

The MINER ν A Operations Report

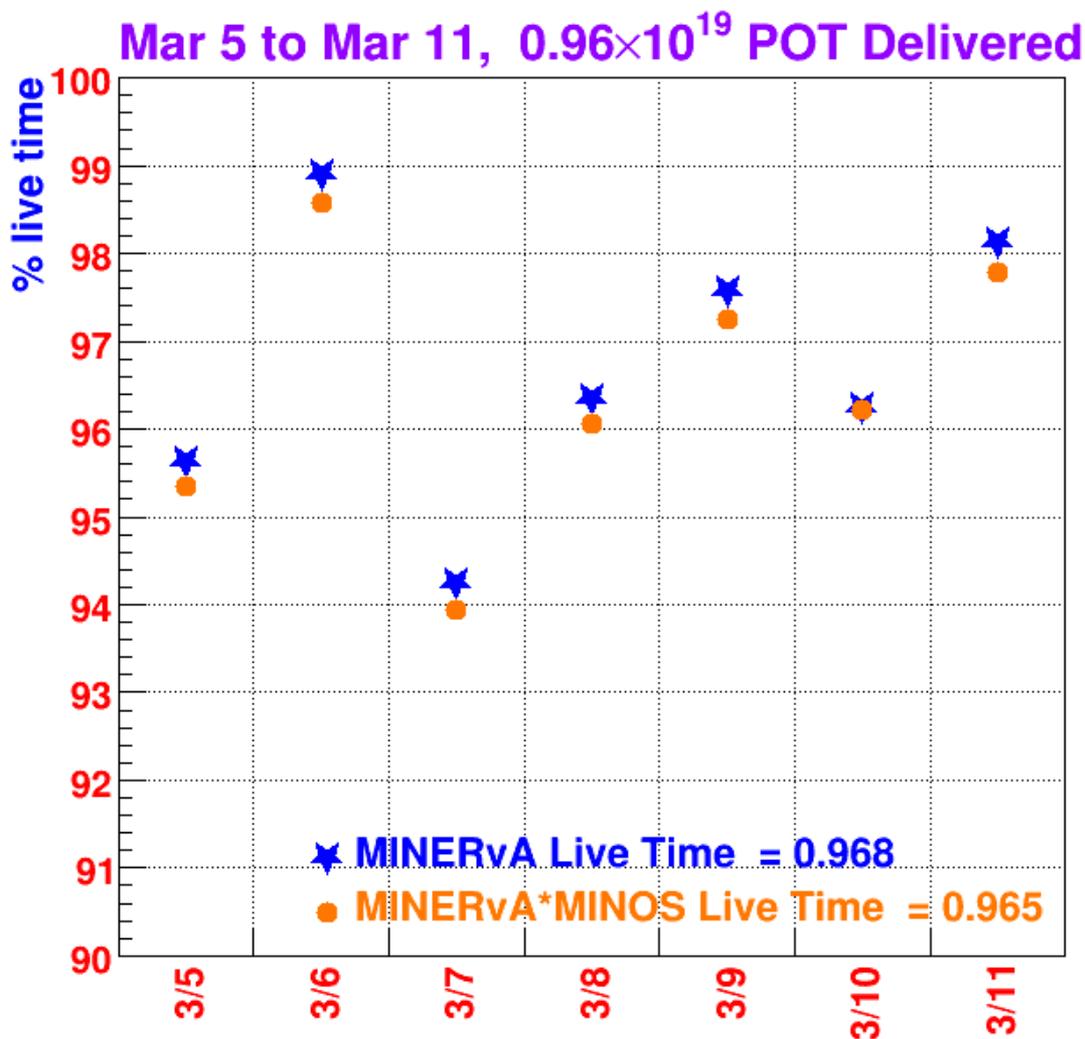
All Experimenters Meeting

Howard Budd, University of Rochester
Mar 16, 2015





v Data



- Live time, Mar 5-11
- 0.96×10^{19} POT
- MINERvA 96.8%
- MINERvA*MINOS 96.5%
- Mar 5 - 95.6% live
 - Down for 8 minutes when DAQ stopped, but there does not appear to be any other time when the DAQ was down.



v Data



- Mar 7 – 94.2%
 - DAQ stopped taking data. Several attempts were made to restart it. The expert shifter was called and he got the DAQ working.
 - Runcontrol would not automatically skip to the next subrun, so data taking stopped. Two expert shifters helped getting the DAQ going. It look like the DAQ restart script had to be run twice to get the DAQ running.
- Mar 8 - 96.3%
 - 2 runs had a Device Header problem. Although we were taking data during this period of time. It is effectively ~ 20 minutes of down time.
- Mar 10 – 96.4%
 - Not clear why the efficiency was lower.



Bank Problems



- The offline fix to the frame length error seems to have fixed that problem. So far all run with the frame length problem can be recovered. The problem still occurs in the raw data files, but the offline can analyze all the gates in the run.
- We have had 6 subruns since Mar 8 with a device header error. Right now the data in a subrun after the error occurs cannot be recovered. Two of these subruns gave the lower efficiency on March 8.



Runcontrol having trouble starting a new a subrun

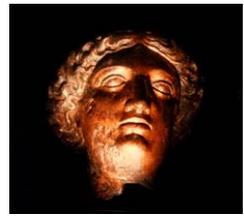


- We have been having problems with runcontrol starting a new subrun. Sometimes it succeeds, but sometimes it does not. Either the shifter or expert shifter is required to get the next subrun going. We have put in a couple of fixes to address this issue.
 - We have changed how the copying is done from the DAQ machine to the mnvonlinelogger. mnvonlinelogger controls the online monitoring and is called “logger”.
 - Some of the runcontrol files in the DAQ machines and logger were not up to date. This has been fixed.
 - The NTP configuration on logger is not specifying any NTP server to use. So the clock on logger was about 45 seconds behind real time. This has been temporarily fixed by setting the correct time for logger.



AC Down Day

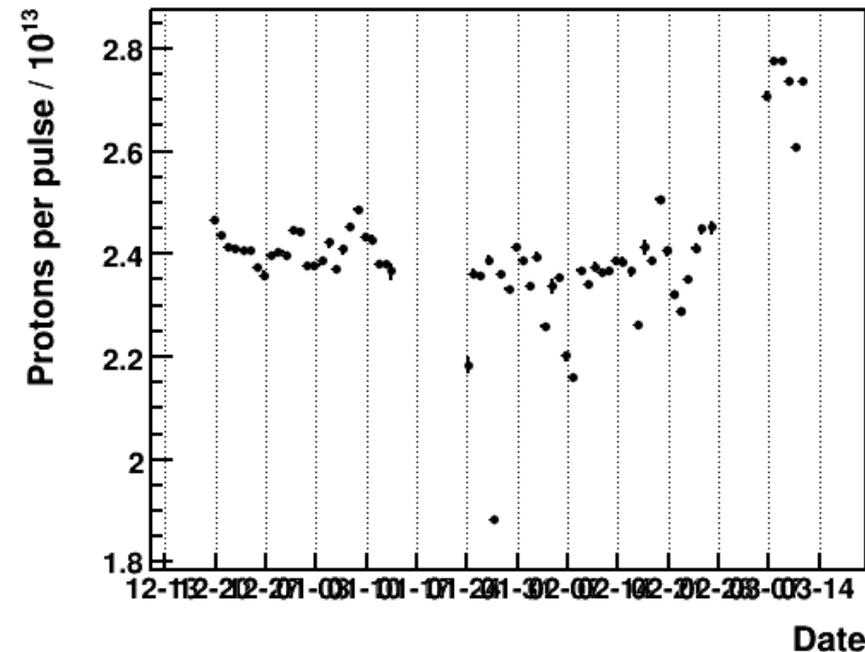
Mar 18 2015



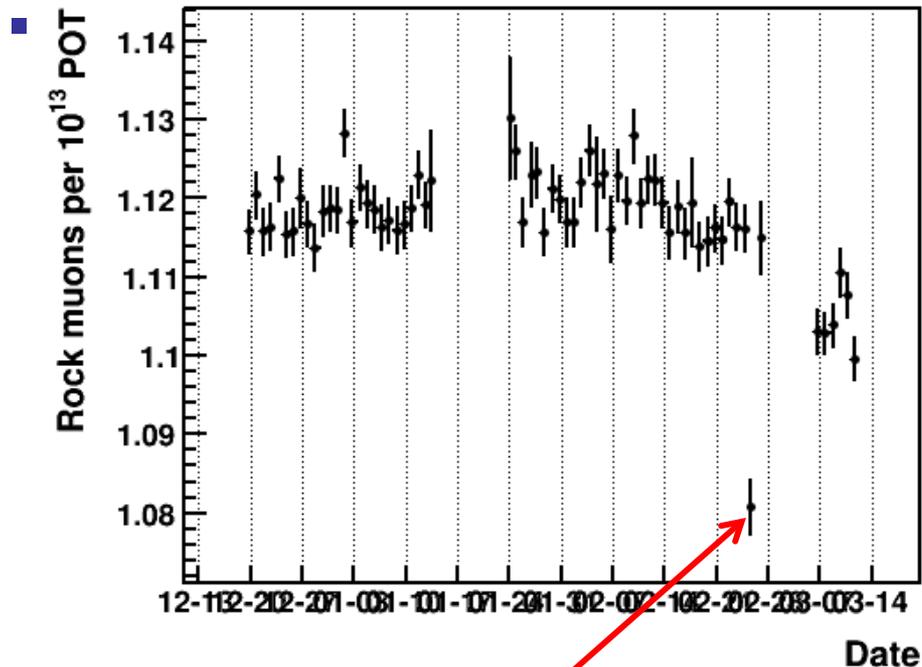
- We will update logger to specify the server for NTP to use.
- We may replace a CROC-E to try to address the Device Header problem.



Rock Muons/POT



POT/Pulse

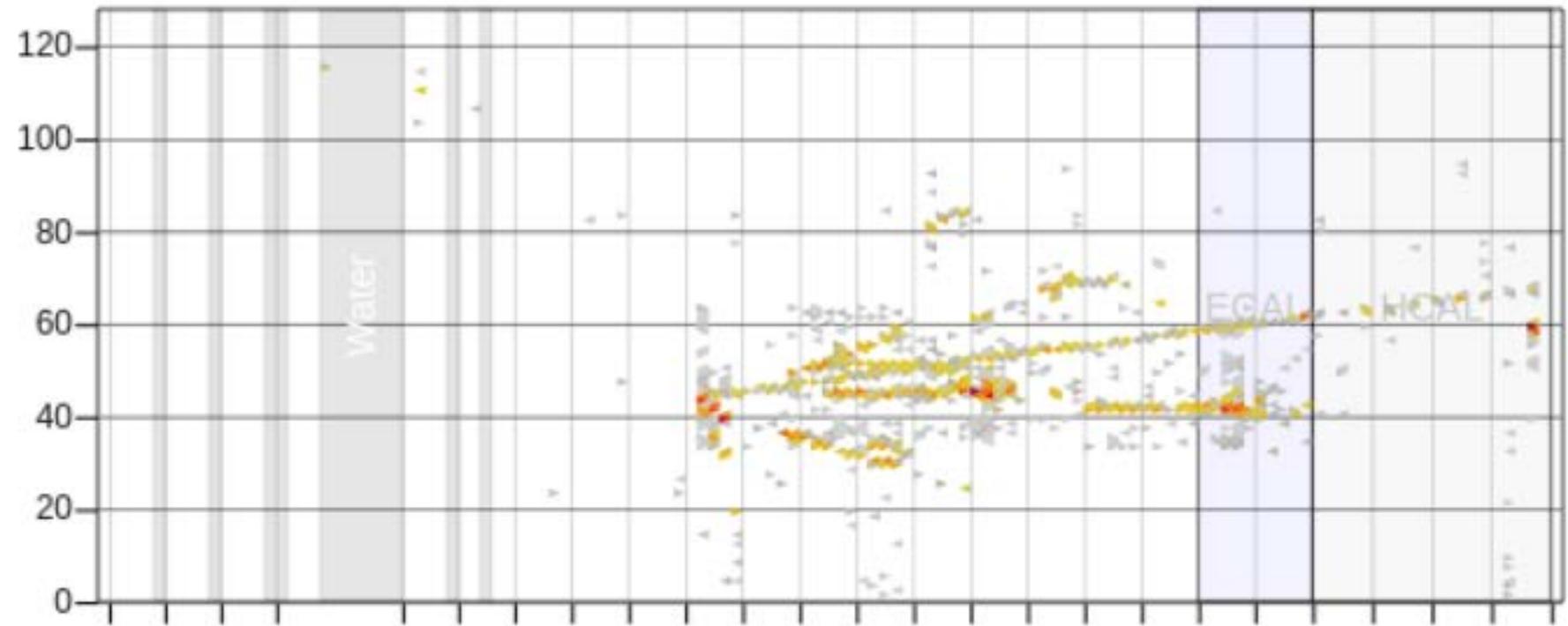
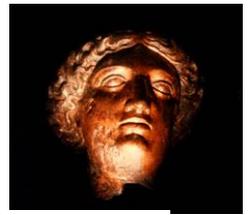


Rock Muons/POT

- We were able to get the submission scripts working.
- The POT software routine returns the same value for some number of gates, and hence, the total POT is wrong.
- We are seeing reduced tracking efficiency from the high luminosity, especially due to the slip stacking.



Event Display



DIS CC Event

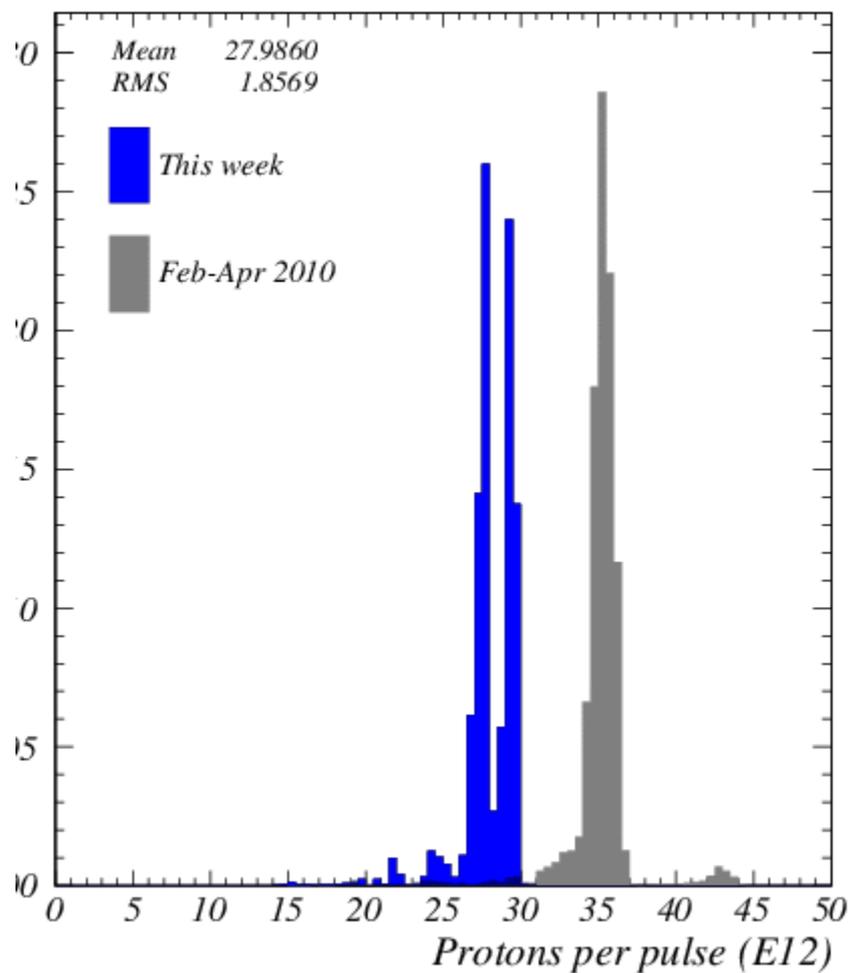


NuMI Beam Plots

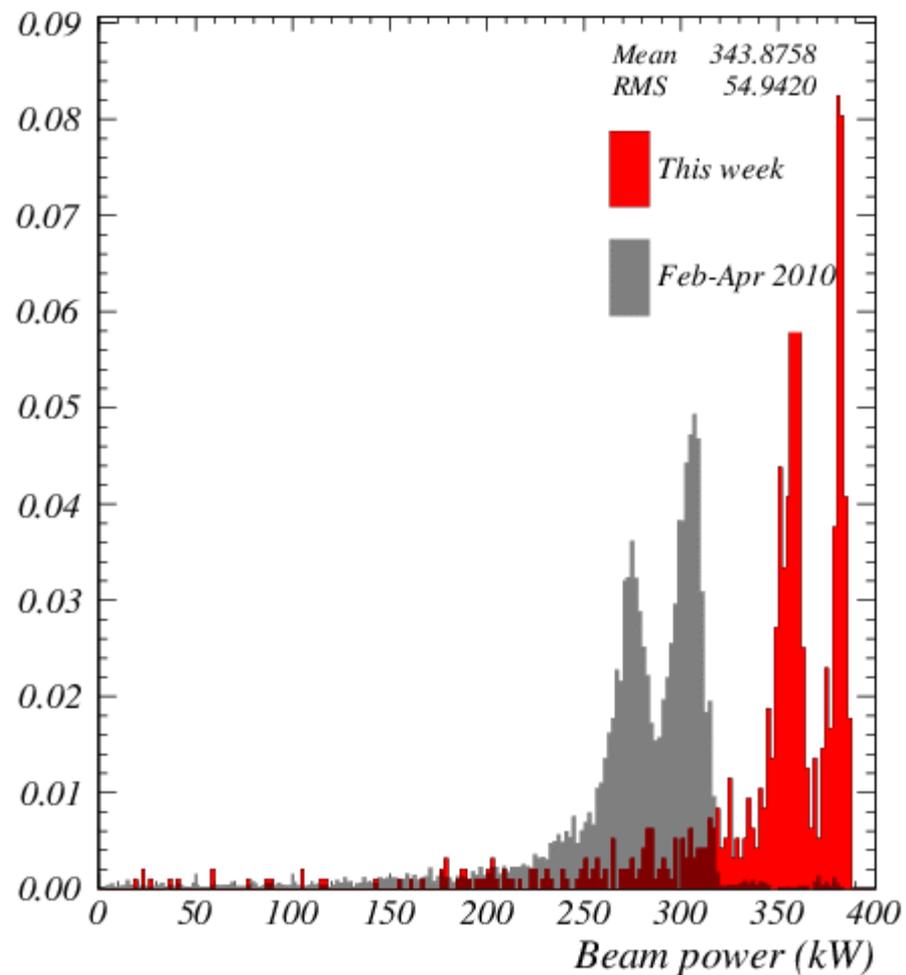
Mar 9 - 15, 2015



Week ending 00:00 Monday 16 March 2015

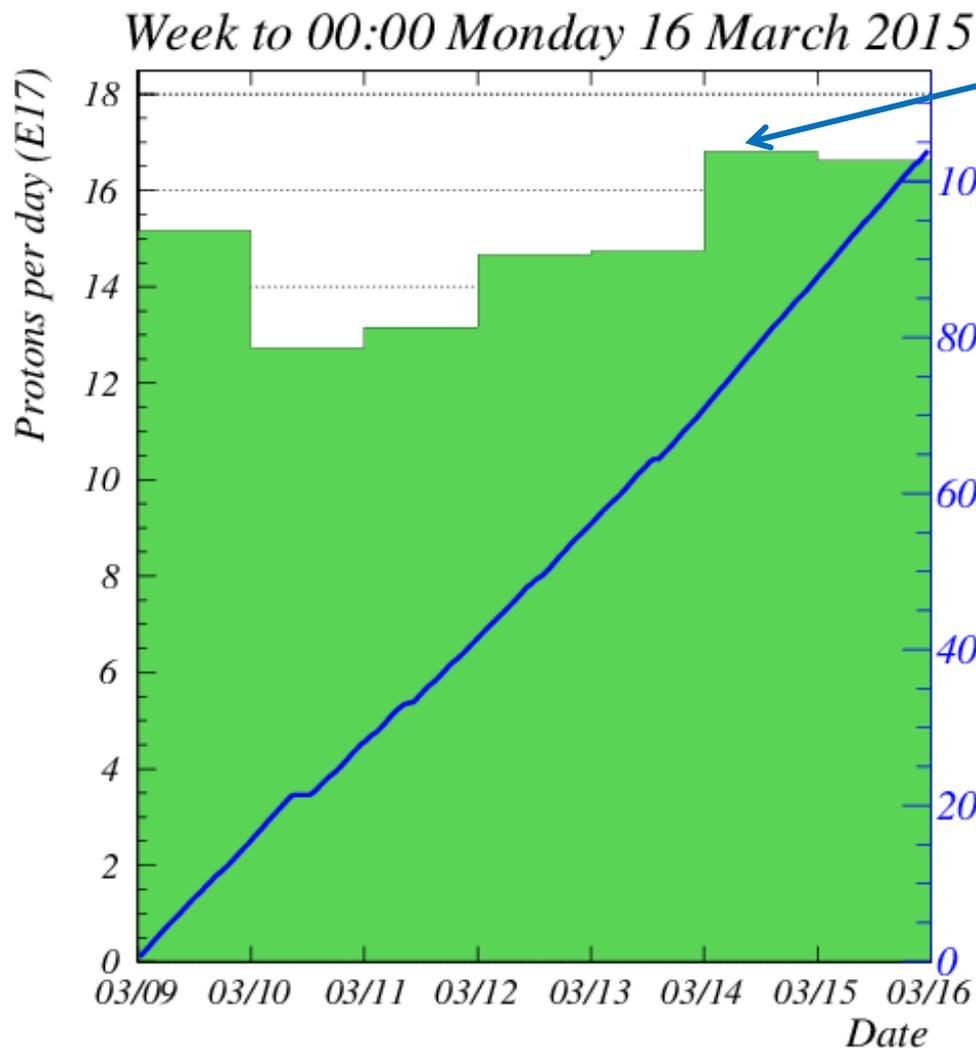


Week ending 00:00 Monday 16 March 2015





Protons for the Week

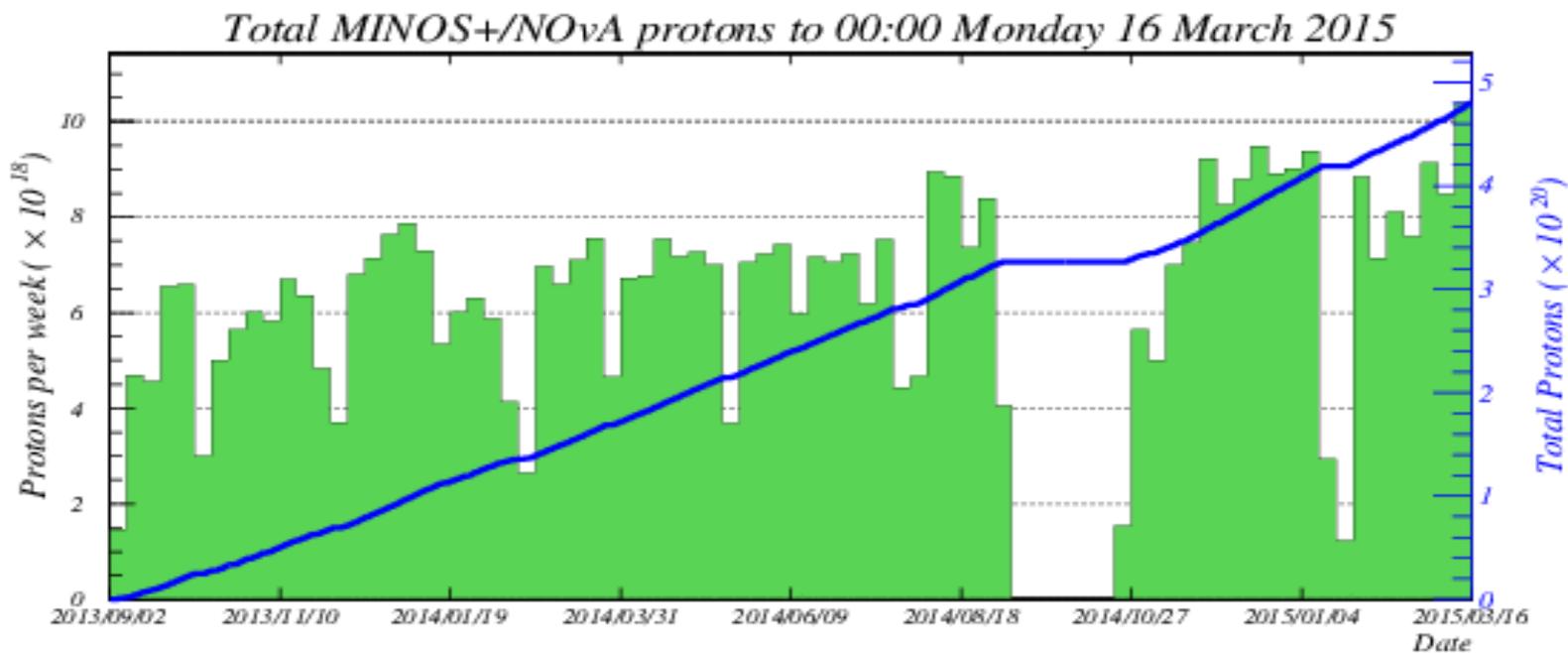


16.78×10^{17} POT broke
Previous 1 day record
On Nov 6, 2011
 15.66×10^{17}

1.04×10^{19} POT
Mar 9 - 15, 2015



Protons for ME Run



47.97 $\times 10^{19}$ POT - Sep 6, 2013 at 15:00 – Mar 15, 2015

Record week for ME Run with 1.04×10^{19} POT

Record week ending for NuMI running ending Thursdays,
 0.993×10^{19} POT.



All NuMI Protons



The 2 record weeks (Monday – Sundays)

