

Mode 10 Update

Meet with Mark Jones and we got the Amplitude threshold in hcana to read in properly.

Now looking at the plots we can see that there is indeed a large discrepancy between what hcana produces and what the hardware fADC's produces. I have plots from run 11799.

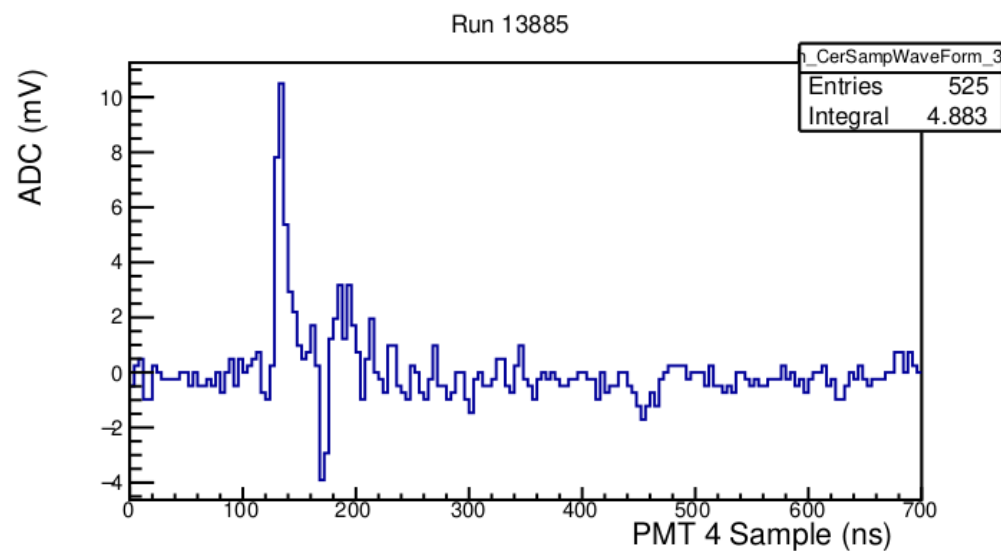
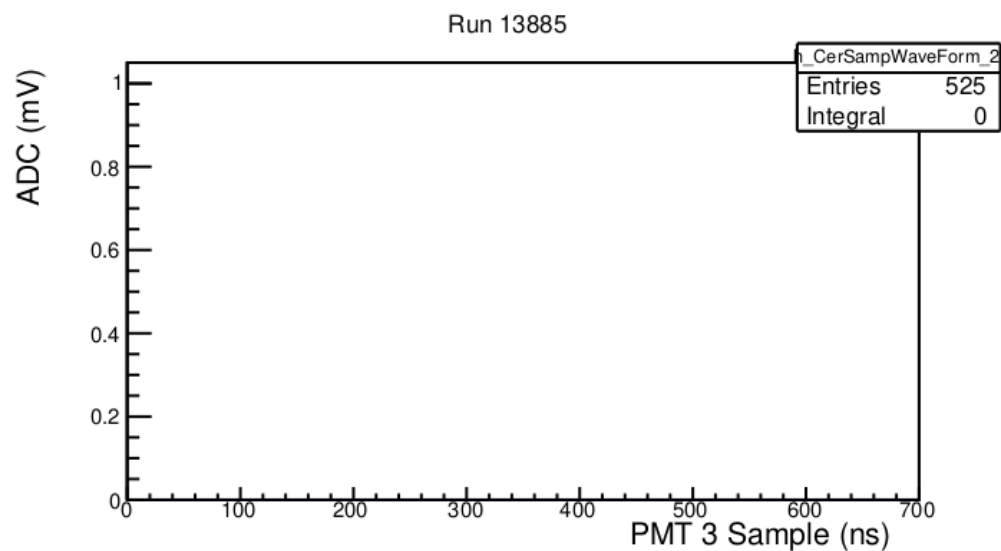
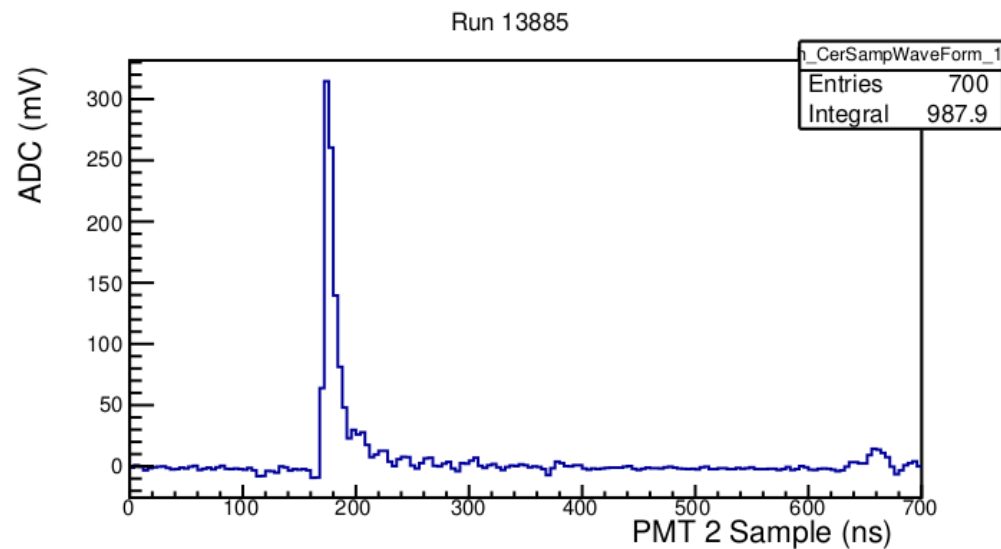
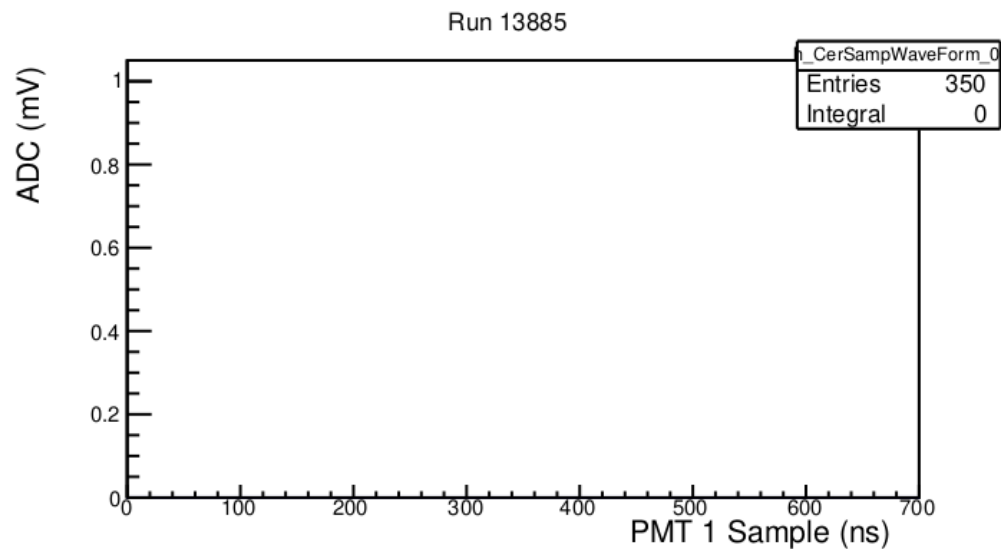
Mark also added the waveform output

In what follow, 'Samp' refers to the software version of the variables.

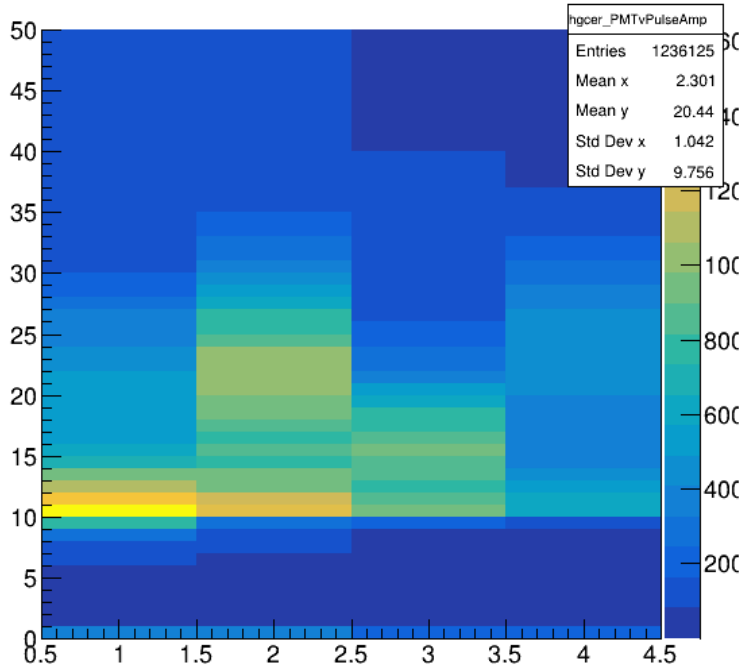
Also the plots are all in the units that are assigned to the variables, (so mV for PulseAmp)

And for 1D plots the Blue is the samp version and black is hardware.

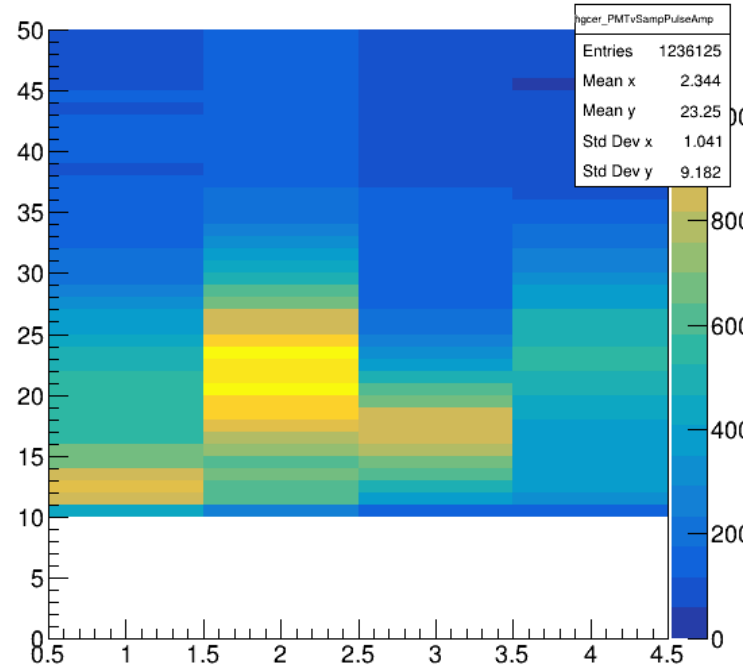
New Waveform Output!



hgcer_PMTvPulseAmp



hgcer_PMTvSampPulseAmp

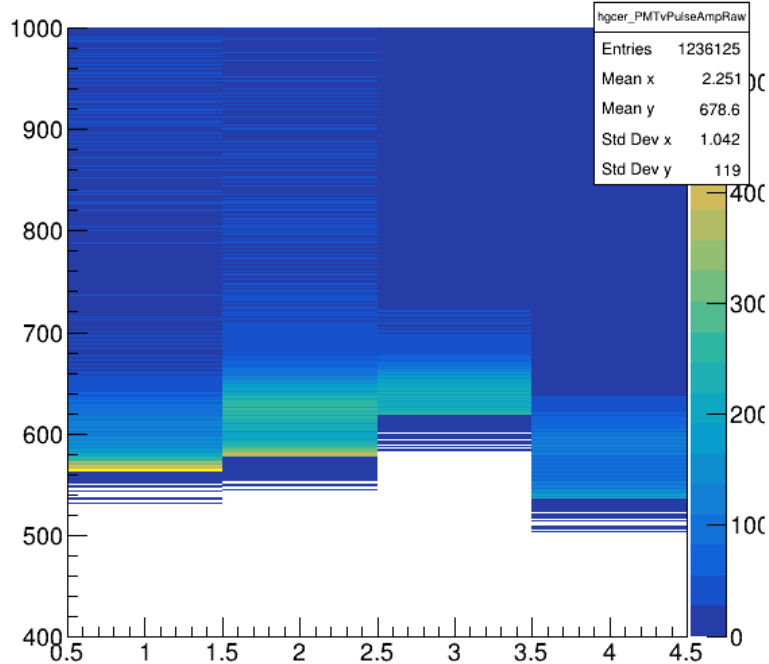


We can see the threshold is in the right spot. But also notice that there are some peaks not represented in the Hcana data.

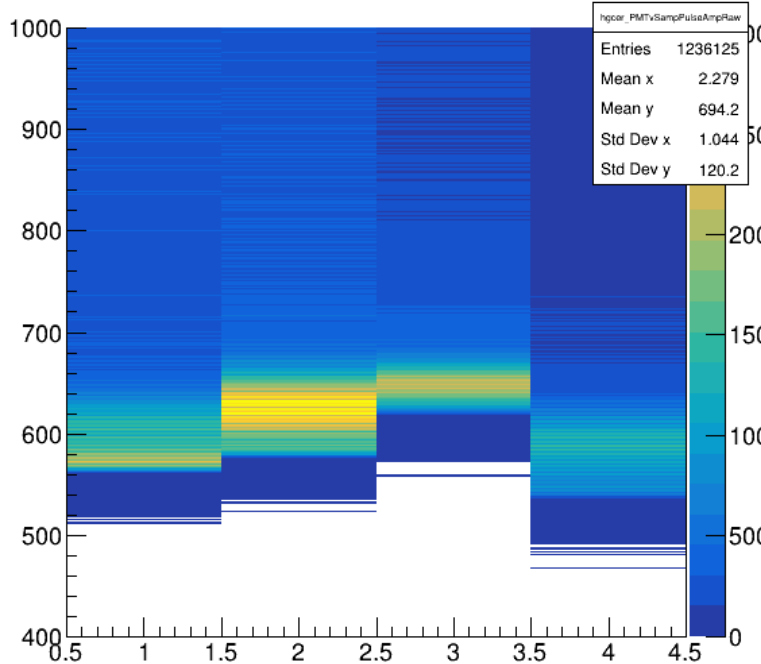
Mark believes the difference is due to a parameter he added which sets how many consecutive pulses must be above threshold before triggering.

So those hits are likely noise.

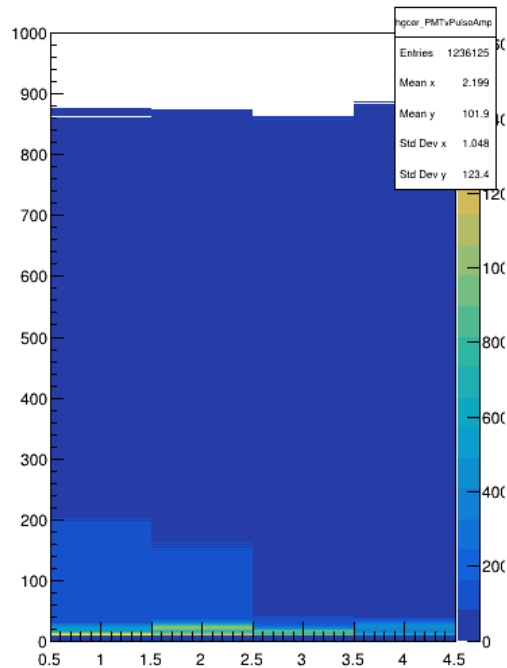
hgcer_PMTvPulseAmpRaw



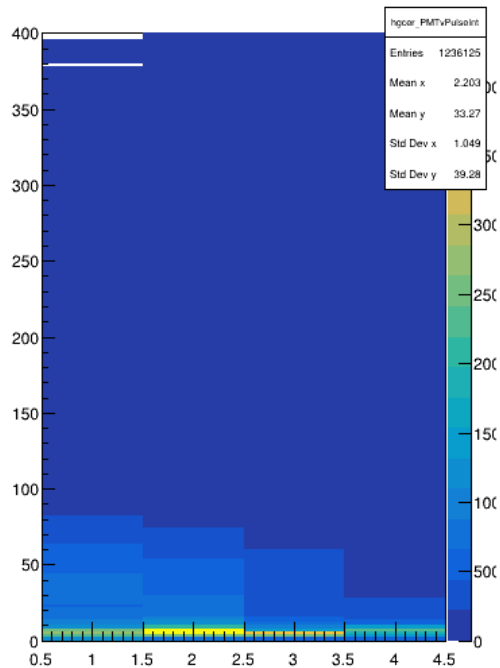
hgcer_PMTvSampPulseAmpRaw



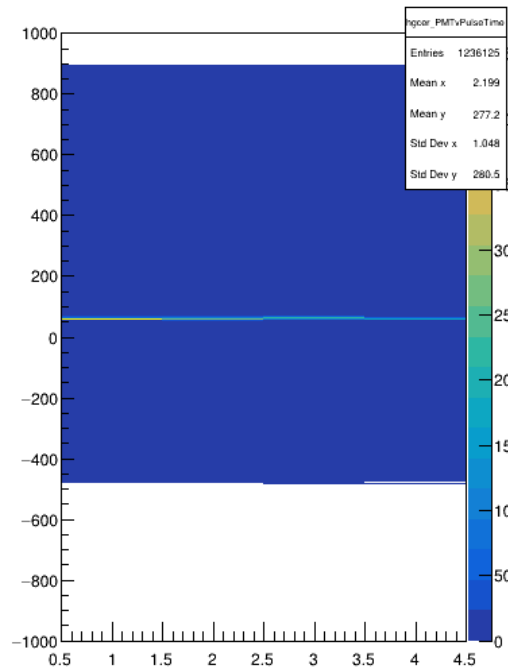
hgcer_PMTvPulseAmp



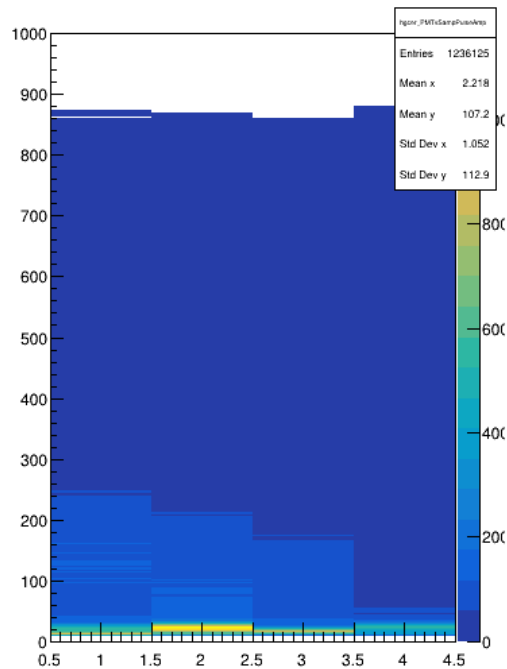
hgcer_PMTvPulseInt



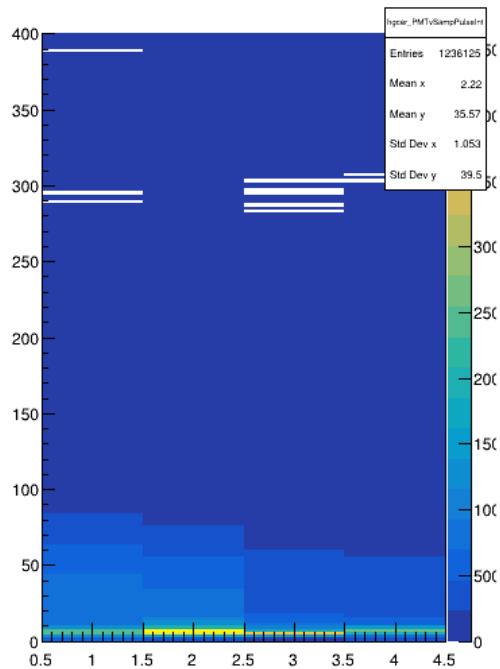
hgcer_PMTvPulseTime



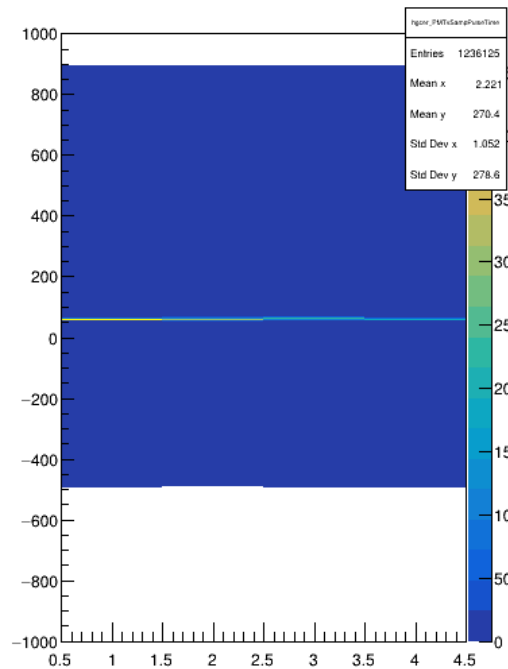
hgcer_PMTvSampPulseAmp



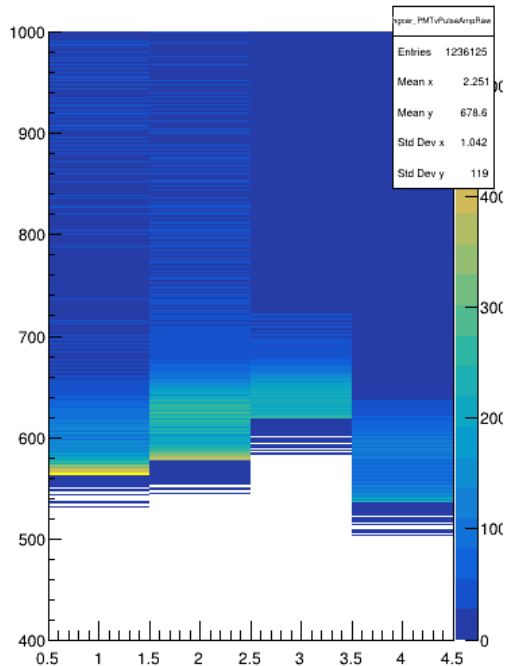
hgcer_PMTvSampPulseInt



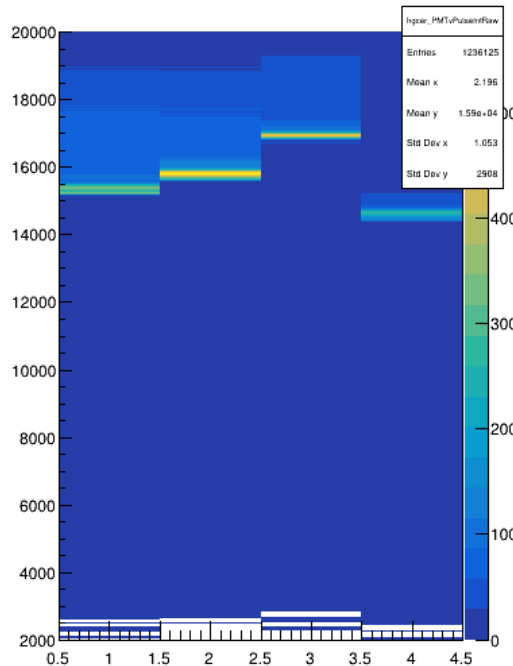
hgcer_PMTvSampPulseTime



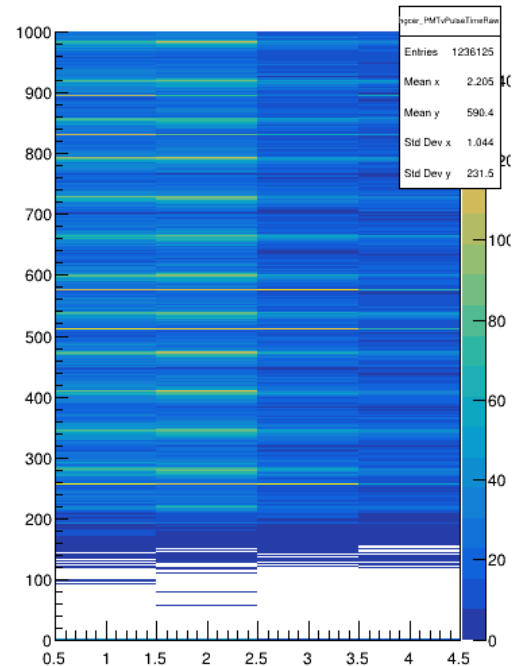
hgcer_PMTvPulseAmpRaw



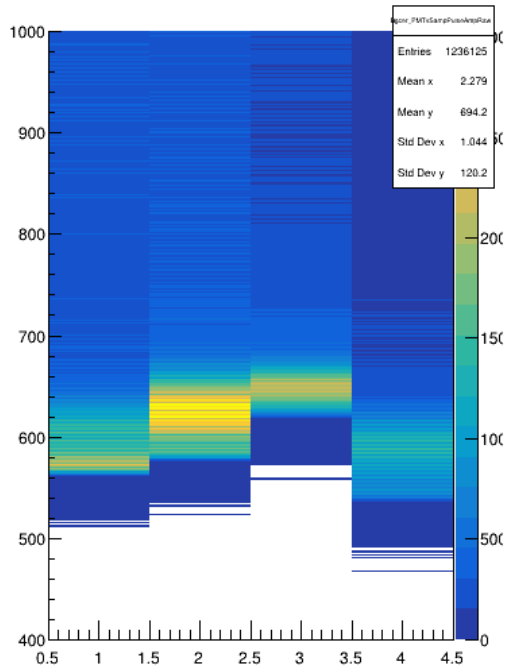
hgcer_PMTvPulseIntRaw



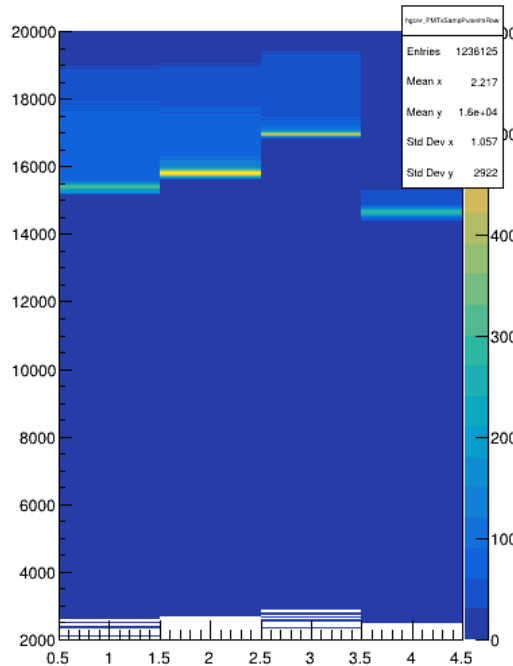
hgcer_PMTvPulseTimeRaw



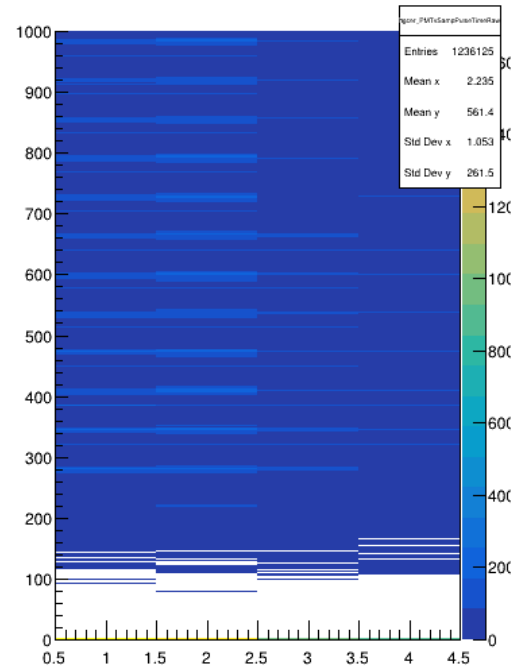
hgcer_PMTvSampPulseAmpRaw



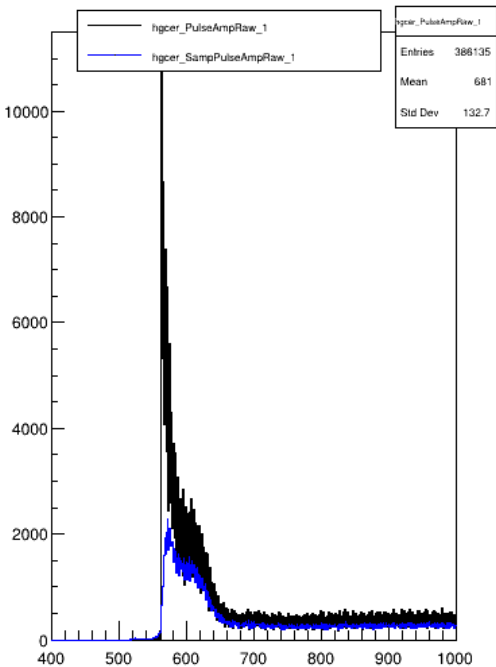
hgcer_PMTvSampPulseIntRaw



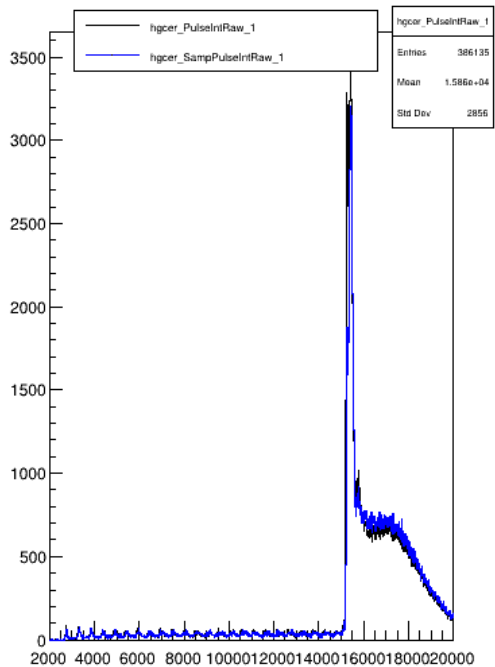
hgcer_PMTvSampPulseTimeRaw



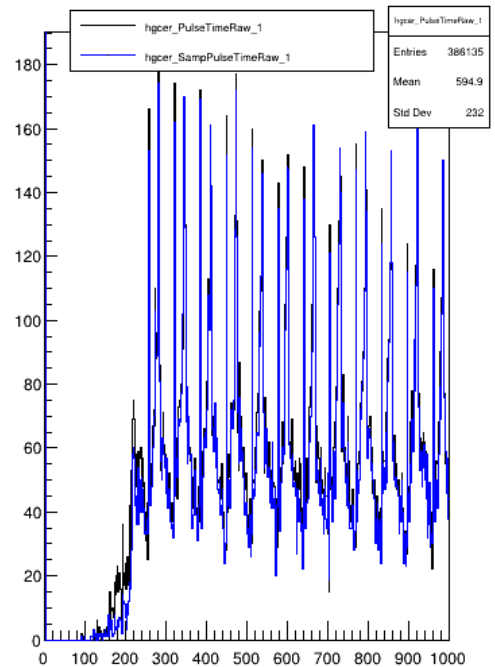
hgcer_PulseAmpRaw_1



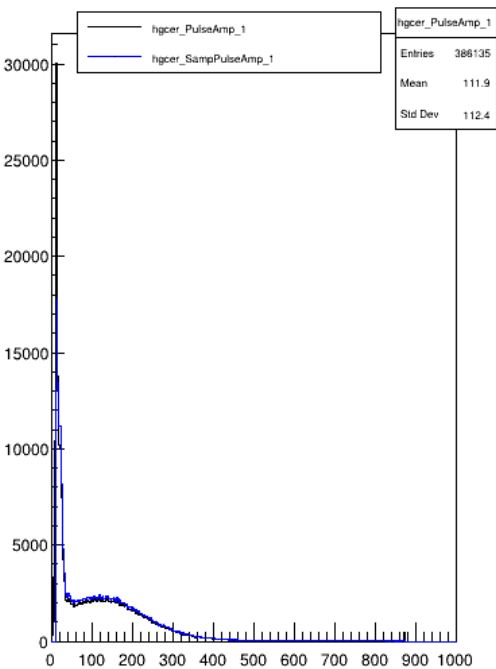
hgcer_PulseIntRaw_1



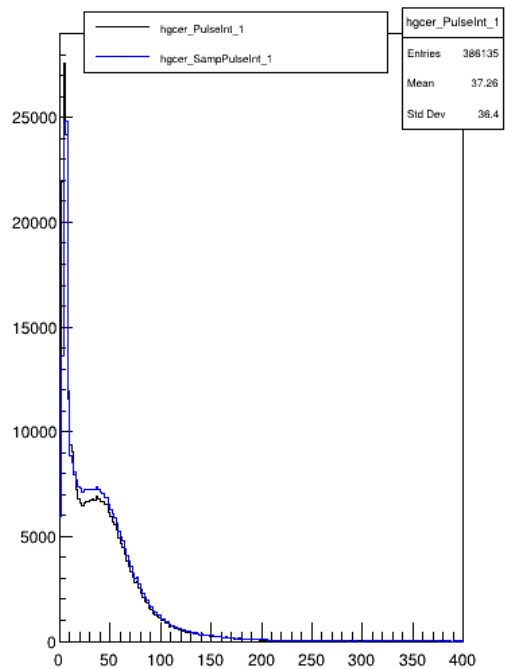
hgcer_PulseTimeRaw_1



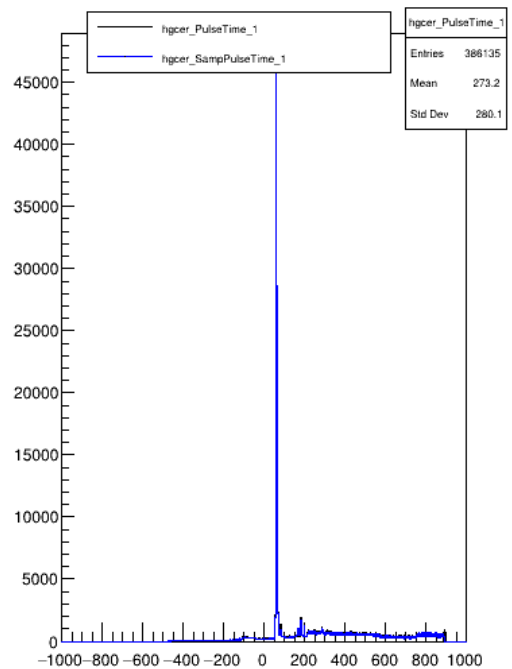
hgcer_PulseAmp_1



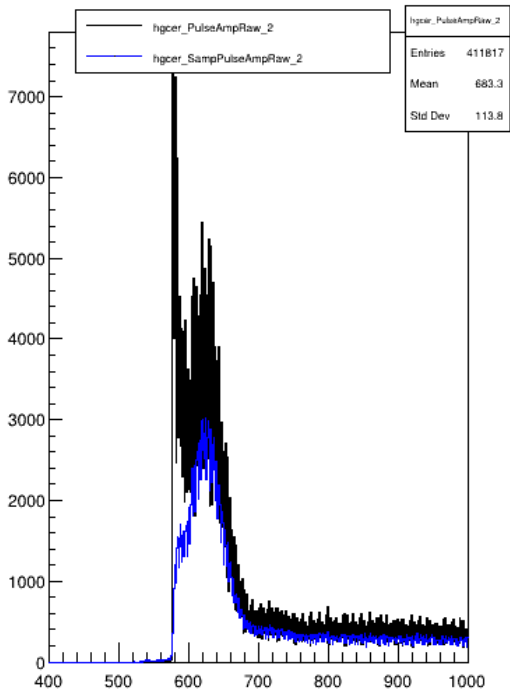
hgcer_PulseInt_1



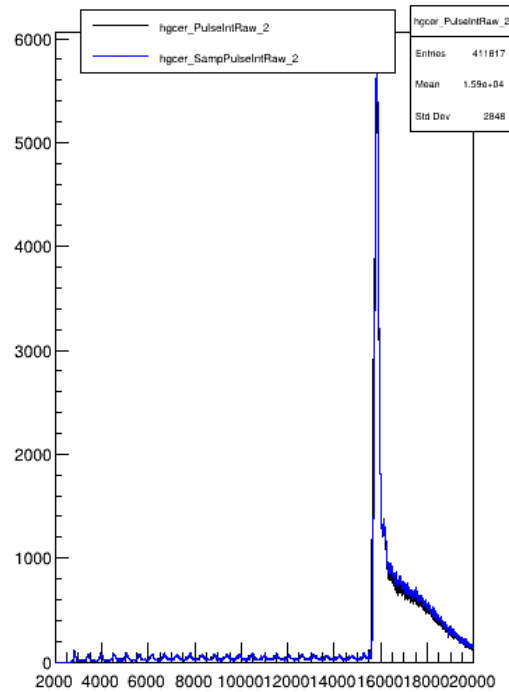
hgcer_PulseTime_1



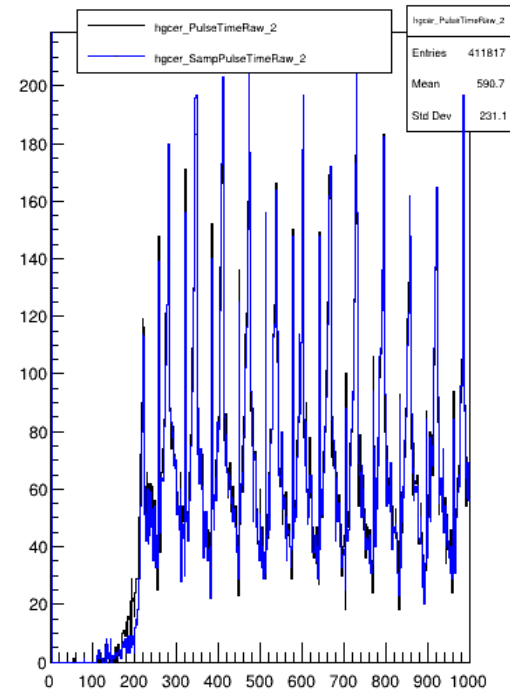
hgcer_PulseAmpRaw_2



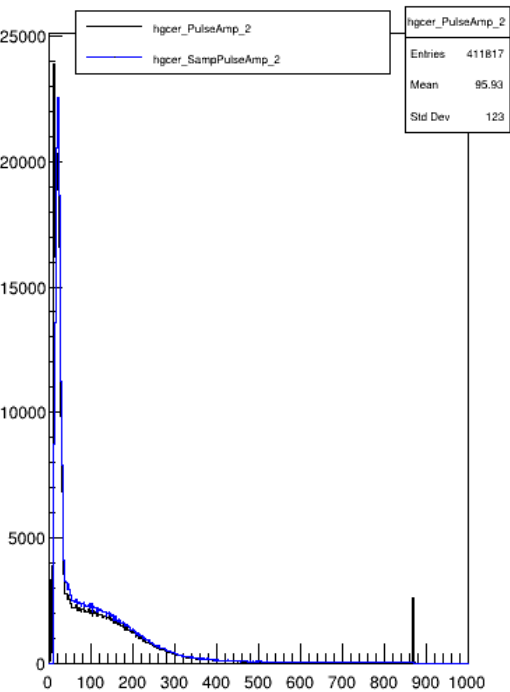
hgcer_PulseIntRaw_2



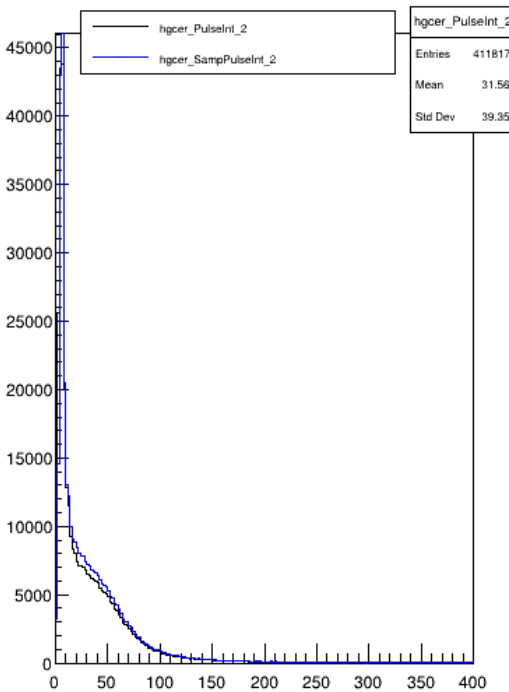
hgcer_PulseTimeRaw_2



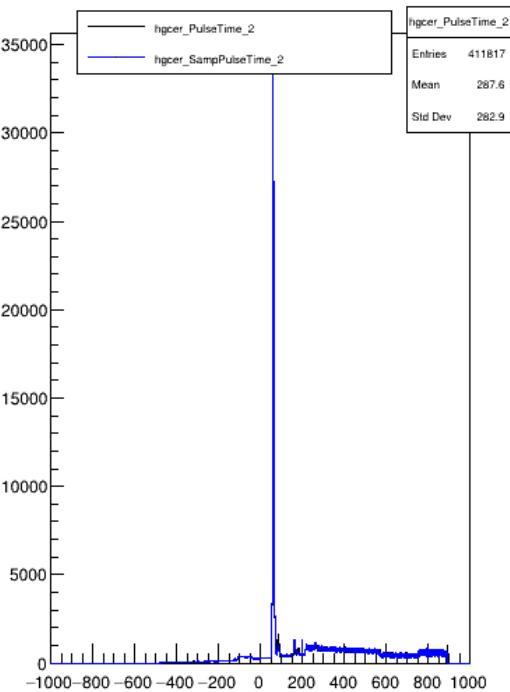
hgcer_PulseAmp_2



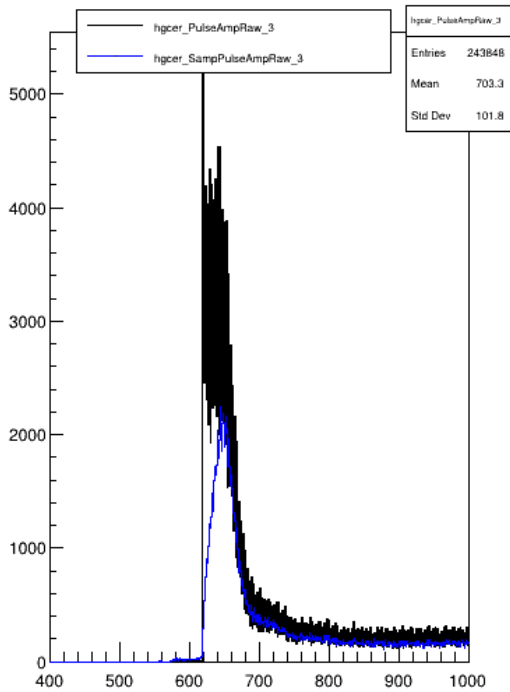
hgcer_PulseInt_2



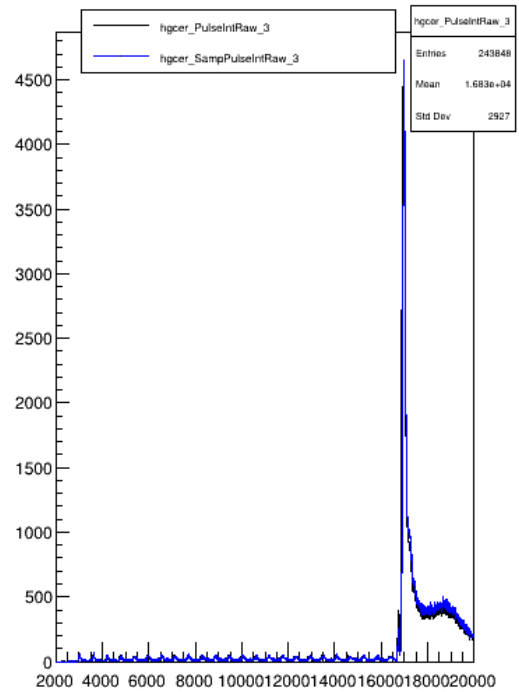
hgcer_PulseTime_2



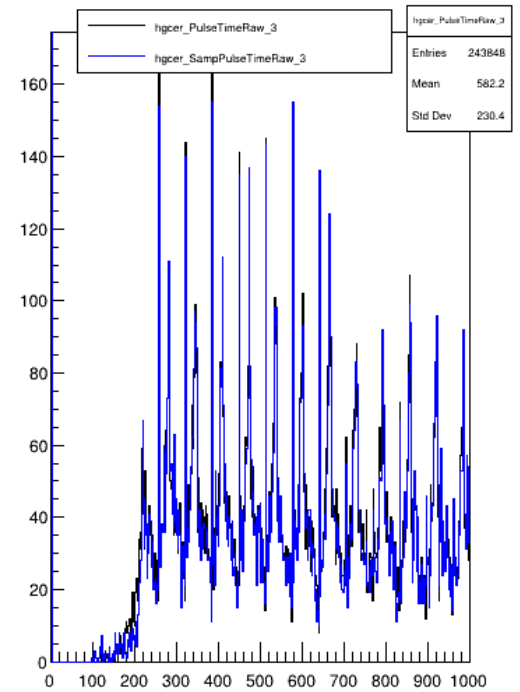
hgcer_PulseAmpRaw_3



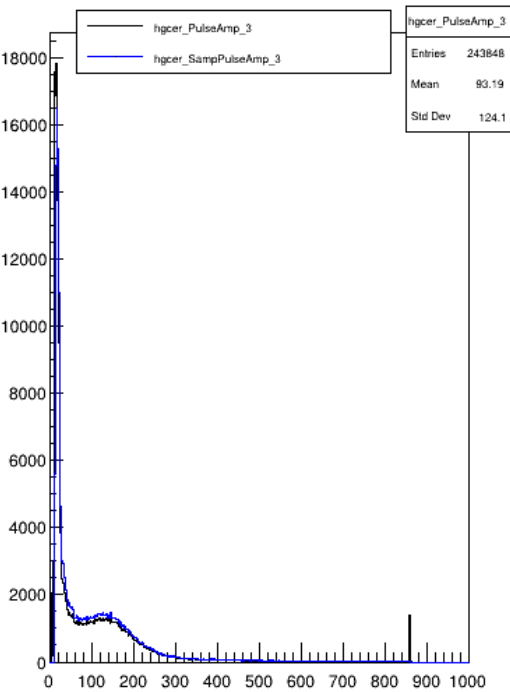
hgcer_PulseIntRaw_3



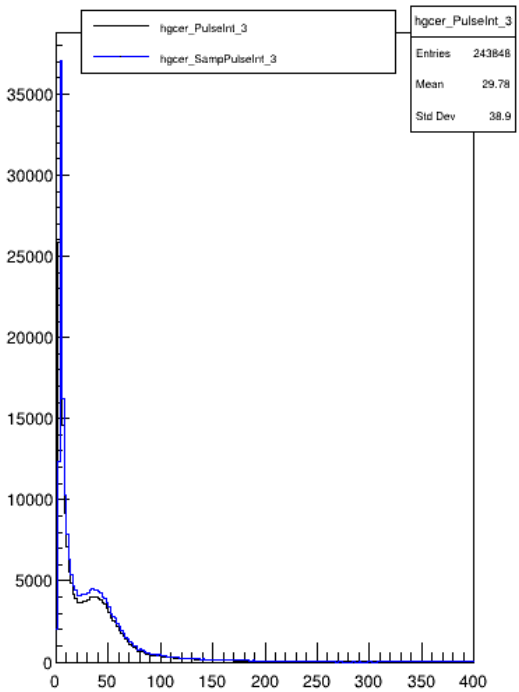
hgcer_PulseTimeRaw_3



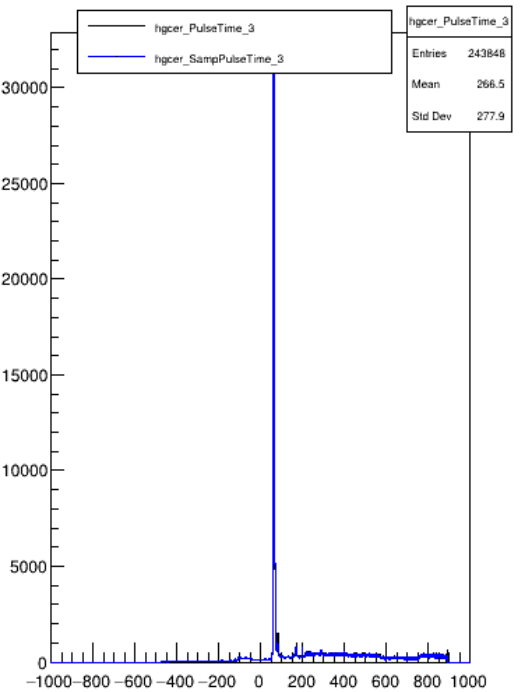
hgcer_PulseAmp_3



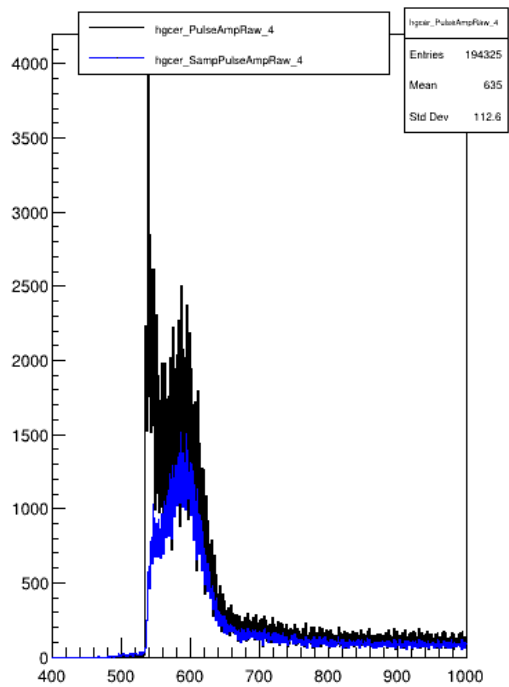
hgcer_PulseInt_3



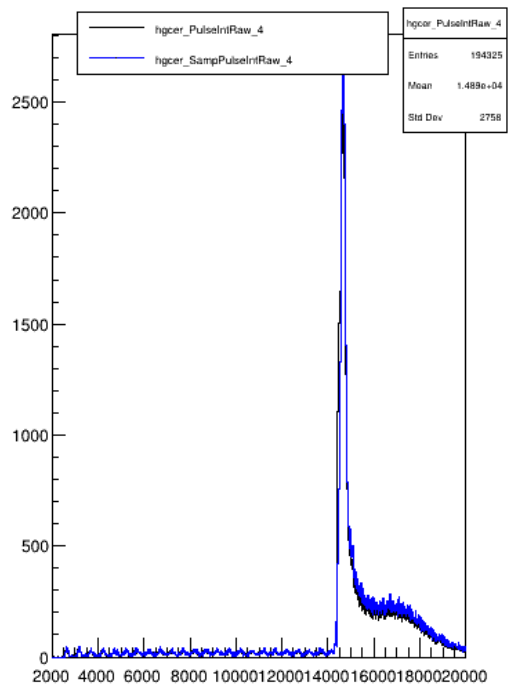
hgcer_PulseTime_3



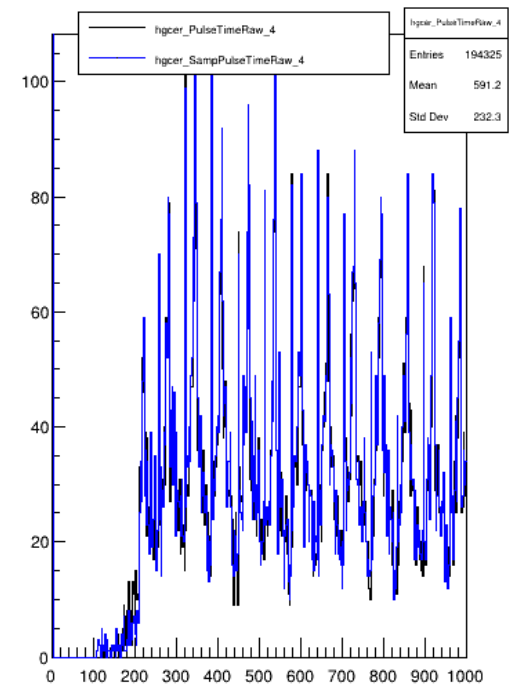
hgcer_PulseAmpRaw_4



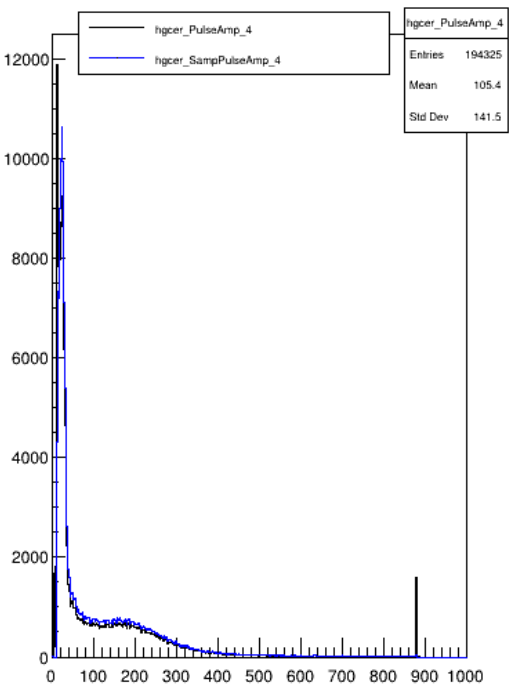
hgcer_PulseIntRaw_4



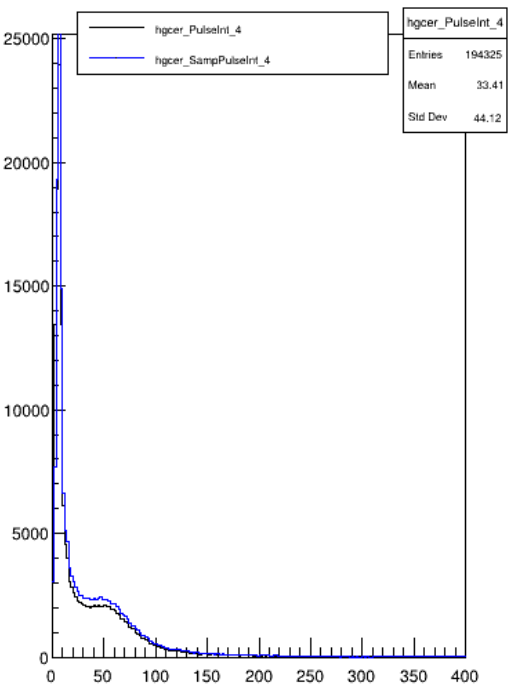
hgcer_PulseTimeRaw_4



hgcer_PulseAmp_4



hgcer_PulseInt_4



hgcer_PulseTime_4

