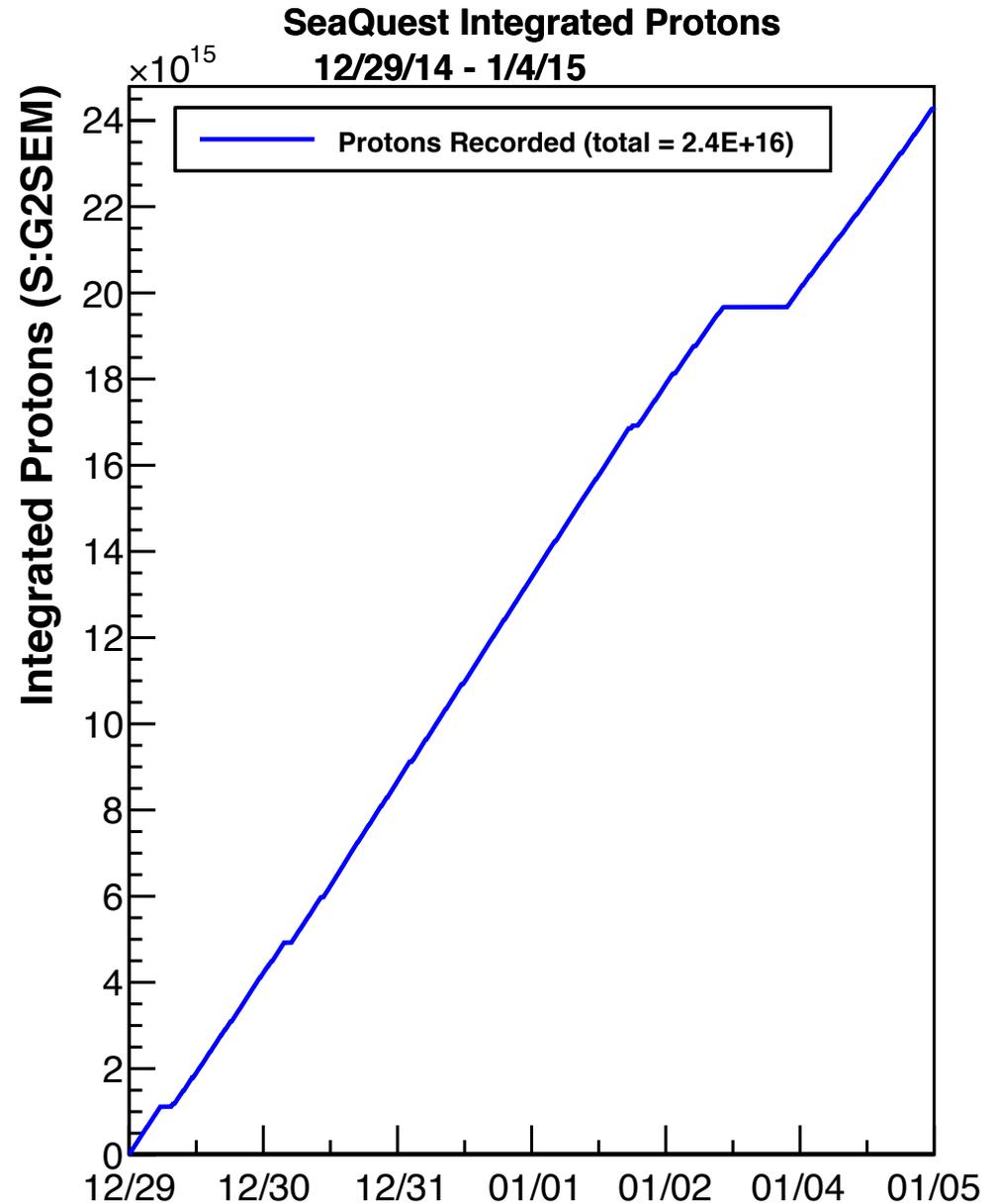
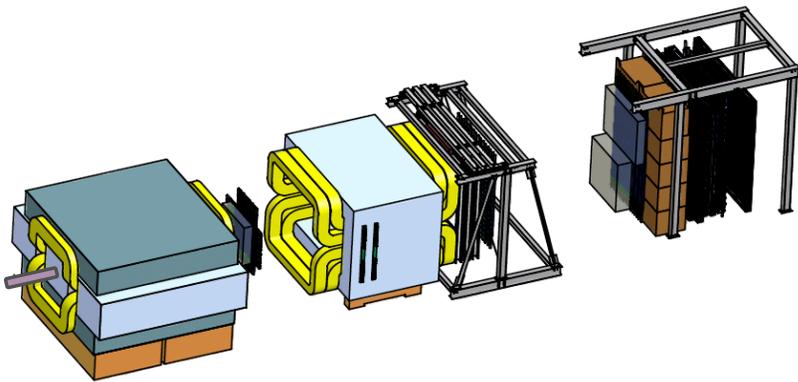


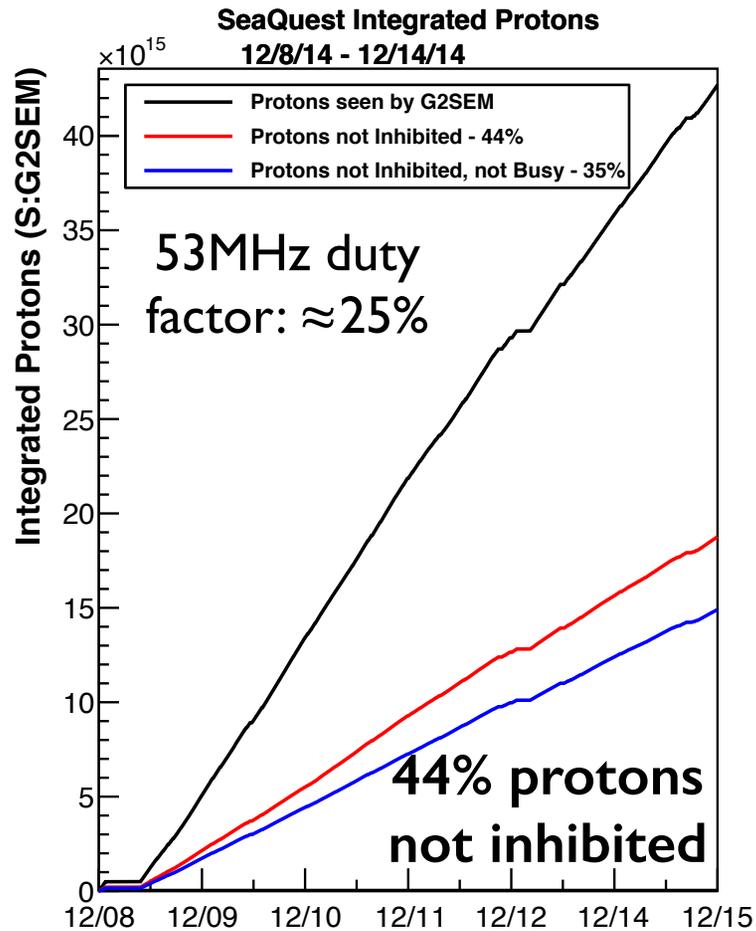
SeaQuest Status:

- ◆ Mostly smooth data-taking last week.
 - ▶ A few short interruptions
 - ▶ \approx 12 hour unexpected downtime on Saturday due mechanical problem with target table

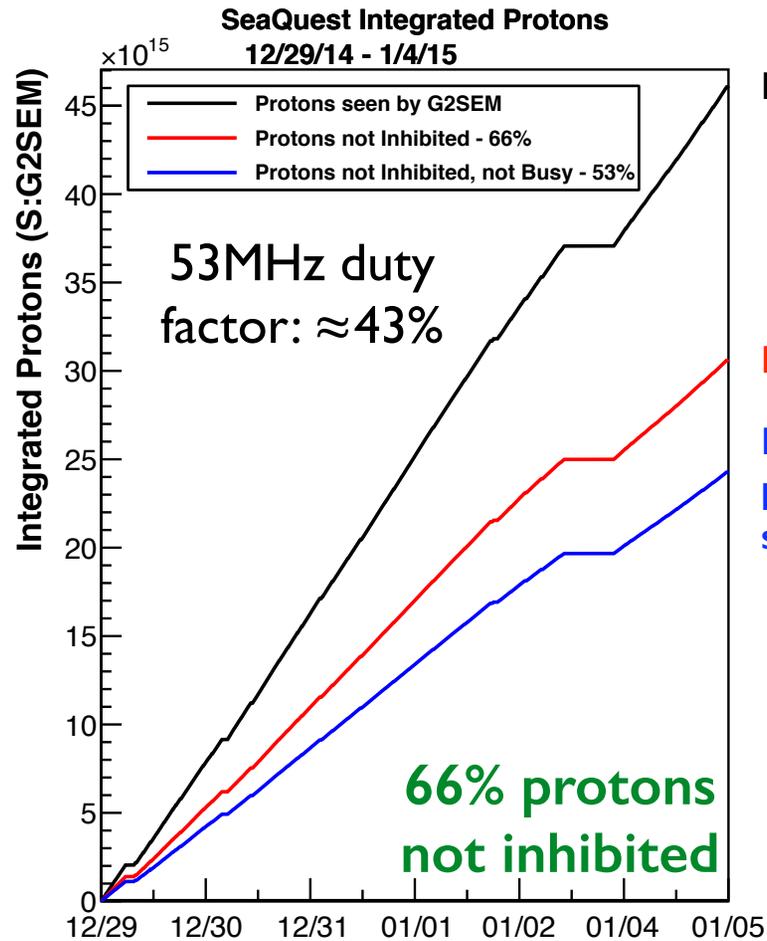


Good news! - beam quality improvements:

three weeks ago



last week



Protons seen in G2SEM

Protons not inhibited

Integrated accepted protons (as in previous slide)

On 12/17, a module controlling phasing of RF/smoothing of beam was found by accelerator to be disabled (maybe turned down in amplitude). High frequency variations reduced significantly, 50Hz and lower somewhat.

Saturday's target problem:

- 04:30 Target fails to move to next position, beam vetoed. Shift crew can't fix... expert was called, but can't resolve on the phone.
- 07:00 Expert arrived. Target stuck on hydrogen. Motor controller and power supplies swapped, but no improvement.
- 11:00 AD rad tech called in to make a cave access. Thanks Joel Fulgham!
- 12:00 Entered target cave, verified target stuck in hydrogen position, motor making noise, but leadscrew not rotating.
- 13:30 Reentered cave, removed stepper motor. Found that it works, and leadscrew is free to turn. **Coupling between them slipping.** Parts were cleaned and retightened. Motion restored.
- 15:30 New motor control modules behaving inconsistently. Originals put back. Automatic motion restored.
- 17:30 Automatic motion verified, beam requested.

