



MINOS+ Status Report



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All Experimenters' Meetings
January 13, 2014



Near Detector

General



- MINOS+ DAQ and detector run very smoothly during the Holidays weeks and the past week

Electronics

- RPS Fan Failure warning in rack FEV-207
 - Was on throughout the two holidays weeks
 - Remote RPS resetting did not help
 - Waiting for a failure or beam downtime to intervene
 - Fixed during a parasitic access for MINERvA, by manually resetting the RPS unit
- One Hot Minder (3-18-0) appeared briefly
 - Fixed restarting the run sequence
- One Minder (0-17-7) shows an odd pattern (border) of hot Menus
- Another Minder (0-18-4) shows many ‘Wrong Datatype’ errors
 - we’ll replace these two boards the next opportunity



Near Detector

DAQ



- OM processes crashed twice and were restarted by the DAQ expert on call
- Added a new DAQ script, watchTarget, that looks for ≥ 15 minutes gaps in POT for NuMI. If a gap is found, an e-mail is sent to numi-beam-notify@fnal.gov so people are alerted (implemented by Bill Badgett)
 - Subscription to this mailing list is open to everyone

Magnet/LCW

- The LCW PLC had been re-programmed in early December by Tom Zuchnik to wait 30 seconds (after any given variable glitch's) to drop the magnet's permit
- Averted two potential magnet's power down due to water level tank readout dropping to zero



Near Detector



Magnet/LCW



- The NuMI chiller tripped on Monday Jan 06, at 6:04 am due to the very cold outdoors temperatures (-16F & wind chill of -40F)
- With the chiller off, the LCW temperature increased up to 77F (normally 66F) and several electronics Minder crates tripped
- We powered down the MINOS magnet to be safe
- After some consultation, it was first decided to switch back to the old ground water system which was not without risks (contaminants in water)
- Fortunately the chiller recovered by itself around noon due to mid-day soothing -10F !
- Given that the forecast for Monday-Tuesday night was a bit better than the night before, we switched the magnet back ON, recovered the MINOS DAQ and went back taking data by 2:45 pm
- Total beam loss was about 6 hours
- Some protection for the chiller is being worked on by FESS



Far Detector



- FD DAQ and Detector also had been running very smoothly during the Holidays weeks and the past week
- Took a CI special run on Dec 20 during two hours of beam downtime
- Some HVAC1 chiller warnings due to very frigid temperatures
- RPS warning for Crate 9: fixed resetting the RPS output latch
- Some ETC (Event Timestamp Controller) errors in Crate 4: fixed by replacing some flickering fluorescent lights near the crate (noise reduction)



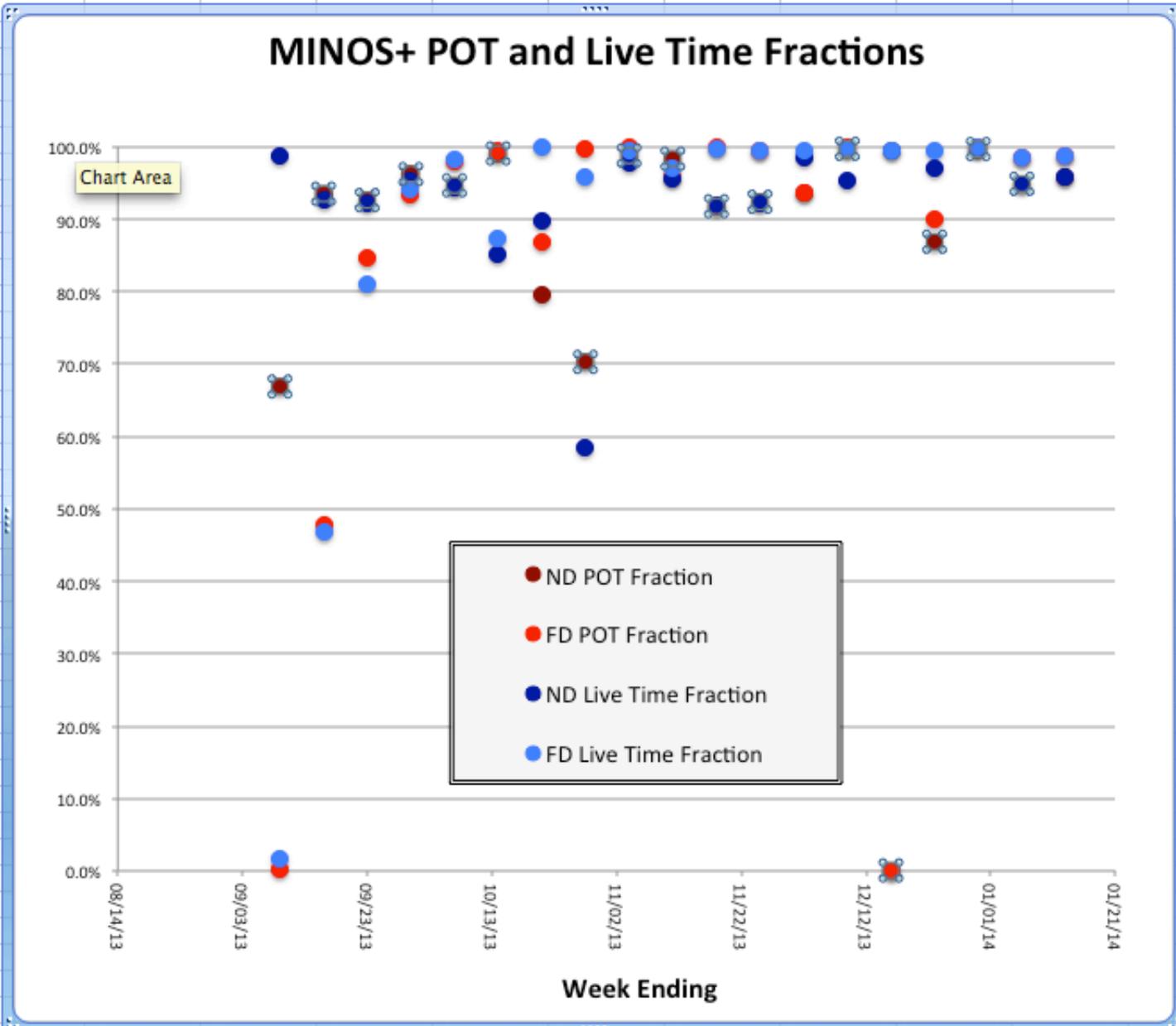
MINOS+ Status



Near Detector

Far Detector

Start Date/Time	End Date/Time	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%
11/18/13 00:00:00	11/25/13 00:00:00	92.4%	92.2%	99.5%	99.6%
11/25/13 00:00:00	12/2/13 00:00:00	93.6%	98.6%	93.6%	99.5%
12/2/13 00:00:00	12/9/13 00:00:00	99.7%	95.3%	99.9%	99.6%
12/9/13 00:00:00	12/16/13 00:00:00	0.07%	99.5%	0.07%	99.4%
12/16/13 00:00:00	12/23/13 00:00:00	86.9%	97%	90%	99.5%
12/23/13 00:00:00	12/30/13 00:00:00	99.7%	99.7%	99.9%	99.9%
12/30/13 00:00:00	01/06/14 00:00:00	94.9%	94.9%	98.5%	98.5%
01/16/14 00:00:00	01/13/14 00:00:00	95.9%	95.9%	98.7%	98.8%





Minos+ Status



- Shifts mostly covered for the next three months
- Taking very good data
 - Many thanks AD !