



MINOS+ Status Report



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All Experimenters' Meetings
September 23 2013



Near Detector



- **Cold/Warm/Hot channels**
 - Replaced two minders last Thursday during a beam downtime
 - Two new problem channels developed since
 - Will keep trying replacing hardware during beam downtimes, if we can wait
- **Low rate minders (0-18-6, 0-20-1)**
 - Only small fraction of data is affected
 - Confirmed that correct voltages are present at both output spigots on the back of the HV Mainframe AND at the PMT's input.
 - This suggests issues with PMT/ Alner box, which we are planning to replace
 - Found 2 spares for each of the two types of Alner Boxes we need (Type 4 & 5)
 - Installed one Type 4 box in MINERvA PMT's test setup (dark box) at Lab G
 - Checked signals on few output channels: we'll like to measure gain as well
 - We'll also practice parts of the replacement procedure, to minimize installation time



Near Detector



- ND new DAQ is running very well
- Beam-on new-DAQ validation in progress
 - Validation was done over the summer on cosmic data
 - Taking beam data with old-DAQ since Thursday afternoon
 - Reconstruction and DQ group will have the DST tonight and checks done by tomorrow
 - We do not expect problems
 - We'll then remove the old-DAQ hardware and send the parts to Sudan to be used as spares
- Email alarms for MINOS DAQ
 - Installed a process to watch the DAQ status both at ND and FD to alert in case of failure
 - We'll add SMS to DAQ experts' cell phones
 - This adds another layer of notification/protection from data loss



Far Detector



- The FD DAQ ran well over the past week
 - Except for two crashes on Branch 1
 - Moved the PVIC hardware from Branch1 to Branch 0
 - The problem moved to Branch 0; re-seated boards
 - Had been running since
- Three good spares CPUs (RIO3) are on site
- Regular detector maintenance always underway
 - Replaced VMM card (Crate 4, VARC 0)
 - Special CI run taken
 - Monthly LI Gain Curve taken
 - Changed HV card today during beam downtime



MINOS+ Status



- We are taking good beam data
- Regular shifts are underway
 - Shifts are covered for the next two months.
- New Remote Operation Center
 - Tufts is currently taking the three-day shadow shifts (Mon-Wedn) required to obtain qualification.
 - Once certified, Boston-based MINOS+ institutions, Tufts and Harvard, will be able to take official MINOS+ shift remotely.