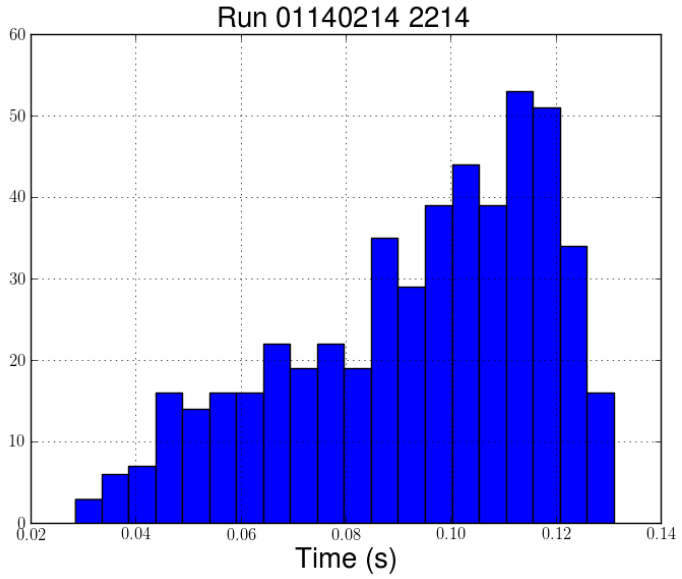
Weekly Meeting

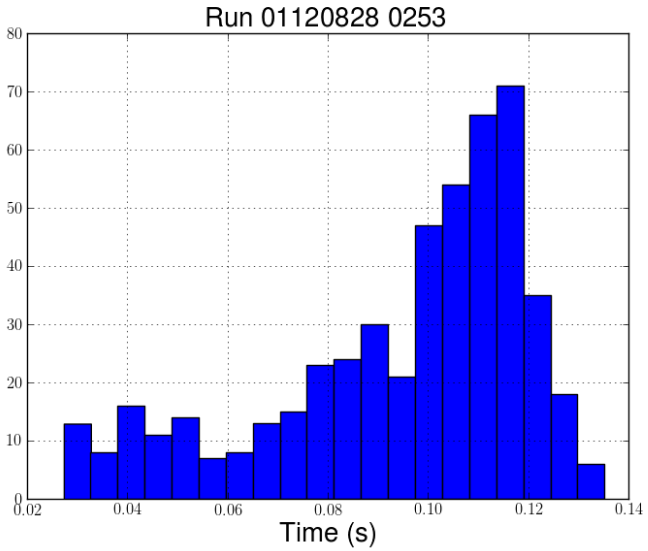
May 23 2018

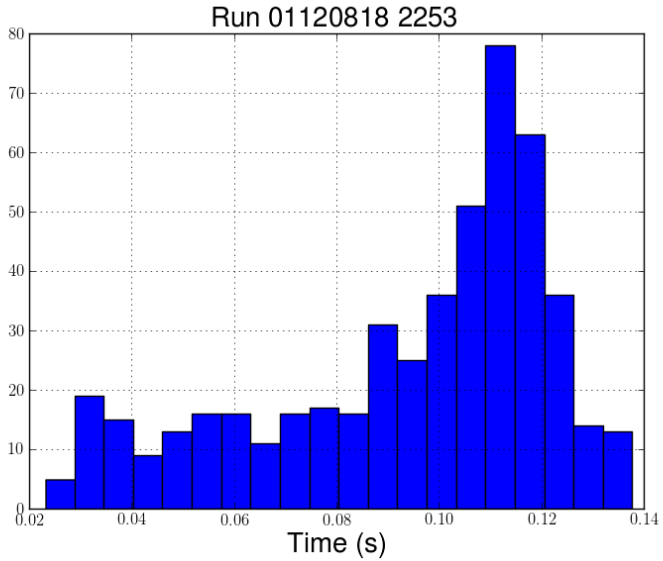
Timing Calc

- Used chrono instead of ctime to get a more precise measure of time
- Initially what I’ve done is measure the time it takes to calculate noise PSD per event

Time to produce noisePSD per event







Next for NoisePSD Timing

- What do we need to actually measure?
  - Per event? Per detector per event? Just per detector? Per run?
  - How long does it take to calculate all noisePSDs for all channels
  - From command to file closed
  - Linux command time
    - Compare with timing within code start to finish (BatNoise)
  - Want an answer for start to finish, estimate how long it will take a snolab. If it's >~5, then investigate further
  - Keep track of how many events we are processing
- Scaling for trace length?
  - Is the scaling actually linear?
  - We may want to know the scaling for trace length (second order task)
  - Start with the trace length we think we will be using – use data that has that trace length
  - Talk to Scott and Bill about proposed trace length
  - Talk to someone from test facility that is taking data, Bruno, Anthony, tsuguo, ask what trace length they are using. See if they can take some data with snolab trace length.
  - Check about how many detectors and how many channels per detectors. Try to scale
- Scaling for processor speed.
  - Use nero as standard candle.

Other Service Tasks

- Next few months: building type 2 and type 3 deciders, finish MIDAS file writing in DMC

- Heading into the fall: working on alarm system for DQM

Measurements at SLAC with Si Detectors

- First thing we need to do is look into the laser/light setup we can have
  - What is feasible/practical
  - Cost and who is purchasing – where are the funds coming from?

Other

- Visa fees and $15 insurance fee not covered by SLAC.
  - How do I go about getting reimbursed for these?