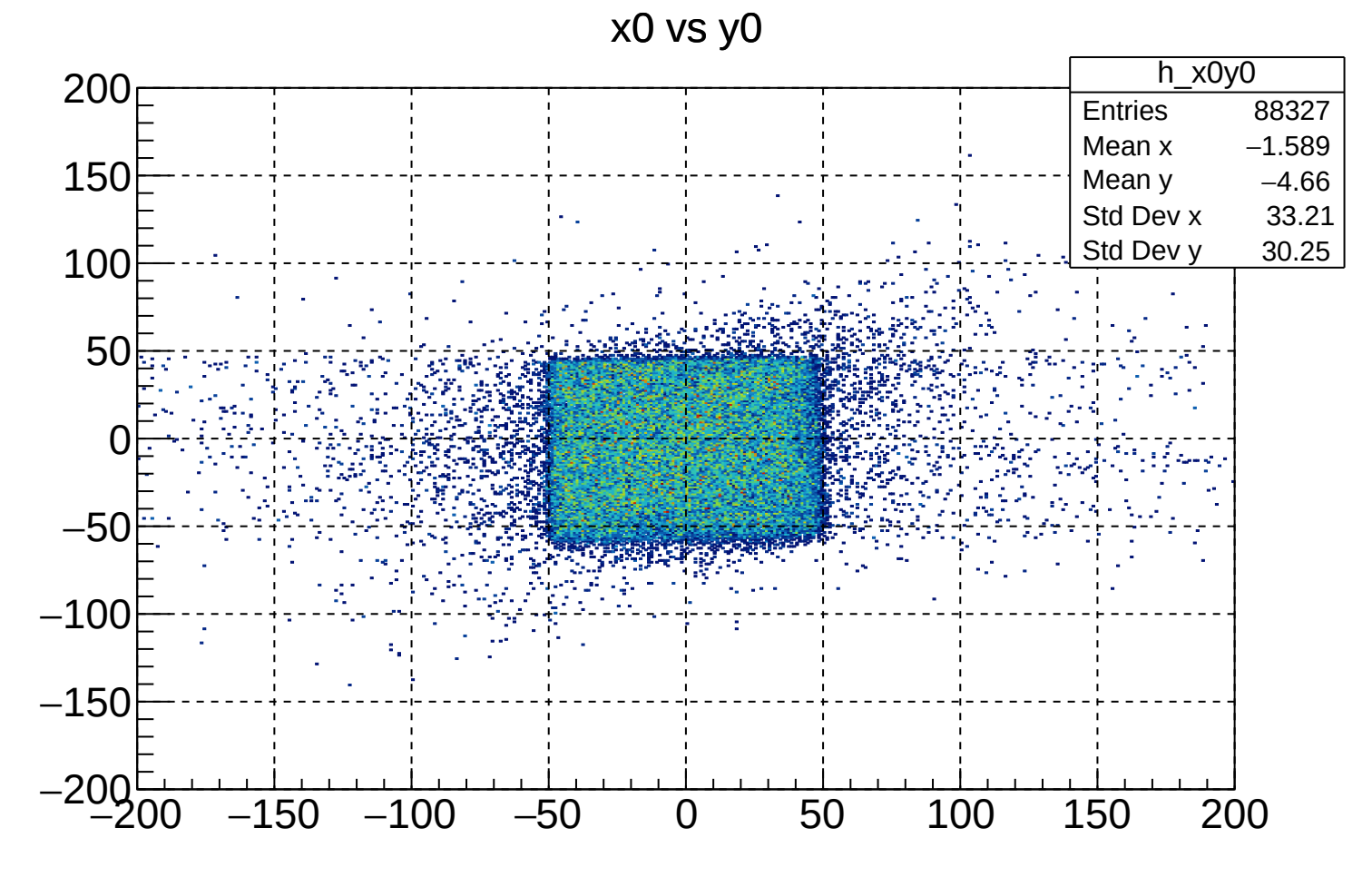
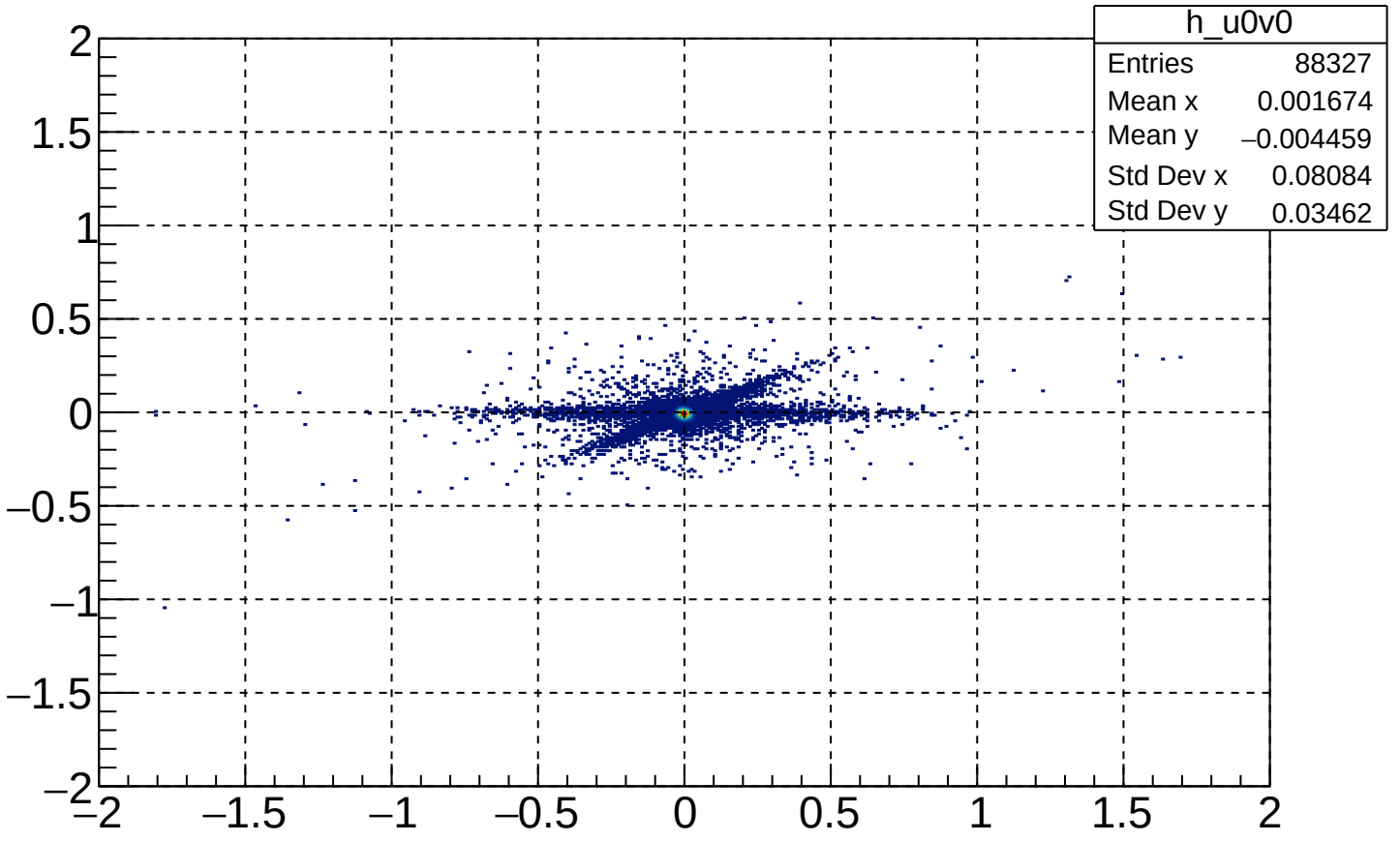
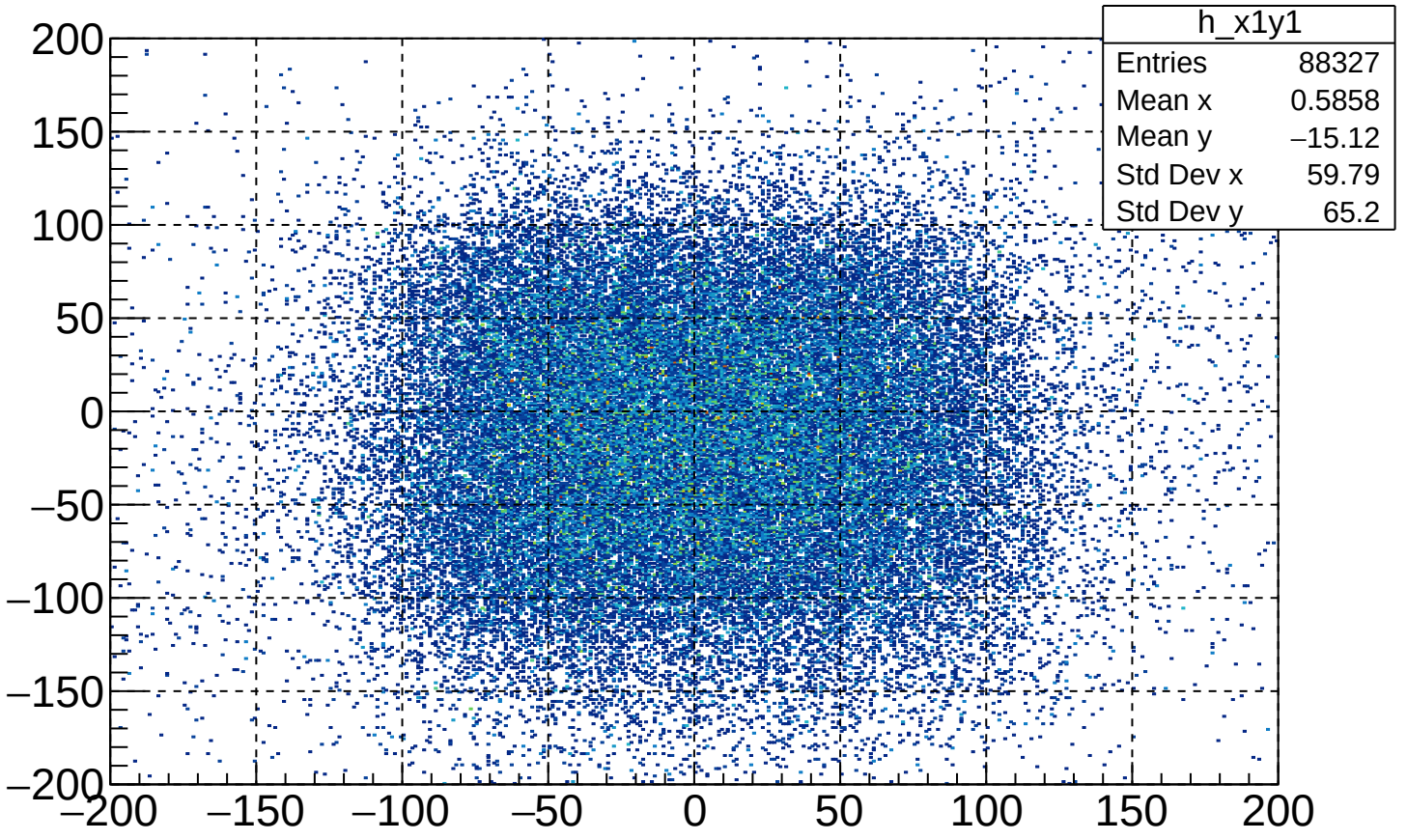
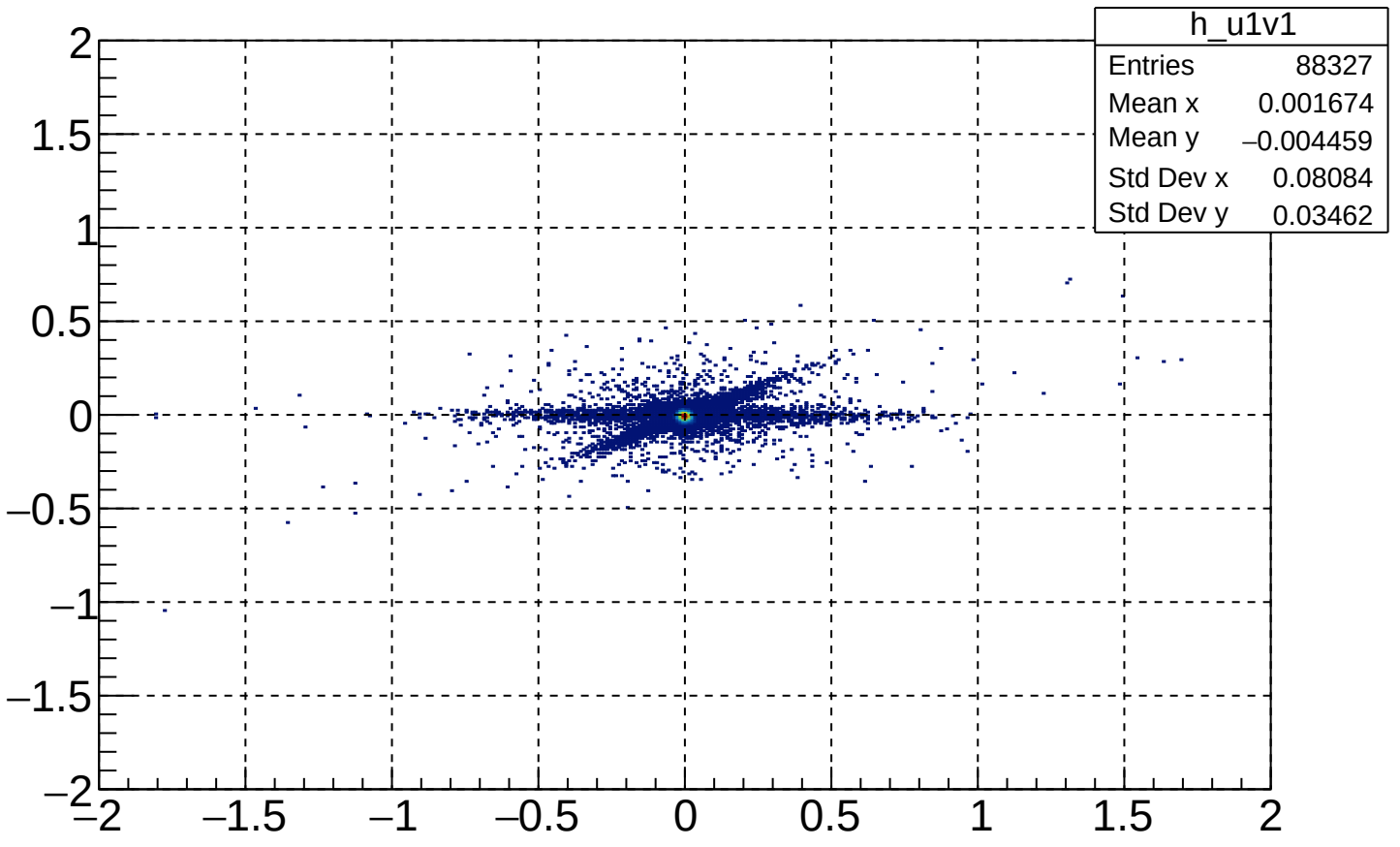
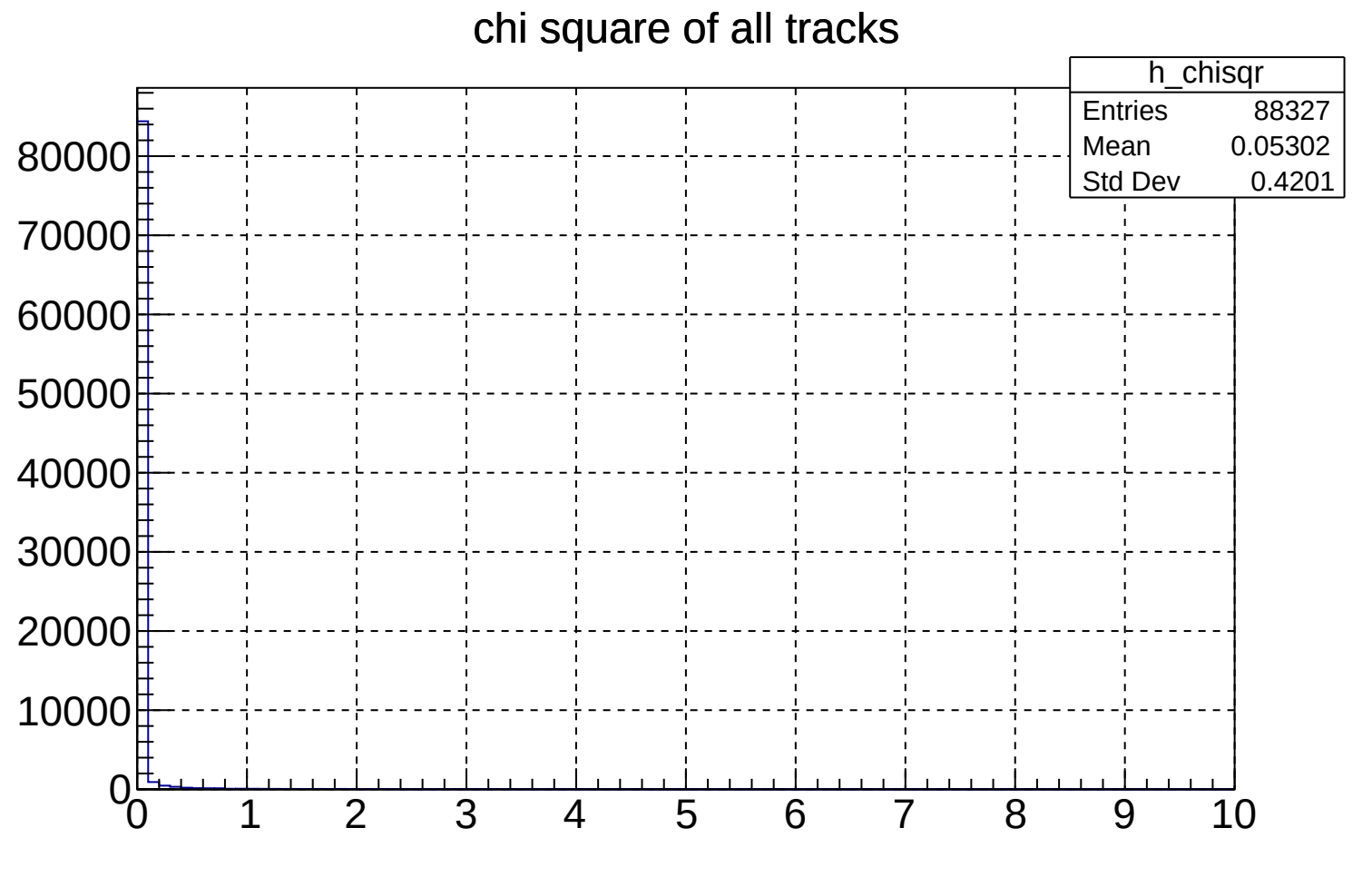
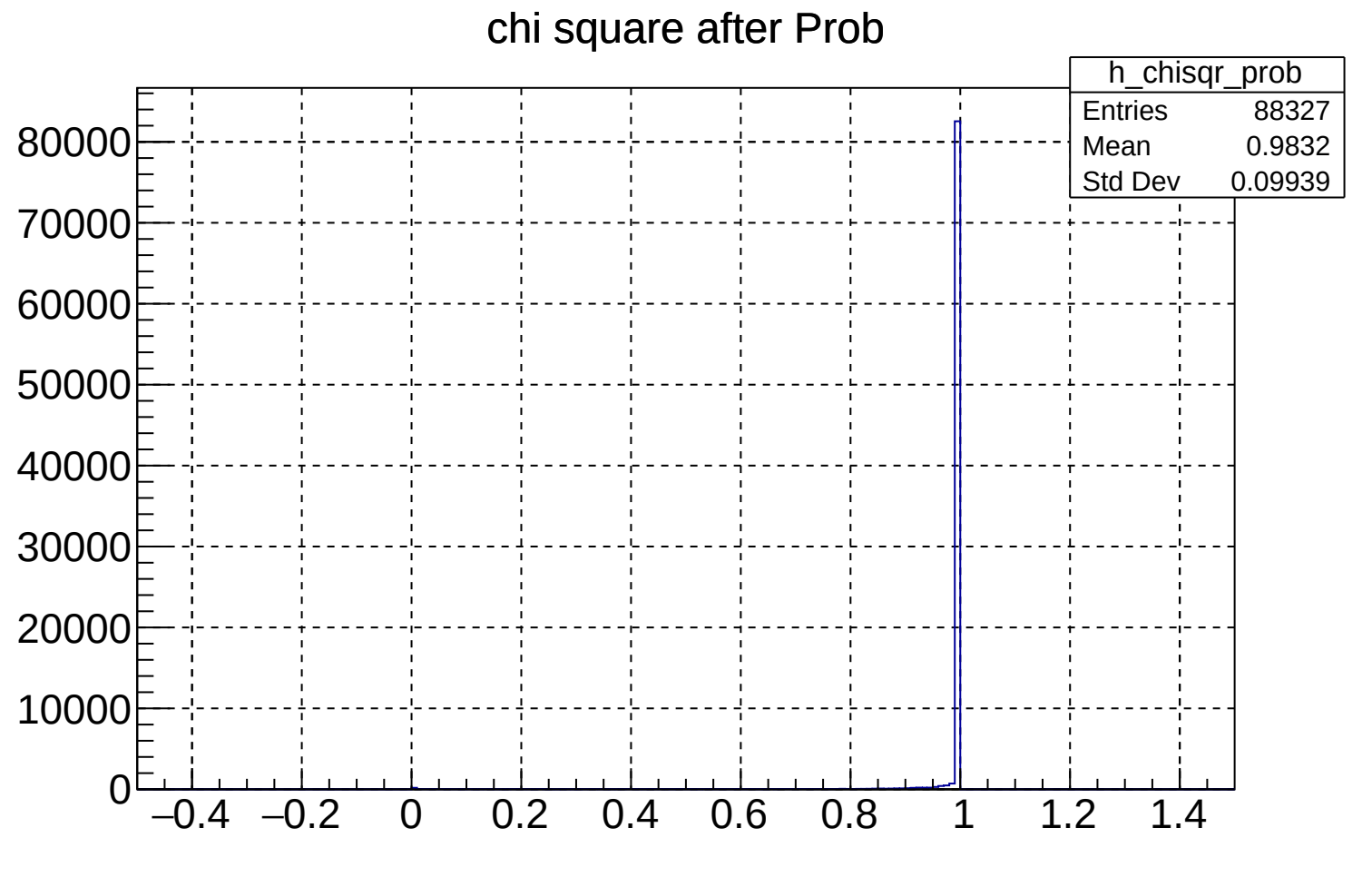

x0 vs y0
h_x0y0
Entries 88327
Mean x −1.589
Mean y −4.66
Std Dev x 33.21
Std Dev y 30.25
200
150
100
50
0
−50
−100
−150
−200
−200
−150
−100
−50
0
50
100
150
200

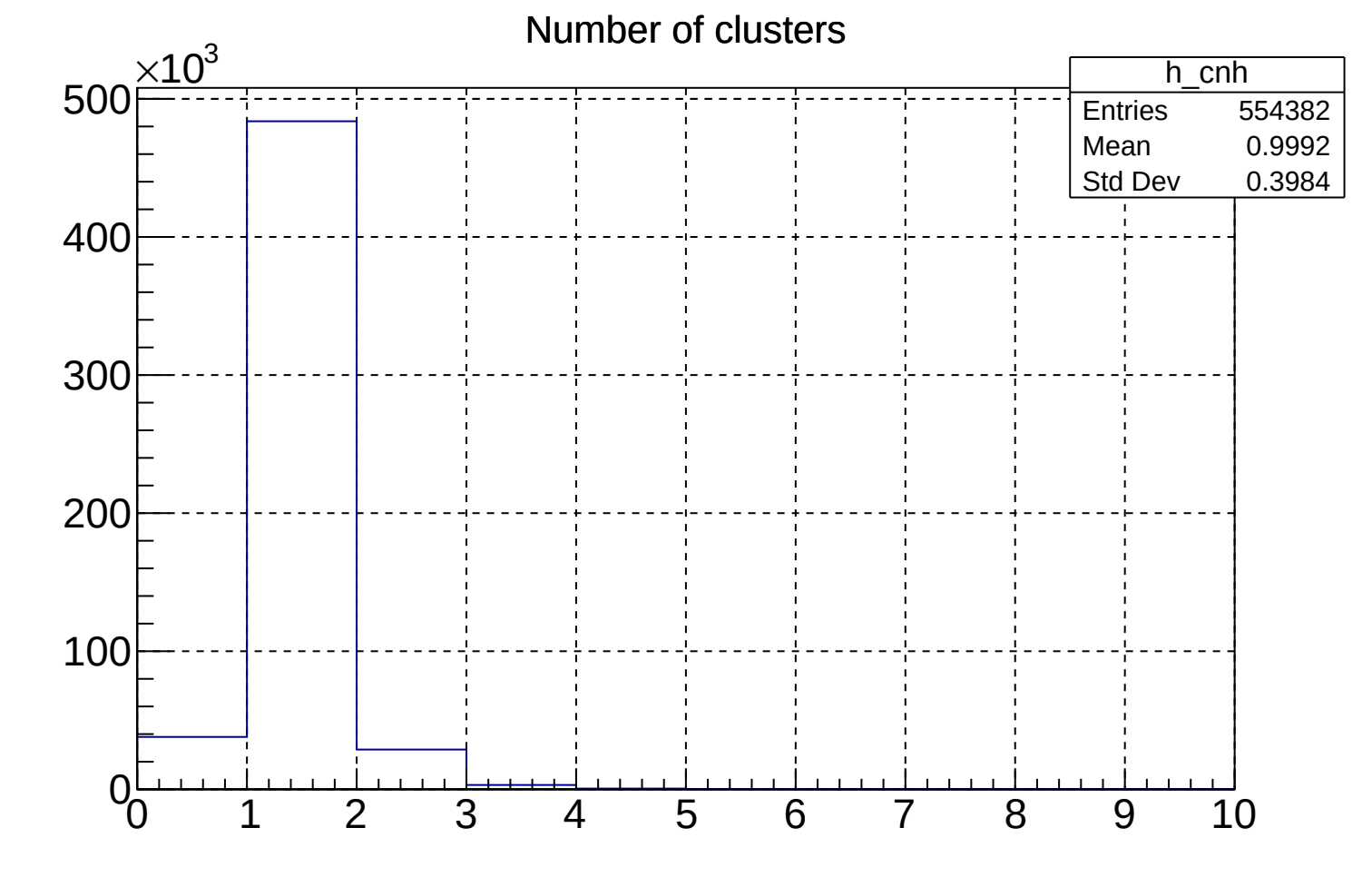

u0 vs v0
h_u0v0
Entries 88327
Mean x 0.001674
Mean y −0.004459
Std Dev x 0.08084
Std Dev y 0.03462
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2
−1.5
−1
−0.5
0
0.5
1
1.5
2

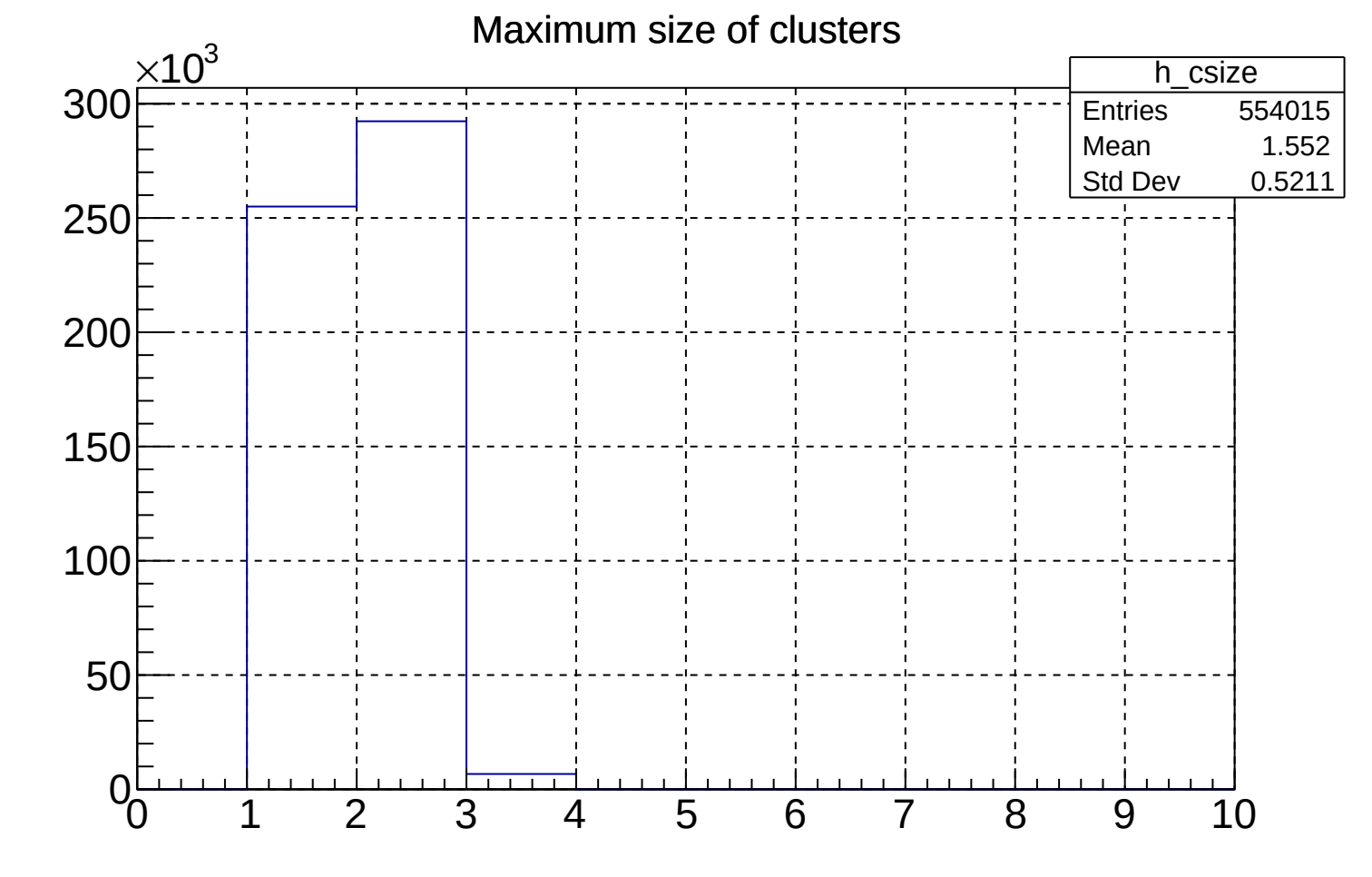

x1 vs y1
h_x1y1
Entries 88327
Mean x 0.5858
Mean y –15.12
Std Dev x 59.79
Std Dev y 65.2
200
150
100
50
0
–50
–100
–150
–200
–200
–150
–100
–50
0
50
100
150
200

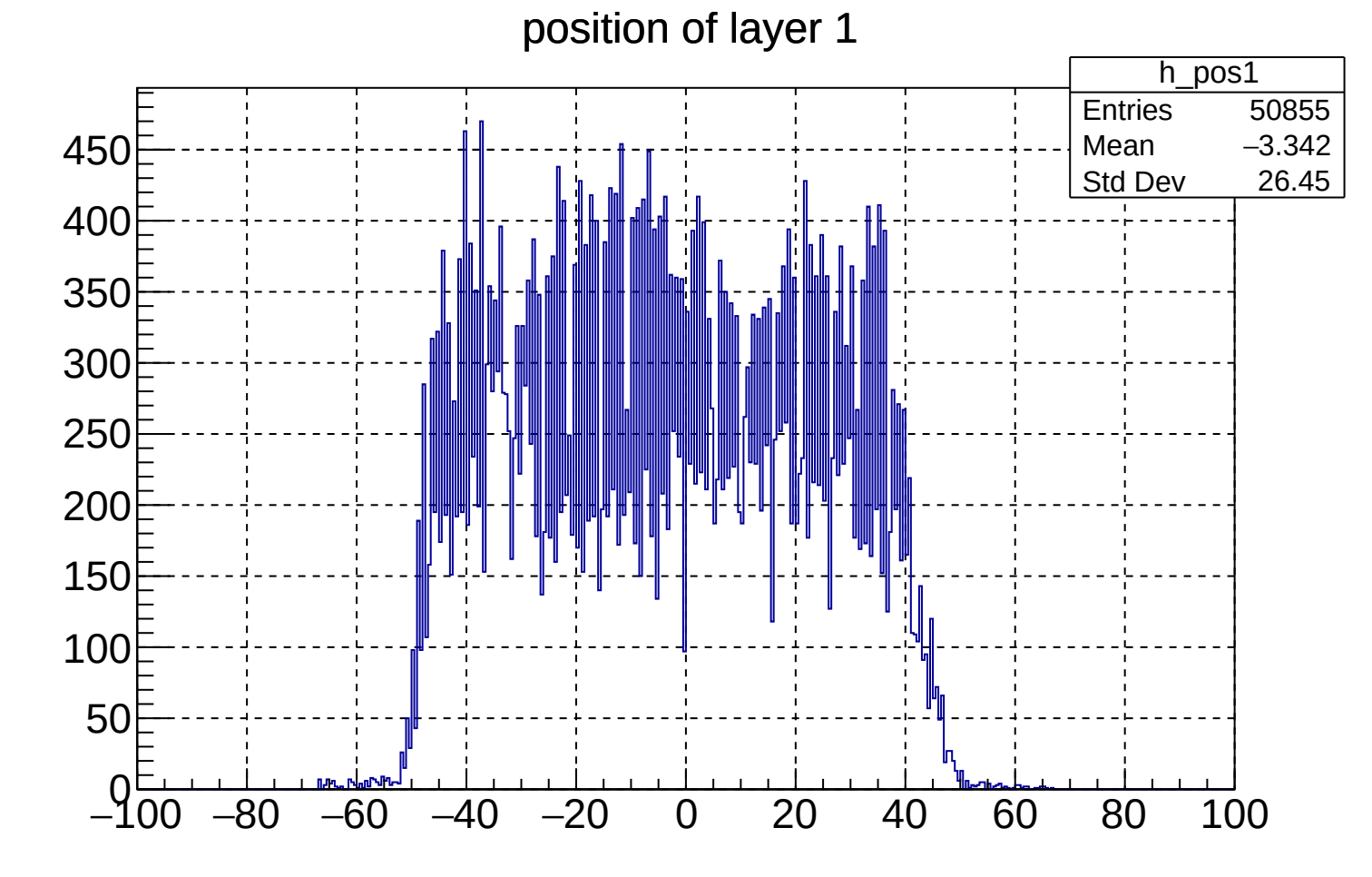

u1 vs v1
h_u1v1
Entries 88327
Mean x 0.001674
Mean y −0.004459
Std Dev x 0.08084
Std Dev y 0.03462
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2
−1.5
−1
−0.5
0
0.5
1
1.5
2

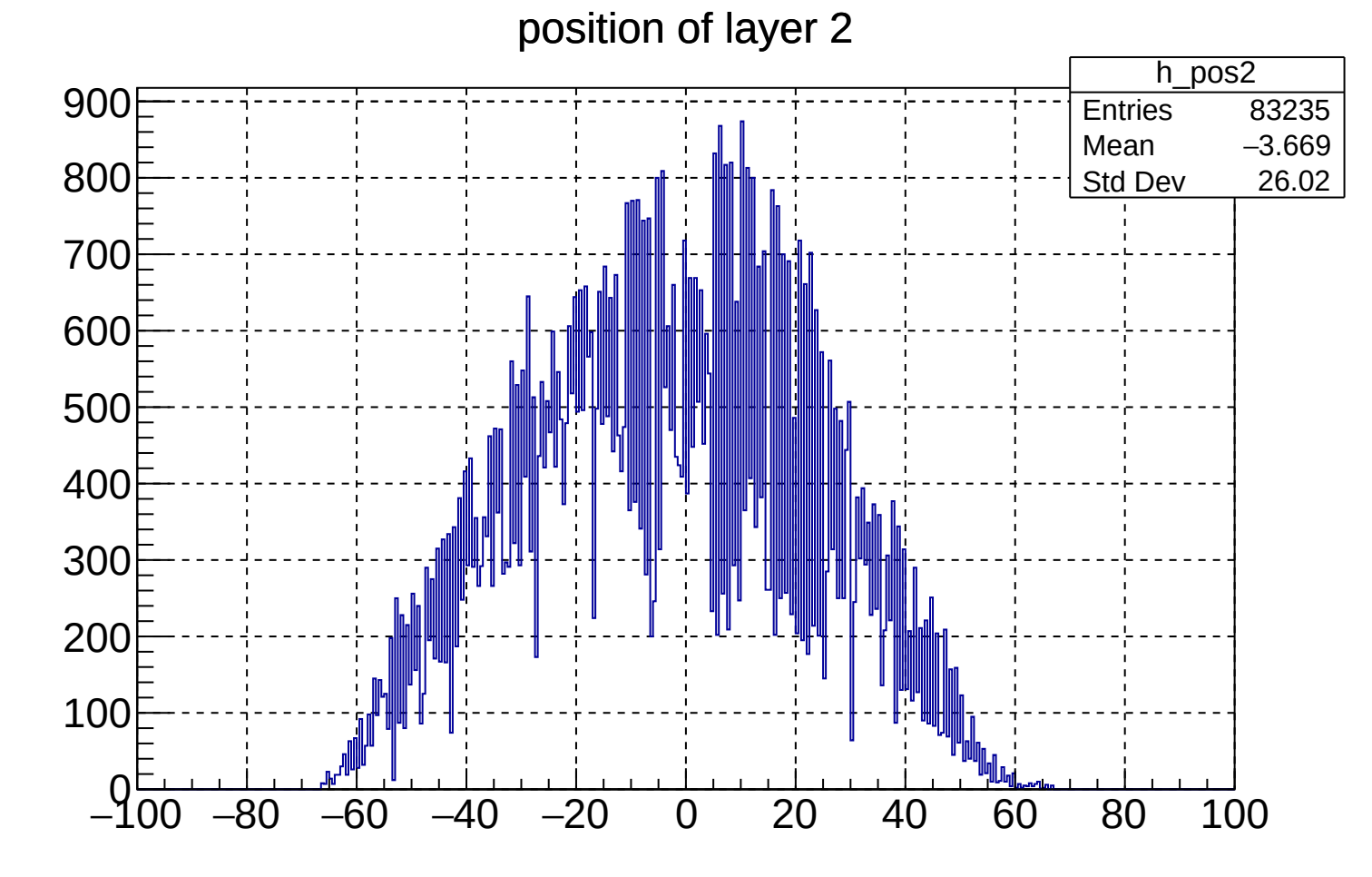

chi square of all tracks
h_chisqr
Entries 88327
Mean 0.05302
Std Dev 0.4201
80000
70000
60000
50000
40000
30000
20000
10000
0
0 1 2 3 4 5 6 7 8 9 10

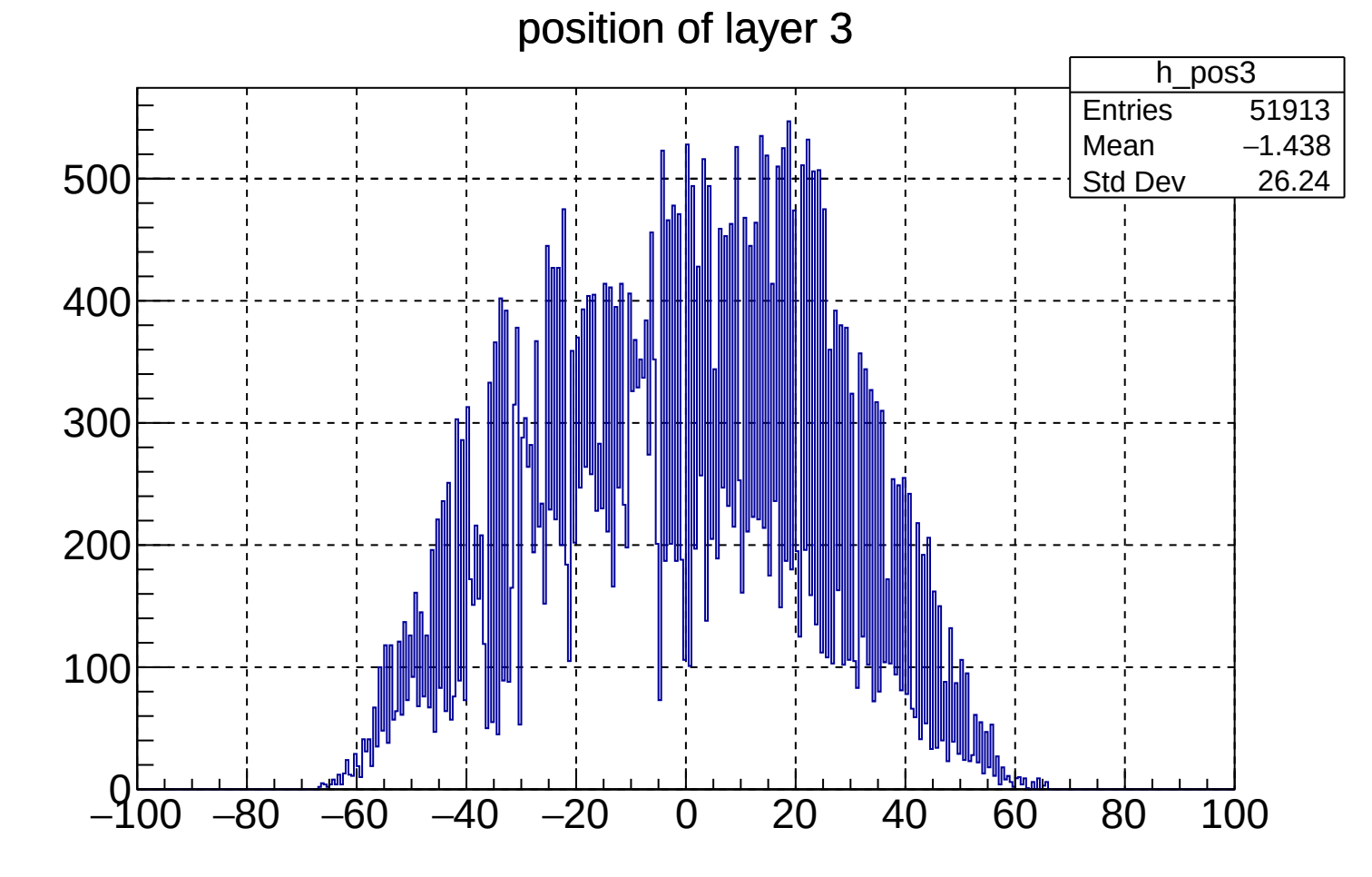

chi square after Prob
h_chisqr_prob
Entries 88327
Mean 0.9832
Std Dev 0.09939
80000
70000
60000
50000
40000
30000
20000
10000
0
–0.4
–0.2
0
0.2
0.4
0.6
0.8
1
1.2
1.4

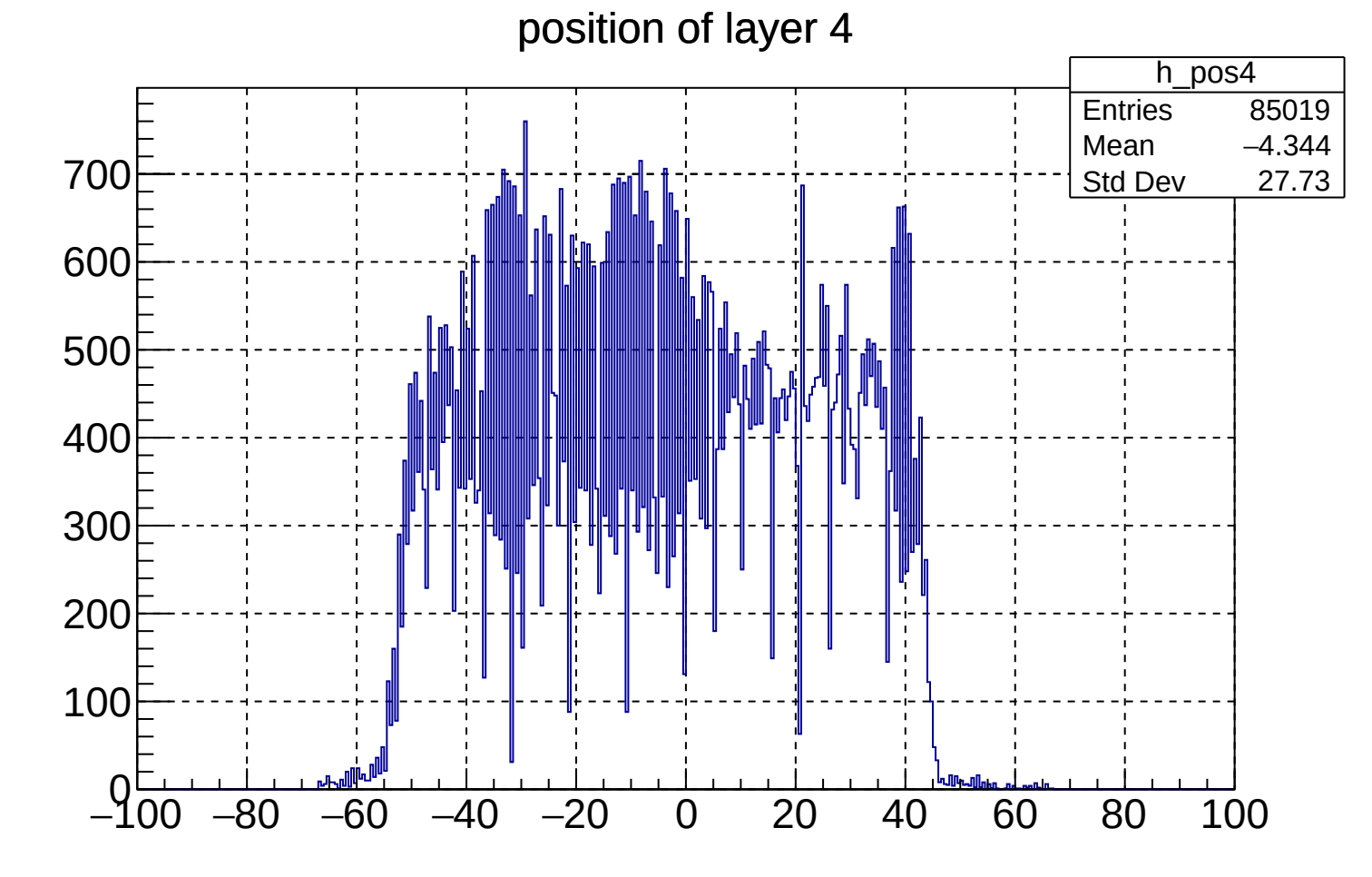

Number of clusters
×10^3
500
400
300
200
100
0
0
1
2
3
4
5
6
7
8
9
10
h_cnh
Entries 554382
Mean 0.9992
Std Dev 0.3984

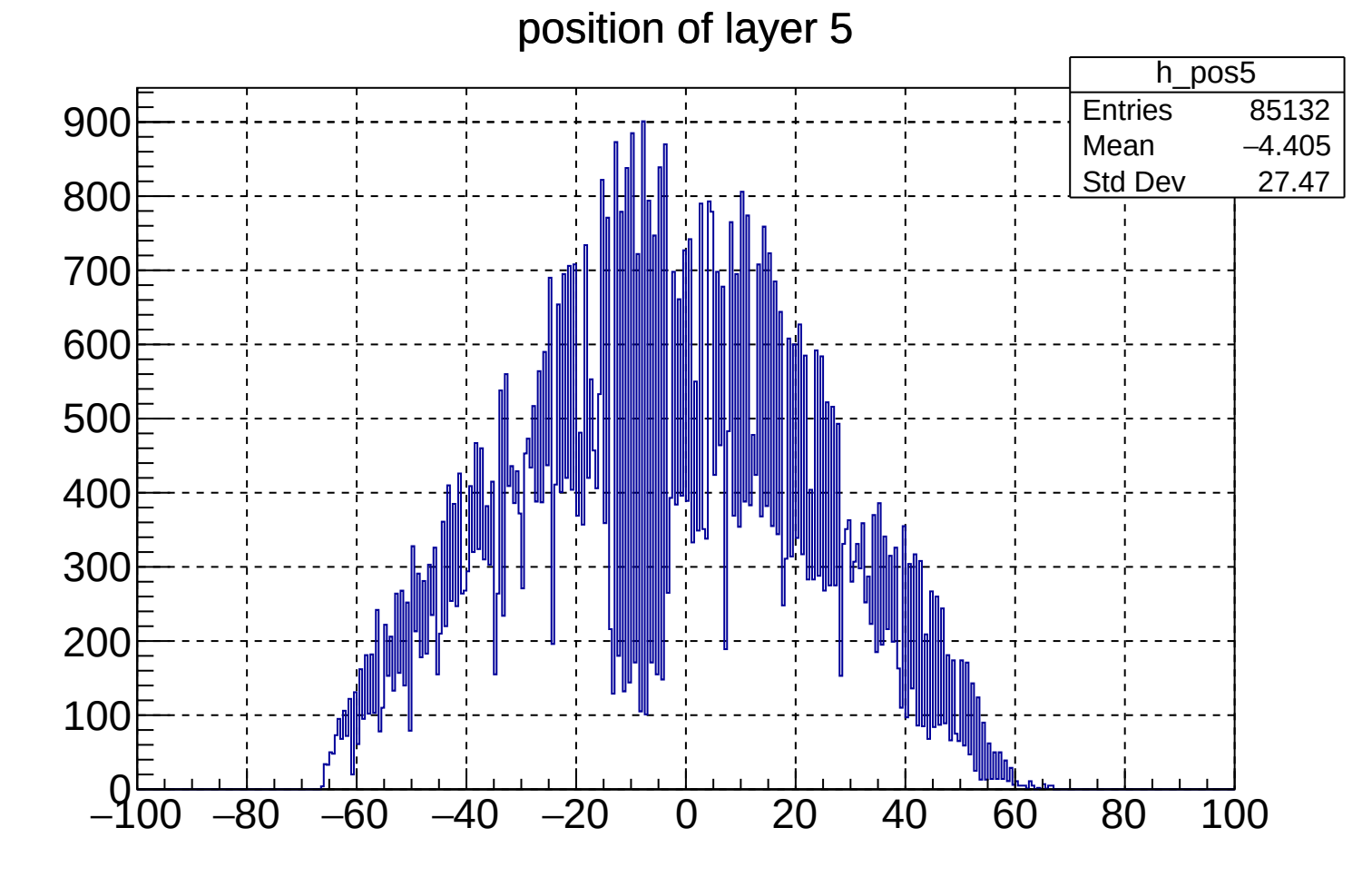

Maximum size of clusters
×10^3
300
250
200
150
100
50
0
0
1
2
3
4
5
6
7
8
9
10
h_csize
Entries 554015
Mean 1.552
Std Dev 0.5211

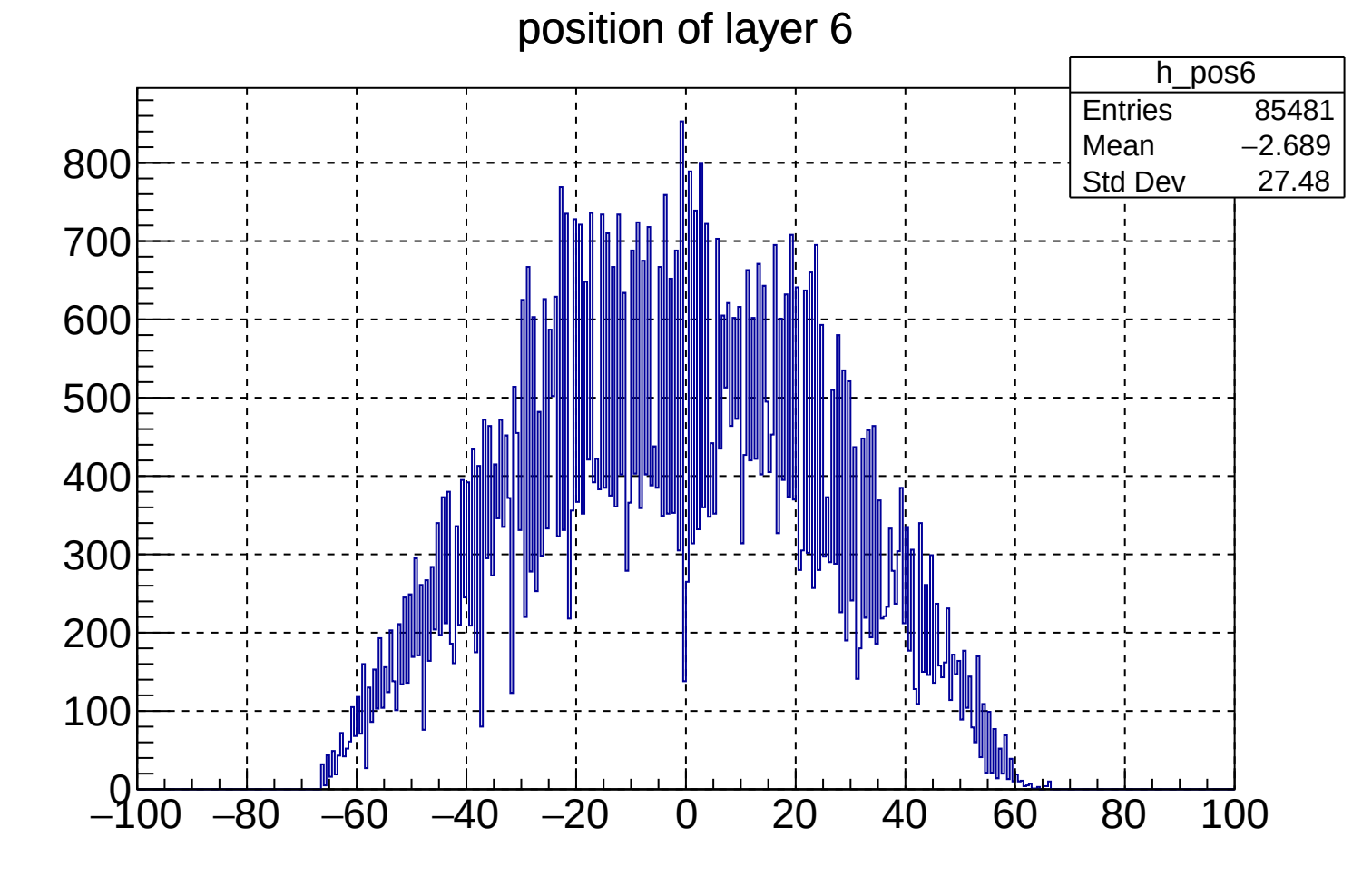

position of layer 1
h_pos1
Entries 50855
Mean –3.342
Std Dev 26.45
450
400
350
300
250
200
150
100
50
0
–100
–80
–60
–40
–20
0
20
40
60
80
100

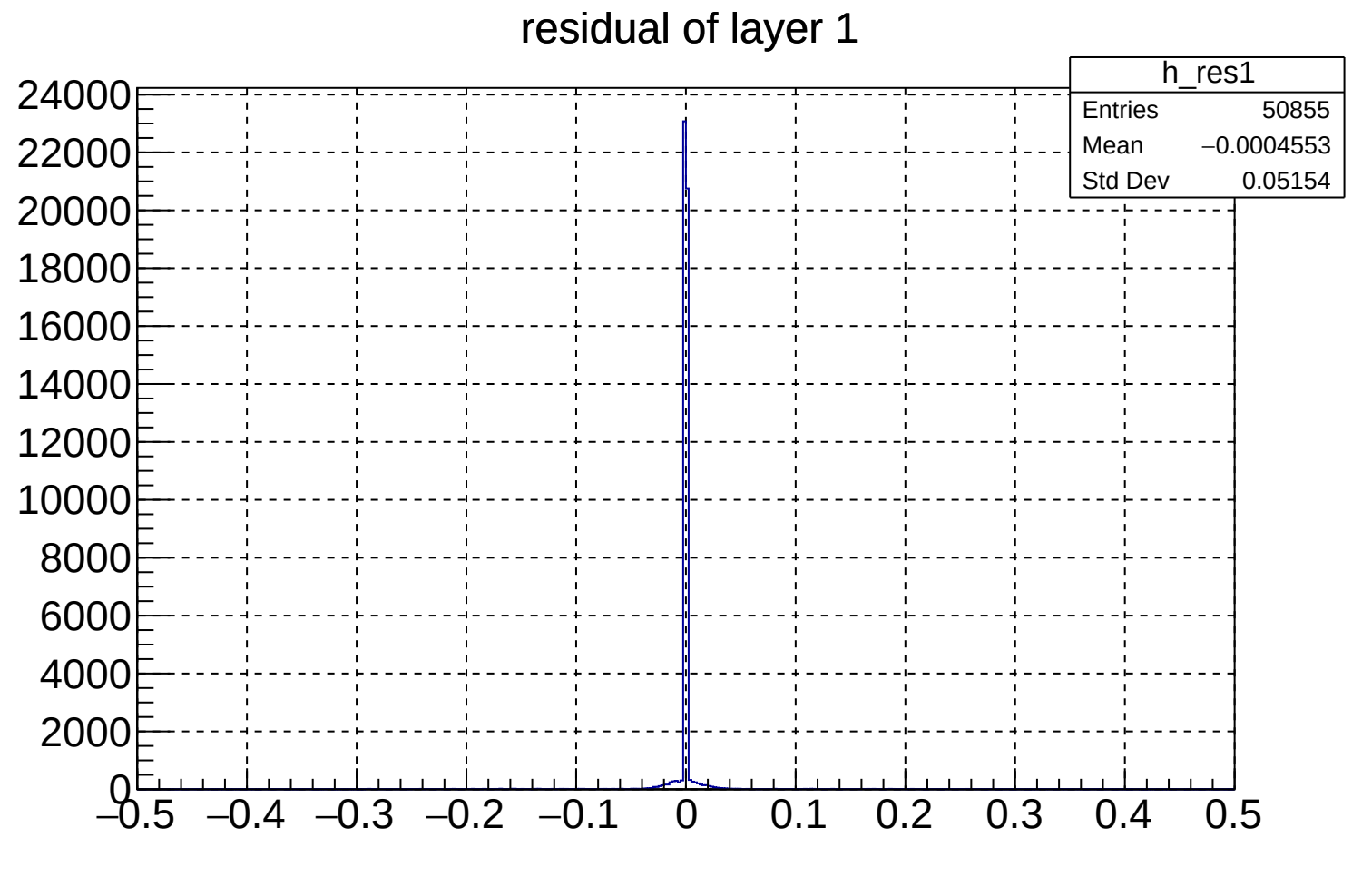

position of layer 2
h_pos2
Entries 83235
Mean –3.669
Std Dev 26.02
900
800
700
600
500
400
300
200
100
0
–100
–80
–60
–40
–20
0
20
40
60
80
100

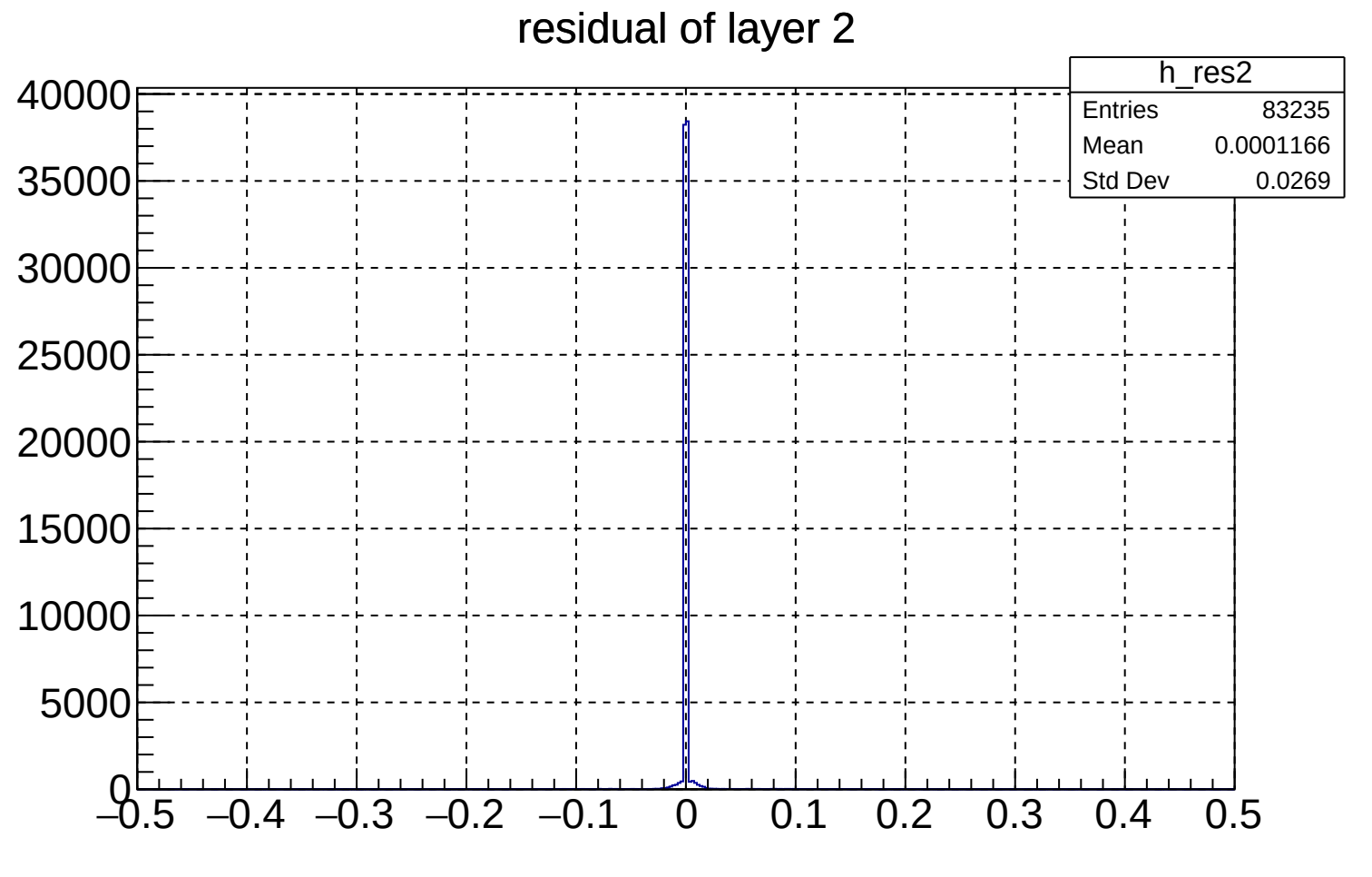

position of layer 3
h_pos3
Entries 51913
Mean –1.438
Std Dev 26.24
500
400
300
200
100
0
–100
–80
–60
–40
–20
0
20
40
60
80
100

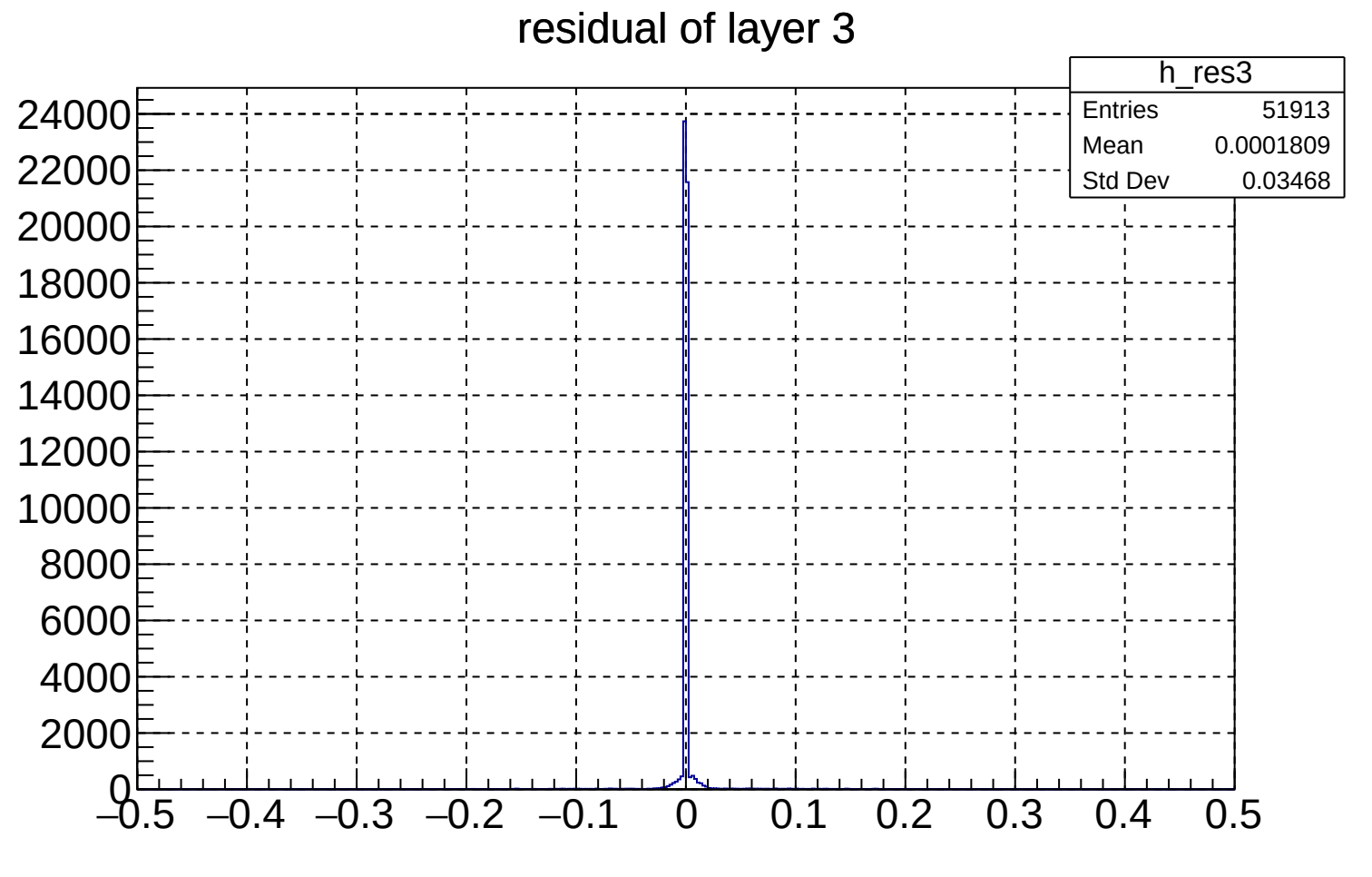

position of layer 4
h_pos4
Entries 85019
Mean –4.344
Std Dev 27.73
700
600
500
400
300
200
100
0
–100
–80
–60
–40
–20
0
20
40
60
80
100

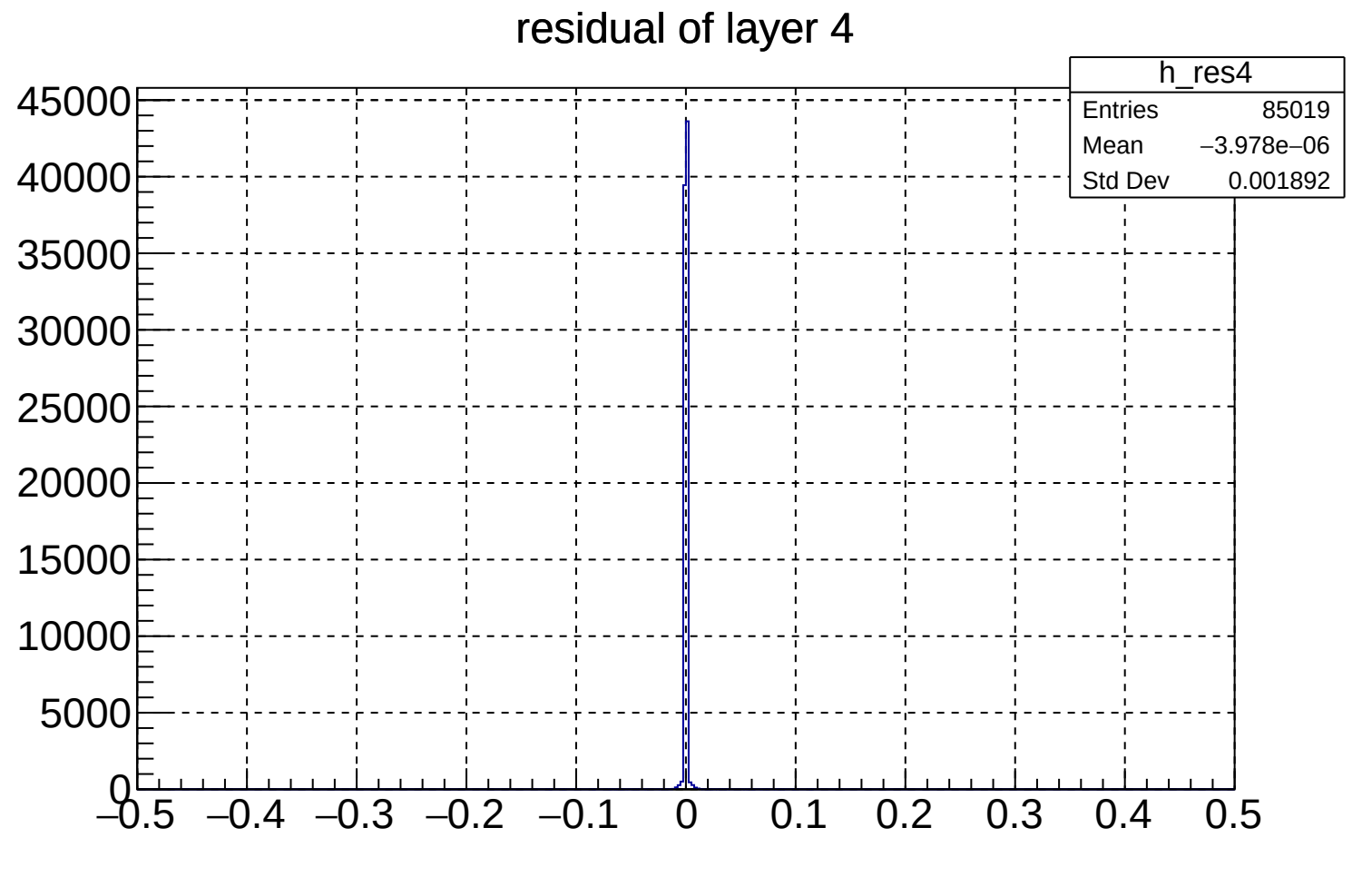

position of layer 5
h_pos5
Entries 85132
Mean –4.405
Std Dev 27.47
900
800
700
600
500
400
300
200
100
0
–100
–80
–60
–40
–20
0
20
40
60
80
100

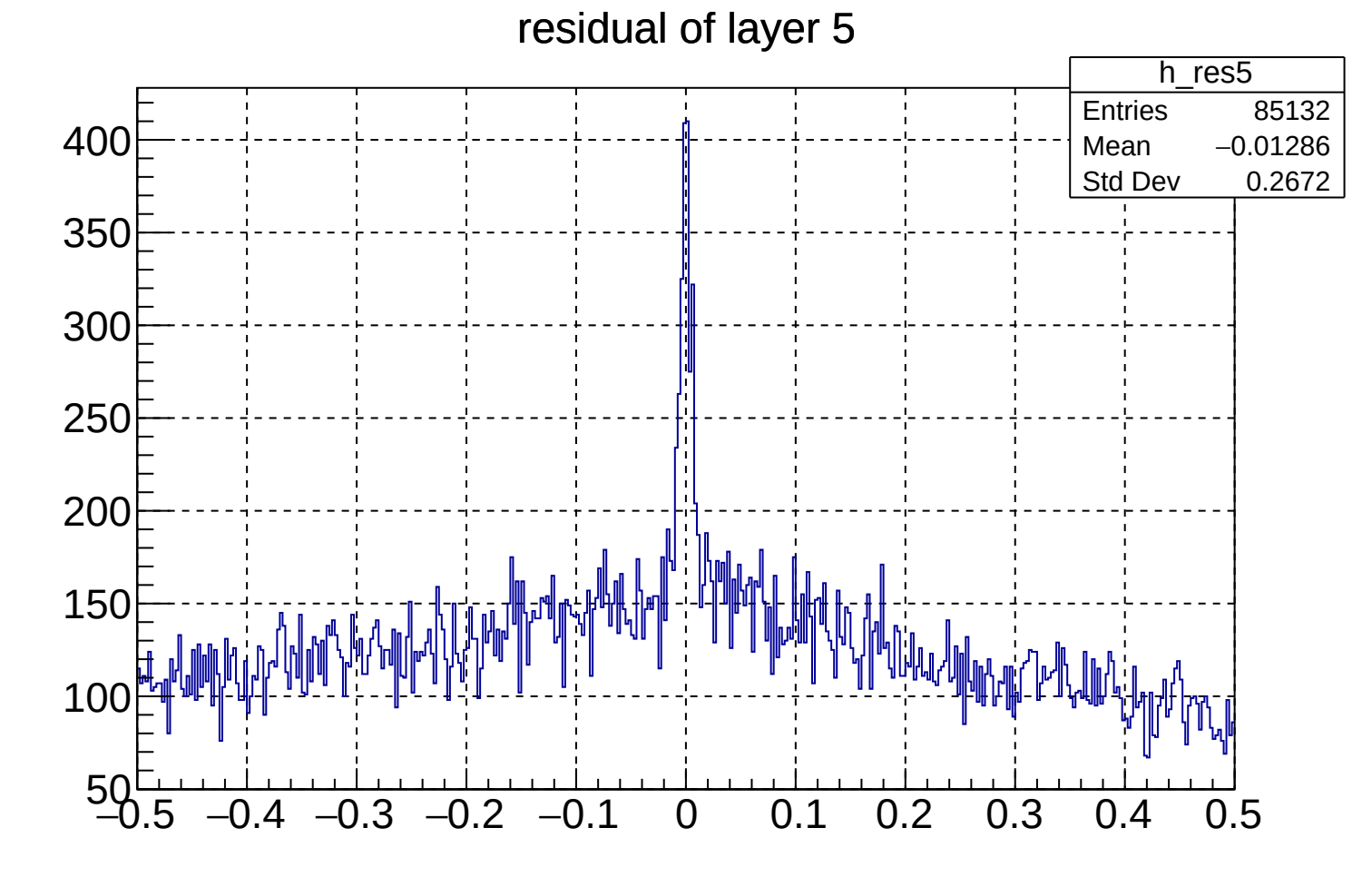

position of layer 6
h_pos6
Entries 85481
Mean −2.689
Std Dev 27.48
800
700
600
500
400
300
200
100
0
−100
−80
−60
−40
−20
0
20
40
60
80
100

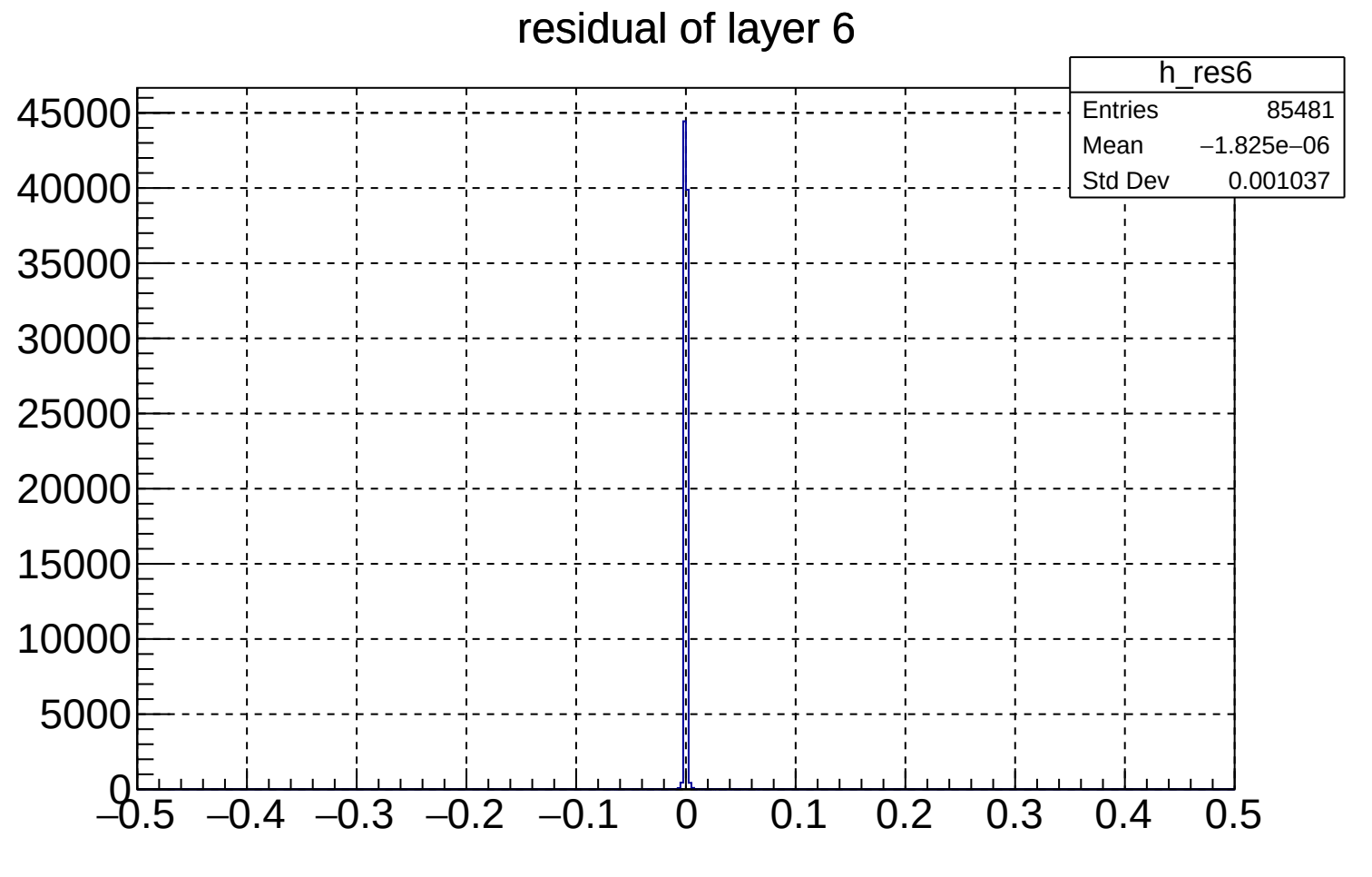

residual of layer 1
h_res1
Entries 50855
Mean −0.0004553
Std Dev 0.05154
24000
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
−0.5
−0.4
−0.3
−0.2
−0.1
0
0.1
0.2
0.3
0.4
0.5

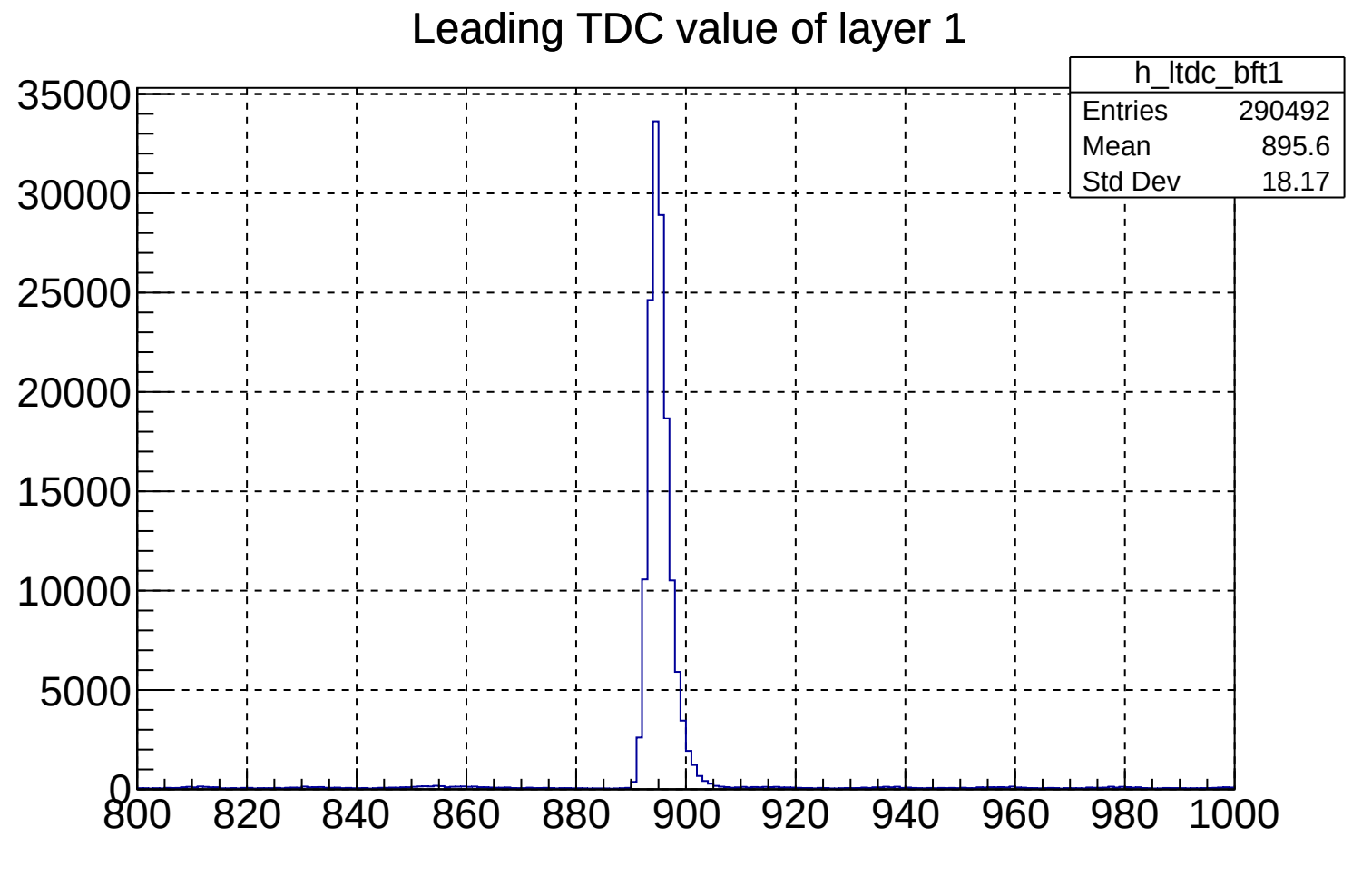

residual of layer 2
h_res2
Entries 83235
Mean 0.0001166
Std Dev 0.0269
40000
35000
30000
25000
20000
15000
10000
5000
0
–0.5
–0.4
–0.3
–0.2
–0.1
0
0.1
0.2
0.3
0.4
0.5

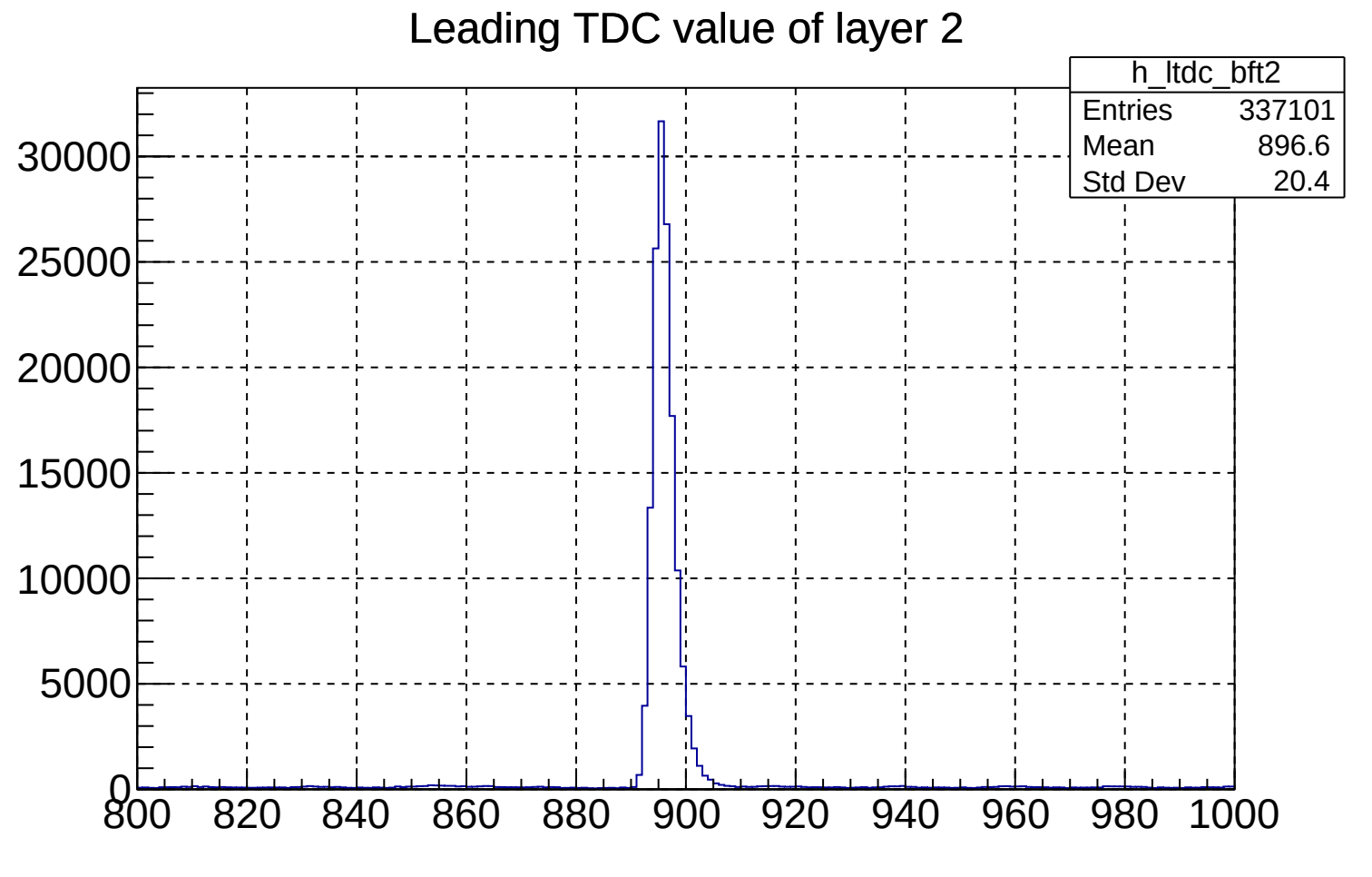

residual of layer 3
h_res3
Entries 51913
Mean 0.0001809
Std Dev 0.03468
24000
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
–0.5
–0.4
–0.3
–0.2
–0.1
0
0.1
0.2
0.3
0.4
0.5

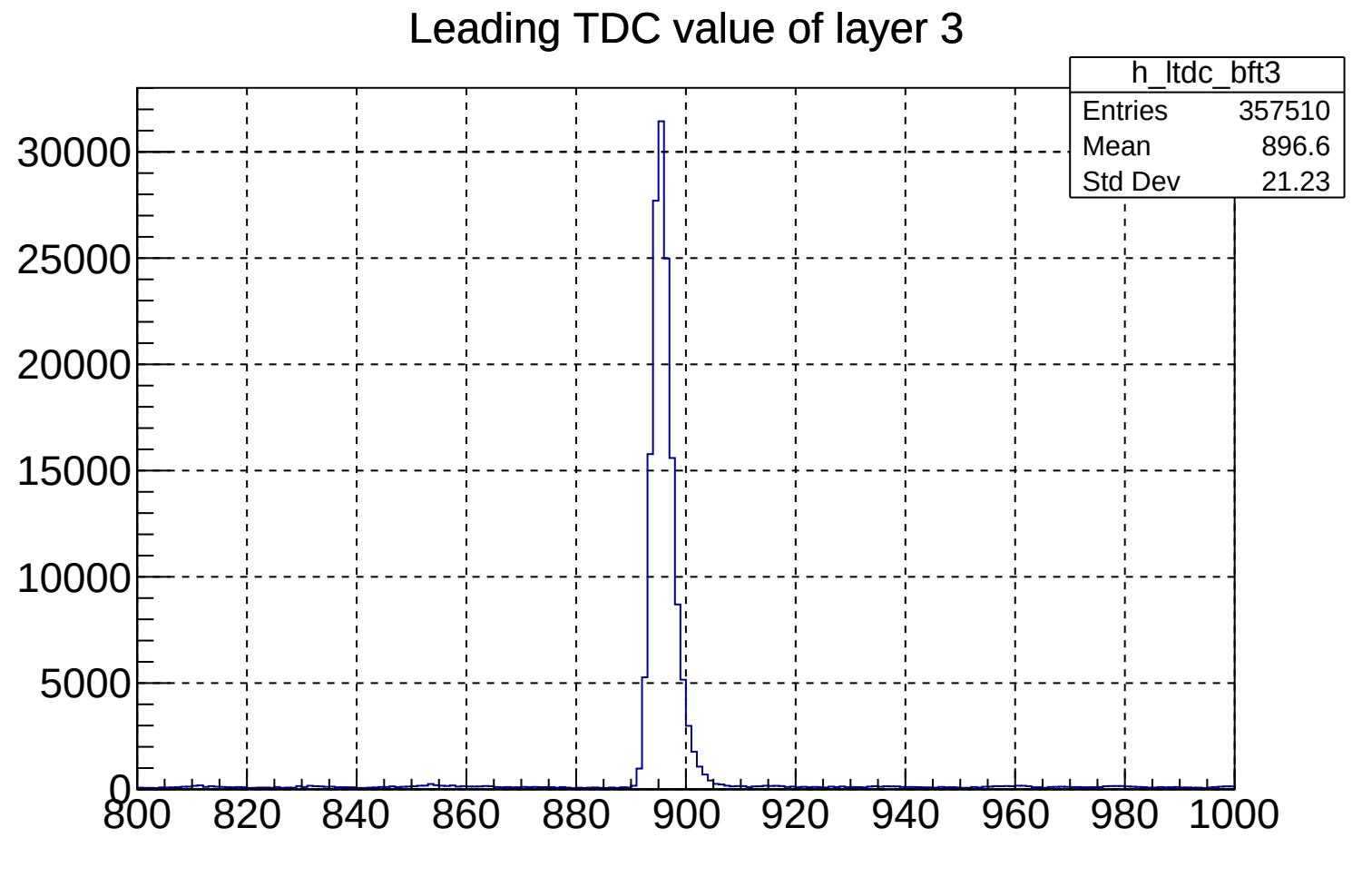

residual of layer 4
h_res4
Entries 85019
Mean −3.978e−06
Std Dev 0.001892
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
−0.5
−0.4
−0.3
−0.2
−0.1
0
0.1
0.2
0.3
0.4
0.5

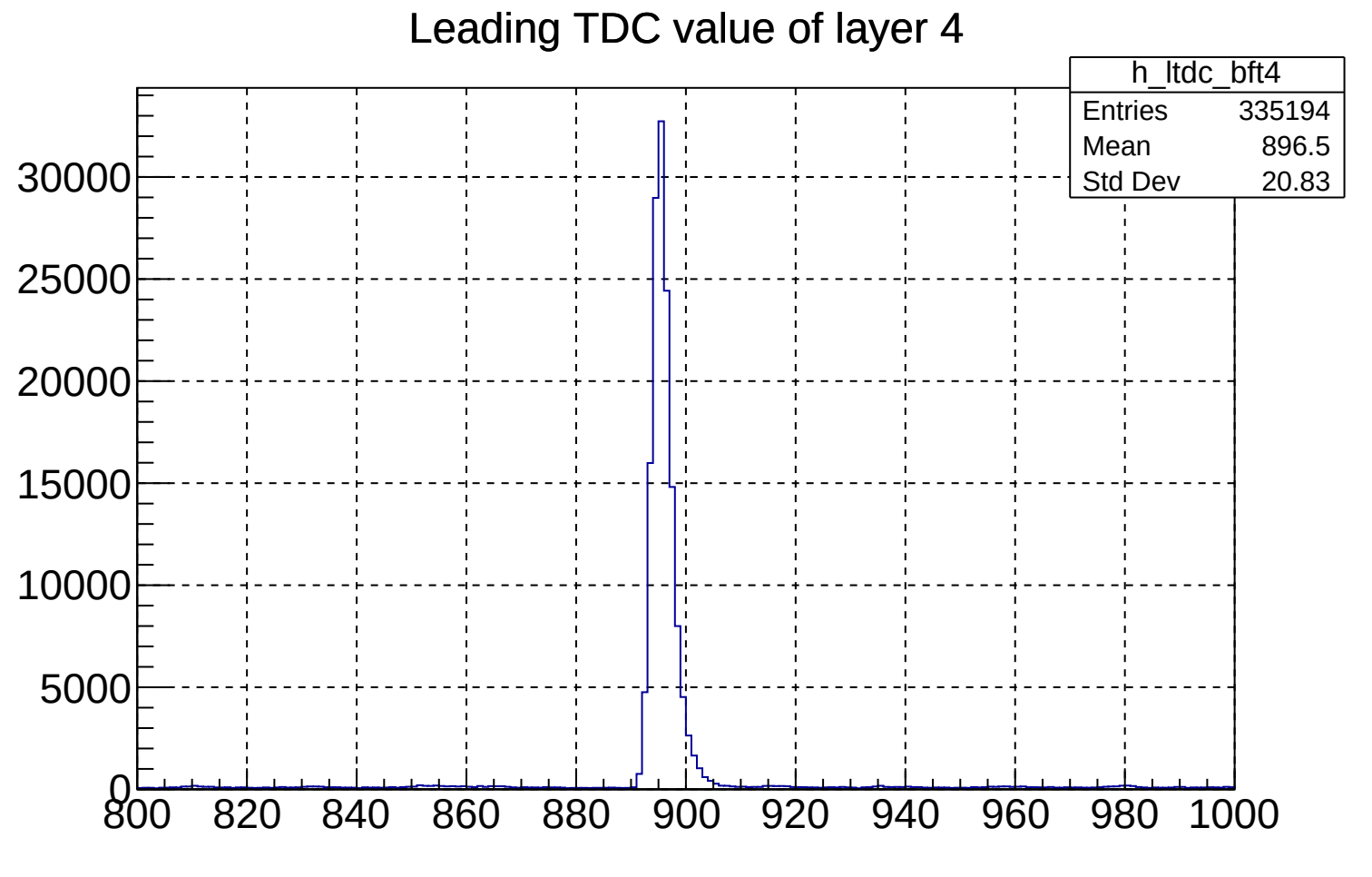

residual of layer 5
h_res5
Entries 85132
Mean –0.01286
Std Dev 0.2672
400
350
300
250
200
150
100
50
–0.5
–0.4
–0.3
–0.2
–0.1
0
0.1
0.2
0.3
0.4
0.5

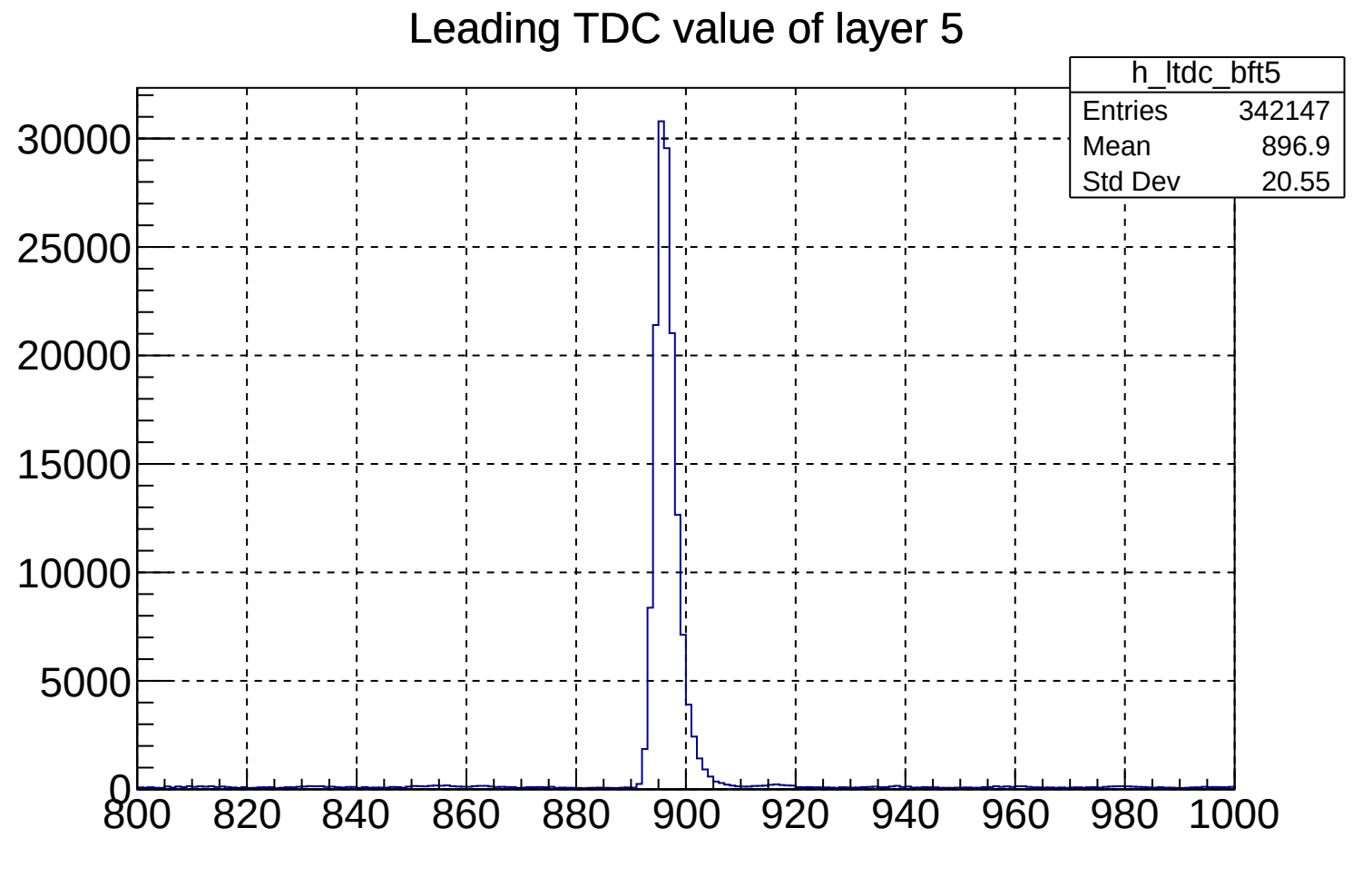

residual of layer 6
h_res6
Entries 85481
Mean −1.825e−06
Std Dev 0.001037
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
−0.5
−0.4
−0.3
−0.2
−0.1
0
0.1
0.2
0.3
0.4
0.5

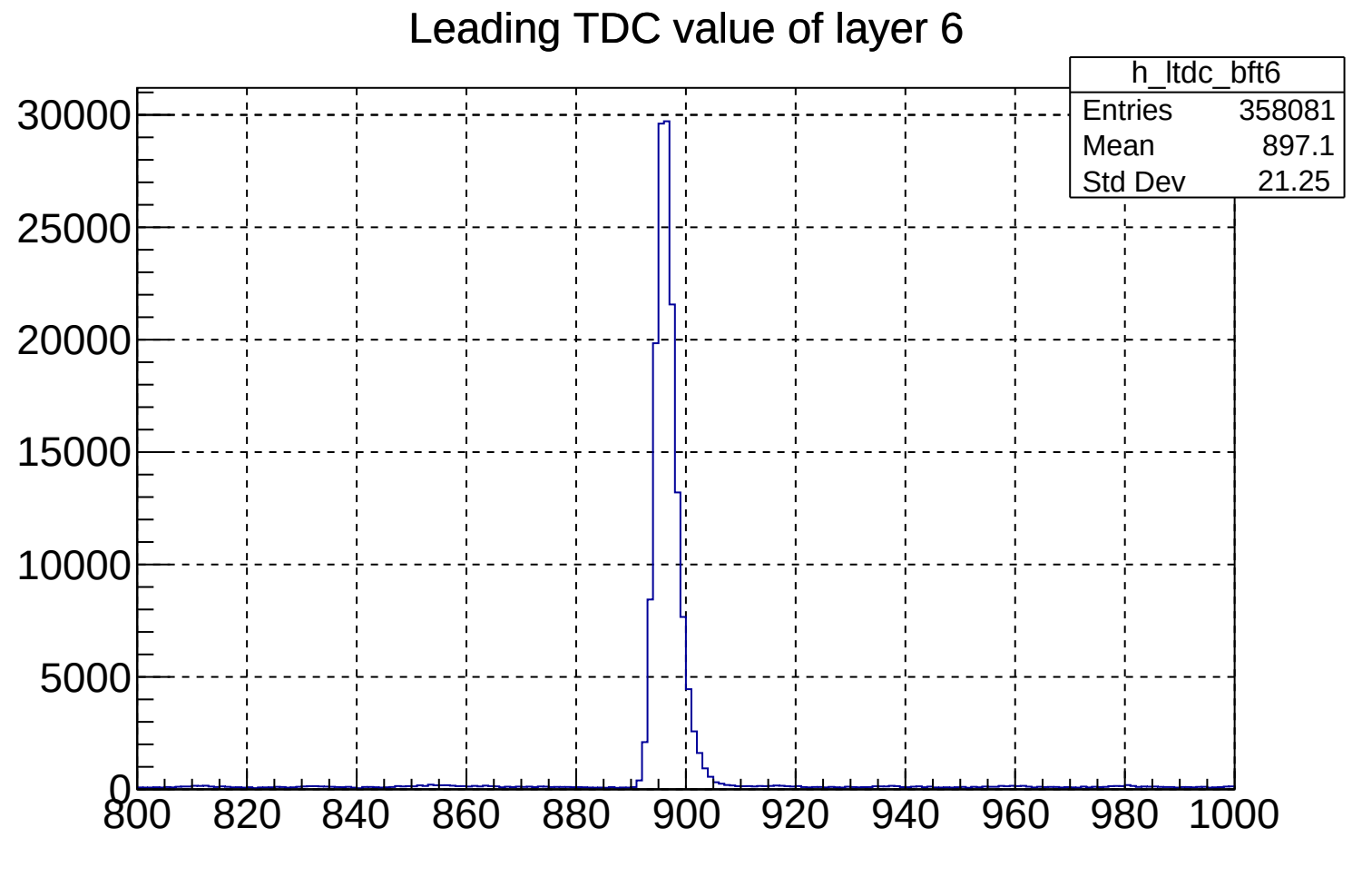

Leading TDC value of layer 1
h_ltdc_bft1
Entries 290492
Mean 895.6
Std Dev 18.17
35000
30000
25000
20000
15000
10000
5000
0
800
820
840
860
880
900
920
940
960
980
1000

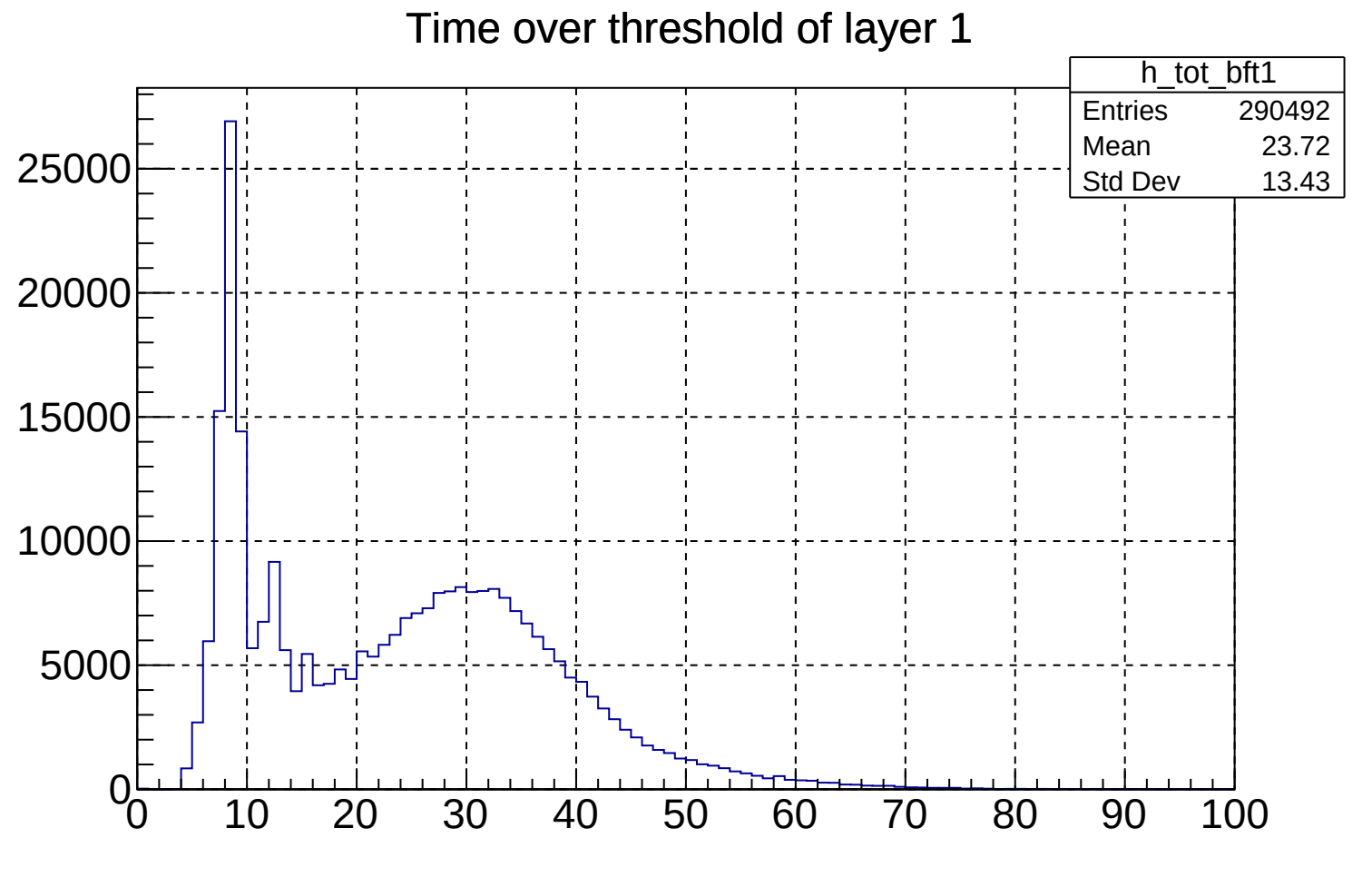

Leading TDC value of layer 2
h_ltdc_bft2
Entries 337101
Mean 896.6
Std Dev 20.4
30000
25000
20000
15000
10000
5000
0
800
820
840
860
880
900
920
940
960
980
1000

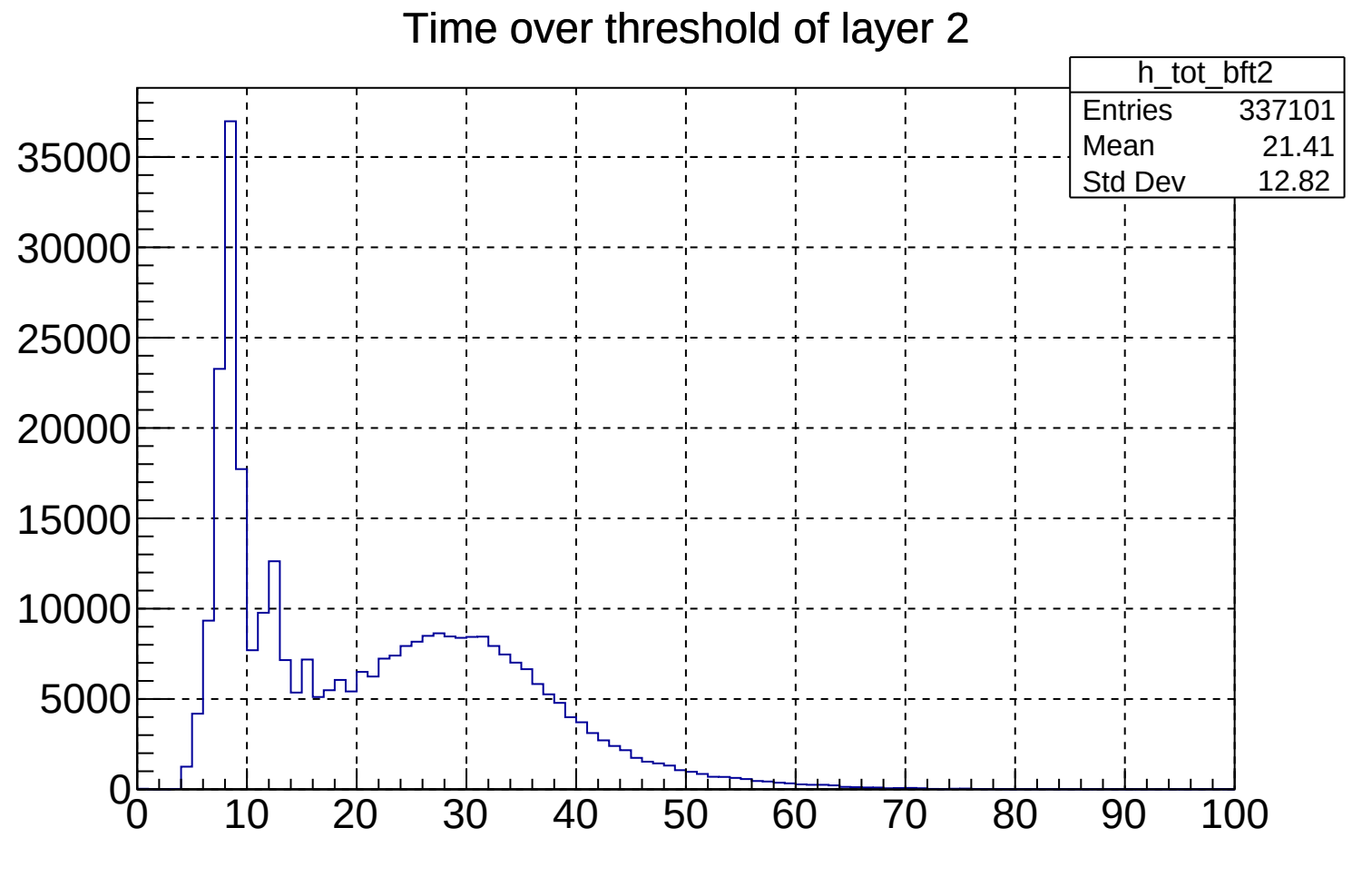

Leading TDC value of layer 3
h_ltdc_bft3
Entries 357510
Mean 896.6
Std Dev 21.23
30000
25000
20000
15000
10000
5000
0
800
820
840
860
880
900
920
940
960
980
1000

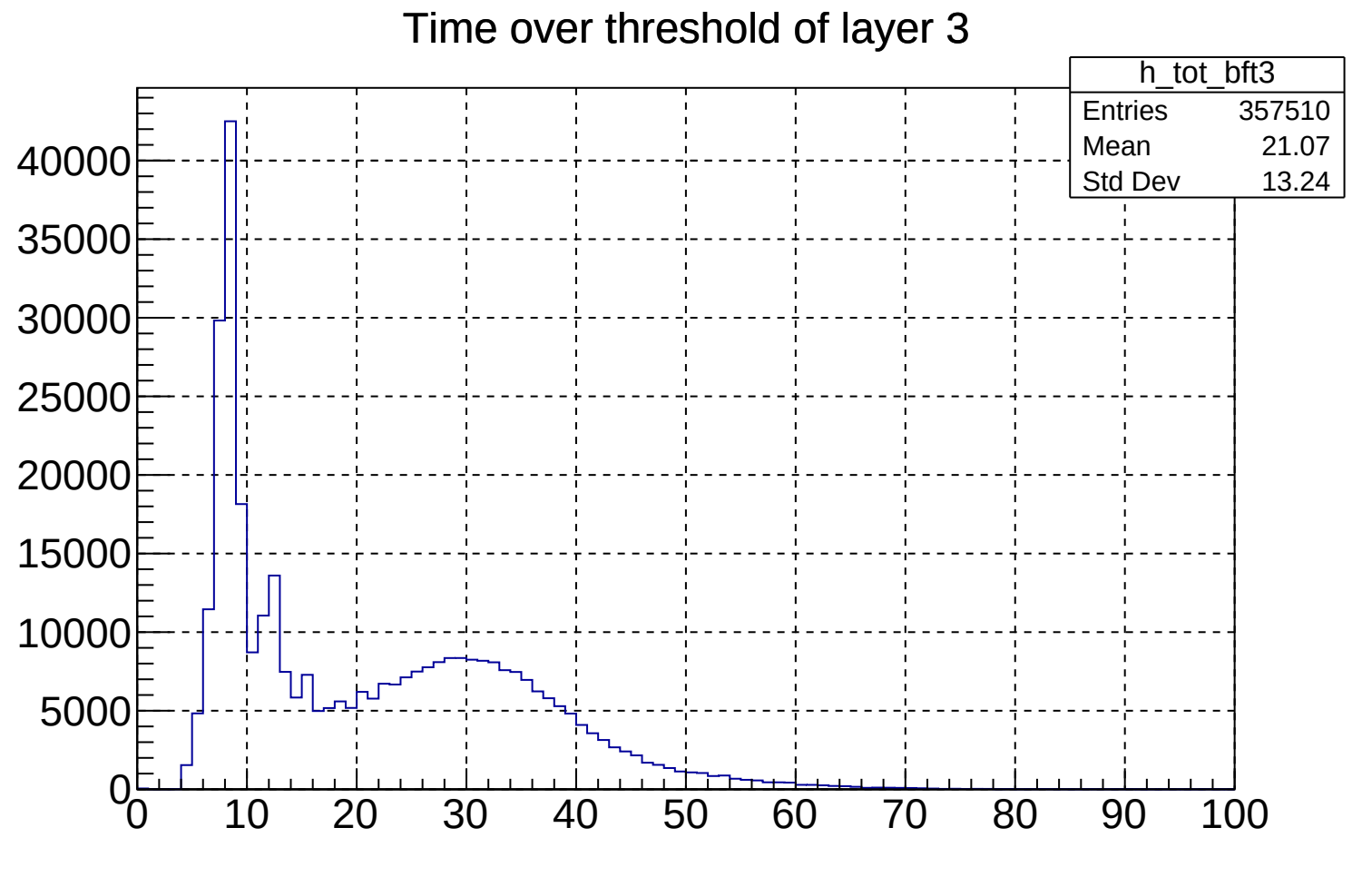

Leading TDC value of layer 4
h_ltdc_bft4
Entries 335194
Mean 896.5
Std Dev 20.83
30000
25000
20000
15000
10000
5000
0
800
820
840
860
880
900
920
940
960
980
1000

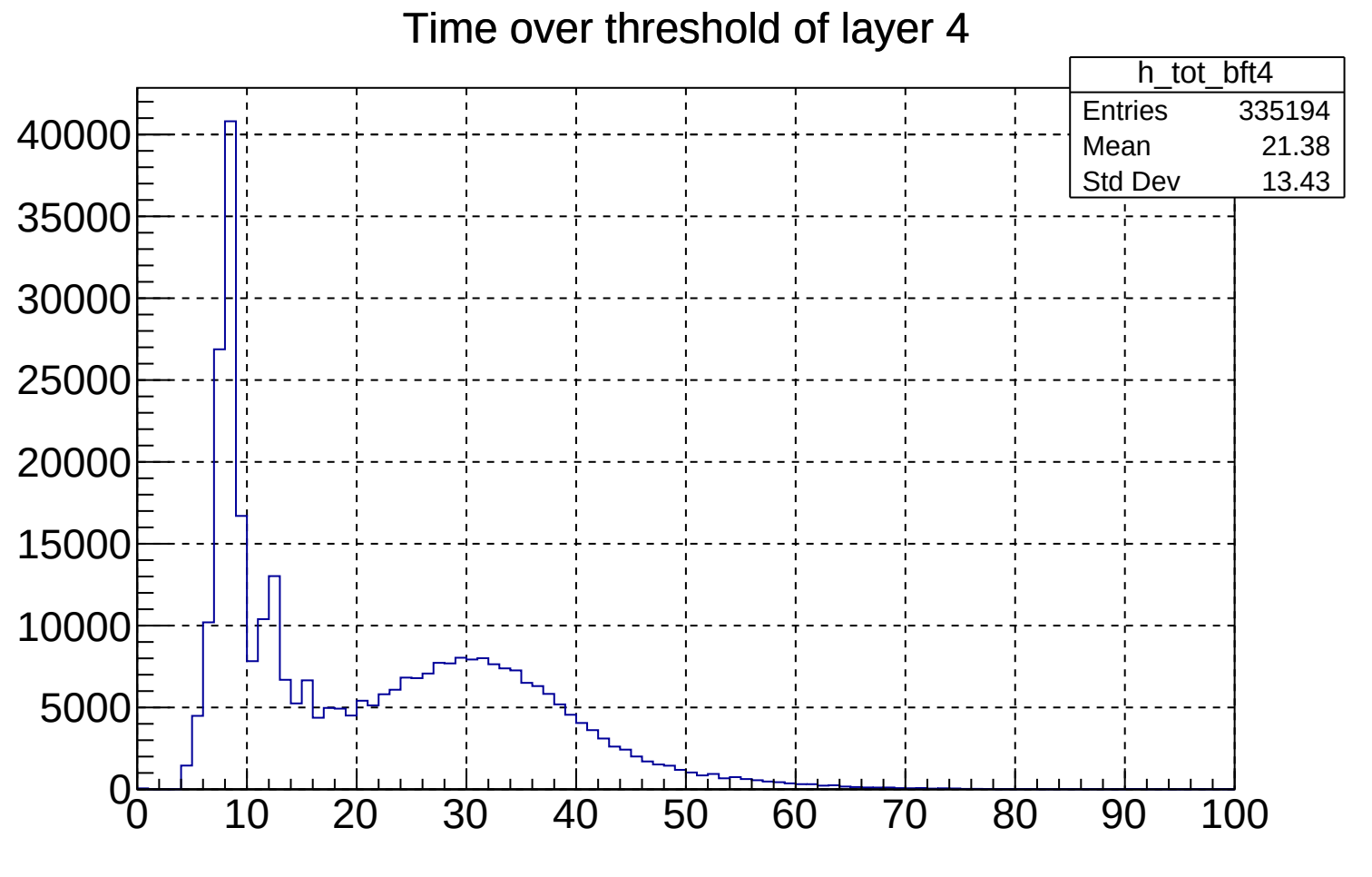

Leading TDC value of layer 5
h_ltdc_bft5
Entries 342147
Mean 896.9
Std Dev 20.55
30000
25000
20000
15000
10000
5000
0
800
820
840
860
880
900
920
940
960
980
1000

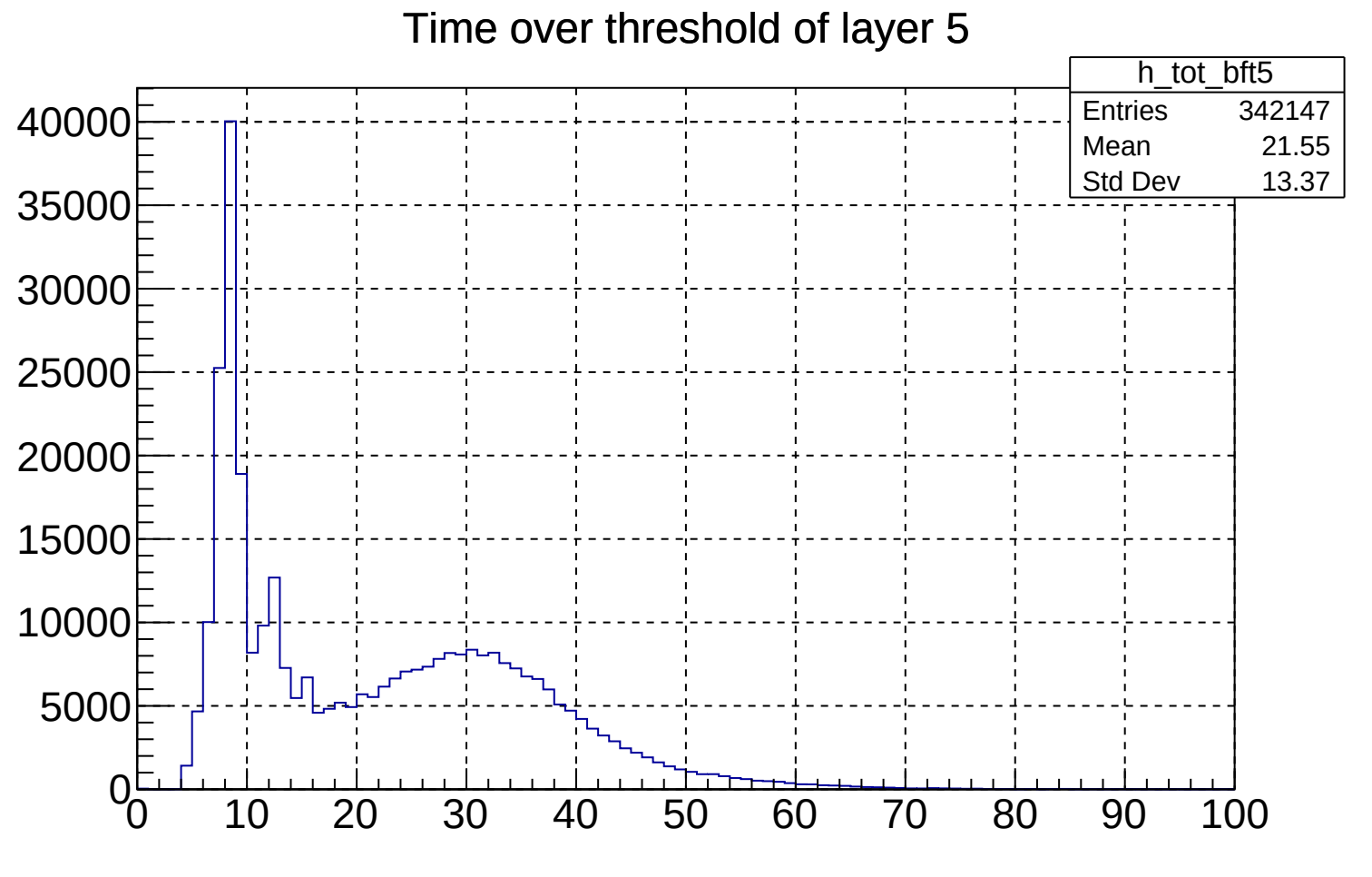

Leading TDC value of layer 6
h_ltdc_bft6
Entries 358081
Mean 897.1
Std Dev 21.25
30000
25000
20000
15000
10000
5000
0
800
820
840
860
880
900
920
940
960
980
1000

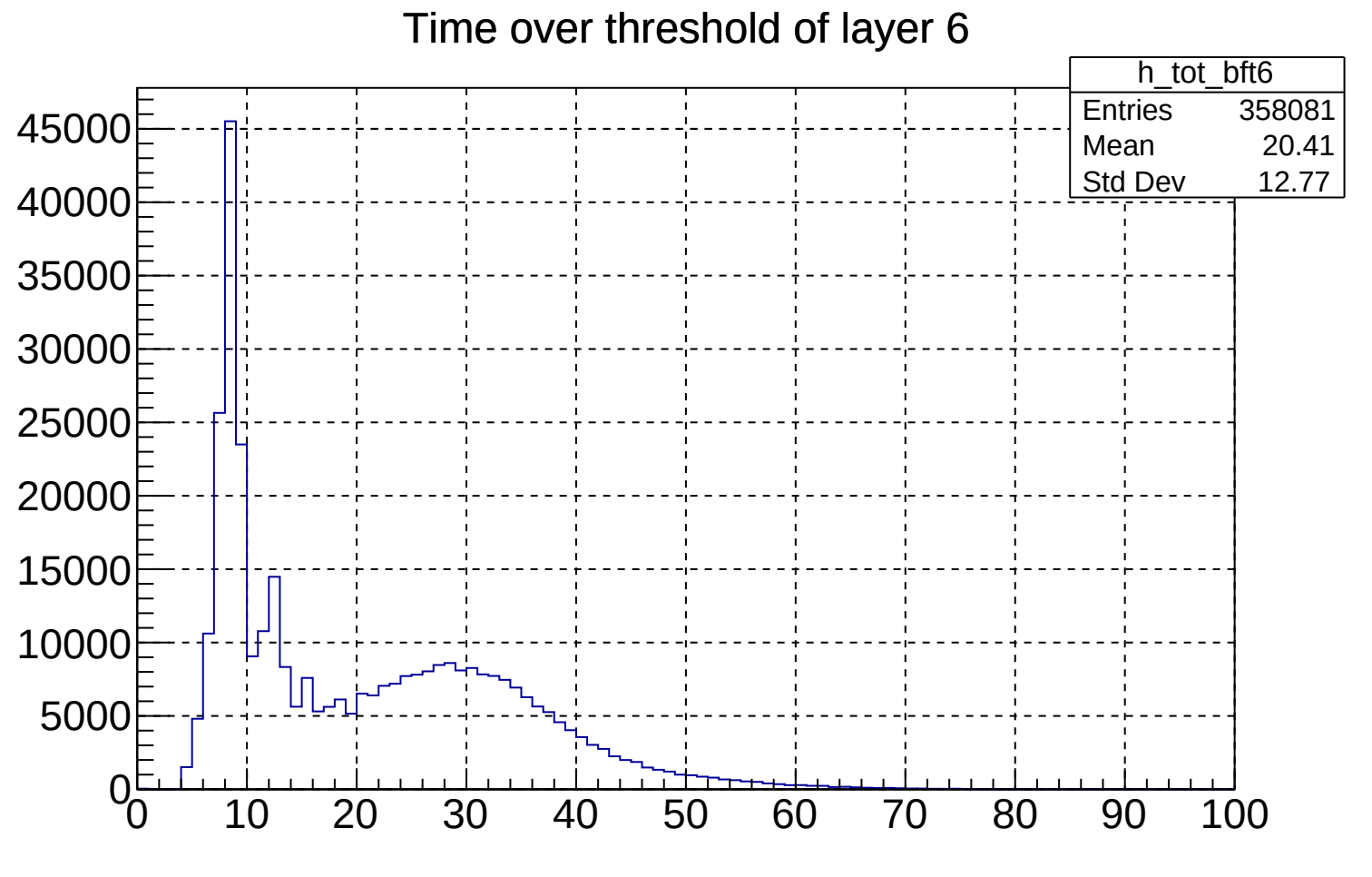

Time over threshold of layer 1
h_tot_bft1
Entries 290492
Mean 23.72
Std Dev 13.43
25000
20000
15000
10000
5000
0
0
10
20
30
40
50
60
70
80
90
100


Time over threshold of layer 2
h_tot_bft2
Entries 337101
Mean 21.41
Std Dev 12.82
35000
30000
25000
20000
15000
10000
5000
0
0
10
20
30
40
50
60
70
80
90
100


Time over threshold of layer 3
h_tot_bft3
Entries 357510
Mean 21.07
Std Dev 13.24
40000
35000
30000
25000
20000
15000
10000
5000
0
0
10
20
30
40
50
60
70
80
90
100


Time over threshold of layer 4
h_tot_bft4
Entries 335194
Mean 21.38
Std Dev 13.43
40000
35000
30000
25000
20000
15000
10000
5000
0
0
10
20
30
40
50
60
70
80
90
100


Time over threshold of layer 5
h_tot_bft5
Entries 342147
Mean 21.55
Std Dev 13.37
40000
35000
30000
25000
20000
15000
10000
5000
0
0
10
20
30
40
50
60
70
80
90
100


Time over threshold of layer 6
h_tot_bft6
Entries 358081
Mean 20.41
Std Dev 12.77
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
0
10
20
30
40
50
60
70
80
90
100