

The MINERvA Operations Report

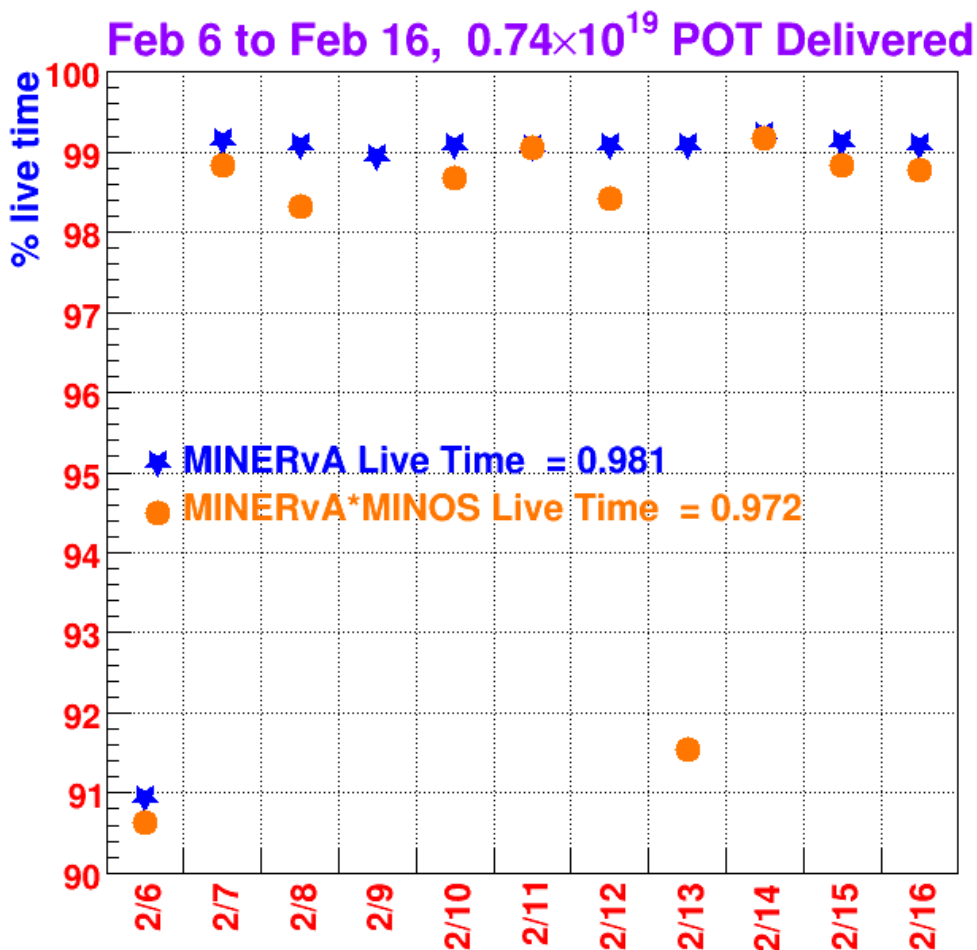
All Experimenters Meeting

Howard Budd, University of Rochester
Feb 24, 2014





v Data



- MINERvA Live time Feb 6 - 16
 - ● Given a MINERvA gate was there a MINOS gate so it is the total MINERvA MINOS live time
- Feb 6 FEB replacement
- Feb 9 not all MINOS files ready
- Couldn't get efficiencies for Feb 17-19. We create the POT data from the lumberjack plotter. For those days the plotter would not send any data. We have contacted AD about this problem.
 - We ran fine for these days



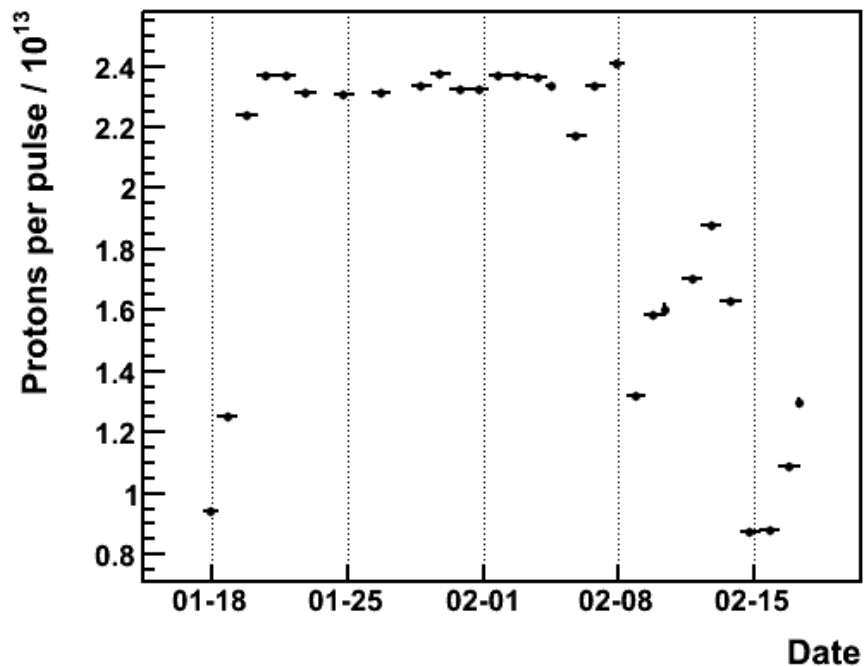
Putting the Roof Back On



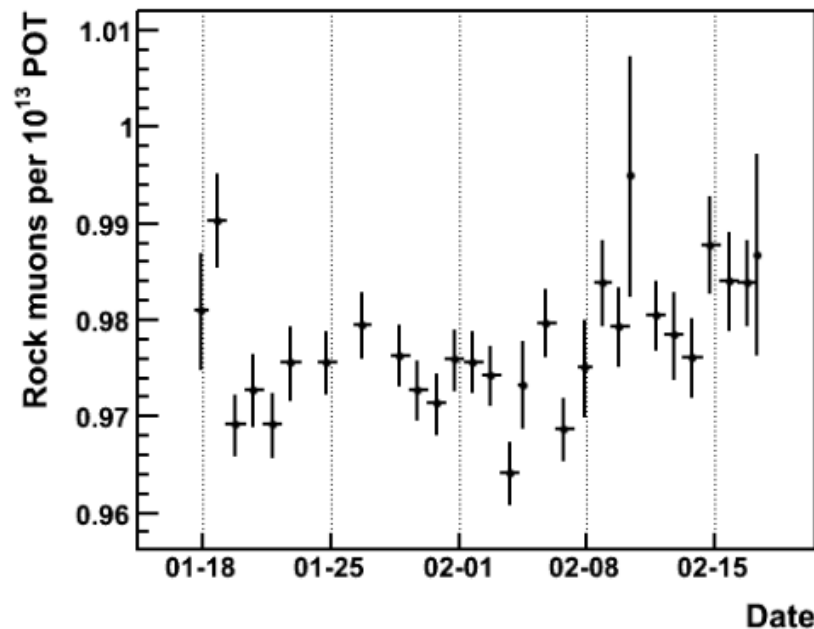
- During the filling of the He target, 1 of the 3 panels above the detector was removed.
 - Uncovered were parts of the He Target and the veto counters.
 - During the shutdown the detector was covered with all 3 panels. While taking off the roof, connecting the spreader bar to the hooks on the middle roof panel was difficult. During the reinstallation of the roof, the spreader bar was attached to the hooks in a slightly different way. The techs were able to make connection to the panel quickly. We elected not to change the hooks for the middle panel
 - Thank John Voirin's group for this



Rock Muons/POT



POT/Pulse

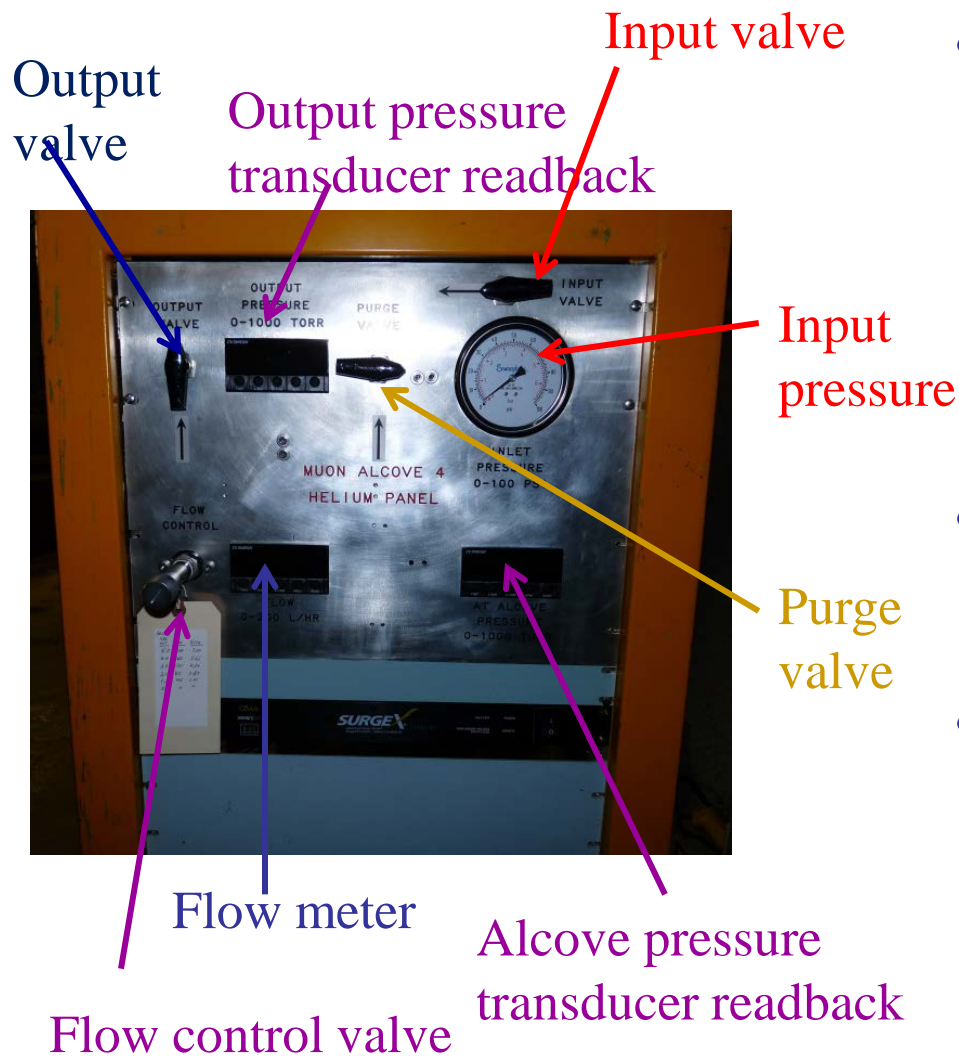


Rock Muons/POT

- Rock muons are generated in the berm, not the detector.
- Staring the plot at Jan 18 2014.



Status of Muon Monitor 4



- A review of the MM4 gas rack took place on Feb 14. It passed the review with one finding.
 - A question arose regarding the system's relief valve. The location of this relief valve was not defined
- A relief valve was put on the output of the panel i.e. input to the chamber to protect the chamber.
- The gas panel and the chamber were pressurized with nitrogen to a couple of PSI. In this test all components of the panel worked as expected.



MM4



- The connection to the hadron monitor and MM1,2, & 3 He line was made.
 - The flow meter was reading negative flow
 - Pressure transducer in alcove went from 760 Torr to 50 Torr
 - The decision was made to remove MM4 from He line
- With Bob Barger of PPD the next day
 - The flow meter problem was due to a connector into the readout which was not properly secured.
 - The connector in the pressure transducer to the readback in the alcove was reconnected and that fixed the problem. This connector was difficult to seat correctly. Connector was shaken to be sure the problem was fixed.
 - Misunderstanding of the flow control valve. Belief was that it was a shutoff valve.
 - We needed to install a relief valve between the flow valve and the output valves. This protects the output pressure transducer.



MM4, the Plan



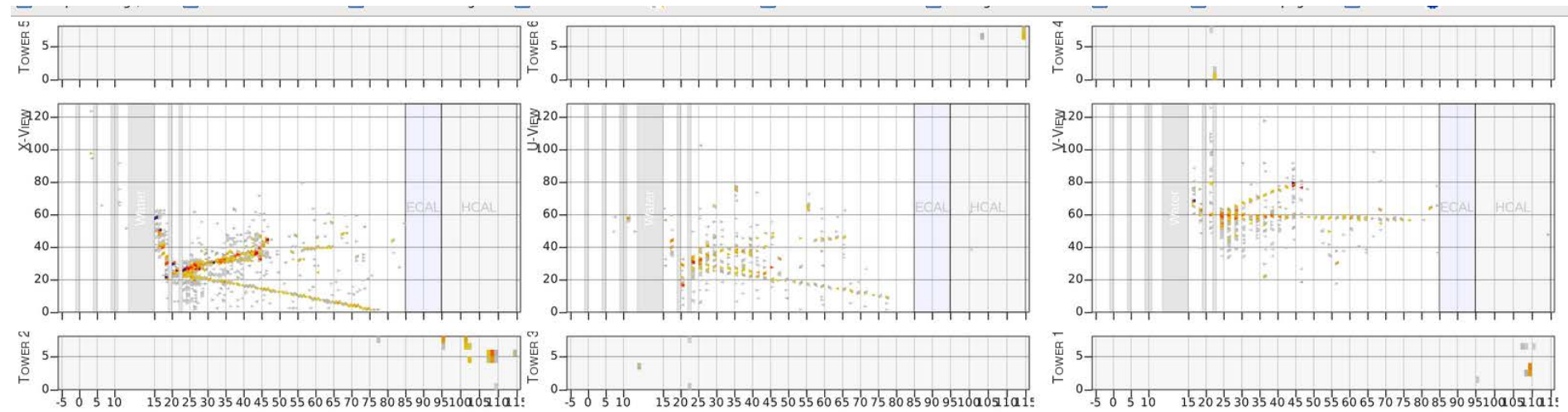
- The relief valve set for 12.5 PSI in the gas rack between flow valve and output valve has been installed.
- Pressure test the system with He
 - The gas rack to 65 PSI
 - The chamber to 2-4 PSI.
- Update documentation to be sent to safety committee
- With approval of safety committee, we will start flowing He from a single gas He bottle to MM4 through the entire system. There will be no connection to the gas line to the other monitors. Purge the nitrogen with He.
- Put MM4 on HV and check out MM4.
- Seal off the gas rack and chamber.
- At this point we are ready to connect MM4's gas line to main gas supply.



Event Display



Outer Calorimeter



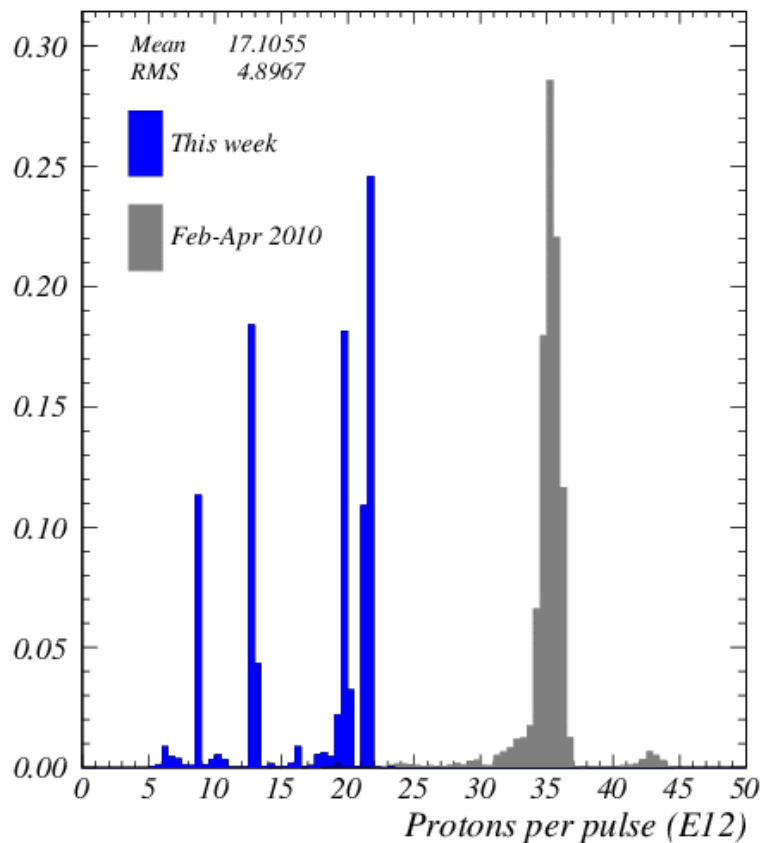
Nuclear Target Event



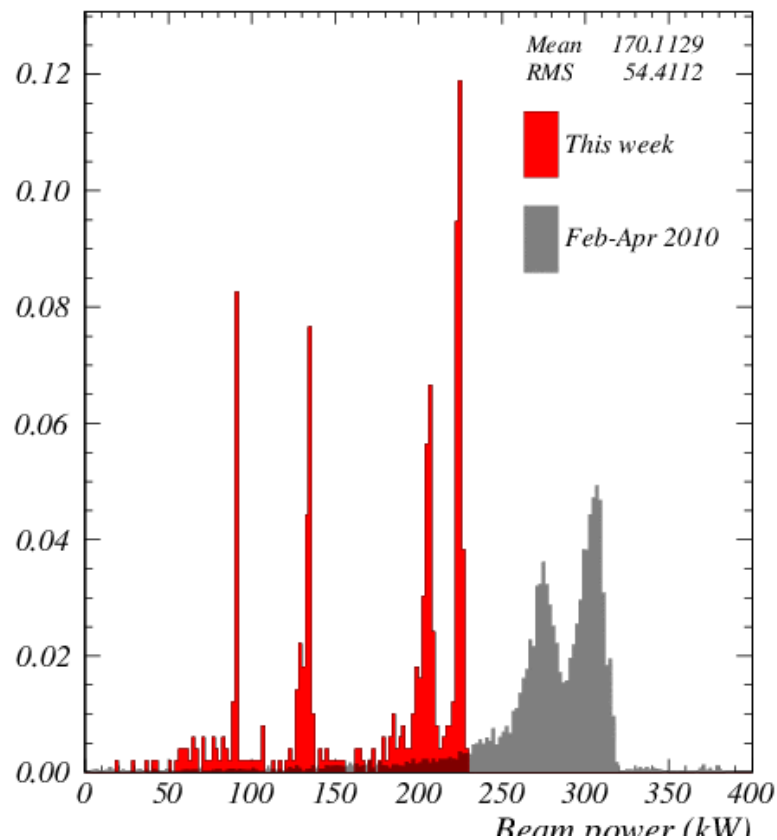
NuMI Beam Plots



Week ending 00:00 Monday 24 February 2014

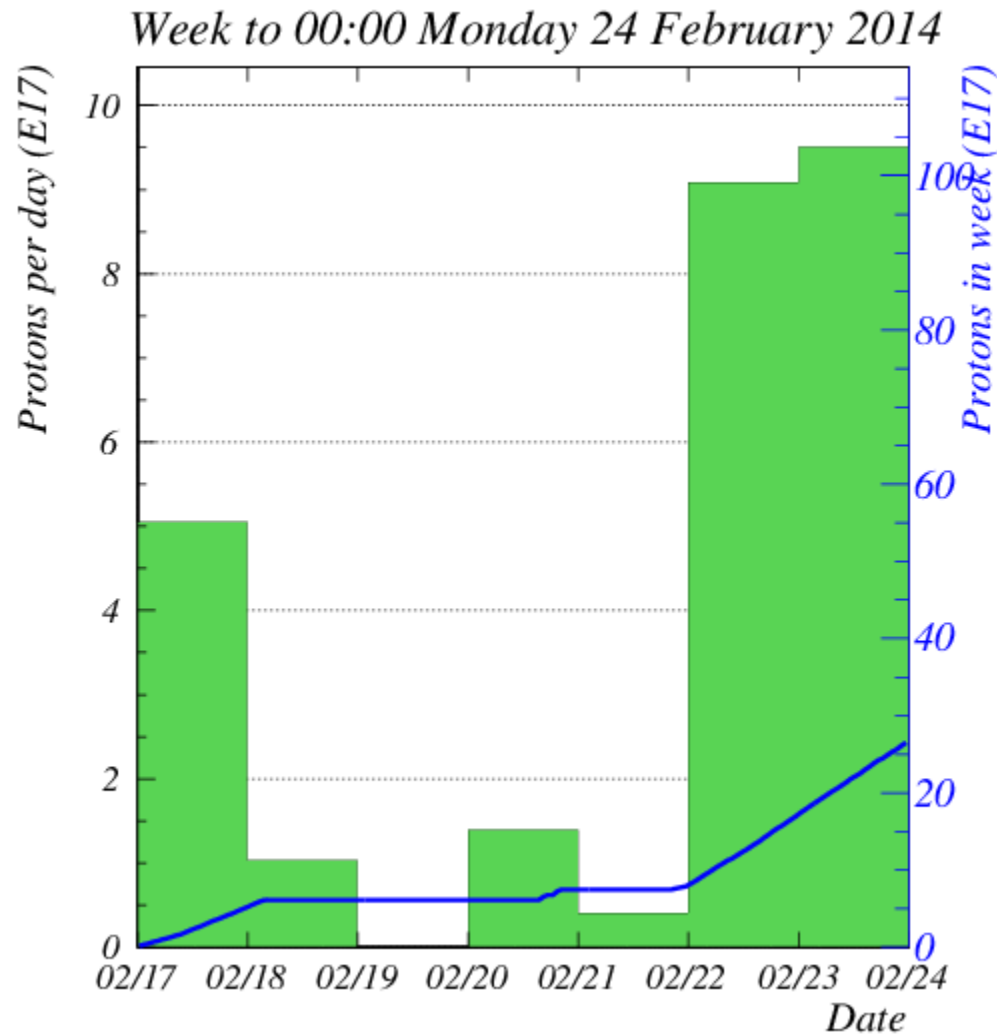


Week ending 00:00 Monday 24 February 2014





Protons for the Week



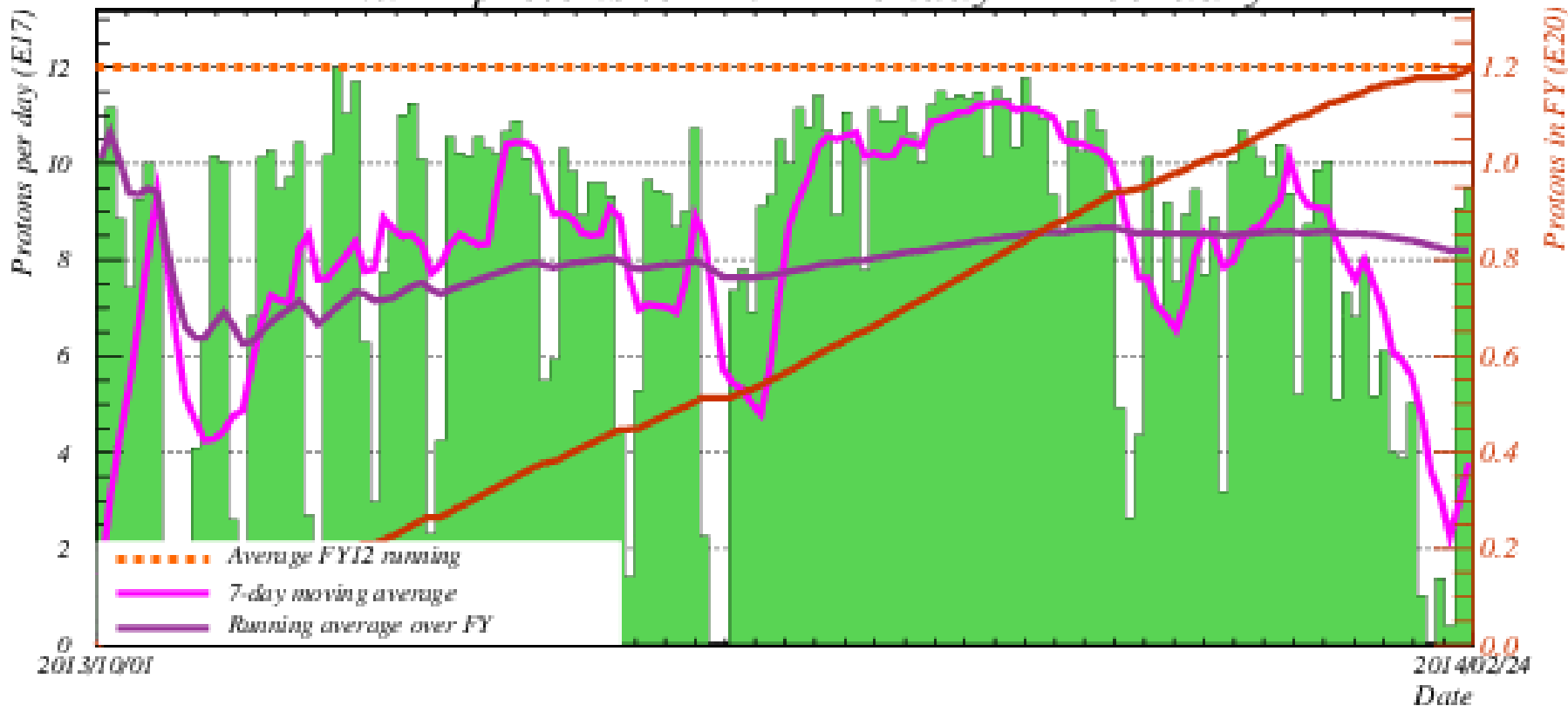
0.26×10^{19} POT
Feb 17-23 2014



FY2014 Protons



FY14 NuMI protons to 00:00 Monday 24 February 2014

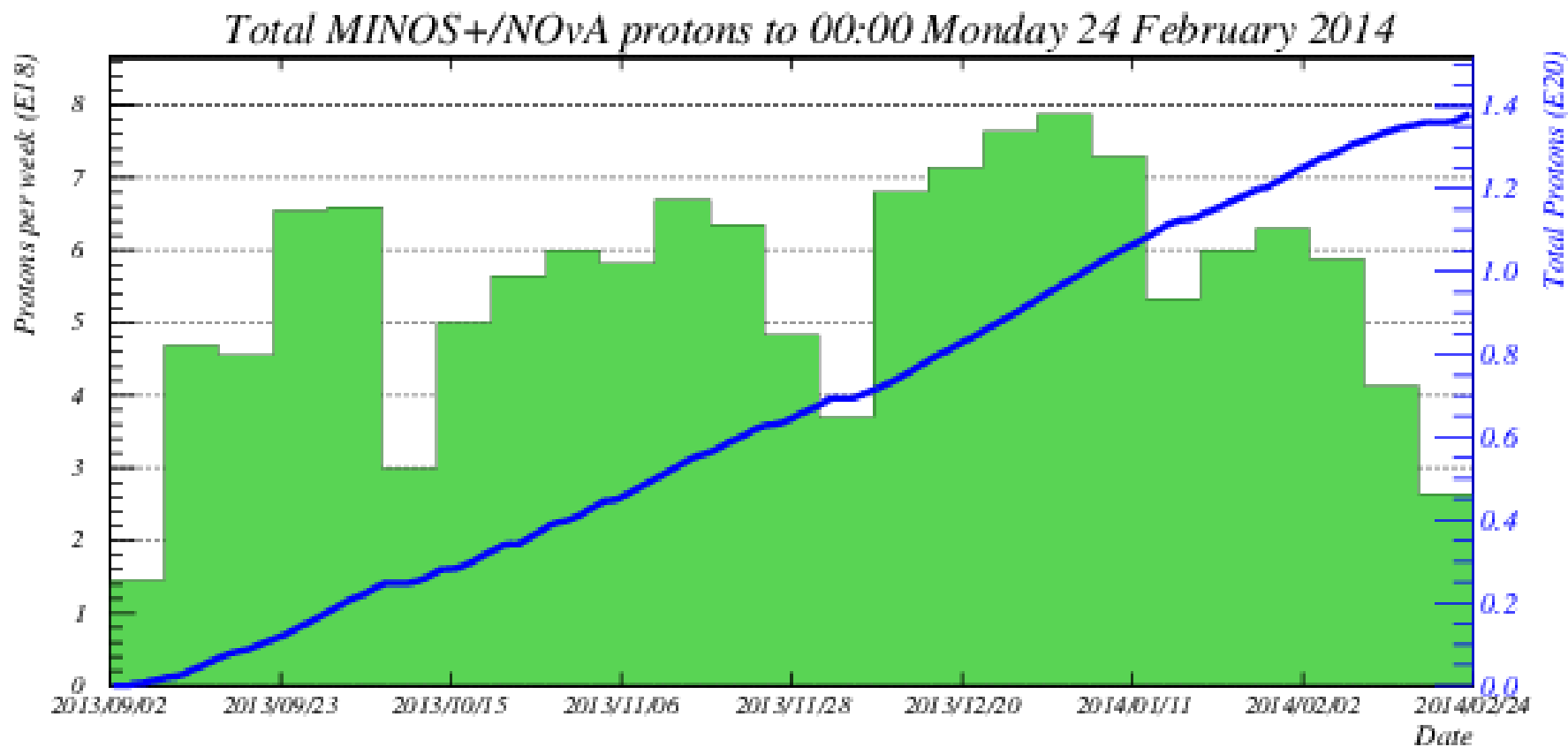


11.98×10^{19} POT

Oct 1 2013- Feb 23 2014



Protons for ME Run



13.76×10^{19} POT

Sep 6 2013 at 15:00 – Feb 23 2014