

CERN Beam Test Analysis Update

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This presentation includes analysis plots from run 479.

- (Ar : CO₂ 80 : 20, uRWELL HV Scan @ uRWELL HV =470V, GEM 370 V, Transfer field 3.0 kV / cm and drift field 2 kV / cm).
- Detector 0,1,4, and 5 are 10x10 cm² GEMs.
- Detector 2, and 3 are readout from the large prototype.

Cut definitions:

Zero Suppression Threshold = 7

#allowed time bin with max ADC

max time bin detector 0= 1, 2, 3, 4

max time bin detector 1= 3, 4, 5, 6

max time bin detector 2= 3, 4, 5

max time bin detector 3= 3, 4, 5

max time bin detector 4= 1, 2, 3, 4

max time bin detector 5= 1, 2, 3, 4

allowed strip mean time range

strip mean time range detector 0 = 90, 130

strip mean time range detector 1 = 130, 170

strip mean time range detector 2 = 120, 160

strip mean time range detector 3 = 130, 170

strip mean time range detector 4 = 90, 130

strip mean time range detector 5 = 90, 130

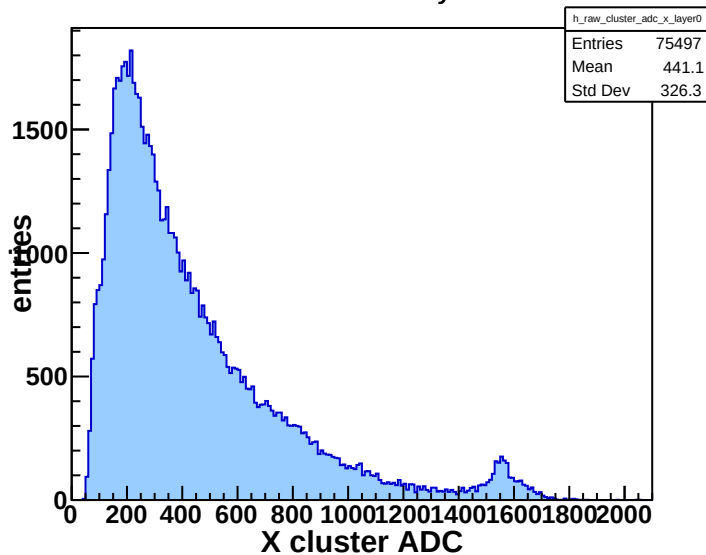
minimum ADC requirement for strip max time sample

seed strip min peak ADC = 10

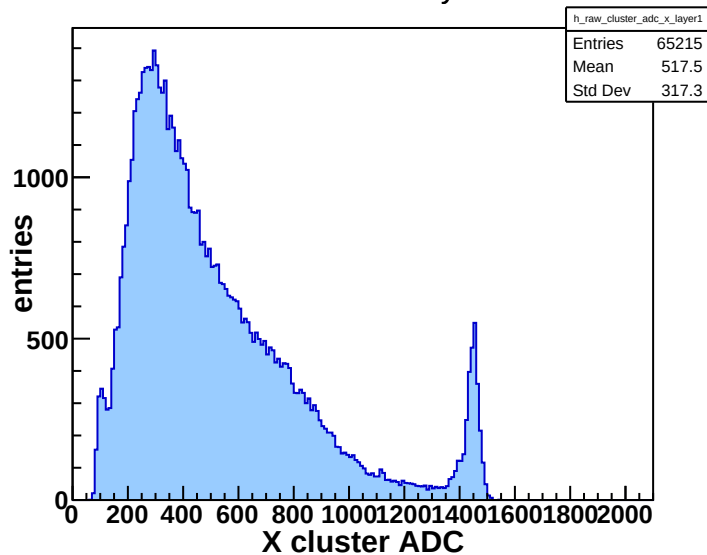
minimum ADC sum for strips

seed strip min sum ADC = 150

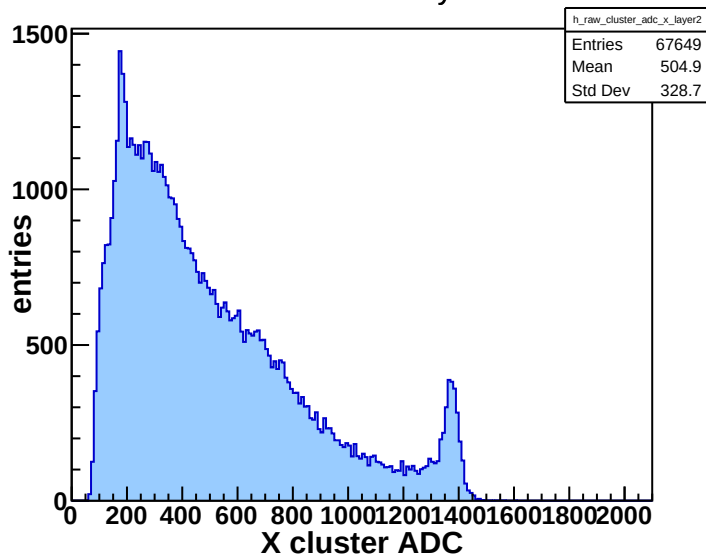
x cluster ADC layer0



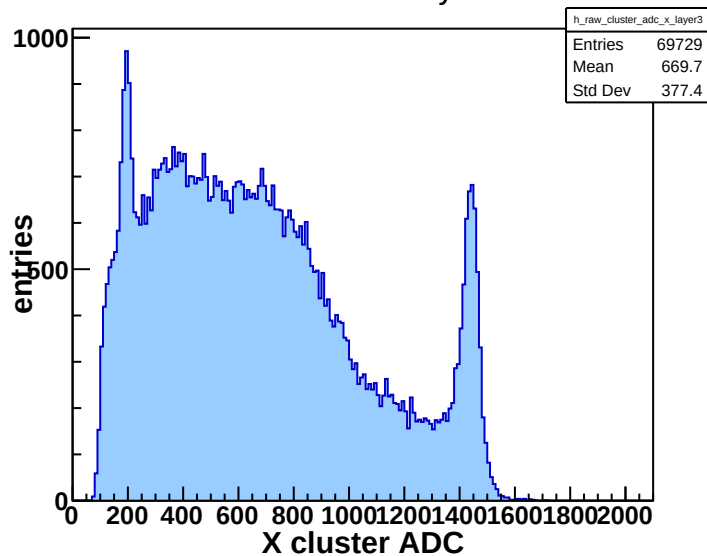
x cluster ADC layer1



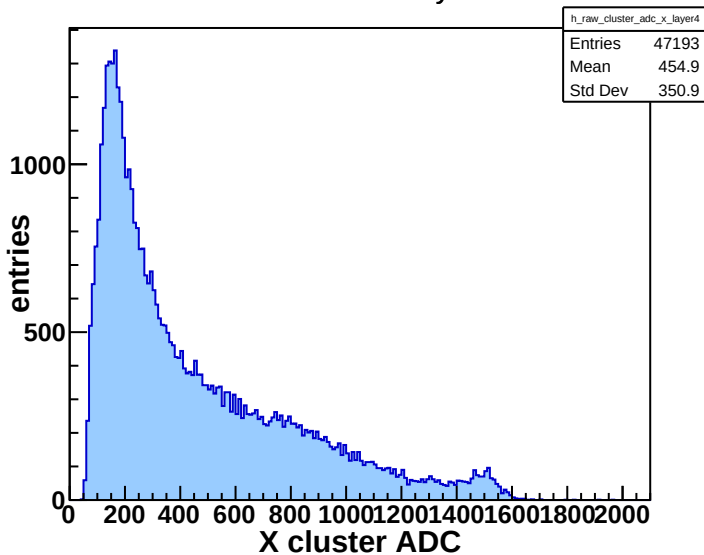
x cluster ADC layer2



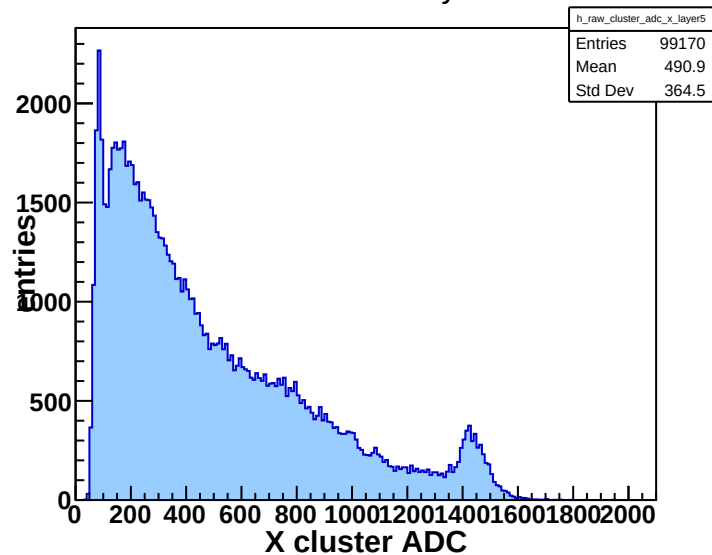
x cluster ADC layer3



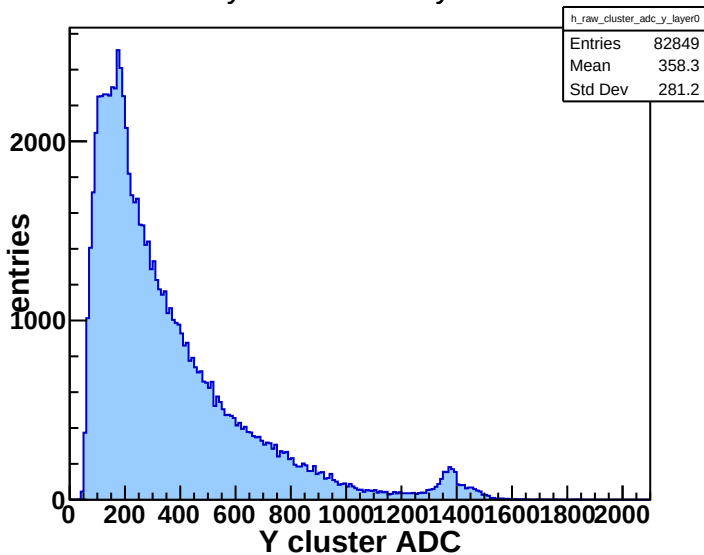
x cluster ADC layer4



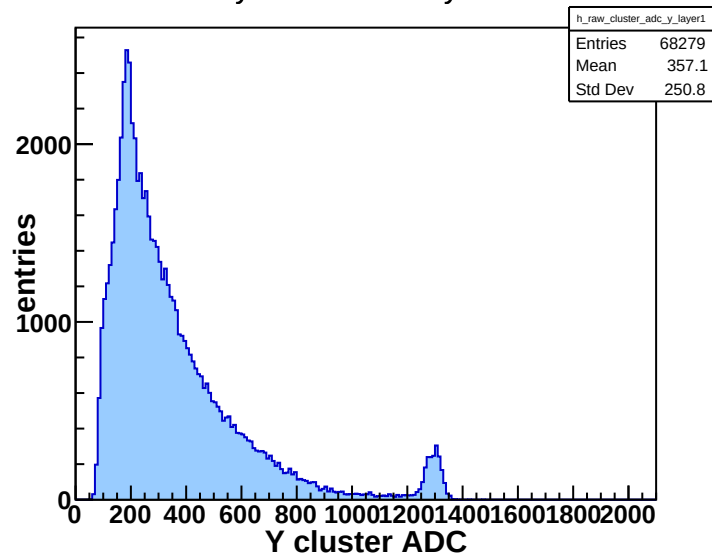
x cluster ADC layer5



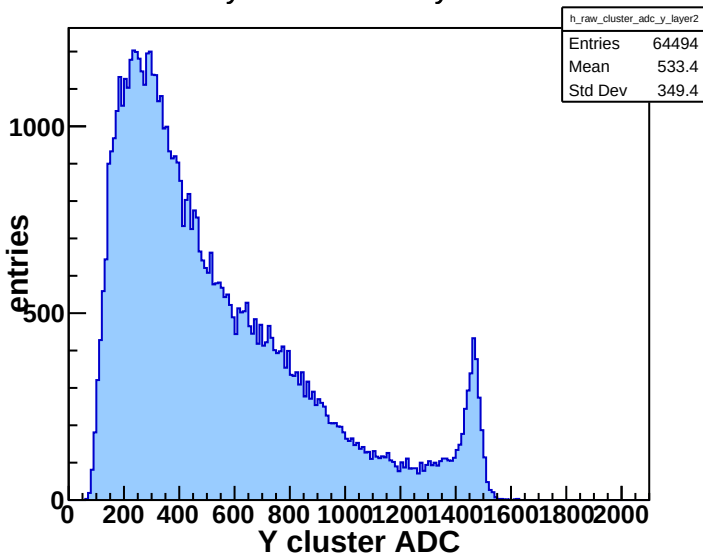
y cluster ADC layer0



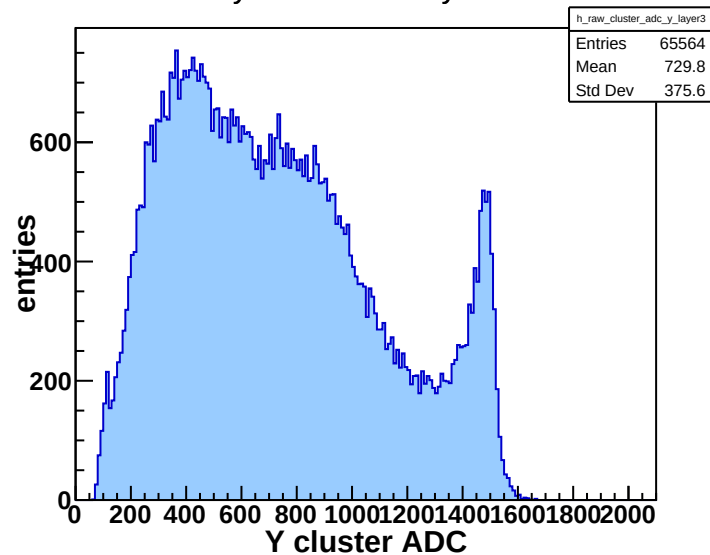
y cluster ADC layer1



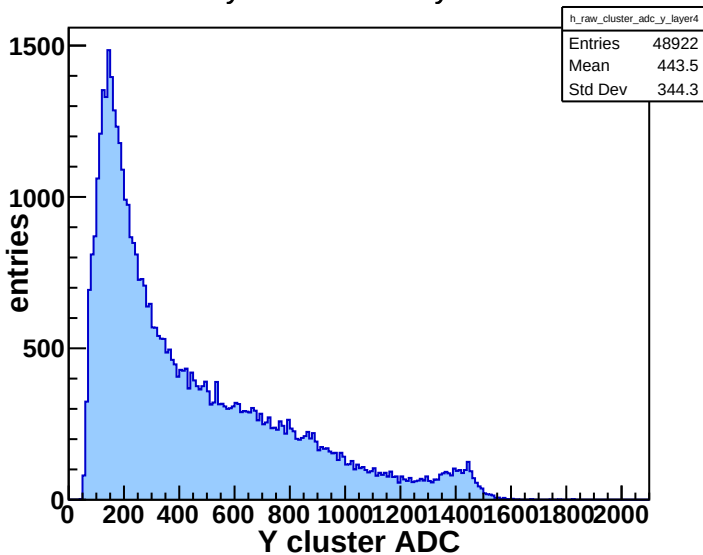
y cluster ADC layer2



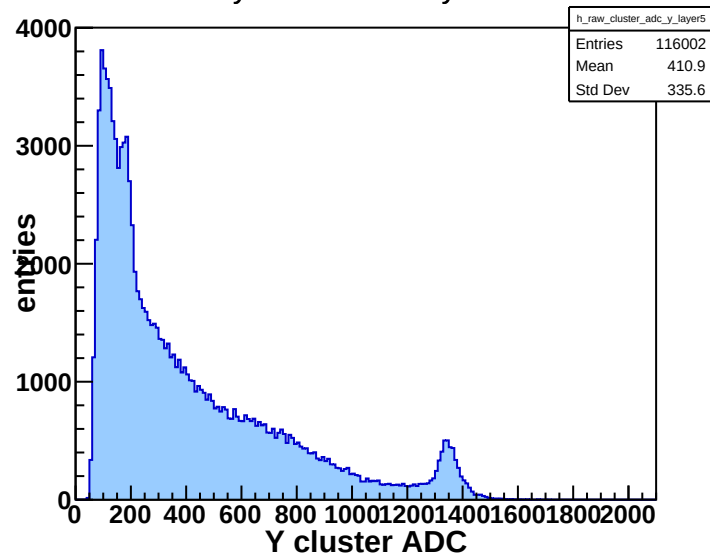
y cluster ADC layer3



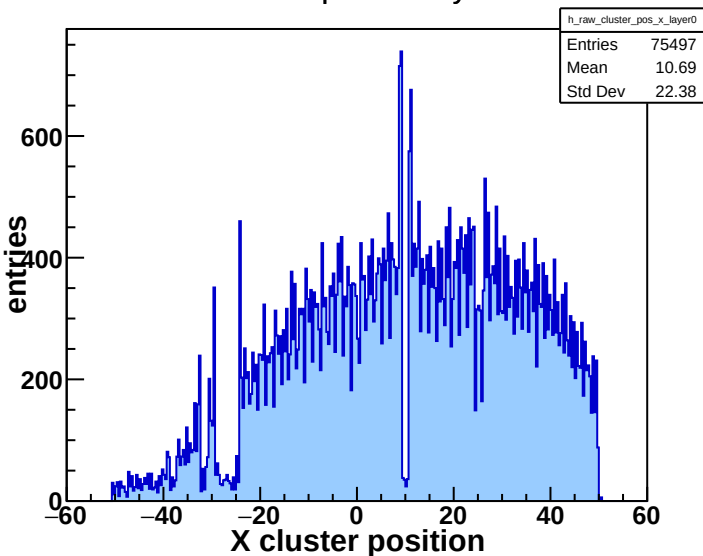
y cluster ADC layer4



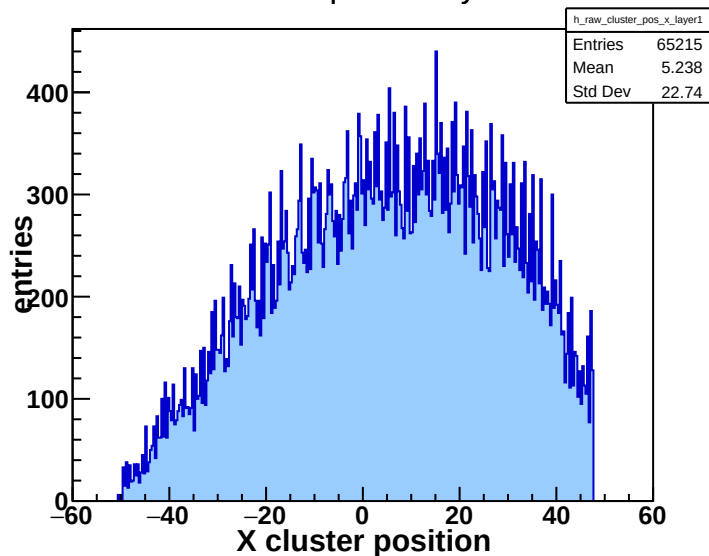
y cluster ADC layer5



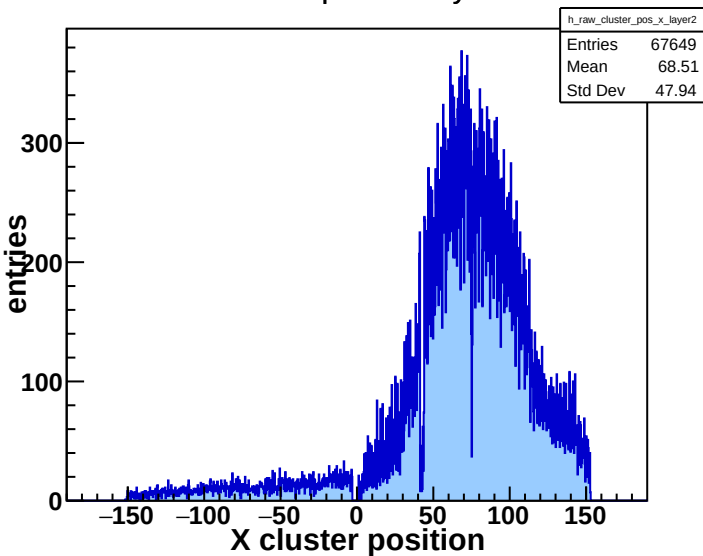
x cluster position layer0



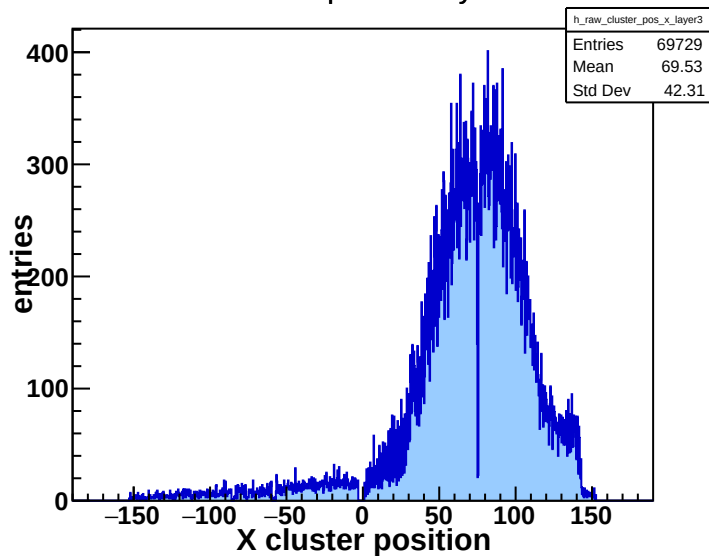
x cluster position layer1



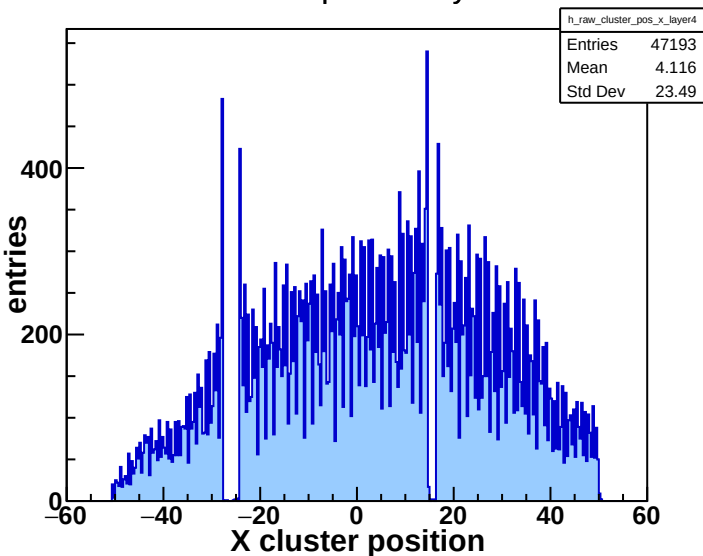
x cluster position layer2



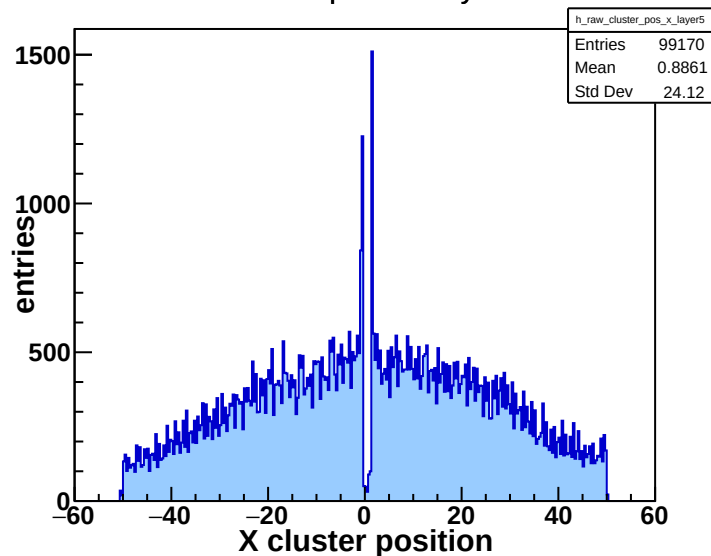
x cluster position layer3



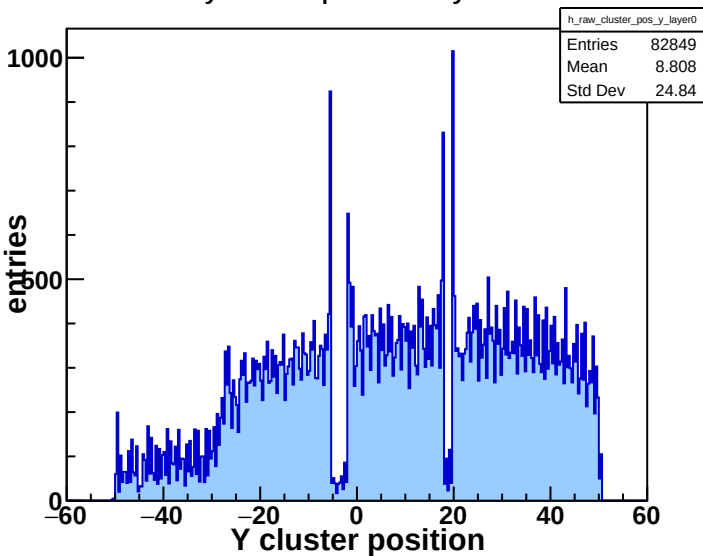
x cluster position layer4



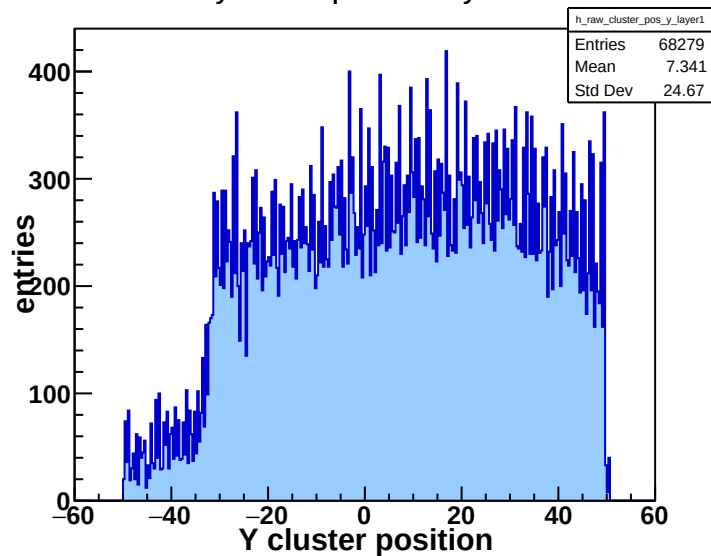
x cluster position layer5



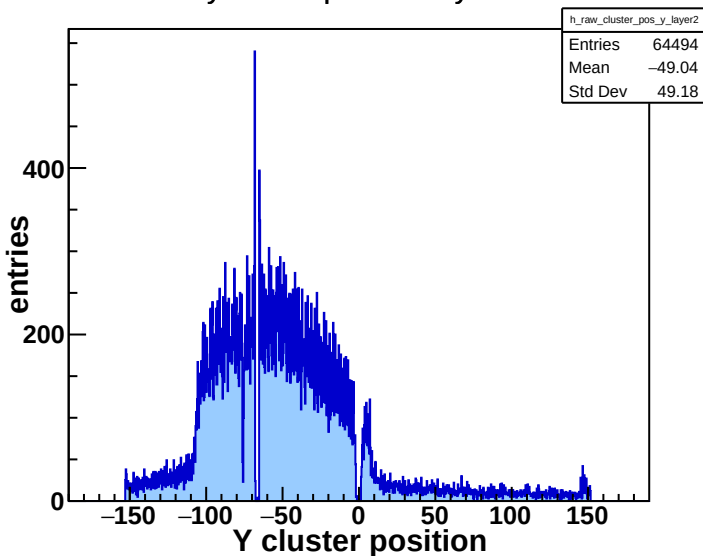
y cluster position layer0



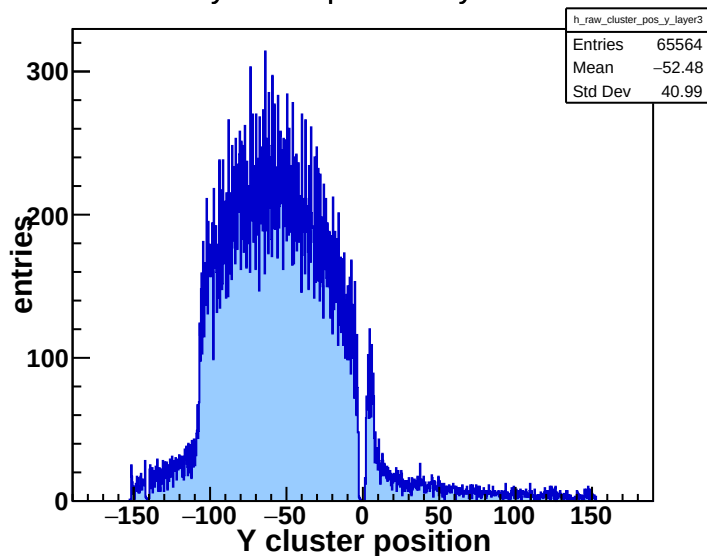
y cluster position layer1



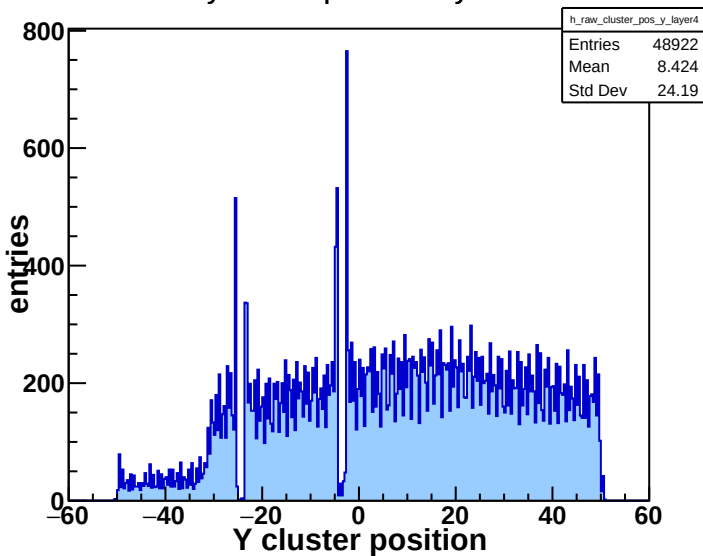
y cluster position layer2



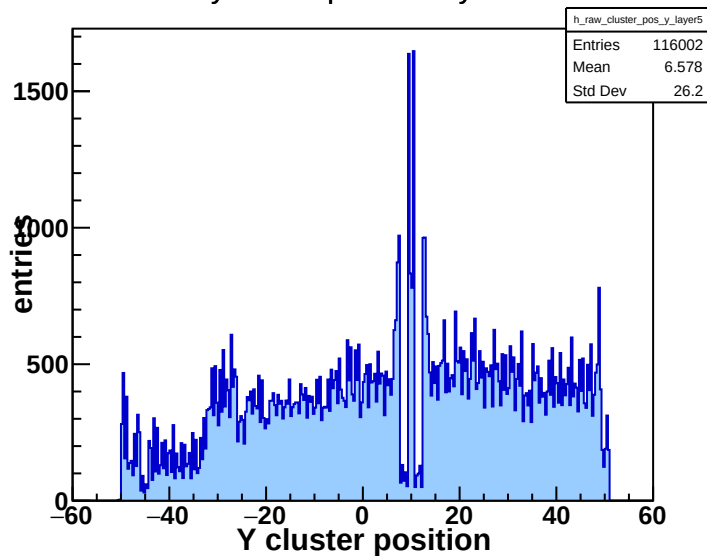
y cluster position layer3



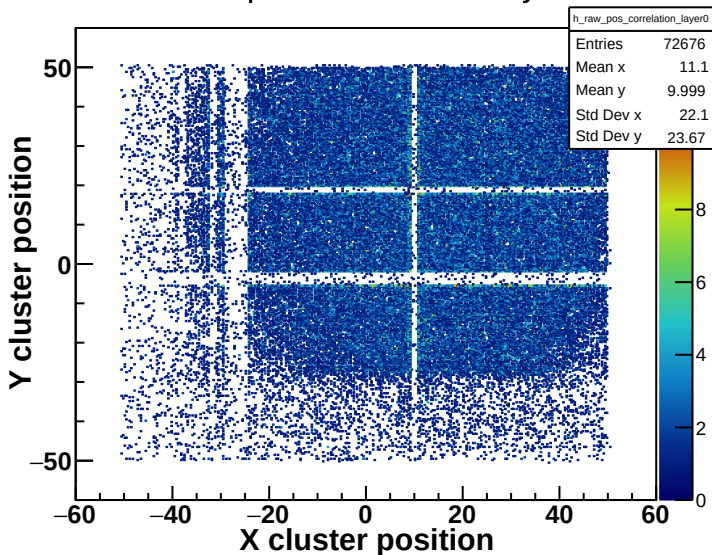
y cluster position layer4



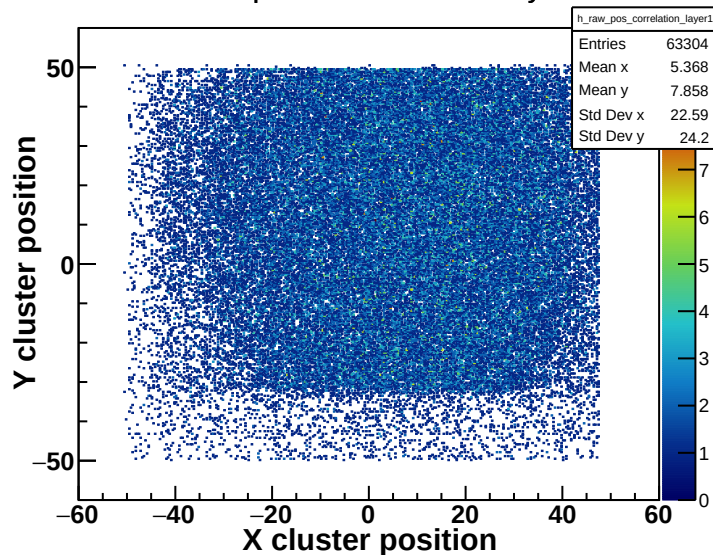
y cluster position layer5



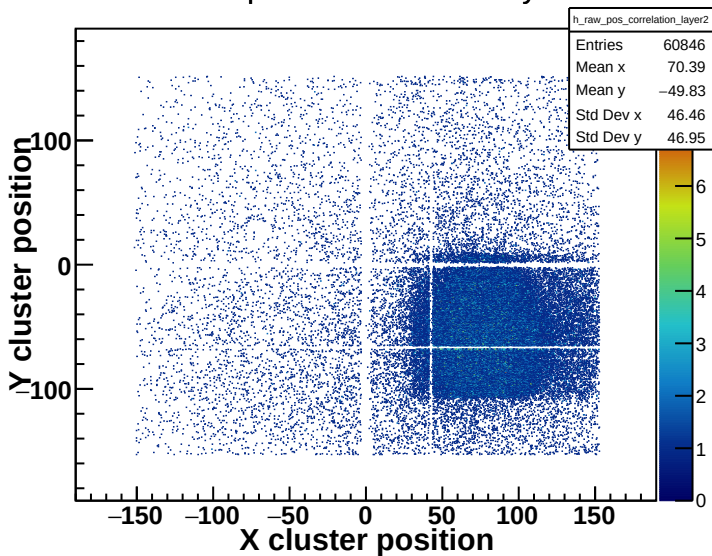
cluster position correlation layer0



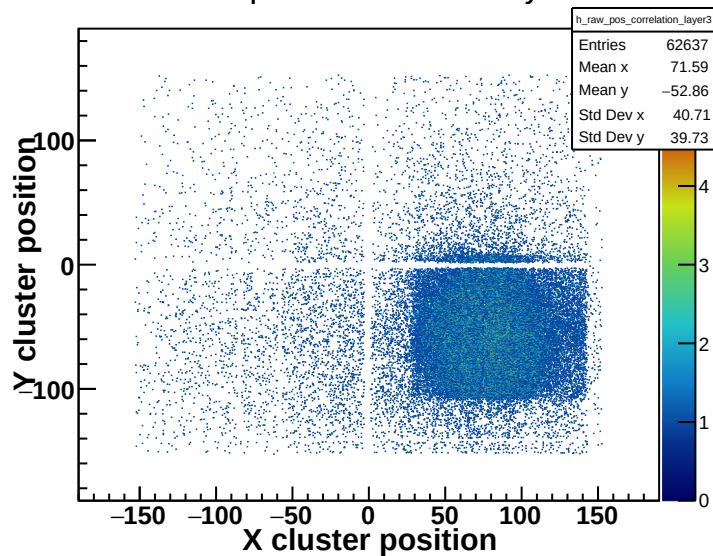
cluster position correlation layer1



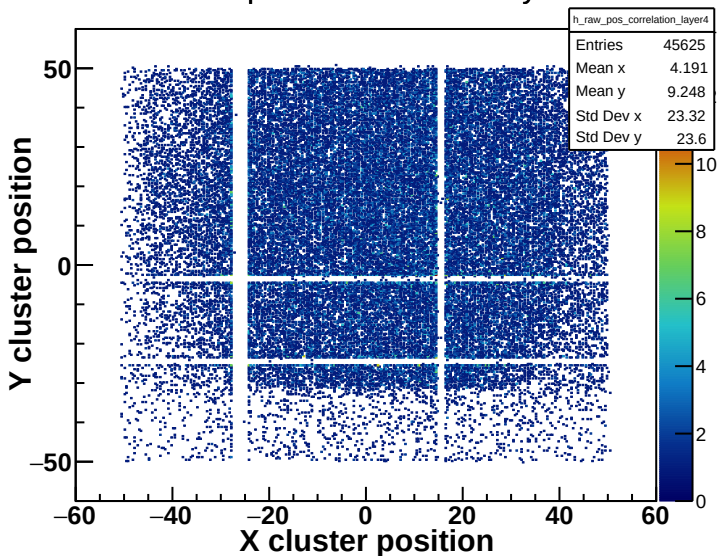
cluster position correlation layer2



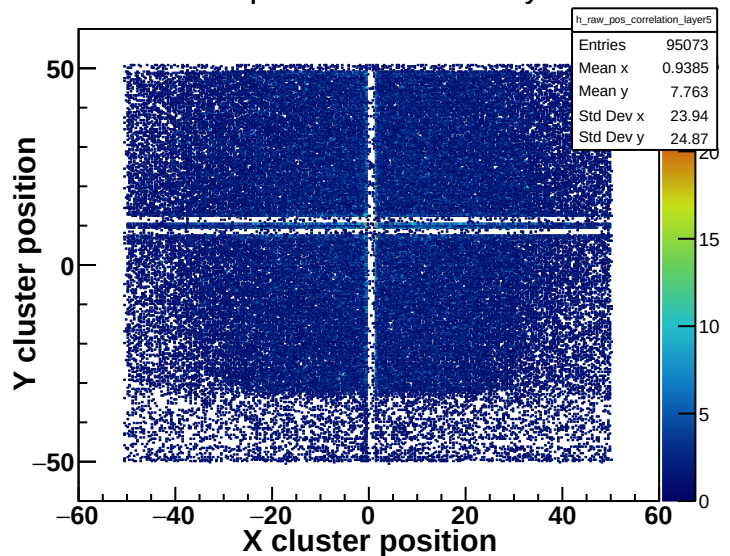
cluster position correlation layer3



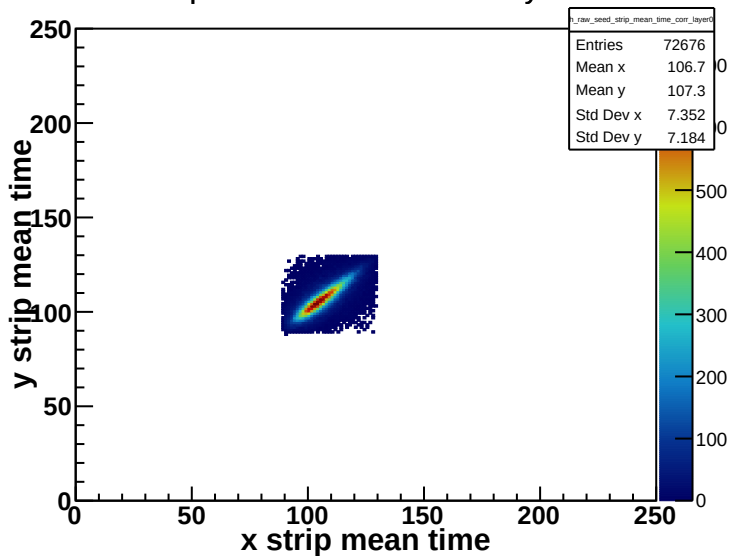
cluster position correlation layer4



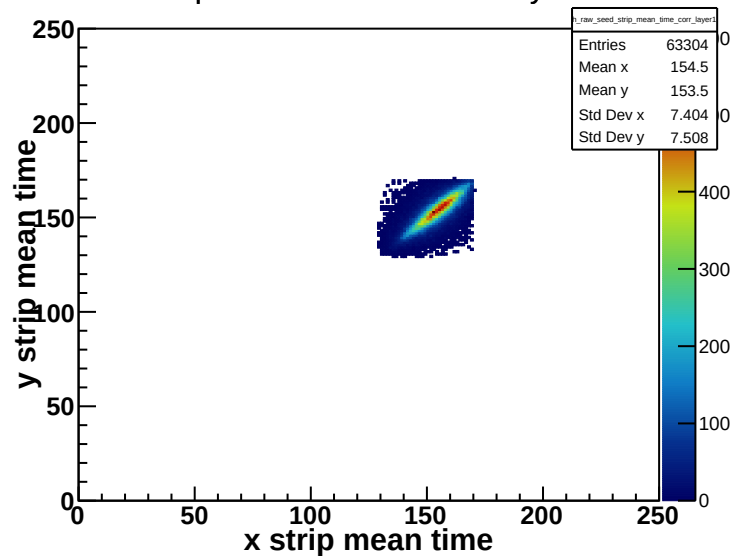
cluster position correlation layer5



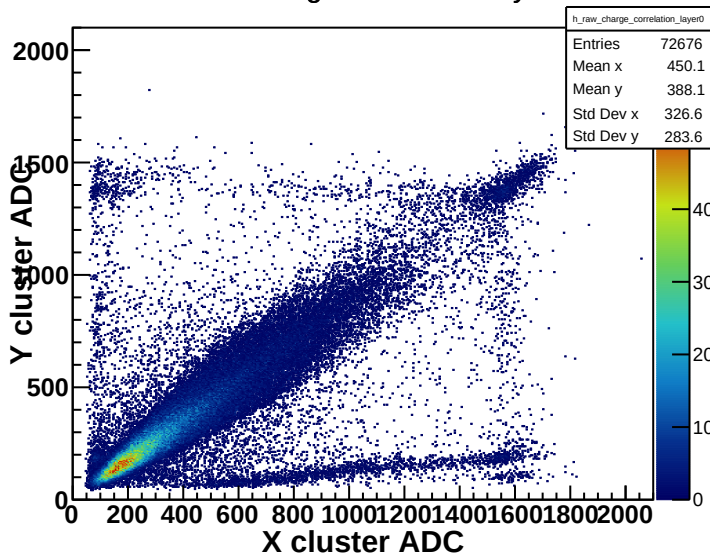
strip mean time correlation layer0



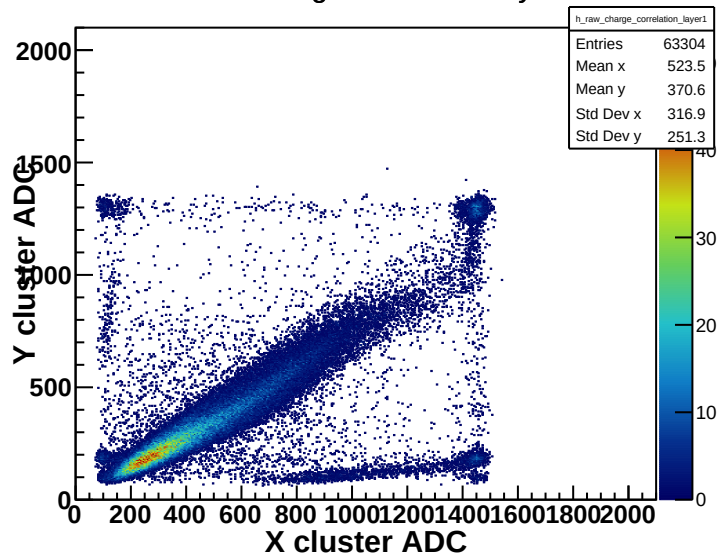
strip mean time correlation layer1



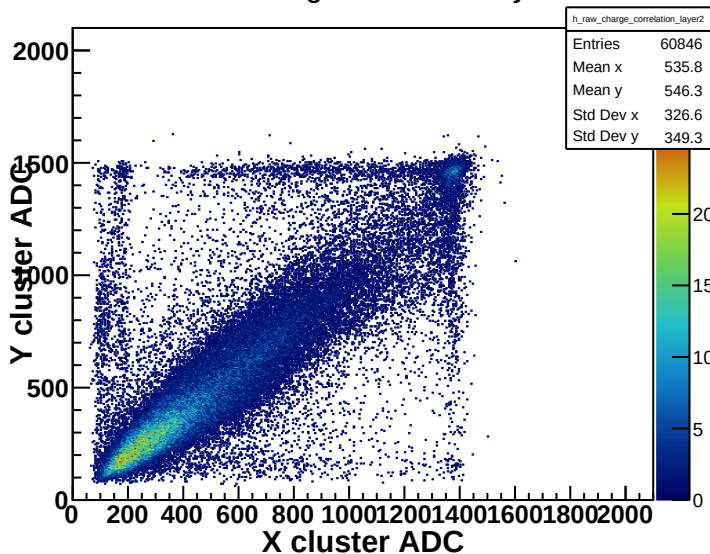
cluster charge correlation layer0



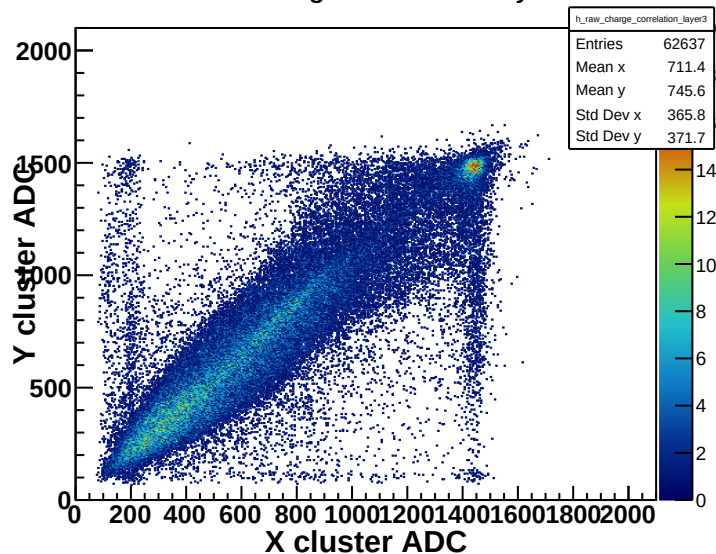
cluster charge correlation layer1



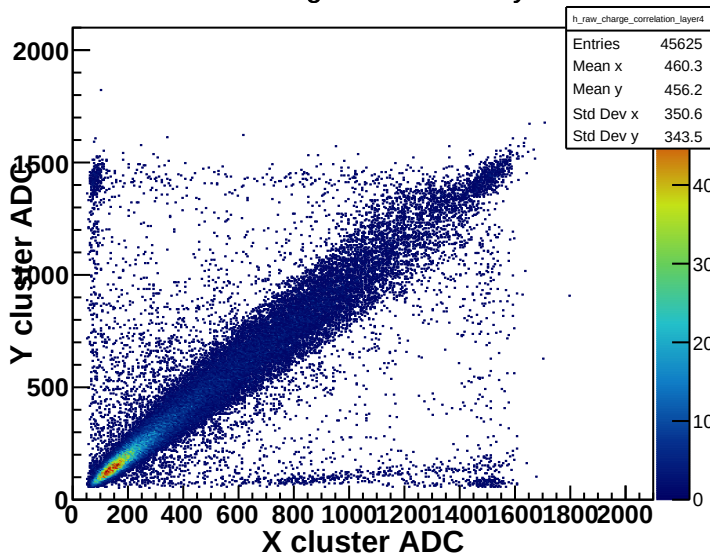
cluster charge correlation layer2



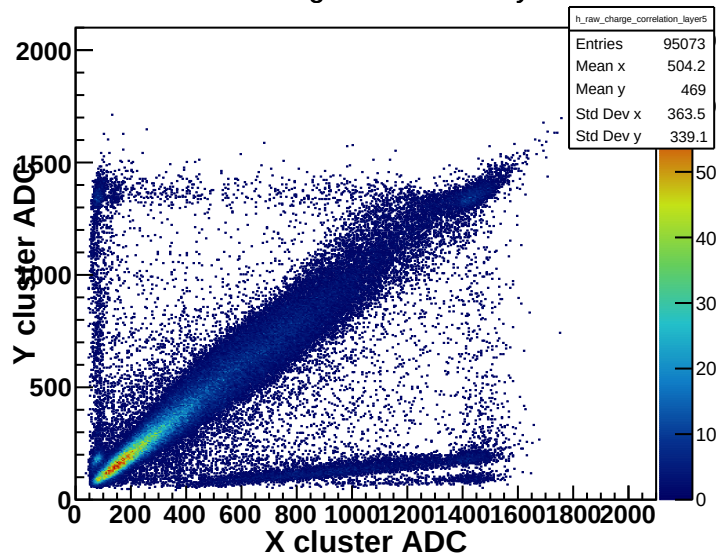
cluster charge correlation layer3



cluster charge correlation layer4

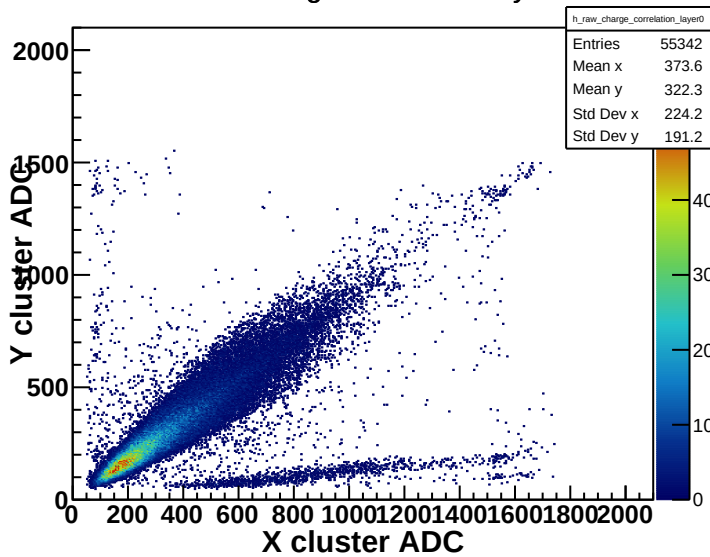


cluster charge correlation layer5

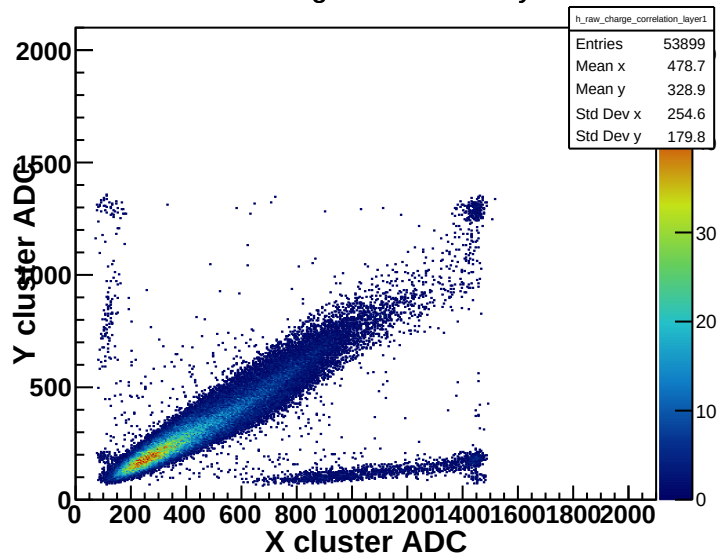


Single Cluster Events

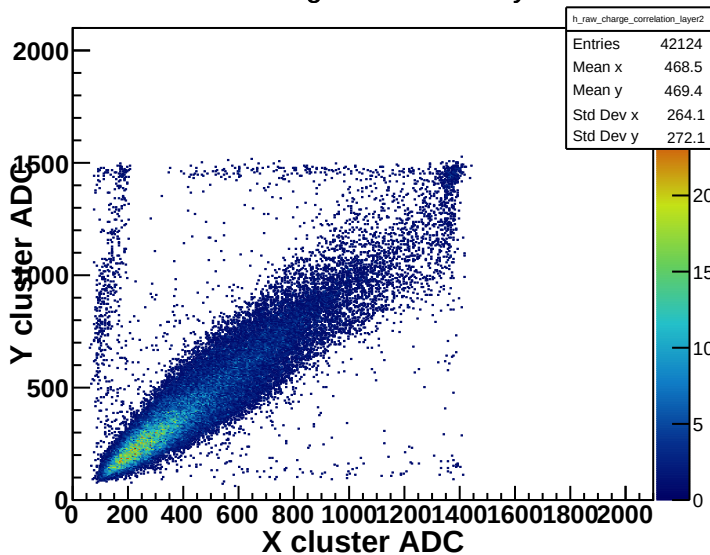
cluster charge correlation layer0



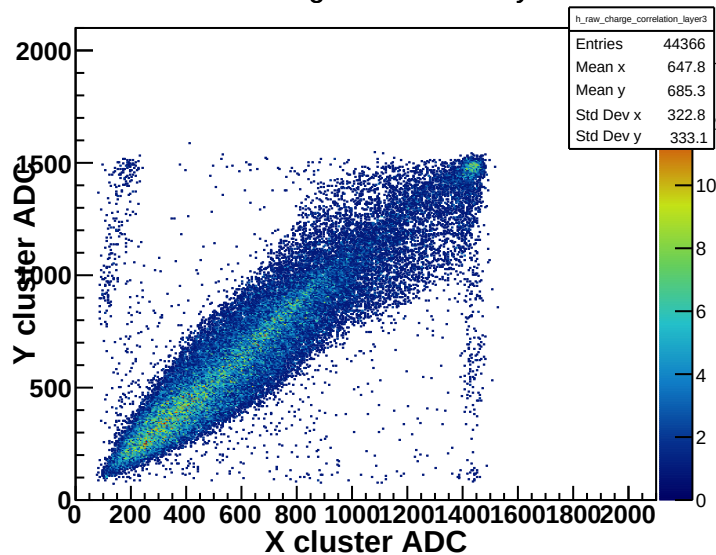
cluster charge correlation layer1



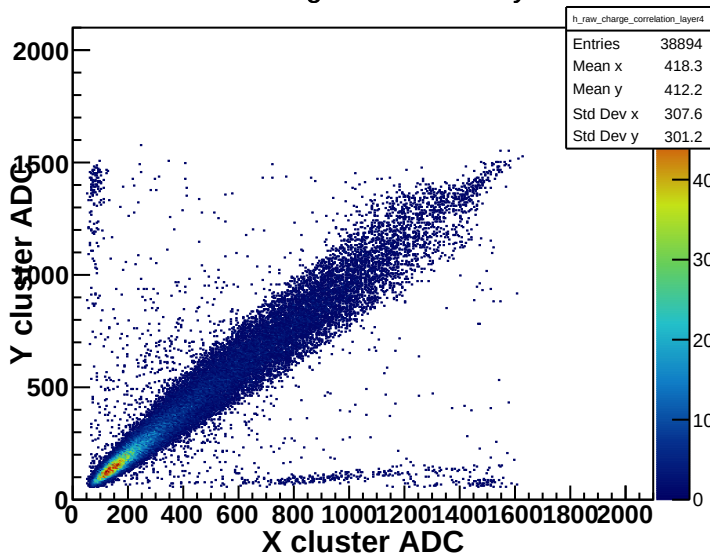
cluster charge correlation layer2



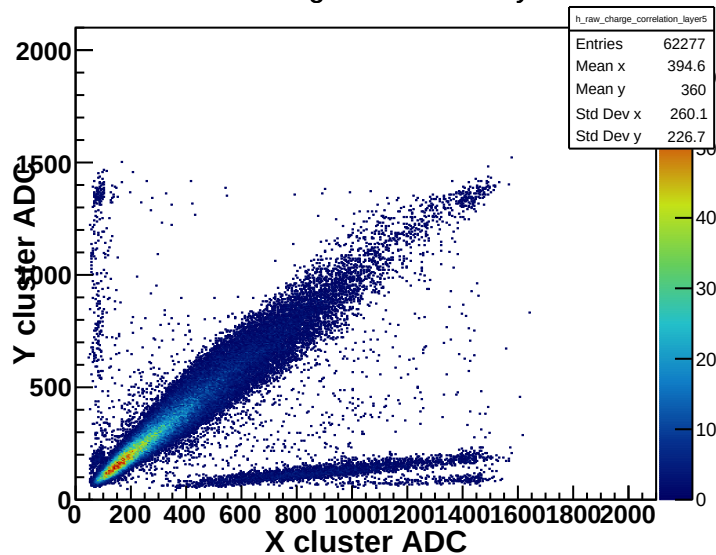
cluster charge correlation layer3



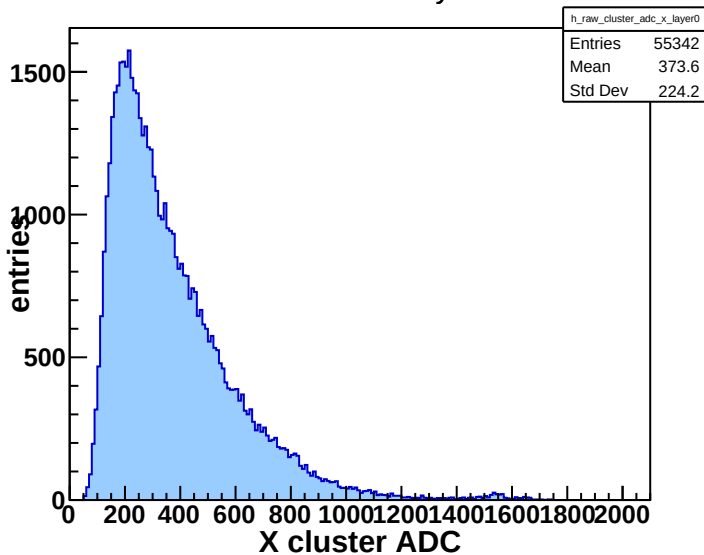
cluster charge correlation layer4



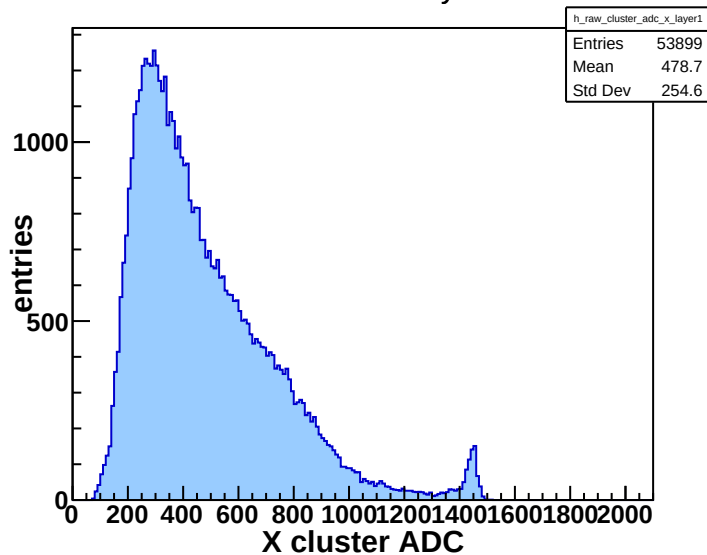
cluster charge correlation layer5



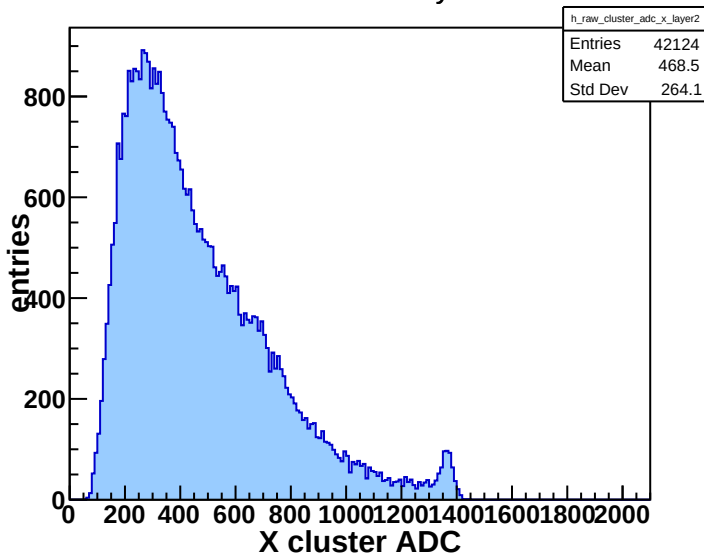
x cluster ADC layer0



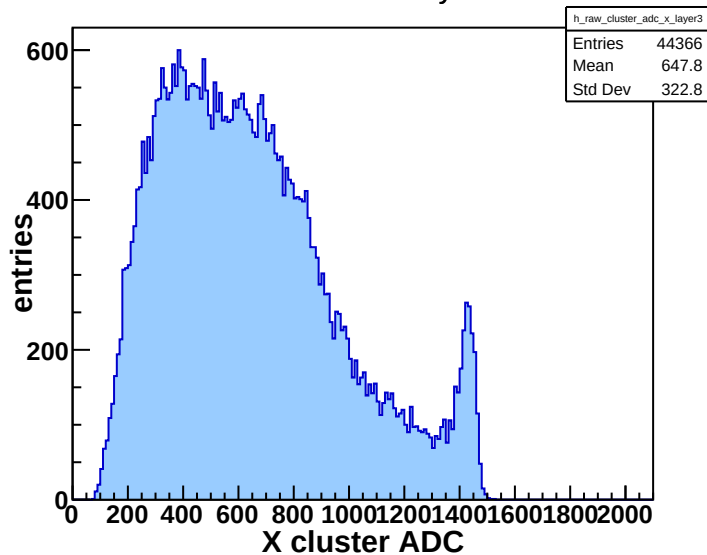
x cluster ADC layer1



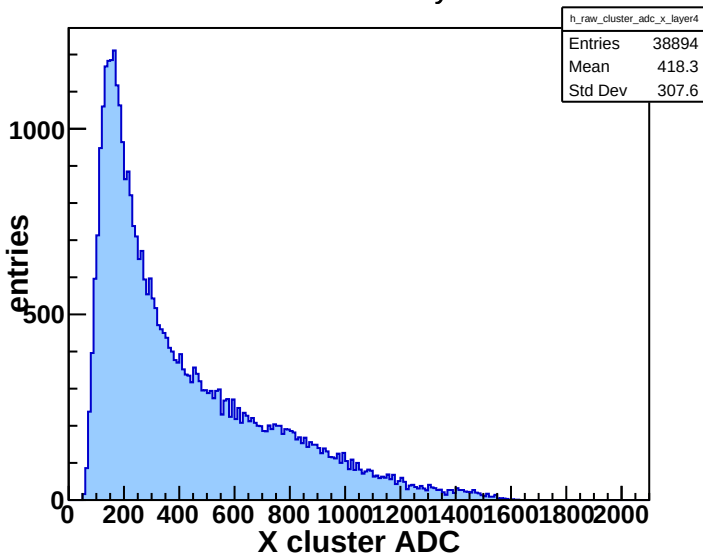
x cluster ADC layer2



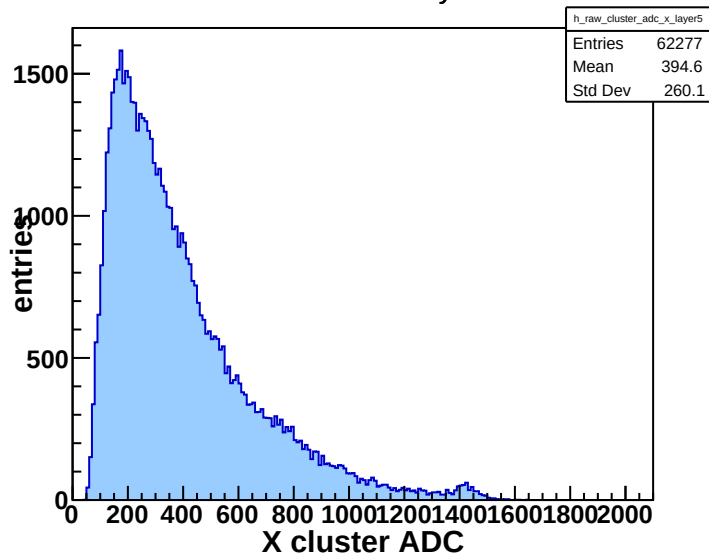
x cluster ADC layer3



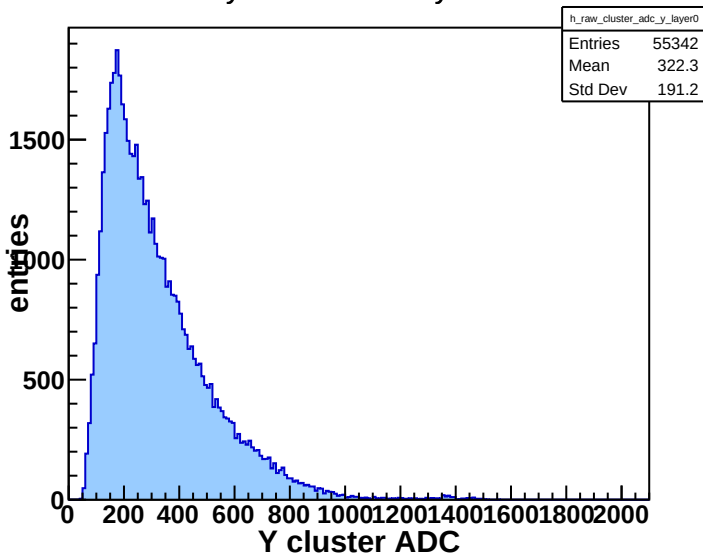
x cluster ADC layer4



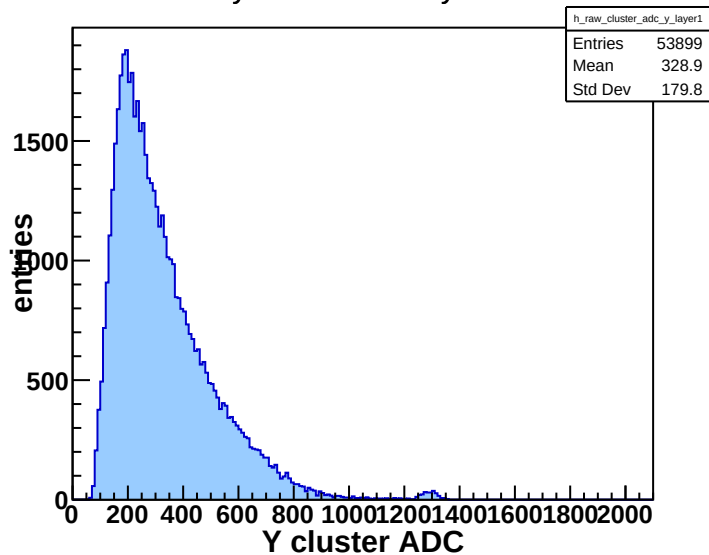
x cluster ADC layer5



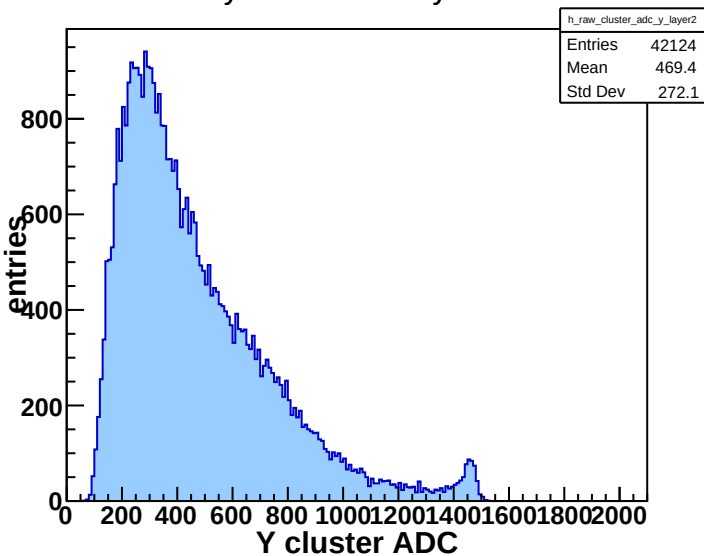
y cluster ADC layer0



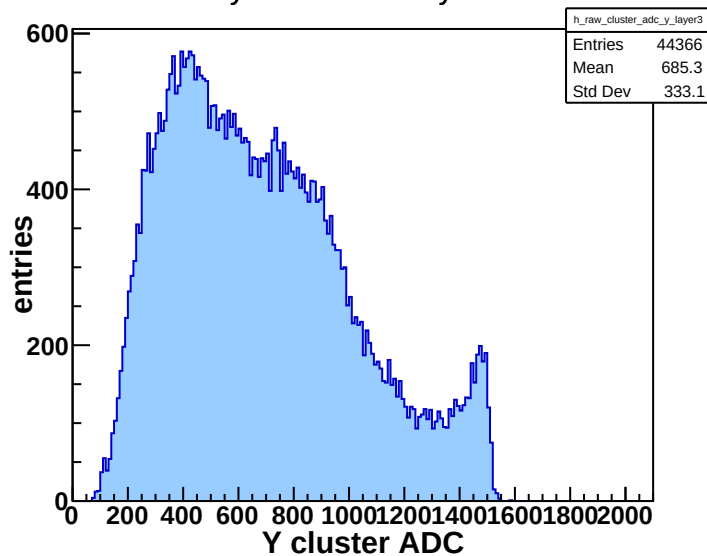
y cluster ADC layer1



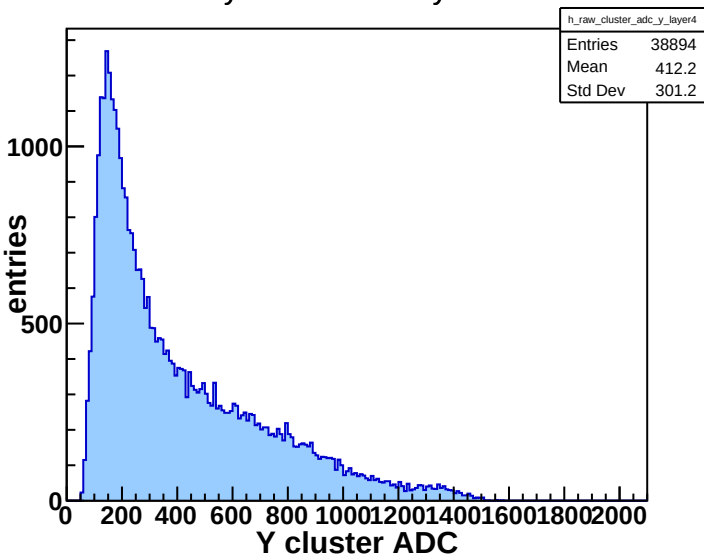
y cluster ADC layer2



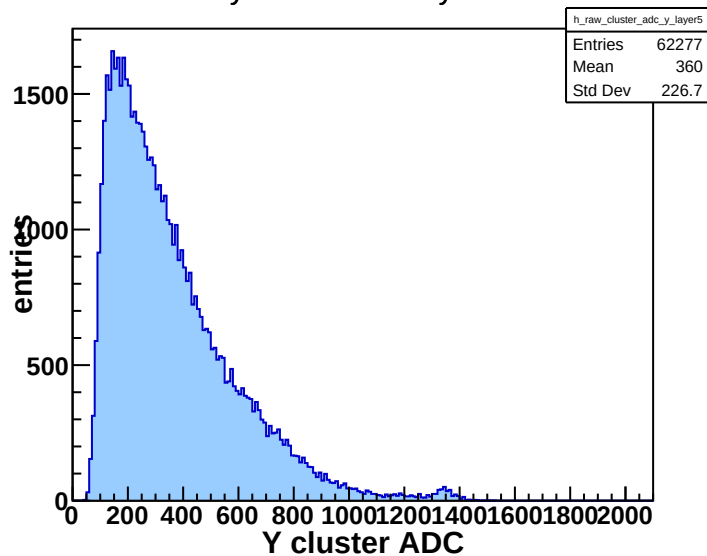
y cluster ADC layer3



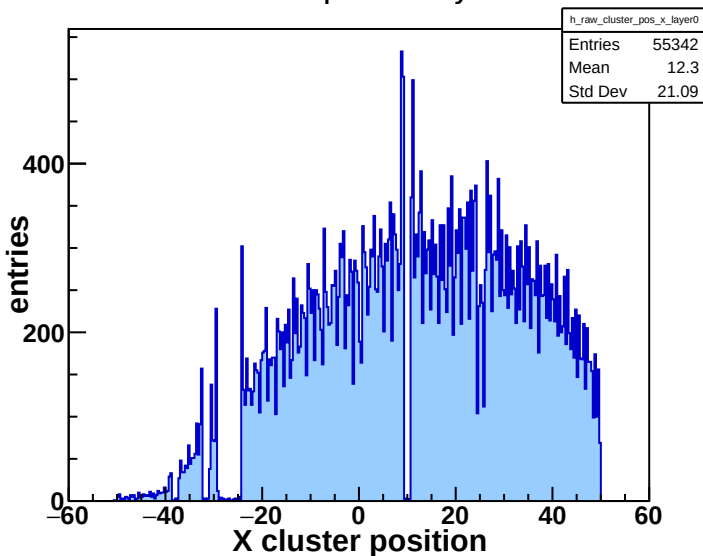
y cluster ADC layer4



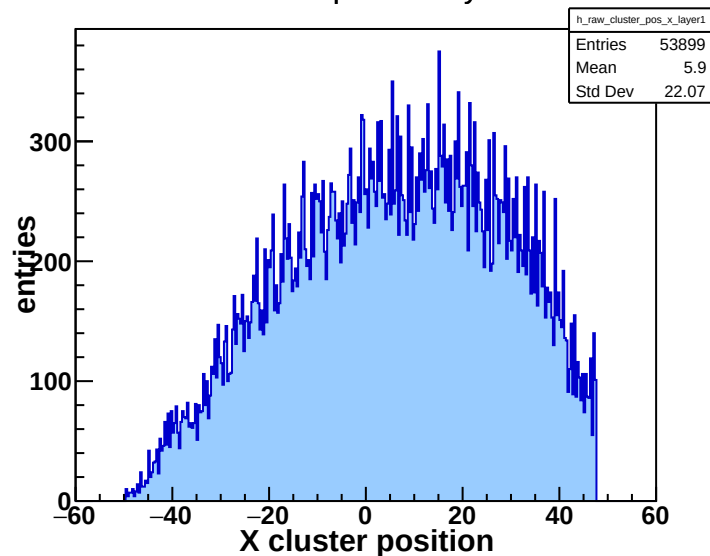
y cluster ADC layer5



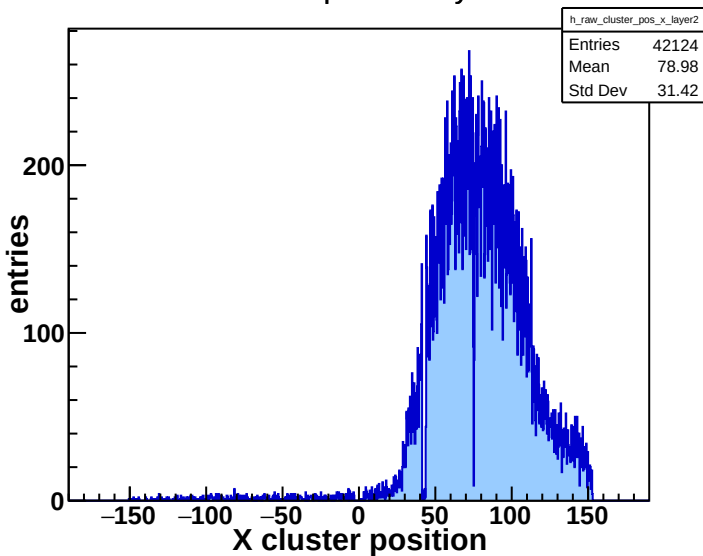
x cluster position layer0



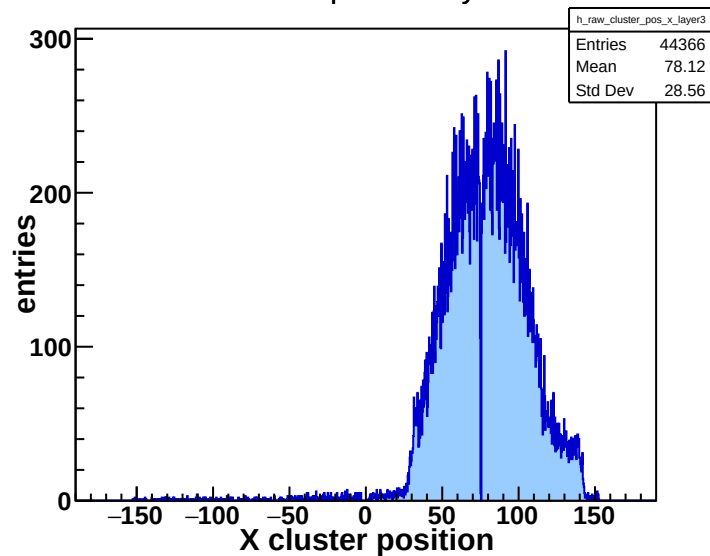
x cluster position layer1



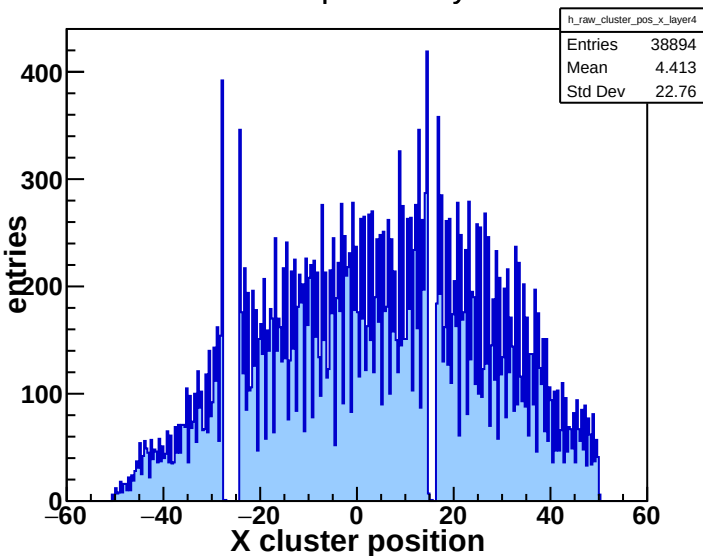
x cluster position layer2



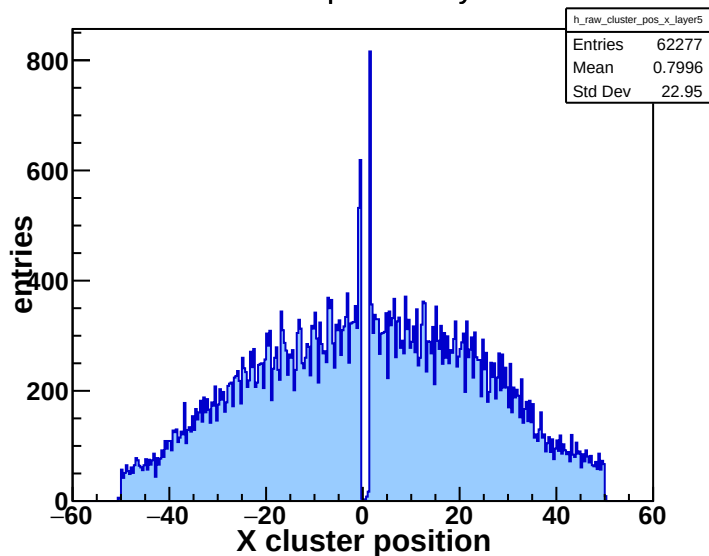
x cluster position layer3



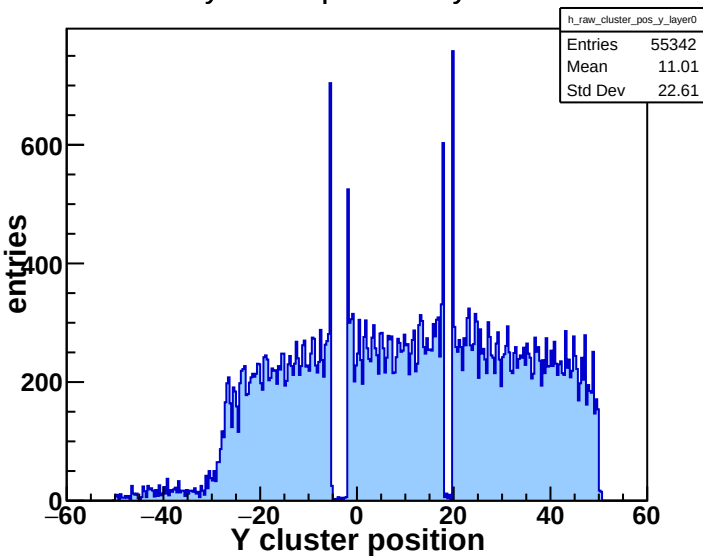
x cluster position layer4



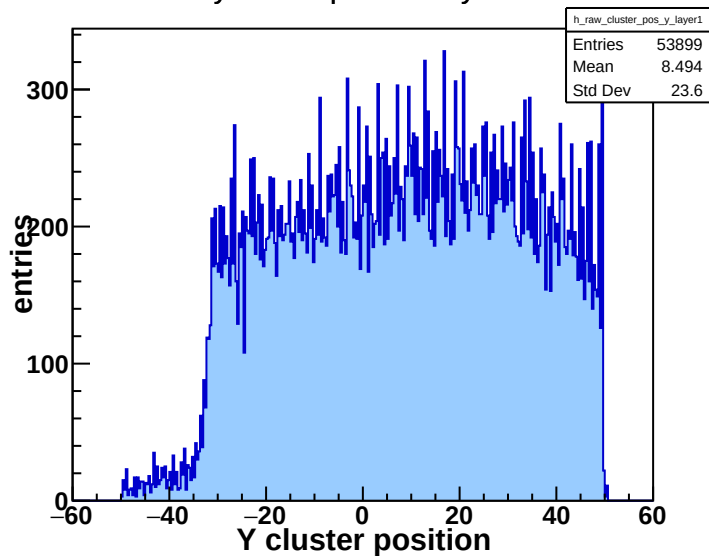
x cluster position layer5



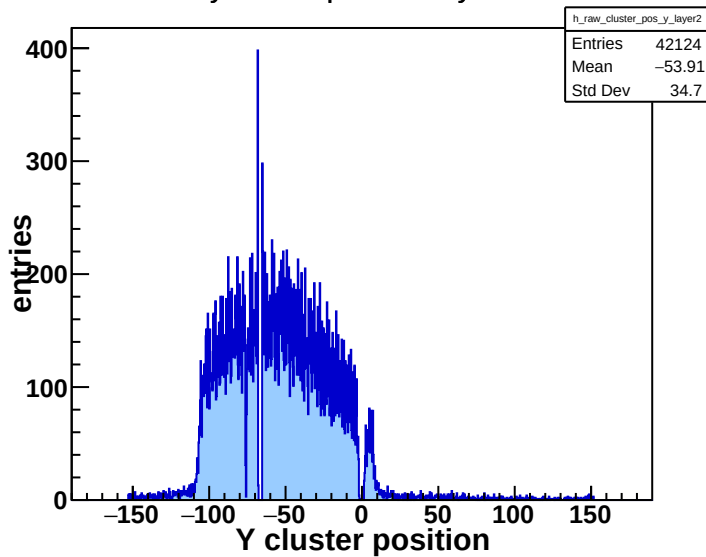
y cluster position layer0



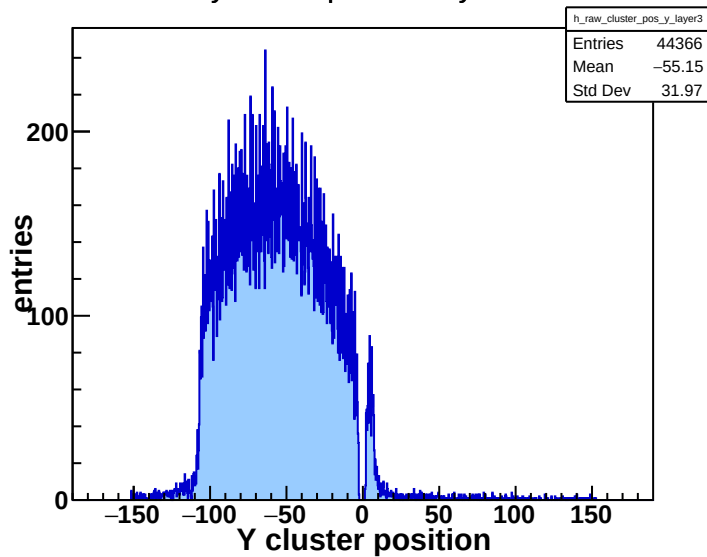
y cluster position layer1



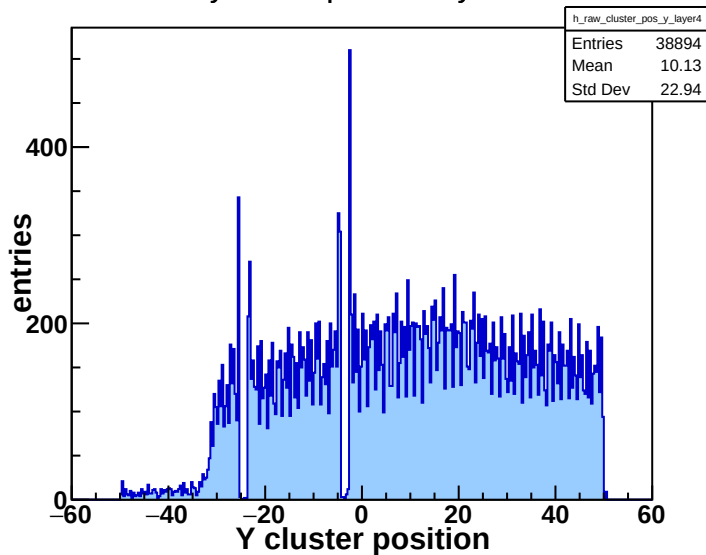
y cluster position layer2



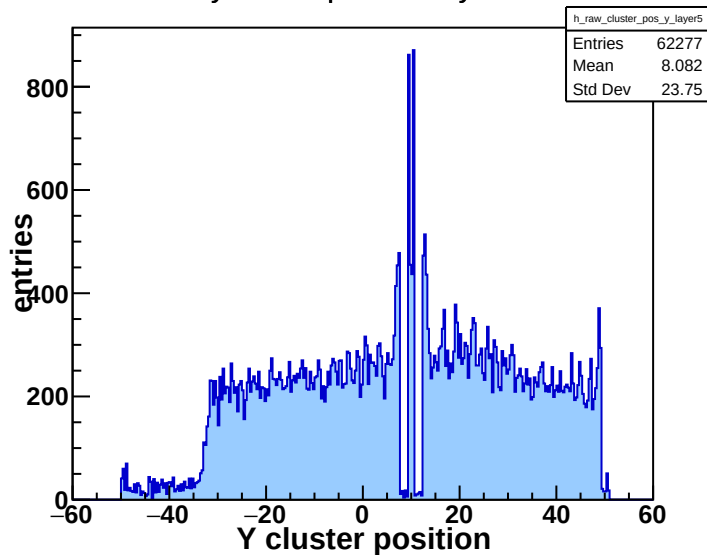
y cluster position layer3



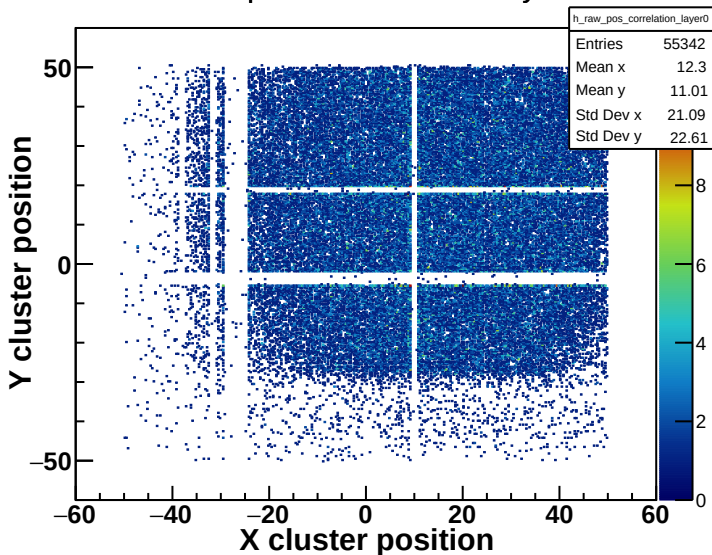
y cluster position layer4



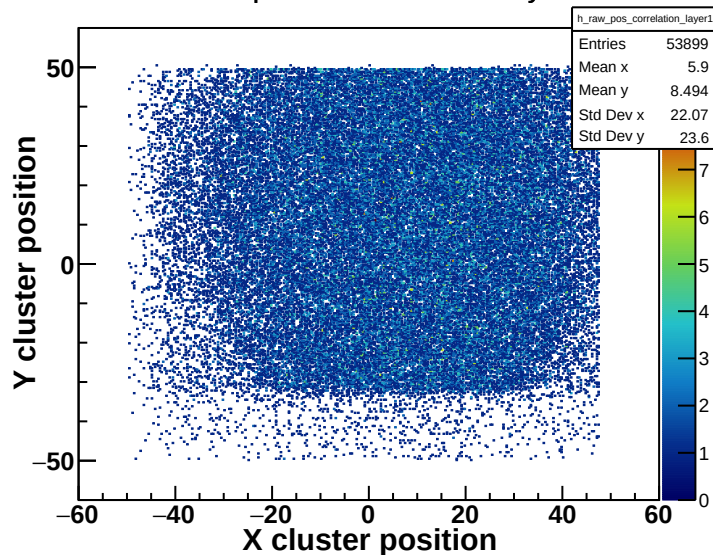
y cluster position layer5



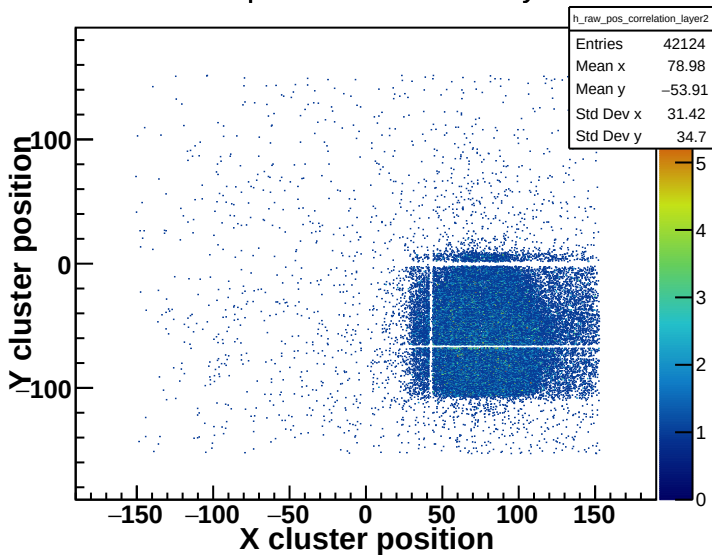
cluster position correlation layer0



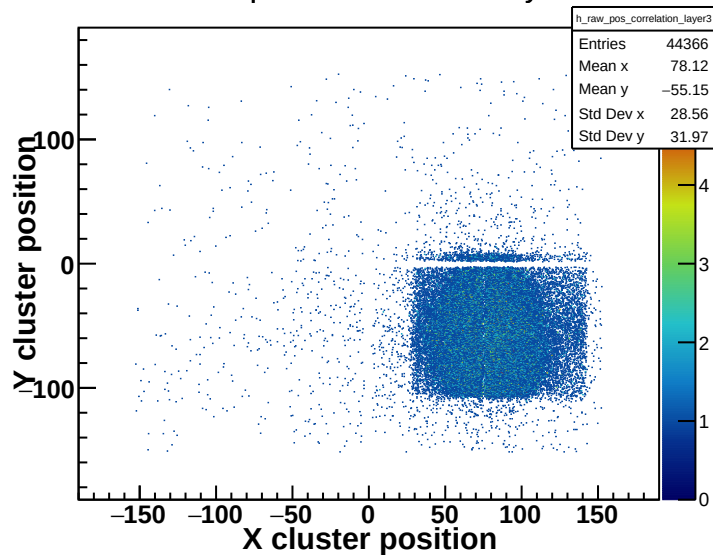
cluster position correlation layer1



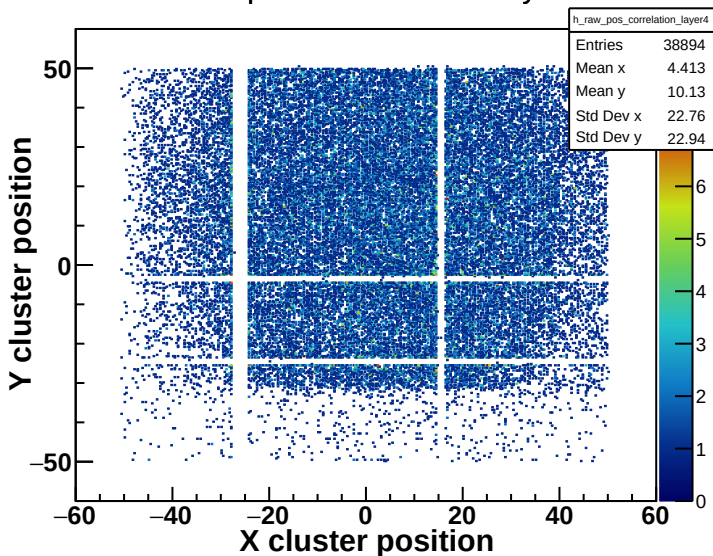
cluster position correlation layer2



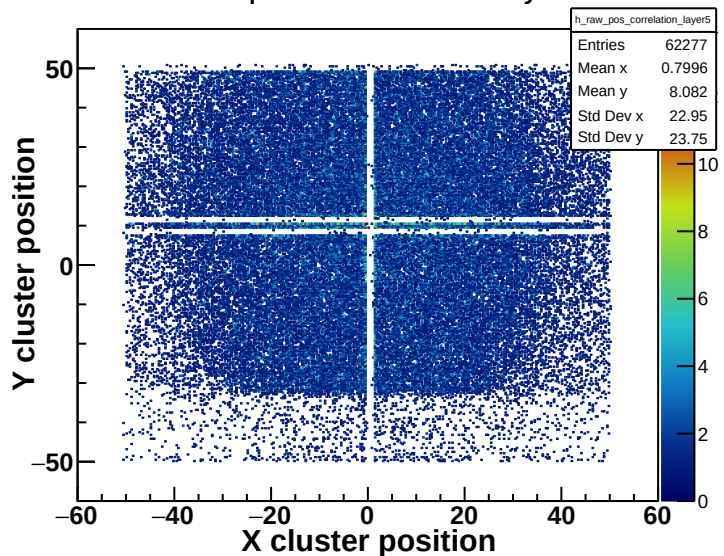
cluster position correlation layer3



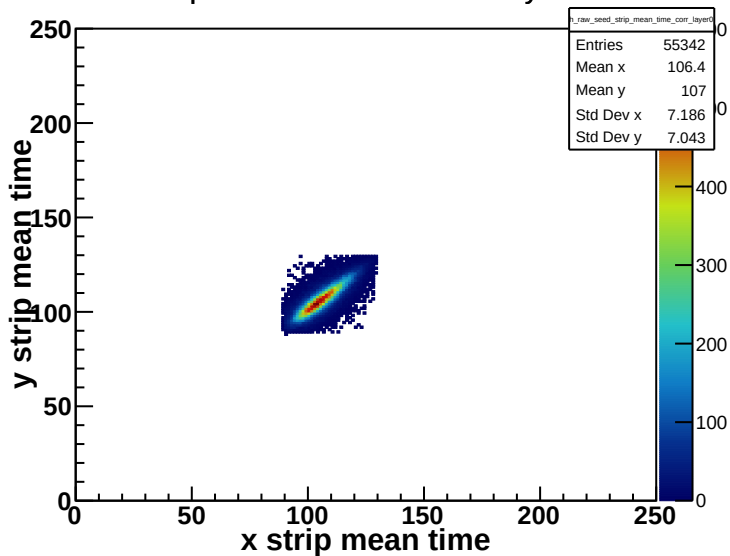
cluster position correlation layer4



cluster position correlation layer5



strip mean time correlation layer0



strip mean time correlation layer1

