MiniBooNE Report

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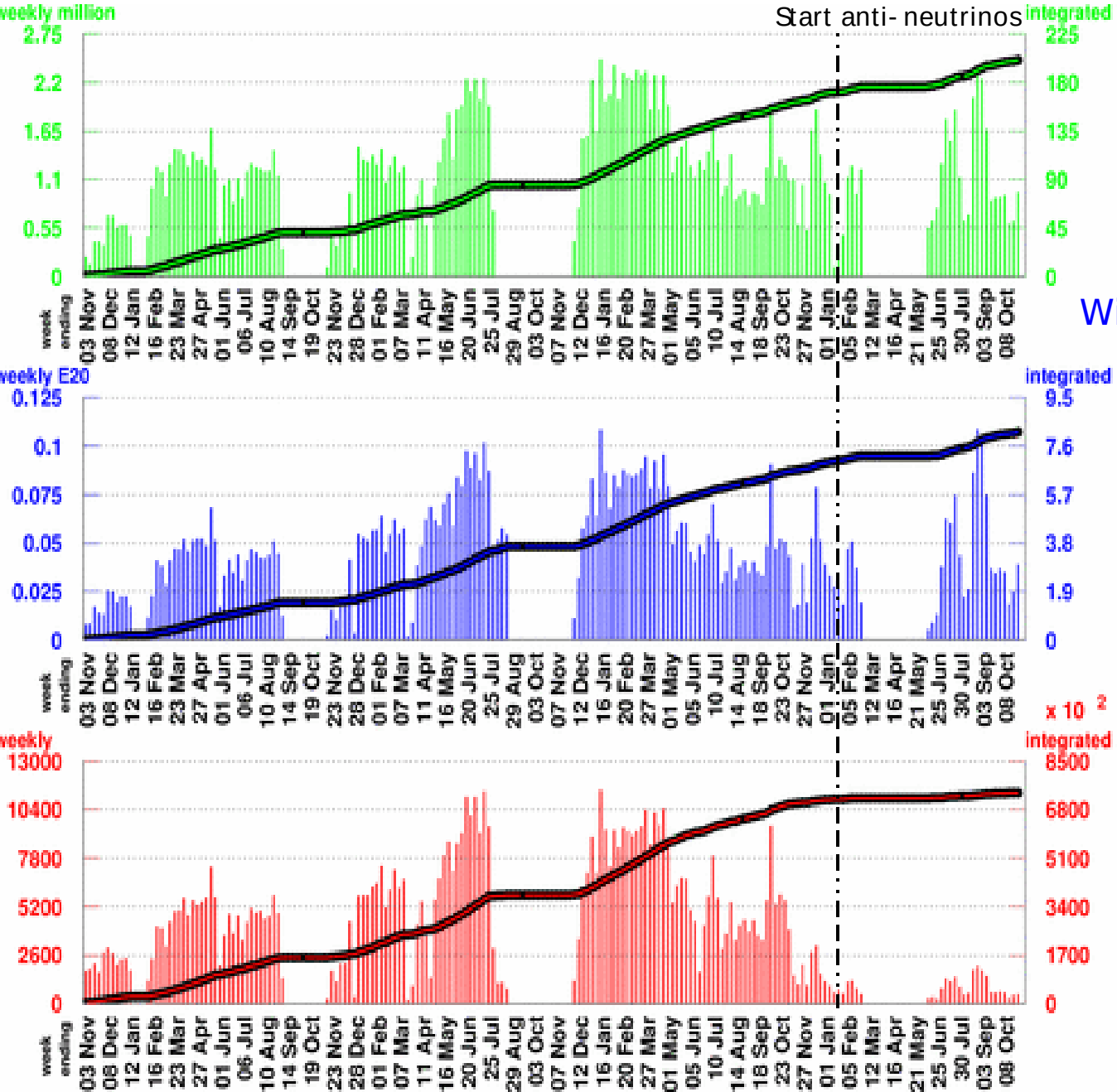
Week Summary 23 Oct – 30 Oct 0.39E19 POT, 95.2% Uptime

- Excellent uptime!
- Booster/Linac getting back to good tune.
- Major Downtime:
  - 1.5hrs, diagnose F-sector quench (Oct 24).
  - 3hrs, Safety system check (Oct 26).

23 Oct – 30 Oct



Number of Horn Pulses

To date: 200.88 million

Largest week: 2.46 million

Latest week: 0.96 million

With Beam Information Cuts

Number of Protons on Target

To date: 8.1534 E20

Largest week: 0.1085 E20

Latest week: 0.0389 E20

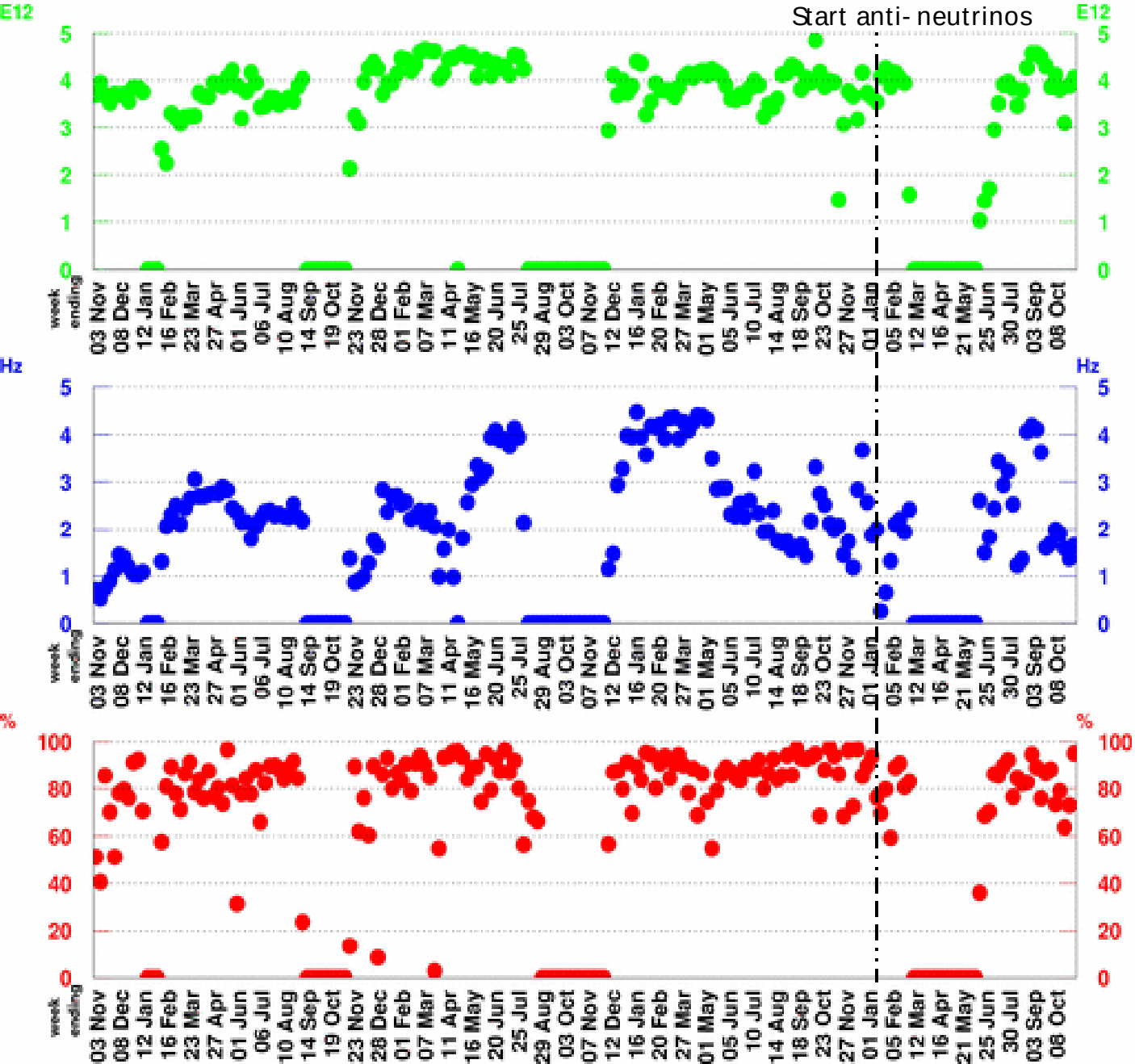
Number of Neutrino Events

To date:738972

Largest week: 11447

Latest week: 489

23 Oct – 30 Oct



POT per Horn Pulse

Largest week: 4.85 E12

Latest week: 4.06 E12

Horn Rate

(for time periods with beam)

Largest week: 4.48 Hz

Latest week: 1.65 Hz

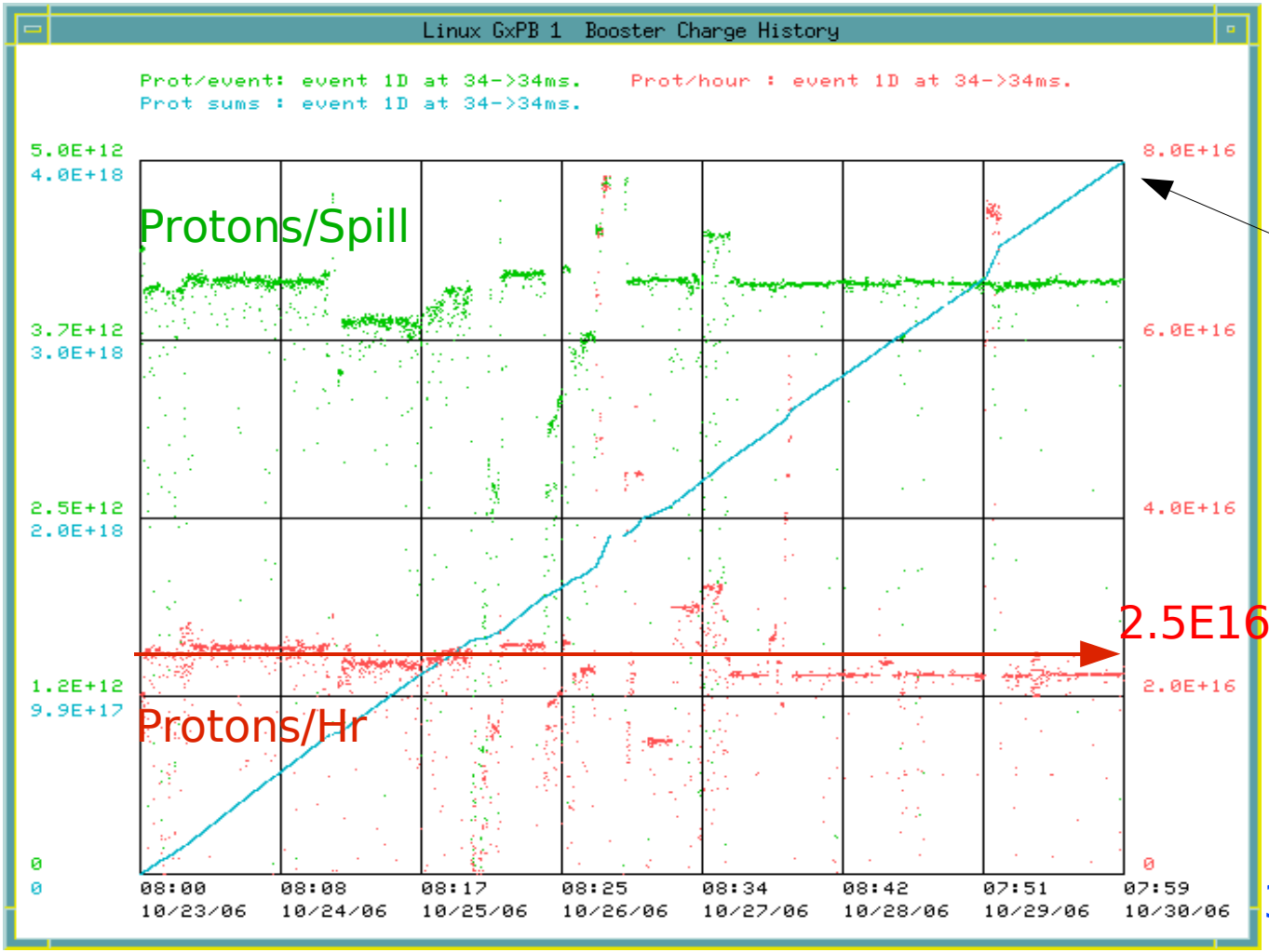
Beam Uptime Fraction

(fraction of time with beam)

Largest week: 97.4 %

Latest week: 95.2 %

One Week MB Proton/Hr Summary



Steady running at 10 turns...

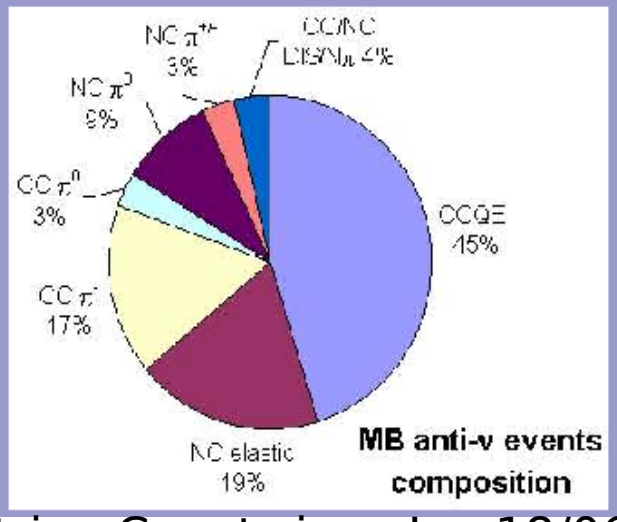
Antineutrino Scattering with MiniBooNE

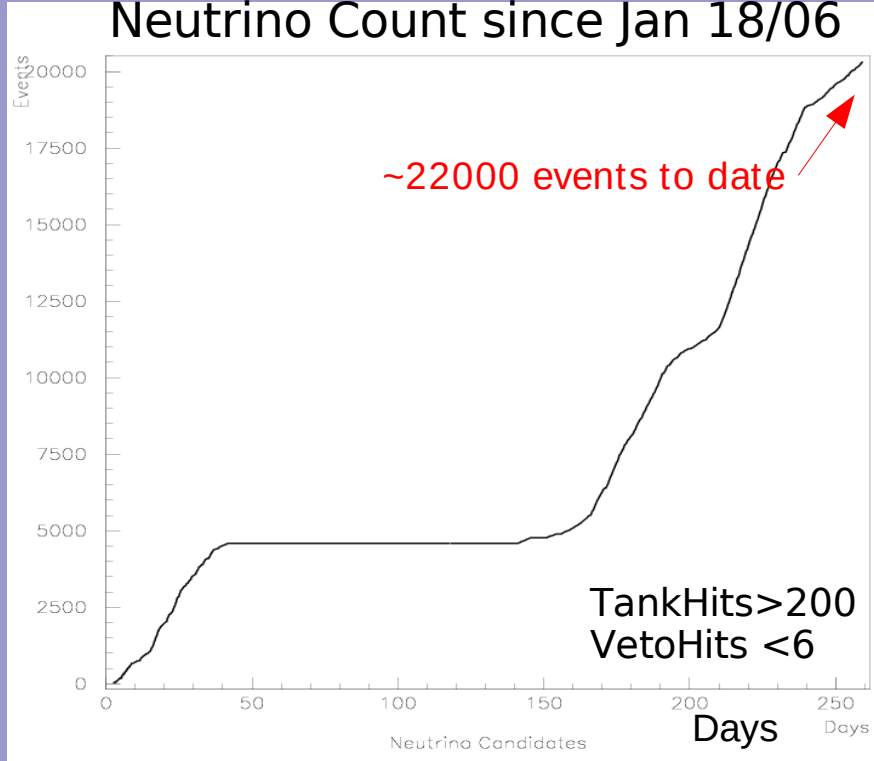
$\bar{\nu}$ events expected in next year:

- from 2E20 "protons-on-target" (POT)
- with fiducial radius of 500cm
- before cuts
- ν event (wrong-sign) contribution not included

$\bar{\nu}$ channel	events
all channels	54k
CC quasielastic	24k
NC elastic	10k
CC π^-	8.9k
CC π^0	1.7k
NC π^0	4.9k
NC $\pi^{+/-}$	1.8k

"CC" = charged current
"NC" = neutral current





1.18E20 POT collected so far....

2.5E16 Pr/Hr => 1.5E20 POT/yr

This Week's Plan

- Try to maintain good uptime.
- Continue taking quality anti-neutrino physics data!