

The MINERvA Operations Report

All Experimenters Meeting

Howard Budd, University of Rochester
Apr 18, 2011



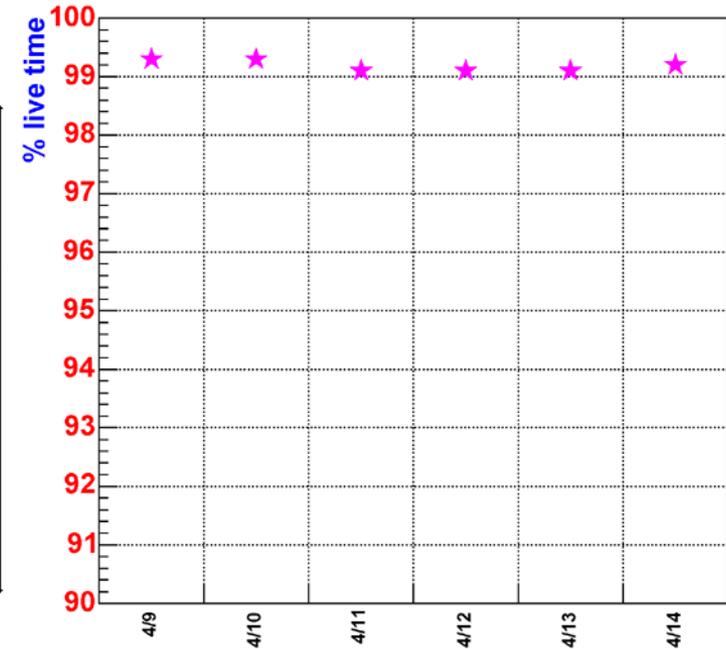


v Data



% live time Apr 9 – Apr 14

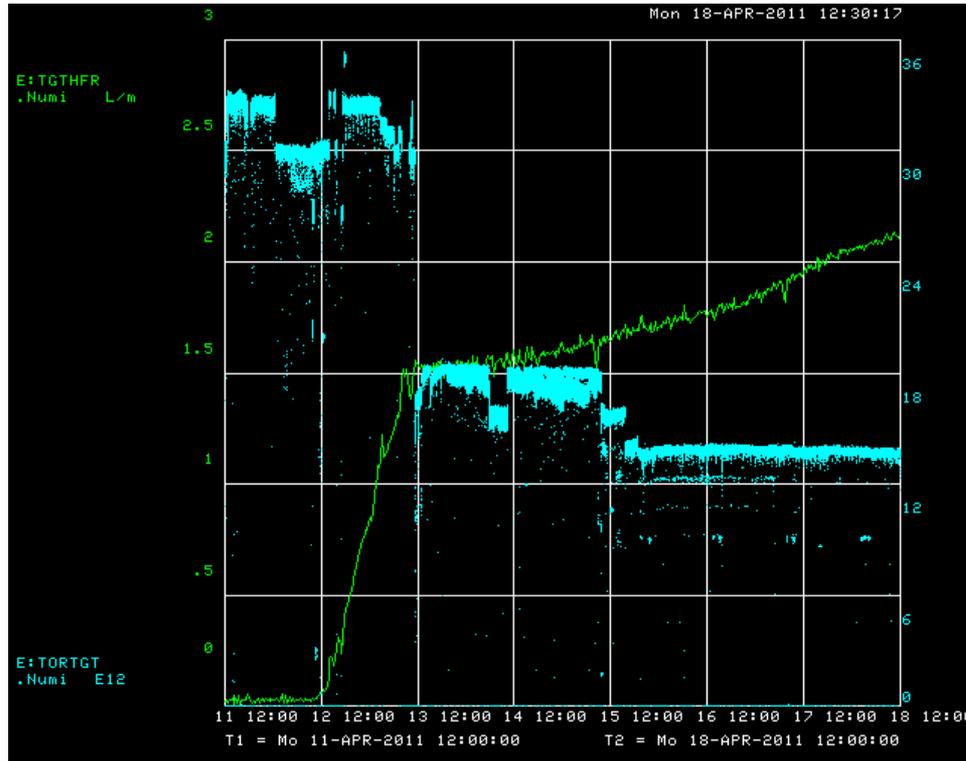
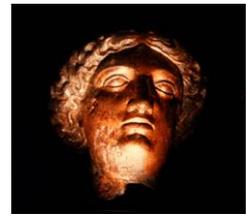
Date	POT Recorded	POT Delivered	Live Time
9-Apr-2011	4.31E+017	4.34E+017	99.30%
10-Apr-2011	7.19E+017	7.23E+017	99.30%
11-Apr-2011	9.57E+017	9.66E+017	99.10%
12-Apr-2011	9.89E+017	9.98E+017	99.10%
13-Apr-2011	8.01E+017	8.09E+017	99.10%
14-Apr-2011	6.00E+017	6.04E+017	99.20%
Total	4.50E+018	4.53E+018	9.92E-001



- We have been running v mode, horn current 185KA
- We have switched to 0 horn current
 - Plan to collect $7E18$ at this setting
- 0.60×10^{19} POT delivered from Apr 9 to Apr 17
- 99.2% live from Apr 9 to Apr 14, 0.453×10^{19} POT



He Leak in Target



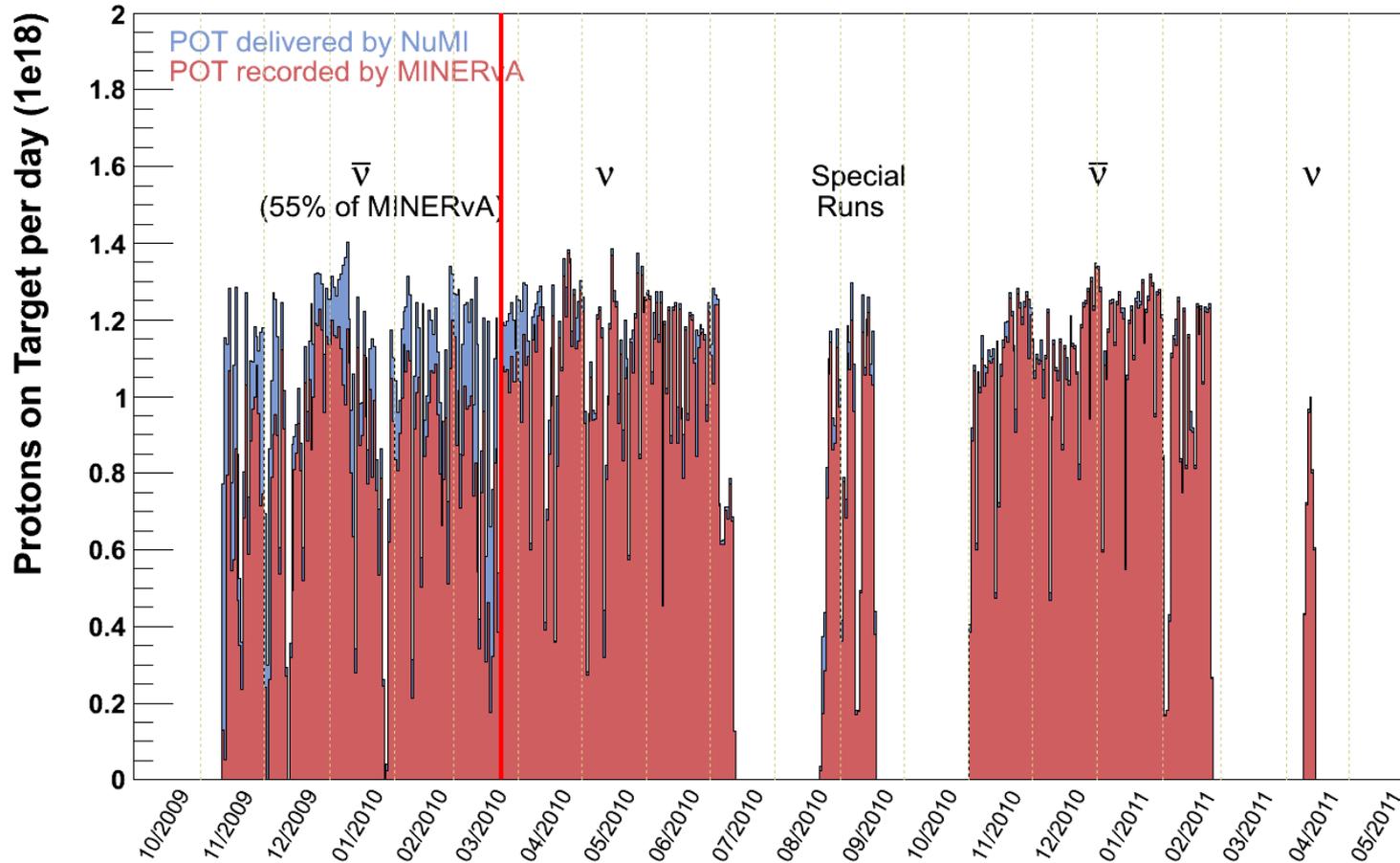
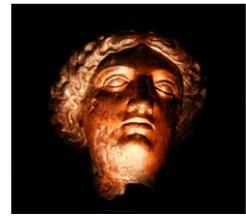
He leak rate
POT rate

Plot start noon Apr 11,
End noon today
Each bin is a day

- On Apr 12 noon, the target developed a He leak with the rate increasing time.
- At He leak rate of 1.5 lt/min, the POT rate was reduced from 33E12 to 18E12 on Apr 13.
- He leak rate **was** increasing Apr 15 so set POT rate to 14E12
- He Leak rate is about 2 lt/min and slowly increasing, 10% per day
- Plan to run at POT 16E12 as the change in the He leak rate is similar for 14E12 and 16E12

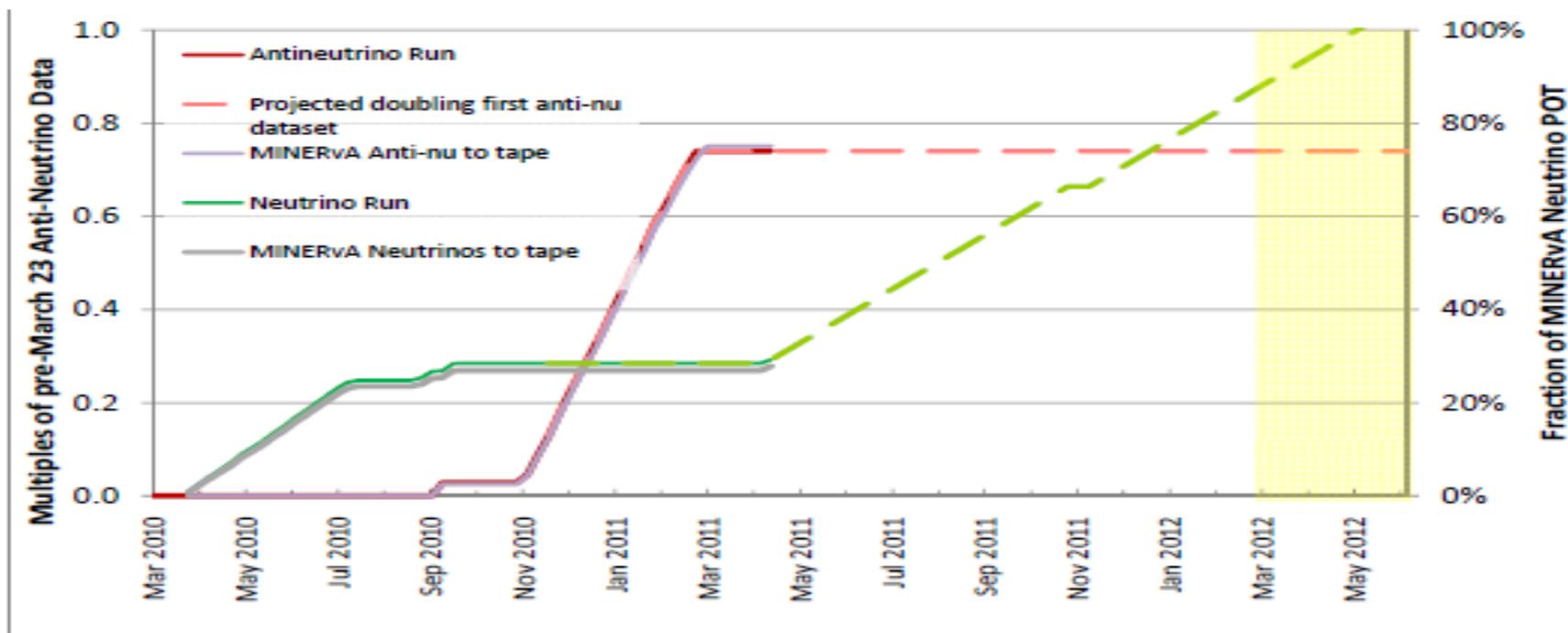


MINER_vA POT/Day March 2010 - Present





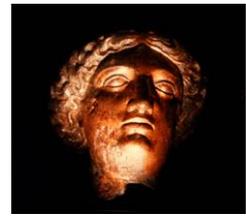
Accumulated POT to Apr 14



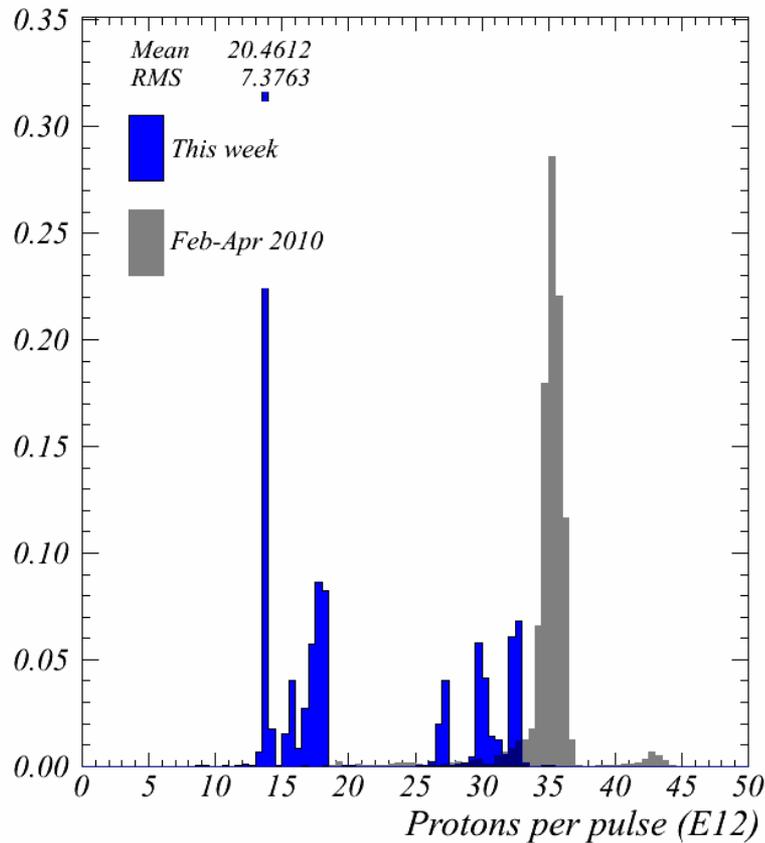
- Anti- ν run, full scale corresponds to 1.76×10^{20} POT
 - # POT for collected for anti- ν before Mar 23 10, official start of MINERvA ν run
- Minerva run , full scale corresponds to 4.9×10^{20} POT
 - # for which MINERvA project & experiment were reviewed & the detector built.
- Projected assumes 0.92×10^{18} POT/day plus 2 week shutdown to change target
 - # POTs – average over the uptime during the past 1.5 years
 - Actual run plan not yet determined, this is one possible scenario



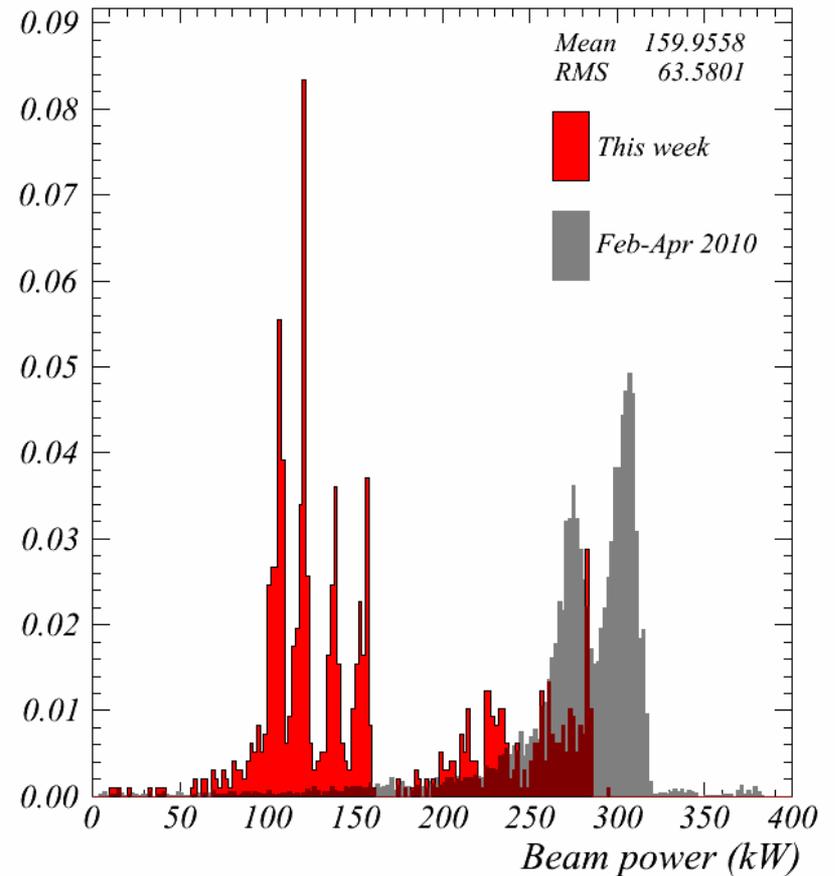
NuMI Beam Plots



Week ending 00:00 Monday 18 April 2011

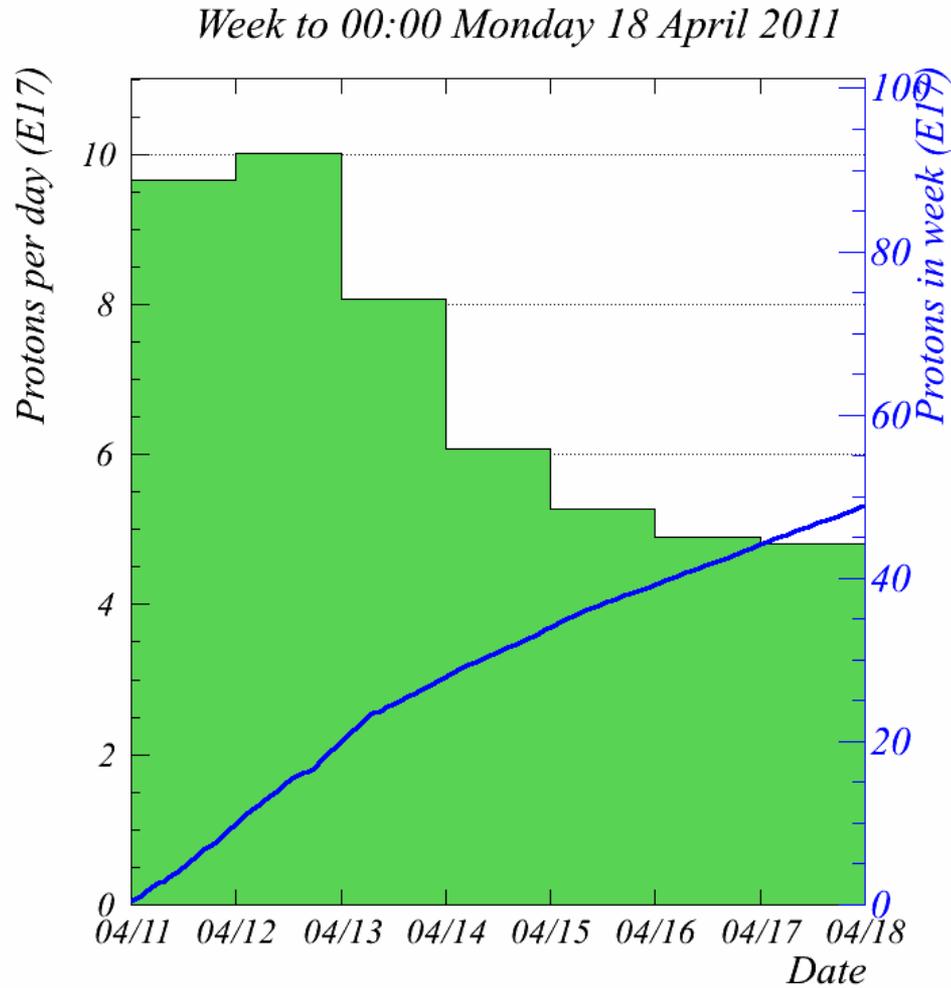


Week ending 00:00 Monday 18 April 2011



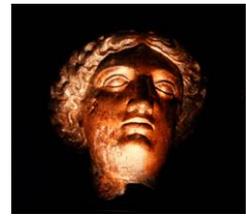


Protons for the Week

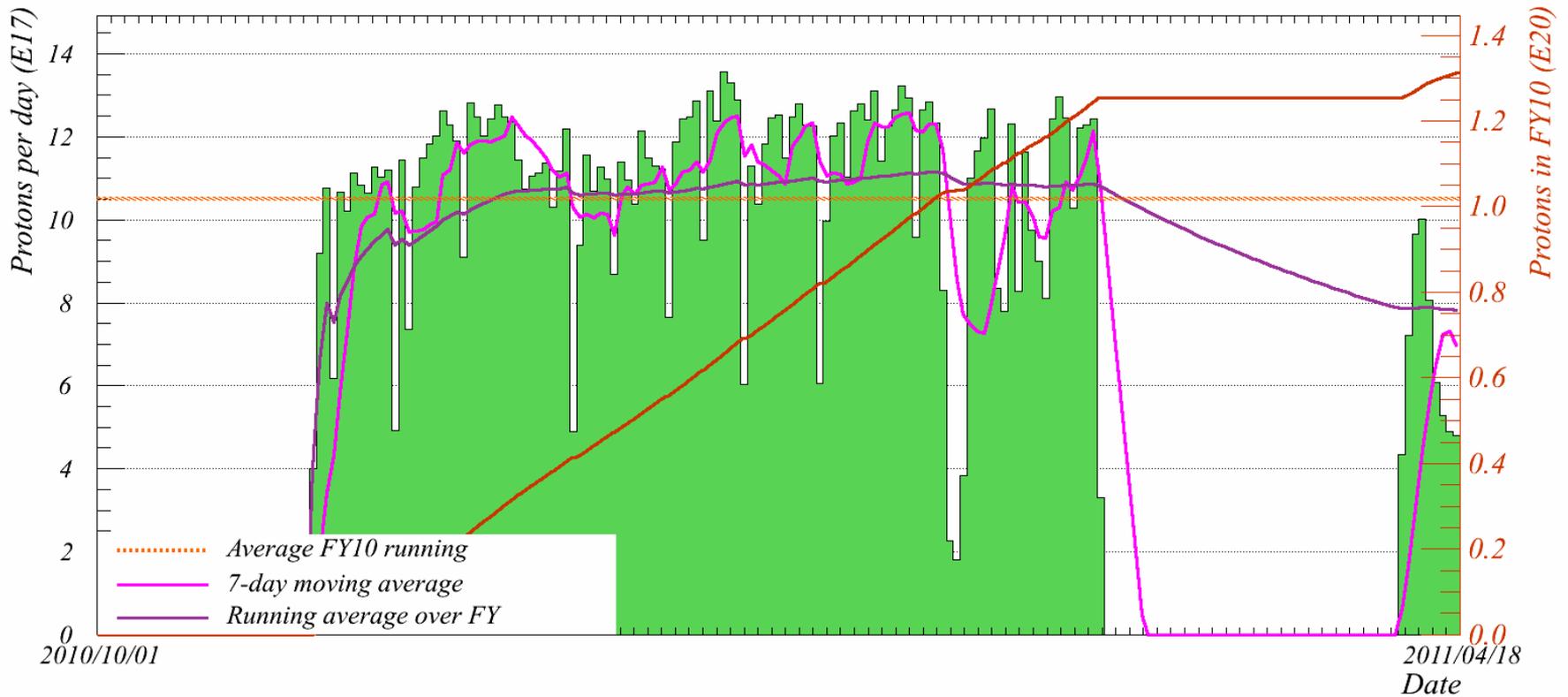




FY2011 Protons



FY11 NuMI protons to 00:00 Monday 18 April 2011





NuMI Protons over History



Total NuMI protons to 00:00 Monday 18 April 2011

