

# MINERvA OPERATIONS REPORT

César Castromonte

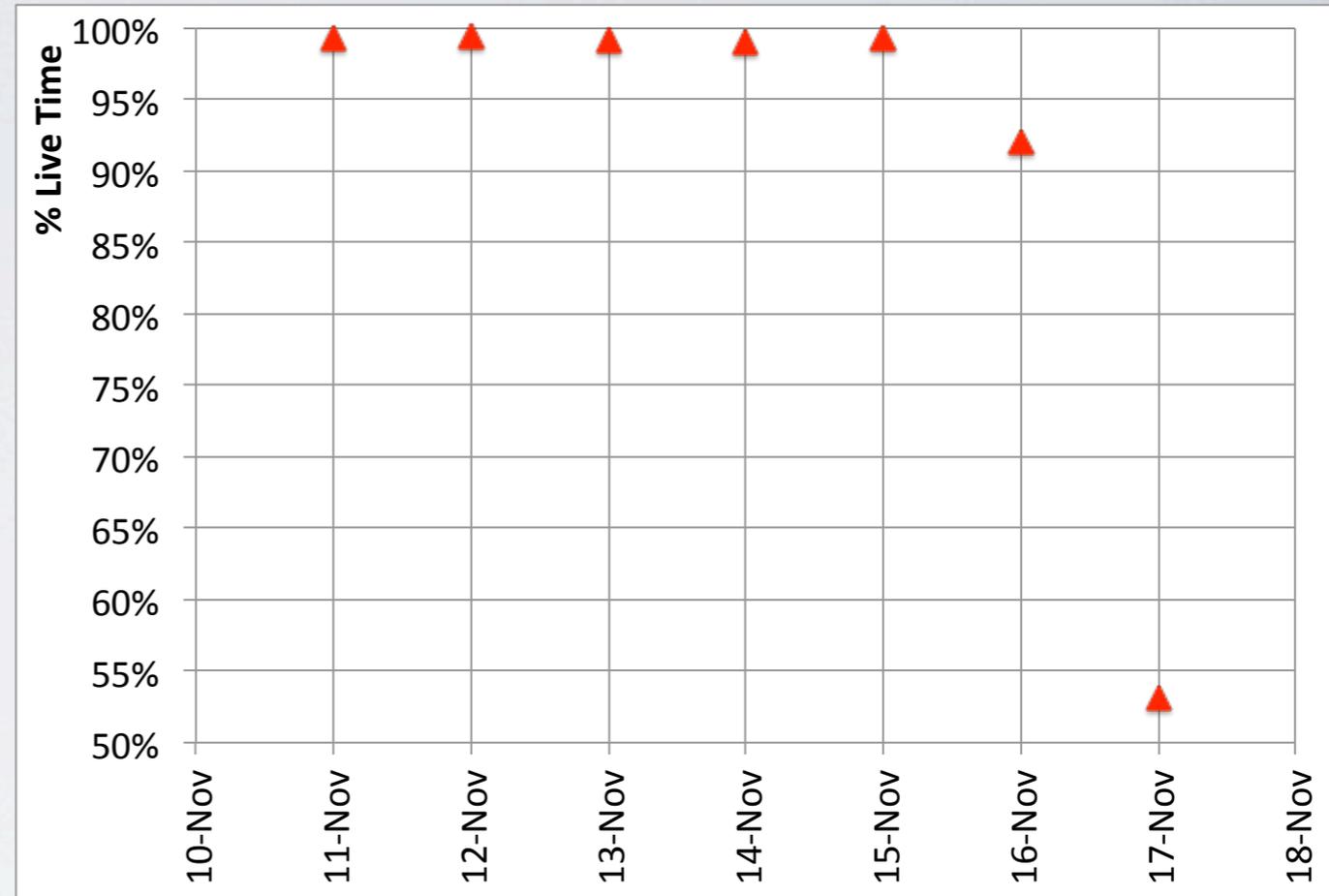
All Experimenters Meeting, Nov. 21, 2011



# $\nu$ Data

% Live time Nov. 11 - Nov. 17

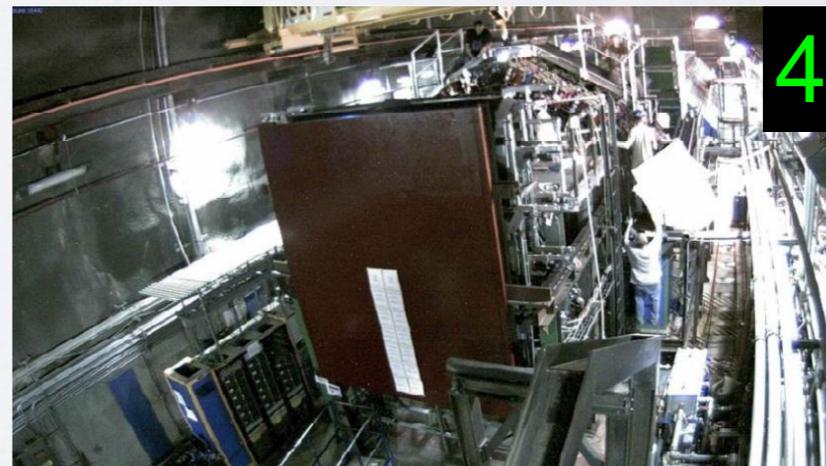
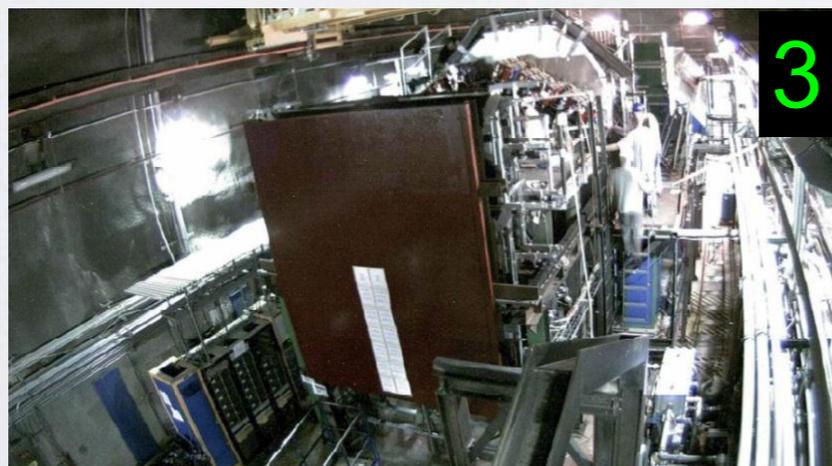
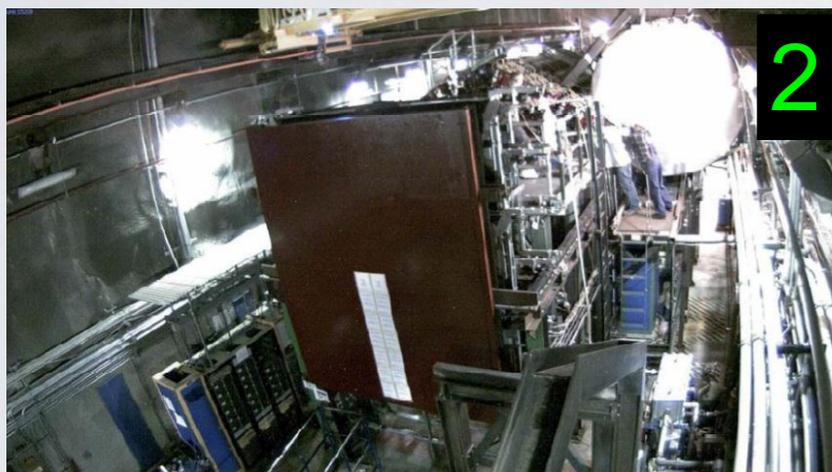
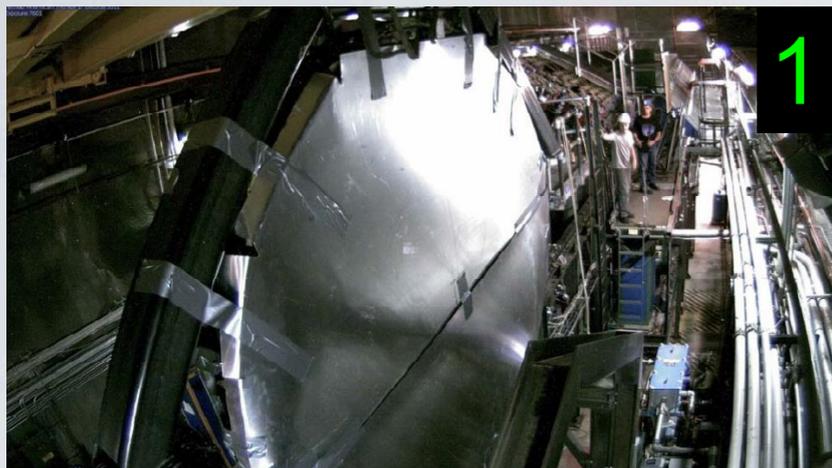
Date	NuMI Rec. POT	NuMI Del. POT	Live Time
11-Nov-2011	1.14E+18	1.15E+18	99.30%
12-Nov-2011	4.77E+17	4.80E+17	99.40%
13-Nov-2011	1.26E+18	1.27E+18	99.20%
14-Nov-2011	1.35E+18	1.36E+18	99.10%
15-Nov-2011	9.81E+17	9.88E+17	99.30%
16-Nov-2011	1.32E+18	1.44E+18	92.00%
17-Oct-2011	7.33E+17	1.38E+18	53.20%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



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



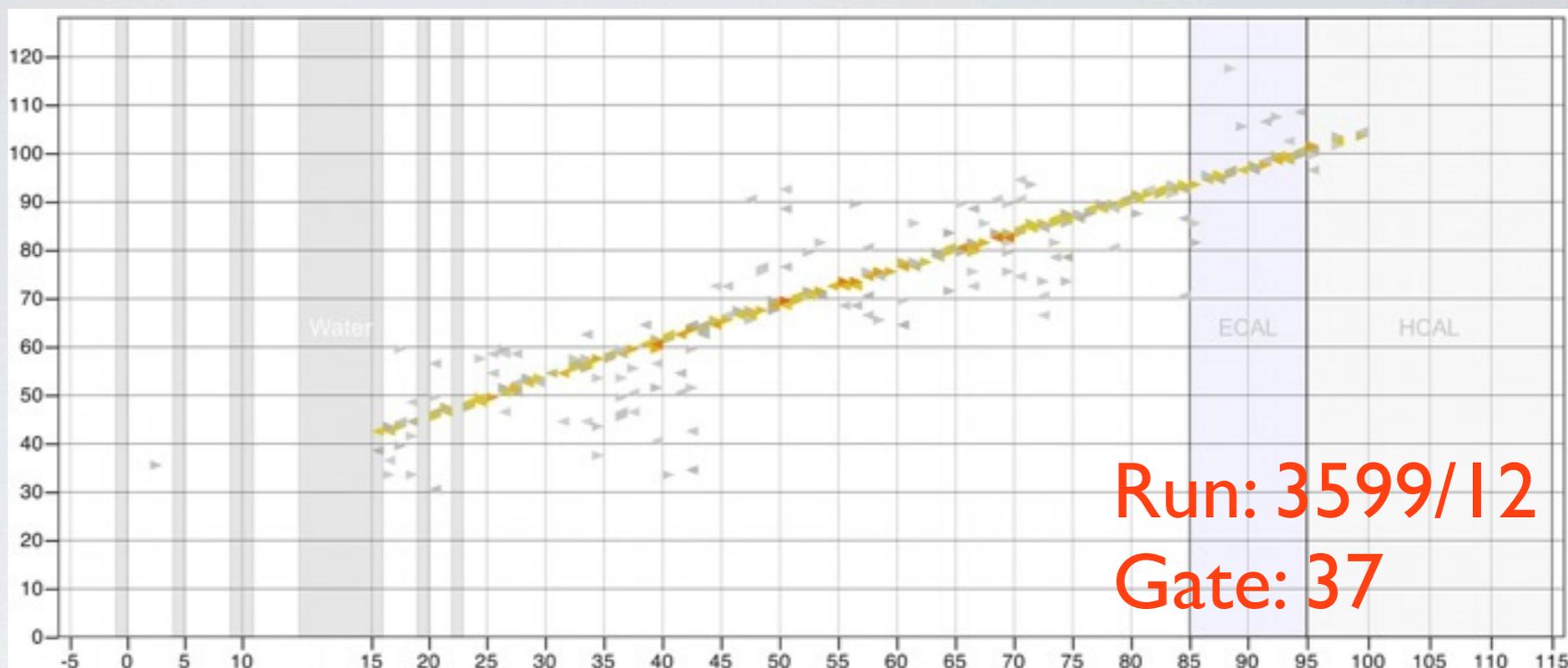
# MINERvA Water Target Update



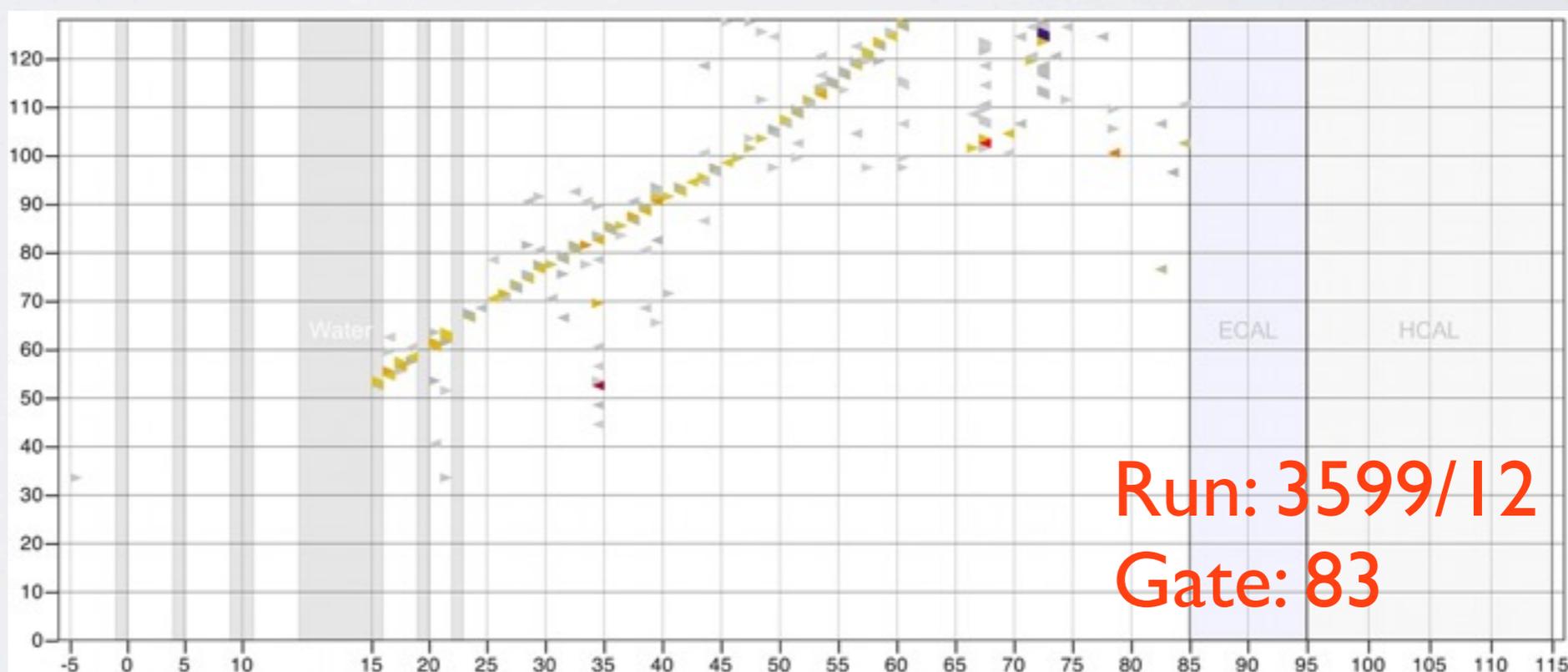
- Water target was installed on [Nov. 17](#).
- 1/32" Al sheet were added to reduce risk of damage from protrusions. Removed after target insertion.
- A couple of cables were damaged in the process and had to be replaced with spares.
- About 8 hours were needed to make the detector light tight again.
- 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 masked off 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.



# Water Target events

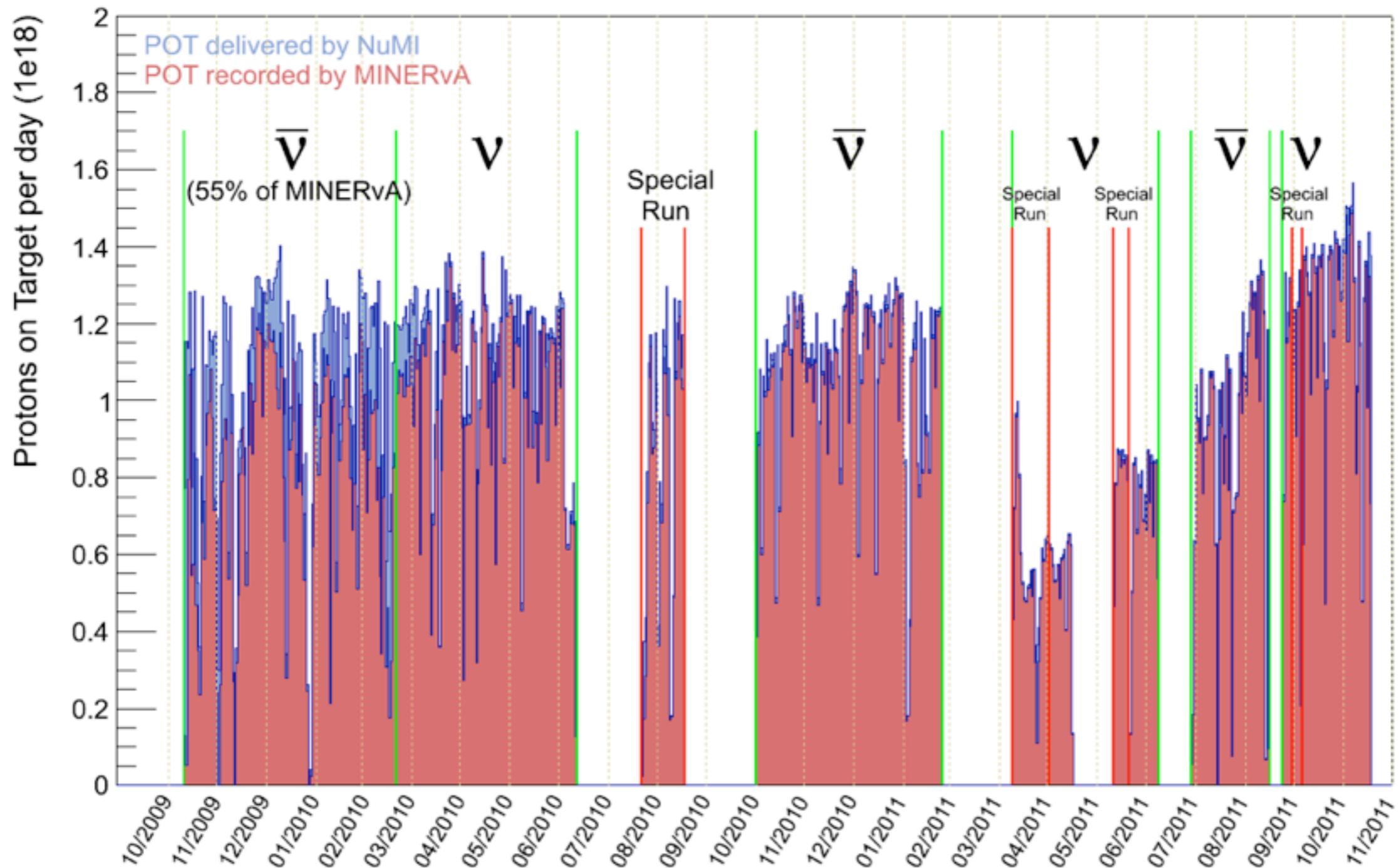


Nov. 20, 2011



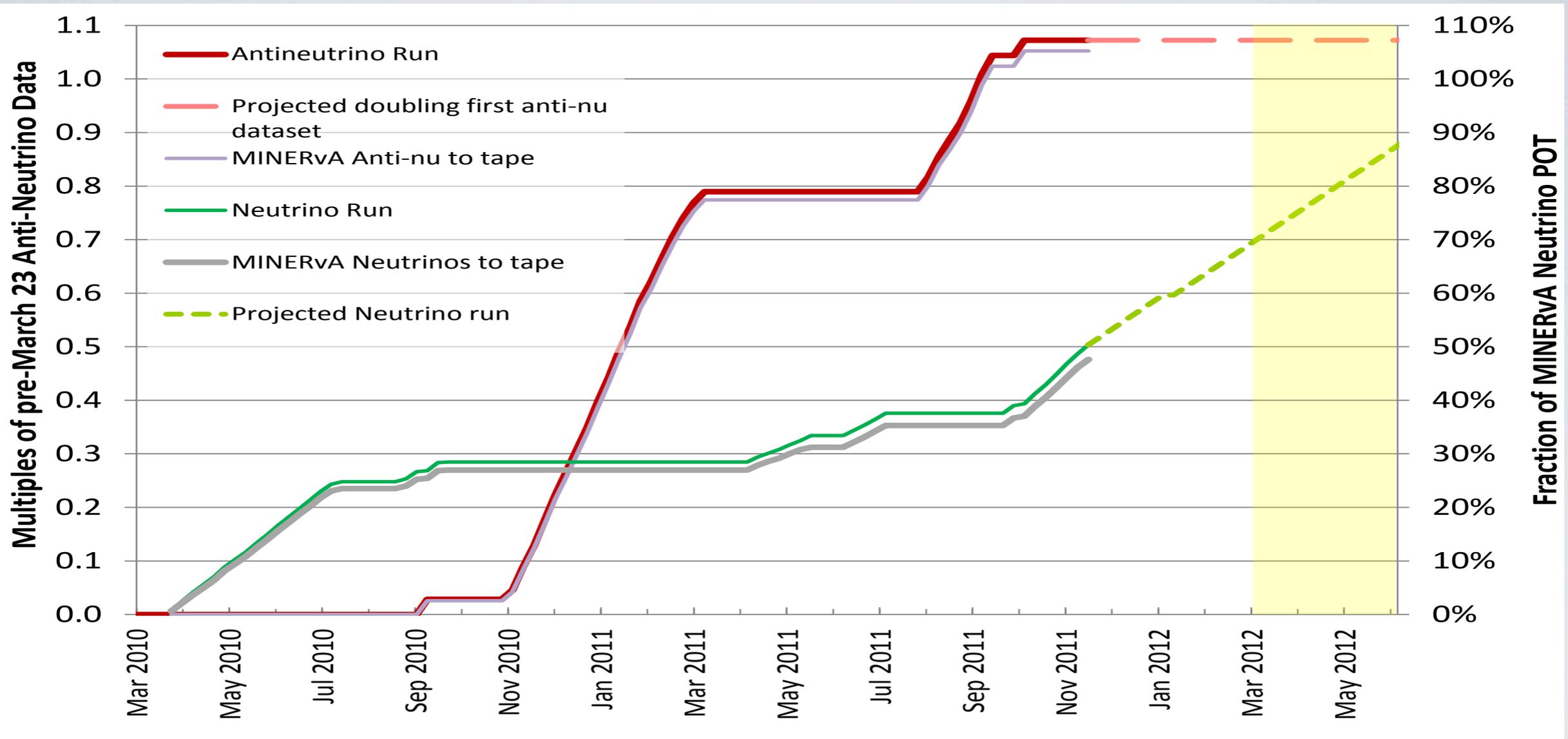


# MINERvA POT/Day Nov. 2009 - Present





# Accumulated POT to Nov. 17

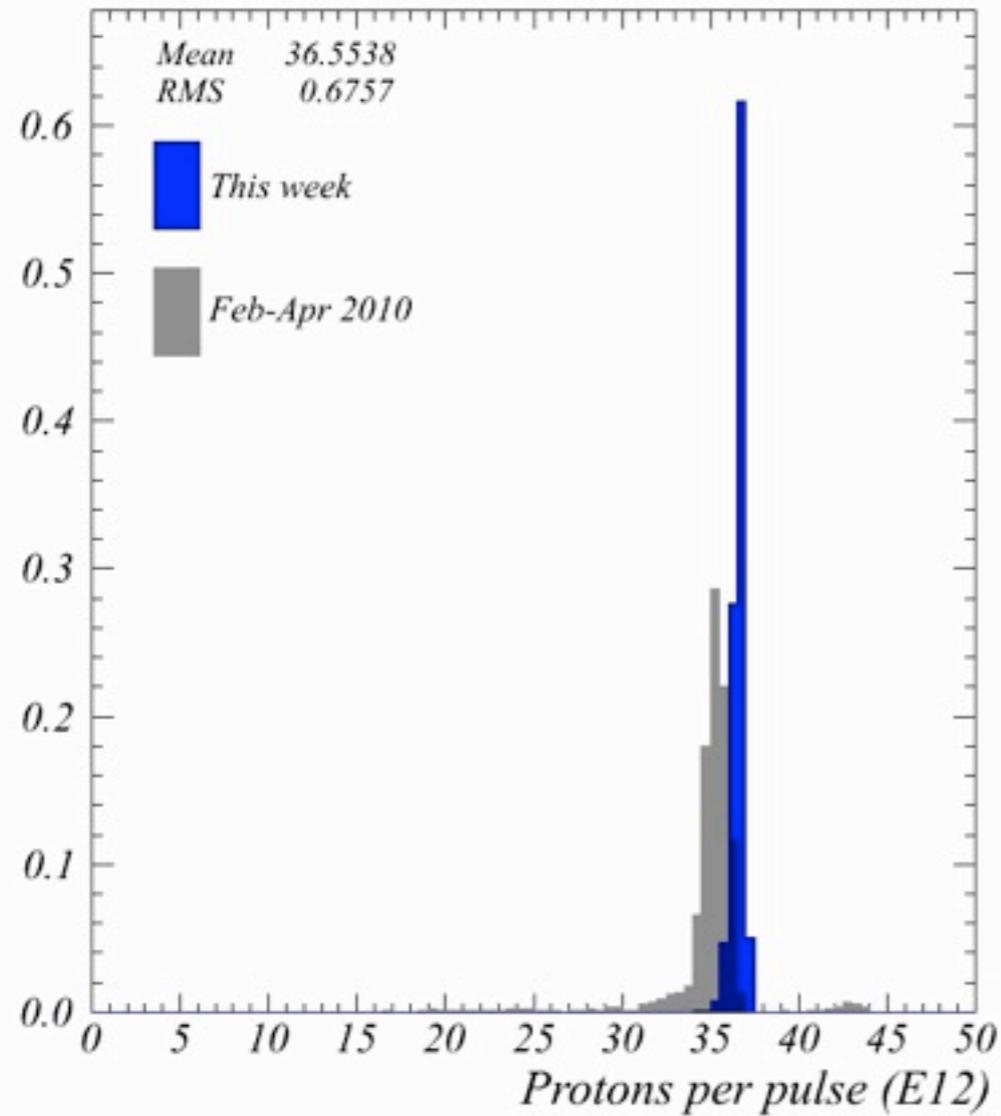


- Anti- $\nu$  run, full scale corresponds to  $1.76 \times 10^{20}$  POT
  - # POT for collected for anti- $\nu$  before Mar 23 10, official start of MINERvA  $\nu$  run
- NT02 running gives enough anti- $\nu$  data for doubling of the 1st anti- $\nu$  data set.
- Minerva run , full scale corresponds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

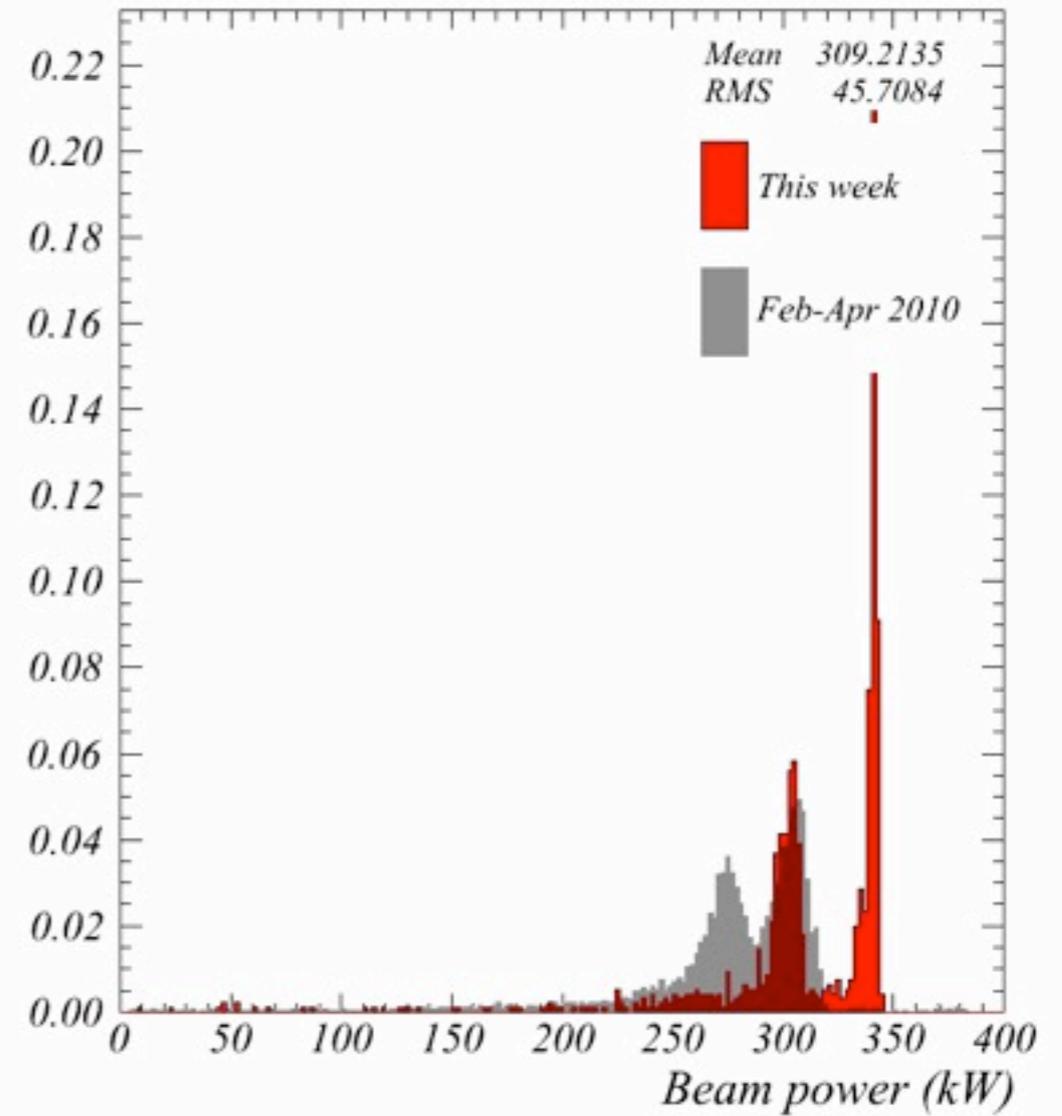


# NuMI Beam Plots

Week ending 00:00 Monday 21 November 2011

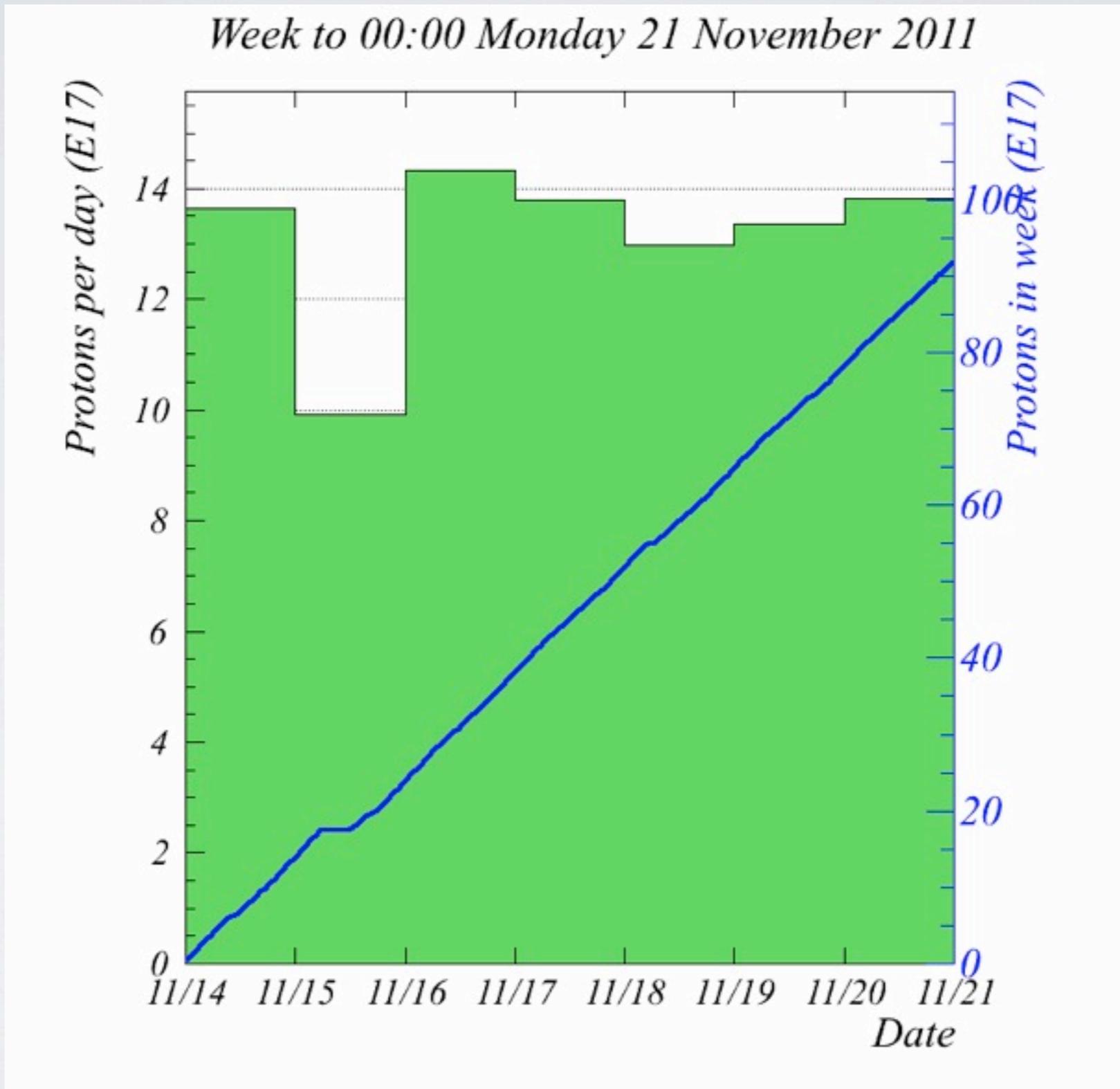


Week ending 00:00 Monday 21 November 2011





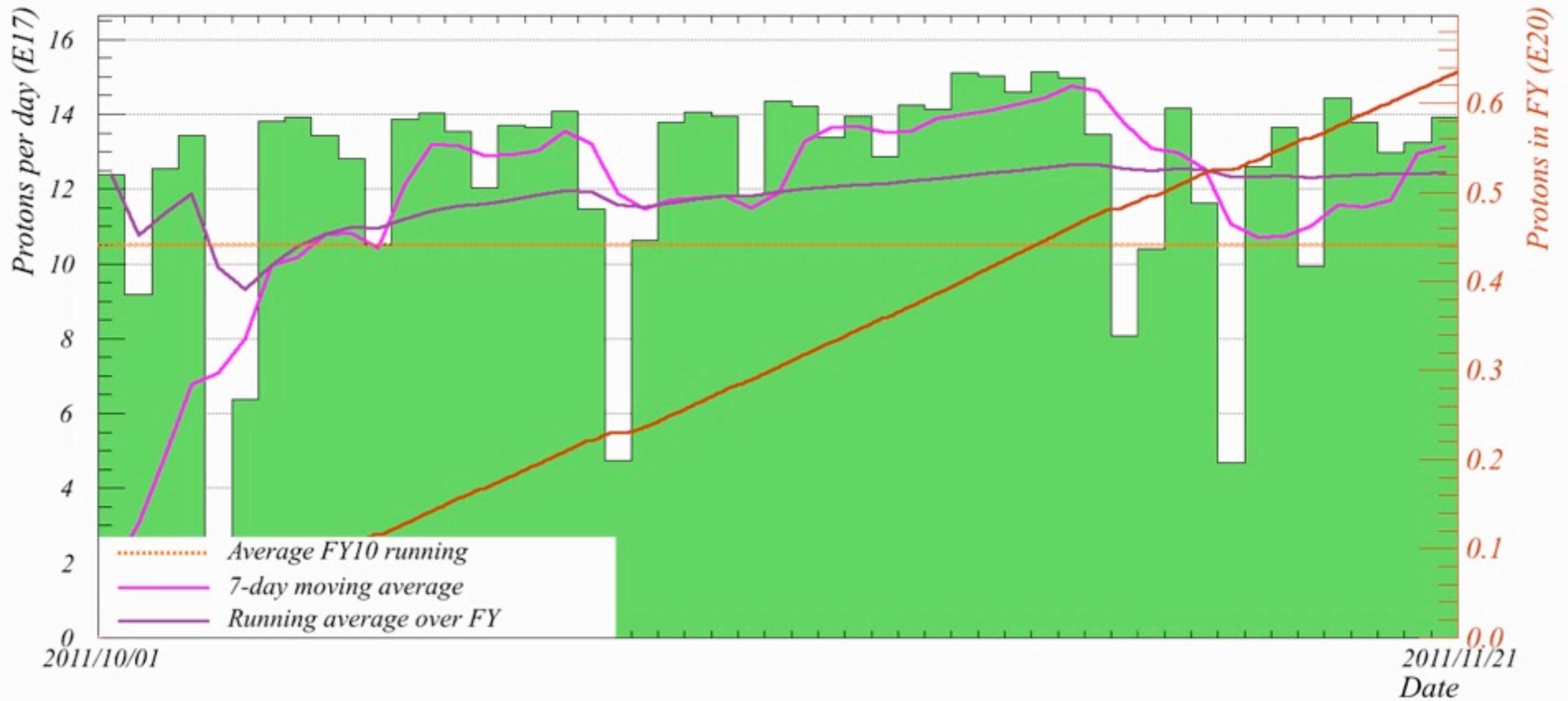
# Protons for the Week





# FY2011 Protons

*FY12 NuMI protons to 00:00 Monday 21 November 2011*





# NuMI Protons over History

Total NuMI protons to 00:00 Monday 21 November 2011

