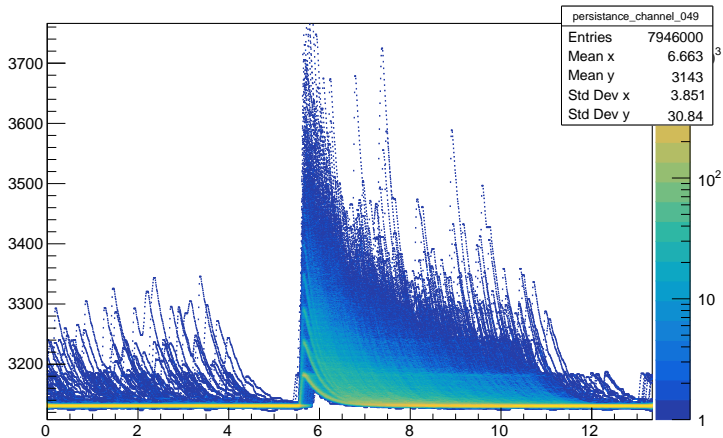


Introduction

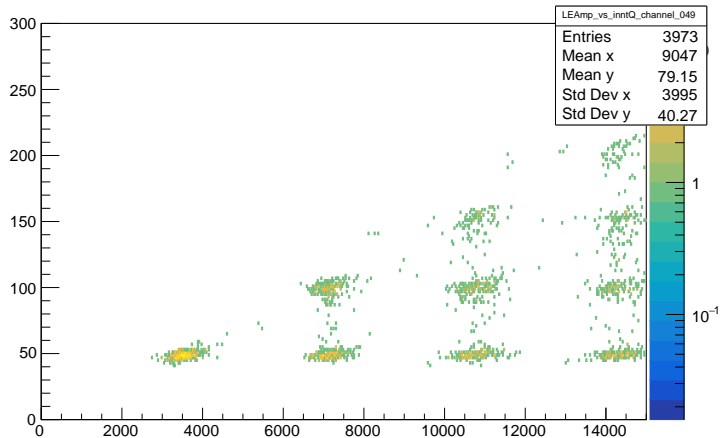
- ▶ Plots of waveforms from selected channels in run 4116.
- ▶ SensL 26 V, Bar MPPC 46.5 V, ARAPUCA MPPC 48.75 V
- ▶ Waveforms from external triggers.
- ▶ Looking at leading edge amplitude vs integrated charge plots to circumvent peak finding, which has proven difficult.

channel 049 - SensL- 002-0049-IU16



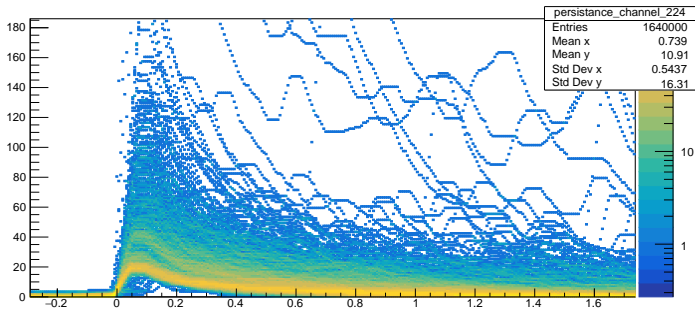
As a reference- SensL channel 049.

channel 049 - SensL- 002-0049-IU16



As a reference- SensL channel 049.

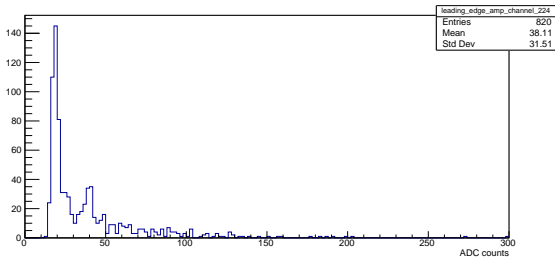
Channel 224 - Hamamatsu - 002-0058-FL24



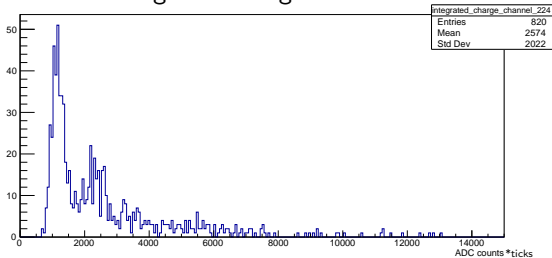
No real peak structure. Maybe there, statistics could bring out more.

Channel 224 - Hamamatsu - 002-0058-FL24

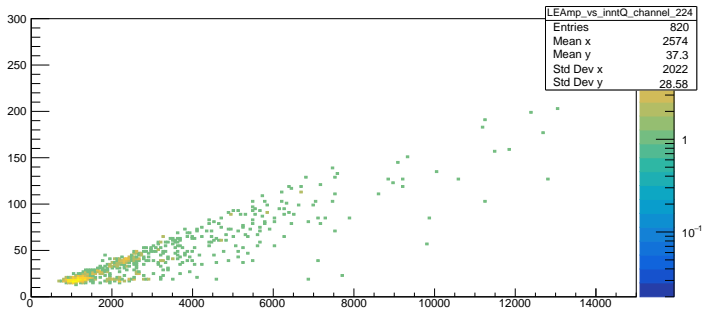
Leading edge amplitude distribution



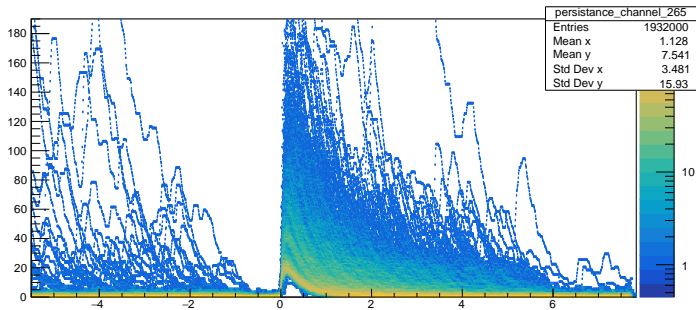
Integrated charge distribution



Channel 224 - Hamamatsu - 002-0058-FL24



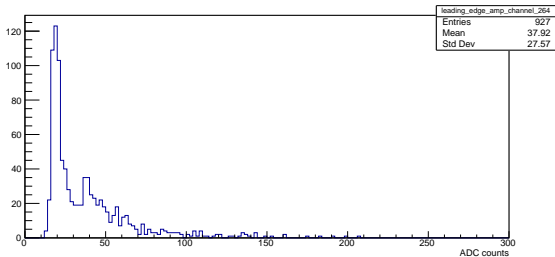
ARAPUCA2 - Hamamatsu



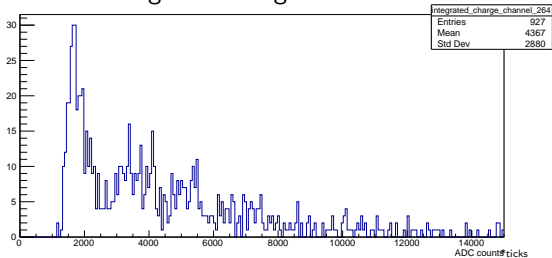
No real peak structure still.

ARAPUCA2 - Hamamatsu

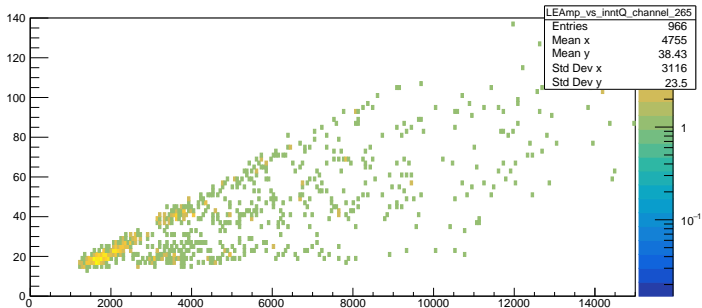
Leading edge amplitude distribution



Integrated charge distribution



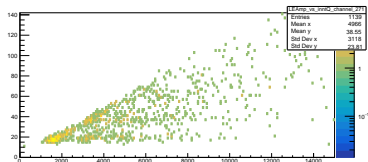
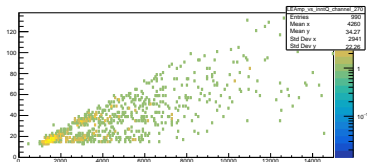
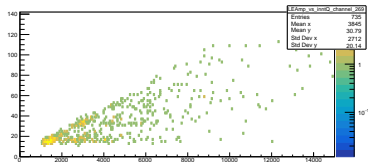
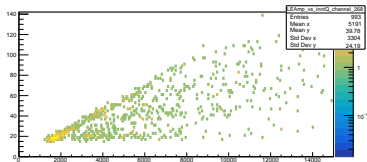
ARAPUCA2 - Hamamatsu



We can see the Amplitude = Integrated Charge trend. There is an indication of Amplitude = Integrated Charge + 1PE. Hopefully more statistics will make this more prominent.

- ▶ Working on this 2-dimensional space approach.
- ▶ This may be viable across all channels, but will need more statistics to be certain.
- ▶ A lot of the work on the algorithm has been completed, statistics is the next big goal.
 - ▶ Finding runs with same conditions.
 - ▶ Getting past file access issues.
- ▶ Only External triggers examined- port work to internal triggers as well.

Backups- ARAPUCA2 - Hamamatsu



Backups- ARAPUCA2 - Hamamatsu

