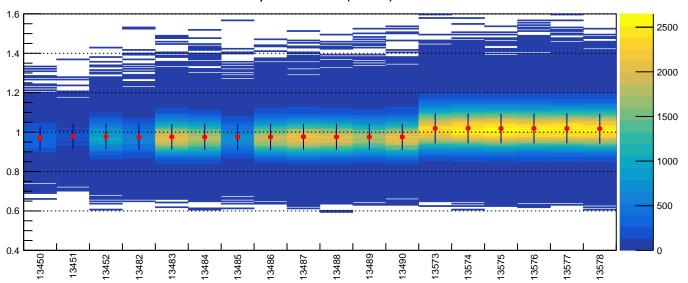
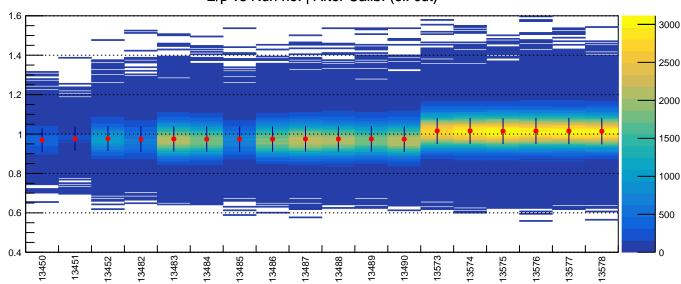


E/p vs Run no. (el. cut)



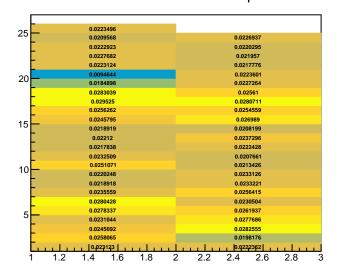
E/p vs Run no. | After Calib. (el. cut)



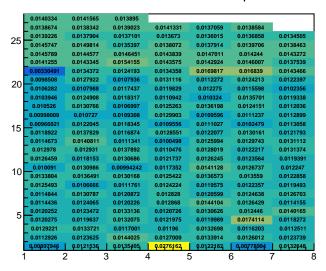
Old ADC Gain Coefficients | SH

| | 0.0140334 | 0.0141565 | 0.013895 | | | | |
|-----|------------|------------|------------|------------|------------|------------|------------|
| | 0.0138674 | 0.0138342 | 0.0139023 | 0.0141331 | 0.0137059 | 0.0138584 | |
| 25 | 0.0139226 | 0.0137904 | 0.0137101 | 0.013673 | 0.0136015 | 0.0136858 | 0.0134505 |
| | 0.0145747 | 0.0149814 | 0.0135397 | 0.0138072 | 0.0137914 | 0.0139706 | 0.0138463 |
| | 0.0145789 | 0.0144577 | 0.0146451 | 0.0143839 | 0.0147011 | 0.014244 | 0.0143272 |
| | 0.0141255 | 0.0143345 | 0.0154155 | 0.0143575 | 0.0142924 | 0.0146007 | 0.0137539 |
| | 0.00330491 | 0.00624463 | 0.00487926 | 0.00698126 | 0.00838063 | 0.00780571 | 0.0143466 |
| 20 | 0.0109785 | 0.0123398 | 0.0115057 | 0.0120379 | 0.0113408 | 0.0124776 | 0.00968864 |
| | 0.01143 | 0.0113848 | 0.0121897 | 0.0120205 | 0.0125123 | 0.0117085 | 0.0111273 |
| | 0.0108273 | 0.0127291 | 0.0114741 | 0.0111263 | 0.0101958 | 0.0136365 | 0.0128332 |
| | 0.0109661 | 0.0130602 | 0.0106907 | 0.0125874 | 0.0136704 | 0.012273 | 0.0115158 |
| | 0.0102266 | 0.0105148 | 0.0109705 | 0.0127349 | 0.0108023 | 0.0109852 | 0.0116149 |
| 4 = | 0.00959691 | 0.0122534 | 0.0115488 | 0.0108943 | 0.0109962 | 0.010138 | 0.0115328 |
| 15 | 0.01241 | 0.0136827 | 0.0116418 | 0.0127482 | 0.0120971 | 0.0129953 | 0.0129987 |
| | 0.0118537 | 0.0139131 | 0.0110223 | 0.0101741 | 0.0126672 | 0.0124871 | 0.0135928 |
| | 0.0127877 | 0.0129092 | 0.0136097 | 0.0110892 | 0.0126005 | 0.0117657 | 0.0127897 |
| | 0.0130258 | 0.0116147 | 0.0125878 | 0.0118586 | 0.0122923 | 0.0120456 | 0.012494 |
| 10 | 0.0105833 | 0.0129574 | 0.0103795 | 0.0115769 | 0.0141954 | 0.0121451 | 0.0122237 |
| 10 | 0.0137284 | 0.0134599 | 0.0132813 | 0.0119161 | 0.0132018 | 0.0130597 | 0.0121119 |
| | 0.0124555 | 0.010522 | 0.0109755 | 0.0119942 | 0.011689 | 0.0122173 | 0.0112944 |
| | 0.011525 | 0.012749 | 0.0120883 | 0.012151 | 0.0113024 | 0.012102 | 0.0117107 |
| | 0.0117233 | 0.0118608 | 0.0115435 | 0.0123749 | 0.0133628 | 0.0121621 | 0.0112954 |
| 5 | 0.0122758 | 0.0117088 | 0.0130291 | 0.0112717 | 0.0121557 | 0.0122055 | 0.0120624 |
| 5 | 0.0122076 | 0.0116001 | 0.0128392 | 0.0118684 | 0.0122604 | 0.0116131 | 0.0118272 |
| | 0.0114827 | 0.0126553 | 0.0113256 | 0.0118859 | 0.0117918 | 0.0116203 | 0.0112511 |
| | 0.0112926 | 0.0126835 | 0.013282 | 0.0127009 | 0.0133914 | 0.0126012 | 0.0123739 |
| | Q.00897946 | 0.0121536 | 9.0135405 | 0.0276162 | 0.0122182 | 0,00778994 | 0.0132648 |
| | 1 2 | 2 ; | 3 | 4 | 5 | 6 | 7 |

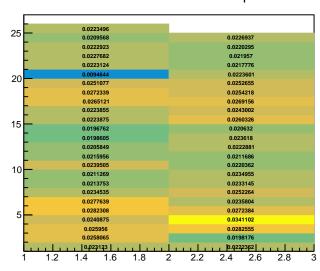
Old ADC Gain Coefficients | PS

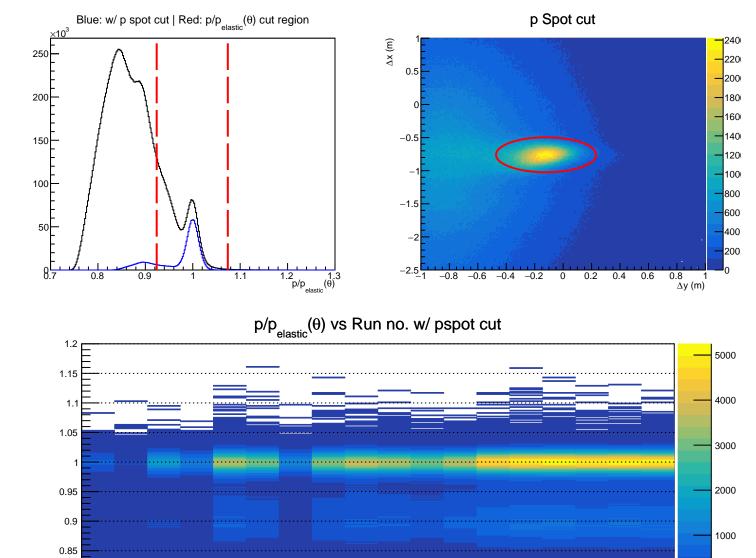


New ADC Gain Coefficients | SH

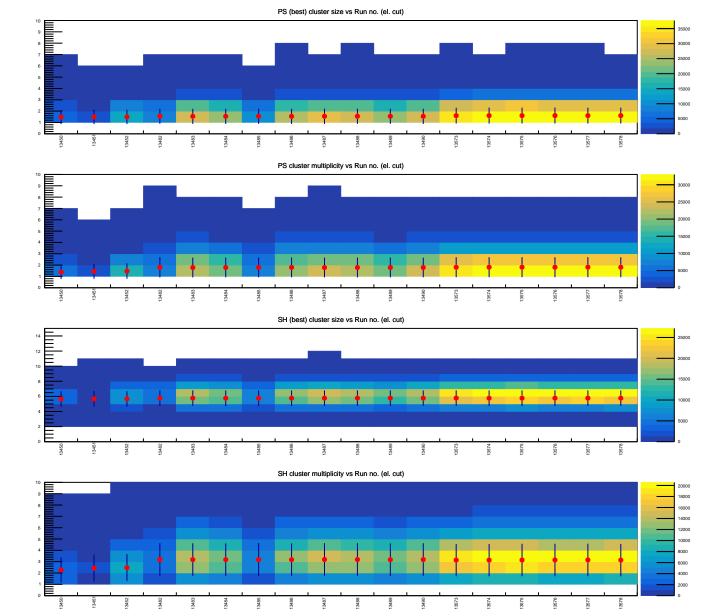


New ADC Gain Coefficients | PS





0.8



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Date of creation: 8/29/2023
```

Configfile: BBCal_replay/macros/Combined_macros/cfg/sbs8-sbs70p.cfg

Total # events analyzed: 45309559, Preparing for replay pass: 2 E/p (before calib.) | μ = 0.99, σ = (6.592 \pm 0.011) p E/p (after calib.) | μ = 0.99, σ = (6.146 \pm 0.011) 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)<0.345,

PS cluster energy > 0.2 GeV p_recon > 2.9 GeV/c

events passed global cuts: 18434609

Elastic cuts: $|p/p_{el}(\theta) - 0.999| \le 5.0*0.015$

proton spot cut ranges:

proton spot cut ranges: Δx (m): Mean = -0.7600, 2.0 σ = 0.1320

 Δy (m): Mean = -0.1200, 2.0 σ = 0.1760

events passed global & elastic cuts: 1024844
Other cuts:

Minimum # events per block: 1500, (Cluster) hit threshold: 0.02 GeV

Various offsets:

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

Mom. calib. params: A = 0.292476240, B = 1.032896400, C = 0.0, Avy = 0.000000, Bvy = 0.000000, θ_{pitch}^{GEM} = 10.0°, d_{BB} = 1.9747 m

Macro processing time: CPU 3553.3s | Real 4777.8s