NOvA Experiment Status
All Experimenter's Meeting

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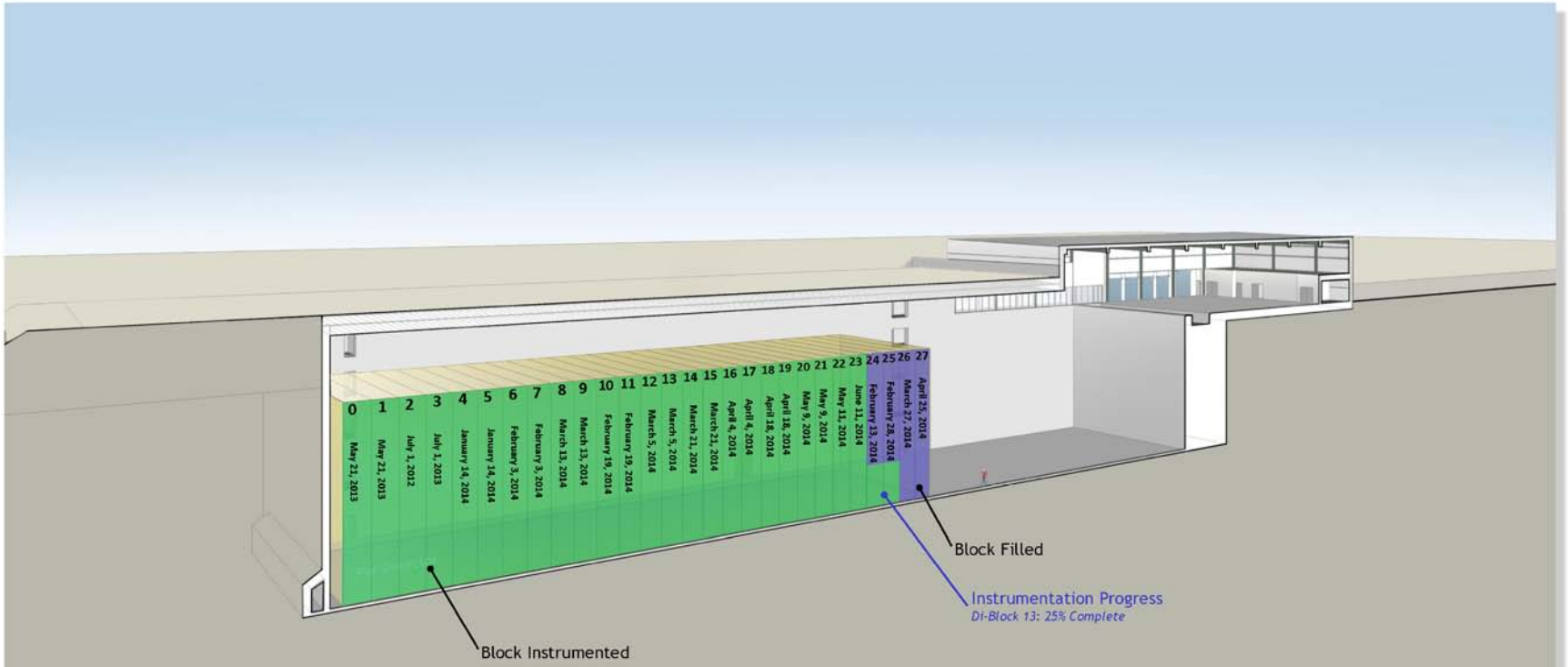
FD: Detector Assembly Progress

The Intensity Frontier

NOvA Far Detector Assembly Progress

Status Date: 16JUN14



14 kilotons = 28 NOvA Blocks

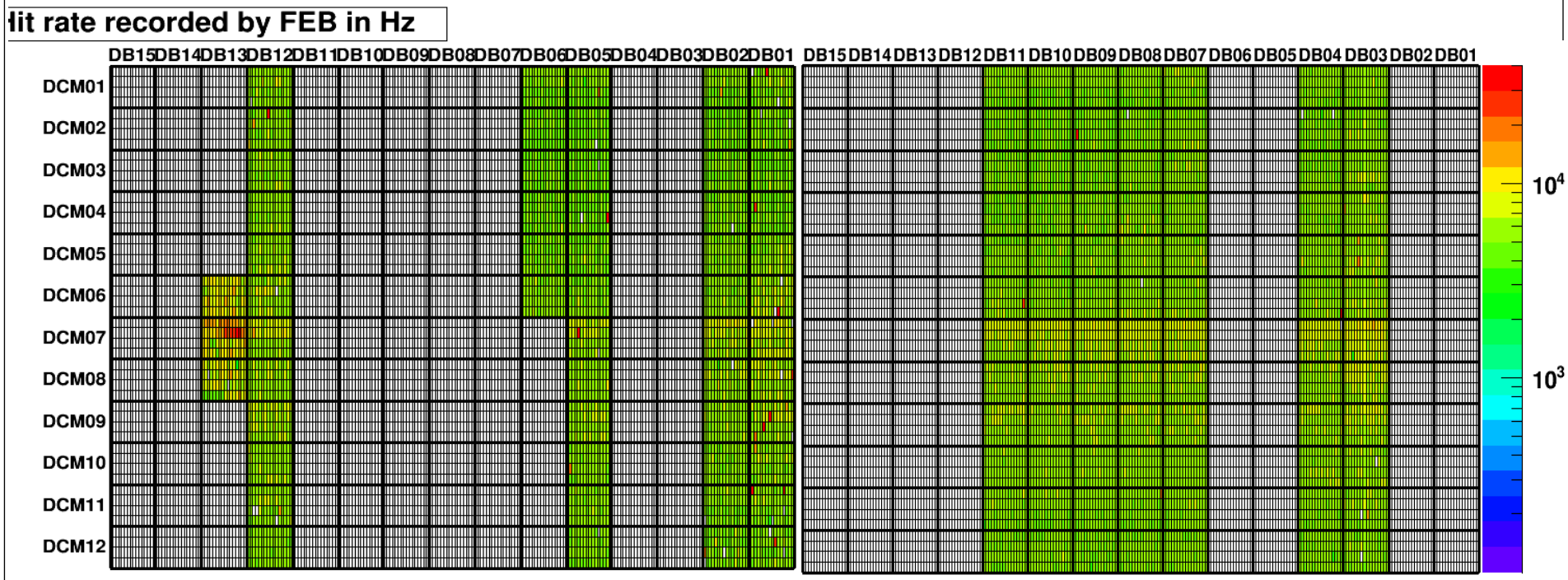
28 blocks of PVC modules are assembled and installed in place

28 blocks are filled with liquid scintillator

24.50 blocks are outfitted with electronics

86% cooled down

FarDet: Data-Taking

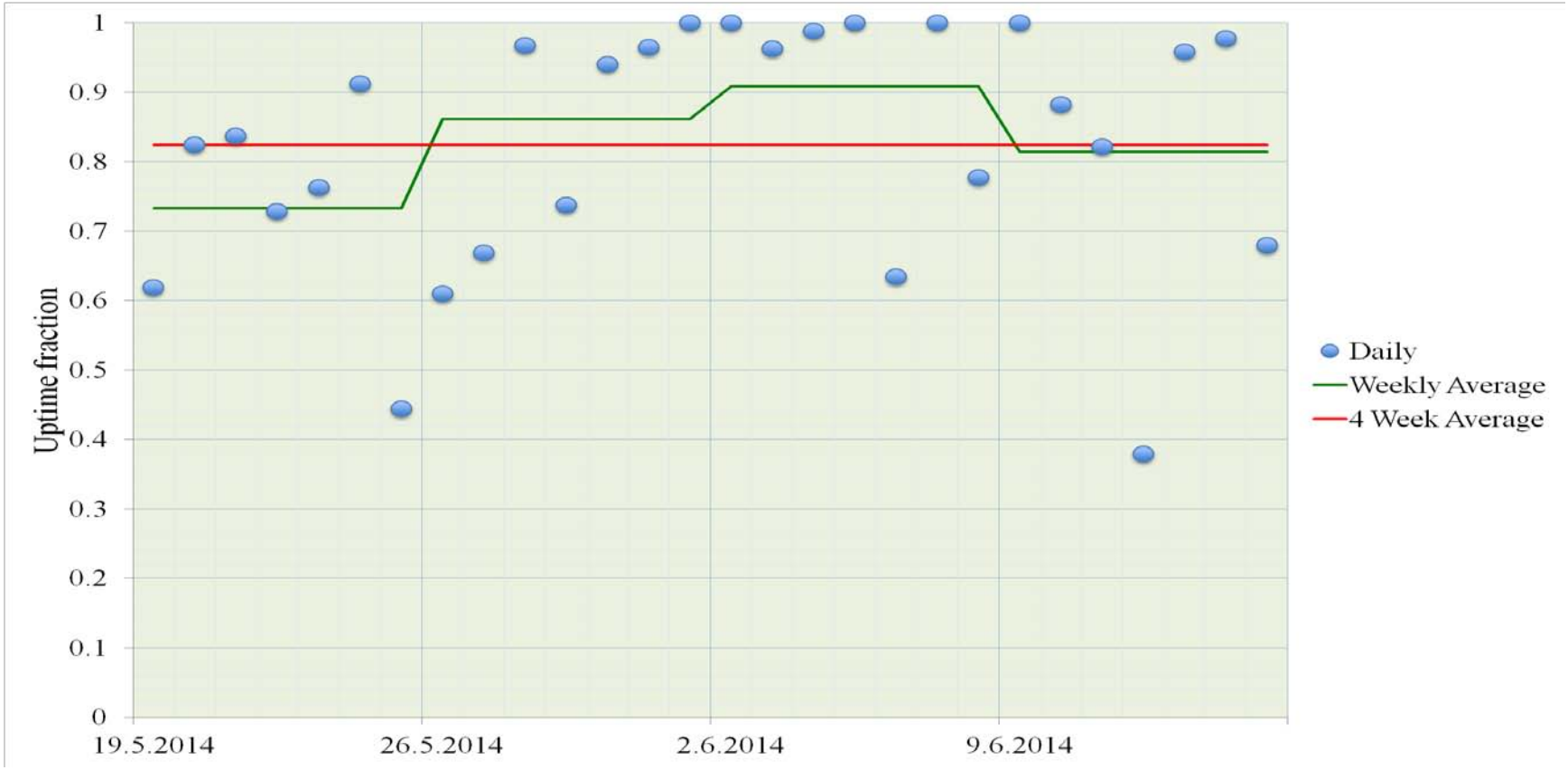


Partition 2 – Diblocks 12 +1,2,5,6, 13
Diblocks 1-13 cooled APDs
2nd –ary oil top-up for DiB 6
Installation of new APDs on DB 13

Partition 1 – diblocks 3,4,7,8,9,10,11
4th superblock is active.
Running ~99% active, cooled APDs
HV at full gain values

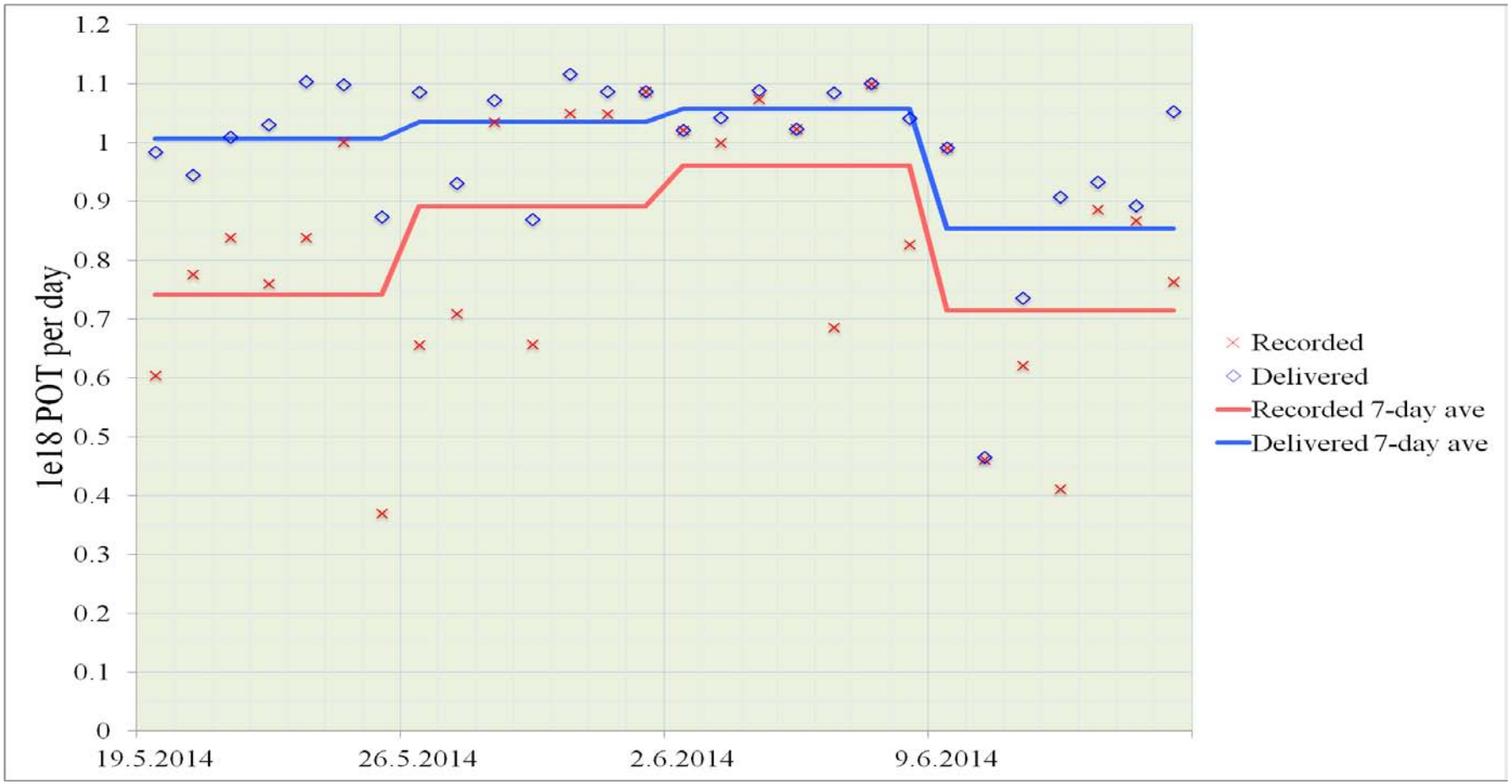
Partition 3 – running diblocks only 14 (Front End Boards only)

FD: DAQ Uptime



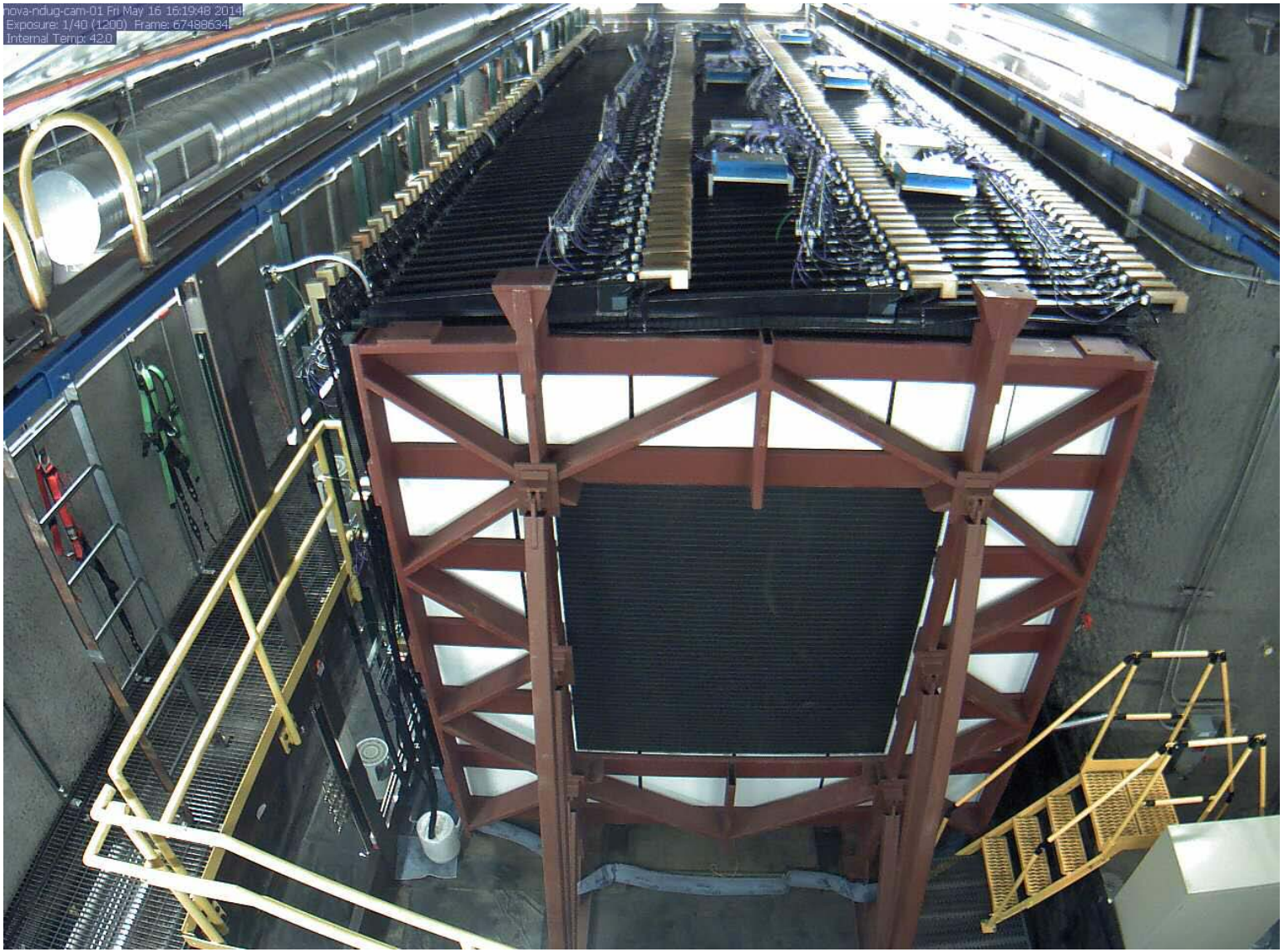
- Averaging about 82% over 4 weeks and 81% in past week.
- Wed/Thu we had 2 water leaks in row (9h down) and after got interlock alarm for high dew point. Another downtime due to test of the interlock system for cooling DiB-12.
- Sun we had a timing issue (got asynchronous detector), to scrub timing system we had to stop all data taking and solve other related issues.

FD: POTs delivered/recorded

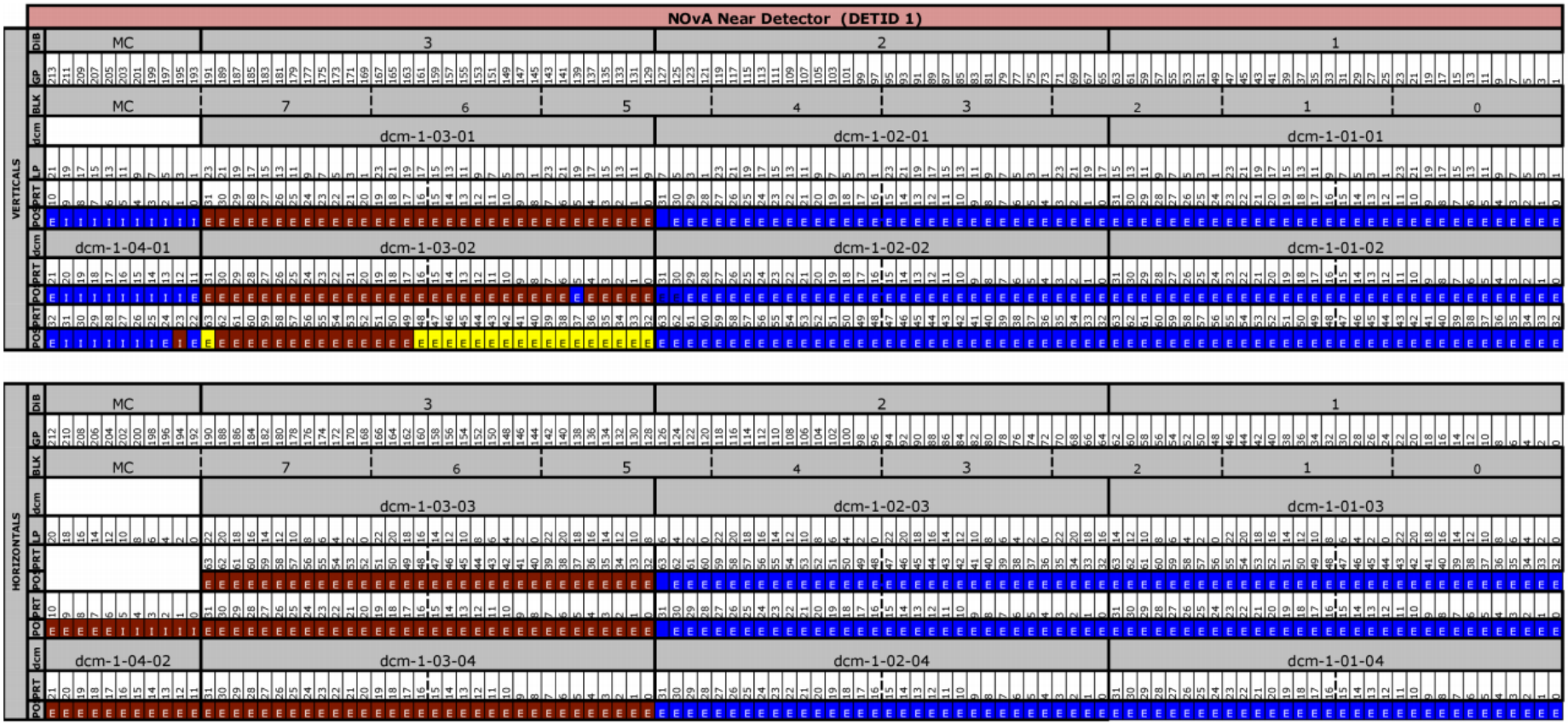


- Good week start was interrupted by water leaks and interlock tests on Wed/Thu and the timing issue on Sun (partially there was beam off).
- We recorded in average 0.71 e18 (from low 0.85) pots/day with 84% efficiency.

NearDet: Detector Assembly Progress



Near Detector status



BLUE = FEB only installed **BROWN = APD installed** **YELLOW = APD being installed**

- ✓ **ALL FEBs installed, some of them seems to noisy.**
- ✓ **New DAQ computer cluster in the FCC, installed and being tested.**
- ➢ **214/631 (31%) APD installed, hooked up to water/dry system.**

Summary

FarDet:

- 24.5 of 28 blocks of FarDet fully-instrumented, running with full gain mode.
- 24 of 28 blocks successfully cooled down.
- The 'Physics' partition is not contiguous due to oil top-up, still running with the 4th superblock for neutrino counting.
- We had 2 water leaks and another interlock alarm and timing issue which caused most of data-taking down time.

NearDet:

- APDs are being installed on the DiB-3 and Muon Catcher.
- Trying to running of DAQ system in the shifter mode after we got and installed the new computing cluster.