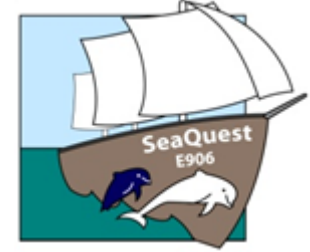


# SeaQuest/E906 AEM Report

Po-Ju Lin

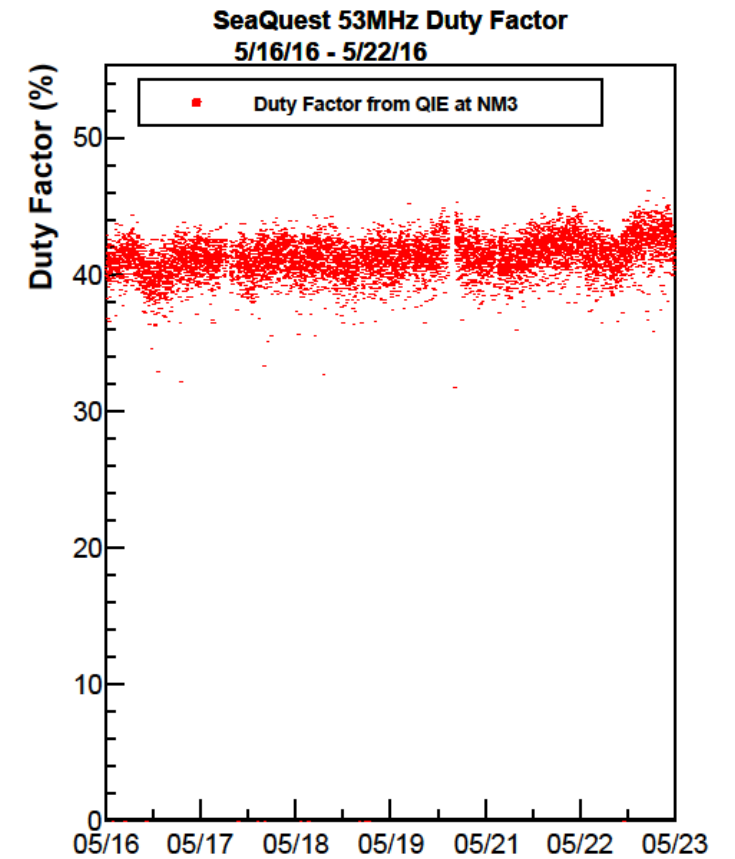
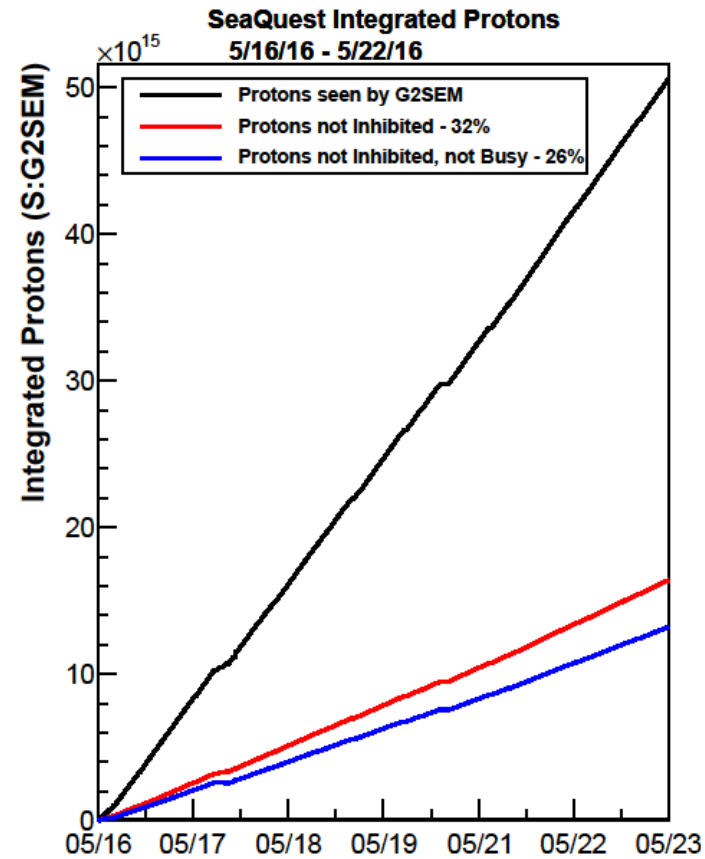
University of Colorado

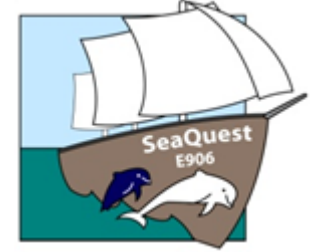
May.23 2016



# Beam

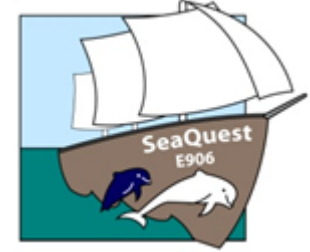
- About  $1.3E16$  live protons received. Duty factor above  $\sim 40\%$  steadily as usual. Mostly smooth data taking week.





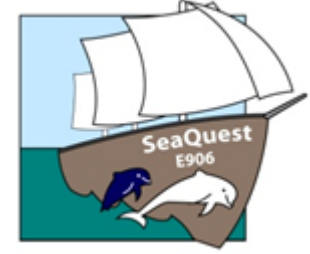
# Drift Chambers

- **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 was 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 was 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, has 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.**