SeaQuest/E906 AEM Report

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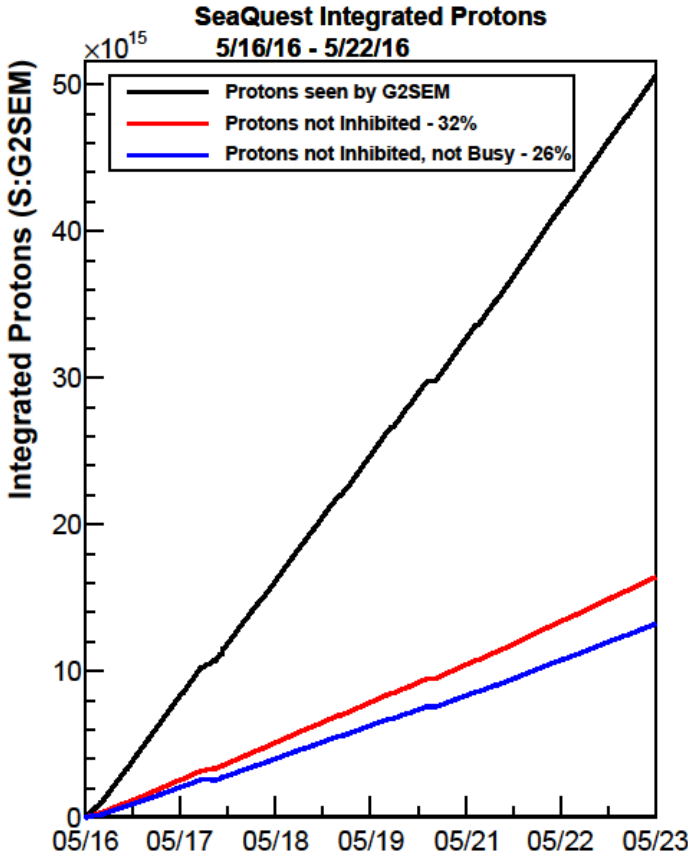
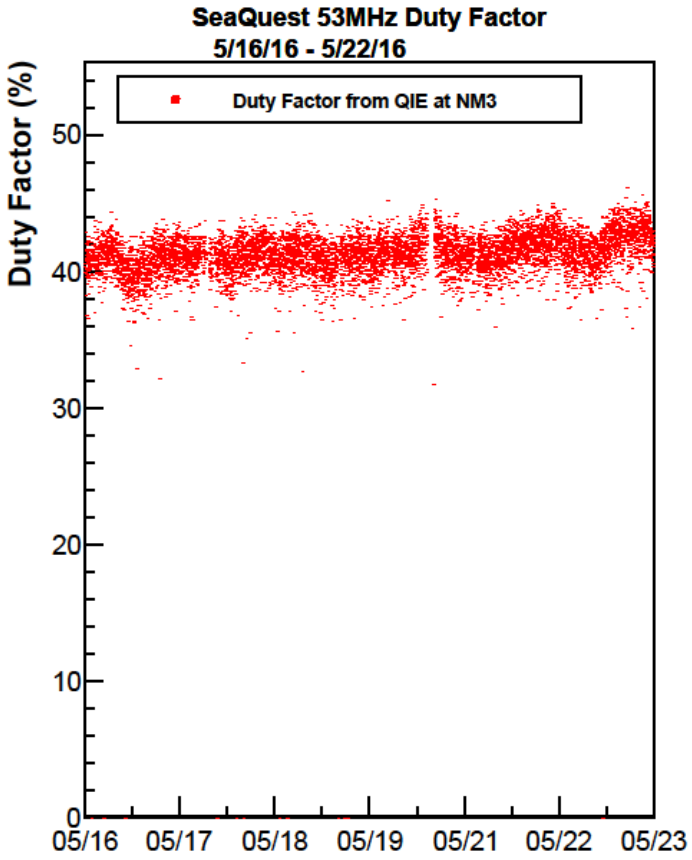
Beam

- About 1.3E16 live protons received. Duty factor above ~40% steadily as usual. Mostly smooth data taking week.





Drift Chambers

- D1
  - Tripped for few times since last Wednesday, had to lowered voltage
  - Slowly raised HV back to nominal value afterwards, working fine now
- D2
  - An old broken channel caused the trip more frequently
  - HV would automatically reset itself, so far so good
- D0 & D3 have been working smoothly

DAQ Issues

- TDC broken last Tuesday night (5/17)
  - A ROC failed to work properly continuously
  - Realized that a TDC which belongs to this ROC was problematic and caused this
- ScalerDAQ online decoder failed last Wednesday night (5/18)
  - Scaler data is fine, just not being decoded to the data base
  - Error in the code that cause failure after spill number 10^6
  - Quickly fixed on last Thursday
- Trigger Supervisor board broken last Thursday night (5/19)
  - Number of triggers taken per spill is odd – either 10 times smaller or greater compared to normal condition
  - Online monitor showed the enabled trigger setting and prescale value were wrong and couldn't be recovered – had to replace the TS board
  - New board caused a TDC timing shift – caused by firmware, could be modified

Other issues & Status

- Targets
  - No big issues.
- Hodoscopes
  - 1 plane, H2L, have been inefficient due to problematic HV module.
  - Doesn’t affect physics data. HV module repair underway.
- Prop tubes
  - Working fine.

Plan

Sailing full speed ahead. Continue taking good data.