NIM Paper PID Plots

Nathan Heinrich, 2024 March 7

Finally got good plots for the NIM paper.
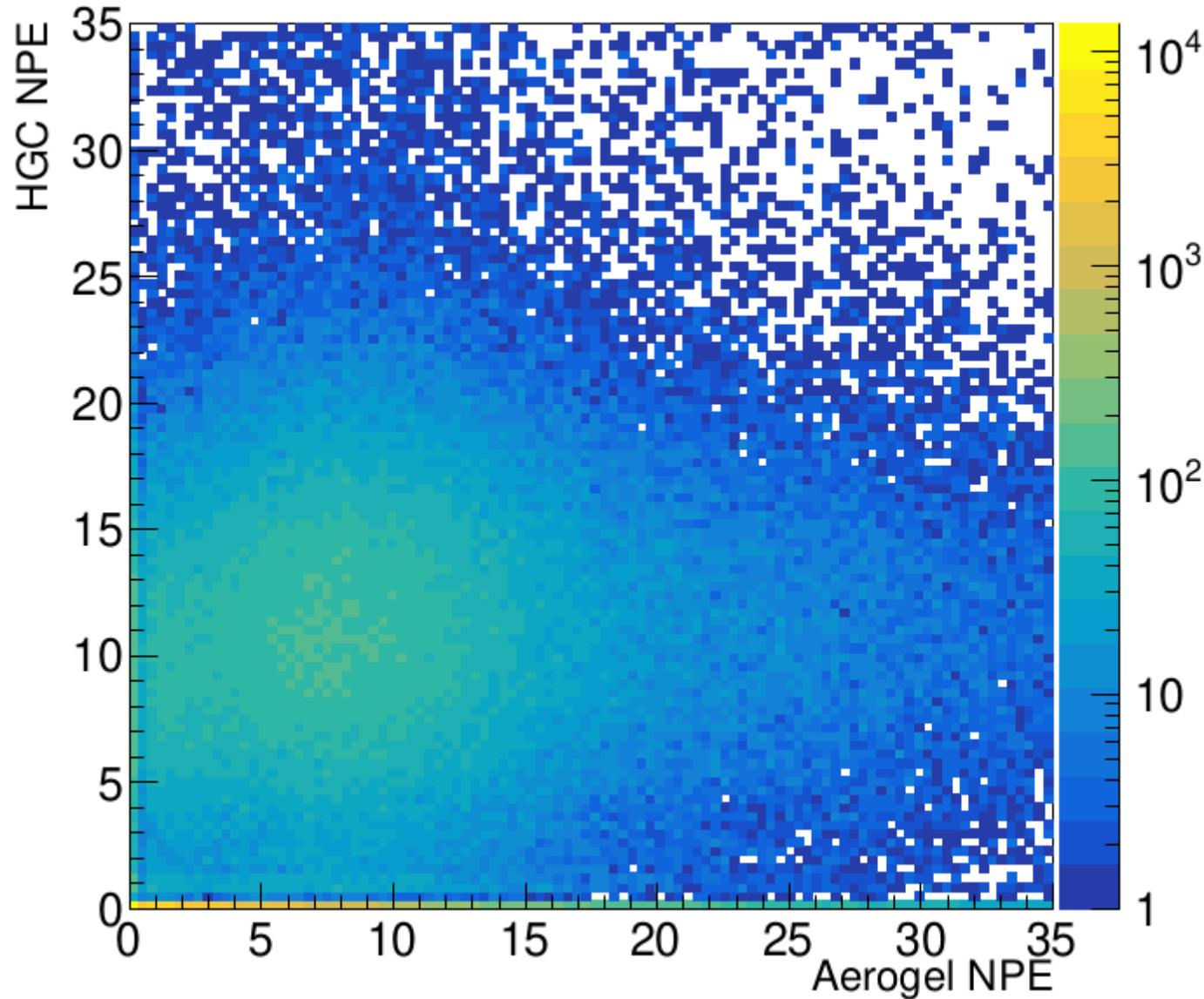Lots of fiddling with root commands to get it to give me what I wanted

Noticed that the zero bin entries in the HGC that Vijay found in KaonLT are still a problem for us in PionLT.

A detailed study should be possible with fADC mode 10 data that we now have.

Not an issue for the H(e,e'pi)n channel as we can avoid using the HGC in our PID, But all other channels will need the HGC.
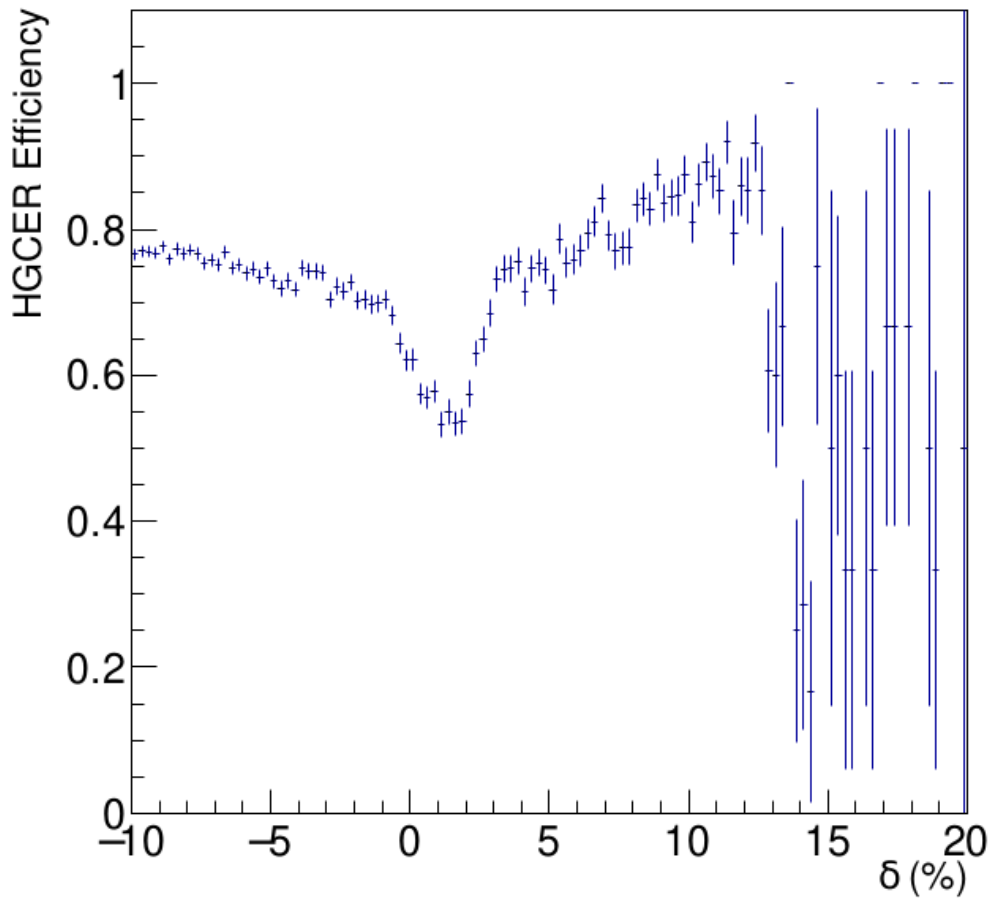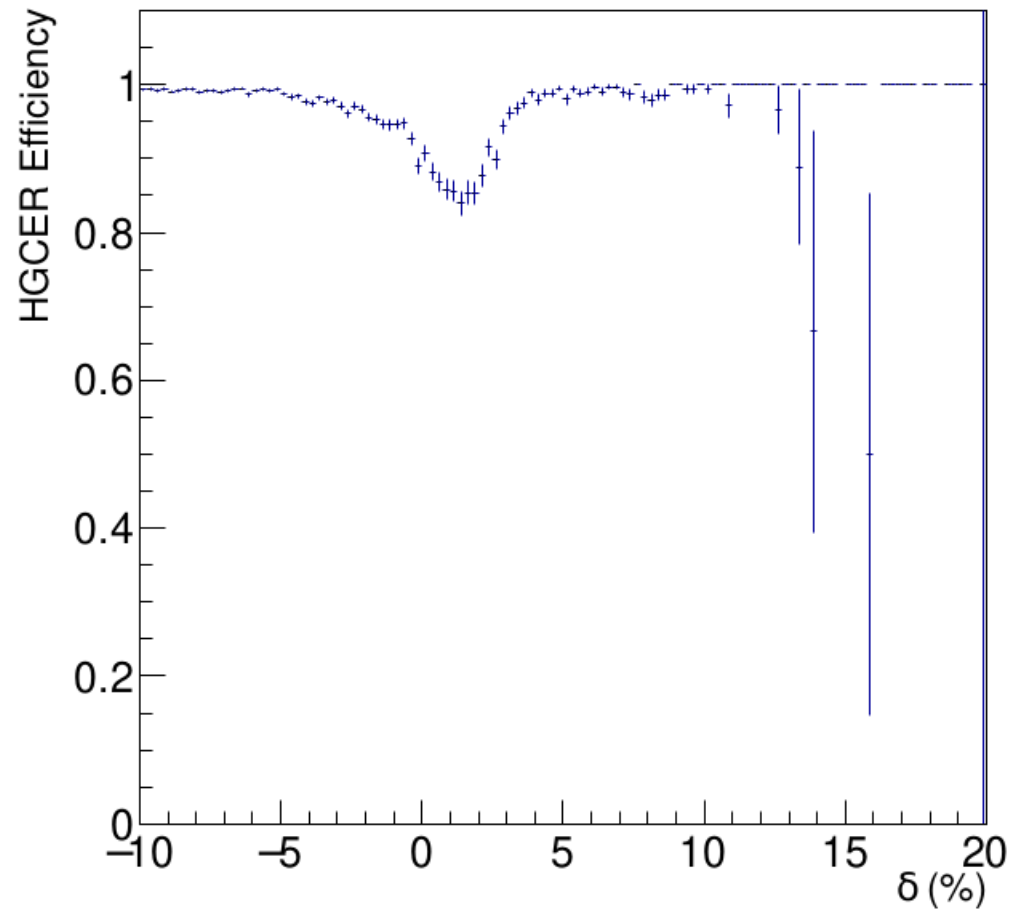
The following are for run 16504 (LH+ prod)

HGC v Aerogel

Notice big zero bin in HGC npe corresponding to large aerogel signal.
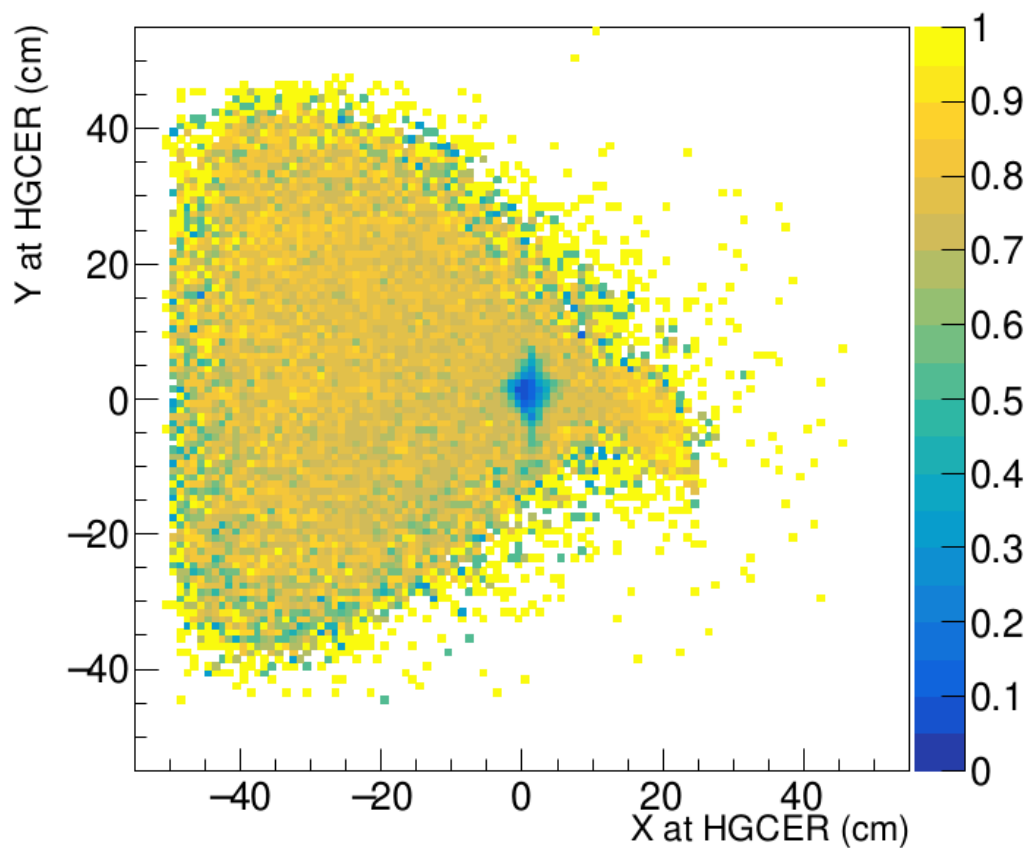
Efficiency vrs delta

Without zero bin cut

With zero bin cut

Efficiency vrs X,Y

Without zero bin cut

With zero bin cut