

SeaQuest/E906 AEM Report

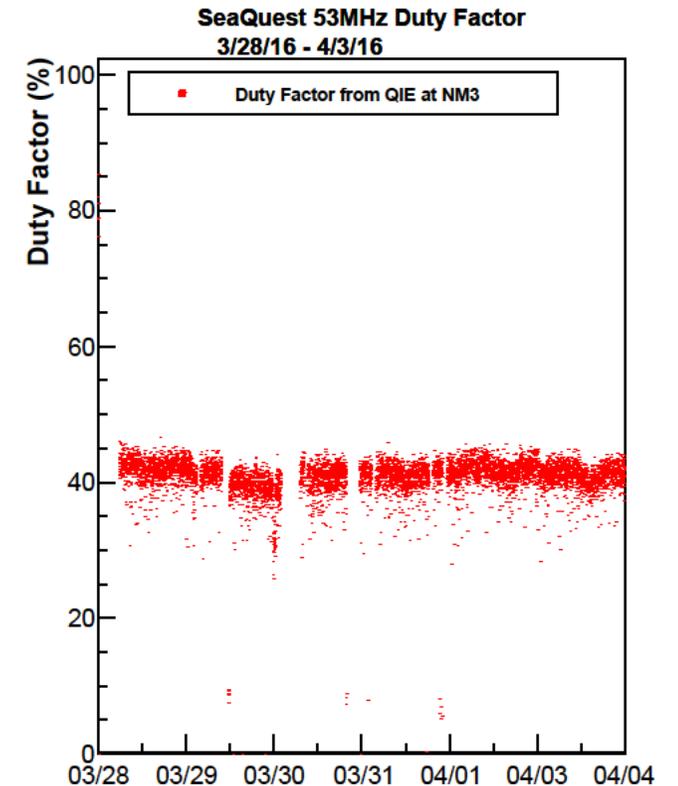
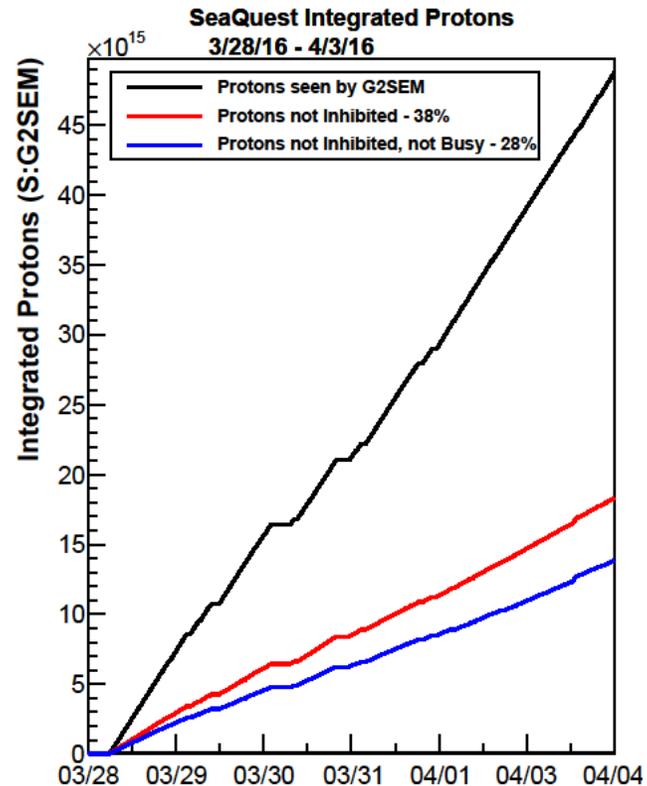
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Beam

- Scheduled downtimes
 - Wed. -- Booster access for water leak check
 - Thu. -- Beam studies
- About $1.4E16$ live protons received. Duty factor above $\sim 40\%$ steadily over the week



Beam Intensity Monitor

- **BeamDAQ** failed around midnight last Sunday (3/27)
 - Giving unrealistic duty factor values
 - Beam structure display was dead
- **QIE module** didn't seem to work properly
 - Checked BeamDAQ, setting of the module, status output → everything looked normal.
- The **oscilloscope** caused the problem
 - Input signals from phototube to the QIE has been connected to the scope with a tee for monitoring purpose
 - Somehow crashed and rebooted. The input termination changed from 1 MOhm to 50 Ohms
 - Changed the DC bias of phototube output signal and saturated the QIE

Drift Chambers

- **D0**
 - Xp plane showed ohmic behavior about 3am Tuesday
 - Took resistance measurements on HV port, variation observed
 - Ohmic behavior cured itself
 - Working normally now. Xp plane hit distribution behaves the same as before
 - Over 97% efficiency for all planes
- **D1, D2, D3** have been working smoothly
 - CAEN HV module for D1 failed → Replaced, shall be fixed in two weeks
 - Another threshold scan for D1 → Threshold raised

Other issues & Status

- **FMAG** went down for 1.5hr due to water resistivity
- **Targets**
 - No big issues. Had some transient pressure alarms.
- **Hodoscopes & Prop tubes**
 - Working fine.
- **DAQ**
 - Doing its job.
 - Re-flashed one spare MVME 5500 CPU from PREP.

Plan

- Chamber performance tests on Wednesday during downtime.

Continue taking good data.