MINOS+ Status Report

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All Experimenters' Meeting
May 2, 2016

Near Detector

NEAR DETECTOR

DAQ

- Two DAQ crashes recovered within minutes

Electronics/Detector

- PIN diode noisy channel(s) in Crate 0:
  - Up to 3x avg rate, infrequently, difficult to debug
  - Data are OK
  - Investigating how to repair this
- Two very hot channels
  - We'll replace the Minder boards at the next opportunity
  - Bad channels are masked in offline production

Far Detector

DAQ

- No issues: ran well the whole week

Electronics/Detector

- Magnet's Super Module 1 (SM1) tripped on April 28
- Magnet's Super Module 2 (SM2) tripped on April 29
  - Recovered within 20-30 minutes each
  - Not sure yet what caused the trip
- No detector issues
- Taking CI special runs during beam downtimes

MINOS+ Status

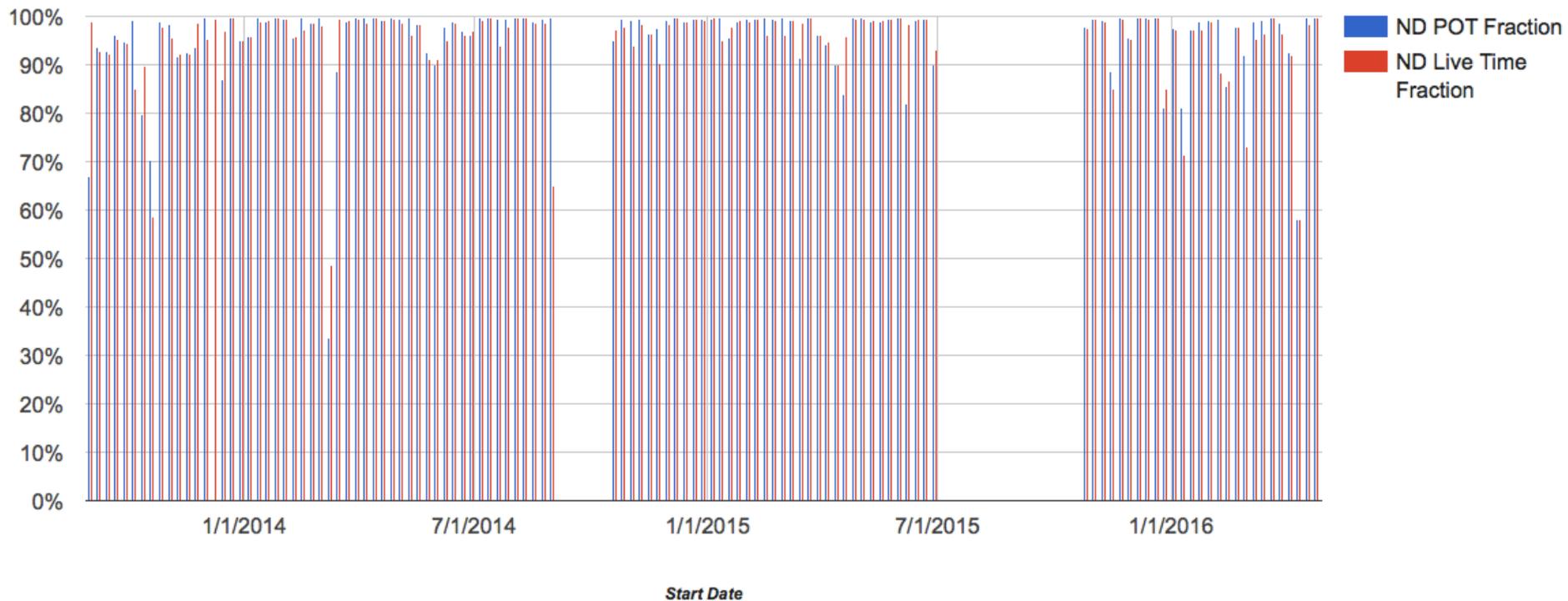| Start Date/Time	End Date/Time	Near Detector		Far Detector	
		POT Fraction	Live Time Fraction	POT Fraction	Live Time Fraction
1/4/2016 00:00:00	1/11/2015 00:00:00	97.5%	97.1%	99.8%	99.8%
1/11/2016 00:00:00	1/18/2016 00:00:00	81.0%(&)	71.5%(&)	92.1%	96.5%
1/18/2016 00:00:00	1/25/2016 00:00:00	97.1%	97.3%	99.7%	99.8%
1/25/2016 00:00:00	2/1/2016 00:00:00	98.8%	97.2%	98.7%	96.5%
2/1/2016 00:00:00	2/8/2016 00:00:00	99.1%	99.8%	87.2%	86%
2/8/2016 00:00:00	2/15/2016 00:00:00	99.4%	88.2%(#)	99.2%	88.3%(#)
2/15/2016 00:00:00	2/22/2016 00:00:00	86%	87%(*)	95%	96%
2/22/2016 00:00:00	2/29/2016 00:00:00	98%	98%	99%	98%
2/29/2016 00:00:00	3/07/2016 00:00:00	91.7%	73%(!!)	92%	92%(!!)
3/07/2016 00:00:00	4/14/2016 00:00:00	99%	95.2%	99.9%	99.7%
3/14/2016 00:00:00	3/28/2016 00:00:00	99.3%	96.5%	99.8%	99.5%
3/21/2016 00:00:00	3/28/016 00:00:00	99.7%	99.7%	99.8%	99.8%
3/28/2016 00:00:00	4/4/2016 00:00:00	98.5%	96.5%	98.3%	98.2%
4/4/2016 00:00:00	4/11/2016 00:00:00	92.4%	91.9%	99.9%	97.9%
4/11/2016 00:00:00	4/18/2016 00:00:00	58%(**)	58%(**)	99.8%	99.8%
4/18/2016 00:00:00	4/25/2016 00:00:00	99.6%	98.3%	99.4%	99.5%
4/25/2016 00:00:00	05/02/2016 00:00:00	99.6%	99.7%	98%	98%

(&) Numi Breaker power glitches (#) GPS/Timing issues (*) Ntp config file owerwitten (!!) ND GPS Timing issues (**) LI issues

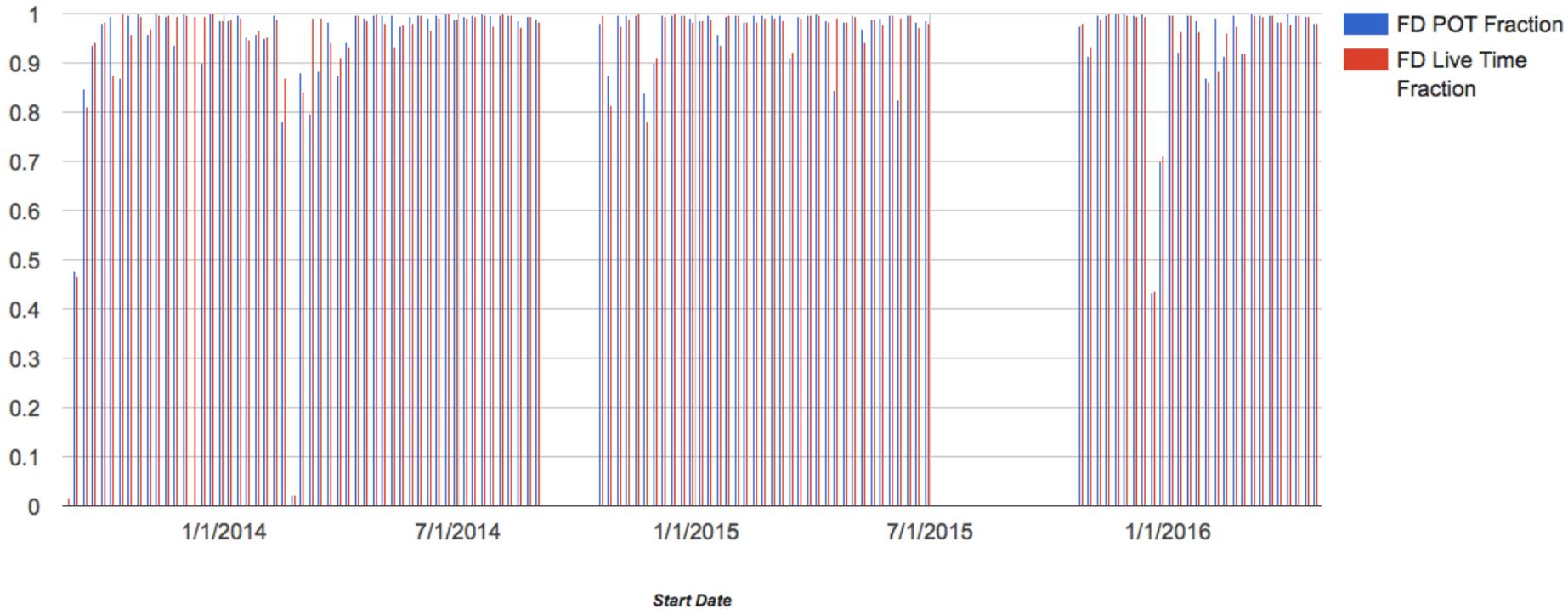# MINOS+ ND Status

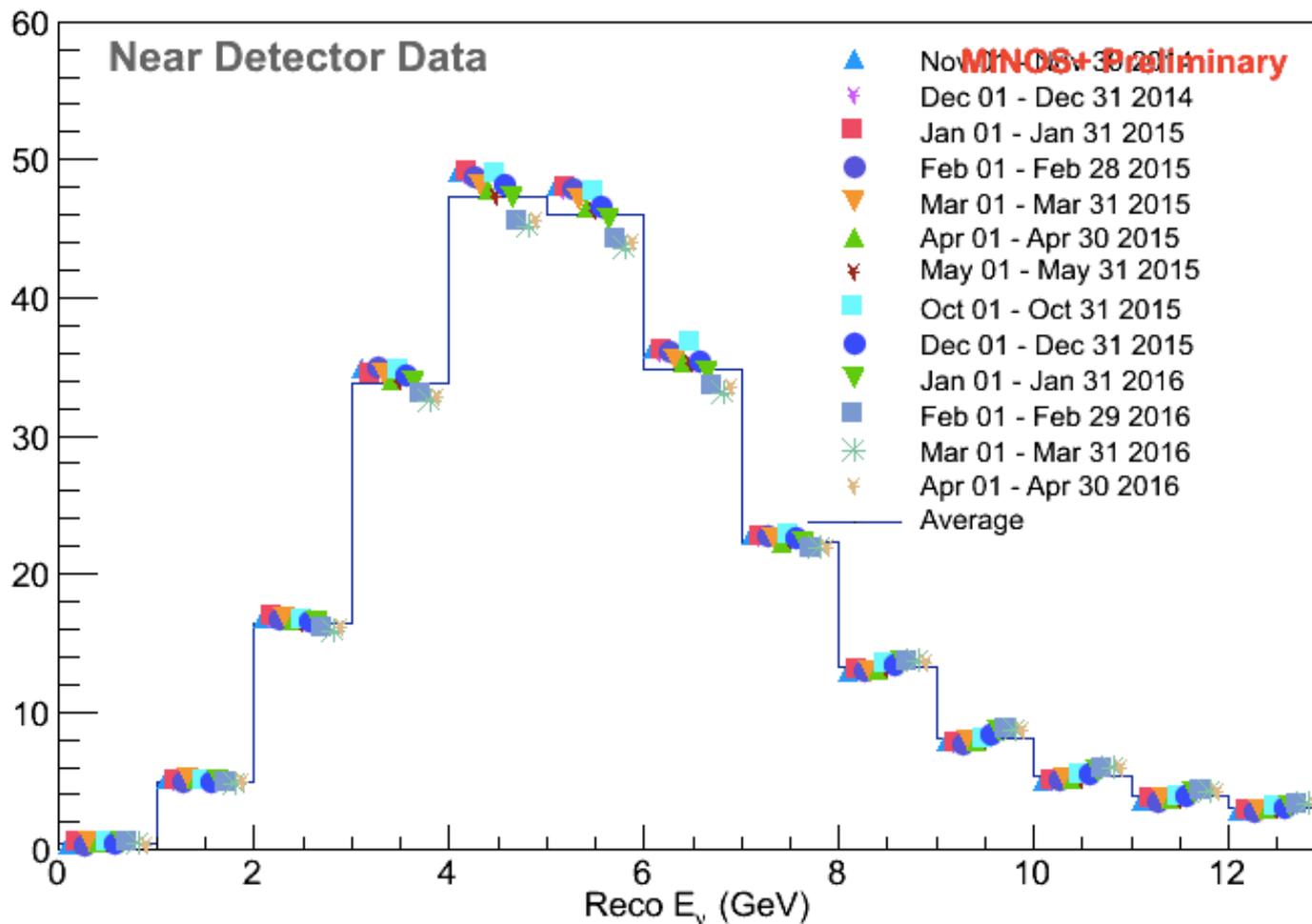**ND POT fraction and Live Time Fraction**

MINOS+ FD Status

FD POT Fraction and Live Time Fraction

Energy Spectrum

Neutrino Energy Spectrum Stability (PQ and NQ)

Events/POT + Intensity

Spectrum by Batch!

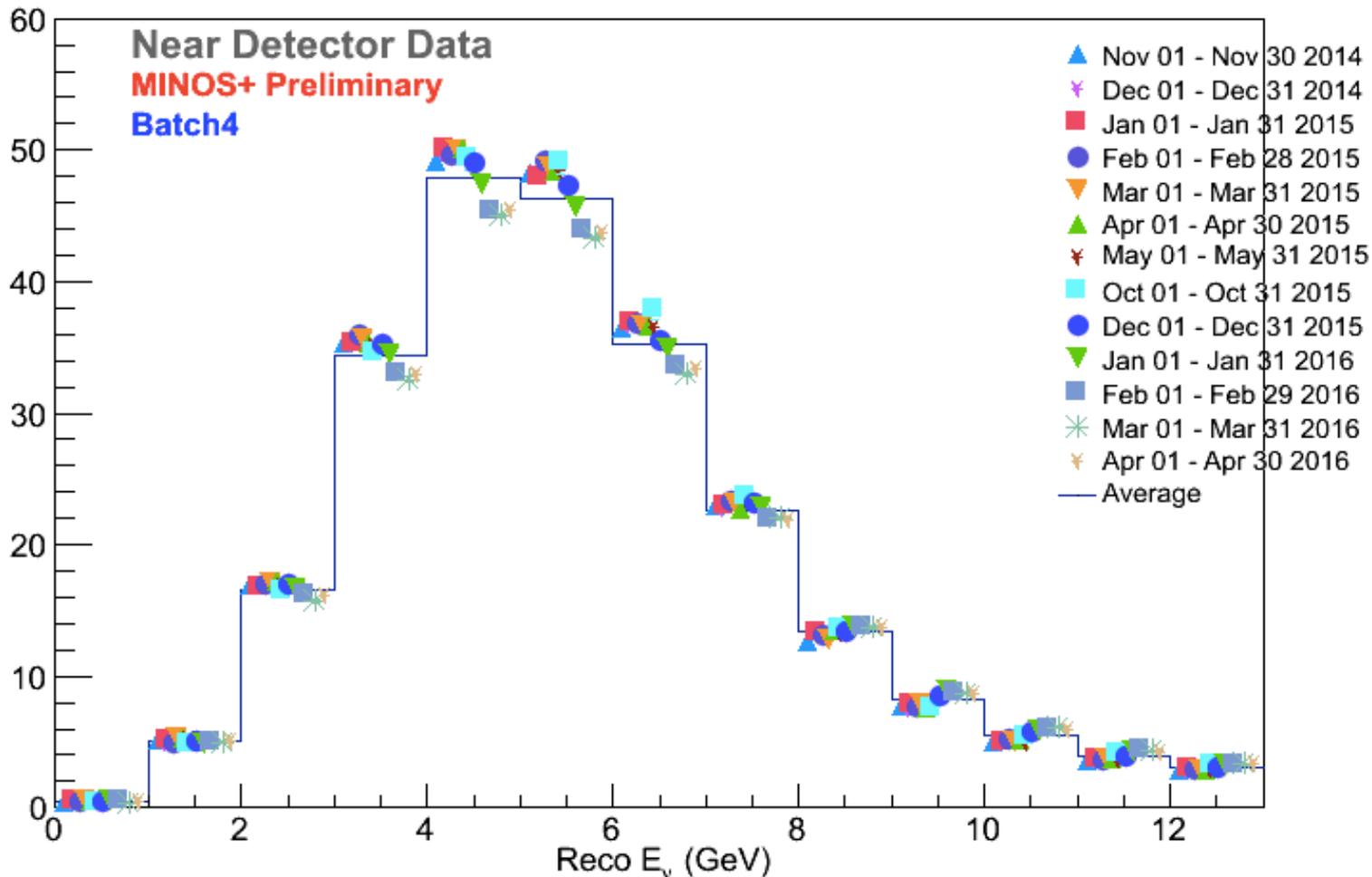http://minos.fnal.gov/DataQuality/BatchPage.php

Energy Spectrum (batch #4)

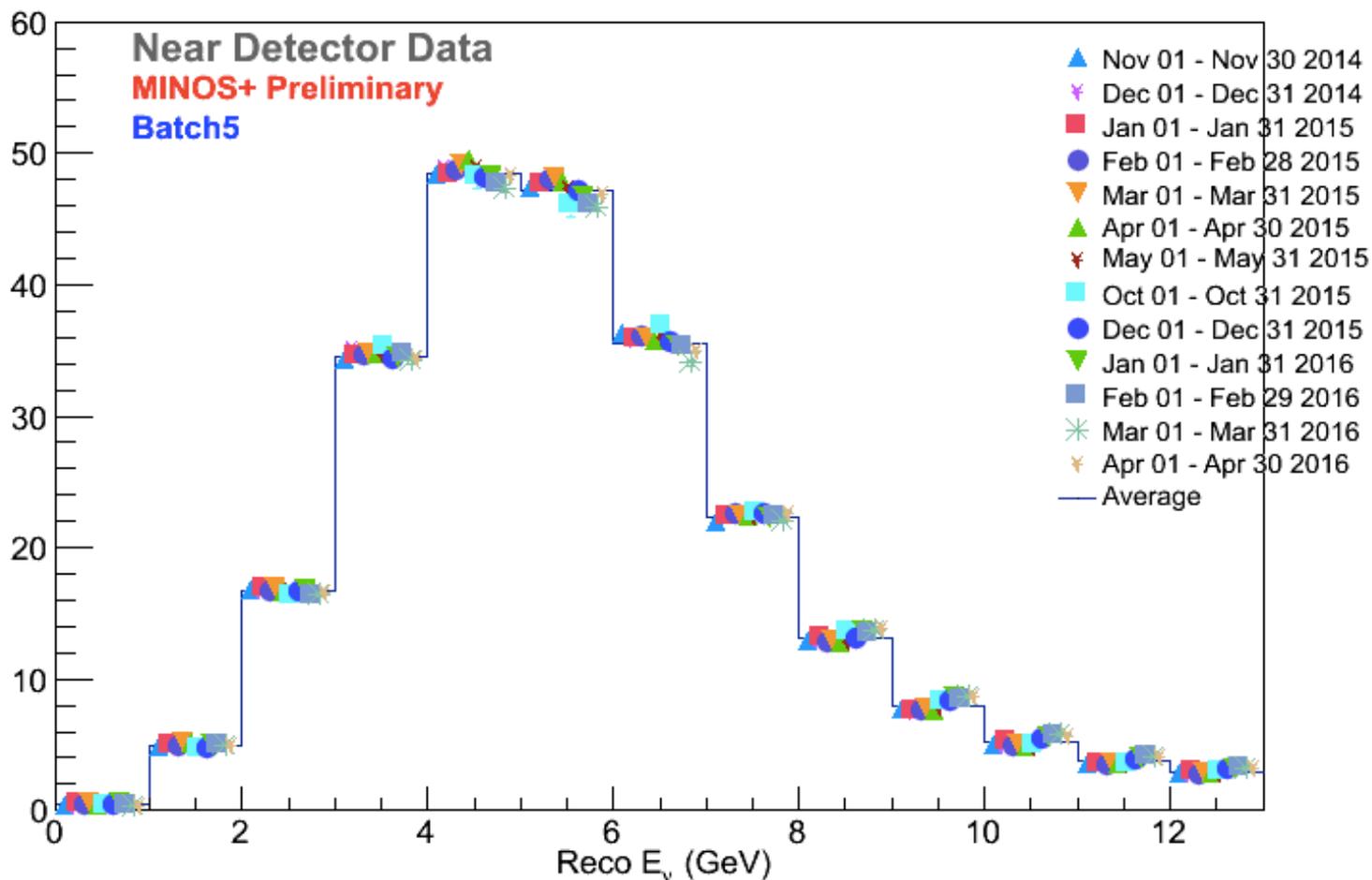Neutrino Selected Batch Energy Spectrum Stability (PQ and NQ)

Energy Spectrum (batch #5)

Neutrino Selected Batch Energy Spectrum Stability (PQ and NQ)

Energy Spectrum (batch #6)

Neutrino Selected Batch Energy Spectrum Stability (PQ and NQ)