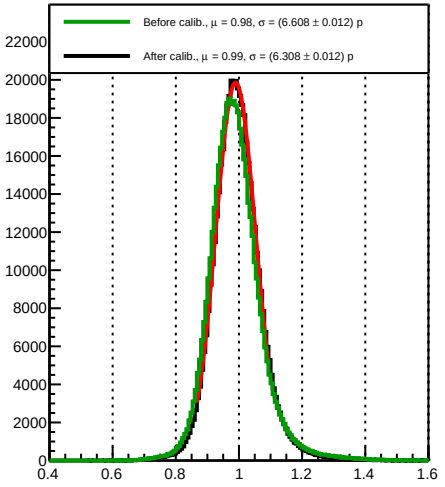
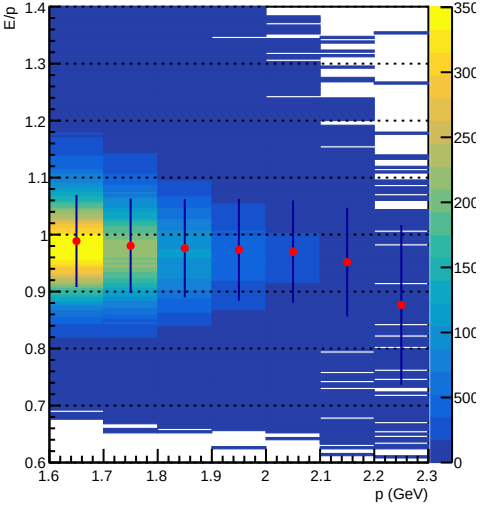
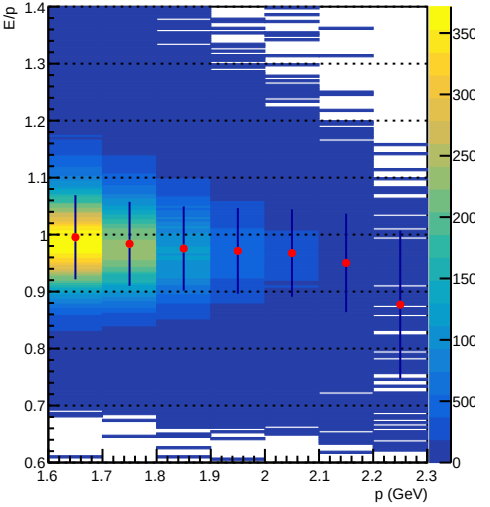
E/p



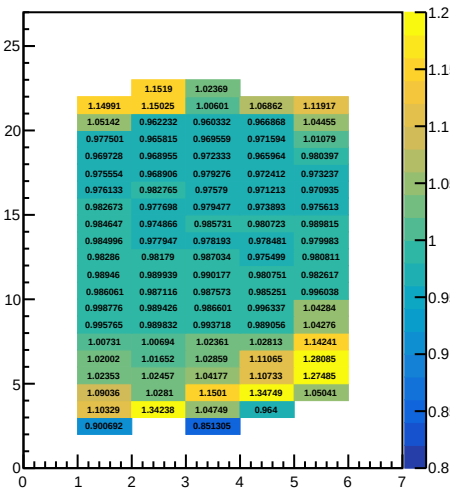
E/p vs p



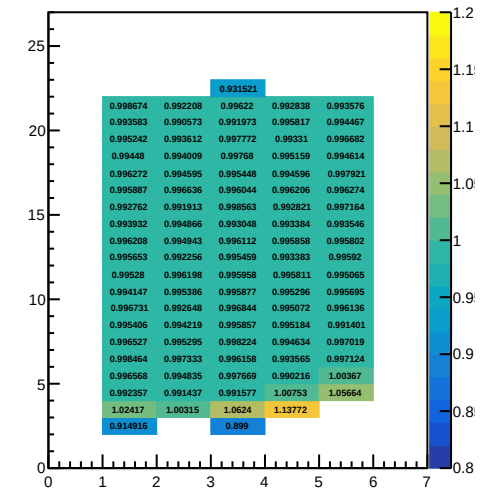
E/p vs p | After Calib.



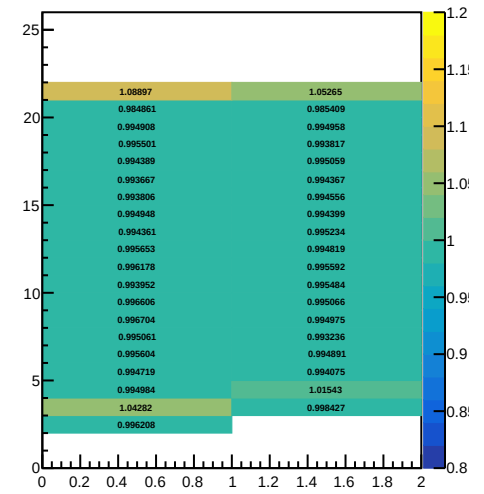
E/p per SH block



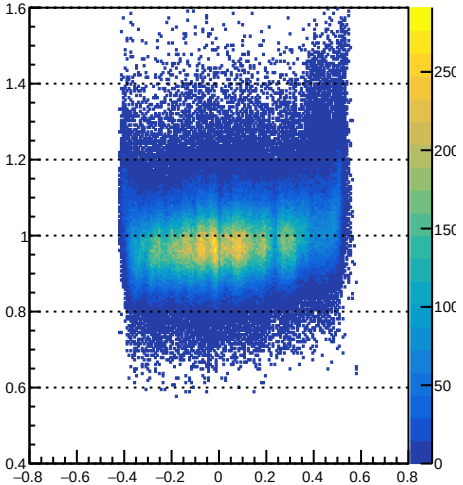
E/p per SH block | After Calib.



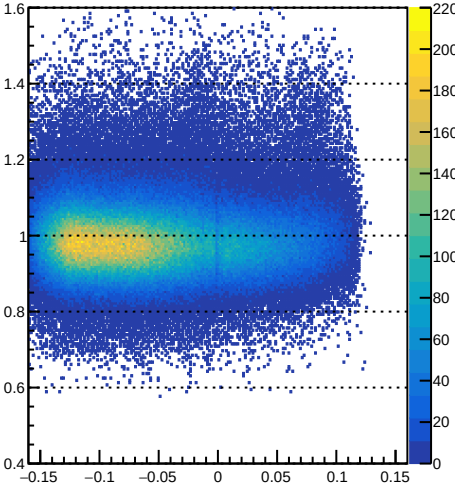
E/p per PS block | After Calib.



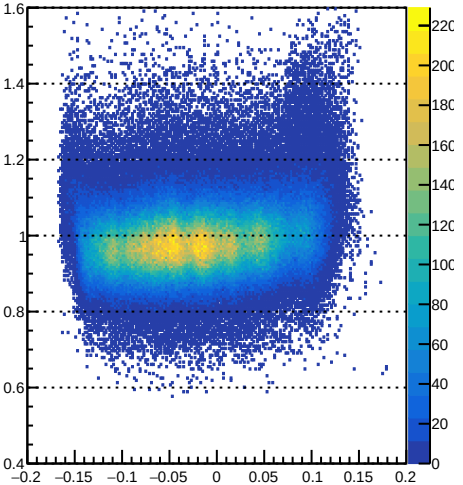
E/p vs Track x



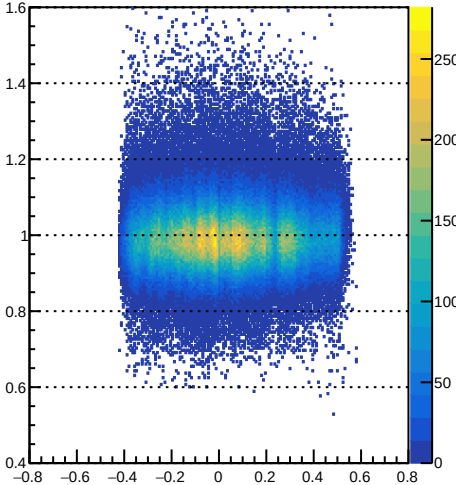
E/p vs Track y



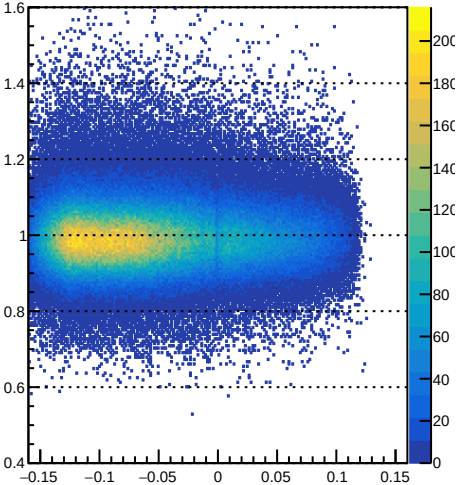
E/p vs Track theta



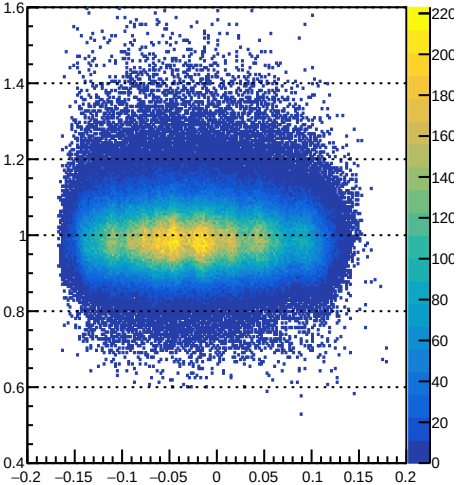
E/p vs Track x | After Calib.



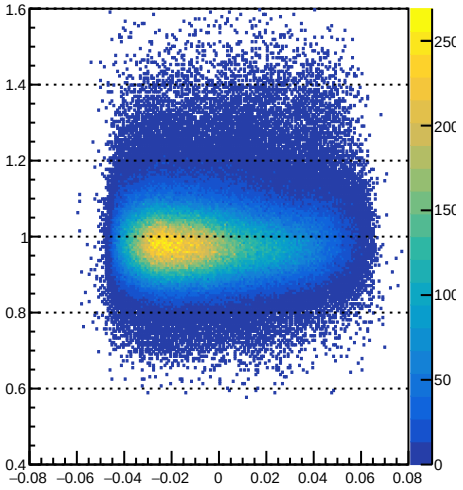
E/p vs Track y | After Calib.



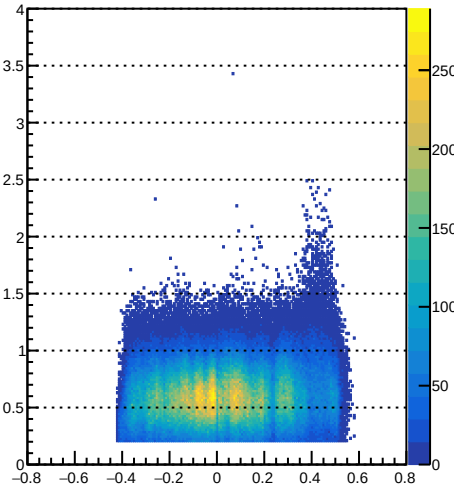
E/p vs Track theta | After Calib.



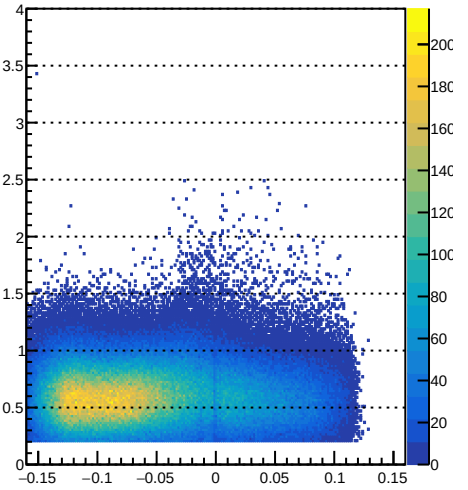
E/p vs Track phi



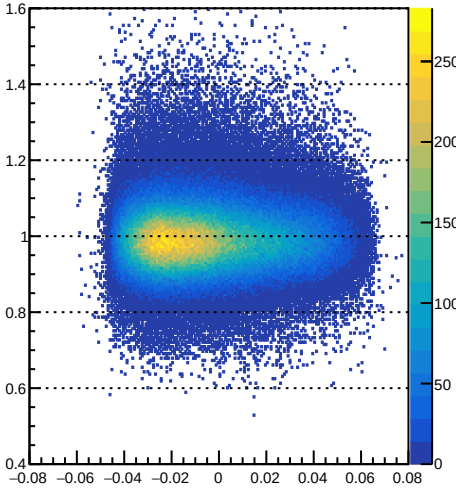
PS energy vs Track x



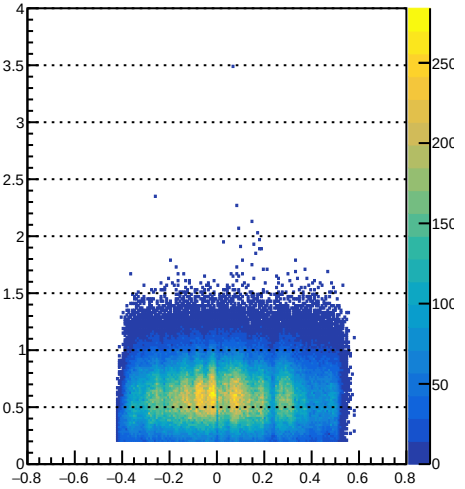
PS energy vs Track y



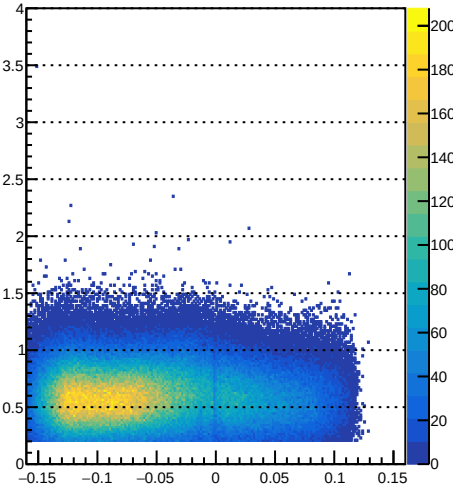
E/p vs Track phi | After Calib.



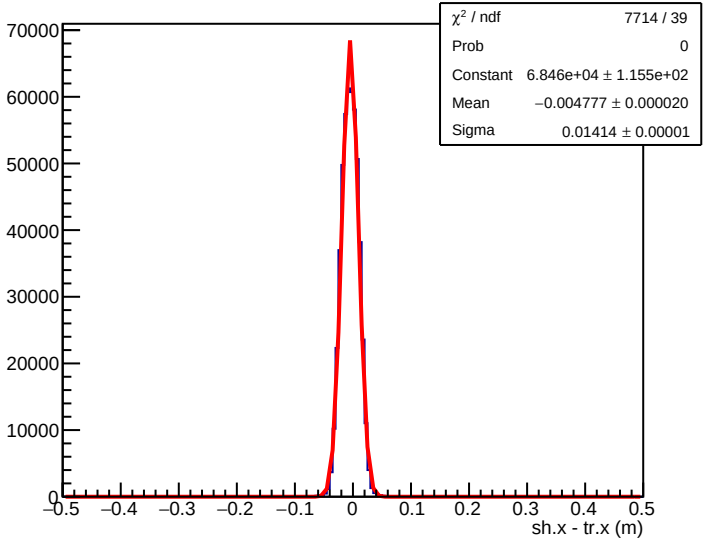
PS energy vs Track x | After Calib.



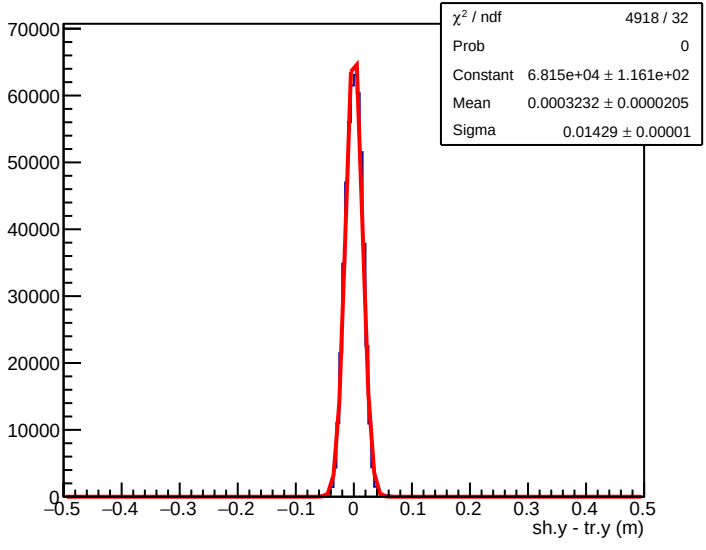
PS energy vs Track y | After Calib.



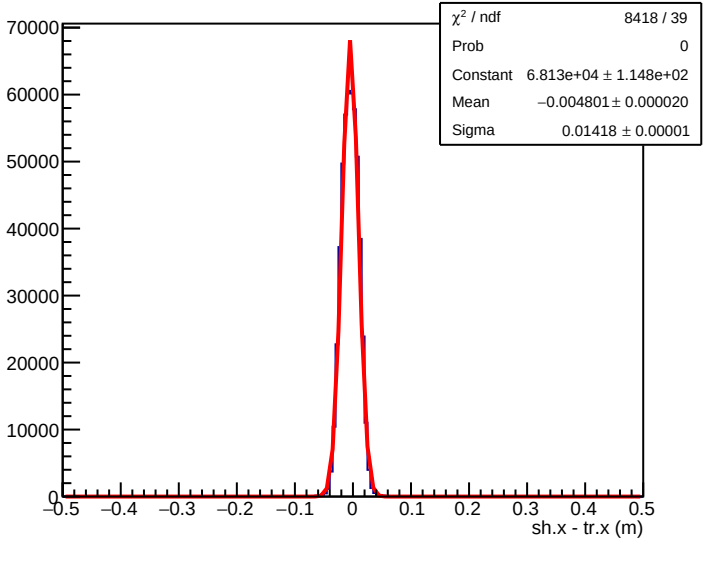
Vertical Position Difference



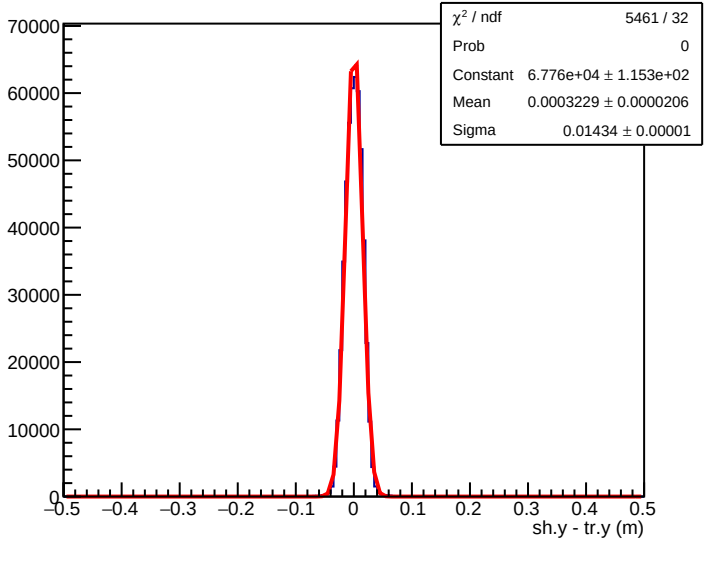
Horizontal Position Difference

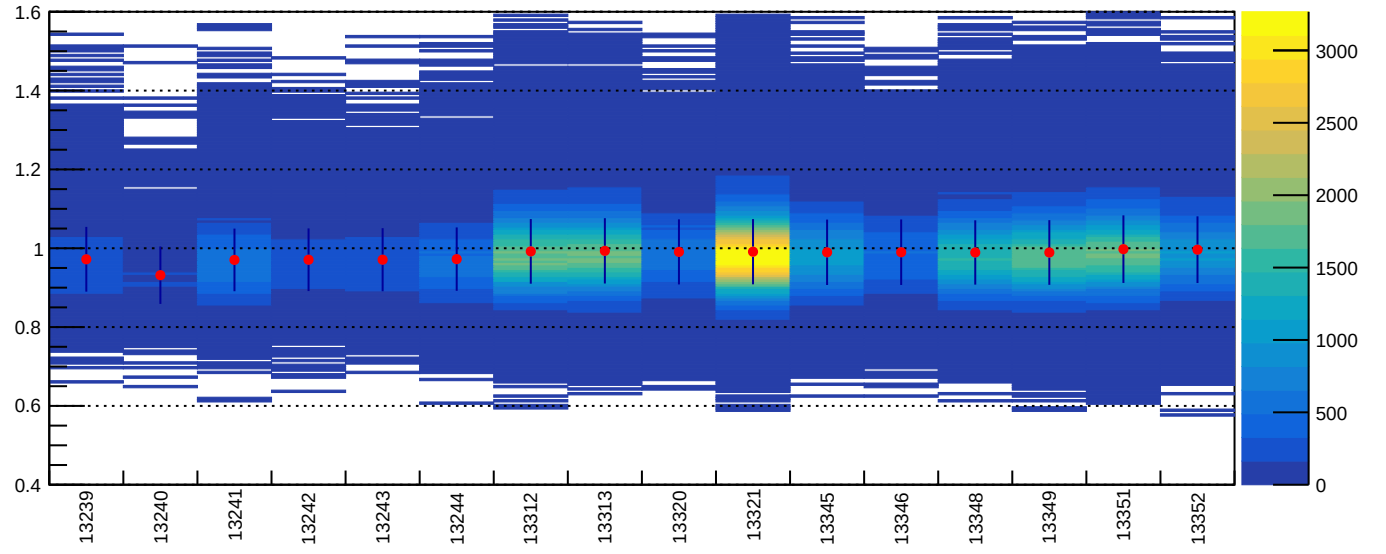


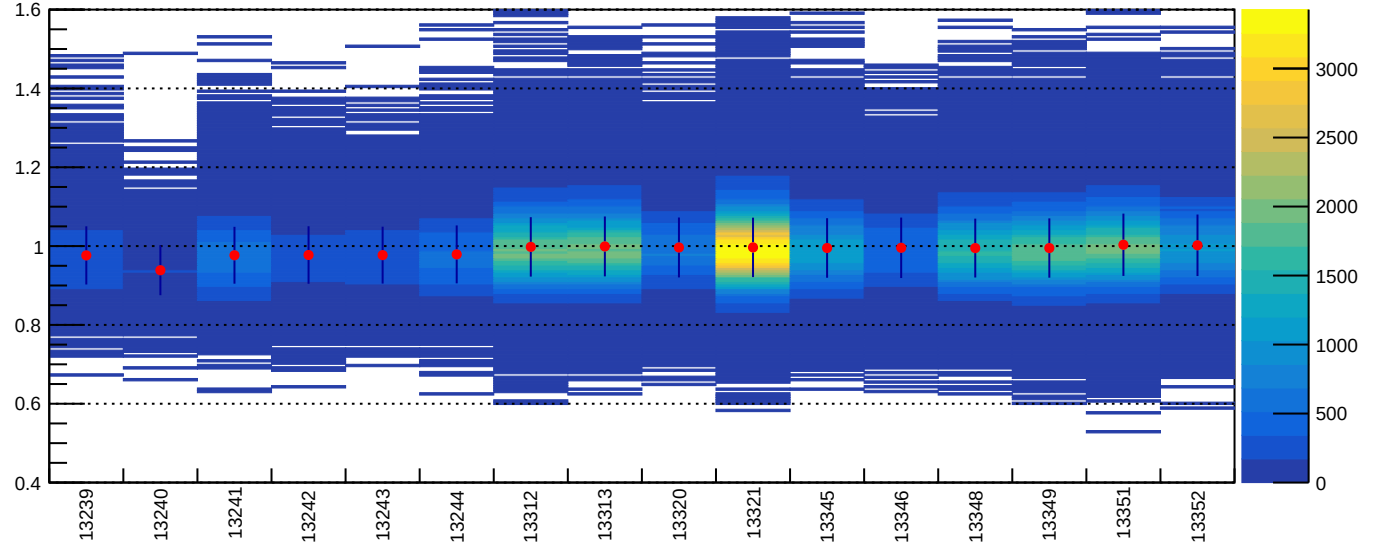
Vertical Pos. Diff. | After Calib.



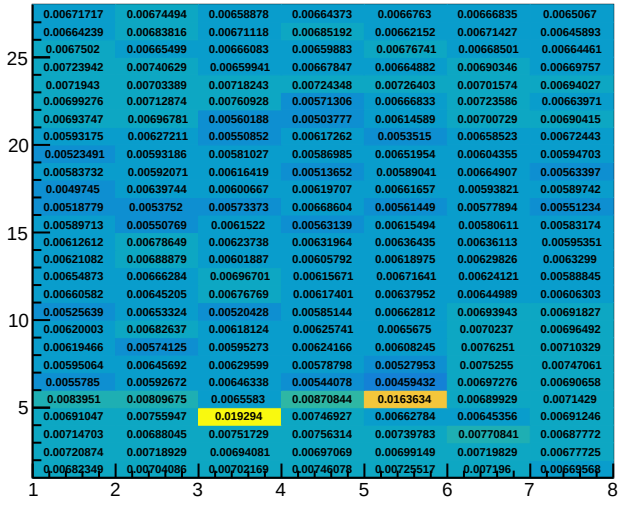
Horizontal Pos. Diff. | After Calib.



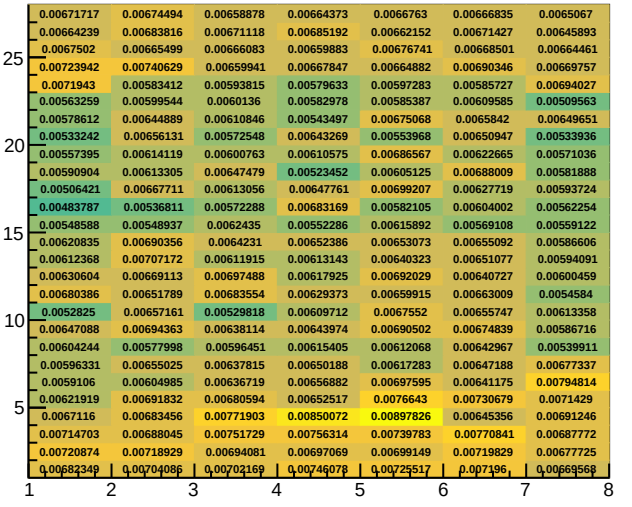

E/p vs Run no.
1.6
1.4
1.2
1
0.8
0.6
0.4
3000
2500
2000
1500
1000
500
0
13239
13240
13241
13242
13243
13244
13312
13313
13320
13321
13345
13346
13348
13349
13351
13352


E/p vs Run no. | After Calib.
1.6
1.4
1.2
1
0.8
0.6
0.4
3000
2500
2000
1500
1000
500
0
13239
13240
13241
13242
13243
13244
13312
13313
13320
13321
13345
13346
13348
13349
13351
13352

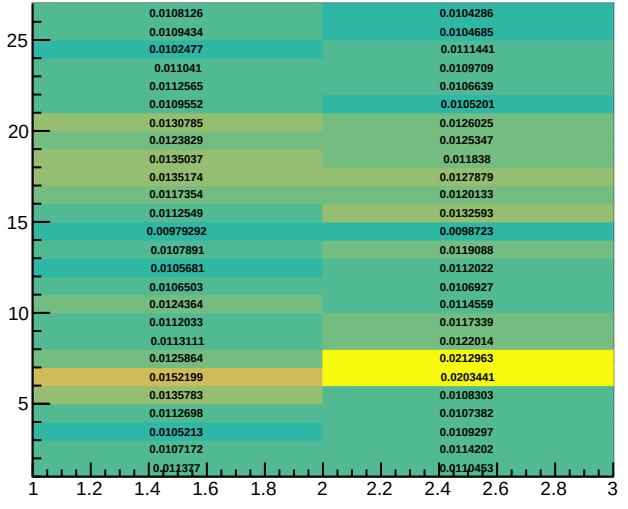
Old ADC Gain Coefficients | SH



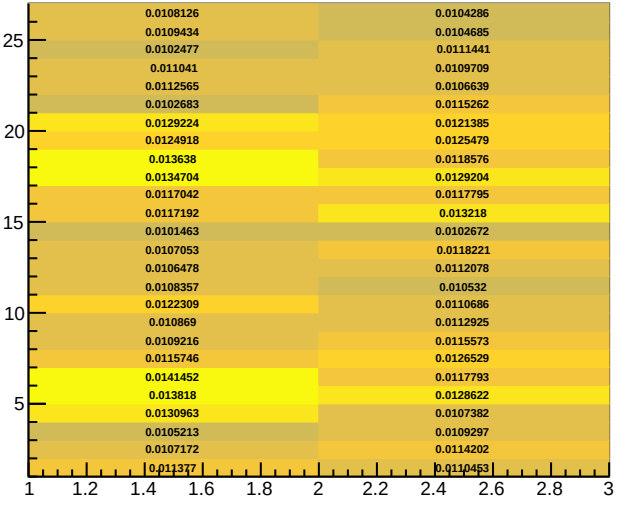
New ADC Gain Coefficients | SH



Old ADC Gain Coefficients | PS



New ADC Gain Coefficients | PS



Date of creation: 8/16/2023

Configfile: BBCal_replay/macros/Combined_macros/cfg/sbs14-sbs70p.cfg

Total # events analyzed: 3506692, Preparing for replay pass: 2

E/p (before calib.) | μ = 0.98, σ = (6.608 $\pm$ 0.012) p

E/p (after calib.) | μ = 0.99, σ = (6.308 $\pm$ 0.012) p

Global cuts:

bb.tr.n==1, abs(bb.tr.vz[0])<0.08, bb.gem.track.nhits>3,

abs(bb.tr.r_x[0]-0.9*bb.tr.r_th[0]-0.035)<0.335,

PS cluster energy > 0.2 GeV

p_recon > 1.5 GeV/c

 # events passed global cuts: 629404

Other cuts:

Minimum # events per block: 300, (Cluster) hit threshold: 0.02 GeV

Various offsets:

Momentum fudge factor: 1.00, BBCAL cluster energy scale factor: 1.00

Momentum calibration factors: A = 0.268609000, B = 0.953111000, C = 0.0, θ_{pitch}^{GEM} = 10.0^{o}, d_{BB} = 1.8479 m

Macro processing time: CPU 413.6s | Real 427.9s