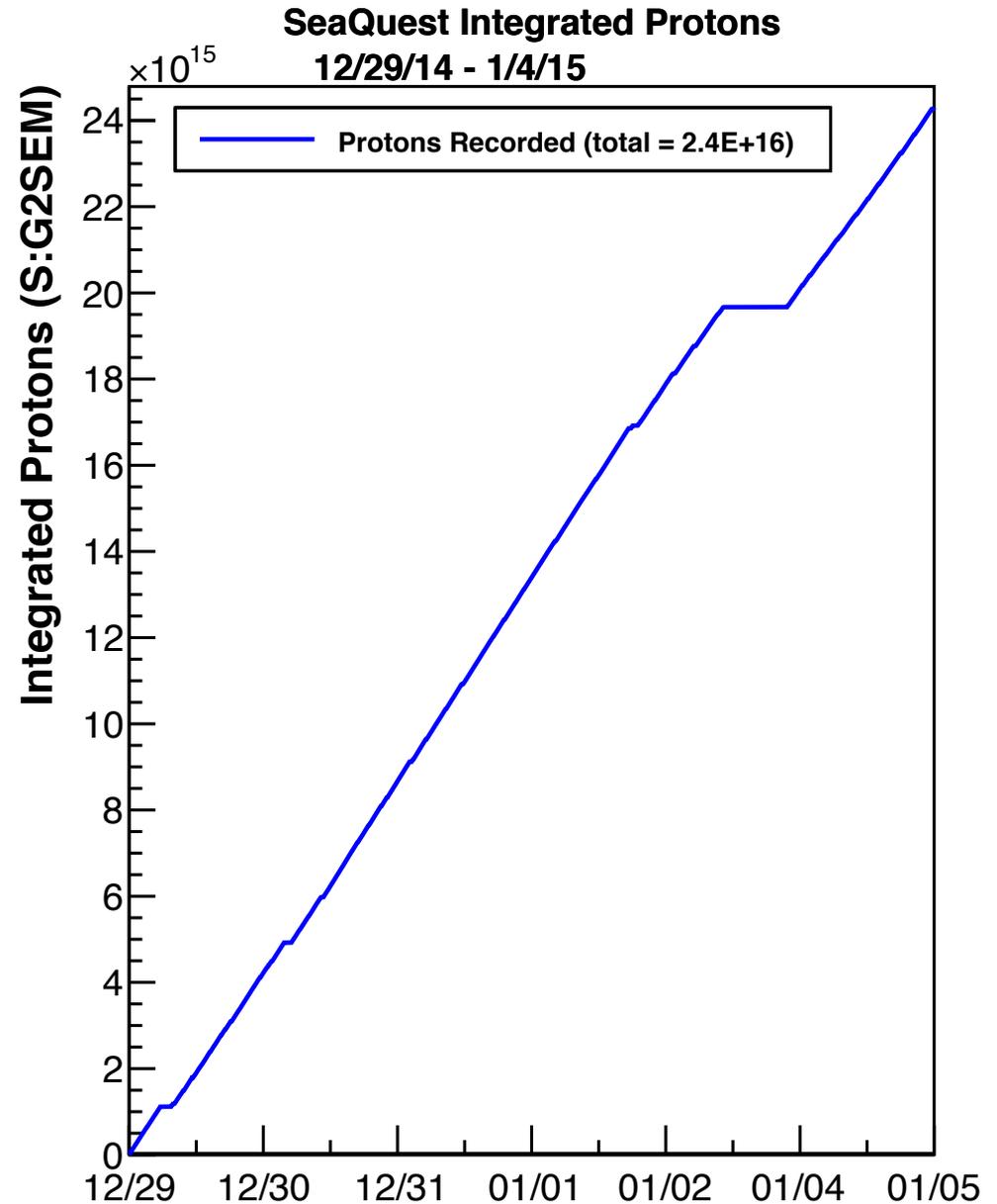
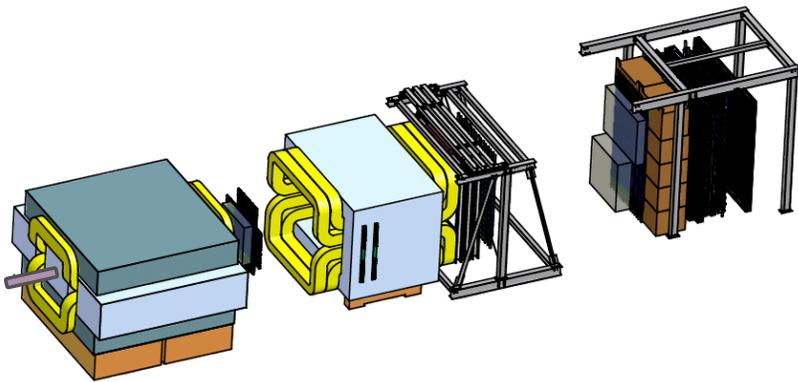


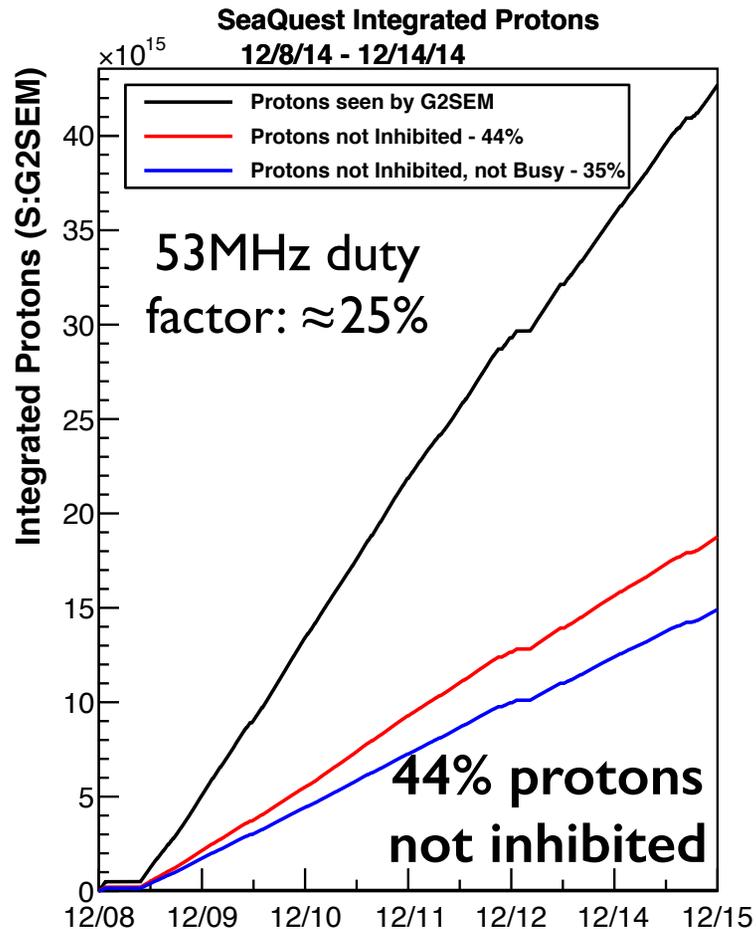
# SeaQuest Status:

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

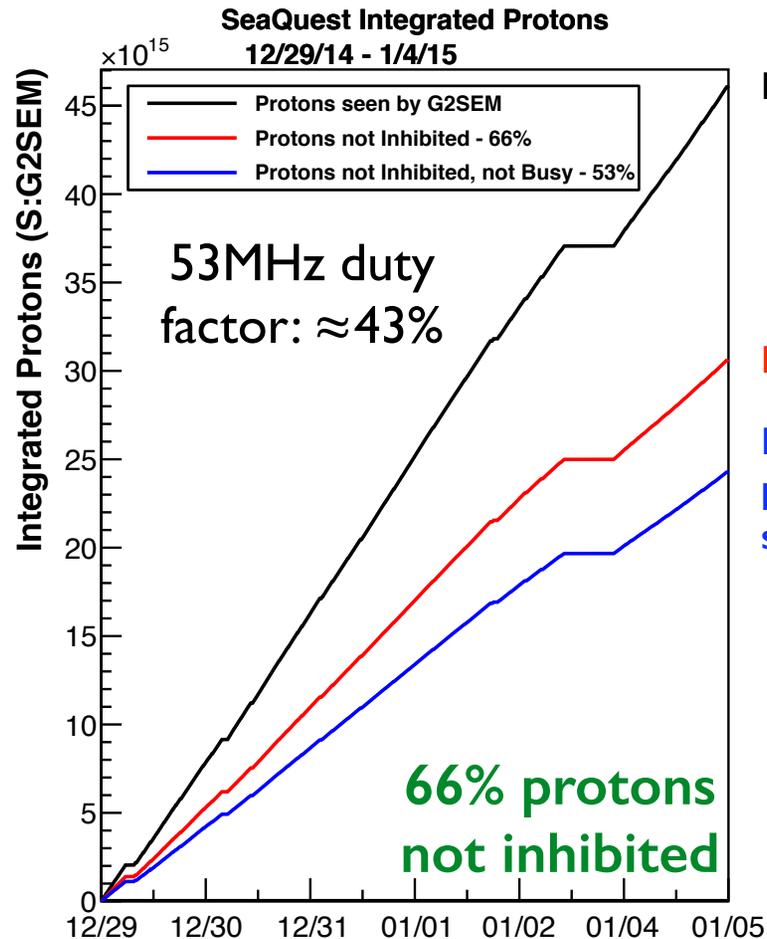


# Good news! - beam quality improvements:

## three weeks ago



## last week



Protons seen in G2SEM

Protons not inhibited

Integrated accepted protons (as in previous slide)

On 12/17, an adjustment was made that significantly improved our duty factor.

# 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.

