MiniBooNE Report

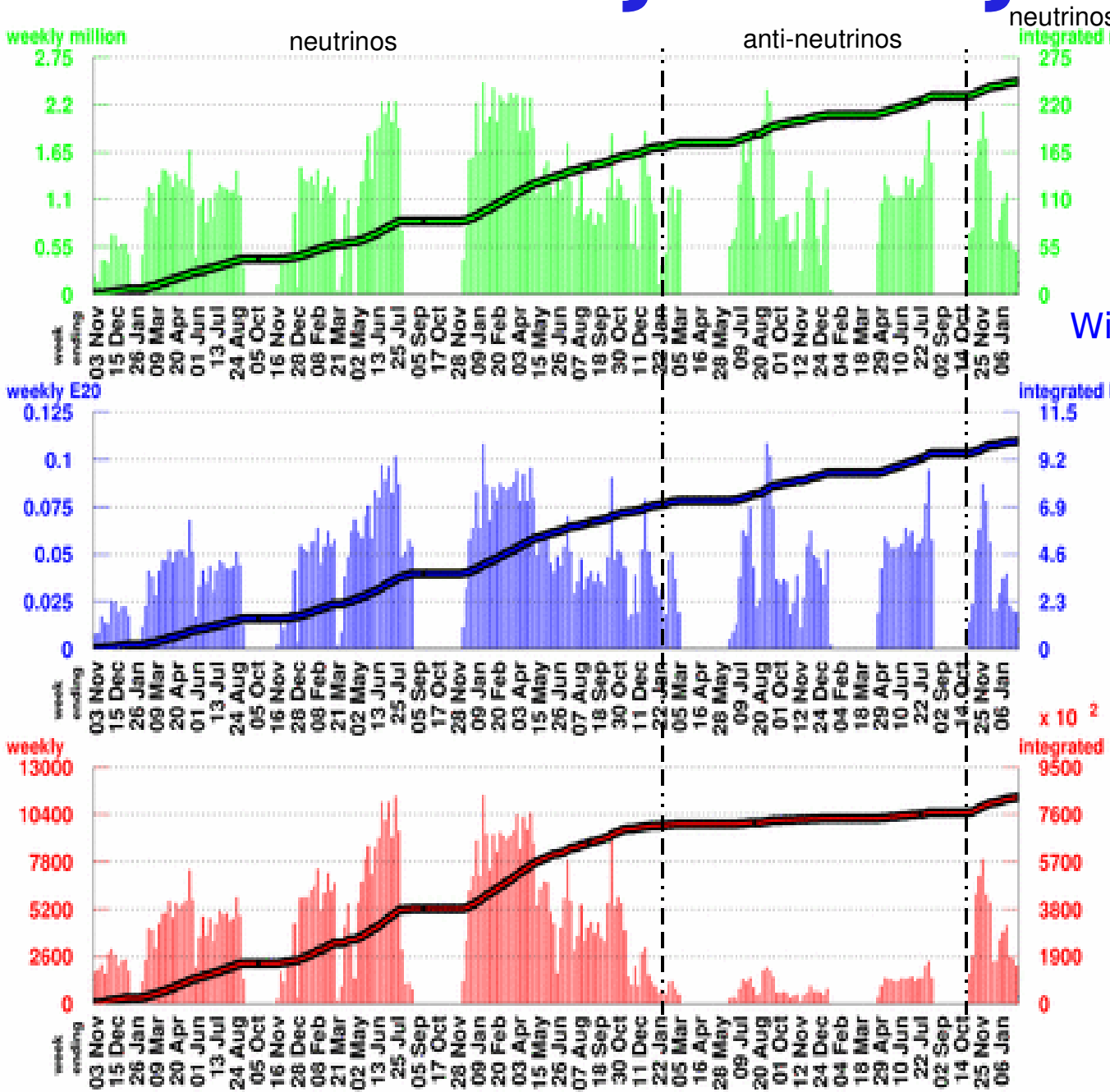
Richard Van de Water
Los Alamos National Laboratory
for the MiniBooNE collaboration

28 January 2008

Week Summary 14 Jan – 21 Jan 2.0E18 POT, 81.8% Uptime Week Summary 21 Jan – 28 Jan 2.0E18 POT, 84.5% Uptime

- Reduced protons/hr to BNB due to NuMI 11 batch slip stacking, running at ~1.4E16 p/hr.
- Good beam uptime, POT/spill increasing!
- Detector ran well, ~100% uptime.
- Major Downtime:
  - 4 hrs, Linac RF problems (Jan 15).
  - 9 hrs, Booster frozen water problems (Jan 19).
  - 5 hrs, Booster problem (Jan 21).
  - 12 hrs, Linac RF and MI problems (Jan 25).

14 Jan – 28 Jan



Number of Horn Pulses

To date: 246.42 million

Largest week: 2.46 million

Latest week: 0.5 million

With Beam Information Cuts

Number of Protons on Target

To date10.0951 E20

Largest week: 0.1085 E20

Latest week: 0.0195 E20

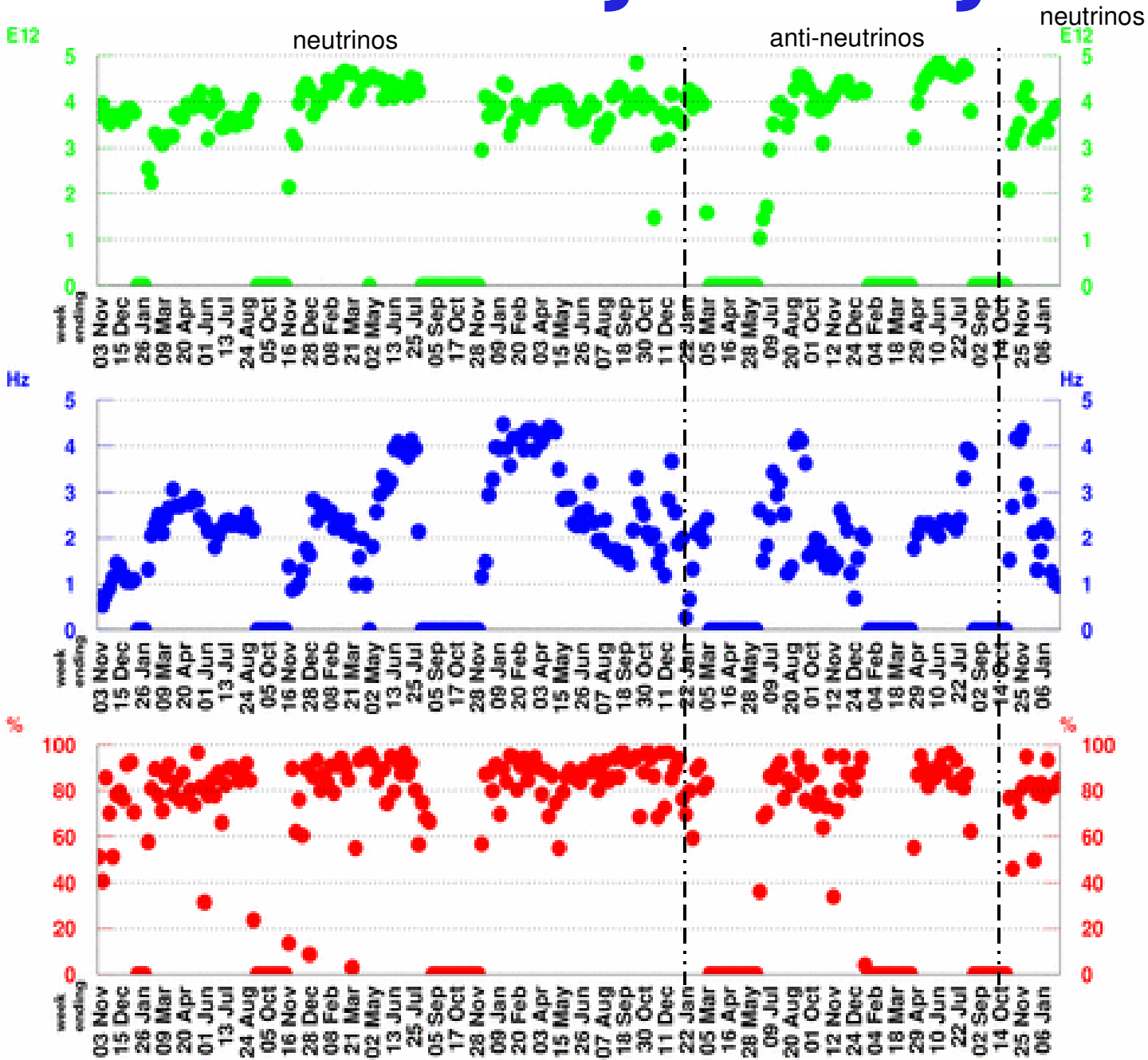
Number of Neutrino Events

To date:828145

Largest week: 11447

Latest week: 2088

14 Jan – 28 Jan



POT per Horn Pulse

Largest week: 4.89 E12

Latest week: 3.9 E12

Horn Rate

(for time periods with beam)

Largest week: 4.48 Hz

Latest week: 0.97 Hz

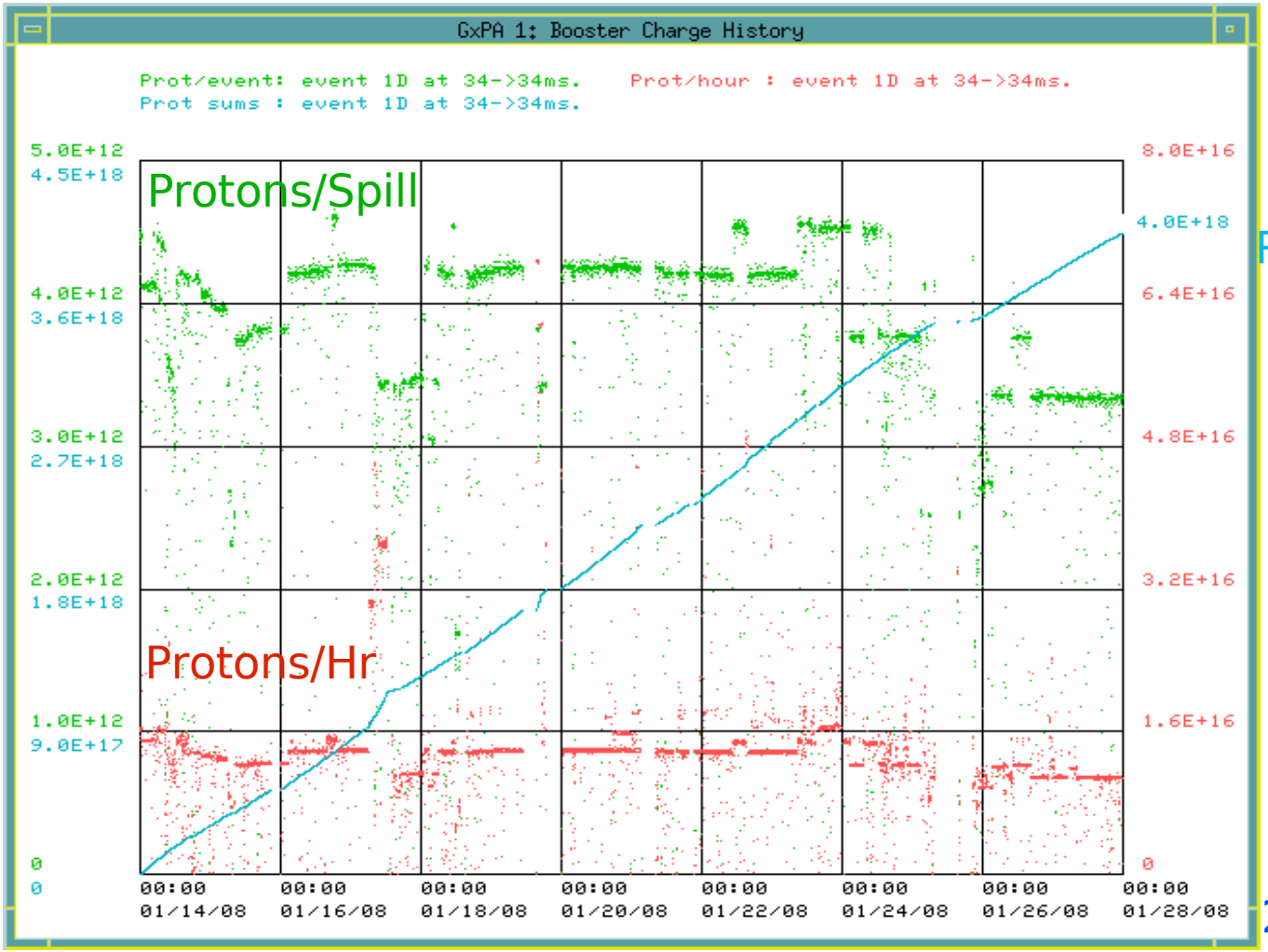
Beam Uptime Fraction

(fraction of time with beam)

Largest week: 97.4 %

Latest week: 84.5 %

One Week MB Proton/Hr Summary



POT/week

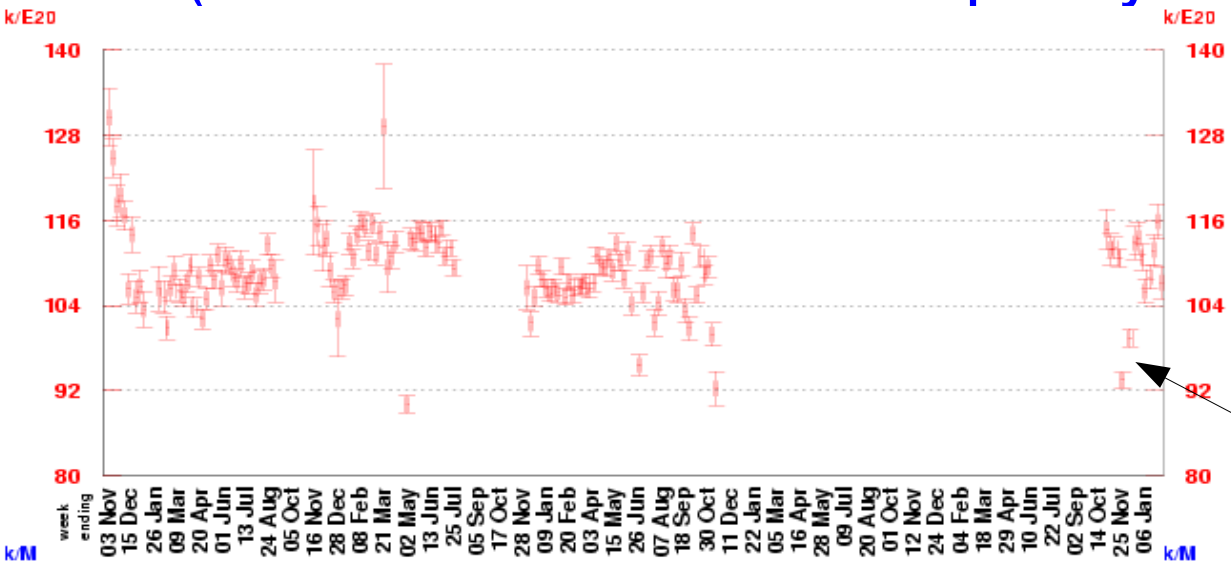
14 Jan

28 Jan

Steady running at 10 turns, ~1.4E16 p/hr.

Nearline Neutrinos Rates

(does not include data quality corrections)

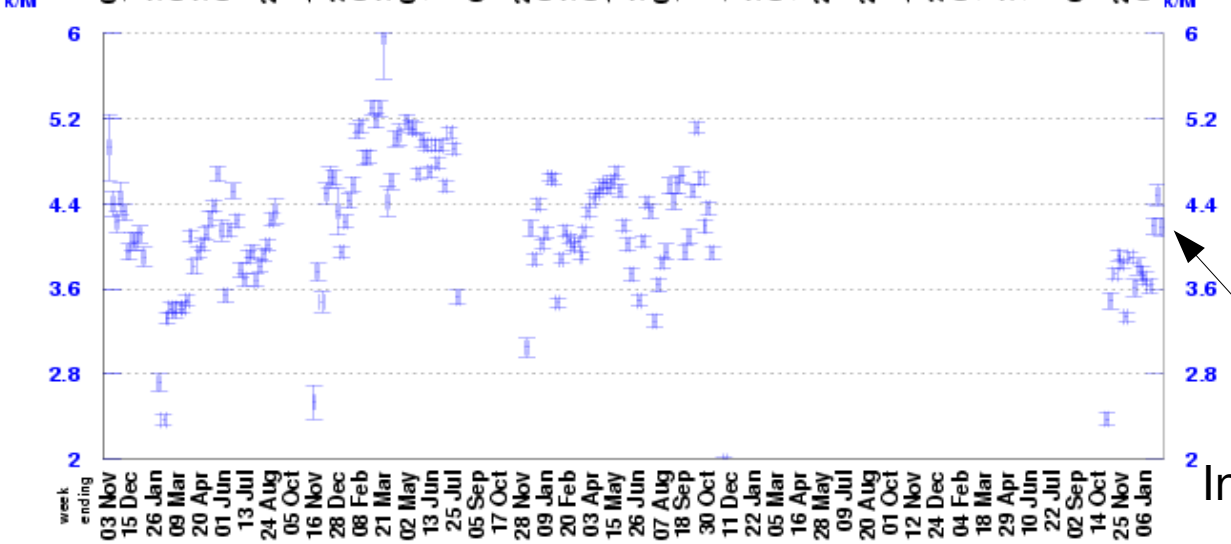


Neutrino Events per POT

Largest week: 178.5 k/E20

Latest week: 107.2 k/E20

Missing full RWM signal, data okay



Neutrino Events per Horn Pulse

Largest week: 90.91 k/M

Latest week: 4.18 k/M

Increase in average POT/pulse

This Week's Plan

- Keep on running, hope for improved Booster tuning to increase POT to BNB.
- Pizza party this Friday to celebrate 1E21 POT milestone. Noon in Operations back room.