

MiniBooNE Report

Žarko Pavlović

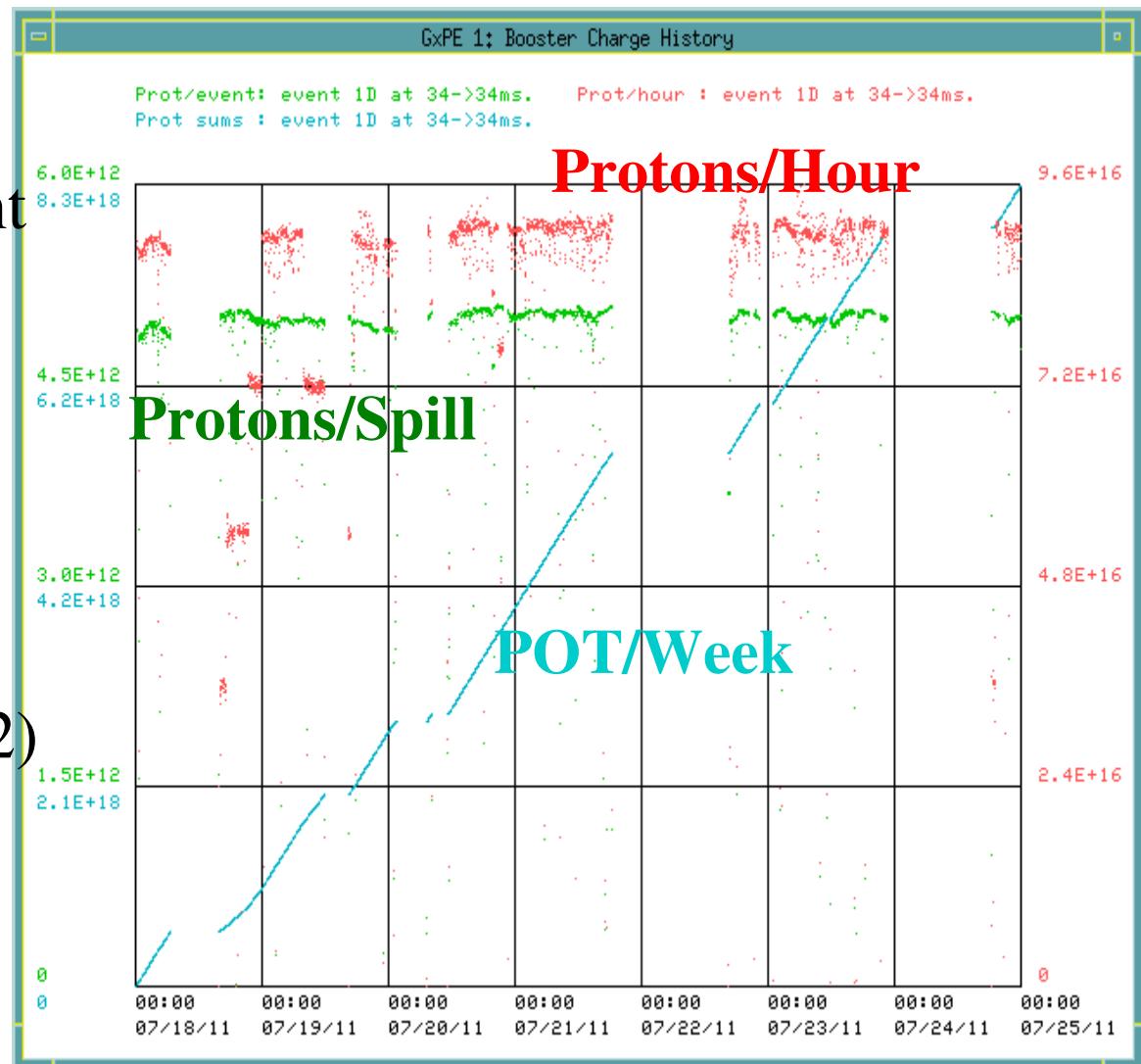
Los Alamos National Laboratory
for the MiniBooNE collaboration

25 July 2011

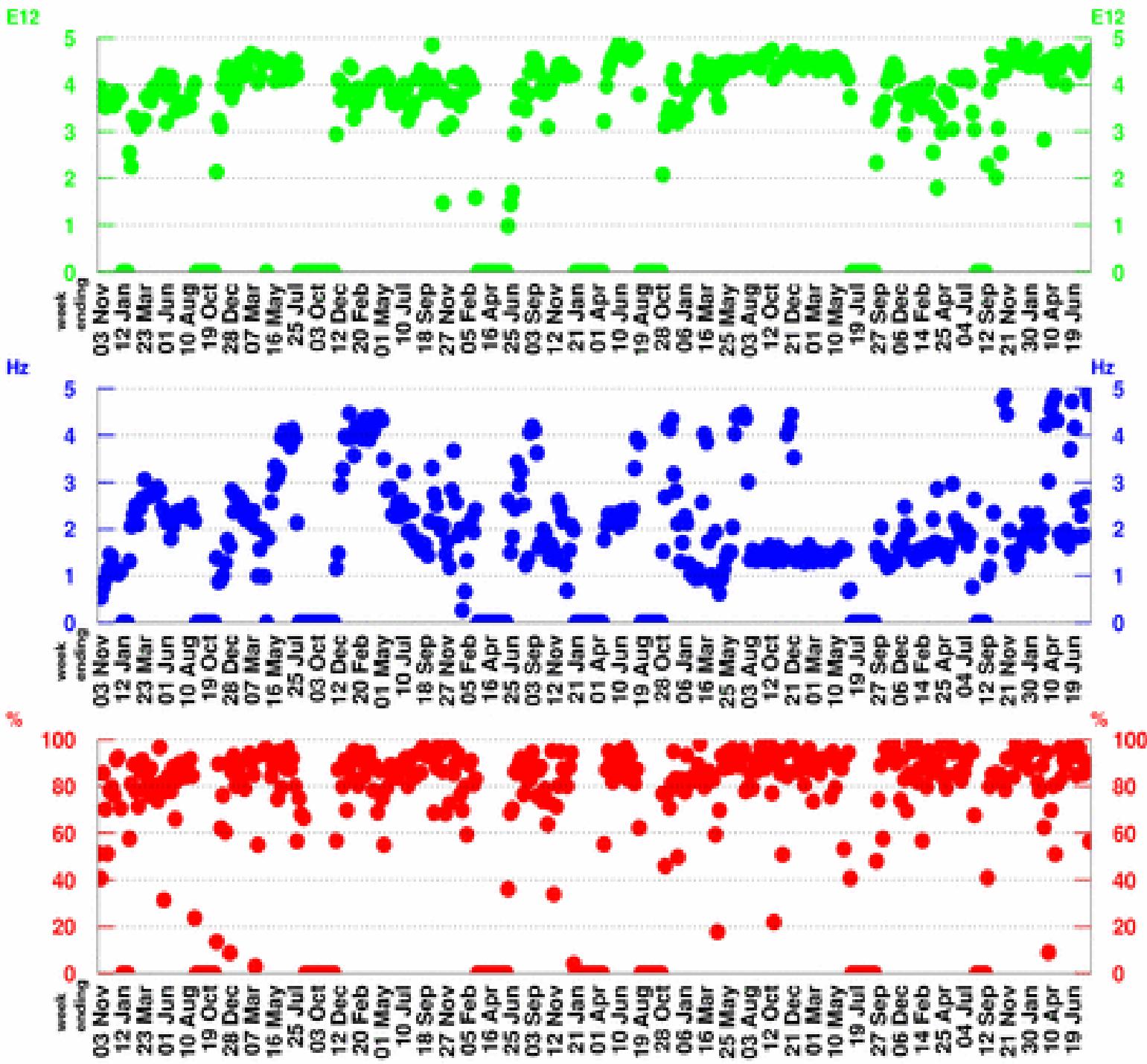
Beam summary 07/18/11 - 07/25/11

- Beam downtime:

- 9hr, MI12 temp. (07/18)
- 4hr, MI12 AC replacement (07/19)
- 9hr, Linac/Horn PS problems/Booster access (07/20)
- 22hr, LCW leak (07/21-22)
- 2hr, MI12 AC (07/23)
- 19hr, M12 tunnel temp (07/24)



07/18/11 - 07/25/11



POT per Horn Pulse

Largest week: 4.89 E12

Latest week: 4.72 E12

Horn Rate

(for time periods with beam)

Largest week: 10.33 Hz

Latest week: 4.69 Hz

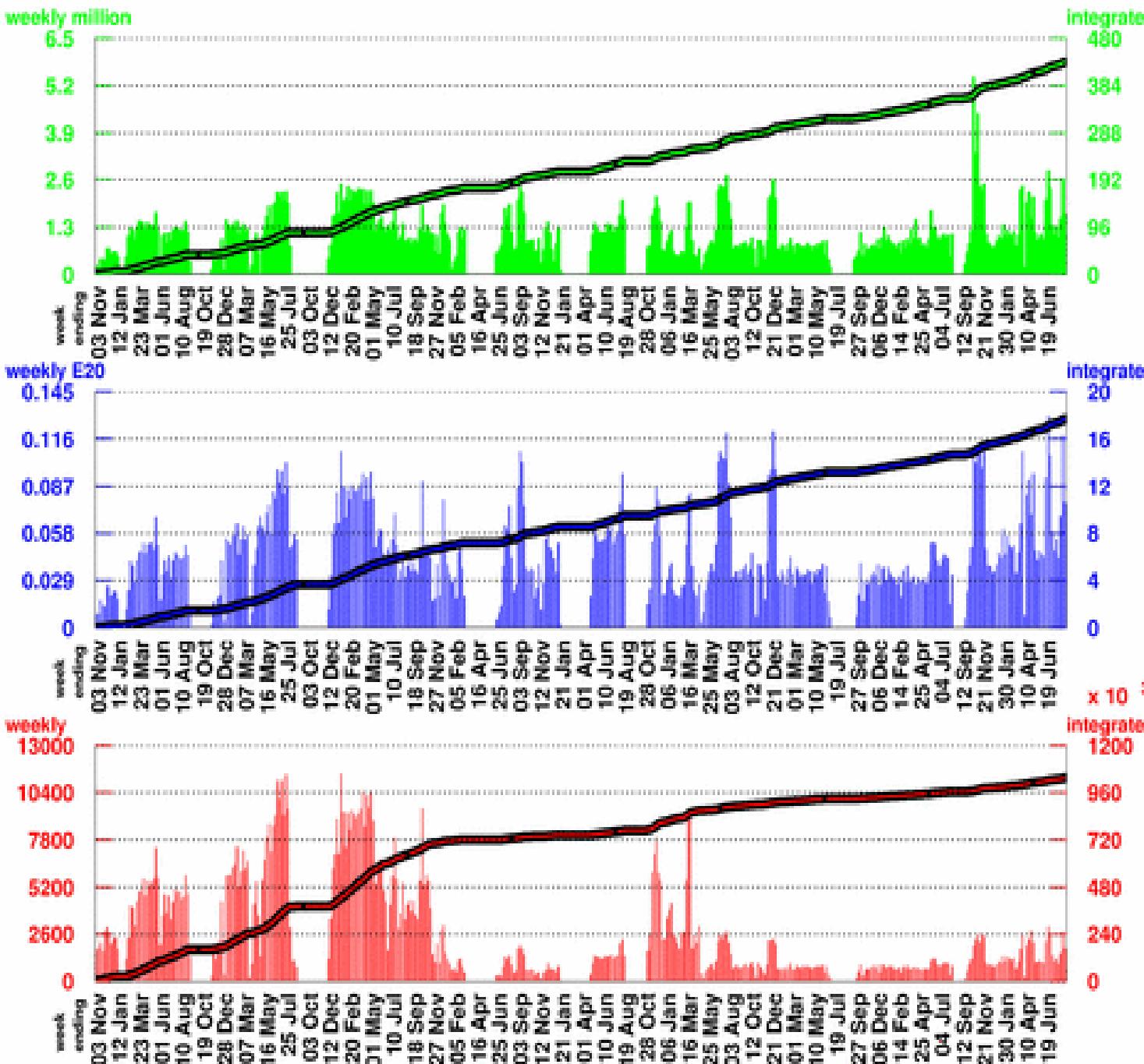
Beam Uptime Fraction

(fraction of time with beam)

Largest week: 98.9 %

Latest week: 56.2 %

07/18/11 - 07/25/11



Number of Horn Pulses

To date: 431.86 million

Largest week: 5.41 million

Latest week: 1.64 million

Number of Protons on Target

To date: 17.702 E20

Largest week: 0.13 E20

Latest week: 0.0772 E20

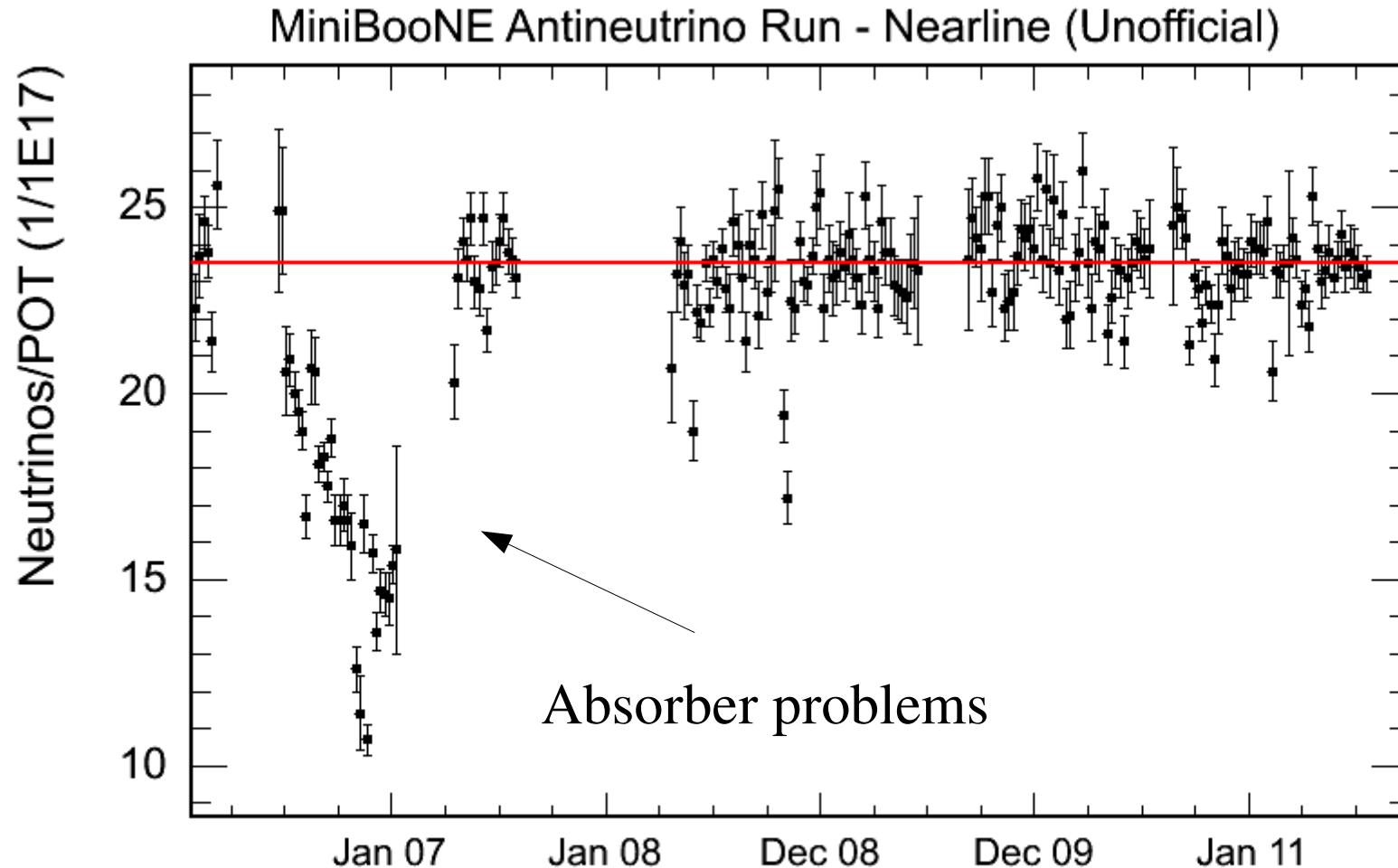
Number of Neutrino Events

To date: 1035398

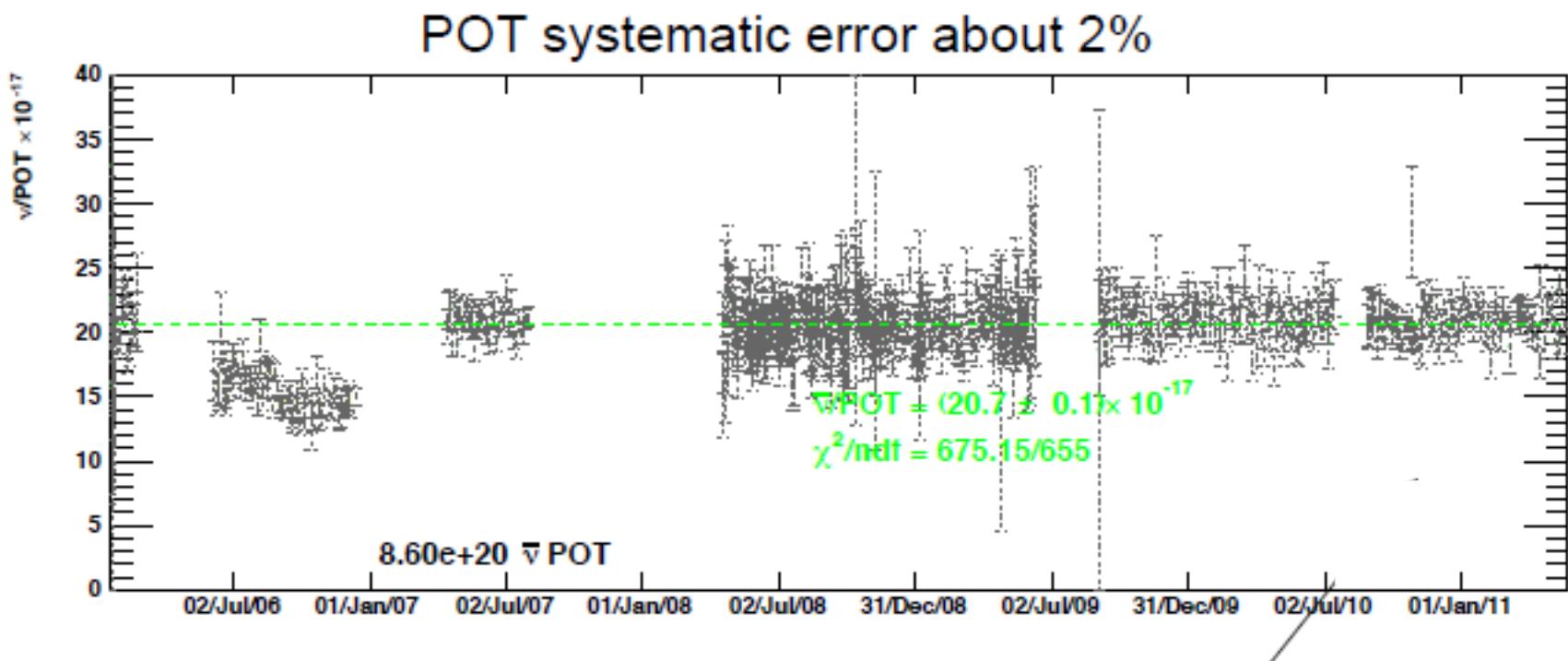
Largest week: 11447

Latest week: 1804

AntiNeutrinos/POT unofficial

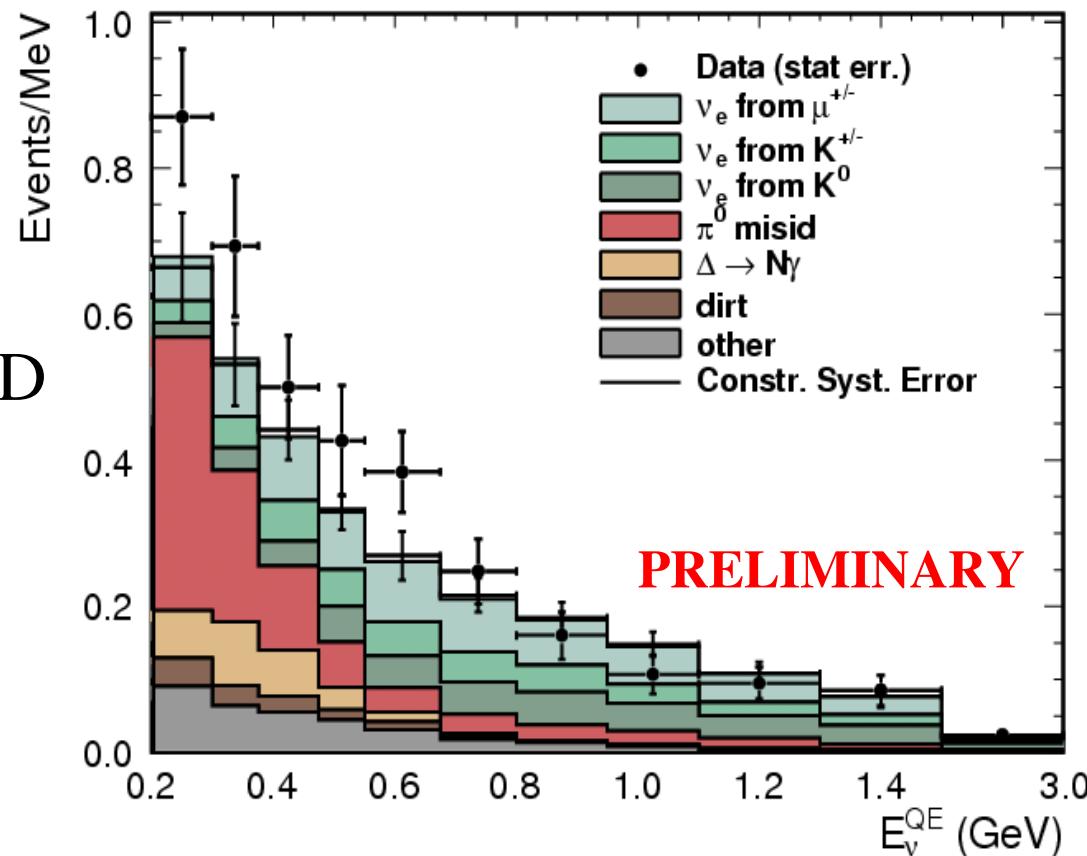


AntiNeutrinos/POT official

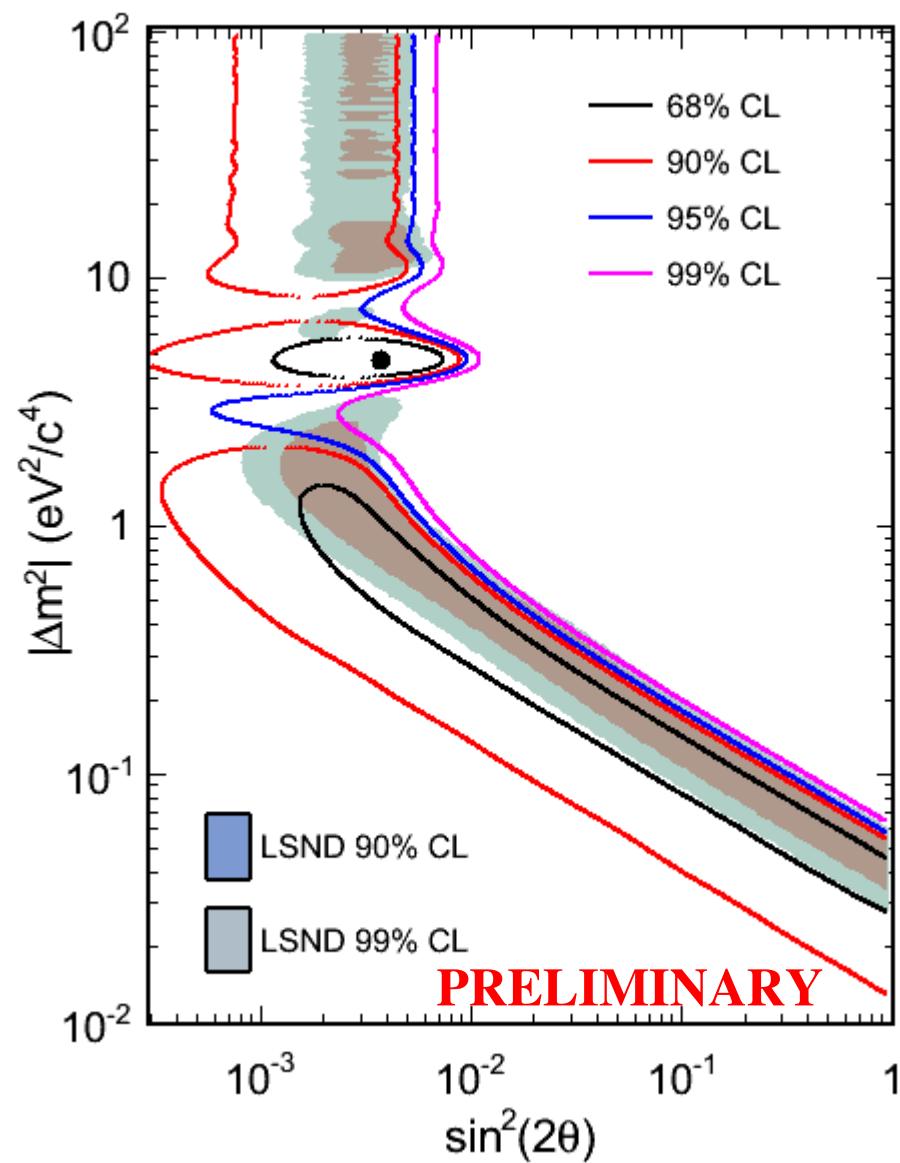


Summer 2011 $\bar{\nu}_e$ appearance result

- 8.584e20 POT
- Overall excess over entire energy range 200-3000 MeV
57.7+28.5
 - with new data excess grew at low energy and somewhat reduced at high energy
- Use $E>475\text{MeV}$ to test LSND
 - results consistent with LSND at 91.1% confidence level



- E>200MeV fit
(subtracted expected low E excess due to neutrinos)



- E>475MeV fit

