

# The MINERvA Operations Report

## All Experimenters Meeting

Howard Budd, University of Rochester  
Mar 19 2012



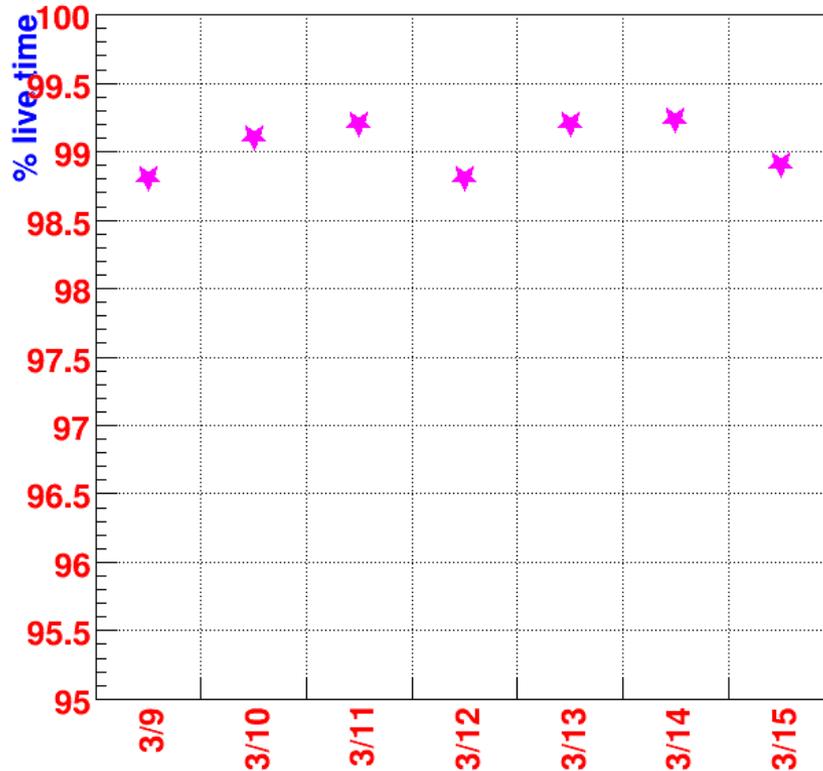


# $\nu$ Data



% live time  
Mar 9-15

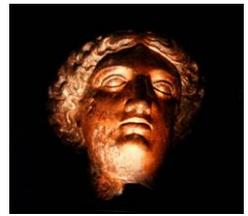
From	To	POT	MINOS Live time	MINERvA Live time	Live time
9-Mar-2012	15-Mar-2012	9.29E+18	99.3%	99.0%	98.3%



- $21.18 \times 10^{19}$  POT with NT-07
- $19.86 \times 10^{19}$  POT for  $\nu$ , Oct 6 – Mar 18, LE10 with NT-07
- $0.93 \times 10^{19}$  POT for  $\nu$ , Mar 12-18



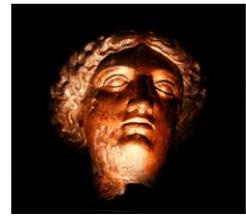
# NuMI Beam Logging Issues



- There were problems with Beam Data Process (XML-RPC) this weekend. This is the process which MINOS and MINERvA use to get their beam data.
  - Muon monitors and hadron monitor were not reading in.
- Fixed by resetting front-end nodes NMAAT (for muon monitors and hadron monitor) and MWIRE3.
- The Neutrino data is probably fine during this period
  - It looks like the toroid was not affected.



# Empty He Target



Pressure

Temperature



Mass

Mass of Vessel

- Started emptying the He target starting at 8:30 AM Mar 12.
- The target was at 1% of full target density on Mar 15 at 10 PM.
- At this point we can use the data for empty target run.
  - Background subtraction
- We would like to thank R. Schmitt, R. Sanders, J. Kilmer for emptying the He target



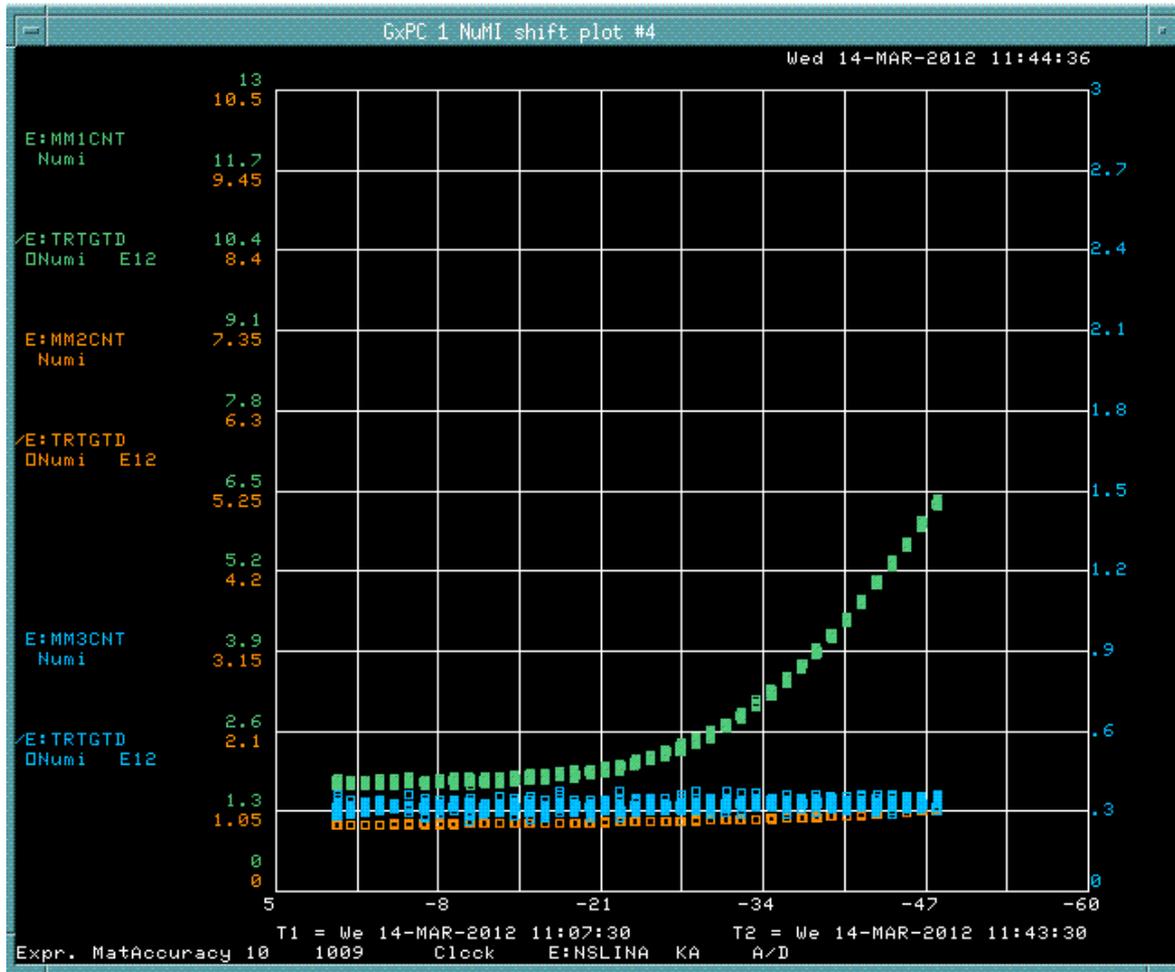
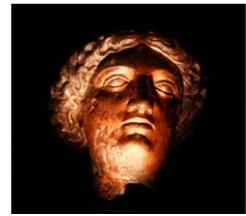
# Veto HV



- During this evacuation time, we replaced the veto HV (bulk HV supply and a cow) with D0 style HV system.
  - The new HV system enables us to put HV on all the counters and enables us to look at the HV remotely
    - This puts HV on 2 counters did not have HV before with this temporary solution, but they were outside the fiducial volume
- This system was working on 9:30 PM on Mar 15
- We would like to thank G. Savage, L Bagby, & M. Matulik for doing this work quickly on short notice.



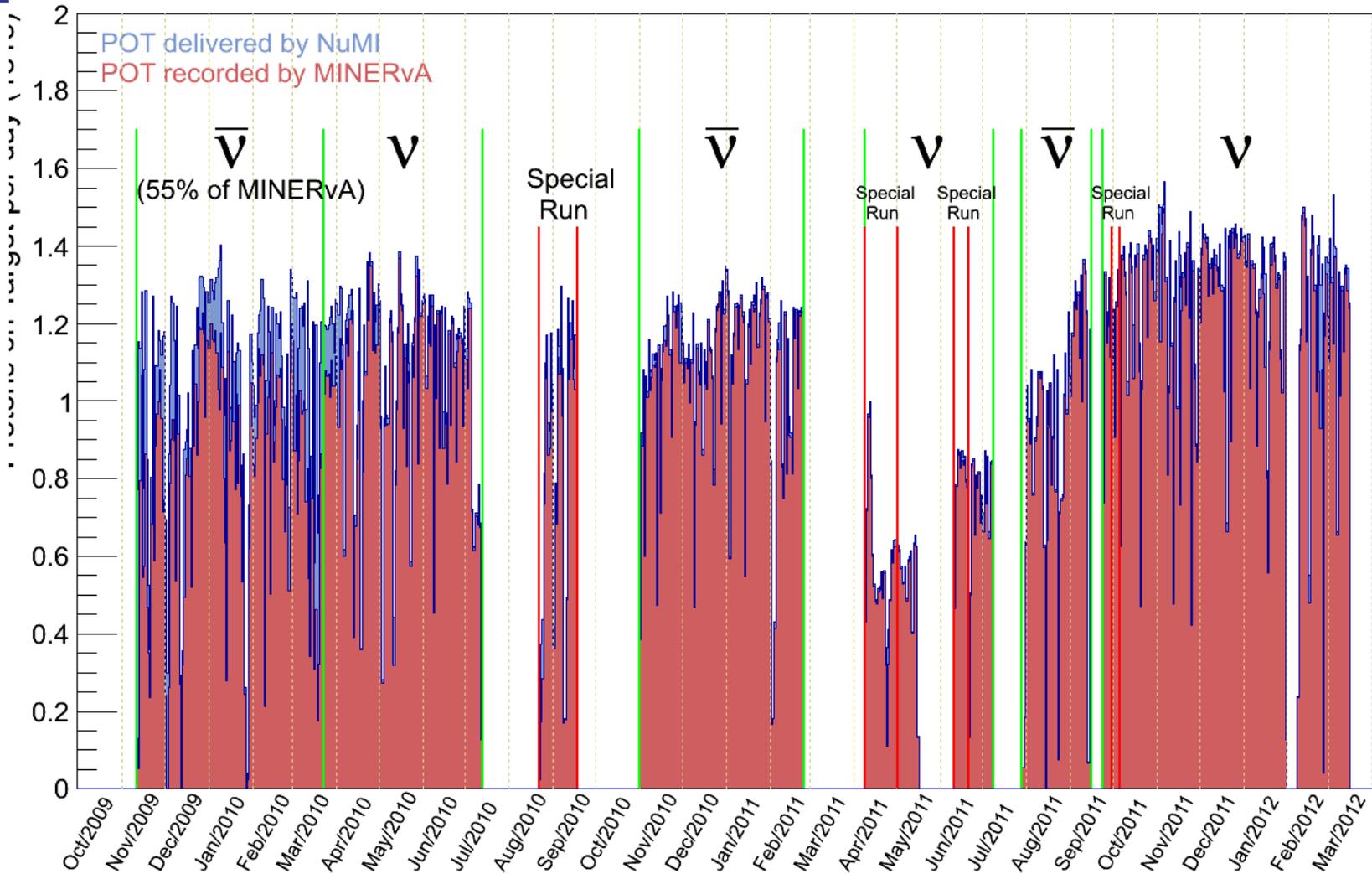
# Horn Scan for LE10z185



- On Mar 14, A horn scan was done.
- We would like to thank J.Hylen.

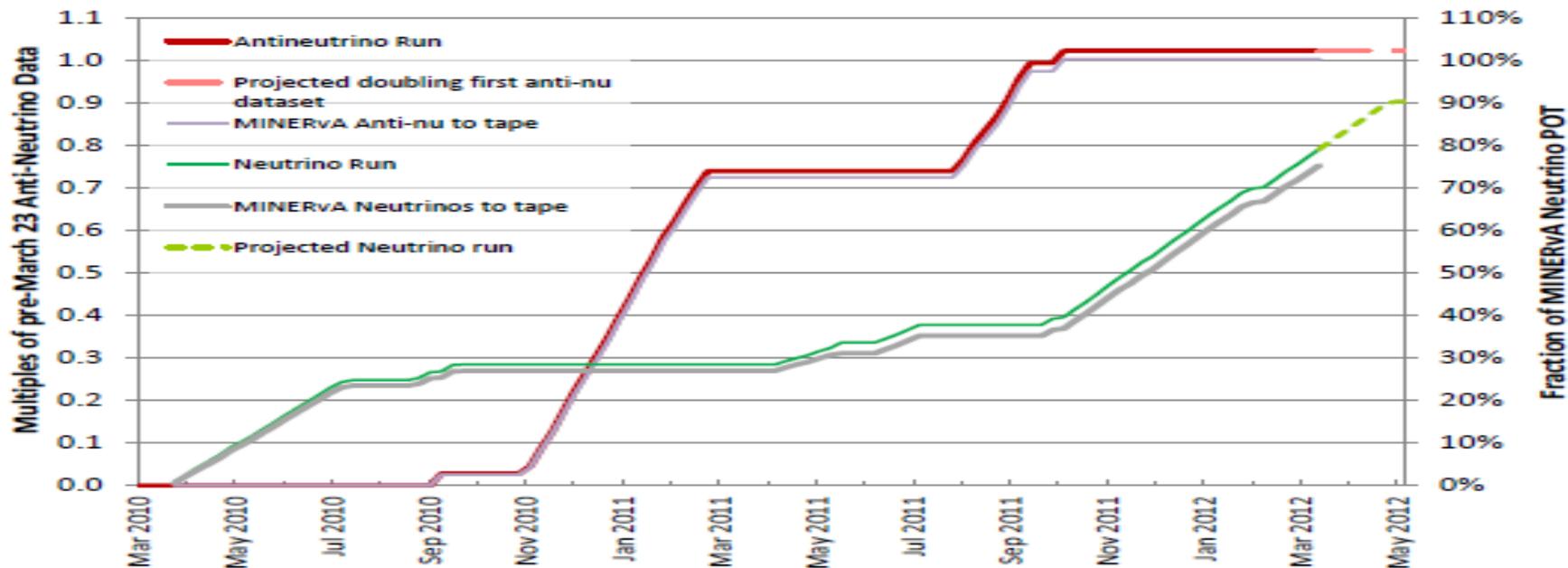


# MINER<sub>v</sub>A POT/Day Nov 2009 - Present





# Accumulated POT to Mar 15



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

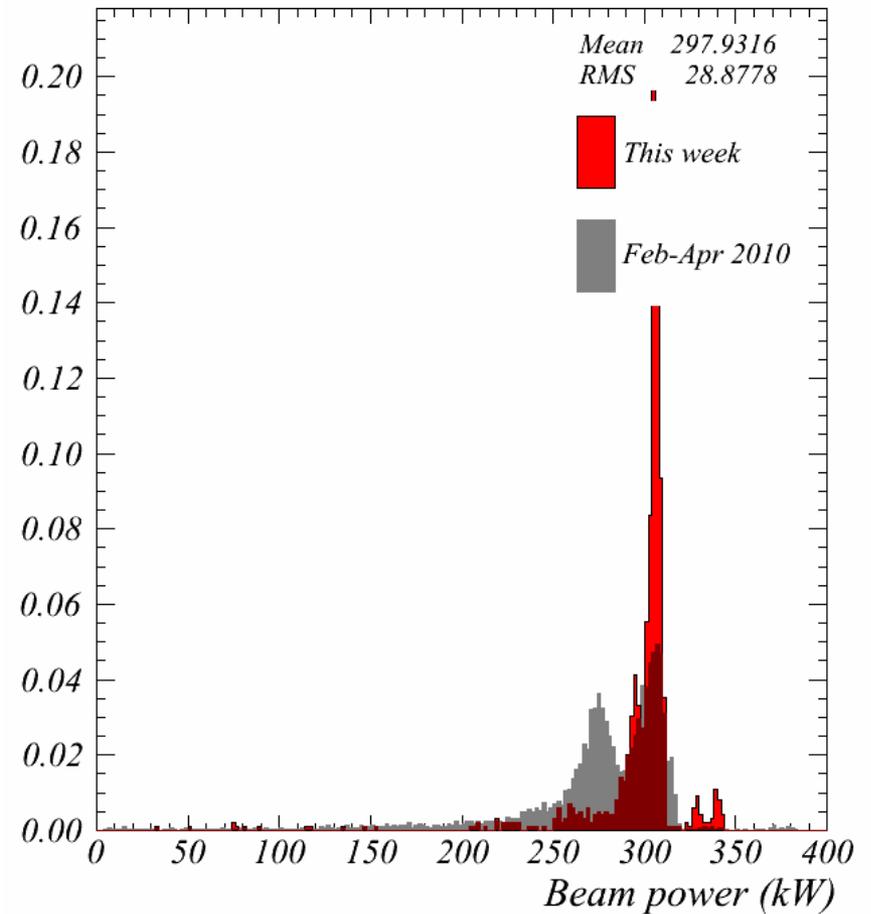
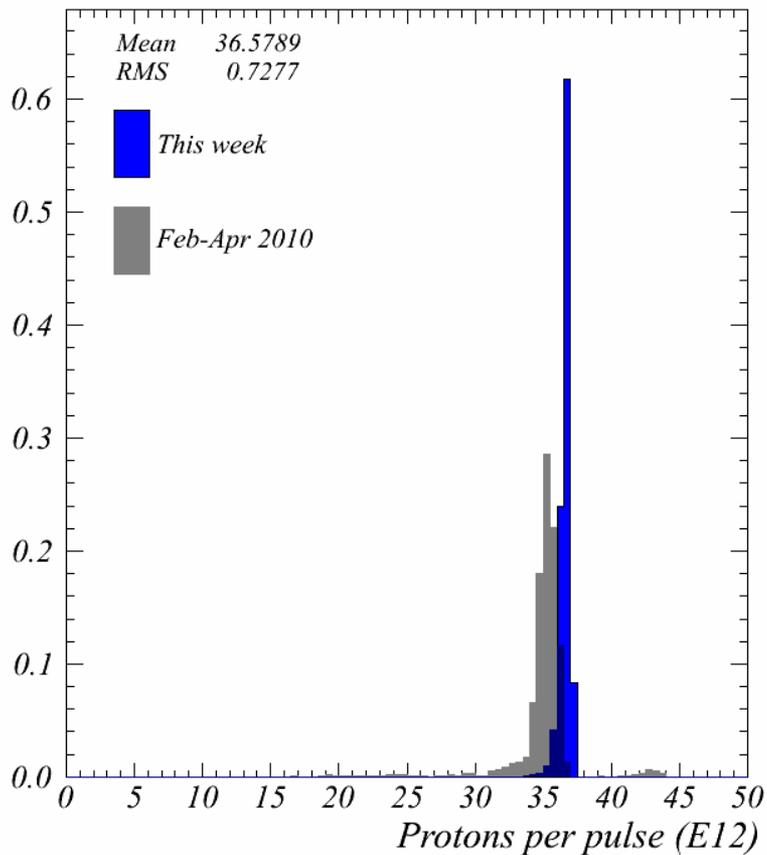


# NuMI Beam Plots



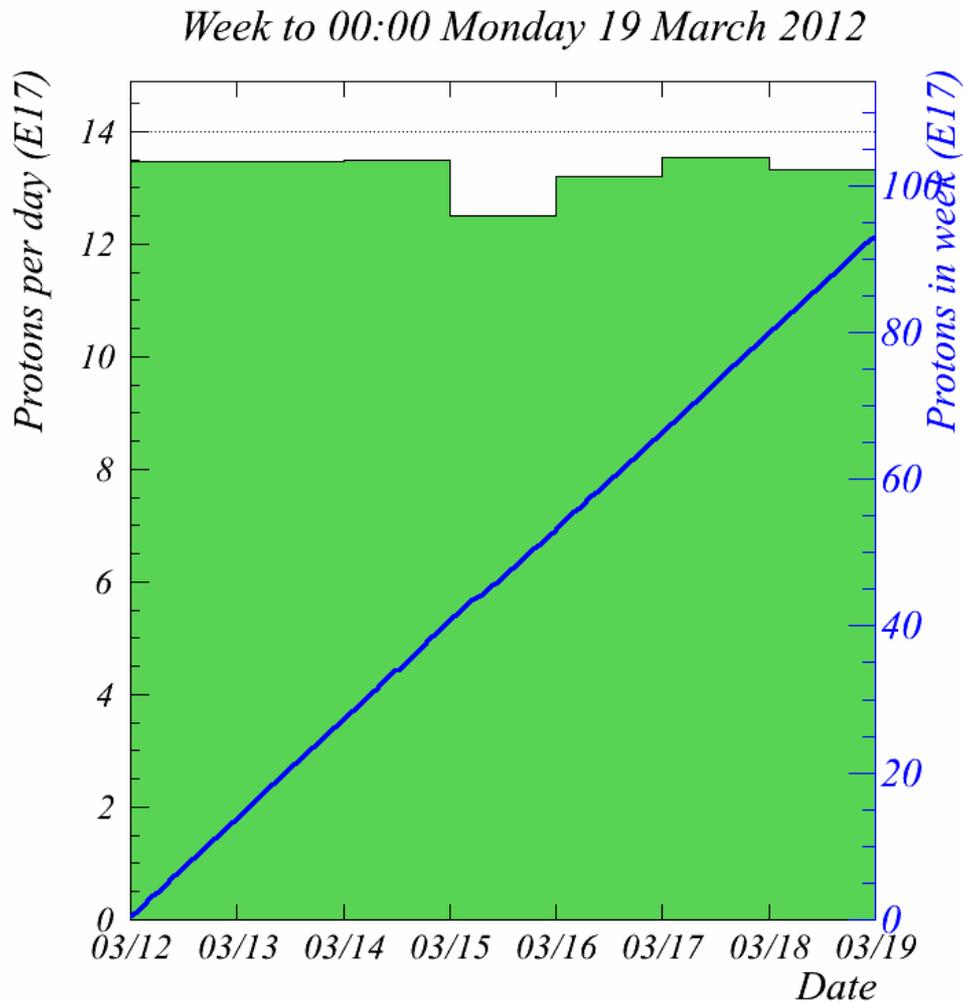
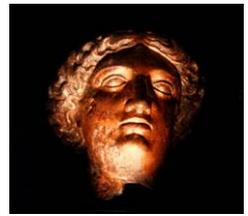
Week ending 00:00 Monday 19 March 2012

Week ending 00:00 Monday 19 March 2012





# Protons for the Week

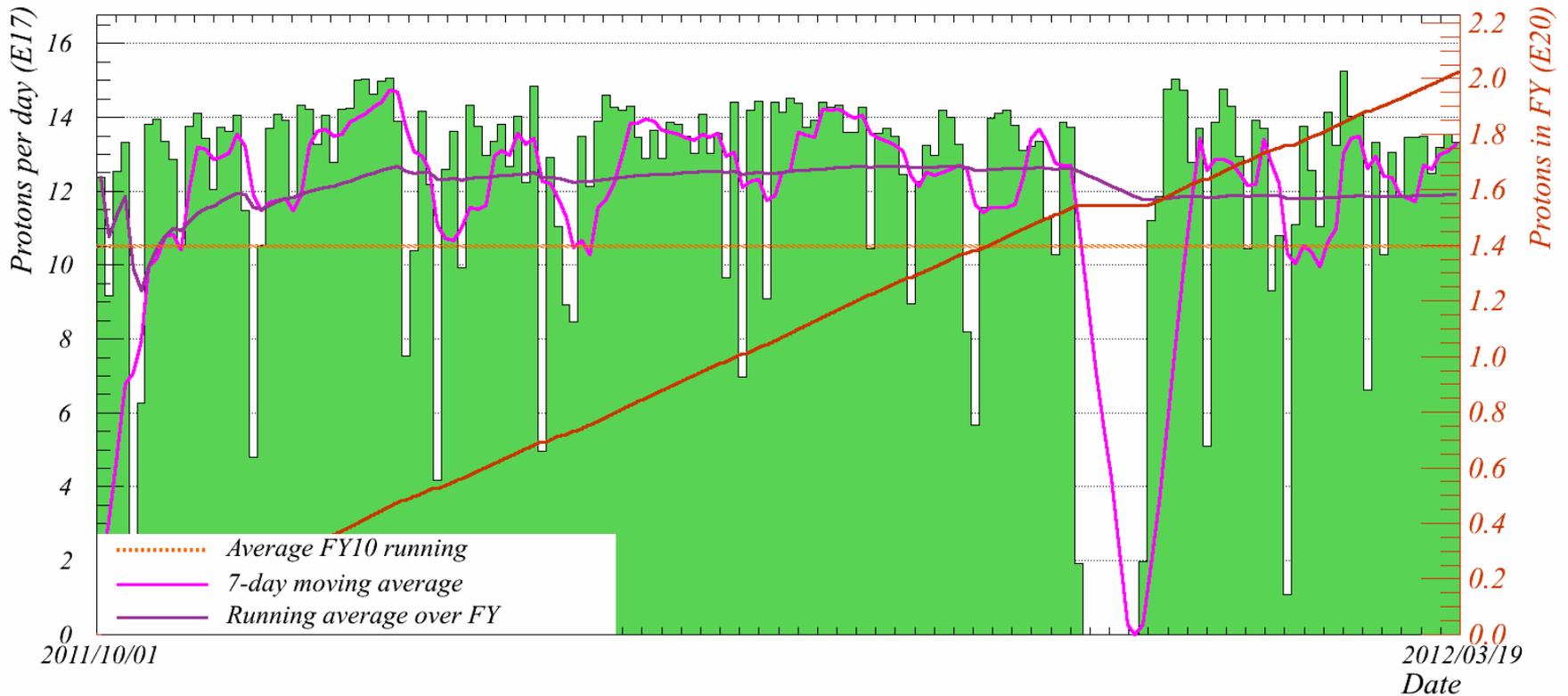




# FY2012 Protons

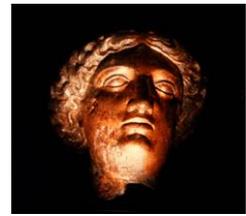


*FY12 NuMI protons to 00:00 Monday 19 March 2012*





# NuMI Protons over History



*Total NuMI protons to 00:00 Monday 19 March 2012*

