MiniBooNE Report

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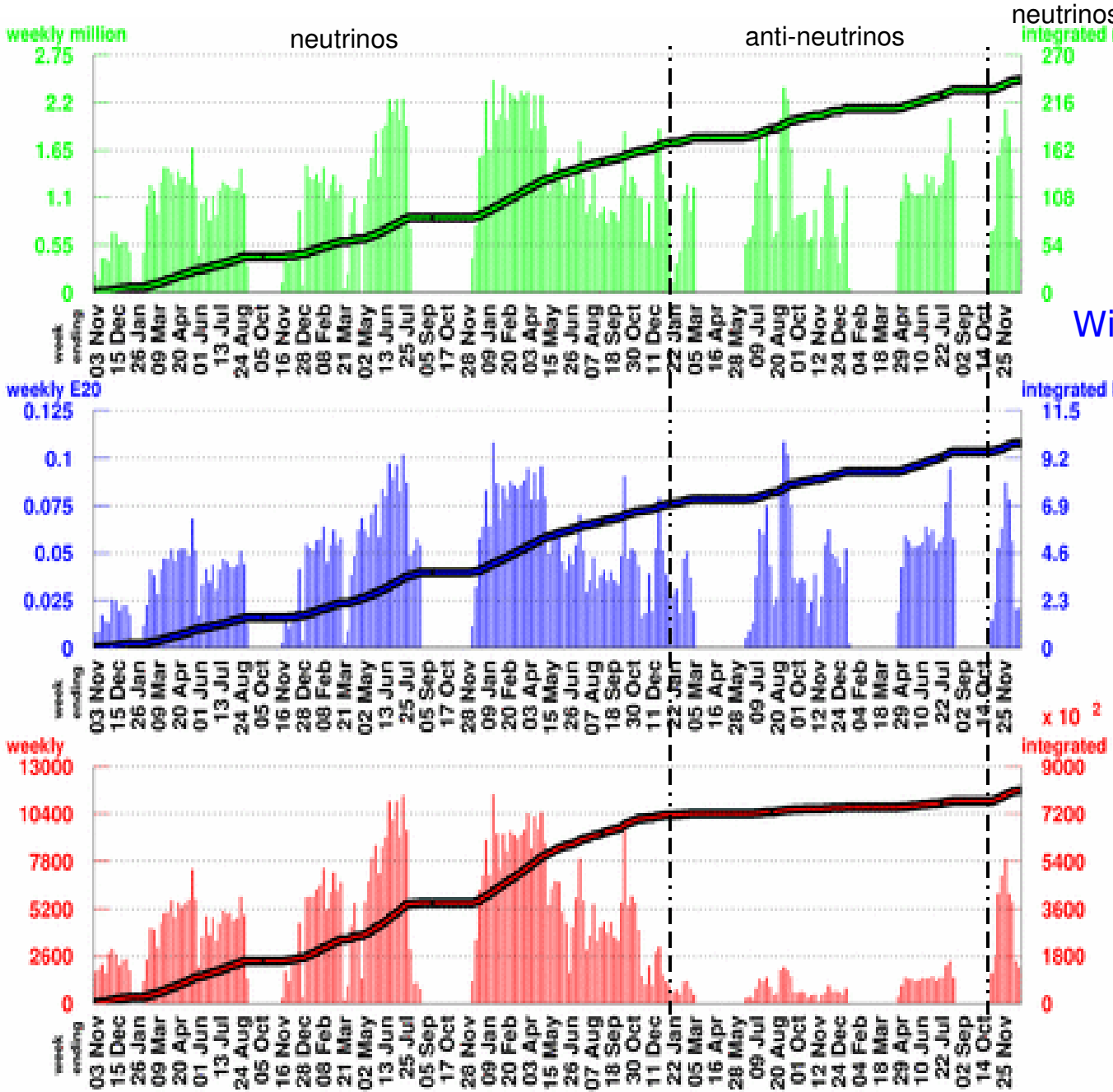
for the MiniBooNE collaboration

17 December 2007

Week Summary 10 Dec – 17 Dec 2.1E18 POT, 79% Uptime

- Reduced beam to MiniBooNE:
  - Linac vacuum and Booster magnet problems have limited proton output.
  - Even at lower intensity, we took useful data!
- Major Downtime:
  - 16 hrs, Linac dump vacuum repairs (Dec 12).
  - 8hrs, Linac breaker repairs (Dec 13).
  - 4 hrs, Booster BEX magnet power supply problem (Dec 15).

10 Dec – 17 Dec



Number of Horn Pulses

To date: 241.67 million

Largest week: 2.46 million

Latest week: 0.61 million

With Beam Information Cuts

Number of Protons on Target

To date: 9.9262 E20

Largest week: 0.1085 E20

Latest week: 0.0206 E20

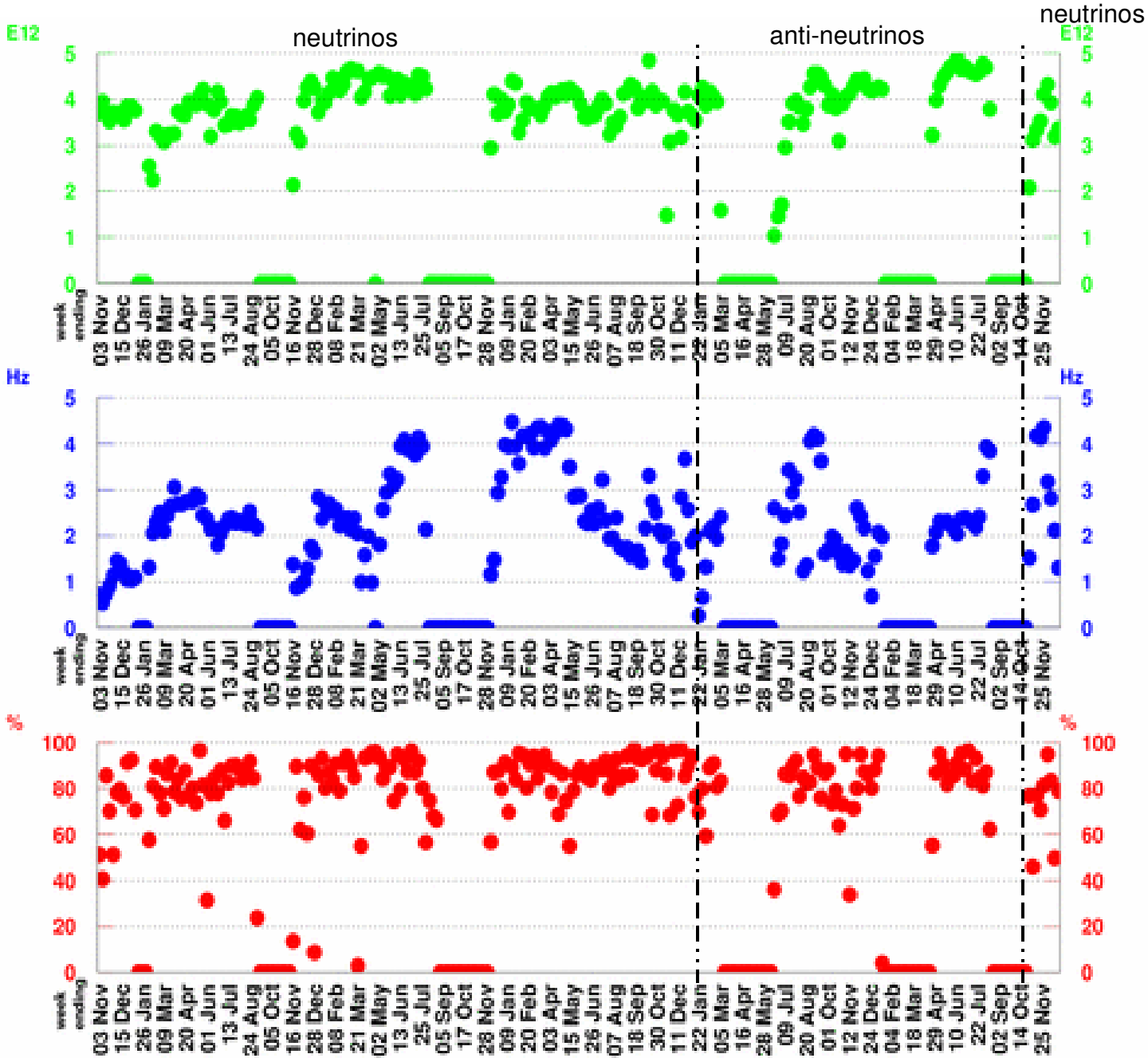
Number of Neutrino Events

To date:808957

Largest week: 11447

Latest week: 1995

10 Dec – 17 Dec



POT per Horn Pulse

Largest week: 4.89 E12

Latest week: 3.36 E12

Horn Rate

(for time periods with beam)

Largest week: 4.48 Hz

Latest week: 1.3 Hz

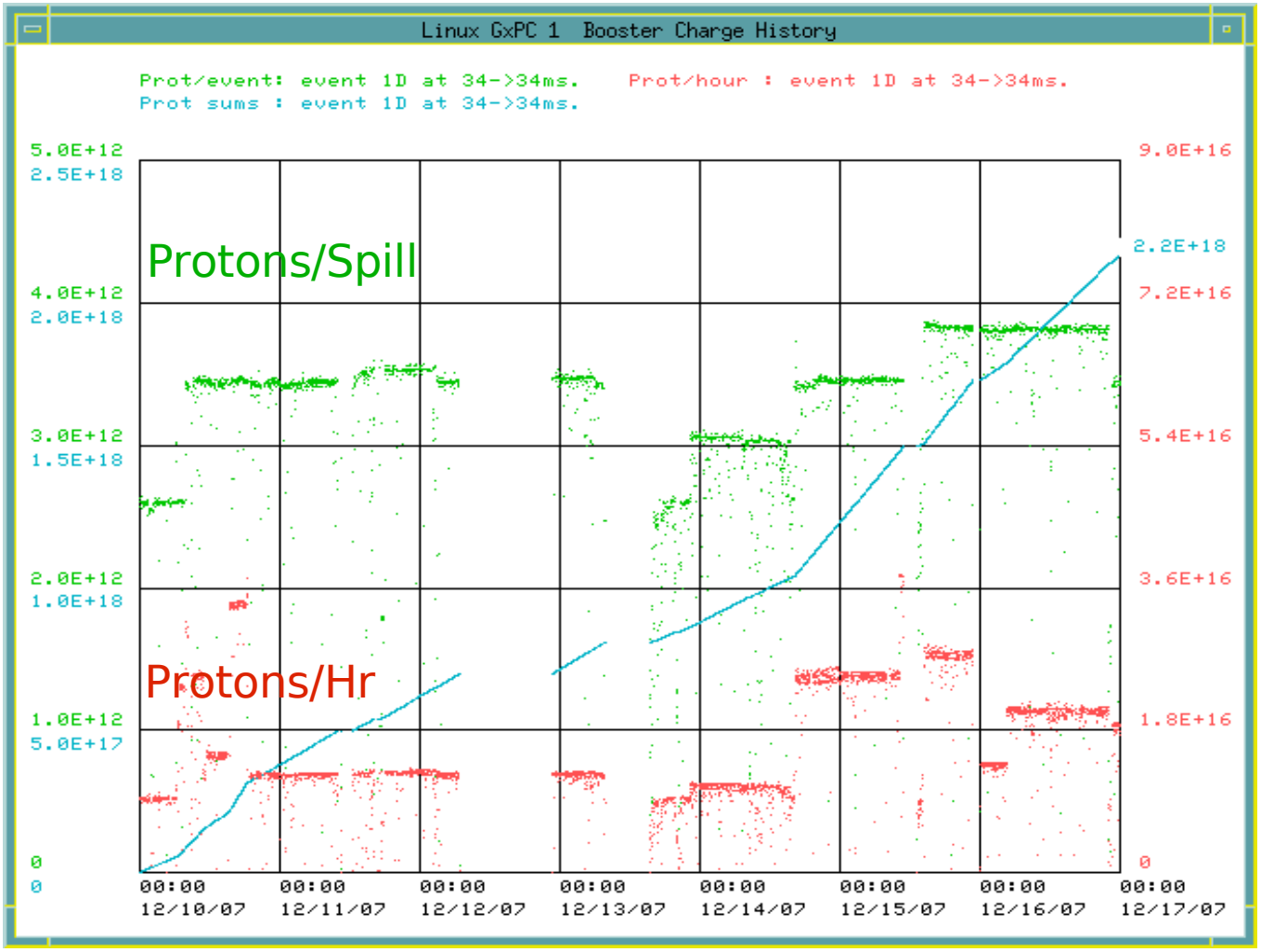
Beam Uptime Fraction

(fraction of time with beam)

Largest week: 97.4 %

Latest week: 79 %

One Week MB Proton/Hr Summary



POT/week

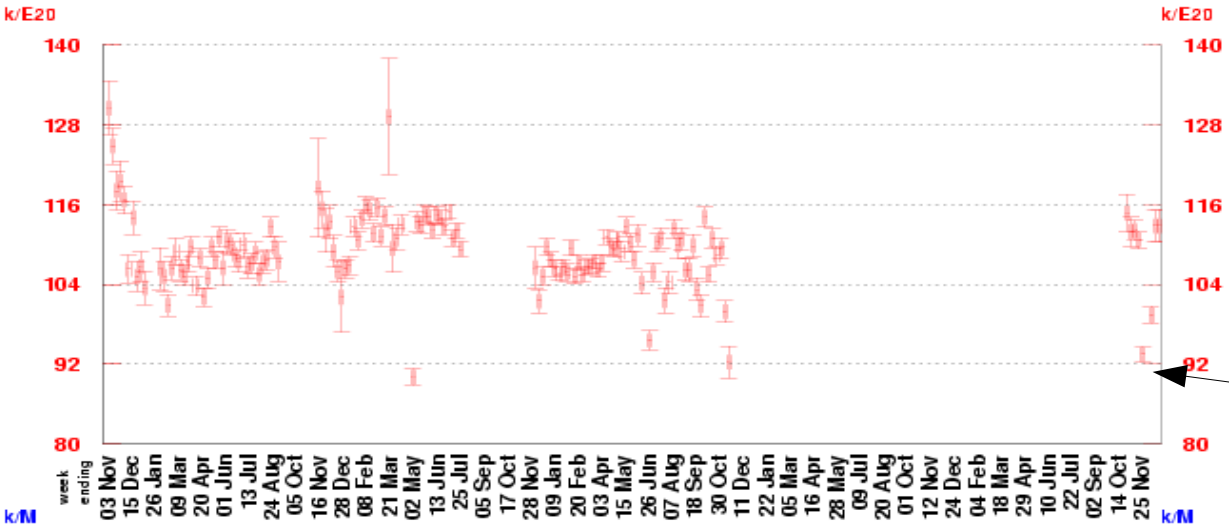
10 Dec

17 Dec

Steady, but reduced running at ~3.5E12 protons/spill

Nearline Neutrinos Rates

(does not include data quality corrections)

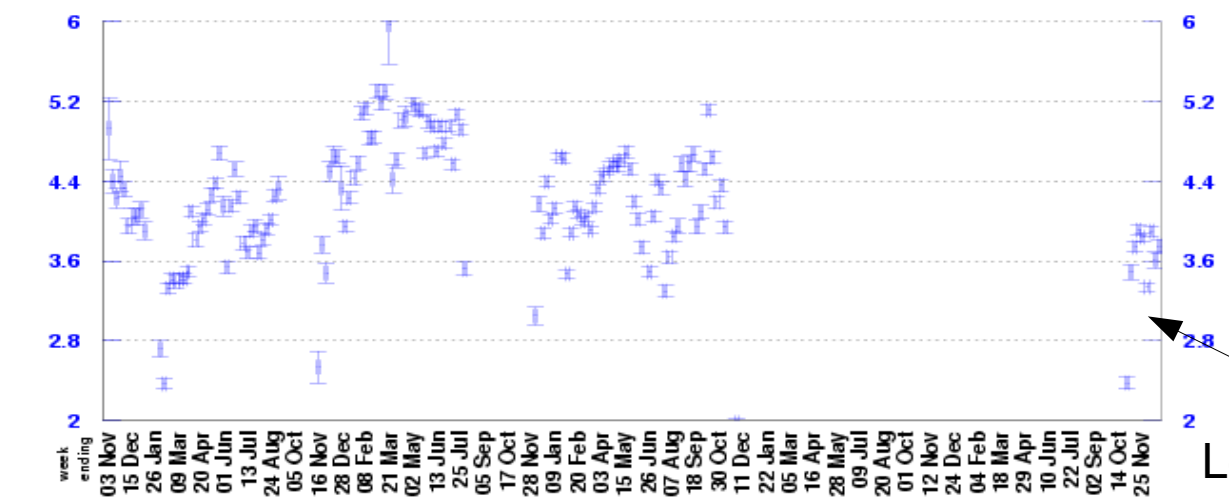


Neutrino Events per POT

Largest week: 178.5 k/E20

Latest week: 112.8 k/E20

Missing full RWM signal, data okay

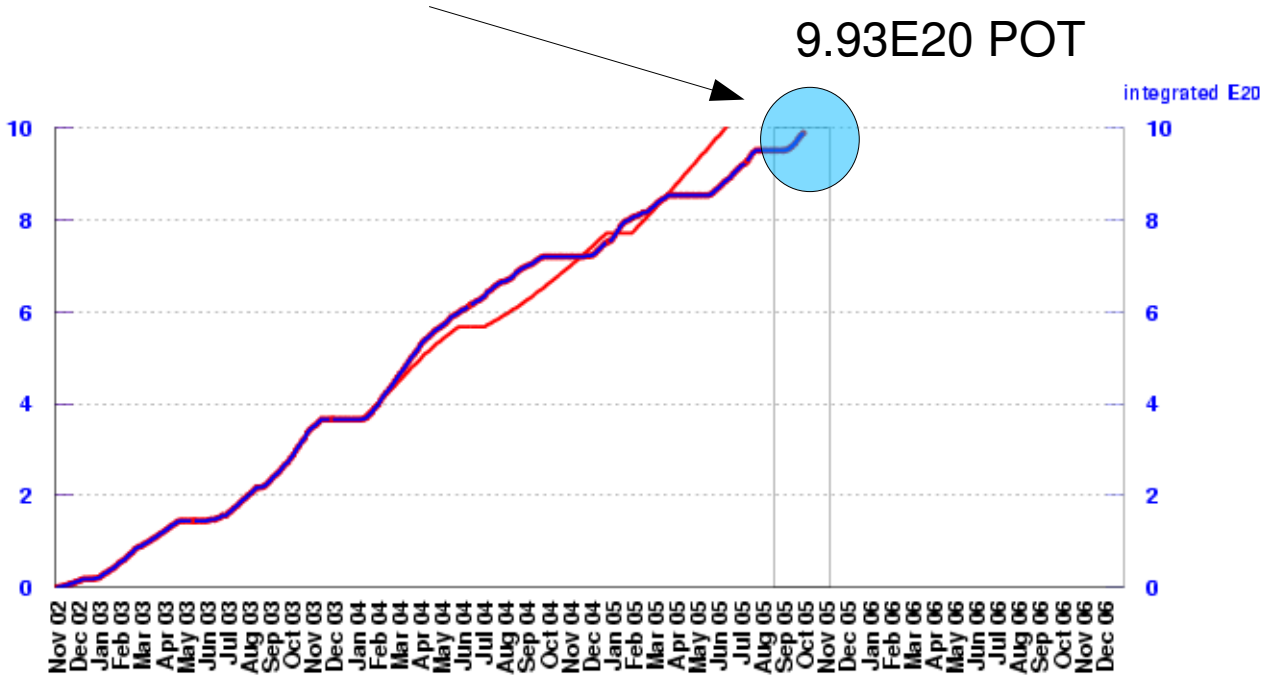


Neutrino Events per Horn Pulse

Largest week: 90.91 k/M

Latest week: 3.75 k/M

Lower average POT/pulse

This Week's Plan

- Hope Linac/Booster can be tuned up for higher proton intensity over the holidays.
- Closing in on 10E20POT total protons collected!