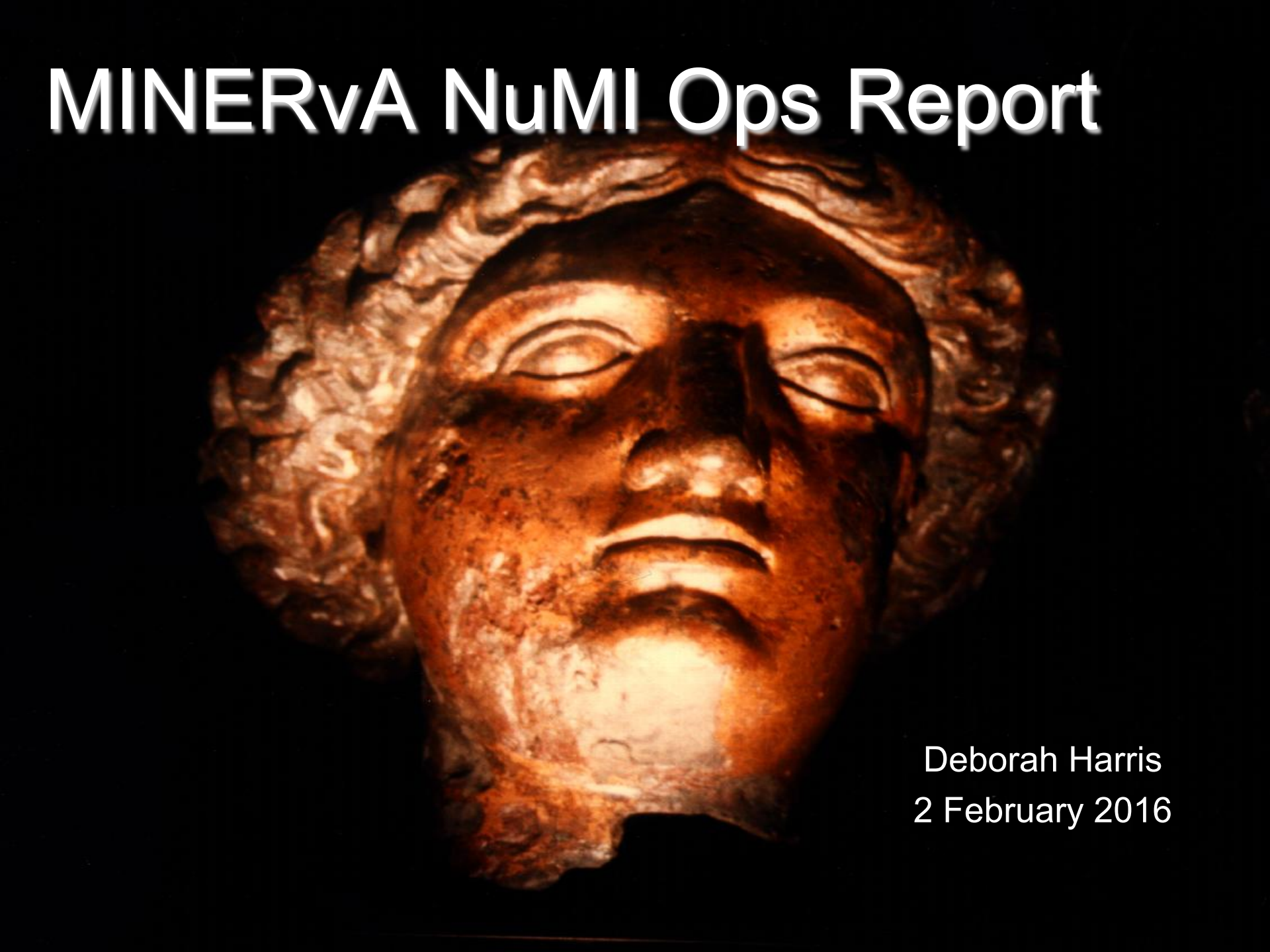
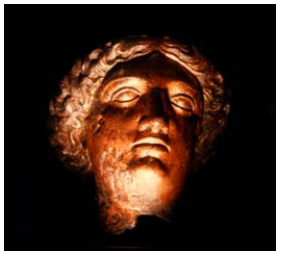
# MINERvA NuMI Ops Report



Deborah Harris

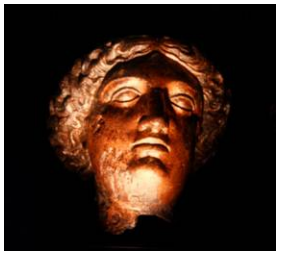
2 February 2016

# Rock Muon Monitoring



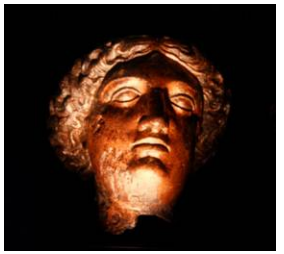
- MINERvA checks once per day
  - Rate of rock muons traversing MINERvA /POT
  - Rate of rock muons traversing MINERvA and tracked by MINOS /POT
  - Rate of rock muons traversing MINERvA and tracked by MINOS /POT for gates with a MINOS match
- Web site is available to the public, although documentation of site is not public
- http://minerva.fnal.gov/nusoft/minervacal/daily_muon_monitoring.html

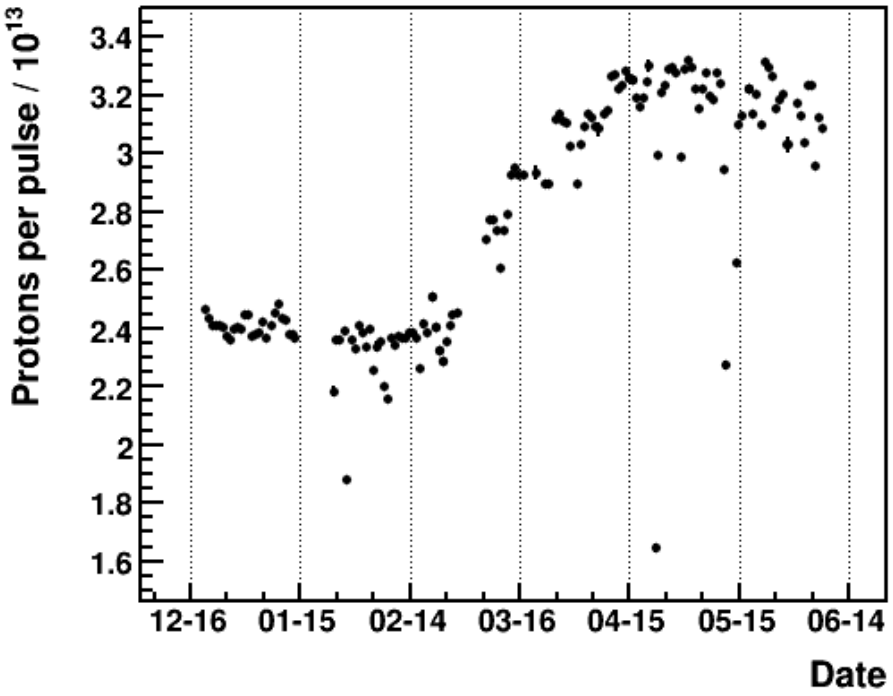
# What these plots show

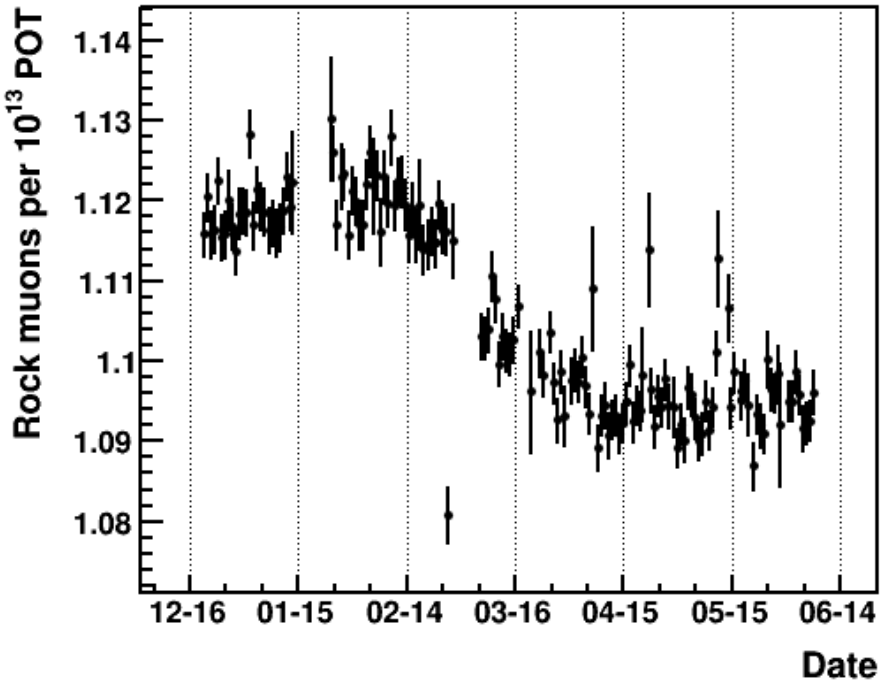


- Most common thing we see and then act on: whether or not the previous night's processing found the MINOS data files to run
- Can also see evidence of increasing detector deadtime as a function of protons on target
- Large changes in rock muons/POT:  horn current changing from 200kA to 0kA

# Evidence of deadtime

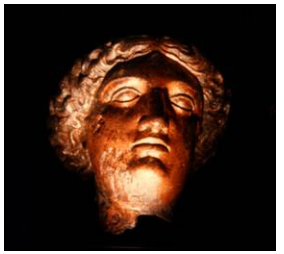


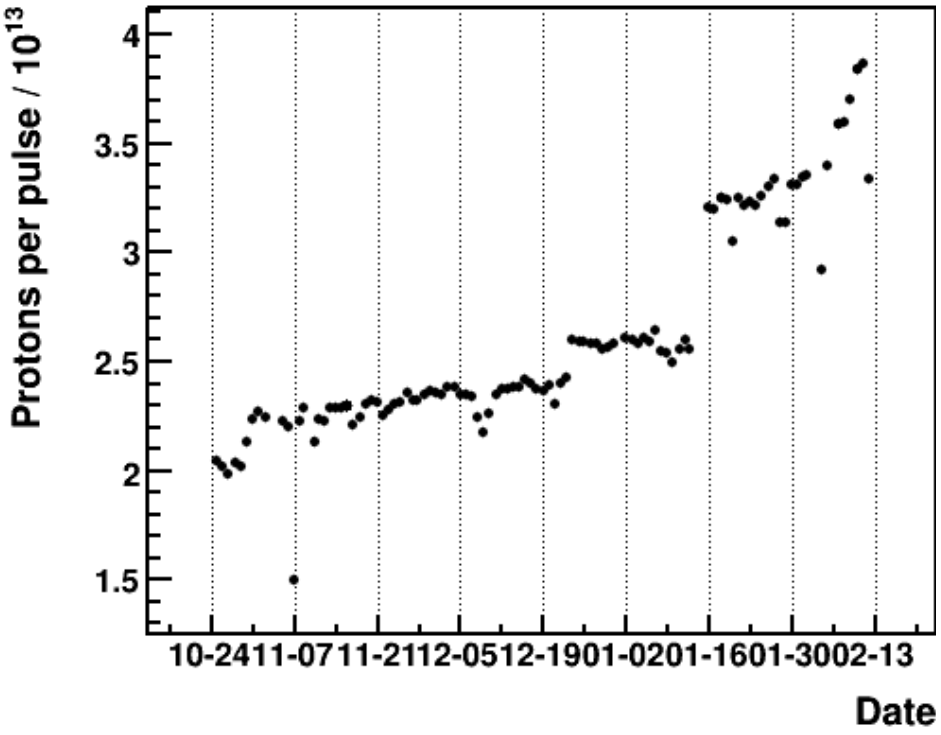


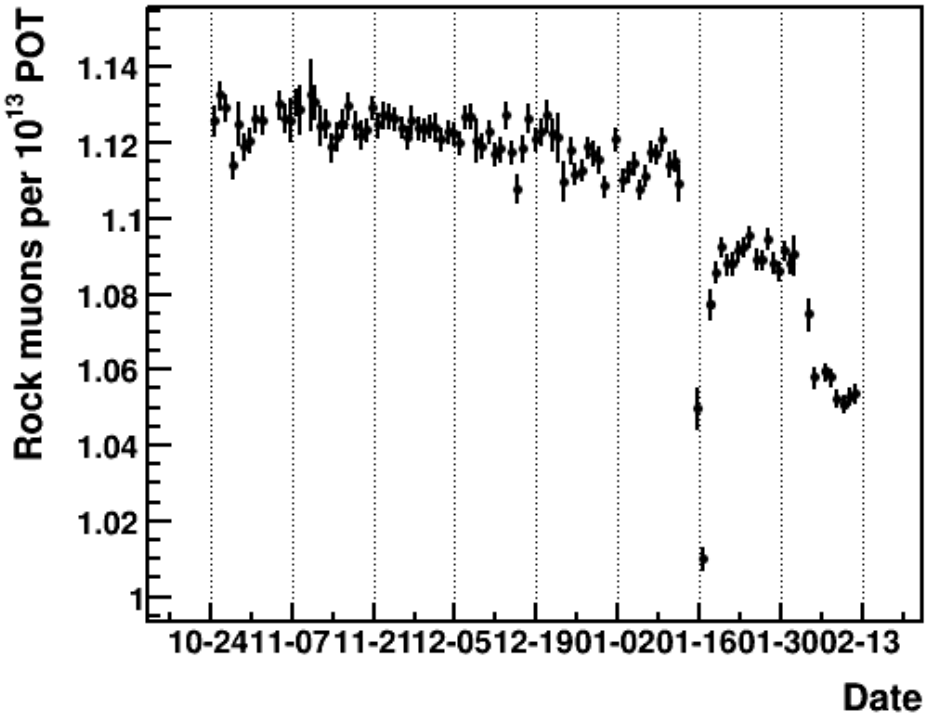




Note: this is going from 0+6 to 2+6, so 1/3 of the spills have 2x the intensity. If all the spills had 2x the intensity then this plot implies we would see a ~10% drop in rock muons/POT

# Recent Running






10% jump is due to DAQ problems which eventually were fixed, 3%+3% drop is due to the change from 0+6 to 4+6 running