Wire Chamber

Installed, cabled, on gas, integrated with DAQ, etc. but ...

HV distribution cards

- 16 of 66 HV cards unable to hold HV
- poor design of cards had HV traces too close to lower voltage traces
  - on small, 2 layer board not possible to easily avoid these instances
  - potting helped and tested okay
  - but breaking down with time and/or higher humidity in HH
- have sent 15 new boards to replace some of the failing 16
  - still old design but with some improved potting, etc.
  - hopefully help sufficiently to get more cells working for the short term
- redesigning HV board and replace all HV cards in January, 2012
  - prototype cards hopefully available in October
  - 4 layer board with sense wire traces (highest HV) internal
  - can avoid any HV lines running close to lower voltage traces
  - some added improvements too based on experience with current boards

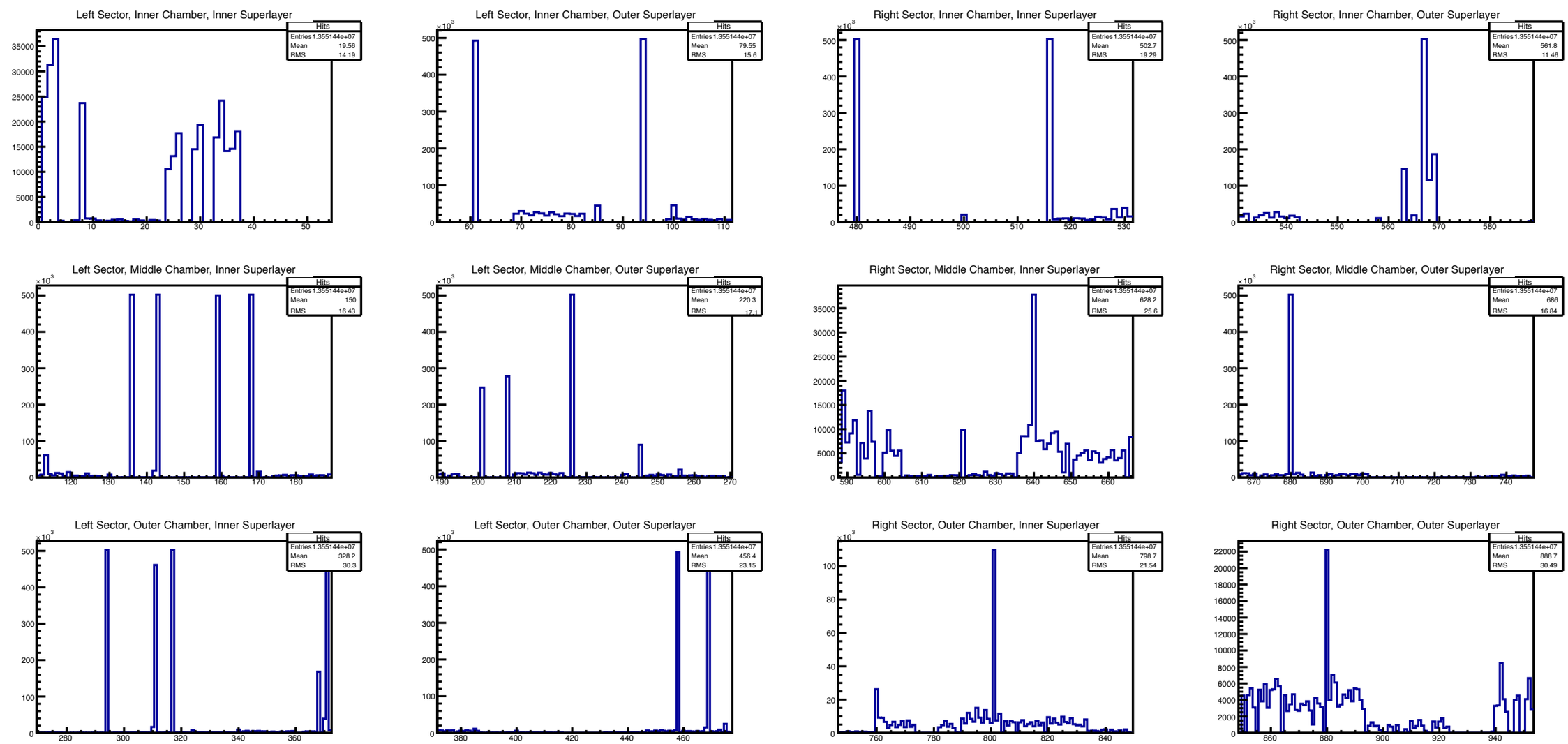
4 cells have problems with wires

- identify broken or bad wires and replace

Wire Chamber

TDC distribution dominated by noise

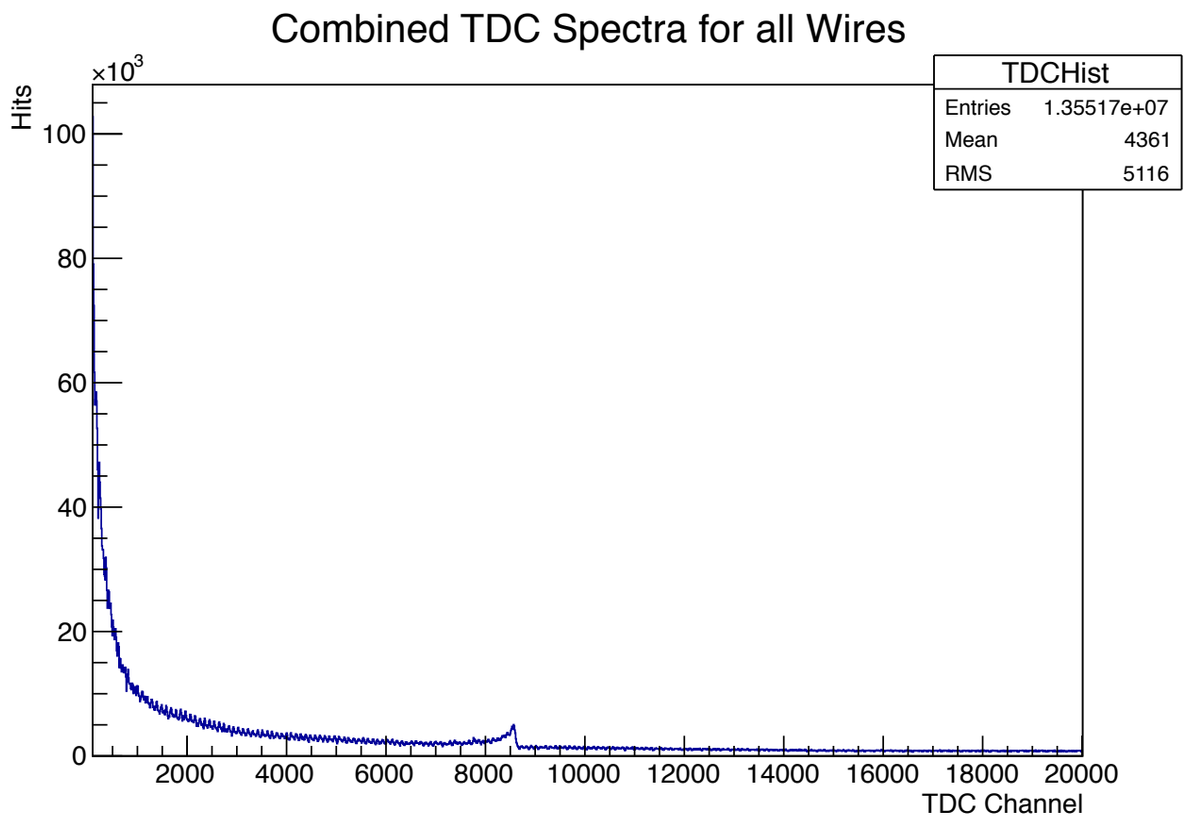
- some “hot” wires

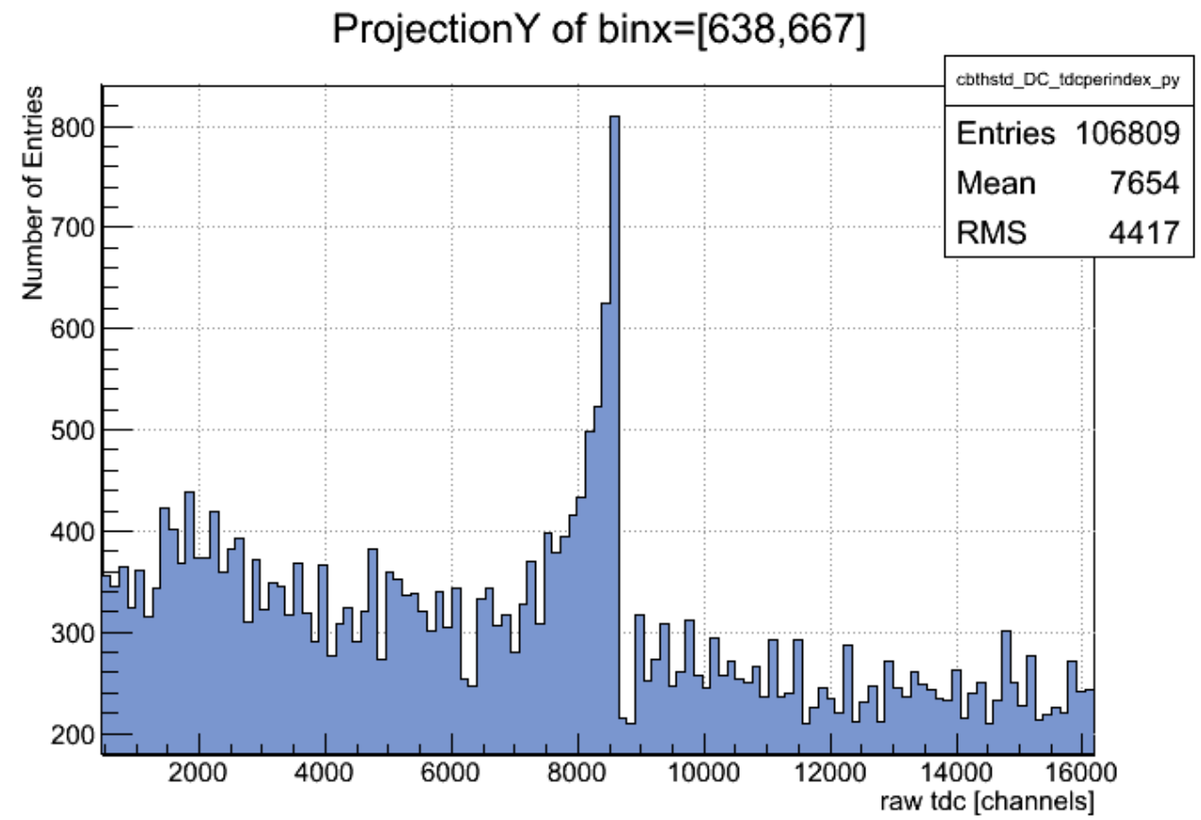


Wire Chamber

Noisy wires obviously just constantly ringing

- grounding problem ? threshold too lower ? noise on supply voltage?
- some proper signals seen if you remove the noisy wires
- will investigate next week during access



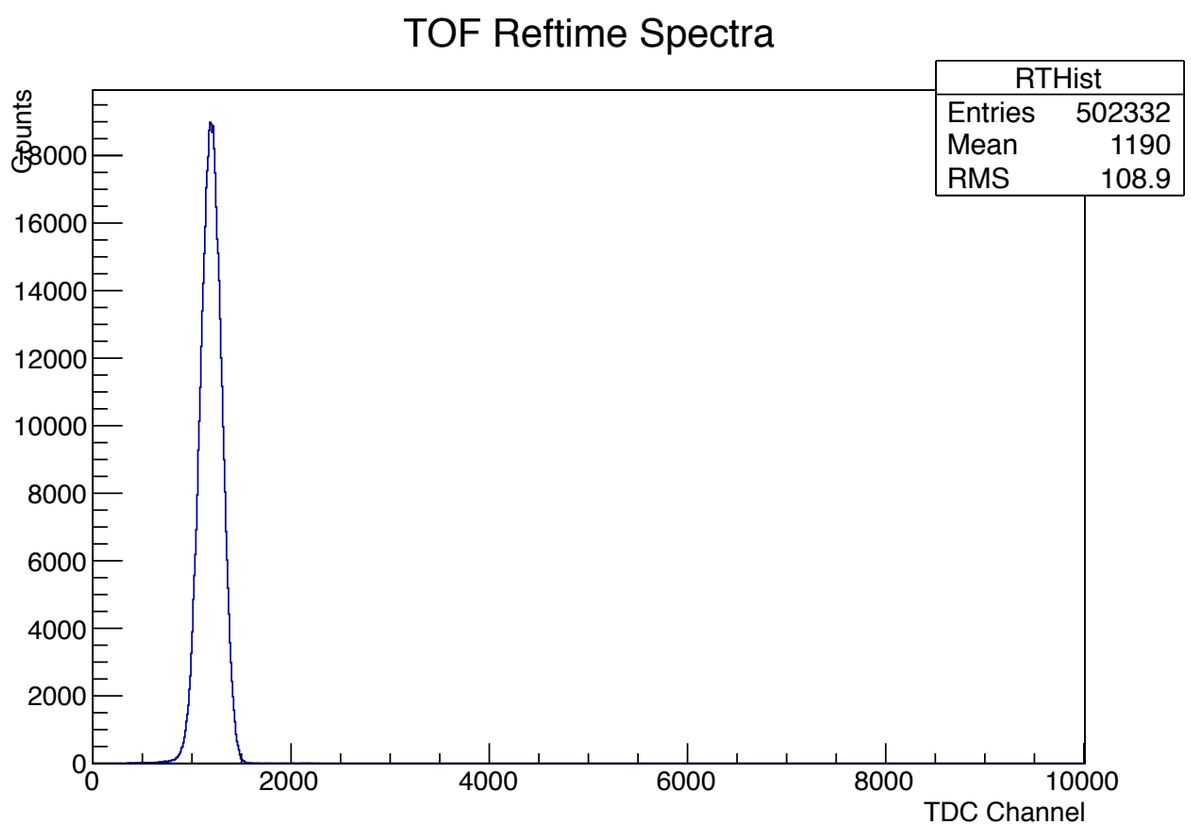
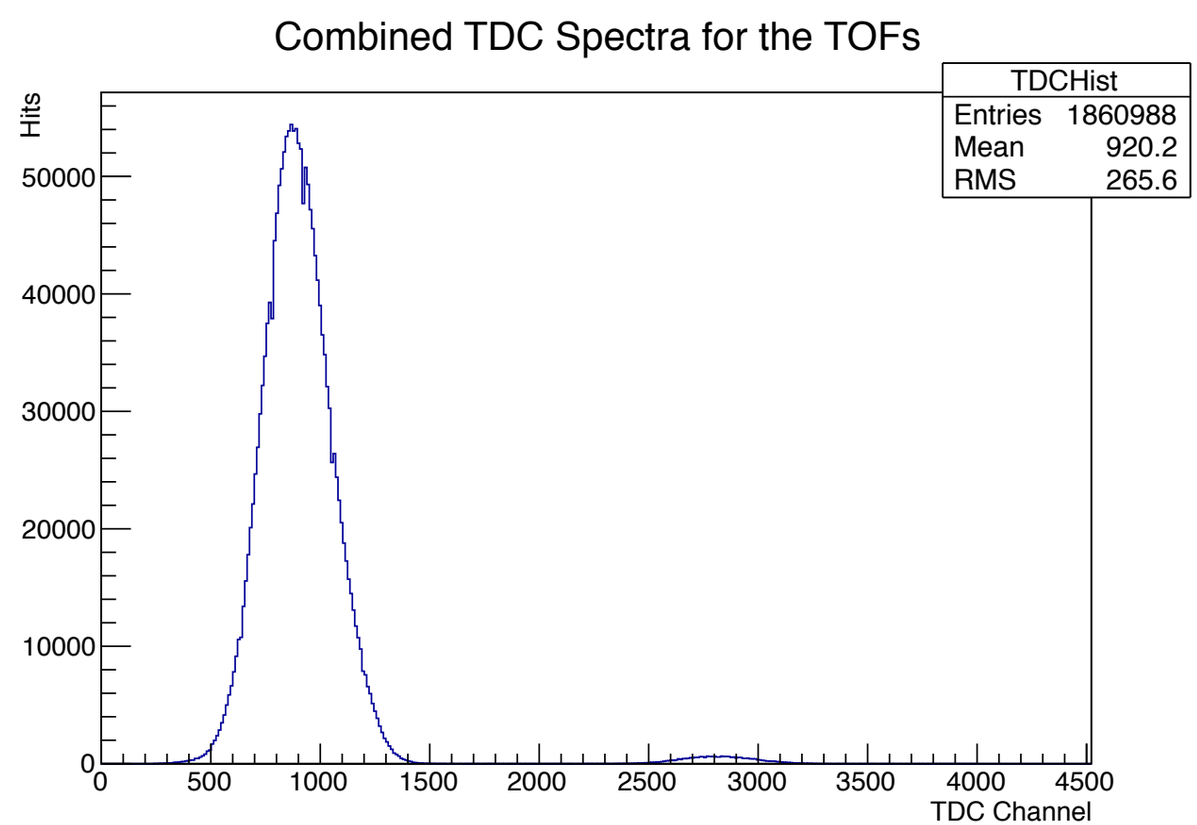


Beam Reference Timing

Axel Schmidt looked at TDC distributions

Beam clock reference distribution

- RMS = 109 channels = 5 ns spread from trigger timing

TOF timing shows some triggers from next bunch

- gate too wide ?
- deconvoluting TOF RMS -> 12 ns spread