



Timing Update

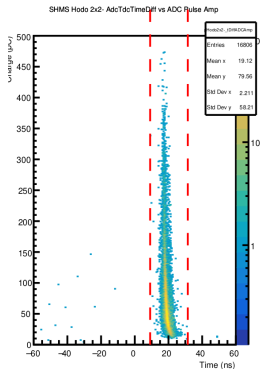
**Stephen Kay
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14/11/19

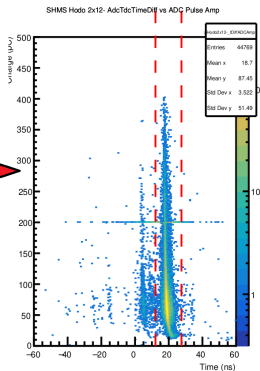
Ref Times and Detector Times Update

- We were going through the process of setting reference and detector time windows for our analysis
- As shown at a meeting back in October, seeing some weird effects
- Can compensate for most of these with cuts that Mark/Simona and others mentioned
- Cuts are only a stop gap since ultimately some of these odd events may actually be good events we want to keep
- Tried updated hcana from Pete Bosted
- Some issues found

SHMS Hodoscope Spectra Comparison



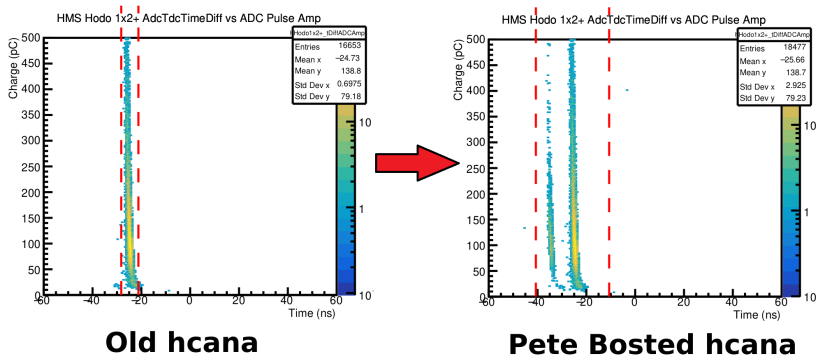
Old hcana



Peter Bosted hcana

Comparison between the 2D SHMS timing spectra replayed with the old version of hcana and Peter Bosted's version.

HMS Hodoscope Spectra Comparison



Comparison between the 2D HMS timing spectra replayed with the old version of hcana and Peter Bosted's version.

Discussion

- Still need ADC retime pulse amp cut with Peter's hcana or get ghost band.
- Introduces new problems though, ghost band in HMS hodoscope and weird horizontal band in SHMS
- Will need some of the changes for Physics analysis, but doesn't look like it's there yet
- Continue with old hcana for calibrations?
- Some detectors seem unaffected by the change anyway but the hodoscope looks like it's going to be problematic