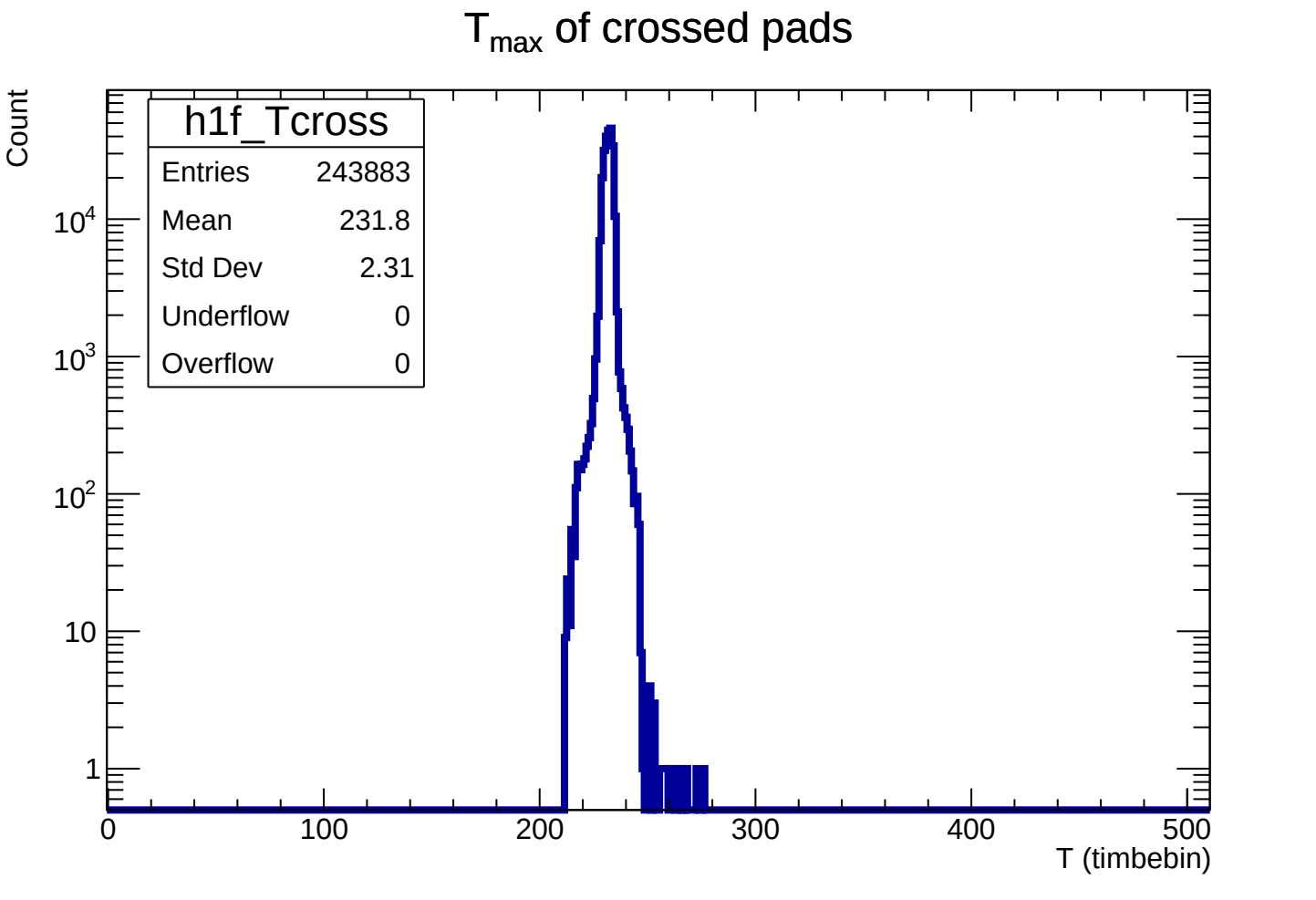
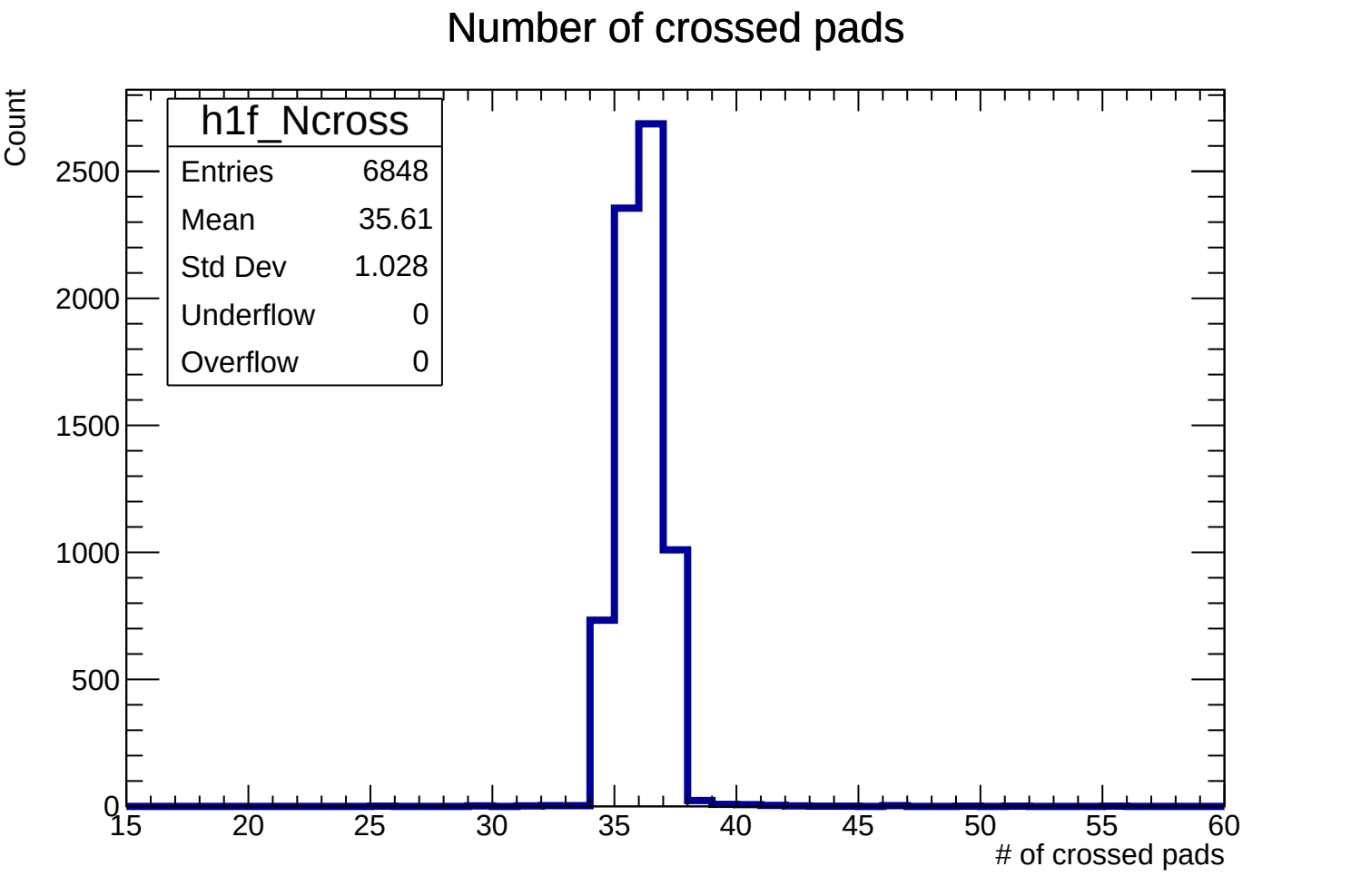
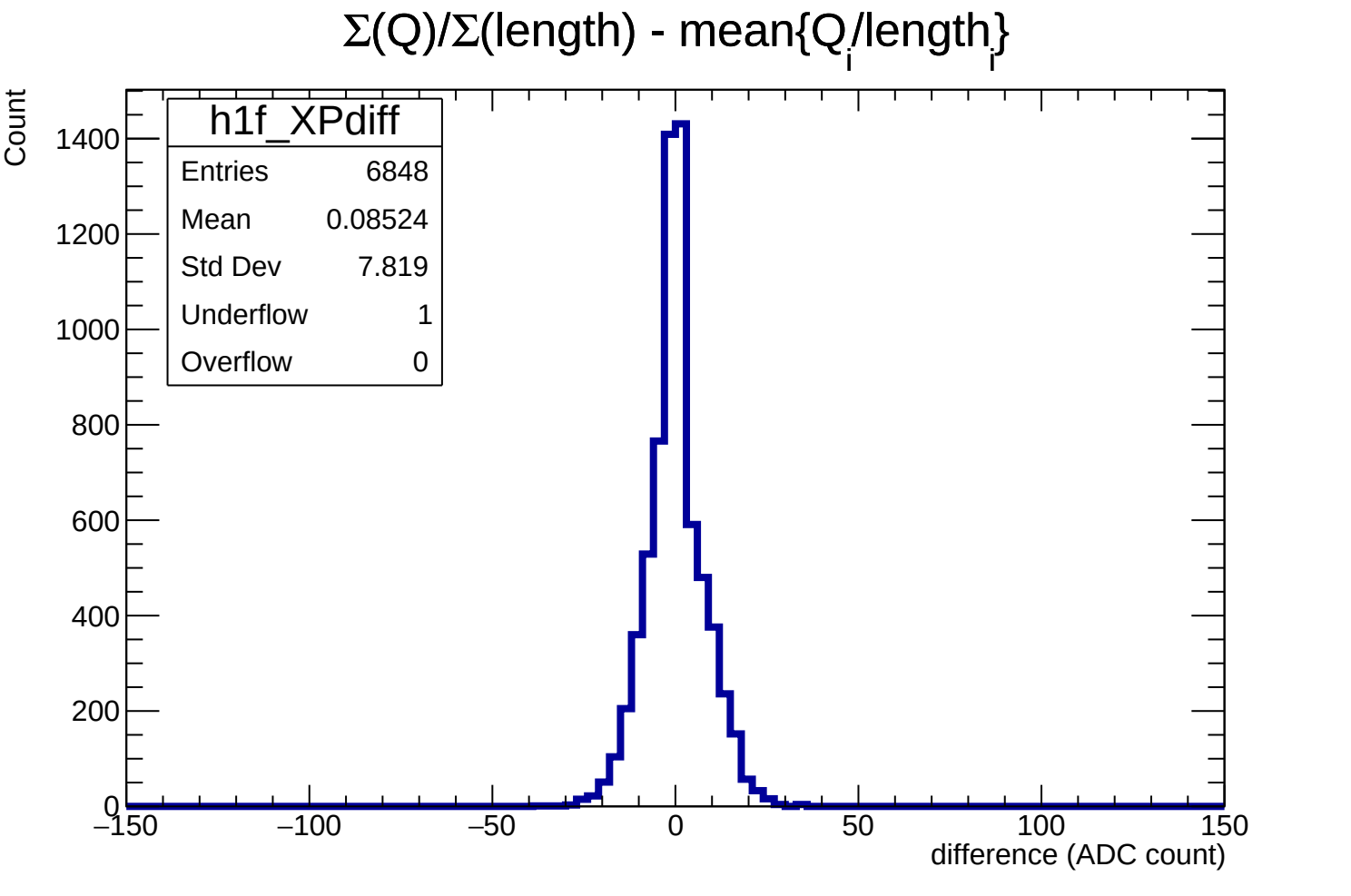
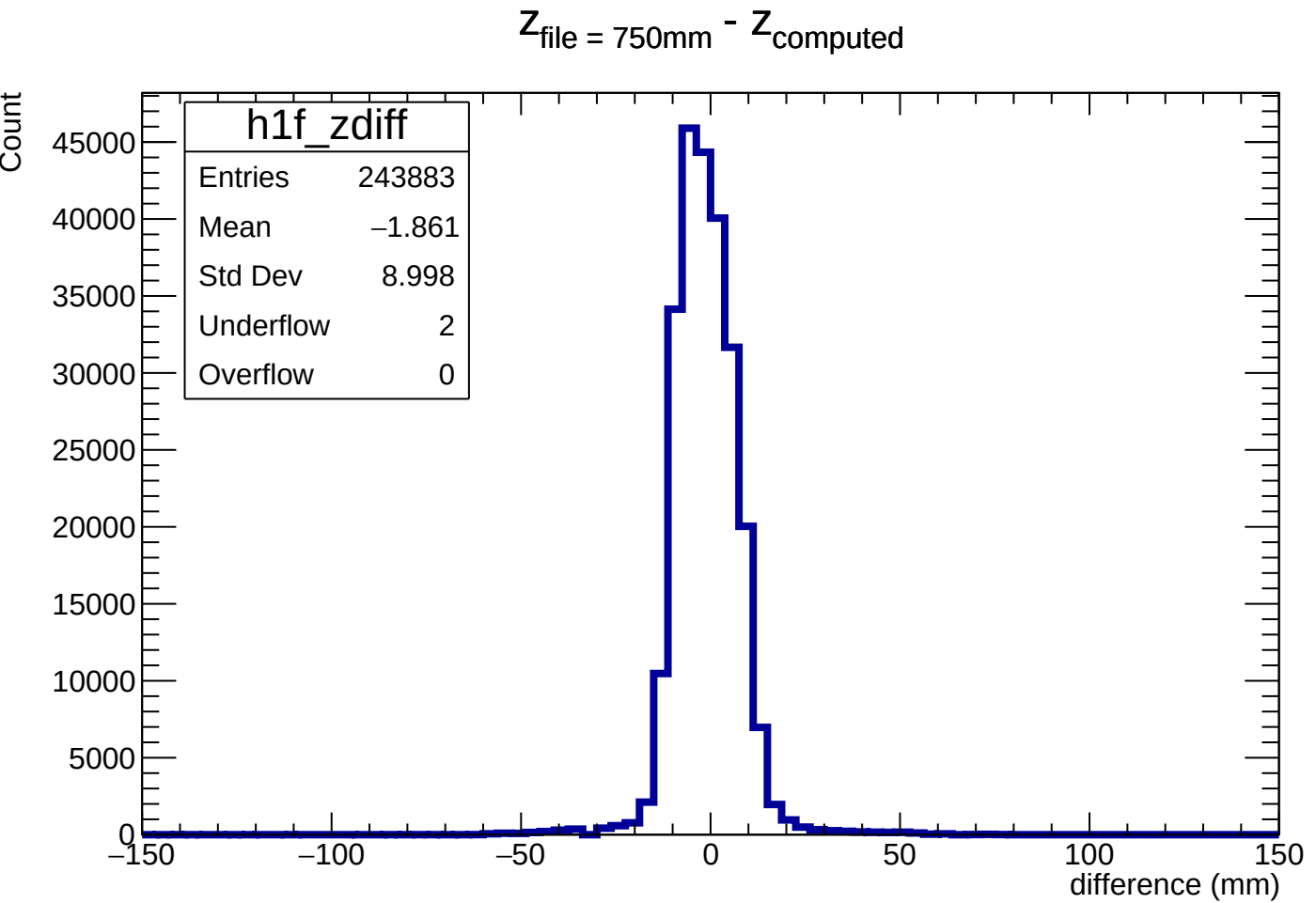
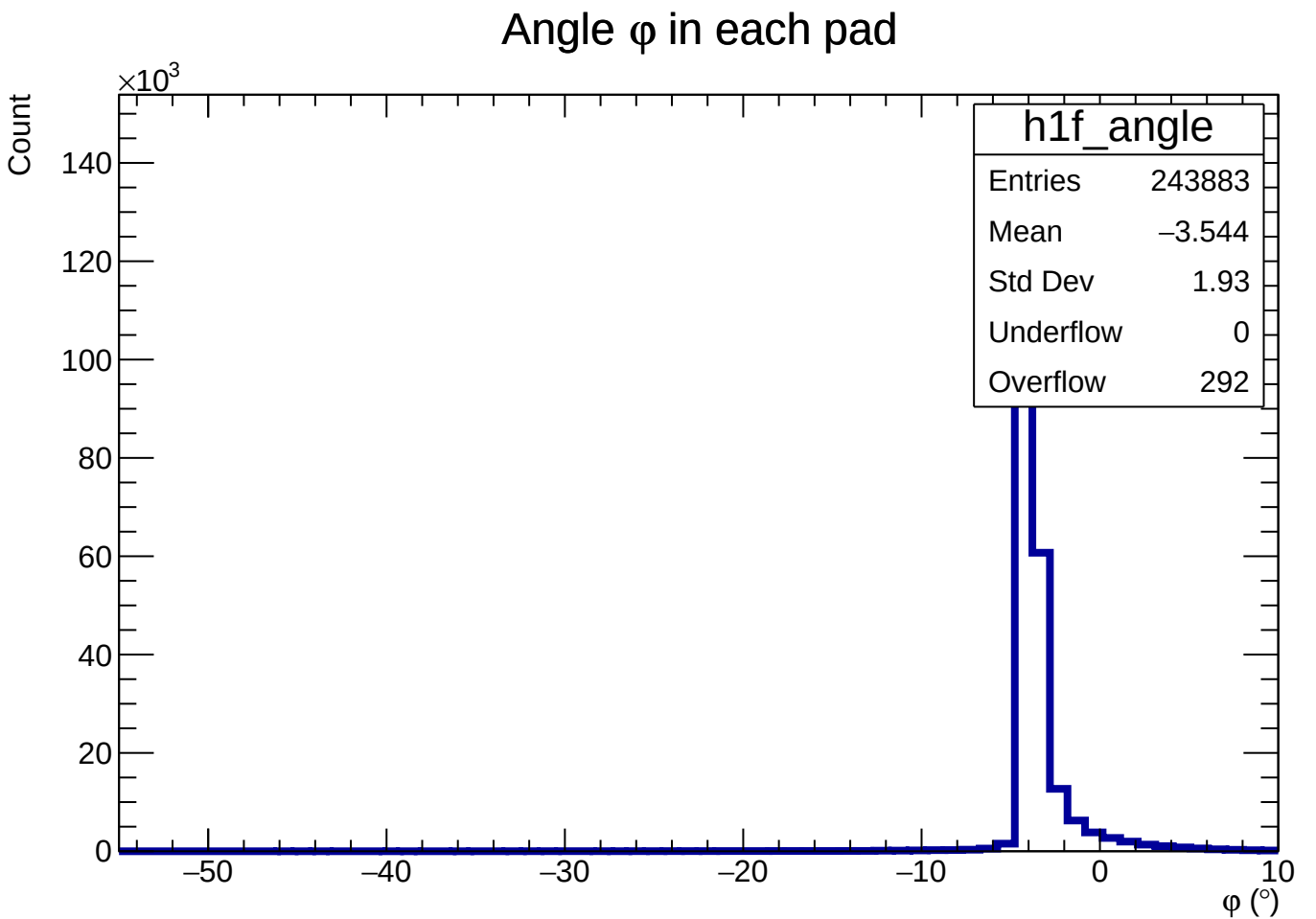
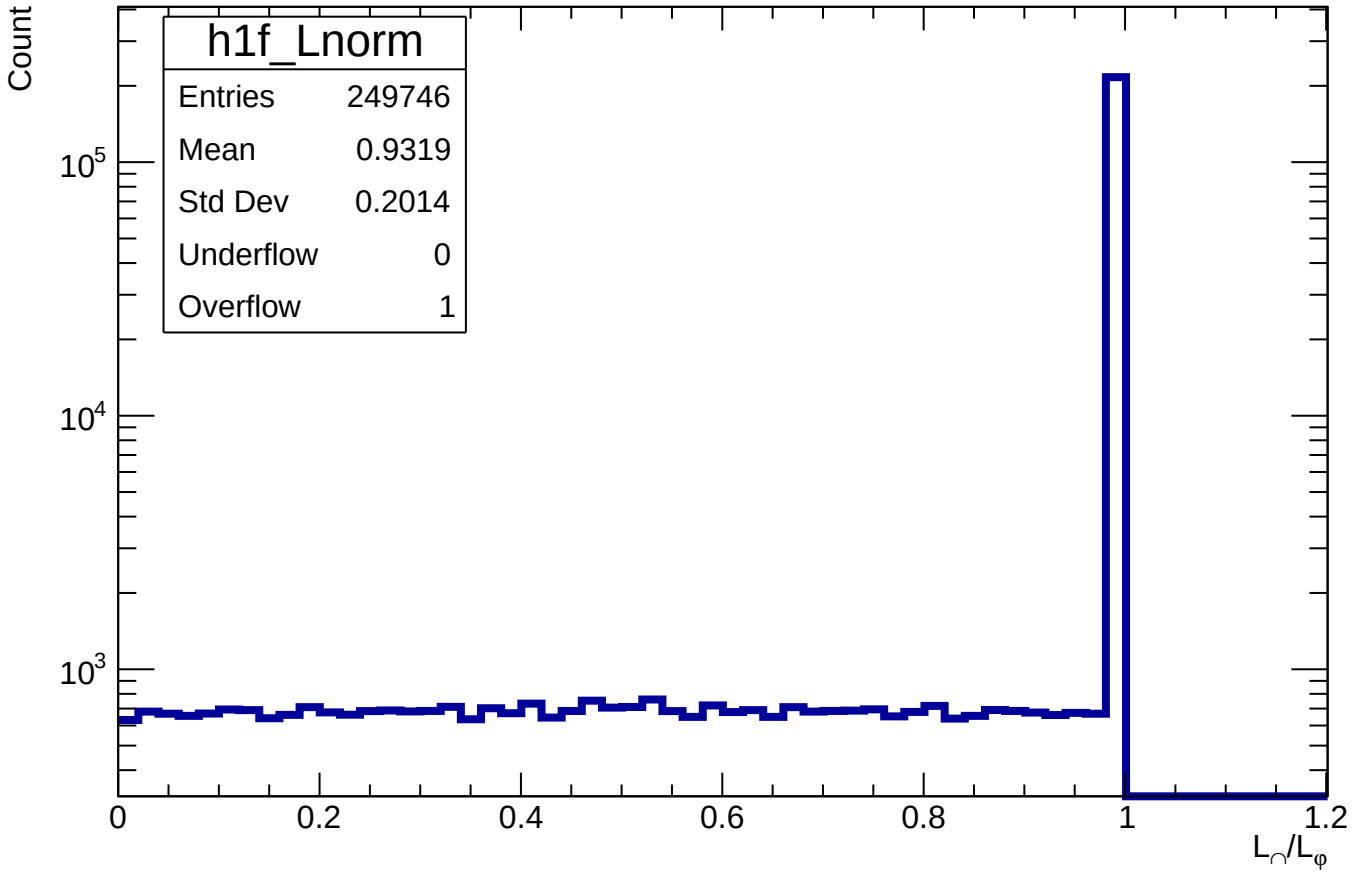

T_{max} of crossed pads
h1f_Tcross
Entries 243883
Mean 231.8
Std Dev 2.31
Underflow 0
Overflow 0
Count
10^4
10^3
10^2
10
1
0
100
200
300
400
500
T (timbebin)

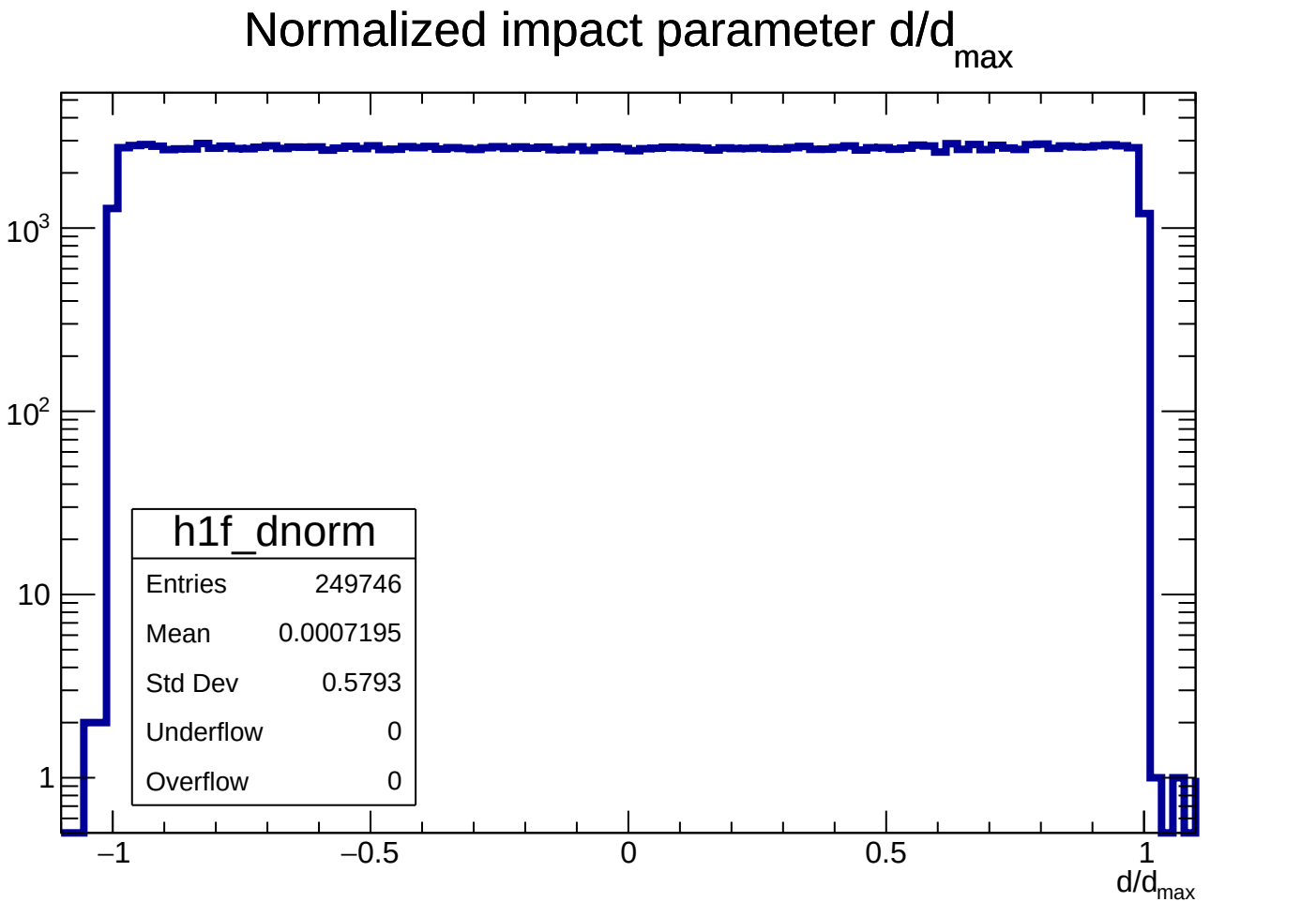

Number of crossed pads
h1f_Ncross
Entries 6848
Mean 35.61
Std Dev 1.028
Underflow 0
Overflow 0
Count
2500
2000
1500
1000
500
0
15
20
25
30
35
40
45
50
55
60
# of crossed pads

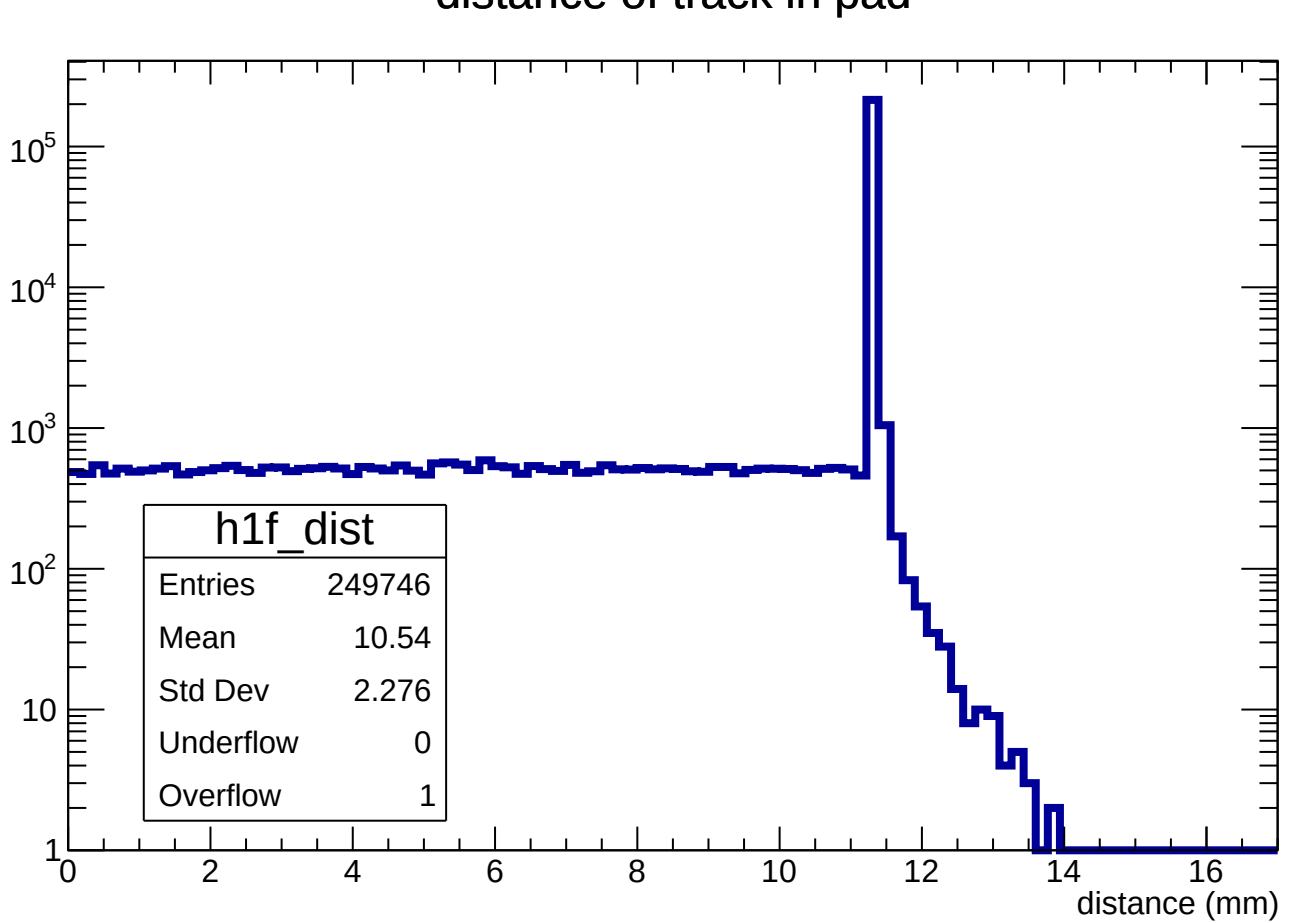

Σ(Q)/Σ(length) - mean{Q_i/length_i}
h1f_XPdiff
Entries 6848
Mean 0.08524
Std Dev 7.819
Underflow 1
Overflow 0
Count
1400
1200
1000
800
600
400
200
0
–150
–100
–50
0
50
100
150
difference (ADC count)

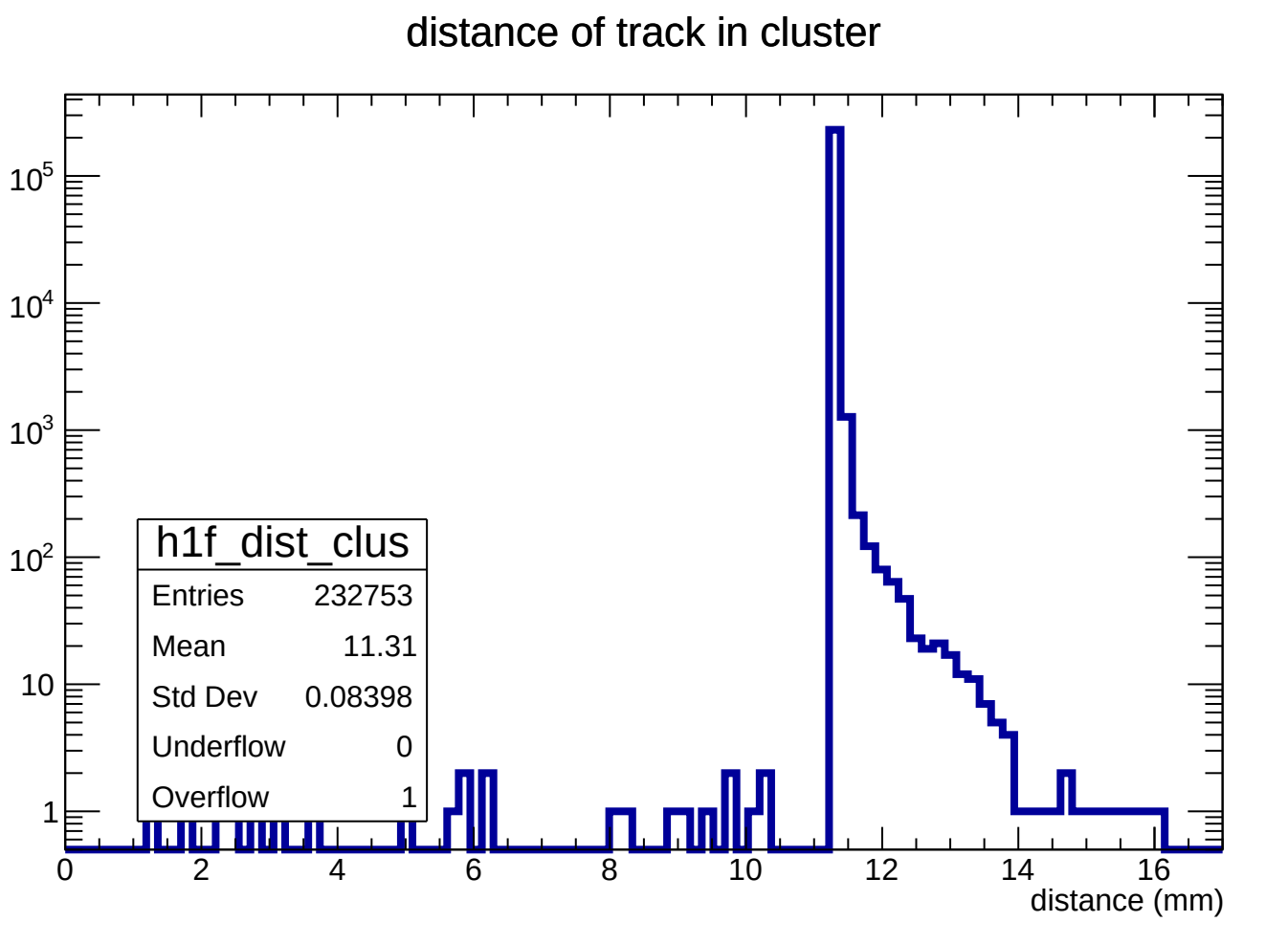

$z_{file = 750mm} - z_{computed}$
h1f_zdiff
Entries 243883
Mean –1.861
Std Dev 8.998
Underflow 2
Overflow 0
Count
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
–150
–100
–50
0
50
100
150
difference (mm)

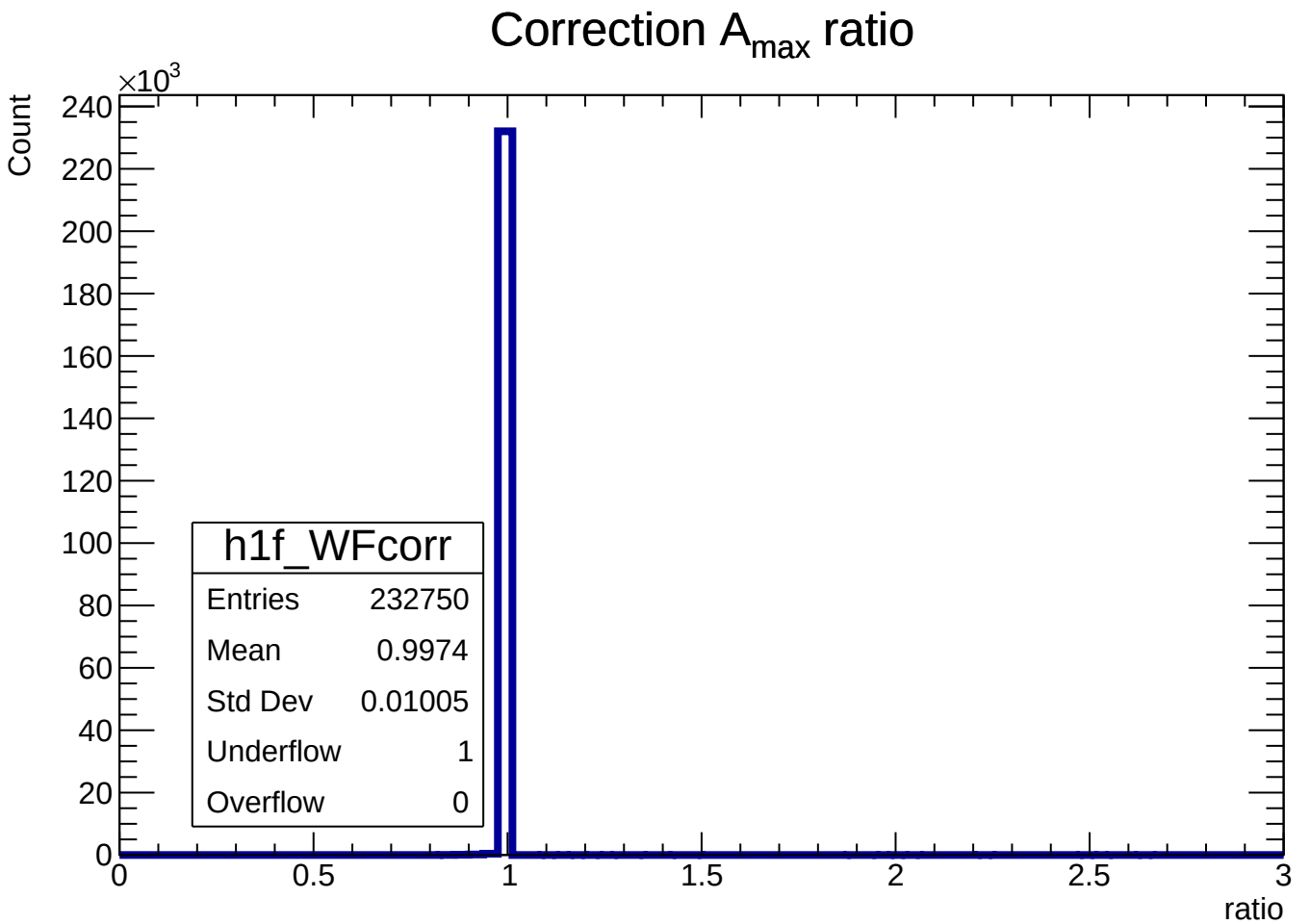

Angle φ in each pad
Count
×10^3
140
120
100
80
60
40
20
0
h1f_angle
Entries 243883
Mean –3.544
Std Dev 1.93
Underflow 0
Overflow 292
–50
–40
–30
–20
–10
0
10
φ (°)

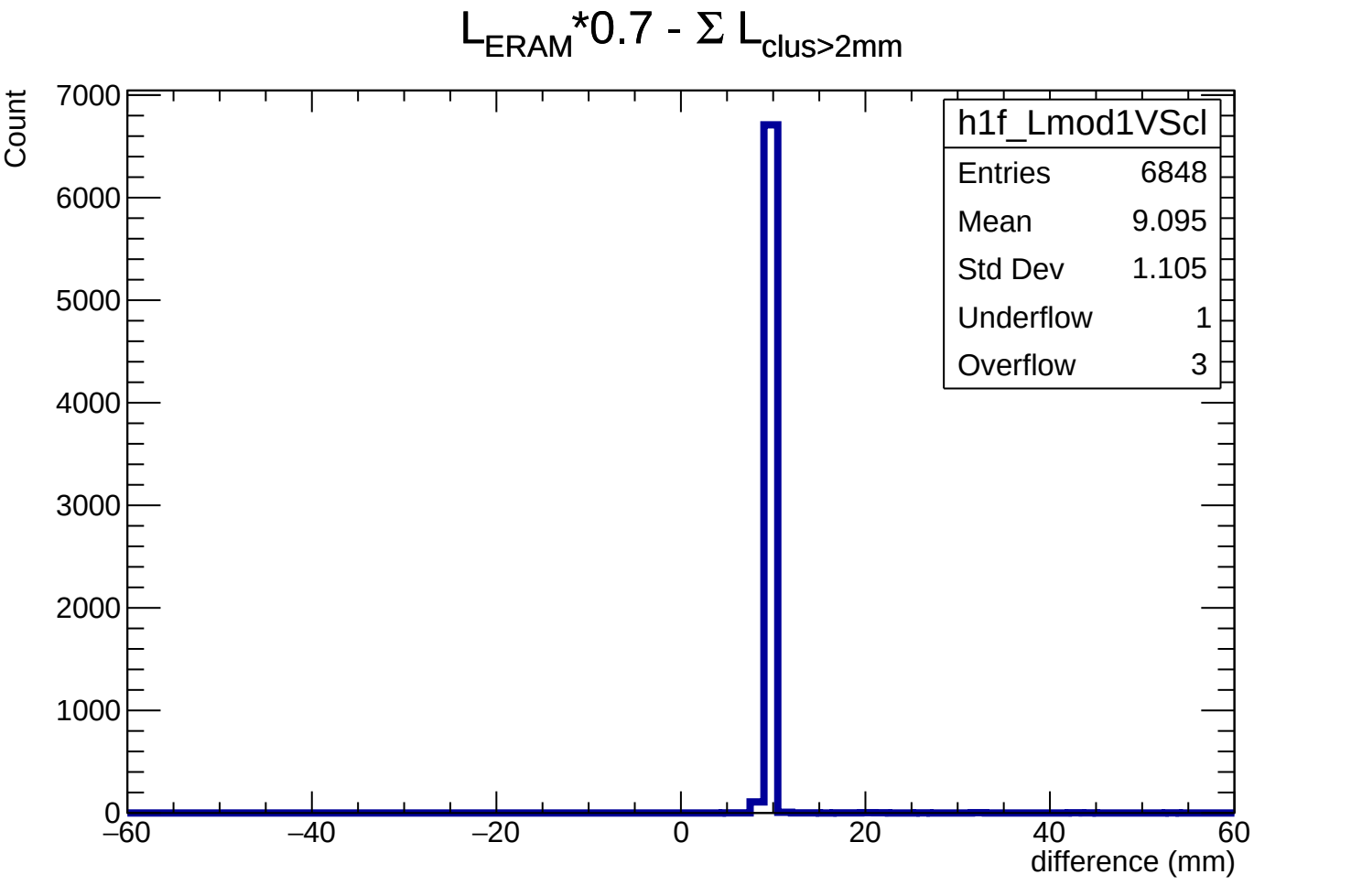

Length in pad normalized to maximum length in pad for a given φ
h1f_Lnorm
Entries 249746
Mean 0.9319
Std Dev 0.2014
Underflow 0
Overflow 1
Count
10^5
10^4
10^3
0
0.2
0.4
0.6
0.8
1
1.2
L_⌒/L_φ

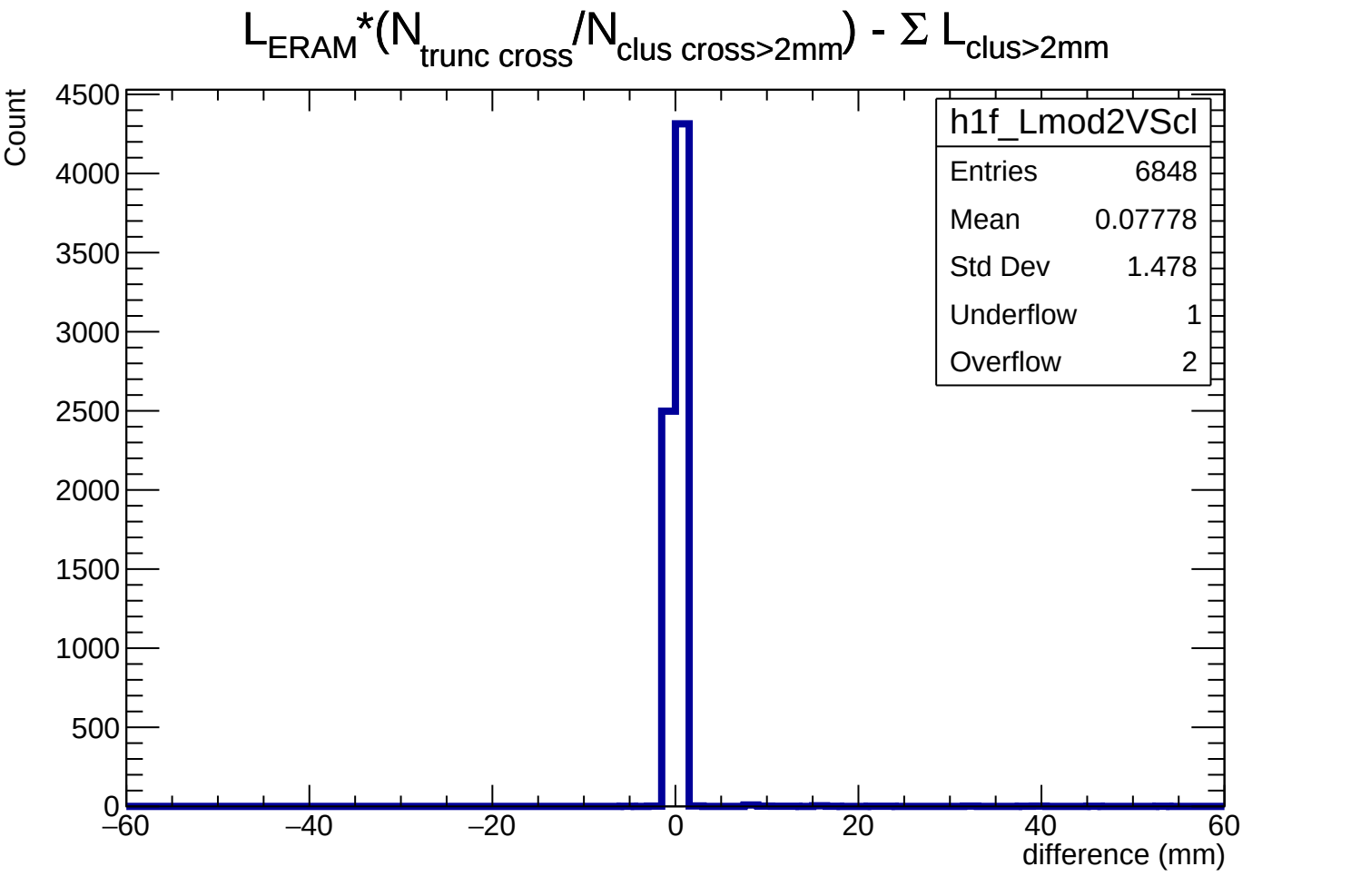

Normalized impact parameter d/d max
10 3
10 2
10
1
h1f_dnorm
Entries 249746
Mean 0.0007195
Std Dev 0.5793
Underflow 0
Overflow 0
−1
−0.5
0
0.5
1
d/d max

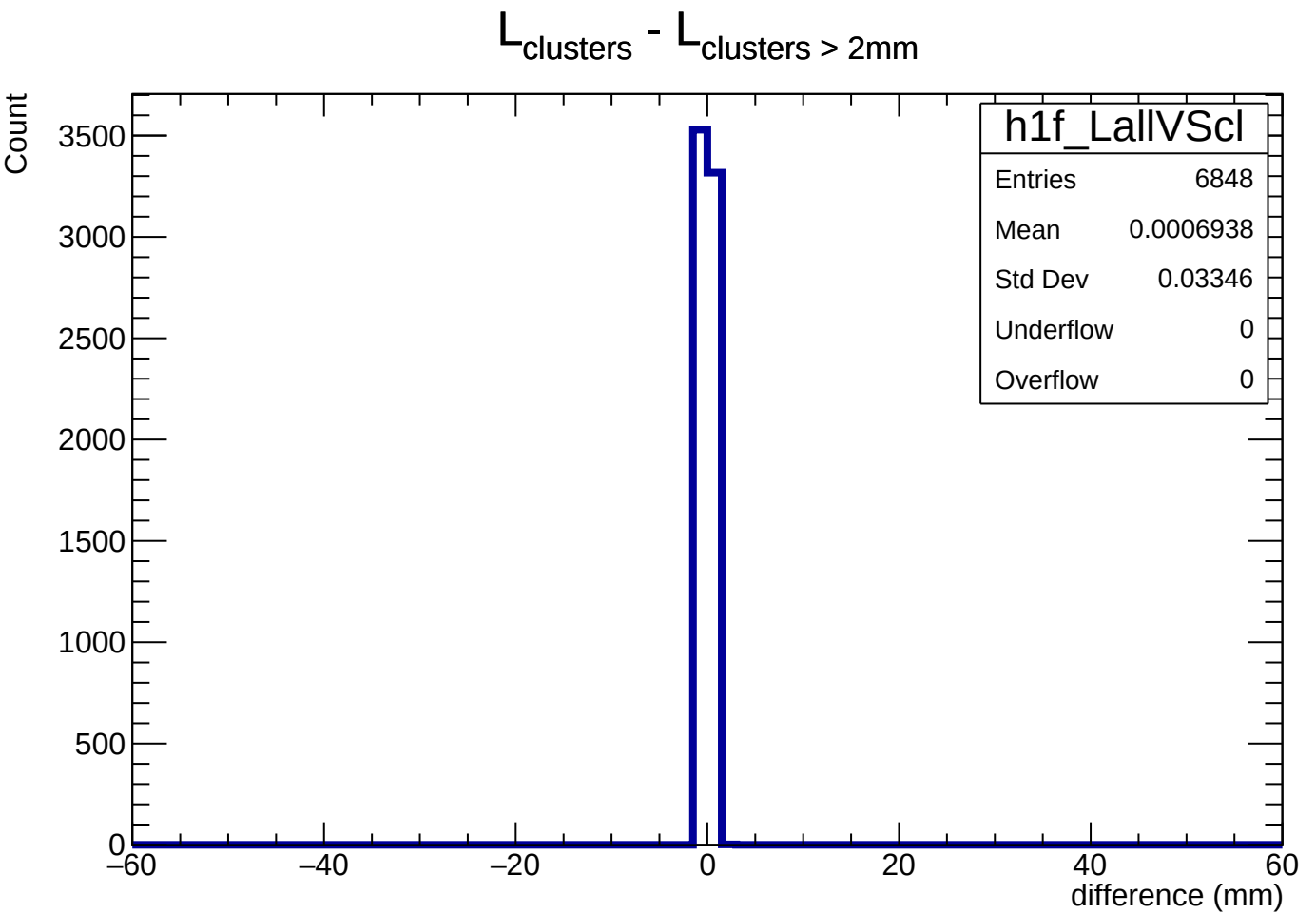

distance of track in pad
h1f_dist
Entries 249746
Mean 10.54
Std Dev 2.276
Underflow 0
Overflow 1
10^5
10^4
10^3
10^2
10
1
0
2
4
6
8
10
12
14
16
distance (mm)

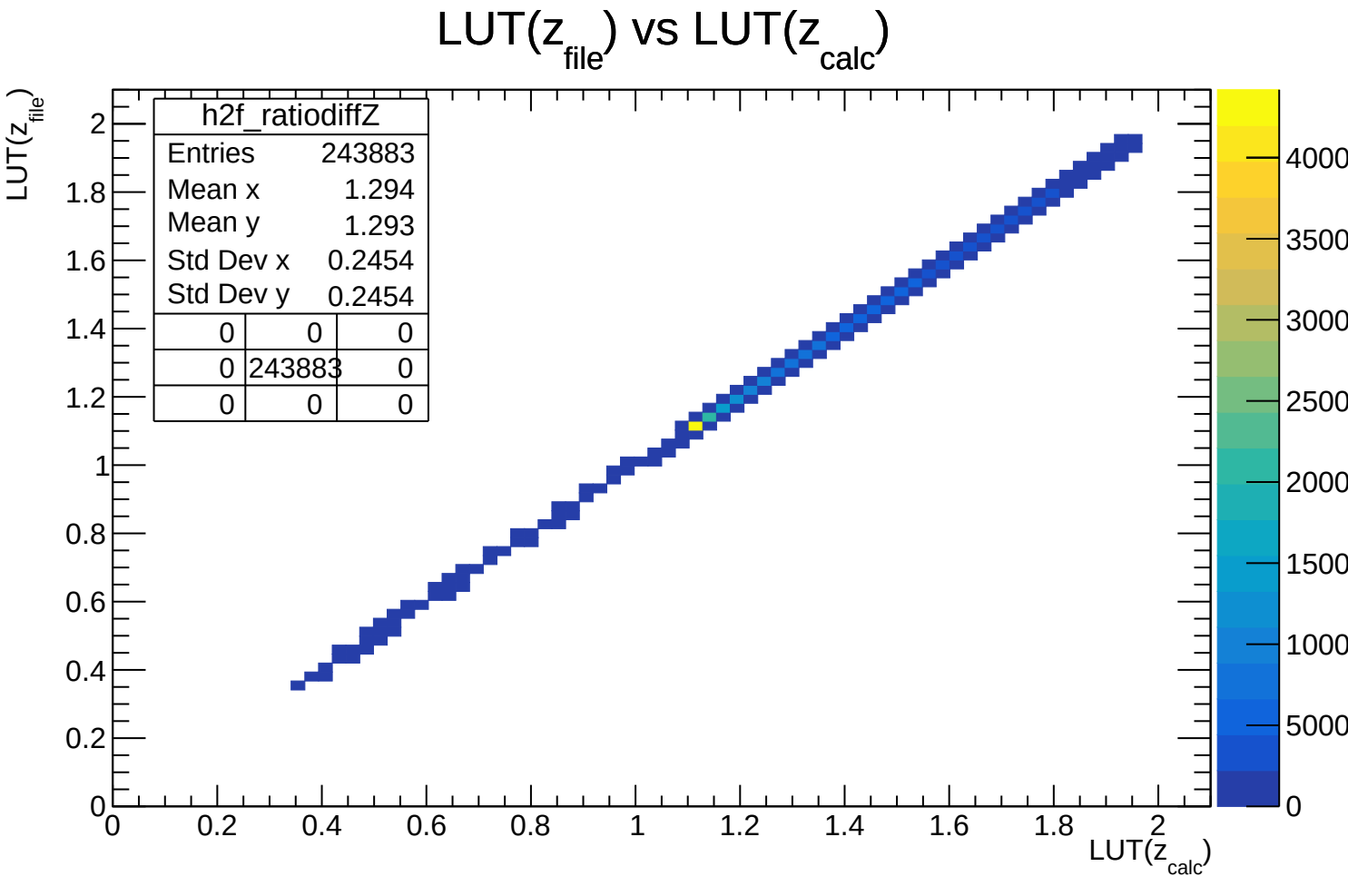

distance of track in cluster
h1f_dist_clus
Entries 232753
Mean 11.31
Std Dev 0.08398
Underflow 0
Overflow 1
10^5
10^4
10^3
10^2
10
1
0
2
4
6
8
10
12
14
16
distance (mm)

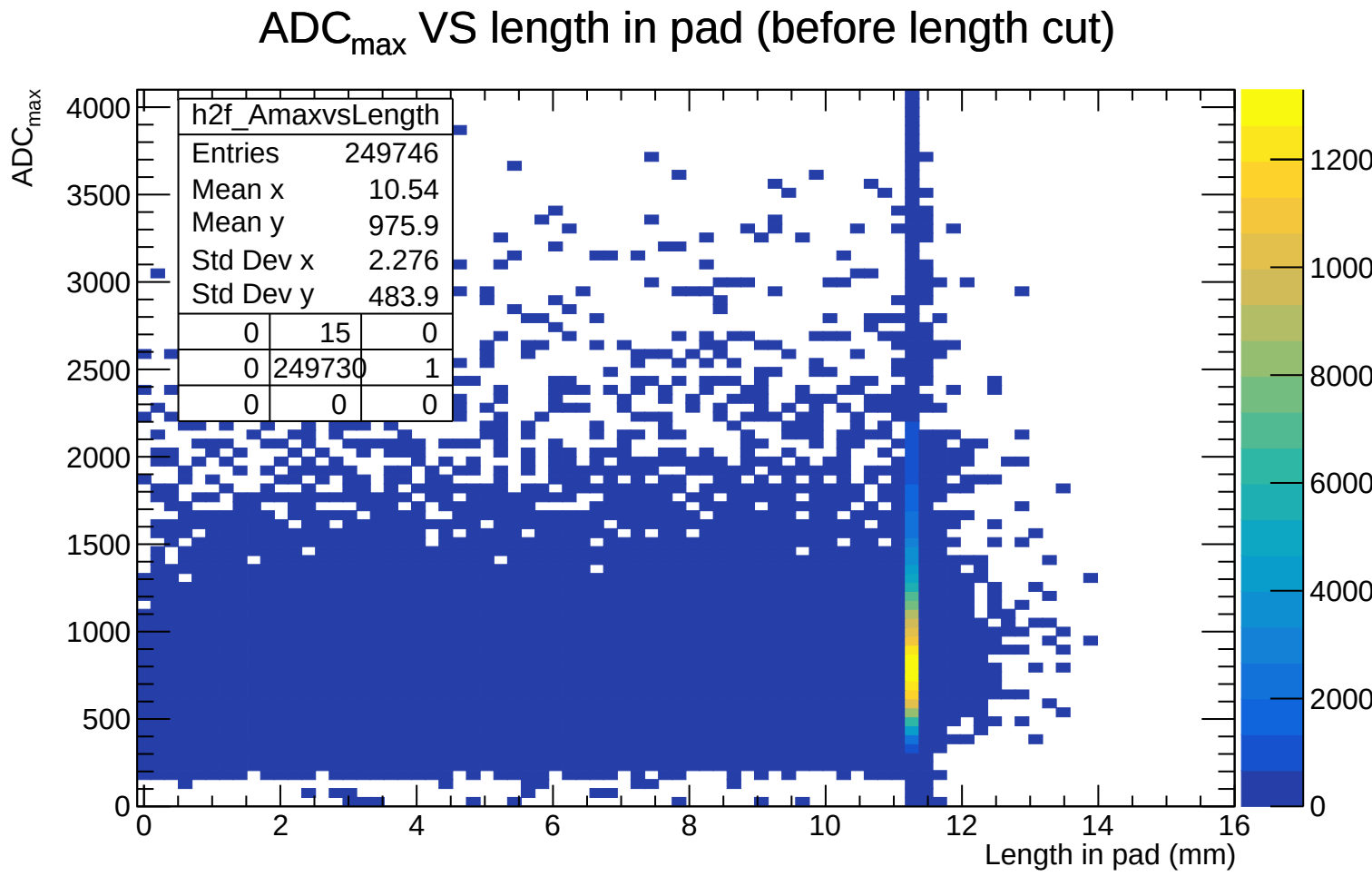

Correction A_{max} ratio
$\times 10^3$
Count
240
220
200
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5
3
ratio
h1f_WFcorr
Entries 232750
Mean 0.9974
Std Dev 0.01005
Underflow 1
Overflow 0

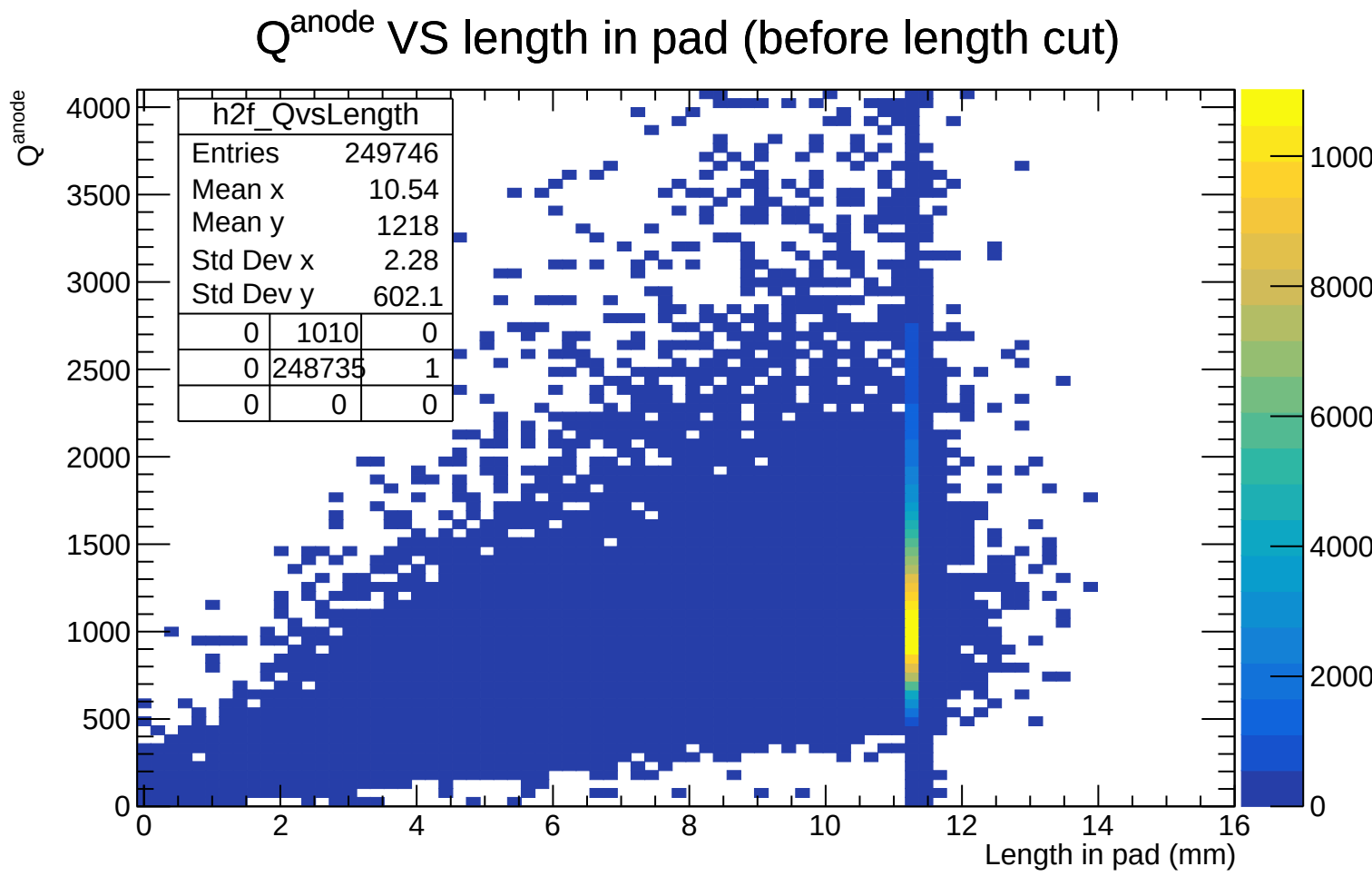

L_{ERAM}*0.7 - Σ $L_{clus>2mm}$
Count
7000
6000
5000
4000
3000
2000
1000
0
–60
–40
–20
0
20
40
60
difference (mm)
h1f_Lmod1VScl
Entries 6848
Mean 9.095
Std Dev 1.105
Underflow 1
Overflow 3

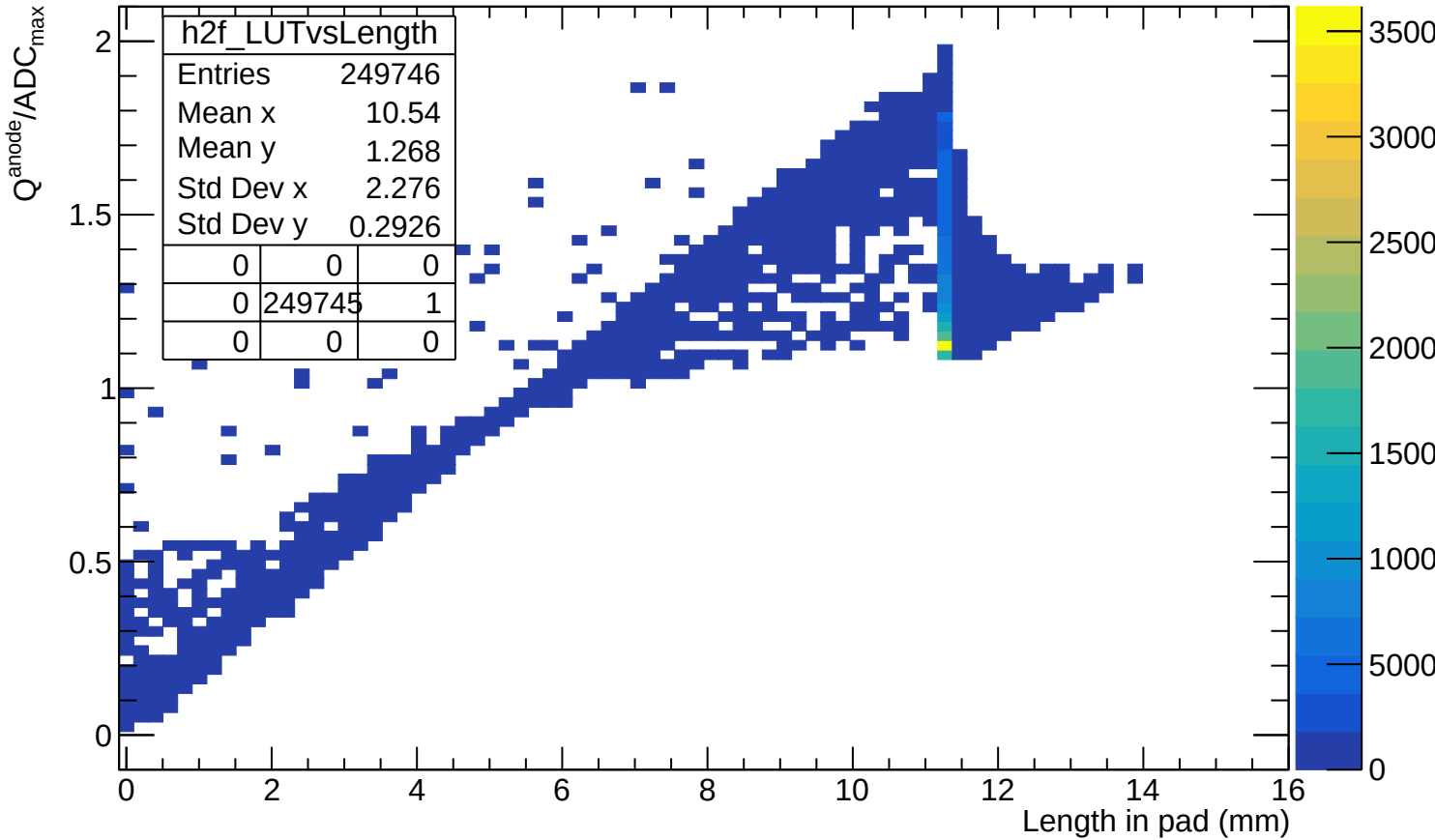

$L_{ERAM}*(N_{trunc\ cross}/N_{clus\ cross>2mm}) - \Sigma\ L_{clus>2mm}$
Count
4500
4000
3500
3000
2500
2000
1500
1000
500
0
h1f_Lmod2VScl
Entries 6848
Mean 0.07778
Std Dev 1.478
Underflow 1
Overflow 2
–60
–40
–20
0
20
40
60
difference (mm)

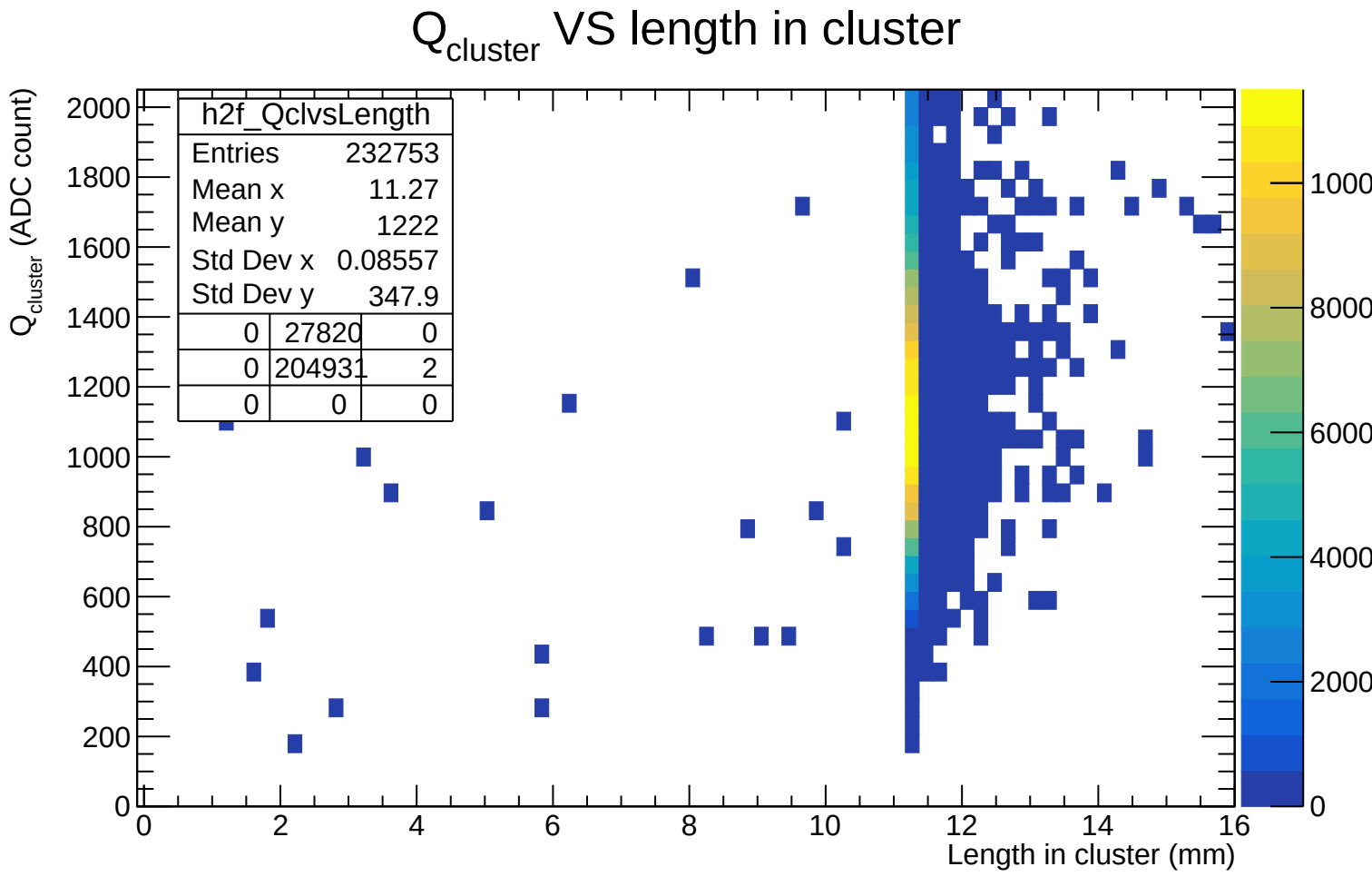

$L_{clusters}$ - $L_{clusters > 2mm}$
Count
3500
3000
2500
2000
1500
1000
500
0
–60
–40
–20
0
20
40
60
difference (mm)
h1f_LallVScl
Entries 6848
Mean 0.0006938
Std Dev 0.03346
Underflow 0
Overflow 0

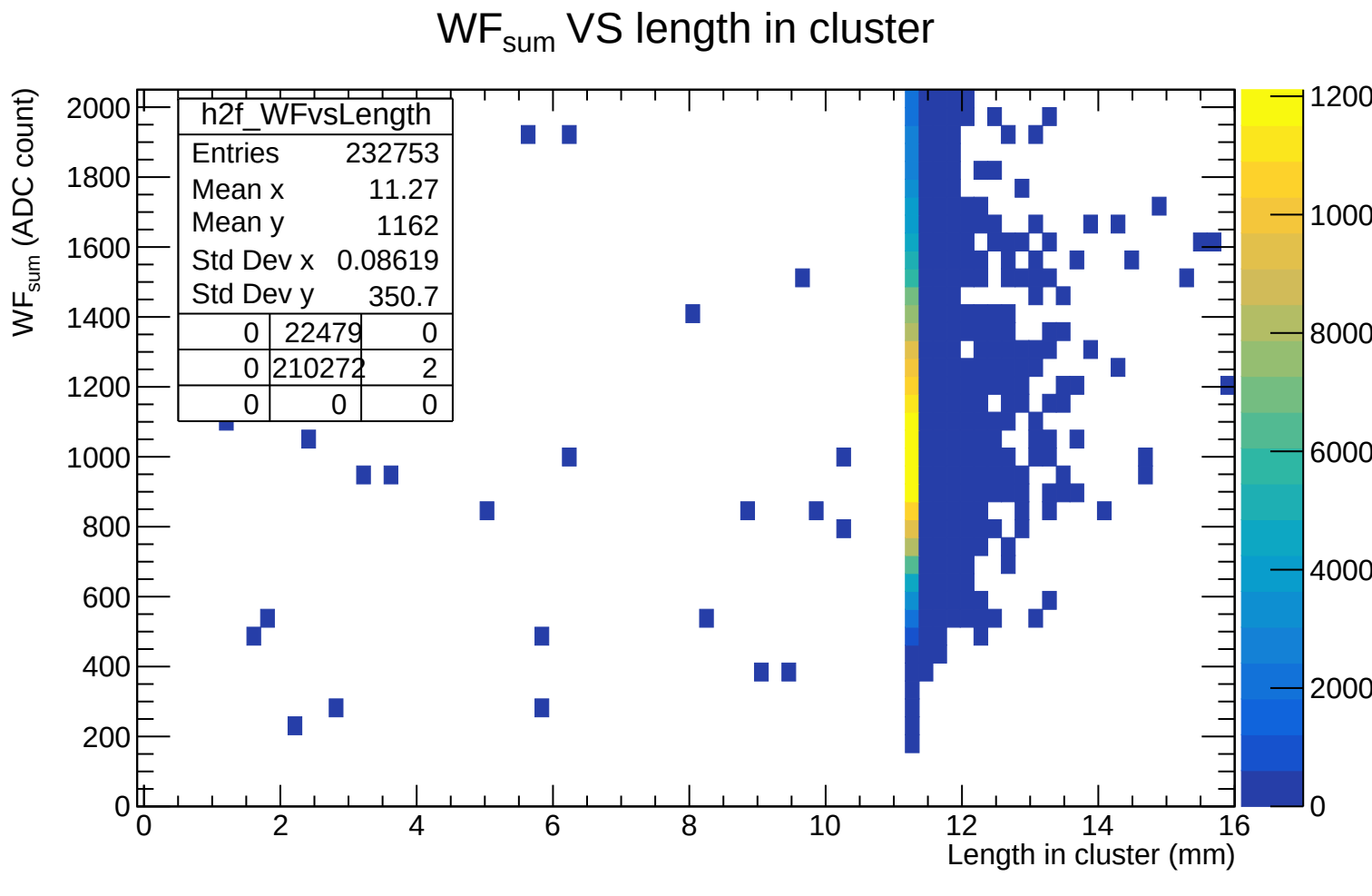

LUT(z_file) vs LUT(z_calc)
h2f_ratiodiffZ
Entries 243883
Mean x 1.294
Mean y 1.293
Std Dev x 0.2454
Std Dev y 0.2454
0 0 0
0 243883 0
0 0 0
LUT(z_file)
LUT(z_calc)
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
0 5000 1000 1500 2000 2500 3000 3500 4000

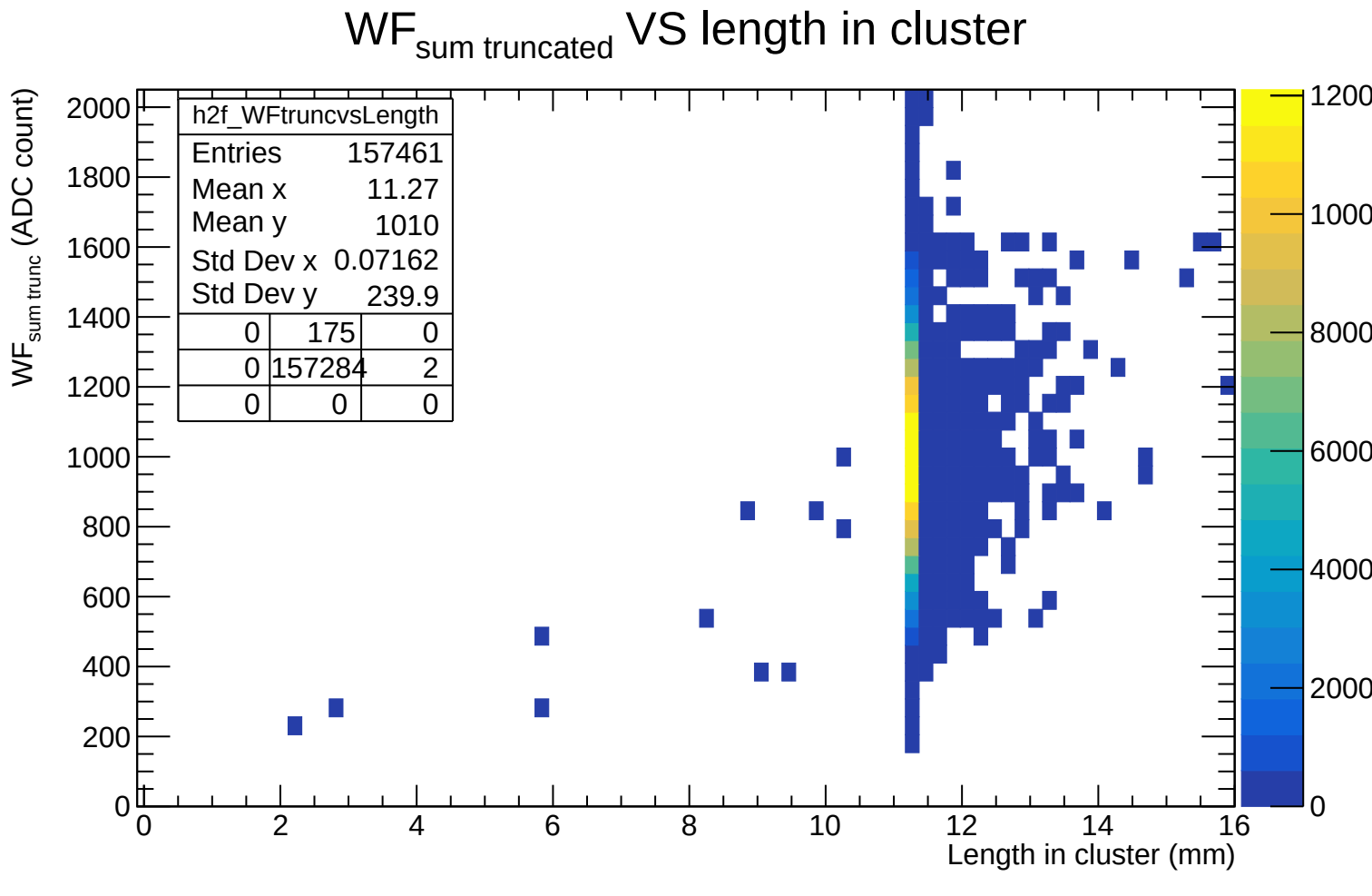

ADC$_{max}$ VS length in pad (before length cut)
h2f_AmaxvsLength
Entries 249746
Mean x 10.54
Mean y 975.9
Std Dev x 2.276
Std Dev y 483.9
0 15 0
0 249730 1
0 0 0
ADC$_{max}$
Length in pad (mm)
0
500
1000
1500
2000
2500
3000
3500
4000
0
2
4
6
8
10
12
14
16
0
2000
4000
6000
8000
1000
1200

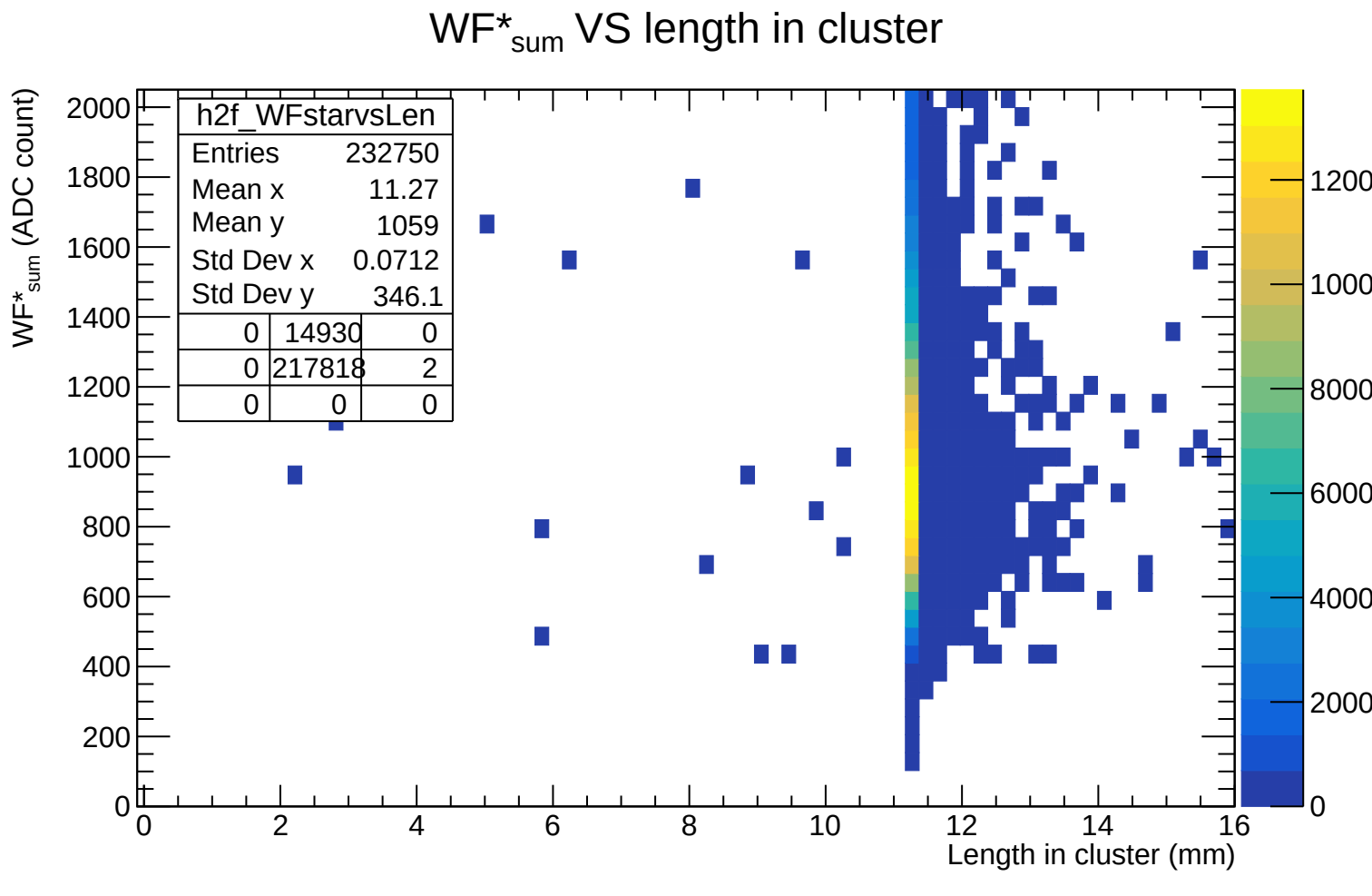

Q^anode VS length in pad (before length cut)
h2f_QvsLength
Entries 249746
Mean x 10.54
Mean y 1218
Std Dev x 2.28
Std Dev y 602.1
0 1010 0
0 248735 1
0 0 0
Q^anode
Length in pad (mm)
0
500
1000
1500
2000
2500
3000
3500
4000
0
2
4
6
8
10
12
14
16
1000
8000
6000
4000
2000
0

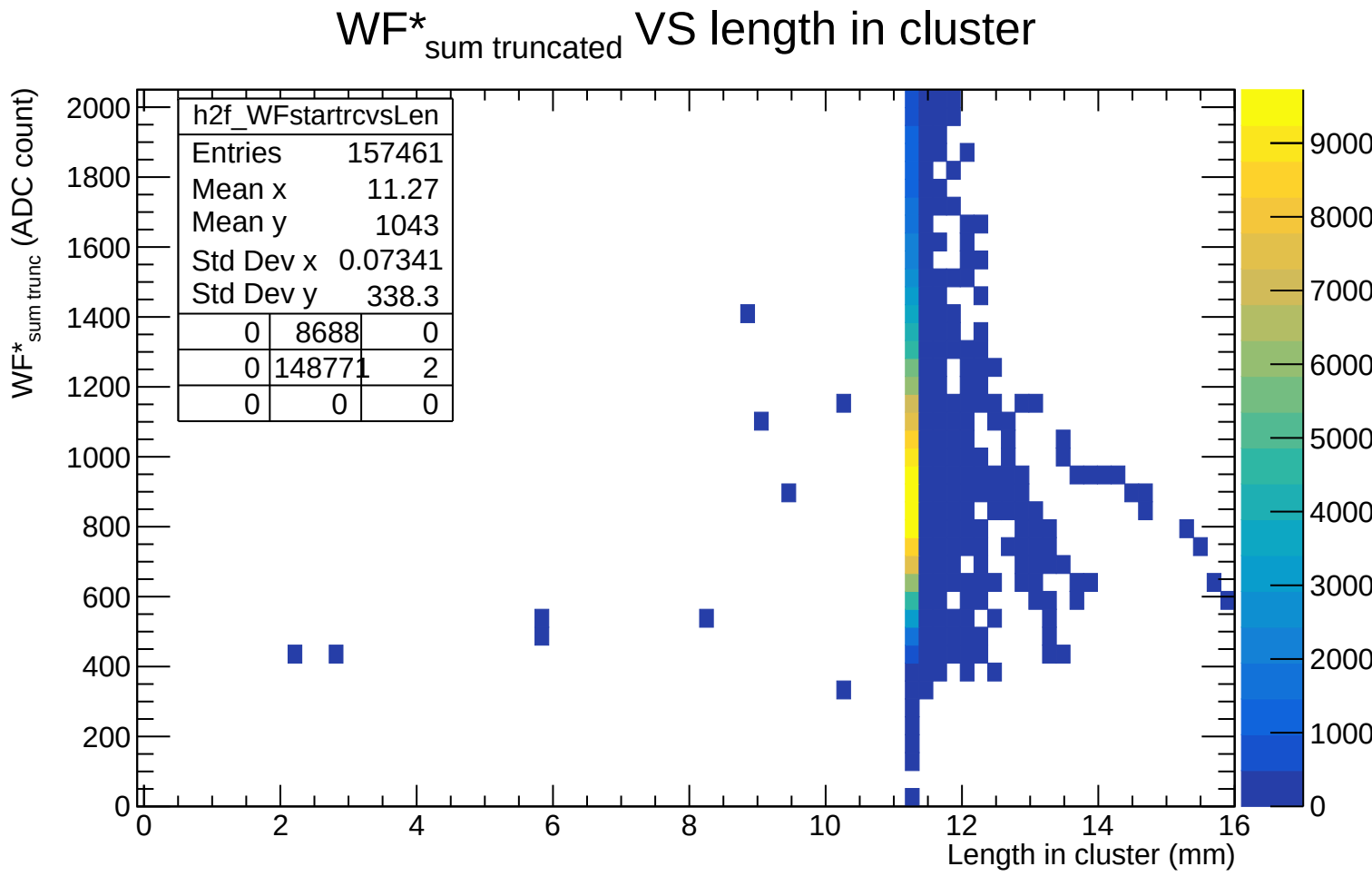

Q^{anode}/ADC_{max} VS length in pad (before length cut)
h2f_LUTvsLength
Entries 249746
Mean x 10.54
Mean y 1.268
Std Dev x 2.276
Std Dev y 0.2926
0 0 0
0 249745 1
0 0 0
Q^{anode}/ADC_{max}
Length in pad (mm)
0
0.5
1
1.5
2
0
2
4
6
8
10
12
14
16
0
500
1000
1500
2000
2500
3000
3500

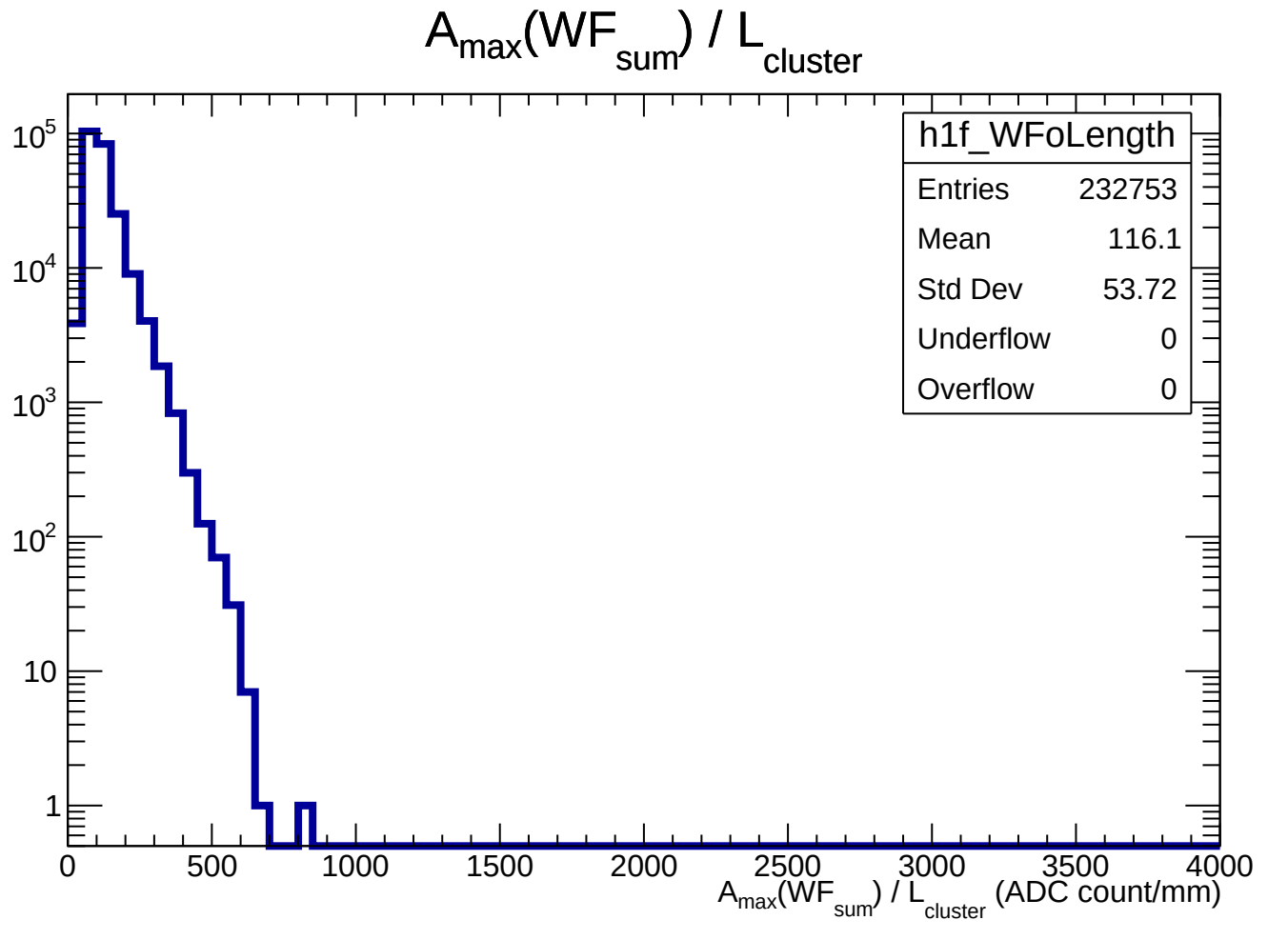

$Q_{cluster}$ VS length in cluster
h2f_QclvsLength
Entries 232753
Mean x 11.27
Mean y 1222
Std Dev x 0.08557
Std Dev y 347.9
0 27820 0
0 204931 2
0 0 0
$Q_{cluster}$ (ADC count)
Length in cluster (mm)
0 200 400 600 800 1000 1200 1400 1600 1800 2000
0 2 4 6 8 10 12 14 16
0 2000 4000 6000 8000 1000

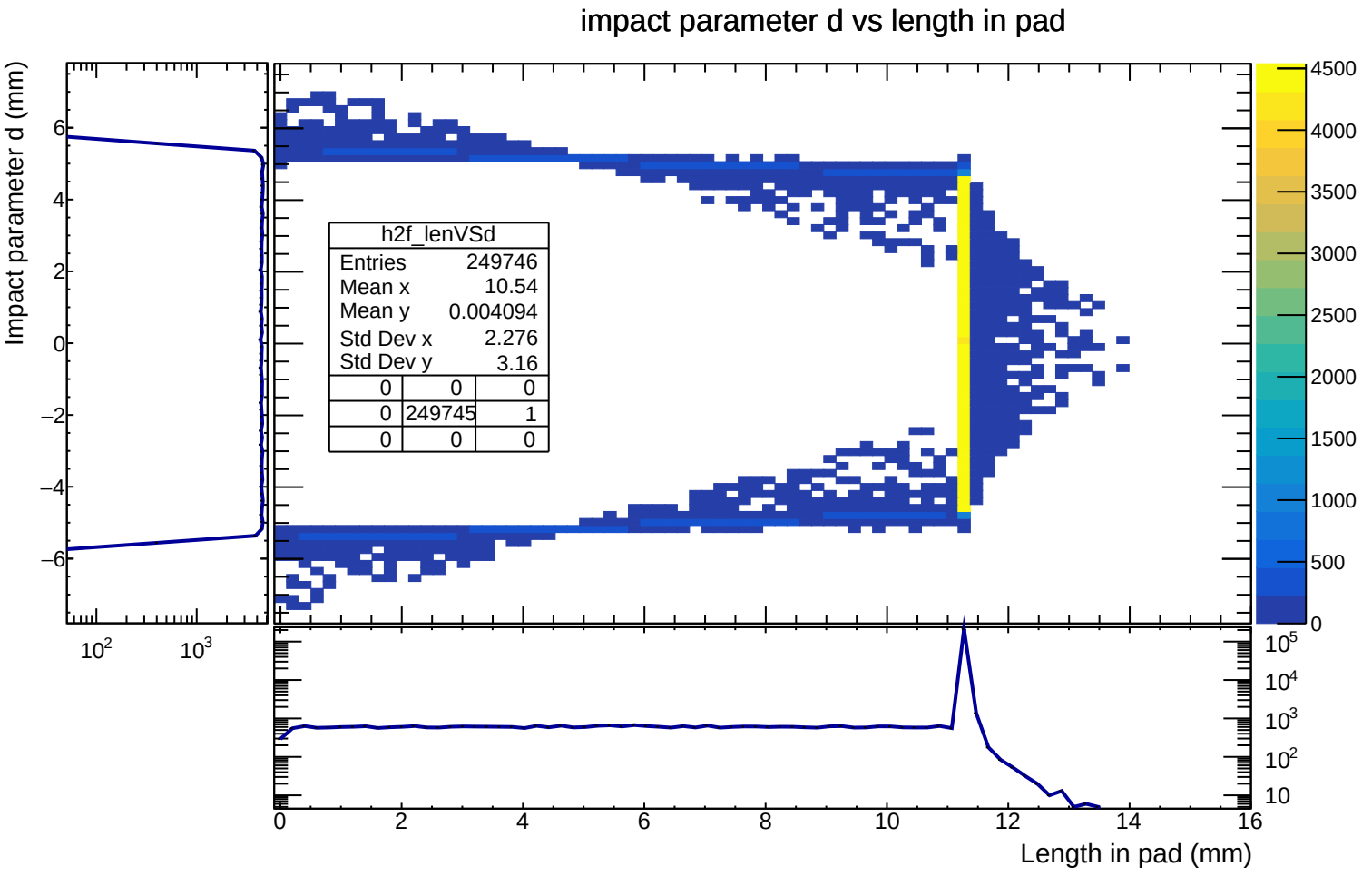

WF_sum VS length in cluster
h2f_WFvsLength
Entries 232753
Mean x 11.27
Mean y 1162
Std Dev x 0.08619
Std Dev y 350.7
0 22479 0
0 210272 2
0 0 0
WF_sum (ADC count)
Length in cluster (mm)
0
200
400
600
800
1000
1200
1400
1600
1800
2000
0
2
4
6
8
10
12
14
16
0
2000
4000
6000
8000
1000
1200


WF sum truncated VS length in cluster
WF sum trunc (ADC count)
Length in cluster (mm)
h2f_WFtruncvsLength
Entries 157461
Mean x 11.27
Mean y 1010
Std Dev x 0.07162
Std Dev y 239.9
0 175 0
0 157284 2
0 0 0
0 200 400 600 800 1000 1200 1400 1600 1800 2000
0 2 4 6 8 10 12 14 16
0 2000 4000 6000 8000 1000 1200


WF*sum VS length in cluster
h2f_WFstarvsLen
Entries 232750
Mean x 11.27
Mean y 1059
Std Dev x 0.0712
Std Dev y 346.1
0 14930 0
0 217818 2
0 0 0
WF*sum (ADC count)
Length in cluster (mm)
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2
4
6
8
10
12
14
16
2000
4000
6000
8000
1000
1200


WF*sum truncated VS length in cluster
h2f_WFstartrcvsLen
Entries 157461
Mean x 11.27
Mean y 1043
Std Dev x 0.07341
Std Dev y 338.3
0 8688 0
0 148771 2
0 0 0
WF*sum trunc (ADC count)
Length in cluster (mm)
0 200 400 600 800 1000 1200 1400 1600 1800 2000
0 2 4 6 8 10 12 14 16
0 1000 2000 3000 4000 5000 6000 7000 8000 9000


$A_{max}(WF_{sum}) / L_{cluster}$
h1f_WFoLength
Entries 232753
Mean 116.1
Std Dev 53.72
Underflow 0
Overflow 0
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
3000
3500
4000
$A_{max}(WF_{sum}) / L_{cluster}$ (ADC count/mm)


impact parameter d vs length in pad
Impact parameter d (mm)
Length in pad (mm)
h2f_lenVSd
Entries 249746
Mean x 10.54
Mean y 0.004094
Std Dev x 2.276
Std Dev y 3.16
0 0 0
0 249745 1
0 0 0