MINERνA OPERATIONS REPORT

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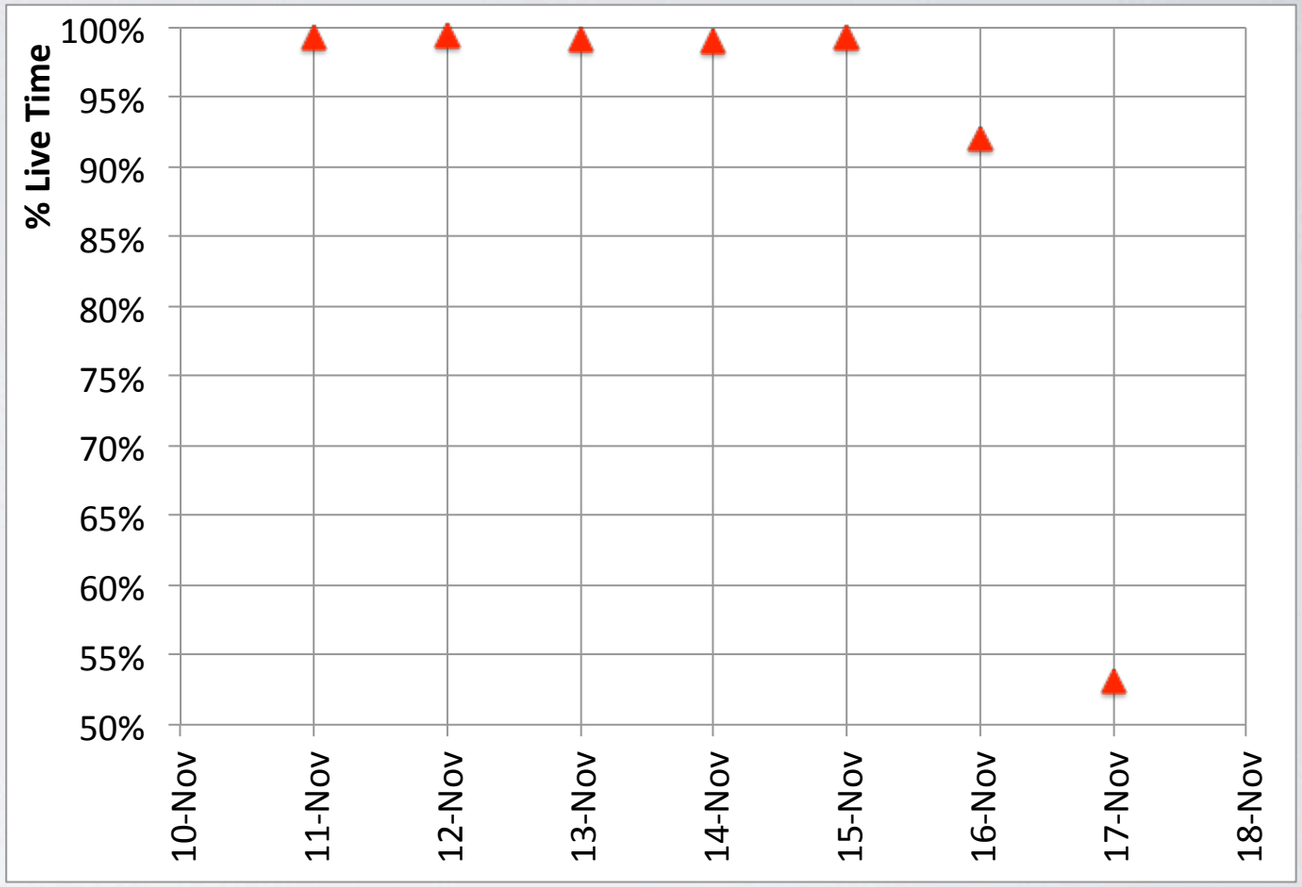
All Experimenters Meeting, Nov. 21, 2011

ν Data

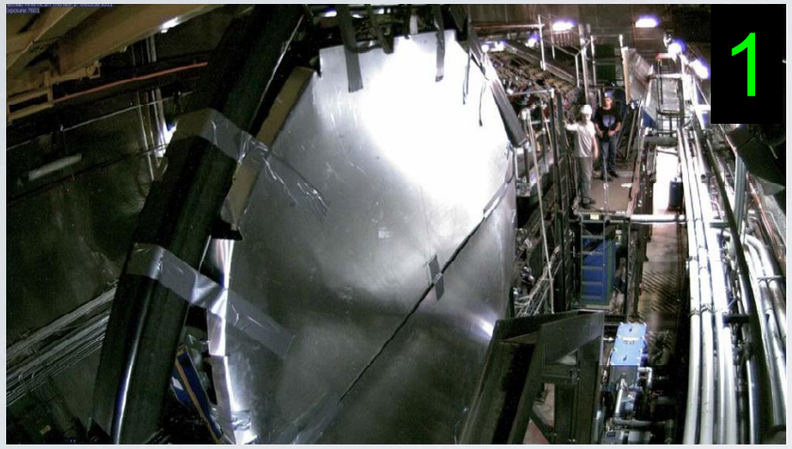
% Live time Nov. 11 - Nov. 17

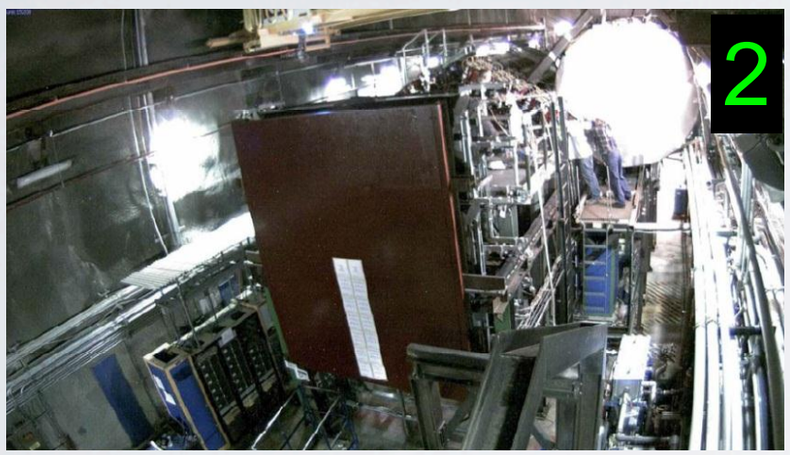
Date	NuMI Rec. POT	NuMI Del. POT	Live Time
11-Nov-2011	1.14E+18	1.15E+18	99.30%
12-Nov-2011	4.77E+17	4.80E+17	99.40%
13-Nov-2011	1.26E+18	1.27E+18	99.20%
14-Nov-2011	1.35E+18	1.36E+18	99.10%
15-Nov-2011	9.81E+17	9.88E+17	99.30%
16-Nov-2011	1.32E+18	1.44E+18	92.00%
17-Oct-2011	7.33E+17	1.38E+18	53.20%
Total	**7.26E+18**	**8.06E+18**	**91.64%**



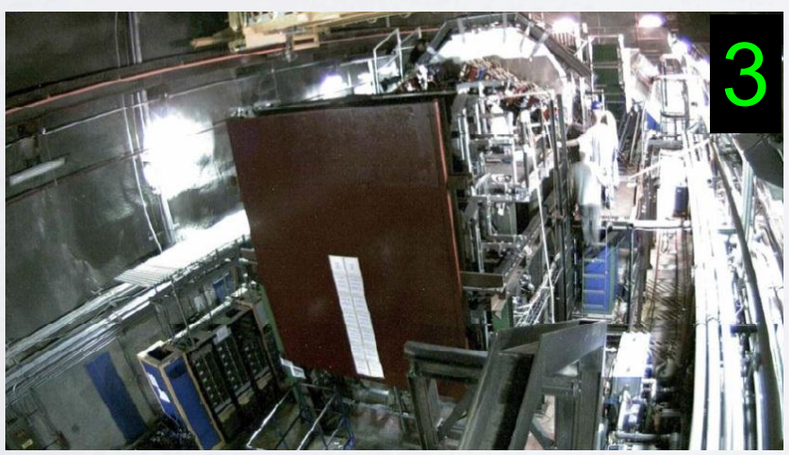
- NuMI: 8.06×10^{18} POT delivered. (Nov. 11- 17).
- MINERvA: 7.26×10^{18} POT recorded. (Nov. 11 - 17), ~92% live time.
- Minos: 98% live time (Nov. 14 - 20).
- 5.45×10^{19} POT for ν, Oct. 6 - Nov. 17, ν with NT-07.
- 6.76×10^{19} POT with NT-07.
- On Oct. 17, the detector stopped taking neutrino data for several hours (~11h) due to water target installation (see next slide).

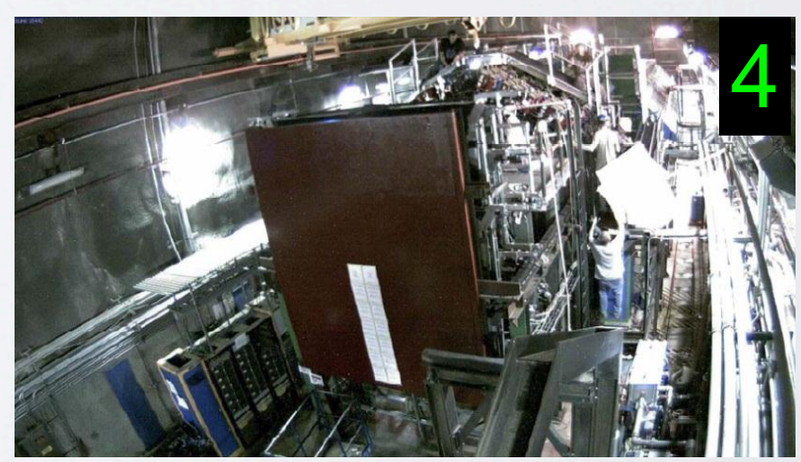
MINERνA Water Target Update



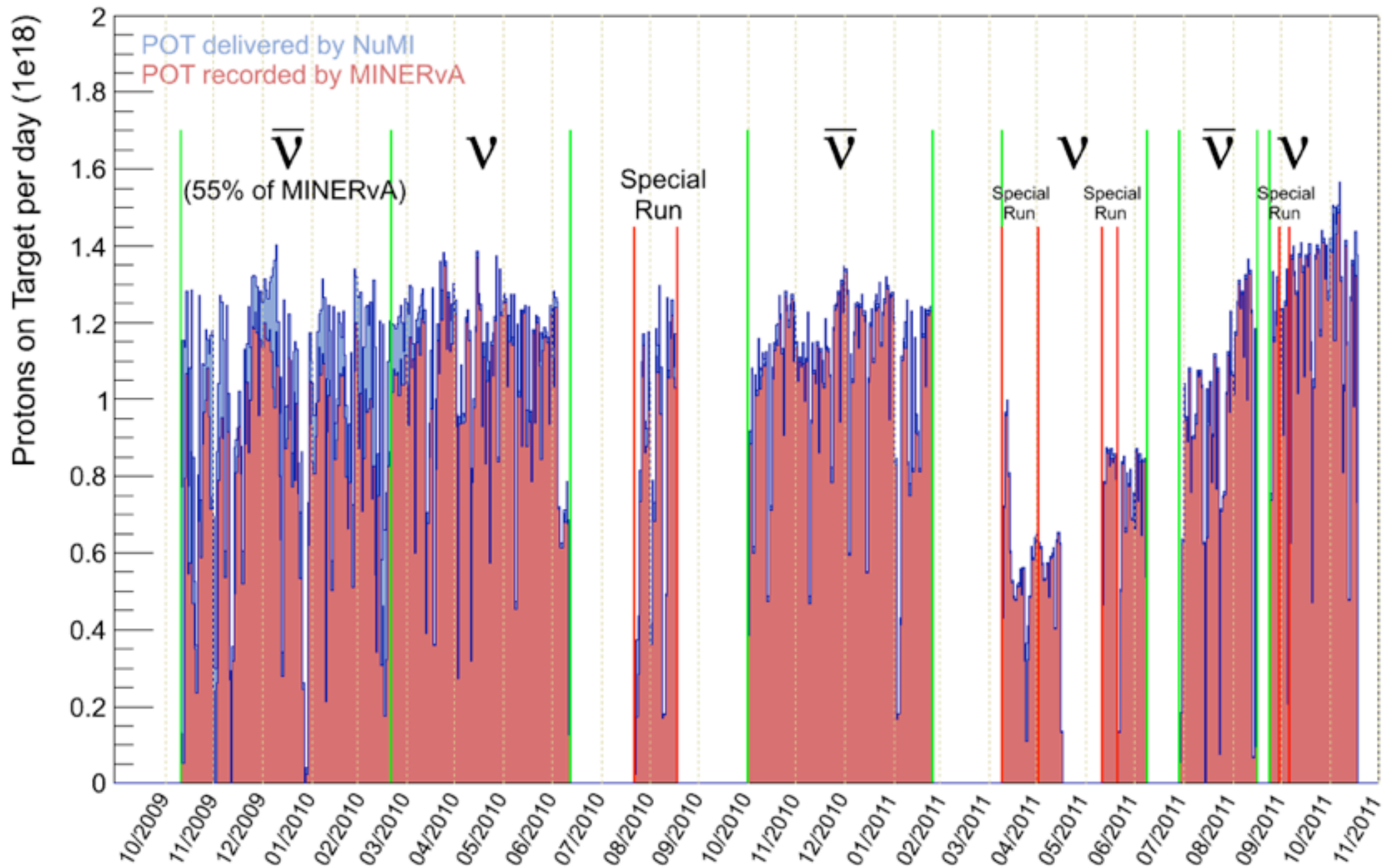


- Water target was installed on Nov. 17.
- 1/32" Al sheet were added to reduce risk of damage from protrusions. Removed after target insertion.
- A couple of cables were damaged in the process and had to be replaced with spares.
- About 8 hours were needed to make the detector light tight again.
- 32 channels were masked off because of light leaks resulting from the installation.
  - New special optical cables will be made to reduce the number of channels (from 32 to about 10).
- Special thanks to **Jon Voirin**, **Tom Olszanowski**, **John Cornele** and **Mark Shoun**, of **Particle Physics Division**, and **Dan Ruggiero** of the University of Rochester for this work.
- The water target was successfully filled on Nov. 18.

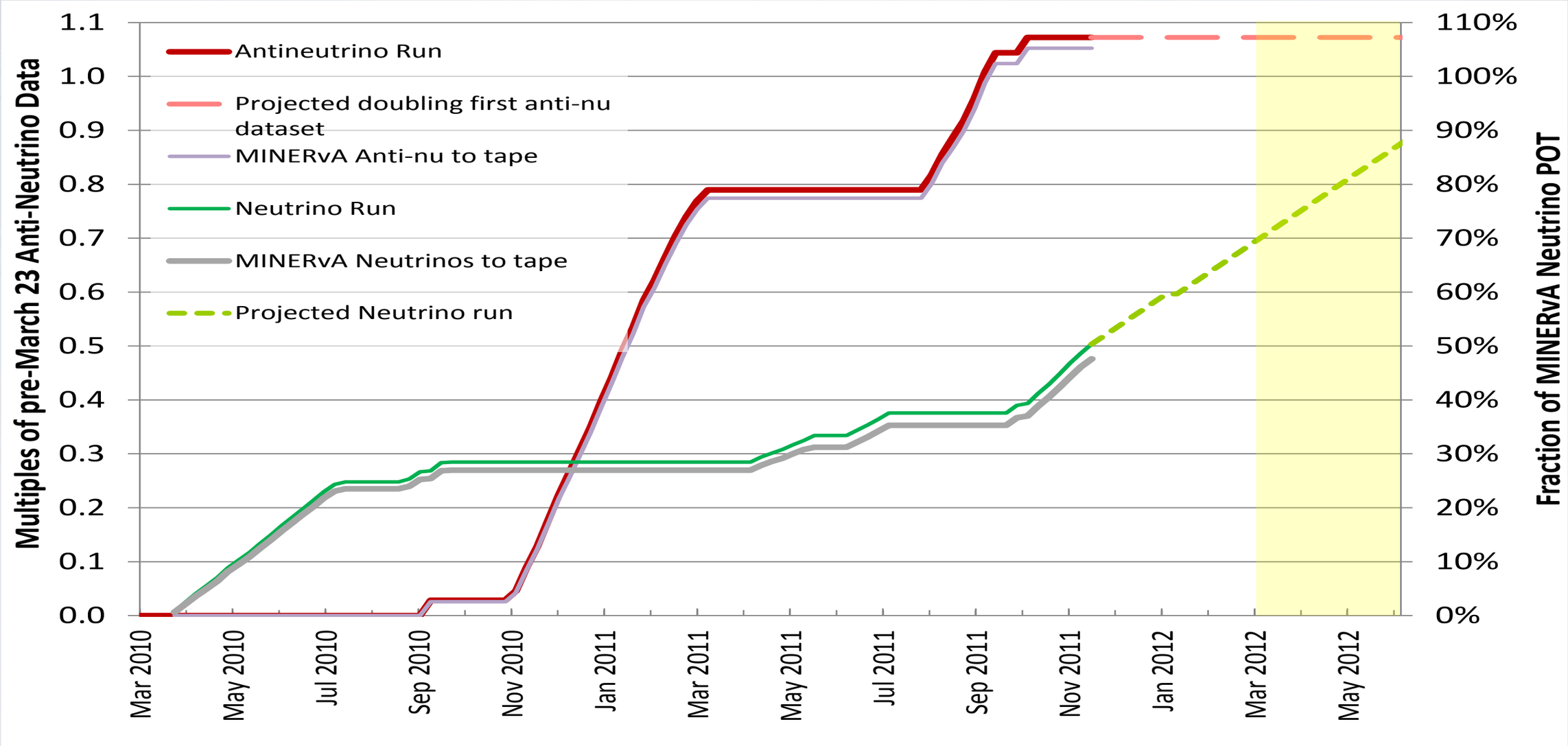




MINERνA POT/Day
Nov. 2009 - Present

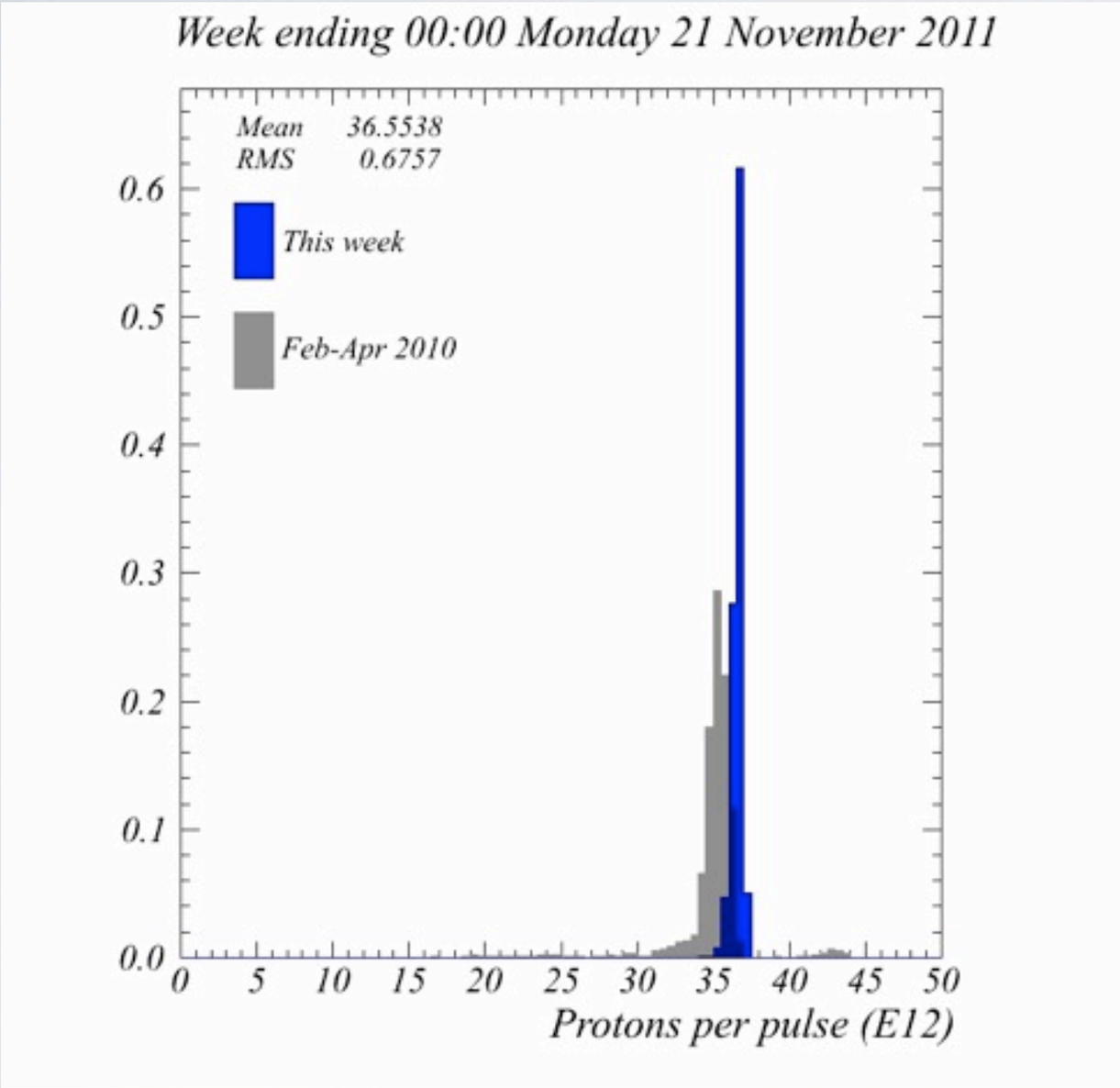


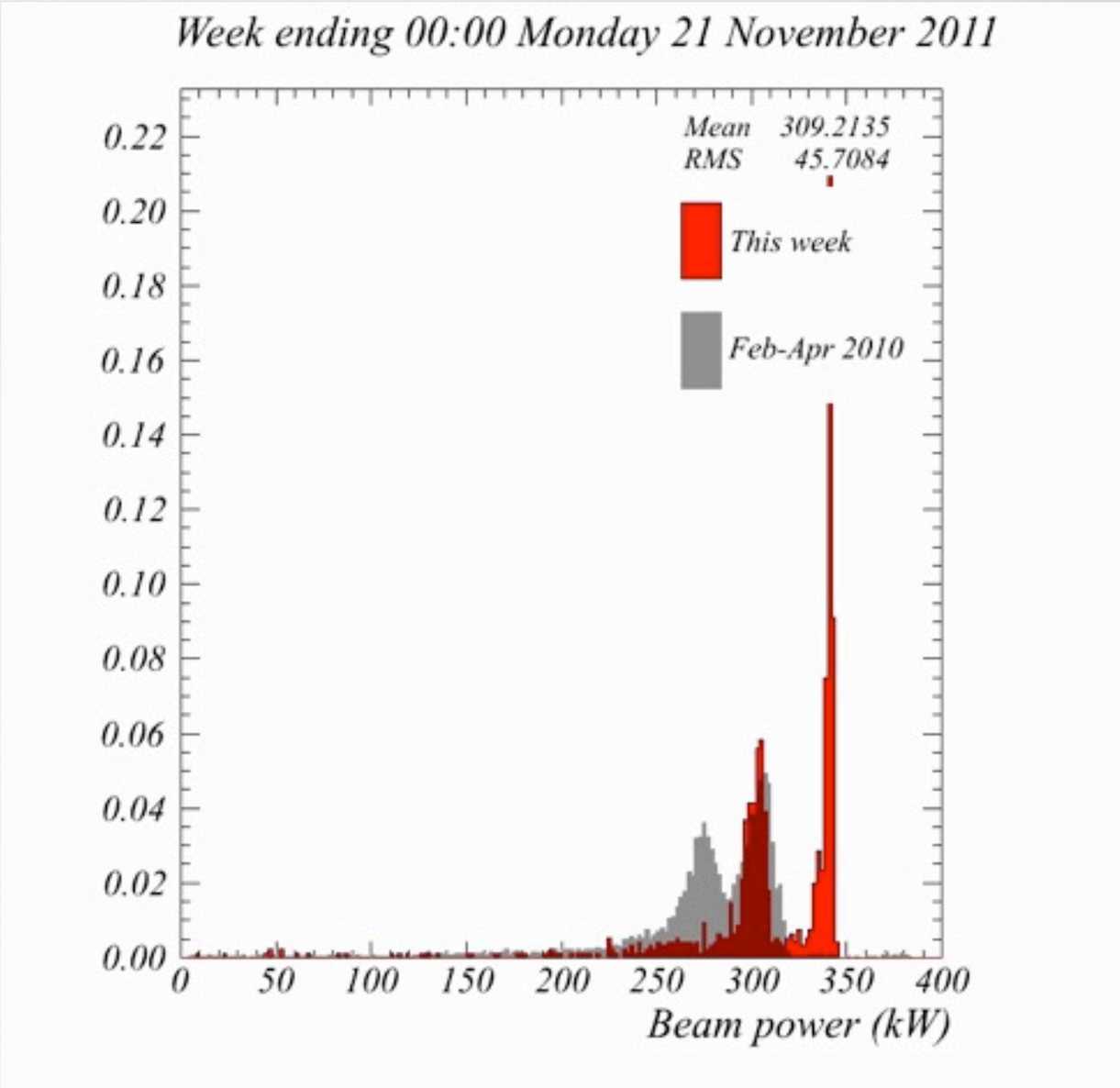
Accumulated POT to Nov. 17



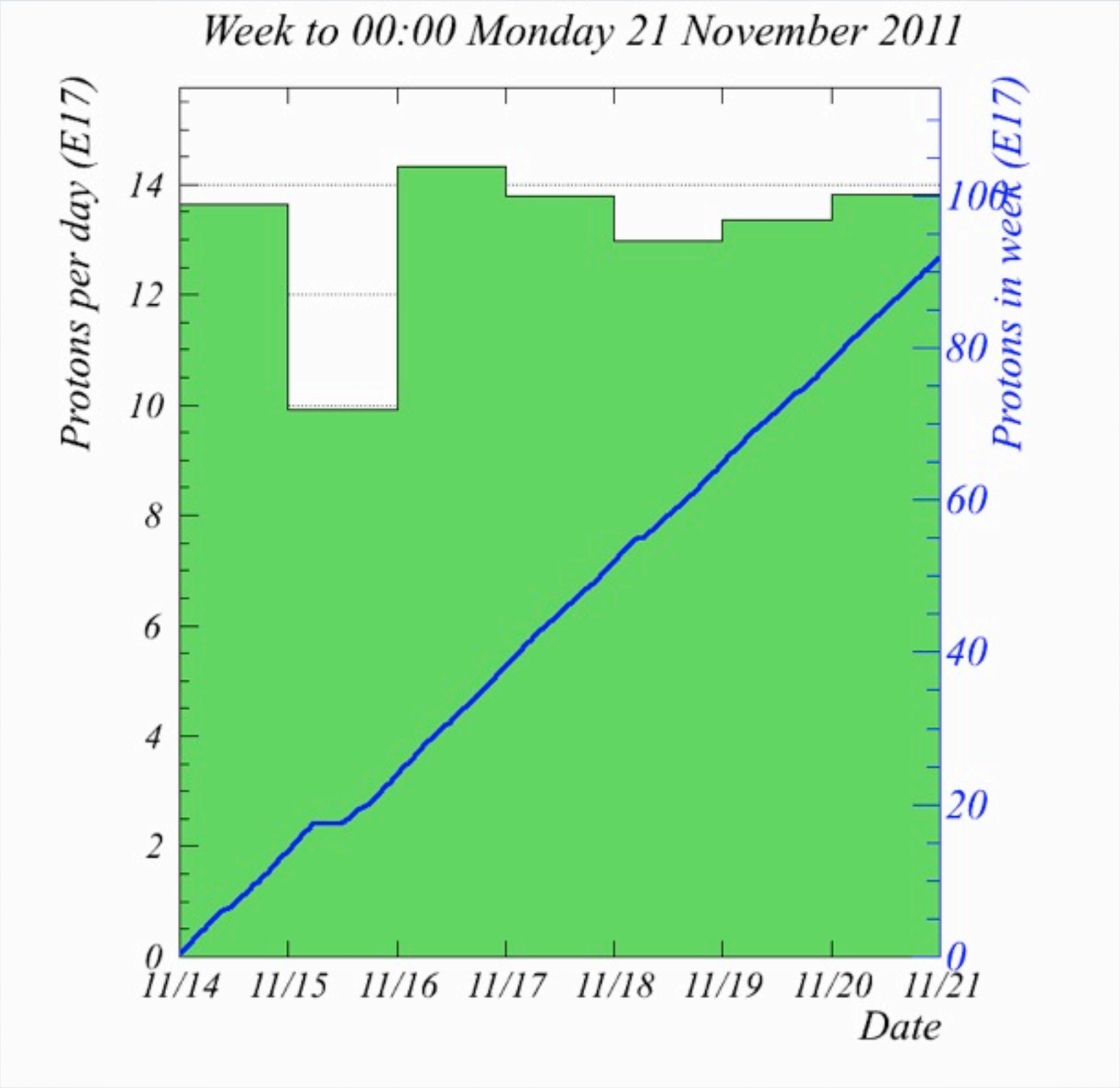
- Anti-ν run, full scale corresponds to 1.76×10^{20} POT
  - # POT for collected for anti-ν before Mar 23 10, official start of MINERνA ν run
- NT02 running gives enough anti−ν data for doubling of the 1st anti−ν data set.
- Minerva run , full scale corresponds to 4.9×10^{20} POT.
  - # for which MINERvA project & experiment were reviewed & the detector built.
- Projected assumes 0.93×10^{18} POT/day.
  - # POTs – average over the uptime during the past 1.5 years.
  - Actual plan not yet determined, this is one possible scenario.

NuMI Beam Plots

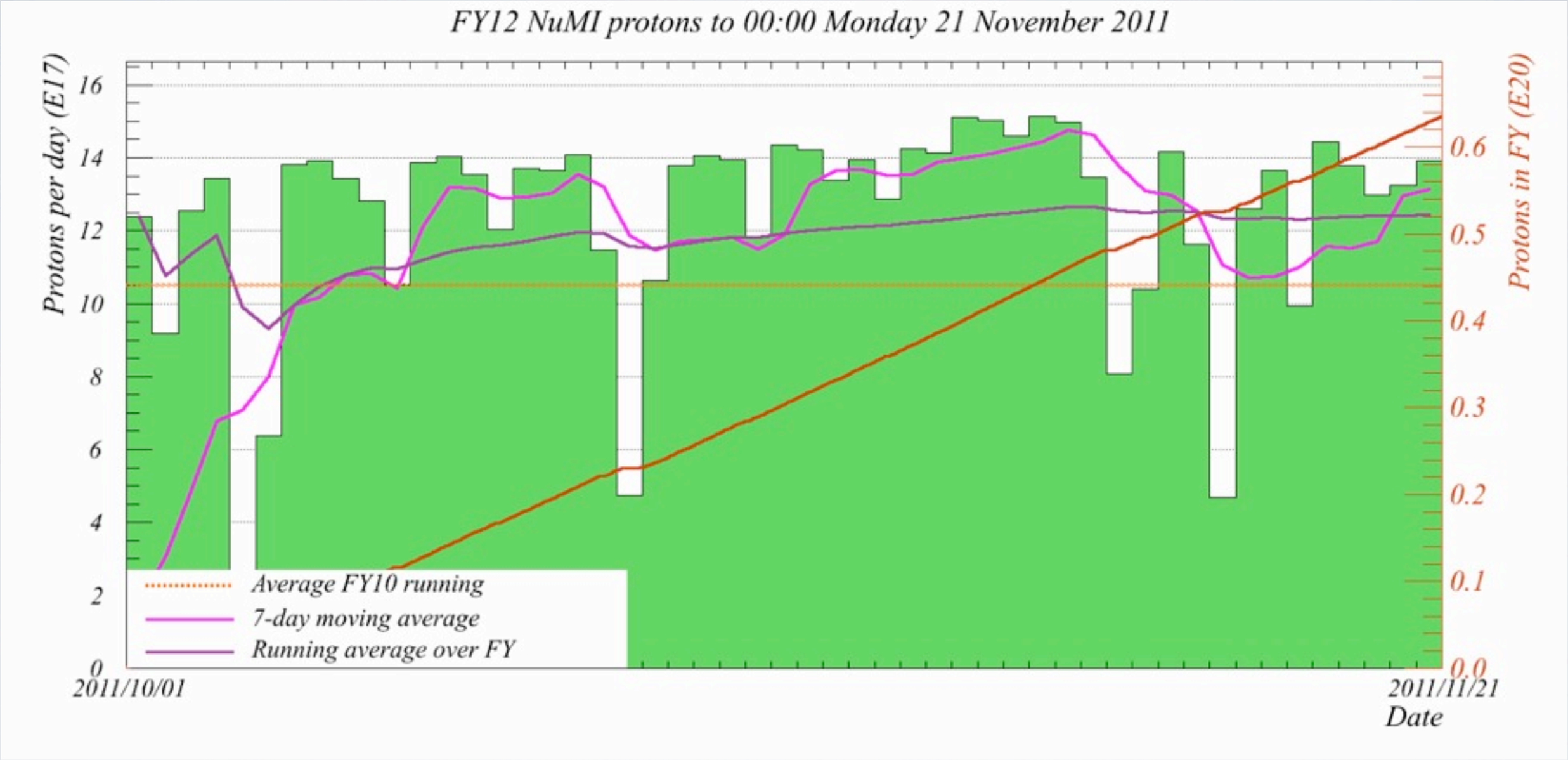
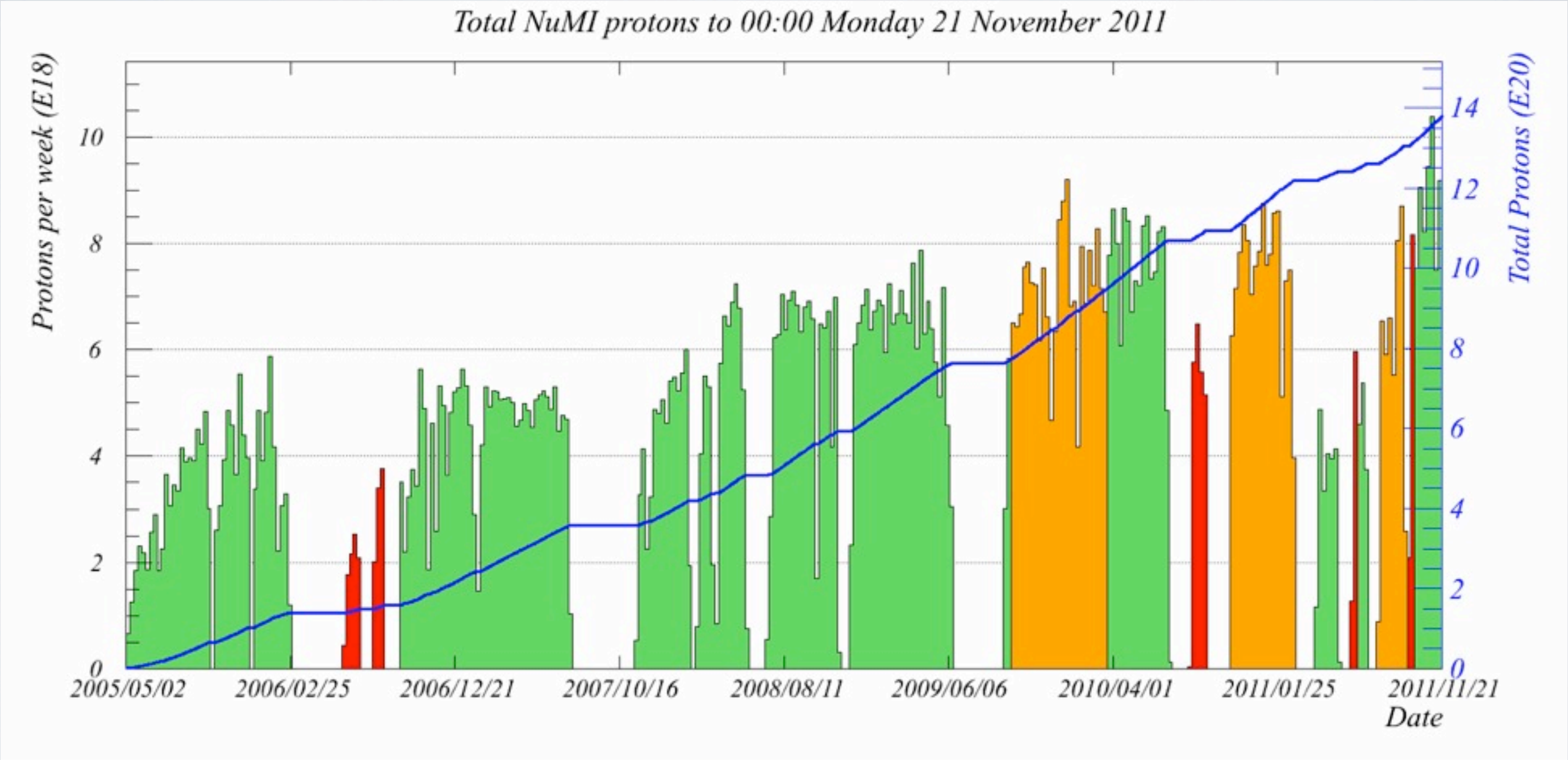




Protons for the Week



FY2011 Protons



NuMI Protons over History