

The MINERvA Operations Report

All Experimenters Meeting

Howard Budd, University of Rochester
April 16, 2012



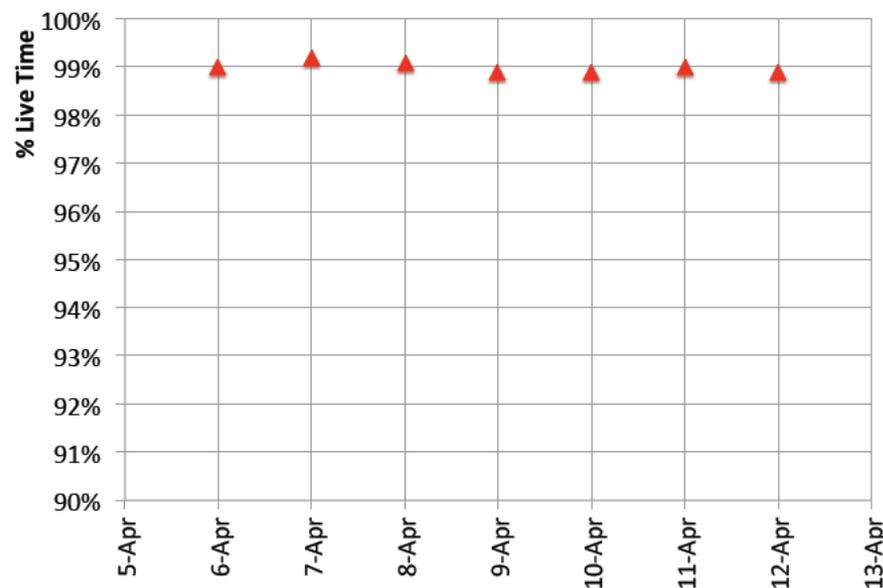


ν Data



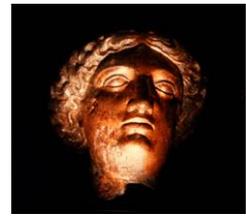
From	To	POT	MINOS Live time	MINERvA Live time	Live time
6-Apr-2012	12-Apr-2012	8.61E+18	99.7%	99.0%	98.6%

% live time Apr 6-12



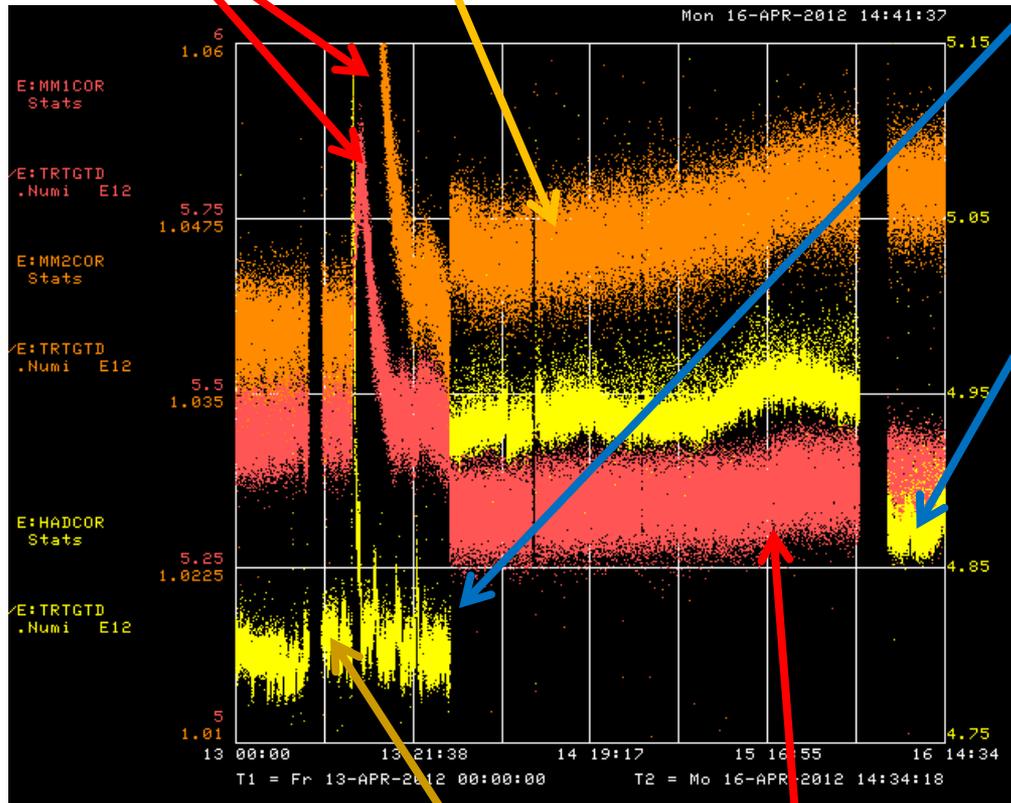
- 24.72×10^{19} POT with NT-07
- 23.41×10^{19} POT for ν , Oct 6 – Apr 15, LE10 with NT-07
- 0.91×10^{19} POT for ν , Apr 9-15

Steps In Response of Hadron and Muon Monitors



Gas Change

MM2/toroid



Apr 13, 00:00

Hadron Monitor/toroid

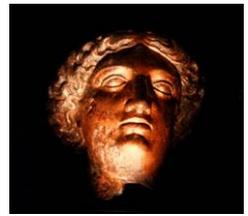
Apr 16, 16:15

MM1/Toroid

- All at the same time
 - On Apr 14 hadron monitor steps up ~ 4%
 - MM1 down ~ 2%
 - MM2 up slightly
- Apr 16 the hadron monitor drop 2%, but no change in MM1 and MM2
- Not clear what is happening
 - Monitors look fine
 - A gas change about 5 hours before the step
 - Consistent with change in target
 - A target and horn current scan will be performed



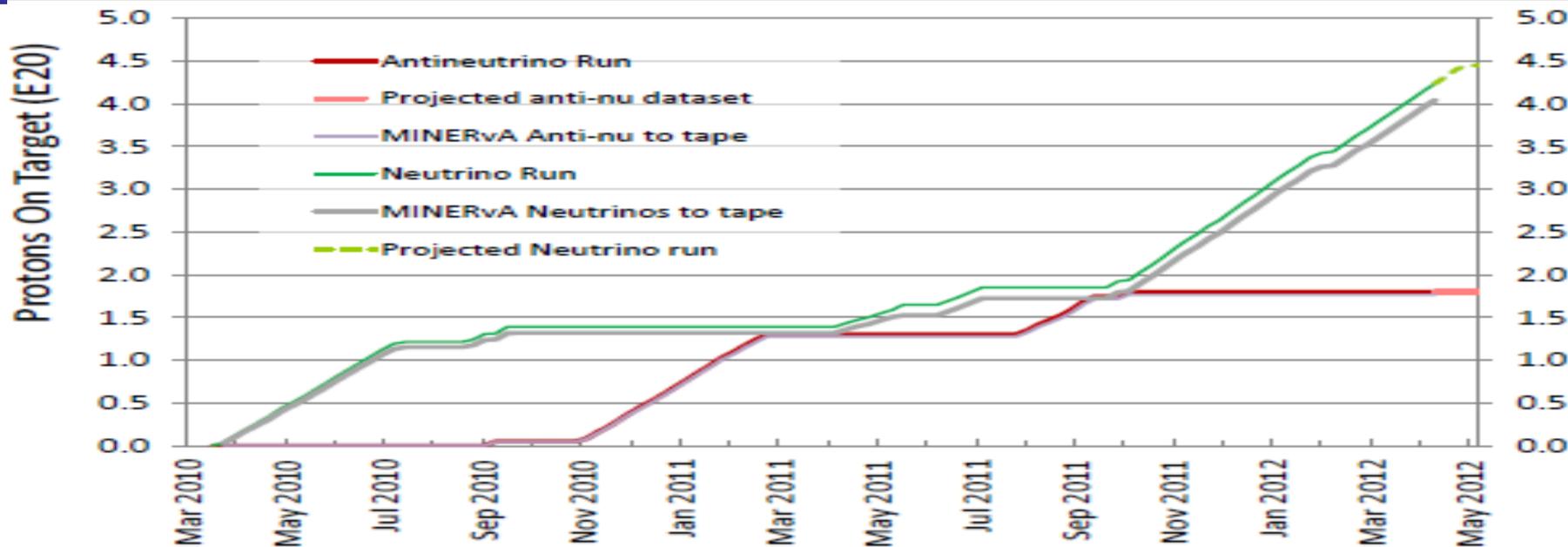
Replacement



- We replaced the FEB for a tube which has the HV varying problem during Friday's no beam period.
 - The tube's HV varied about 12 volts around nominal for about 1 hour every 3-4 day.
 - This didn't fix the problem, so it's the PMT box, and that replacement takes longer and has more risk.
 - The FEB replacement has very little risk.



Accumulated POT to Apr 12



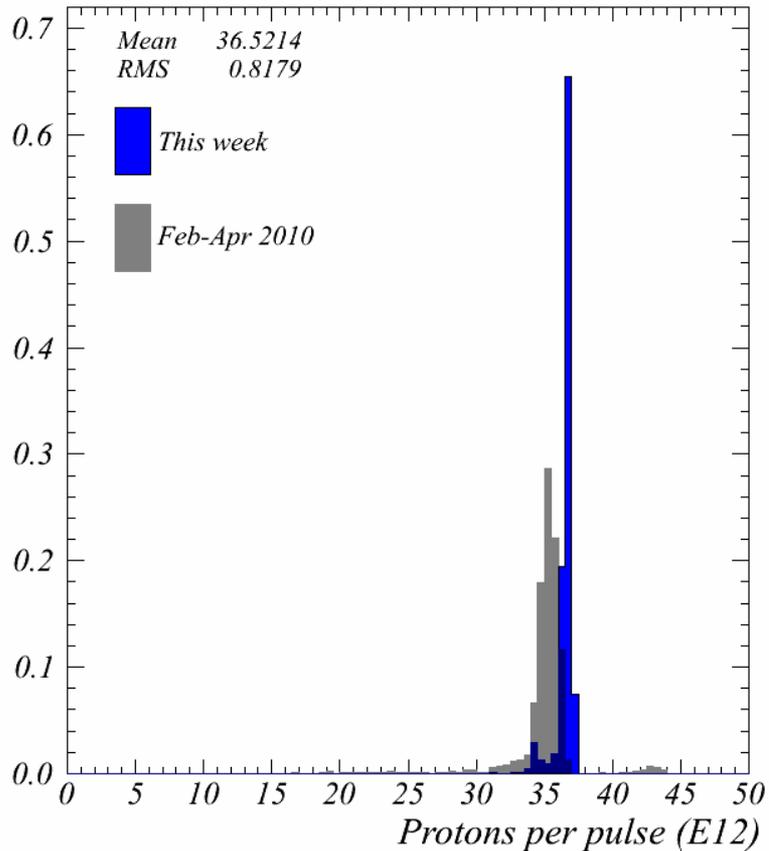
- Anti-ν run, full scale corresponds to 1.76×10^{20} POT
 - # POT for collected for anti-ν before Mar 23 10, official start of MINERvA ν run
- NT02 running gives enough anti-ν data for doubling of the 1st anti-ν data set.
- Minerva run, full scale corresponds to 4.9×10^{20} POT
 - # for which MINERvA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



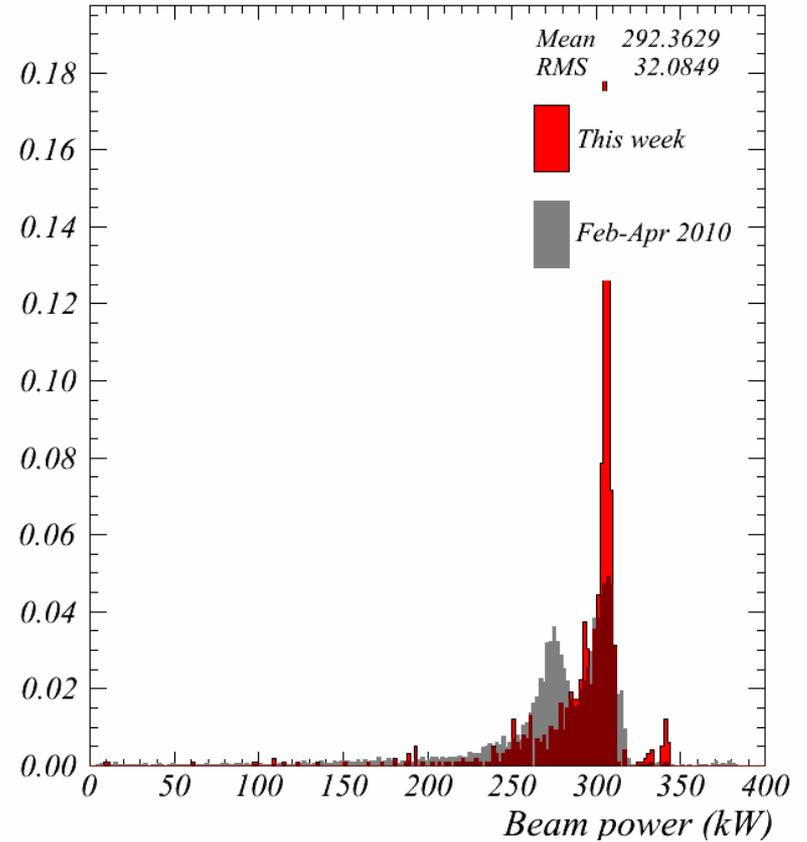
NuMI Beam Plots



Week ending 00:00 Monday 16 April 2012



Week ending 00:00 Monday 16 April 2012

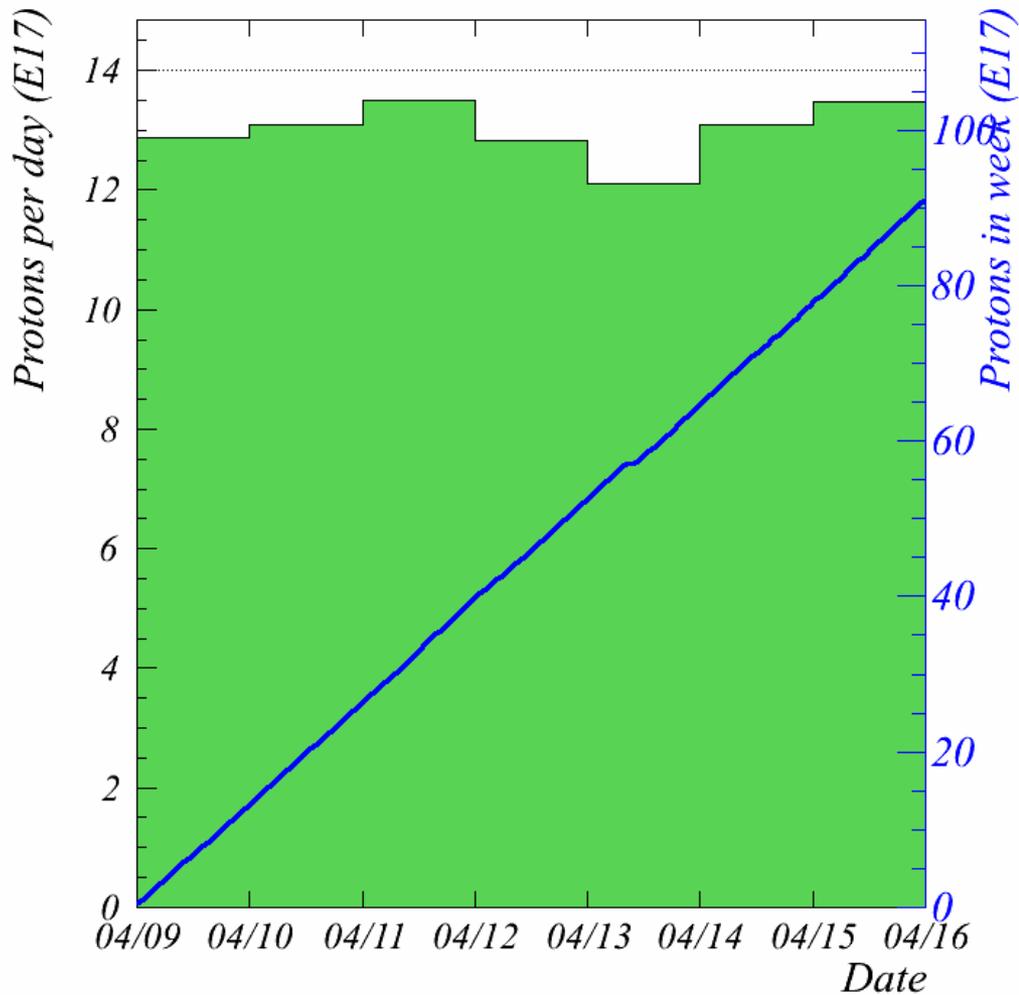




Protons for the Week



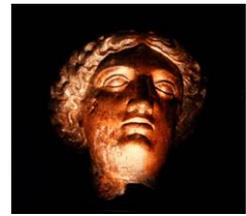
Week to 00:00 Monday 16 April 2012



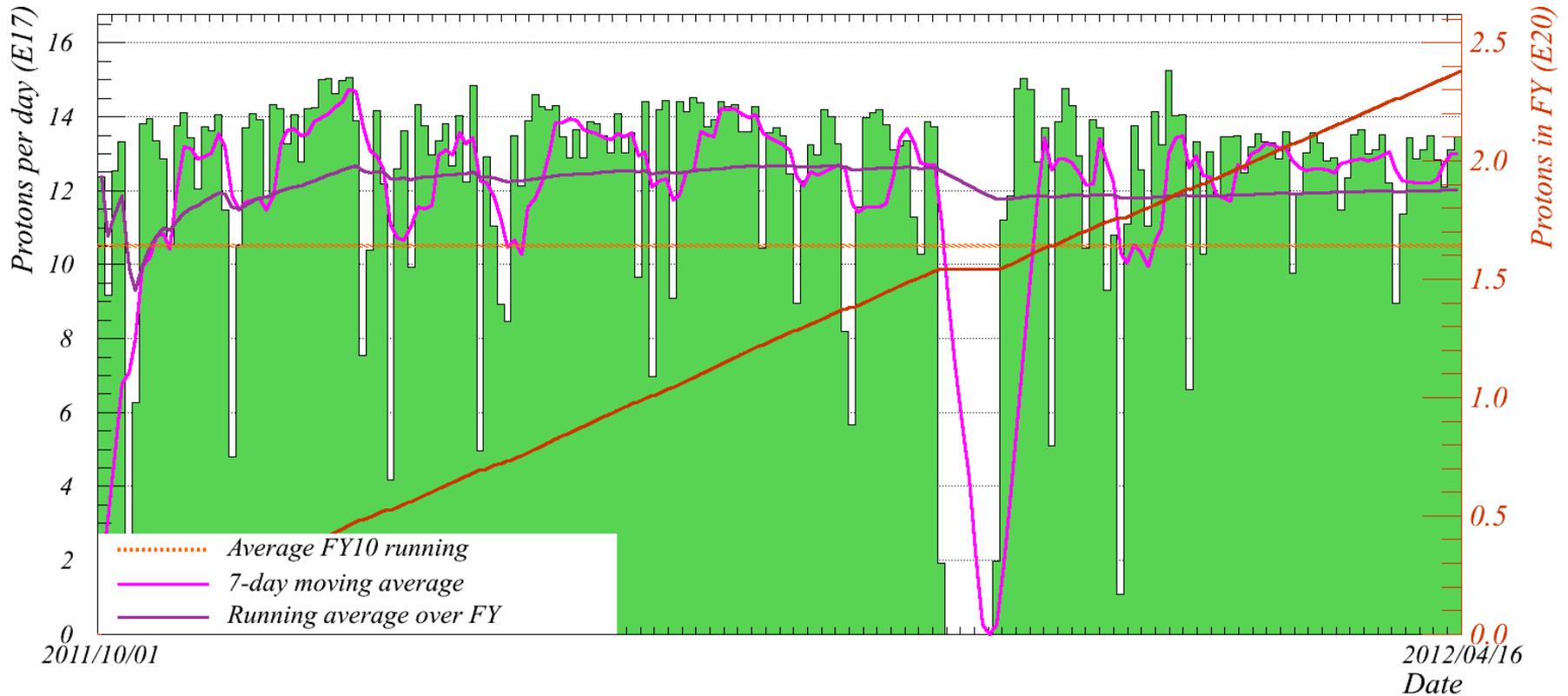
0.91×10^{19} POT



FY2012 Protons



FY12 NuMI protons to 00:00 Monday 16 April 2012



24.72×10^{19} POT



NuMI Protons over History



Total NuMI protons to 00:00 Monday 16 April 2012

