

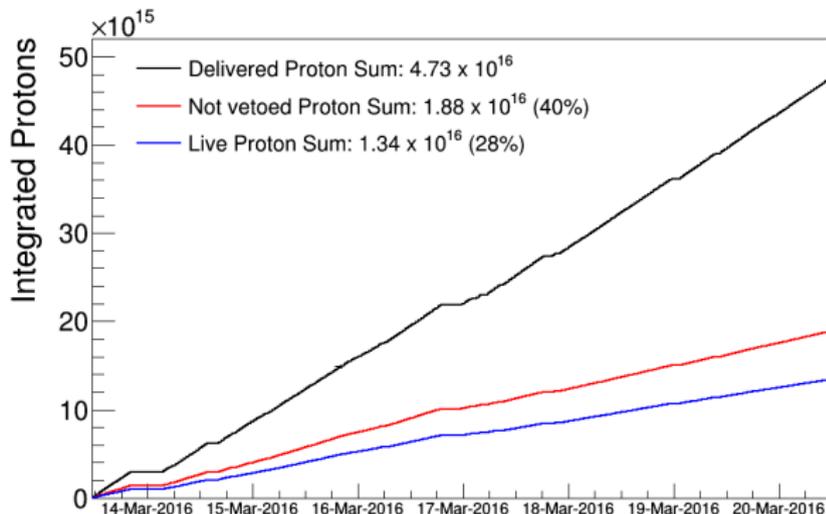
# E906/SeaQuest Report

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for the SeaQuest Collaboration



Mar 21, 2016.

Total protons accumulated:  $1.34 \times 10^{16}$ .



- Few issues receiving BOS (begin of spill) and EOS (end of spill) information → fixed by rebooting target computer and restarting scripts.
- Adjusted QIE inhibit threshold to 500 for nominal data taking.

# Targets.

- Pressure spikes for H<sub>2</sub> → switched to supply pressure.
- D<sub>2</sub> pressure alarm went off because of pressure right at the upper limit → back to normal soon after.
- Flammable gas alarm (also noticed by MCR and Communication Center) → back to normal after a few seconds.
  - D<sub>2</sub> pressure alarm after 5 min → back to normal soon after.

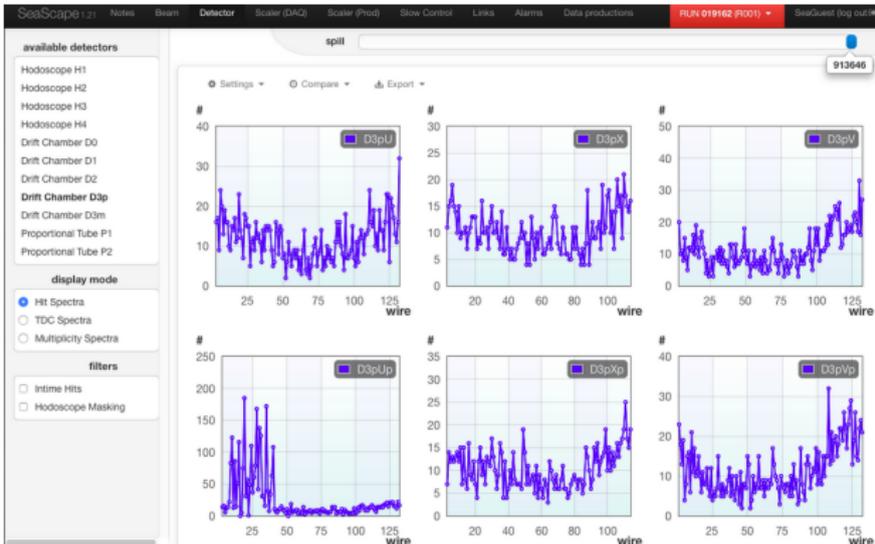
# Station 1.

- Survey done last Monday.
- Running with both 3-way and 4-way premix gas:
  - 4-way premix for 8h/day → 10am - 6pm
  - 3-way premix for 16h/day → 6pm - 10am
- Chamber 1 slowly raised to 1640V (should now be close to fully efficient).

# Stations 2, 3 and 4.

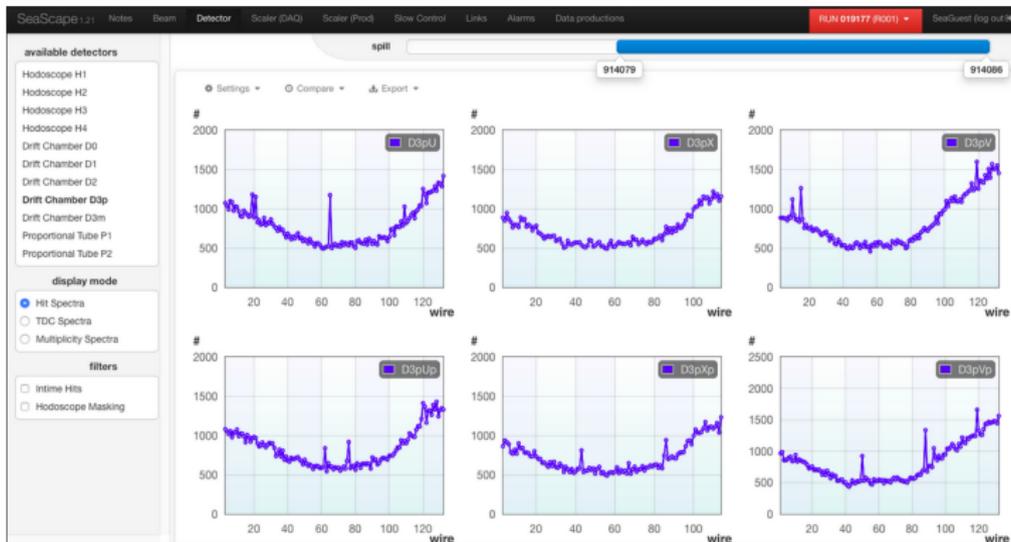
- Replaced 2 level-shifter boards for D3Up because of noise on Thursday → hit distribution went back to normal.

Before replacement:



# Stations 2, 3 and 4.

After replacement:



- Other stations are working well.

# Hodoscopes.

- All Station 1 hodoscopes were scanned one by one to make sure they had the right HV value after the installation of Chamber 0.
- We found two swapped HVs: H1B PMTs 22 and 23; H1L PMTs 11 and 12.
- The cables on the hodoscopes were the culprit → swapped them and fixed the issue.

# Data Acquisition.

- Some issues with our “watching” script → fixed by restarting it.
- Scaler DAQ alarm → fixed after restarting both beam DAQ and target computer.

# Summary.

- Have been taking nominal data since the installation of new Station 1 with both old and new Chambers.
- Running Chamber 1 with 3-way premix gas during the day (10am - 6pm), and with 4-way gas from 6pm to 10am.
- Though we ran through some issues last week, they were quickly fixed.
- Station 1 hodoscopes were scanned and the swaps found were fixed.

**Plan:** continue taking nominal data.