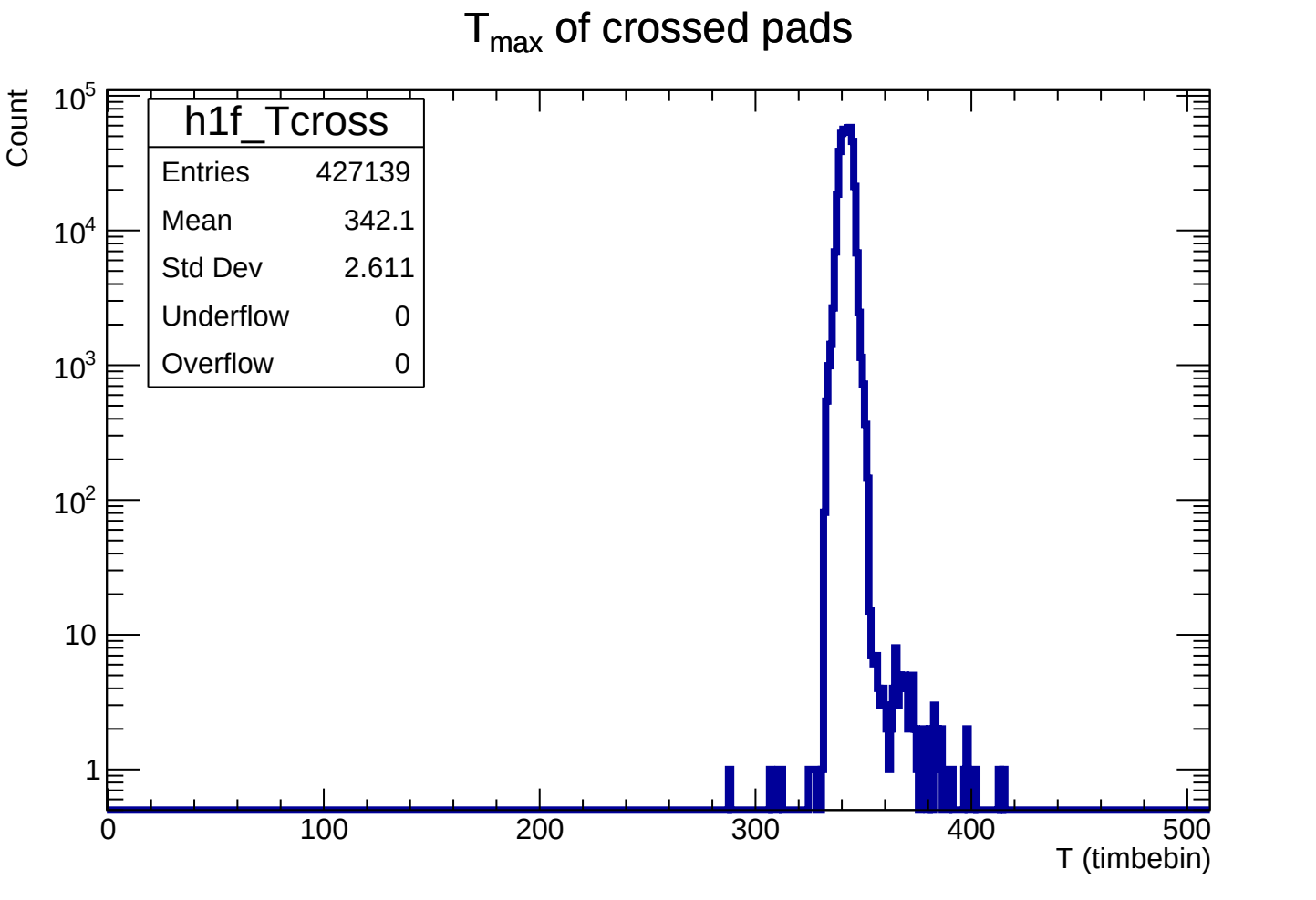
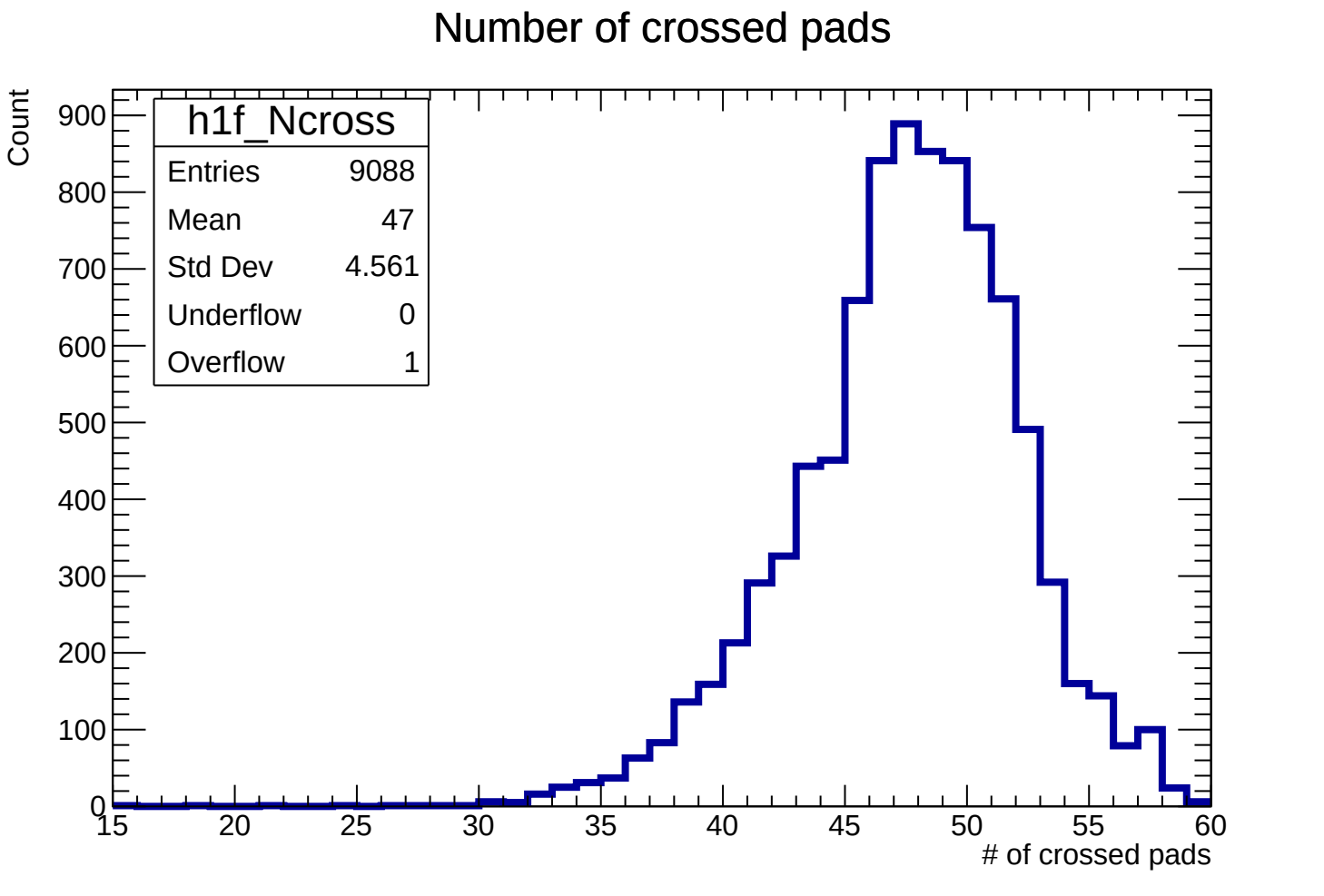
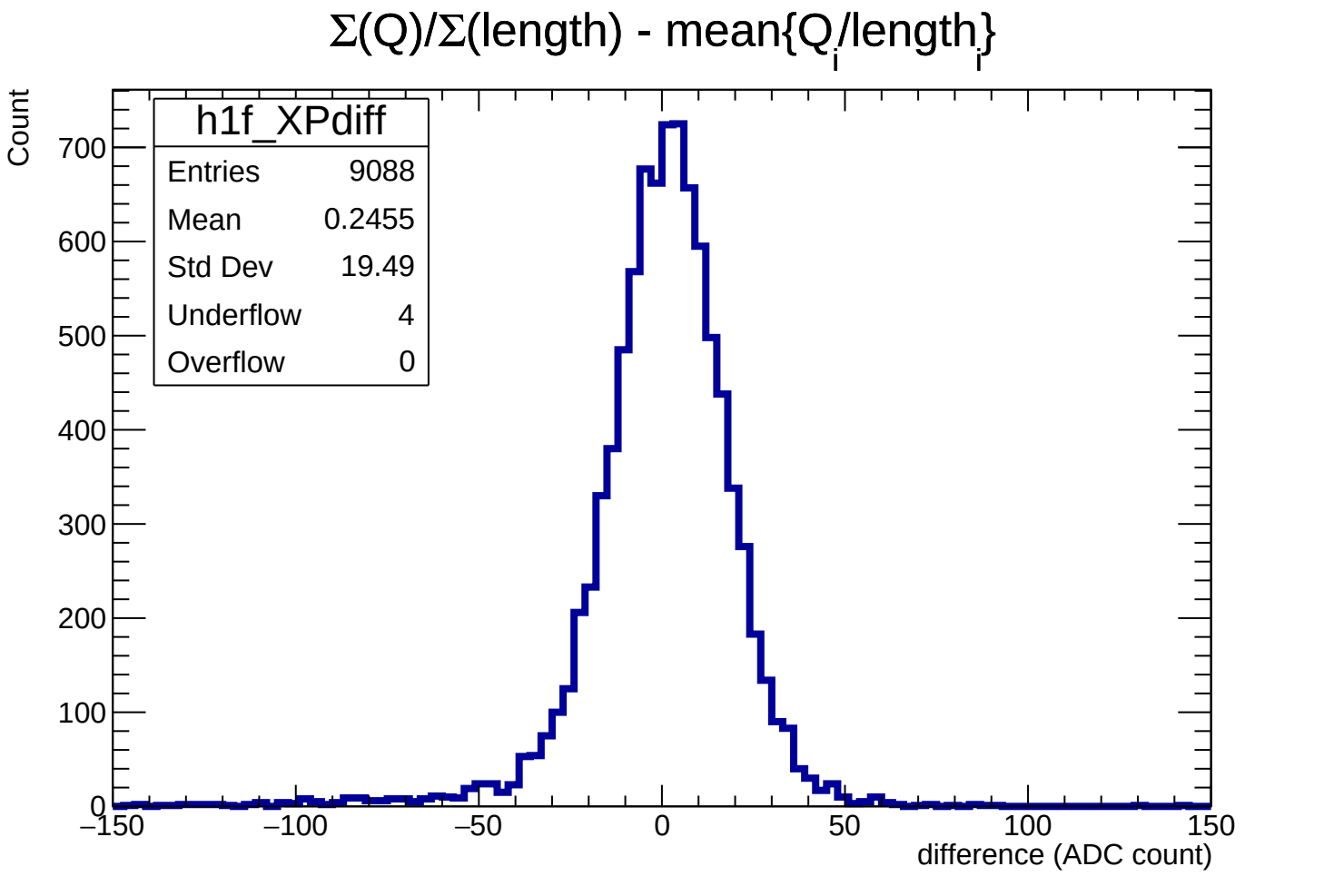
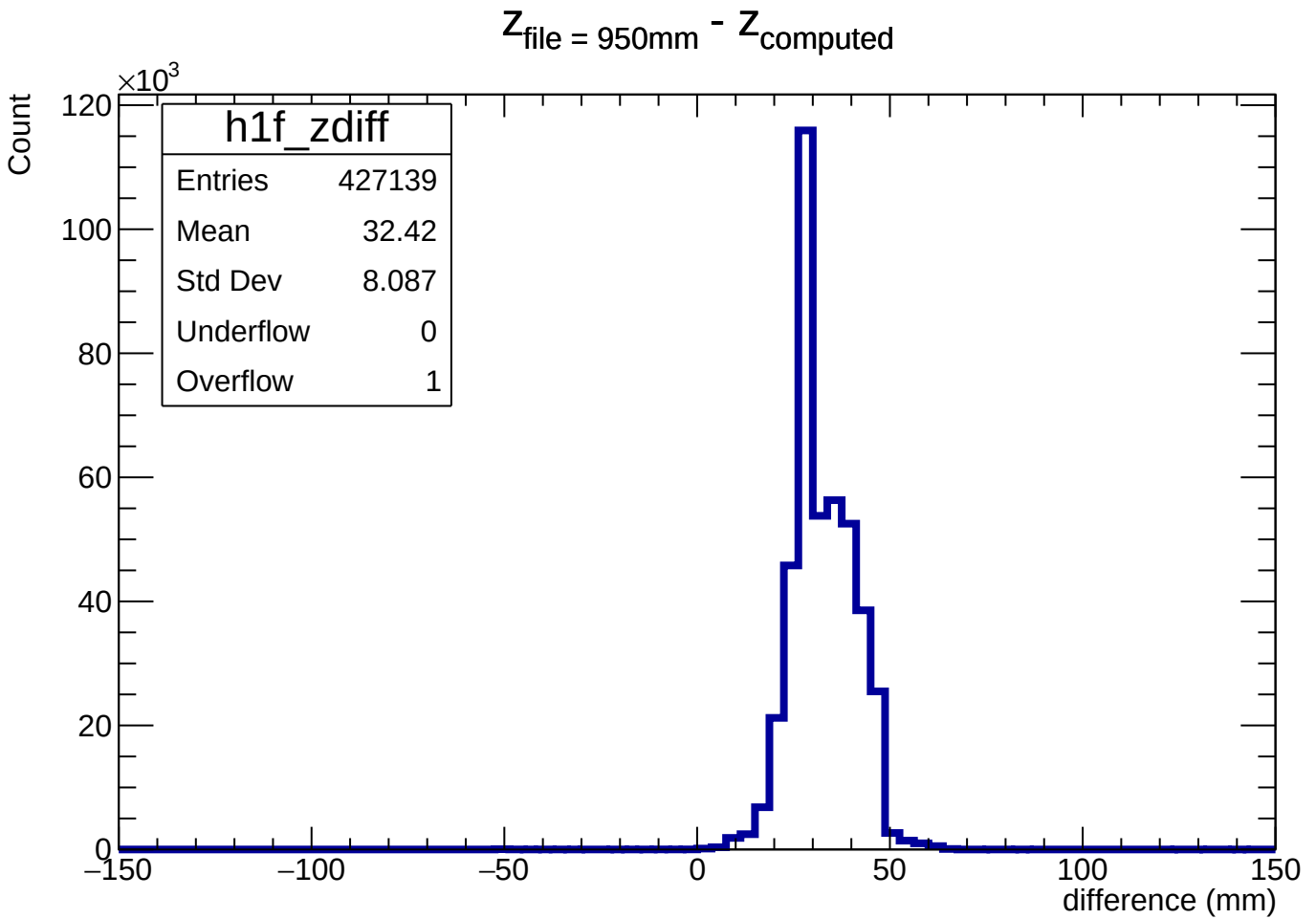
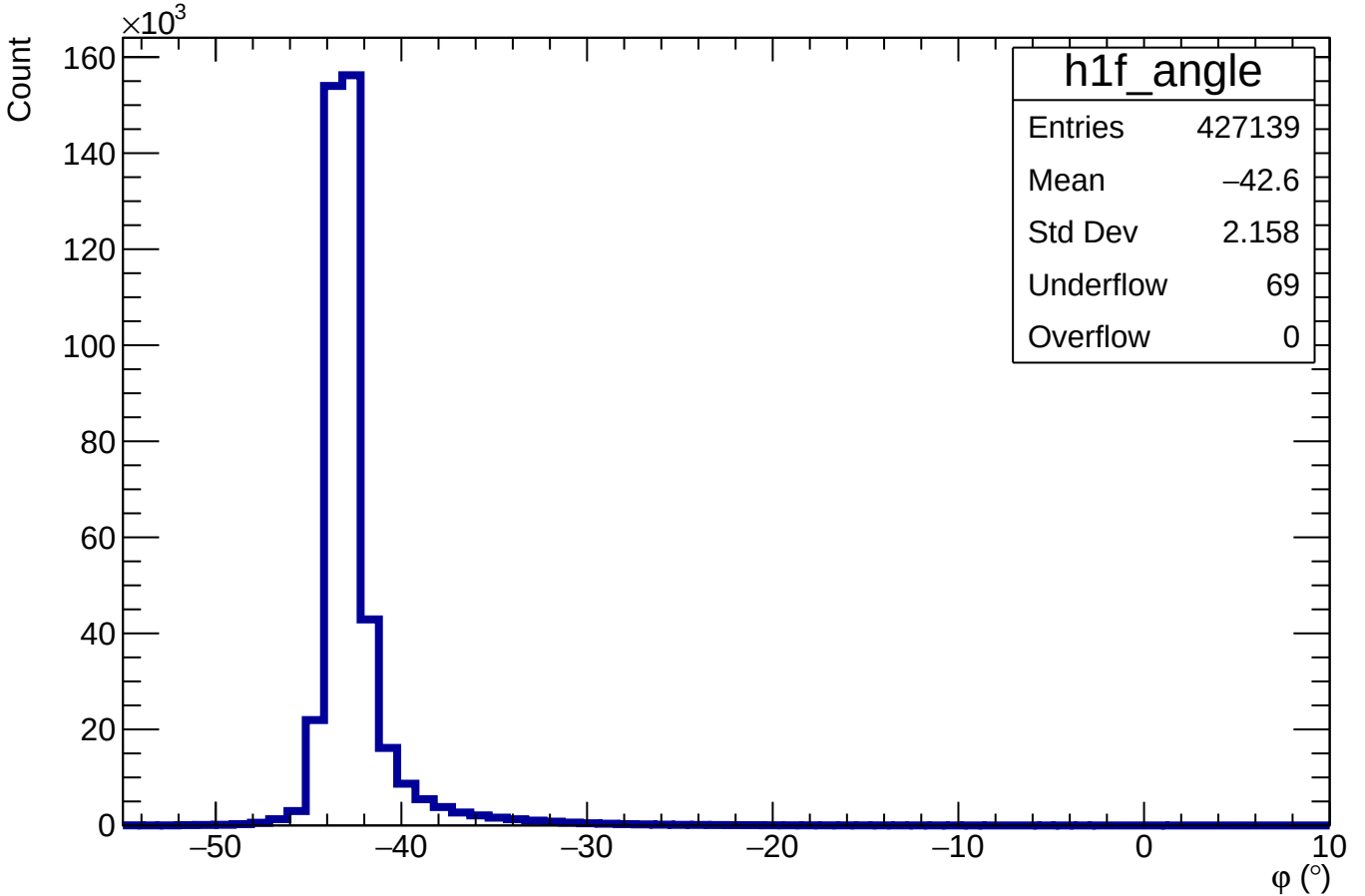
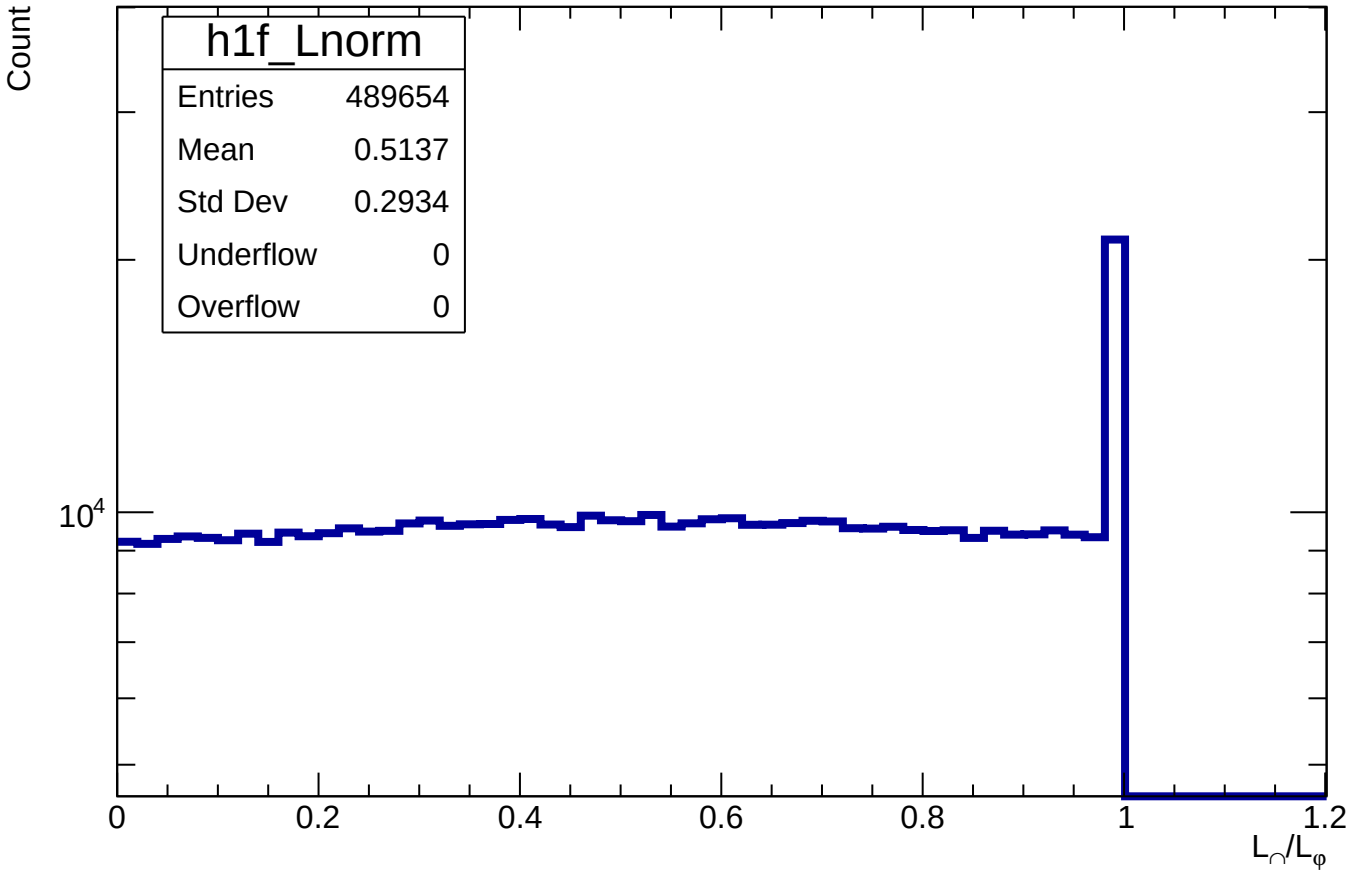

T_{max} of crossed pads
h1f_Tcross
Entries 427139
Mean 342.1
Std Dev 2.611
Underflow 0
Overflow 0
Count
10^5
10^4
10^3
10^2
10
1
0
100
200
300
400
500
T (timbebin)

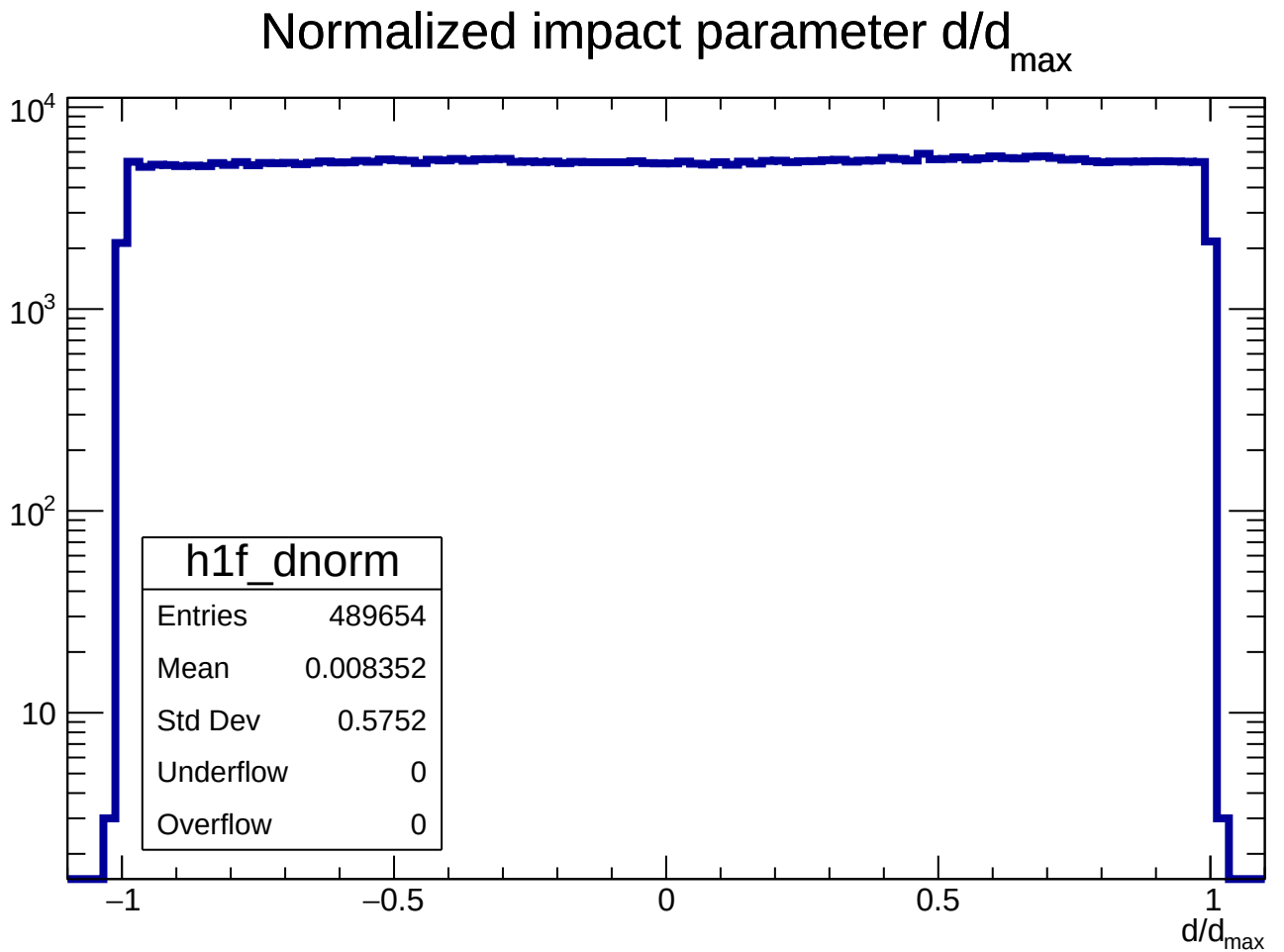

Number of crossed pads
h1f_Ncross
Entries 9088
Mean 47
Std Dev 4.561
Underflow 0
Overflow 1
Count
# of crossed pads
0
100
200
300
400
500
600
700
800
900
15
20
25
30
35
40
45
50
55
60

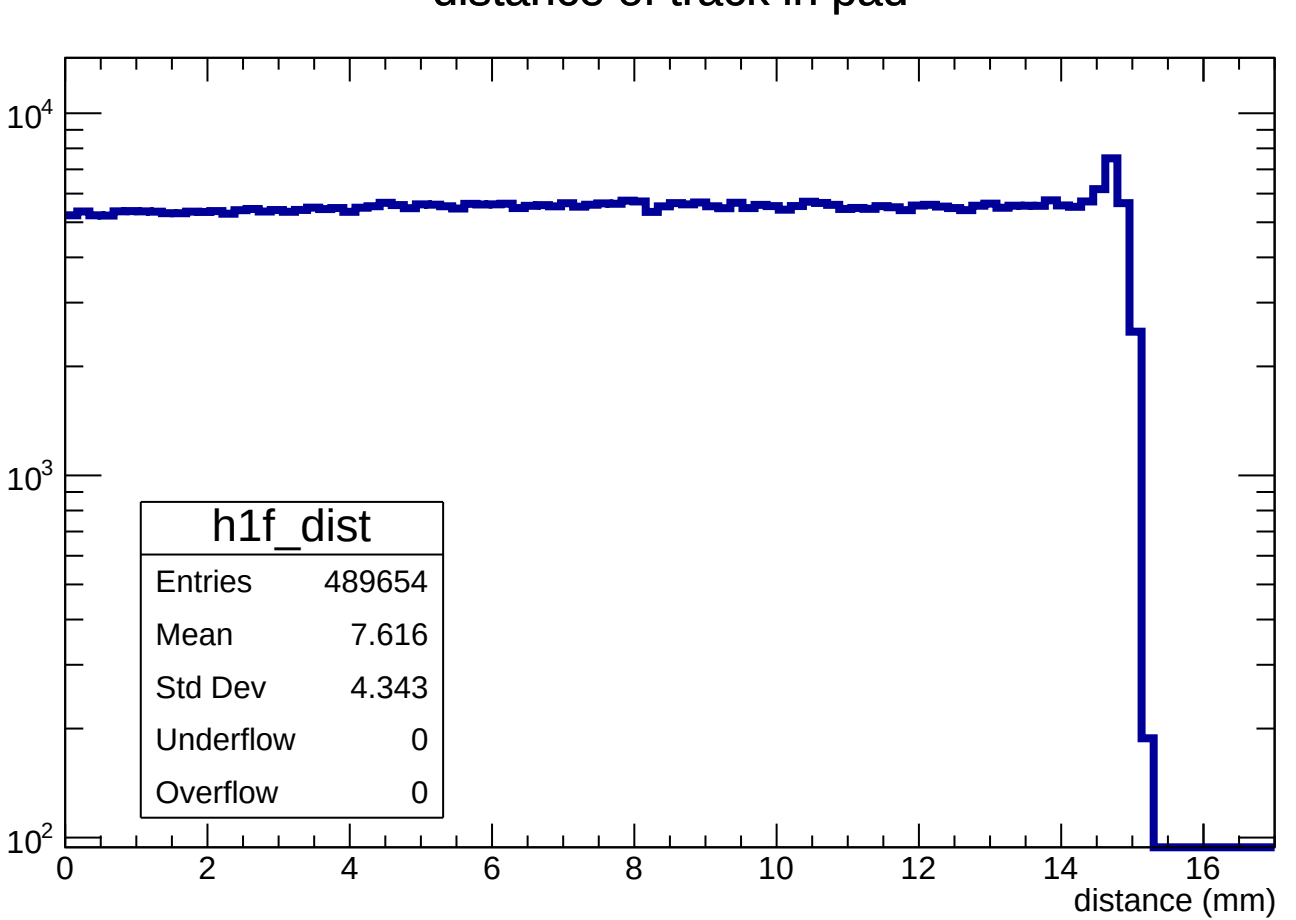

Σ(Q)/Σ(length) - mean{Q_i/length_i}
h1f_XPdiff
Entries 9088
Mean 0.2455
Std Dev 19.49
Underflow 4
Overflow 0
Count
0
100
200
300
400
500
600
700
–150
–100
–50
0
50
100
150
difference (ADC count)

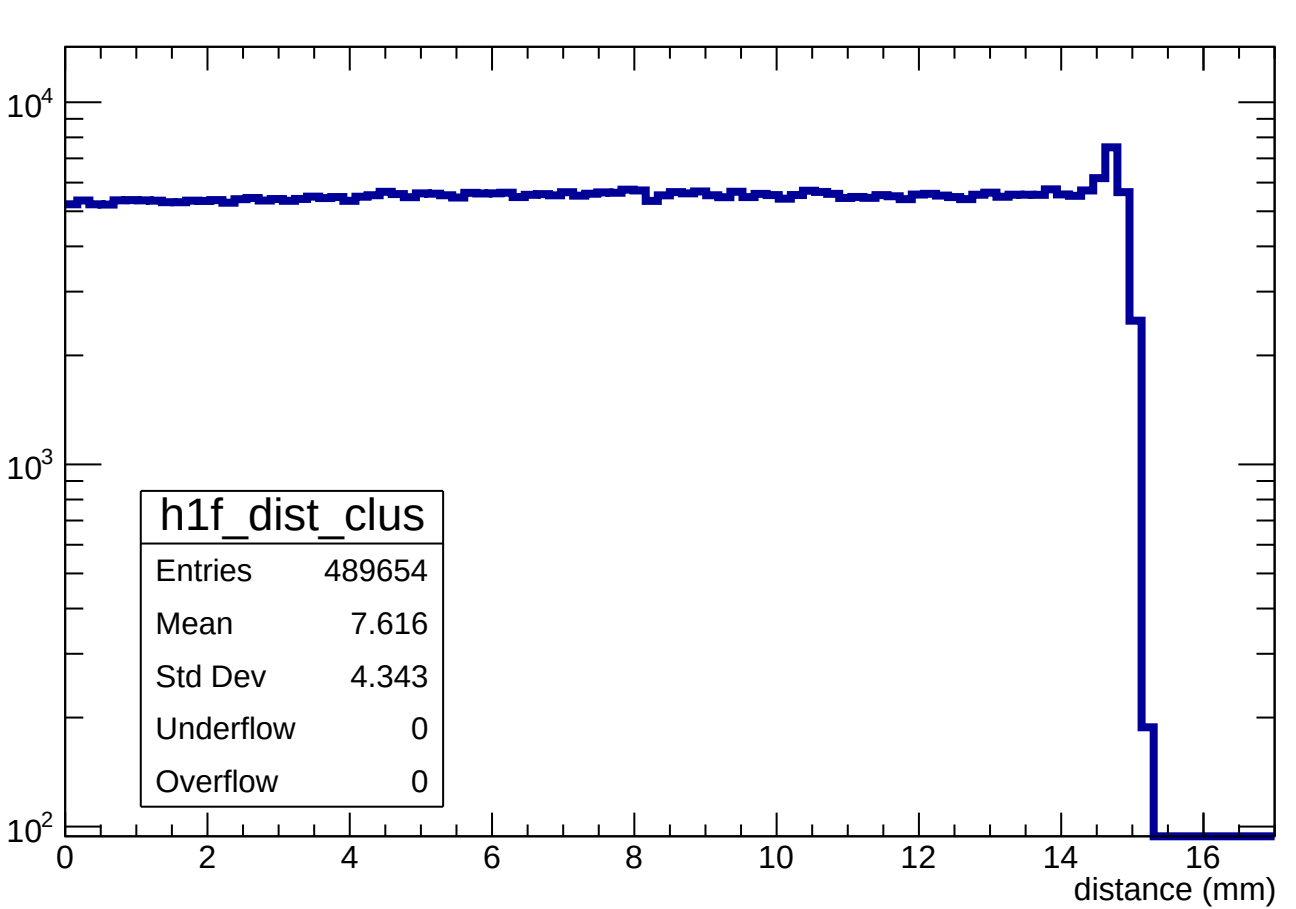

$z_{file = 950mm} - z_{computed}$
Count
×10^3
120
100
80
60
40
20
0
h1f_zdiff
Entries 427139
Mean 32.42
Std Dev 8.087
Underflow 0
Overflow 1
–150
–100
–50
0
50
100
150
difference (mm)

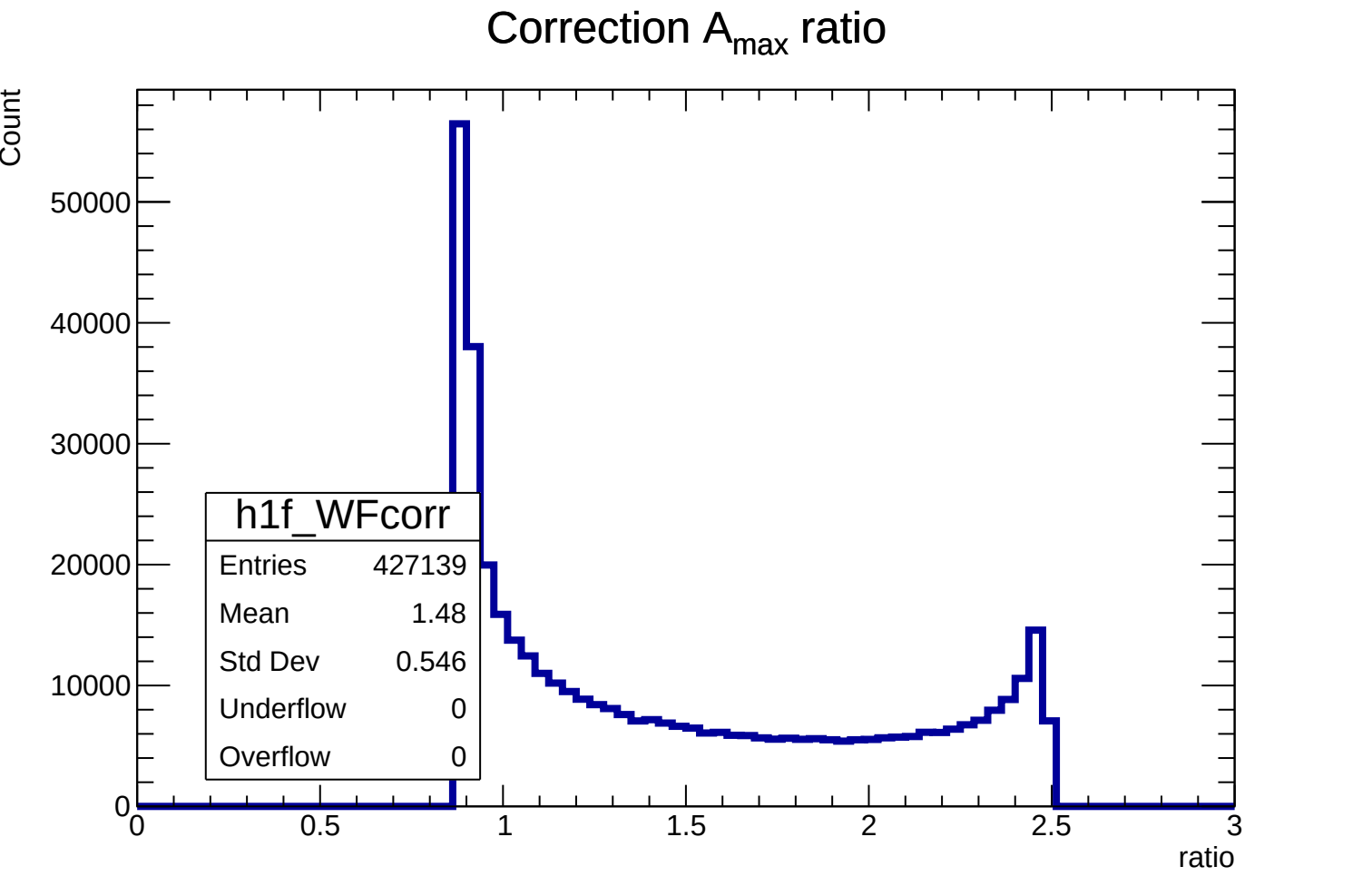

Angle φ in each pad
Count
×10^3
160
140
120
100
80
60
40
20
0
−50
−40
−30
−20
−10
0
10
φ (°)
h1f_angle
Entries 427139
Mean −42.6
Std Dev 2.158
Underflow 69
Overflow 0

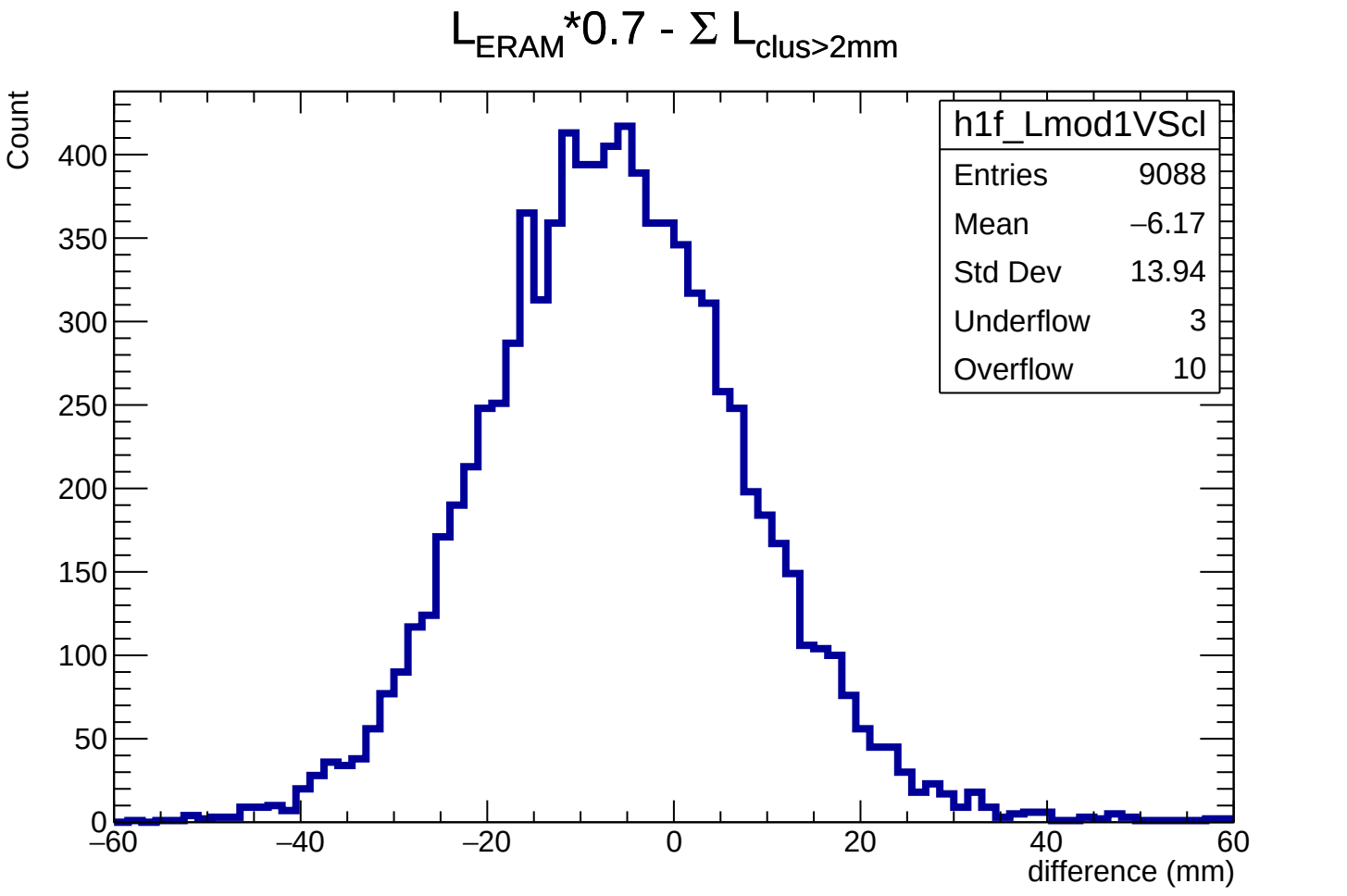

Length in pad normalized to maximum length in pad for a given φ
h1f_Lnorm
Entries 489654
Mean 0.5137
Std Dev 0.2934
Underflow 0
Overflow 0
Count
10^4
0
0.2
0.4
0.6
0.8
1
1.2
L_∩/L_φ

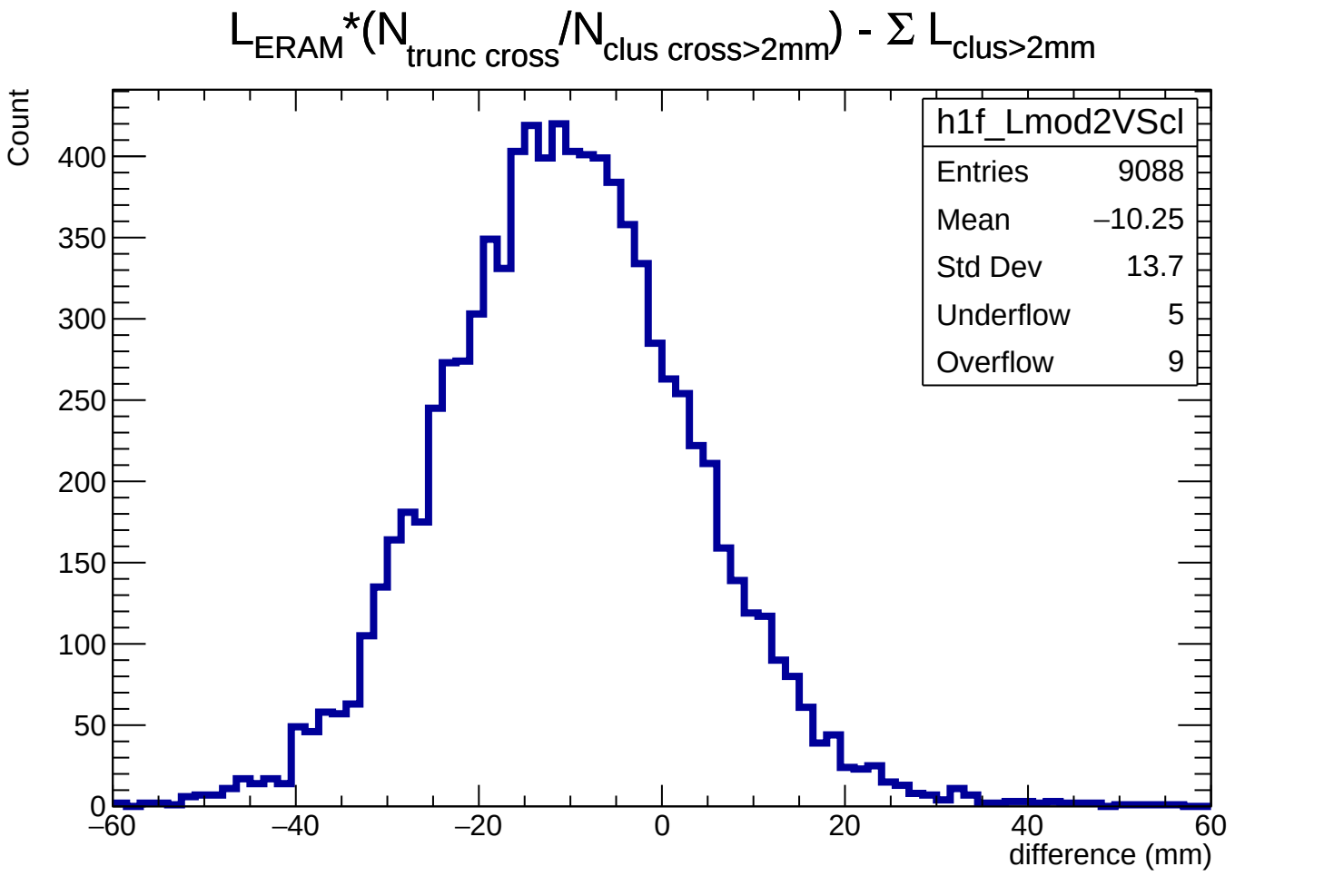

Normalized impact parameter d/d max
10^4
10^3
10^2
10
h1f_dnorm
Entries 489654
Mean 0.008352
Std Dev 0.5752
Underflow 0
Overflow 0
−1
−0.5
0
0.5
1
d/d max

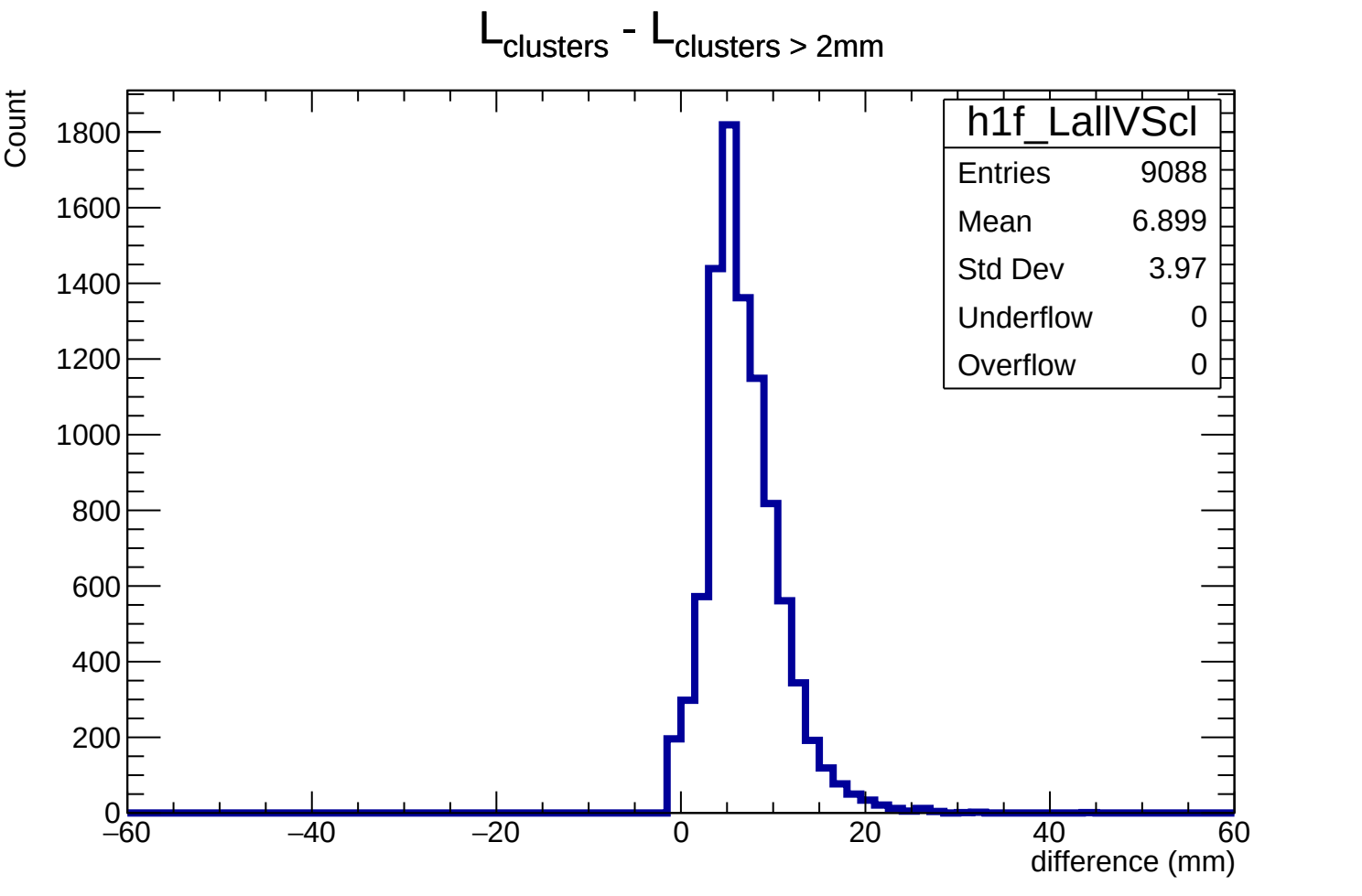

distance of track in pad
10^4
10^3
10^2
0
2
4
6
8
10
12
14
16
distance (mm)
h1f_dist
Entries 489654
Mean 7.616
Std Dev 4.343
Underflow 0
Overflow 0

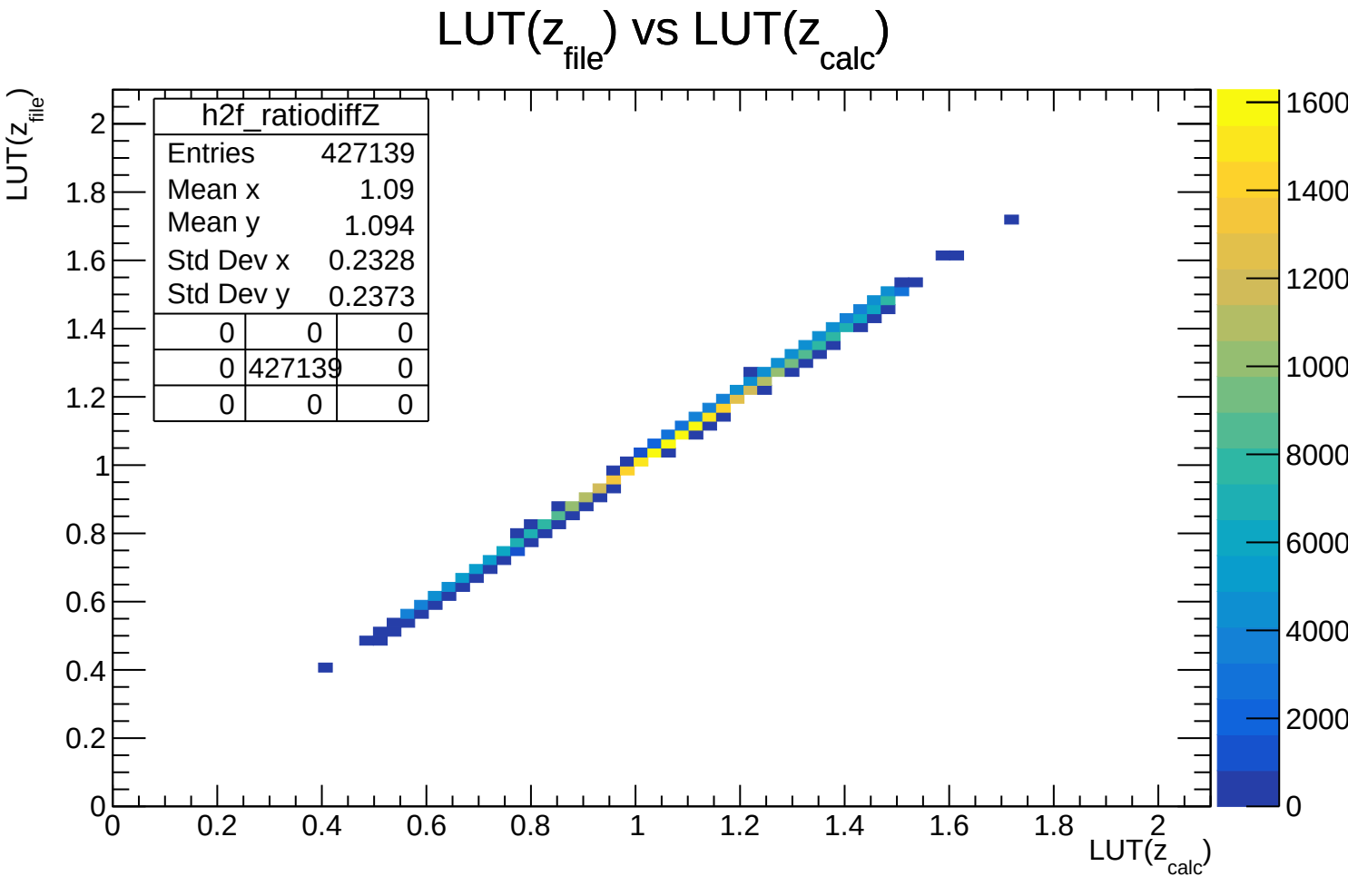

distance of track in cluster
10^4
10^3
10^2
0
2
4
6
8
10
12
14
16
distance (mm)
h1f_dist_clus
Entries 489654
Mean 7.616
Std Dev 4.343
Underflow 0
Overflow 0

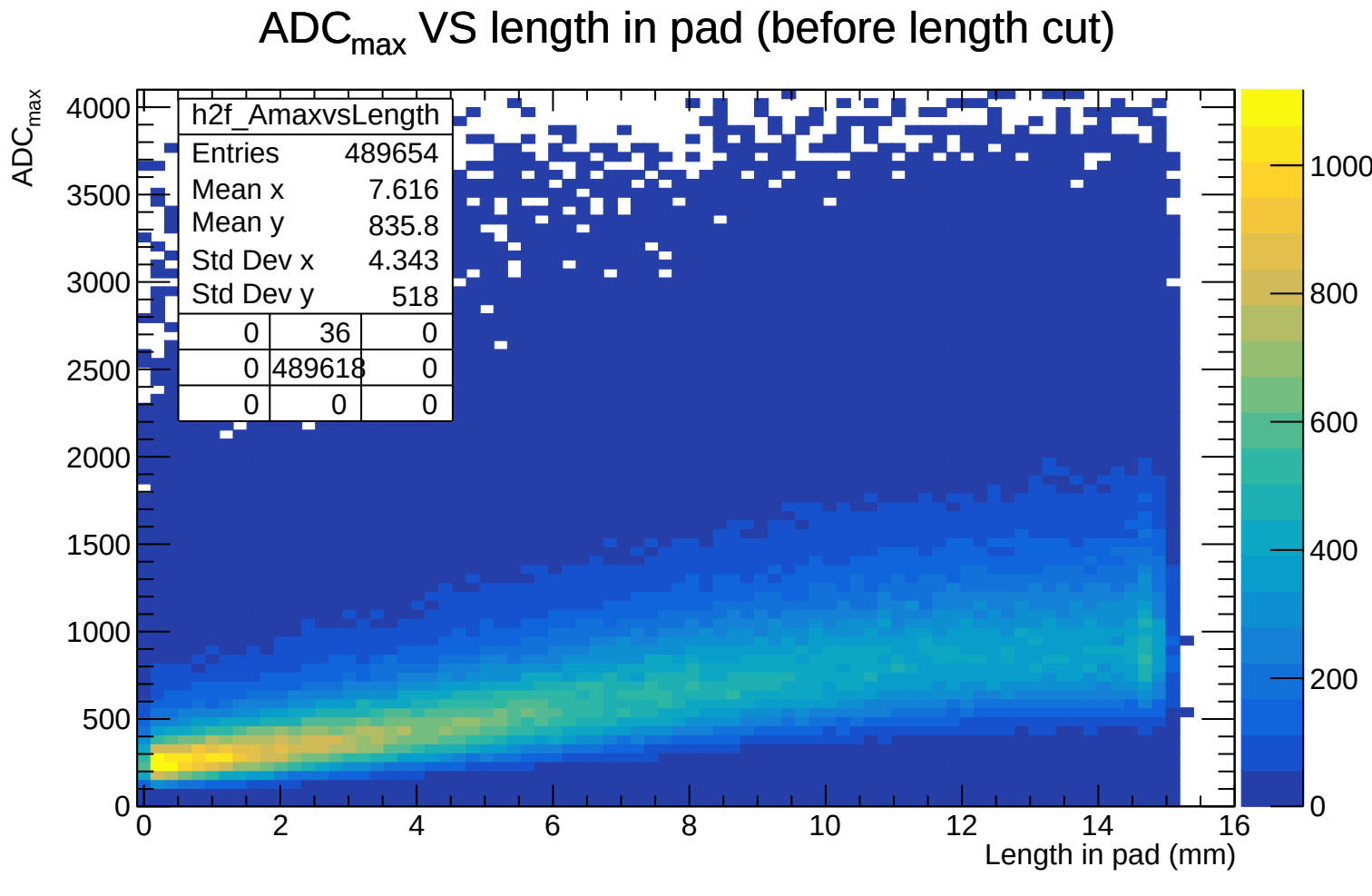

Correction A_{max} ratio
Count
50000
40000
30000
20000
10000
0
0
0.5
1
1.5
2
2.5
3
ratio
h1f_WFcorr
Entries 427139
Mean 1.48
Std Dev 0.546
Underflow 0
Overflow 0

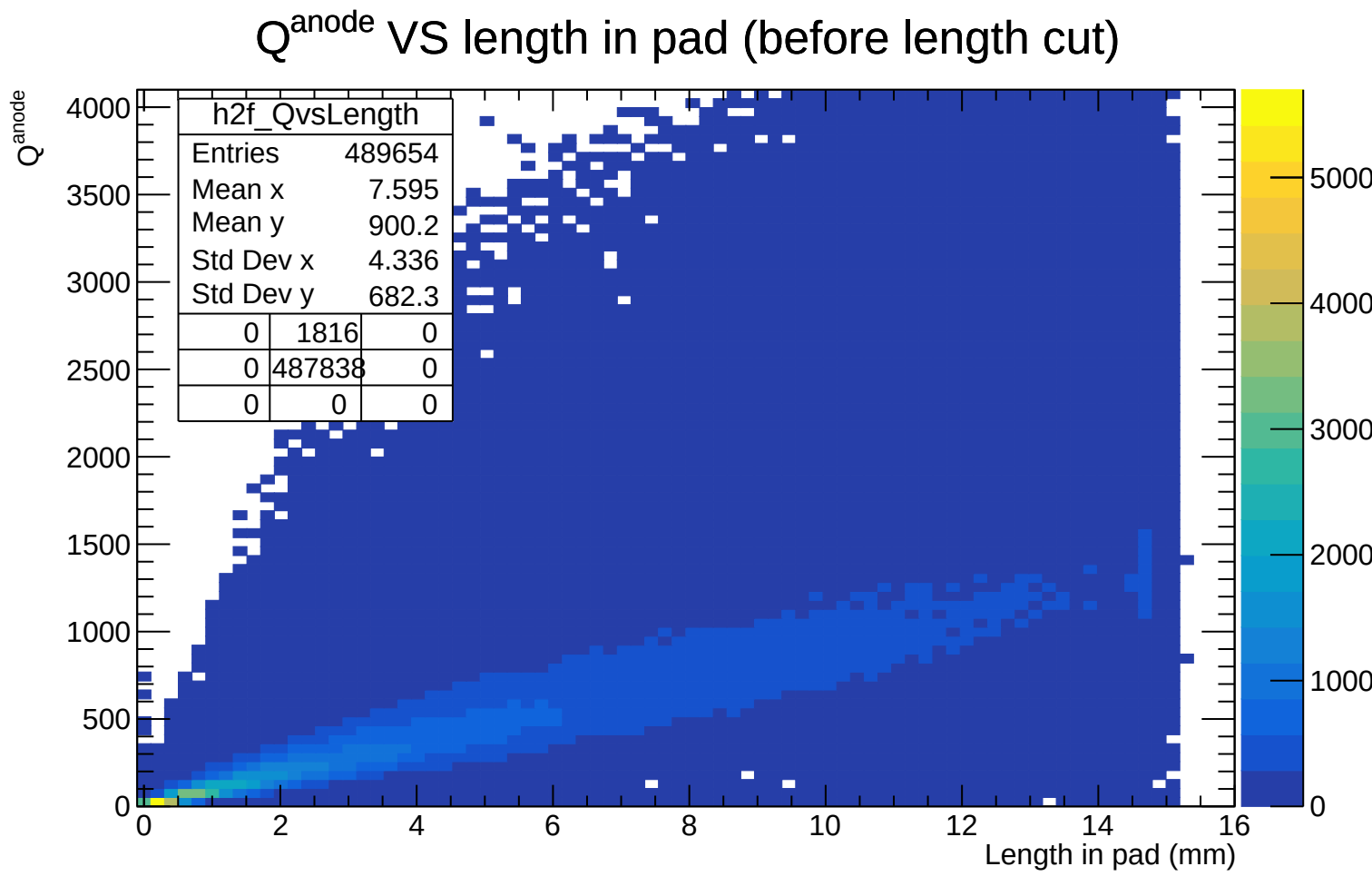

L_{ERAM}*0.7 - Σ $L_{clus>2mm}$
Count
h1f_Lmod1VScl
Entries 9088
Mean –6.17
Std Dev 13.94
Underflow 3
Overflow 10
0
50
100
150
200
250
300
350
400
–60
–40
–20
0
20
40
60
difference (mm)

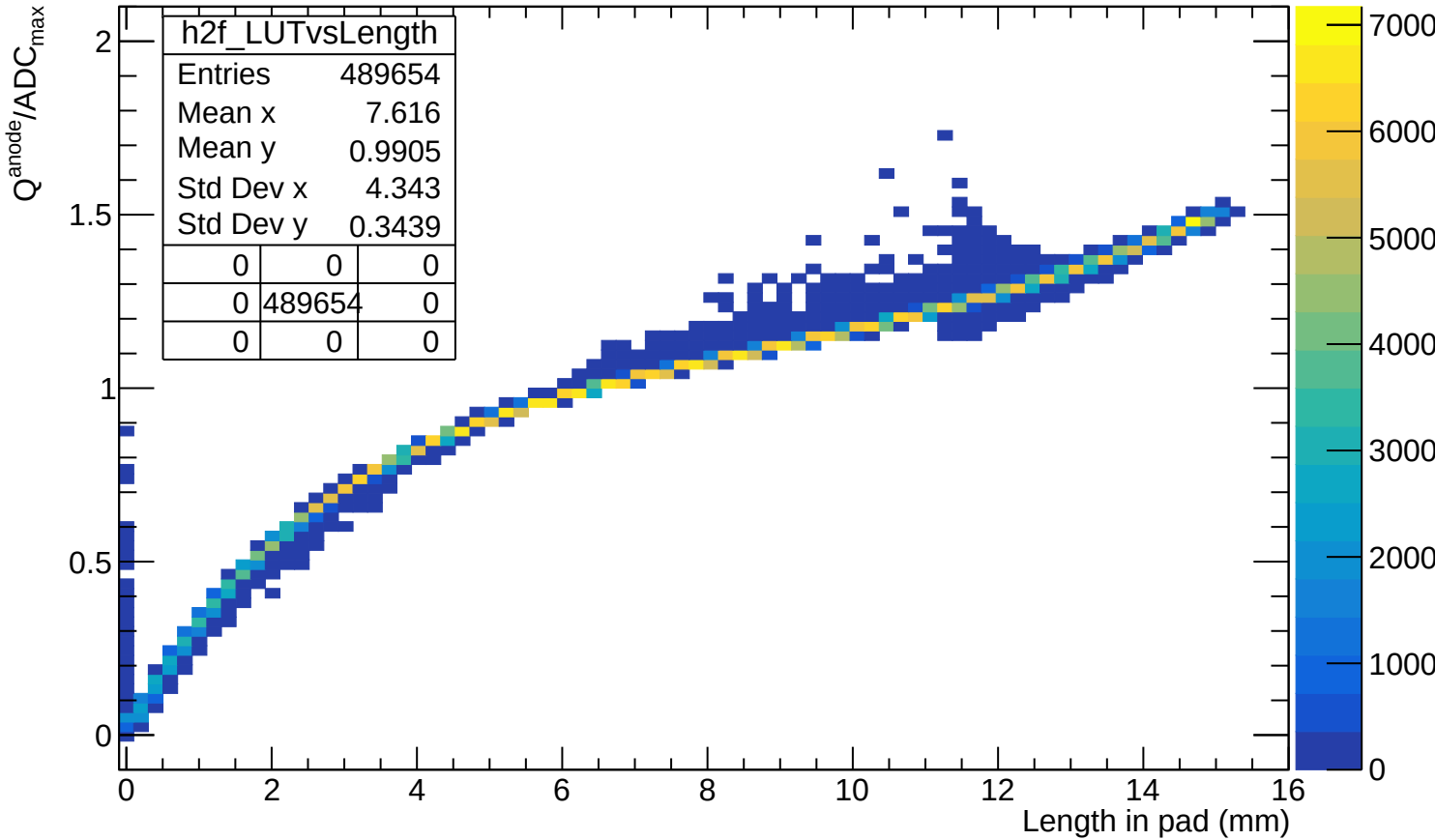

$L_{ERAM}*(N_{trunc\ cross}/N_{clus\ cross>2mm}) - \Sigma\ L_{clus>2mm}$
Count
400
350
300
250
200
150
100
50
0
−60
−40
−20
0
20
40
60
difference (mm)
h1f_Lmod2VScl
Entries 9088
Mean −10.25
Std Dev 13.7
Underflow 5
Overflow 9

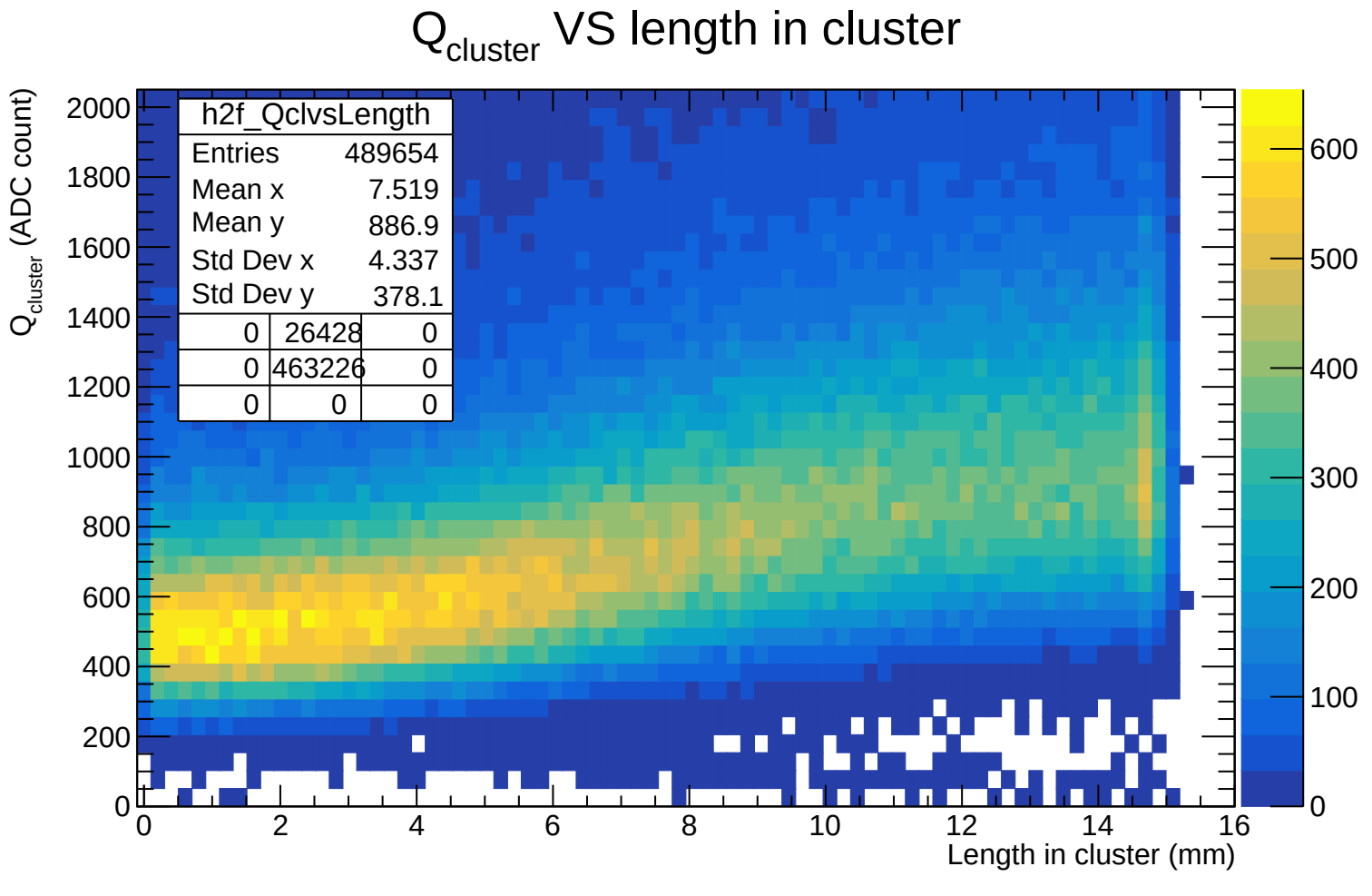

$L_{clusters}$ - $L_{clusters > 2mm}$
Count
h1f_LallVScl
Entries 9088
Mean 6.899
Std Dev 3.97
Underflow 0
Overflow 0
1800
1600
1400
1200
1000
800
600
400
200
0
–60
–40
–20
0
20
40
60
difference (mm)

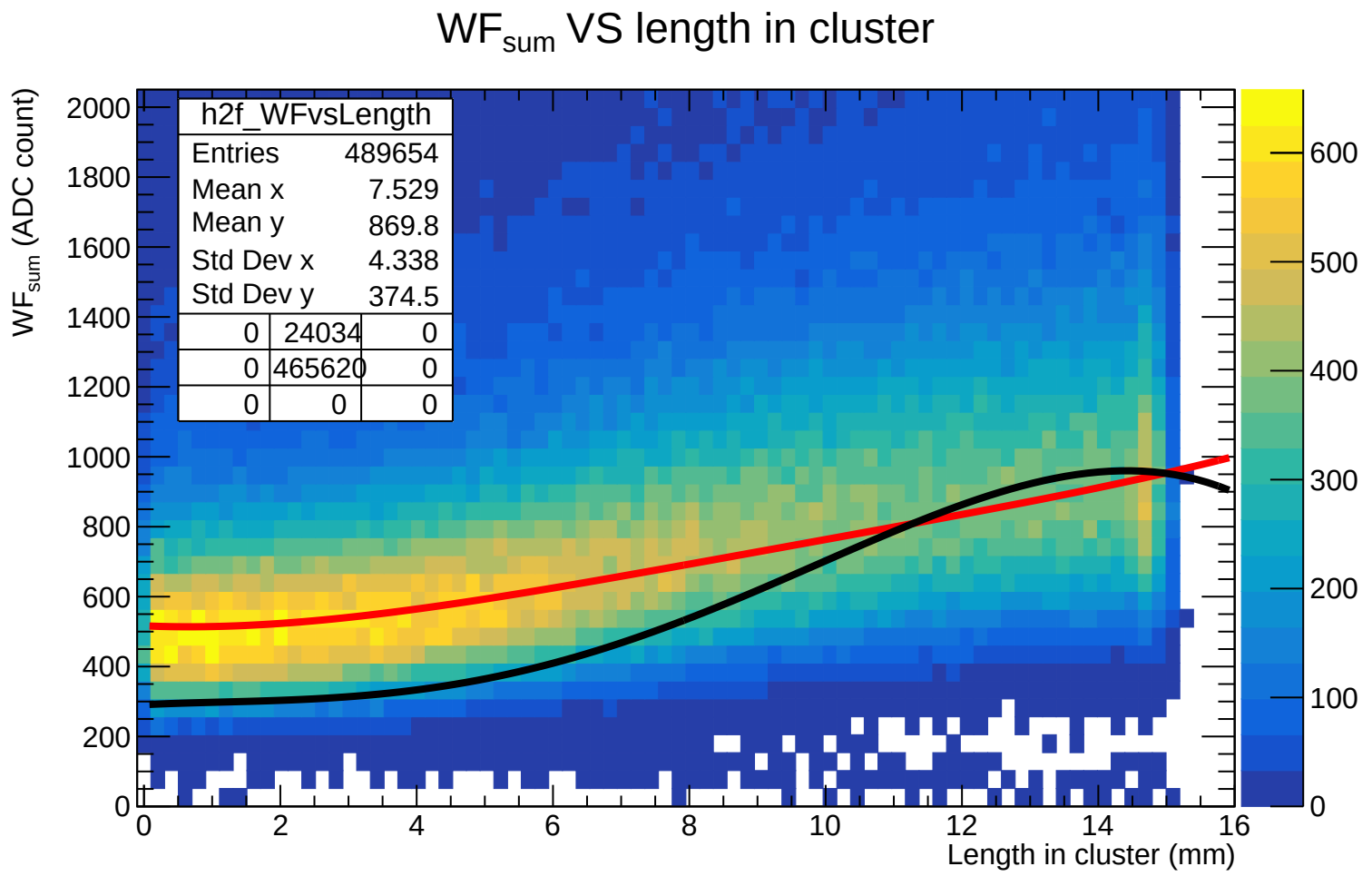

LUT(z_file) vs LUT(z_calc)
h2f_ratiodiffZ
Entries 427139
Mean x 1.09
Mean y 1.094
Std Dev x 0.2328
Std Dev y 0.2373
0 0 0
0 427139 0
0 0 0
LUT(z_file)
LUT(z_calc)
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
0 2000 4000 6000 8000 1000 1200 1400 1600

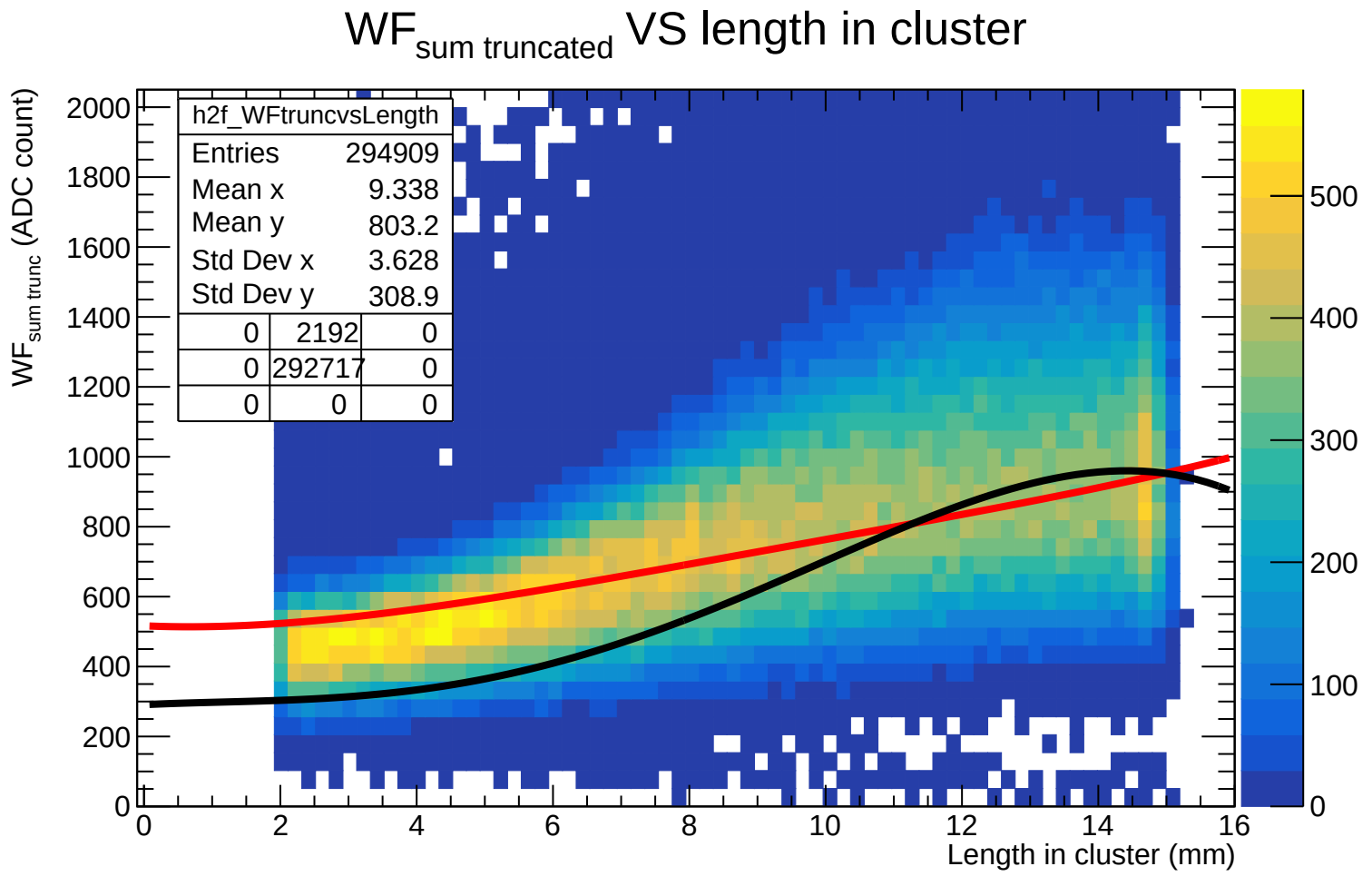

ADC$_{max}$ VS length in pad (before length cut)
h2f_AmaxvsLength
Entries 489654
Mean x 7.616
Mean y 835.8
Std Dev x 4.343
Std Dev y 518
0 36 0
0 489618 0
0 0 0
ADC$_{max}$
Length in pad (mm)
0 500 1000 1500 2000 2500 3000 3500 4000
0 2 4 6 8 10 12 14 16
0 200 400 600 800 1000

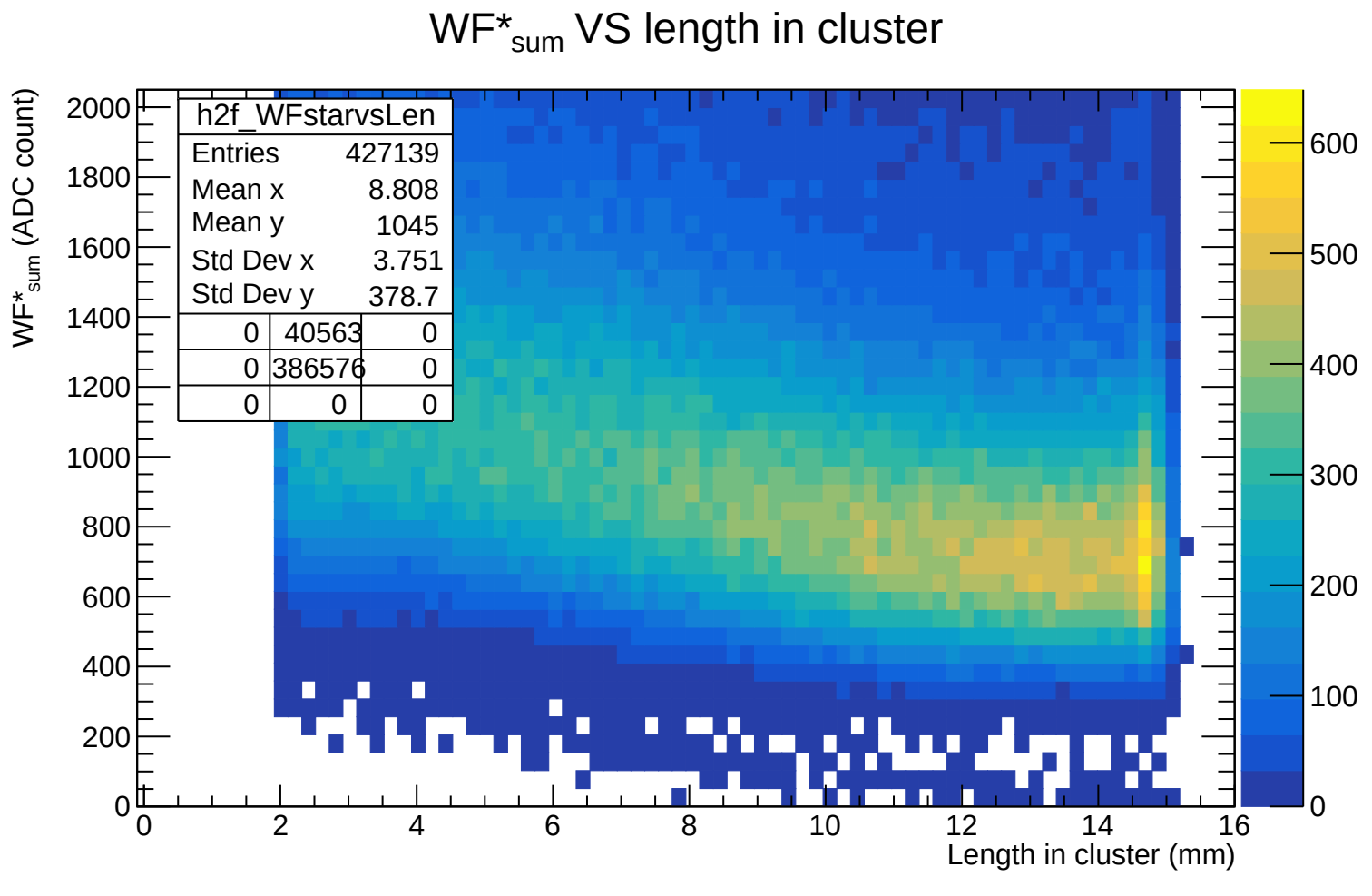

Q^anode VS length in pad (before length cut)
Q^anode
Length in pad (mm)
h2f_QvsLength
Entries 489654
Mean x 7.595
Mean y 900.2
Std Dev x 4.336
Std Dev y 682.3
0 1816 0
0 487838 0
0 0 0
0
500
1000
1500
2000
2500
3000
3500
4000
0
2
4
6
8
10
12
14
16
0
1000
2000
3000
4000
5000

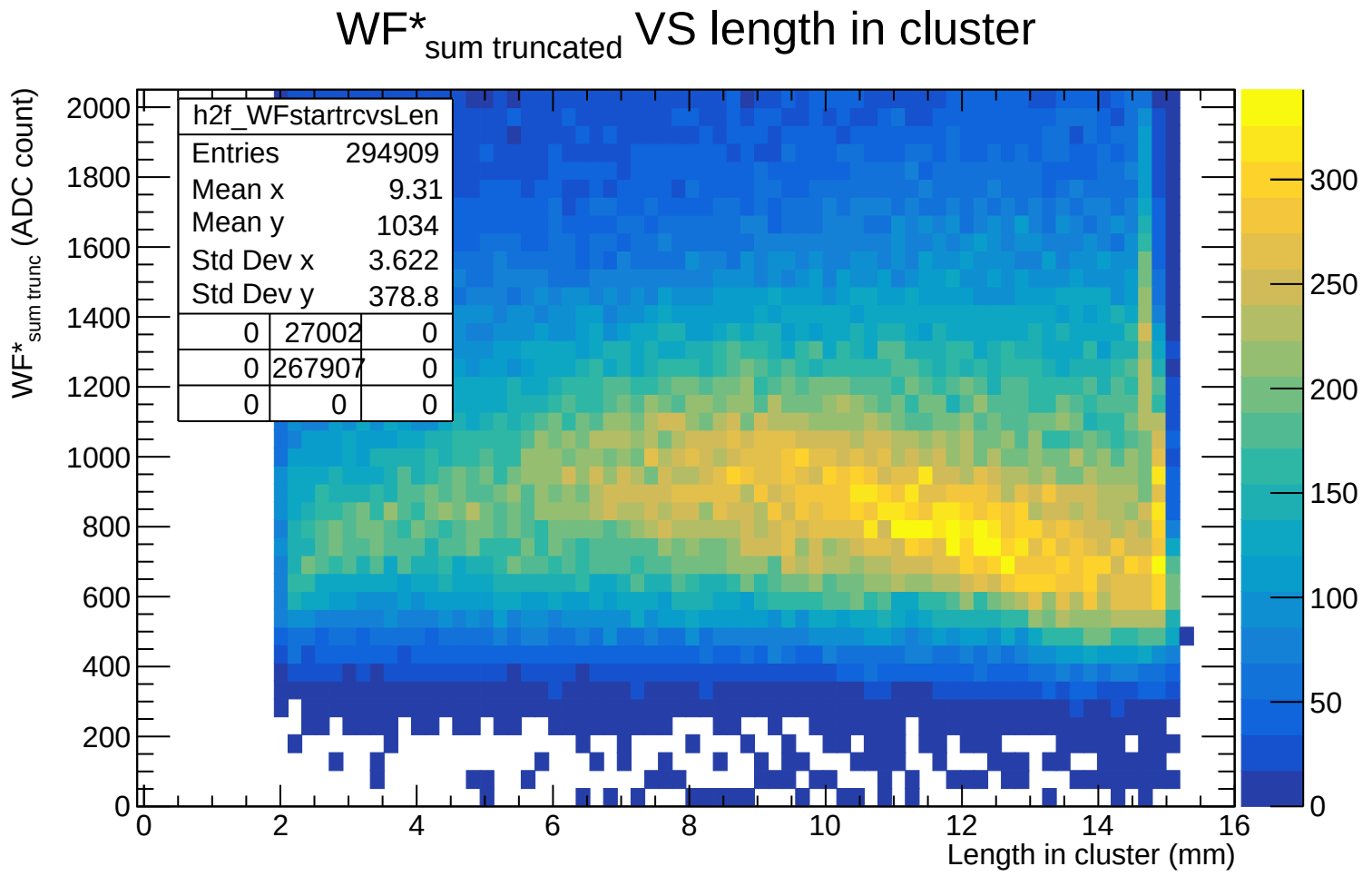

Q^{anode}/ADC_{max} VS length in pad (before length cut)
h2f_LUTvsLength
Entries 489654
Mean x 7.616
Mean y 0.9905
Std Dev x 4.343
Std Dev y 0.3439
0 0 0
0 489654 0
0 0 0
Q^{anode}/ADC_{max}
Length in pad (mm)
0
0.5
1
1.5
2
0
2
4
6
8
10
12
14
16
0
1000
2000
3000
4000
5000
6000
7000

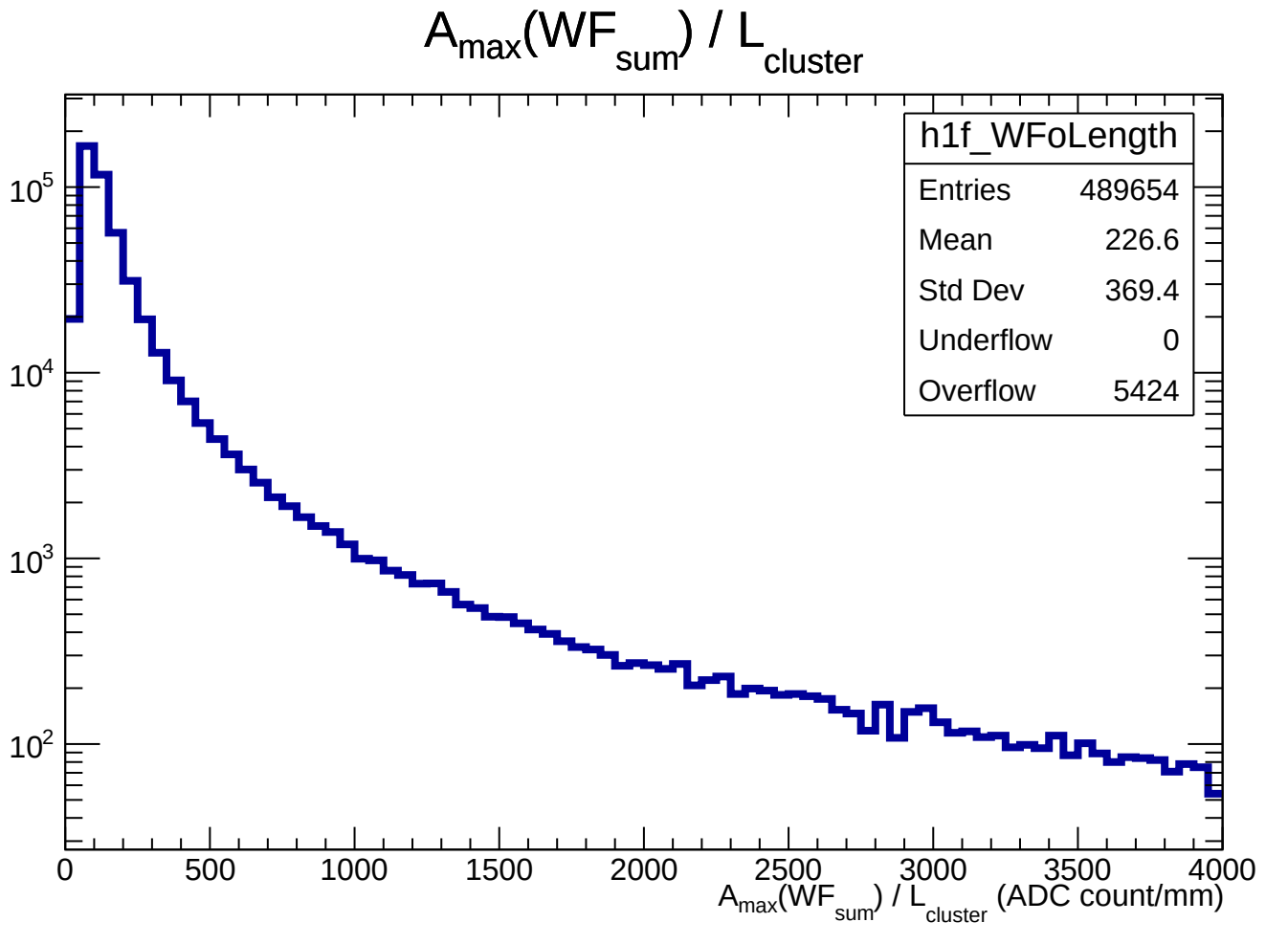

$Q_{cluster}$ VS length in cluster
h2f_QclvsLength
Entries 489654
Mean x 7.519
Mean y 886.9
Std Dev x 4.337
Std Dev y 378.1
0 26428 0
0 463226 0
0 0 0
$Q_{cluster}$ (ADC count)
Length in cluster (mm)
0 2 4 6 8 10 12 14 16
0 200 400 600 800 1000 1200 1400 1600 1800 2000
0 100 200 300 400 500 600

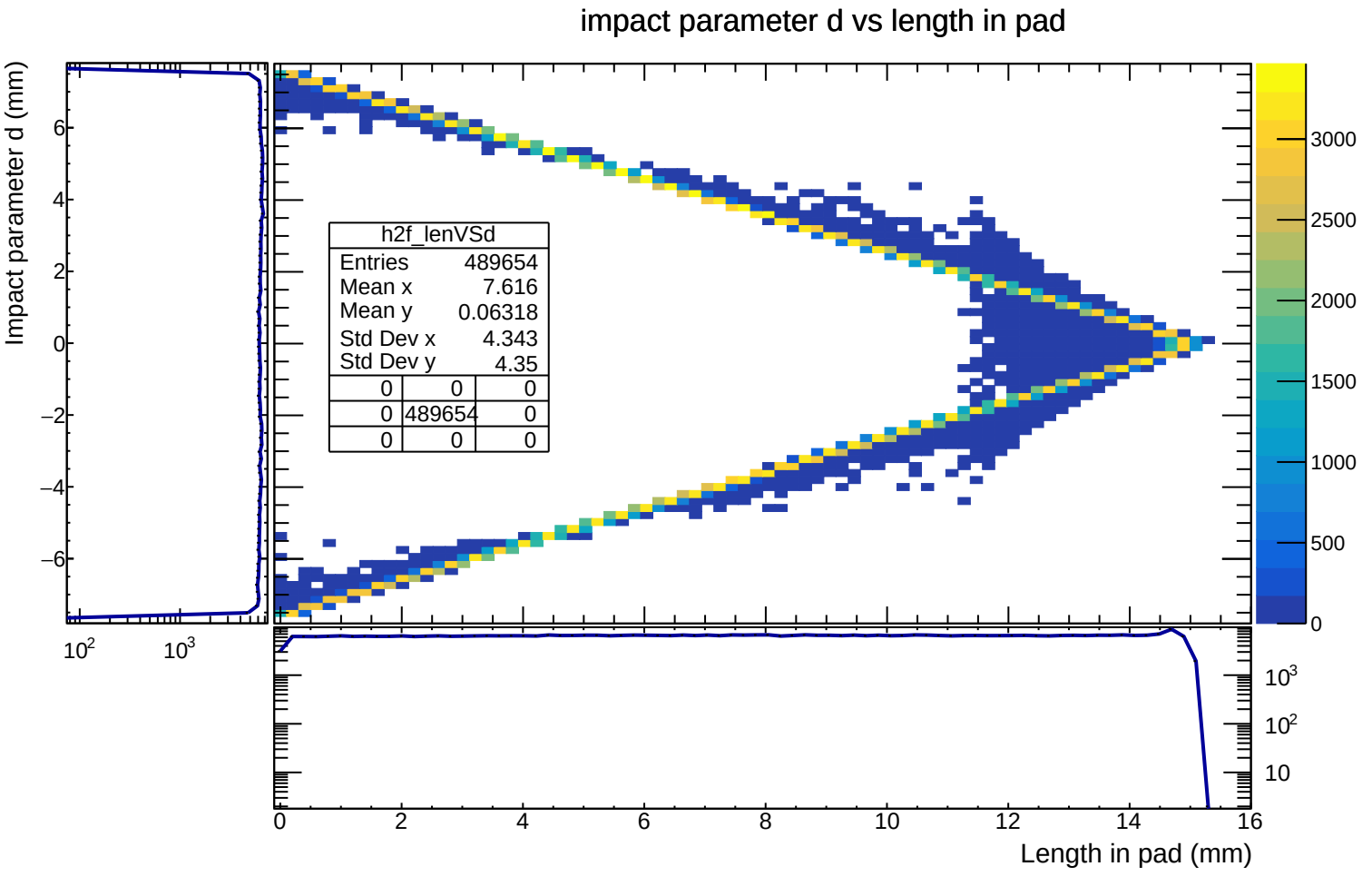

WF$_{sum}$ VS length in cluster
h2f_WFvsLength
Entries 489654
Mean x 7.529
Mean y 869.8
Std Dev x 4.338
Std Dev y 374.5
0 24034 0
0 465620 0
0 0 0
WF$_{sum}$ (ADC count)
Length in cluster (mm)
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2
4
6
8
10
12
14
16
100
300
500


WF sum truncated VS length in cluster
WF sum trunc (ADC count)
Length in cluster (mm)
h2f_WFtruncvsLength
Entries 294909
Mean x 9.338
Mean y 803.2
Std Dev x 3.628
Std Dev y 308.9
0 2192 0
0 292717 0
0 0 0
0 200 400 600 800 1000 1200 1400 1600 1800 2000
0 2 4 6 8 10 12 14 16
0 100 200 300 400 500


WF*sum VS length in cluster
h2f_WFstarvsLen
Entries 427139
Mean x 8.808
Mean y 1045
Std Dev x 3.751
Std Dev y 378.7
0 40563 0
0 386576 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
100
200
300
400
500
600


WF*sum truncated VS length in cluster
WF*sum trunc (ADC count)
Length in cluster (mm)
h2f_WFstartrcvsLen
Entries 294909
Mean x 9.31
Mean y 1034
Std Dev x 3.622
Std Dev y 378.8
0 27002 0
0 267907 0
0 0 0
0 200 400 600 800 1000 1200 1400 1600 1800 2000
0 2 4 6 8 10 12 14 16
0 50 100 150 200 250 300


$A_{max}(WF_{sum}) / L_{cluster}$
h1f_WFoLength
Entries 489654
Mean 226.6
Std Dev 369.4
Underflow 0
Overflow 5424
10^5
10^4
10^3
10^2
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 489654
Mean x 7.616
Mean y 0.06318
Std Dev x 4.343
Std Dev y 4.35
0 0 0
0 489654 0
0 0 0