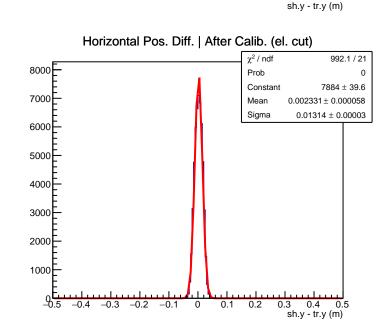
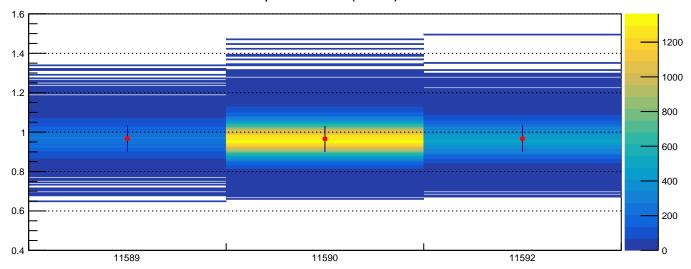


0

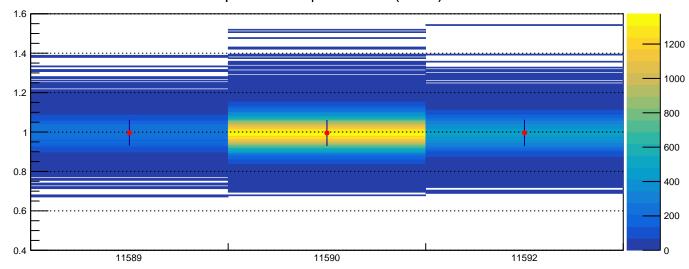
0.1



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



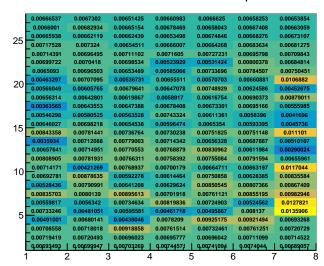
E/p vs Run no. | After Calib. (el. cut)



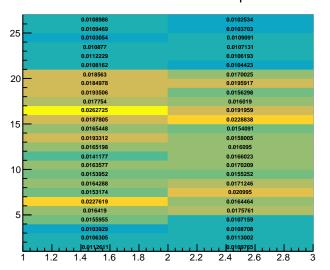
Old ADC Gain Coefficients | SH

066001 665938 717528 714391 699722 6612321 497099 7579941 662309 399831 556012 634504	0.00682934 0.00662119 0.007324 0.00696495 0.0070418 0.00651582 0.0071074 0.00613724 0.00632889 0.00640002 0.00567184 0.006766105	0.00665154 0.00662439 0.00654511 0.00711102 0.00702358 0.00637794 0.00558253 0.00672634 0.00612728 0.00656654 0.00549519 0.00644169	0.00678469 0.00653498 0.00666007 0.0071605 0.00551701 0.0057066 0.00653864 0.00639213 0.00572916 0.0066443 0.0071699	0.00658043 0.00674846 0.00664268 0.00727231 0.00646174 0.00702609 0.00584543 0.00725135 0.00613891 0.00655363 0.00599323	0.00667408 0.00668276 0.00683634 0.00695798 0.00718522 0.00781618 0.00675795 0.00626996 0.00696672 0.00682225 0.0057806	0.00663059 0.00673107 0.00681275 0.00709843 0.00684814 0.00698376 0.0107241 0.00542833 0.00752137 0.00584984 0.00412602
717528 1714391 699722 1612321 497099 1579941 1662309 1399831 1556012 1634504	0.007324 0.00696495 0.0070418 0.00651582 0.0071074 0.00632889 0.00640002 0.00567184 0.00679259	0.00654511 0.00711102 0.00702358 0.00637794 0.00558253 0.00672634 0.00612728 0.00656654 0.00549519	0.00666007 0.0071605 0.00551701 0.0057066 0.00653864 0.00639213 0.00572916 0.0066443 0.0071699	0.00664268 0.00727231 0.00646174 0.00702609 0.00584543 0.00725135 0.00613891 0.00655363 0.00599323	0.00683634 0.00695798 0.00718522 0.00781618 0.00675795 0.00626996 0.00696672 0.00682225	0.00681275 0.00709843 0.00684814 0.00698376 0.0107241 0.00542833 0.00752137 0.00584984
7714391 699722 612321 497099 5579941 662309 399831 556012 634504	0.00696495 0.0070418 0.00651582 0.0071074 0.00613724 0.00632889 0.00640002 0.00567184 0.00679259	0.00711102 0.00702358 0.00637794 0.00558253 0.00672634 0.00612728 0.00656654 0.00549519	0.0071605 0.00551701 0.0057066 0.00653864 0.00639213 0.00572916 0.0066443 0.0071699	0.00727231 0.00646174 0.00702609 0.00584543 0.00725135 0.00613891 0.00655363 0.00599323	0.00695798 0.00718522 0.00781618 0.00675795 0.00626996 0.00696672 0.00682225	0.00709843 0.00684814 0.00698376 0.0107241 0.00542833 0.00752137 0.00584984
699722 612321 497099 579941 662309 399831 556012 634504	0.0070418 0.00651582 0.0071074 0.00613724 0.00632889 0.00640002 0.00567184 0.00679259	0.00702358 0.00637794 0.00558253 0.00672634 0.00612728 0.00656654 0.00549519	0.00551701 0.0057066 0.00653864 0.00639213 0.00572916 0.0066443 0.0071699	0.00646174 0.00702609 0.00584543 0.00725135 0.00613891 0.00655363 0.00599323	0.00718522 0.00781618 0.00675795 0.00626996 0.00696672 0.00682225	0.00684814 0.00698376 0.0107241 0.00542833 0.00752137 0.00584984
612321 497099 579941 662309 399831 556012 634504	0.00651582 0.0071074 0.00613724 0.00632889 0.00640002 0.00567184 0.00679259	0.00637794 0.00558253 0.00672634 0.00612728 0.00656654 0.00549519	0.0057066 0.00653864 0.00639213 0.00572916 0.0066443 0.0071699	0.00702609 0.00584543 0.00725135 0.00613891 0.00655363 0.00599323	0.00781618 0.00675795 0.00626996 0.00696672 0.00682225	0.00698376 0.0107241 0.00542833 0.00752137 0.00584984
497099 579941 662309 399831 556012 634504	0.0071074 0.00613724 0.00632889 0.00640002 0.00567184 0.00679259	0.00558253 0.00672634 0.00612728 0.00656654 0.00549519	0.00653864 0.00639213 0.00572916 0.0066443 0.0071699	0.00584543 0.00725135 0.00613891 0.00655363 0.00599323	0.00675795 0.00626996 0.00696672 0.00682225	0.0107241 0.00542833 0.00752137 0.00584984
579941 662309 399831 556012 634504	0.00613724 0.00632889 0.00640002 0.00567184 0.00679259	0.00672634 0.00612728 0.00656654 0.00549519	0.00639213 0.00572916 0.0066443 0.0071699	0.00725135 0.00613891 0.00655363 0.00599323	0.00626996 0.00696672 0.00682225	0.00542833 0.00752137 0.00584984
662309 399831 556012 634504	0.00632889 0.00640002 0.00567184 0.00679259	0.00612728 0.00656654 0.00549519	0.00572916 0.0066443 0.0071699	0.00613891 0.00655363 0.00599323	0.00696672 0.00682225	0.00752137 0.00584984
399831 556012 634504	0.00640002 0.00567184 0.00679259	0.00656654 0.00549519	0.0066443 0.0071699	0.00655363 0.00599323	0.00682225	0.00584984
556012 634504	0.00567184 0.00679259	0.00549519	0.0071699	0.00599323		
634504	0.00679259				0.0057806	0.00412602
		0.00644169	0.00585934			
	0.00766406			0.00639546	0.00585763	0.00489391
823321	0.00700103	0.00717996	0.00707593	0.00731902	0.00728897	0.0110906
376452	0.00693178	0.00756531	0.00701492	0.00628827	0.00655199	0.00492269
063628	0.00699926	0.00751233	0.00743457	0.00811992	0.0057929	0.0037586
774766	0.00762926	0.00744368	0.00734309	0.00724254	0.00767686	0.00594793
694511	0.004505	0.00757247	0.00689796	0.00630237	0.00658908	0.0101769
658243	0.00842288	0.00571569	0.00593932	0.00713399	0.00601821	0.00854438
531647	0.00769971	0.00622091	0.00612656	0.00858062	0.00827534	0.00758069
831066	0.00766908	0.00859695	0.00675662	0.00726511	0.00872517	0.00751359
57377	0.00556073	0.00717939	0.00798586	0.00705388	0.00521804	0.0120462
781726	0.00503806	0.00604023	0.00485842	0.00518557	0.00906907	0.00729594
20	0.00787748	0.00500099	0.00982958	0.0114886	0.00654166	0.00693268
545829	0.00681514	0.00743293	0.00749715	0.00732461	0.00761251	0.00720729
		0.00696023	0.00695777	0.00696042	0.00711099	0.00714522
545829	0.00720493					
		708558 0.00681514	708558 0.00681514 0.00743293	708558 0.00681514 0.00743293 0.00749715	708558 0.00681514 0.00743293 0.00749715 0.00732461	708558 0.00681514 0.00743293 0.00749715 0.00732461 0.00761251

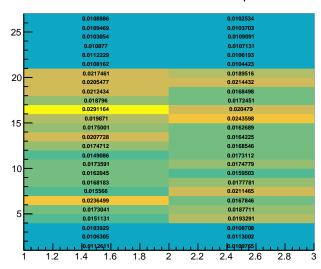
New ADC Gain Coefficients | SH

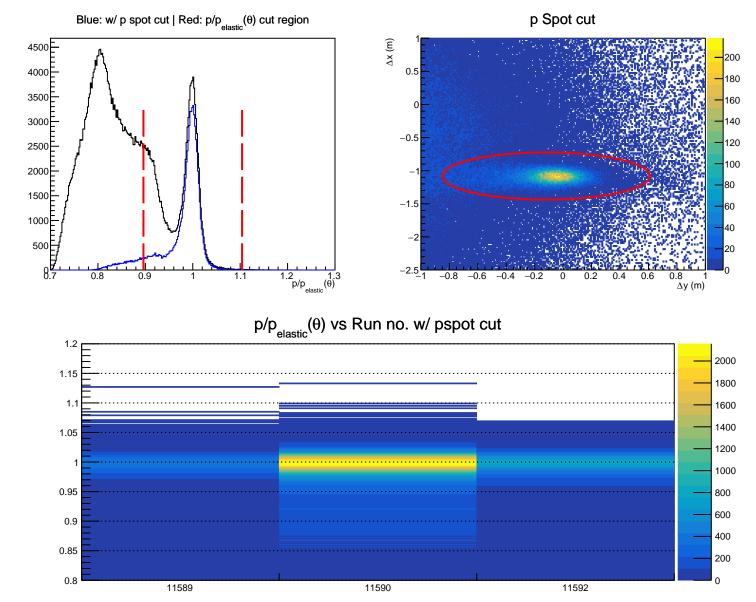


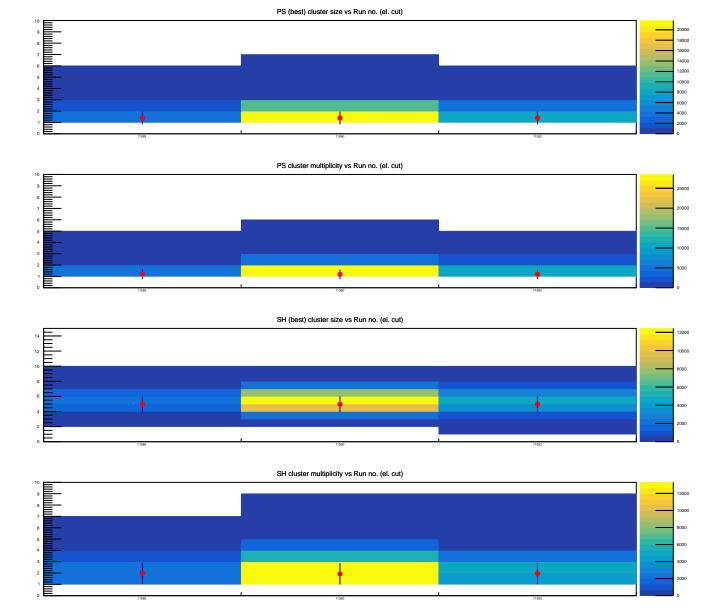
Old ADC Gain Coefficients | PS



New ADC Gain Coefficients | PS







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Date of creation: 8/18/2023
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$Config file: BBCal_replay/macros/Combined_macros/cfg/sbs4-sbs50p.cfg$

Total # events analyzed: 1194686, Preparing for replay pass: 2 E/p (before calib.) | μ = 0.96, σ = (6.030 \pm 0.039) p

E/p (after calib.) | μ = 0.99, σ = (6.139 \pm 0.041) 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]-0.02)<0.33, PS cluster energy > 0.2 GeV

p_recon > 1.6 GeV/c

events passed global cuts: 377657

Elastic cuts:

 $|p/p_{ol}(\theta) - 1.000| \le 8.0*0.013$

proton spot cut ranges:

 Δx (m): Mean = -1.0800, 4.0 σ = 0.0890

 Δ y (m): Mean = -0.1200, 5.0 σ = 0.1460 # events passed global & elastic cuts: 66871

Other cuts:

Minimum # events per block: 80, (Cluster) hit threshold: 0.02 GeV

Various offsets:

Momentum fudge factor: 1.00, BBCAL cluster energy scale factor: 1.00 Momentum calibration factors: A = 0.274307350, B = 1.014258780, C = 0.0, $\theta_{\text{nitch}}^{\text{GEM}}$ = 10.0°, d_{BB} = 1.7988 m

Macro processing time: CPU 93.1s | Real 112.9s