



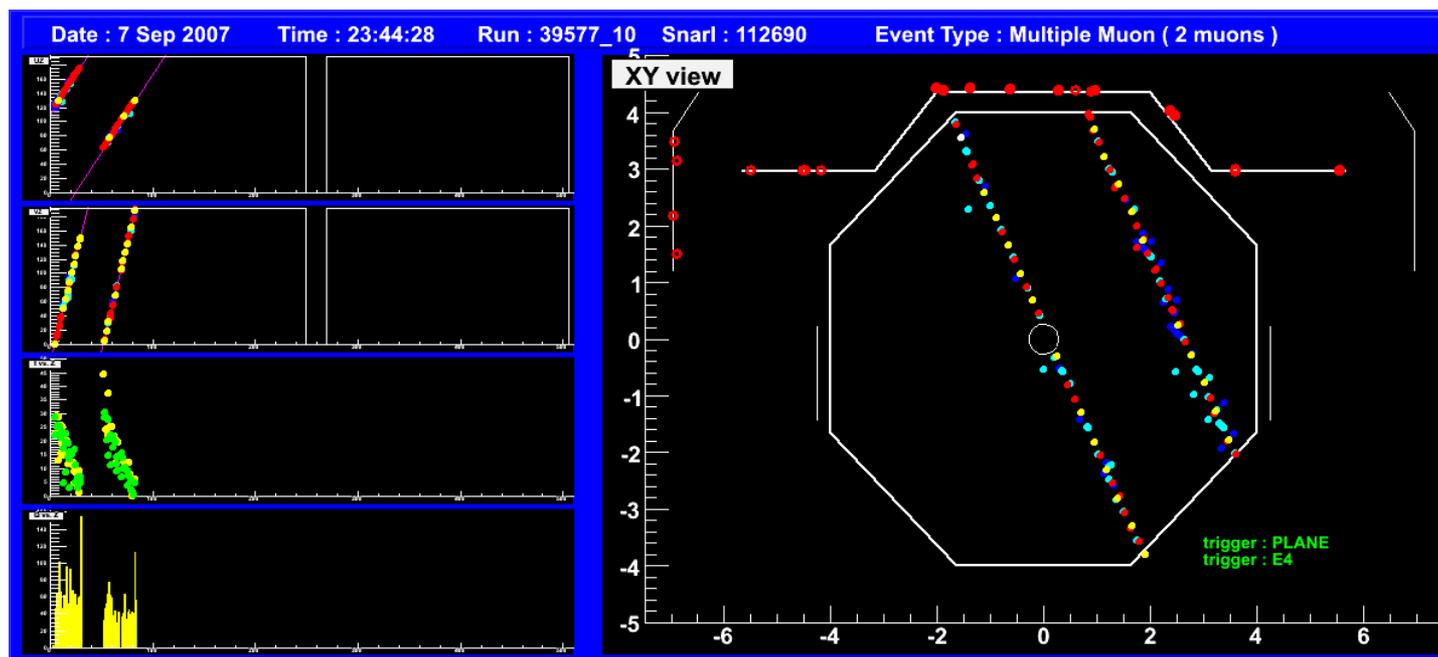
- Shutdown Work Progress:

Detectors and Beam Systems



# NuMI-MINOS Status Report — S. Childress

- FAR DETECTOR: Alec Habig
- B-field mapping studies done
- DAQ computers upgraded
- Rack, chiller, UPS system maintenance completed
- Aggressive debugging of the few flaky channels
- Data taking for cosmics, atmospheric neutrinos continues, 83% live overall during shutdown

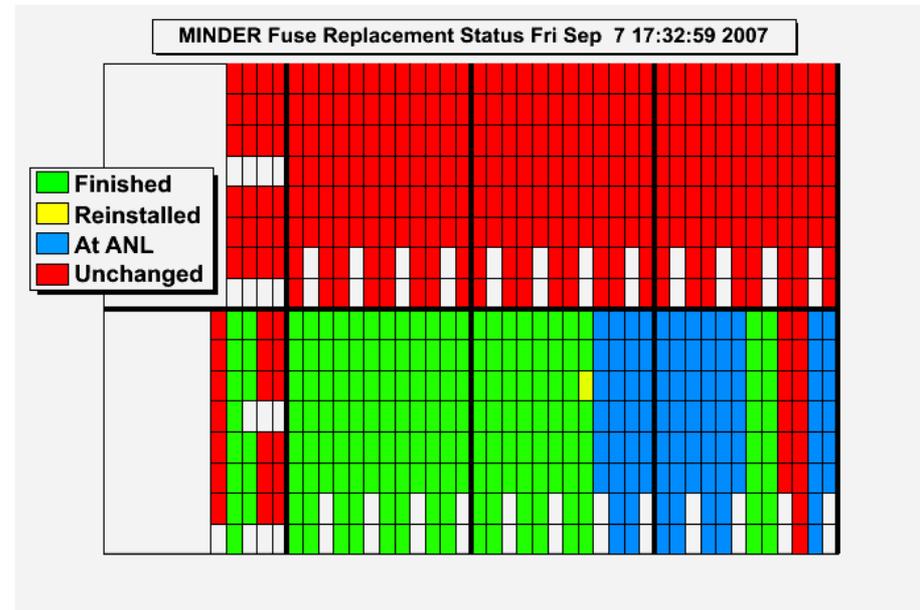


A double cosmic ray  $\mu$  in the MINOS Far Detector



# NuMI-MINOS Status Report – S. Childress

- NEAR DETECTOR: Alec Habig
- Since beam halt:
  - Additional reversed-field cosmics data taken
  - B-field mapping studies done
- Not taking data since early August
  - Troublesome fuses on Minder cards under-going mass replacement with reset-able polyfuses
  - Three crates at a time pulled, sent to Argonne
  - ~30% complete
  - Reliability upgrade





# NuMI-MINOS Status Report – S. Childress

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- BEAM SYSTEM EFFORTS:      Mike Andrews Shutdown Coordinator
- Tritium baseline measurements with no beam, but target hall configuration and air systems remaining in beam mode
  - July 17 - August 20
- Drain cleaning completed in all underground areas
- Target Pile Dehumidification Installation Project:
  - Completion of contractor efforts in target hall projected ~ Oct 3
- Horn 2 leak identified and repair preparations in progress
  - Air leak at the ceramic insulator on the suction line (same problem as fixed during Spring 2006 shutdown). Will be repaired using new design ceramic isolator assembly [*as presented in July 16 AEM*]
- Installed upgraded FNAL profile monitor prototype



# NuMI-MINOS Status Report – S. Childress

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- BEAM SYSTEM EFFORTS: (cont)
- Addressing high leakage current with HV101 magnet string
  - Problem isolated to 1<sup>st</sup> dipole (of 6) and to the aisle side of the magnet. **Today's update:** Problem determined not to be with one of ceramic insulators Will require a magnet replacement. Spare checked out and installation equipment being readied.
- Planning toward filling decay pipe with helium in place of vacuum
  - Motivation is risk mitigation for the decay pipe window; an increasing concern due to the severe environment of target hall chase. Would cost ~ 3% in flux at MINOS far detector.
  - Efforts ongoing for He fill and monitoring system, ODH analysis, safety assessment documentation, understanding of radiation effects, etc.