

The MINERvA Operations Report

All Experimenters Meeting

Howard Budd, University of Rochester
Feb 27 2012



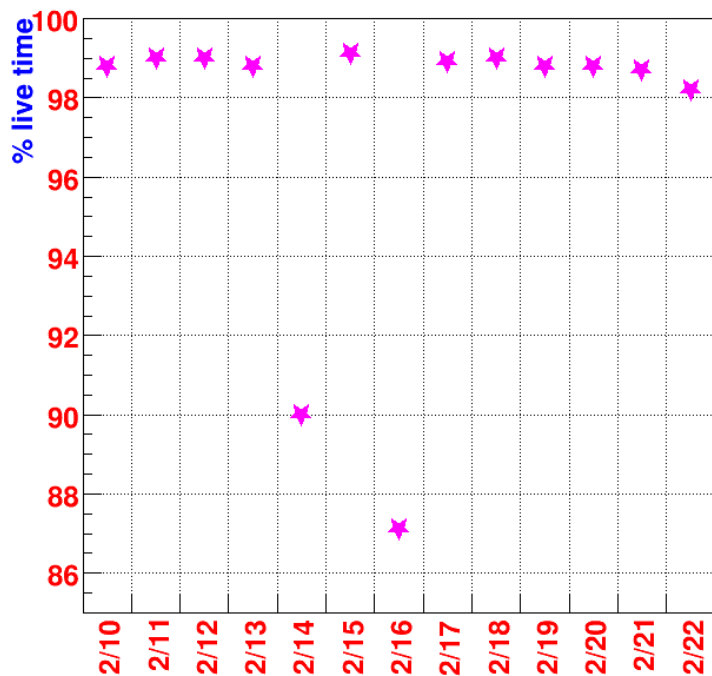


ν Data



% live time
Feb 10-22

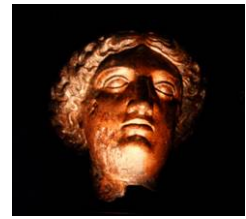
From	To	POT	MINOS Live time	MINERvA Live time	Live time
10-Feb-2012	16-Feb-2012	8.79E+18	99.7%	96.9%	96.5%
17-Feb-2012	22-Feb-2012	7.93E+18	99.7%	98.7%	98.5%
10-Feb-2012	22-Feb-2012	1.67E+19	99.7%	97.8%	97.5%



- 18.46×10^{19} POT with NT-07
- 17.15×10^{19} POT for ν , Oct 6 – Feb 26, LE10 with NT-07
- 0.79×10^{19} POT for ν , Feb 20-26
- 97.5% MINOS*MINERvA, Total live time Feb 10-22
- Problem processing data for Feb 23 so no live time



Feb 14 & 16



- Feb 14, the DAQ stopped & the audible alarm did not sound. I think the sound was left on when this computer was repaired.
 - Lost 1 hour of beam time
 - We are now continually turning the sound on
 - In addition, there were other DAQ problems which contributed to the down time
- Feb 16, due to an inexperienced shifter the MINERvA DAQ was not returned to beam mode from Light Injection (LI) mode when the NuMI beam return.
 - Lost 1 hour of beam time.
 - For calibration we need LI data. Changed the way we take LI data to prevent this from recurring.



Veto HV



- Evening of Feb 22, the VETO HV power supply, LeCroy 4032, failed.
 - The VETO is need for the He target data
 - The LeCroy 4032 is not supported at the Lab.
- To fix the problem as quickly as possible, we decided to go to a Fluke 415B HV supply and a Cow to supply the HV.
- With this solution, we had the VETO HV back up at 5 PM on Feb 23.
 - We kept taking data.
- We would like to thank PREP, Linda Bagby and Dave Huffman for working with us to solve this problem quickly.
- In the longer term, we plan on implementing the DO power supply hardware and software.



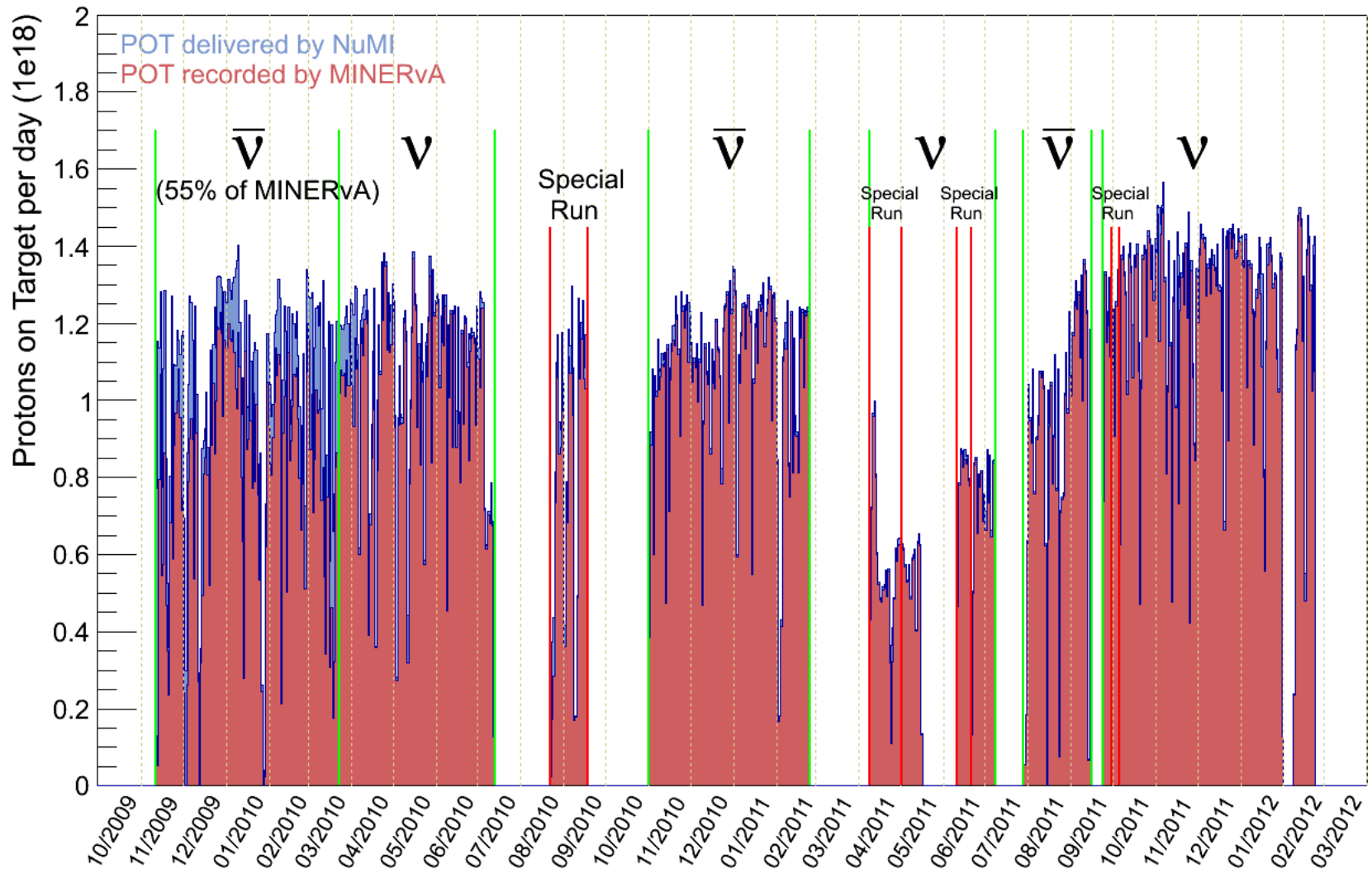
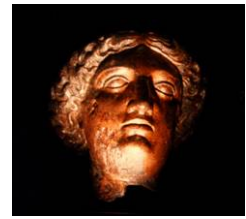
Problems



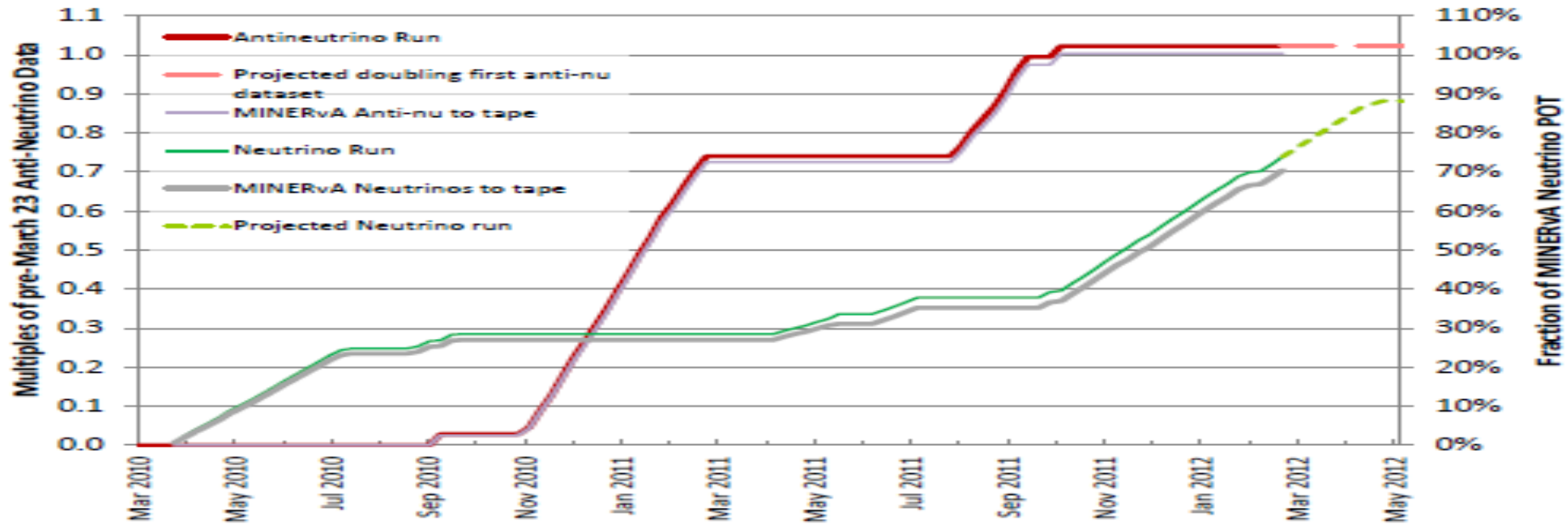
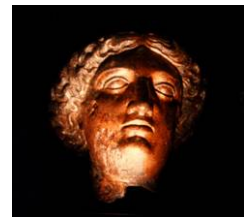
- The Wiki, Fermilab Redmine, has been down today
 - Our documentation for running the detector is given on the Wik
 - These pages enable us to solve problems.



MINERvA POT/Day Nov 2009 - Present



Accumulated POT to Feb 23



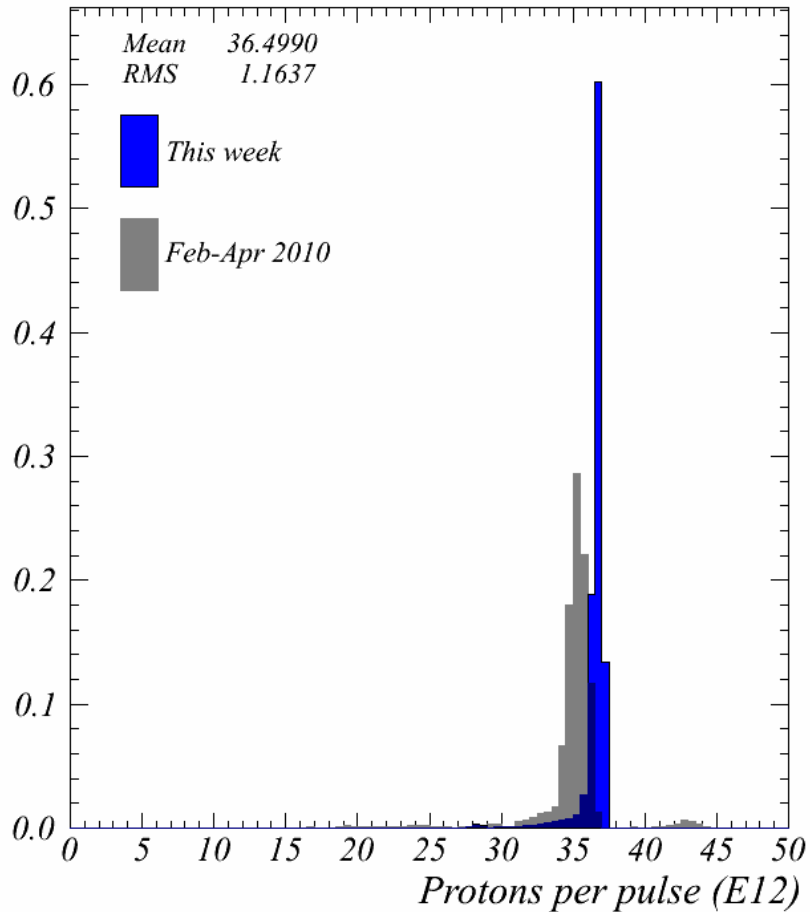
- Anti- ν run, full scale corresponds to 1.76×10^{20} POT
 - # POT for collected for anti- ν before Mar 23 10, official start of MINERvA ν run
- NT02 running gives enough anti- ν data for doubling of the 1st anti- ν data set.
- Minerva run, full scale corresponds to 4.9×10^{20} POT
 - # for which MINERvA project & experiment were reviewed & the detector built.
- Projected assumes 1.25×10^{18} POT/day
 - # POTs – average from Oct 2011 to now.
 - Assumes $\frac{1}{2}$ intensity for last 2 weeks.



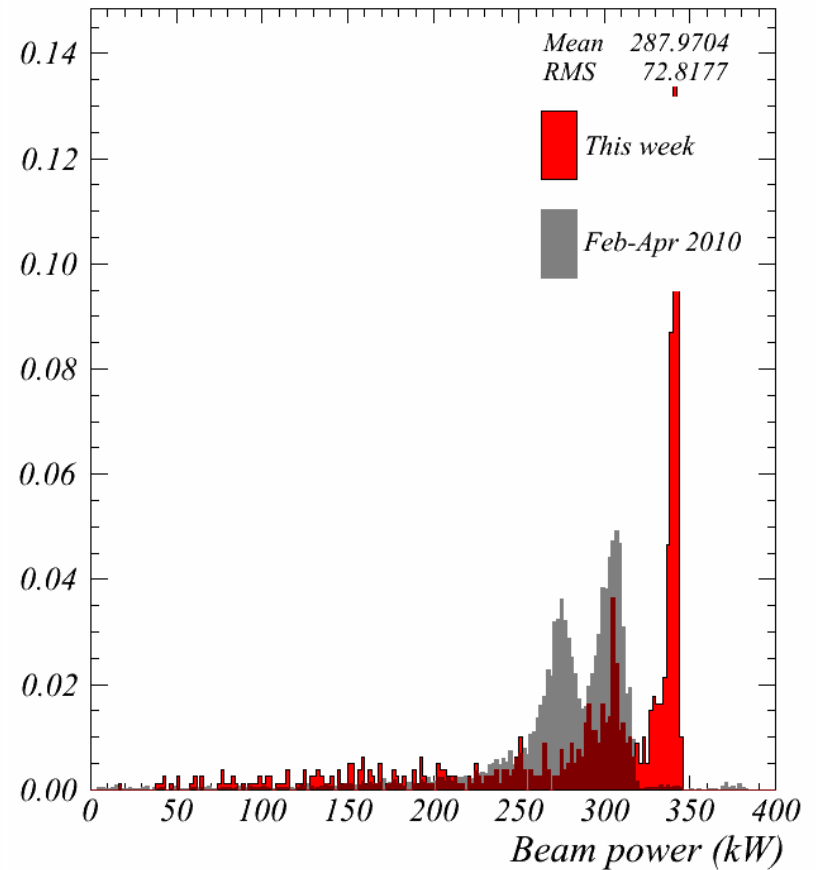
NuMI Beam Plots



Week ending 00:00 Monday 27 February 2012



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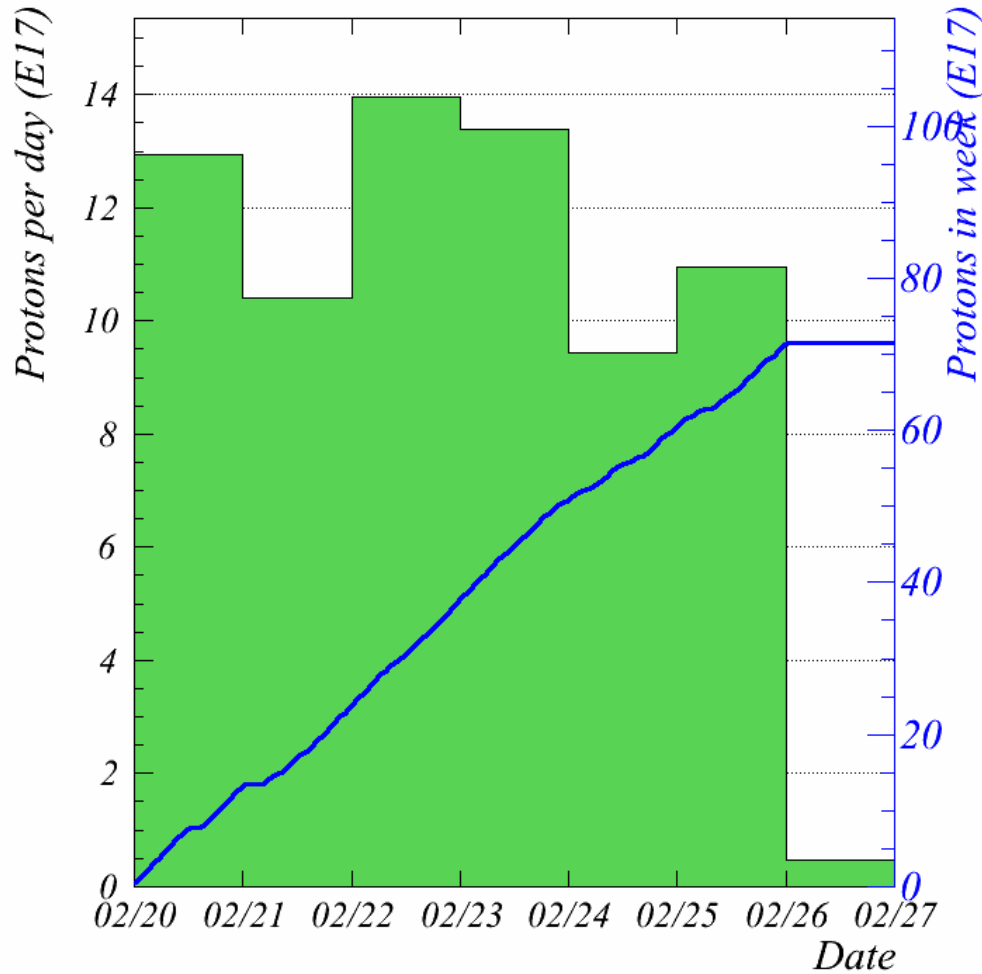




Protons for the Week

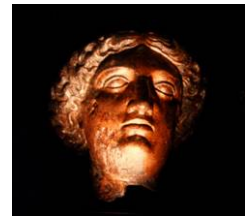


Week to 00:00 Monday 27 February 2012

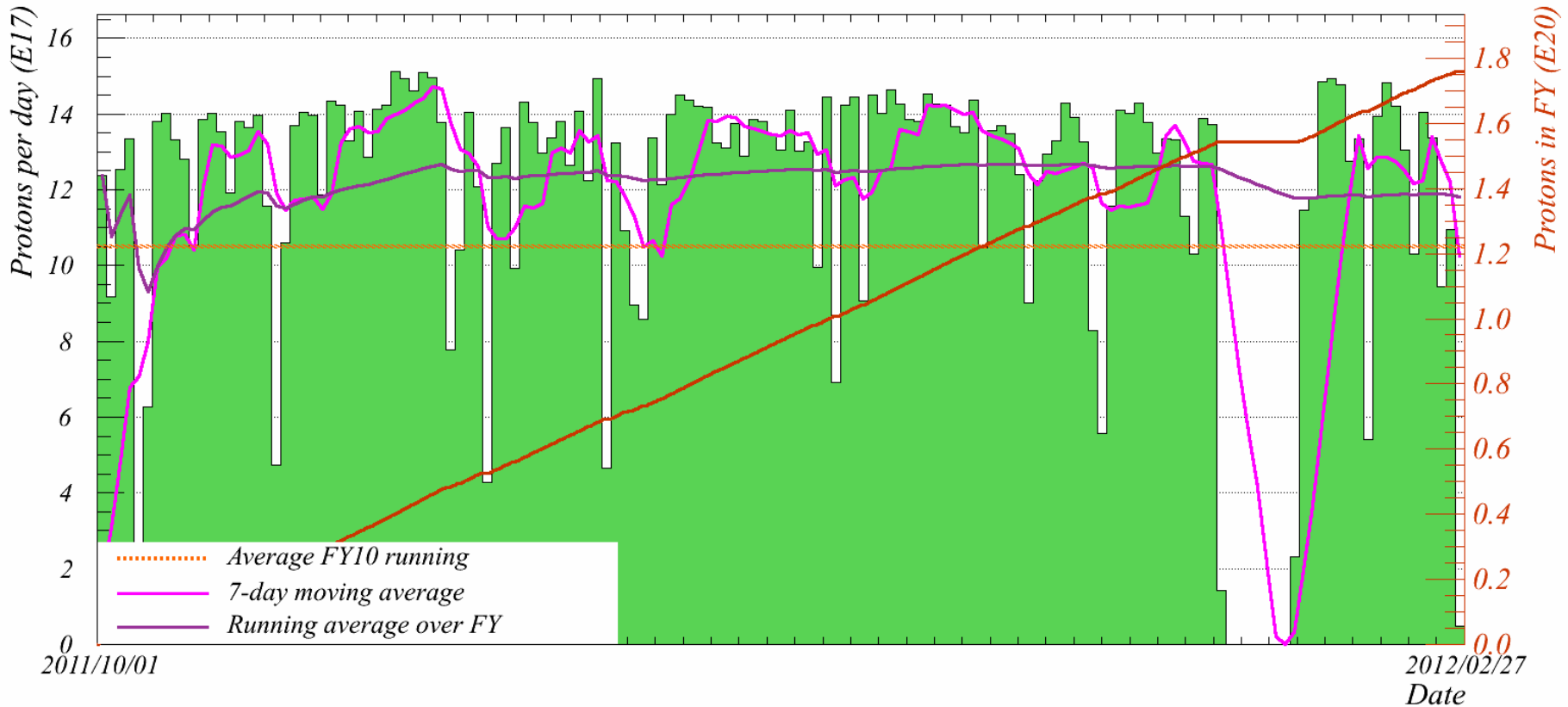




FY2012 Protons

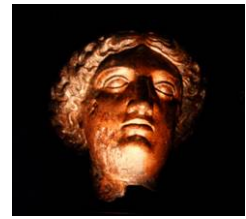


FY12 NuMI protons to 00:00 Monday 27 February 2012





NuMI Protons over History



Total NuMI protons to 00:00 Monday 27 February 2012

