



MINOS+ Status Report



Xinjie Qiu

All Experimenters' Meetings

November 25, 2013



Near Detector



- MINOS+ DAQ is running very well.
- Magnet Tripped on Nov. 12 & Nov. 25
 - DCS alarms
 - Magnet trip, LCW (Low Conductivity Water) Pumps OFF, Booster Pumps OFF, Multiple Wiener PS in alarm
 - Magnet could only be powered on by resetting the LCW PLC (Programmable logic controller), then restarting the LCW pump, the Booster pump
 - The LCW PLC system was wrongly reporting that the expansion tank water level was low
 - It is due to a faulty level indicator that needs to be replaced
 - Parts order was placed, will arrive in two weeks
 - For the moment, the readout of the tank level on the PLC is bypassed so it wouldn't trip the magnet
 - Both MINOS and Minerva shifters help watch the water level from a webcam and report it in the eLog.
 - So far there is no indication of water tank leaks,



Near Detector



- CAPID errors
 - High rate 2-11-2-4
 - We saw errors in some other channels infrequently
 - Restarting RS24 sequence clears the errors in those other channels.
 - Keep running during low intensity special run
 - Plan to replace this minder on Wednesday.
- RPS fan Failure warning in two racks
 - Rack M2 had “Fan Failure” RPS warning
 - Remotely reset via the "rpsbox" program
 - But we can not clear warnings in rack M4
 - Maybe a real fan failure problem
 - Keep running during low intensity special run
 - Plan to replace it on Wednesday.



Far Detector



- FD DAQ glitch last Friday
 - Branch 1 had gone into error state.
 - Reset the branch and restarted the Run.
 - Lost about 31 minutes.
- Secure ESNET tunnel is down between Soudan FD and FNAL
 - Since about 08:04 am.
 - Spill Server and Beam Servers can not be connected from FD
 - Possibly to recover spill data from data base later
 - UMN reported TelecomB-GR-01 has a hardware problem. No spares available. Parts were overnight shipped, expect to arrive tomorrow
 - Little impact on the low intensity special run, since less one neutrino event was expected during 48 hours



MINOS+ Status



Start Date/Time	End Date/Time	Near Detector		Far Detector	
		POT Fraction	Live Time Fraction	POT Fraction	Live Time Fraction
9/2/13 00:00:00	9/9/13 00:00:00	66.9%	98.8%	0.2%	1.6%
9/9/13 00:00:00	9/16/13 00:00:00	93.5%	92.7%	47.7%	46.8%
9/16/13 00:00:00	9/23/13 00:00:00	92.7%	92.3%	84.7%	81.0%
9/23/13 00:00:00	9/30/13 00:00:00	96.2%	95.3%	93.5%	94.1%
9/30/13 00:00:00	10/7/13 00:00:00	94.7%	94.4%	98.0%	98.3%
10/7/13 00:00:00	10/14/13 00:00:00	99.1%	85.0%	99.5%	87.4%
10/14/13 00:00:00	10/21/13 00:00:00	79.7%	89.7%	86.9%	99.9%
10/21/13 00:00:00	10/28/13 00:00:00	70.3%	58.5%	99.8%	95.8%
10/28/13 00:00:00	11/4/13 00:00:00	98.8%	97.8%	99.9%	99.5%
11/4/13 00:00:00	11/11/13 00:00:00	98.4%	95.5%	95.7%	96.9%
11/11/13 00:00:00	11/18/13 00:00:00	91.8%	92.7%	99.9%	99.8%
11/18/18 00:00:00	11/25/13 00:00:00	92.4%	92.2%	99.5%	99.6%



MINOS+ Status



- We are now taking low intensity (6 batches and 2 turns, $3E12$ protons/pulse) special run data for the next 2 days
- Detectors are running great!
- Two institutions have started the ROC certification process last week
 - College of William and Mary
 - University Minnesota - Twin Cities