DAQ Update

Chao Peng
Duke University
08/28/2014

Situation of DAQ

Electronics we have

- 4 Single board computer (2 MVME 5100 and 1 MVME 2431 from Hall C&D, 1 MVME 5500 from Dipangkar)
- 31 1881M working boards, 3 1881M boards with bad channels (5 are from Hall A)
- 1 Trigger Interface master (TIm) and 3 Trigger Interface slaves (TIs) from Sergey
- 3 Struck 340 Fastbus Interface (SFI) from Sergey

Electronics needed

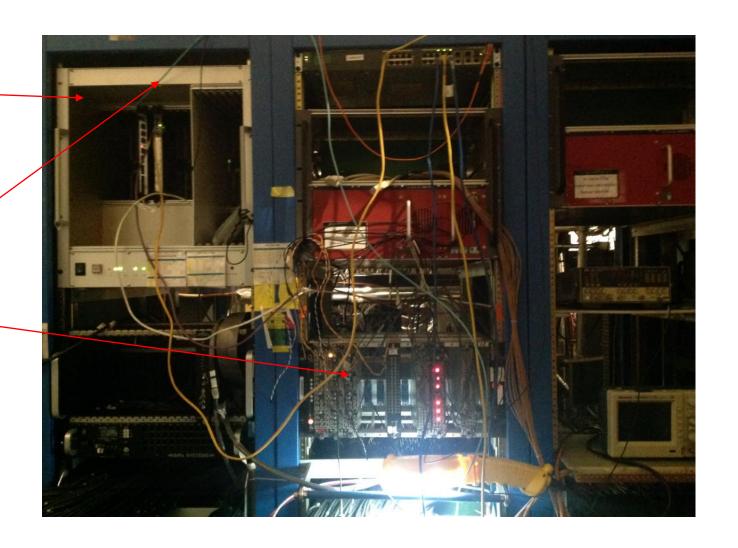
- VME TDC and VME scaler (will borrow them from Sergey)
- Achieved
 - 3 crates and all ADC boards working with SFI AUX card (old trigger system similar to PrimEx's)
 - Successfully used the TIm in one Fastbus crate
- Ongoing
 - Setting up the trigger crate (TIm in VME crate) to control TIs in Fastbus crates

Situation of DAQ

VME crate (trigger crate)
TIm, MVME 2431

Fiber for communications between TIm and Tis

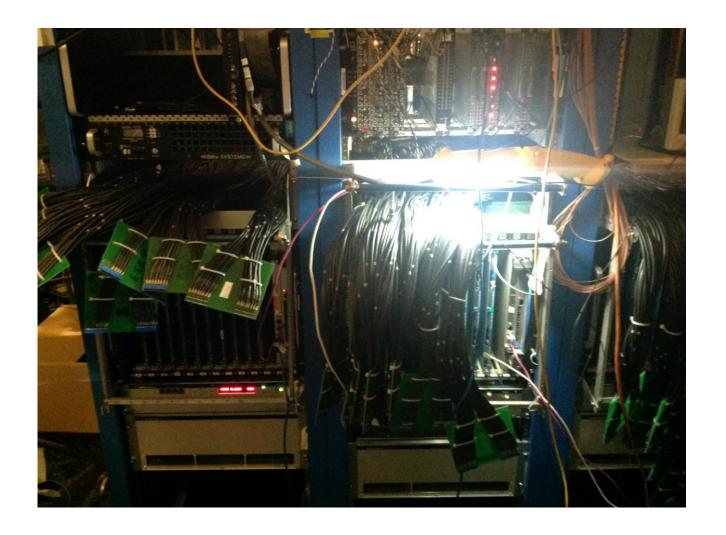
NIM crate and modules for adjustment of ADC gate



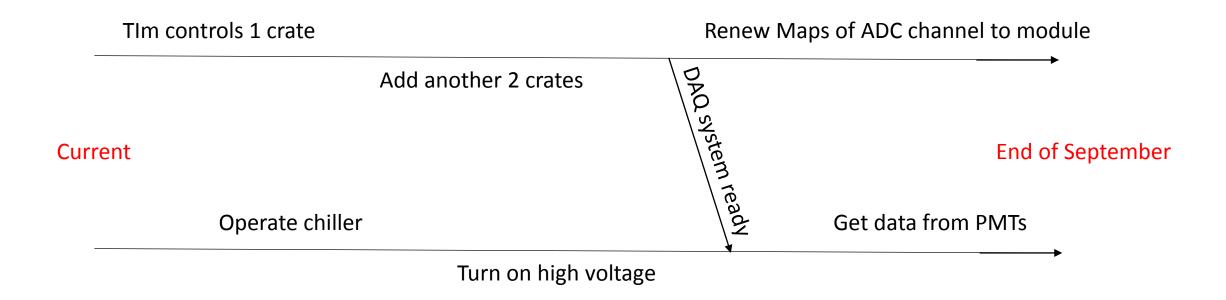
Situation of DAQ

Three Fastbus crates with 10 ADC boards in each

Center crate is connected to Tim for current test



Plan on DAQ



I am currently trying to use the trigger crate (TIm) to control 1 Fastbus crate (with TIs), will add another two after it succeeds.

The high voltage test is expected to be done in September, but it depends on when we can get the utility power back