

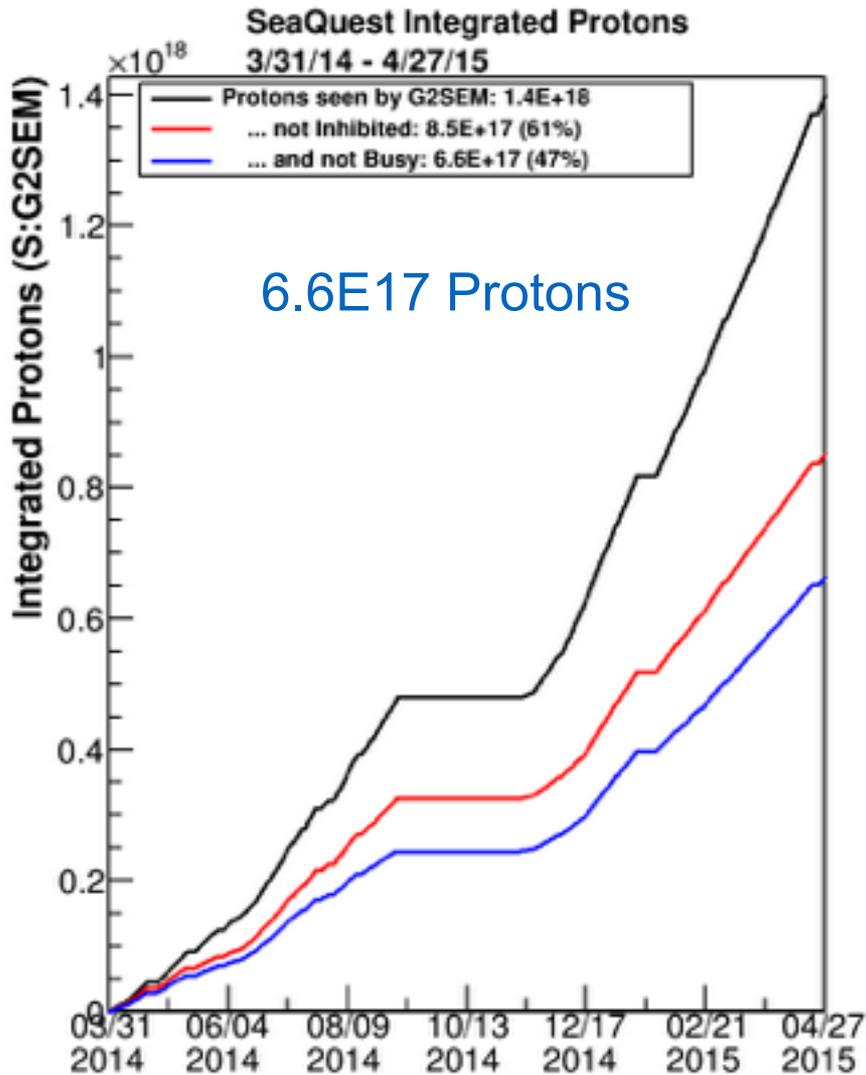
SeaQuest Status

April 20-26, 2015

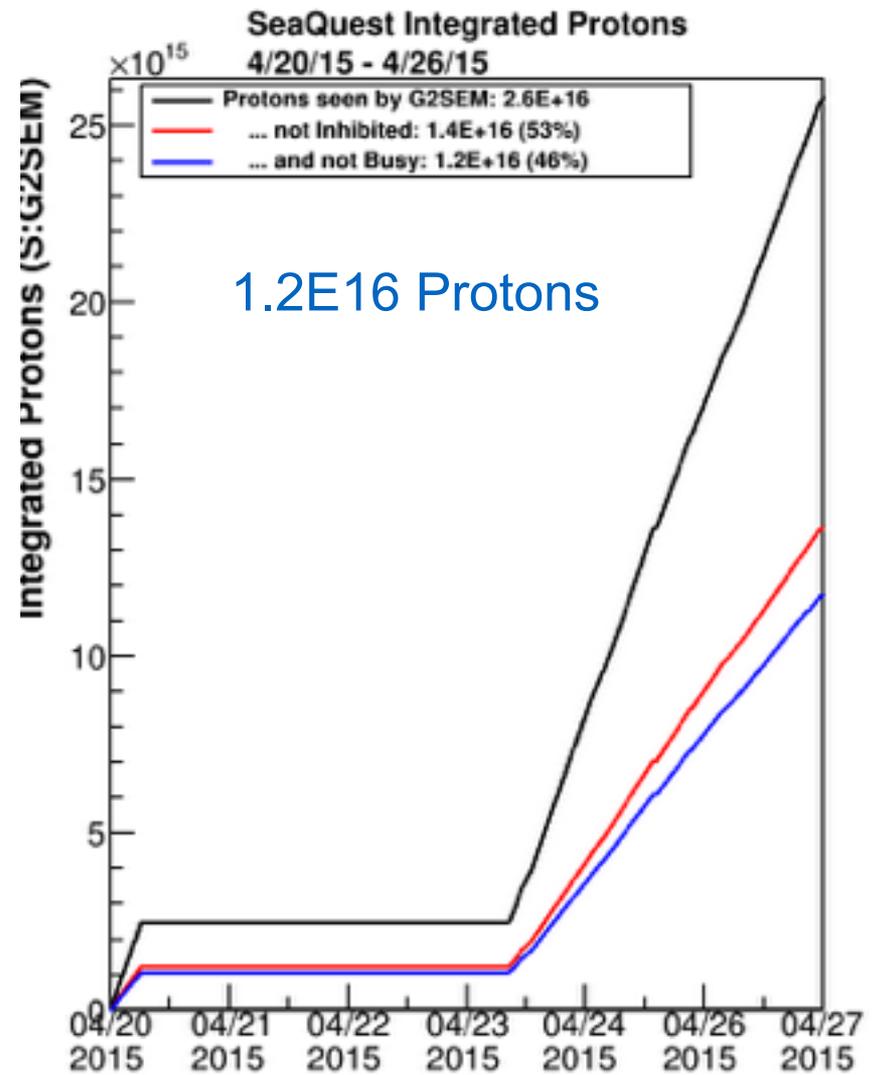
Brian Tice

April 27, 2015

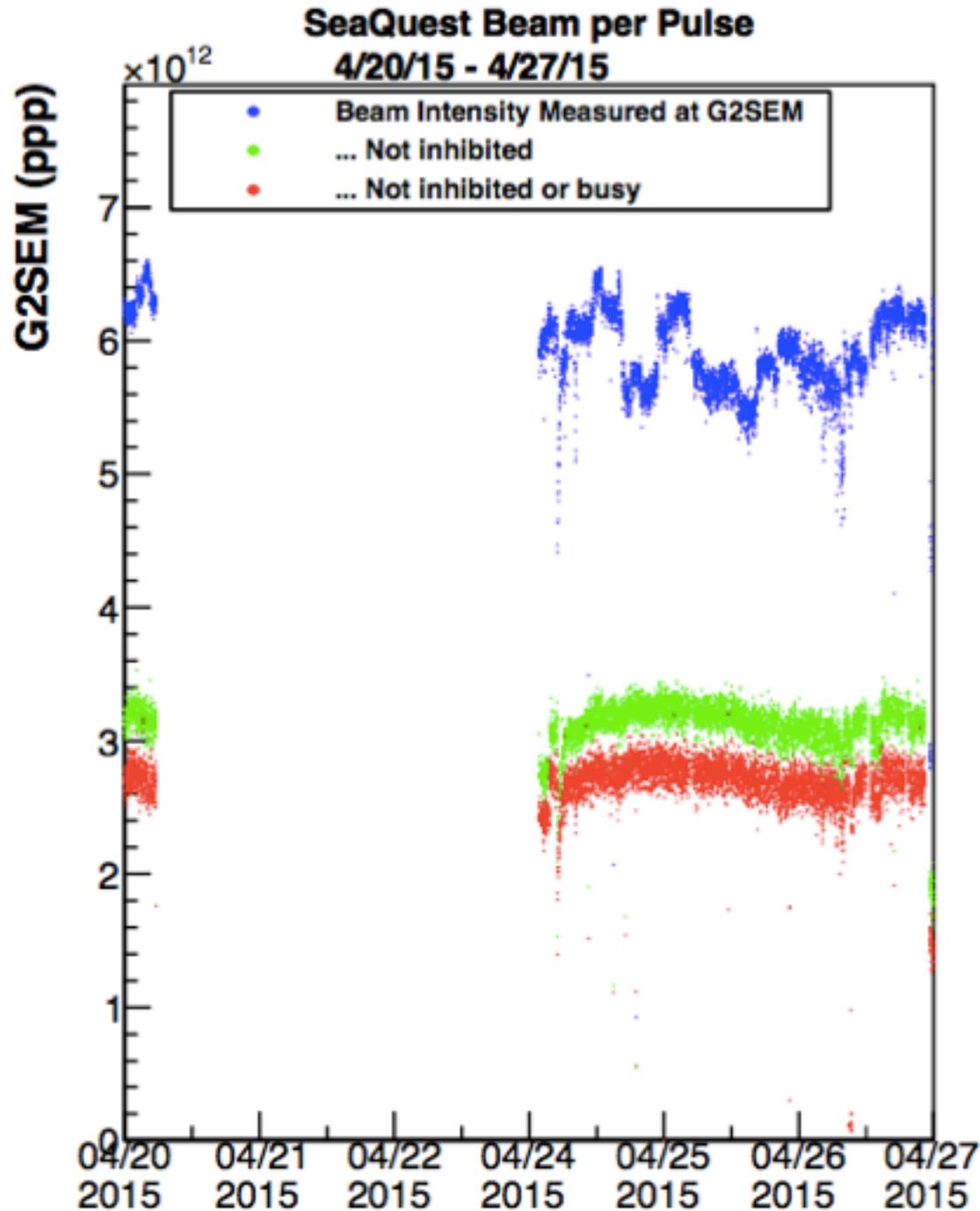
Full Production Runs II+III



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 purity ~12%. New purity <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

