

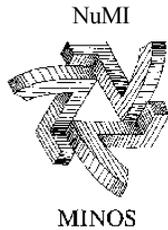
NuMI/MINOS Status

Rob Plunkett

MINOS Run Coordinator

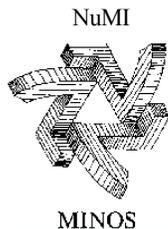
Fermilab All Experimenters' Meeting

13 September, 2004

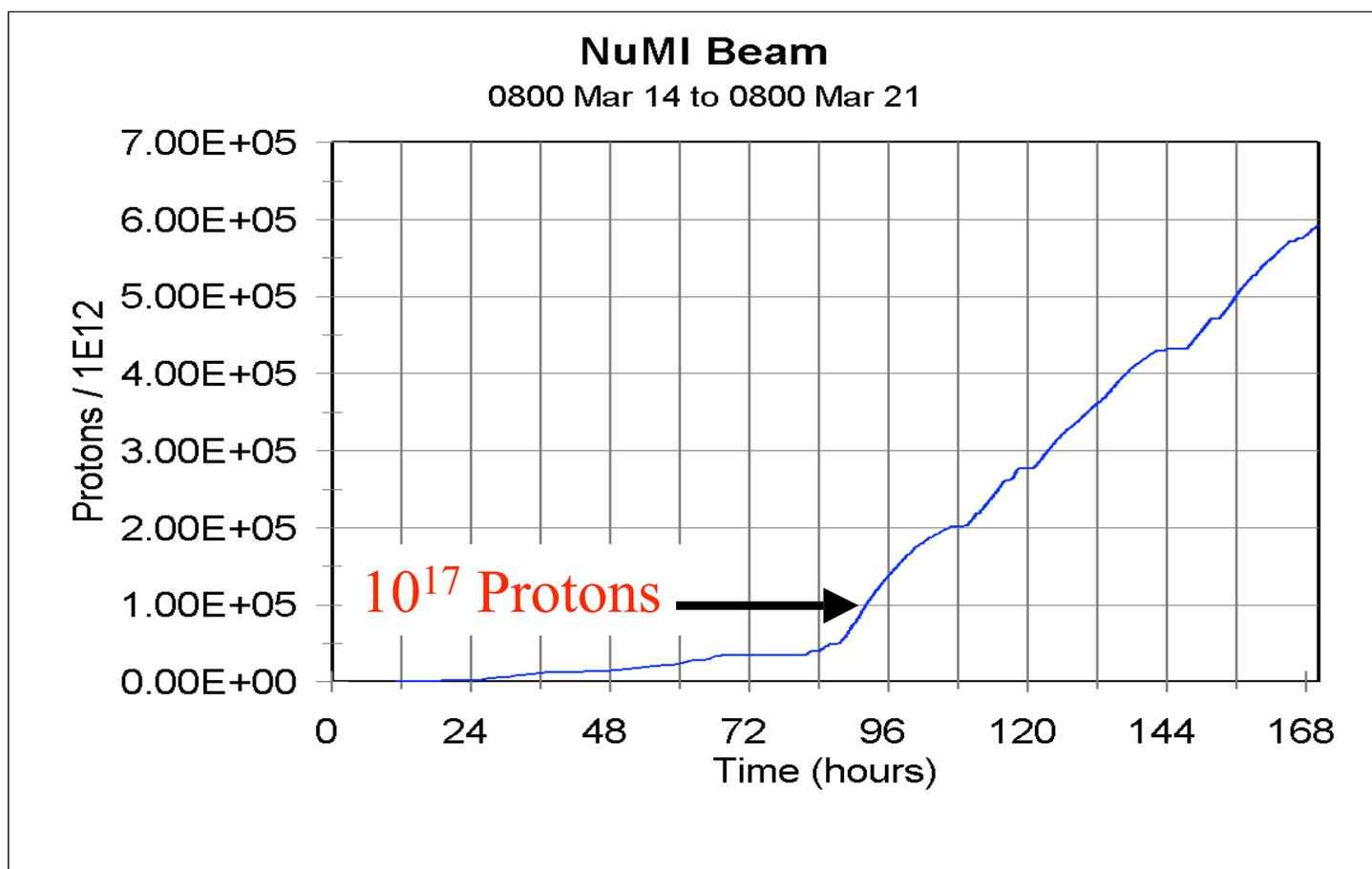


Beam Status

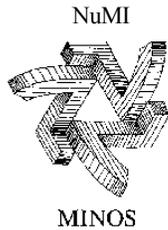
- **Beamline operation improved significantly last week**
 - « MI RF ramp changed, remnant slip-stack beam pinged out (Dave Capista, Phil Adamson)
- **Beam optics not quite right**
 - « “1 bump” study identified first NuMI quad not at expected current (Ming-Jen Yang)
 - « Beam size at target too small
 - « Traced to incorrect database scale factor
 - * Fixed today - Will check optics tonight
- **NuMI + pbar has been running smoothly**
 - « Will check for Pre-Target settling Tues/Wed day shifts
 - « Possible source of ~1mm offset between Pre-Target and Target Hall alignment



NuMI Estimate of POT

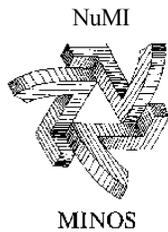


Created from datalogged ACNET data



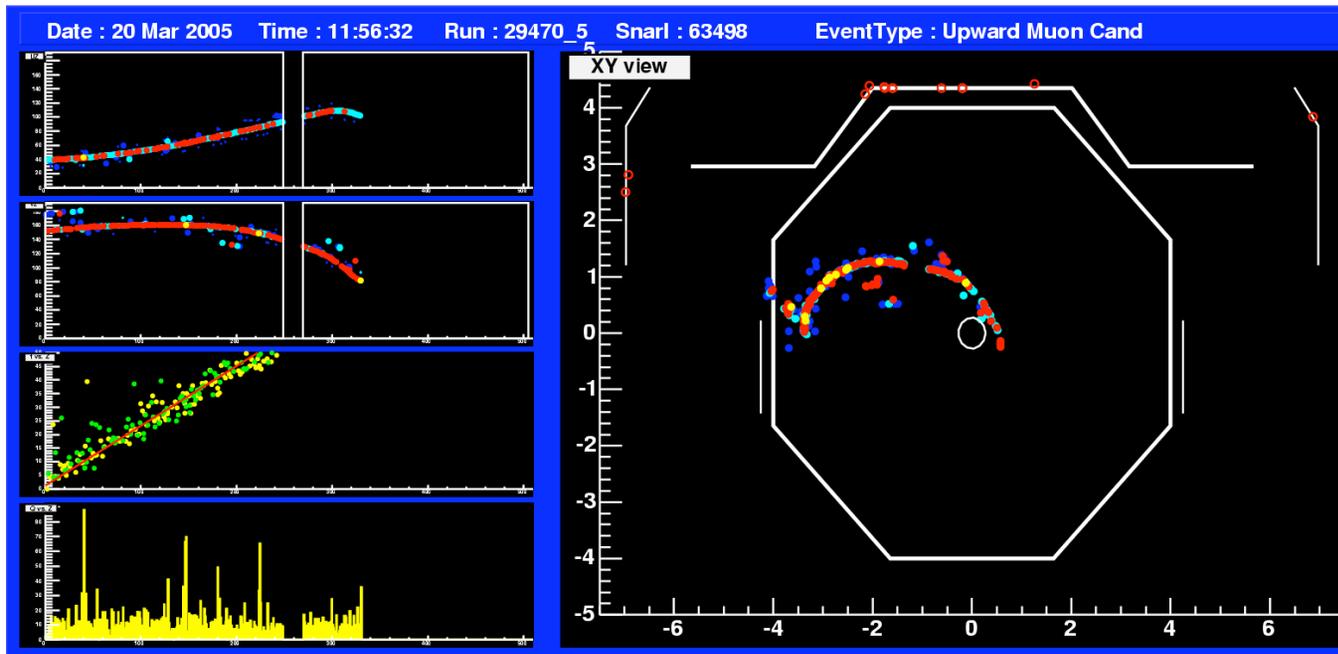
Detector Status

- Detectors ran efficiently during the past week.
 - « Defined as 8:00 Monday to 8:00 Monday.
- At the moment, we are able to report the weekly uptime as a fraction of clock time.
 - « Near detector 98%
 - « Far detector 94%
 - * Mostly due to working on setting up for B-H curve measurement.
- Some maintenance items waiting for appropriate moments.



Rock Muon Candidate from Far Detector

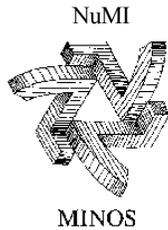
R. Plunkett
Fermilab All Experimenters
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Likely interaction in cavern wall – 13 GeV muon

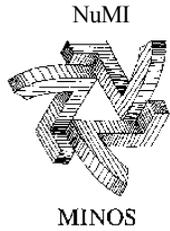
Found by process looking at online data

Timing, angles consistent with beam spill and direction.



Planned Maintenance

- We'll use planned downtime to accomplish maintenance at both near and far detectors.
- Far items currently on list:
 - « Complete B-H curve studies using Bdot system.
 - « Periodic check of dynode thresholds that serve as lowest level trigger.
 - « Modifications to light injection calibration
 - « Other smaller jobs if possible.
- Near items currently on list:
 - « Repair small number of electronics channels
 - « Find light injection problem in two planes.
 - « Other smaller jobs if possible.



Upcoming Plans

- Continue data-taking with 24 hour shift coverage
- Look for more events in far detector
- We plan to move target to “pseudo HE” position for about three shifts to look at effect on neutrino spectrum in near detector and study beam systematics.
- This starts our normalization study before highest intensity comes. (Total in this configuration limited by collaboration run plan).