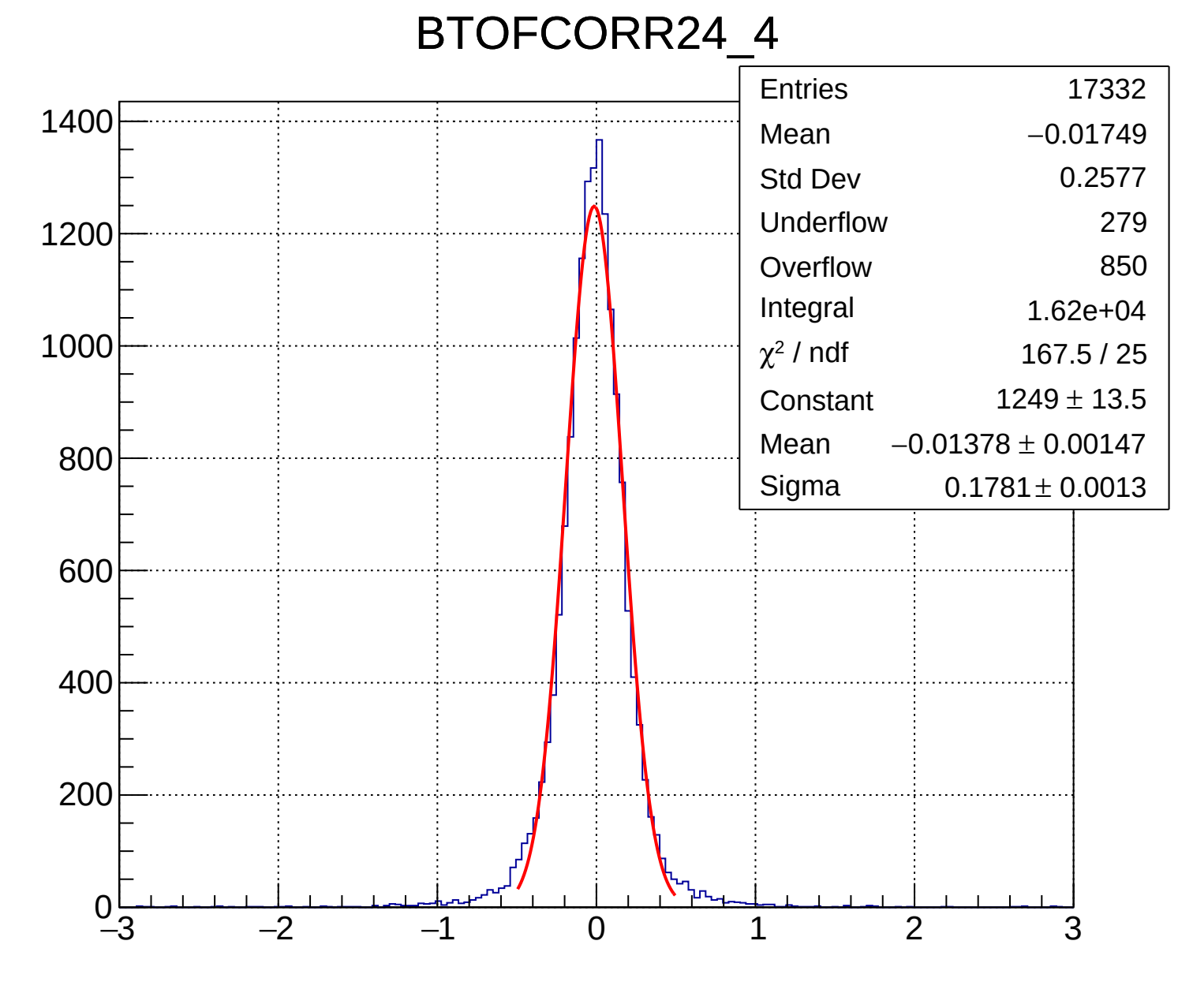

hist2_1
χ² / ndf 81.47 / 2
a0 −31.36 ± 1.993
a1 11.41 ± 0.5261
a2 8.871 ± 0.3914
Integral 1.614e+04
0 833 21
0 16140 58
0 275 5
BTOF(BH1MTCORR-BH2T) [ns]
BH2_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

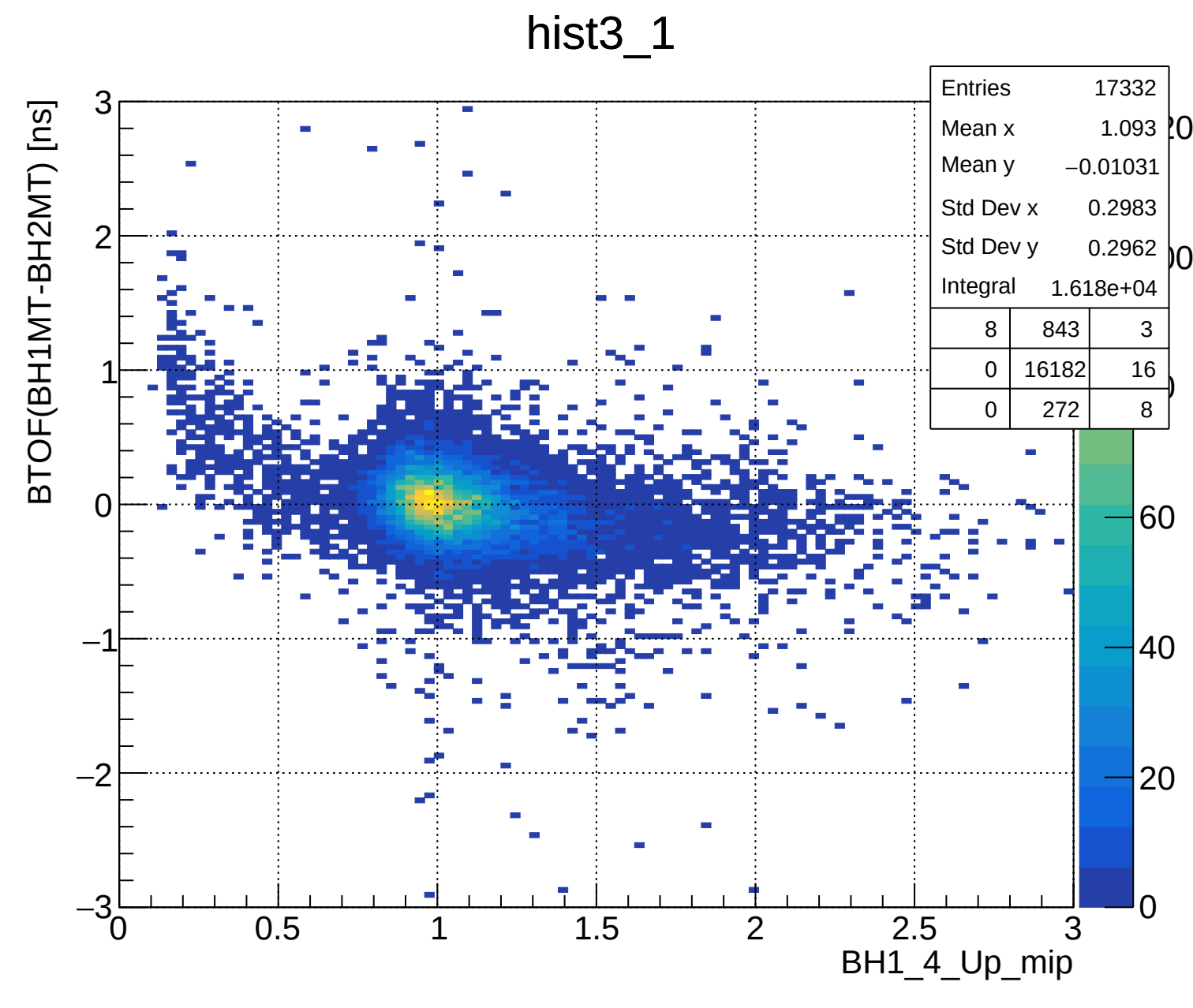

hist1_1
Entries 22
Mean −1.145
Std Dev 0.4396
Underflow 2
Overflow 1
Integral 19
χ² / ndf 1.955 / 3
Constant 2.115 ± 4.779
Mean −0.8061 ± 2.7472
Sigma 0.4072 ± 0.6967
hist1_1
Entries 178
Mean −0.5811
Std Dev 0.4506
Underflow 2
Overflow 2
Integral 174
χ² / ndf 14.32 / 18
Constant 6.933 ± 0.850
Mean −0.4346 ± 0.0582
Sigma 0.3101 ± 0.0657
hist1_1
Entries 3779
Mean −0.159
Std Dev 0.2553
Underflow 54
Overflow 91
Integral 3634
χ² / ndf 22.47 / 18
Constant 243.7 ± 5.6
Mean −0.1402 ± 0.0053
Sigma 0.2101 ± 0.0047
hist1_1
hist1_1
Entries 2889
Mean 0.1285
Std Dev 0.2645
Underflow 52
Overflow 125
Integral 2712
χ² / ndf 14.73 / 18
Constant 194.3 ± 5.2
Mean 0.1254 ± 0.0045
Sigma 0.1914 ± 0.0043
hist1_1
Entries 1094
Mean 0.1918
Std Dev 0.3095
Underflow 18
Overflow 144
Integral 932
χ² / ndf 38.13 / 18
Constant 56.94 ± 2.72
Mean 0.1908 ± 0.0097
Sigma 0.2117 ± 0.0096
hist1_1
Entries 615
Mean 0.2638
Std Dev 0.3346
Underflow 12
Overflow 109
Integral 494
χ² / ndf 21.08 / 18
Constant 30.21 ± 2.01
Mean 0.2526 ± 0.0124
Sigma 0.2093 ± 0.0128
hist1_1
Entries 292
Mean 0.2974
Std Dev 0.349
Underflow 5
Overflow 49
Integral 238
χ² / ndf 10.43 / 18
Constant 13.75 ± 1.36
Mean 0.2538 ± 0.0207
Sigma 0.2251 ± 0.0232
hist1_1
Entries 145
Mean 0.3681
Std Dev 0.3718
Underflow 3
Overflow 35
Integral 107
χ² / ndf 13.57 / 17
Constant 6.254 ± 0.980
Mean 0.2961 ± 0.0271
Sigma 0.1939 ± 0.0281
hist1_1
Entries 72
Mean 0.4361
Std Dev 0.3195
Underflow 2
Overflow 19
Integral 51
χ² / ndf 3.275 / 13
Constant 3.317 ± 0.732
Mean 0.382 ± 0.050
Sigma 0.2227 ± 0.0615

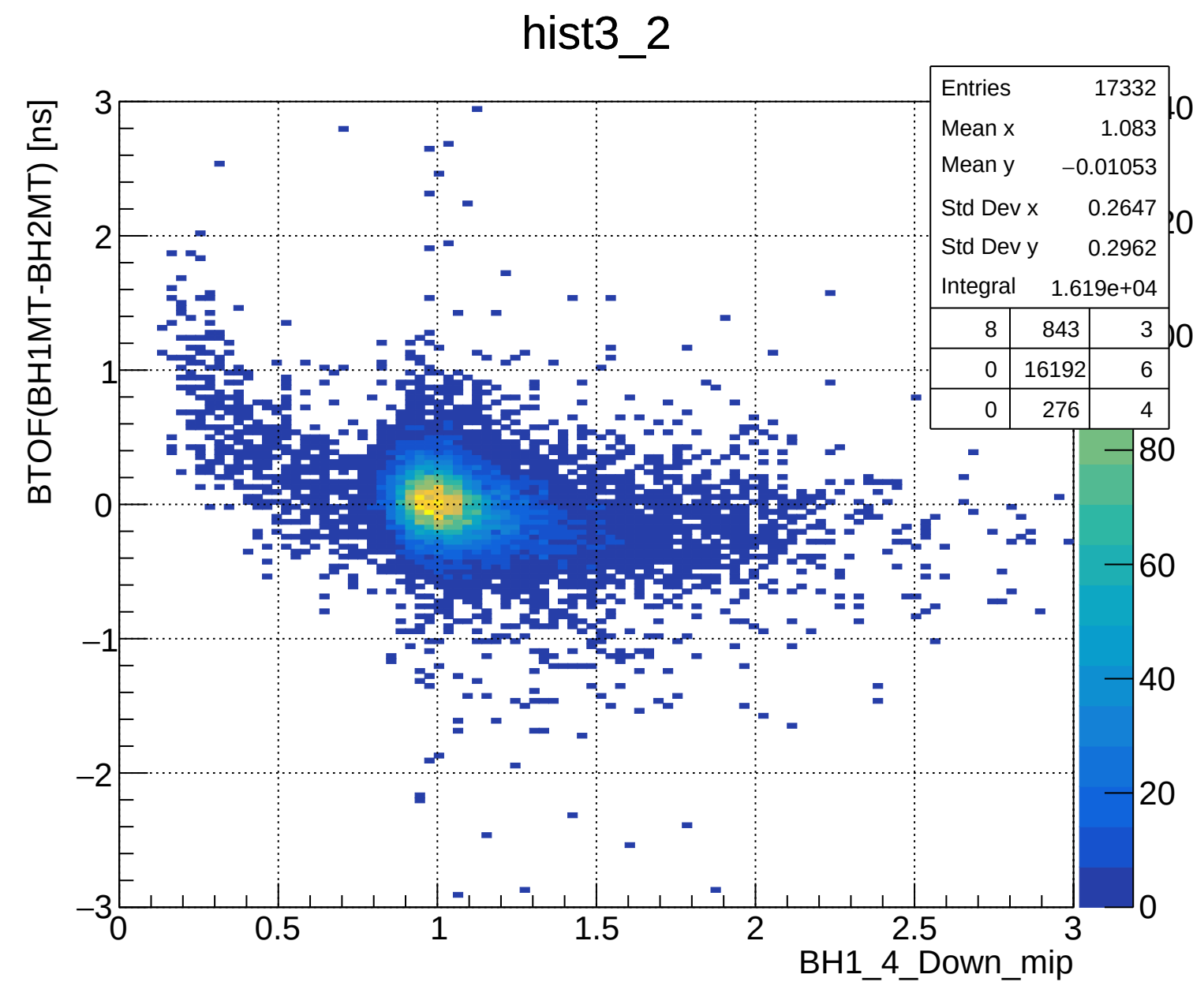

hist2_2
χ² / ndf 76.59 / 2
a0 –86.99 ± 2.451
a1 22.88 ± 0.1014
a2 17.78 ± 0.4629
Integral 1.614e+04
0 835 19
0 16139 59
0 276 4
BTOF(BH1MTCORR-BH2T) [ns]
BH2_4D_mip
3
2
1
0
–1
–2
–3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

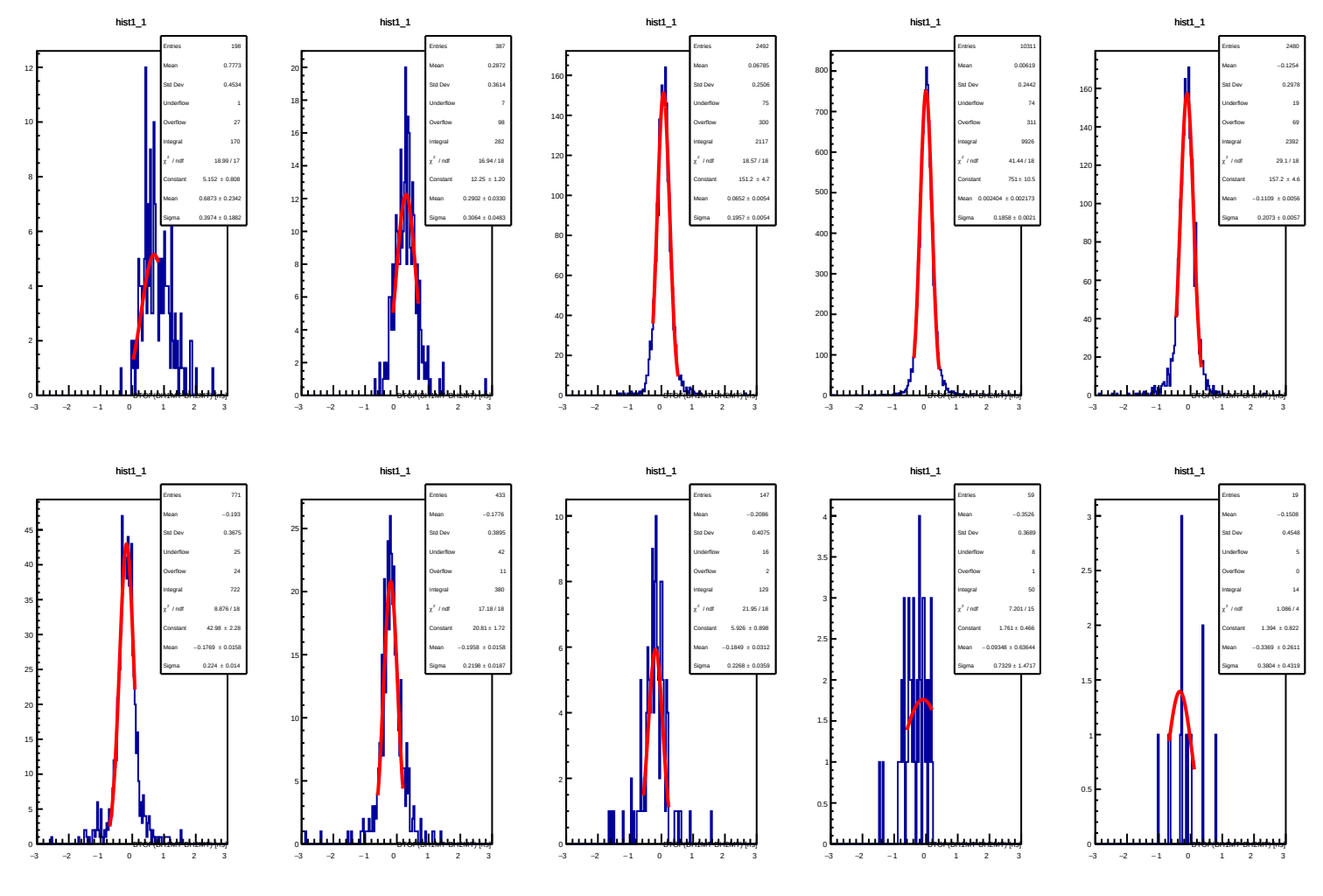

hist2_3
Entries 17332
Mean x 1.127
Mean y −0.01228
Std Dev x 0.3485
Std Dev y 0.2753
Integral 1.614e+04
0 829 21
0 16144 58
0 275 5
BTOF(BH1UT_corr - BH2UT_corr) [ns]
BH2_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
40
30
20
10
0

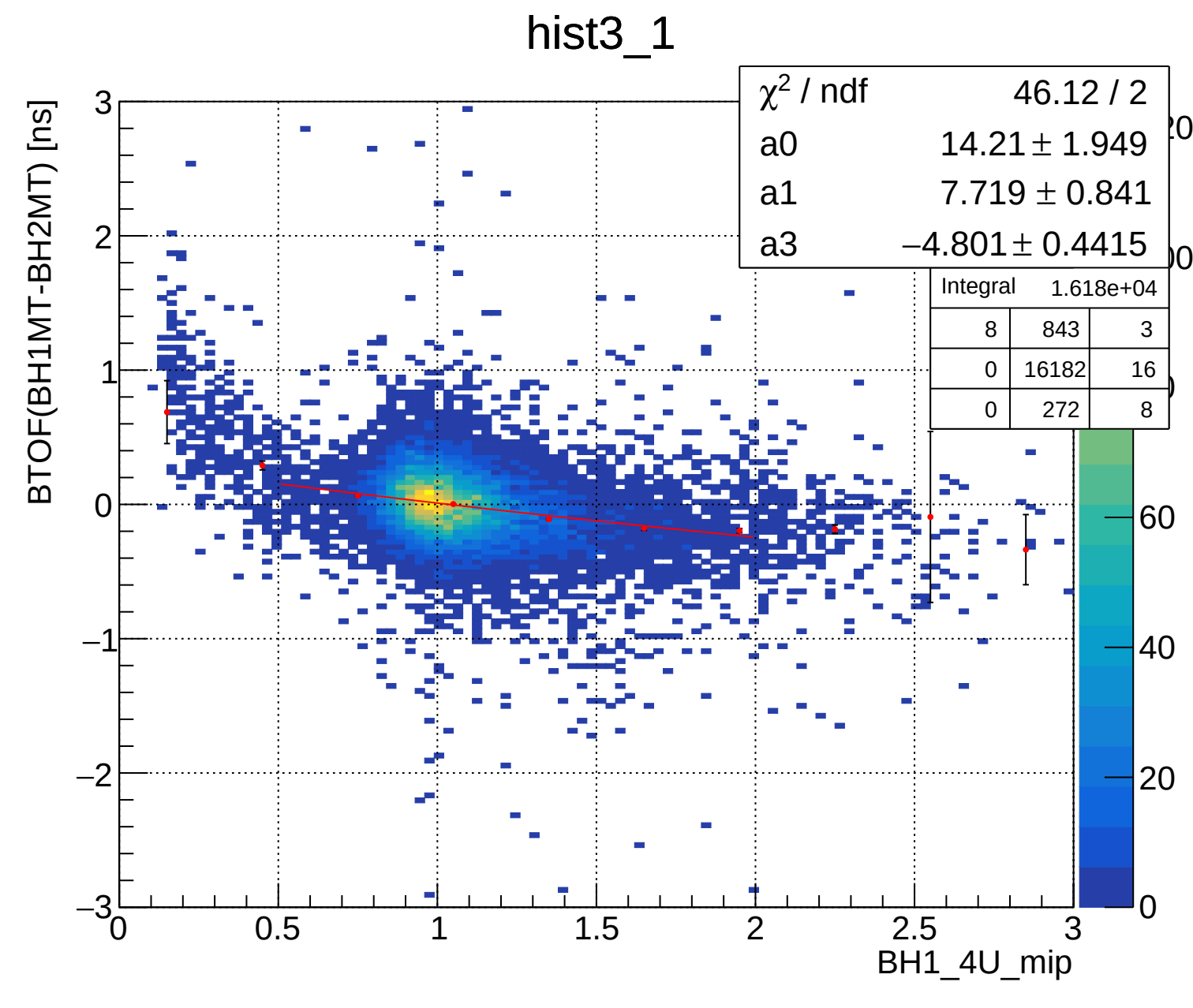

hist2_4
Entries 17332
Mean x 1.122
Mean y −0.0175
Std Dev x 0.3447
Std Dev y 0.2731
Integral 1.614e+04
0 832 19
0 16142 56
0 276 7
BTOF(BH1DT_corr-BH2DT_corr) [ns]
BH2_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
40
30
20
10
0

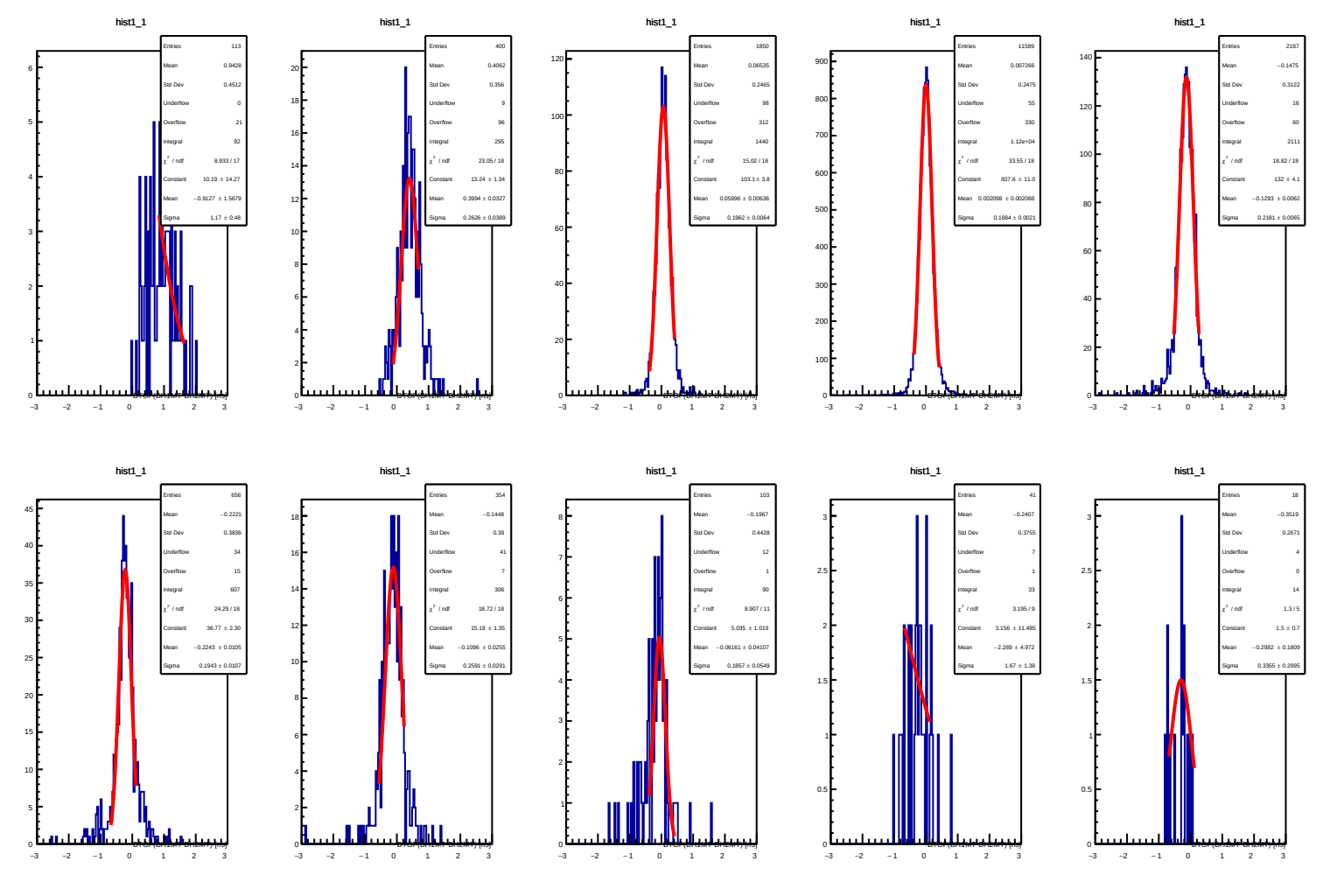

BTOFCORR24_4
Entries 17332
Mean −0.01749
Std Dev 0.2577
Underflow 279
Overflow 850
Integral 1.62e+04
χ² / ndf 167.5 / 25
Constant 1249 ± 13.5
Mean −0.01378 ± 0.00147
Sigma 0.1781 ± 0.0013
1400
1200
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3

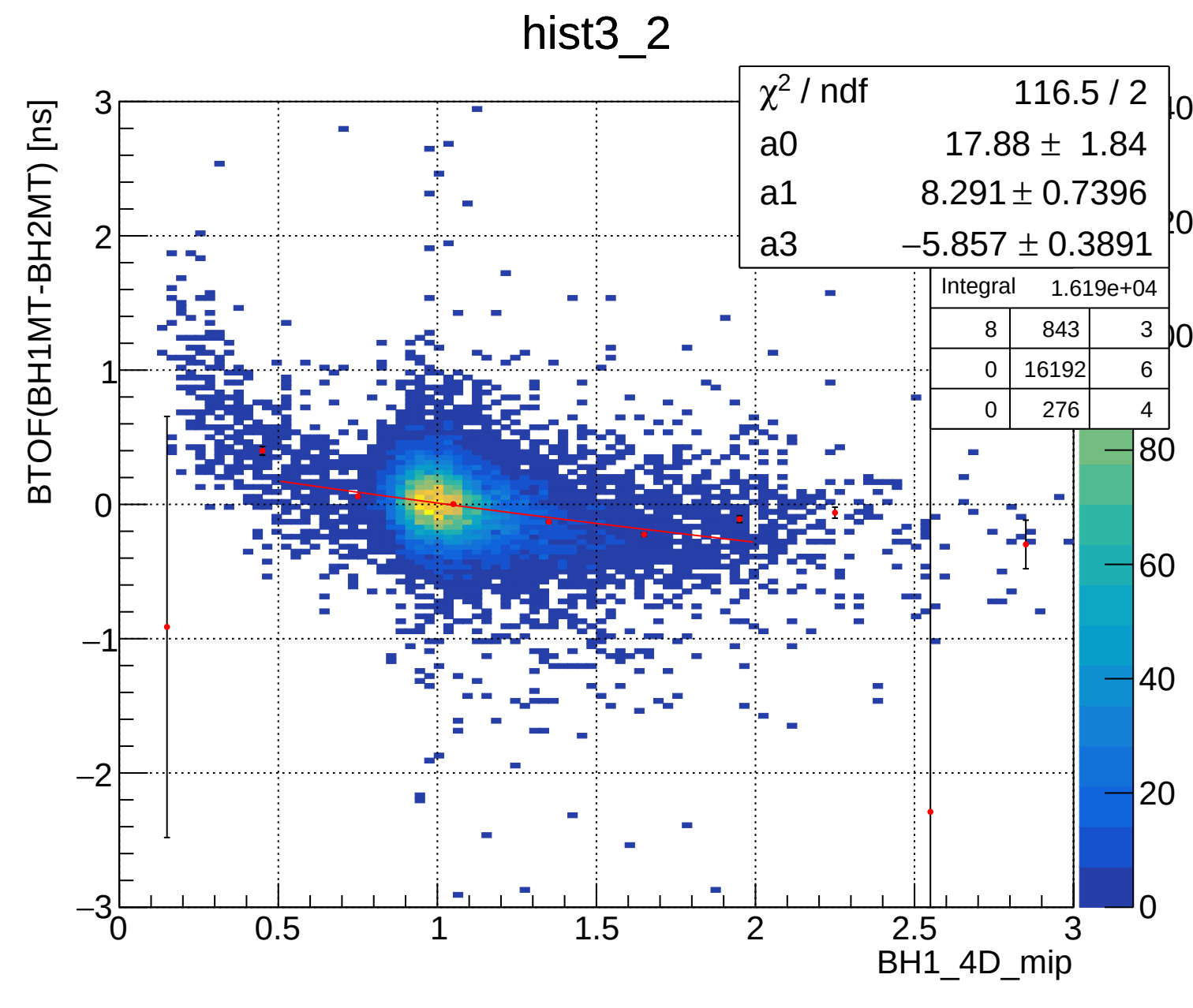

hist3_1
Entries 17332
Mean x 1.093
Mean y −0.01031
Std Dev x 0.2983
Std Dev y 0.2962
Integral 1.618e+04
8 843 3
0 16182 16
0 272 8
BTOF(BH1MT-BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

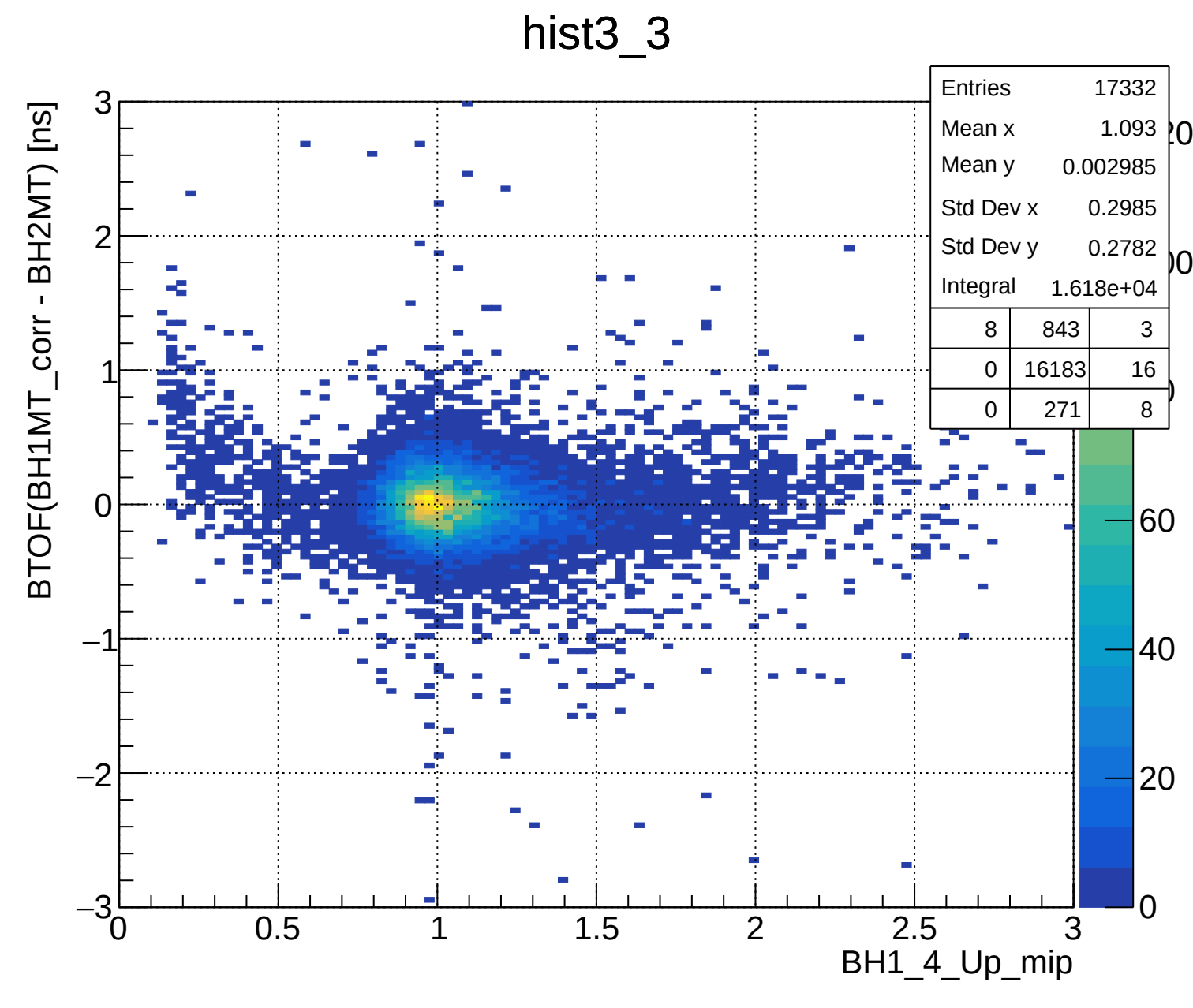

hist3_2
Entries 17332
Mean x 1.083
Mean y −0.01053
Std Dev x 0.2647
Std Dev y 0.2962
Integral 1.619e+04
8 843 3
0 16192 6
0 276 4
BTOF(BH1MT-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
80
60
40
20
0

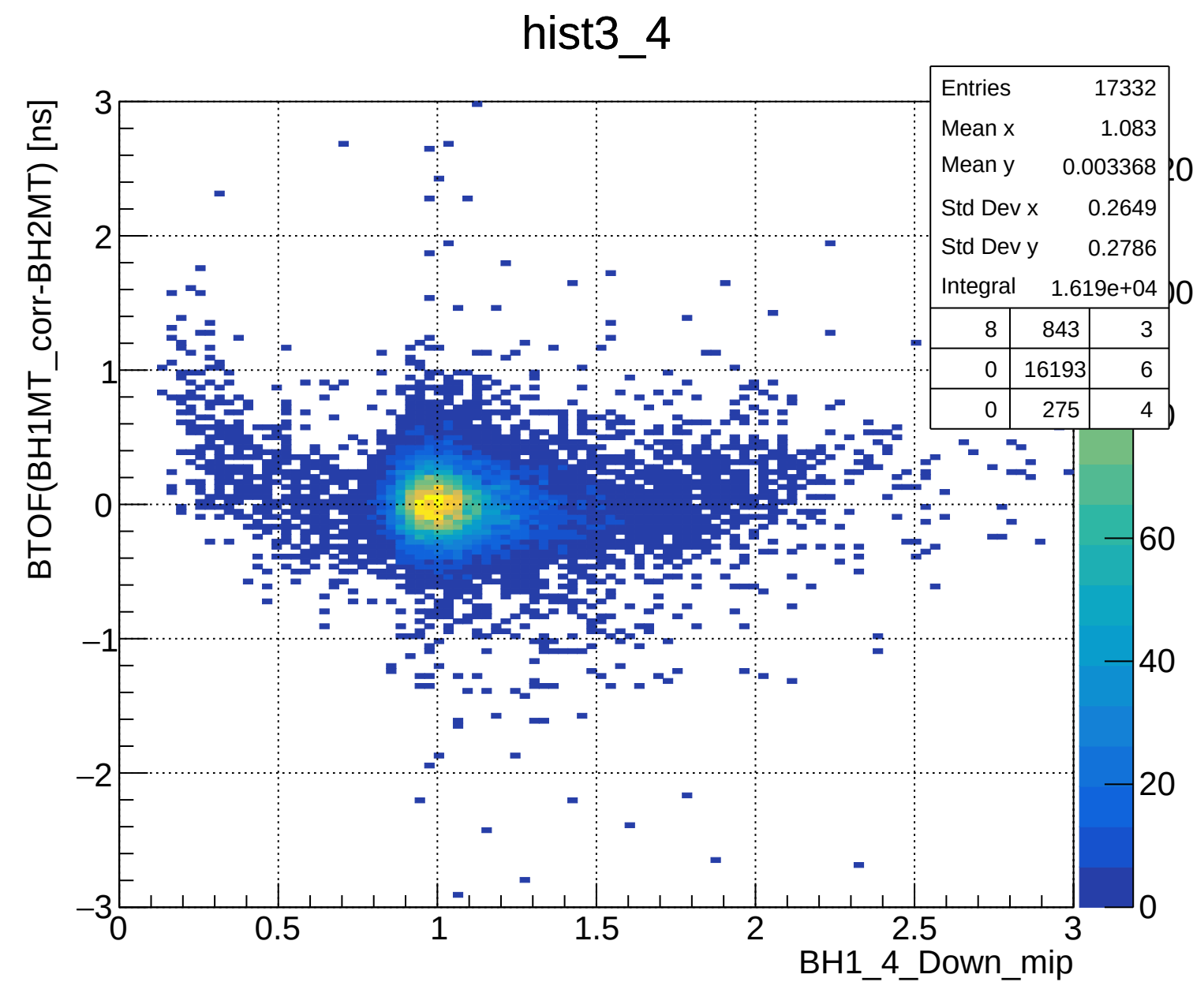

hist1_1
Entries 198
Mean 0.7773
Std Dev 0.4534
Underflow 1
Overflow 27
Integral 170
χ² / ndf 18.99 / 17
Constant 5.152 ± 0.808
Mean 0.6873 ± 0.2342
Sigma 0.3974 ± 0.1882
hist1_1
Entries 387
Mean 0.2872
Std Dev 0.3614
Underflow 7
Overflow 98
Integral 282
χ² / ndf 16.94 / 18
Constant 12.25 ± 1.20
Mean 0.2902 ± 0.0330
Sigma 0.3064 ± 0.0483
hist1_1
Entries 2492
Mean 0.06785
Std Dev 0.2506
Underflow 75
Overflow 300
Integral 2117
χ² / ndf 18.57 / 18
Constant 151.2 ± 4.7
Mean 0.0652 ± 0.0054
Sigma 0.1957 ± 0.0054
hist1_1
Entries 10311
Mean 0.00619
Std Dev 0.2442
Underflow 74
Overflow 311
Integral 9926
χ² / ndf 41.44 / 18
Constant 751± 10.5
Mean 0.002404 ± 0.002173
Sigma 0.1858 ± 0.0021
hist1_1
Entries 2480
Mean −0.1254
Std Dev 0.2978
Underflow 19
Overflow 69
Integral 2392
χ² / ndf 29.1 / 18
Constant 157.2 ± 4.6
Mean −0.1109 ± 0.0056
Sigma 0.2073 ± 0.0057
hist1_1
Entries 771
Mean −0.193
Std Dev 0.3675
Underflow 25
Overflow 24
Integral 722
χ² / ndf 8.876 / 18
Constant 42.98 ± 2.28
Mean −0.1769 ± 0.0158
Sigma 0.224 ± 0.014
hist1_1
Entries 433
Mean −0.1776
Std Dev 0.3895
Underflow 42
Overflow 11
Integral 380
χ² / ndf 17.18 / 18
Constant 20.81 ± 1.72
Mean −0.1958 ± 0.0158
Sigma 0.2198 ± 0.0187
hist1_1
Entries 147
Mean −0.2086
Std Dev 0.4075
Underflow 16
Overflow 2
Integral 129
χ² / ndf 21.95 / 18
Constant 5.926 ± 0.898
Mean −0.1849 ± 0.0312
Sigma 0.2268 ± 0.0359
hist1_1
Entries 59
Mean −0.3526
Std Dev 0.3689
Underflow 8
Overflow 1
Integral 50
χ² / ndf 7.201 / 15
Constant 1.761 ± 0.466
Mean −0.09348 ± 0.63644
Sigma 0.7329 ± 1.4717
hist1_1
Entries 19
Mean −0.1508
Std Dev 0.4548
Underflow 5
Overflow 0
Integral 14
χ² / ndf 1.086 / 4
Constant 1.394 ± 0.822
Mean −0.3369 ± 0.2611
Sigma 0.3804 ± 0.4319

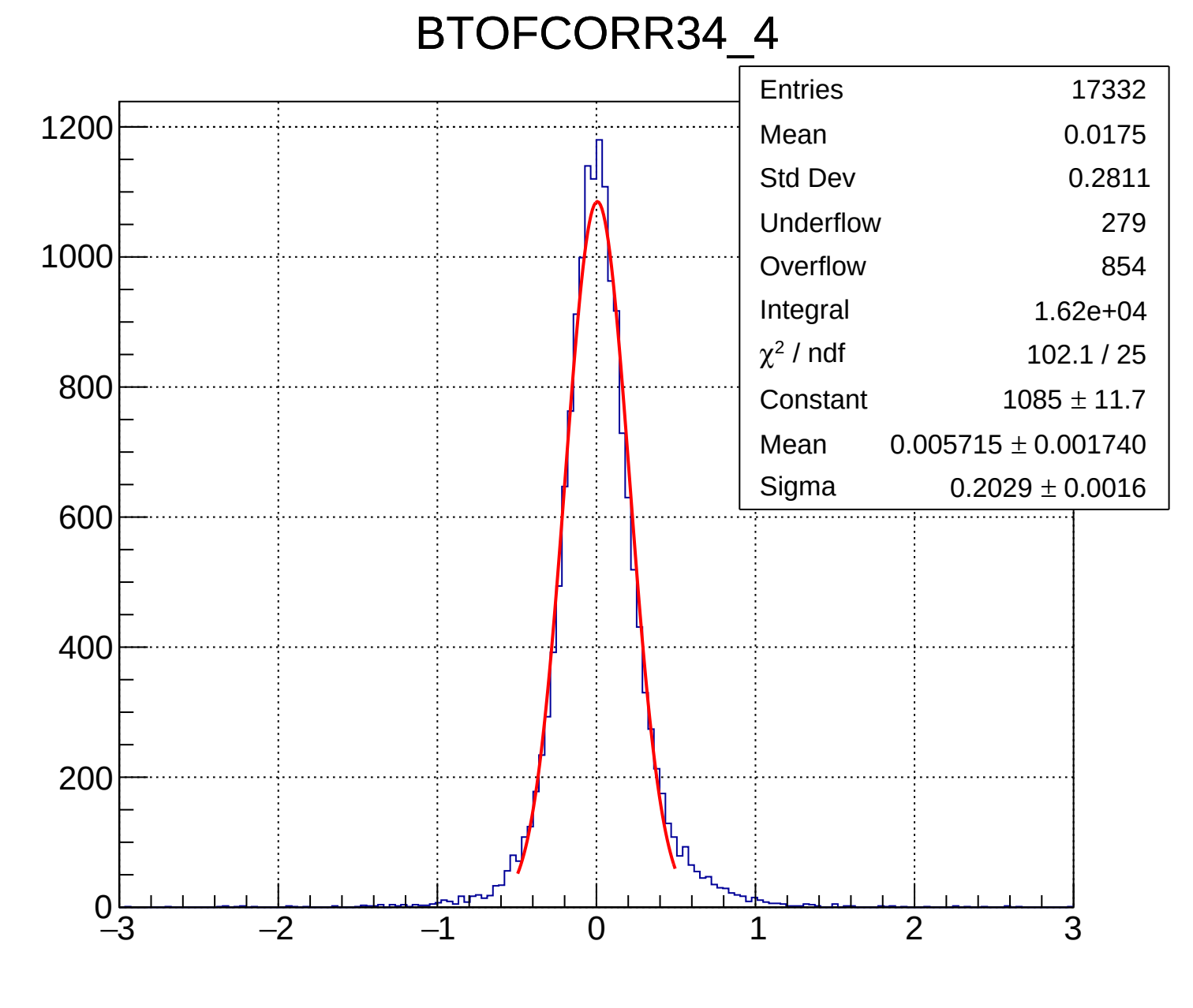

hist3_1
χ² / ndf 46.12 / 2
a0 14.21 ± 1.949
a1 7.719 ± 0.841
a3 −4.801 ± 0.4415
Integral 1.618e+04
8 843 3
0 16182 16
0 272 8
BTOF(BH1MT-BH2MT) [ns]
BH1_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

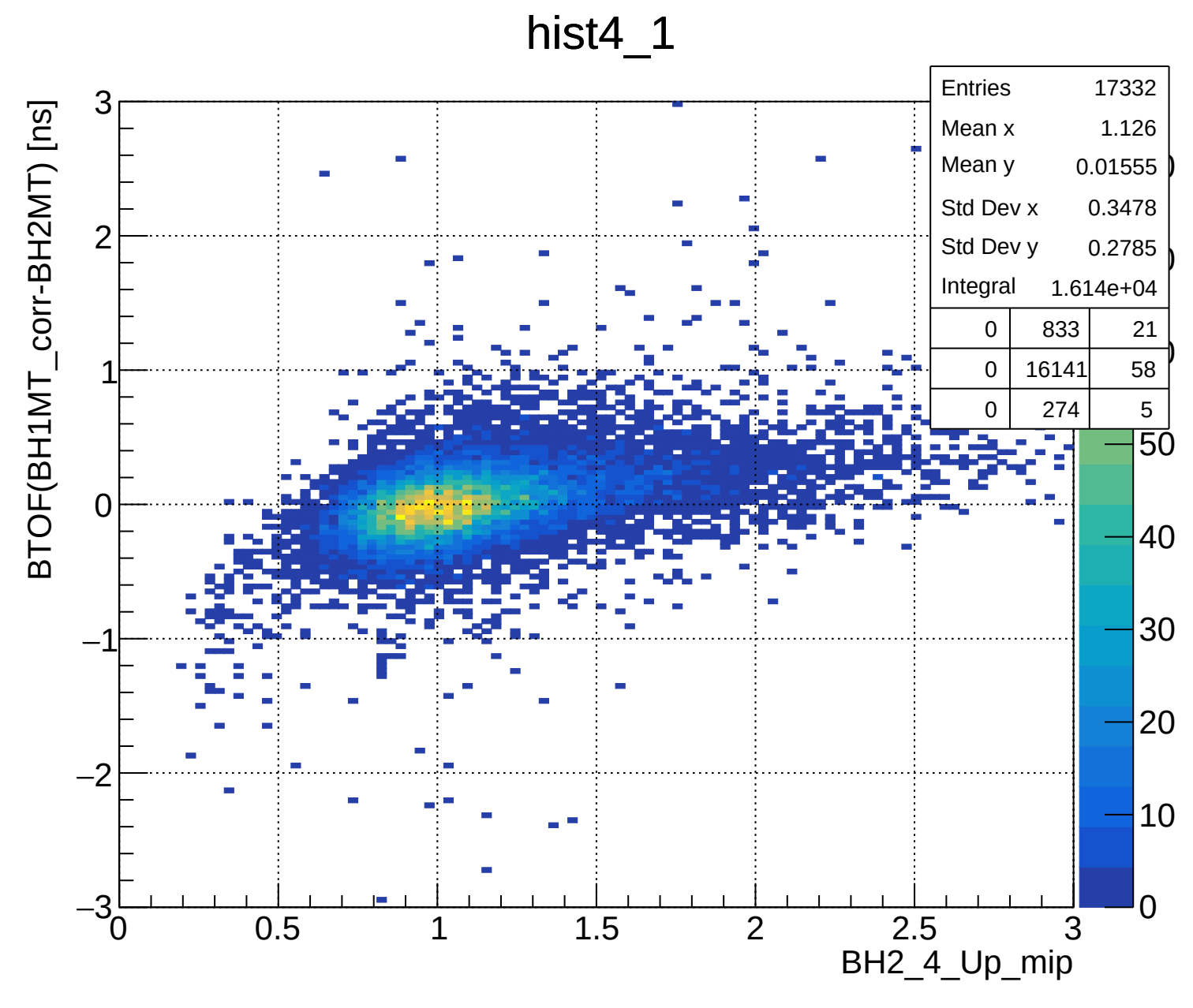

hist1_1
Entries 113
Mean 0.9428
Std Dev 0.4512
Underflow 0
Overflow 21
Integral 92
χ² / ndf 8.933 / 17
Constant 10.19 ± 14.27
Mean −0.9127 ± 1.5679
Sigma 1.17 ± 0.48
hist1_1
Entries 400
Mean 0.4062
Std Dev 0.356
Underflow 9
Overflow 96
Integral 295
χ² / ndf 23.05 / 18
Constant 13.24 ± 1.34
Mean 0.3994 ± 0.0327
Sigma 0.2626 ± 0.0389
hist1_1
Entries 1850
Mean 0.06535
Std Dev 0.2465
Underflow 98
Overflow 312
Integral 1440
χ² / ndf 15.02 / 18
Constant 103.1 ± 3.8
Mean 0.05996 ± 0.00636
Sigma 0.1962 ± 0.0064
hist1_1
Entries 11589
Mean 0.007266
Std Dev 0.2475
Underflow 55
Overflow 330
Integral 1.12e+04
χ² / ndf 33.55 / 18
Constant 837.6 ± 11.0
Mean 0.002098 ± 0.002088
Sigma 0.1884 ± 0.0021
hist1_1
Entries 2187
Mean −0.1475
Std Dev 0.3122
Underflow 16
Overflow 60
Integral 2111
χ² / ndf 18.82 / 18
Constant 132 ± 4.1
Mean −0.1293 ± 0.0062
Sigma 0.2181 ± 0.0065
hist1_1
Entries 656
Mean −0.2221
Std Dev 0.3836
Underflow 34
Overflow 15
Integral 607
χ² / ndf 24.29 / 18
Constant 36.77 ± 2.30
Mean −0.2243 ± 0.0105
Sigma 0.1943 ± 0.0107
hist1_1
Entries 354
Mean −0.1448
Std Dev 0.39
Underflow 41
Overflow 7
Integral 306
χ² / ndf 18.72 / 18
Constant 15.18 ± 1.35
Mean −0.1096 ± 0.0255
Sigma 0.2591 ± 0.0291
hist1_1
Entries 103
Mean −0.1967
Std Dev 0.4428
Underflow 12
Overflow 1
Integral 90
χ² / ndf 8.907 / 11
Constant 5.035 ± 1.019
Mean −0.06161 ± 0.04107
Sigma 0.1857 ± 0.0549
hist1_1
Entries 41
Mean −0.2407
Std Dev 0.3755
Underflow 7
Overflow 1
Integral 33
χ² / ndf 3.195 / 9
Constant 3.156 ± 11.485
Mean −2.289 ± 4.972
Sigma 1.67 ± 1.38
hist1_1
Entries 18
Mean −0.3519
Std Dev 0.2671
Underflow 4
Overflow 0
Integral 14
χ² / ndf 1.3 / 5
Constant 1.5 ± 0.7
Mean −0.2982 ± 0.1809
Sigma 0.3355 ± 0.2995

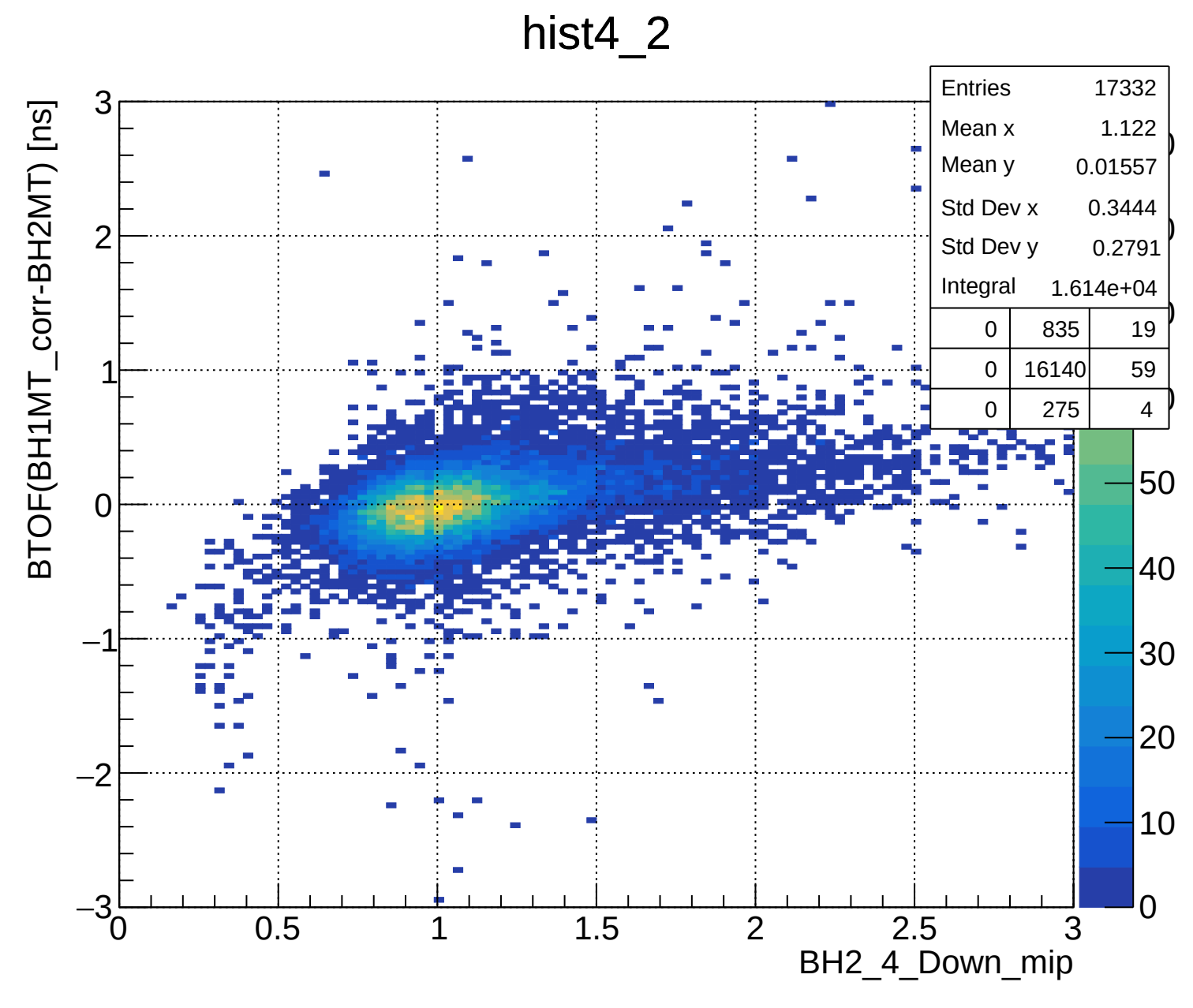

hist3_2
χ² / ndf 116.5 / 2
a0 17.88 ± 1.84
a1 8.291 ± 0.7396
a3 −5.857 ± 0.3891
Integral 1.619e+04
8 843 3
0 16192 6
0 276 4
BTOF(BH1MT-BH2MT) [ns]
BH1_4D_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
80
60
40
20
0

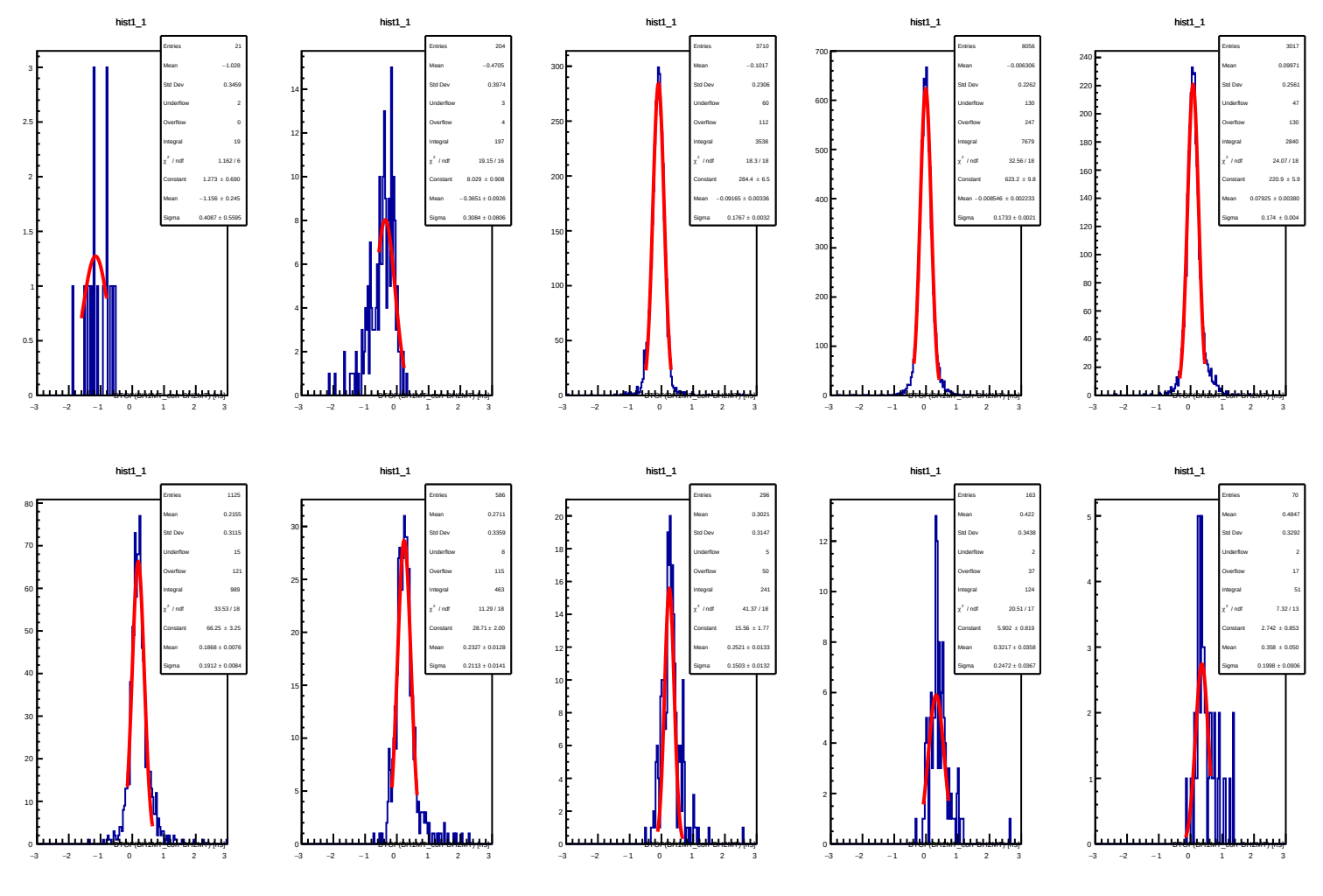

hist3_3
Entries 17332
Mean x 1.093
Mean y 0.002985
Std Dev x 0.2985
Std Dev y 0.2782
Integral 1.618e+04
8 843 3
0 16183 16
0 271 8
BTOF(BH1MT_corr - BH2MT) [ns]
BH1_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

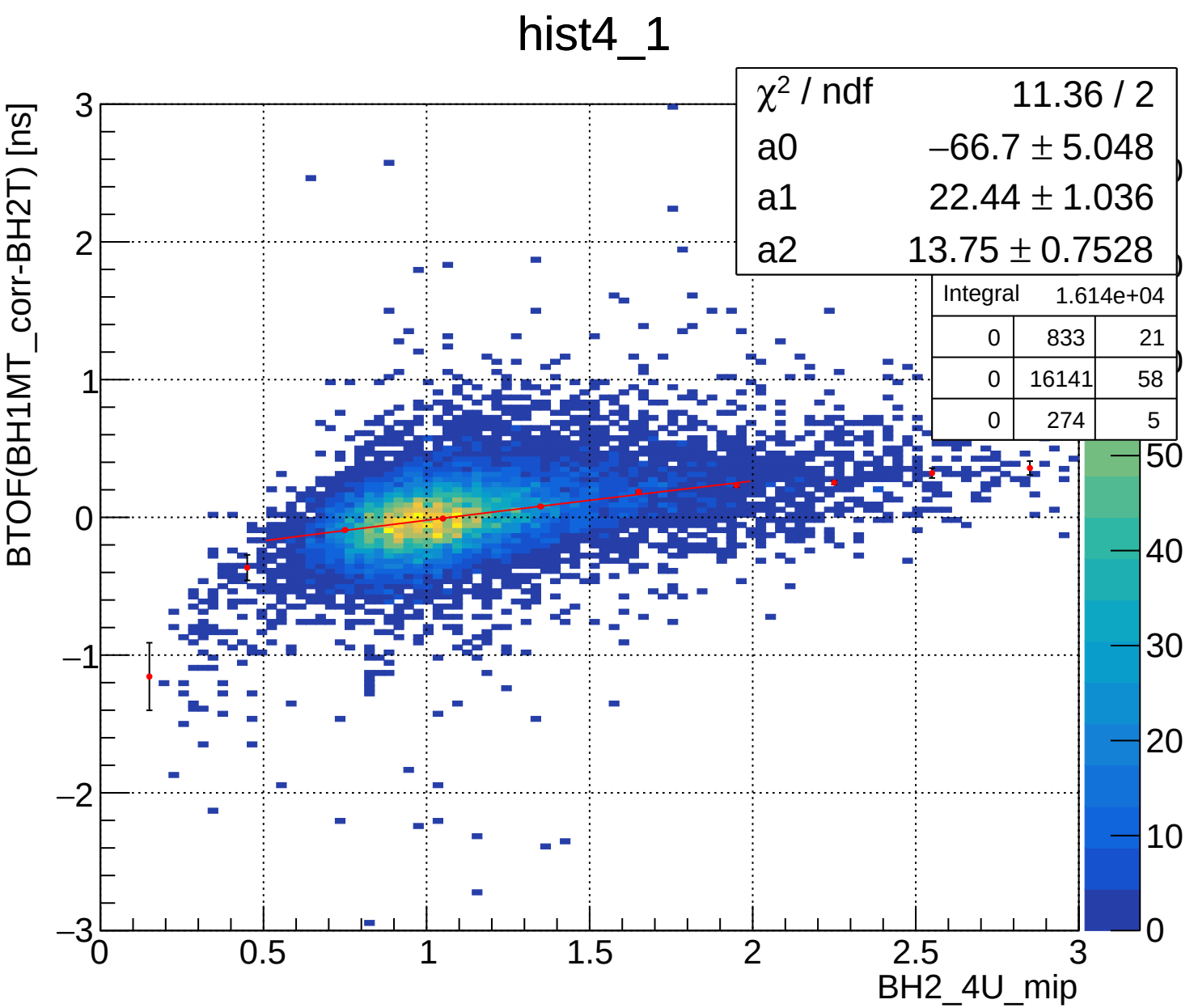

hist3_4
Entries 17332
Mean x 1.083
Mean y 0.003368
Std Dev x 0.2649
Std Dev y 0.2786
Integral 1.619e+04
8 843 3
0 16193 6
0 275 4
BTOF(BH1MT_corr-BH2MT) [ns]
BH1_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
60
40
20
0

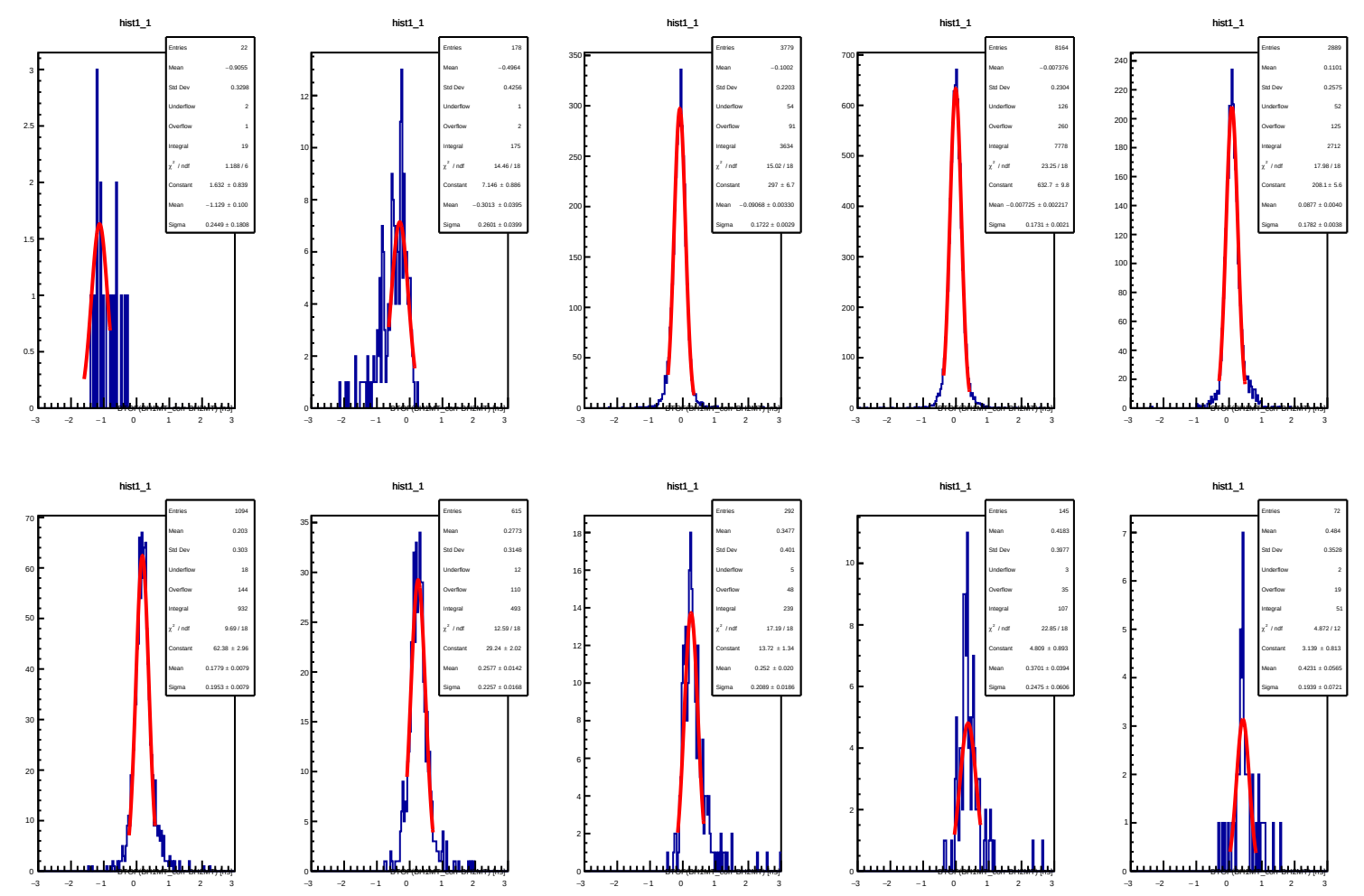

BTOFCORR34_4
Entries 17332
Mean 0.0175
Std Dev 0.2811
Underflow 279
Overflow 854
Integral 1.62e+04
χ² / ndf 102.1 / 25
Constant 1085 ± 11.7
Mean 0.005715 ± 0.001740
Sigma 0.2029 ± 0.0016
1200
1000
800
600
400
200
0
–3
–2
–1
0
1
2
3

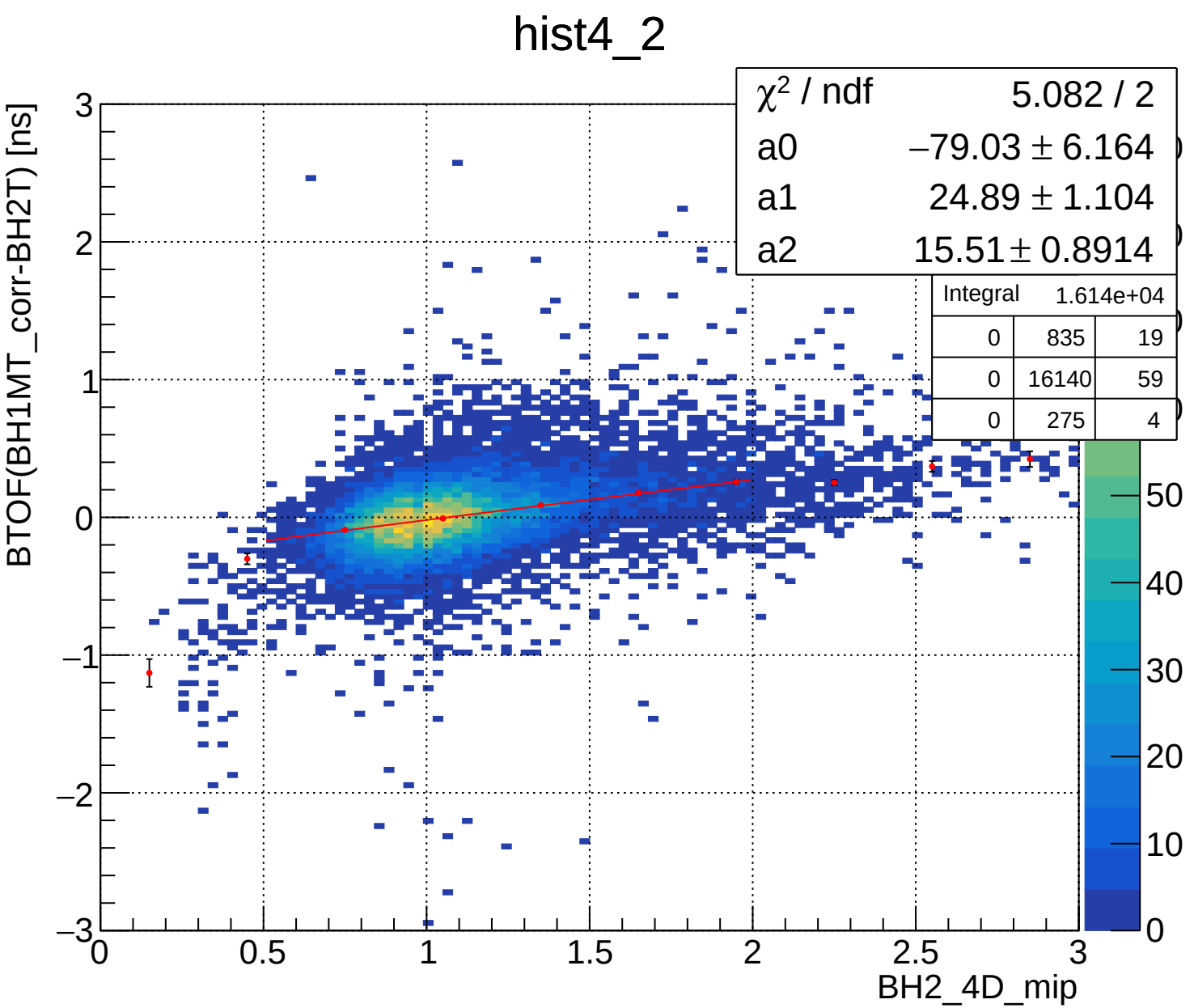

hist4_1
Entries 17332
Mean x 1.126
Mean y 0.01555
Std Dev x 0.3478
Std Dev y 0.2785
Integral 1.614e+04
0 833 21
0 16141 58
0 274 5
BTOF(BH1MT_corr-BH2MT) [ns]
BH2_4_Up_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

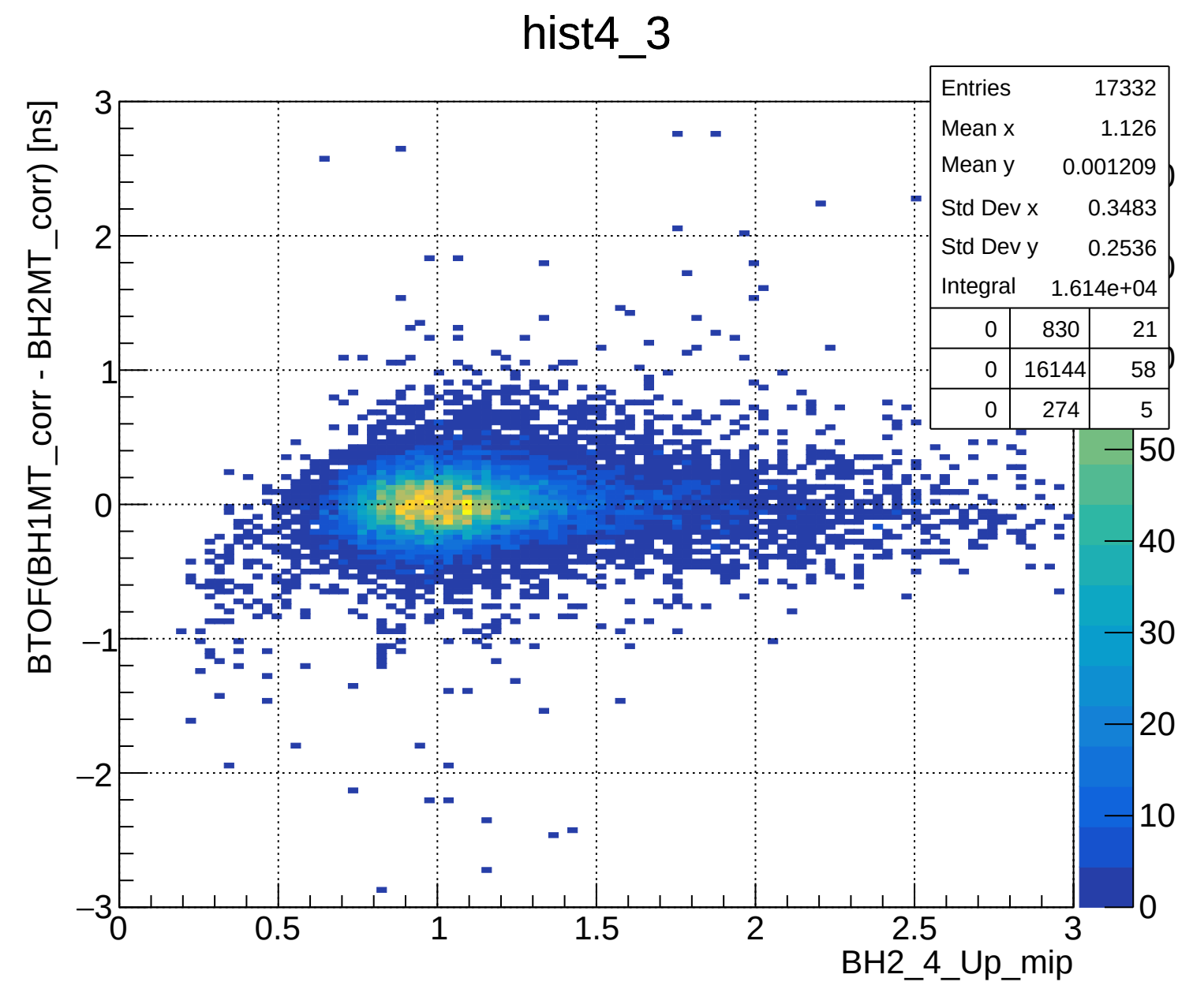

hist4_2
Entries 17332
Mean x 1.122
Mean y 0.01557
Std Dev x 0.3444
Std Dev y 0.2791
Integral 1.614e+04
0 835 19
0 16140 59
0 275 4
BTOF(BH1MT_corr-BH2MT) [ns]
BH2_4_Down_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0

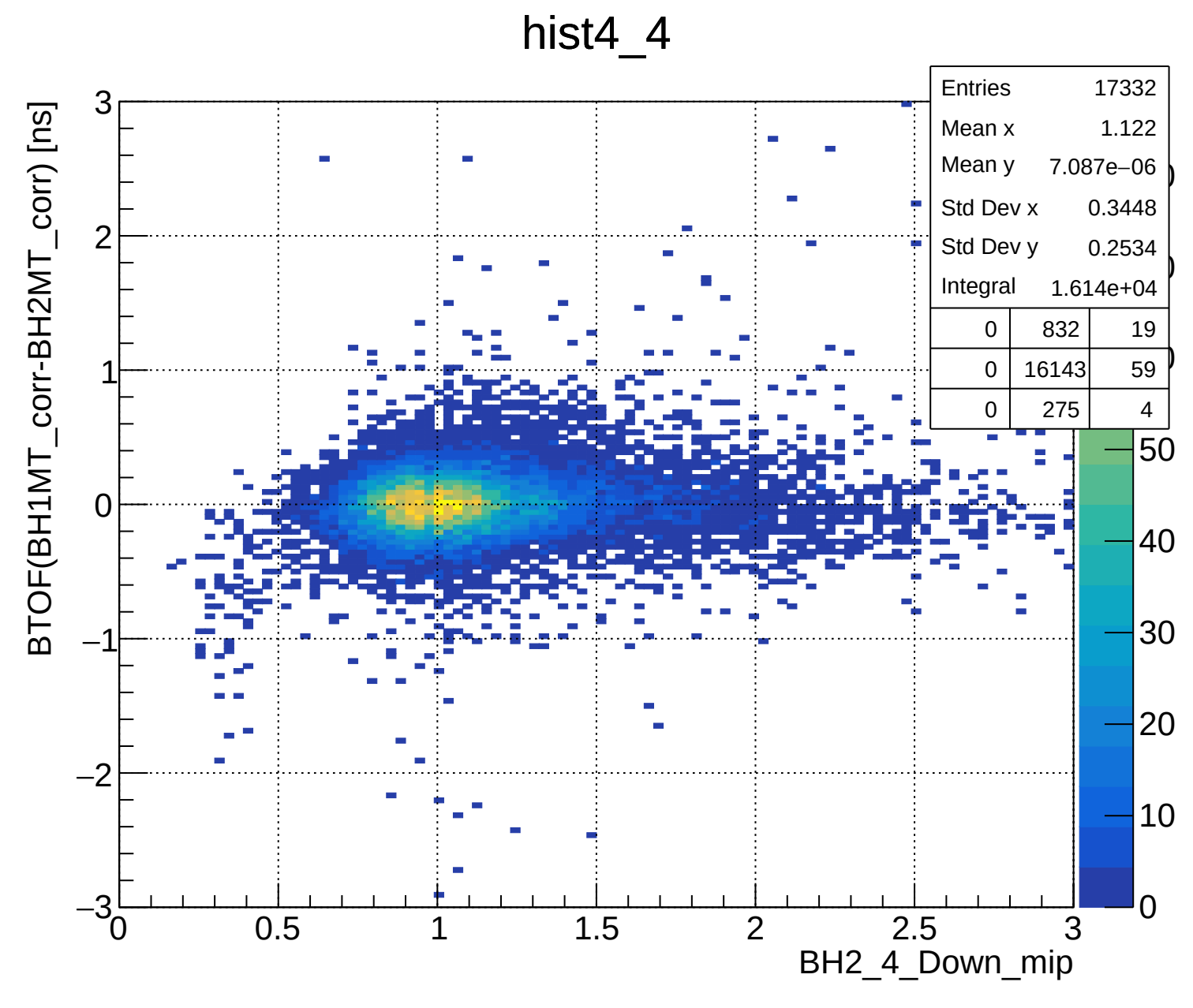

hist1_1
Entries 21
Mean −1.028
Std Dev 0.3459
Underflow 2
Overflow 0
Integral 19
χ² / ndf 1.162 / 6
Constant 1.273 ± 0.690
Mean −1.156 ± 0.245
Sigma 0.4087 ± 0.5595
hist1_1
Entries 204
Mean −0.4705
Std Dev 0.3974
Underflow 3
Overflow 4
Integral 197
χ² / ndf 19.15 / 16
Constant 8.029 ± 0.908
Mean −0.3651 ± 0.0926
Sigma 0.3084 ± 0.0806
hist1_1
Entries 3710
Mean −0.1017
Std Dev 0.2306
Underflow 60
Overflow 112
Integral 3538
χ² / ndf 18.3 / 18
Constant 284.4 ± 6.5
Mean −0.00165 ± 0.00336
Sigma 0.1767 ± 0.0032
hist1_1
Entries 8056
Mean −0.006306
Std Dev 0.2262
Underflow 130
Overflow 247
Integral 7679
χ² / ndf 32.56 / 18
Constant 623.2 ± 9.8
Mean −0.008546 ± 0.002233
Sigma 0.1733 ± 0.0021
hist1_1
Entries 3017
Mean 0.09971
Std Dev 0.2561
Underflow 47
Overflow 130
Integral 2840
χ² / ndf 24.07 / 18
Constant 220.9 ± 5.9
Mean 0.07925 ± 0.00380
Sigma 0.174 ± 0.004
hist1_1
Entries 1125
Mean 0.2155
Std Dev 0.3115
Underflow 15
Overflow 121
Integral 989
χ² / ndf 33.53 / 18
Constant 66.25 ± 3.25
Mean 0.1868 ± 0.0076
Sigma 0.1912 ± 0.0084
hist1_1
Entries 586
Mean 0.2711
Std Dev 0.3359
Underflow 8
Overflow 115
Integral 463
χ² / ndf 11.29 / 18
Constant 28.71 ± 2.00
Mean 0.2327 ± 0.0128
Sigma 0.2113 ± 0.0141
hist1_1
Entries 296
Mean 0.3021
Std Dev 0.3147
Underflow 5
Overflow 50
Integral 241
χ² / ndf 41.37 / 18
Constant 15.56 ± 1.77
Mean 0.2521 ± 0.0133
Sigma 0.1503 ± 0.0132
hist1_1
Entries 163
Mean 0.422
Std Dev 0.3438
Underflow 2
Overflow 37
Integral 124
χ² / ndf 20.51 / 17
Constant 5.902 ± 0.819
Mean 0.3217 ± 0.0358
Sigma 0.2472 ± 0.0367
hist1_1
Entries 70
Mean 0.4847
Std Dev 0.3292
Underflow 2
Overflow 17
Integral 51
χ² / ndf 7.32 / 13
Constant 2.742 ± 0.853
Mean 0.358 ± 0.050
Sigma 0.1998 ± 0.0906

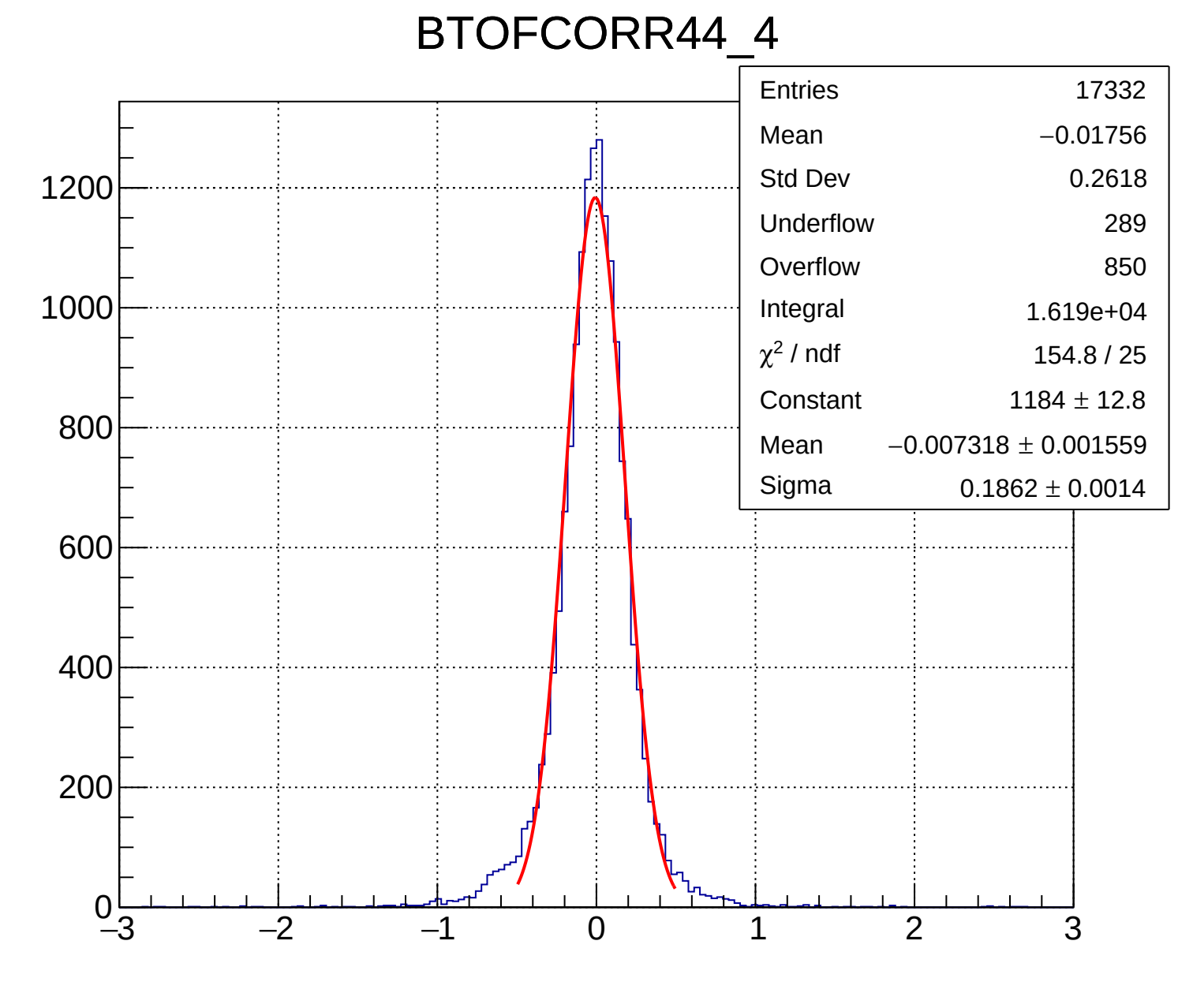

hist4_1
χ² / ndf 11.36 / 2
a0 −66.7 ± 5.048
a1 22.44 ± 1.036
a2 13.75 ± 0.7528
Integral 1.614e+04
0 833 21
0 16141 58
0 274 5
BTOF(BH1MT_corr-BH2T) [ns]
BH2_4U_mip
3
2
1
0
−1
−2
−3
0
0.5
1
1.5
2
2.5
3
50
40
30
20
10
0


hist1_1
Entries 22
Mean −0.9055
Std Dev 0.3298
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 −0.4964
Std Dev 0.4256
Underflow 1
Overflow 2
Integral 175
χ² / ndf 14.46 / 18
Constant 7.146 ± 0.886
Mean −0.3013 ± 0.0395
Sigma 0.2601 ± 0.0399
hist1_1
Entries 3779
Mean −0.1002
Std Dev 0.2203
Underflow 54
Overflow 91
Integral 3634
χ² / ndf 15.02 / 18
Constant 297 ± 6.7
Mean −0.09068 ± 0.00330
Sigma 0.1722 ± 0.0029
hist1_1
Entries 8164
Mean −0.007376
Std Dev 0.2304
Underflow 126
Overflow 260
Integral 7778
χ² / ndf 23.25 / 18
Constant 632.7 ± 9.8
Mean −0.007725 ± 0.002217
Sigma 0.1731 ± 0.0021
hist1_1
Entries 2889
Mean 0.1101
Std Dev 0.2575
Underflow 52
Overflow 125
Integral 2712
χ² / ndf 17.98 / 18
Constant 208.1 ± 5.6
Mean 0.0877 ± 0.0040
Sigma 0.1782 ± 0.0038
hist1_1
Entries 1094
Mean 0.203
Std Dev 0.303
Underflow 18
Overflow 144
Integral 932
χ² / ndf 9.69 / 18
Constant 62.38 ± 2.96
Mean 0.1779 ± 0.0079
Sigma 0.1953 ± 0.0079
hist1_1
Entries 615
Mean 0.2773
Std Dev 0.3148
Underflow 12
Overflow 110
Integral 493
χ² / ndf 12.59 / 18
Constant 29.24 ± 2.02
Mean 0.2577 ± 0.0142
Sigma 0.2257 ± 0.0168
hist1_1
Entries 292
Mean 0.3477
Std Dev 0.401
Underflow 5
Overflow 48
Integral 239
χ² / ndf 17.19 / 18
Constant 13.72 ± 1.34
Mean 0.252 ± 0.020
Sigma 0.2089 ± 0.0186
hist1_1
Entries 145
Mean 0.4183
Std Dev 0.3977
Underflow 3
Overflow 35
Integral 107
χ² / ndf 22.85 / 18
Constant 4.809 ± 0.893
Mean 0.3701 ± 0.0394
Sigma 0.2475 ± 0.0606
hist1_1
Entries 72
Mean 0.484
Std Dev 0.3528
Underflow 2
Overflow 19
Integral 51
χ² / ndf 4.872 / 12
Constant 3.139 ± 0.813
Mean 0.4231 ± 0.0565
Sigma 0.1939 ± 0.0721


hist4_2
χ² / ndf 5.082 / 2
a0 −79.03 ± 6.164
a1 24.89 ± 1.104
a2 15.51 ± 0.8914
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 1.126
Mean y 0.001209
Std Dev x 0.3483
Std Dev y 0.2536
Integral 1.614e+04
0 830 21
0 16144 58
0 274 5
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 7.087e−06
Std Dev x 0.3448
Std Dev y 0.2534
Integral 1.614e+04
0 832 19
0 16143 59
0 275 4
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 −0.01756
Std Dev 0.2618
Underflow 289
Overflow 850
Integral 1.619e+04
χ² / ndf 154.8 / 25
Constant 1184 ± 12.8
Mean −0.007318 ± 0.001559
Sigma 0.1862 ± 0.0014
1200
1000
800
600
400
200
0
−3
−2
−1
0
1
2
3