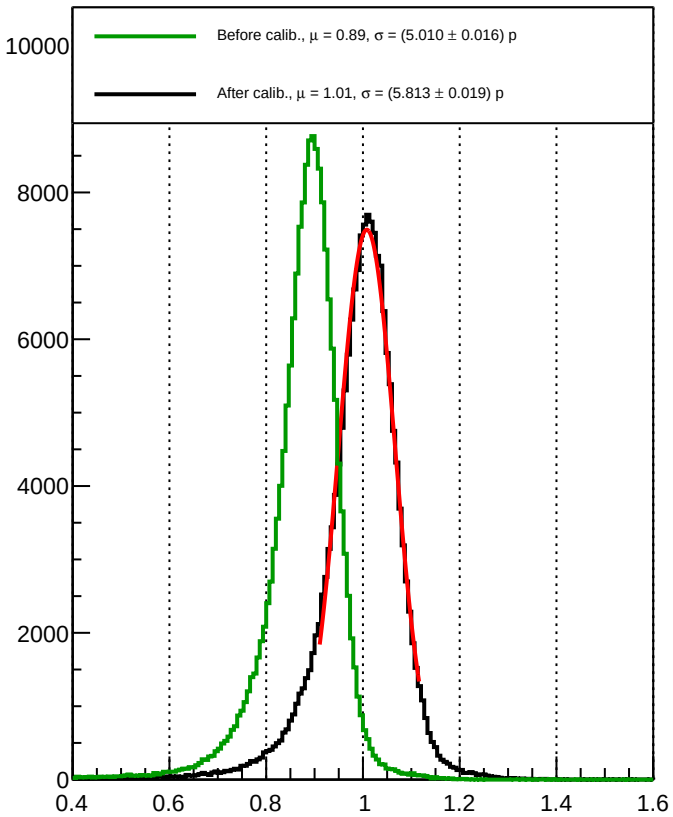
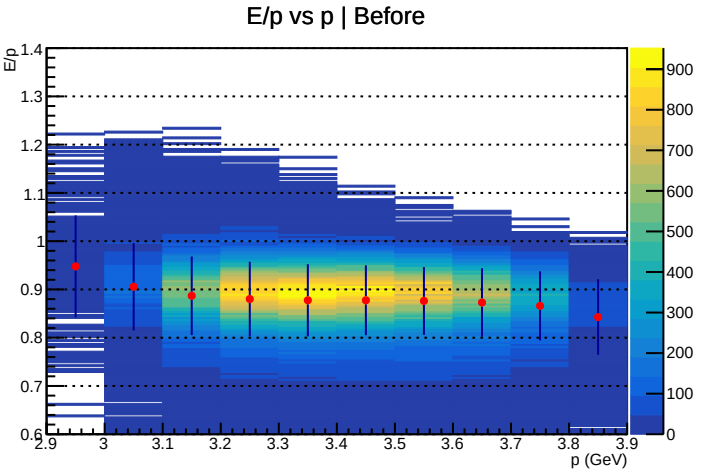
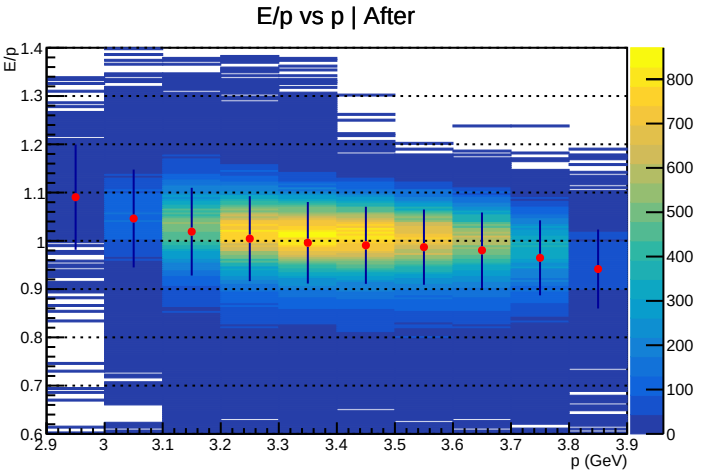
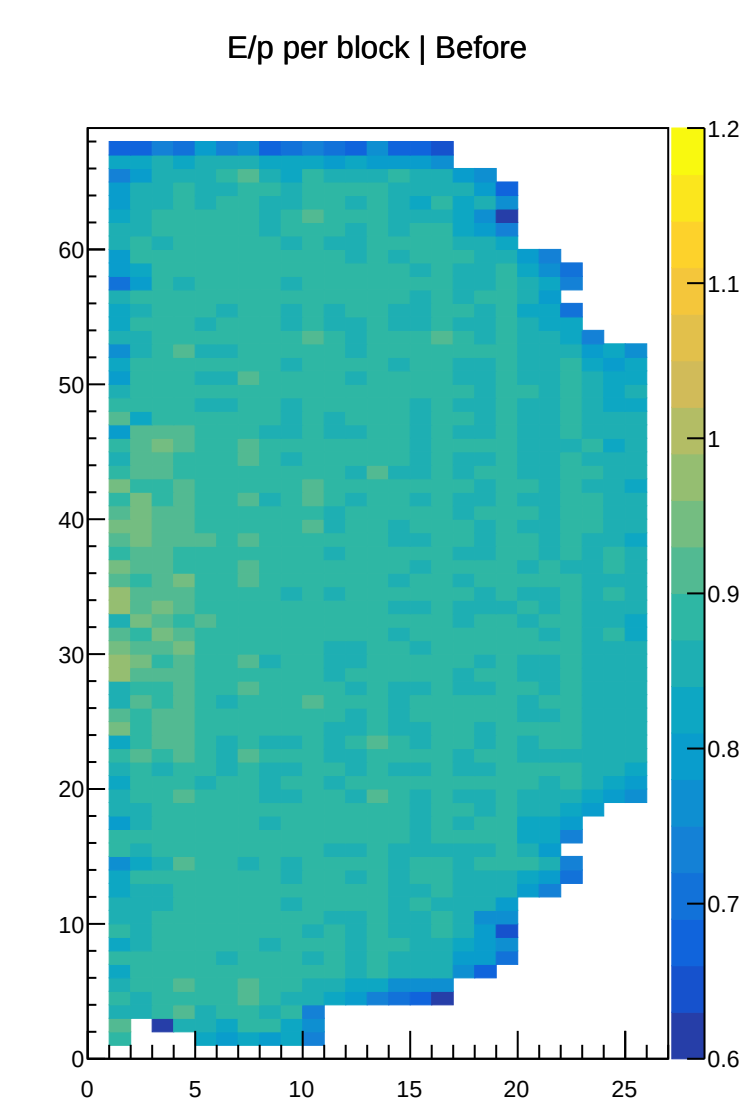
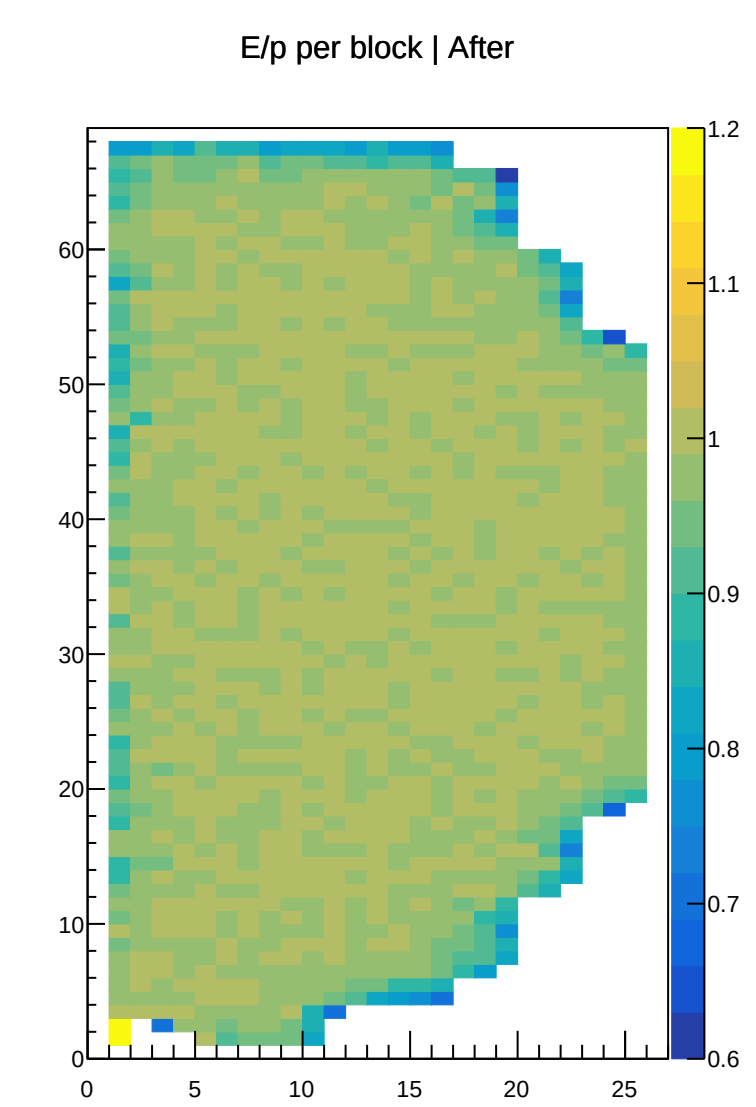

E/p (After)
Before calib., μ = 0.89, σ = (5.010 ± 0.016) p
After calib., μ = 1.01, σ = (5.813 ± 0.019) p
10000
8000
6000
4000
2000
0
0.4
0.6
0.8
1
1.2
1.4
1.6

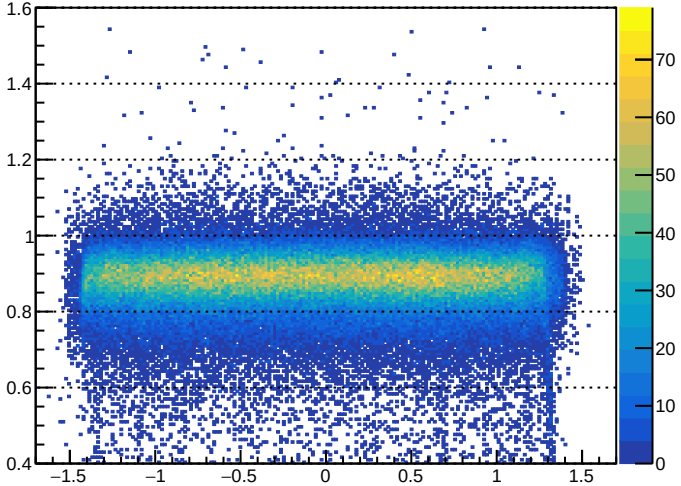

E/p vs p | Before
E/p
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
2.9
3
3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
p (GeV)
900
800
700
600
500
400
300
200
100
0


E/p vs p | After
E/p
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
2.9
3
3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
p (GeV)
800
700
600
500
400
300
200
100
0

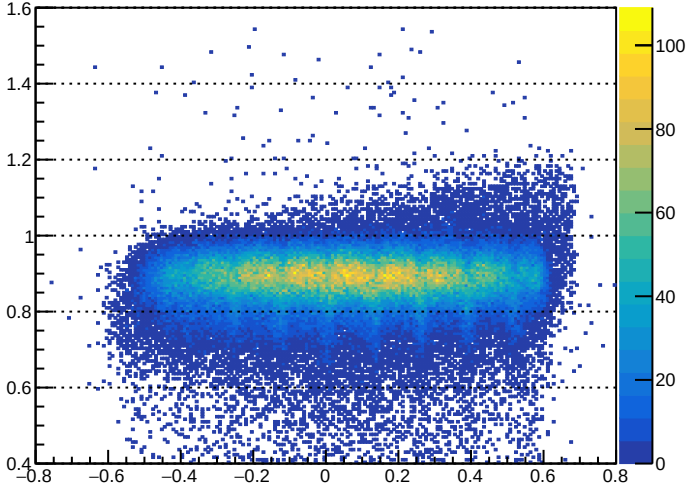

E/p per block | Before
0
10
20
30
40
50
60
0
5
10
15
20
25
0.6
0.7
0.8
0.9
1
1.1
1.2


E/p per block | After
0
10
20
30
40
50
60
0
5
10
15
20
25
0.6
0.7
0.8
0.9
1
1.1
1.2

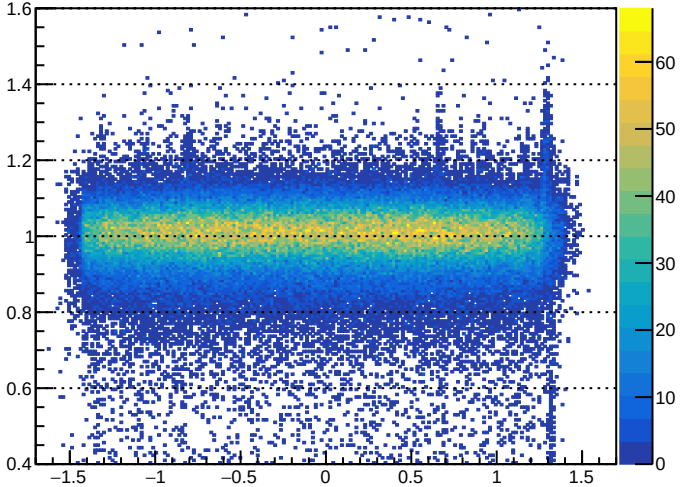
E/p vs xECAL Expected | Before



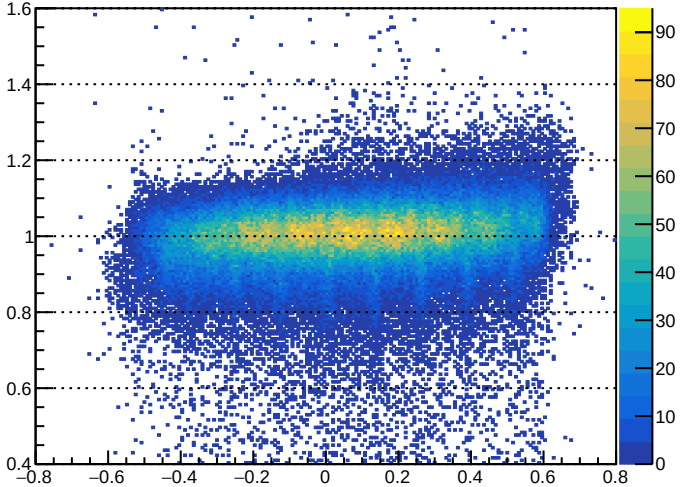
E/p vs yECAL Expected | Before



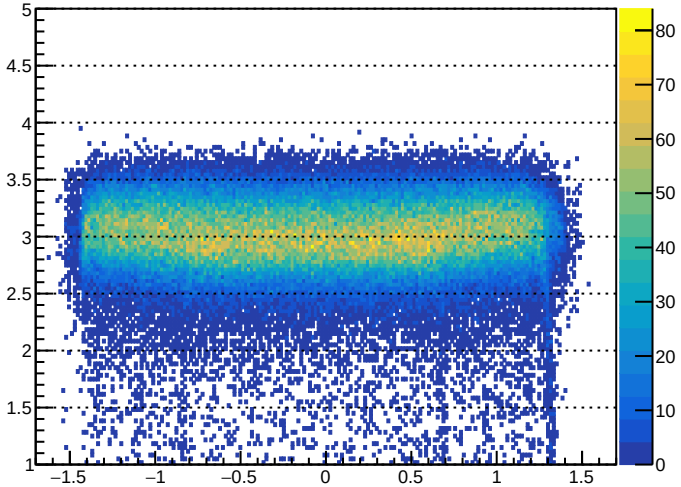
E/p vs xECAL Expected | After



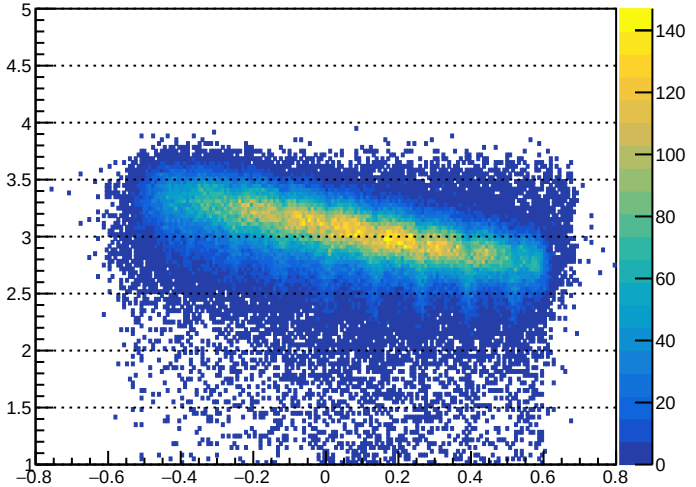
E/p vs yECAL Expected | After



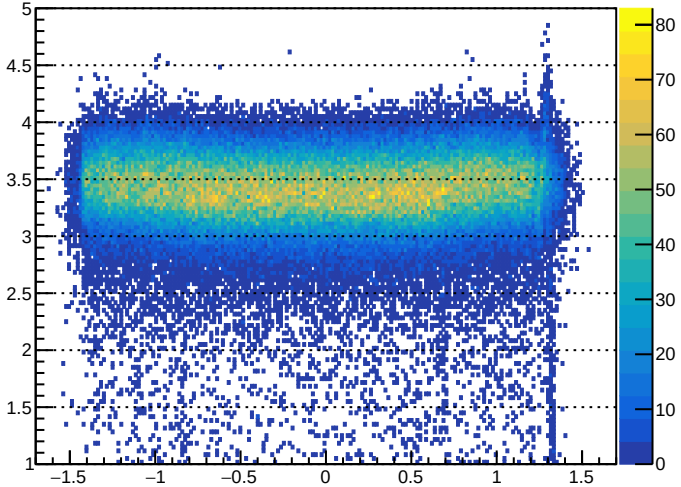
ECAL energy vs xECAL Expected | Before



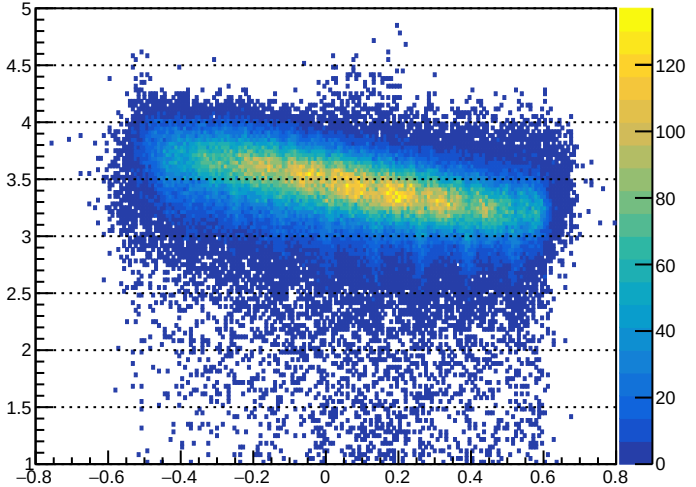
ECAL energy vs yECAL Expected | Before

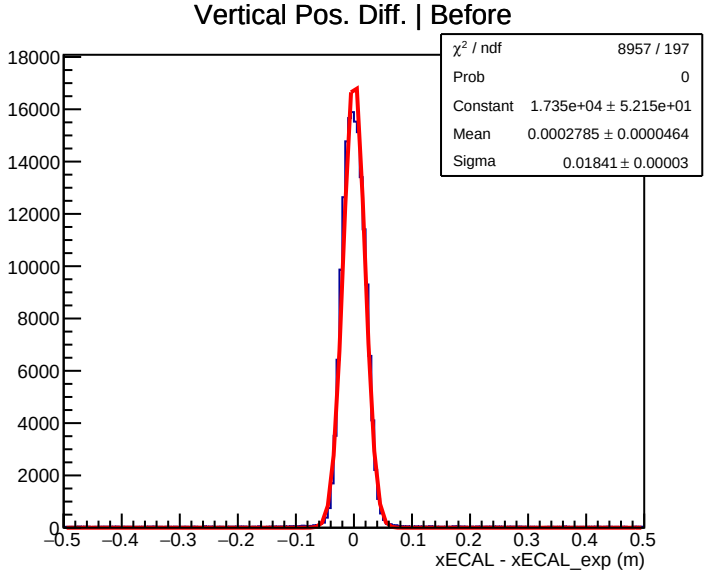


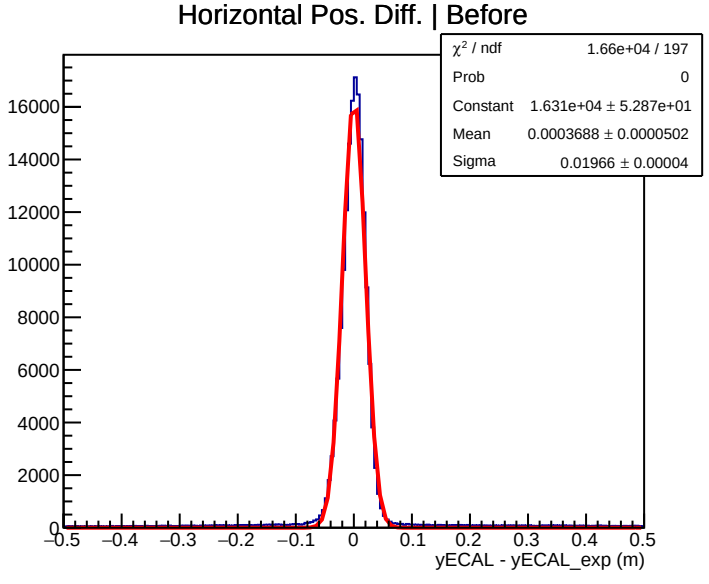
ECAL energy vs xECAL Expected | After

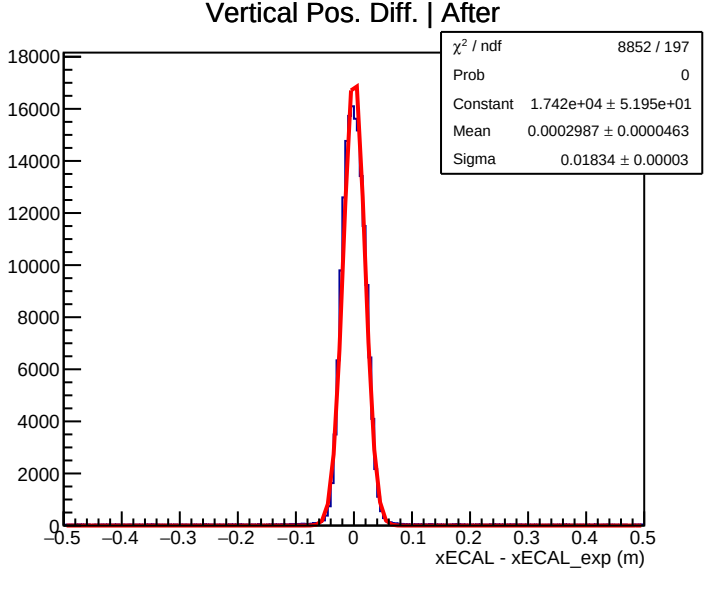


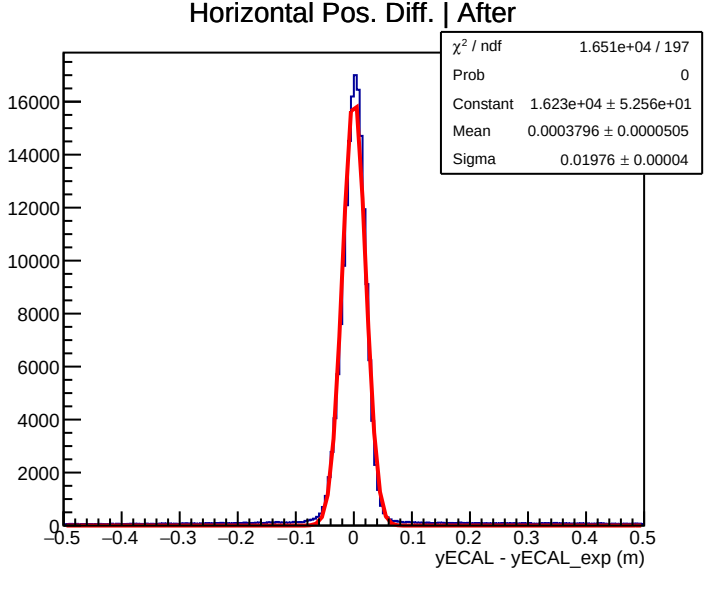
ECAL energy vs yECAL Expected | After



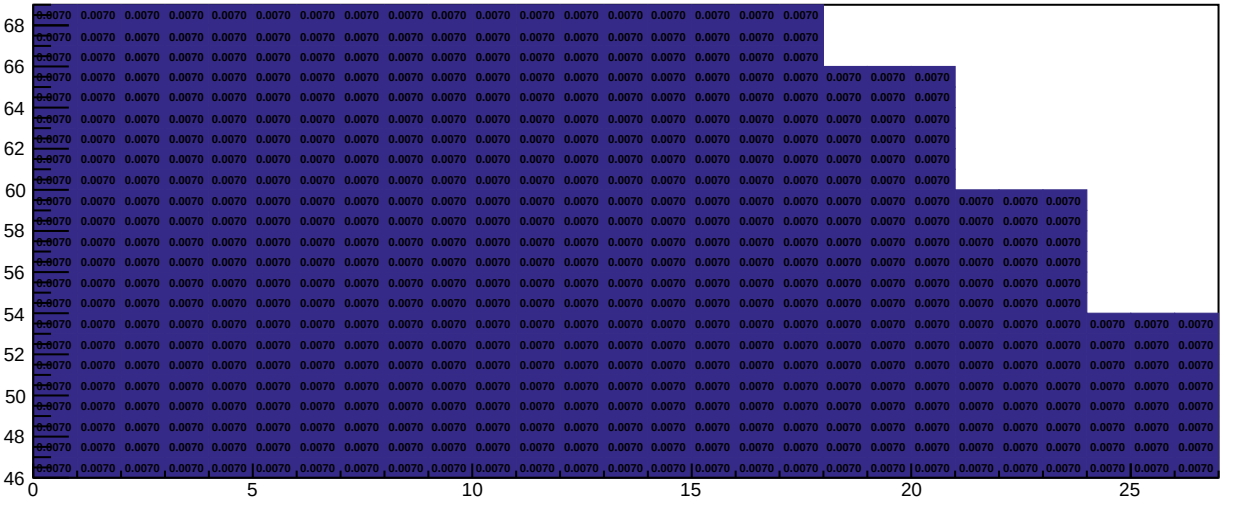

Vertical Pos. Diff. | Before
χ² / ndf 8957 / 197
Prob 0
Constant 1.735e+04 ± 5.215e+01
Mean 0.0002785 ± 0.0000464
Sigma 0.01841 ± 0.00003
xECAL - xECAL_exp (m)


Horizontal Pos. Diff. | Before
χ² / ndf 1.66e+04 / 197
Prob 0
Constant 1.631e+04 ± 5.287e+01
Mean 0.0003688 ± 0.0000502
Sigma 0.01966 ± 0.00004
yECAL - yECAL_exp (m)

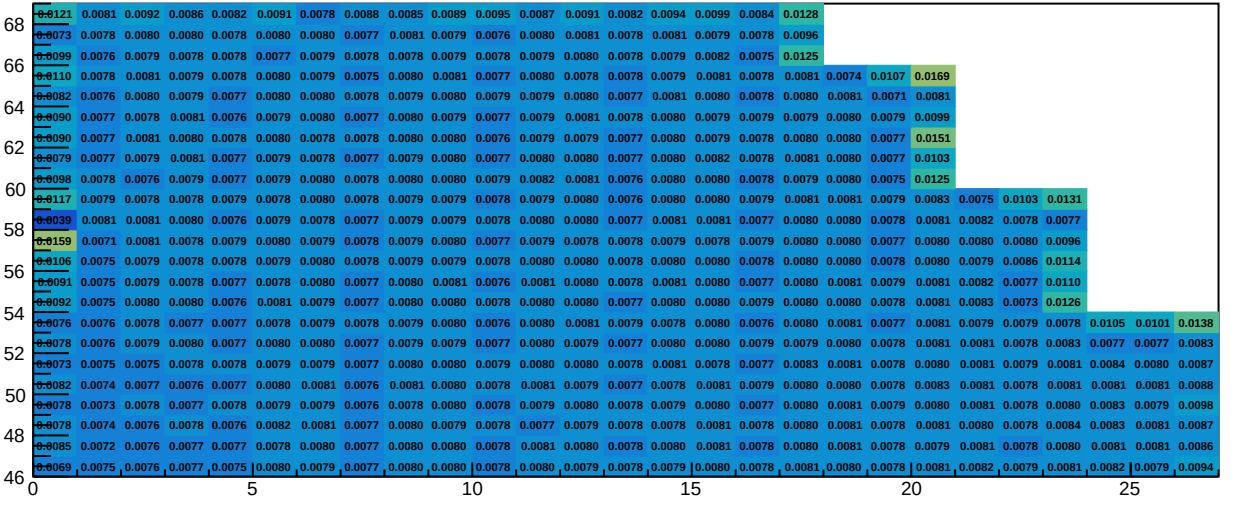

Vertical Pos. Diff. | After
χ² / ndf 8852 / 197
Prob 0
Constant 1.742e+04 ± 5.195e+01
Mean 0.0002987 ± 0.0000463
Sigma 0.01834 ± 0.00003
xECAL - xECAL_exp (m)


Horizontal Pos. Diff. | After
χ² / ndf 1.651e+04 / 197
Prob 0
Constant 1.623e+04 ± 5.256e+01
Mean 0.0003796 ± 0.0000505
Sigma 0.01976 ± 0.00004
yECAL - yECAL_exp (m)

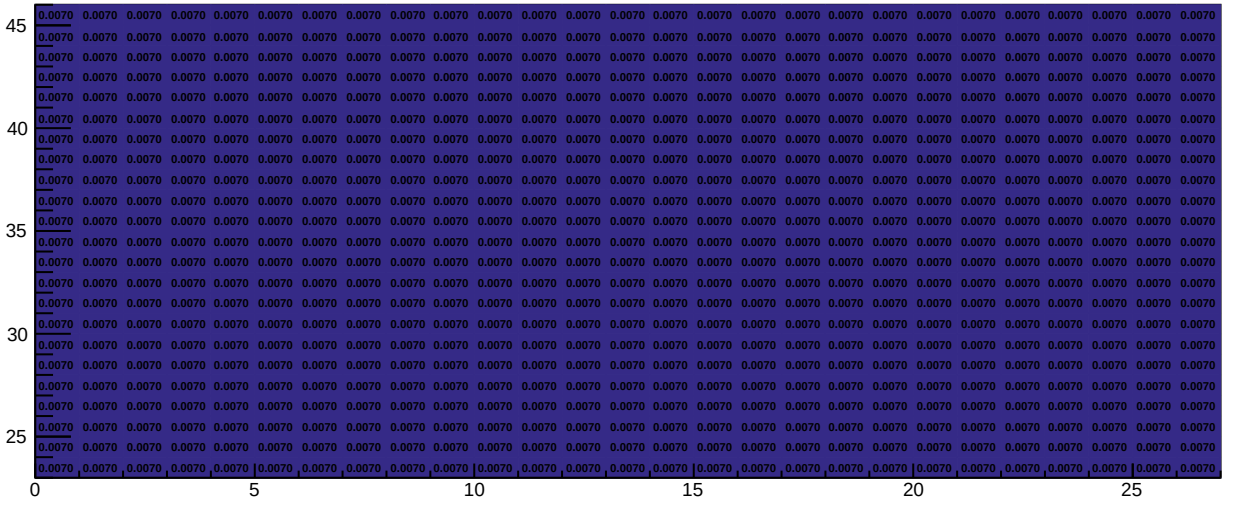
Old ADC Gain Coefficients (Top 23 Rows)



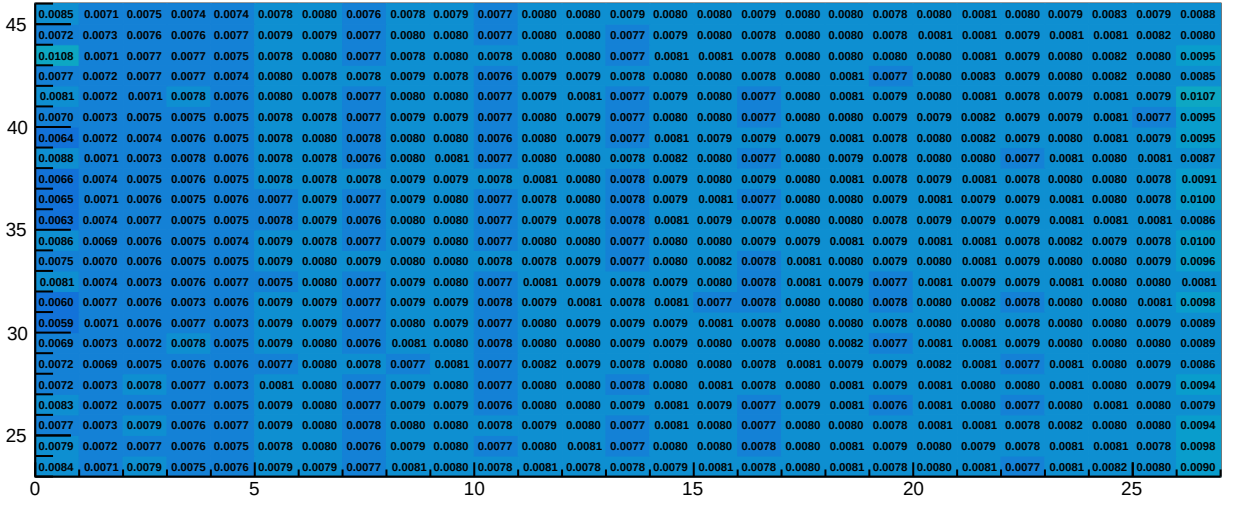
New ADC Gain Coefficients (Top 23 Rows)



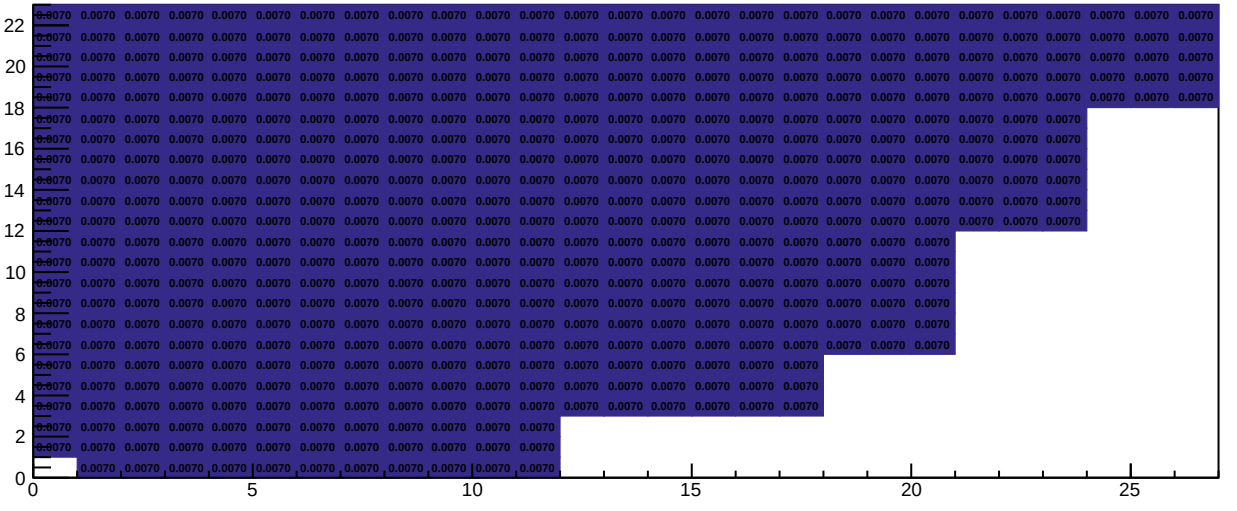
Old ADC Gain Coefficients (Middle 23 Rows)



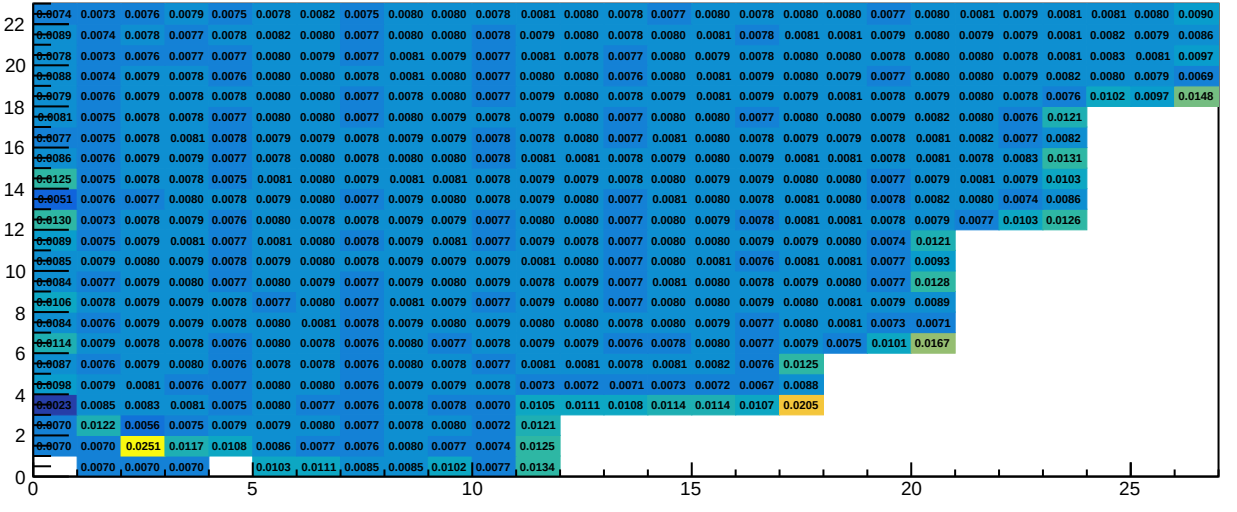
New ADC Gain Coefficients (Middle 23 Rows)



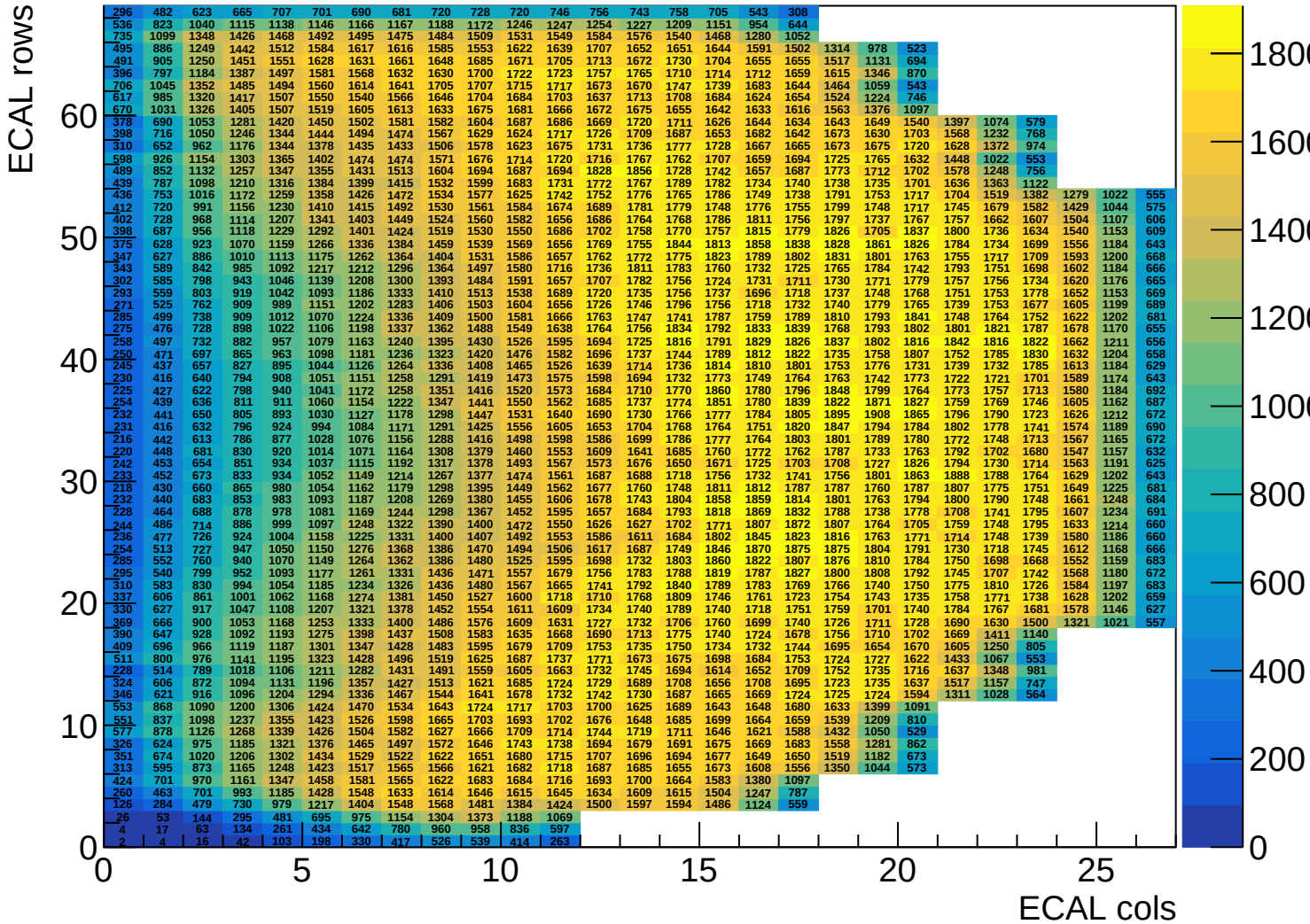
Old ADC Gain Coefficients (Bottom 23 Rows)



New ADC Gain Coefficients (Bottom 23 Rows)



Number of Good Events per Block



Date of creation: 4/6/2025

Configfile: ECAL_replay/scripts/cfg/GEP1_elas_calib_MC_noBADchCut.cfg

Total # events analyzed: 569188

E/p (before calib.) | μ = 0.89, σ = (5.010 $\pm$ 0.016) p

E/p (after calib.) | μ = 1.01, σ = (5.813 $\pm$ 0.019) p

Global cuts:

sbs.tr.p[0]<6, sbs.tr.vz[0]<0.1, sbs.tr.vz[0]>-0.25,

sbs.gemFT.track.chi2ndf<10, sbs.hcal.e>0.05,

events passed global cuts: 184561

Other cuts:

Minimum # events per block: 50 | Cluster hit threshold: 0.00 GeV

Cluster tmax cut: 100.0 ns | Cluster energy fraction cut: 0.0 GeV

Macro processing time: CPU 1779.3s | Real 1792.1s