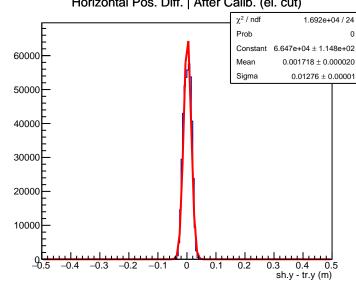


0.1

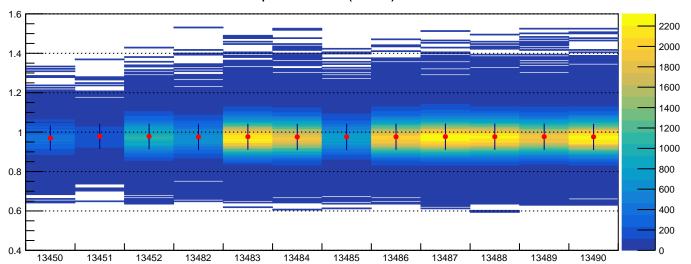
sh.y - tr.y (m)

20000

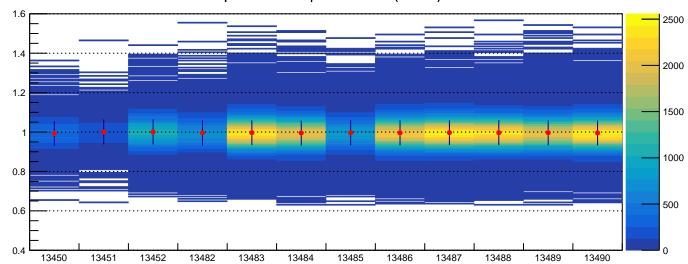
10000



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



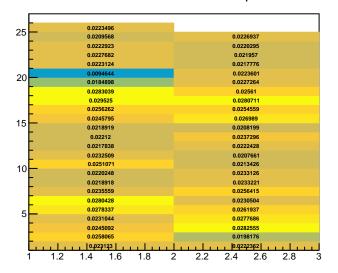
E/p vs Run no. | After Calib. (el. cut)



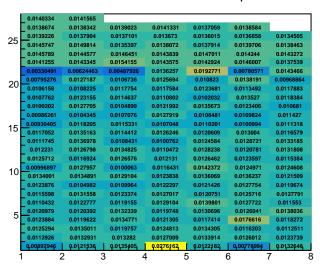
# Old ADC Gain Coefficients | SH

-							
	0.0140334	0.0141565					
25	0.0138674	0.0138342	0.0139023	0.0141331	0.0137059	0.0138584	
	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
15	0.00959691	0.0122534	0.0115488	0.0108943	0.0109962	0.010138	0.0115328
	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
	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
5	0.0117233	0.0118608	0.0115435	0.0123749	0.0133628	0.0121621	0.0112954
	0.0122758	0.0117088	0.0130291	0.0112717	0.0121557	0.0122055	0.0120624
	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
	0.00897946	0.0121536	0.0135405	0.0276162	0.0122182	0.00778994	0.0132648
,			3		5		7
1	ı	_	s	4	5	Ö	1

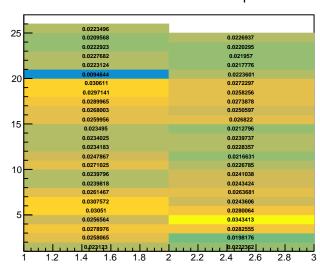
# Old ADC Gain Coefficients | PS

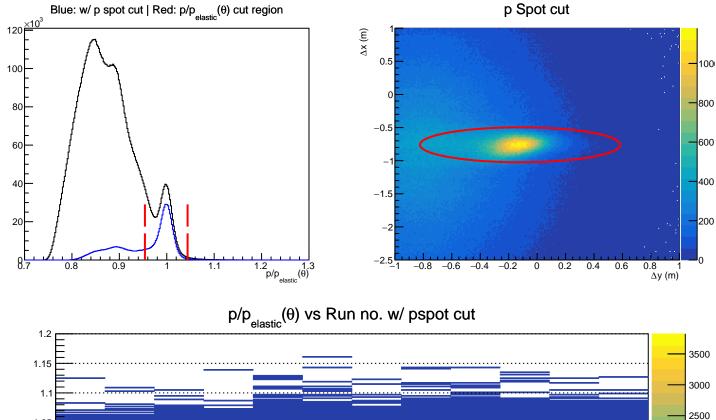


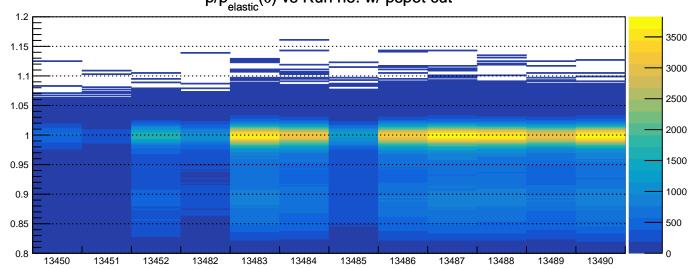
### New ADC Gain Coefficients | SH

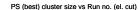


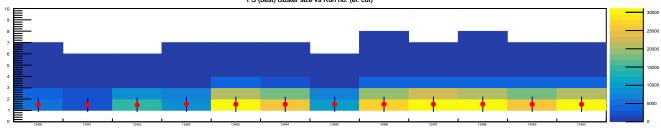
### New ADC Gain Coefficients | PS



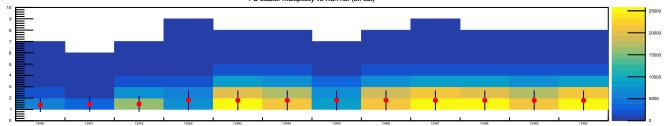




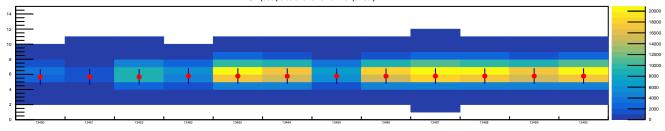




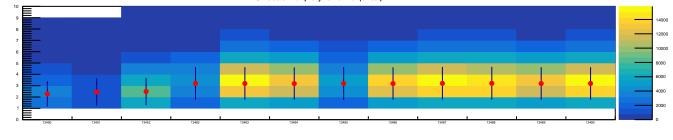
### PS cluster multiplicity vs Run no. (el. cut)



### SH (best) cluster size vs Run no. (el. cut)



#### SH cluster multiplicity vs Run no. (el. cut)



```
Date of creation: 8/16/2023
```

## Configfile: BBCal\_replay/macros/Combined\_macros/cfg/sbs8-sbs70p-set1.cfg

Total # events analyzed: 20930832, Preparing for replay pass: 2 E/p (before calib.) |  $\mu$  = 0.97,  $\sigma$  = (5.897  $\pm$  0.013) p

E/p (after calib.) | 
$$\mu$$
 = 0.99,  $\sigma$  = (5.450  $\pm$  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)<0.345,
PS cluster energy > 0.2 GeV

p\_recon > 2.9 GeV/c

# events passed global cuts: 8449406

Elastic cuts:  $|p/p_{ol}(\theta) - 0.999| \le 3.0*0.015$ 

proton spot cut ranges:

 $\Delta x$  (m): Mean = -0.7600, 2.0 $\sigma$  = 0.1320

 $\Delta$ y (m): Mean = -0.1200, 4.0 $\sigma$  = 0.1760

# events passed global & elastic cuts: 542056

#### Other cuts:

Minimum # events per block: 1200, (Cluster) hit threshold: 0.02 GeV

### Various offsets:

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

Momentum calibration factors: A = 0.292476240, B = 1.032896400, C = 0.0,  $\theta_{pitch}^{GEM}$  = 10.0°, d<sub>BB</sub> = 1.9747 m

Macro processing time: CPU 1414.4s | Real 1468.4s