The MINERνA Operations Report
All Experimenters Meeting

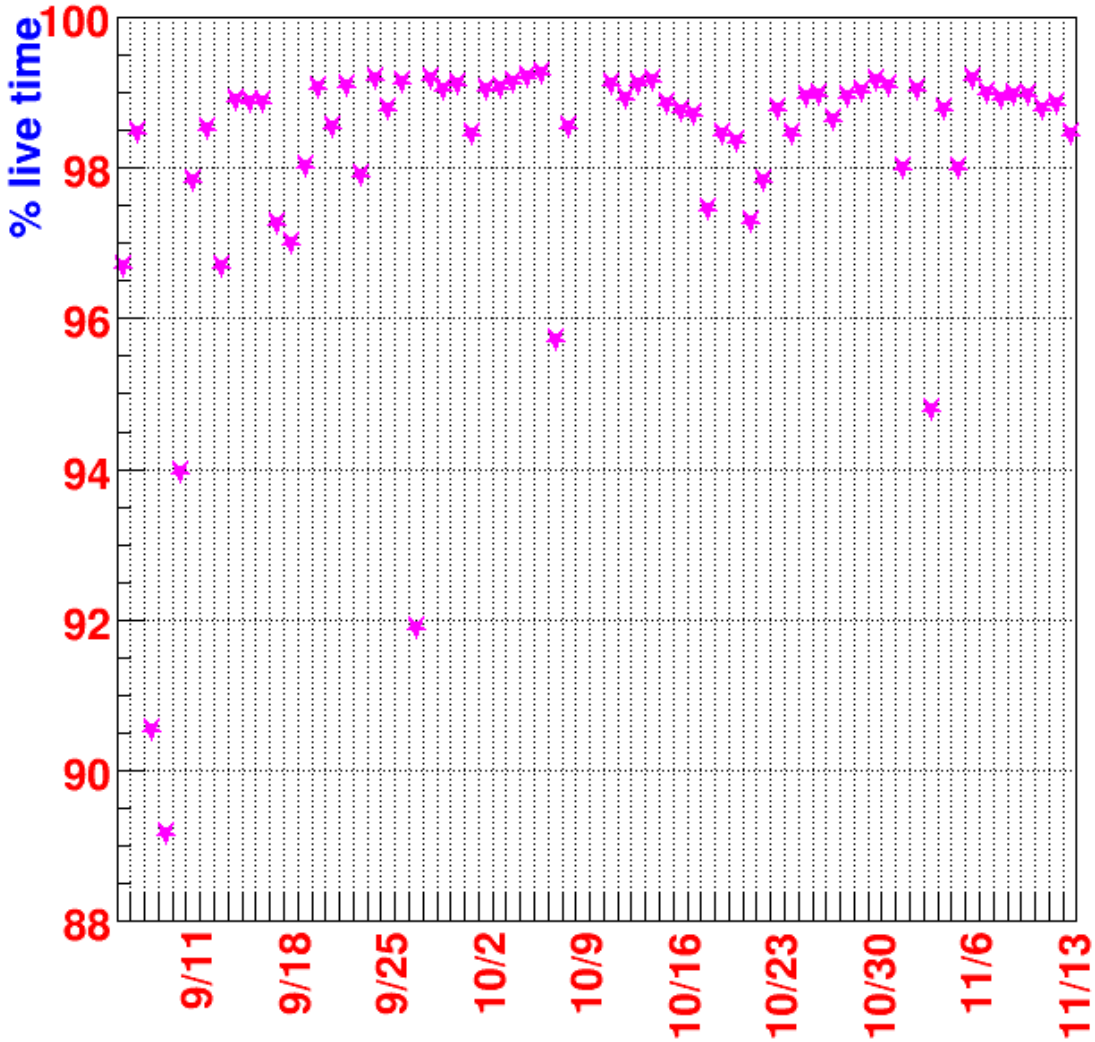
Howard Budd, University of Rochester

Nov 18, 2013

Taking Data

- We are taking data with very small downtimes
  - The detector is operating fine
  - Nov 14, a FEB failed to the point we could not take data. It was on the most East side which is easy to replace.
    - 1st FEB we had to replace which prevented data taking which was not due to junk being deposited on the detectors since the start of the LE Run, Mar 22 2010.
    - 1 year ago we had to go down to physically reset a FEB which prevented data taking, but the FEB was not replaced. If it had done it again, we would have replaced the FEB.
    - Note, we have replace many FEBs.

Calculating Live Times



- Present understanding our live times.
  - Uses LE Run procedure
- Last week efficiencies presented used information from MINOS beam data base. This weeks plot uses only beam data from ACNET through the Lumberjack Plotter
  - Trying to understand why we get the difference.
- Ave live time = 98.2% for 5.20×10^{19} POT

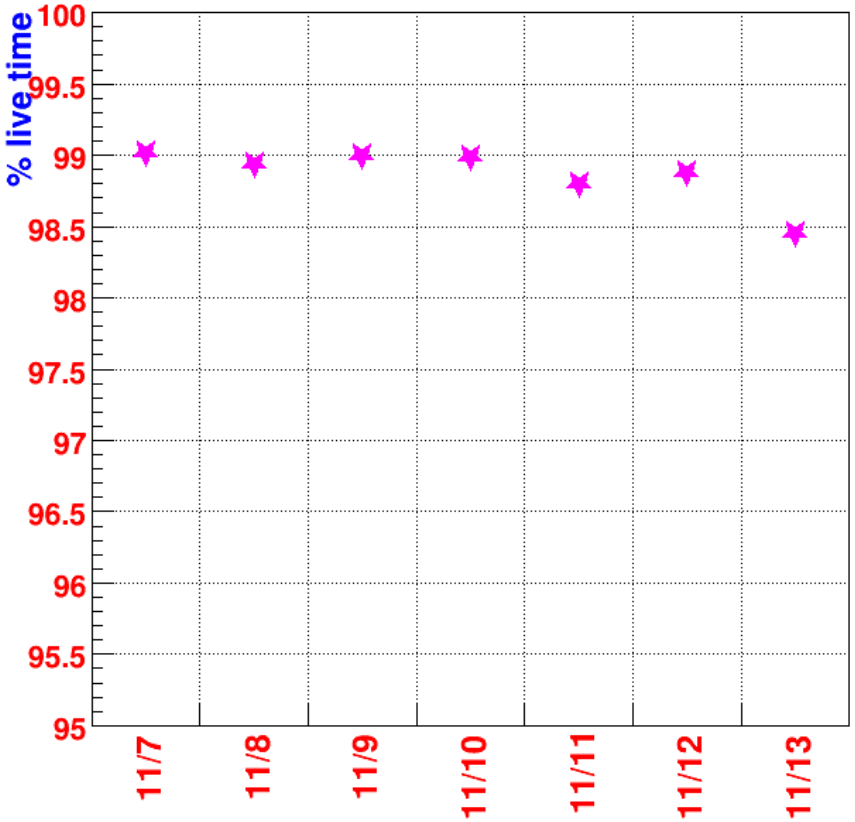
Understanding Down Times

- To understand inefficiencies we can look in the SAM database to see if the data files are there. We also look at ACNET to see if beam was present, & ECL to determine what the problem was. If SAM claims there was data, we do not see an entry in ECL claiming the DAQ was down.
  - Sep 8 2013, 90.5% - Sam claims there should be no inefficiency
  - Sep 9 2013, 89.2% - DAQ problem for 20 minutes. Sam also claims we were down for another hour, but there appears to raw data files during this period of time.
  - Sep 10 2013, 94%. - Sam claims there should be no inefficiency.
  - Sep 27 2013 91.9% - 2 instances of DAQ problem
  - Oct 7 2013 95.7% -2 instances of DAQ problem
  - Oct 9-10 2013 No Beam
  - Nov 3 2013 94.8% - Sam claims there should be no inefficiency

ν Data

From	To	POT	MINERvA Live time
7-Nov-2013	13-Nov-2013	7.26E+18	98.7%

We will be presenting live times Thur-Wed
% live time Nov 7-13



- 0.67×10^{19} POT, Nov 11-17
- 5.56×10^{19} POT since Sep 6 to Nov 17

West Platform

- During previous shutdown PPD has built a platform which will enable access these FESBs & improve access to the FEBs and PMTs on the West side

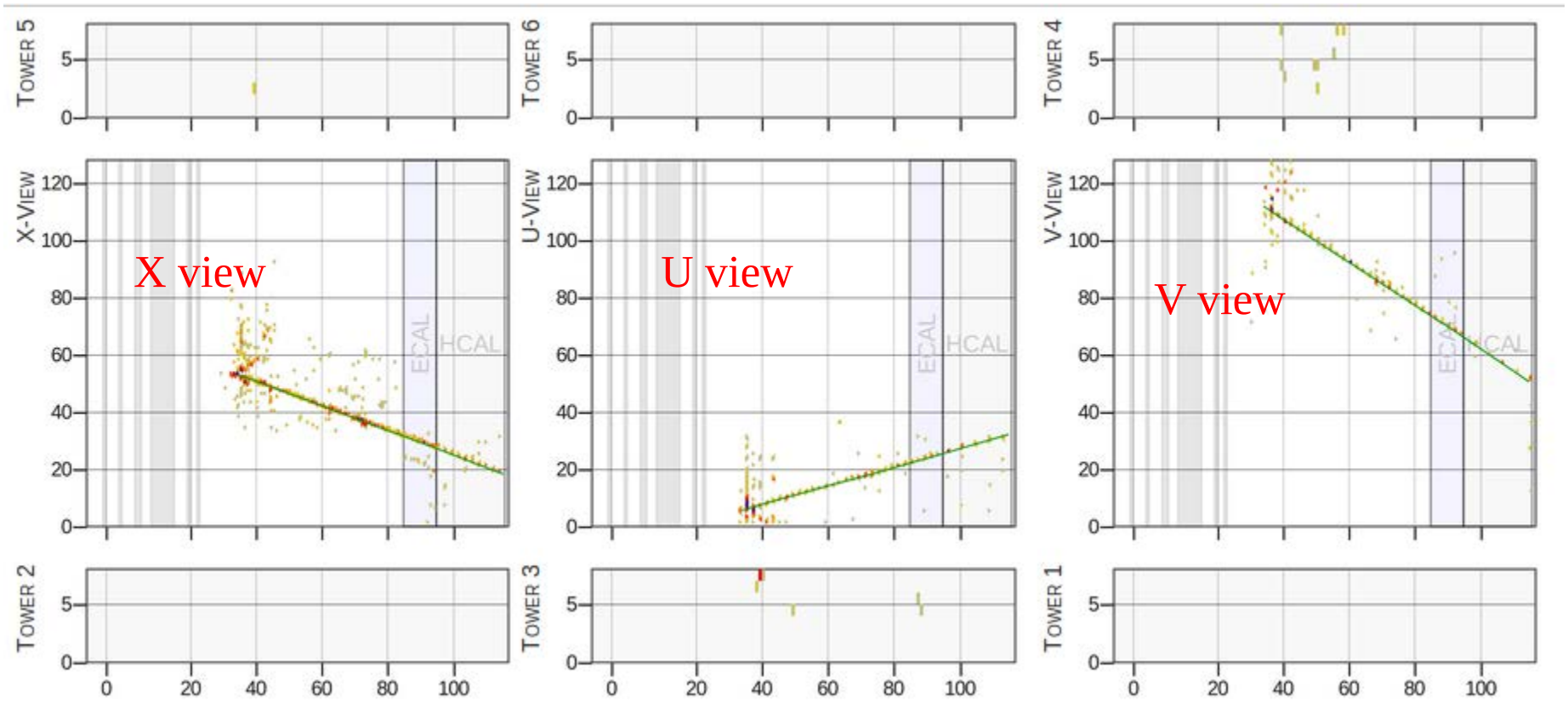
West Platform

- During the next shutdown
  - 2 of the 3 flooring pieces are tied down. A short piece which the person steps on from the ladder is tied down with a hose clamp. It needs to be tied down firmly
  - Install 3d railing on the east side of platform to protect the optical cables & give the person working on the detector something to hold onto besides the detector. 2 of the 3 railings are installed.
- We turn off HV off to do this & hence this must take place during a beam down time.
  - After installation we need to light leak check the detector.
- This total will take about 1 shift

West Platform

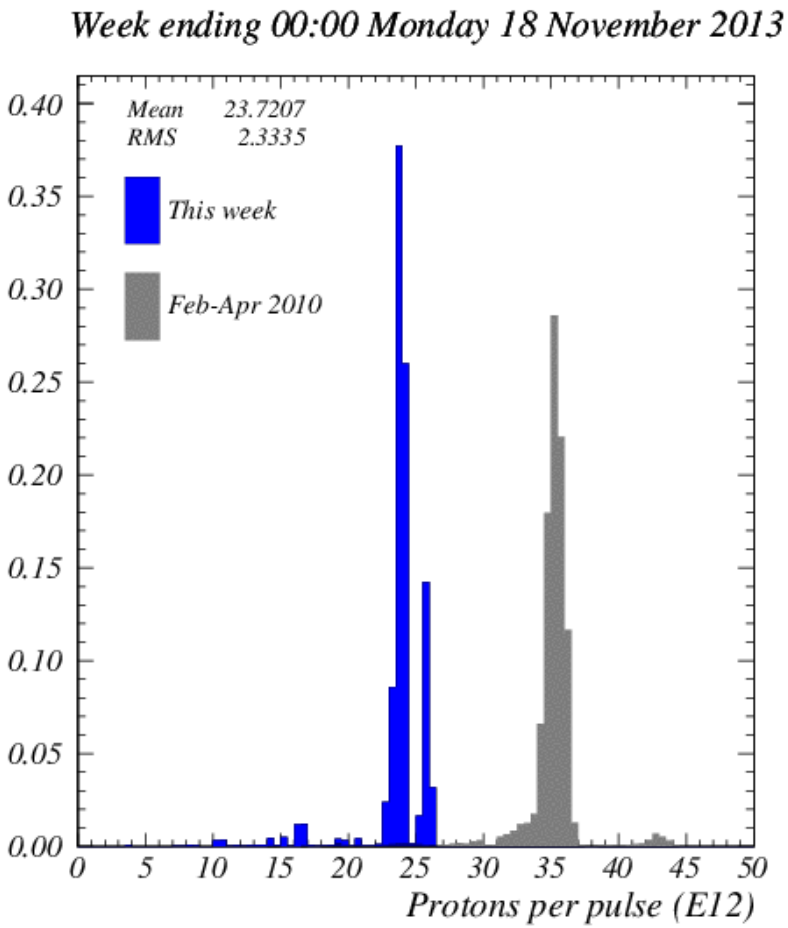
- The goal next is to replace a FEB which has high PEDs ave in ½ the low channels. (The PED ave > 2000 for this FEB, & nominal PED ~ 450.

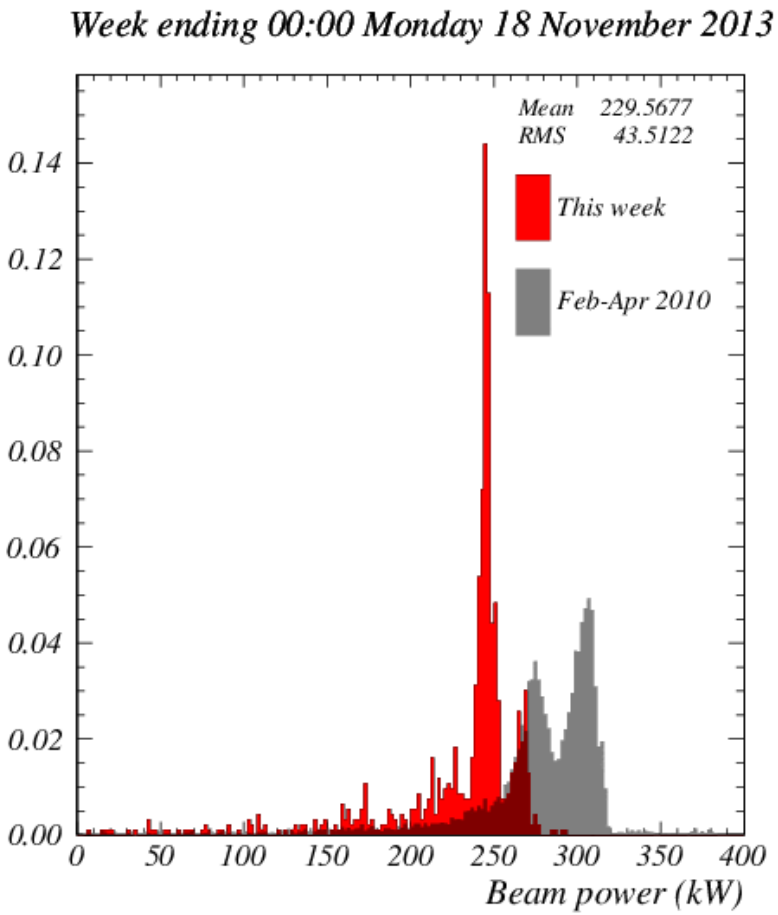
Event Display



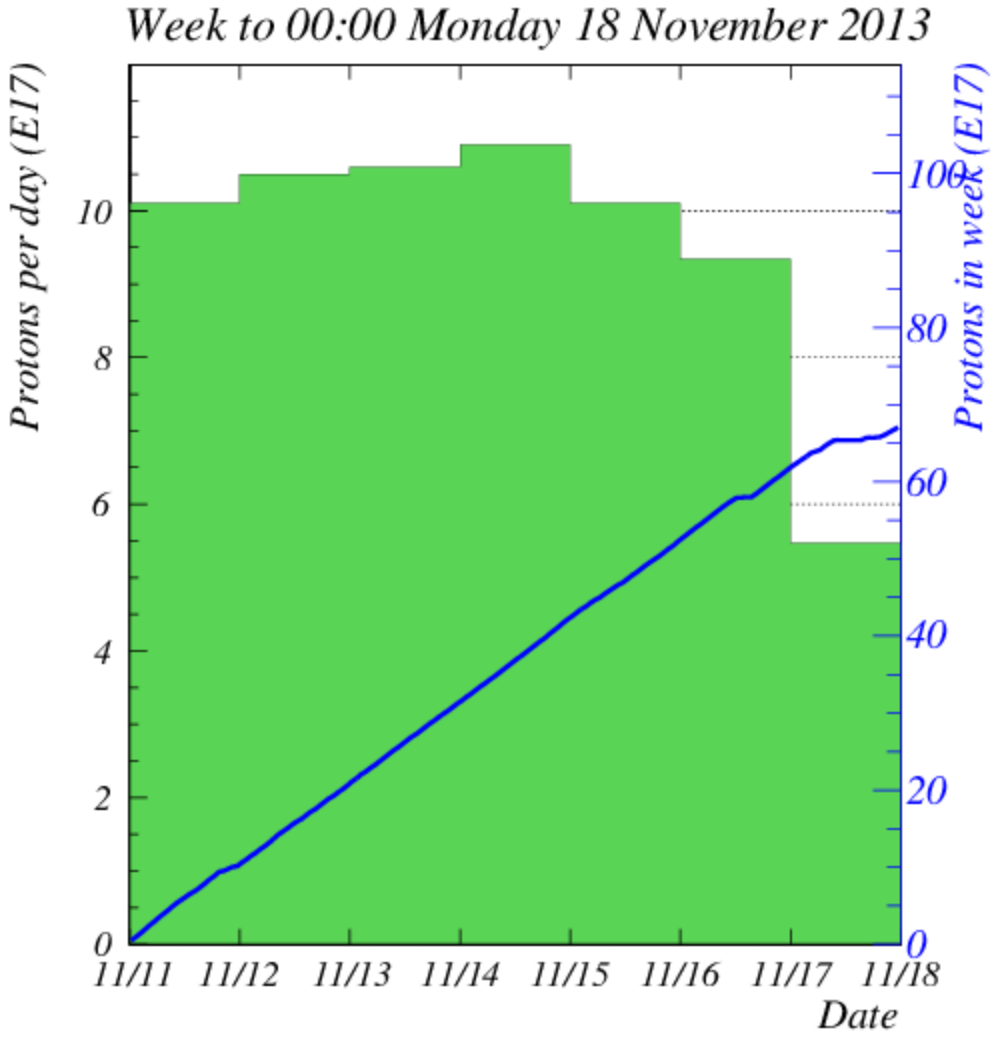
- quasi-elastic event

NuMI Beam Plots



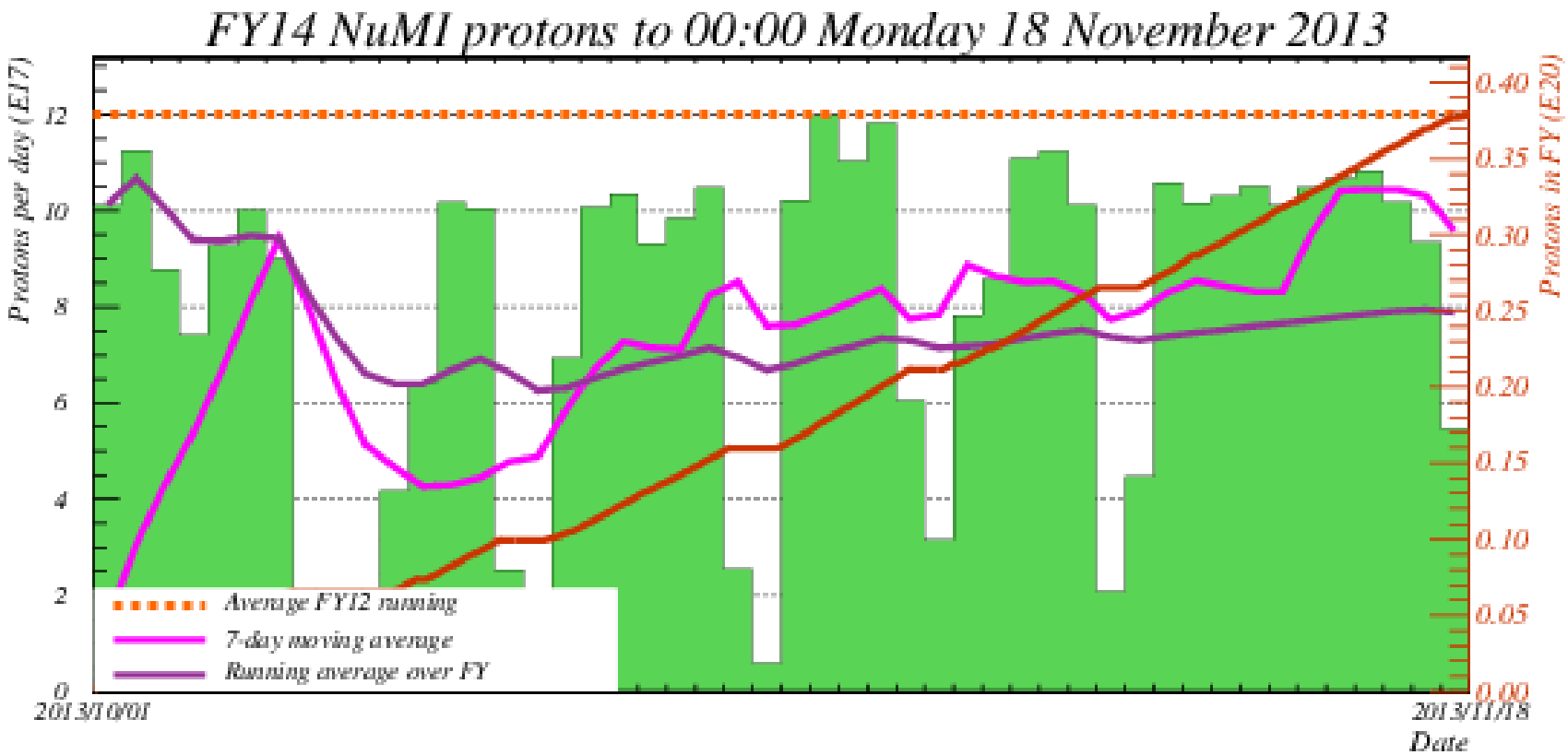


Protons for the Week



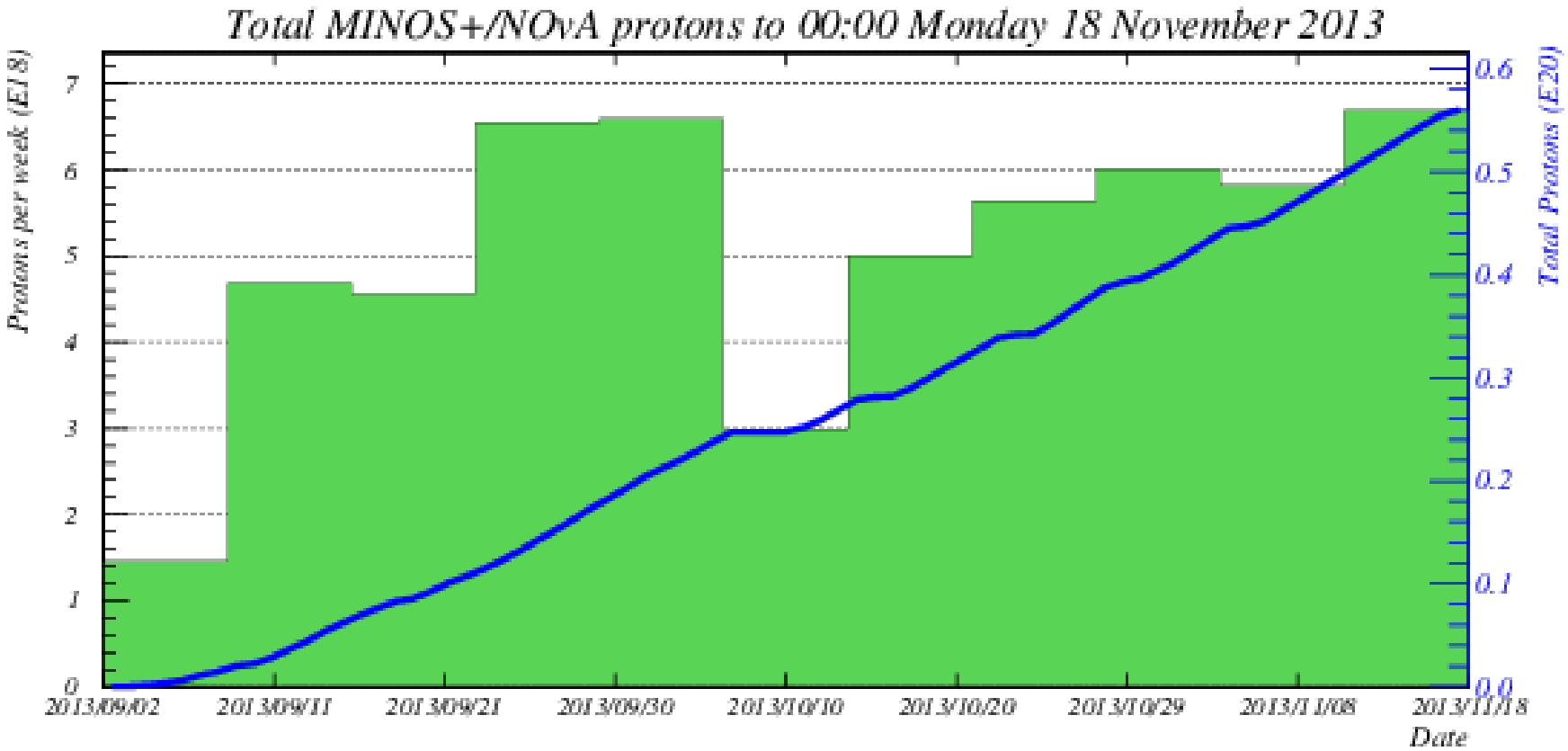
0.67×10^{19} POT

FY2014 Protons



3.78×10^{19} POT

Protons for ME Run



5.56×10^{19} POT (Start Sep 6 2013 at 15:00)