FD: Detector Assembly Progress

The Intensity Frontier

NOvA Far Detector Assembly Progress
Status Date: 17MAR14

14 kilotons = 28 NOvA Blocks
28 blocks of PVC modules are assembled and installed in place
26.67 blocks are filled with liquid scintillator
15.00 blocks are outfitted with electronics

50% cooled down
**Partition 2** – Diblocks 5, 6, 7, 8 (6 dcms)
- Diblocks 5, 6, 7 cooled APDs
- Installation of new APDs on DB 8

**Partition 1** – diblocks 1, 2, 3, 4
- Running >99% active, cooled APDs
- HV at full gain values
- Less noisy running now

**Partition 3** – running diblocks 9-12 (Front End Boards only)
Plot for past 4 weeks
Averaging about 80% and ~ 86% in past week
Since Tuesday no water leaks, DAQ uptime went up
• Plot for past 4 weeks, both delivered and recorded went up last week
• Good last week, we recorded in average 0.87 e18 pots/day with 85% efficiency
• No big issues last week since Tue, 5 days with more than 90% efficiency (2x max 95%)
Summary

- 15 of 28 blocks of FarDet fully-instrumented, running with full gain mode.
- 3 Partitions are running.
- We added DB04 to ‘Physics’ partition, i.e. 29% of FarDet.
- Since last Tuesday no major issues and downtimes.
- Good news: cooled down 50% of volume now.
- Near Detector: running in the Pattern mode (where DCMs and PS available)
- Continued with oil filling.
- Expecting delivery & installation of first FEBs (ver 5) this week.