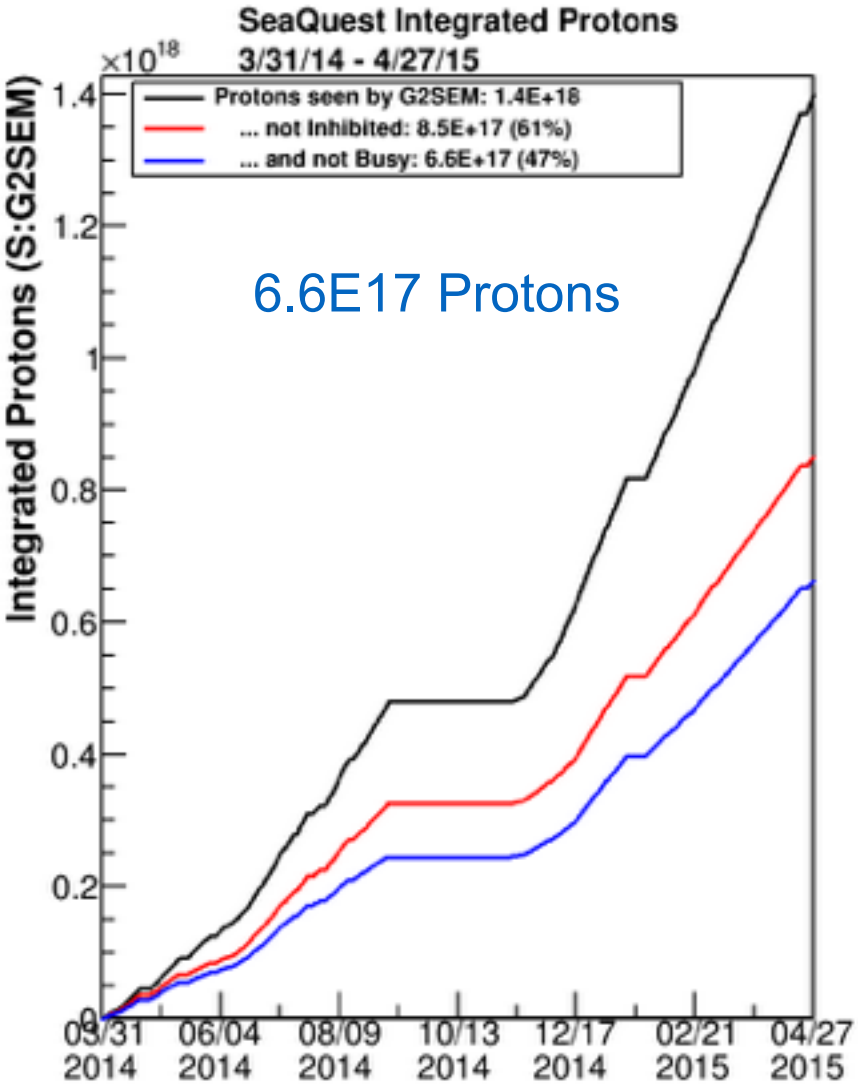
SeaQuest Status
April 20-26, 2015

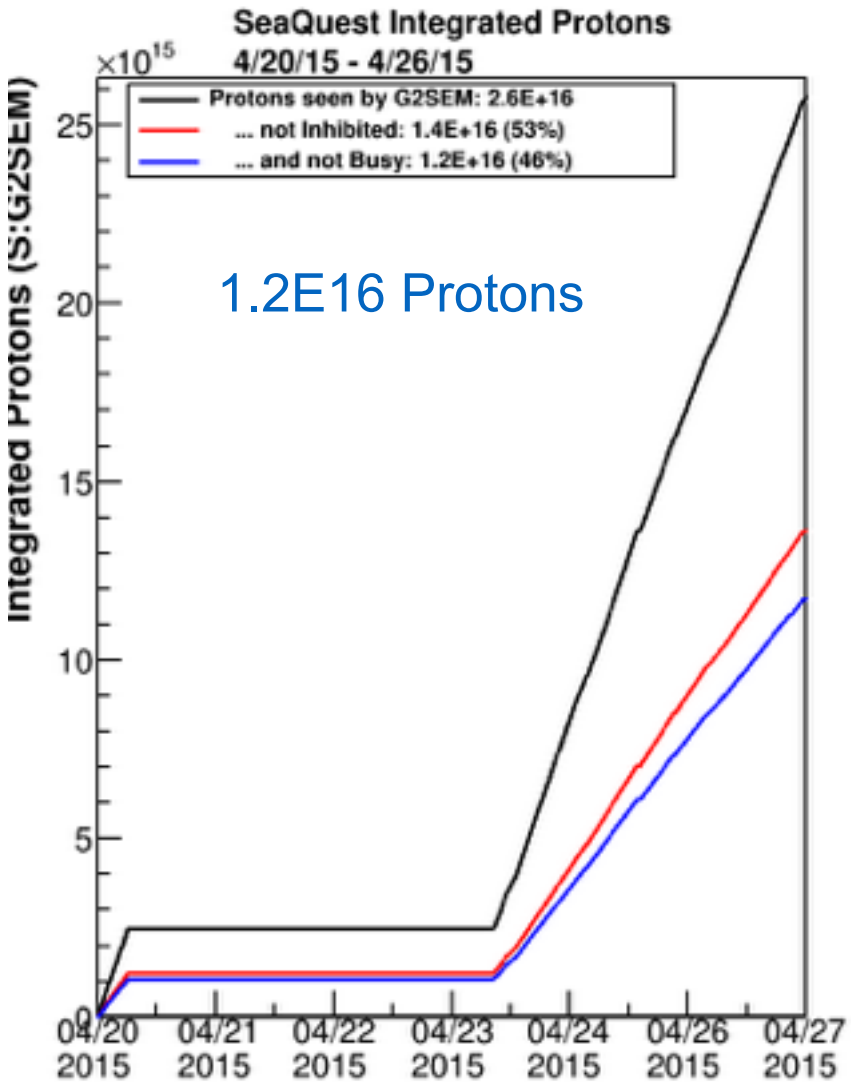
Brian Tice

April 27, 2015

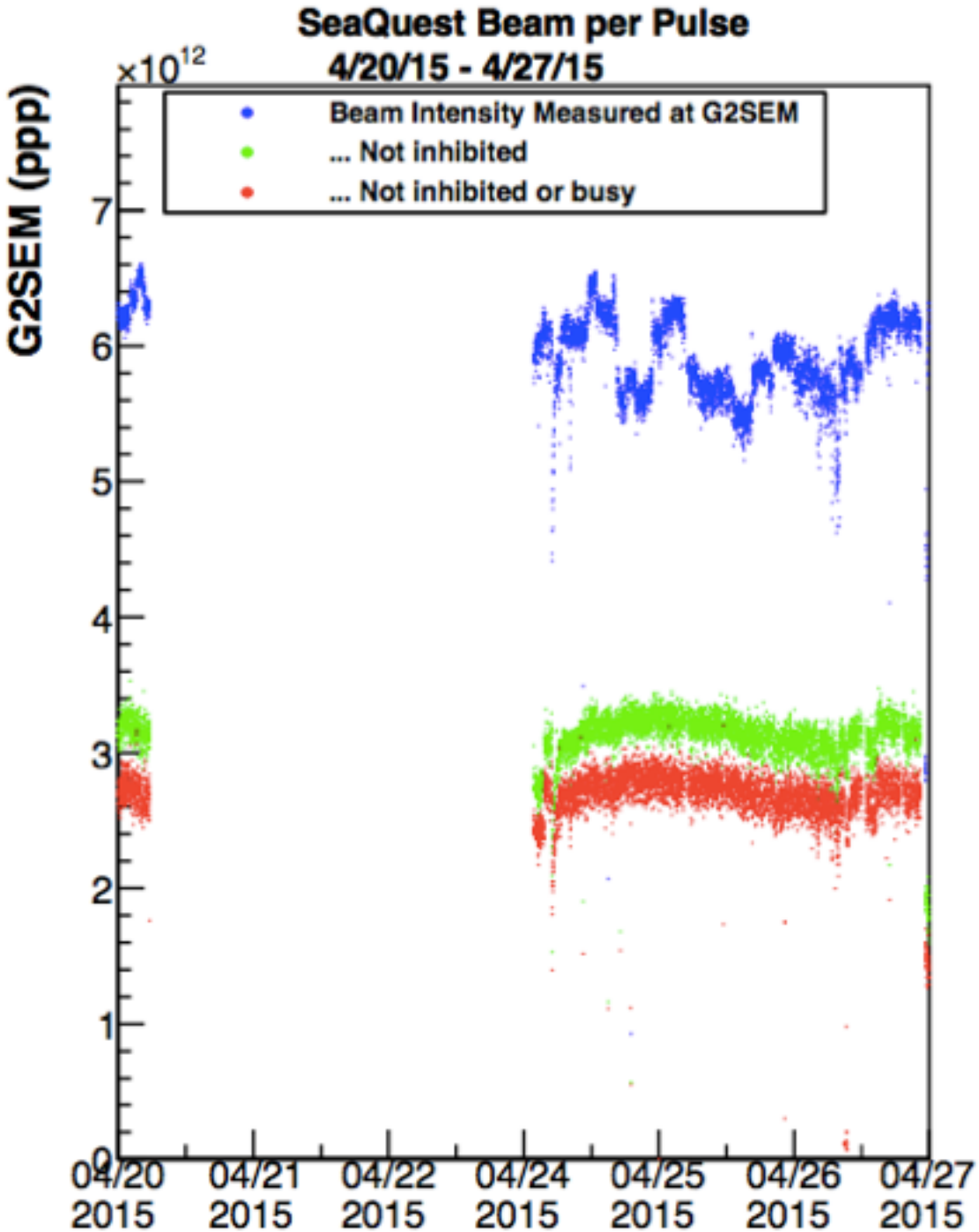
Full Production Runs II+III



Previous Week



Shutdown Beam



Tuesday's Power Outage

Plan

- SeaQuest's outage was Tuesday at 2:10
- Detector and computing systems powered down prior to outage
- Power generator used to keep keep liquid H2 target cold
  - D2 target was warmed and purged previous day. Wanted to refill with higher grade D2.

Outcome

- No problem with H2 target!
- No problem with computing systems!
- One power supply for drift chamber readout died
  - The 13 level shifter boards using the power supply also died
  - All were replaced with spares.
  - Level shifter boards on 14th floor for repair. Typically fixed easily.
- No problem with other detector systems!

Target System

Deuterium Upgrade

- D2 target warmed up and purged Monday
- D2 target refilled and cooled Thursday using high-purity D2
  - Old impurity ~12%. New impurity <1%
- Beam returned late Thursday and we took data on the other 6 targets

- Gate valve problems on both H2 and D2 targets
  - D2 gate valve replaced successfully
  - Other new spare gate valve faulty, H2 will need replacement

Other News

- NM3SEM was off when beam returned Thursday
  - When it was turned on, calibration had changed (reading ~50% of previous values)
  - Currently is reading in the ballpark of previous values but calibration seems to fluctuate
- MySQL server had 3 TB disk fail Saturday. Disk replaced. Data-taking not affected
  - 2 more spare disks ordered

- All subsystems currently performing well
  - Beam monitoring, targets, magnets, detectors, DAQ all good