MiniBooNE Report

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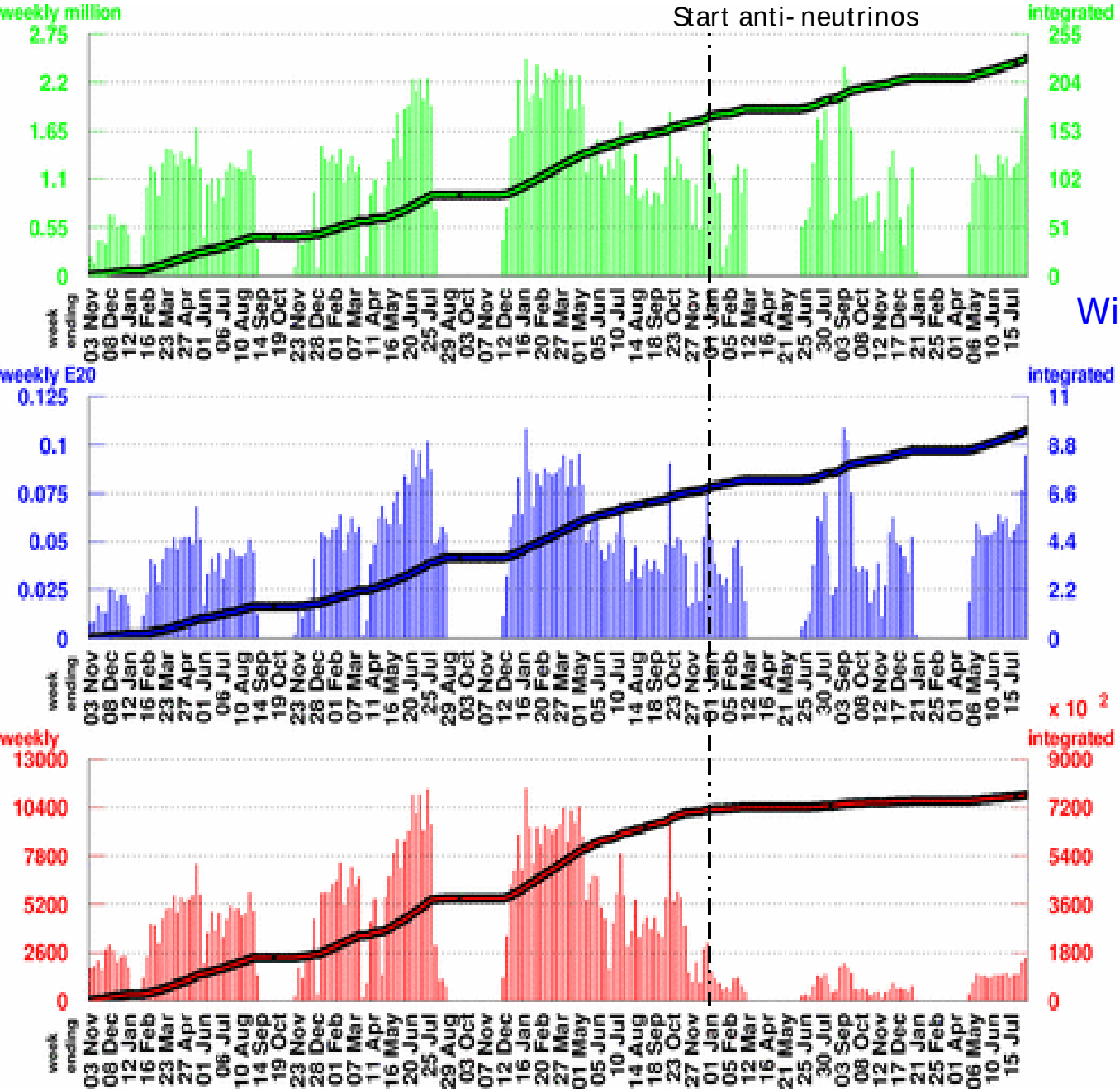
for the MiniBooNE collaboration

30 July 2007

Week Summary 23 July – 30 July 9.5E18 POT, 87% Uptime

- Booster delivering stable beam to MiniBooNE at ~7.5E16p/hr.
- Major Downtime:
  - 8 hrs: missing ACNET DAQ information, but is recoverable (July 23).
  - 4 hrs, Booster water leak (July 24).
  - 6 hrs: Linac repairs (July 27).

23 July – 30 July



Number of Horn Pulses

To date: 228.7 million

Largest week: 2.46 million

Latest week: 2.02 million

With Beam Information Cuts

Number of Protons on Target

To date: 9.4518 E20

Largest week: 0.1085 E20

Latest week: 0.0946 E20

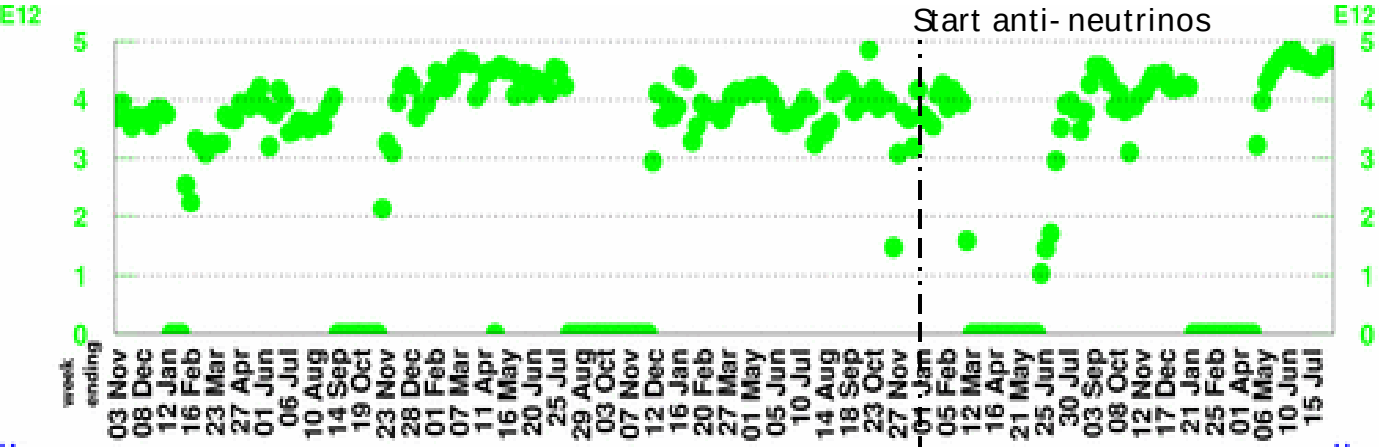
Number of Neutrino Events

To date: 766342

Largest week: 11447

Latest week: 2308

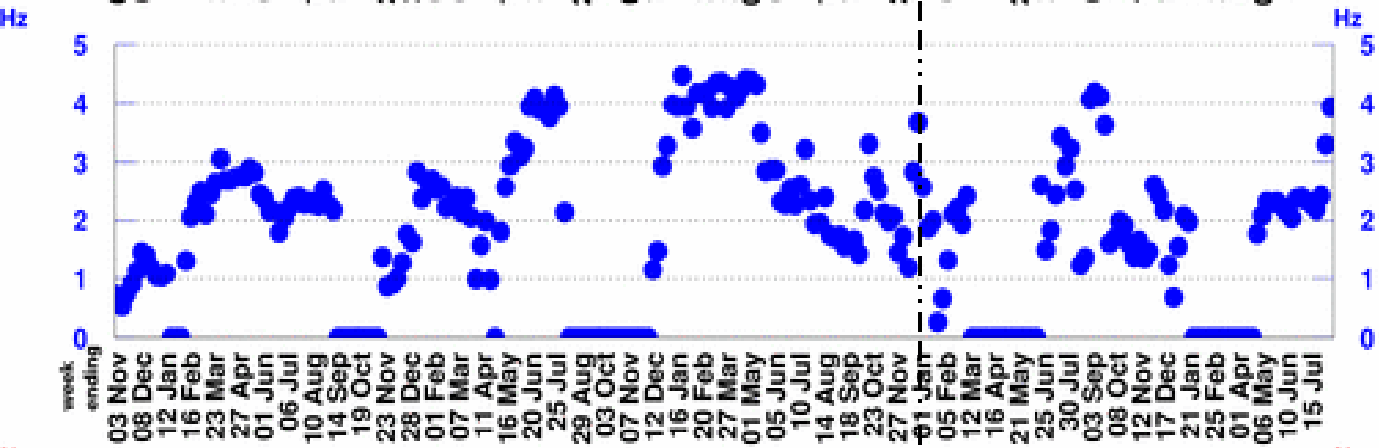
23 July – 30 July



POT per Horn Pulse

Largest week: 4.89 E12

Latest week: 4.69 E12

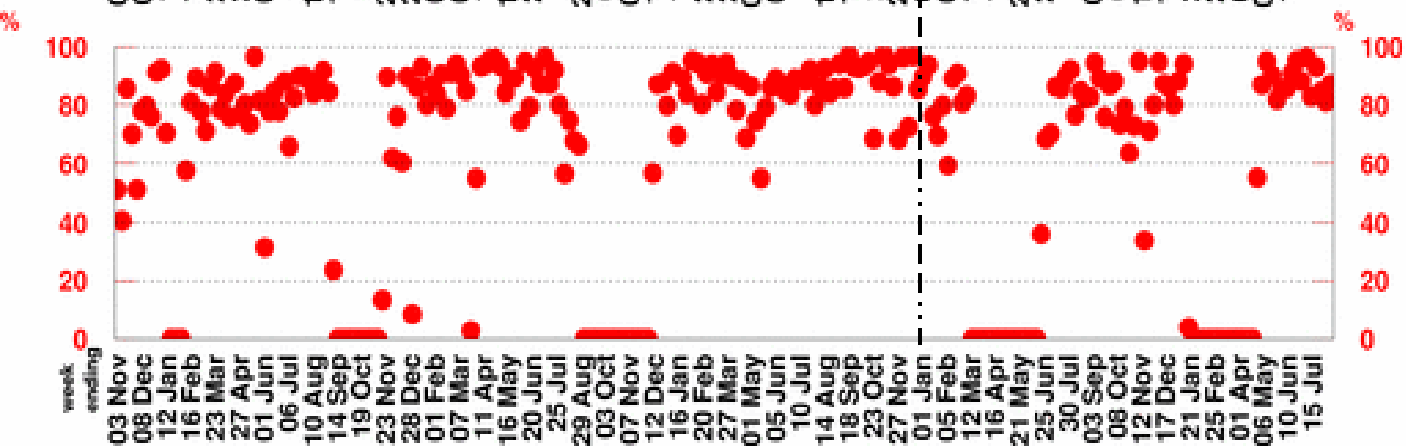


Horn Rate

(for time periods with beam)

Largest week: 4.48 Hz

Latest week: 3.94 Hz



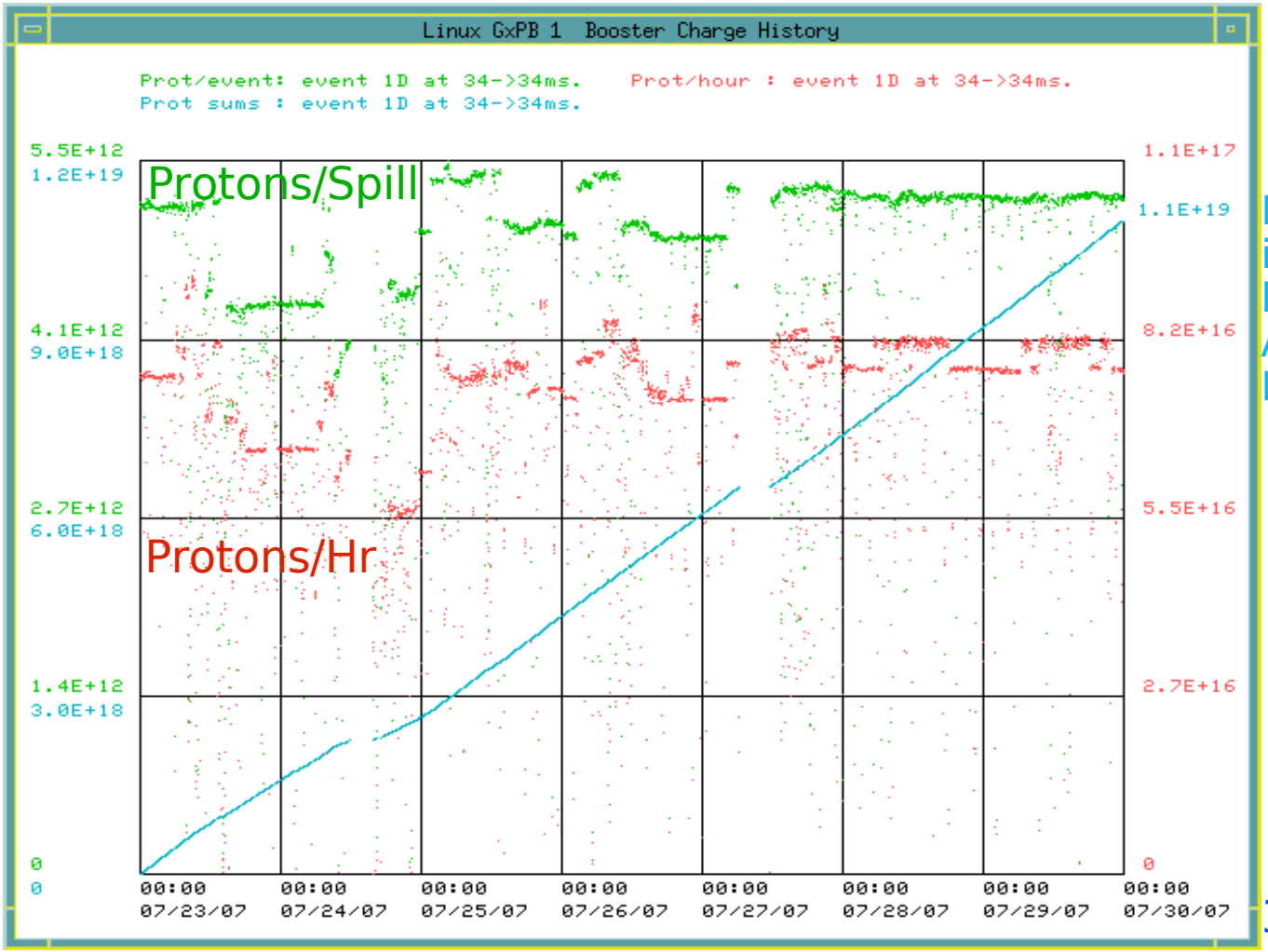
Beam Uptime Fraction

(fraction of time with beam)

Largest week: 97.4 %

Latest week: 87.1 %

One Week MB Proton/Hr Summary

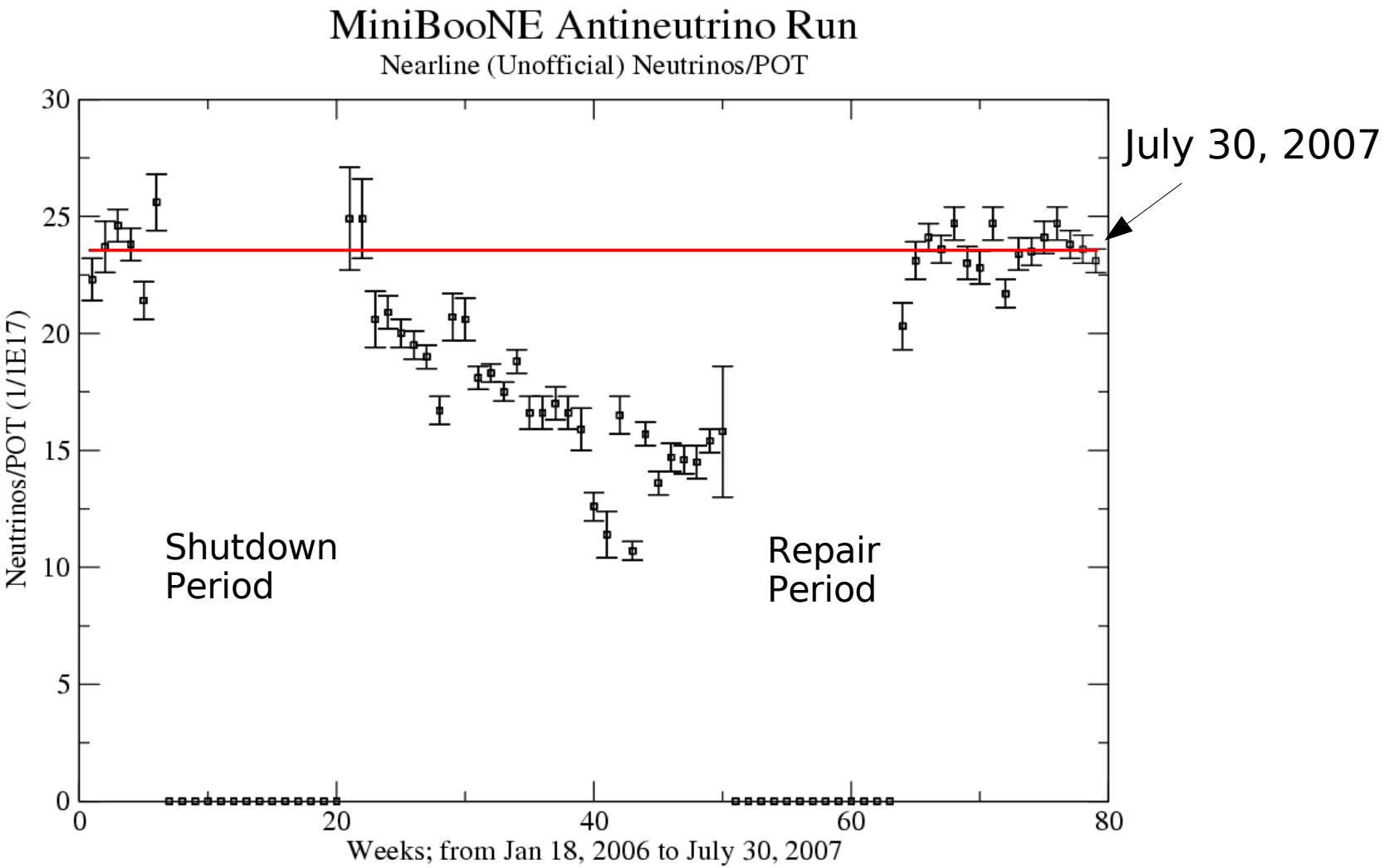


Booster Toroid integrated luminosity. A weekly Record!

23 July

30 July

Excellent running at ~7.5E16 p/hr!



25m Absorber Repairs appear to still be working!

This Week's Plan

- Power ramp down of Booster this week.
  - No plans for special runs.
- Antineutrino mode POT totals:
  - 0.2E20 POT no absorber.
  - 0.7E20 POT absorber #10 down. → 30 weeks: 4.3E18POT/week
  - 0.6E20 POT absorber #10 and #7 down. → 30 weeks: 4.3E18POT/week
  - 0.9E20 POT since absorber repair (no absorber). → 14 weeks: 6.4E18POT/week
- Have collected a total of 2.4E20 POT (2.1E20 de-rated for absorber problem).
  - We have surpassed our physics goal of 2.0E20POT!
- Thanks to AD for outstanding effort in reaching this goal!!