



NuMI/MINOS Update
Fermilab All Experimenter's Meeting
20 June, 2005

Sam Childress



NuMI/MINOS –13-20 June '05

S. Childress – MINOS
All Experimenter's Meeting
20 June 2005

-
- Efficient data collection for MINOS
 - « Minimal detector downtime (Live times – ND 98.7%, FD 98.8%)
 - 2 recurring problems – now addressed, no data loss
 - « Spill server – sends each pulse spill info from ND to FD over network. Problem for several days. **GPS spill signal always present – but added work to establish FD beam spill information**
 - « Several trips on MINOS area HVAC chiller
 - Target remains stable (He backpressure containing water leak)
 - « Running with target in ~ Low Energy position (LE10)



NuMI Beam Downtimes

13-20 June

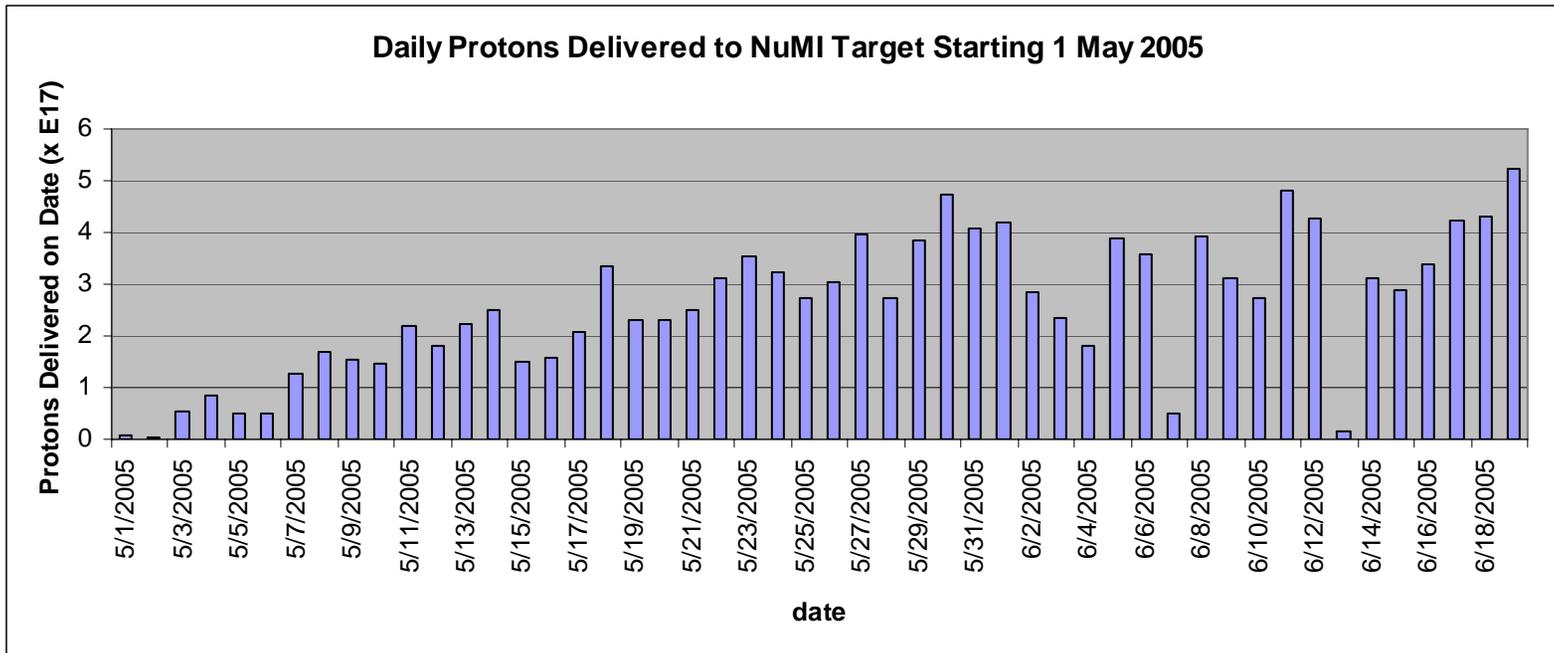
S. Childress – MINOS
All Experimenter's Meeting
20 June 2005

-
- V100 (C-Magnet) cable problem reported by Dixon at last week's AE meeting.
 - « Inspections for similar cable/tray installation problems is ongoing. Nothing else seen to date.
 - Follow-up downtime from LCW valve for V100 left closed after exiting tunnel
 - « **ESSENTIAL** to do detailed walk-thru tunnel inspection in region where work is done!
 - V108 power supply SCR failure Tues 14 June.
 - « A major cause of downtime was that several spare SCR's were found to be bad. AD/EE is evaluating the cause for this, and will implement a solution



Protons on Target since 1 May

S. Childress – MINOS
All Experimenters' Meeting
20 June 2005



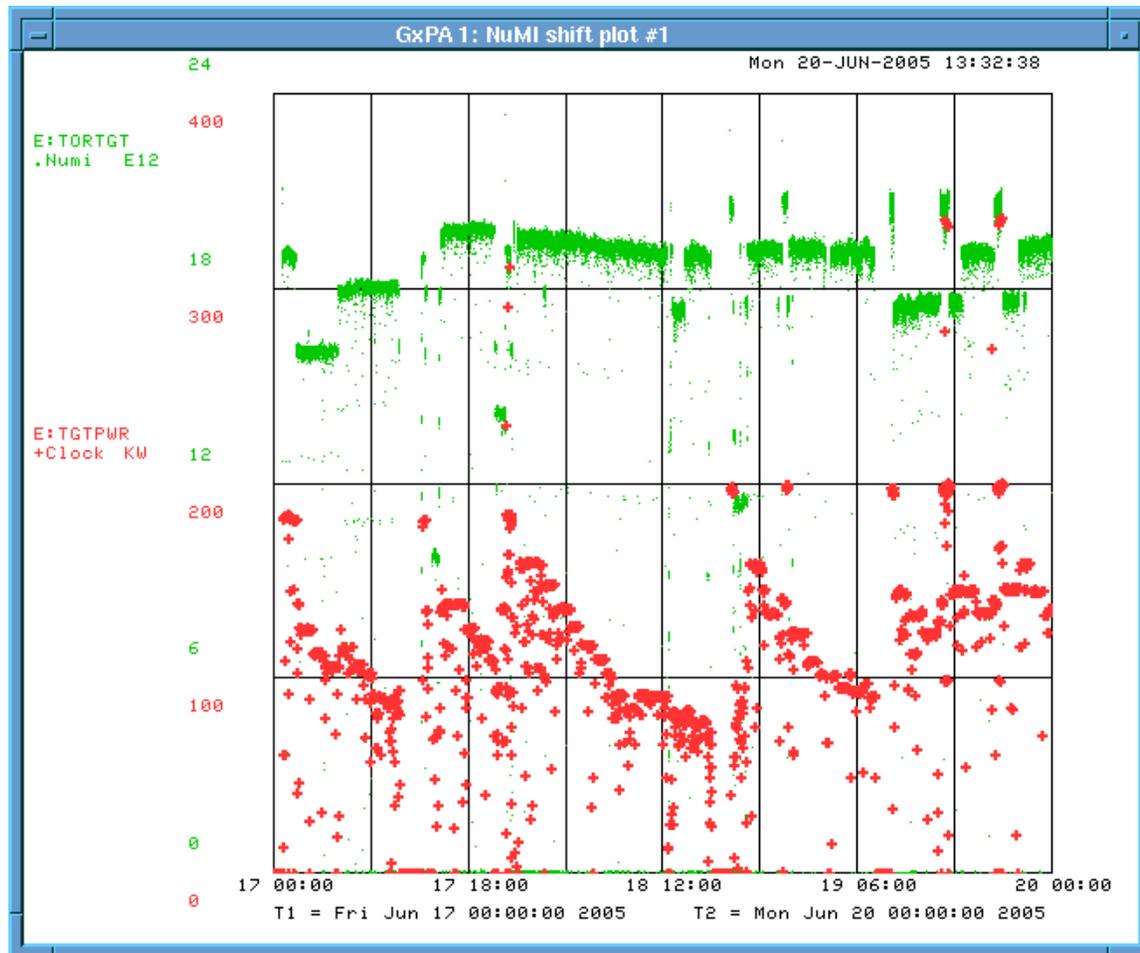
1.3E19 POT since 1 May



Beam Power (kW)

Friday - Sunday

S. Childress – MINOS
All Experimenter's Meeting
20 June 2005





NuMI/MINOS Protons

– Near Term

S. Childress – MINOS
All Experimenter's Meeting
20 June 2005

-
- Sunday 19 June – $5.24E17$ POT – is the best to date for us.
 - « Maintaining fast PBAR stacking rate, achieved by transfers to Recycler when Stack is ≥ 60 mA, helps us considerably
 - « Mostly stable running in Mixed Mode (with stacking) at 10 Booster turns for NuMI; gives $\sim 19.5E12$ ppp.
 - Next beam power increments
 - « Implement NuMI running during TeV shot set-up. Look to begin this during this week.
 - * Currently have ~ 3 hours of downtime each day from this.
 - * NuMI running during Recycler shot setup has been very good for us.
 - Have been getting $\sim 20E12$ per pulse at ~ 2 sec rep rate.
 - « Take next intensity step to 11 Booster turns in mixed mode.
 - * Gives $\sim 21.5E12$ to NuMI / MINOS in Mixed Mode