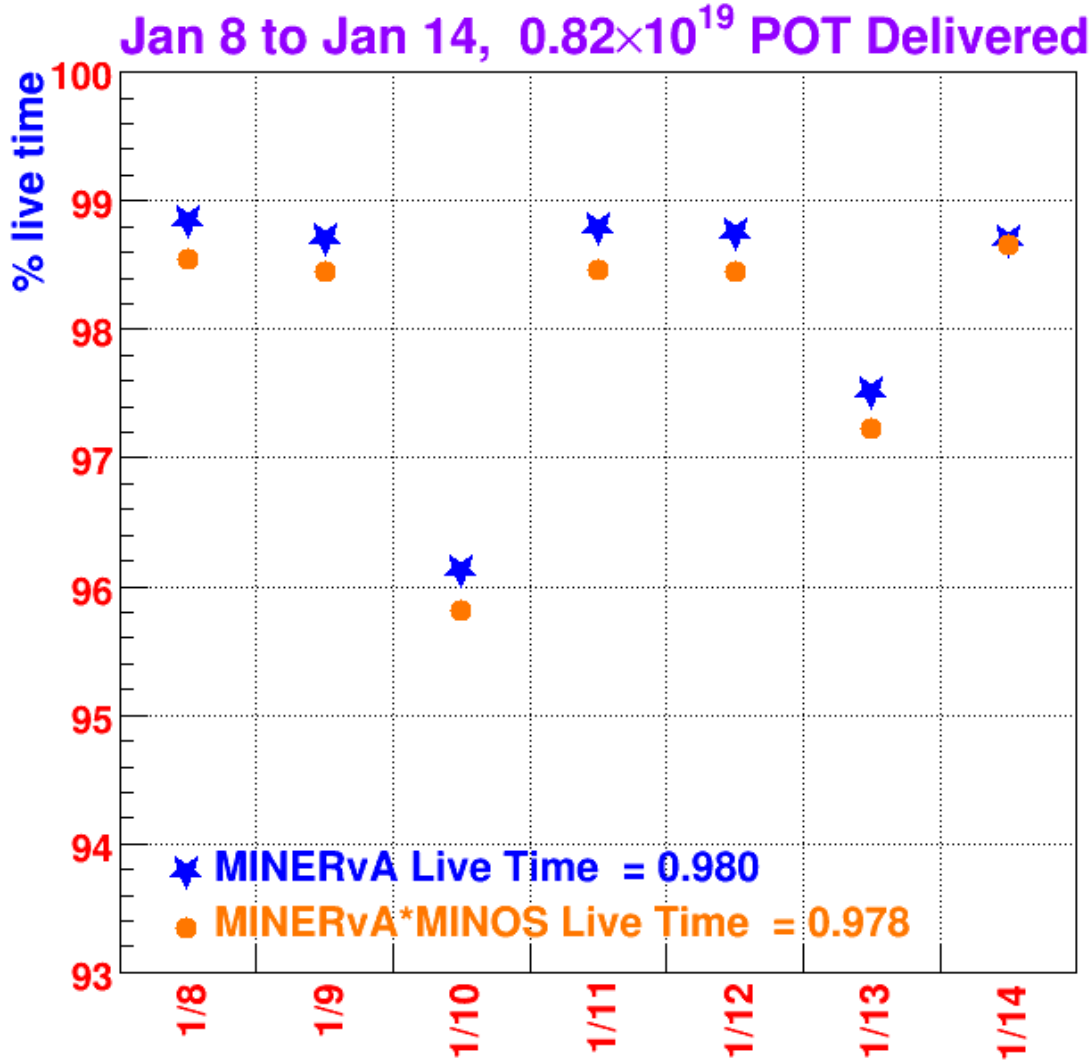
The MINERνA Operations Report
All Experimenters Meeting

Howard Budd, University of Rochester

Jan 26, 2015

ν Data



- Live time, Jan 8-14
- MINERvA 98.0%
- MINERvA*MINOS 97.8%
- Jan 10 live time lower,
  - See next page for details

Jan 10

- The nearline system analyzed only 11 gates out of 700 gates for one of the runs. This is due to a data header problem in an event, in this case event 12, which caused the near line to crash.
- This problem has occurred about 1 gate out of every 0.5 M gates since the end of the summer shutdown when we downloaded a new version of the CROC-E firmware.
  - This contributes to ~< 0.1% loss in analyzed events.
- We are investigating the problem
  - We have Cristian Gingu looking at the problem by running tests on the CROC-Es for ~ 1.0 M events on the 14th floor setup.
  - Since it is so rare we might never fix the problem.
  - We have a modification of the unpacking to recognize and get around this problem. This offline fix will recover all the lost events. We would need a convenient time to install this software modification.
    - This does not fix the underlying problem but makes it mute.

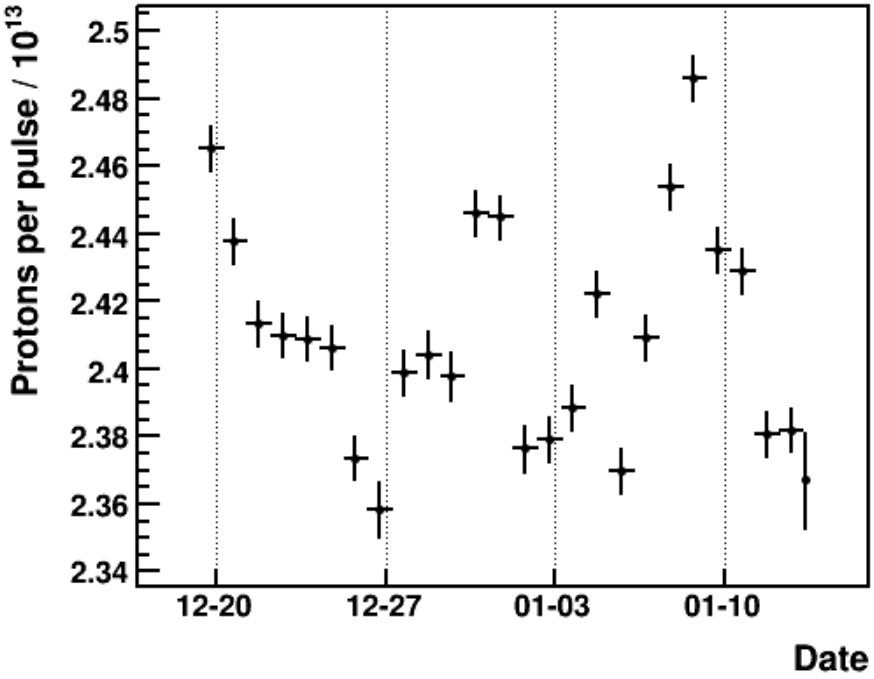
Accelerator Shutdown

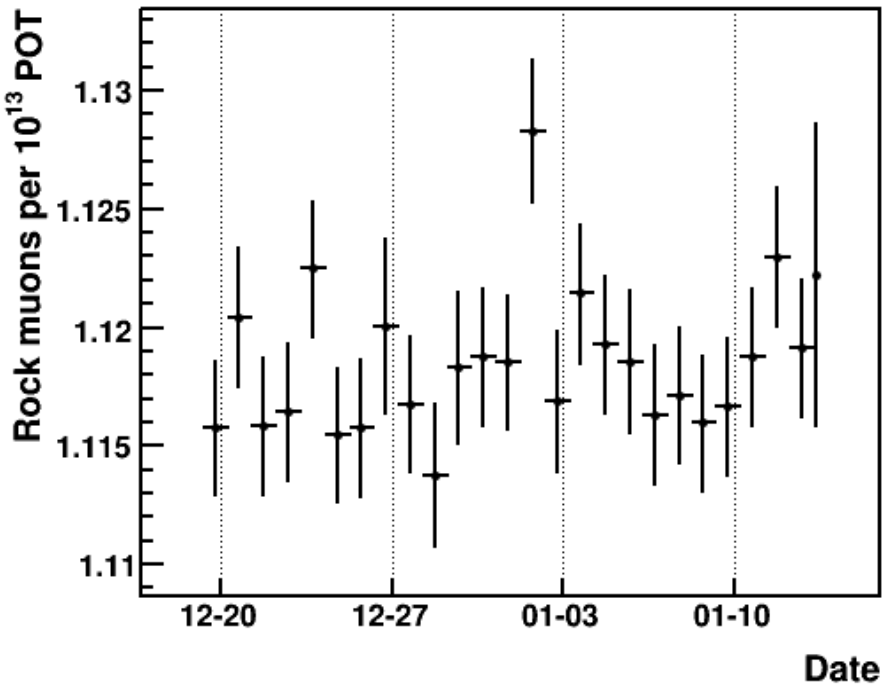
- We replaced the old computer, mnvonline0, for the new computer, mnvonline03, as the DAQ computer.
  - We ran PEDs and Light Injection. The near line plots with GMBrowser look fine.
  - For the NuMI beam startup, we switched back to mnvonline0.
  - Tomorrow, we will switch back to mnvonline03 and if plots look OK, the event display looks OK, and the DST looks OK, stay with mnvonline03 as the DAQ computer.
    - The switchover takes about 10 minutes.
  - Thanks to Geoff Savage and Donatella Torretta for help.

Accelerator Shutdown

- We replaced an FEB which appeared to have small cross talk in the TriP-t chip. This chip stores the pixel charges for neutrino spill.
  - Steve Chappa was able to replace the FEB with the roof on.
  - The replacement worked and the cross talk went away.
- The BIOS setup for near line computer in the MINOS Hall was changed so that the computer does not turn on when the rack is turned on.
  - The rack the computer is in has the MINERvA camera electronics. The rack needs to be turned on soon after a power outage.
  - Thanks to Jason Harrington.

Rock Muons/POT

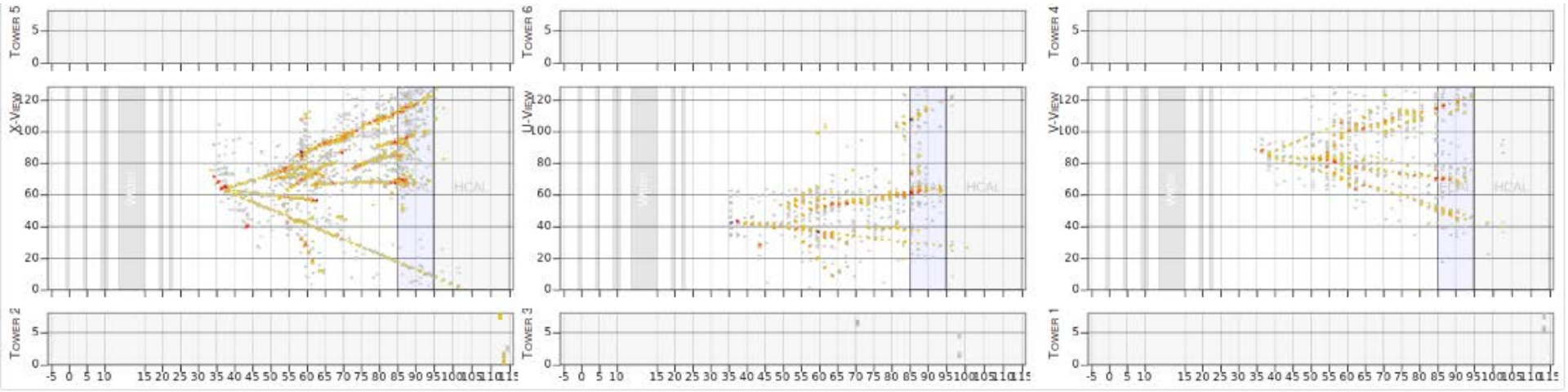




POT/Pulse

Rock Muons/POT

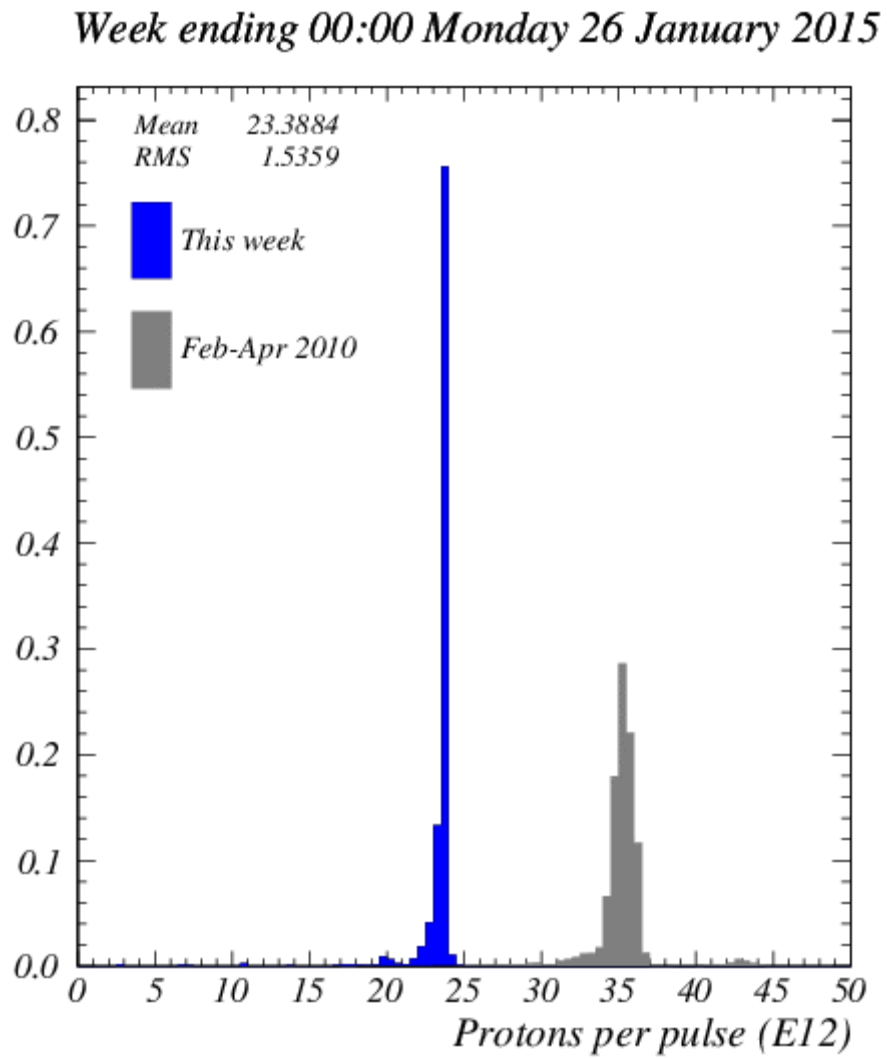
Event Display

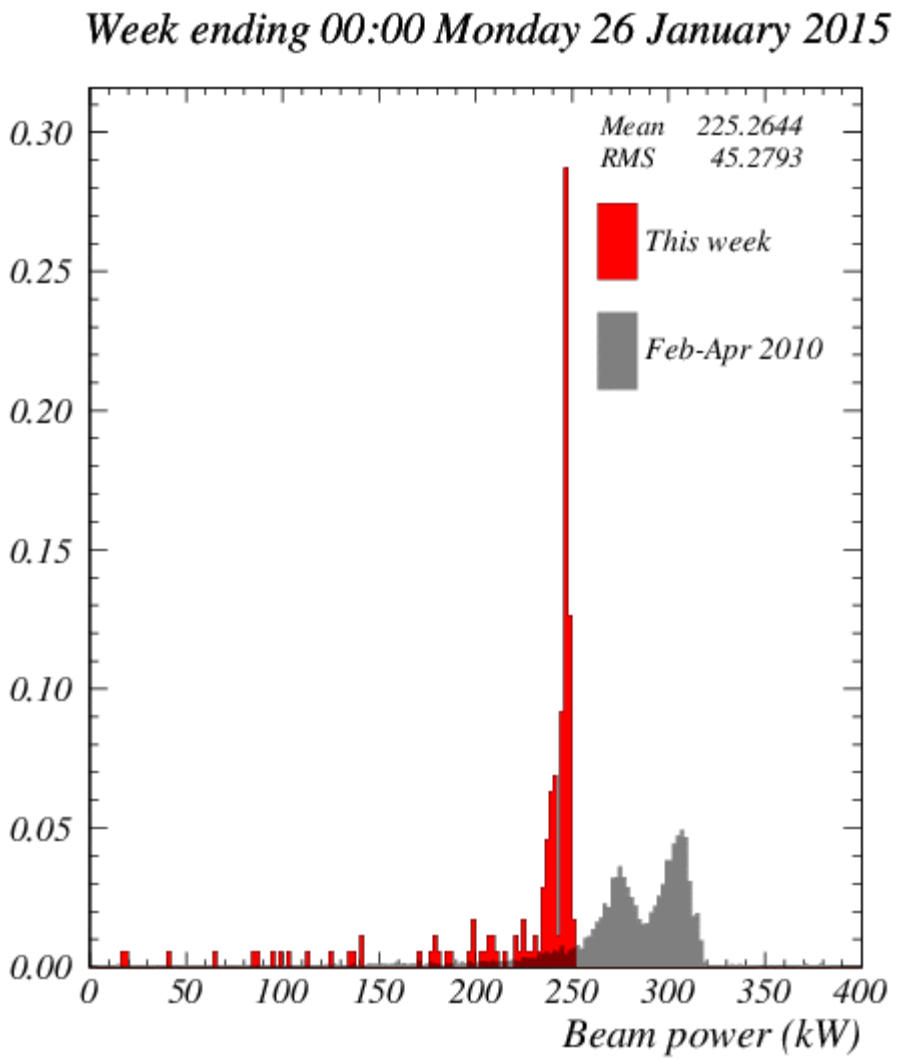


X View V View U View

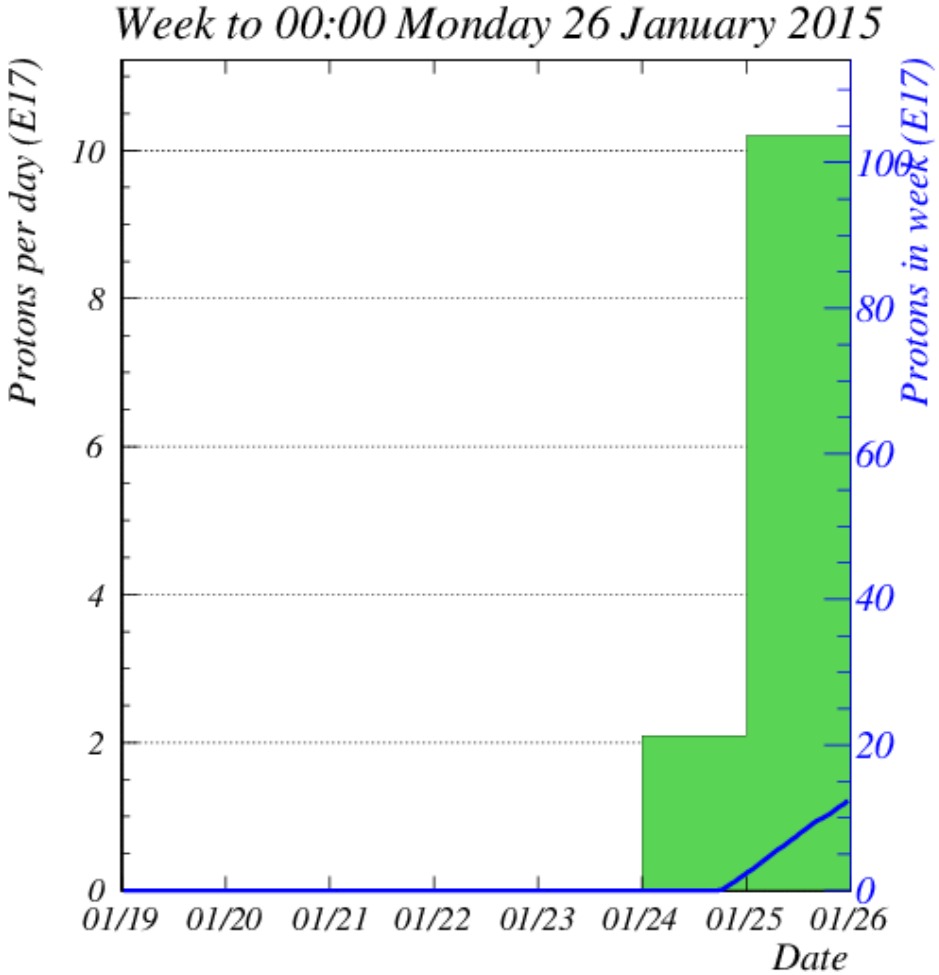
DIS Event

NuMI Beam Plots
Jan 5-11, 2015





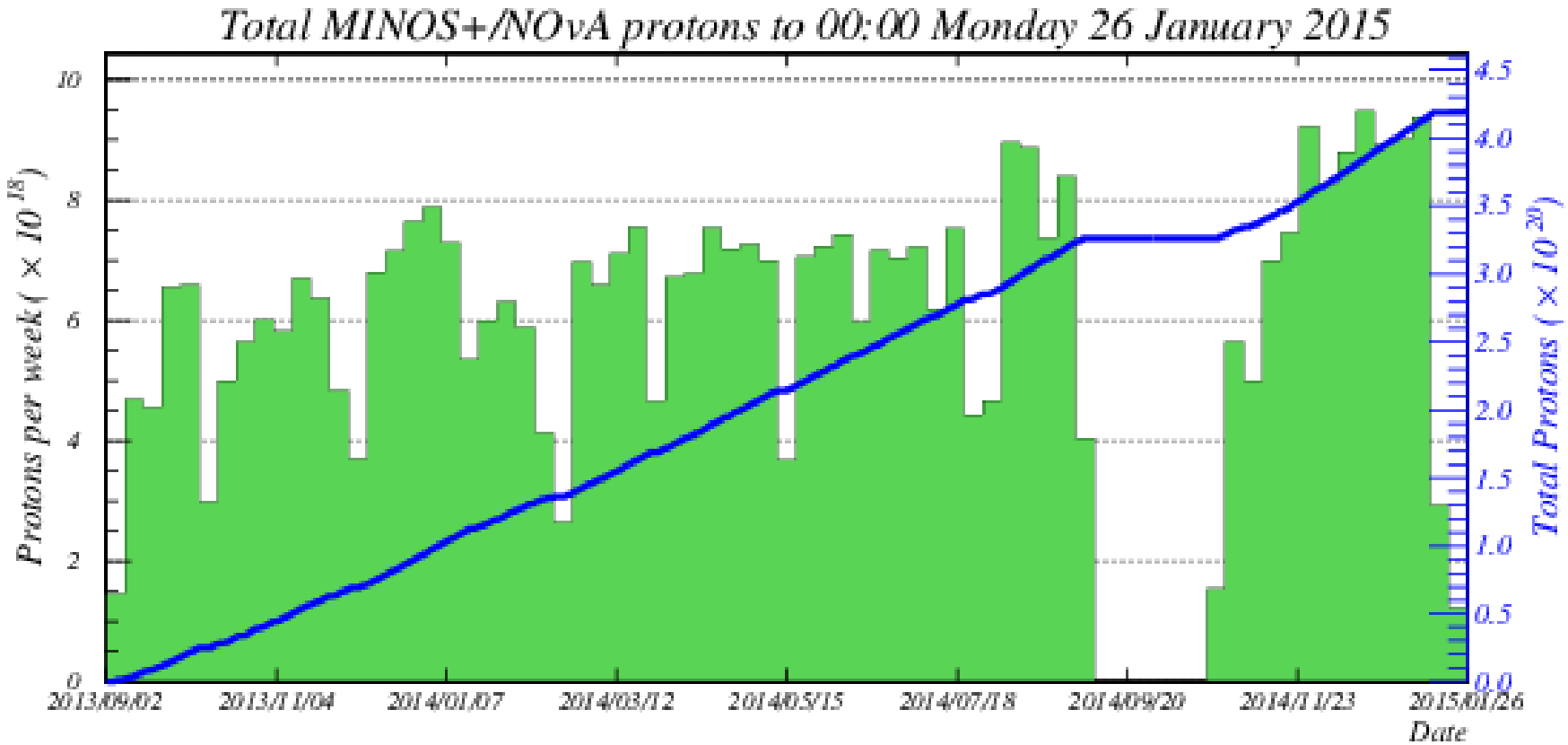
Protons for the Week



0.12×10^{19} POT
Jan 19-25, 2015

Thanks to the AD for understanding and fixing the new problem with the MI ground fault in as little time as it took.

Protons for ME Run



42.00×10^{19} POT

Sep 6, 2013 at 15:00 – Jan 25, 2015