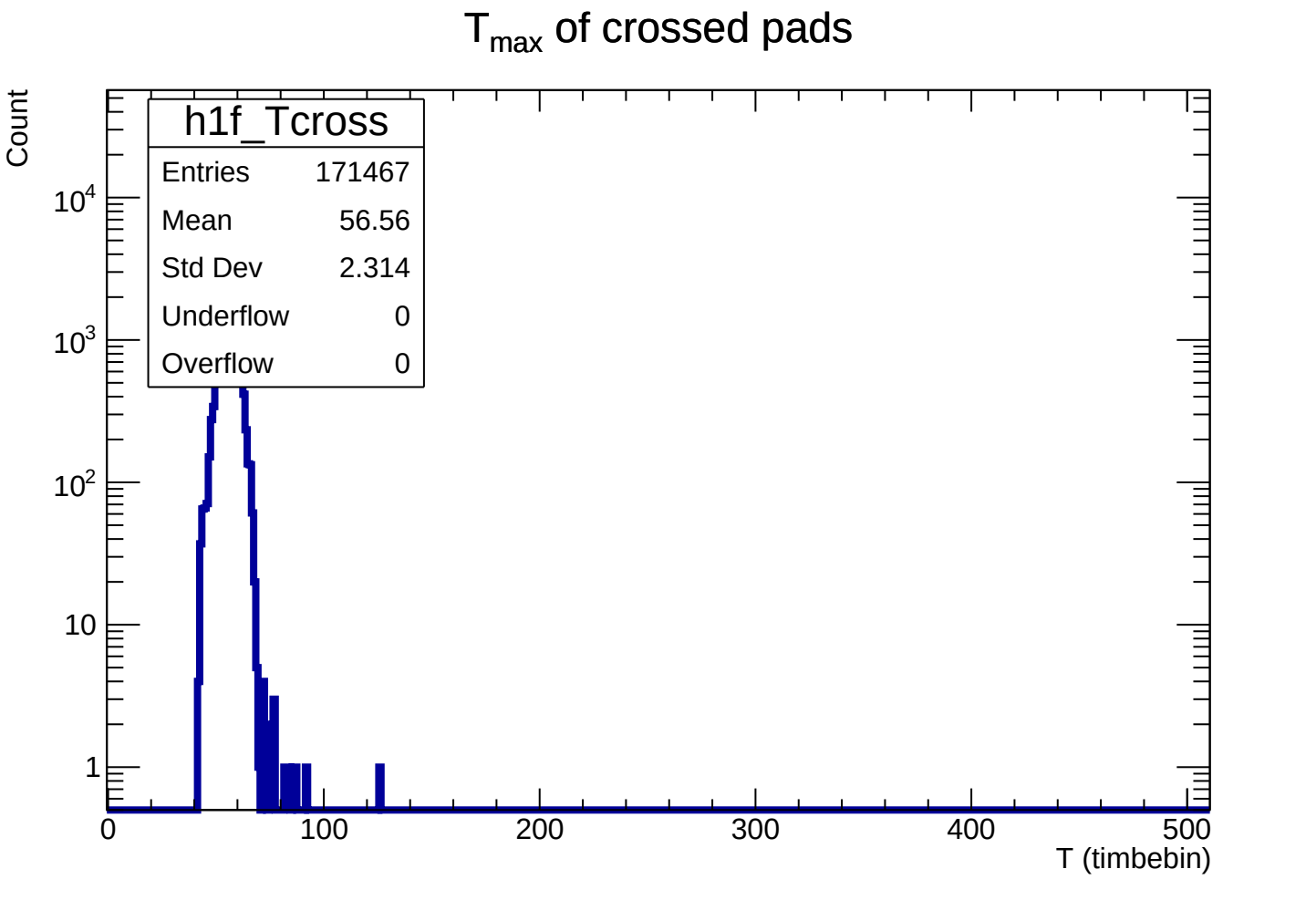
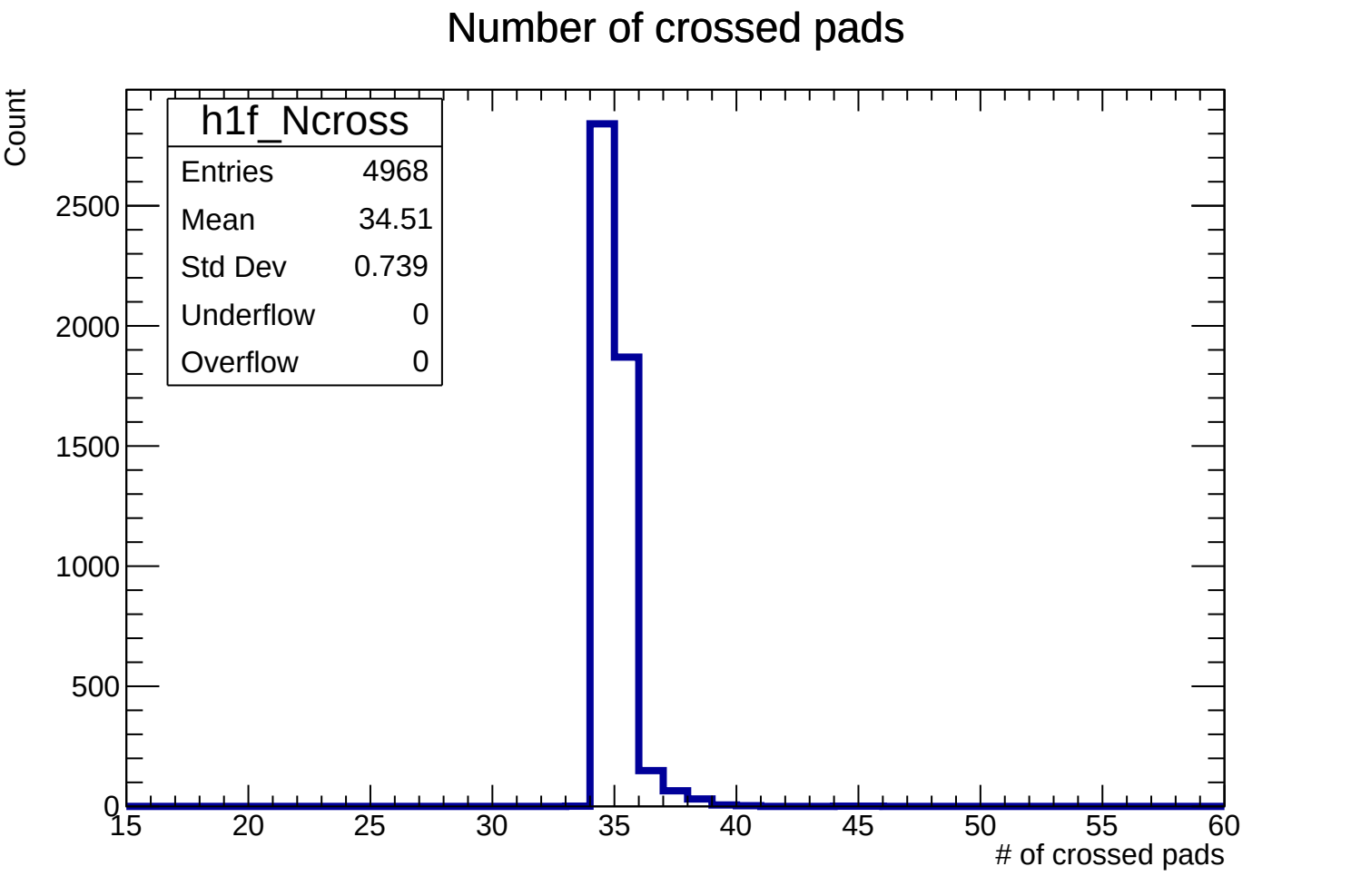
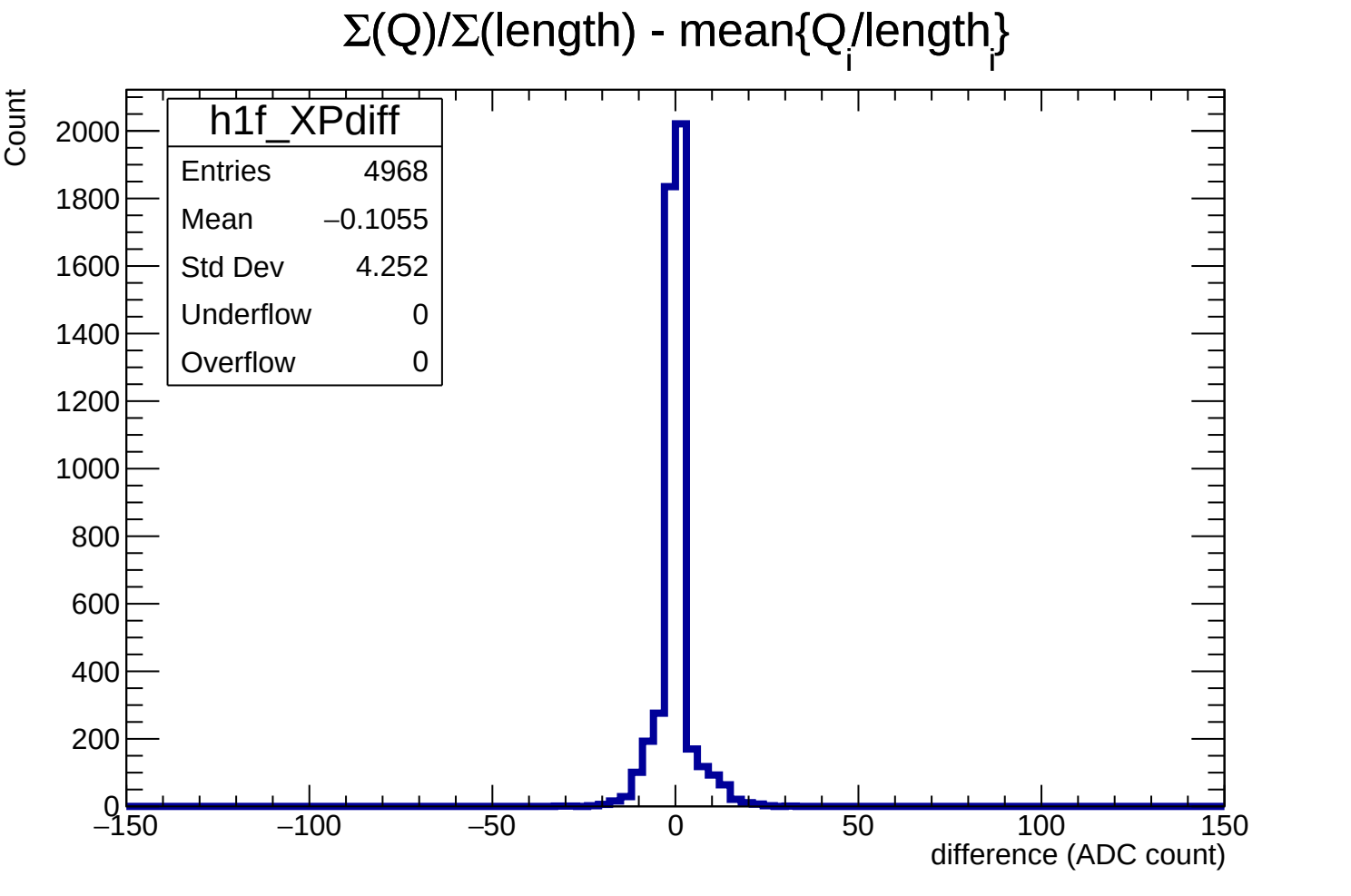
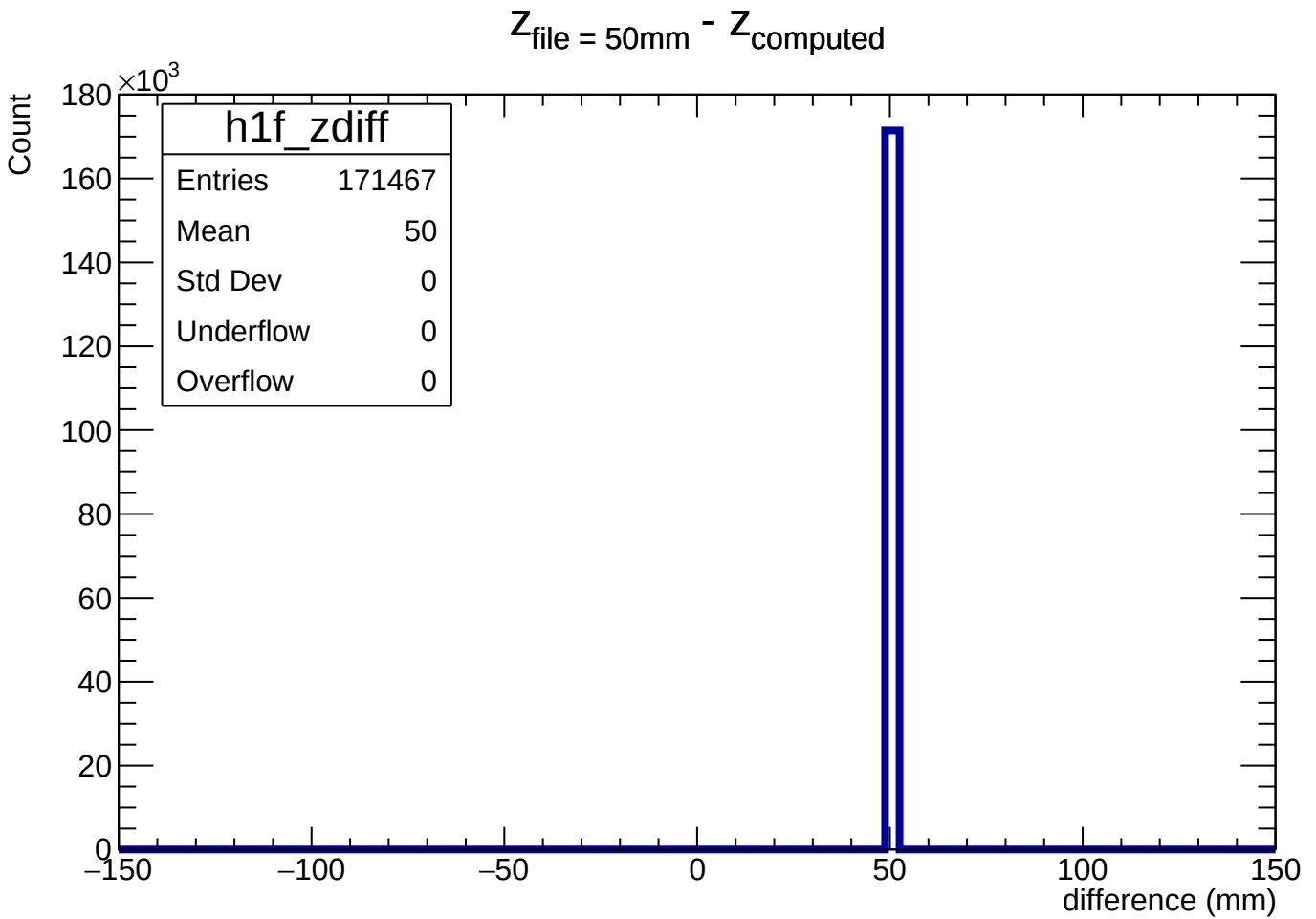
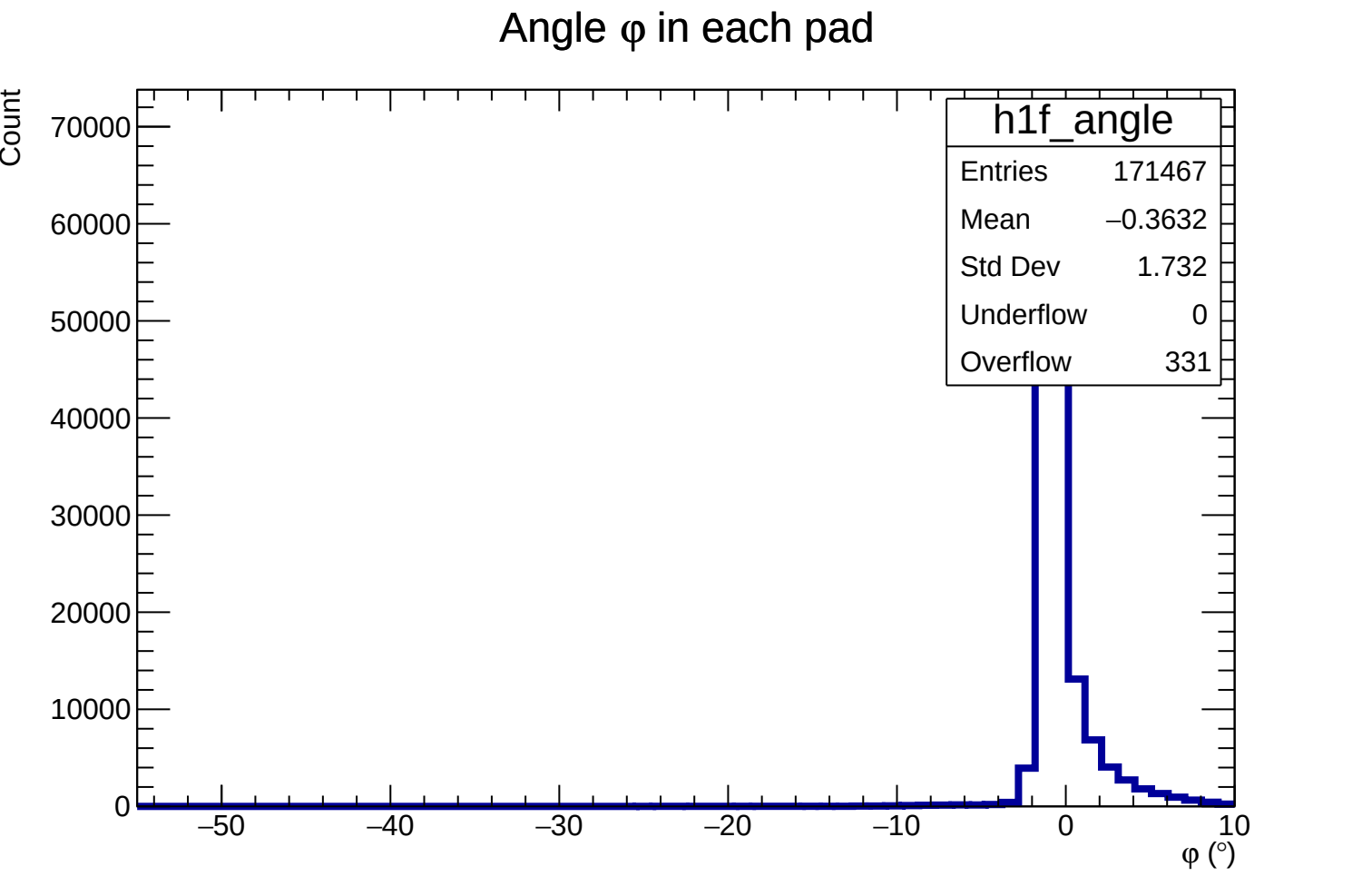
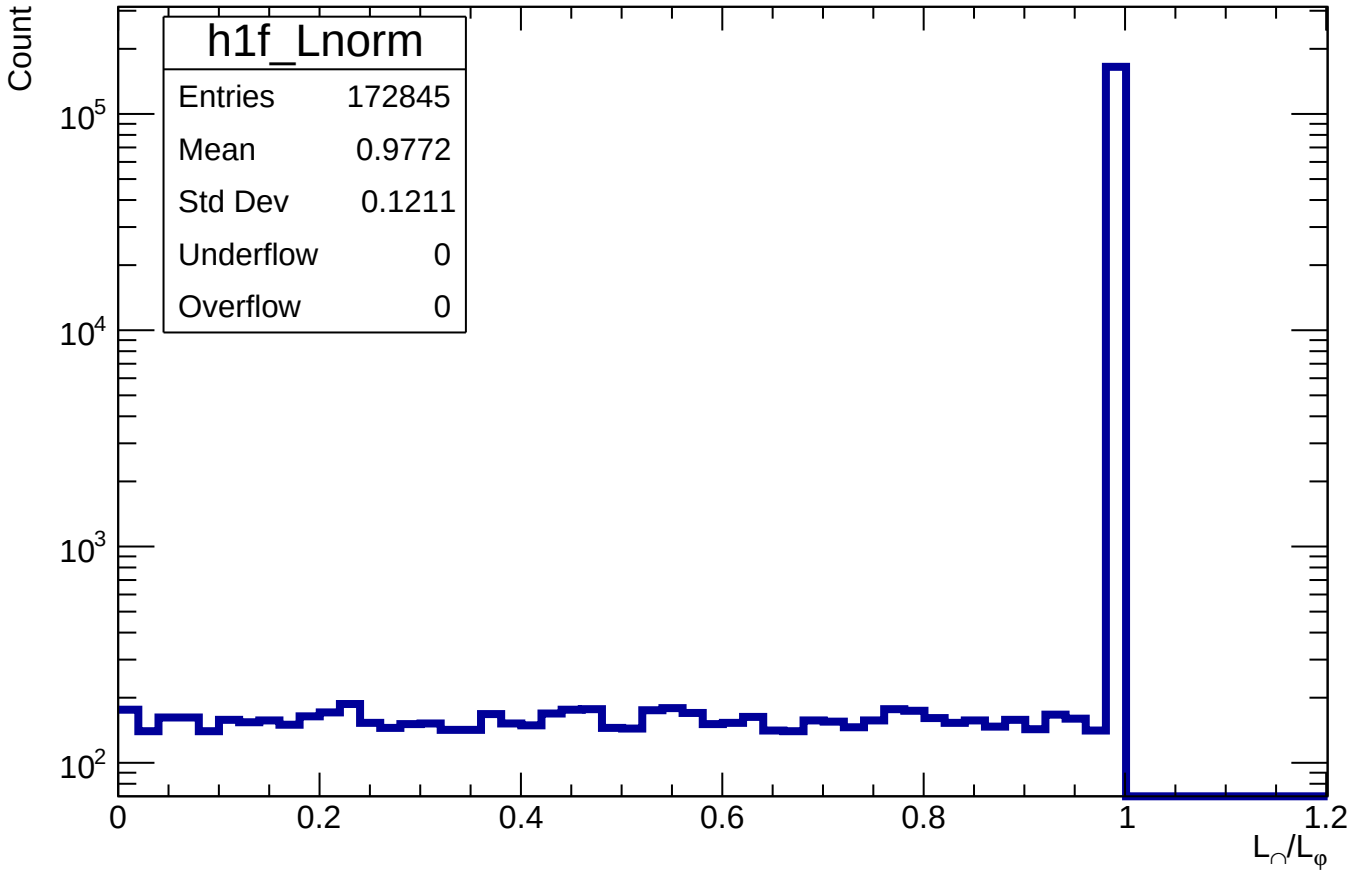

$T_{max}$ of crossed pads
h1f_Tcross
Entries 171467
Mean 56.56
Std Dev 2.314
Underflow 0
Overflow 0
Count
$10^4$
$10^3$
$10^2$
10
1
0
100
200
300
400
500
T (timbebin)

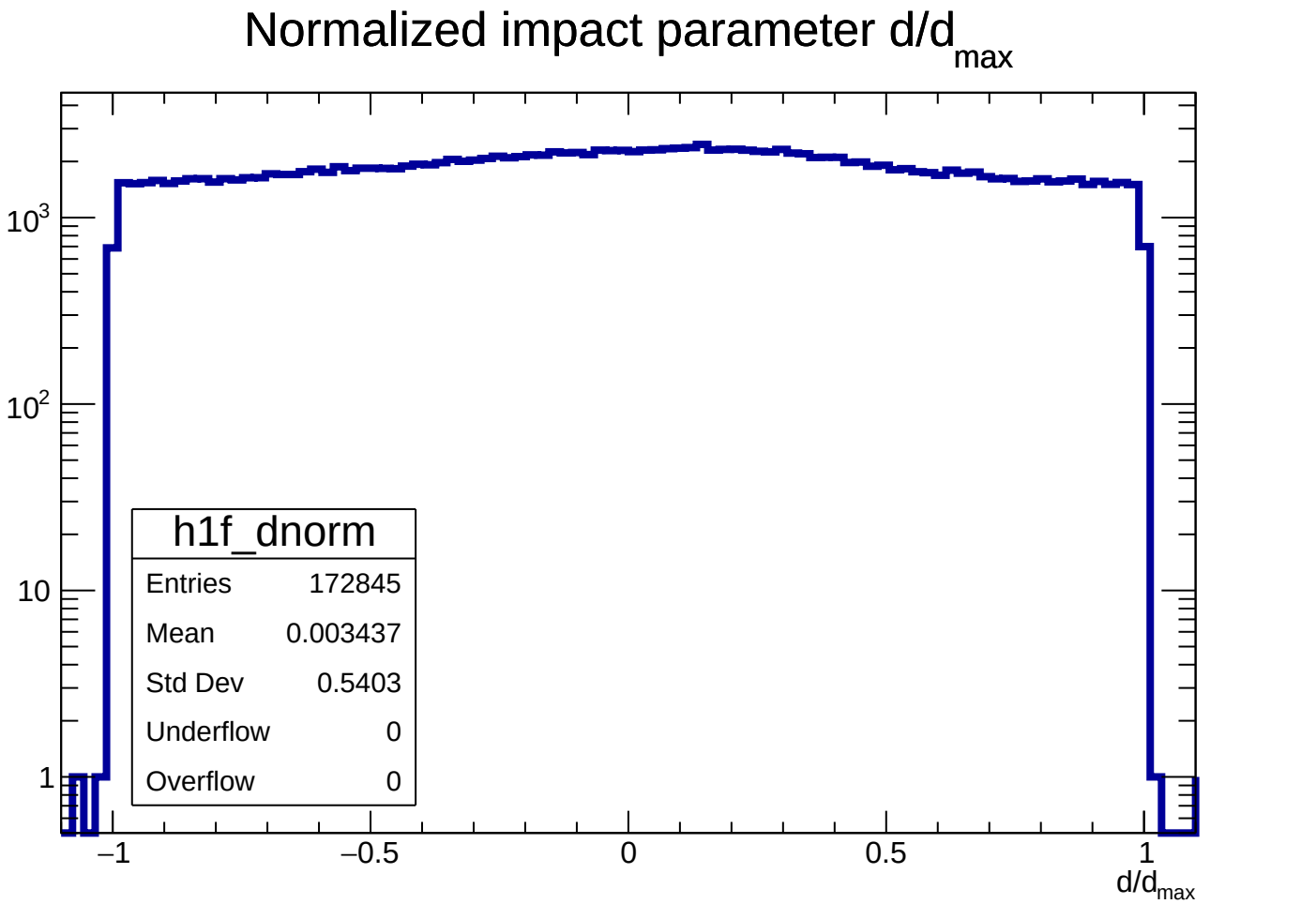

Number of crossed pads
h1f_Ncross
Entries 4968
Mean 34.51
Std Dev 0.739
Underflow 0
Overflow 0
Count
2500
2000
1500
1000
500
0
15
20
25
30
35
40
45
50
55
60
# of crossed pads

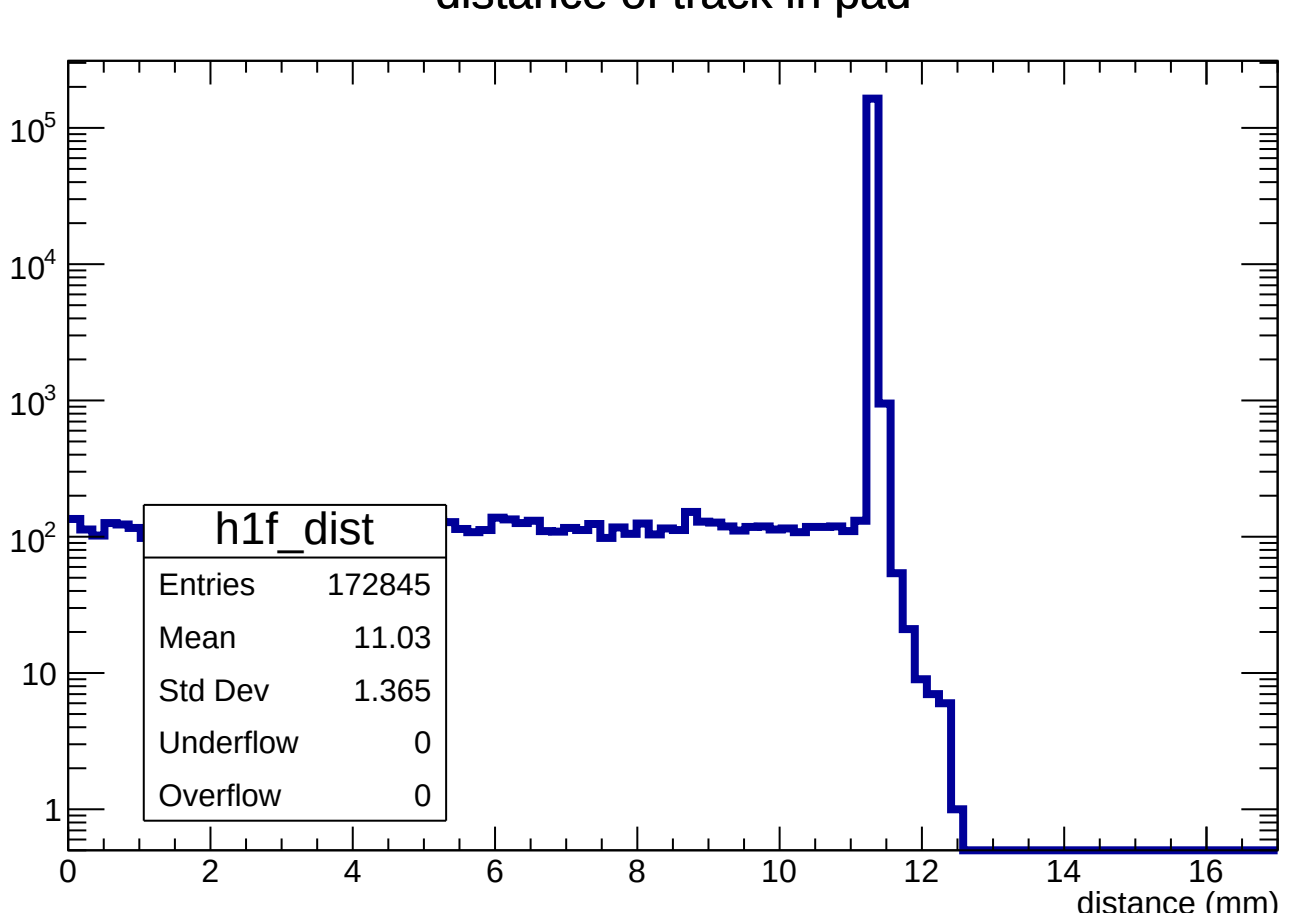

Σ(Q)/Σ(length) - mean{Q_i/length_i}
h1f_XPdiff
Entries 4968
Mean −0.1055
Std Dev 4.252
Underflow 0
Overflow 0
Count
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−150
−100
−50
0
50
100
150
difference (ADC count)

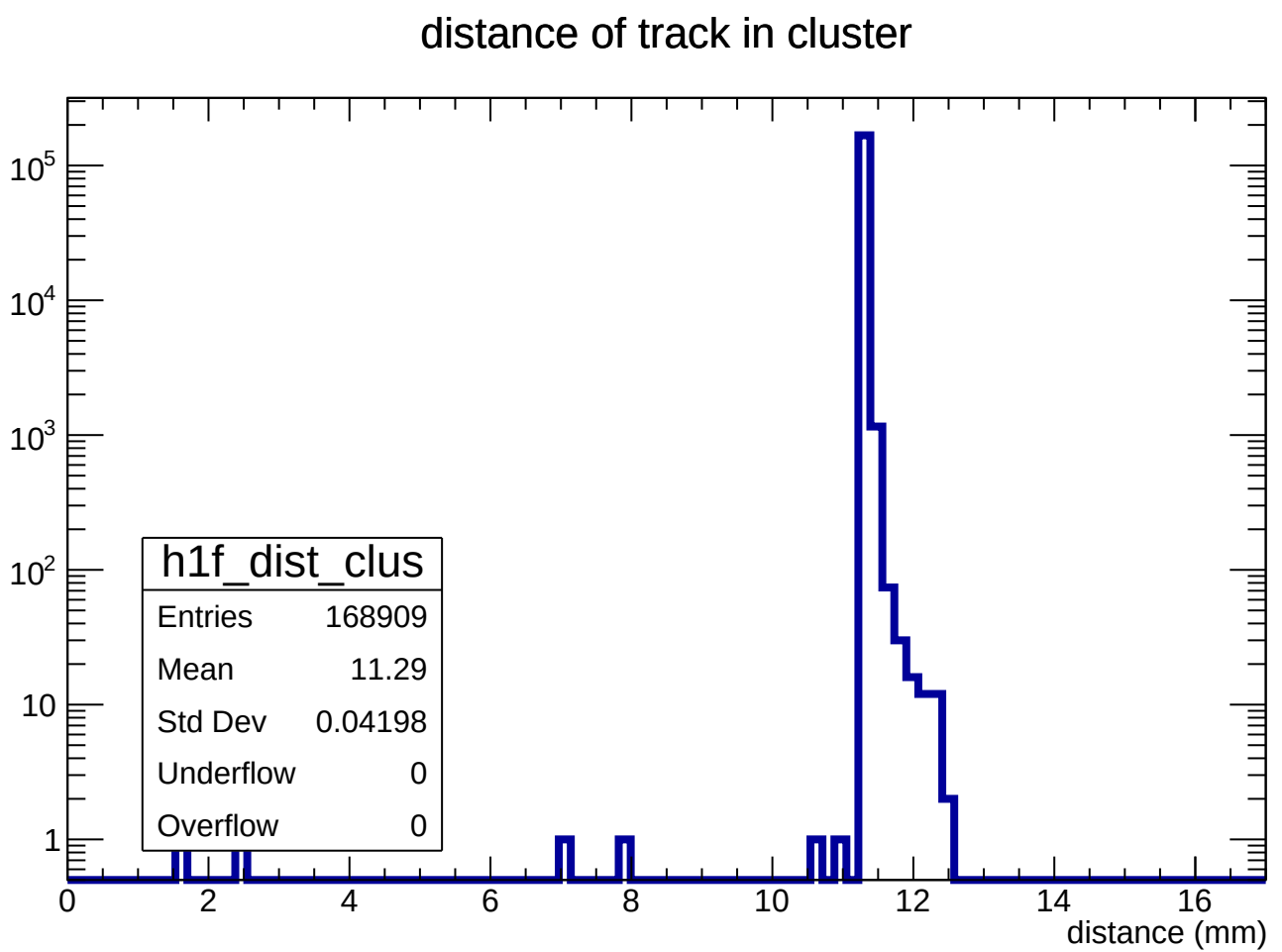

$z_{file = 50mm} - z_{computed}$
Count
×10^3
180
160
140
120
100
80
60
40
20
0
h1f_zdiff
Entries 171467
Mean 50
Std Dev 0
Underflow 0
Overflow 0
–150
–100
–50
0
50
100
150
difference (mm)

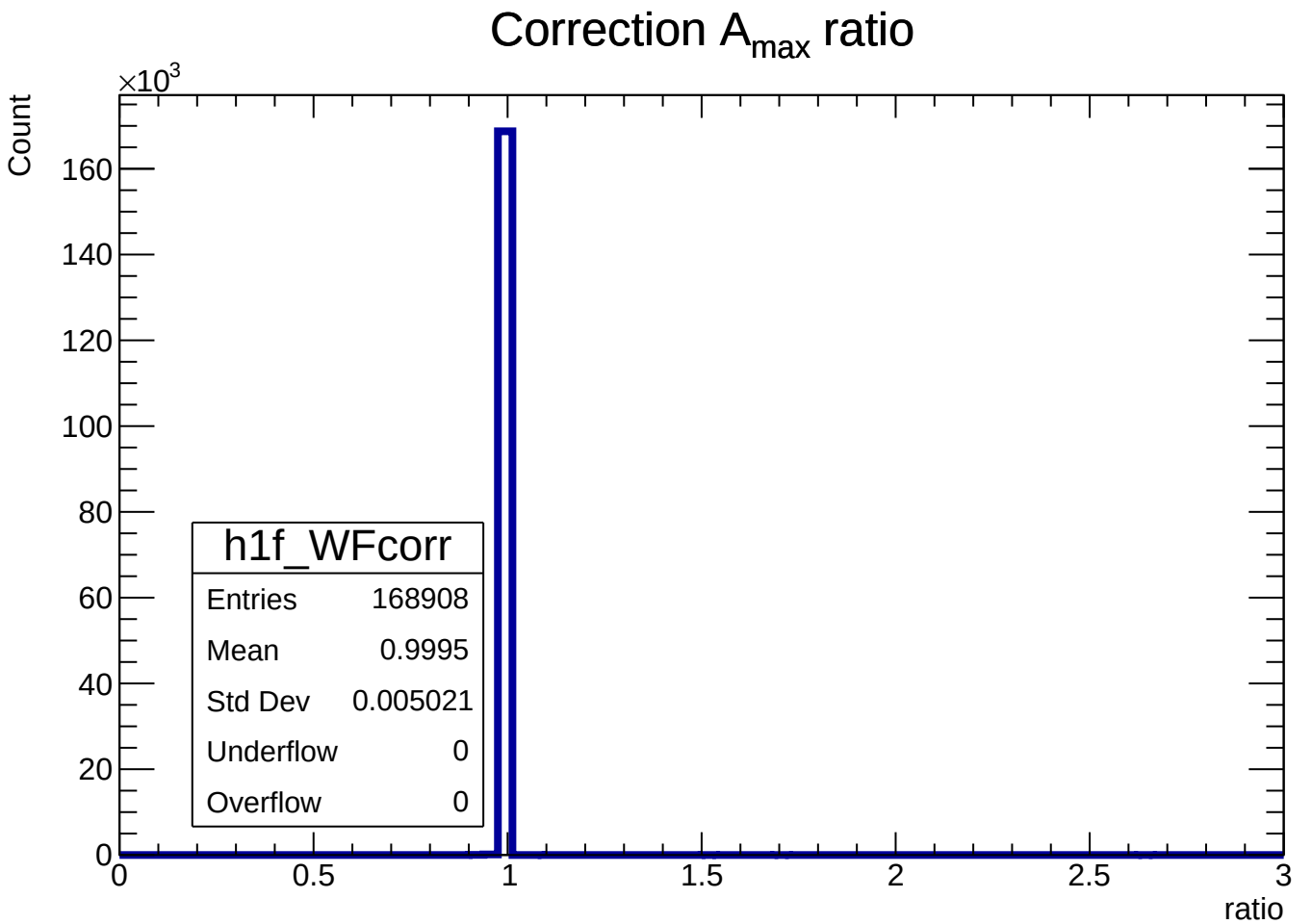

Angle φ in each pad
Count
70000
60000
50000
40000
30000
20000
10000
0
–50
–40
–30
–20
–10
0
10
φ (°)
h1f_angle
Entries 171467
Mean –0.3632
Std Dev 1.732
Underflow 0
Overflow 331

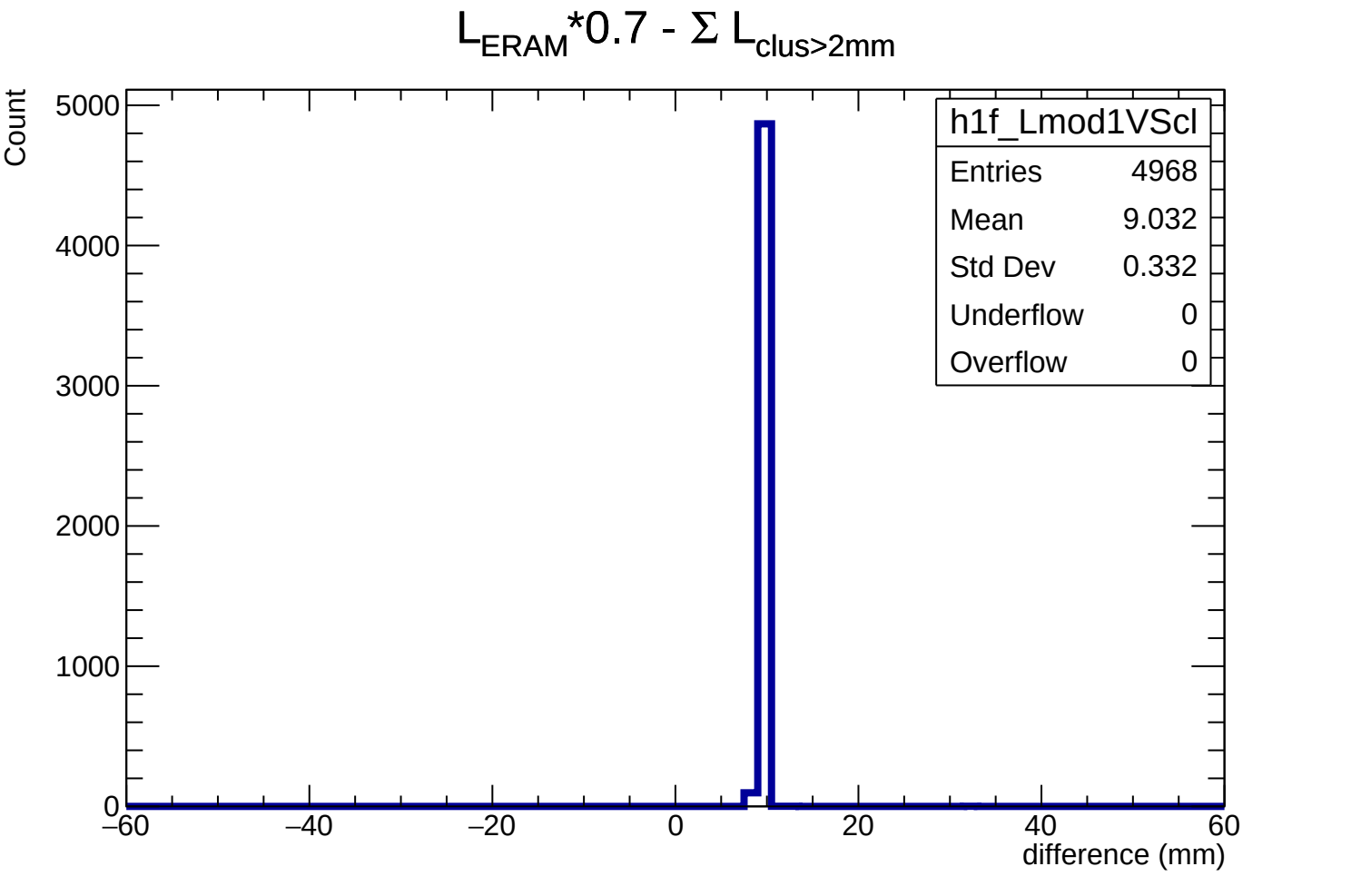

Length in pad normalized to maximum length in pad for a given φ
h1f_Lnorm
Entries 172845
Mean 0.9772
Std Dev 0.1211
Underflow 0
Overflow 0
Count
$10^5$
$10^4$
$10^3$
$10^2$
0
0.2
0.4
0.6
0.8
1
1.2
$L_{\cap}/L_{\varphi}$

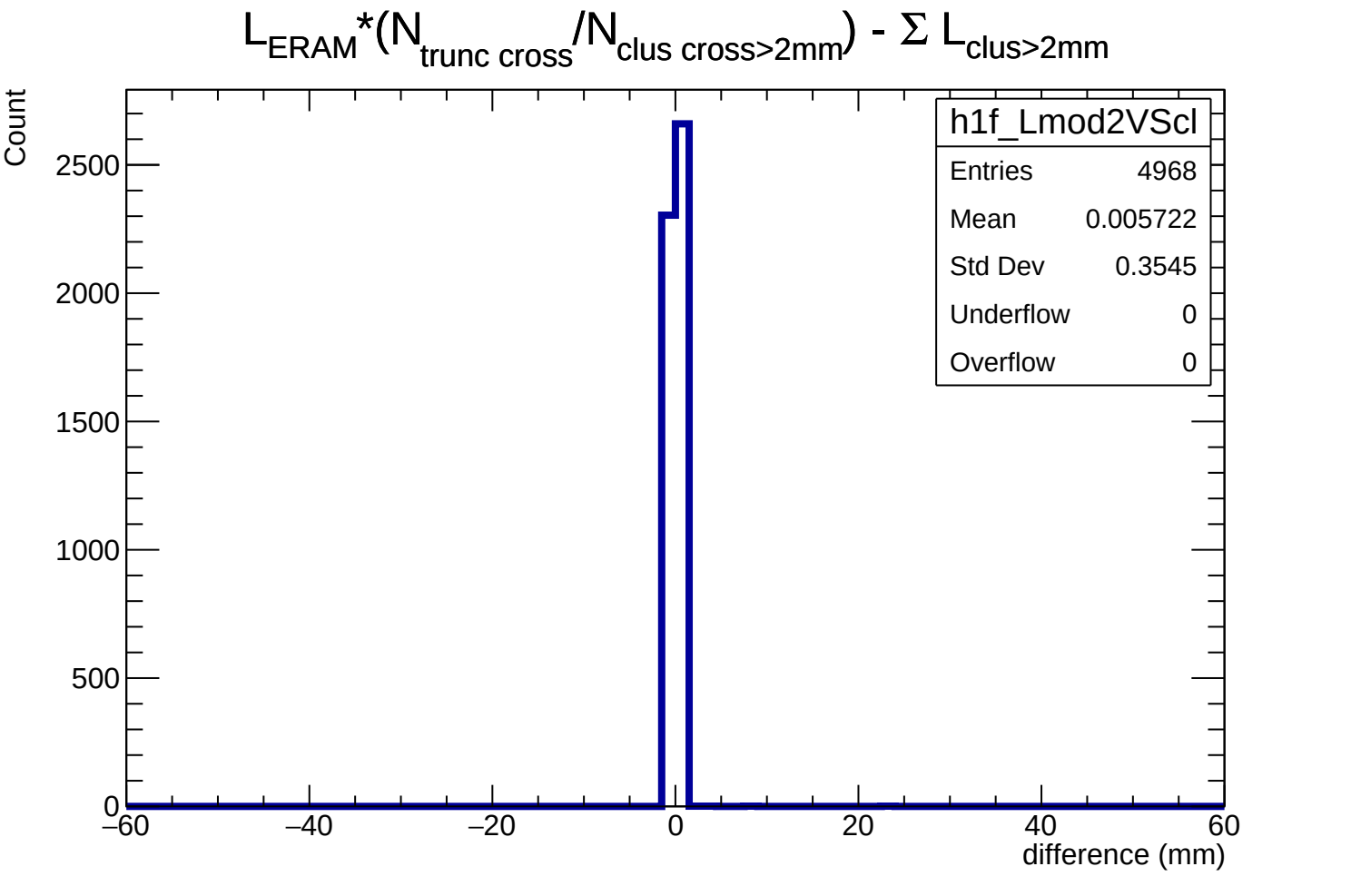

Normalized impact parameter d/d max
10 3
10 2
10
1
h1f_dnorm
Entries 172845
Mean 0.003437
Std Dev 0.5403
Underflow 0
Overflow 0
−1
−0.5
0
0.5
1
d/d max

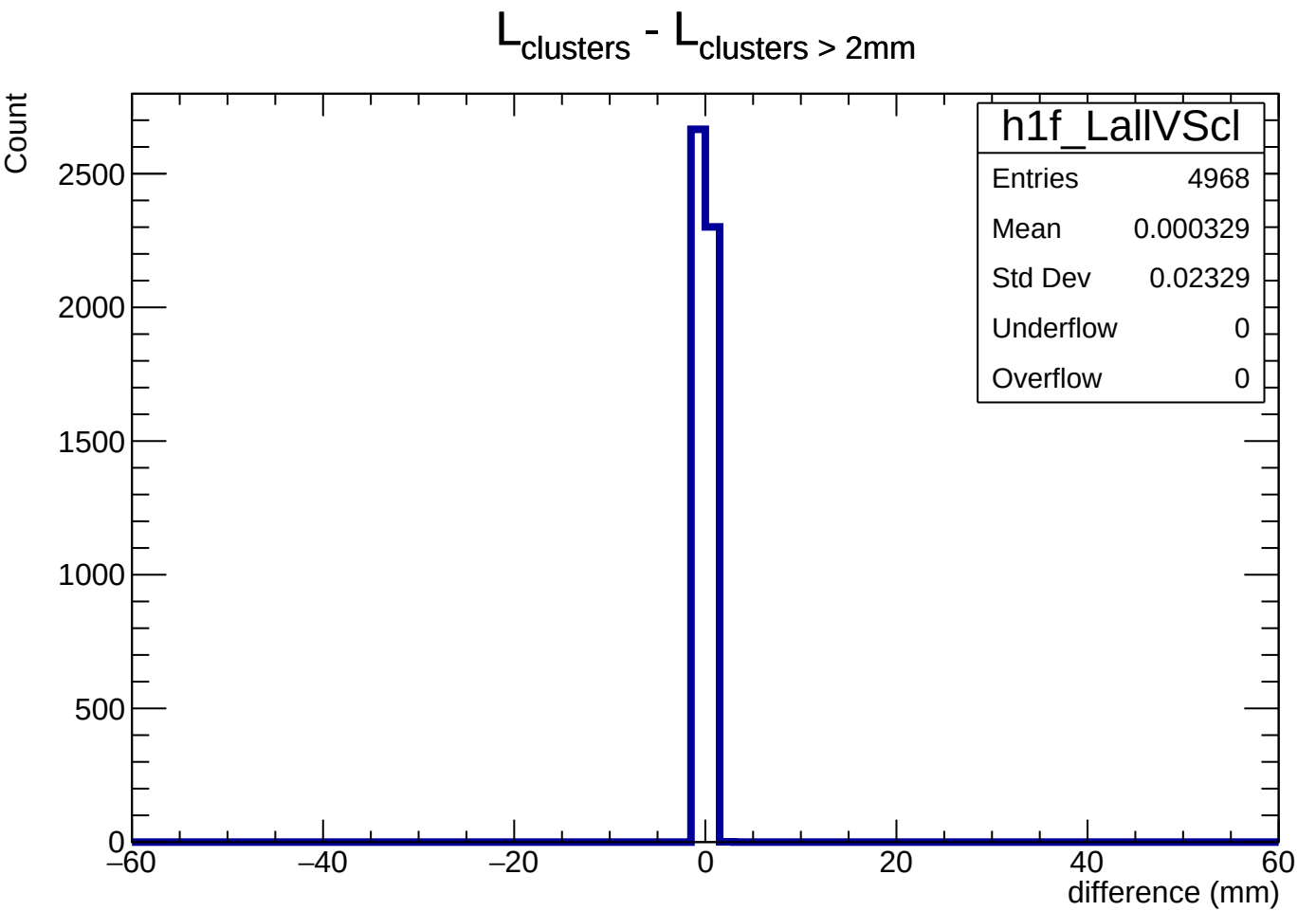

distance of track in pad
h1f_dist
Entries 172845
Mean 11.03
Std Dev 1.365
Underflow 0
Overflow 0
distance (mm)

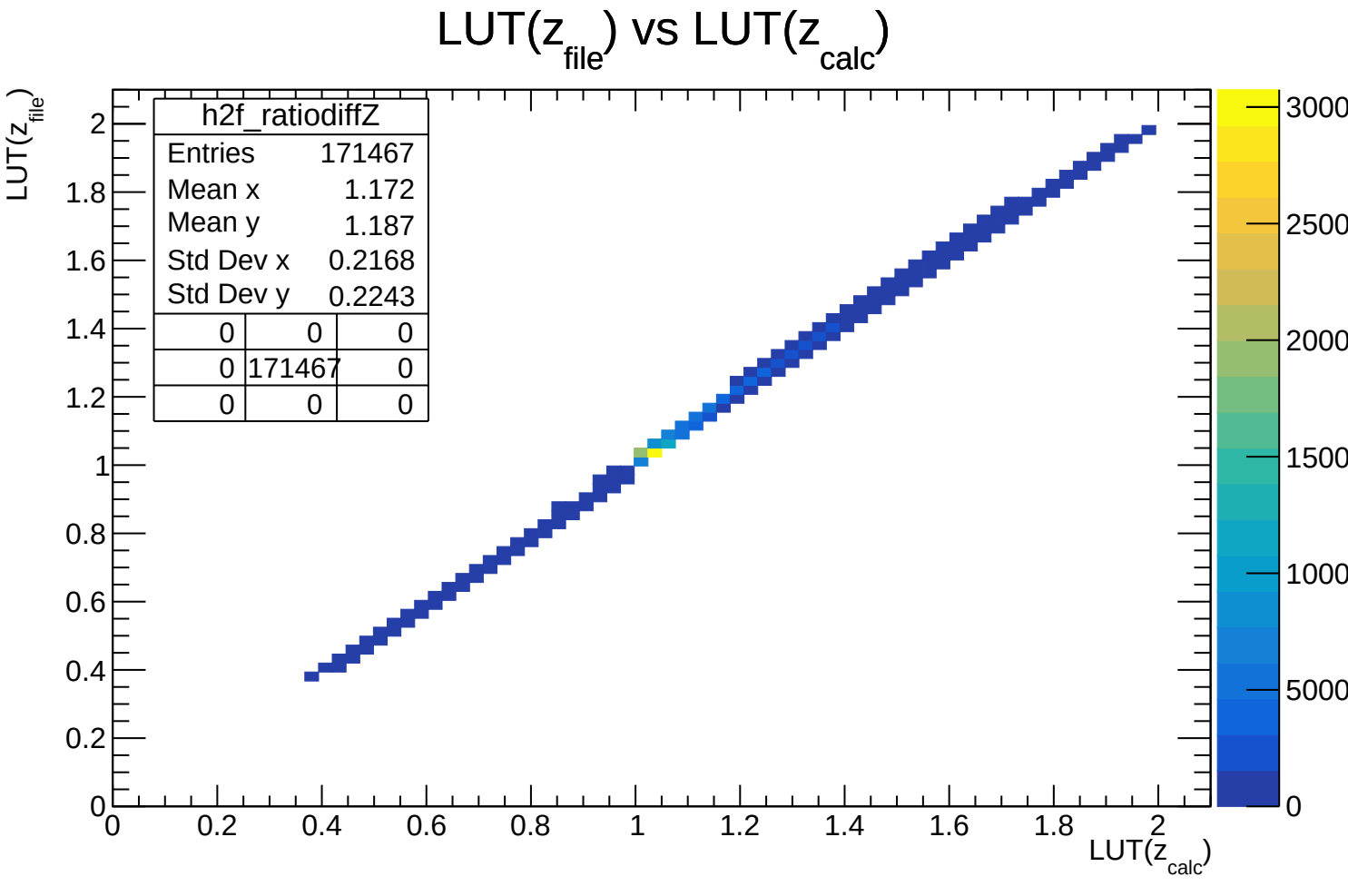

distance of track in cluster
h1f_dist_clus
Entries 168909
Mean 11.29
Std Dev 0.04198
Underflow 0
Overflow 0
distance (mm)

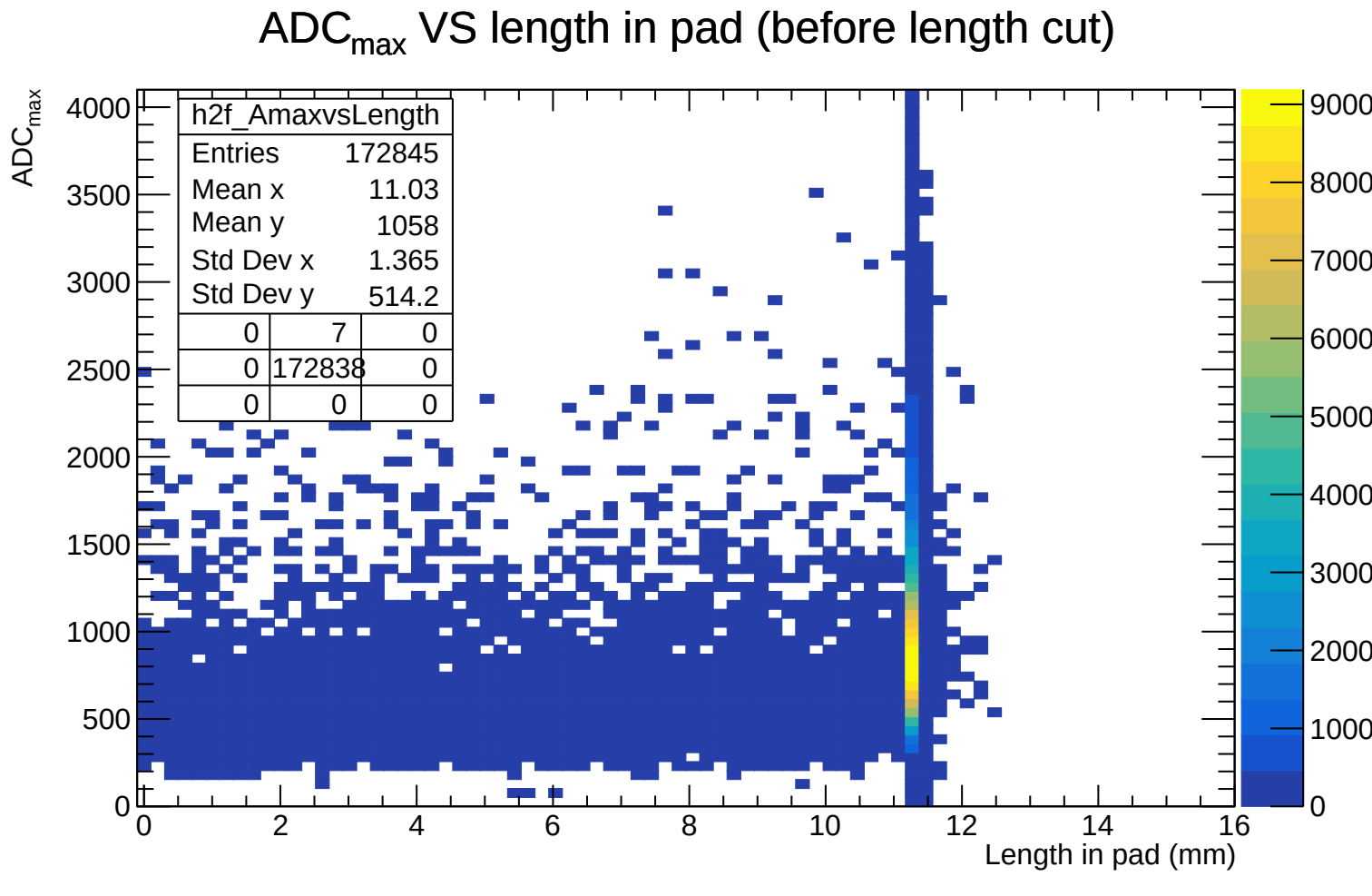

Correction $A_{max}$ ratio
$\times 10^3$
Count
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5
3
ratio
h1f_WFcorr
Entries 168908
Mean 0.9995
Std Dev 0.005021
Underflow 0
Overflow 0

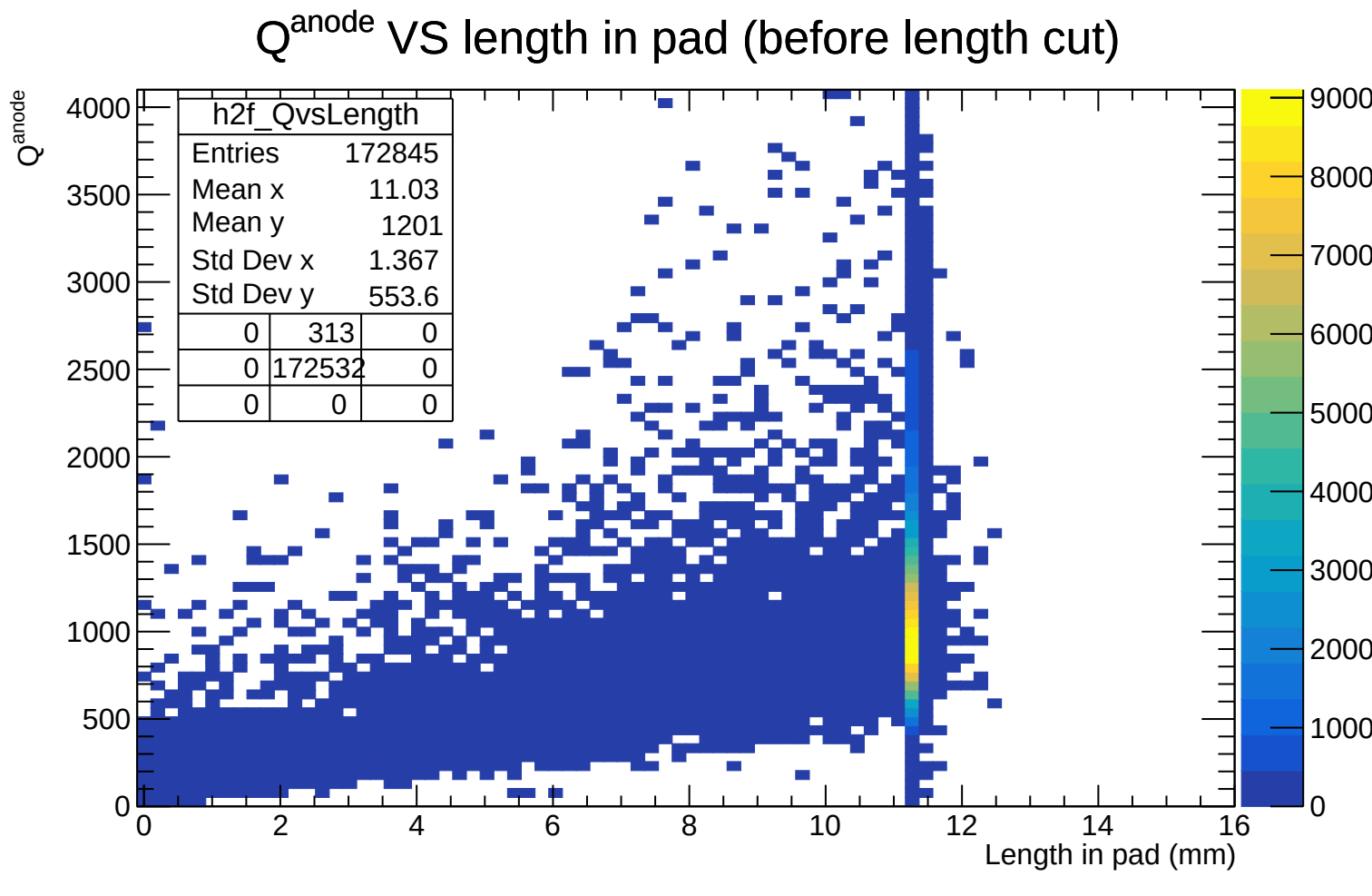

$L_{ERAM}$*0.7 - Σ $L_{clus>2mm}$
Count
5000
4000
3000
2000
1000
0
–60
–40
–20
0
20
40
60
difference (mm)
h1f_Lmod1VScl
Entries 4968
Mean 9.032
Std Dev 0.332
Underflow 0
Overflow 0

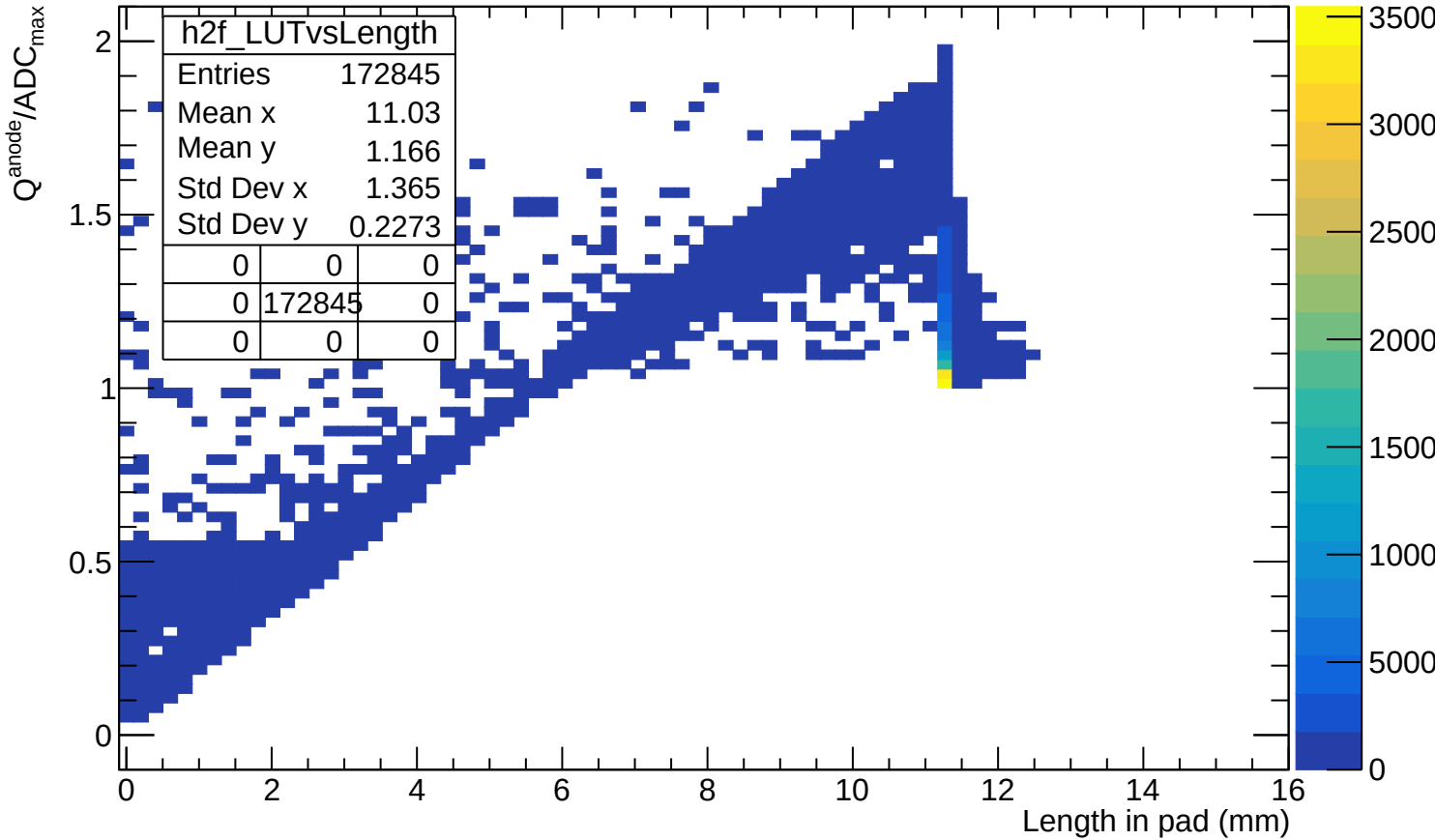

$L_{ERAM}*(N_{trunc\ cross}/N_{clus\ cross>2mm}) - \Sigma\ L_{clus>2mm}$
Count
2500
2000
1500
1000
500
0
−60
−40
−20
0
20
40
60
difference (mm)
h1f_Lmod2VScl
Entries 4968
Mean 0.005722
Std Dev 0.3545
Underflow 0
Overflow 0

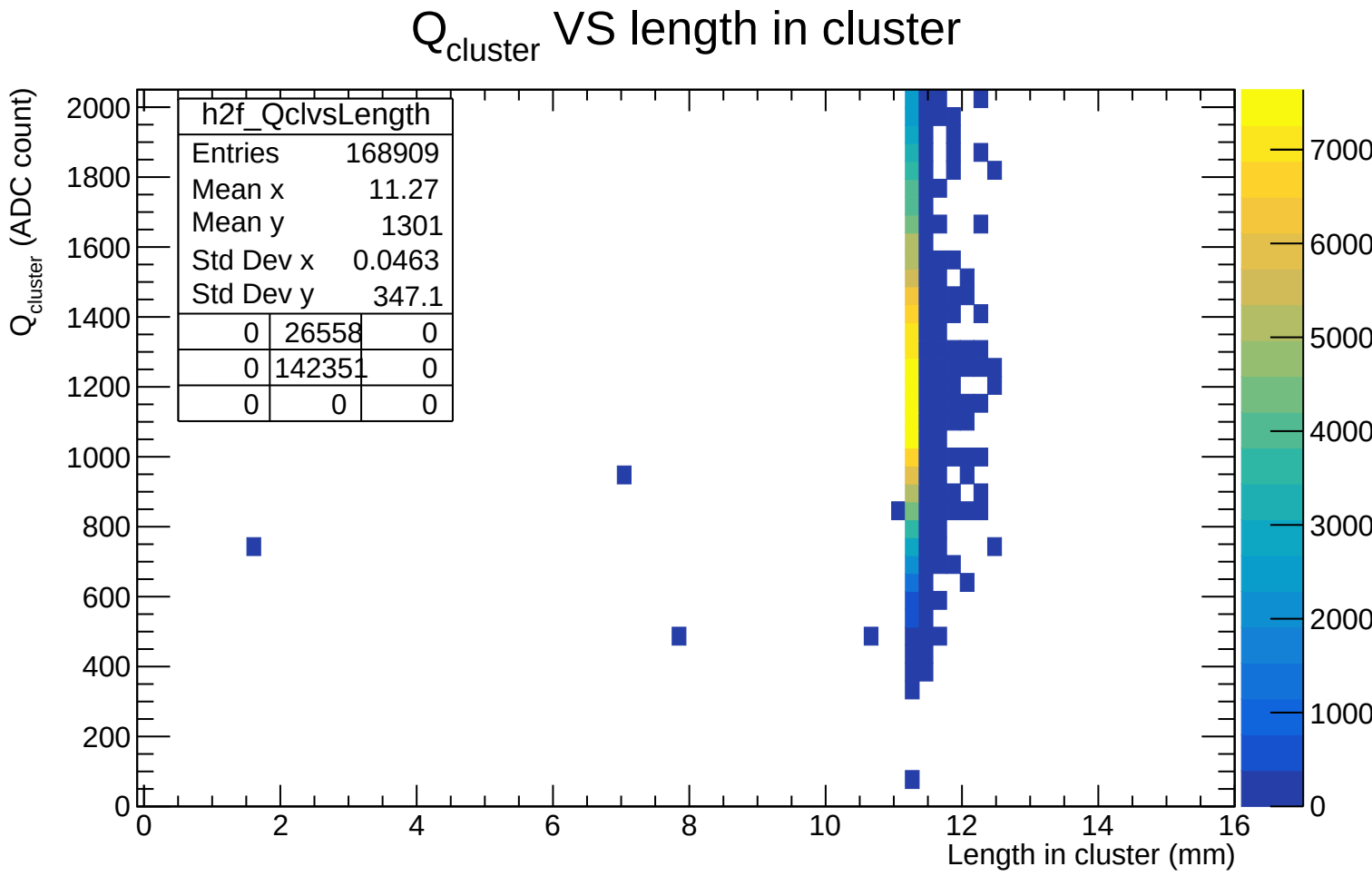

L clusters - L clusters > 2mm
Count
2500
2000
1500
1000
500
0
–60
–40
–20
0
20
40
60
difference (mm)
h1f_LallVScl
Entries 4968
Mean 0.000329
Std Dev 0.02329
Underflow 0
Overflow 0

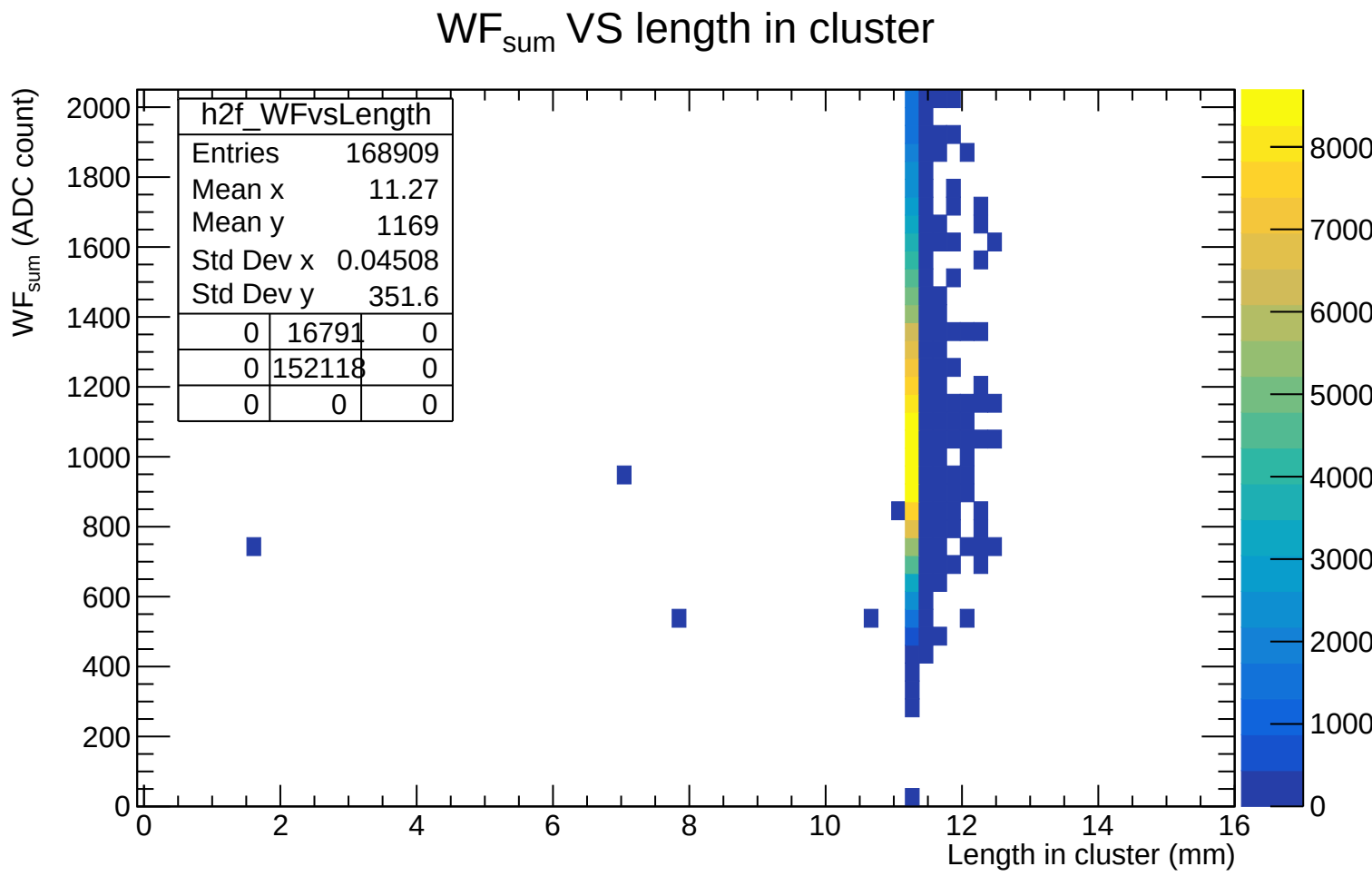

LUT(z_file) vs LUT(z_calc)
h2f_ratiodiffZ
Entries 171467
Mean x 1.172
Mean y 1.187
Std Dev x 0.2168
Std Dev y 0.2243
0 0 0
0 171467 0
0 0 0
LUT(z_file)
LUT(z_calc)
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
0 500 1000 1500 2000 2500 3000

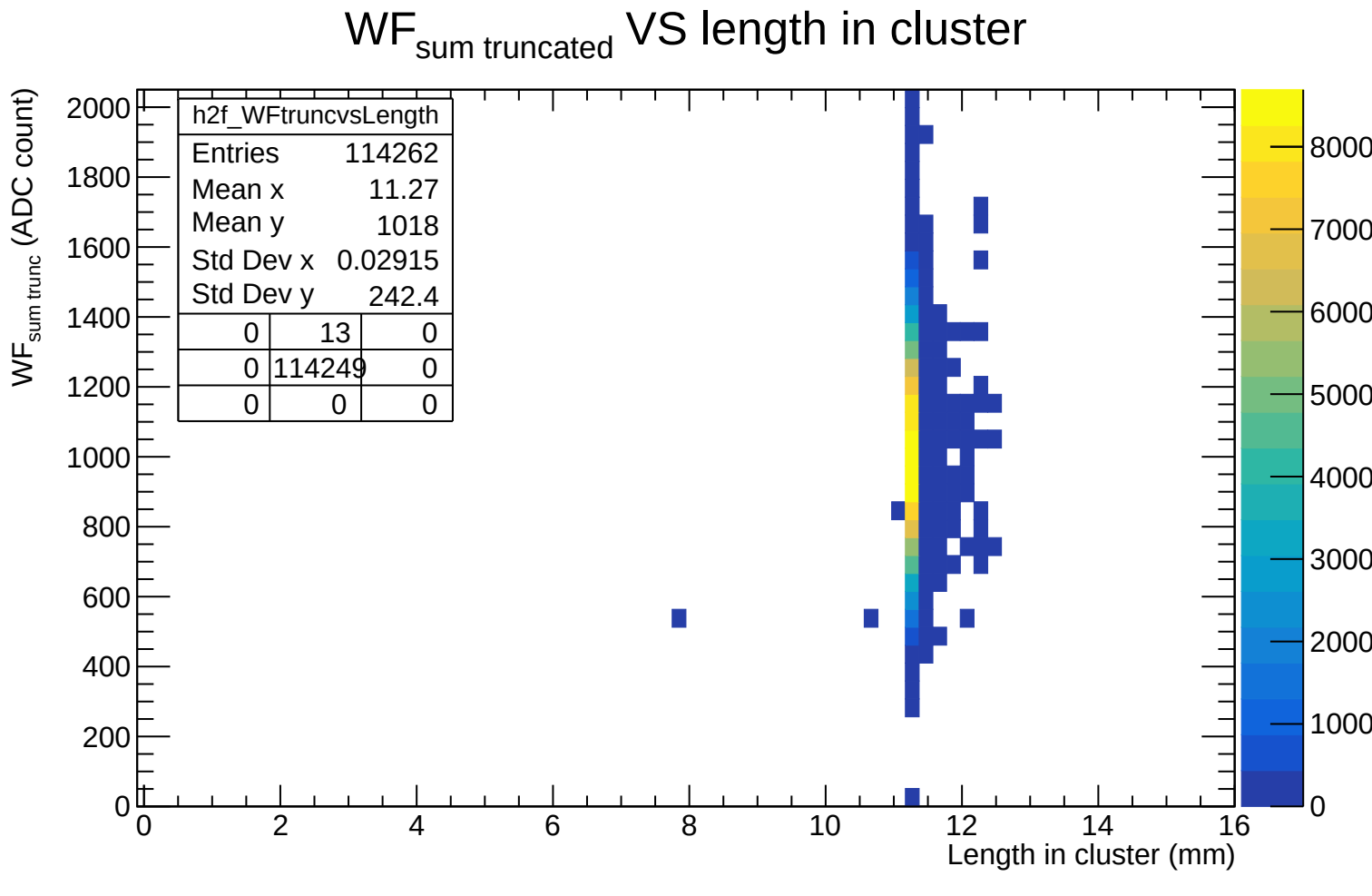

ADC$_{max}$ VS length in pad (before length cut)
h2f_AmaxvsLength
Entries 172845
Mean x 11.03
Mean y 1058
Std Dev x 1.365
Std Dev y 514.2
0 7 0
0 172838 0
0 0 0
ADC$_{max}$
Length in pad (mm)
0 500 1000 1500 2000 2500 3000 3500 4000
0 2 4 6 8 10 12 14 16
0 1000 2000 3000 4000 5000 6000 7000 8000 9000

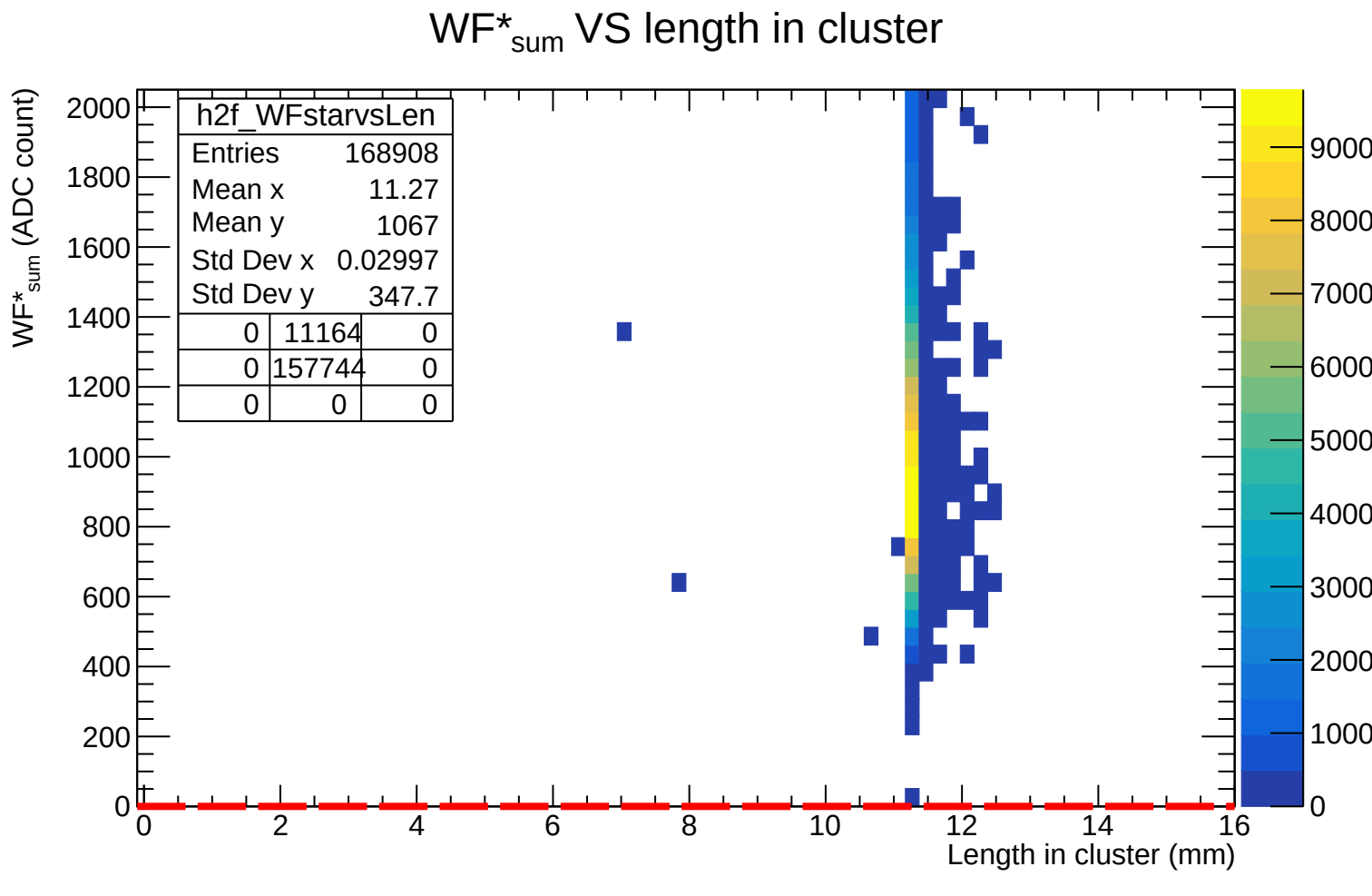

Q^anode VS length in pad (before length cut)
h2f_QvsLength
Entries 172845
Mean x 11.03
Mean y 1201
Std Dev x 1.367
Std Dev y 553.6
0 313 0
0 172532 0
0 0 0
Q^anode
Length in pad (mm)
0
500
1000
1500
2000
2500
3000
3500
4000
0
2
4
6
8
10
12
14
16
0
1000
2000
3000
4000
5000
6000
7000
8000
9000

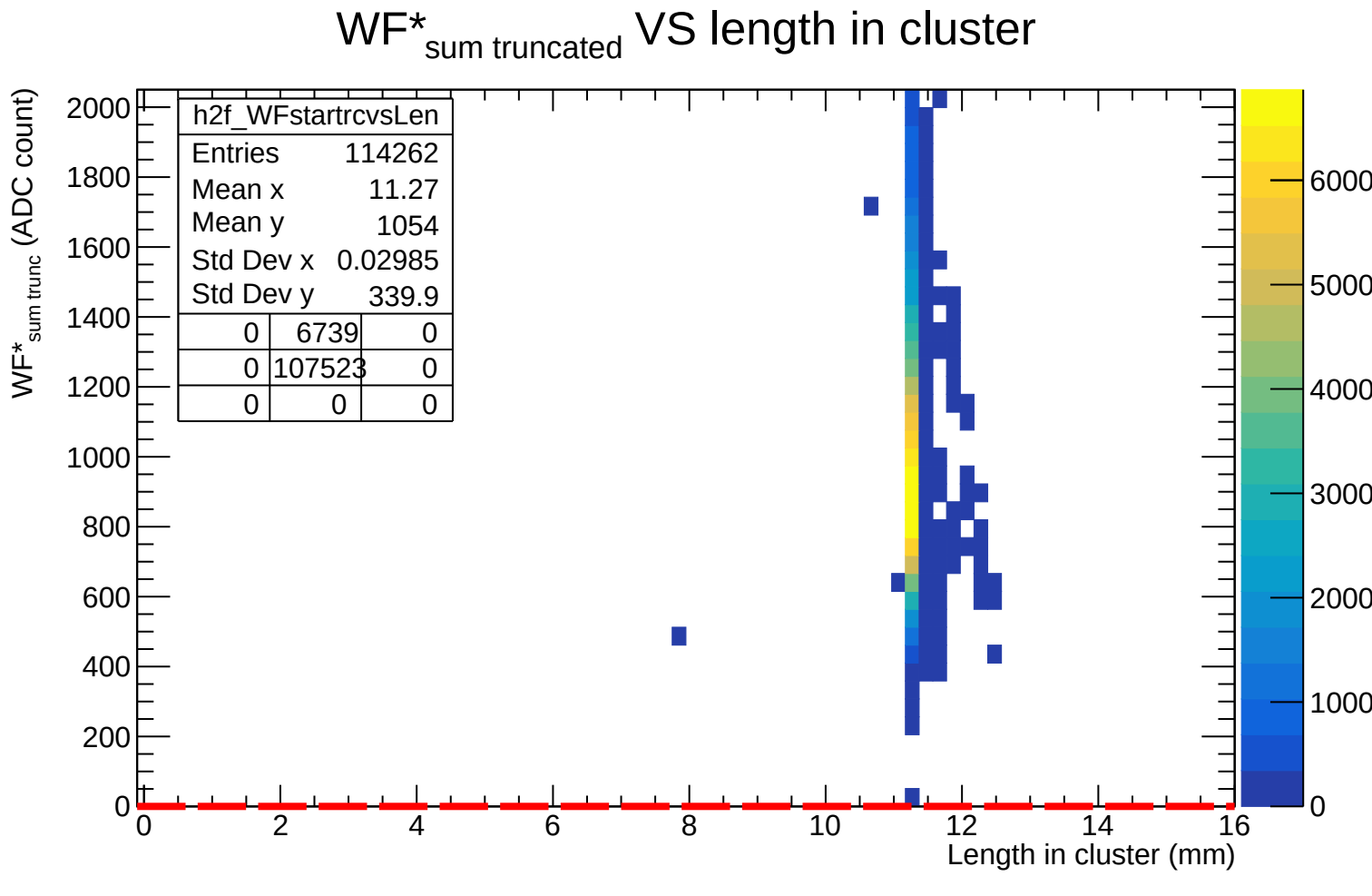

Q^anode/ADC_max VS length in pad (before length cut)
h2f_LUTvsLength
Entries 172845
Mean x 11.03
Mean y 1.166
Std Dev x 1.365
Std Dev y 0.2273
0 0 0
0 172845 0
0 0 0
Q^anode/ADC_max
Length in pad (mm)
0
0.5
1
1.5
2
0
2
4
6
8
10
12
14
16
0
500
1000
1500
2000
2500
3000
3500

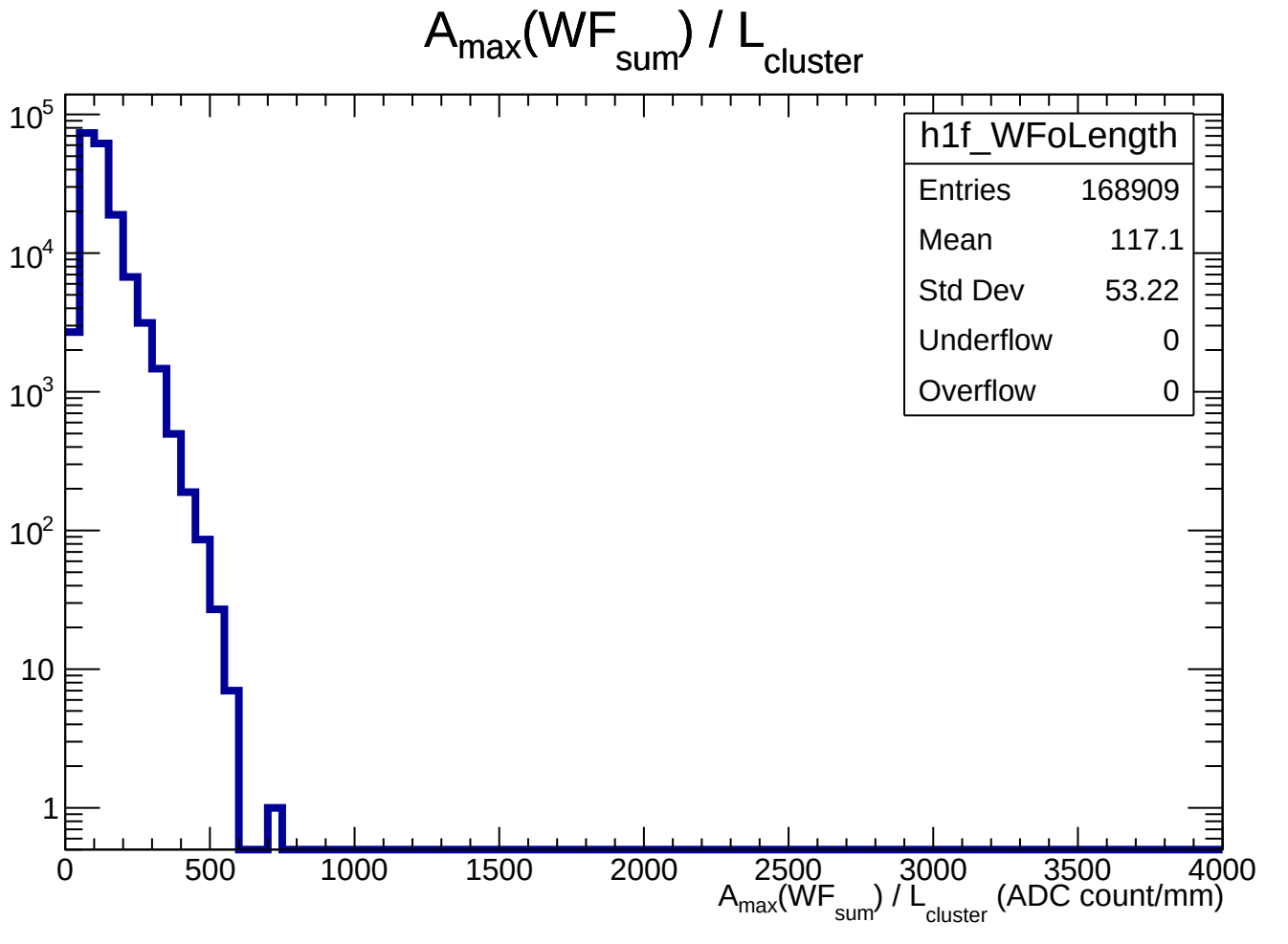

$Q_{cluster}$ VS length in cluster
h2f_QclvsLength
Entries 168909
Mean x 11.27
Mean y 1301
Std Dev x 0.0463
Std Dev y 347.1
0 26558 0
0 142351 0
0 0 0
$Q_{cluster}$ (ADC count)
Length in cluster (mm)
0 200 400 600 800 1000 1200 1400 1600 1800 2000
0 2 4 6 8 10 12 14 16
0 1000 2000 3000 4000 5000 6000 7000

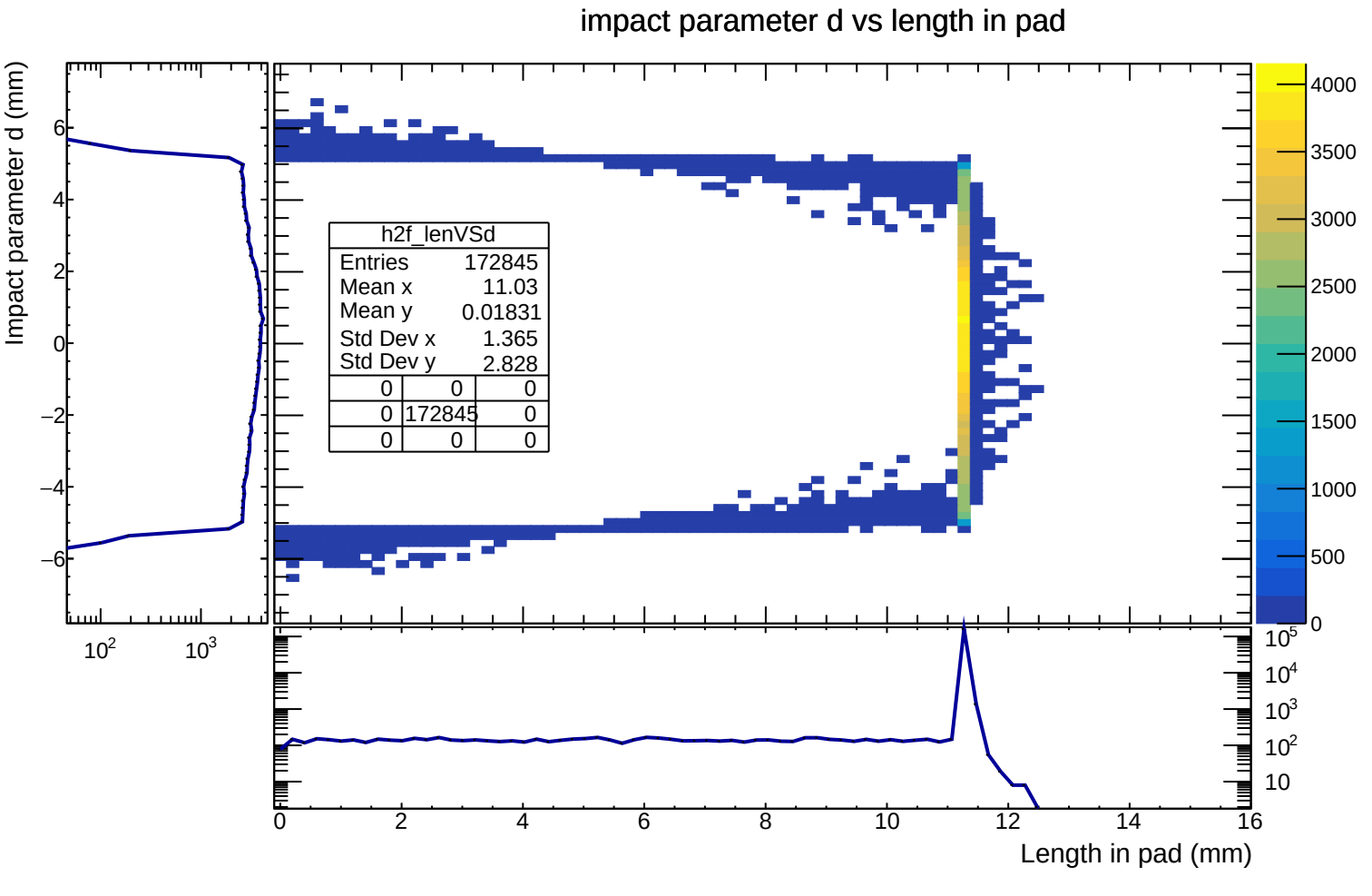

WF_sum VS length in cluster
h2f_WFvsLength
Entries 168909
Mean x 11.27
Mean y 1169
Std Dev x 0.04508
Std Dev y 351.6
0 16791 0
0 152118 0
0 0 0
WF_sum (ADC count)
Length in cluster (mm)
0
200
400
600
800
1000
1200
1400
1600
1800
2000
0
2
4
6
8
10
12
14
16
1000
2000
3000
4000
5000
6000
7000
8000


WF sum truncated VS length in cluster
h2f_WFtruncvsLength
Entries 114262
Mean x 11.27
Mean y 1018
Std Dev x 0.02915
Std Dev y 242.4
0 13 0
0 114249 0
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


WF*sum VS length in cluster
h2f_WFstarvsLen
Entries 168908
Mean x 11.27
Mean y 1067
Std Dev x 0.02997
Std Dev y 347.7
0 11164 0
0 157744 0
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 1000 2000 3000 4000 5000 6000 7000 8000 9000


WF*sum truncated VS length in cluster
h2f_WFstartrcvsLen
Entries 114262
Mean x 11.27
Mean y 1054
Std Dev x 0.02985
Std Dev y 339.9
0 6739 0
0 107523 0
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
1000
2000
3000
4000
5000
6000


$A_{max}(WF_{sum}) / L_{cluster}$
h1f_WFoLength
Entries 168909
Mean 117.1
Std Dev 53.22
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)
6
4
2
0
−2
−4
−6
$10^2$
$10^3$
h2f_lenVSd
Entries 172845
Mean x 11.03
Mean y 0.01831
Std Dev x 1.365
Std Dev y 2.828
0 0 0
0 172845 0
0 0 0
4000
3500
3000
2500
2000
1500
1000
500
0
$10^5$
$10^4$
$10^3$
$10^2$
10
0
2
4
6
8
10
12
14
16
Length in pad (mm)