

The MINERvA Operations Report

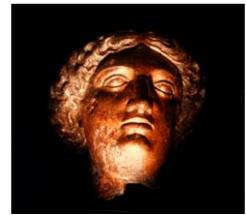
All Experimenters Meeting

Howard Budd, University of Rochester
Feb 23, 2015

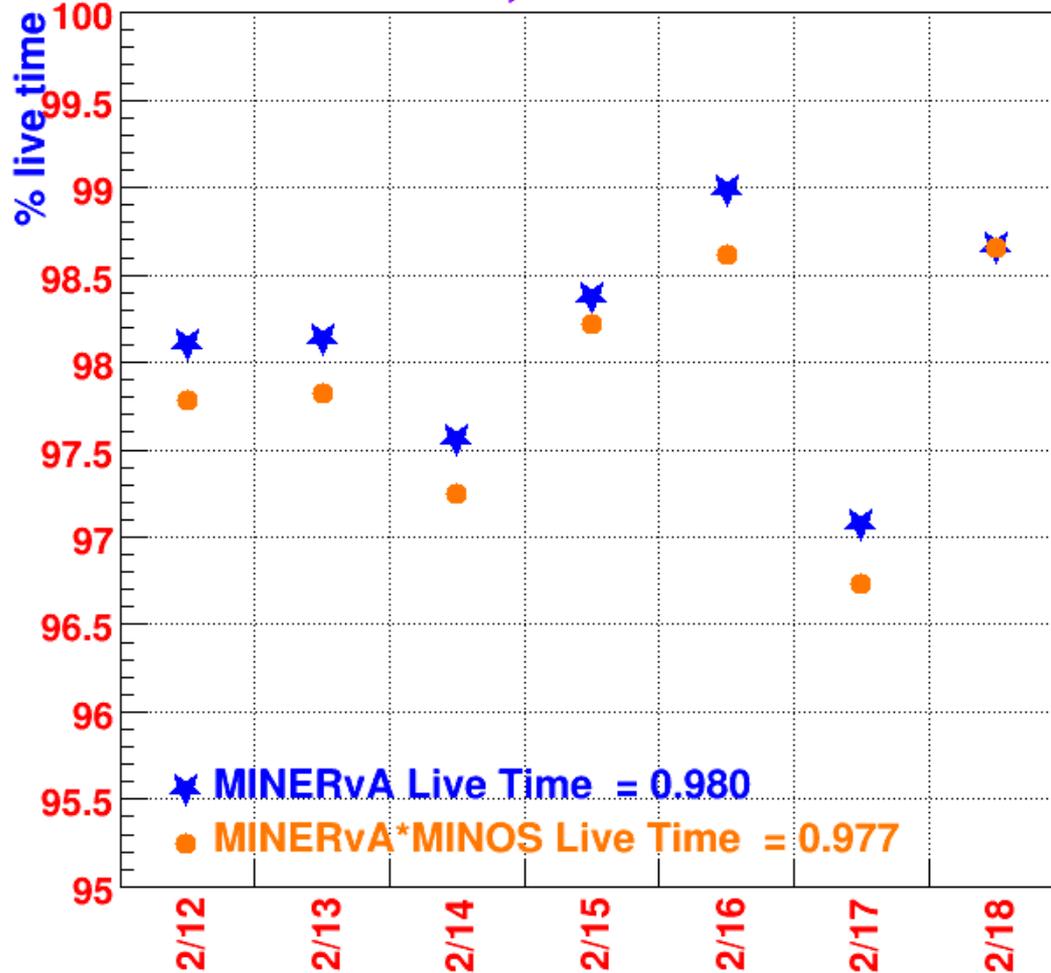




v Data



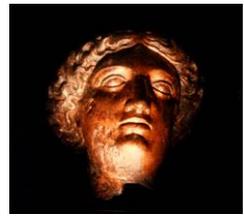
Feb 12 to Feb 18, 0.70×10^{19} POT Delivered



- Live time, Feb 12-18
- 0.7×10^{19} POT
- MINERvA 98.0%
- MINERvA*MINOS 97.7%



DAQ Header Problem



- DAQ header problem
 - The frame length is in the data header twice. Occasionally one or both of these frame lengths is wrong.
 - If we get a wrong frame length, the frame cannot be analyzed and the offline stops with the remaining events in the subrun not analyzed.
 - By getting the correct frame length for that event, we can analyze all the events in the subrun
 - This problem became more frequent with mnvonline03 as the DAQ computer
- On Feb 11, Donatella Torretta installed an offline fix. Her code looks at both these frame lengths and picks the 2d length if they are different.
 - This fix recovered almost all the problem runs.
 - However, occasionally the 2d frame length is not correct.



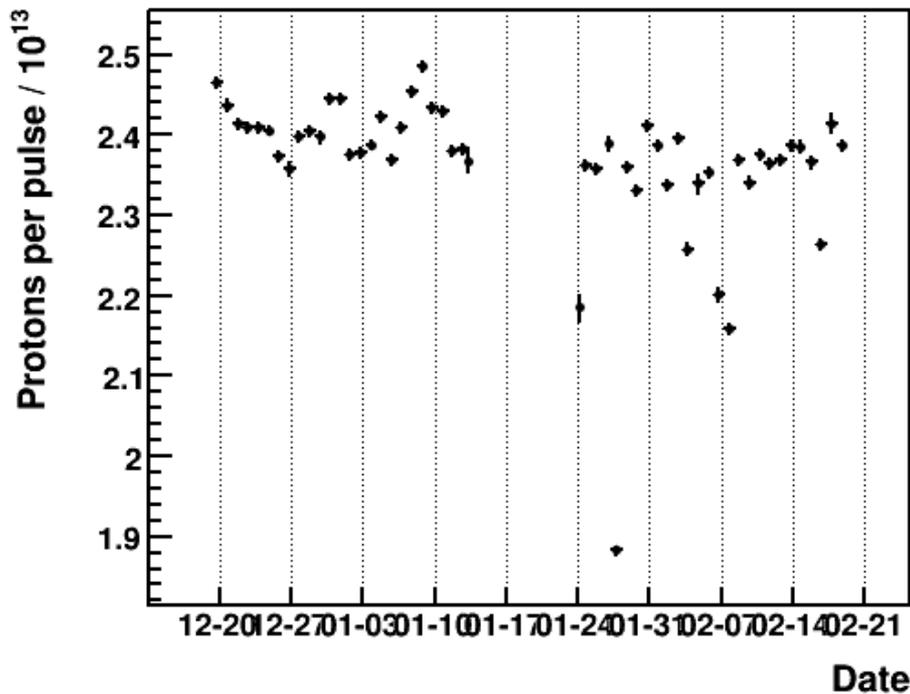
DAQ Header Problem



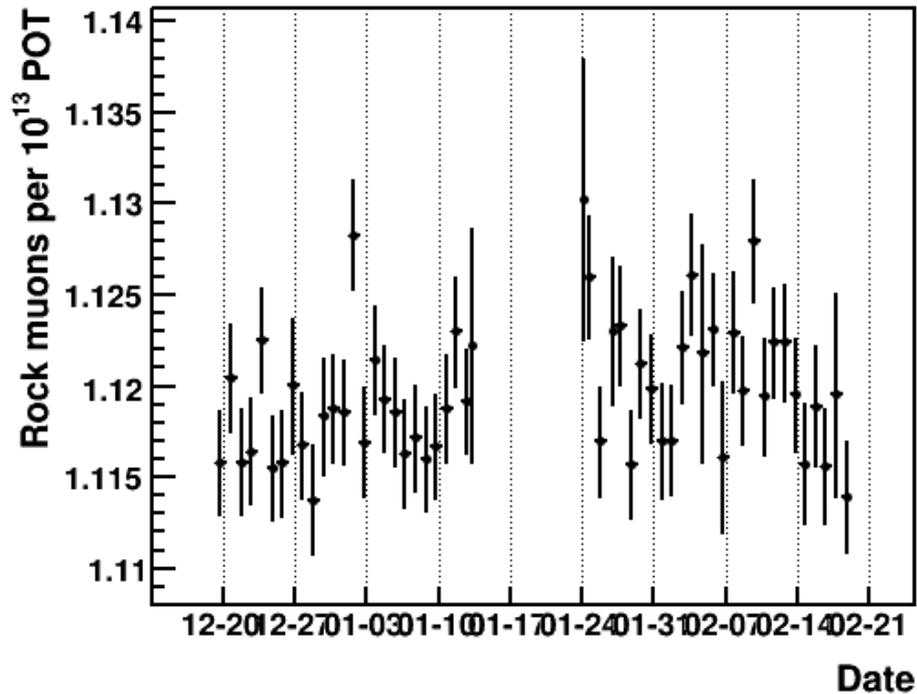
- During the AD Shutdown, we power cycled the VME crates to bring the system up cleanly, hoping that would help. We still get this error, although not as often.
- The length of the frames is either fixed or can be determined from the number of hits. Hence, we do not need to know the length of the frames from the header. Donatella has code which uses the default length of the frames without looking at the frame length to unpack the data. This code will be deployed this week and should recover all the events in the runs with the DAQ header length failure.



Rock Muons/POT

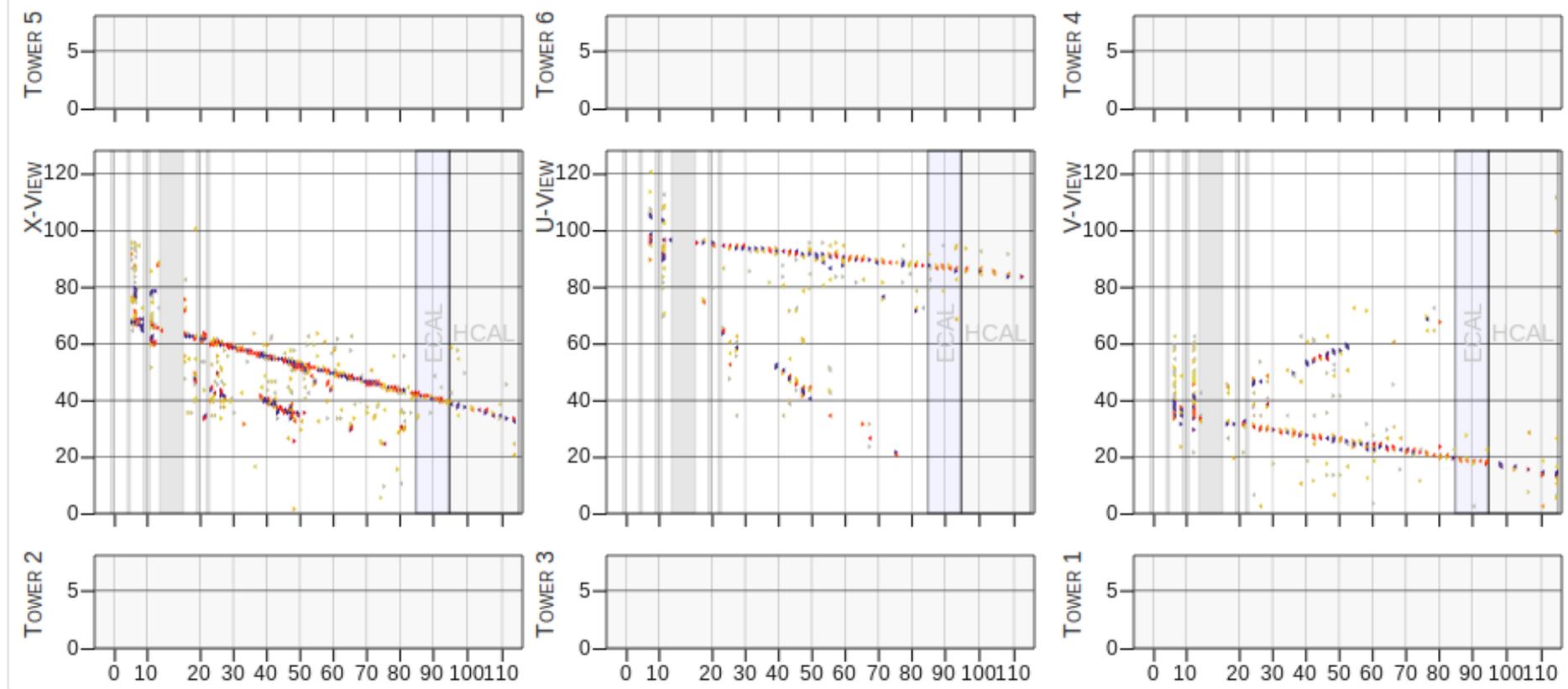


POT/Pulse





Event Display



X View

V View

U View

Nuclear π^0 CC Event

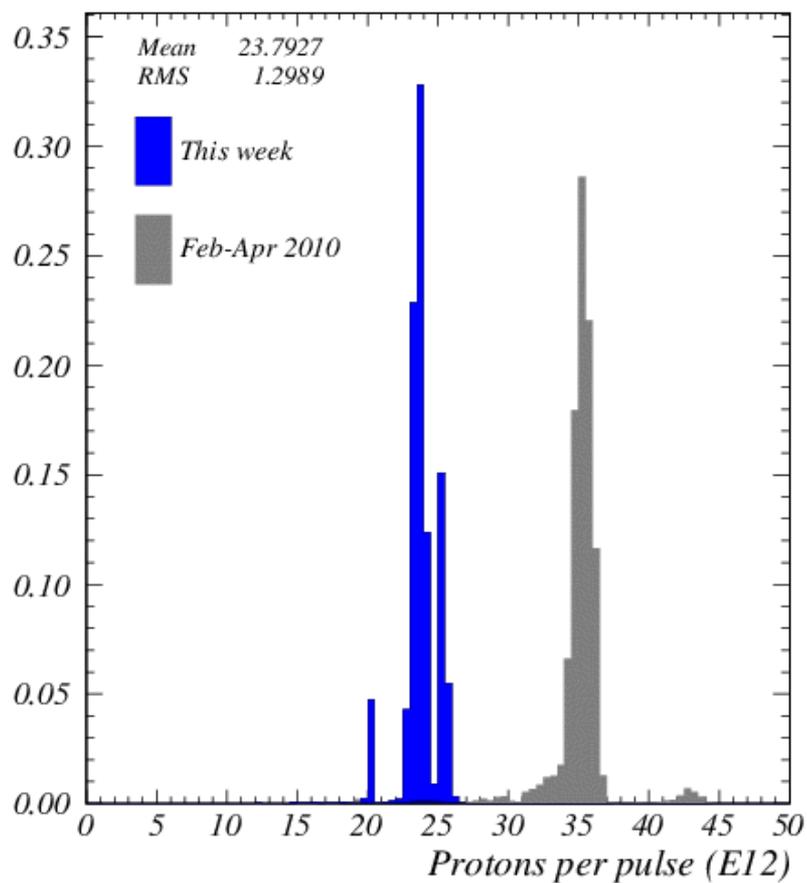


NuMI Beam Plots

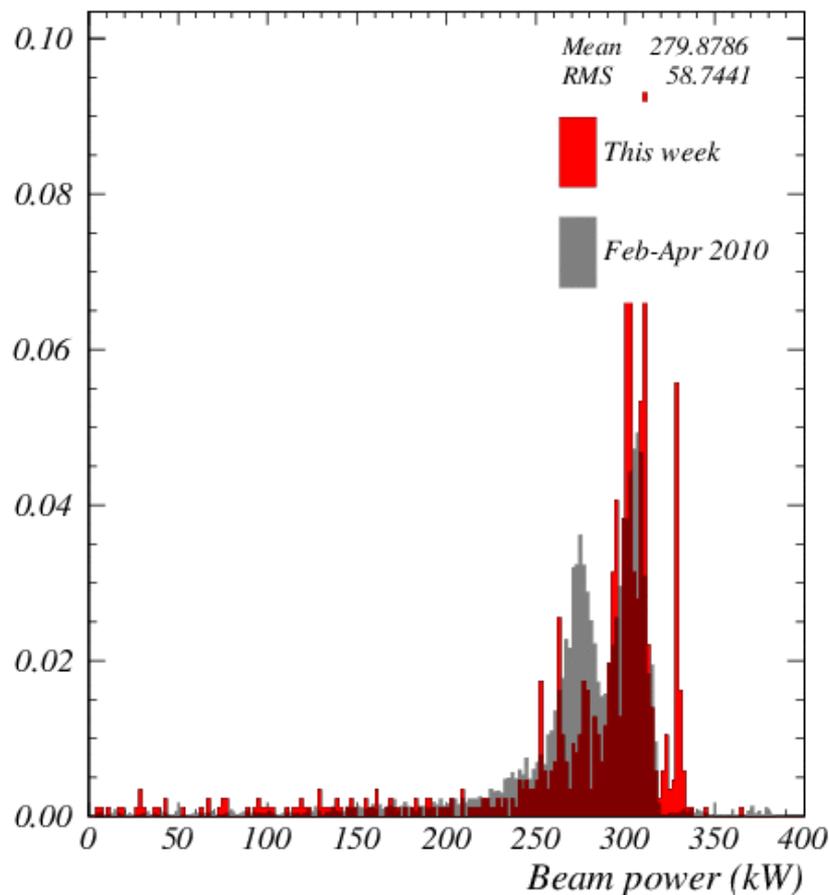
Feb 16-22, 2015



Week ending 00:00 Monday 23 February 2015



Week ending 00:00 Monday 23 February 2015

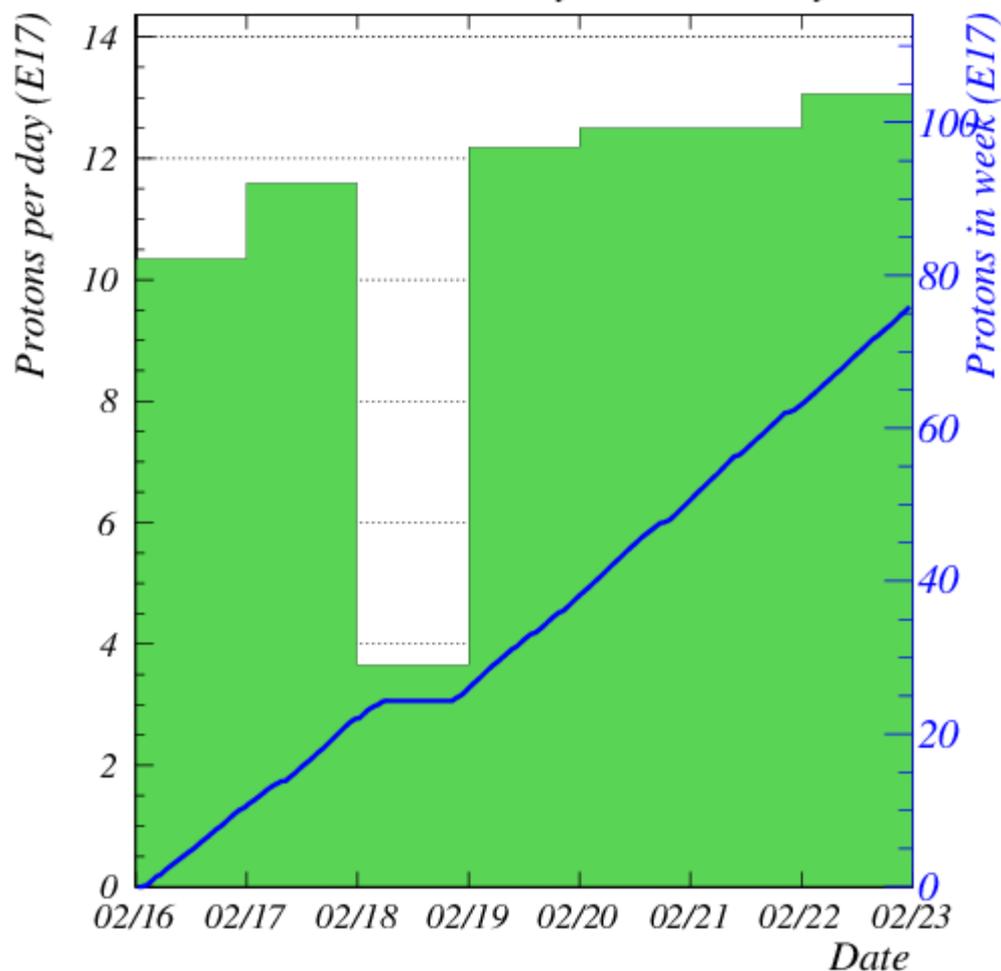




Protons for the Week



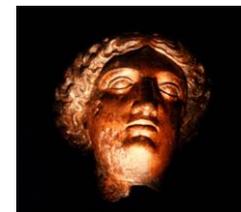
Week to 00:00 Monday 23 February 2015



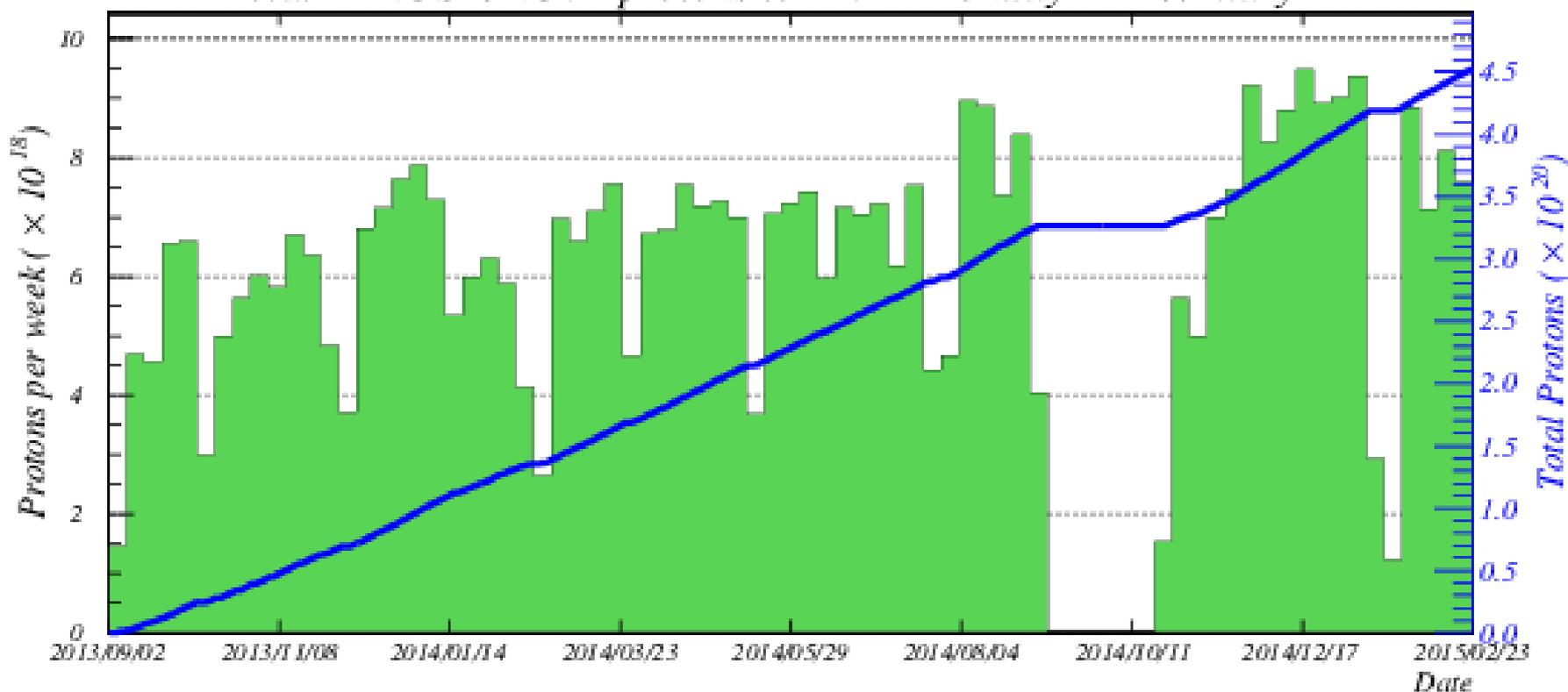
0.76×10^{19} POT
Feb 16-22, 2015



Protons for ME Run



Total MINOS+/NOvA protons to 00:00 Monday 23 February 2015



45.17×10^{19} POT

Sep 6, 2013 at 15:00 – Feb 22, 2015