MINERνA OPERATIONS REPORT

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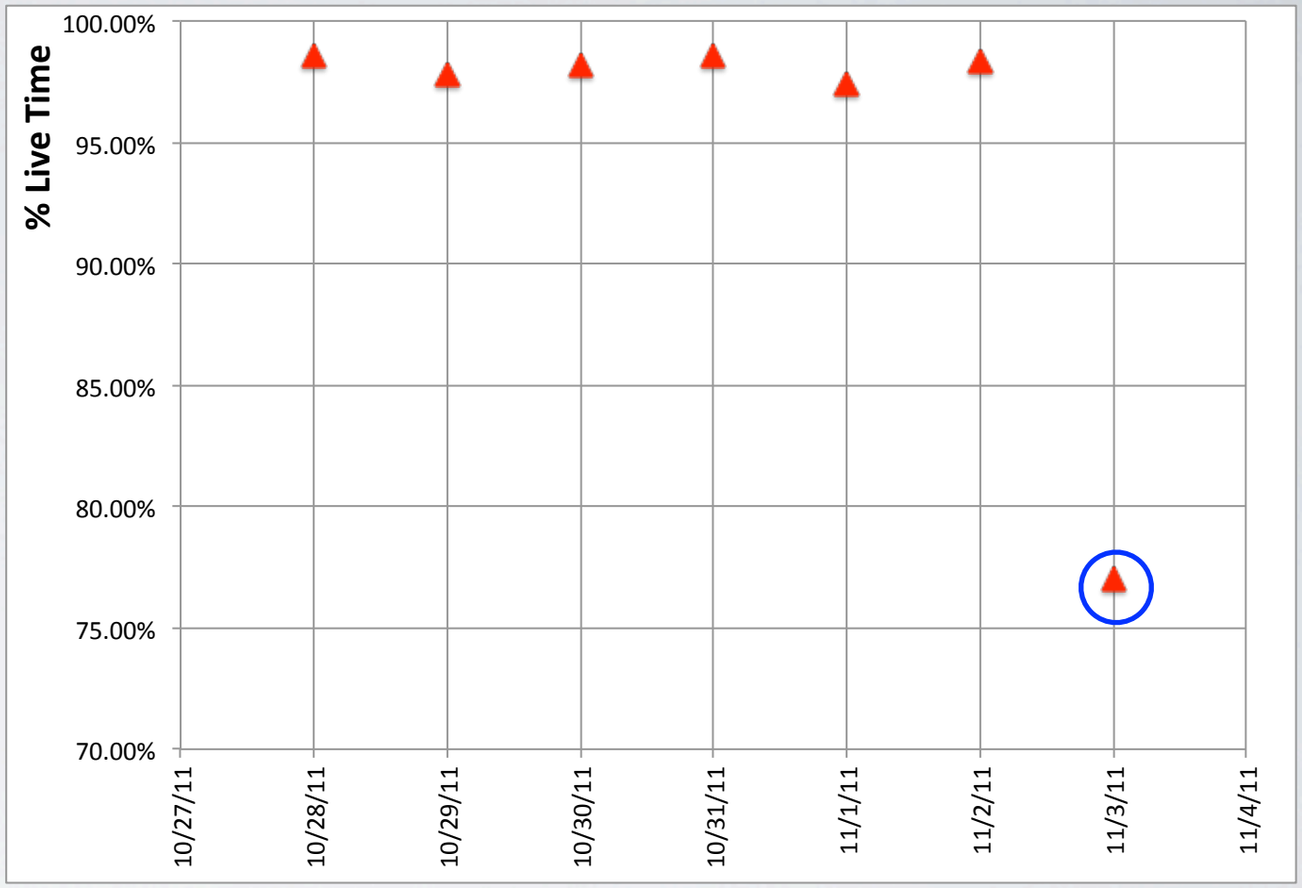
All Experimenters Meeting, Nov. 7, 2011

ν Data

% Live time Oct. 28 - Nov. 3

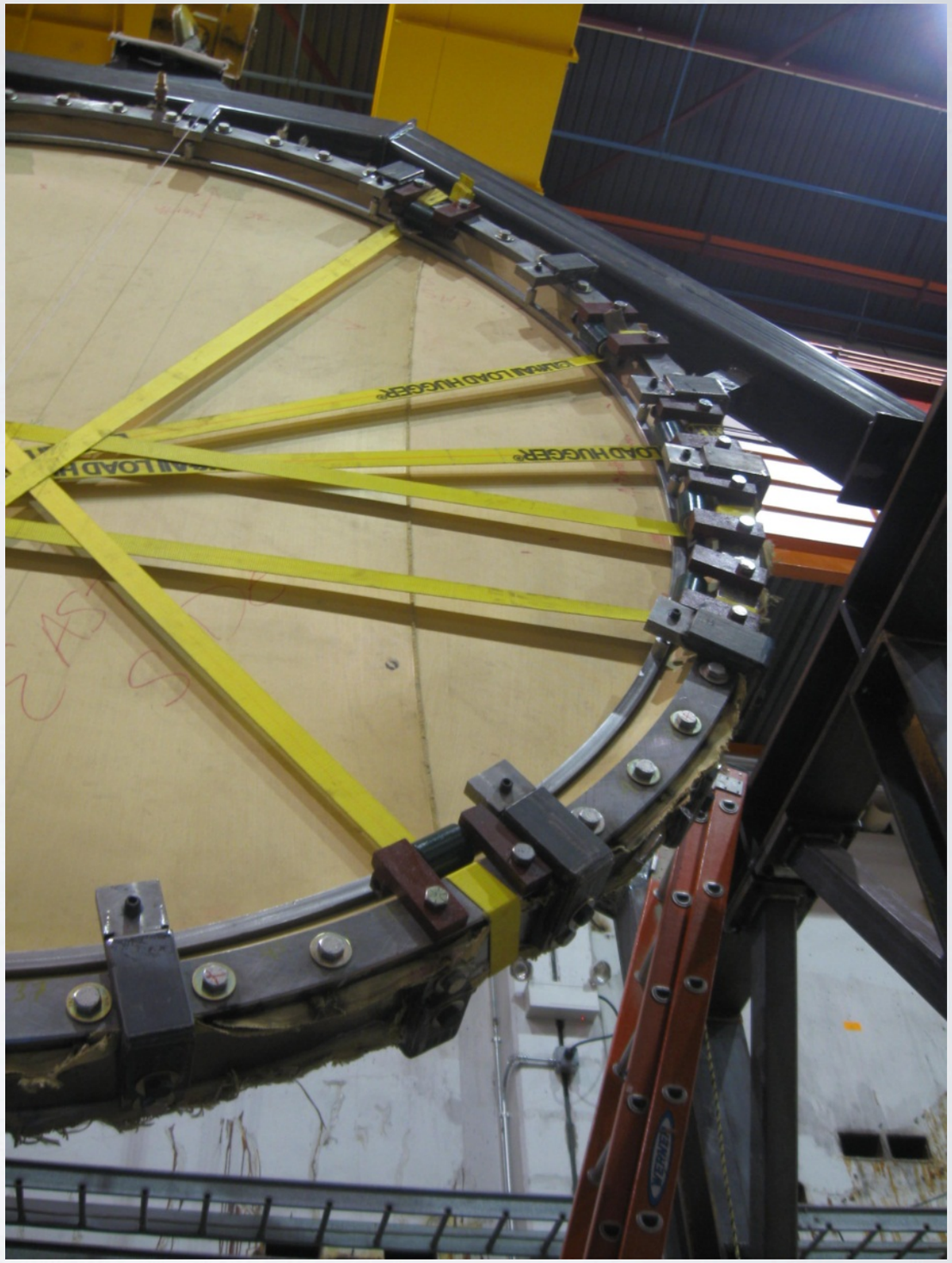
Date	NuMI Rec. POT	NuMI Del. POT	Live Time
28-Oct-2011	1.31E+18	1.33E+18	98.60%
29-Oct-2011	1.37E+18	1.40E+18	97.80%
30-Oct-2011	1.26E+18	1.28E+18	98.20%
31-Oct-2011	1.40E+18	1.42E+18	98.60%
1-Nov-2011	1.38E+18	1.42E+18	97.40%
2-Nov-2011	1.48E+18	1.51E+18	98.40%
3-Nov-2011	1.15E+18	1.50E+18	77.00%
Total	**9.36E+18**	**9.86E+18**	**95.14%**



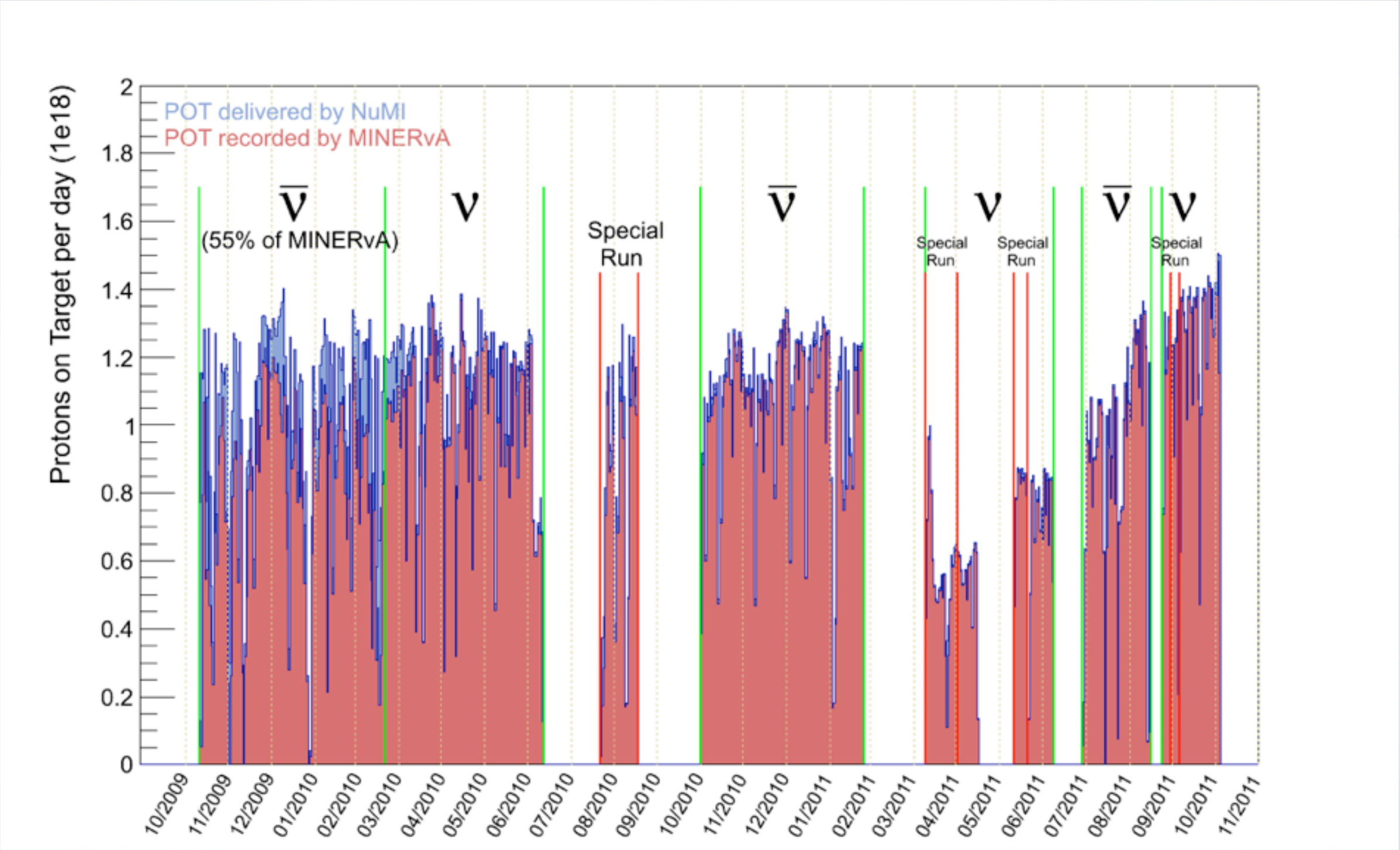
- NuMI: 9.86×10^{18} POT delivered. (Oct. 28 - Nov. 3).
- MINERvA: 9.36×10^{18} POT recorded. (Oct. 28 - Nov. 3), ~95% live time.
- Minos: 85.% live time (Oct. 31 - Nov. 6).
- Best 7 day period: 1.04×10^{19} POT (Oct. 31 - Nov. 6).
- Currently running on LE10 FHC 185 kA horn current since Oct. 6 (ν mode).
  - 3.73×10^{19} POT for ν, Oct. 6 - Nov. 3, ν with NT-07.
- 5.04×10^{19} POT with NT-07.
- Low efficiency on Nov. 3 (~ 4h down) due to water target installation.

MINERvA Water Target Update

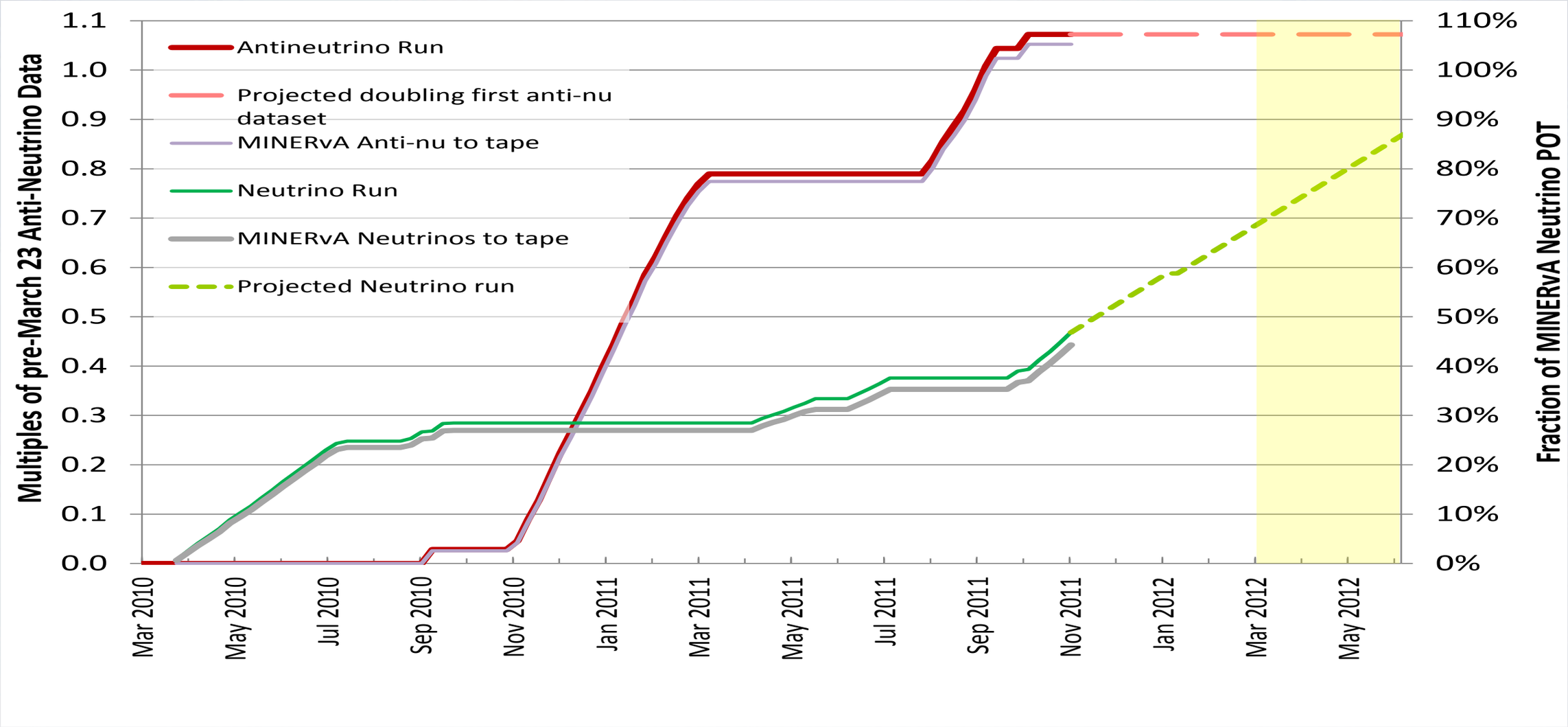
- The water target successfully passed a fill test above ground and on Thursday Nov. 3.
- It was emptied and brought underground for installation.
- The installation could not be completed because of an interference between MINERvA optical connectors and the outer edge of the target ring.
- Investigations are underway to find a solution.



MINERνA POT/Day
Nov. 2009 - Present

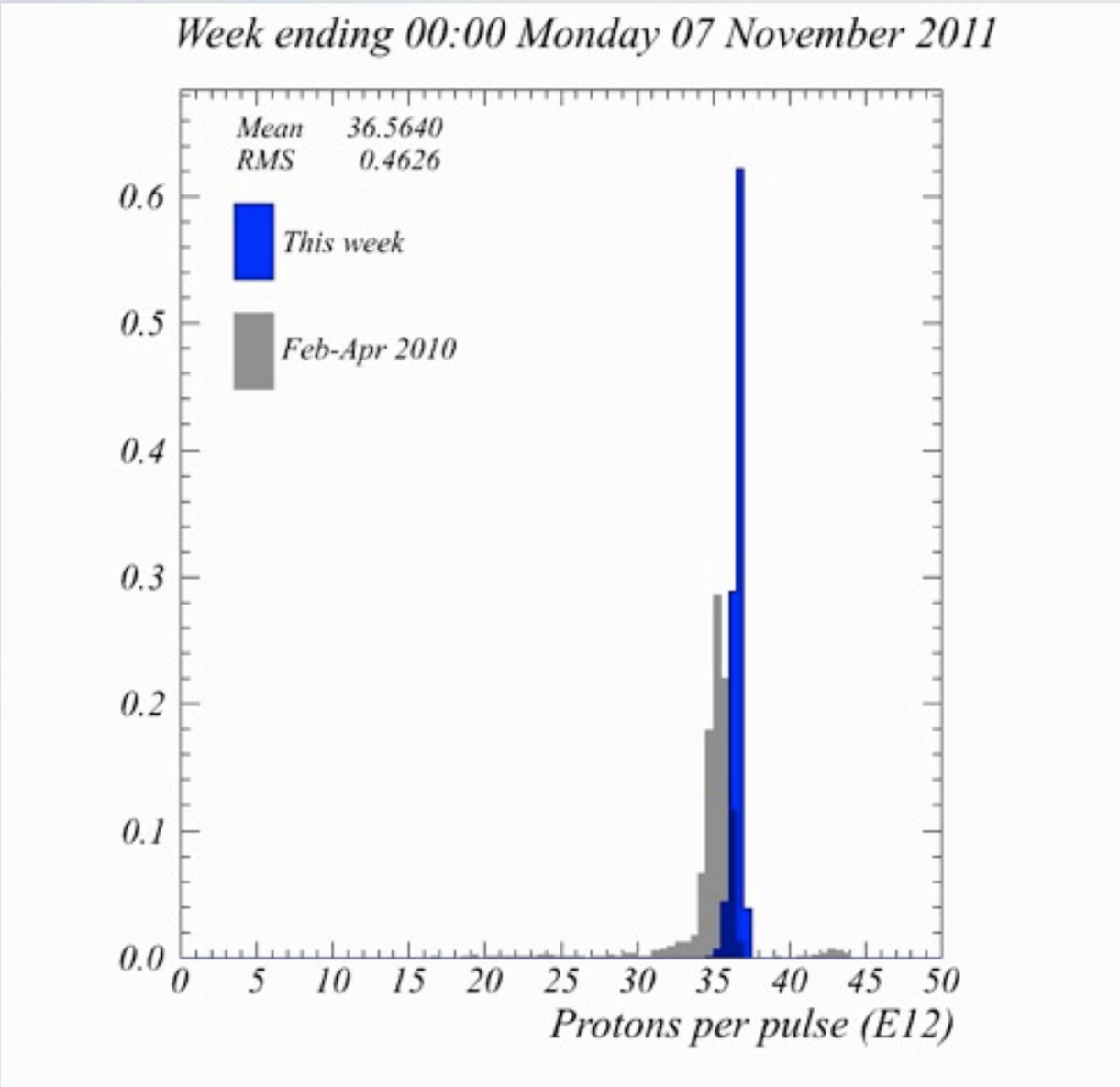


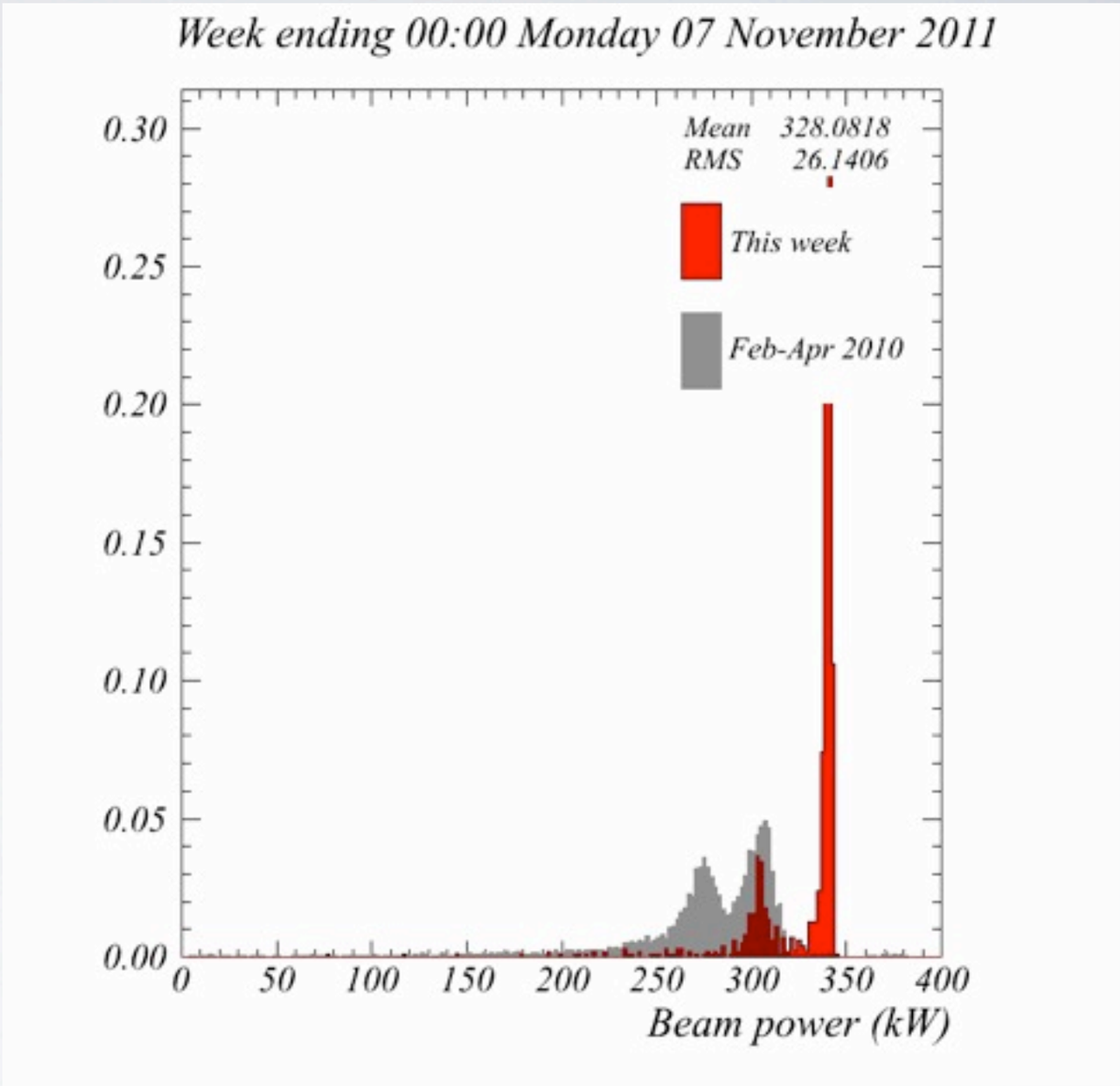
Accumulated POT to Nov. 3



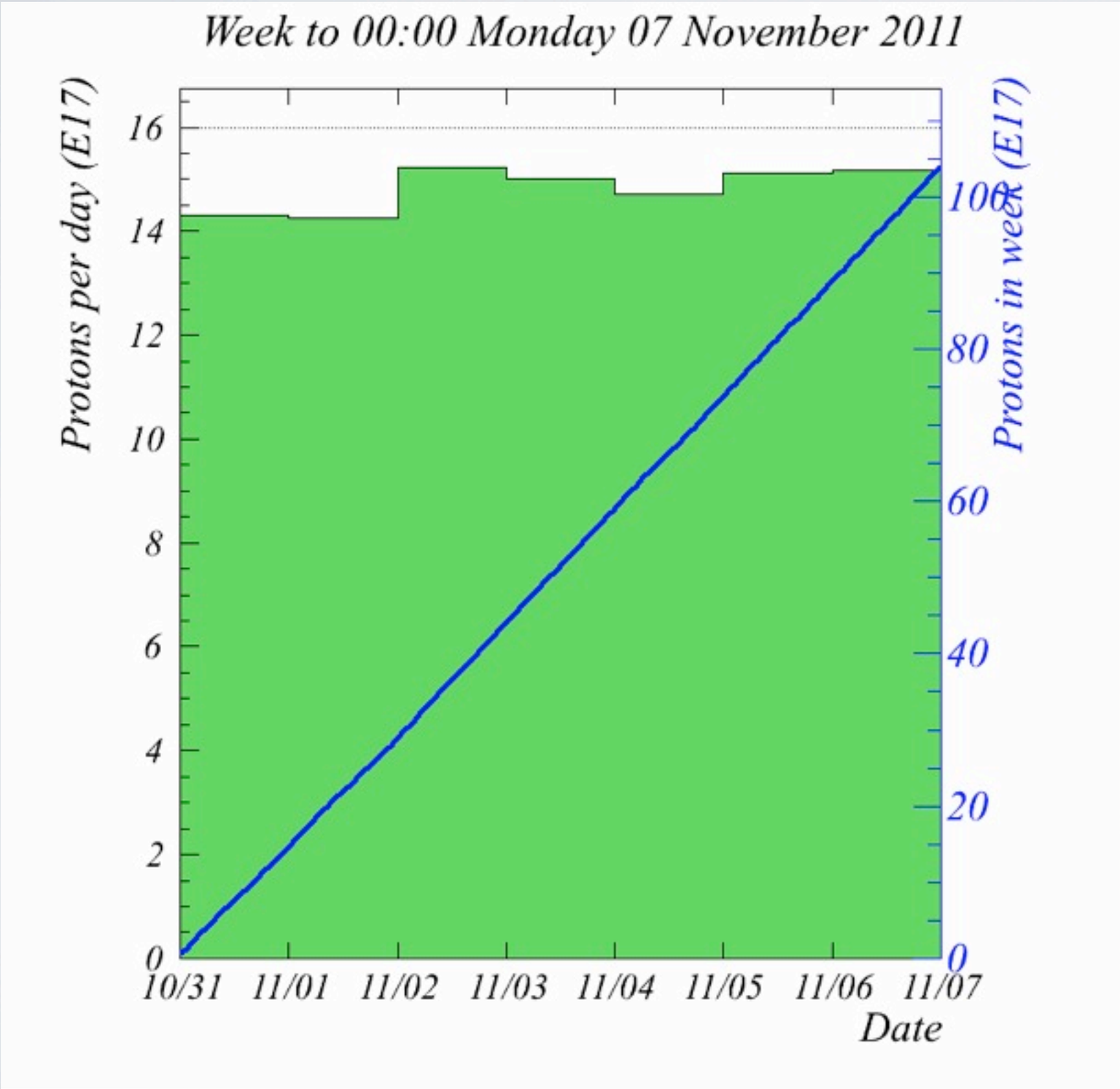
- Anti-ν run, full scale corresponds to 1.76×1020 POT
  - # POT for collected for anti-ν before Mar 23 10, official start of MINERνA ν run
- NT02 running gives enough anti−ν data for doubling of the 1st anti−ν data set.
- Minerva run , full scale corresponds to 4.9×10^{20} POT.
  - # for which MINERvA project & experiment were reviewed & the detector built.
- Projected assumes 0.93×10^{18} POT/day.
  - # POTs – average over the 18 months before the summer 2010, not including scheduled downtimes.
  - Projection considering a cycle time of 2.2 seconds per pulse, and that by going to 2.06 seconds per pulse, that projection would be correspondingly higher but we are choosing not to change it.

NuMI Beam Plots





Protons for the Week



Best day:

- 1.57×10^{18} POT (Nov. 6)

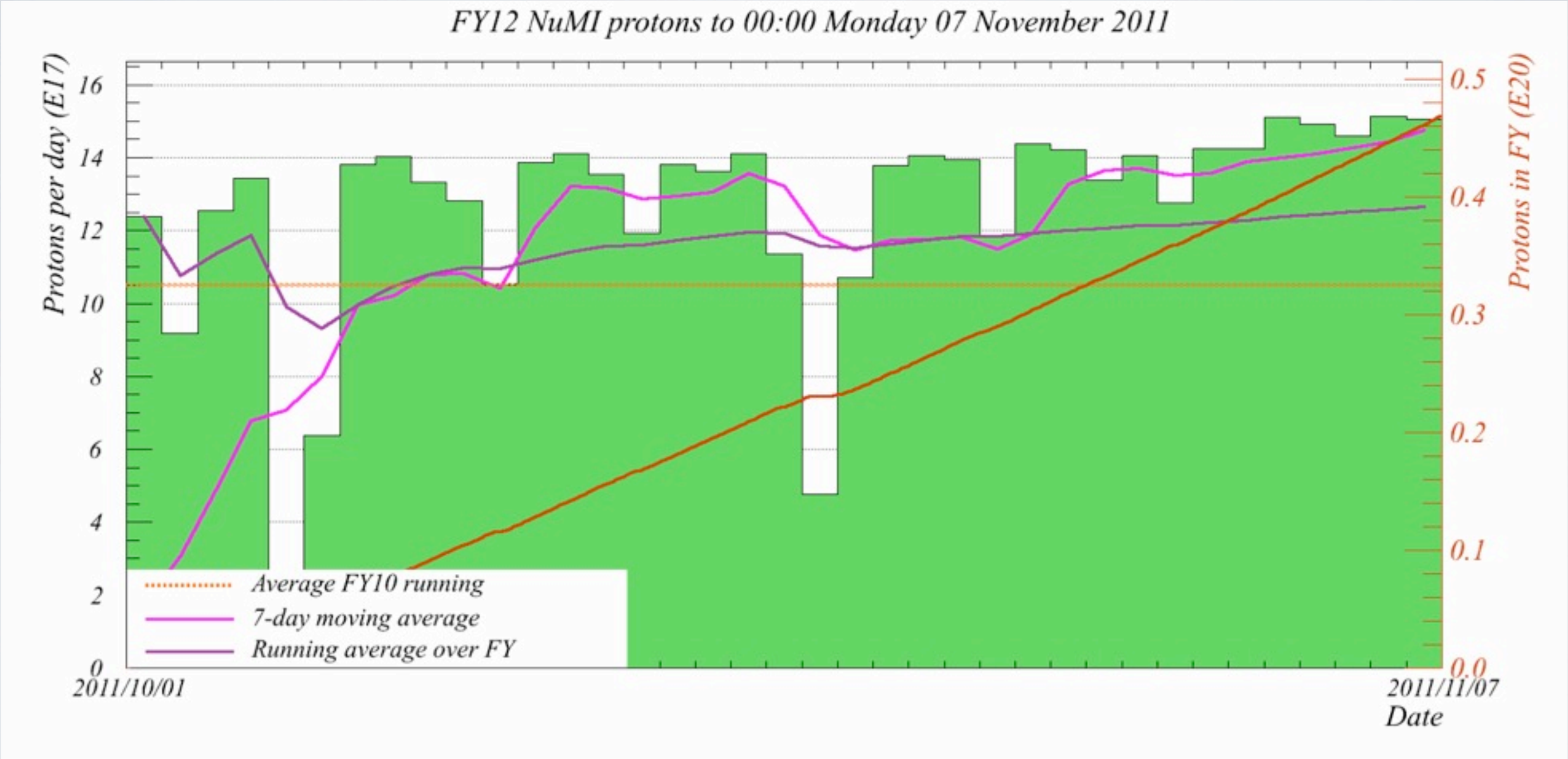
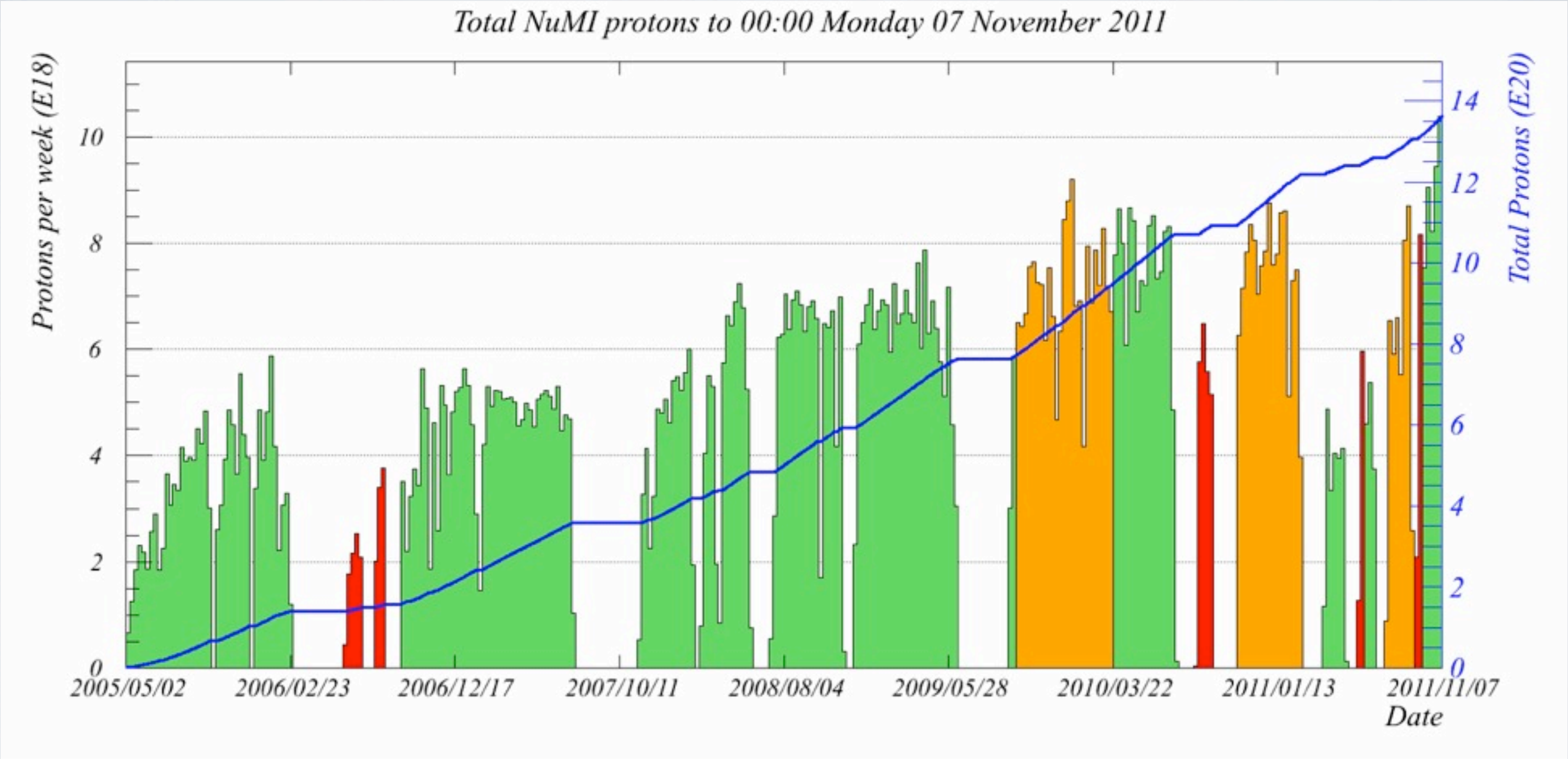
2nd best day ever:

- 1.51×10^{18} POT (Nov. 2)

Previous best day:

- 1.44×10^{18} POT (Oct. 26)

FY2011 Protons



NuMI Protons over History