

# XY-reconstruction

Campaign V  
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# Algorithm:

11713f949ea5bffcc2f0ceb22d1267b5f314a5af

Merge branch 'barycenter' into 'master'

## Cut list:

```
bool cls0_is_S1 = clusters.at(0)->f90 > 0.2;
bool cls0_is_full = clusters.at(0)->rep == 1;

bool S1_Am_peak = (clusters.at(0)->charge > 440) &&
(clusters.at(0)->charge < 630); // mean +- 1.5sigma using run 537

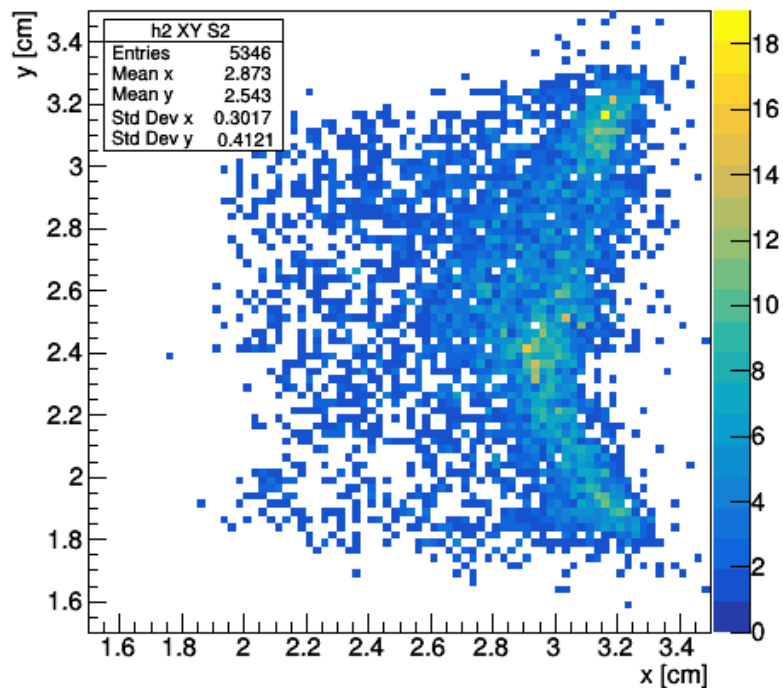
//bool S1_Am_peak = (clusters.at(0)->charge > 419) &&
(clusters.at(0)->charge < 587); // mean +- 1.5sigma using run 542

//bool S1_Am_peak = (clusters.at(0)->charge > 342) &&
(clusters.at(0)->charge < 482); // mean +- 1.5sigma using run 544

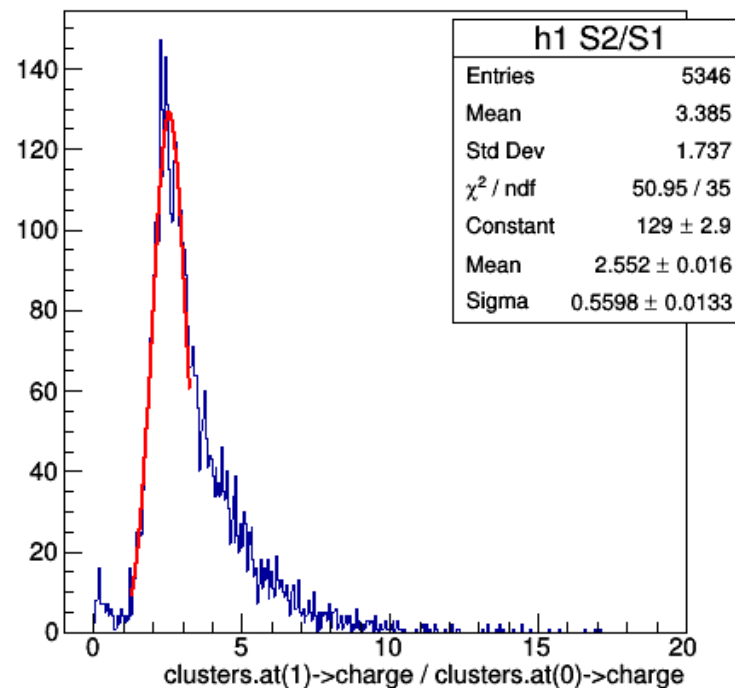
bool cls0 = nc_i == 0; //cluster 0
bool cls1 = nc_i == 1; //cluster 1
bool is_S1 = nc == 2 && cls0 && cls0_is_full && cls0_is_S1;
bool is_S2 = nc == 2 && cls1 && cls0_is_full && cls0_is_S1;
```

Ph2, Am241, run 537

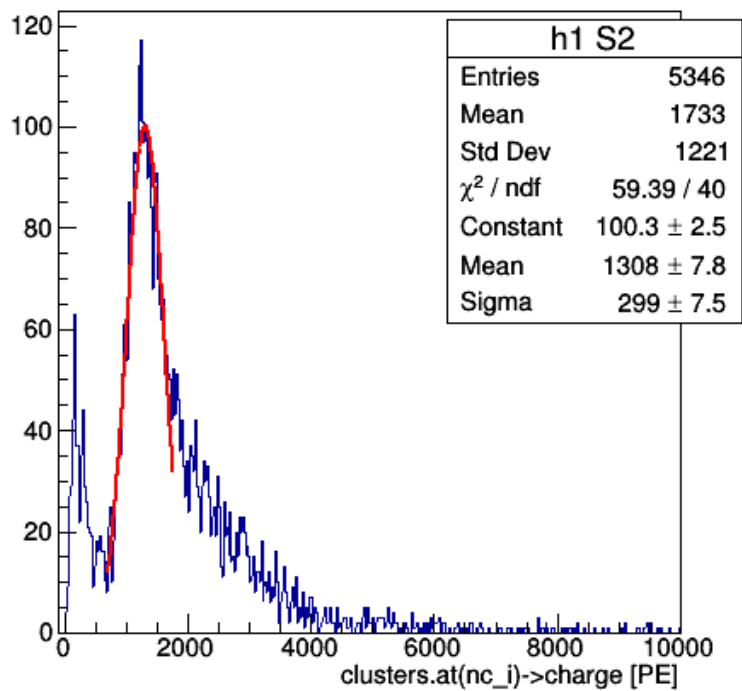
C1.is\_S2



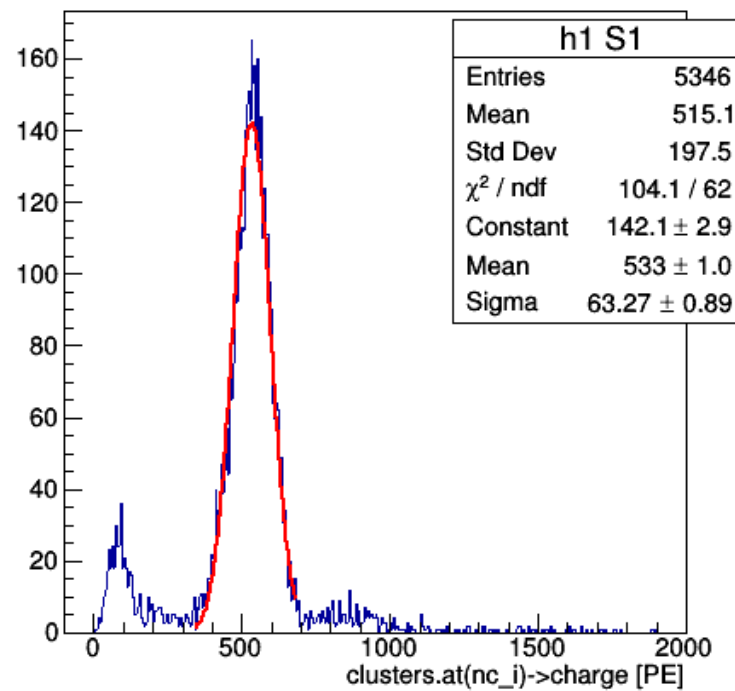
C2.is\_S1



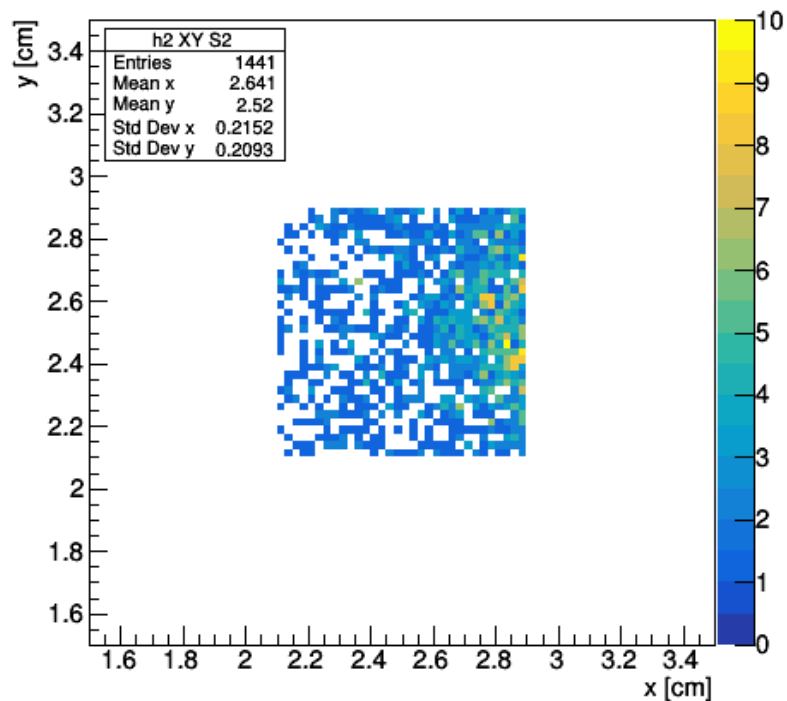
C1.is\_S2



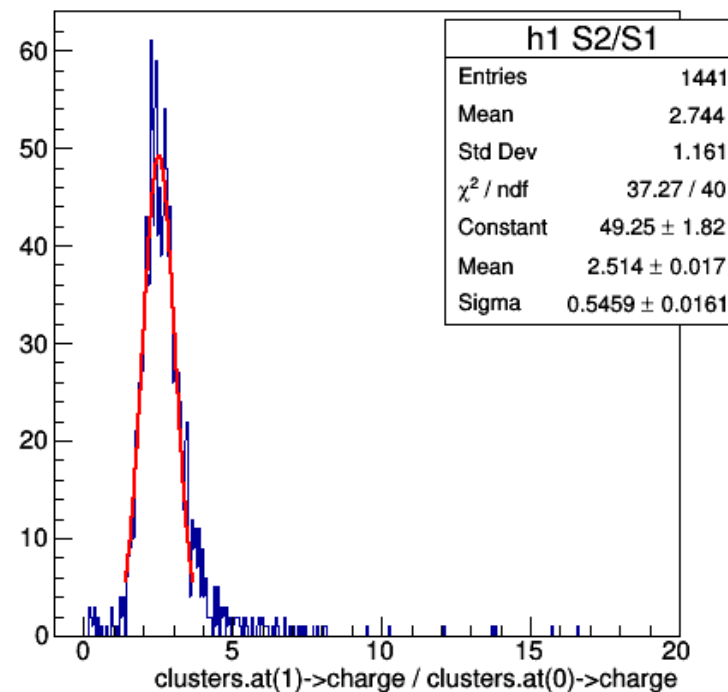
C2.is\_S1



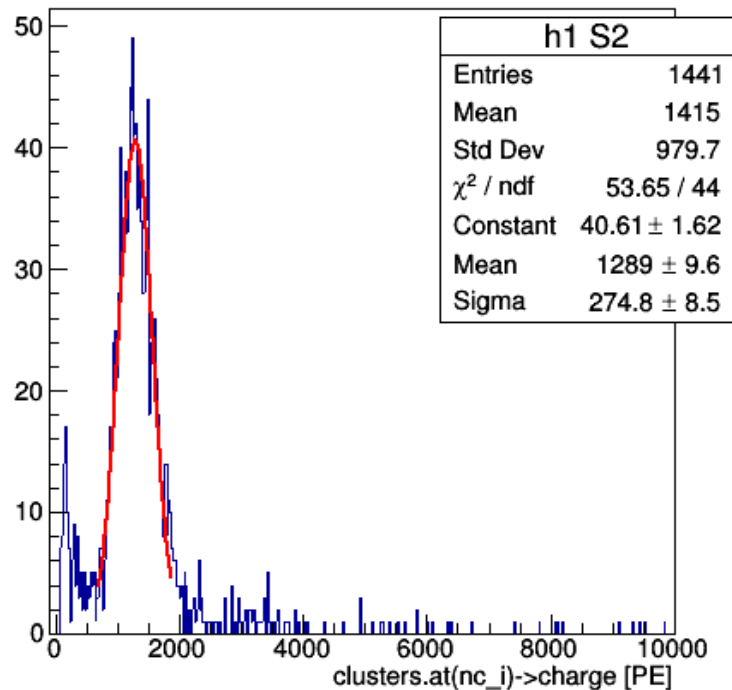
C1.is\_S2 &amp;&amp; C1.cent\_spot



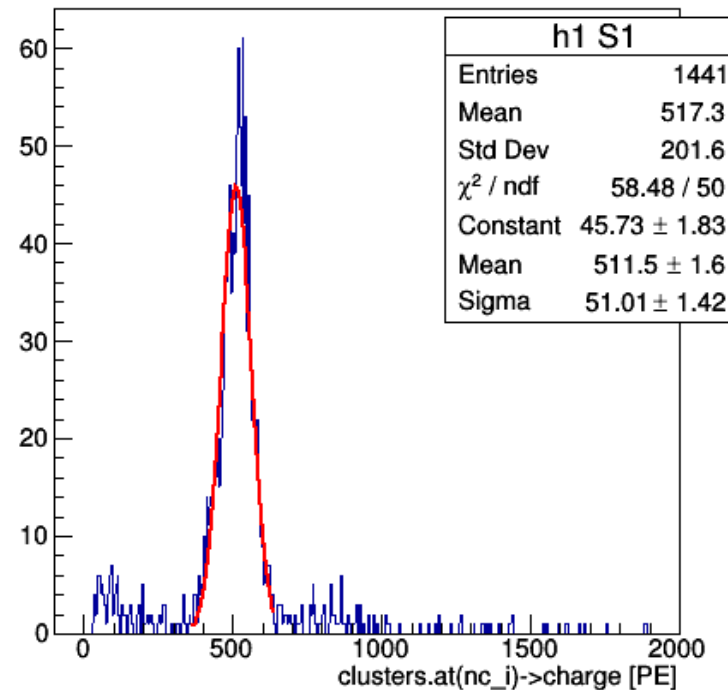
C2.is\_S1



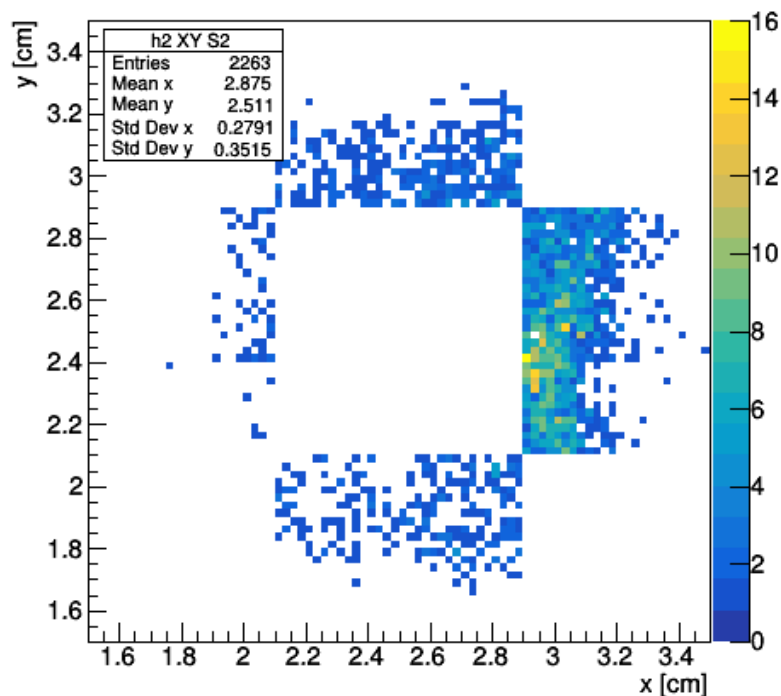
C1.is\_S2 &amp;&amp; C1.cent\_spot



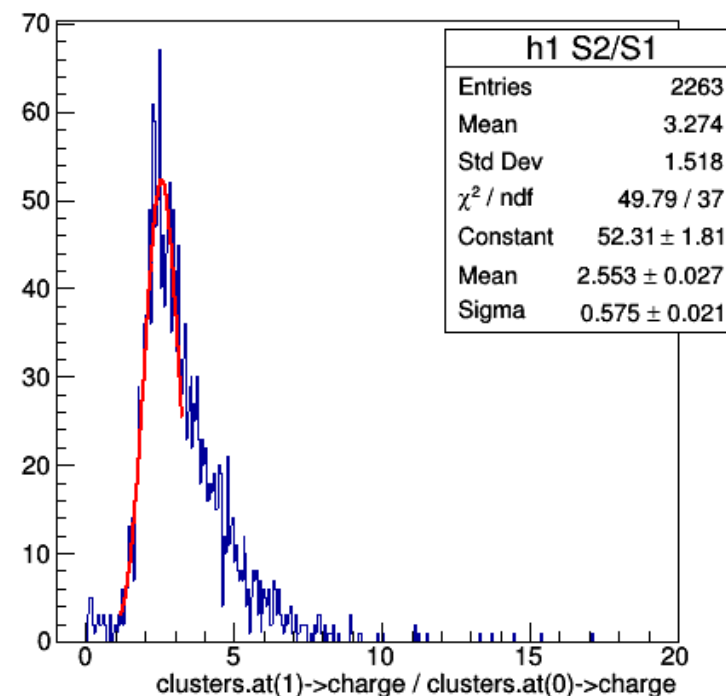
C2.is\_S1



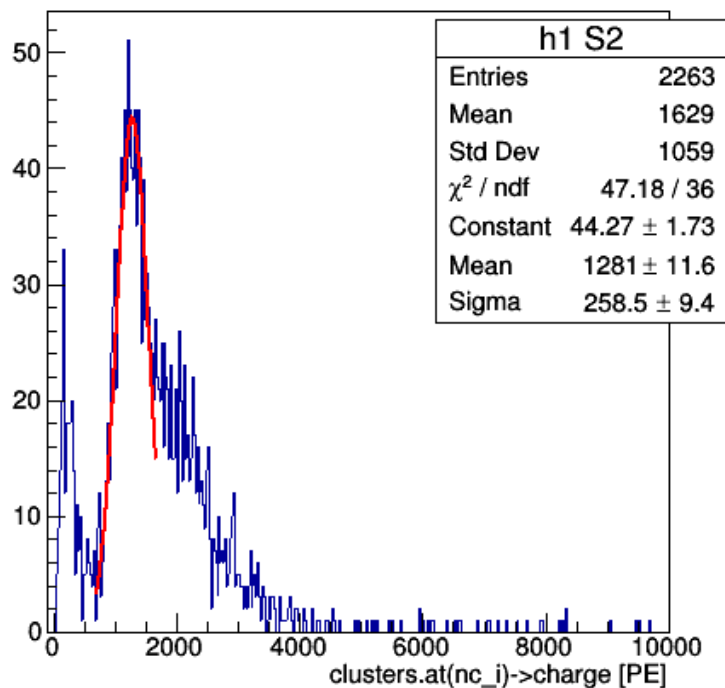
C1.is\_S2 &amp;&amp; C1.edges



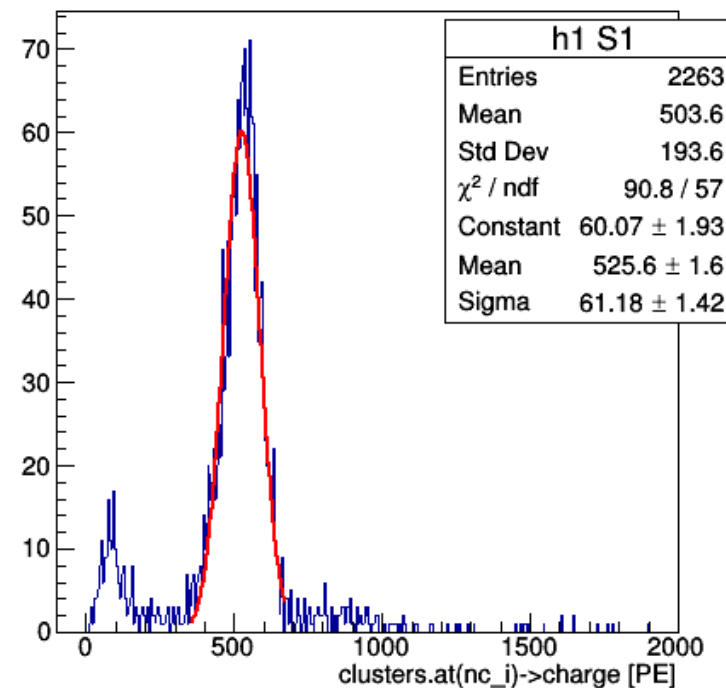
C2.is\_S1



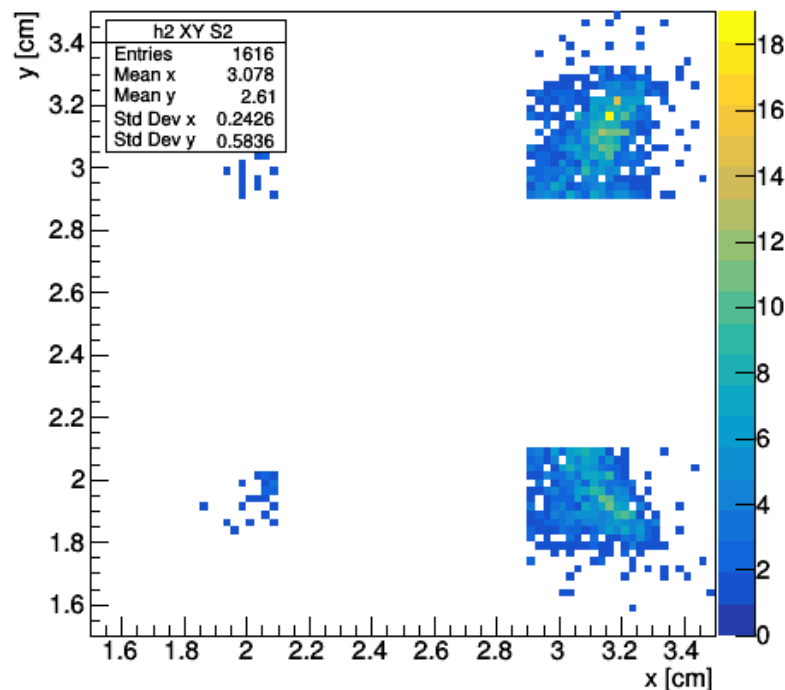
C1.is\_S2 &amp;&amp; C1.edges



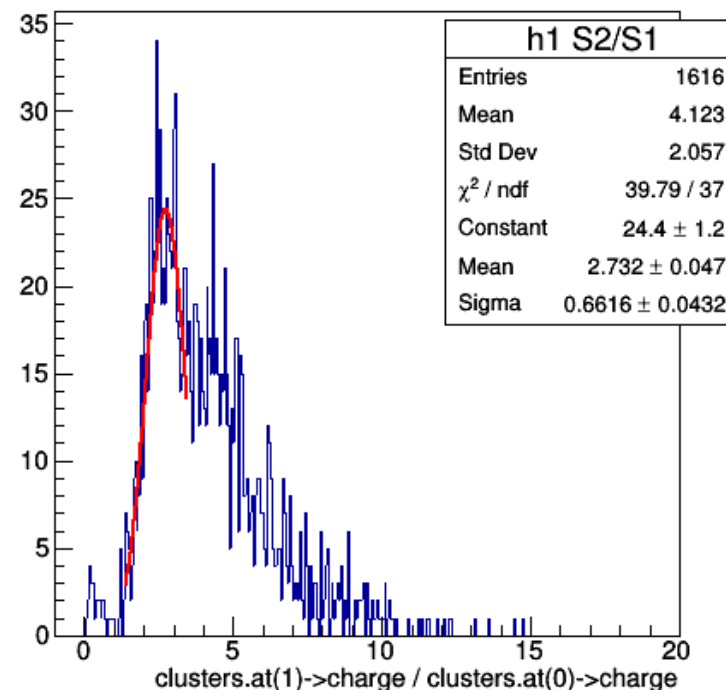
C2.is\_S1



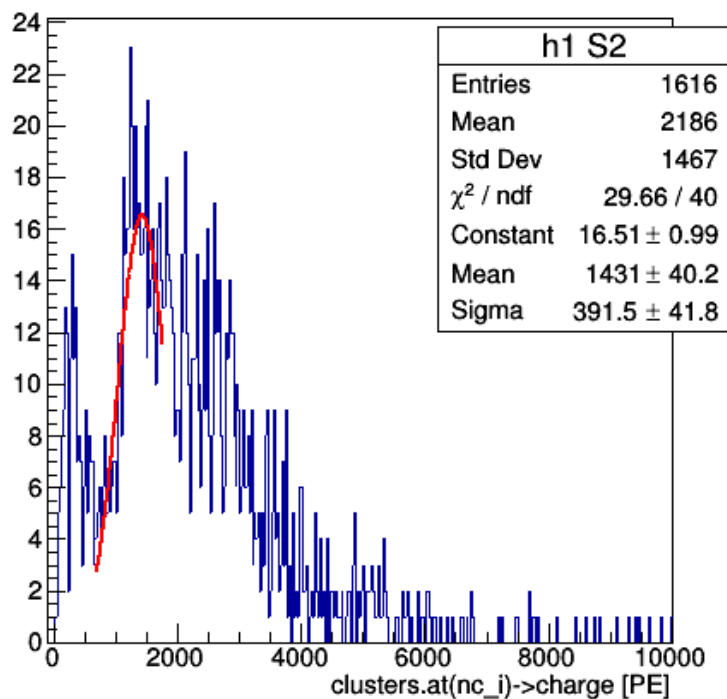
C1.is\_S2 &amp;&amp; C1.corners



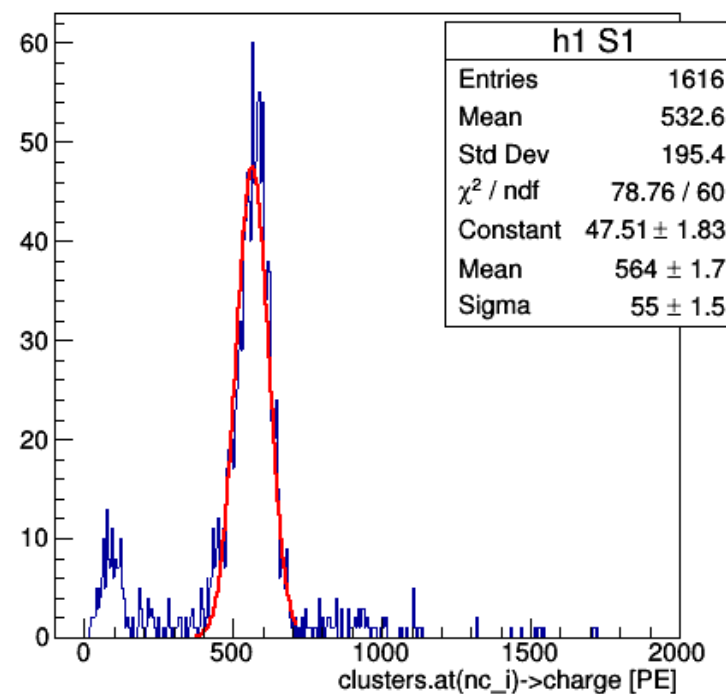
C2.is\_S1



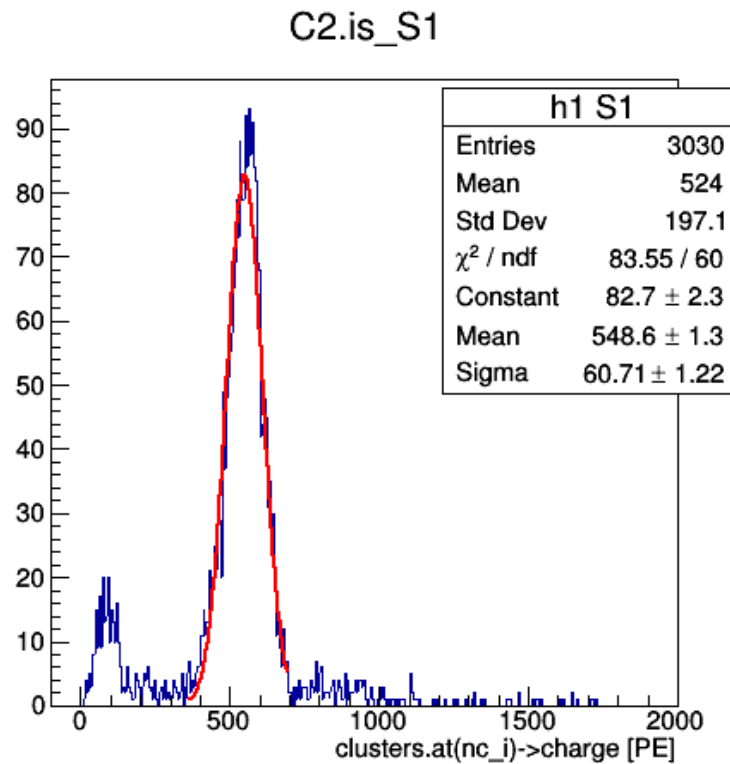
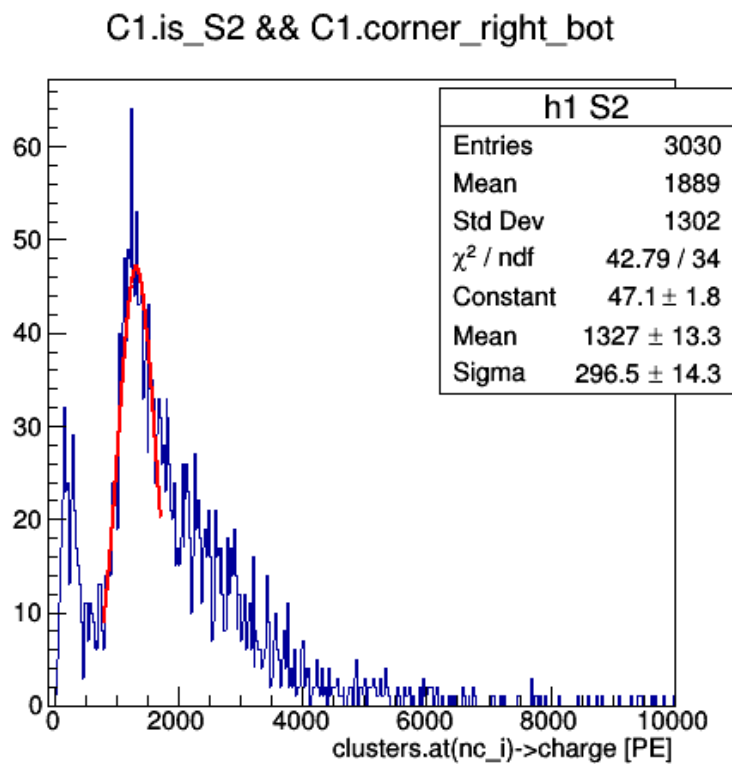
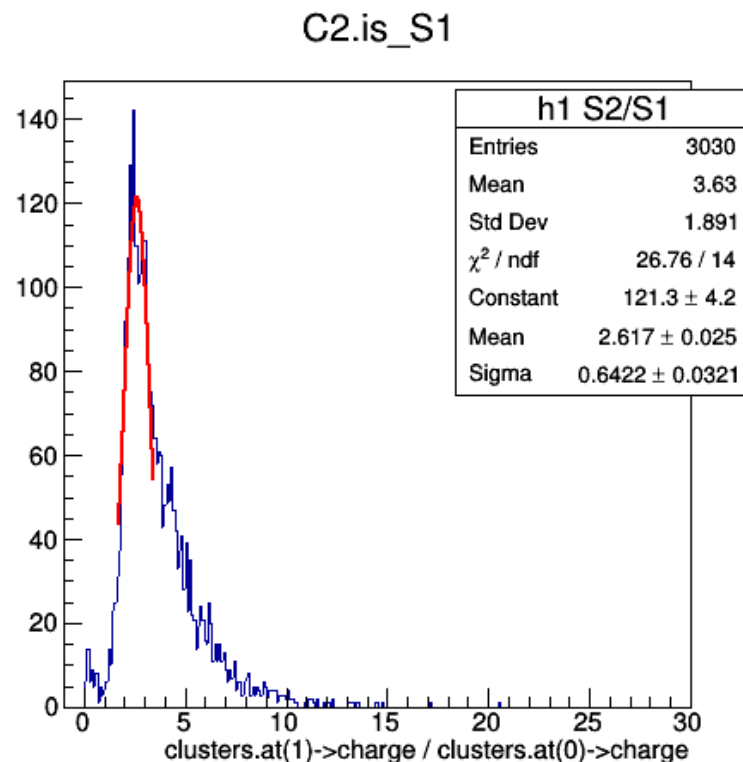
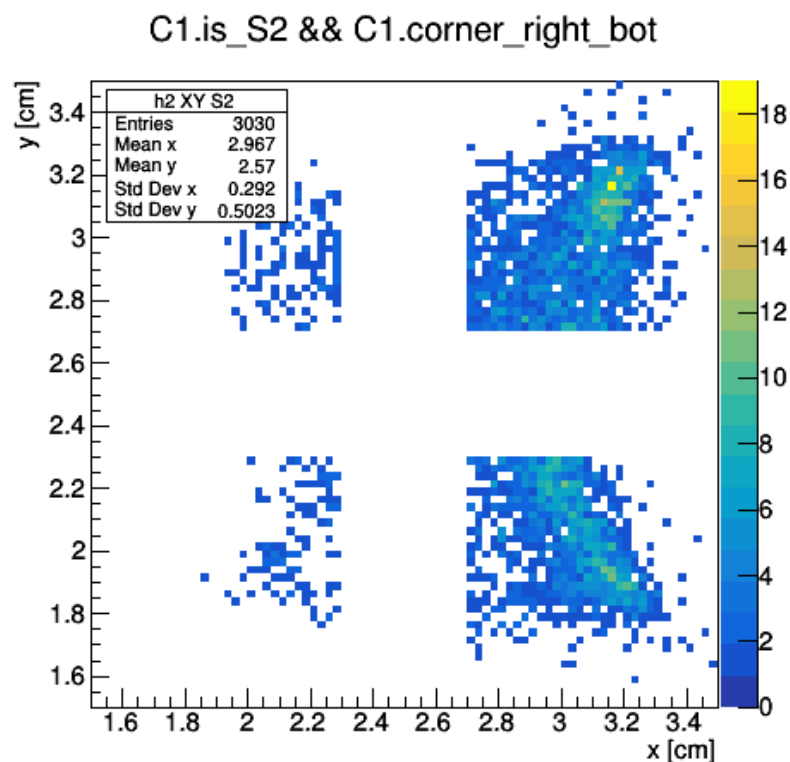
C1.is\_S2 &amp;&amp; C1.corners



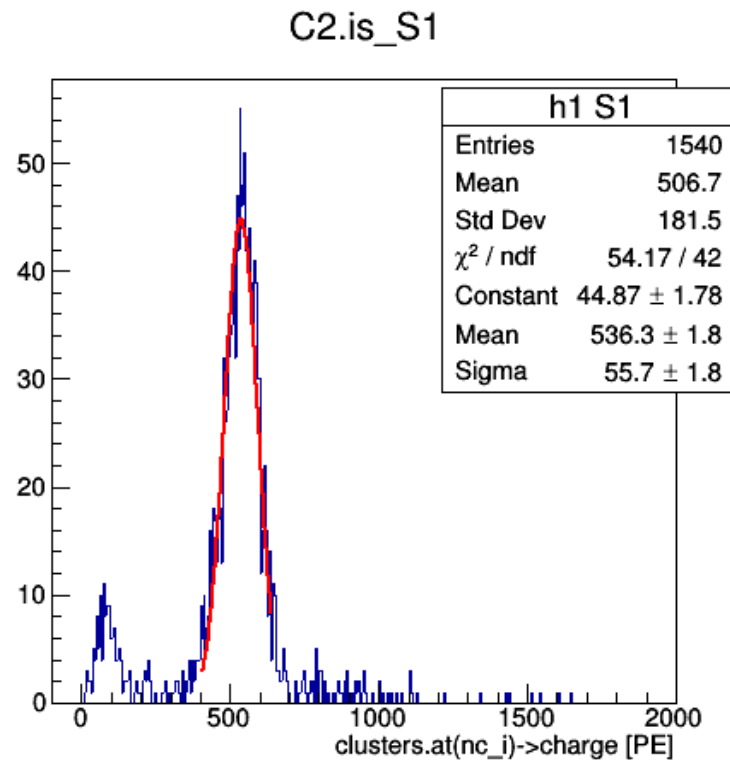
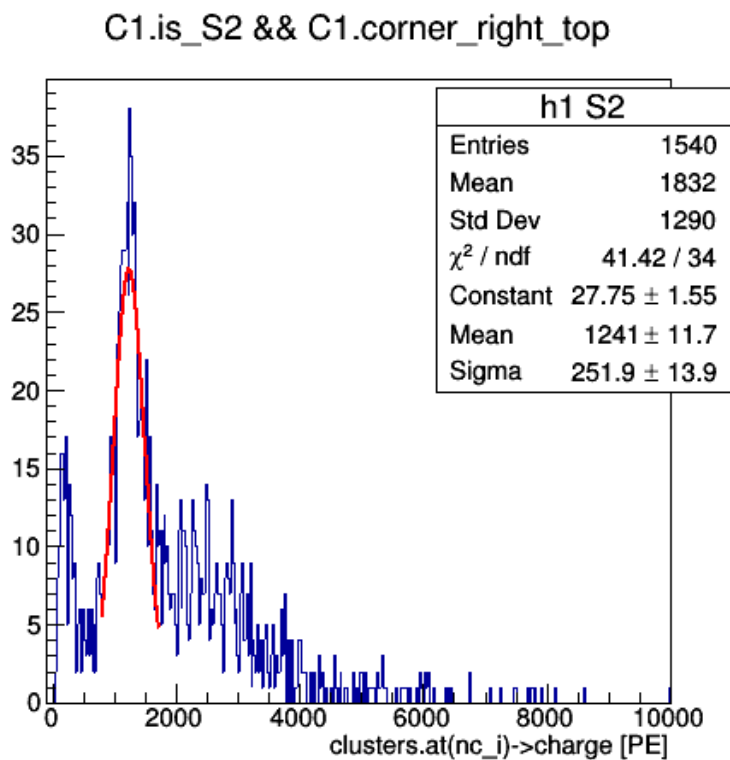
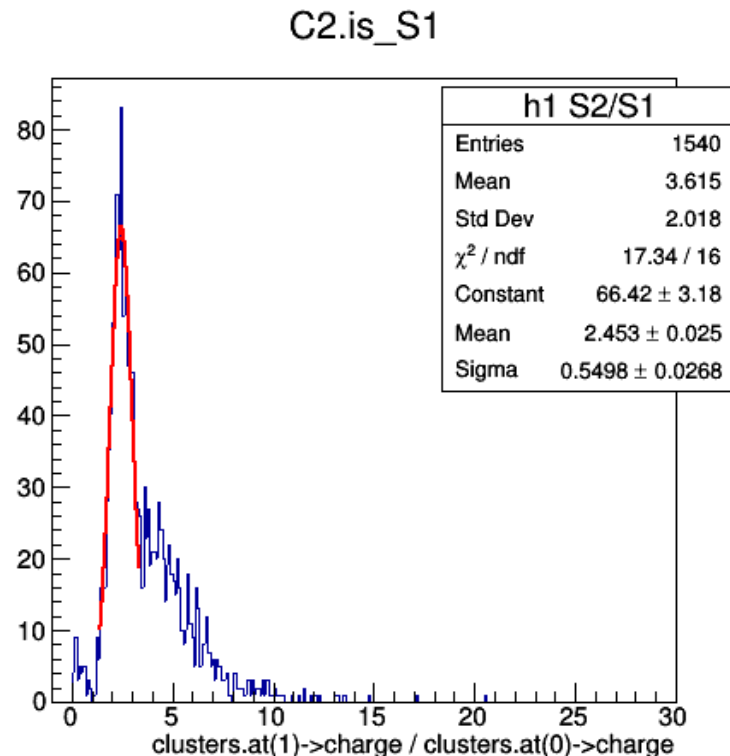
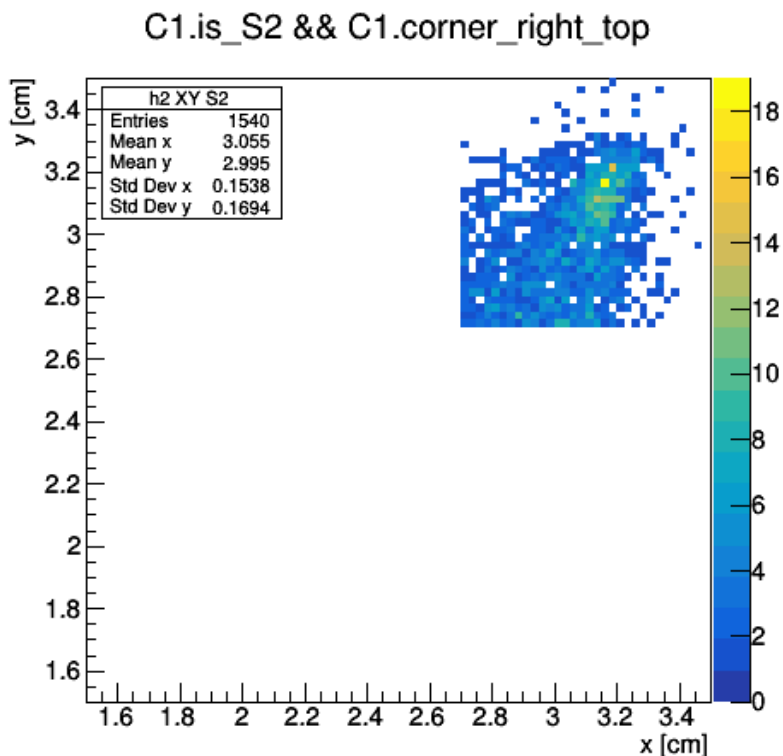
C2.is\_S1





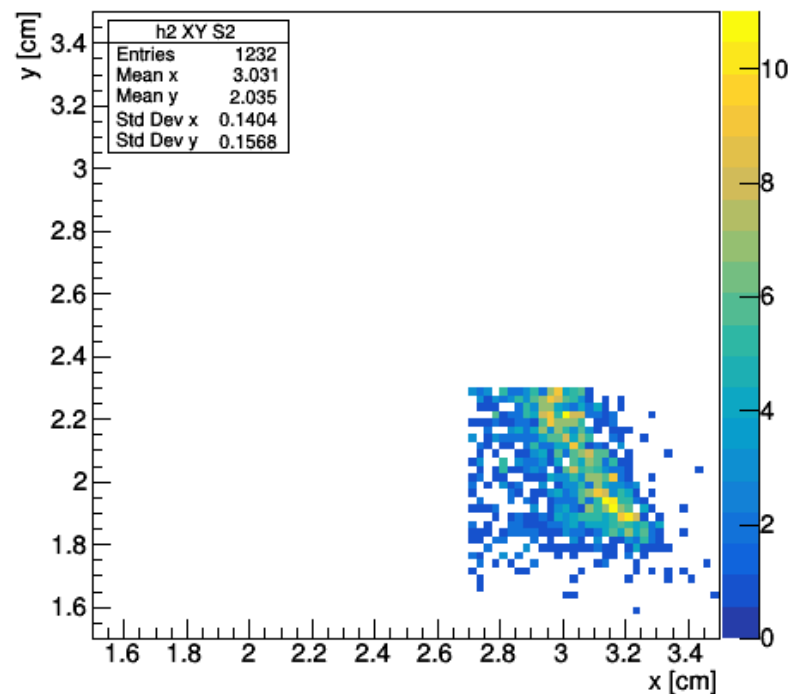


(redefinition of corners)

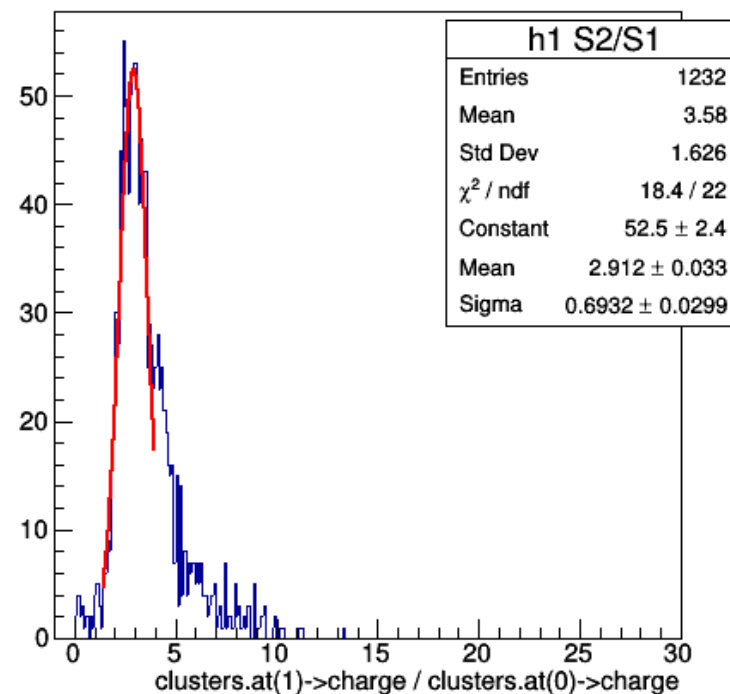


(redefinition of corners)

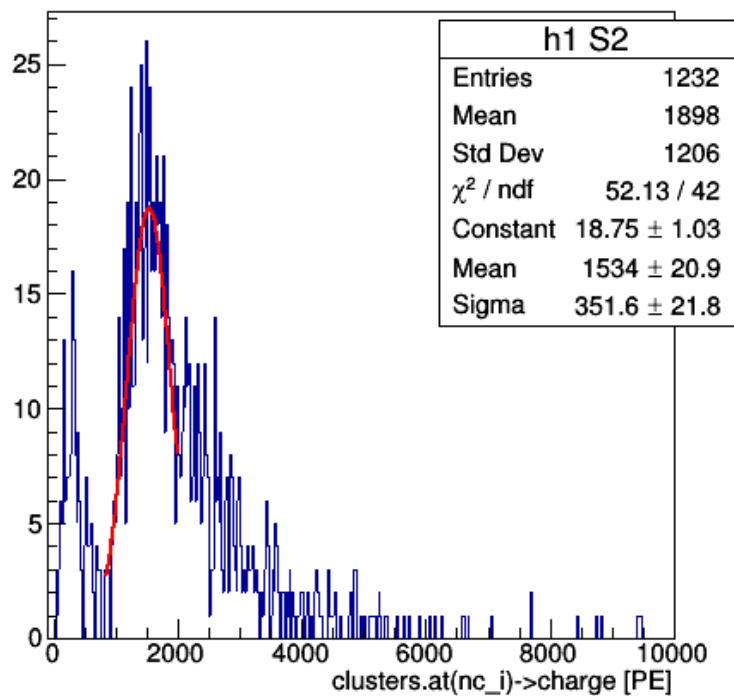
C1.is\_S2 &amp;&amp; C1.corner\_right\_bot



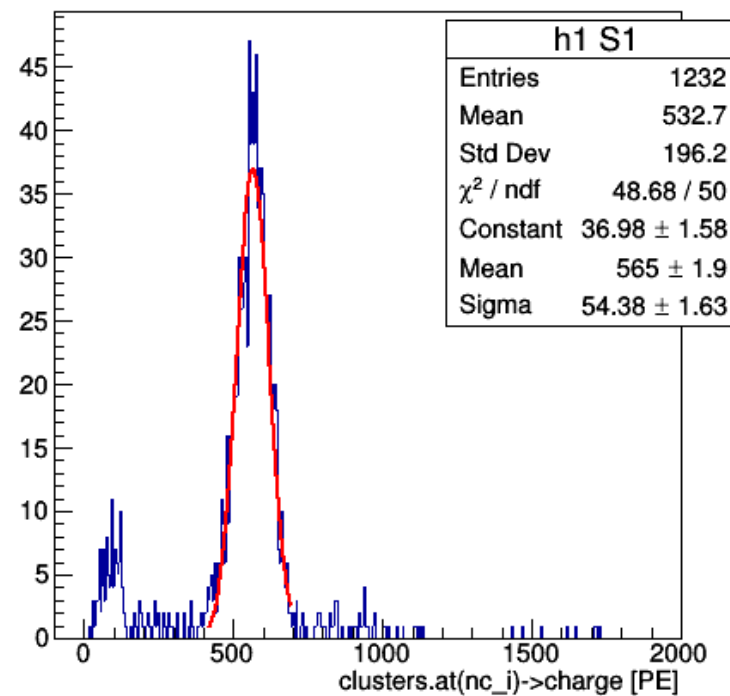
C2.is\_S1



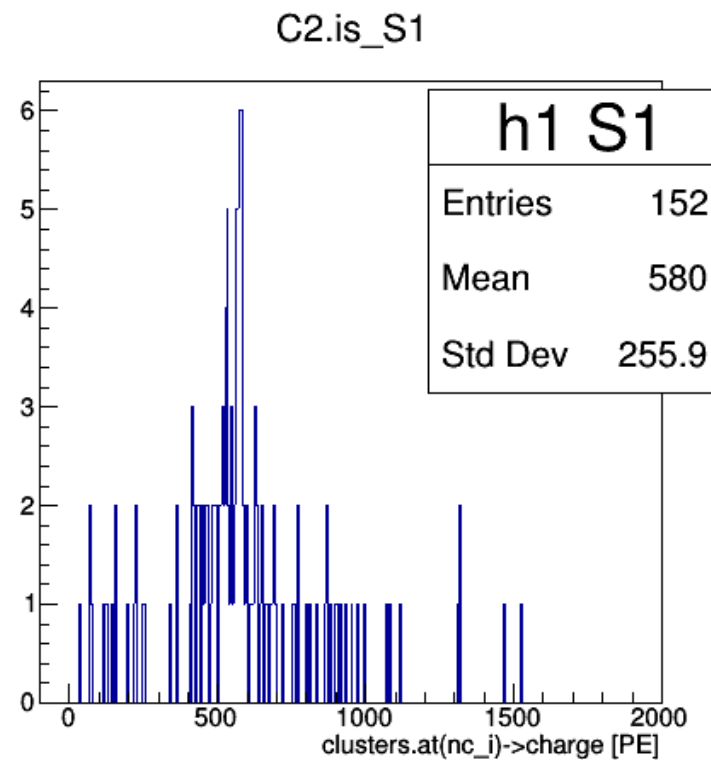
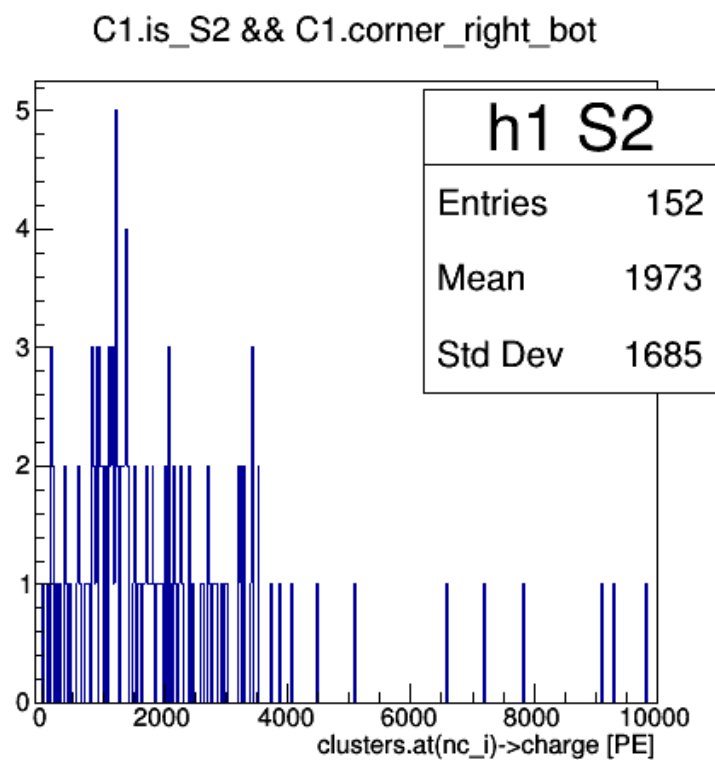
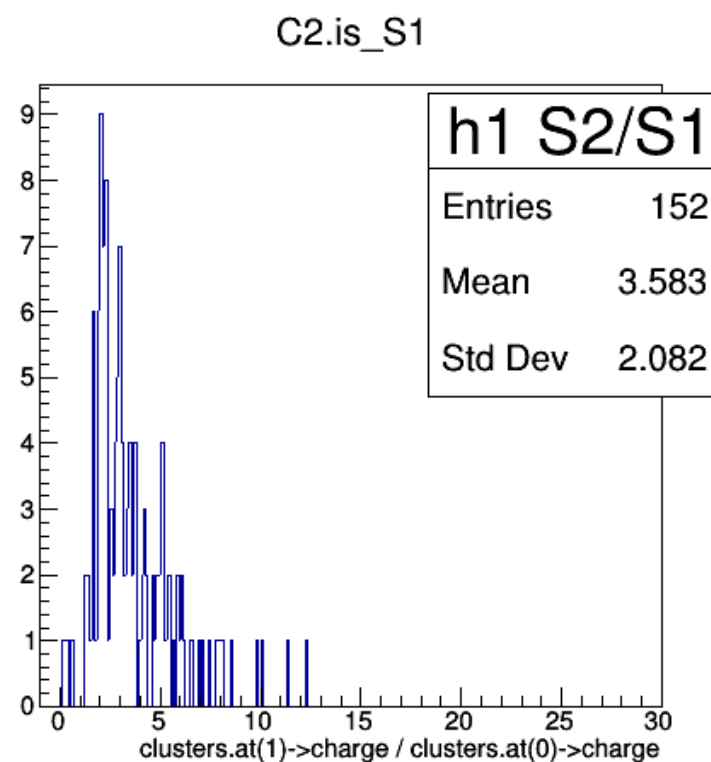
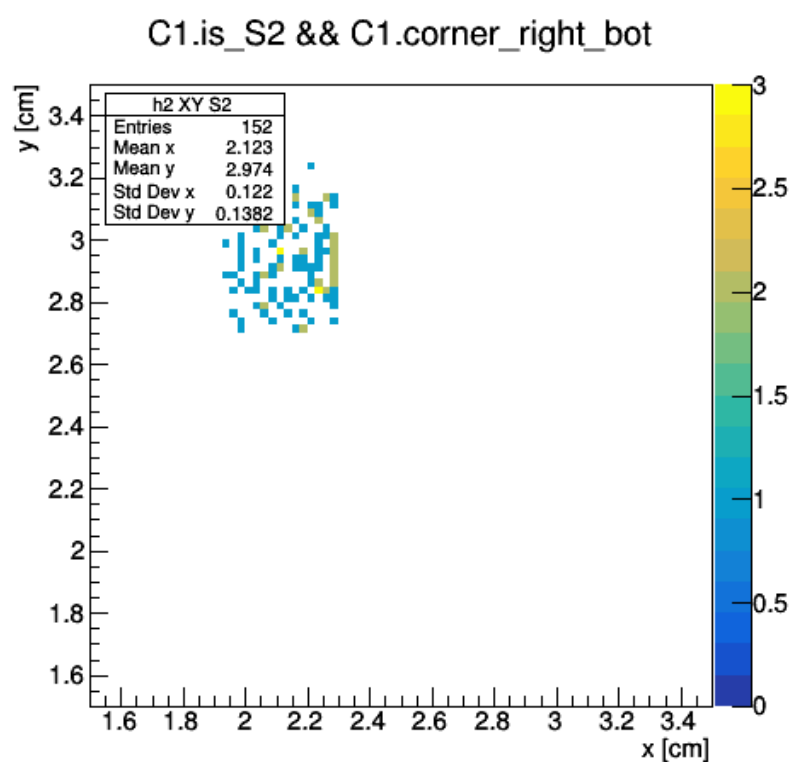
C1.is\_S2 &amp;&amp; C1.corner\_right\_bot



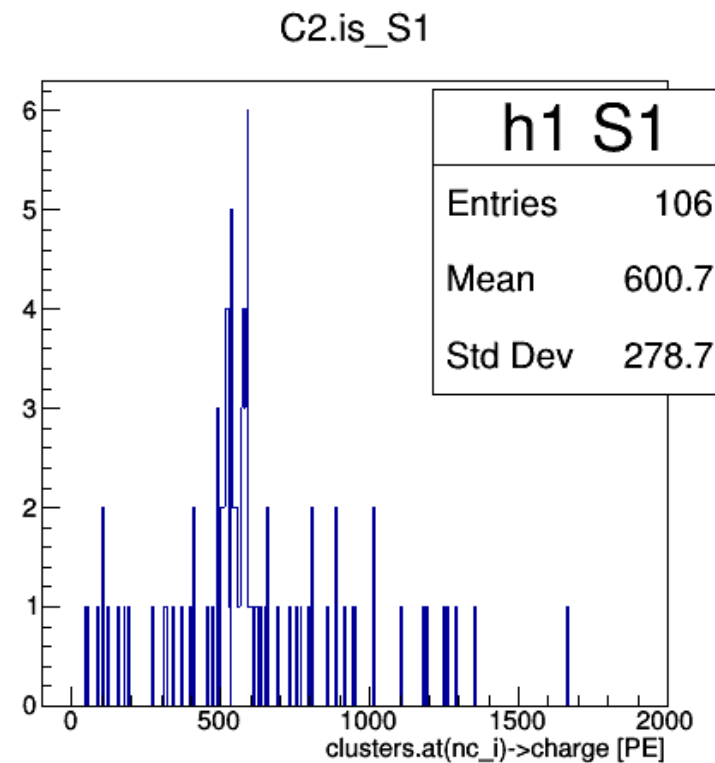
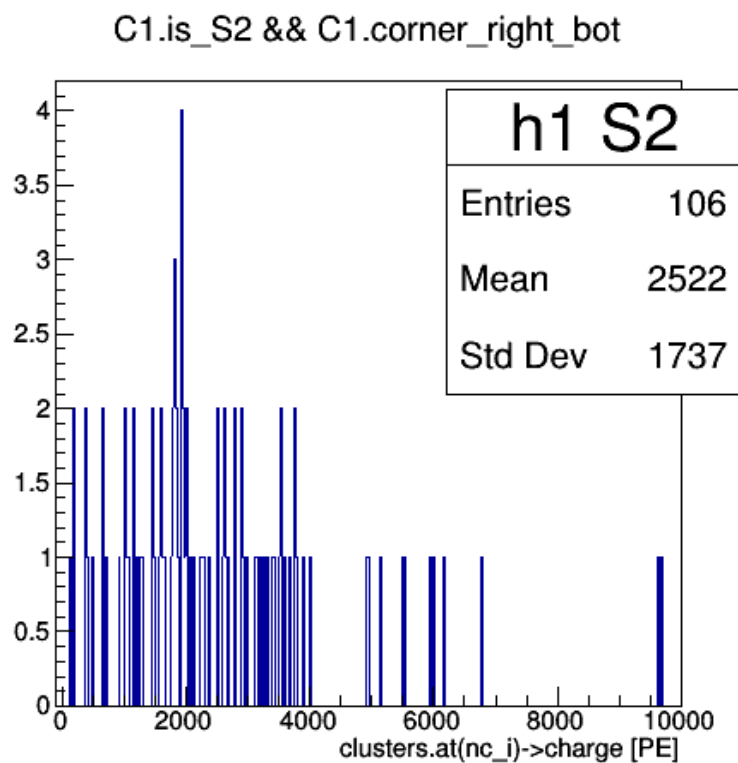
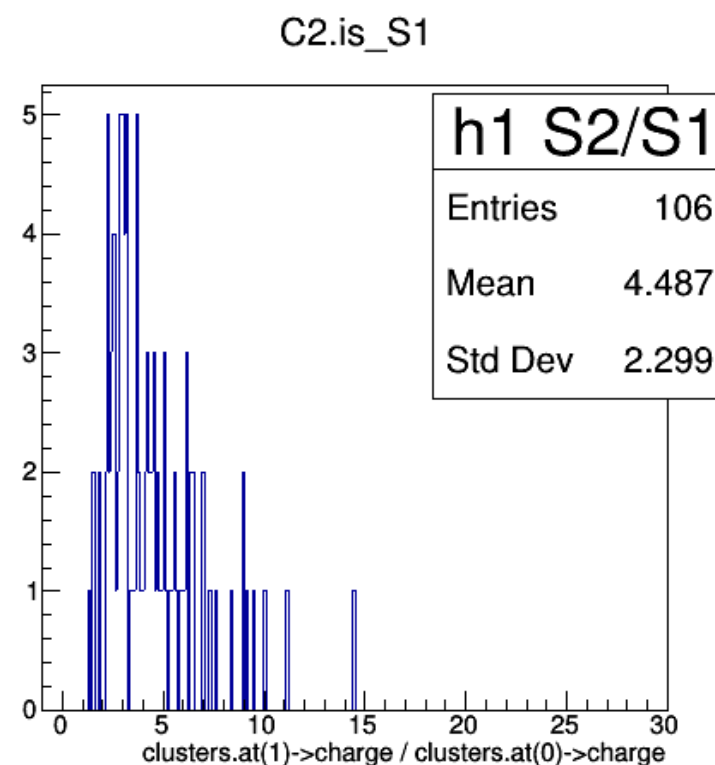
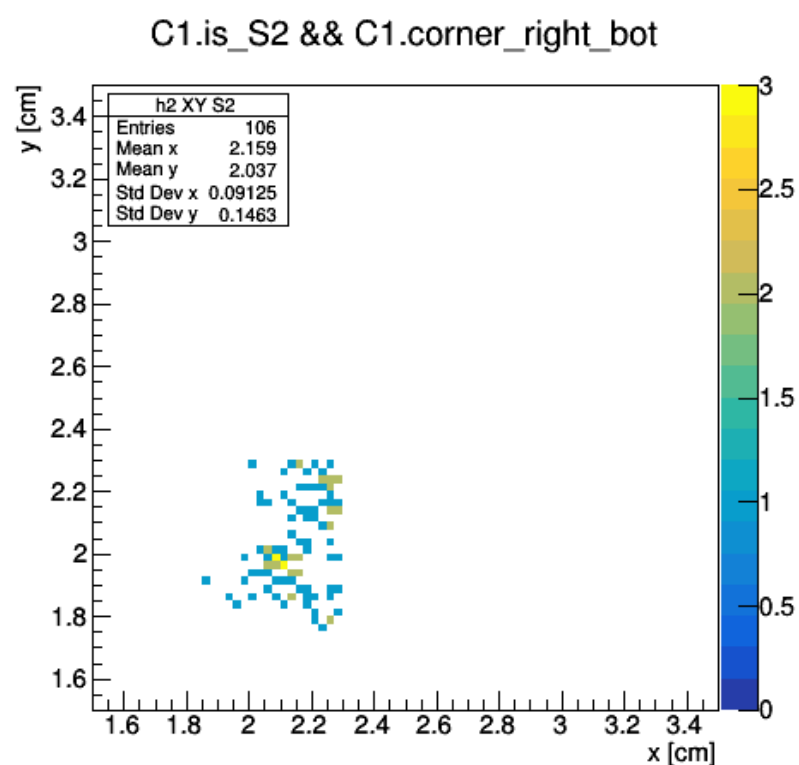
C2.is\_S1



(redefinition of corners)



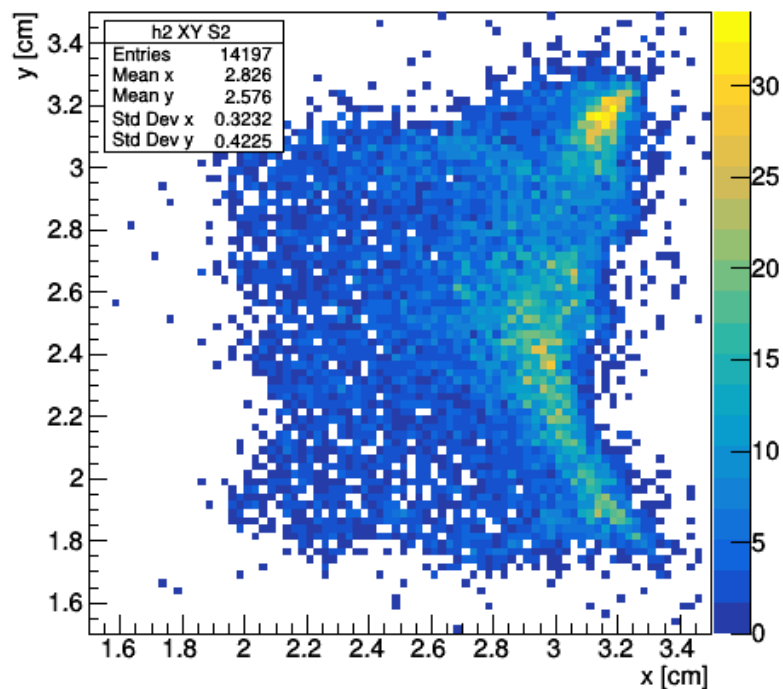
(redefinition of corners)



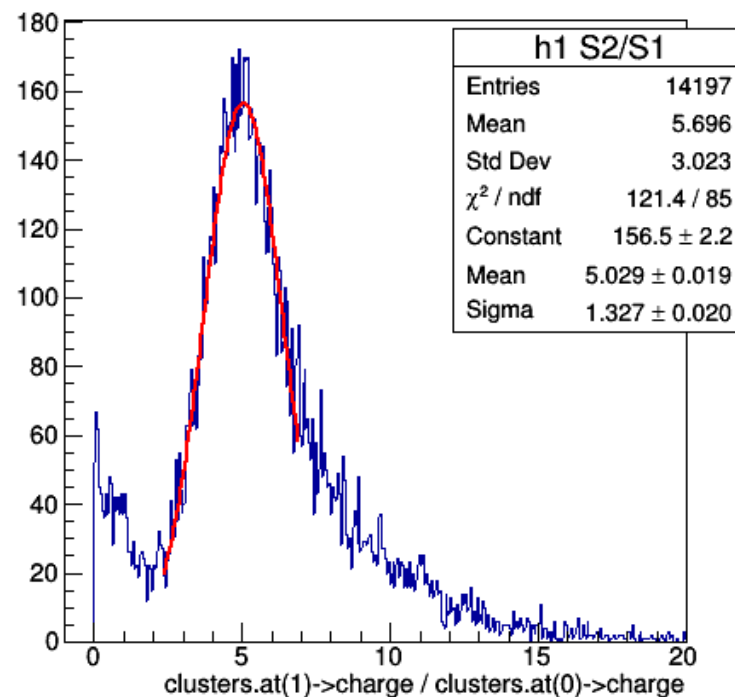
(redefinition of corners)

Ph2, Am241, run 542

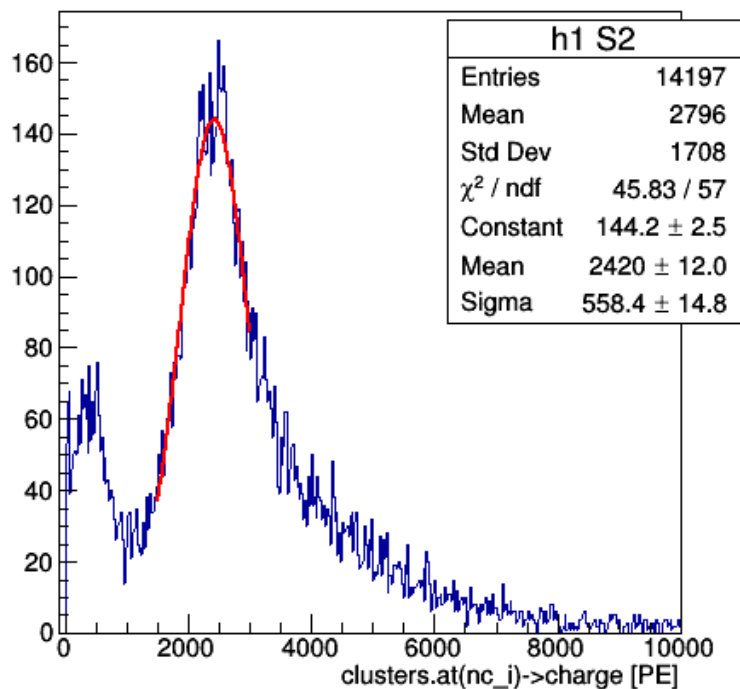
C1.is\_S2



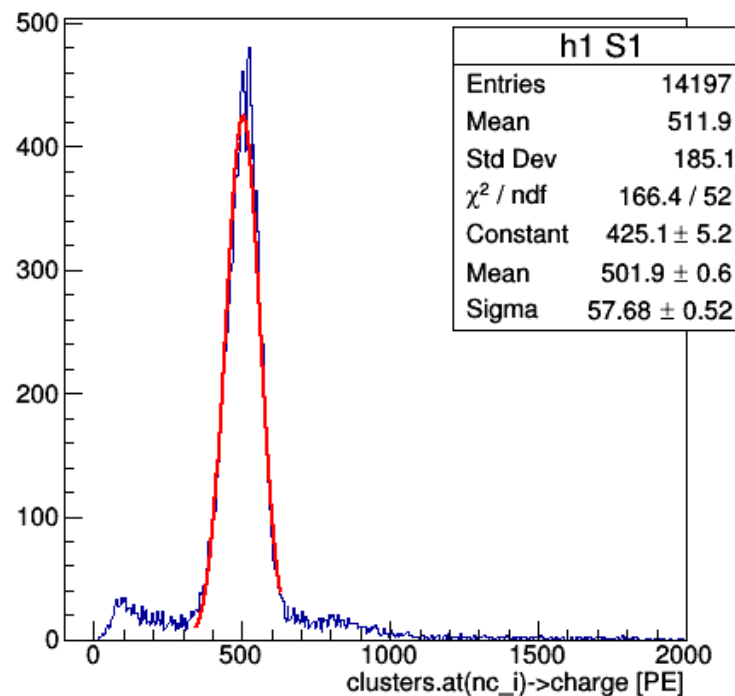
C2.is\_S1

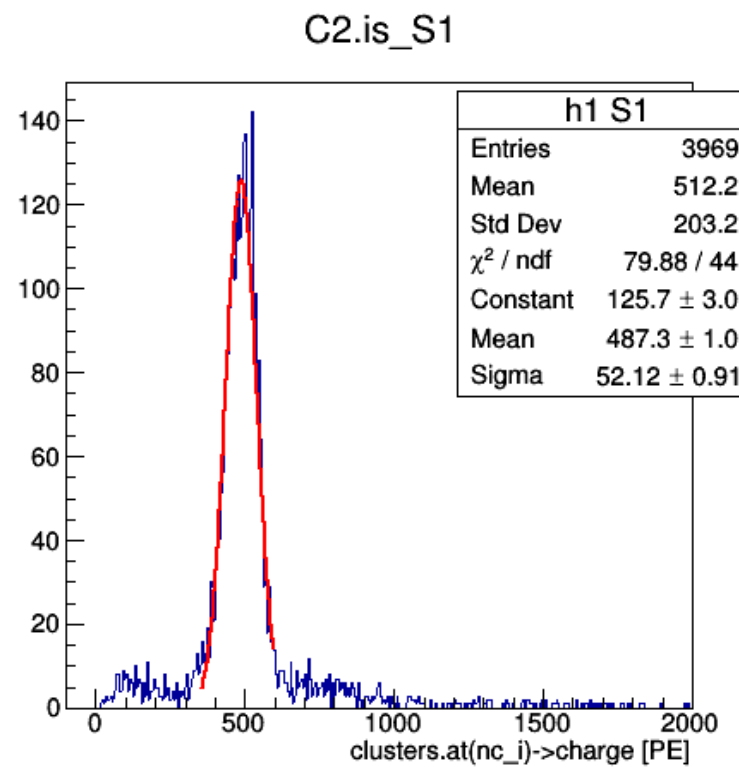
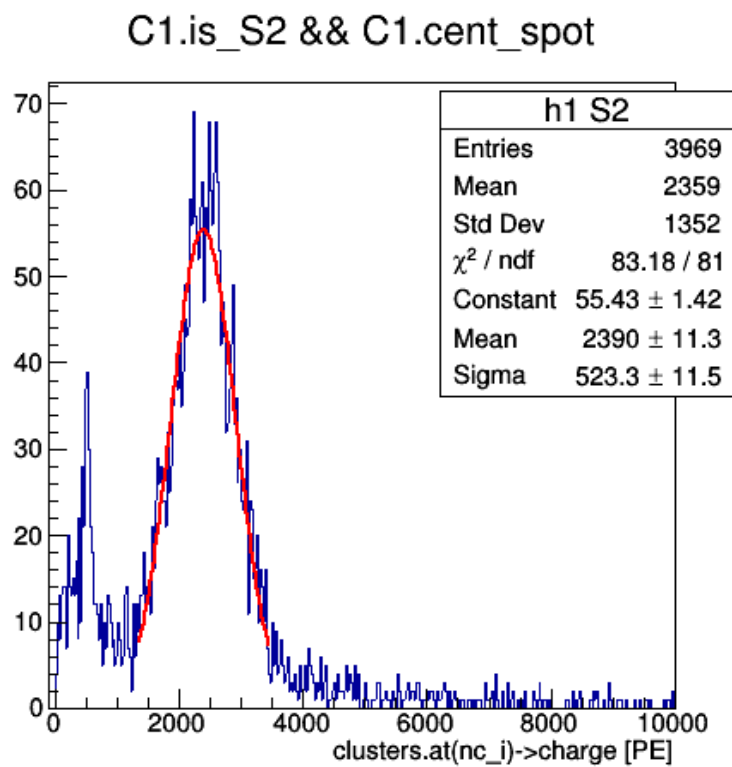
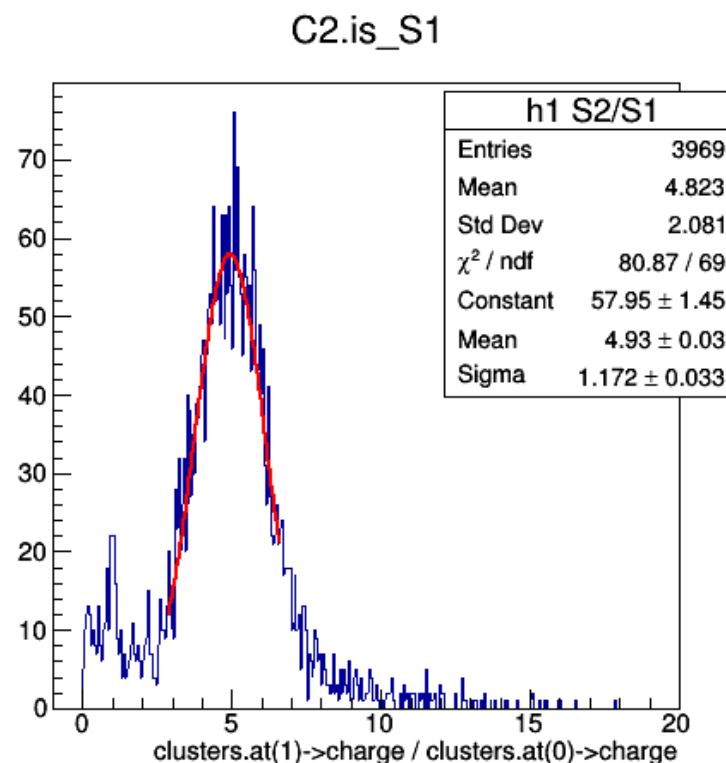
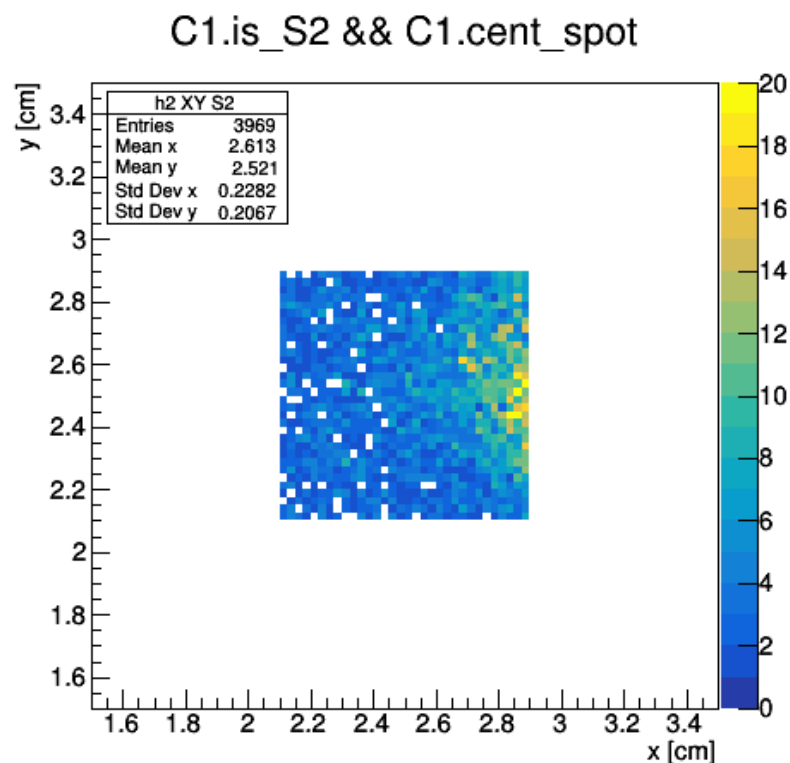


C1.is\_S2



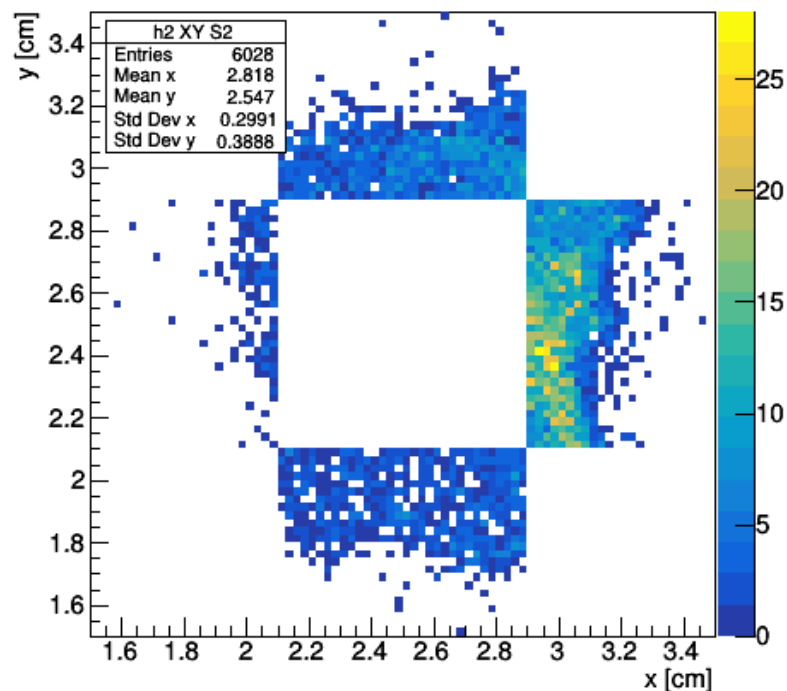
C2.is\_S1



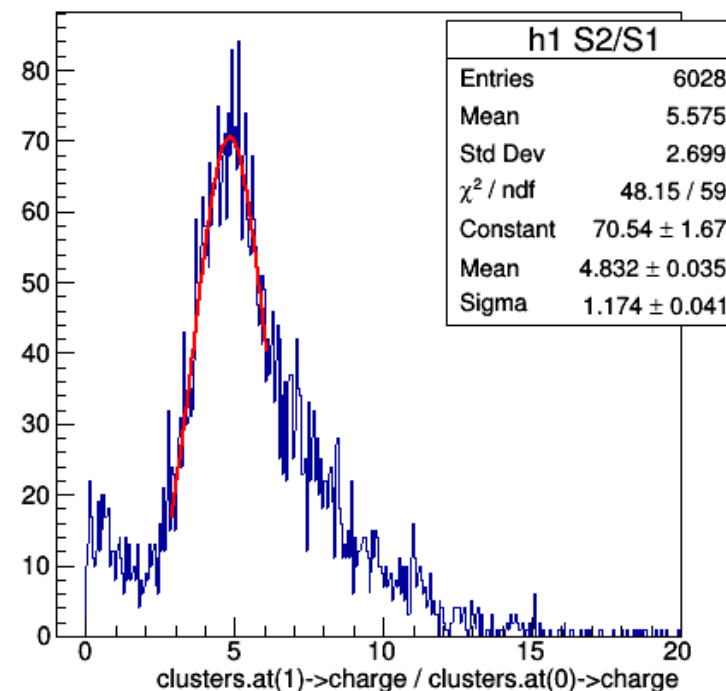




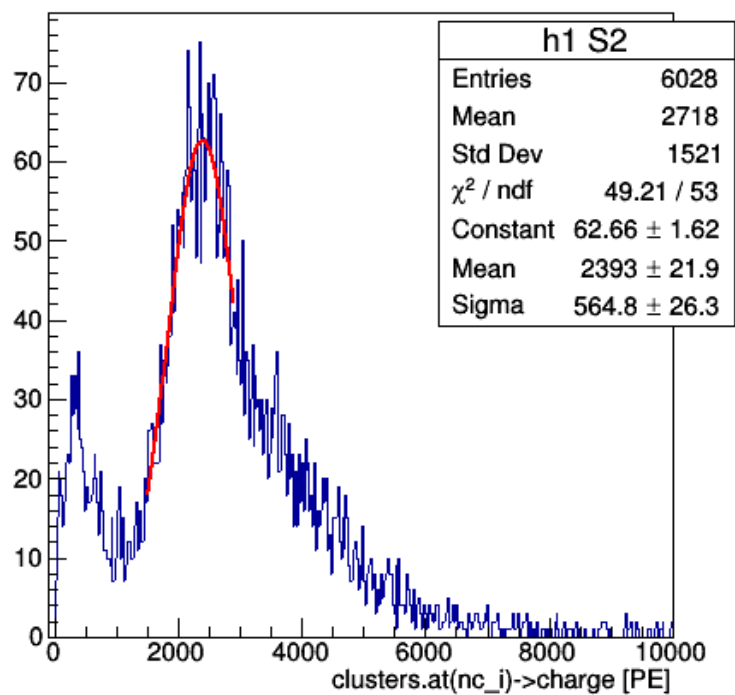
C1.is\_S2 &amp;&amp; C1.edges



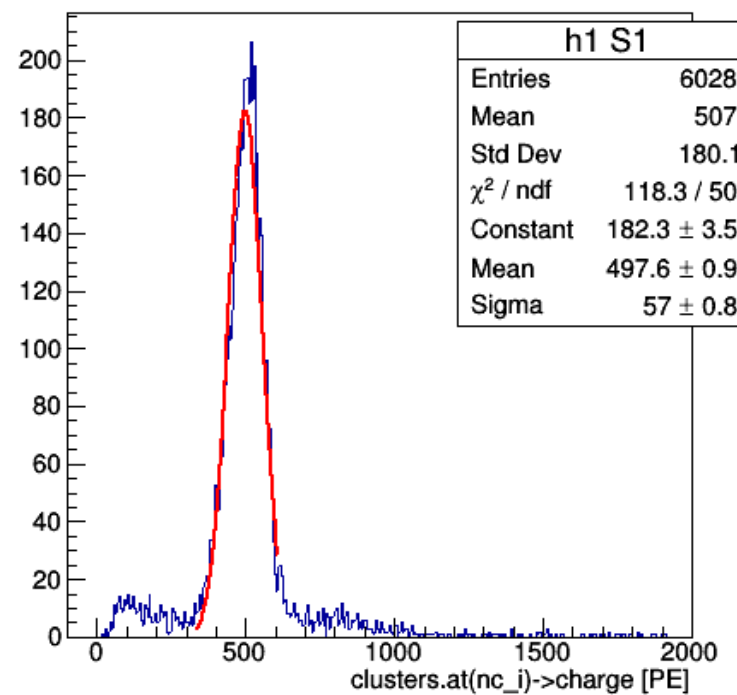
C2.is\_S1



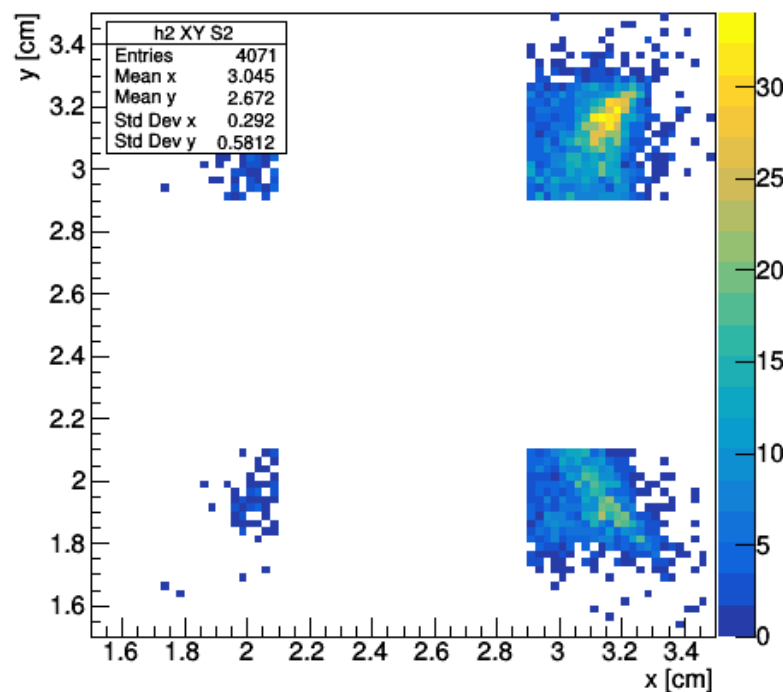
C1.is\_S2 &amp;&amp; C1.edges



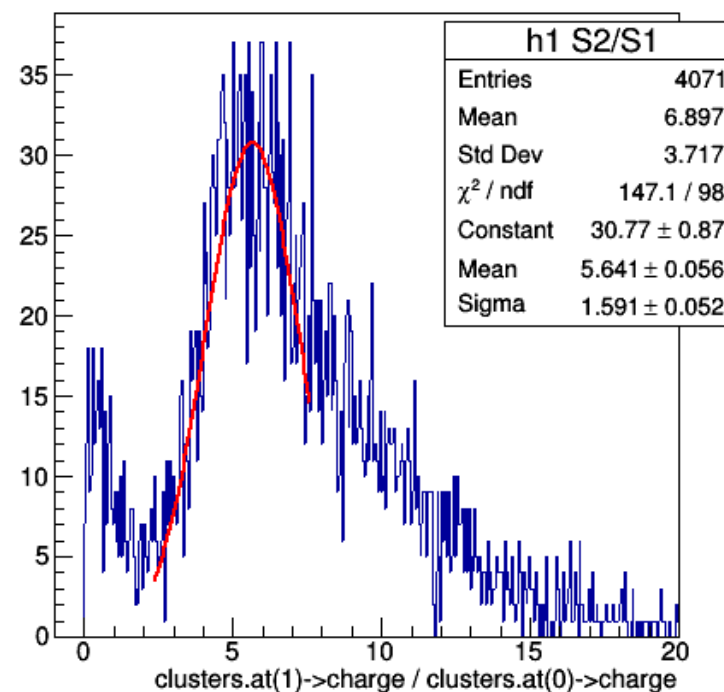
C2.is\_S1



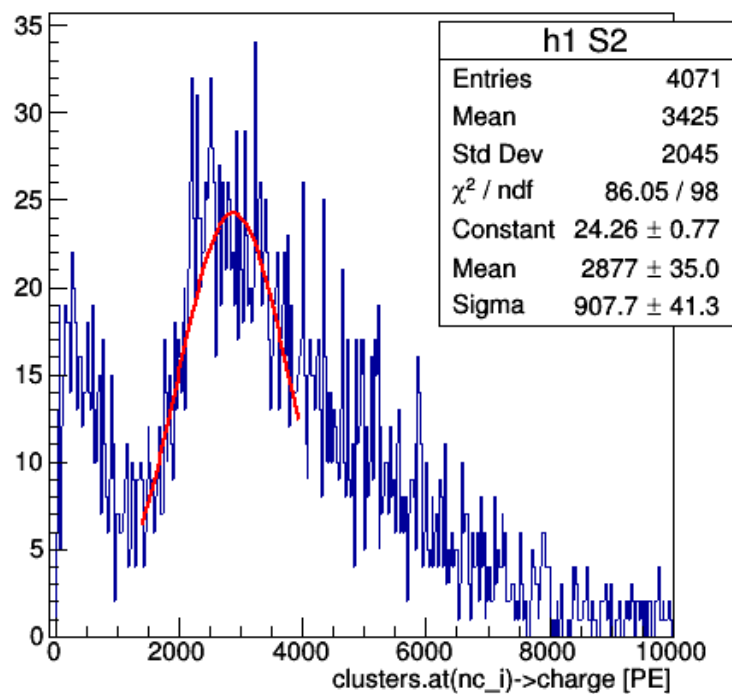
C1.is\_S2 &amp;&amp; C1.corners



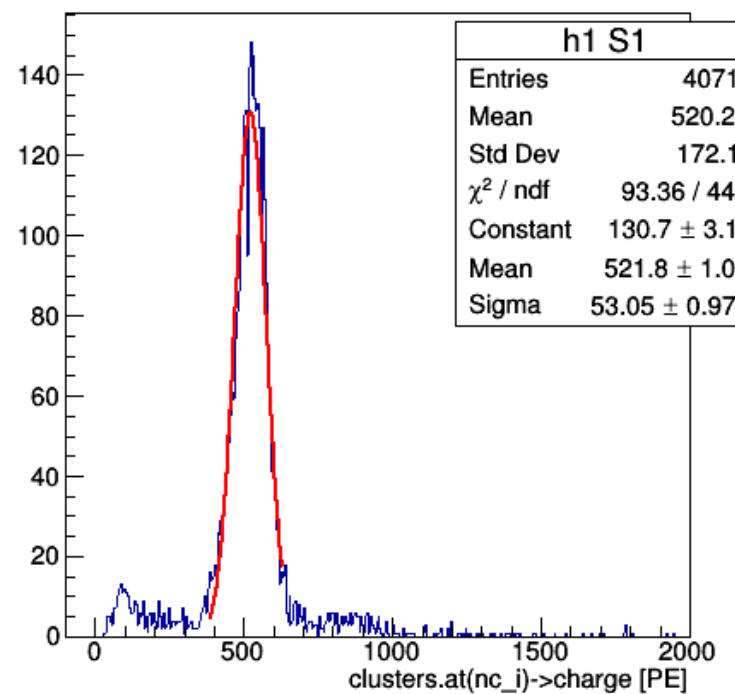
C2.is\_S1

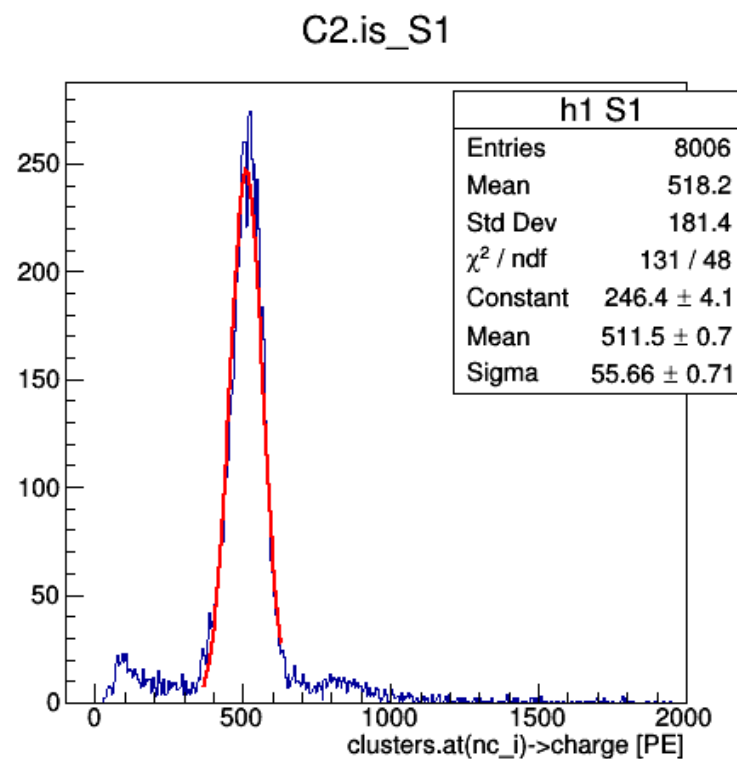
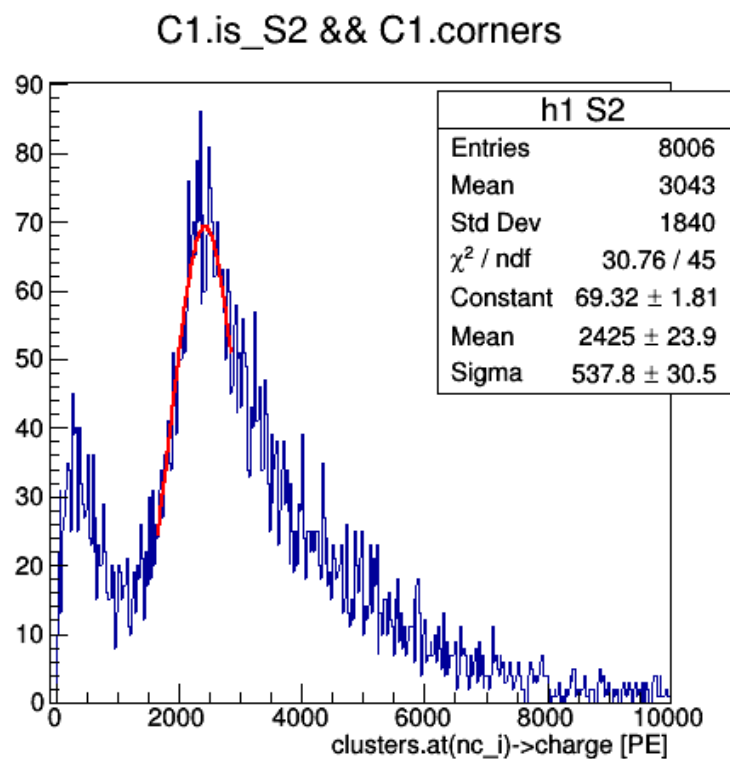
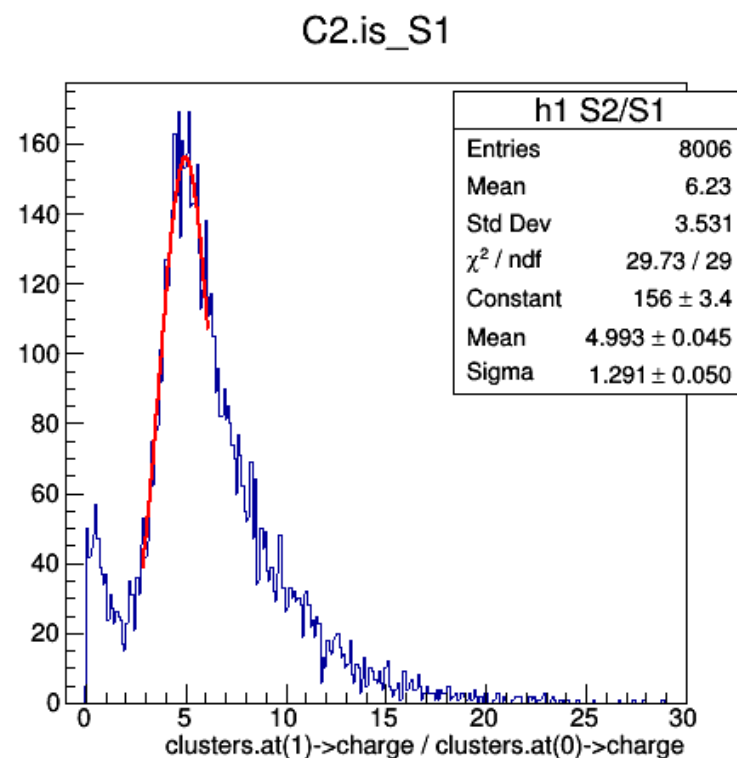
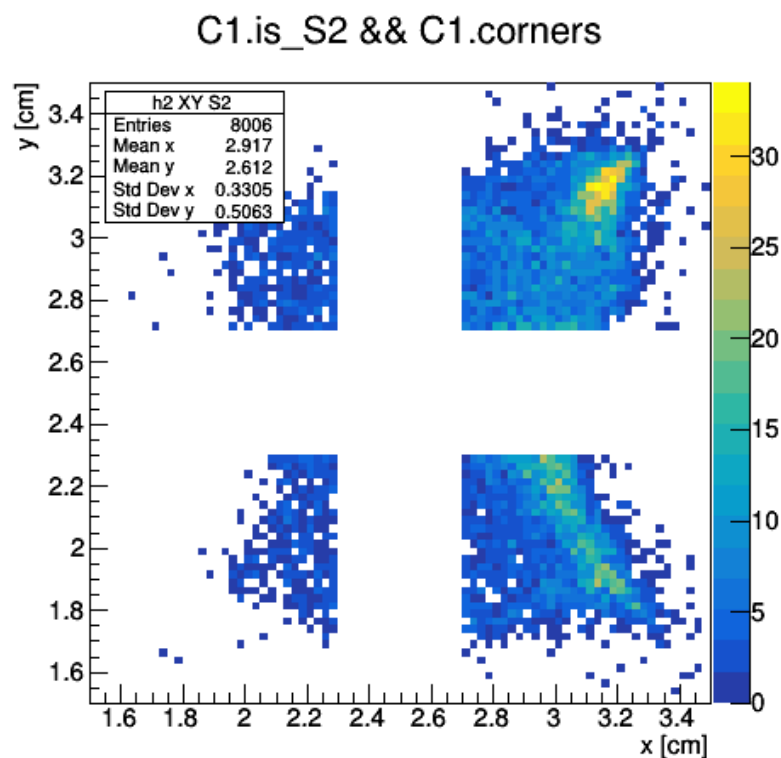


C1.is\_S2 &amp;&amp; C1.corners

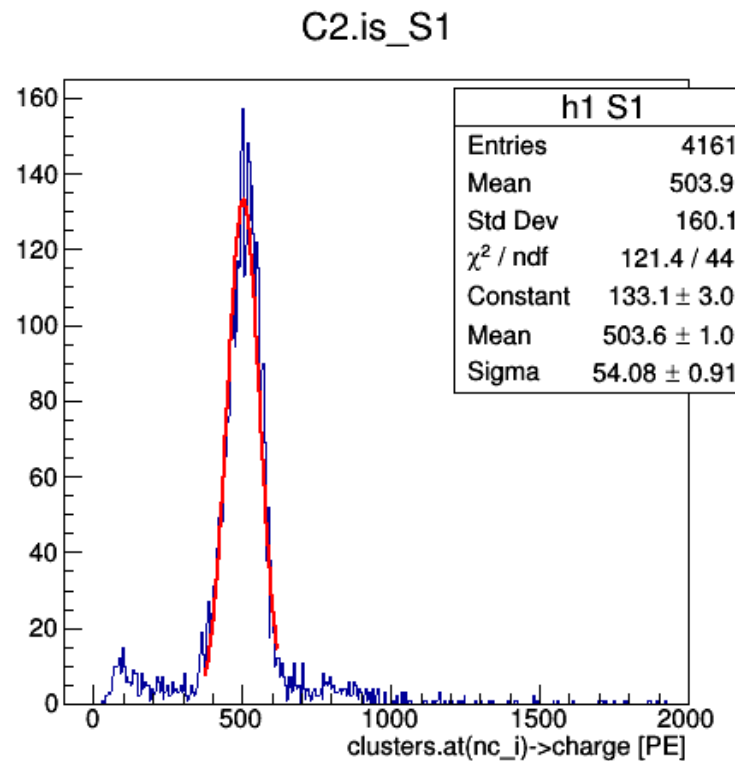
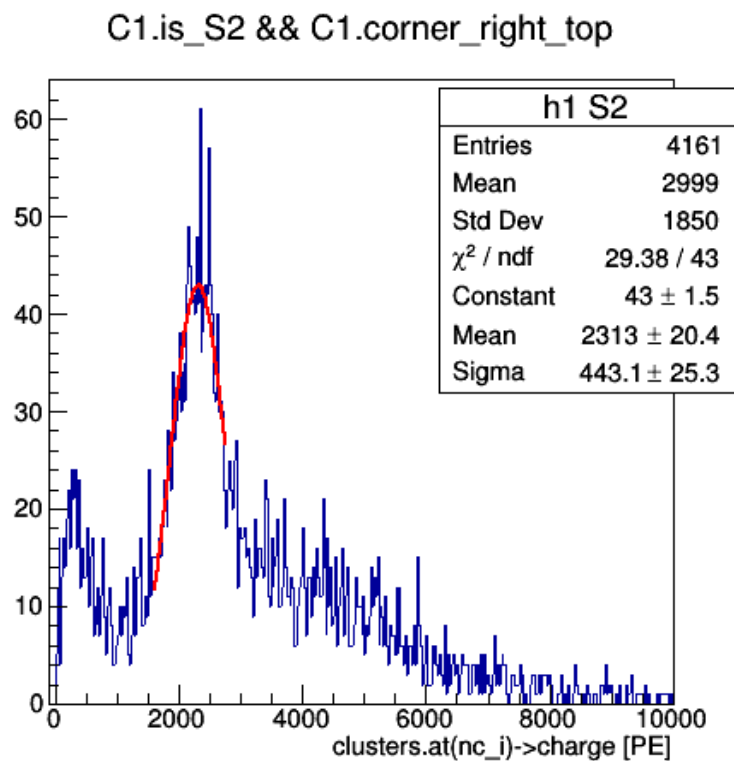
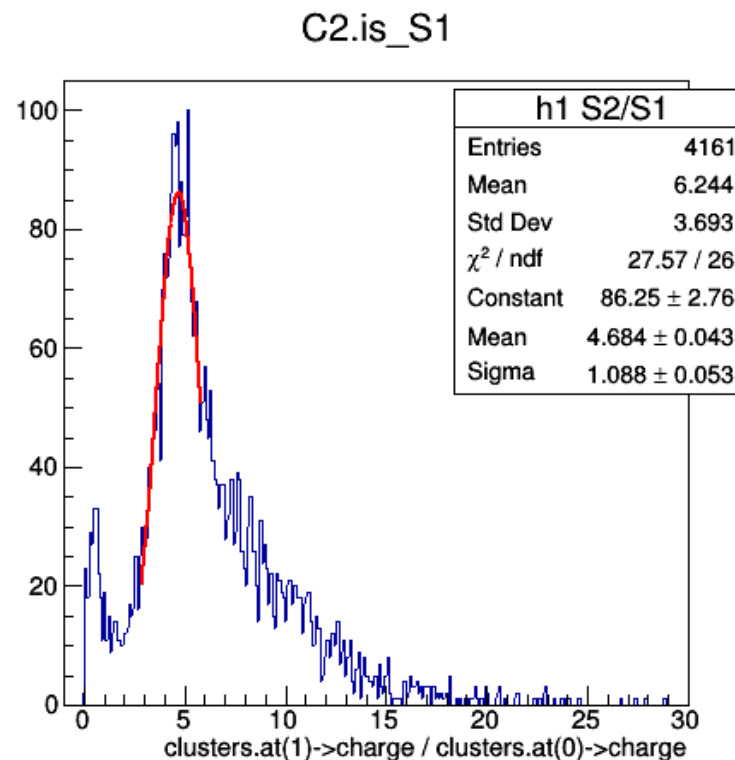
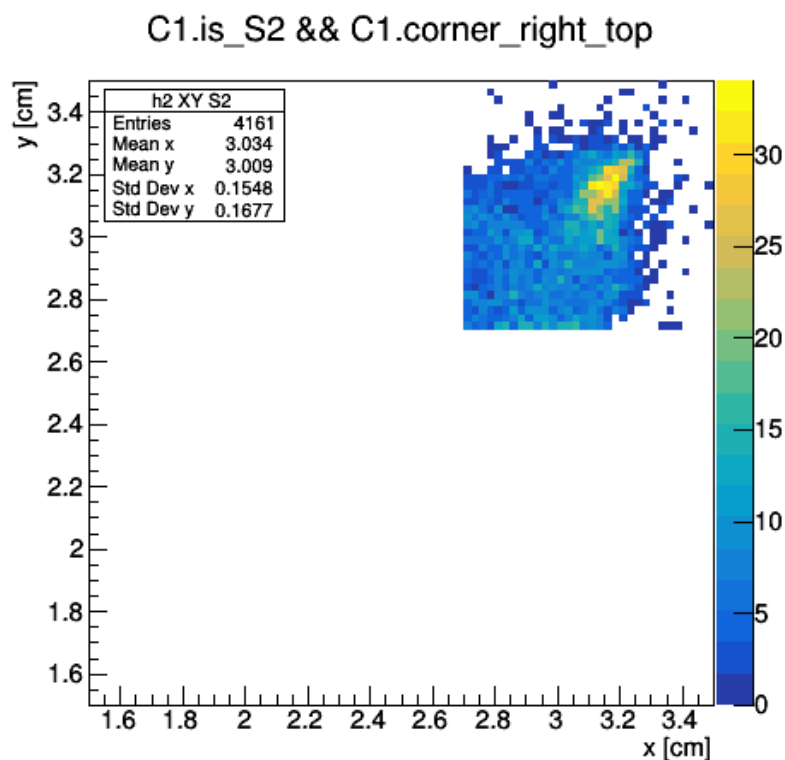


C2.is\_S1



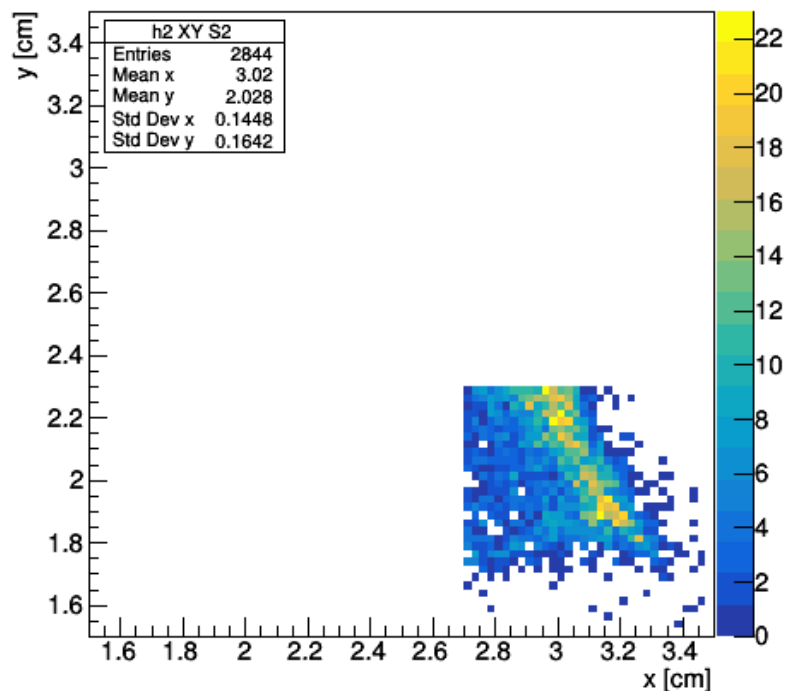


(redefinition of corners)

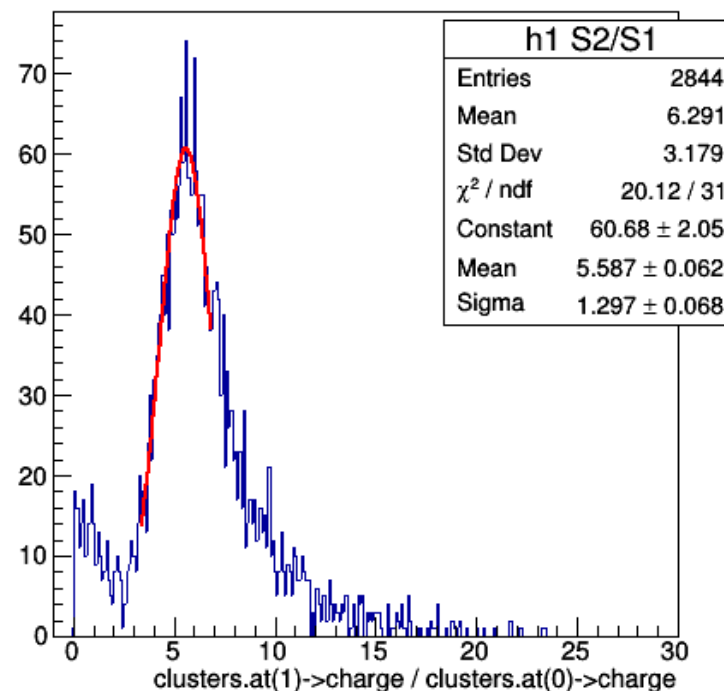


(redefinition of corners)

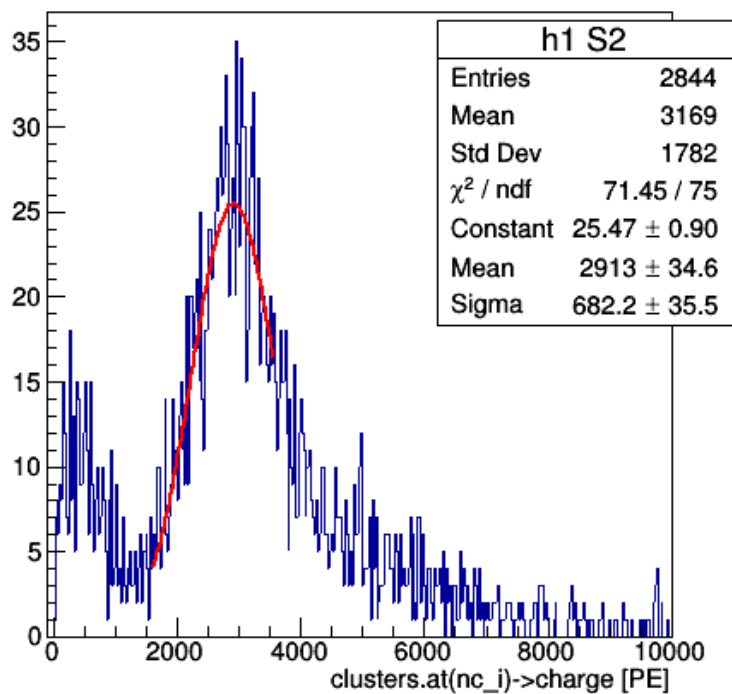
C1.is\_S2 &amp;&amp; C1.corner\_right\_bot



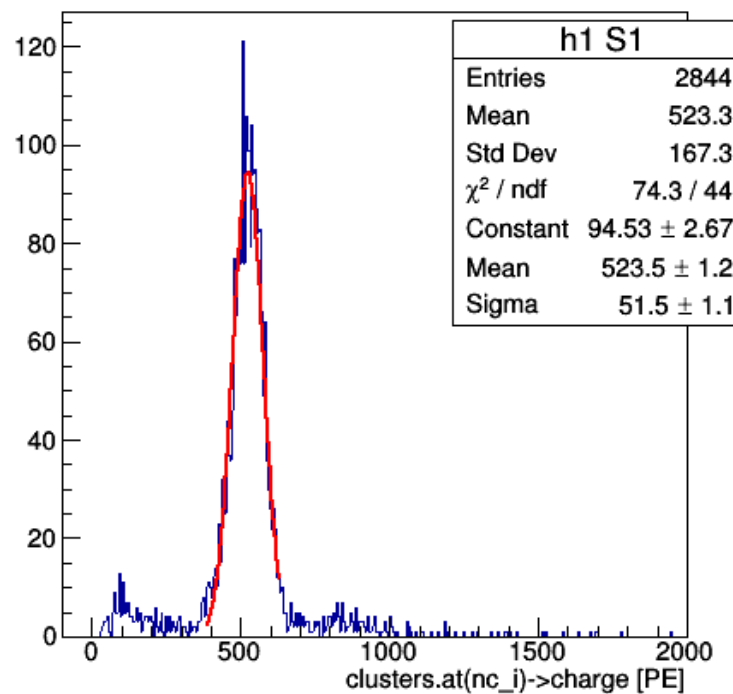
C2.is\_S1



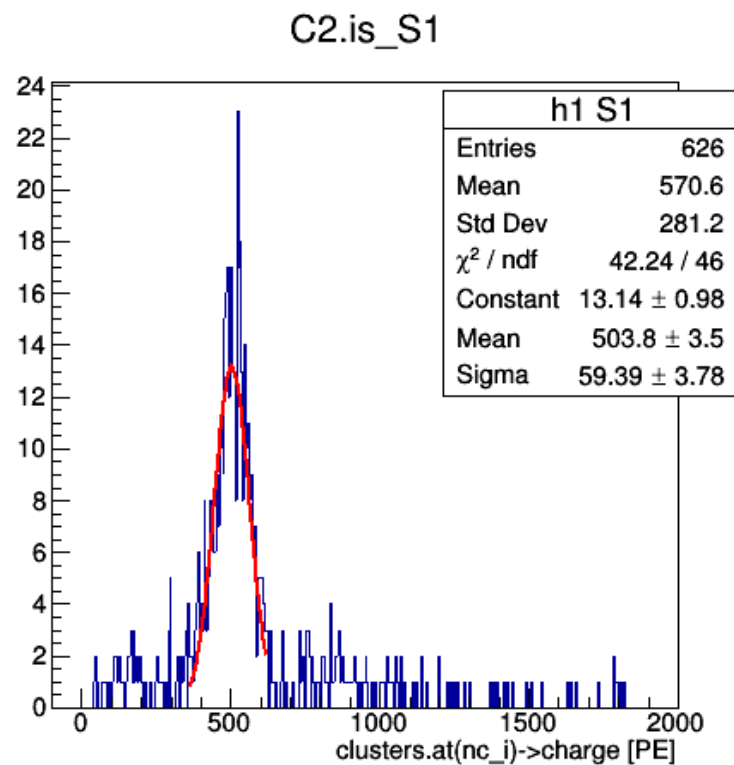
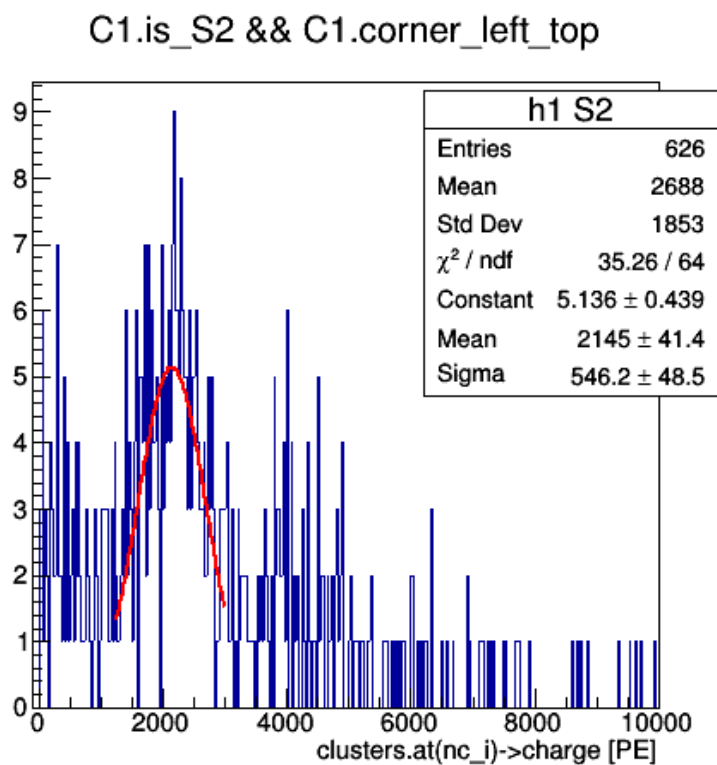
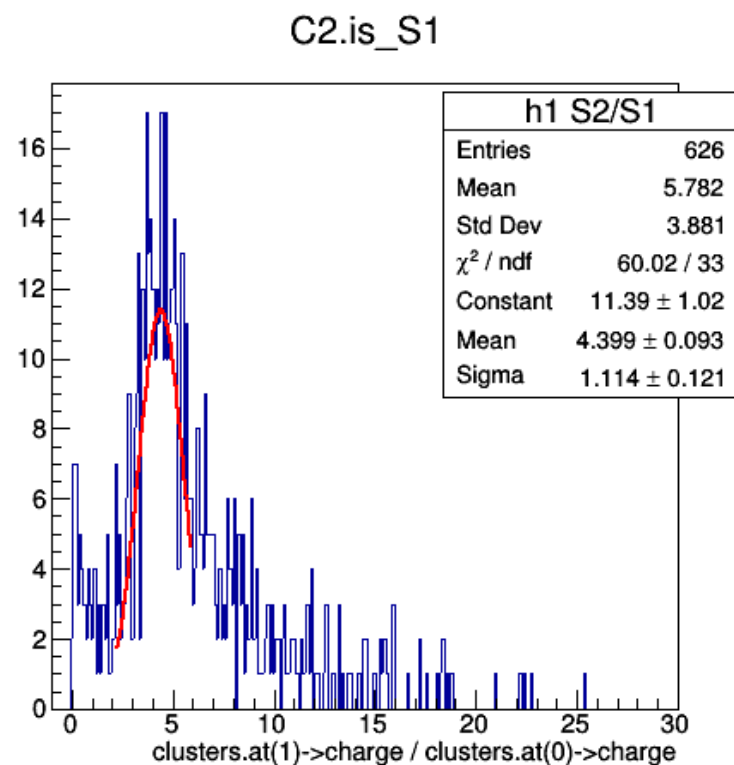
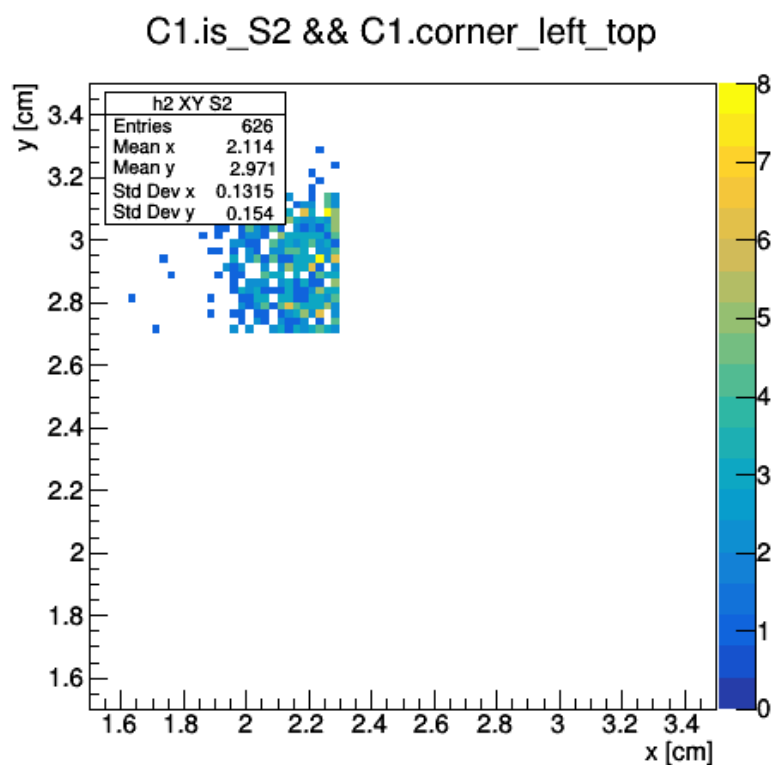
C1.is\_S2 &amp;&amp; C1.corner\_right\_bot



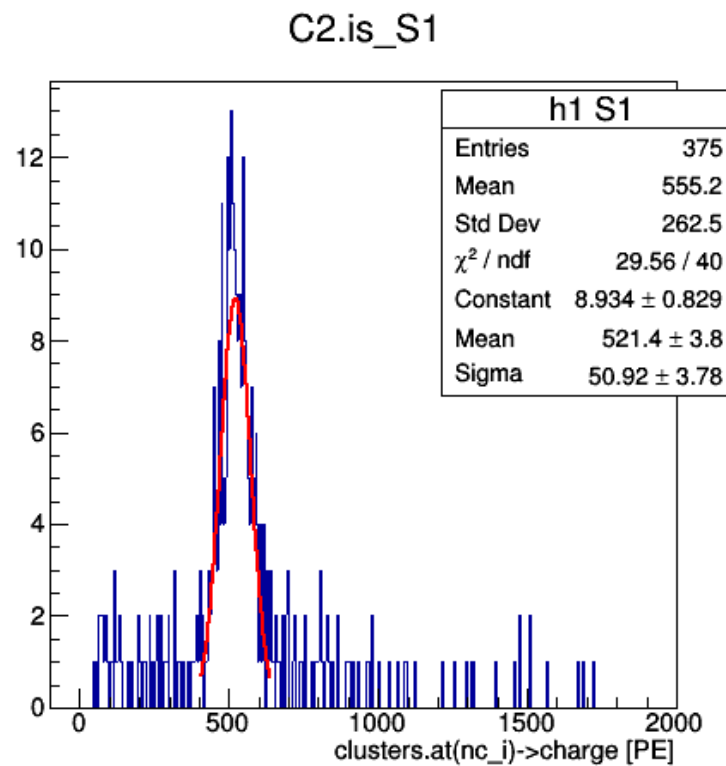
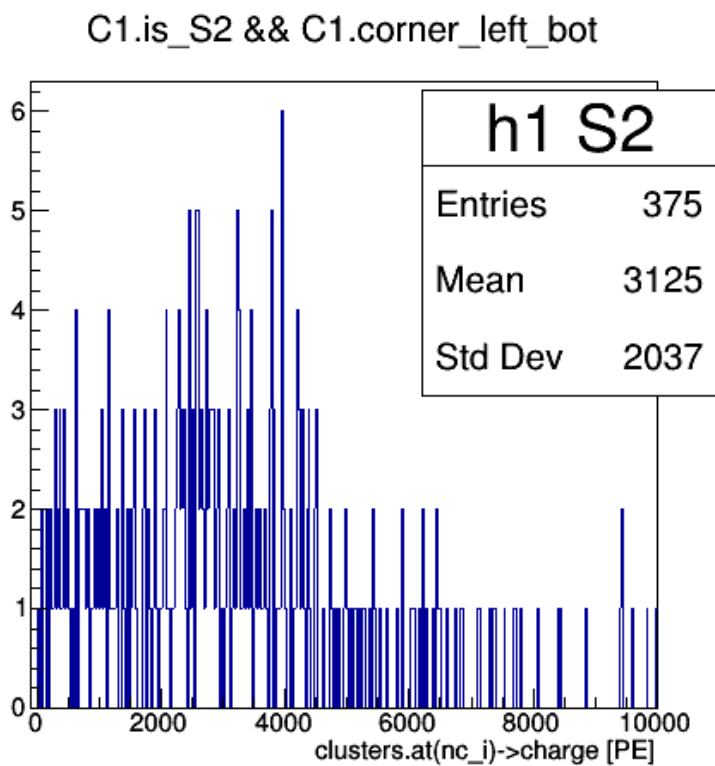
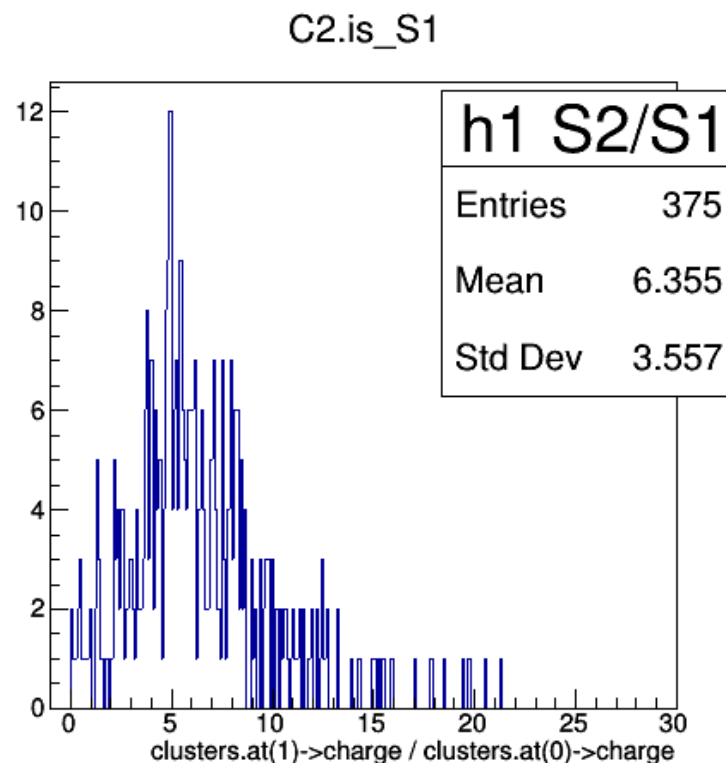
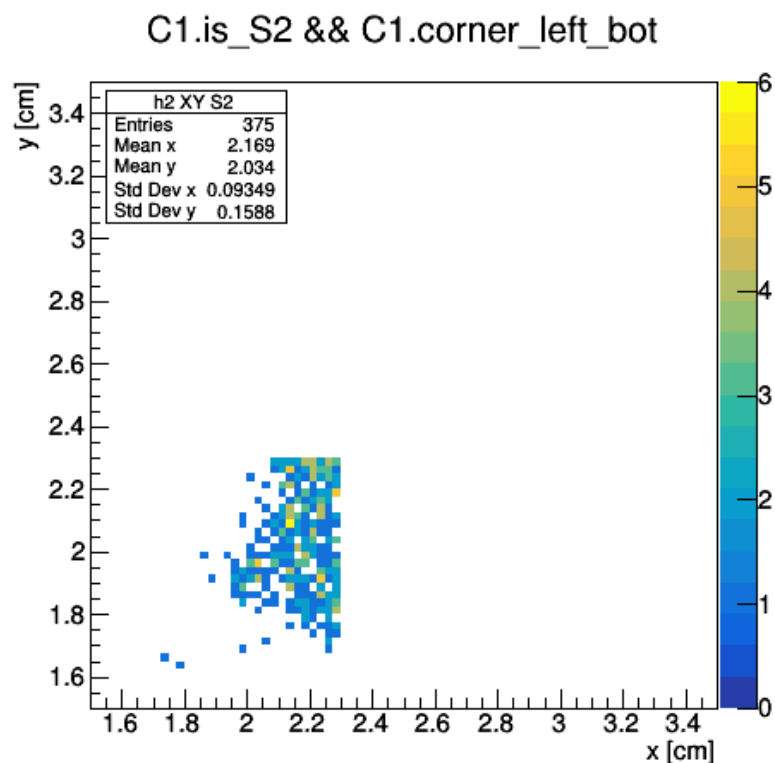
C2.is\_S1



(redefinition of corners)



(redefinition of corners)

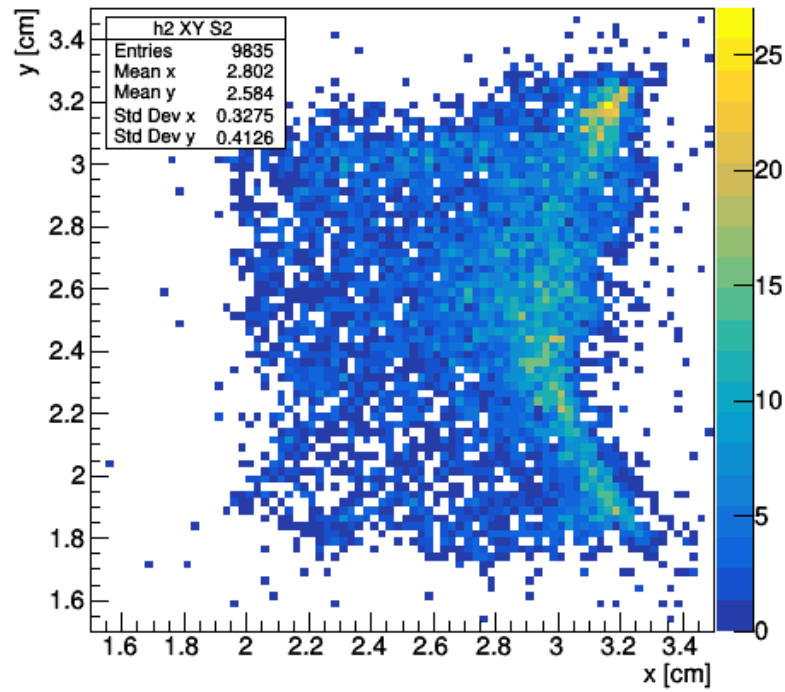


(redefinition of corners)

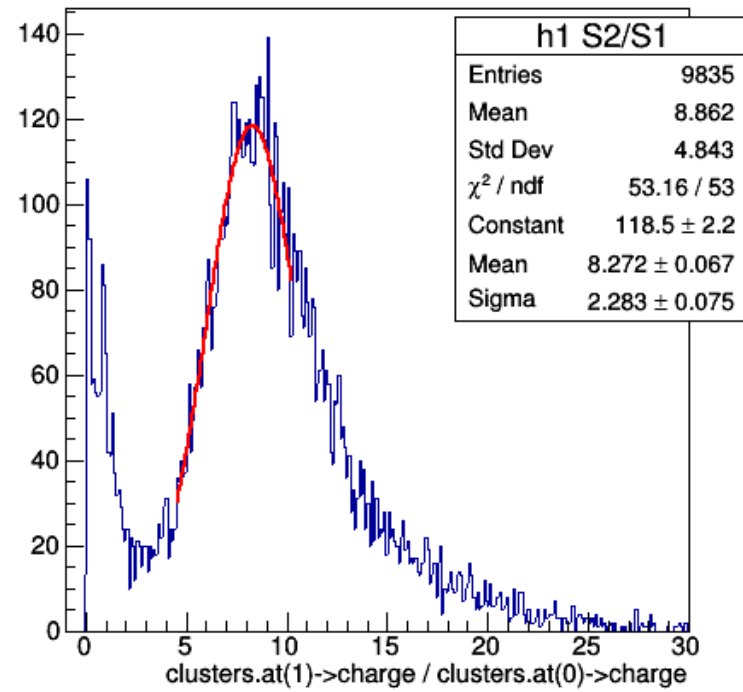
Ph2, Am241, run 544



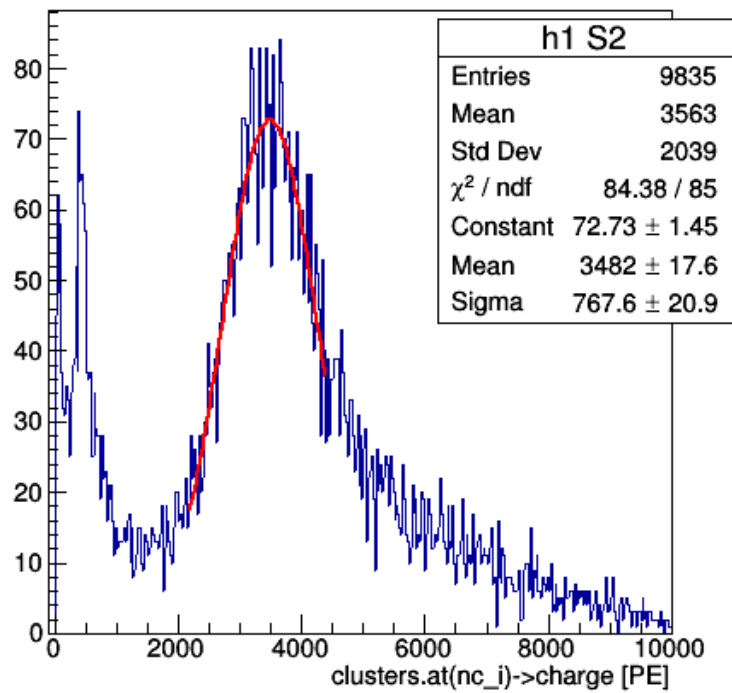
C1.is\_S2



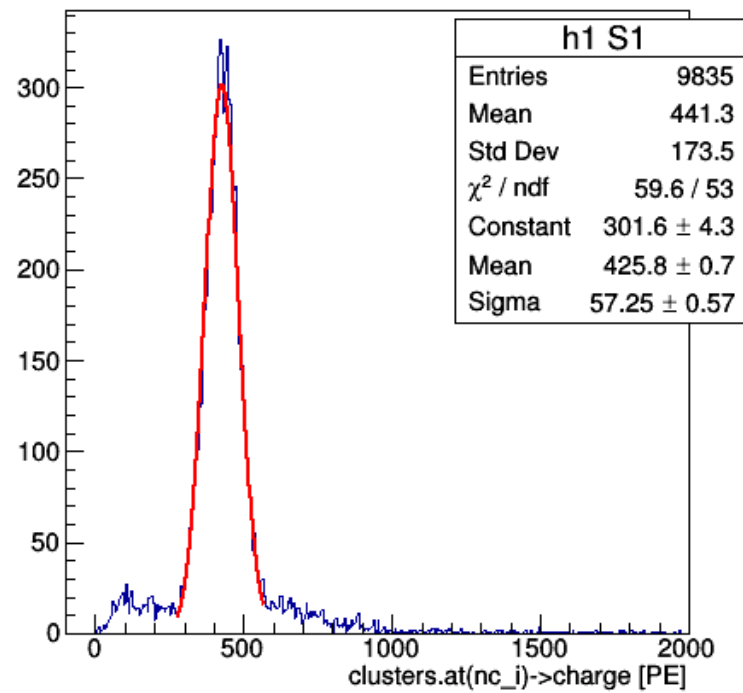
C2.is\_S1



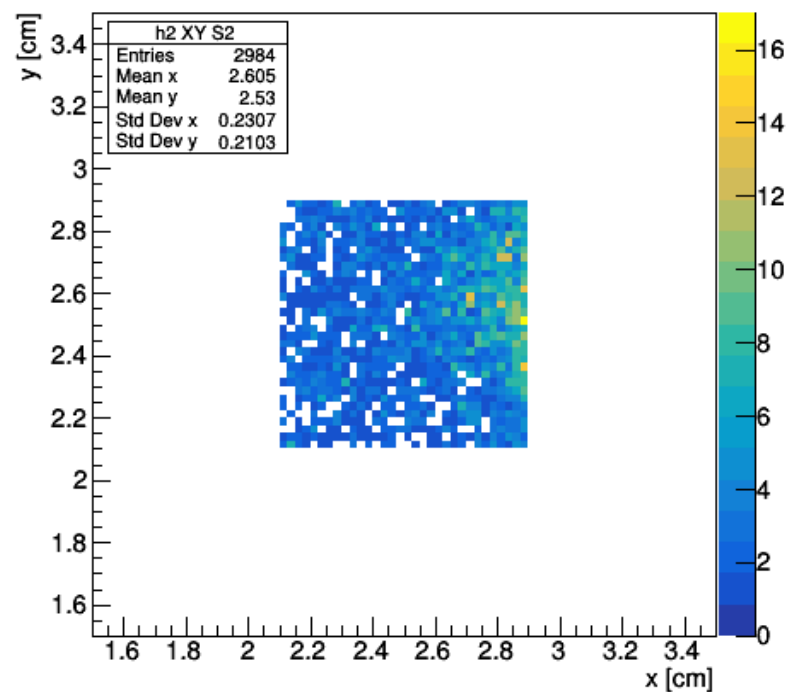
C1.is\_S2



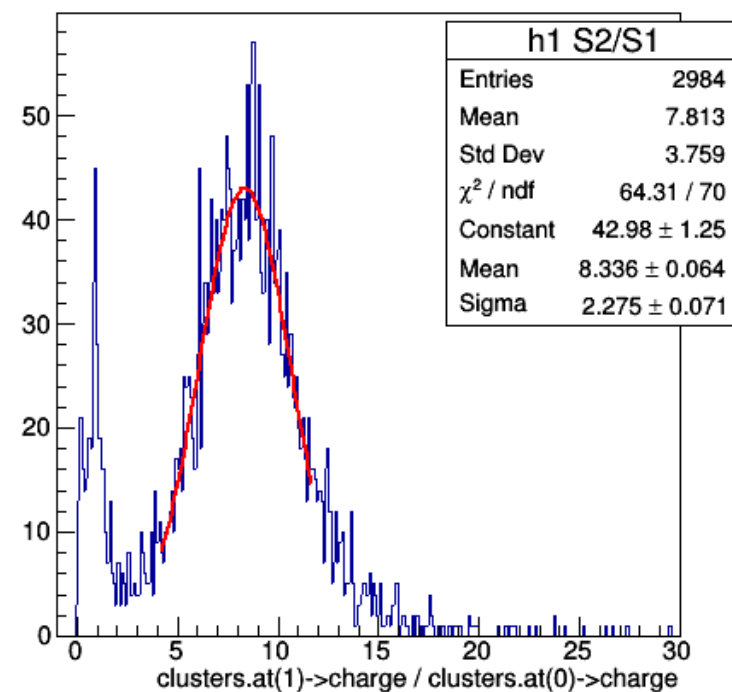
C2.is\_S1



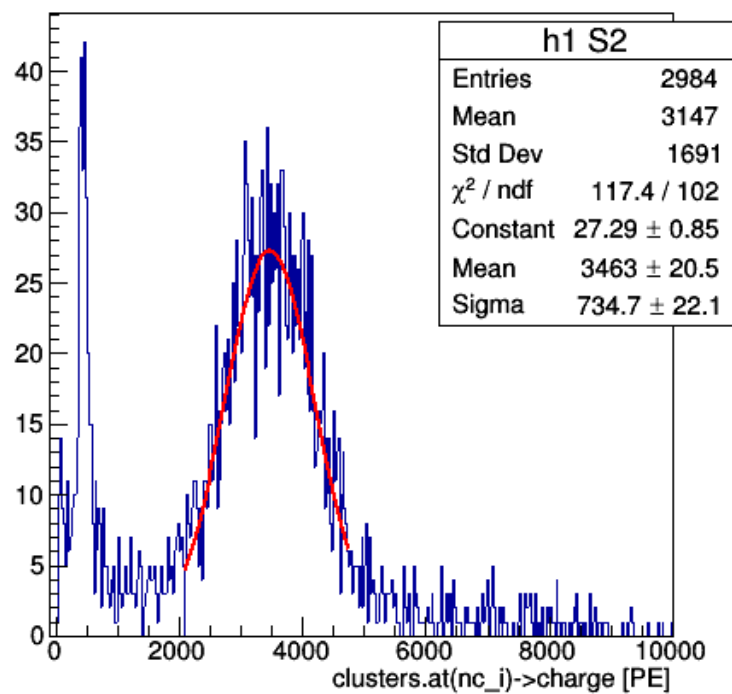
C1.is\_S2 &amp;&amp; C1.cent\_spot



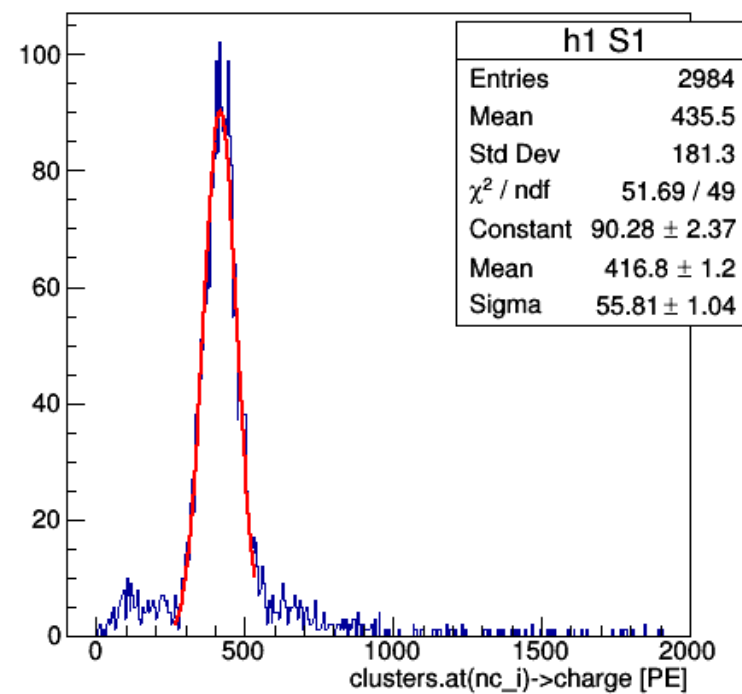
C2.is\_S1



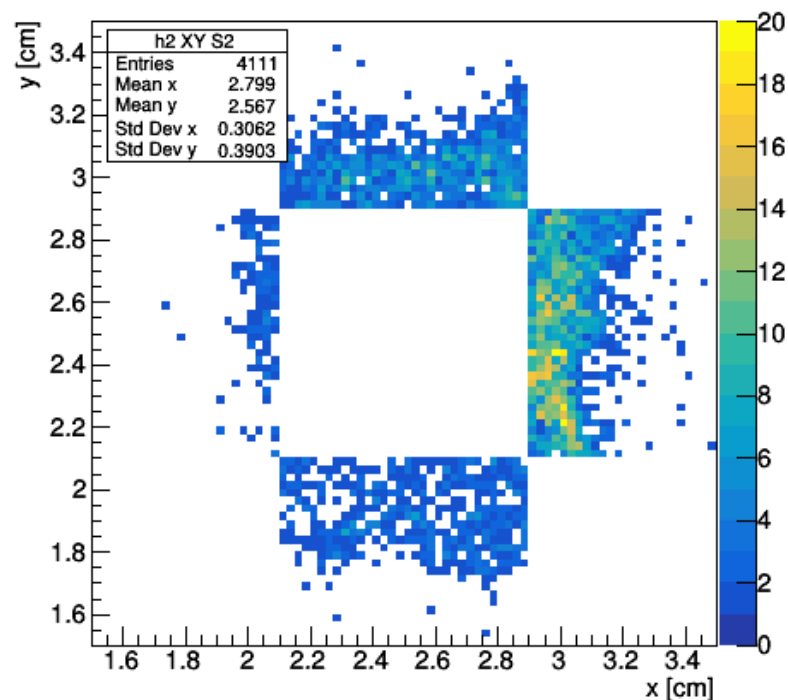
C1.is\_S2 &amp;&amp; C1.cent\_spot



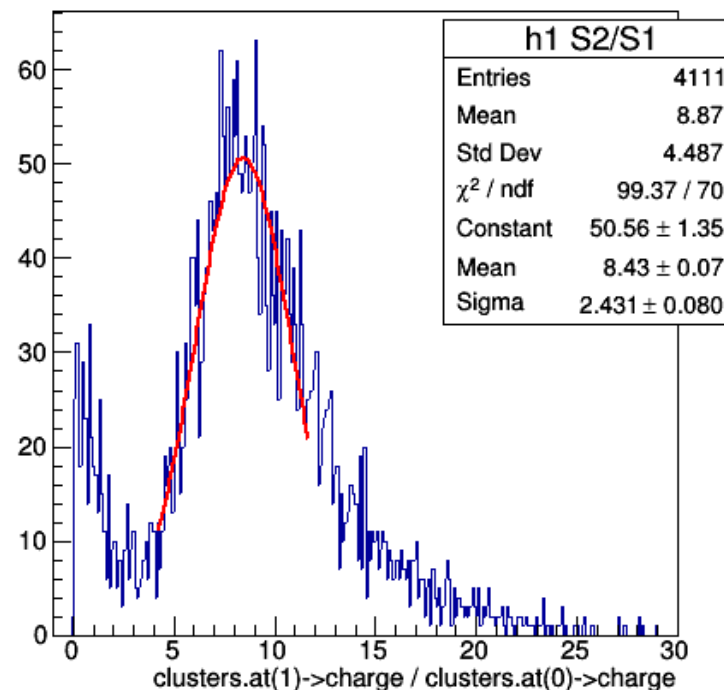
C2.is\_S1



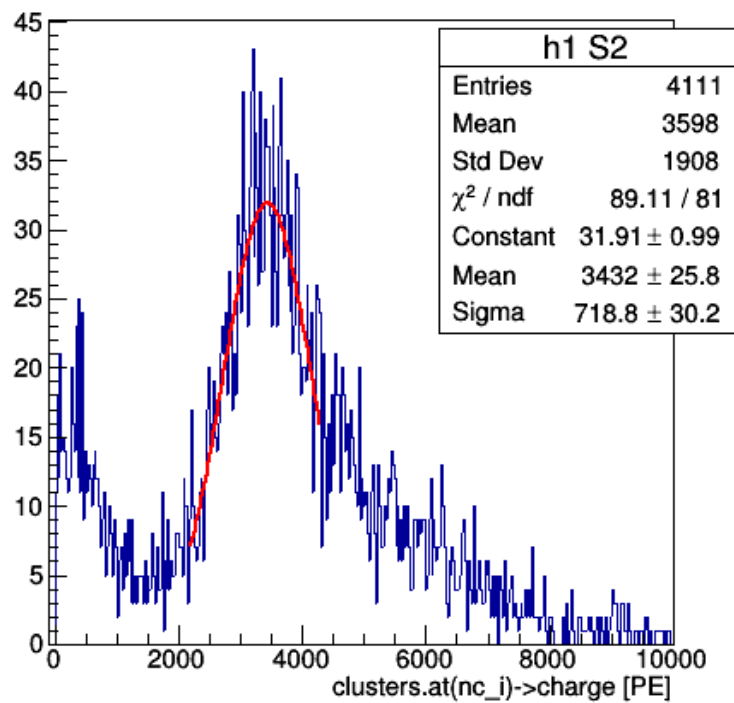
C1.is\_S2 &amp;&amp; C1.edges



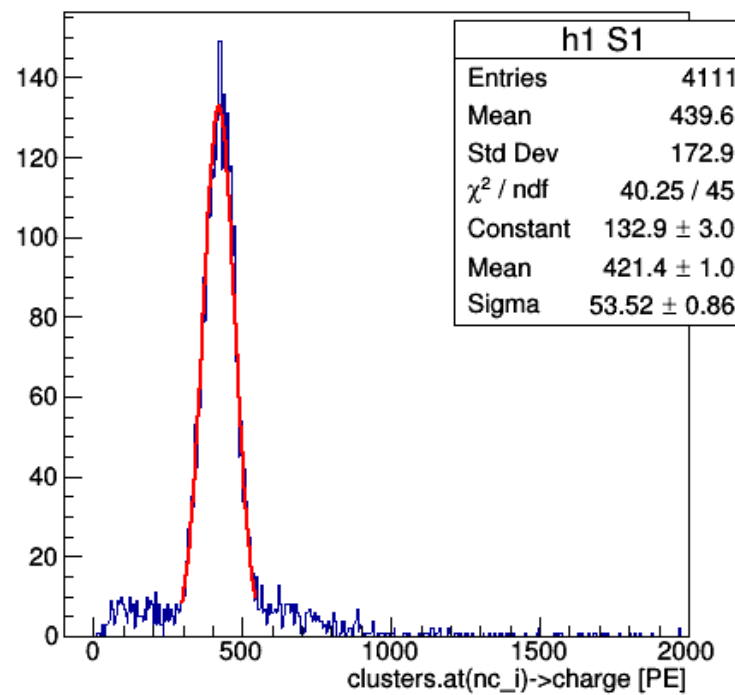
C2.is\_S1



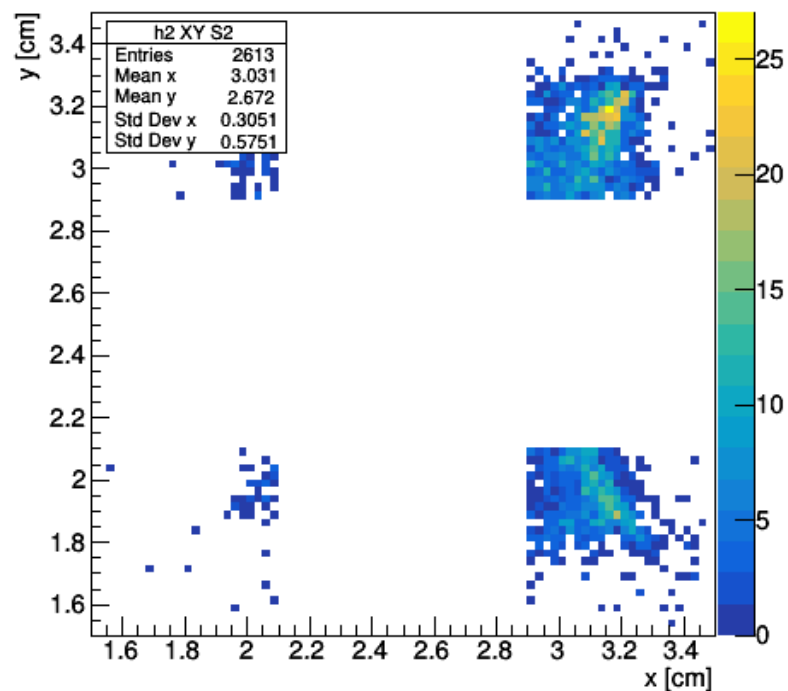
C1.is\_S2 &amp;&amp; C1.edges



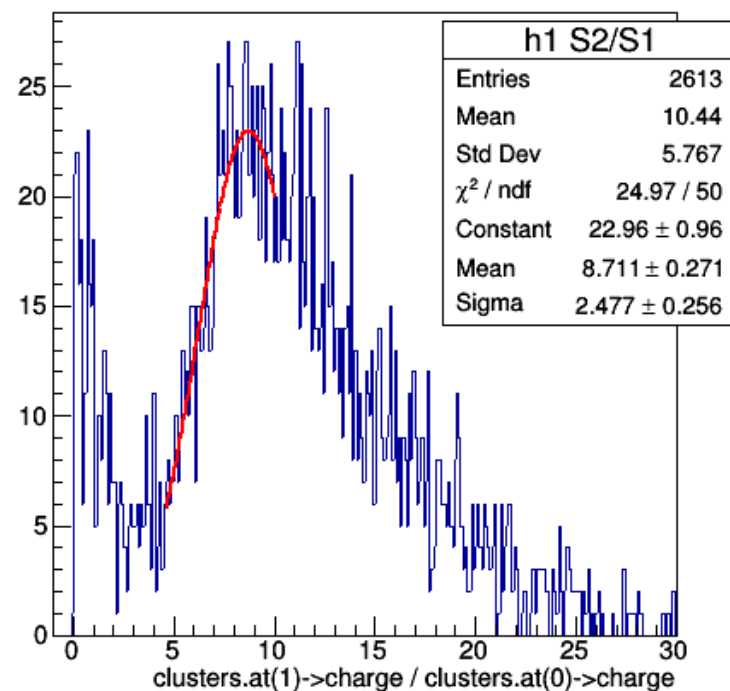
C2.is\_S1



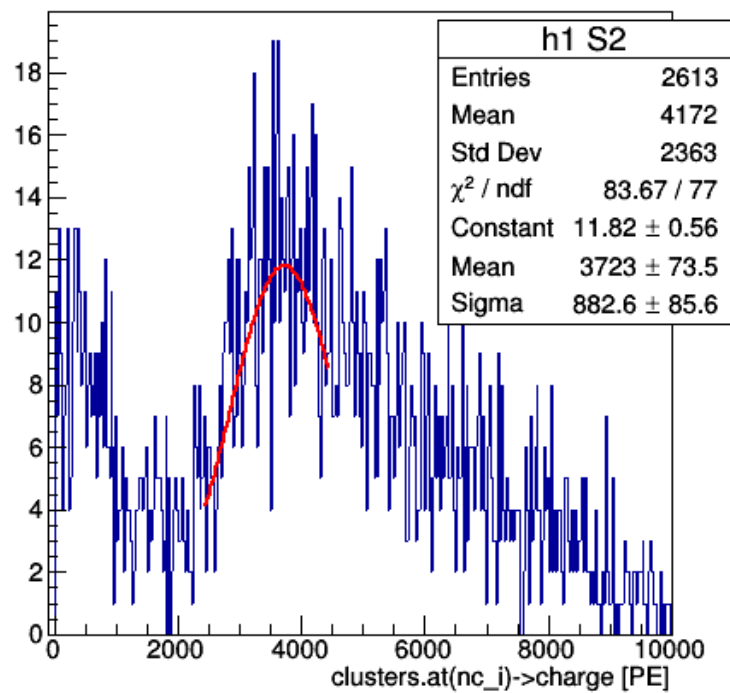
C1.is\_S2 &amp;&amp; C1.corners



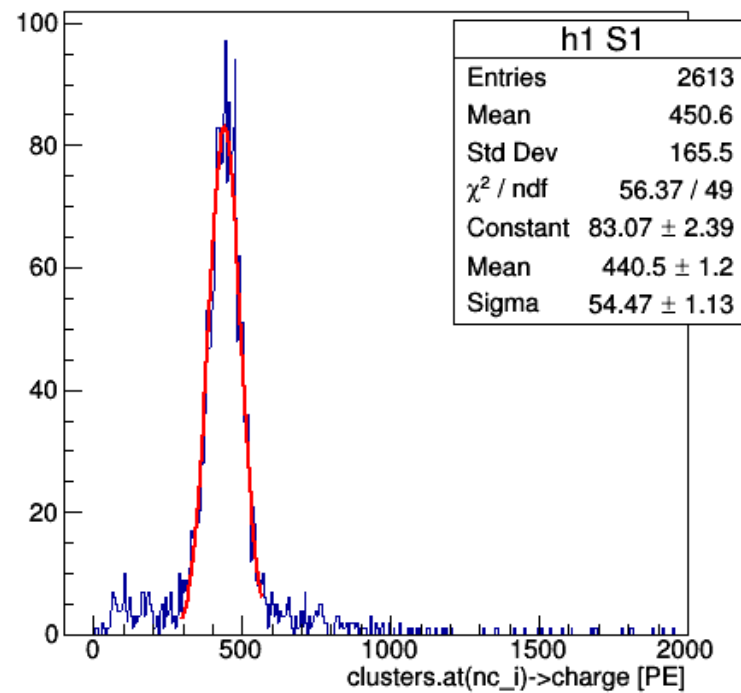
C2.is\_S1



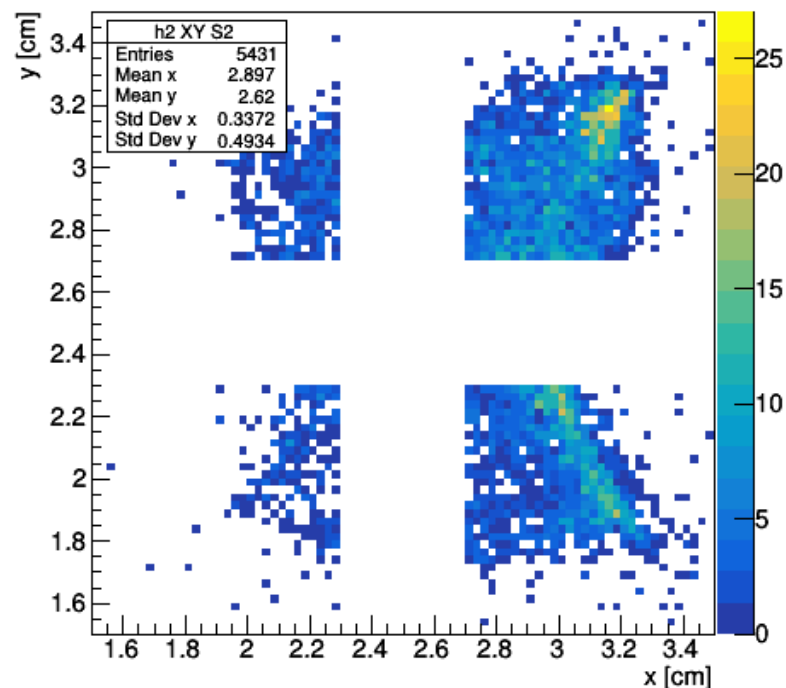
C1.is\_S2 &amp;&amp; C1.corners



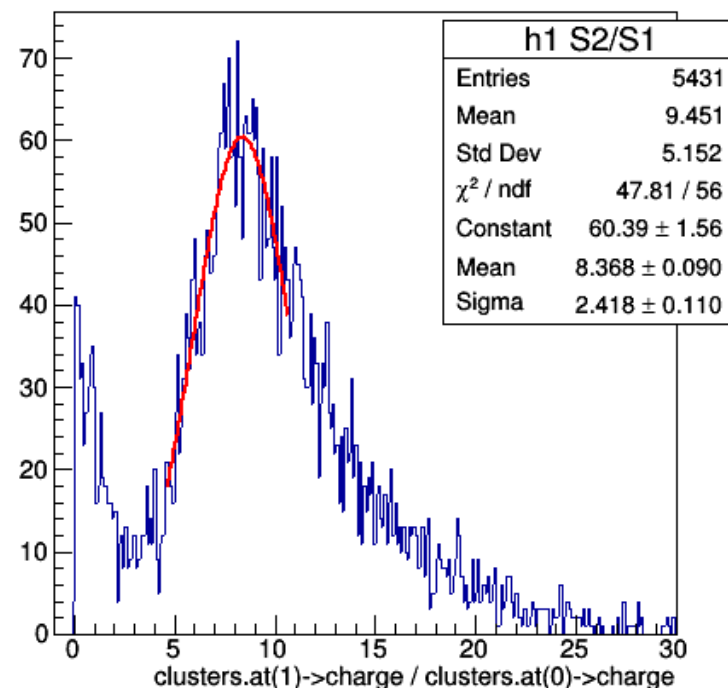
C2.is\_S1



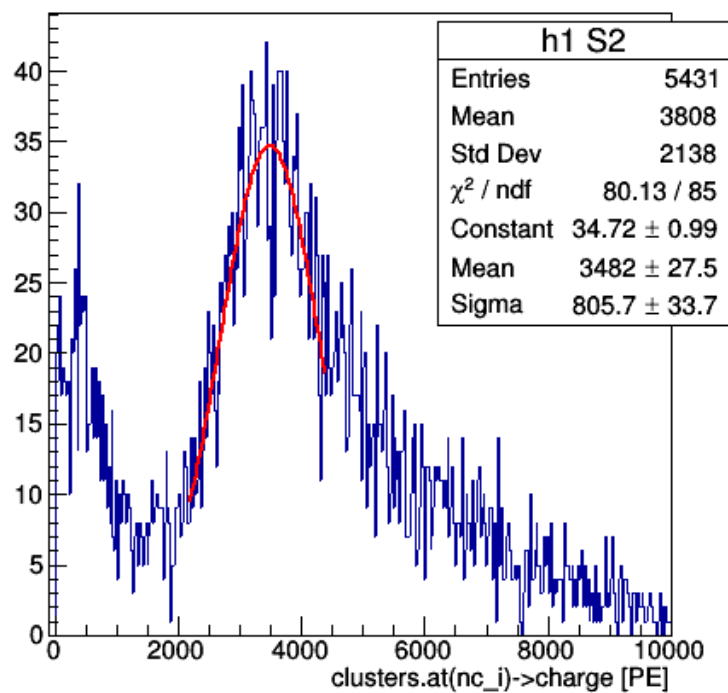
C1.is\_S2 &amp;&amp; C1.corners



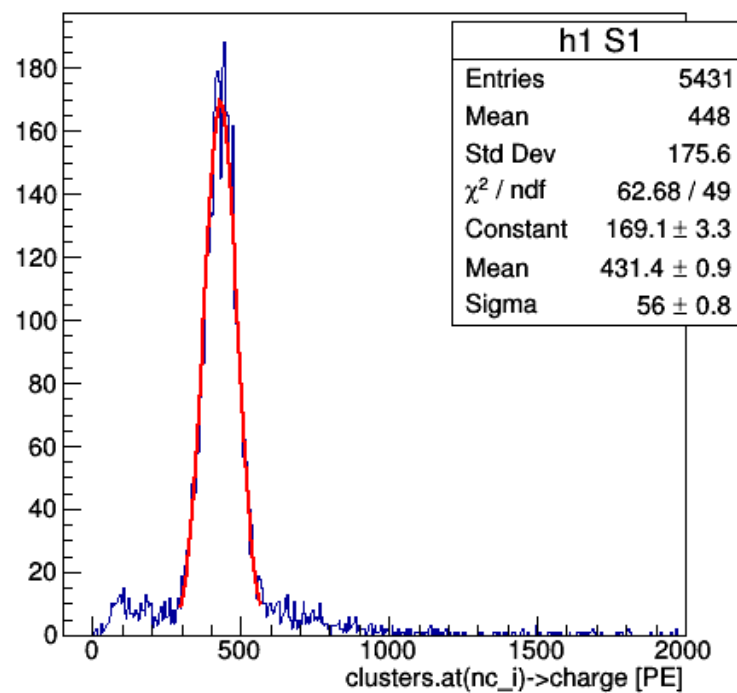
C2.is\_S1



C1.is\_S2 &amp;&amp; C1.corners

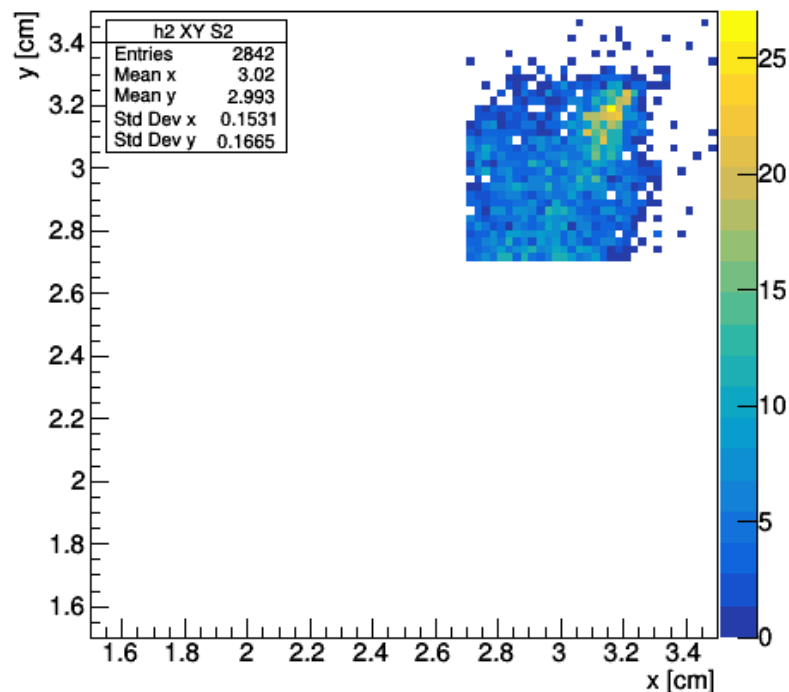


C2.is\_S1

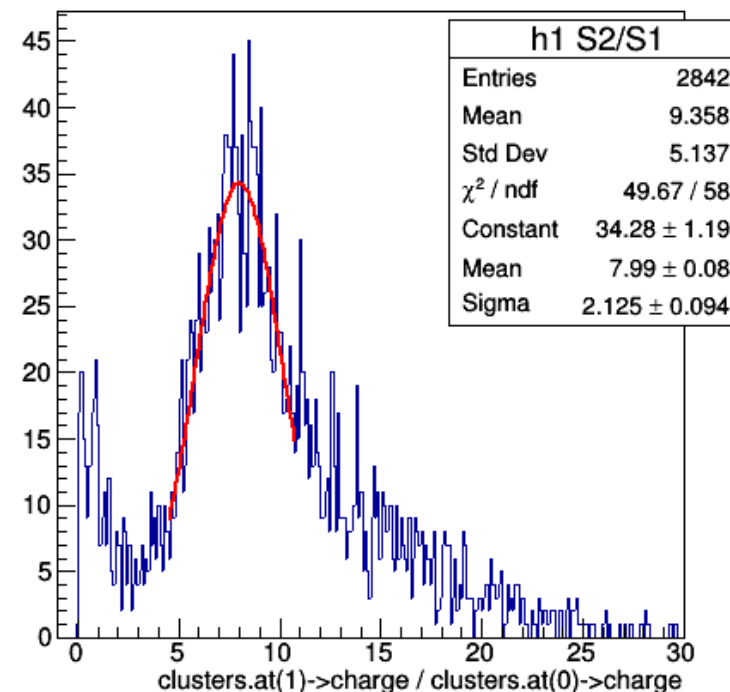


(redefinition of corners)

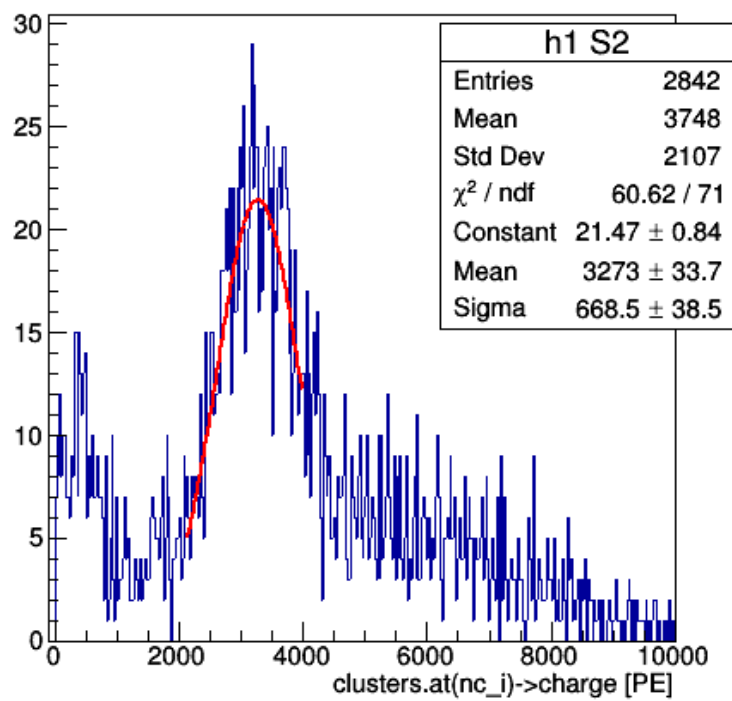
C1.is\_S2 &amp;&amp; C1.corner\_right\_top



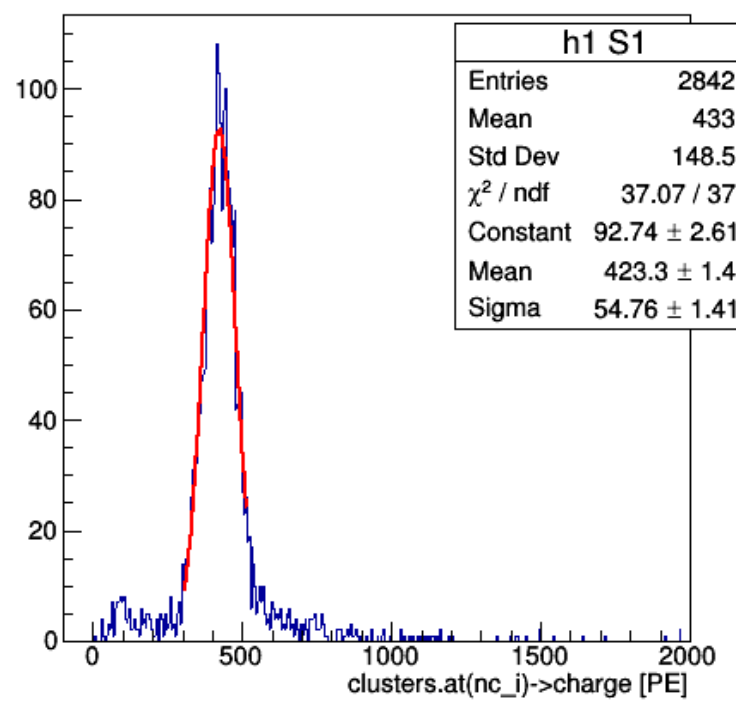
C2.is\_S1



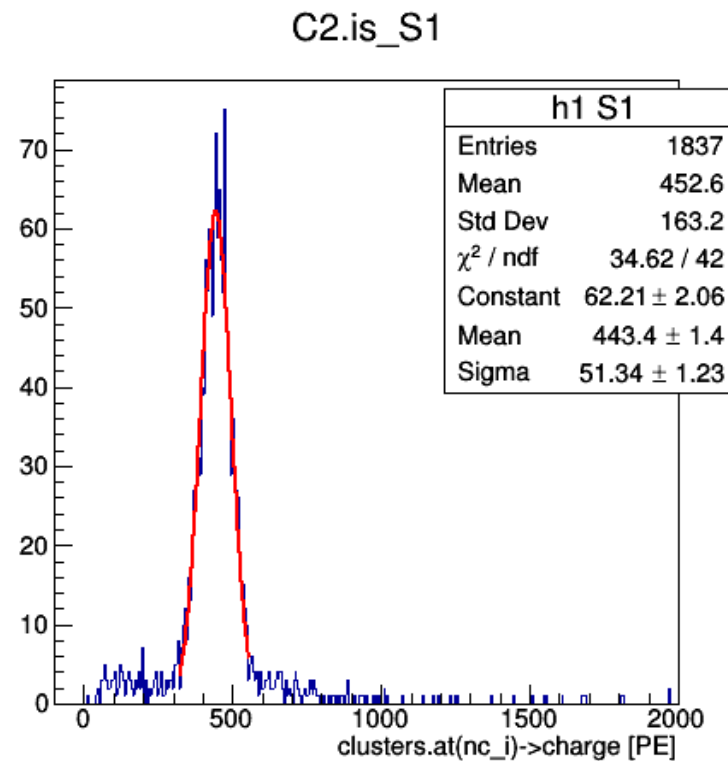
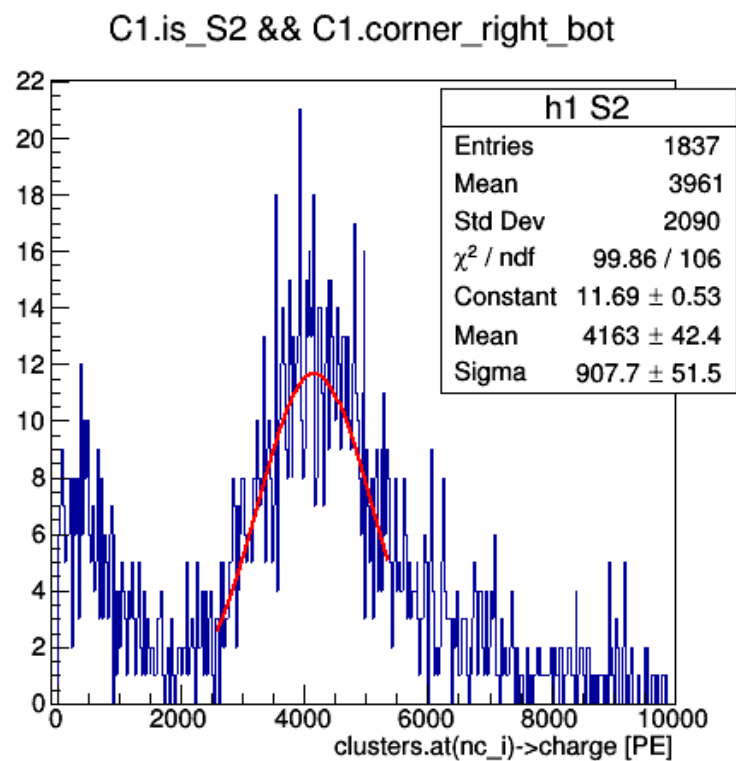
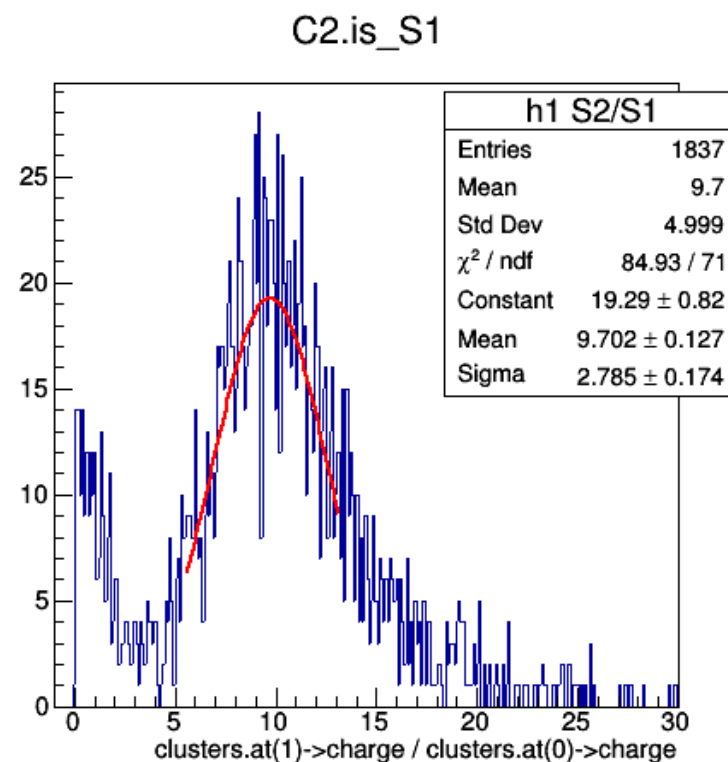
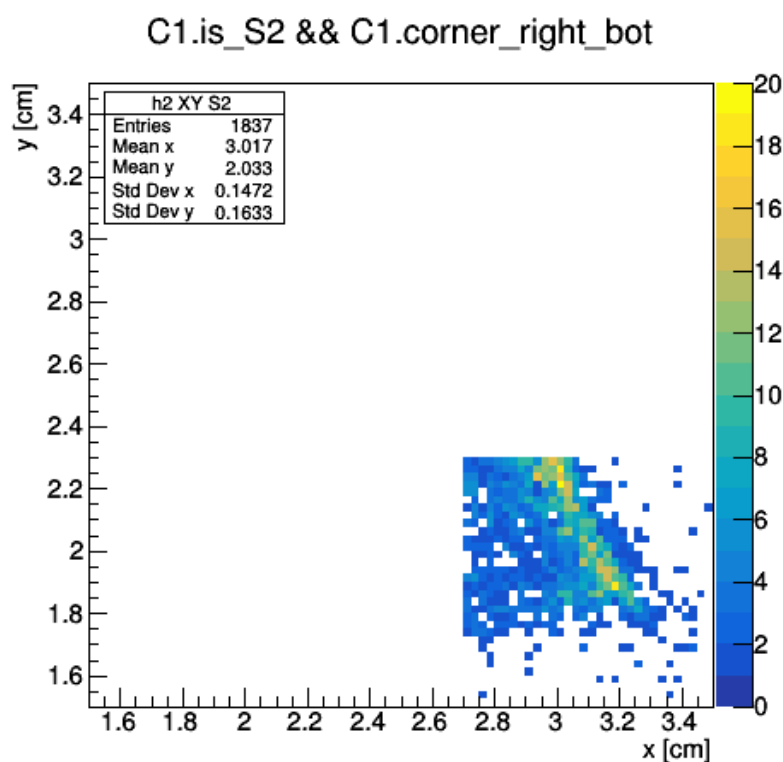
C1.is\_S2 &amp;&amp; C1.corner\_right\_top



C2.is\_S1

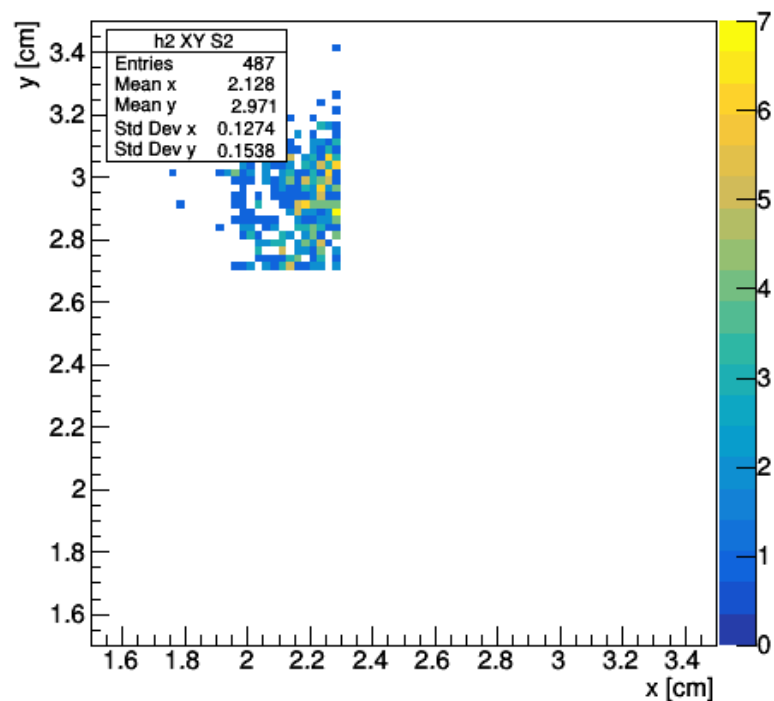


(redefinition of corners)

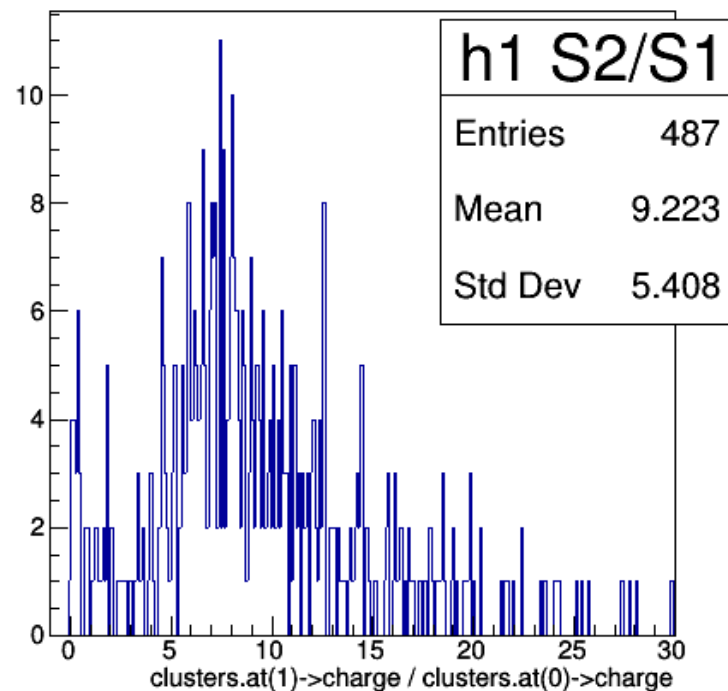


(redefinition of corners)

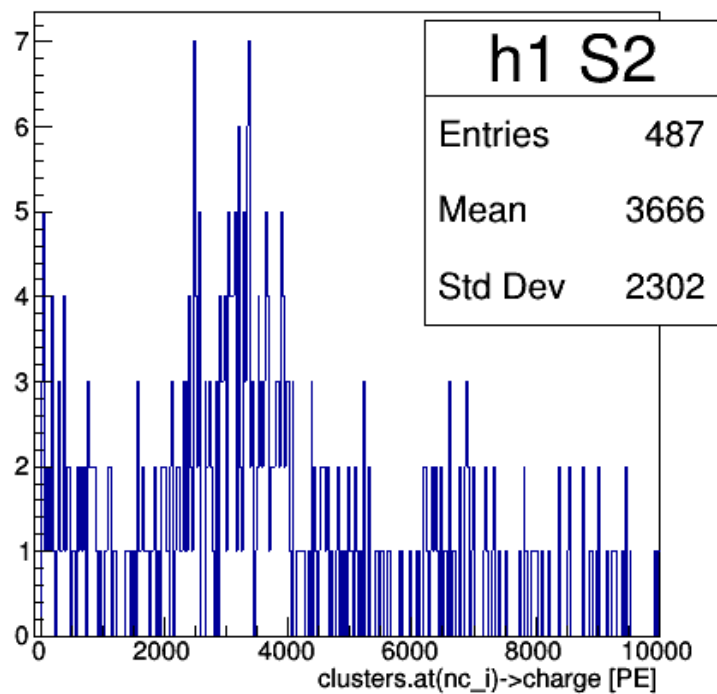
C1.is\_S2 &amp;&amp; C1.corner\_left\_top



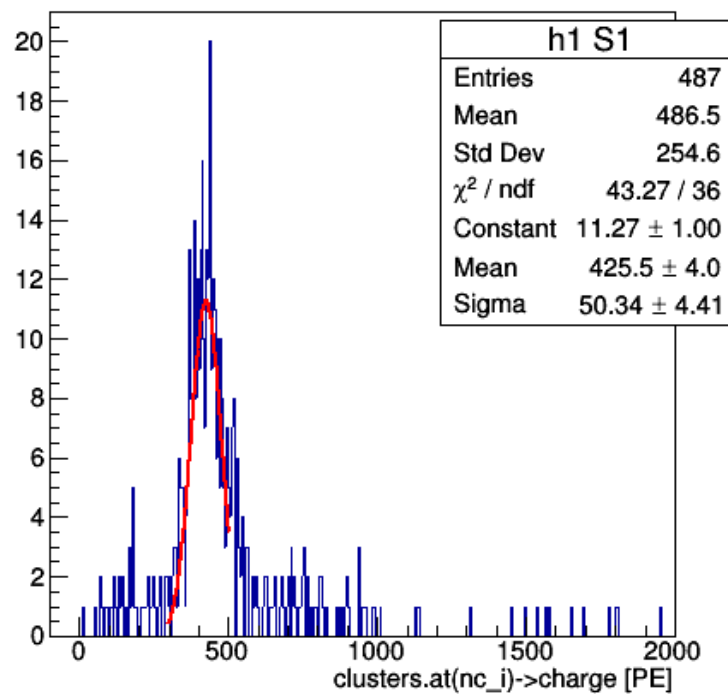
C2.is\_S1



C1.is\_S2 &amp;&amp; C1.corner\_left\_top

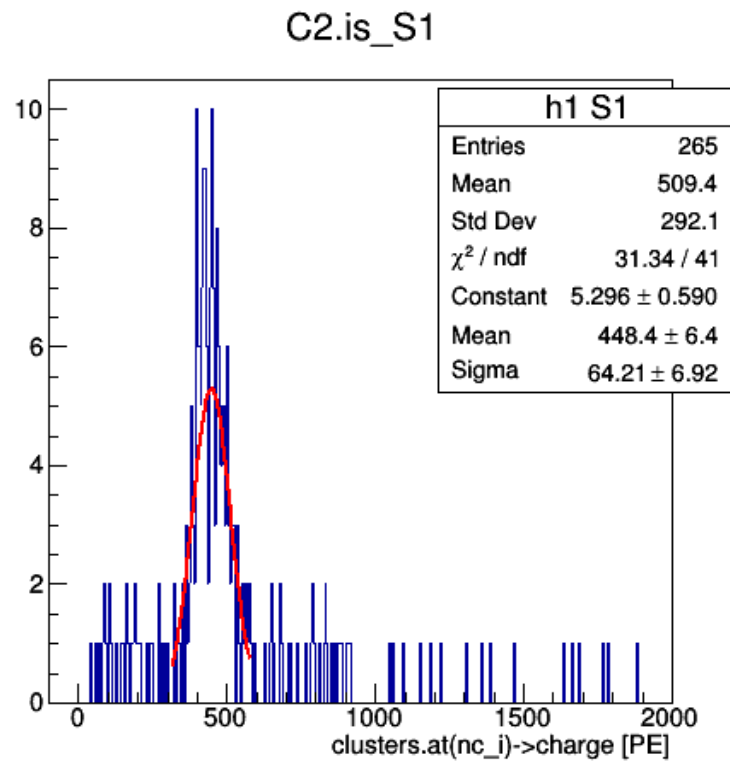
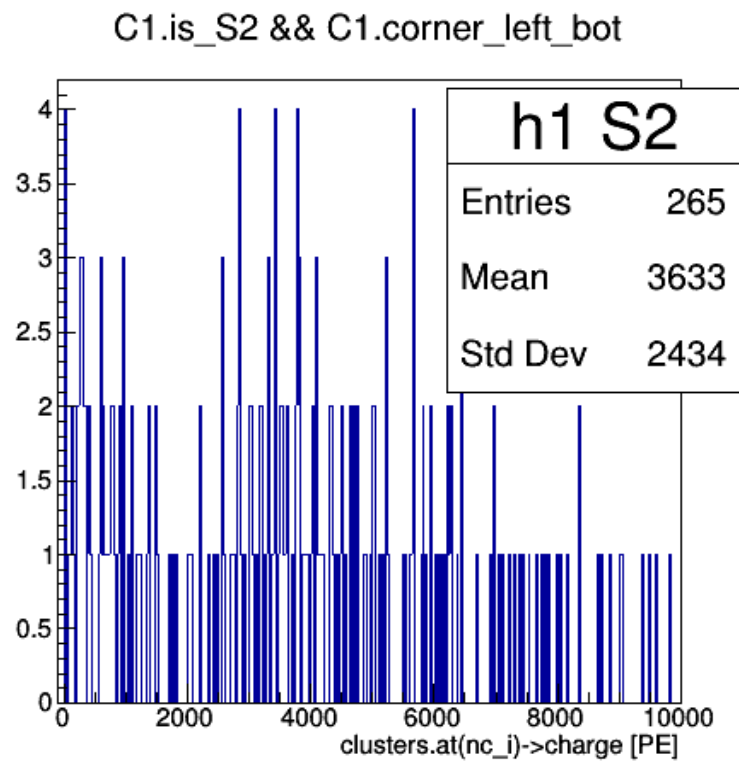
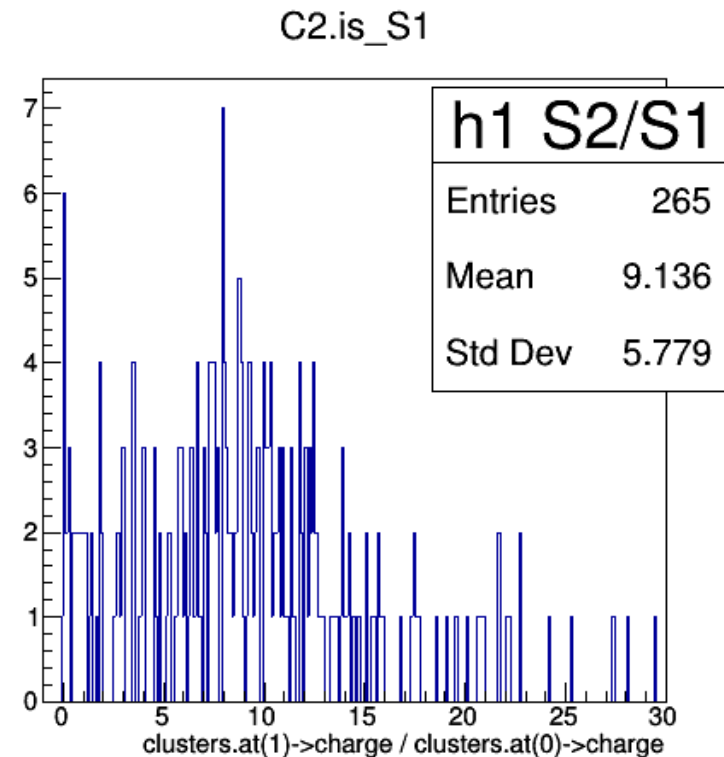
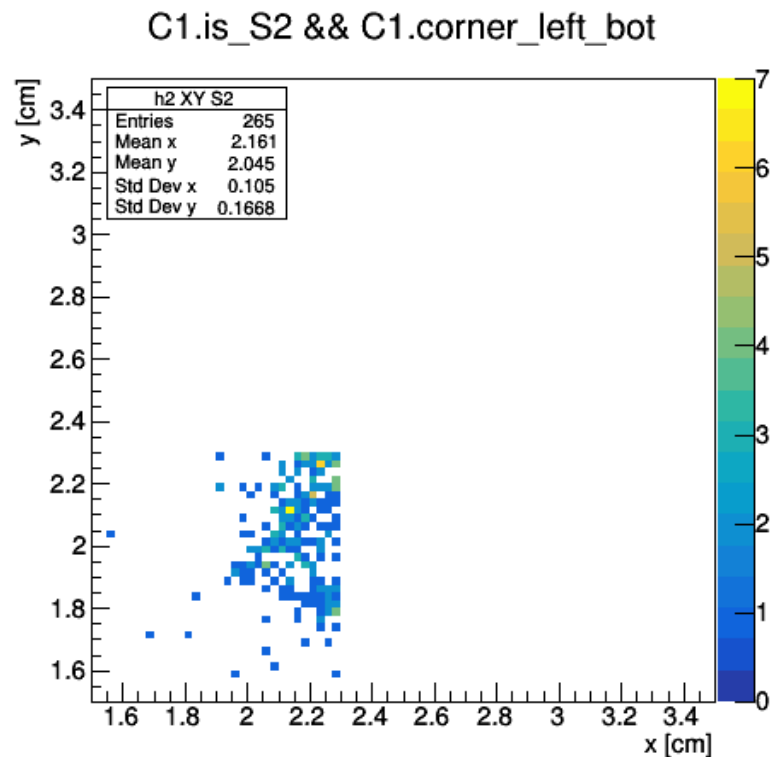


C2.is\_S1



(redefinition of corners)

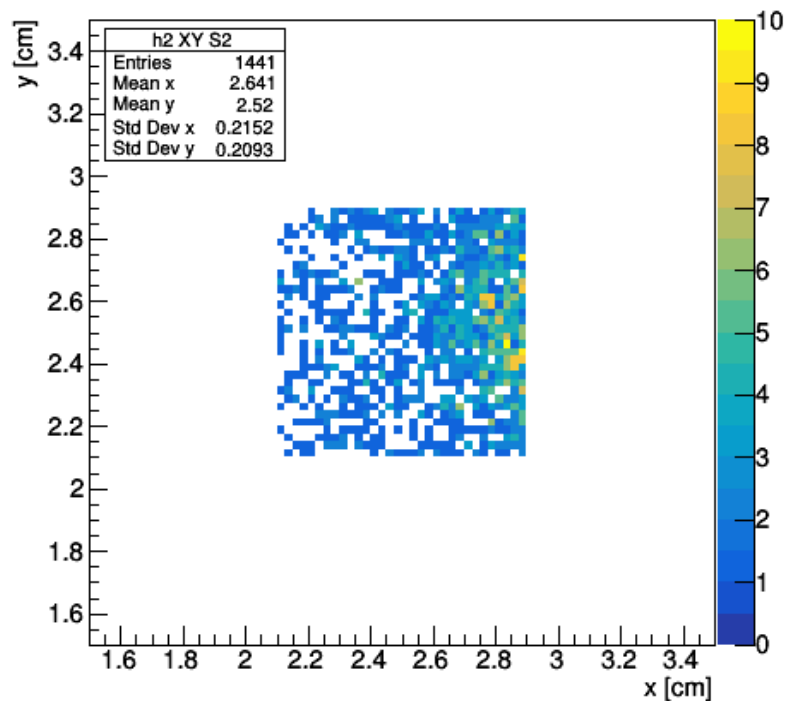




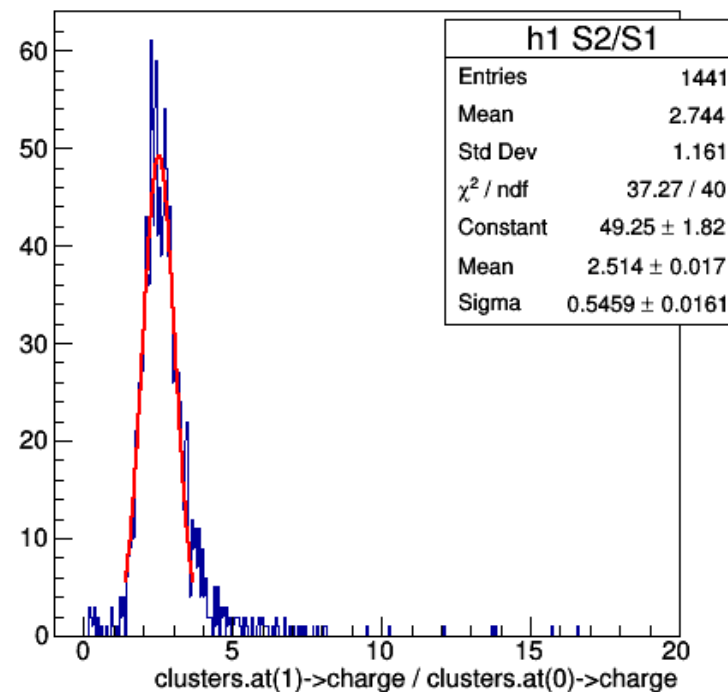
(redefinition of corners)

Ph2, Am241,  
comparison  
(just copies of previous  
slides)

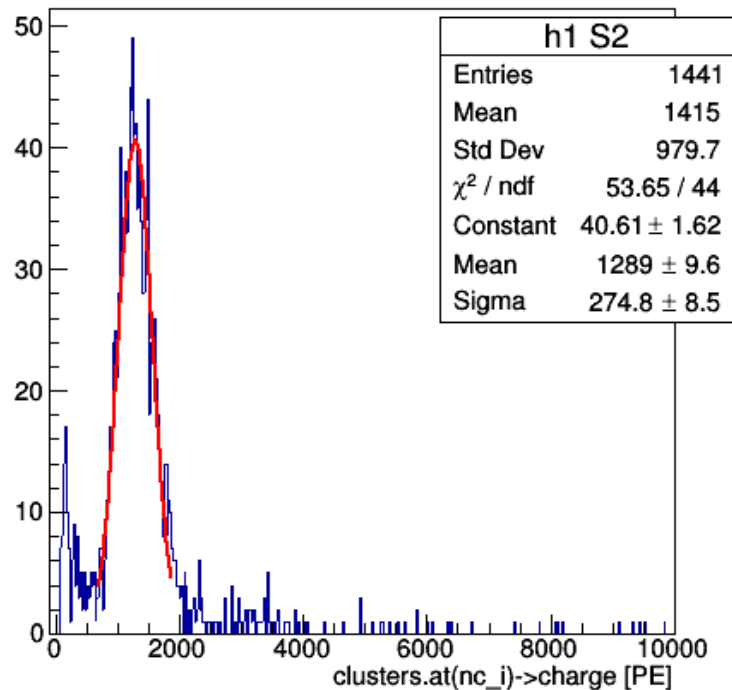
C1.is\_S2 &amp;&amp; C1.cent\_spot



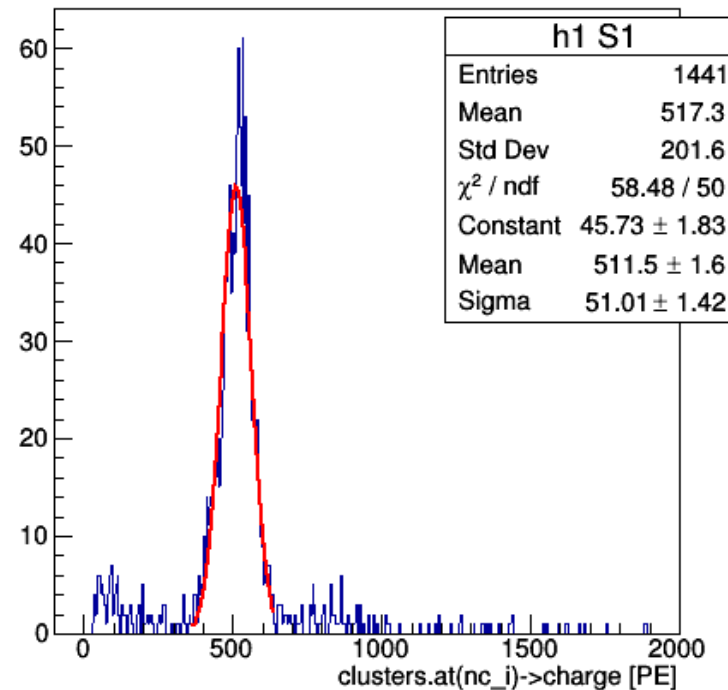
C2.is\_S1

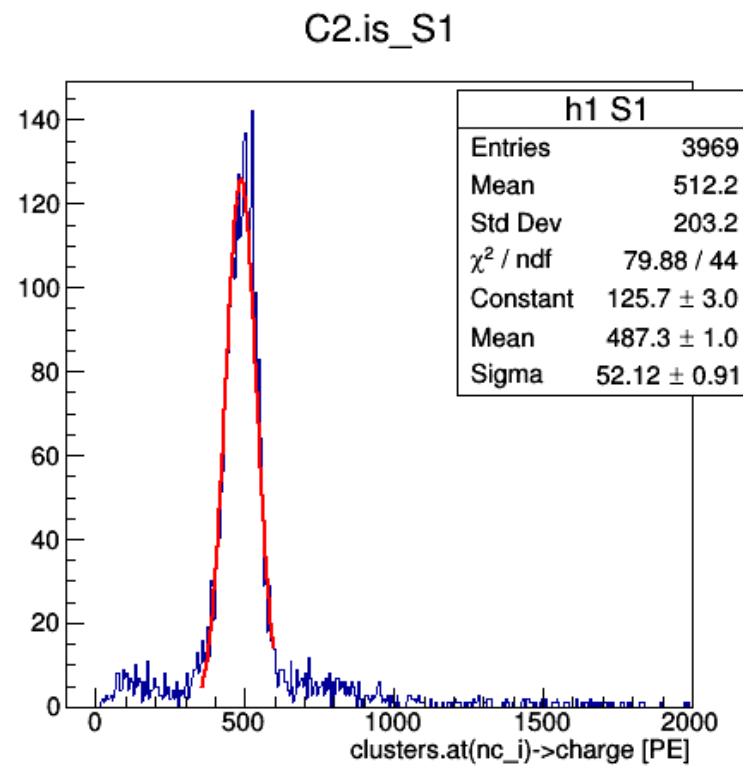
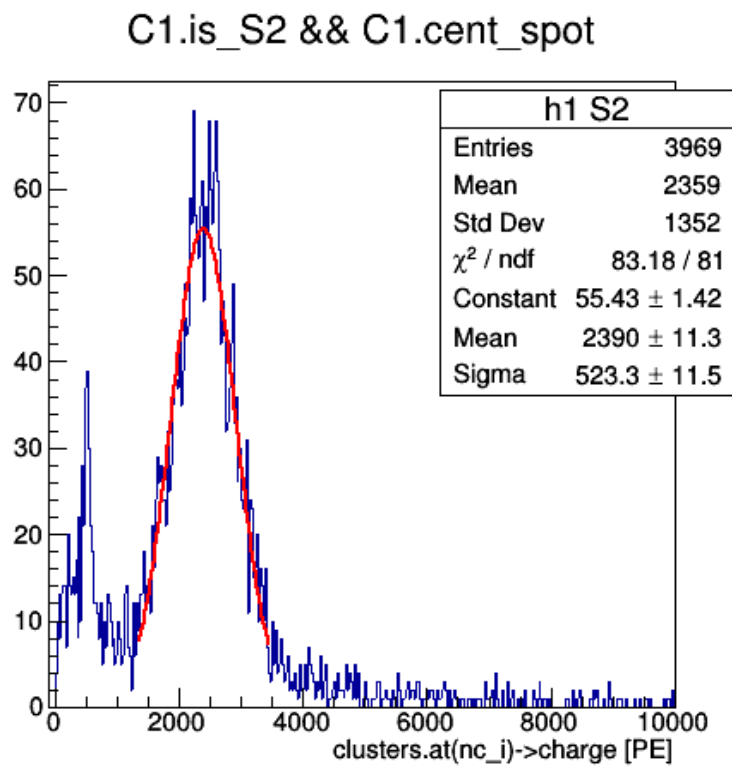
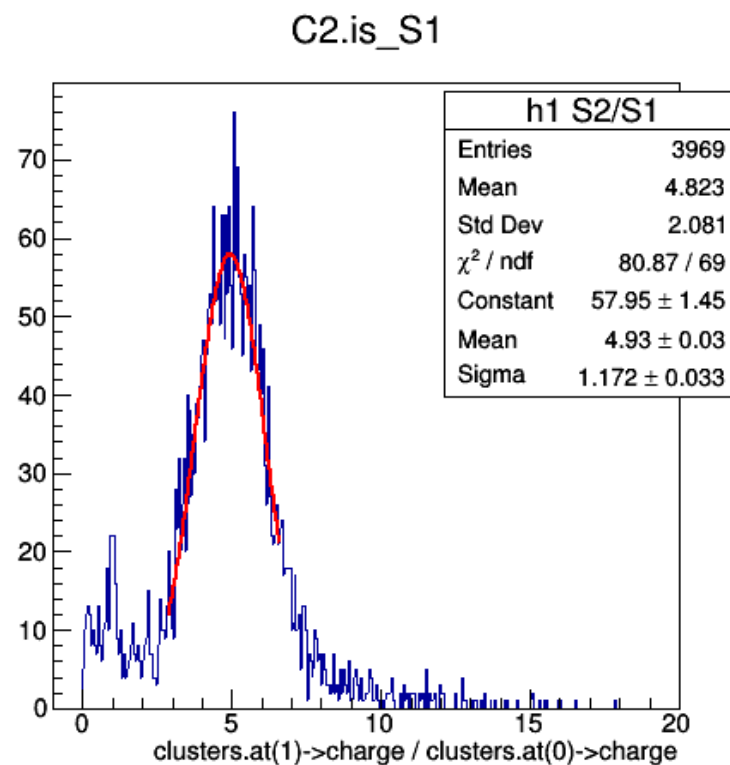
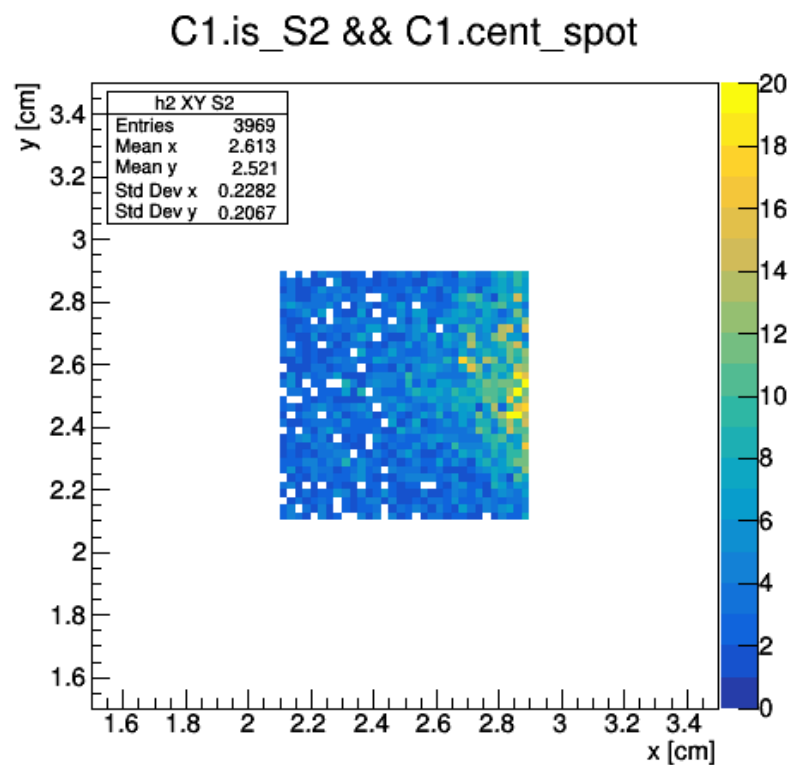


C1.is\_S2 &amp;&amp; C1.cent\_spot

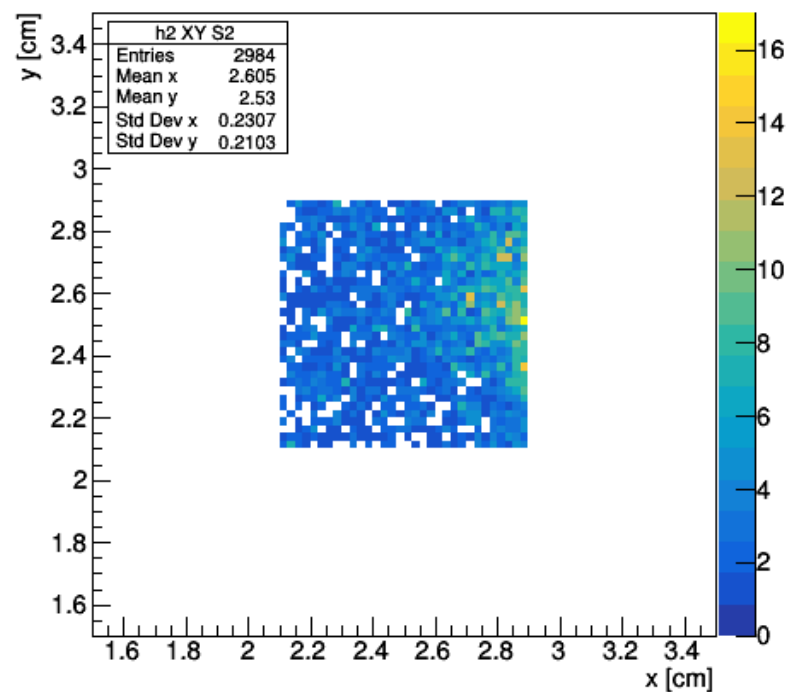


C2.is\_S1

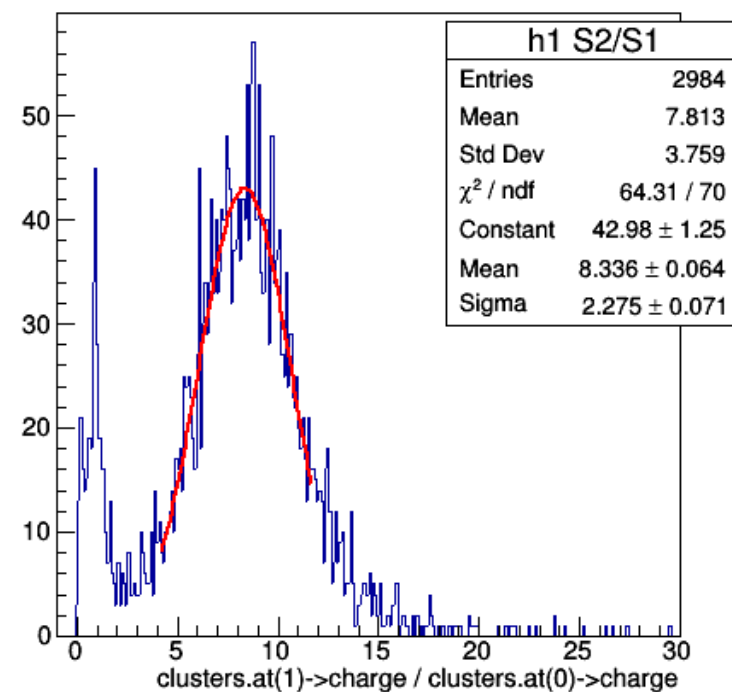




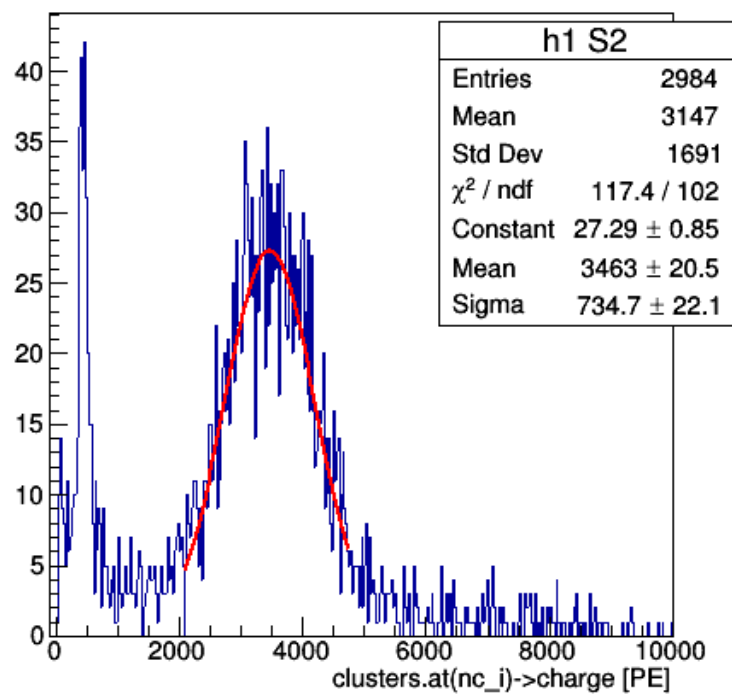
C1.is\_S2 &amp;&amp; C1.cent\_spot



C2.is\_S1



C1.is\_S2 &amp;&amp; C1.cent\_spot



C2.is\_S1

