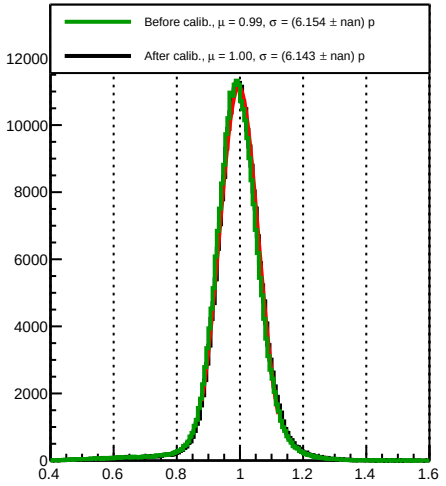
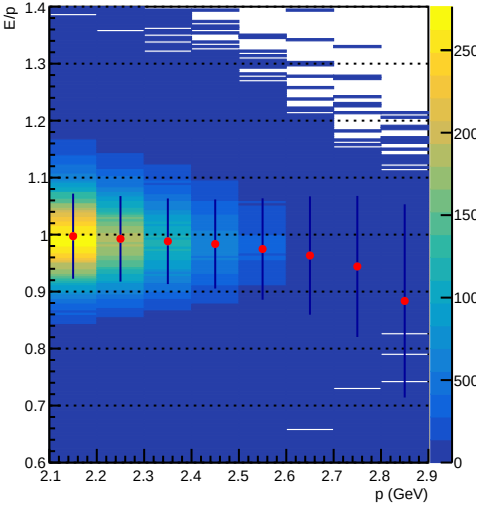
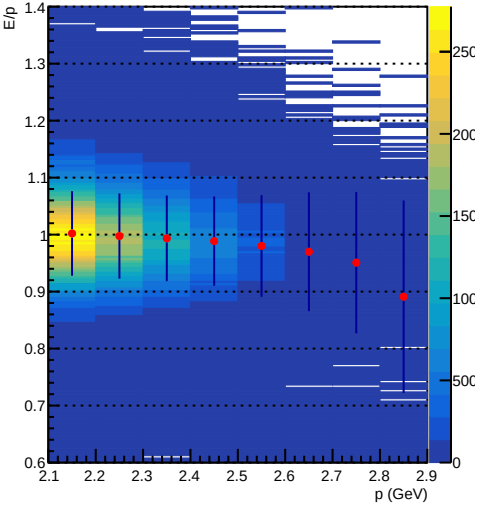
E/p



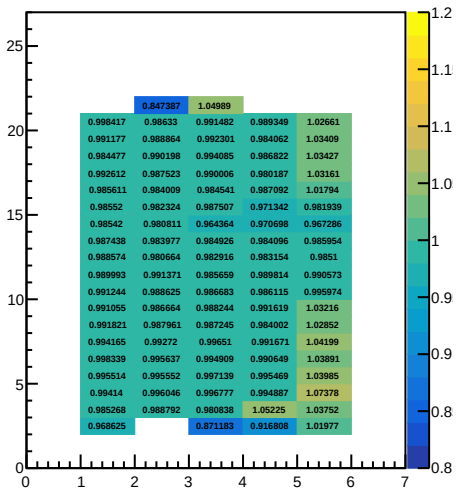
E/p vs p



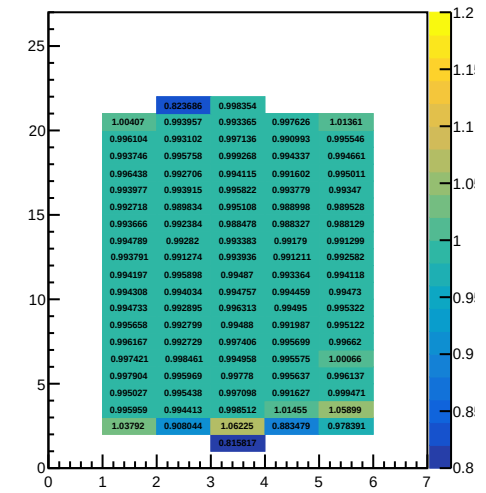
E/p vs p | After Calib.



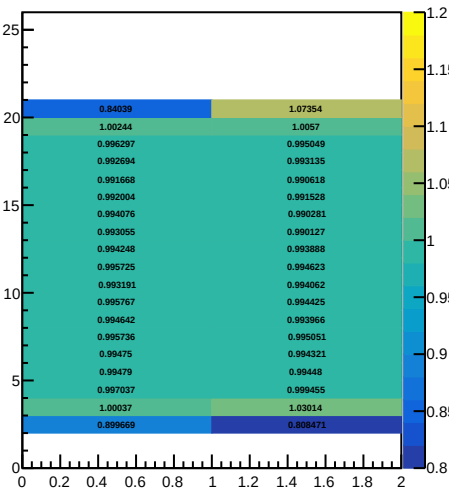
E/p per SH block



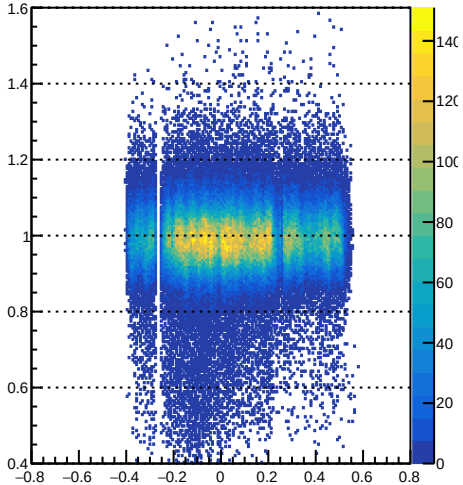
E/p per SH block | After Calib.



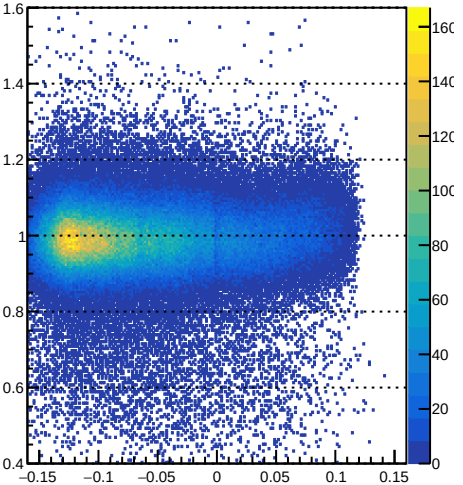
E/p per PS block | After Calib.



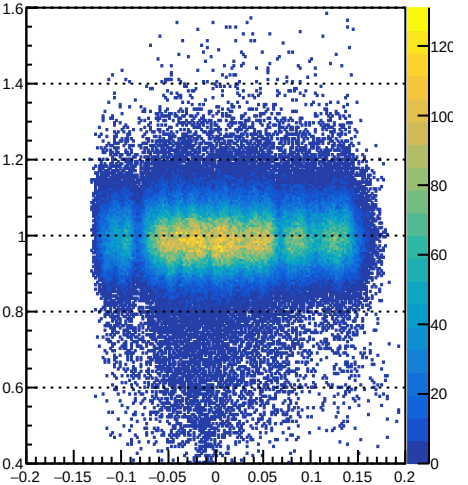
E/p vs Track x



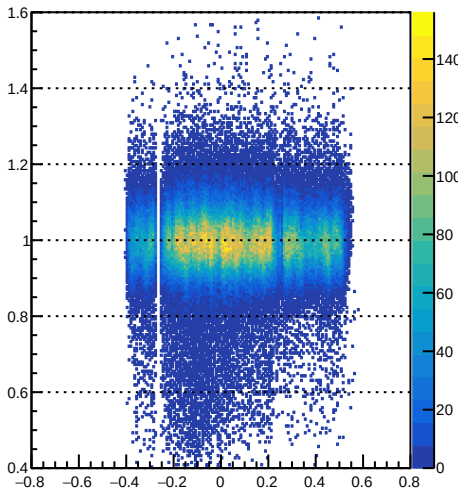
E/p vs Track y



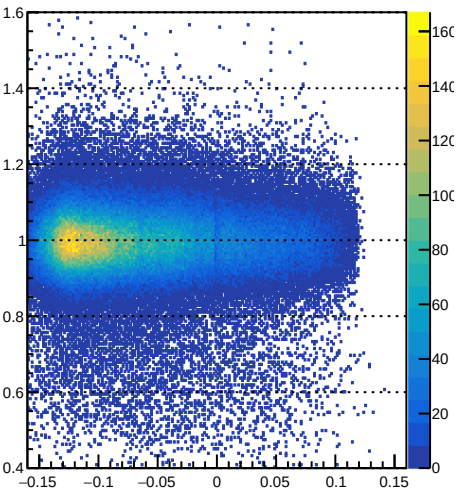
E/p vs Track theta



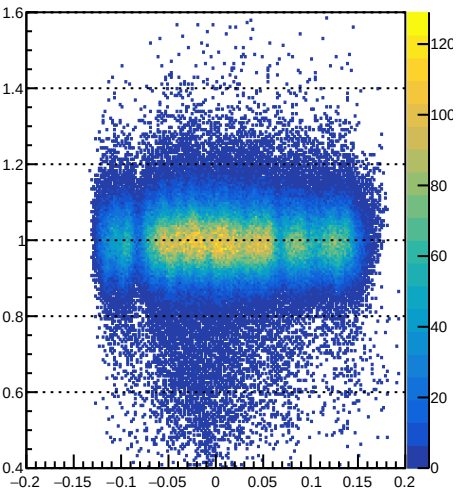
E/p vs Track x | After Calib.



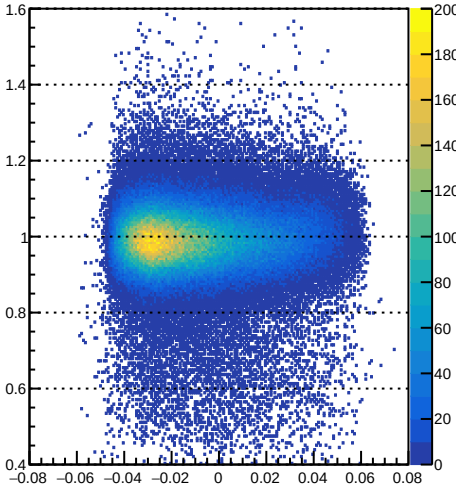
E/p vs Track y | After Calib.



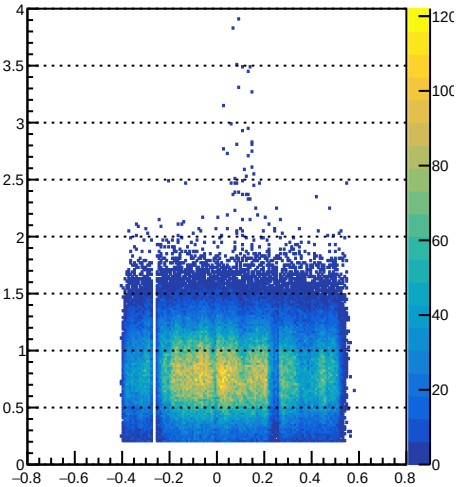
E/p vs Track theta | After Calib.



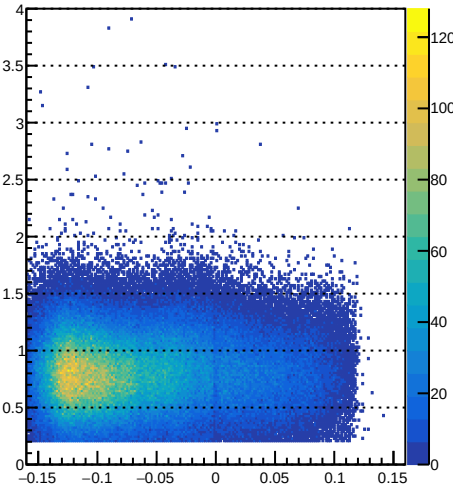
E/p vs Track phi



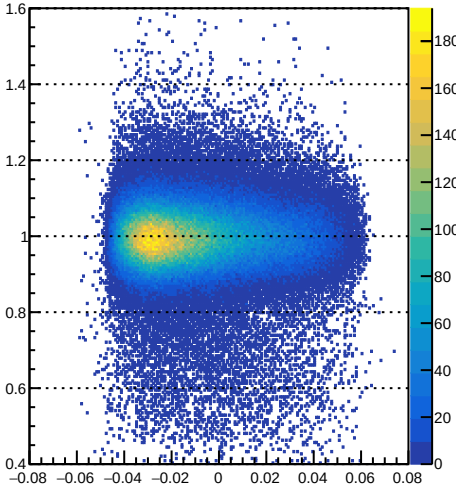
PS energy vs Track x



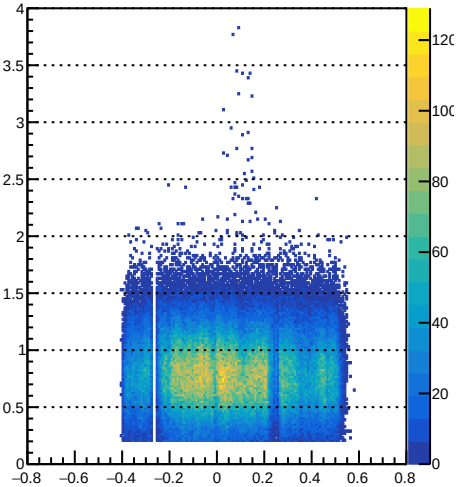
PS energy vs Track y



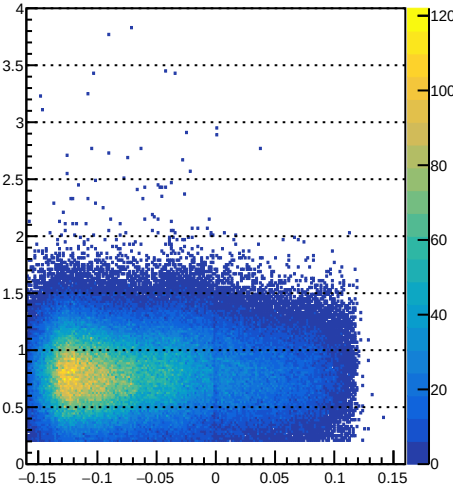
E/p vs Track phi | After Calib.

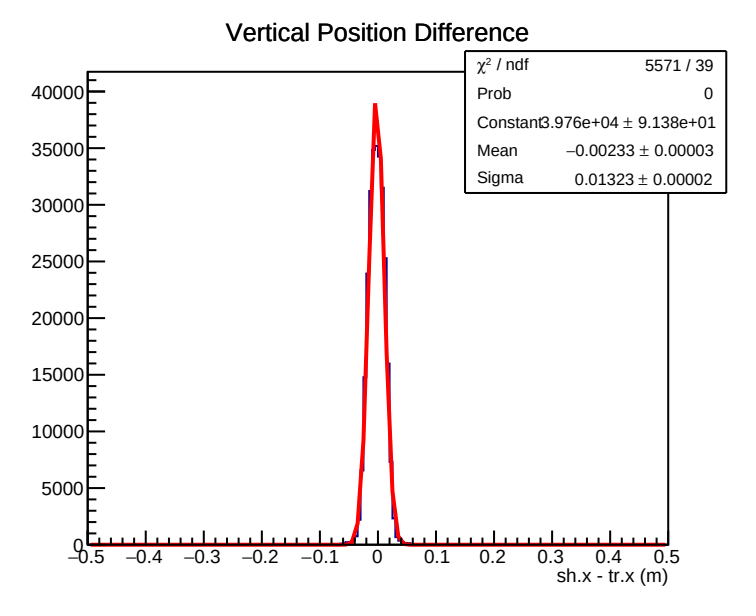


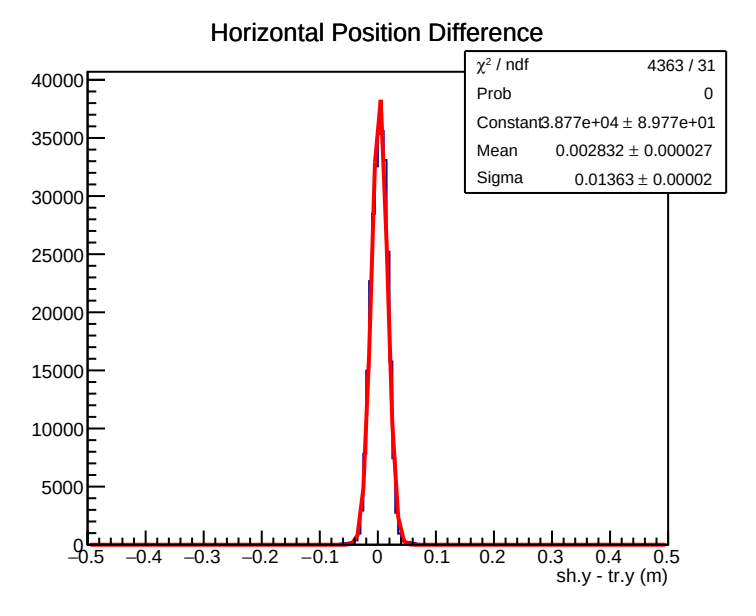
PS energy vs Track x | After Calib.

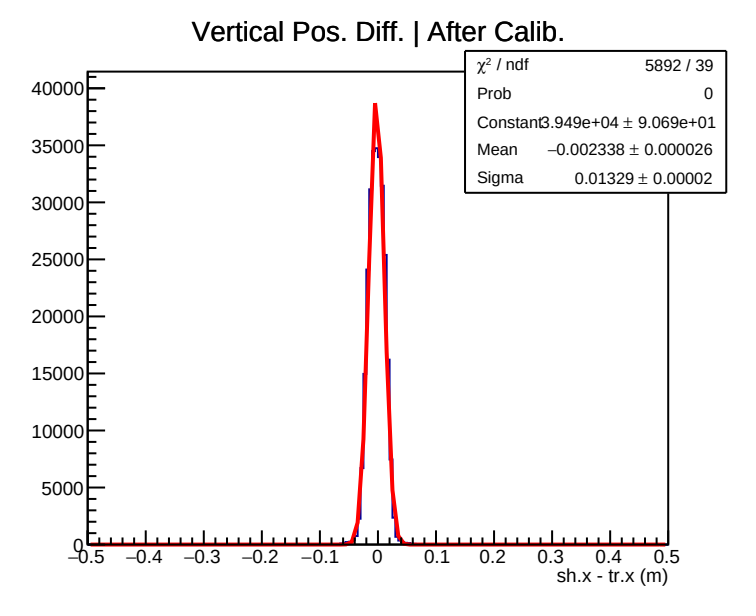


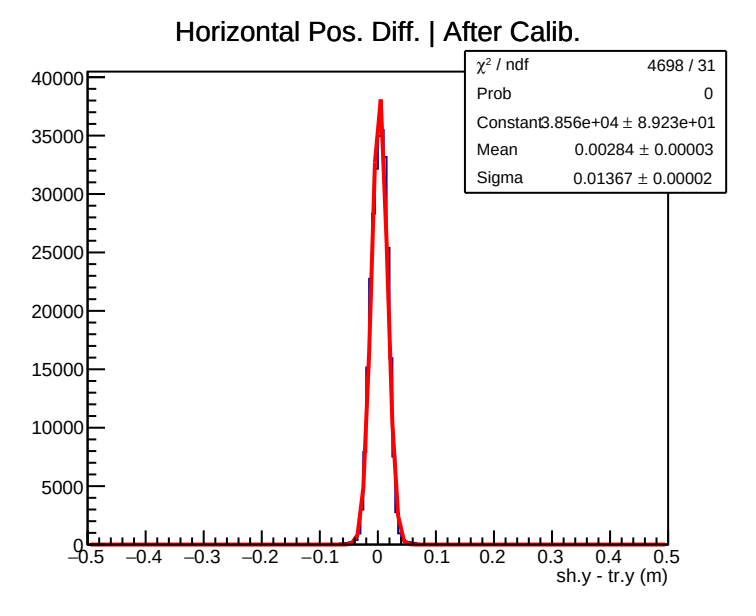
PS energy vs Track y | After Calib.

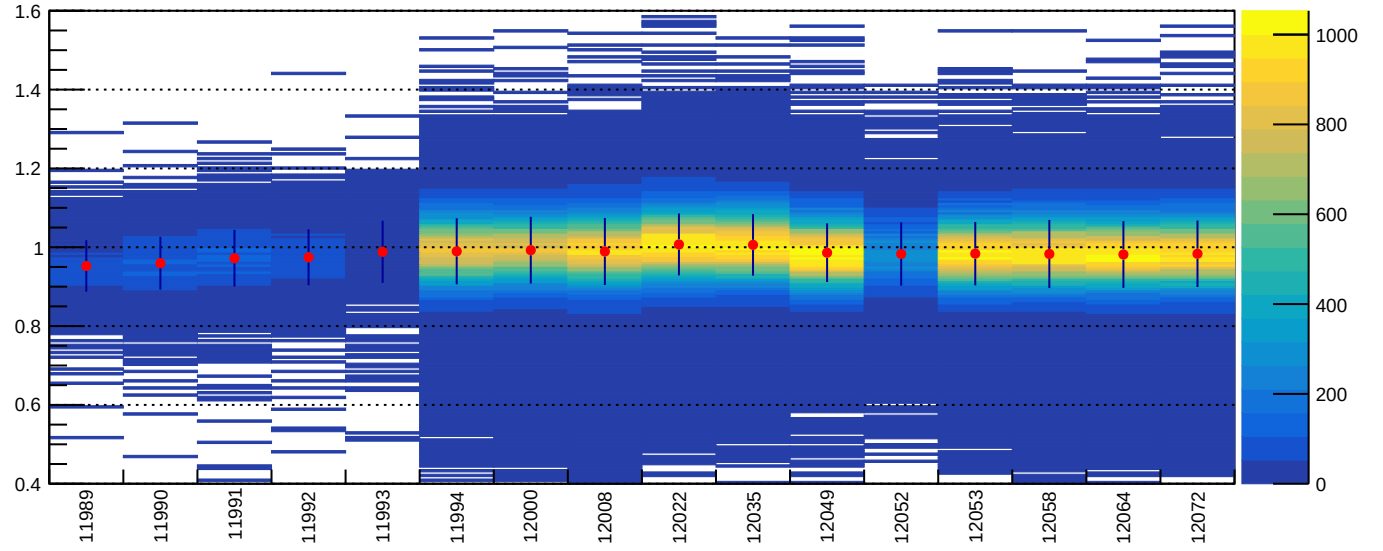


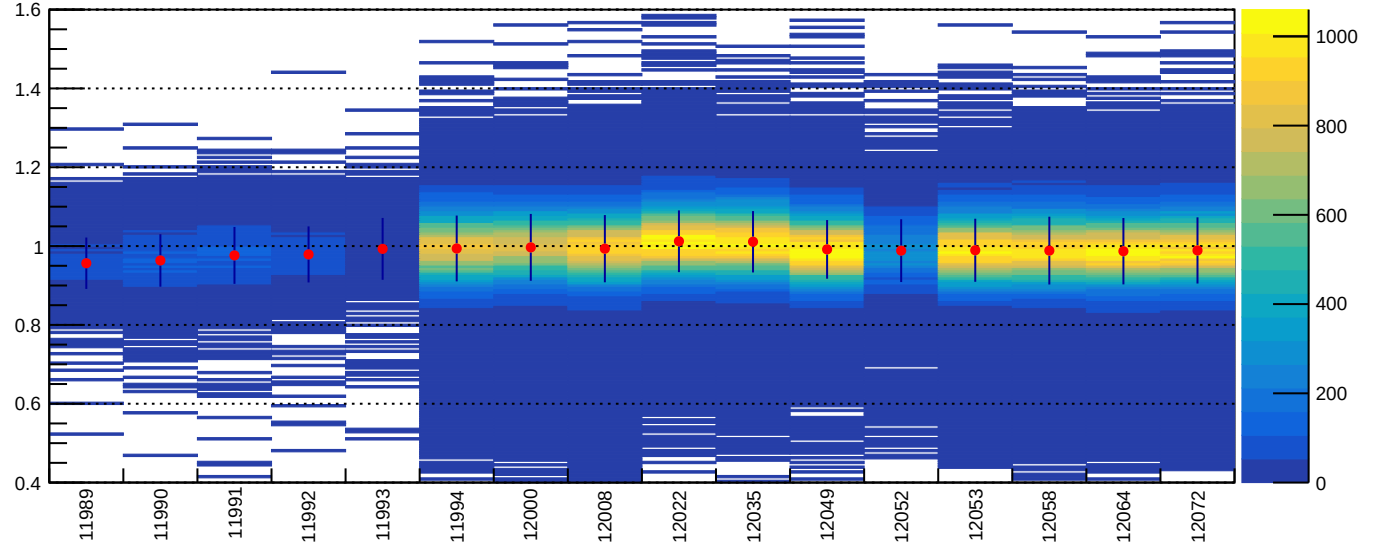

Vertical Position Difference
χ² / ndf 5571 / 39
Prob 0
Constant 3.976e+04 ± 9.138e+01
Mean −0.00233 ± 0.00003
Sigma 0.01323 ± 0.00002
sh.x - tr.x (m)


Horizontal Position Difference
χ² / ndf 4363 / 31
Prob 0
Constant 3.877e+04 ± 8.977e+01
Mean 0.002832 ± 0.000027
Sigma 0.01363 ± 0.00002
sh.y - tr.y (m)

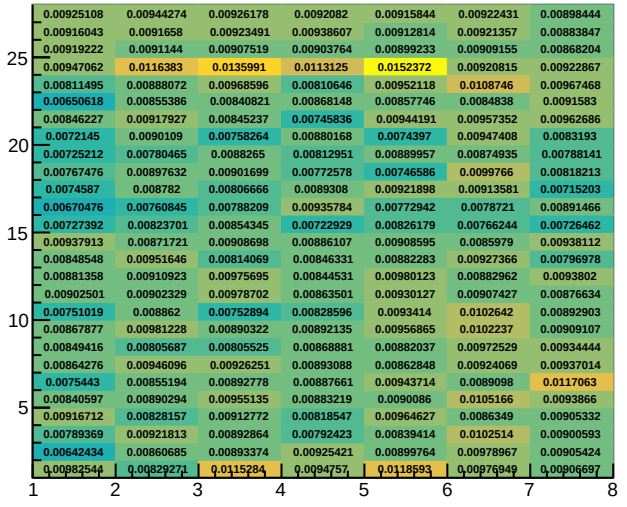

Vertical Pos. Diff. | After Calib.
χ² / ndf 5892 / 39
Prob 0
Constant 3.949e+04 ± 9.069e+01
Mean −0.002338 ± 0.000026
Sigma 0.01329 ± 0.00002
sh.x - tr.x (m)


Horizontal Pos. Diff. | After Calib.
χ² / ndf 4698 / 31
Prob 0
Constant 3.856e+04 ± 8.923e+01
Mean 0.00284 ± 0.00003
Sigma 0.01367 ± 0.00002
sh.y - tr.y (m)

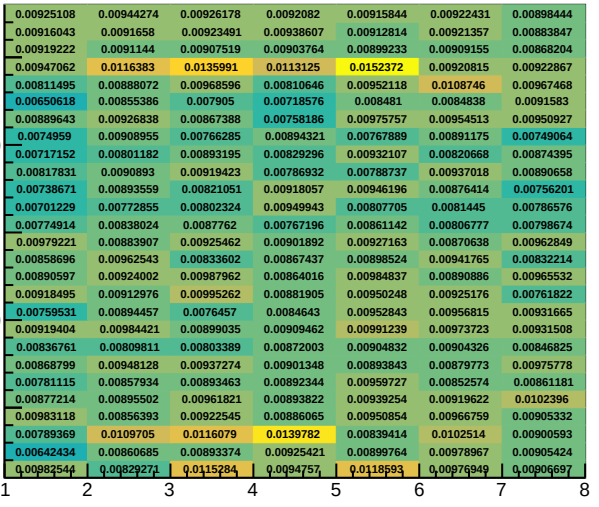

E/p vs Run no.
1.6
1.4
1.2
1
0.8
0.6
0.4
11989
11990
11991
11992
11993
11994
12000
12008
12022
12035
12049
12052
12053
12058
12064
12072
1000
800
600
400
200
0


E/p vs Run no. | After Calib.
1.6
1.4
1.2
1
0.8
0.6
0.4
11989
11990
11991
11992
11993
11994
12000
12008
12022
12035
12049
12052
12053
12058
12064
12072
1000
800
600
400
200
0

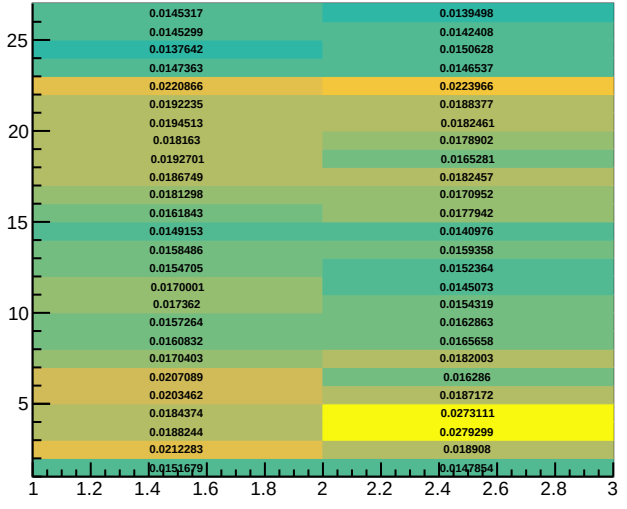
Old ADC Gain Coefficients | SH



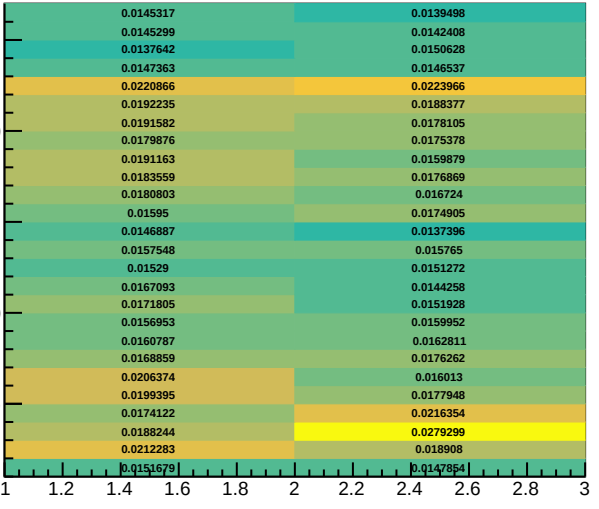
New ADC Gain Coefficients | SH



Old ADC Gain Coefficients | PS



New ADC Gain Coefficients | PS



Date of creation: 8/16/2023

Configfile: BBCal_replay/macros/Combined_macros/cfg/sbs7-sbs85p.cfg

Total # events analyzed: 6298021, Preparing for replay pass: 2

E/p (before calib.) | μ = 0.99, σ = (6.154 $\pm$ nan) p

E/p (after calib.) | μ = 1.00, σ = (6.143 $\pm$ nan) 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]-0.005)<0.33,

PS cluster energy > 0.2 GeV

p_recon > 2.1 GeV/c

events passed global cuts: 367716

Other cuts:

Minimum # events per block: 400, (Cluster) hit threshold: 0.02 GeV

Various offsets:

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

Momentum calibration factors: A = 0.277770030, B = 0.915135981, C = 0.0, θ_{pitch}^{GEM} = 10.0^{o}, d_{BB} = 1.8490 m

Macro processing time: CPU 584.6s | Real 1127.2s