



# MINOS+ Status Report



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All Experimenters' Meeting  
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# Near Detector



## DAQ



- Currently running fine
- Investigating some ntp warnings from CPU in timing crate (NOT affecting data quality)

## Electronics/Detector issues

- One persistent hot channel since yesterday
  - Need to replace the Minder board
- Intermittent HV alarms from one HV channel in MainFrame 10, card 11
  - If it worsens, we'll replace the card



# Far Detector



## DAQ

- Running well

## Electronics/Detector news

- No issues
- Taken a CI special run this morning



# Not so quiet over the Holidays: part 1



## Christmas week: FD

- FD SM1 Field point controller broke on Tuesday Dec 22
- Replaced with spare but this also failed the following day, Dec 23
- Mine crew made access in overtime but could not get it fixed
- No mine access was then possible until the following Monday, Dec 28
  
- While trying to start the DAQ, discovered that Puppet (the automatic admin software update program) had overwritten the FD /etc/ hosts.allow file and the CPUs could not connect/send data to the DAQ computers
- The file was changed by hand by Bill Badgett and a permanent fix was made by the sys admins on Dec 28-Dec 30.
  
- Lost 4 days of beam: LiveTime ~ 43%.



## Not so quiet over the Holidays: part 2



### **New Year Week: ND**

- HV errors in LeCroy MainFrame 10 started on Tuesday Dec 28
- Cleaned Controller from dust on Dec 30 to no avail
- Swapped in a spare controller but we were unable to get to work
- Called PREP for another controller to find out they had none on hand (status has evolved since)
- On Dec 31 we decided to give our spare another try and this time we got it to work and cleared the HV errors
- Basically has been working since, but we are getting now a few errors from card 11
  
- Lost ~2 days of data. LiveTime ~80%

Also, AD Networking Issue on Monday Dec 28 : no Horns currents recorded for about 6 hours. Same happened today for about 2 hours.



# MINOS+ Status



Start Date/Time	End Date/Time	Near Detector		Far Detector	
		POT Fraction	Live Time Fraction	POT Fraction	Live Time Fraction
10/26/2015 00:00:00	11/2/2015 00:00:00	97.9%	97.6%	97.6%	98.1%
11/2/2015 00:00:00	11/9/2015 00:00:00	99.5%	99.5%	91.5%	93.4%
11/9/2015 00:00:00	11/16/2015 00:00:00	99.2%	98.9%	99.7%	98.9%
11/16/2015 00:00:00	11/23/2015 00:00:00	88.7%(*)	85% (*)	99.8%	99.9%
11/23/2015 00:00:00	11/30/2015 00:00:00	99.6%	99.4%	99.9%	99.9%
11/30/2015 00:00:00	12/7/2015 00:00:00	95.6%	95.4%	99.9%	99.6%
12/7/2015 00:00:00	12/14/2015 00:00:00	99.6%	99.6%	99.7%	99.4%
12/14/2015 00:00:00	12/21/2015 00:00:00	99.7%	99.5%	99.8%	99.5%
12/21/2015 00:00:00	12/28/2015 00:00:00	99.7%	99.7%	43.4%**	43.6%**
12/28/2015 00:00:00	1/4/2016 00:00:00	81%(@)	85%(@)	70%**	71%**
1/4/2016 00:00:00	1/11/2016 00:00:00	97.5%	97.1%	99.8%	99.8%

(\*) Intermittent HV bad readings: DQ flags whole subruns as bad, hence lower LiveTimes.

\*\* Bad Field Point controller

@ Bad HV Controller



# MINOS+ ND Status



ND POT fraction and Live Time Fraction





# MINOS+ FD Status



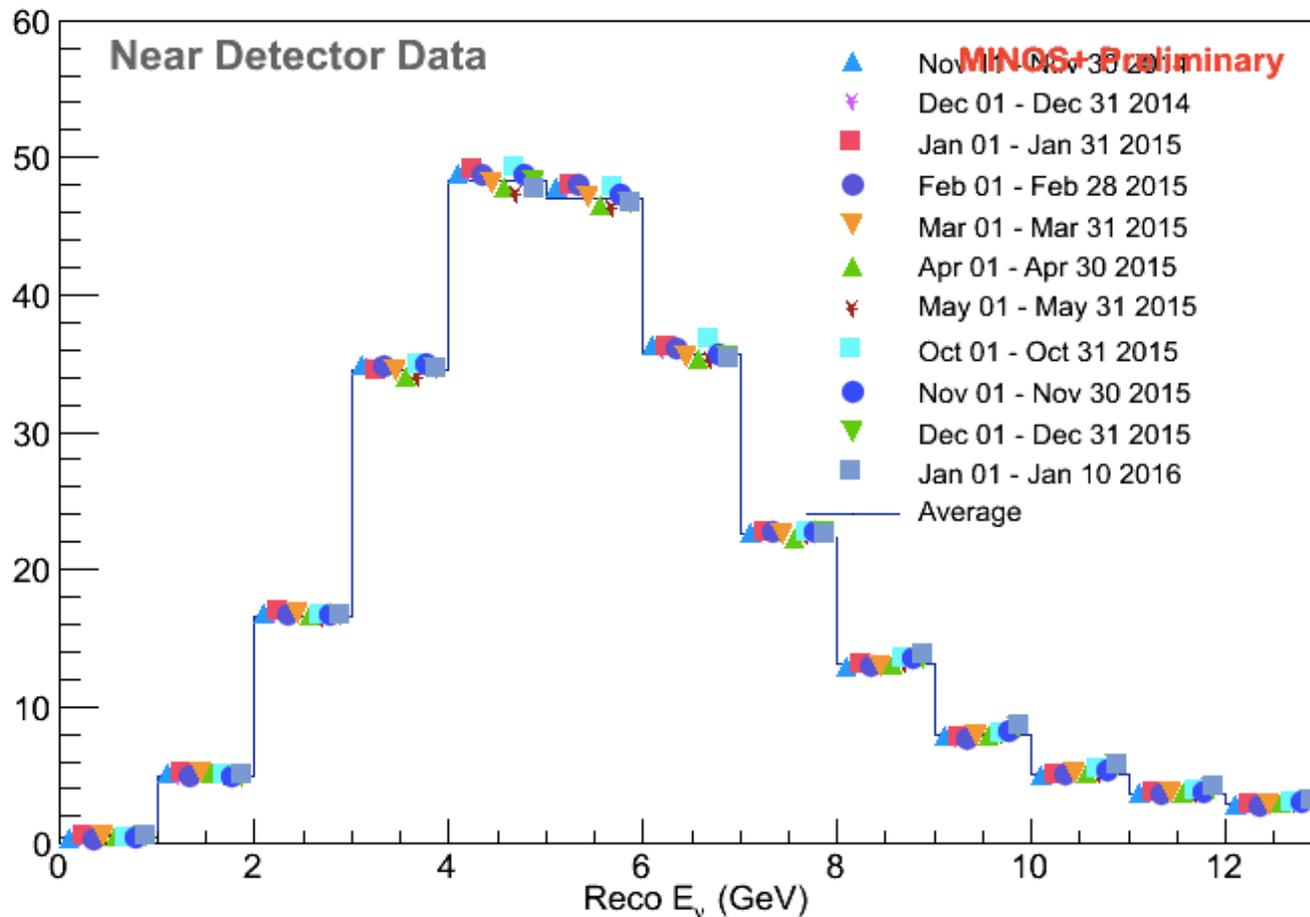
FD POT Fraction and Live Time Fraction





# Energy Spectrum

## Neutrino Energy Spectrum Stability (PQ and NQ)

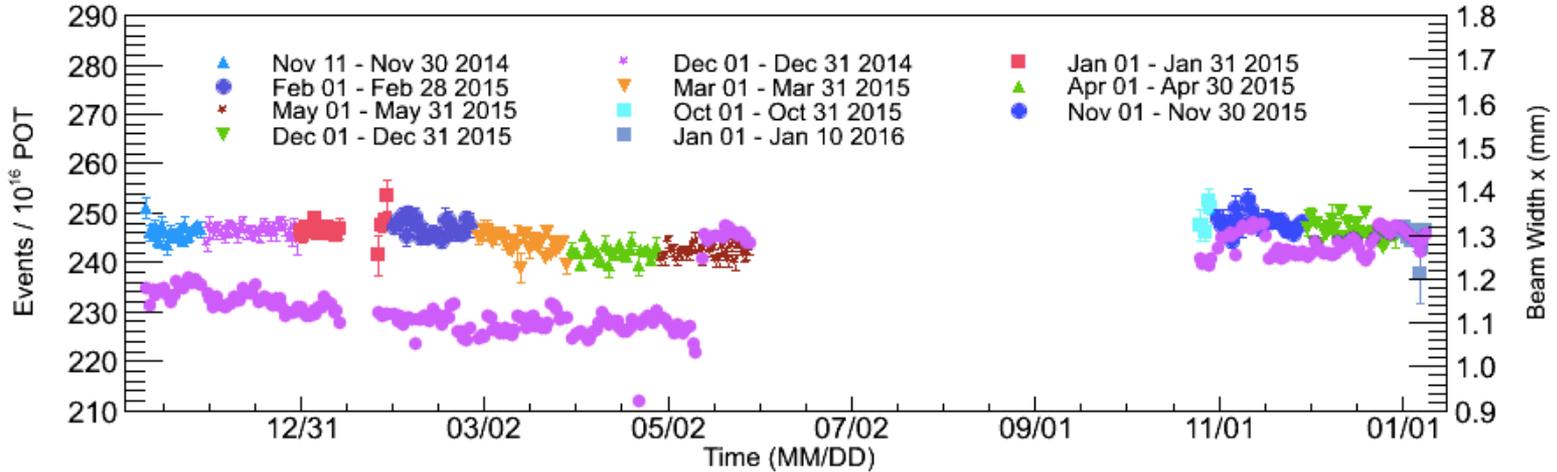




# Events/POT + Intensity



Neutrino Events Per POT v.s. Time ( $E_{\nu} < 14 \text{ GeV}$ )



Neutrino Events Per POT v.s. Time ( $E_{\nu} > 14 \text{ GeV}$ )

