

Tagger Microscope Commissioning Status Report

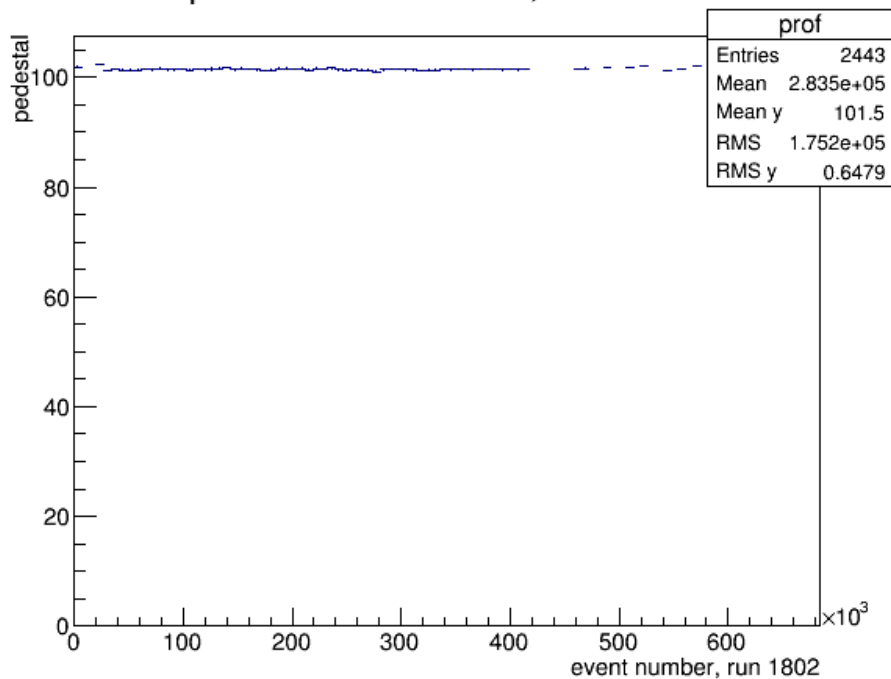
Richard Jones, Alex Barnes
University of Connecticut

Outline

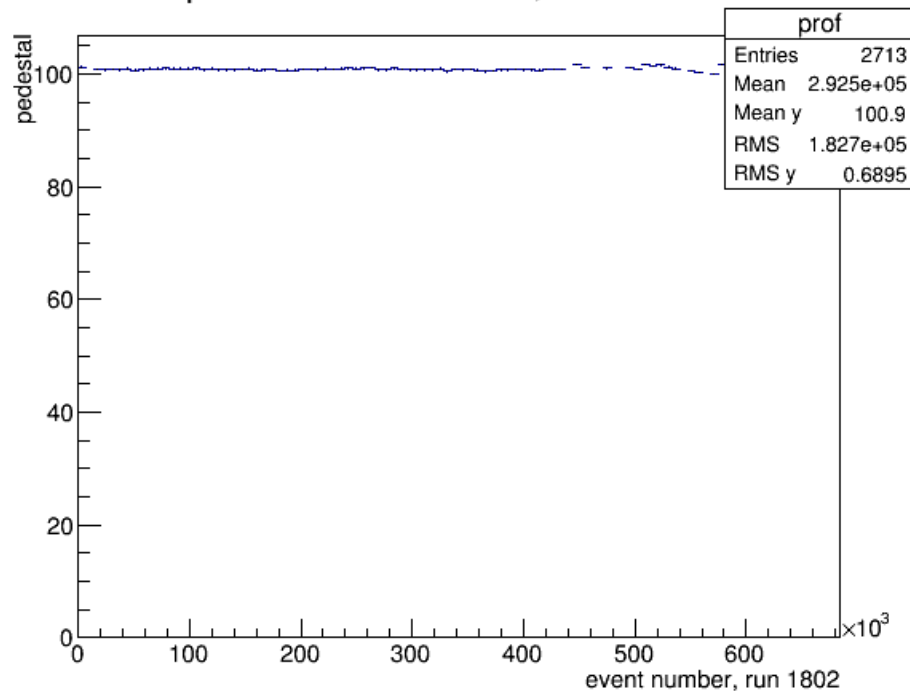
1. FADC signals
 - a. What is the variation of the pedestal with time, on a scale from seconds to days?
 - b. What is the pedestal width, instantaneous and long term?
 - c. How often the pedestal should be measured?
2. Typical FADC spectra for "hits": associated with tracks if possible.
3. What readout threshold should be used?
 - a. What would be the **detection** efficiency (energy cutoff)?
 - b. How often should be the threshold adjusted?
4. Signal rate above the threshold, without beam and at some beam conditions
5. If TDC readout exists: timing difference FADC-TDC, nhits(FADC) vs nhits(TDC) for given channels.

pedestal variation during a run

pedestal vs event no., channel 0



pedestal vs event no., channel 20



pedestal positions and widths

measurements in low gain mode

- readout threshold should be $>5\sigma$ over pedestal.
- pedestals vary over range 99 - 104
- $\sigma \sim 1\text{-}2$ channels
- readout threshold ~ 115 channels

pedestal vs channel number

