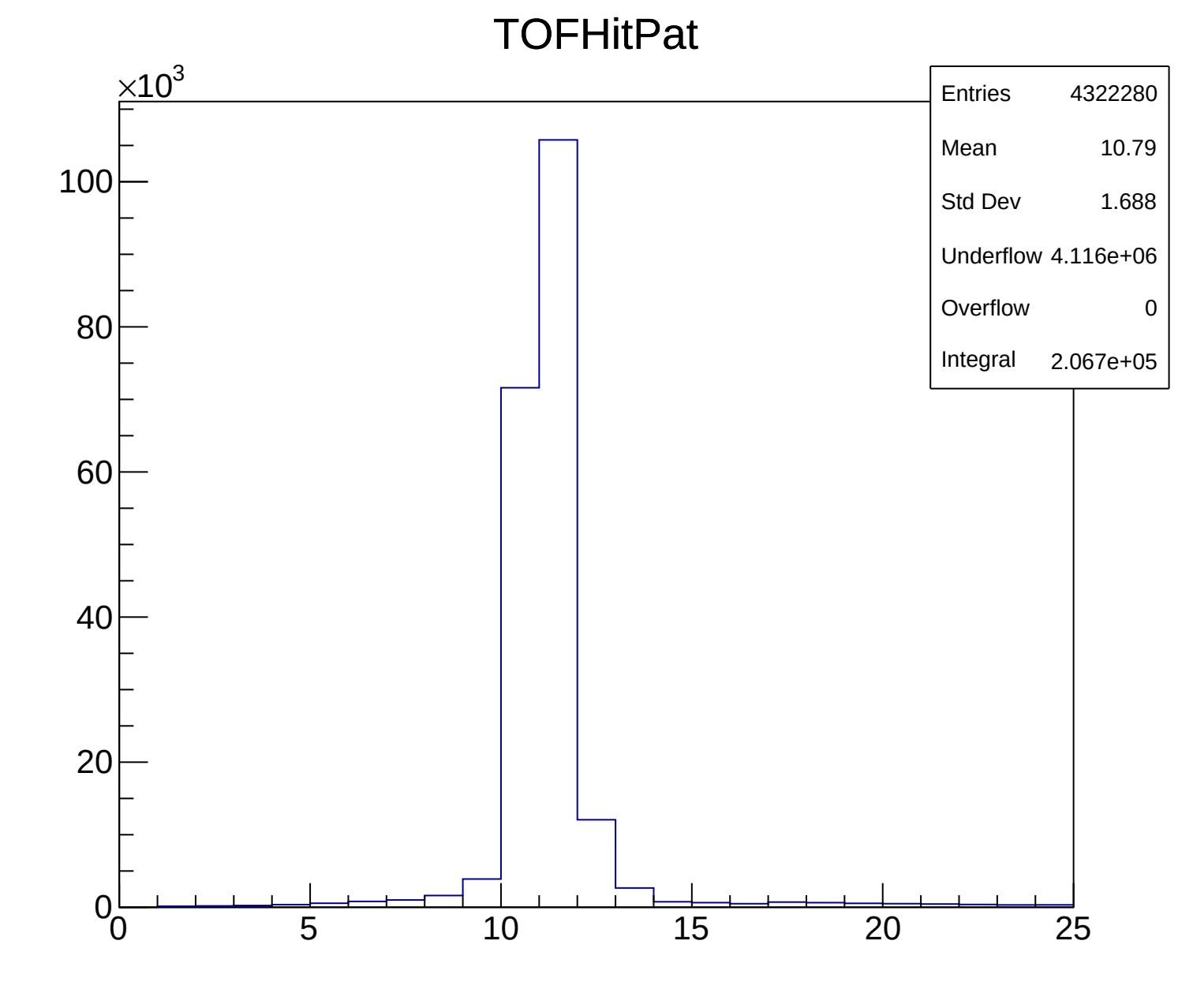
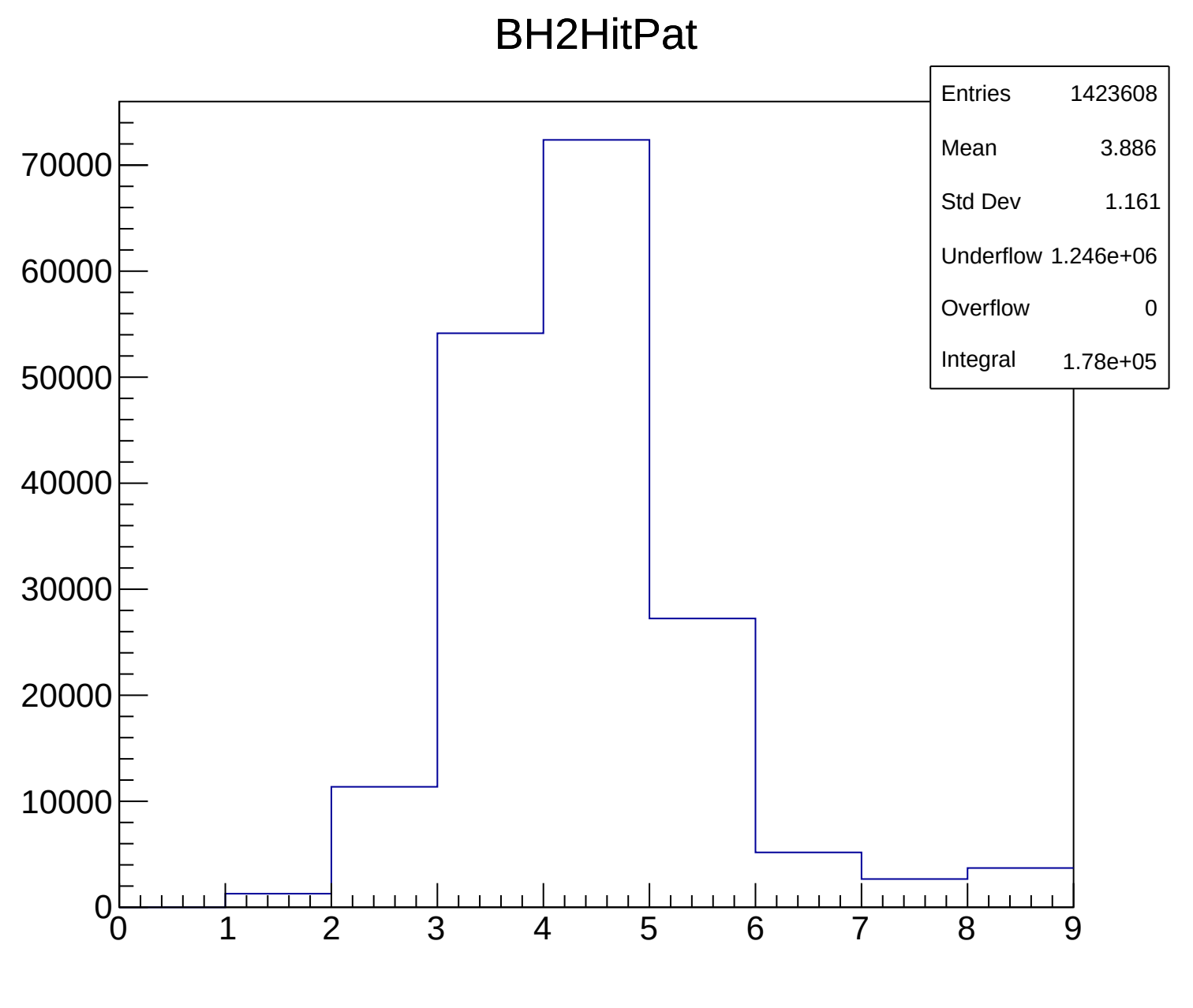
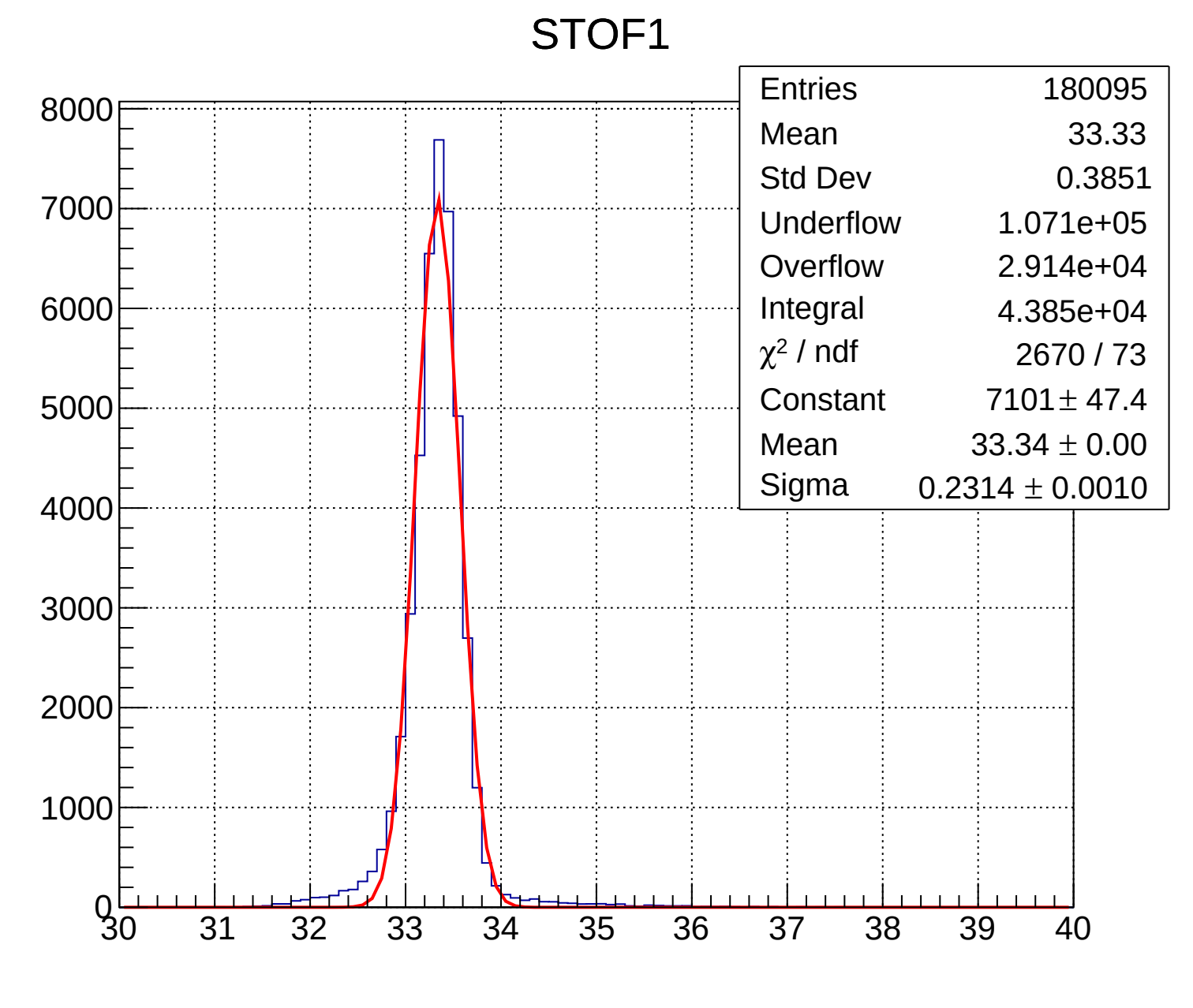
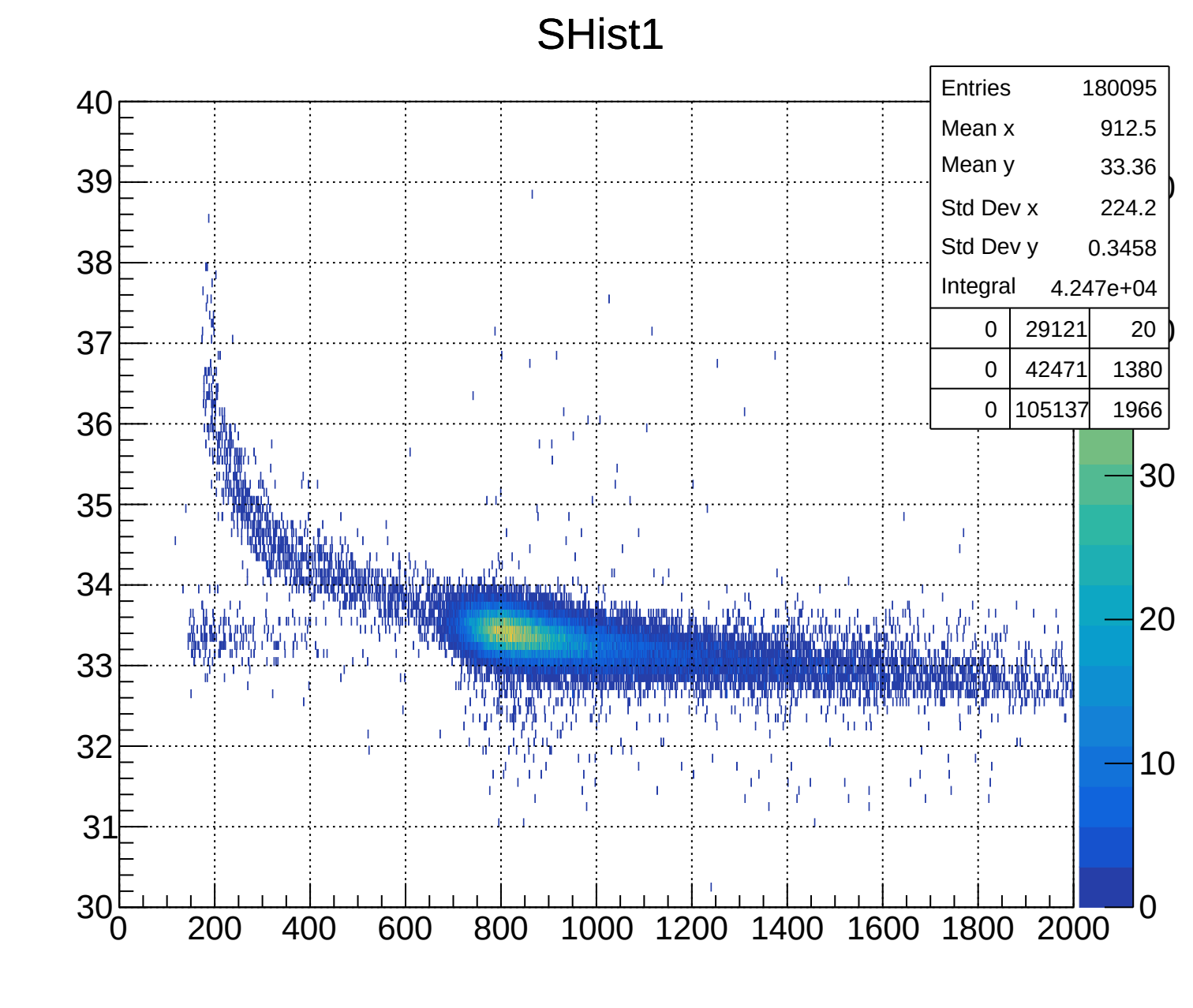
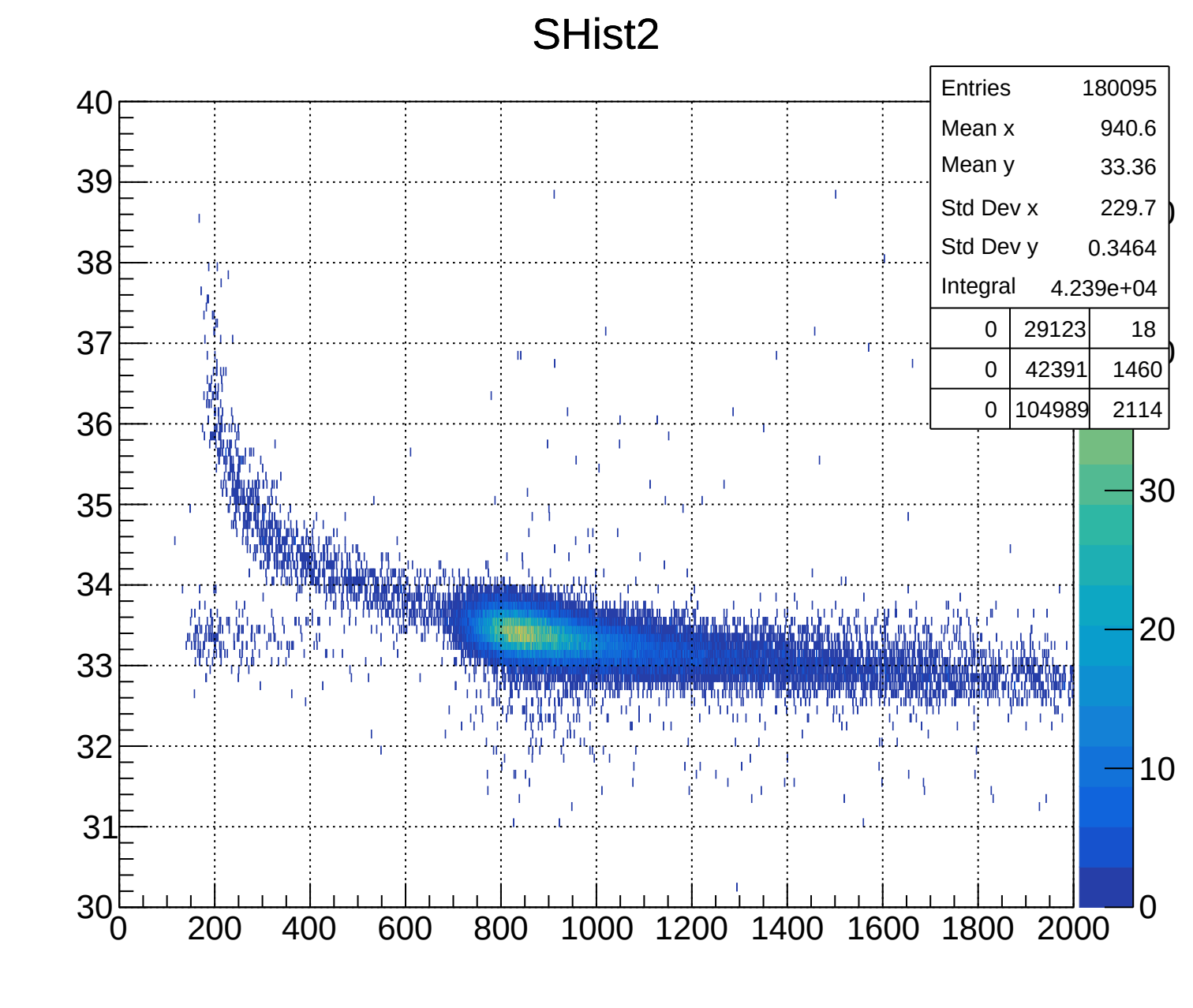
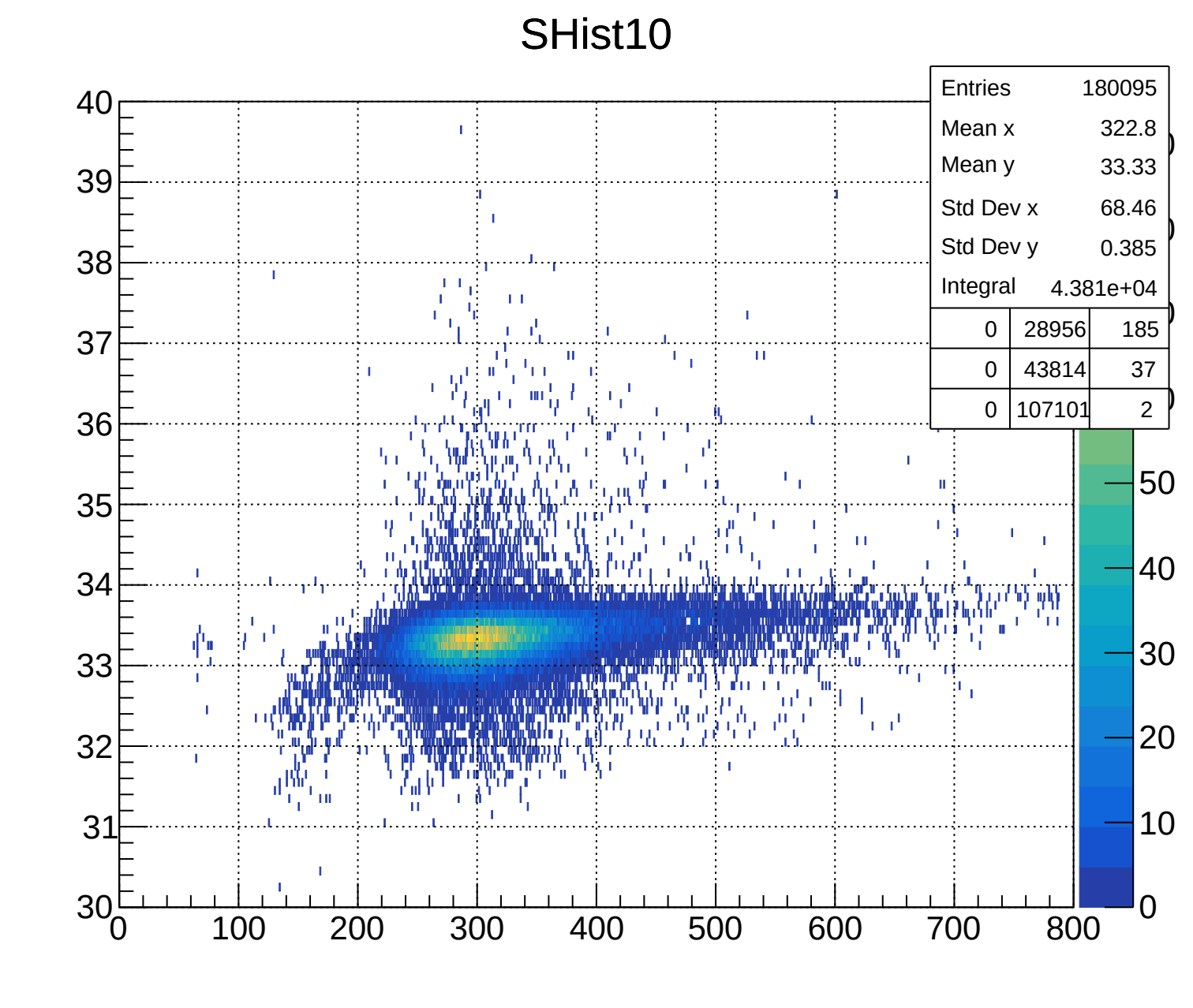

TOFHitPat
×10^3
100
80
60
40
20
0
0
5
10
15
20
25
Entries 4322280
Mean 10.79
Std Dev 1.688
Underflow 4.116e+06
Overflow 0
Integral 2.067e+05

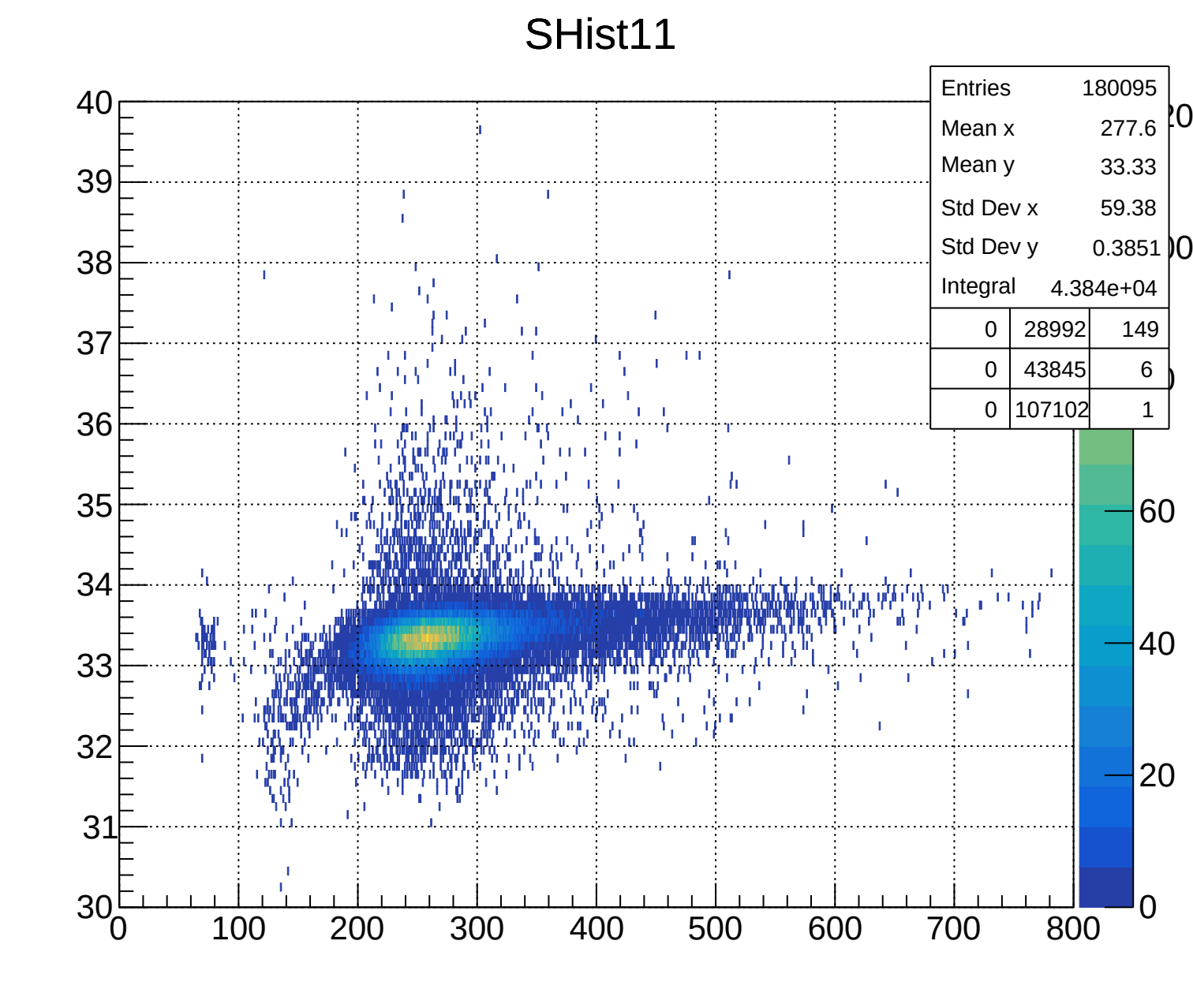

BH2HitPat
Entries 1423608
Mean 3.886
Std Dev 1.161
Underflow 1.246e+06
Overflow 0
Integral 1.78e+05
70000
60000
50000
40000
30000
20000
10000
0
0
1
2
3
4
5
6
7
8
9

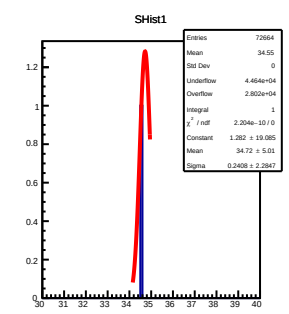

STOF1
Entries 180095
Mean 33.33
Std Dev 0.3851
Underflow 1.071e+05
Overflow 2.914e+04
Integral 4.385e+04
χ² / ndf 2670 / 73
Constant 7101 ± 47.4
Mean 33.34 ± 0.00
Sigma 0.2314 ± 0.0010
8000
7000
6000
5000
4000
3000
2000
1000
0
30
31
32
33
34
35
36
37
38
39
40

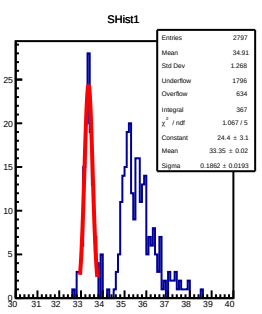

SHist1
Entries 180095
Mean x 912.5
Mean y 33.36
Std Dev x 224.2
Std Dev y 0.3458
Integral 4.247e+04
0 29121 20
0 42471 1380
0 105137 1966
40
39
38
37
36
35
34
33
32
31
30
0
200
400
600
800
1000
1200
1400
1600
1800
2000
30
20
10
0

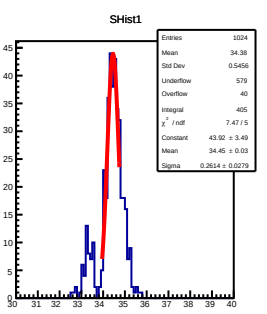

SHist2
Entries 180095
Mean x 940.6
Mean y 33.36
Std Dev x 229.7
Std Dev y 0.3464
Integral 4.239e+04
0 29123 18
0 42391 1460
0 104989 2114
40
39
38
37
36
35
34
33
32
31
30
0
200
400
600
800
1000
1200
1400
1600
1800
2000
30
20
10
0

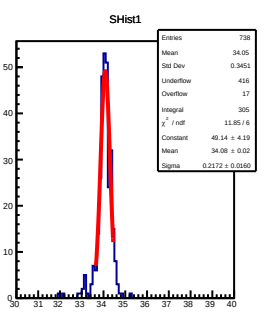

SHist10
Entries 180095
Mean x 322.8
Mean y 33.33
Std Dev x 68.46
Std Dev y 0.385
Integral 4.381e+04
0 28956 185
0 43814 37
0 107101 2
40
39
38
37
36
35
34
33
32
31
30
0
100
200
300
400
500
600
700
800
50
40
30
20
10
0

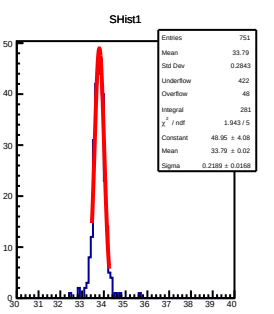

SHist11
Entries 180095
Mean x 277.6
Mean y 33.33
Std Dev x 59.38
Std Dev y 0.3851
Integral 4.384e+04
0 28992 149
0 43845 6
0 107102 1
40
39
38
37
36
35
34
33
32
31
30
0
100
200
300
400
500
600
700
800
60
40
20
0

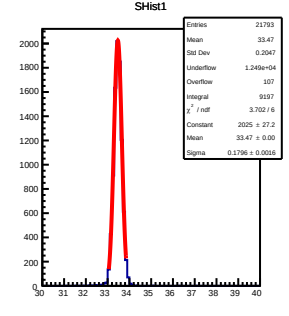

SHist1
Entries 72664
Mean 34.55
Std Dev 0
Underflow 4.464e+04
Overflow 2.802e+04
Integral 1
χ² / ndf 2.204e-10 / 0
Constant 1.282 ± 19.085
Mean 34.72 ± 5.01
Sigma 0.2408 ± 2.2847

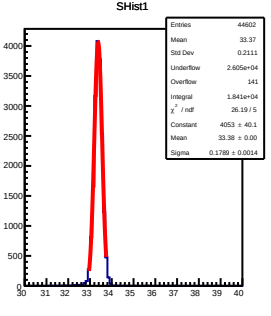

SHist1
Entries 2797
Mean 34.91
Std Dev 1.268
Underflow 1796
Overflow 634
Integral 367
χ² / ndf 1.067 / 5
Constant 24.4 ± 3.1
Mean 33.35 ± 0.02
Sigma 0.1862 ± 0.0193

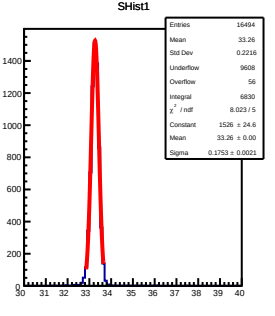

SHist1
Entries 1024
Mean 34.38
Std Dev 0.5456
Underflow 579
Overflow 40
Integral 405
χ² / ndf 7.47 / 5
Constant 43.92 ± 3.49
Mean 34.45 ± 0.03
Sigma 0.2614 ± 0.0279

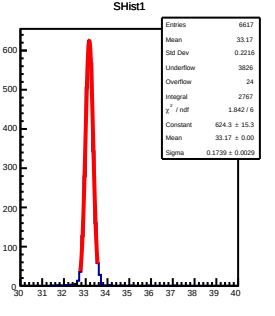

SHist1
Entries 738
Mean 34.05
Std Dev 0.3451
Underflow 416
Overflow 17
Integral 305
χ² / ndf 11.85 / 6
Constant 49.14 ± 4.19
Mean 34.08 ± 0.02
Sigma 0.2172 ± 0.0160

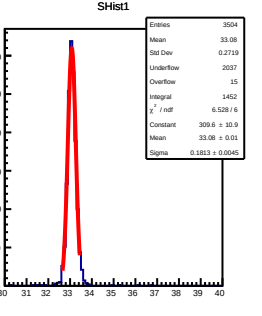

SHist1
Entries 751
Mean 33.79
Std Dev 0.2843
Underflow 422
Overflow 48
Integral 281
χ² / ndf 1.943 / 5
Constant 48.95 ± 4.08
Mean 33.79 ± 0.02
Sigma 0.2189 ± 0.0168

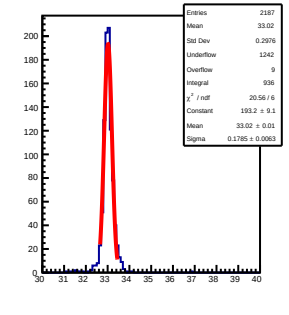

SHist1
Entries 21793
Mean 33.47
Std Dev 0.2047
Underflow 1.249e+04
Overflow 107
Integral 9197
χ² / ndf 3.702 / 6
Constant 2025 ± 27.2
Mean 33.47 ± 0.00
Sigma 0.1796 ± 0.0016

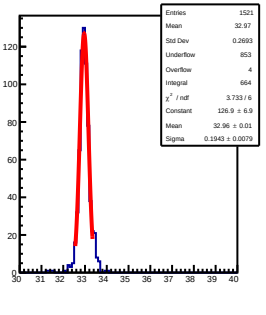

SHist1
Entries 44602
Mean 33.37
Std Dev 0.2111
Underflow 2.605e+04
Overflow 141
Integral 1.841e+04
χ² / ndf 26.19 / 5
Constant 4053 ± 40.1
Mean 33.38 ± 0.00
Sigma 0.1780 ± 0.0014

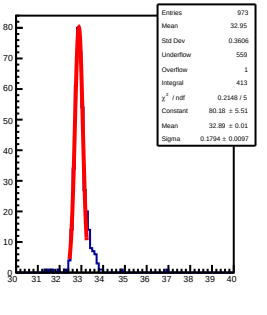

SHist1
Entries 16494
Mean 33.26
Std Dev 0.2216
Underflow 9608
Overflow 56
Integral 6830
χ² / ndf 8.023 / 5
Constant 1526 ± 24.6
Mean 33.26 ± 0.00
Sigma 0.1753 ± 0.0021

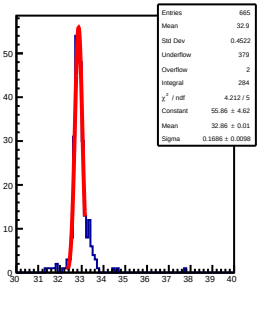

SHist1
Entries 6617
Mean 33.17
Std Dev 0.2216
Underflow 3826
Overflow 24
Integral 2767
χ² / ndf 1.842 / 6
Constant 624.3 ± 15.3
Mean 33.17 ± 0.00
Sigma 0.1739 ± 0.0029

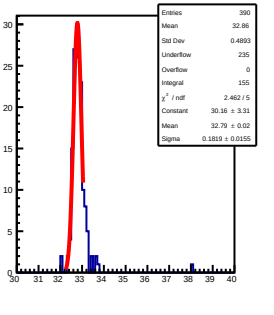

SHist1
Entries 3504
Mean 33.08
Std Dev 0.2719
Underflow 2037
Overflow 15
Integral 1452
χ² / ndf 6.528 / 6
Constant 309.6 ± 10.9
Mean 33.08 ± 0.01
Sigma 0.1813 ± 0.0045

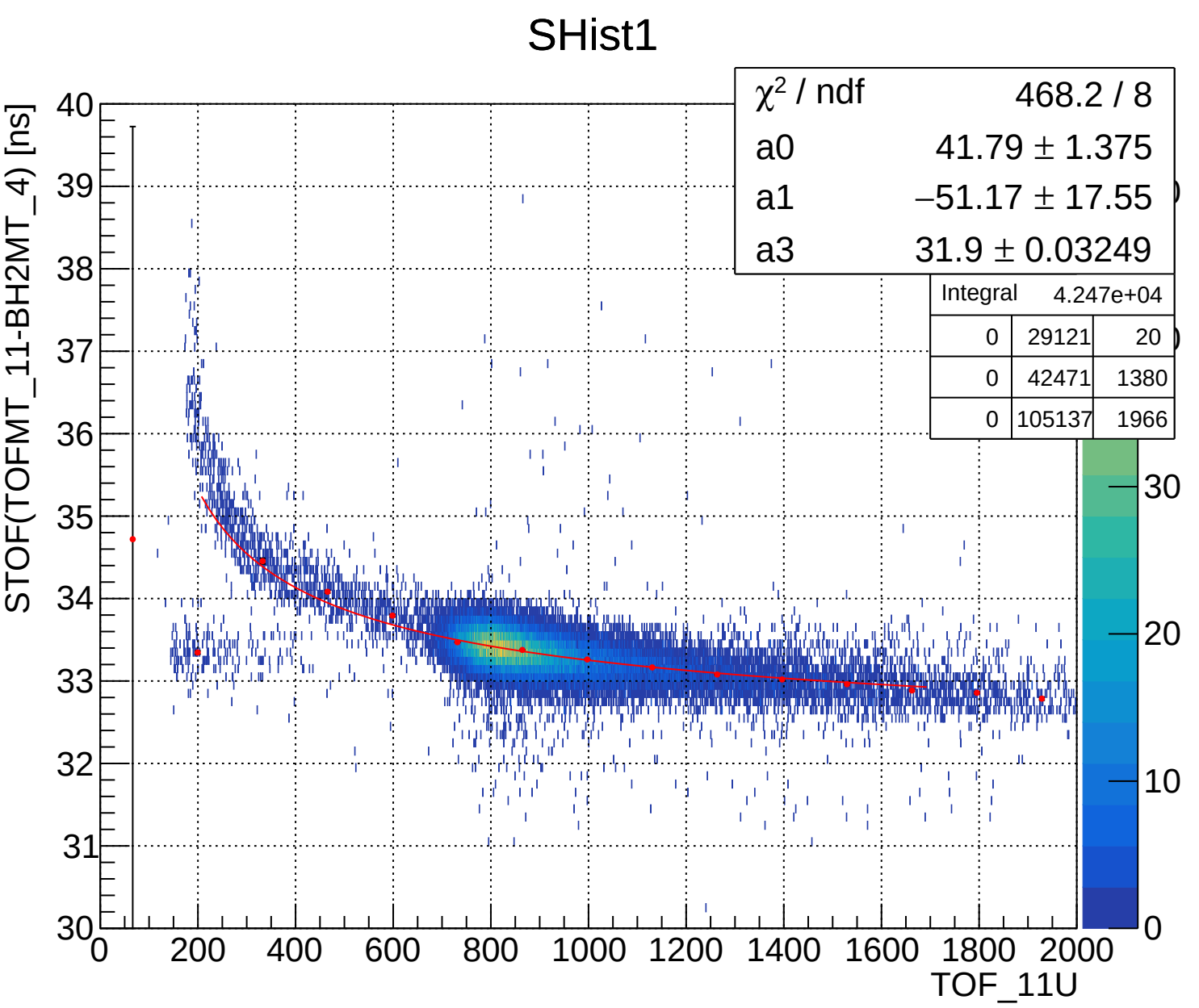

SHist1
Entries 2187
Mean 33.02
Std Dev 0.2976
Underflow 1242
Overflow 9
Integral 936
χ² / ndf 20.56 / 6
Constant 193.2 ± 9.1
Mean 33.02 ± 0.01
Sigma 0.1785 ± 0.0063

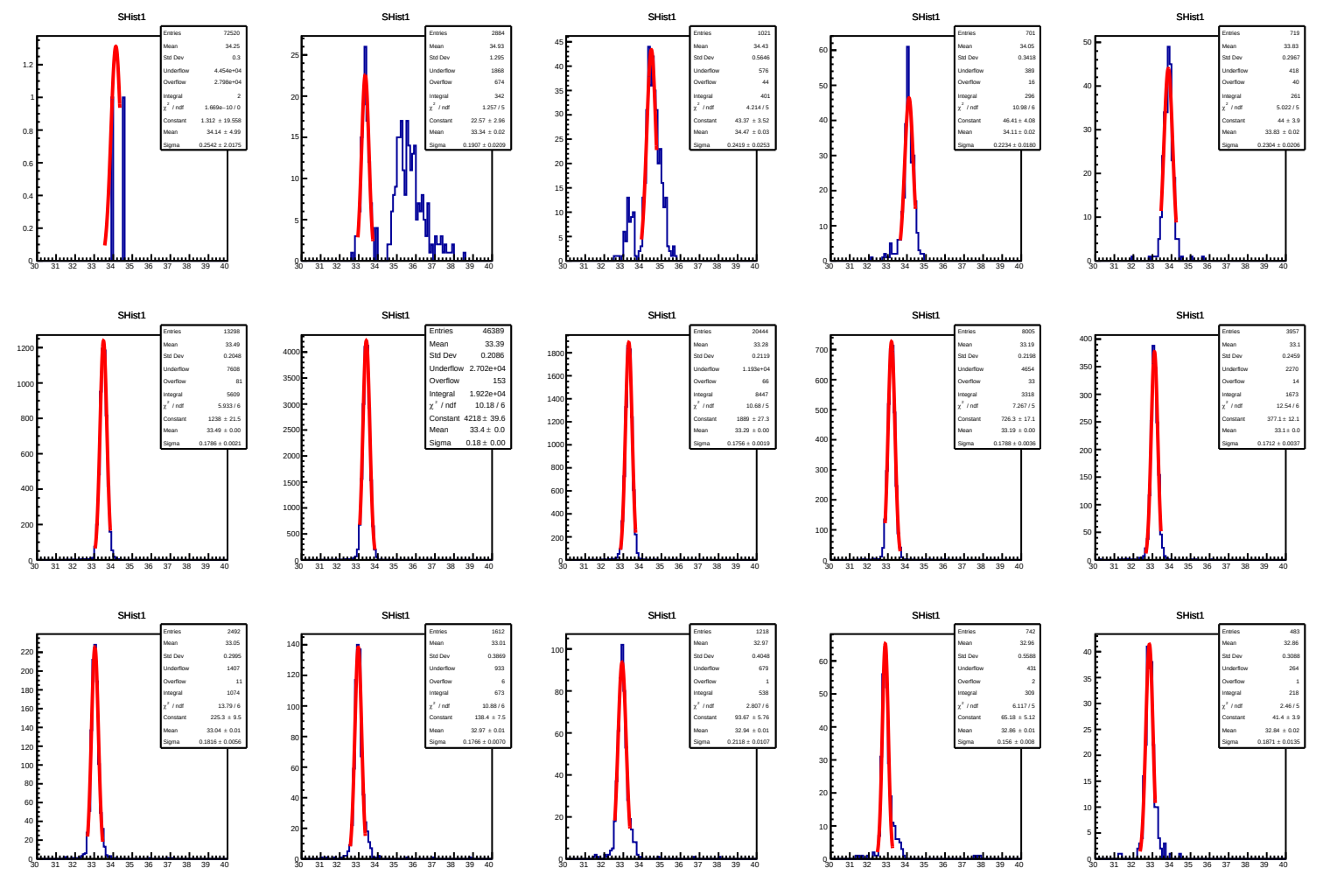

SHist1
Entries 1521
Mean 32.97
Std Dev 0.2693
Underflow 853
Overflow 4
Integral 664
χ² / ndf 3.733 / 6
Constant 126.9 ± 6.9
Mean 32.96 ± 0.01
Sigma 0.1943 ± 0.0079

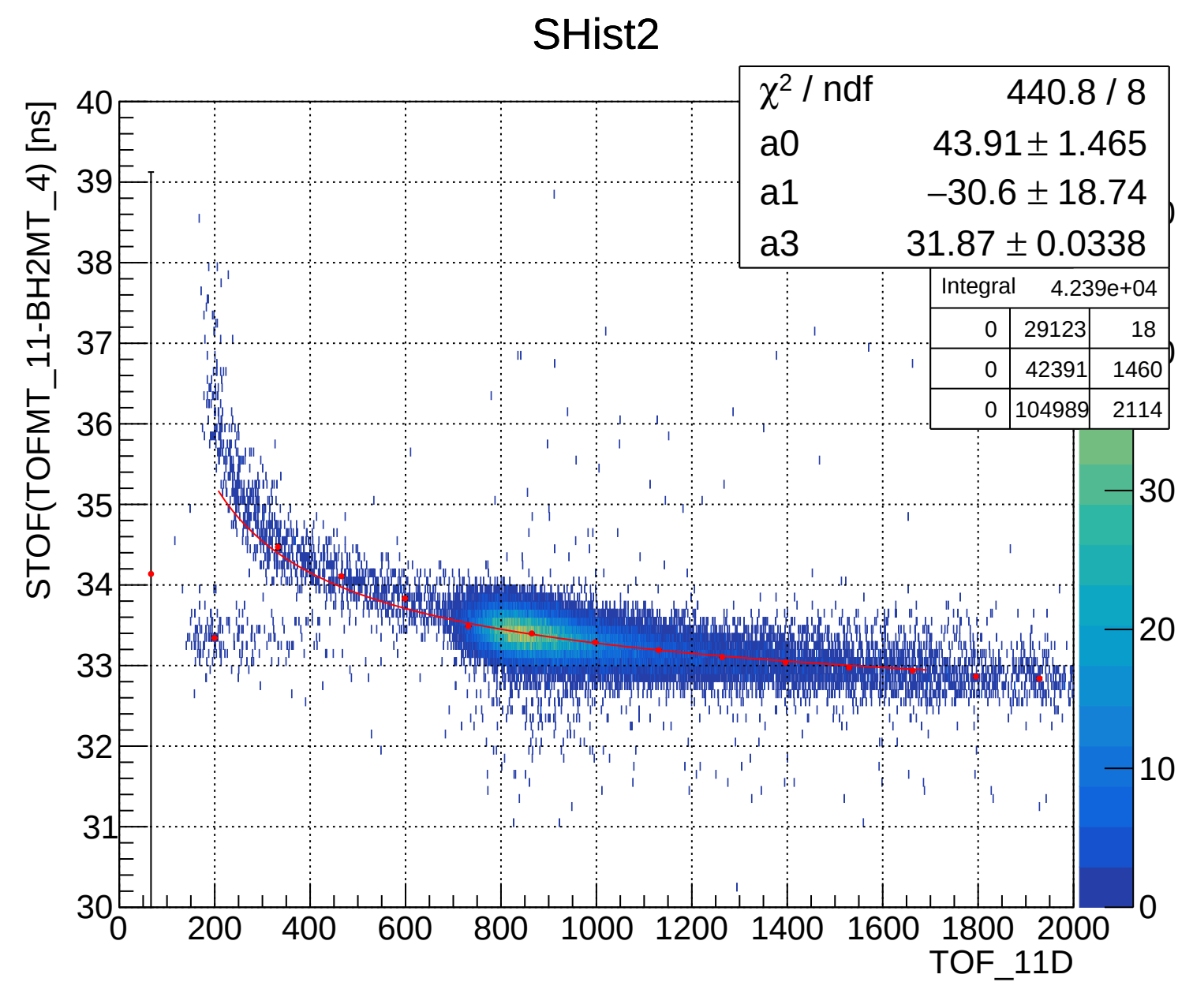

SHist1
Entries 973
Mean 32.95
Std Dev 0.3606
Underflow 559
Overflow 1
Integral 413
χ² / ndf 0.2148 / 5
Constant 80.18 ± 5.51
Mean 32.89 ± 0.01
Sigma 0.1794 ± 0.0097

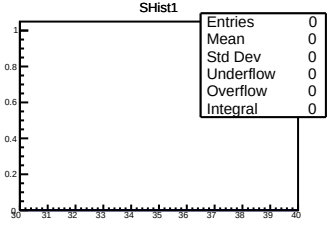

SHist1
Entries 665
Mean 32.9
Std Dev 0.4522
Underflow 379
Overflow 2
Integral 284
χ² / ndf 4.212 / 5
Constant 55.86 ± 4.62
Mean 32.86 ± 0.01
Sigma 0.1686 ± 0.0098

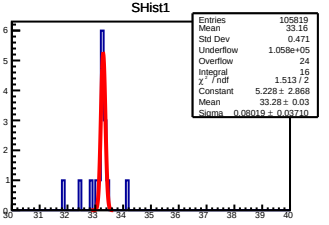

SHist1
Entries 390
Mean 32.86
Std Dev 0.4893
Underflow 235
Overflow 0
Integral 155
χ² / ndf 2.462 / 5
Constant 30.16 ± 3.31
Mean 32.79 ± 0.02
Sigma 0.1819 ± 0.0155

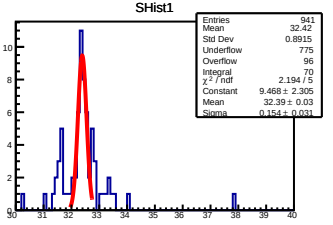

SHist1
χ² / ndf 468.2 / 8
a0 41.79 ± 1.375
a1 −51.17 ± 17.55
a3 31.9 ± 0.03249
Integral 4.247e+04
0 29121 20
0 42471 1380
0 105137 1966
STOF(TOFMT_11-BH2MT_4) [ns]
TOF_11U
40
39
38
37
36
35
34
33
32
31
30
0
200
400
600
800
1000
1200
1400
1600
1800
2000
30
20
10
0

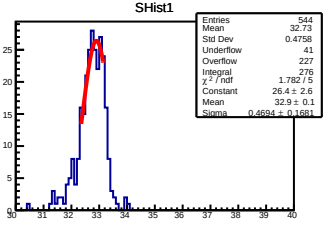

SHist1
Entries 72520
Mean 34.25
Std Dev 0.3
Underflow 4.454e+04
Overflow 2.798e+04
Integral 2
χ² / ndf 1.669e-10 / 0
Constant 1.312 ± 19.558
Mean 34.14 ± 4.99
Sigma 0.2542 ± 2.0175
SHist1
Entries 2884
Mean 34.93
Std Dev 1.295
Underflow 1868
Overflow 674
Integral 342
χ² / ndf 1.257 / 5
Constant 22.57 ± 2.96
Mean 33.34 ± 0.02
Sigma 0.1907 ± 0.0209
SHist1
Entries 1021
Mean 34.43
Std Dev 0.5646
Underflow 576
Overflow 44
Integral 401
χ² / ndf 4.214 / 5
Constant 43.37 ± 3.52
Mean 34.47 ± 0.03
Sigma 0.2419 ± 0.0253
SHist1
Entries 701
Mean 34.05
Std Dev 0.3418
Underflow 389
Overflow 16
Integral 296
χ² / ndf 10.98 / 6
Constant 46.41 ± 4.08
Mean 34.11 ± 0.02
Sigma 0.2234 ± 0.0180
SHist1
Entries 719
Mean 33.83
Std Dev 0.2967
Underflow 418
Overflow 40
Integral 261
χ² / ndf 5.022 / 5
Constant 44 ± 3.9
Mean 33.83 ± 0.02
Sigma 0.2304 ± 0.0206
SHist1
Entries 13298
Mean 33.49
Std Dev 0.2048
Underflow 7608
Overflow 81
Integral 5609
χ² / ndf 5.933 / 6
Constant 1238 ± 21.5
Mean 33.49 ± 0.00
Sigma 0.1786 ± 0.0021
SHist1
Entries 46389
Mean 33.39
Std Dev 0.2086
Underflow 2.702e+04
Overflow 153
Integral 1.922e+04
χ² / ndf 10.18 / 6
Constant 4218 ± 39.6
Mean 33.4 ± 0.0
Sigma 0.18 ± 0.00
SHist1
Entries 20444
Mean 33.28
Std Dev 0.2119
Underflow 1.193e+04
Overflow 66
Integral 8447
χ² / ndf 10.68 / 5
Constant 1889 ± 27.3
Mean 33.29 ± 0.00
Sigma 0.1756 ± 0.0019
SHist1
Entries 8005
Mean 33.19
Std Dev 0.2198
Underflow 4654
Overflow 33
Integral 3318
χ² / ndf 7.267 / 5
Constant 726.3 ± 17.1
Mean 33.19 ± 0.00
Sigma 0.1788 ± 0.0036
SHist1
Entries 3957
Mean 33.1
Std Dev 0.2459
Underflow 2270
Overflow 14
Integral 1673
χ² / ndf 12.54 / 6
Constant 377.1 ± 12.1
Mean 33.1 ± 0.0
Sigma 0.1712 ± 0.0037
SHist1
Entries 2492
Mean 33.05
Std Dev 0.2995
Underflow 1407
Overflow 11
Integral 1074
χ² / ndf 13.79 / 6
Constant 225.3 ± 9.5
Mean 33.04 ± 0.01
Sigma 0.1816 ± 0.0056
SHist1
Entries 1612
Mean 33.01
Std Dev 0.3869
Underflow 933
Overflow 6
Integral 673
χ² / ndf 10.88 / 6
Constant 138.4 ± 7.5
Mean 32.97 ± 0.01
Sigma 0.1766 ± 0.0070
SHist1
Entries 1218
Mean 32.97
Std Dev 0.4048
Underflow 679
Overflow 1
Integral 538
χ² / ndf 2.807 / 6
Constant 93.67 ± 5.76
Mean 32.94 ± 0.01
Sigma 0.2118 ± 0.0107
SHist1
Entries 742
Mean 32.96
Std Dev 0.5588
Underflow 431
Overflow 2
Integral 309
χ² / ndf 6.117 / 5
Constant 65.18 ± 5.12
Mean 32.86 ± 0.01
Sigma 0.156 ± 0.008
SHist1
Entries 483
Mean 32.86
Std Dev 0.3088
Underflow 264
Overflow 1
Integral 218
χ² / ndf 2.46 / 5
Constant 41.4 ± 3.9
Mean 32.84 ± 0.02
Sigma 0.1871 ± 0.0135

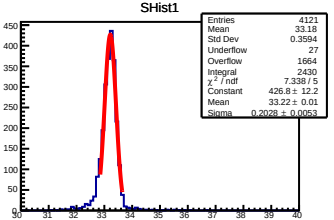

SHist2
χ² / ndf 440.8 / 8
a0 43.91 ± 1.465
a1 −30.6 ± 18.74
a3 31.87 ± 0.0338
Integral 4.239e+04
0 29123 18
0 42391 1460
0 104989 2114
STOF(TOFMT_11-BH2MT_4) [ns]
TOF_11D
40
39
38
37
36
35
34
33
32
31
30
0
200
400
600
800
1000
1200
1400
1600
1800
2000
30
20
10
0

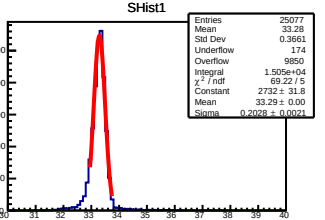

SHist1
Entries 0
Mean 0
Std Dev 0
Underflow 0
Overflow 0
Integral 0

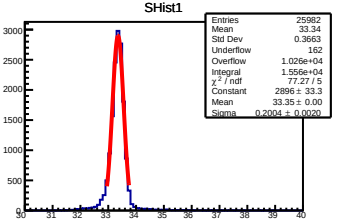

SHist1
Entries 105819
Mean 33.16
Std Dev 0.471
Underflow 1.058e+05
Overflow 24
Integral 16
χ² / ndf 1.513 / 2
Constant 5.228 ± 2.868
Mean 33.28 ± 0.03
Sigma 0.08019 ± 0.02710

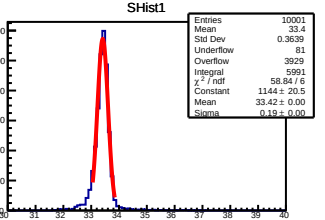

SHist1
Entries 941
Mean 32.42
Std Dev 0.8915
Underflow 775
Overflow 96
Integral 70
χ² / ndf 2.194 / 5
Constant 9.468 ± 2.305
Mean 32.39 ± 0.03
Sigma 0.154 ± 0.031

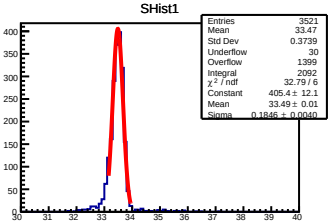

SHist1
Entries 544
Mean 32.73
Std Dev 0.4758
Underflow 41
Overflow 227
Integral 276
χ² / ndf 1.782 / 5
Constant 26.4 ± 2.6
Mean 32.9 ± 0.1
Sigma 0.4694 ± 0.1681

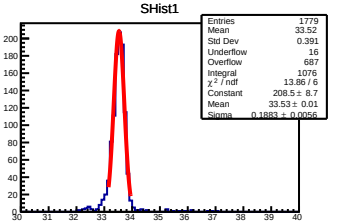

SHist1
Entries 4121
Mean 33.18
Std Dev 0.3594
Underflow 27
Overflow 1664
Integral 2430
χ² / ndf 7.338 / 5
Constant 426.8 ± 12.2
Mean 33.22 ± 0.01
Sigma 0.2028 ± 0.0053

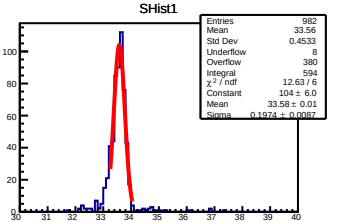

SHist1
Entries 25077
Mean 33.28
Std Dev 0.3661
Underflow 174
Overflow 9850
Integral 1.505e+04
χ² / ndf 69.22 / 5
Constant 2732 ± 31.8
Mean 33.29 ± 0.00
Sigma 0.2028 ± 0.0021

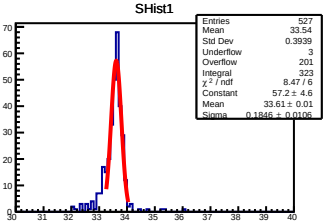

SHist1
Entries 25982
Mean 33.34
Std Dev 0.3663
Underflow 162
Overflow 1.026e+04
Integral 1.556e+04
χ² / ndf 77.27 / 5
Constant 2896 ± 33.3
Mean 33.35 ± 0.00
Sigma 0.2004 ± 0.0020

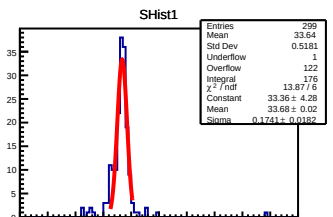

SHist1
Entries 10001
Mean 33.4
Std Dev 0.3639
Underflow 81
Overflow 3929
Integral 5991
χ² / ndf 58.84 / 6
Constant 1144 ± 20.5
Mean 33.42 ± 0.00
Sigma 0.19 ± 0.00

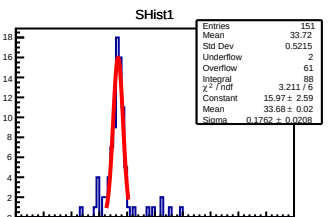

SHist1
Entries 3521
Mean 33.47
Std Dev 0.3739
Underflow 30
Overflow 1399
Integral 2092
χ² / ndf 32.79 / 6
Constant 405.4 ± 12.1
Mean 33.49 ± 0.01
Sigma 0.1846 ± 0.0040

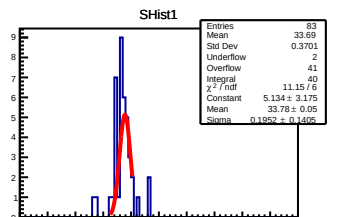

SHist1
Entries 1779
Mean 33.52
Std Dev 0.391
Underflow 16
Overflow 687
Integral 1076
χ² / ndf 13.86 / 6
Constant 208.5 ± 8.7
Mean 33.53 ± 0.01
Sigma 0.1883 ± 0.0056

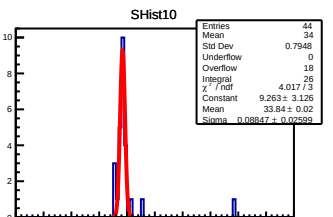

SHist1
Entries 982
Mean 33.56
Std Dev 0.4533
Underflow 8
Overflow 380
Integral 594
χ² / ndf 12.63 / 6
Constant 104 ± 6.0
Mean 33.58 ± 0.01
Sigma 0.1974 ± 0.0087

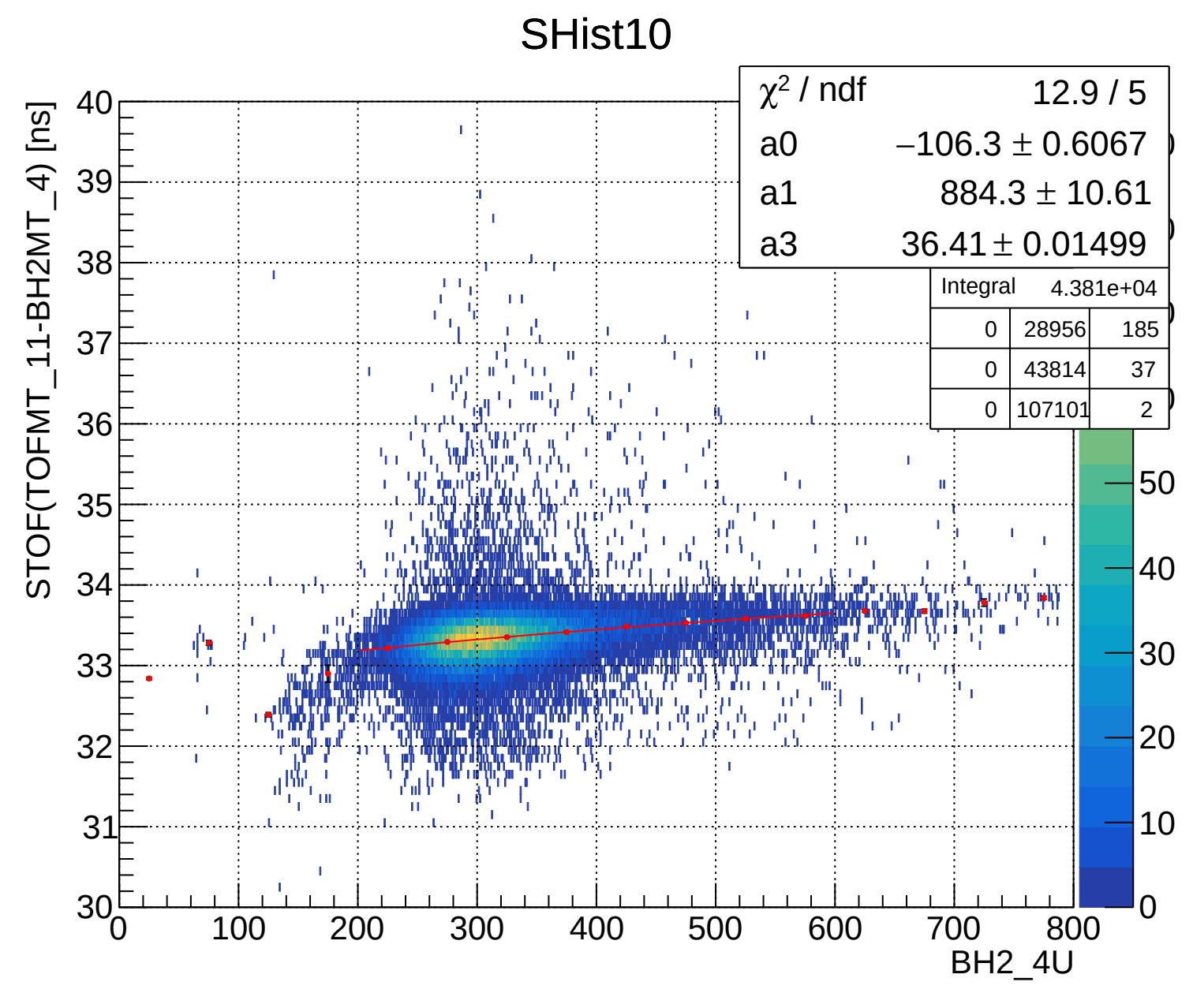

SHist1
Entries 527
Mean 33.54
Std Dev 0.3939
Underflow 3
Overflow 201
Integral 323
χ² / ndf 8.47 / 6
Constant 57.2 ± 4.6
Mean 33.61 ± 0.01
Sigma 0.1846 ± 0.0106


SHist1
Entries 299
Mean 33.64
Std Dev 0.5181
Underflow 1
Overflow 122
Integral 176
χ² / ndf 13.87 / 6
Constant 33.36 ± 4.28
Mean 33.68 ± 0.02
Sigma 0.1741 ± 0.0182


SHist1
Entries 151
Mean 33.72
Std Dev 0.5215
Underflow 2
Overflow 61
Integral 88
χ² / ndf 3.211 / 6
Constant 15.97 ± 2.59
Mean 33.68 ± 0.02
Sigma 0.1762 ± 0.0208


SHist1
Entries 83
Mean 33.69
Std Dev 0.3701
Underflow 2
Overflow 41
Integral 40
χ² / ndf 11.15 / 6
Constant 5.134 ± 3.175
Mean 33.78 ± 0.05
Sigma 0.1952 ± 0.1405


SHist10
Entries 44
Mean 34
Std Dev 0.7948
Underflow 0
Overflow 18
Integral 26
χ² / ndf 4.017 / 3
Constant 9.263 ± 3.126
Mean 33.84 ± 0.02
Sigma 0.08847 ± 0.02599


SHist10
χ² / ndf 12.9 / 5
a0 −106.3 ± 0.6067
a1 884.3 ± 10.61
a3 36.41 ± 0.01499
Integral 4.381e+04
0 28956 185
0 43814 37
0 107101 2
STOF(TOFMT_11-BH2MT_4) [ns]
BH2_4U
40
39
38
37
36
35
34
33
32
31
30
0
100
200
300
400
500
600
700
800
50
40
30
20
10
0

SHist1

Entries	0
Mean	0
Std Dev	0
Underflow	0
Overflow	0
Integral	0

SHist1

Entries	106426
Mean	33.22
Std Dev	0.3071
Underflow	1.063e+05
Overflow	69
Integral	78
χ^2 / ndf	3.142 / 5
Constant	15.25 ± 2.45
Mean	33.28 ± 0.02
Sigma	0.167 ± 0.019

SHist1

Entries	657
Mean	32.45
Std Dev	0.7557
Underflow	311
Overflow	174
Integral	172
χ^2 / ndf	8.62 / 5
Constant	14.96 ± 2.50
Mean	32.6 ± 0.3
Sigma	0.3895 ± 0.2133

SHist1

Entries	1398
Mean	33.07
Std Dev	0.381
Underflow	20
Overflow	597
Integral	781
χ^2 / ndf	13.87 / 6
Constant	113.8 ± 6.2
Mean	33.12 ± 0.01
Sigma	0.2462 ± 0.0136

SHist1

Entries	21623
Mean	33.25
Std Dev	0.371
Underflow	136
Overflow	8483
Integral	1.3e+04
χ^2 / ndf	48.6 / 5
Constant	2375 ± 29.5
Mean	33.27 ± 0.00
Sigma	0.1997 ± 0.0021

SHist1

Entries	32385
Mean	33.33
Std Dev	0.3569
Underflow	226
Overflow	1.281e+04
Integral	1.935e+04
χ^2 / ndf	147 / 5
Constant	3594 ± 37.3
Mean	33.35 ± 0.00
Sigma	0.2002 ± 0.0018

SHist1

Entries	10712
Mean	33.41
Std Dev	0.371
Underflow	73
Overflow	4207
Integral	6432
χ^2 / ndf	33 / 6
Constant	1211 ± 20.7
Mean	33.42 ± 0.00
Sigma	0.1959 ± 0.0025

SHist1

Entries	3565
Mean	33.49
Std Dev	0.3972
Underflow	31
Overflow	1399
Integral	2135
χ^2 / ndf	19.83 / 6
Constant	414.3 ± 12.4
Mean	33.5 ± 0.0
Sigma	0.185 ± 0.004

SHist1

Entries	1598
Mean	33.54
Std Dev	0.4229
Underflow	5
Overflow	618
Integral	975
χ^2 / ndf	14.64 / 6
Constant	187 ± 8.3
Mean	33.55 ± 0.01
Sigma	0.1818 ± 0.0060

SHist1

Entries	810
Mean	33.57
Std Dev	0.4489
Underflow	12
Overflow	316
Integral	482
χ^2 / ndf	11.06 / 6
Constant	88.7 ± 6.0
Mean	33.61 ± 0.01
Sigma	0.1878 ± 0.0099

SHist1

Entries	387
Mean	33.65
Std Dev	0.4968
Underflow	8
Overflow	155
Integral	224
χ^2 / ndf	12.42 / 6
Constant	39.12 ± 3.64
Mean	33.62 ± 0.02
Sigma	0.1861 ± 0.0117

SHist1

Entries	194
Mean	33.68
Std Dev	0.356
Underflow	0
Overflow	70
Integral	124
χ^2 / ndf	3.759 / 4
Constant	23.73 ± 3.19
Mean	33.7 ± 0.0
Sigma	0.1783 ± 0.0220

SHist1

Entries	85
Mean	33.71
Std Dev	0.4547
Underflow	0
Overflow	44
Integral	41
χ^2 / ndf	2.412 / 5
Constant	8.7 ± 2.3
Mean	33.78 ± 0.03
Sigma	0.1408 ± 0.0279

SHist1

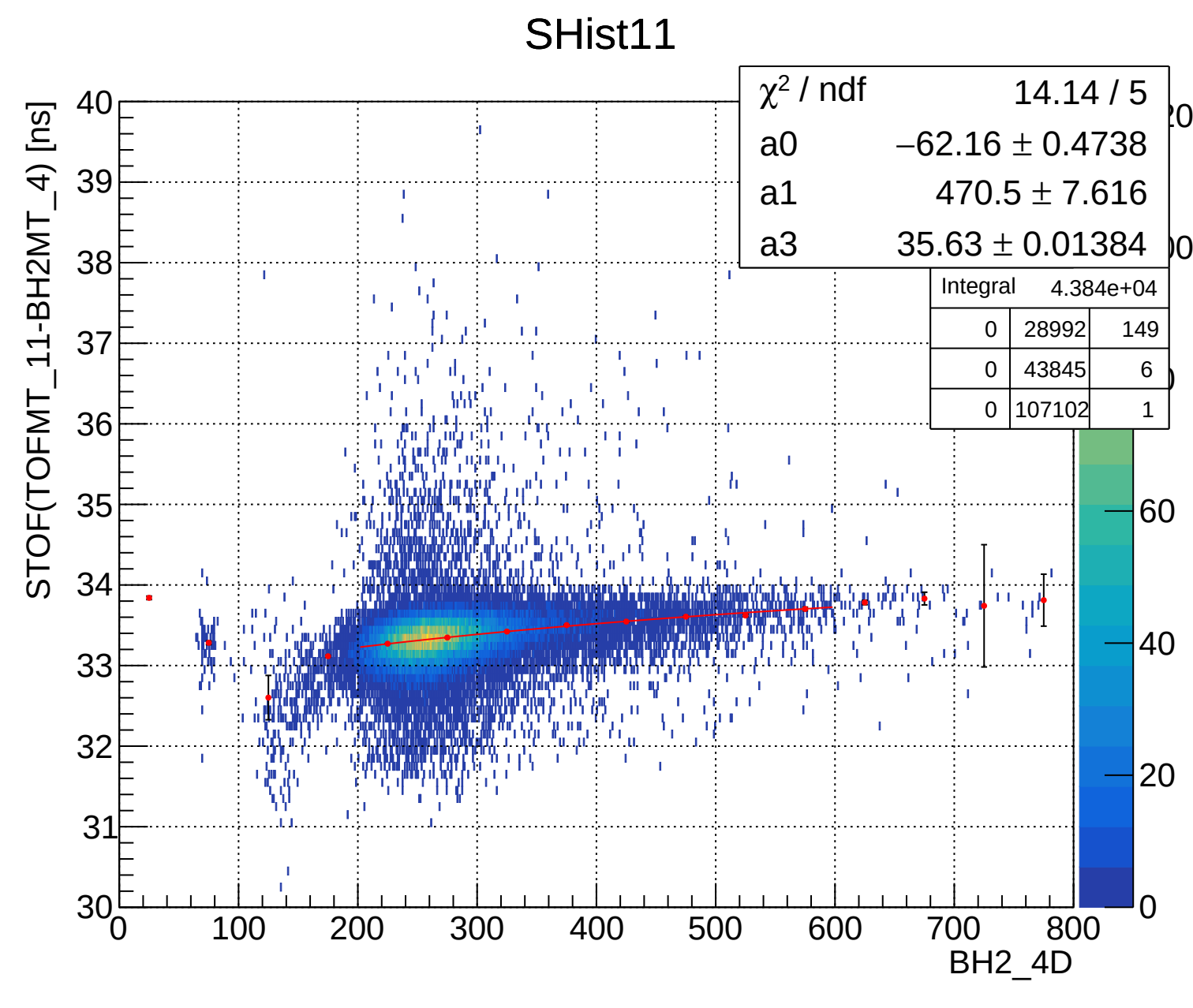
Entries	49
Mean	33.72
Std Dev	0.4313
Underflow	0
Overflow	25
Integral	24
χ^2 / ndf	2.982 / 4
Constant	3.402 ± 1.179
Mean	33.83 ± 0.08
Sigma	0.2343 ± 0.0817

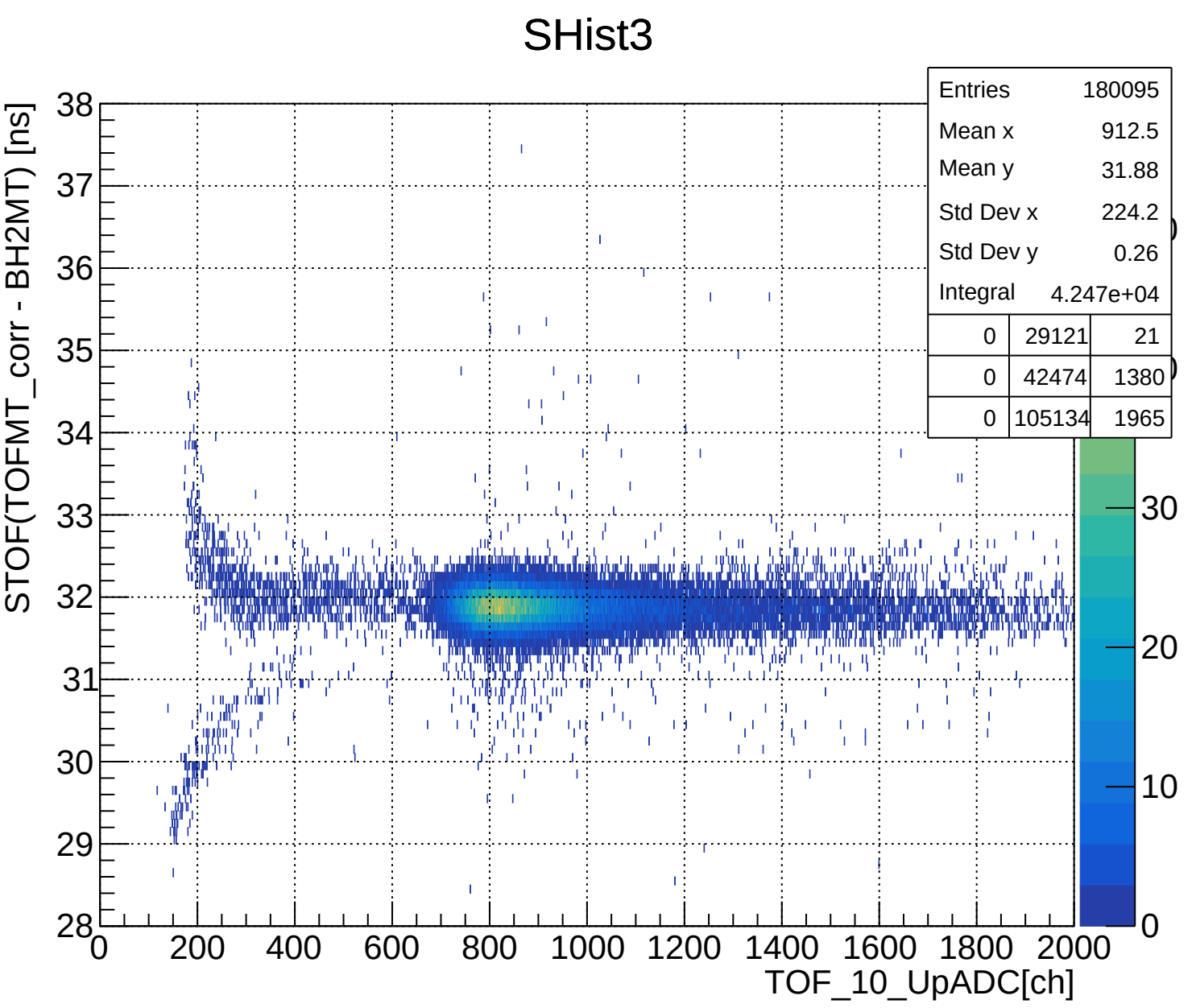
SHist1

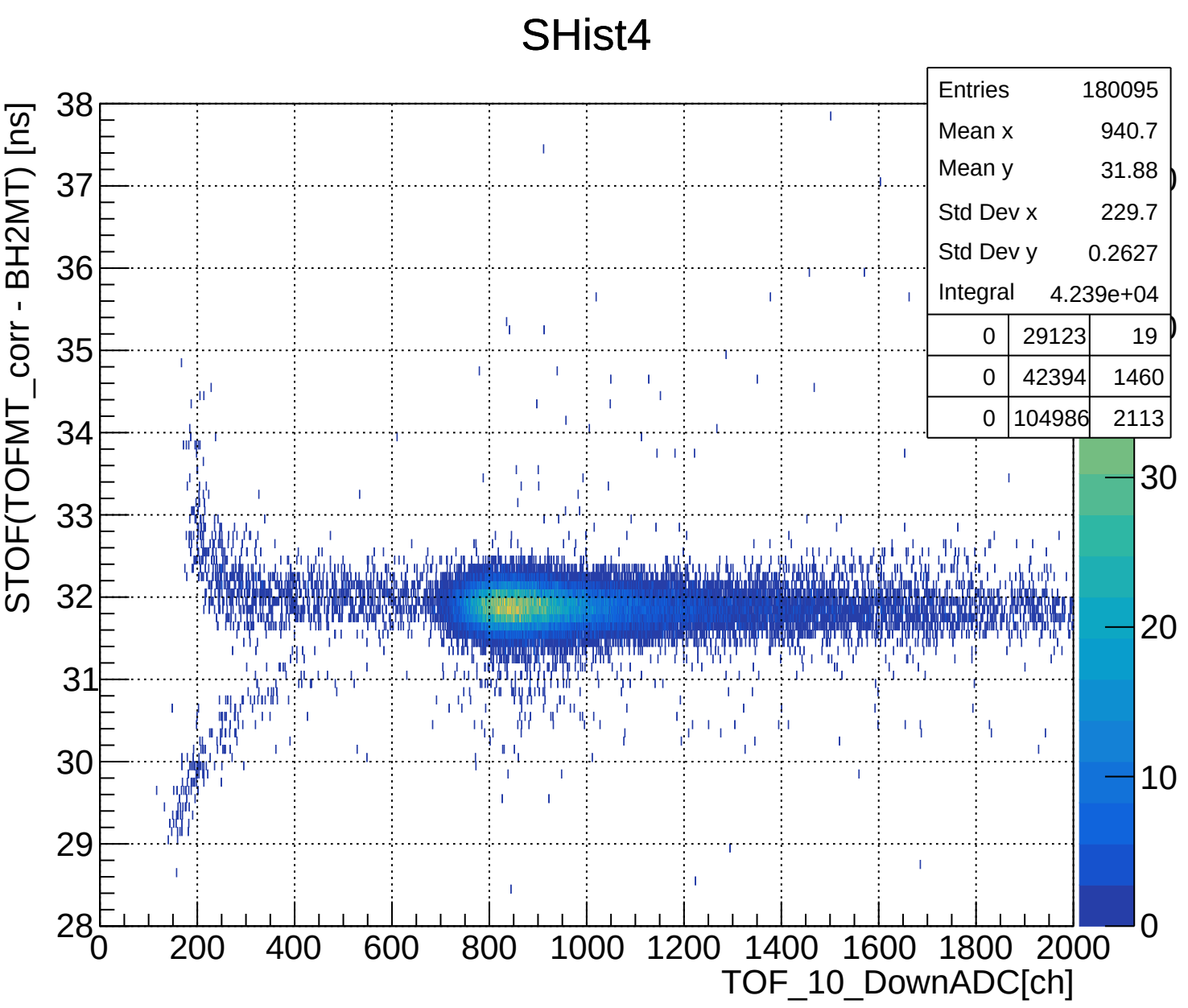
Entries	36
Mean	33.57
Std Dev	0.376
Underflow	1
Overflow	23
Integral	12
χ^2 / ndf	0.0439 / 3
Constant	2.049 ± 0.771
Mean	33.74 ± 0.76
Sigma	0.4559 ± 0.6295

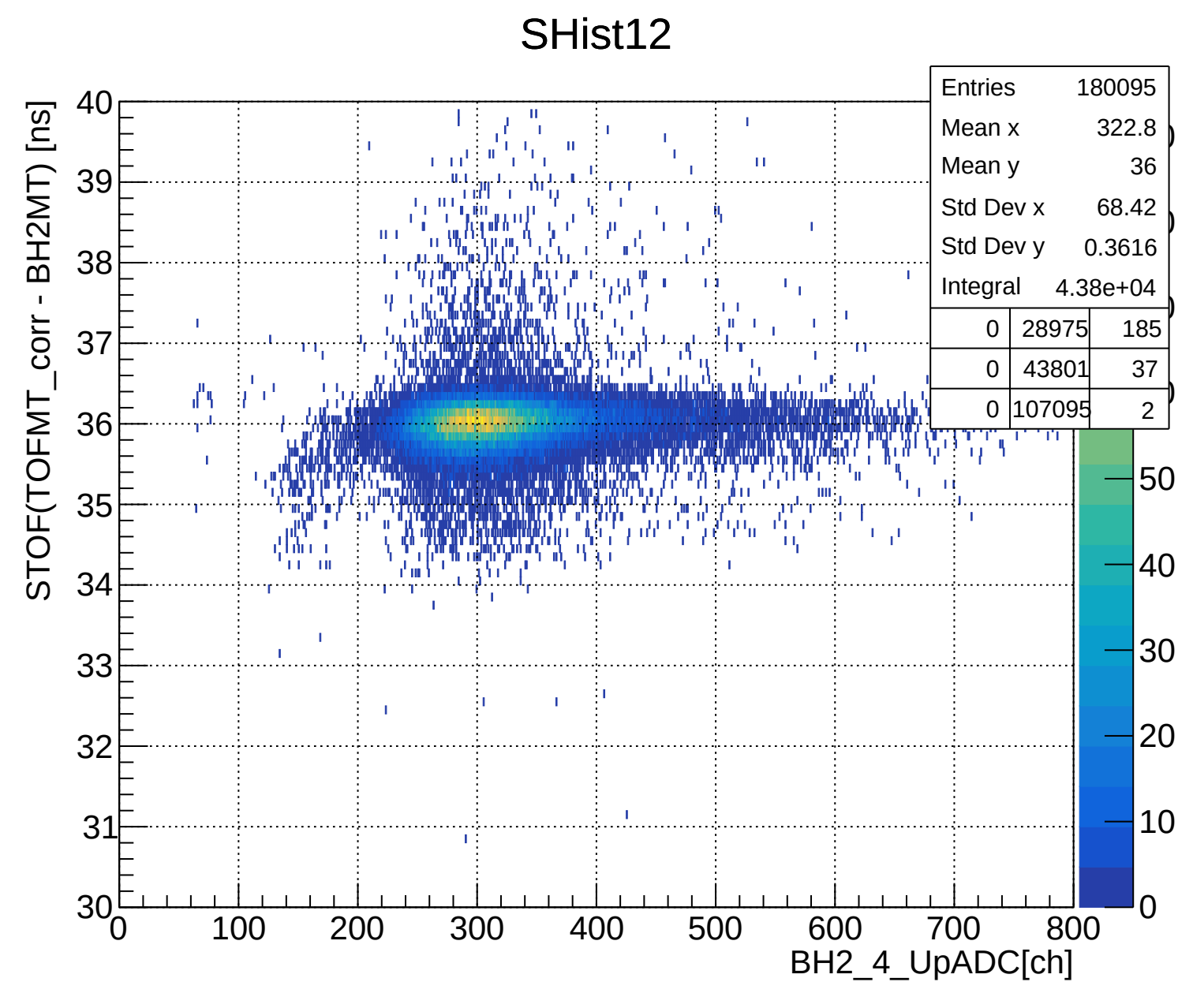
SHist10

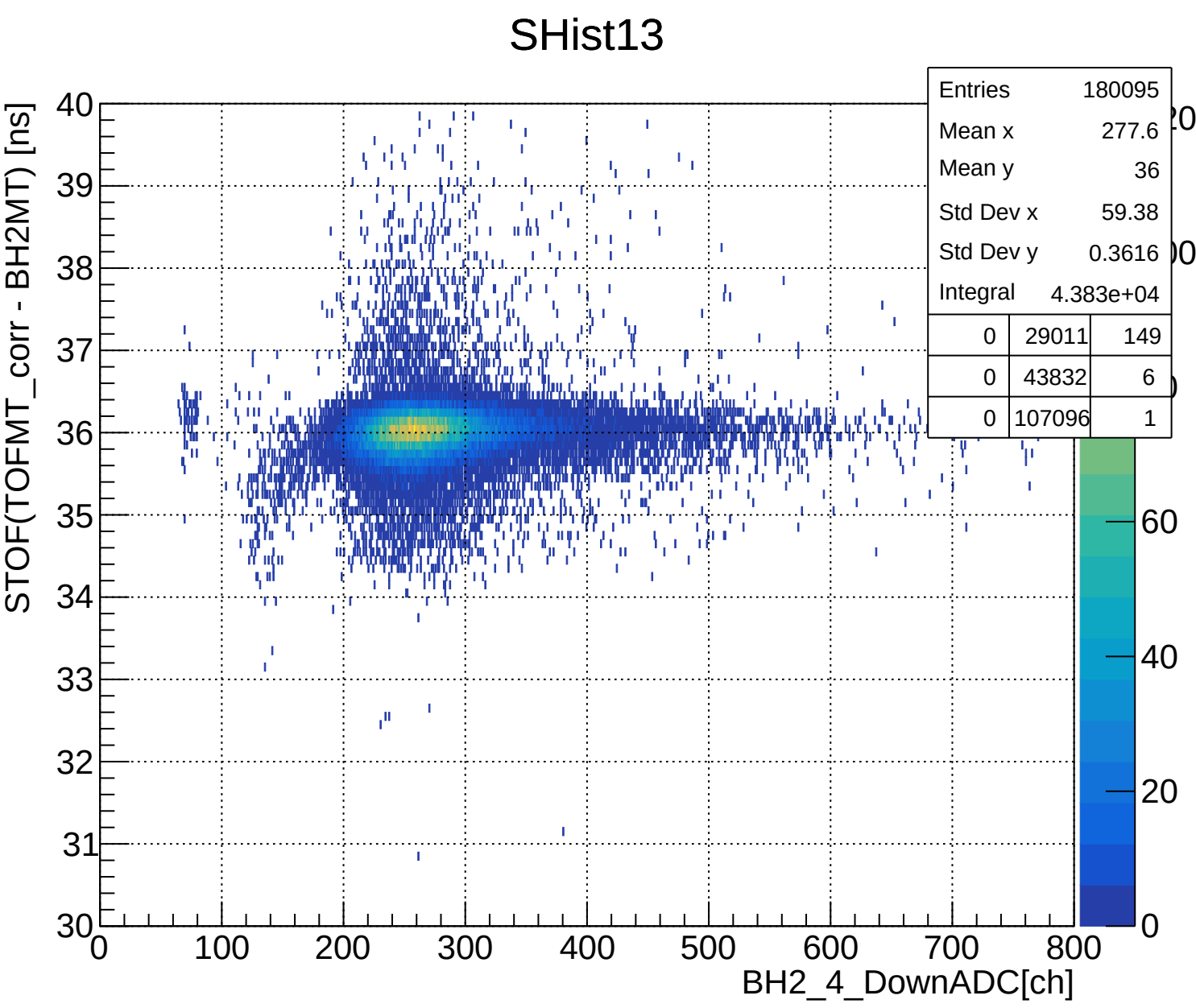
Entries	14
Mean	33.67
Std Dev	0.2615
Underflow	0
Overflow	5
Integral	9
χ^2 / ndf	1.123 / 3
Constant	1.334 ± 0.757
Mean	33.81 ± 0.32
Sigma	0.4211 ± 0.5532

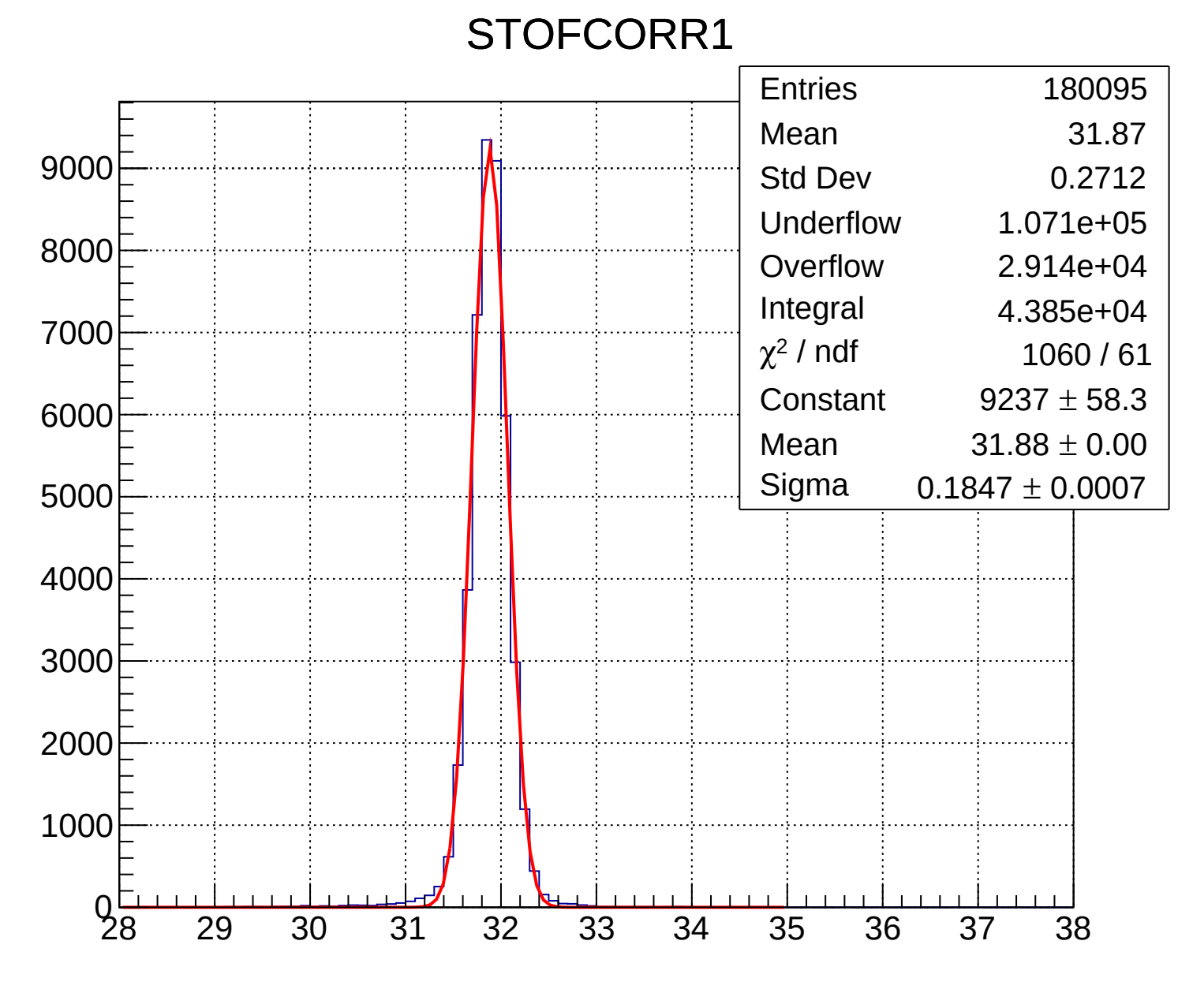

SHist11
χ² / ndf 14.14 / 5
a0 −62.16 ± 0.4738
a1 470.5 ± 7.616
a3 35.63 ± 0.01384
Integral 4.384e+04
0 28992 149
0 43845 6
0 107102 1
STOF(TOFMT_11-BH2MT_4) [ns]
BH2_4D
40
39
38
37
36
35
34
33
32
31
30
0
100
200
300
400
500
600
700
800
60
40
20
0

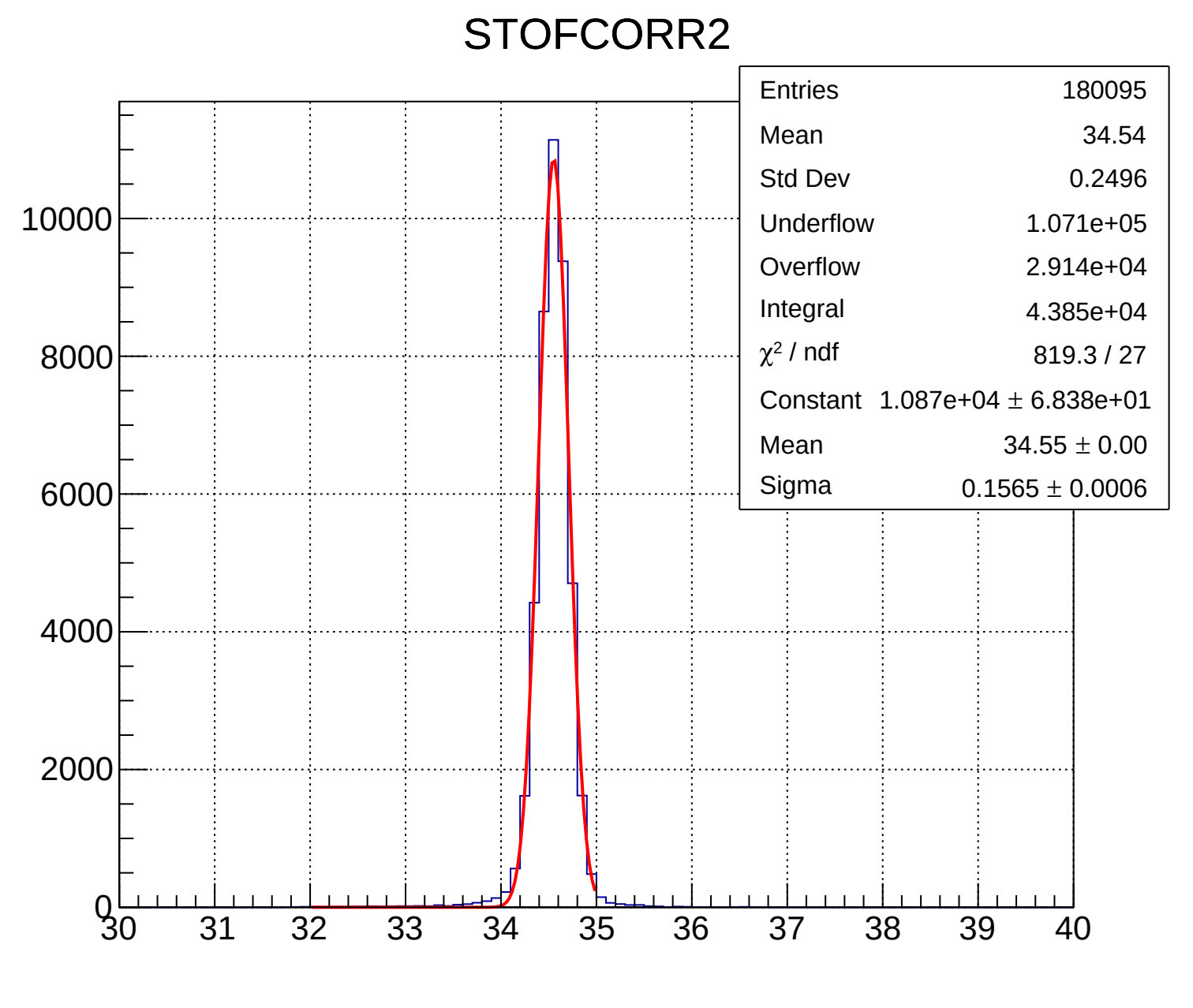

SHist3
Entries 180095
Mean x 912.5
Mean y 31.88
Std Dev x 224.2
Std Dev y 0.26
Integral 4.247e+04
0 29121 21
0 42474 1380
0 105134 1965
STOF(TOFMT_corr - BH2MT) [ns]
TOF_10_UpADC[ch]
38
37
36
35
34
33
32
31
30
29
28
0
200
400
600
800
1000
1200
1400
1600
1800
2000
30
20
10
0


SHist4
Entries 180095
Mean x 940.7
Mean y 31.88
Std Dev x 229.7
Std Dev y 0.2627
Integral 4.239e+04
0 29123 19
0 42394 1460
0 104986 2113
STOF(TOFMT_corr - BH2MT) [ns]
TOF_10_DownADC[ch]
38
37
36
35
34
33
32
31
30
29
28
0
200
400
600
800
1000
1200
1400
1600
1800
2000
30
20
10
0


SHist12
Entries 180095
Mean x 322.8
Mean y 36
Std Dev x 68.42
Std Dev y 0.3616
Integral 4.38e+04
0 28975 185
0 43801 37
0 107095 2
STOF(TOFMT_corr - BH2MT) [ns]
BH2_4_UpADC[ch]
40
39
38
37
36
35
34
33
32
31
30
0
100
200
300
400
500
600
700
800
50
40
30
20
10
0


SHist13
Entries 180095
Mean x 277.6
Mean y 36
Std Dev x 59.38
Std Dev y 0.3616
Integral 4.383e+04
0 29011 149
0 43832 6
0 107096 1
STOF(TOFMT_corr - BH2MT) [ns]
BH2_4_DownADC[ch]
40
39
38
37
36
35
34
33
32
31
30
0
100
200
300
400
500
600
700
800
60
40
20
0


STOFCORR1
Entries 180095
Mean 31.87
Std Dev 0.2712
Underflow 1.071e+05
Overflow 2.914e+04
Integral 4.385e+04
χ² / ndf 1060 / 61
Constant 9237 ± 58.3
Mean 31.88 ± 0.00
Sigma 0.1847 ± 0.0007
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
28
29
30
31
32
33
34
35
36
37
38


STOFCORR2
Entries 180095
Mean 34.54
Std Dev 0.2496
Underflow 1.071e+05
Overflow 2.914e+04
Integral 4.385e+04
χ² / ndf 819.3 / 27
Constant 1.087e+04 ± 6.838e+01
Mean 34.55 ± 0.00
Sigma 0.1565 ± 0.0006
10000
8000
6000
4000
2000
0
30
31
32
33
34
35
36
37
38
39
40