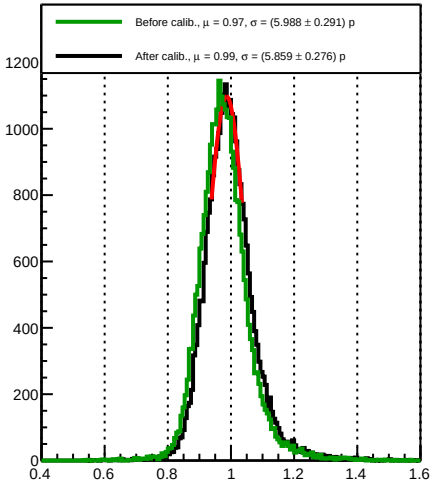
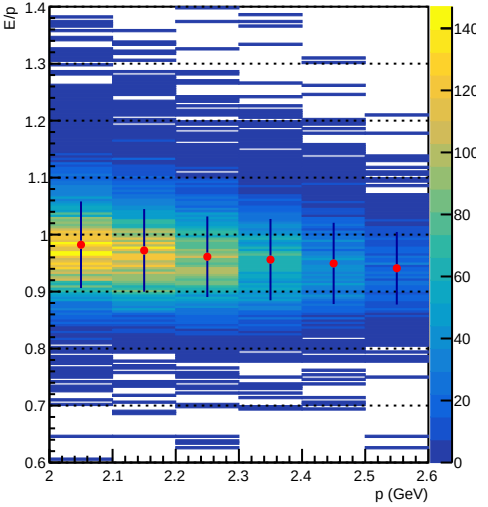
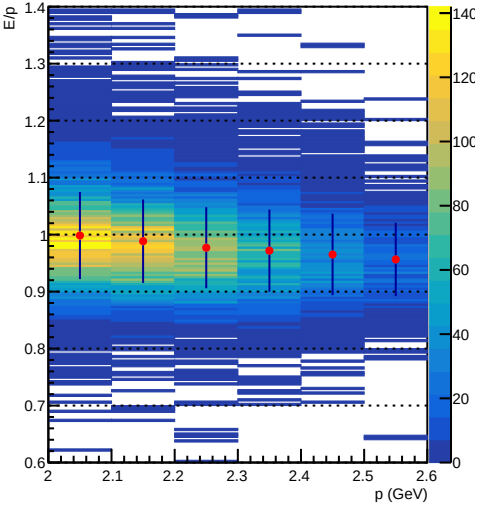
E/p



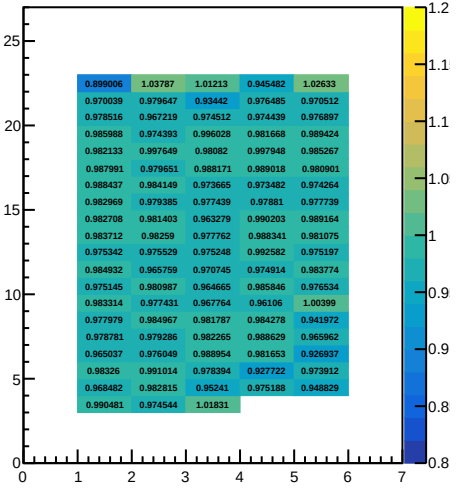
E/p vs p



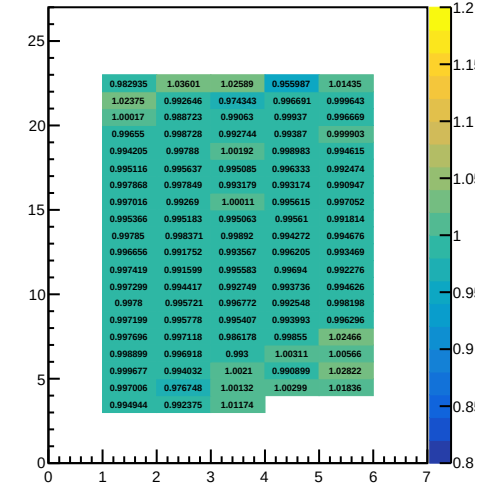
E/p vs p | After Calib.



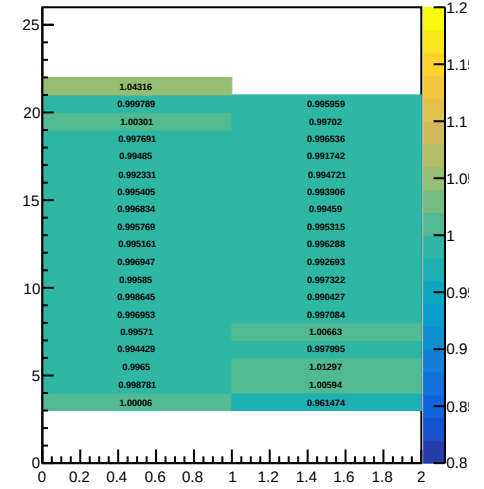
E/p per SH block



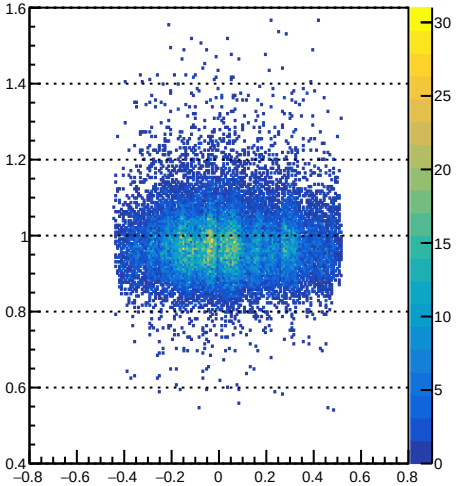
E/p per SH block | After Calib.



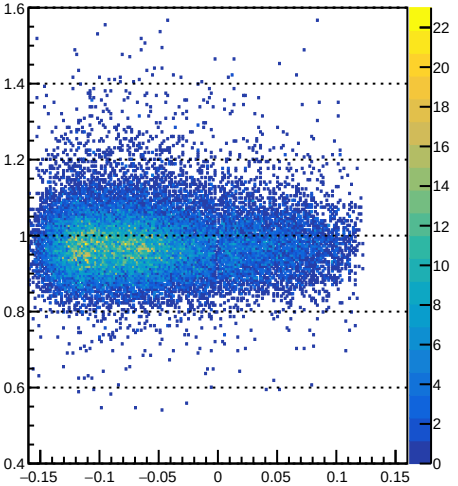
E/p per PS block | After Calib.



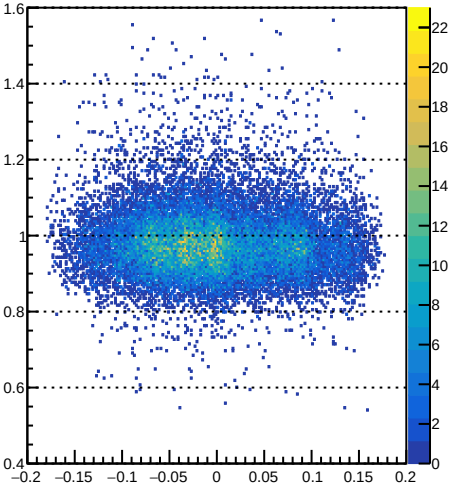
E/p vs Track x



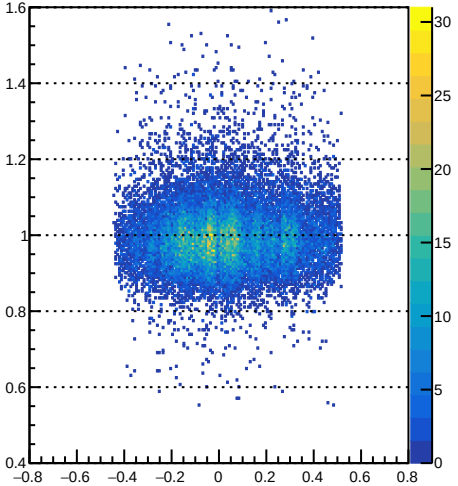
E/p vs Track y



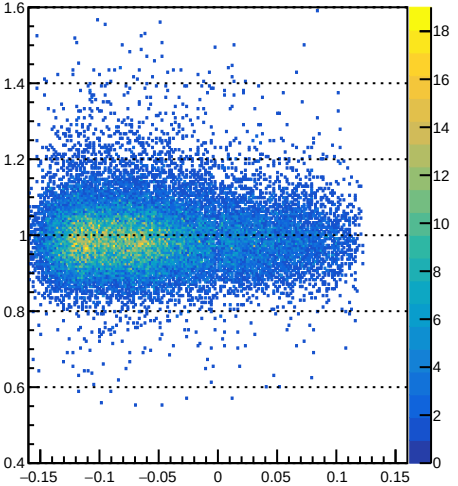
E/p vs Track theta



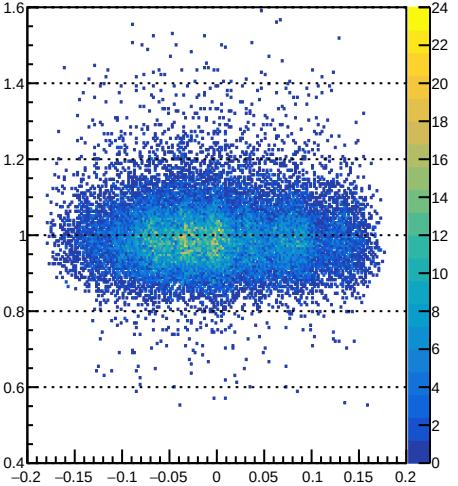
E/p vs Track x | After Calib.



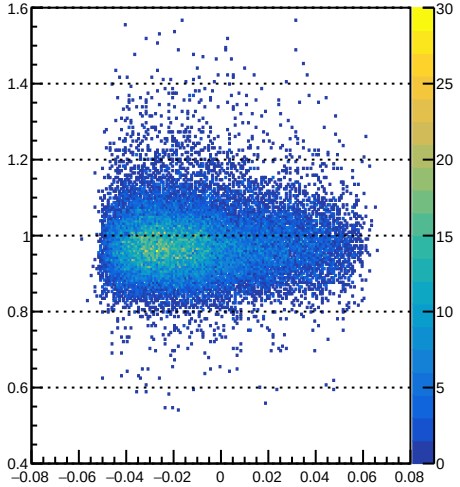
E/p vs Track y | After Calib.



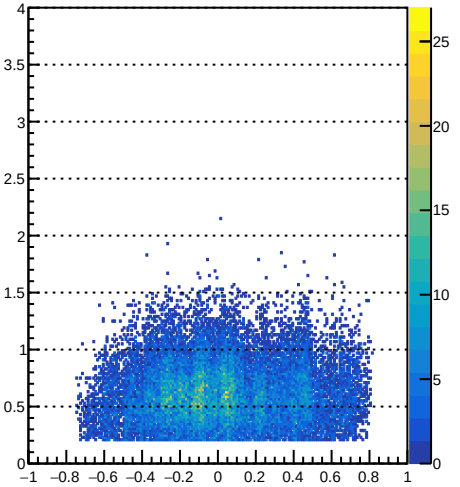
E/p vs Track theta | After Calib.



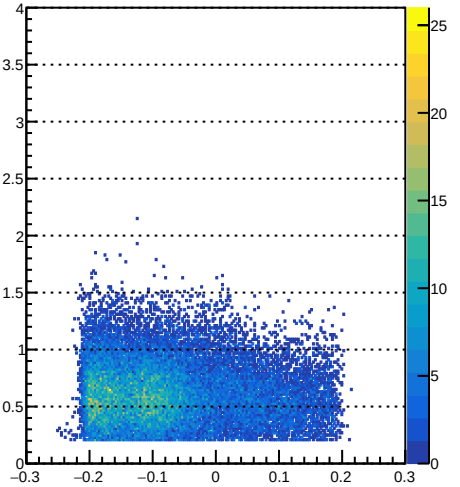
E/p vs Track phi



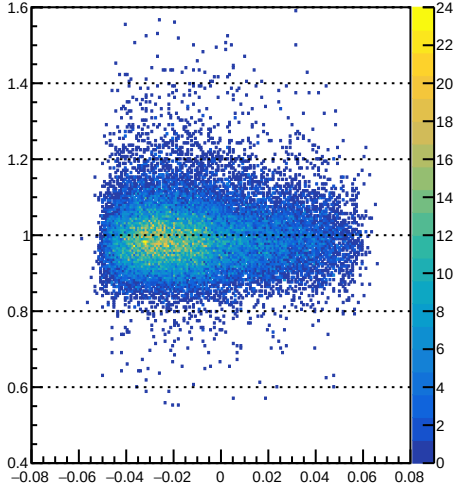
PS energy vs Track x (proj. at PS)



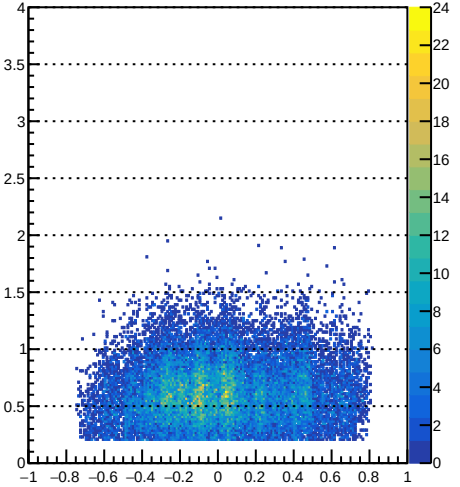
PS energy vs Track y (proj. at PS)



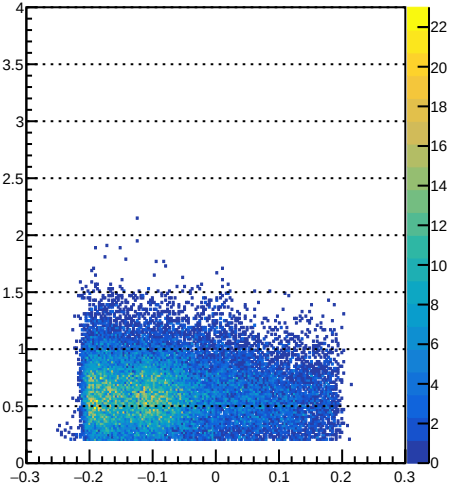
E/p vs Track phi | After Calib.

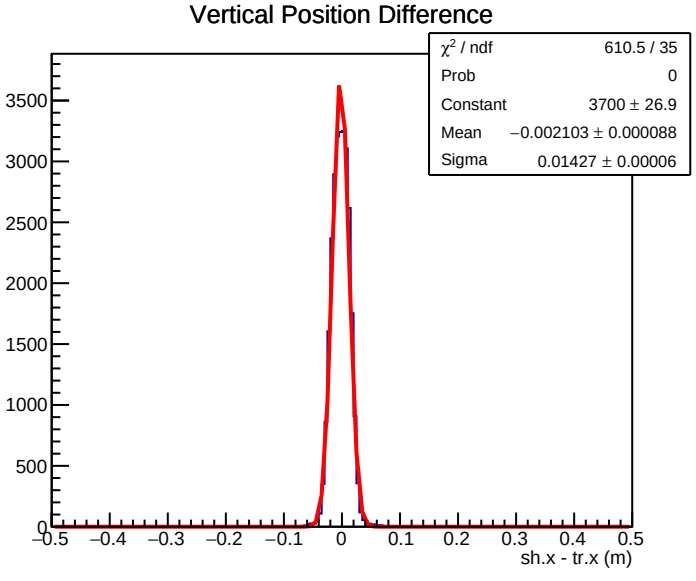


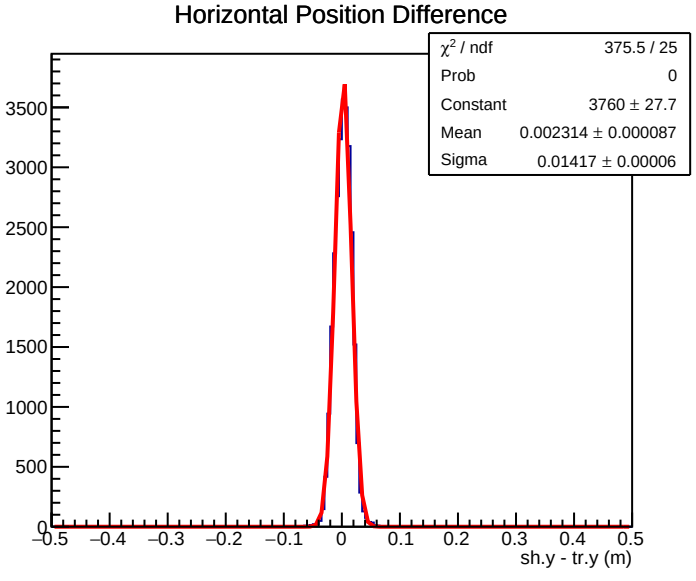
PS energy vs Track x (proj. at PS) | After Calib.

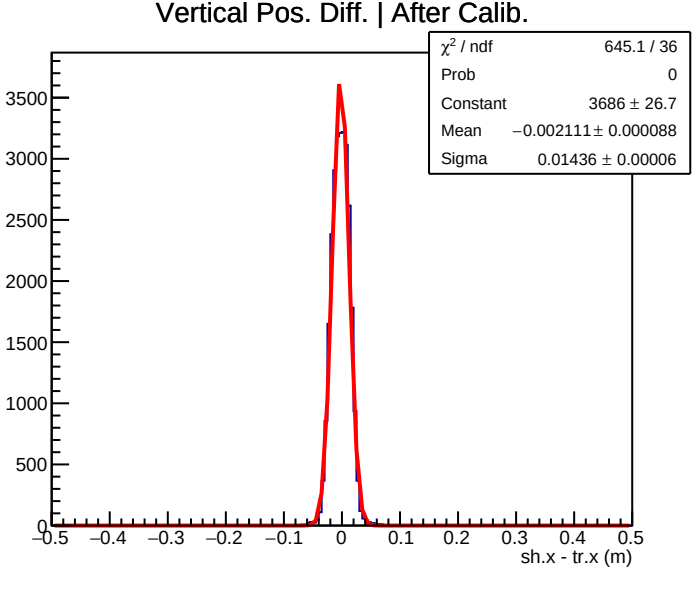


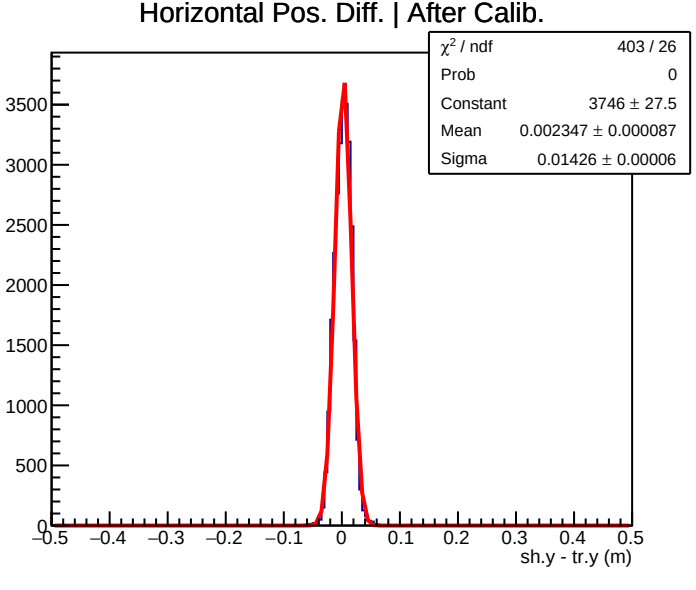
PS energy vs Track y (proj. at PS) | After Calib.



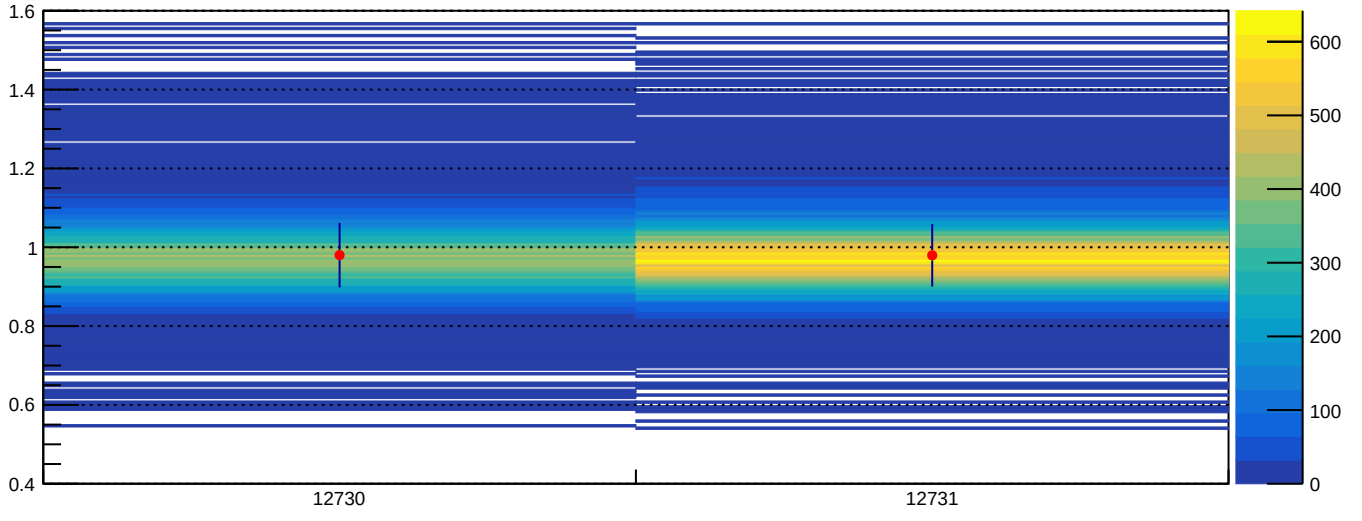

Vertical Position Difference
χ² / ndf 610.5 / 35
Prob 0
Constant 3700 ± 26.9
Mean −0.002103 ± 0.000088
Sigma 0.01427 ± 0.00006
sh.x - tr.x (m)


Horizontal Position Difference
χ² / ndf 375.5 / 25
Prob 0
Constant 3760 ± 27.7
Mean 0.002314 ± 0.000087
Sigma 0.01417 ± 0.00006
sh.y - tr.y (m)

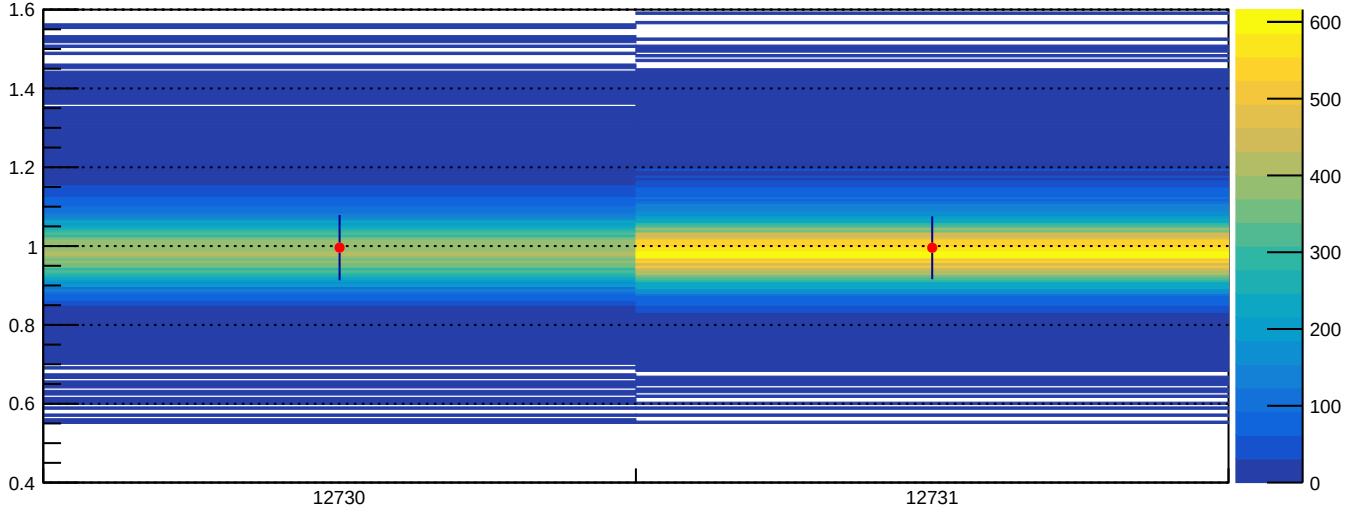

Vertical Pos. Diff. | After Calib.
χ² / ndf 645.1 / 36
Prob 0
Constant 3686 ± 26.7
Mean −0.002111 ± 0.000088
Sigma 0.01436 ± 0.00006
sh.x - tr.x (m)


Horizontal Pos. Diff. | After Calib.
χ² / ndf 403 / 26
Prob 0
Constant 3746 ± 27.5
Mean 0.002347 ± 0.000087
Sigma 0.01426 ± 0.00006
sh.y - tr.y (m)

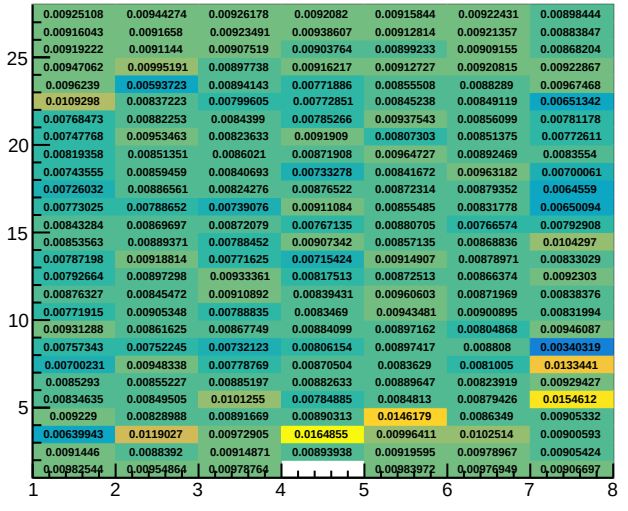
E/p vs Run no.



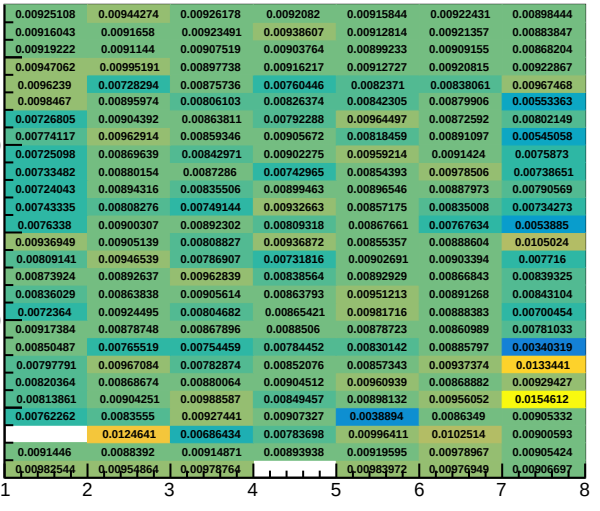
E/p vs Run no. | After Calib.



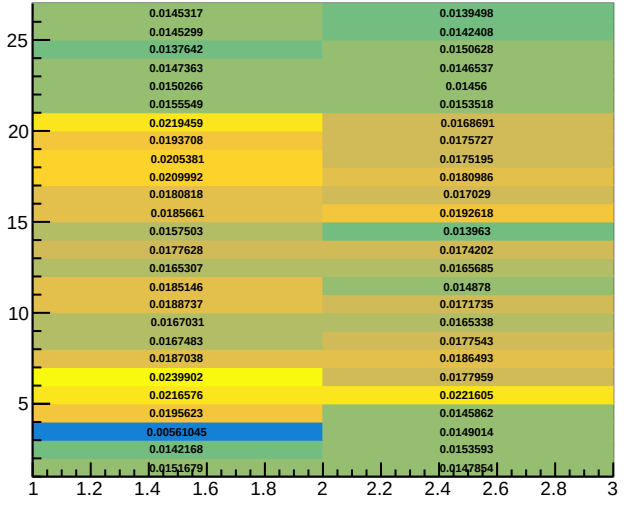
Old ADC Gain Coefficients | SH



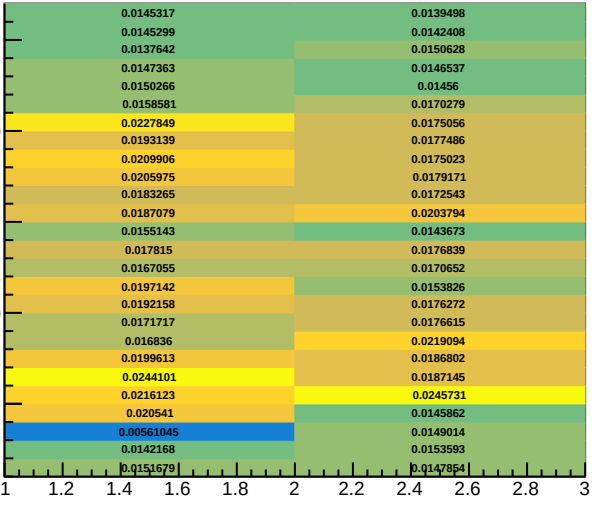
New ADC Gain Coefficients | SH



Old ADC Gain Coefficients | PS



New ADC Gain Coefficients | PS



Date of creation: 1/5/2024

Configfile: BBCal_replay/macros/Combined_macros/cfg/sbs11-sbs0p.cfg

Total # events analyzed: 1690336, Preparing for replay pass: 2

E/p (before calib.) | μ = 0.97, σ = (5.988 $\pm$ 0.291) p

E/p (after calib.) | μ = 0.99, σ = (5.859 $\pm$ 0.276) 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])<0.32, bb.gem.track.ngoodhits[0]>2, bb.gem.track.chi2ndf[0]<15,
bb.sh.e>0.7,

PS cluster energy > 0.2 GeV

1.8 < p_recon < 3.2 GeV/c

events passed global cuts: 37614

Other cuts:

Minimum # events per block: 25 | Cluster hit threshold: 0.02 GeV (SH), 0.01 GeV (PS)

Cluster tmax cut: 10.0 ns (SH), 10.0 ns (PS) | Cluster energy fraction cut: 0.0 GeV (SH), 0.0 GeV (PS)

Various offsets:

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

Macro processing time: CPU 129.3s | Real 297.6s