NOvA Experiment Report
Update on NOvA Operations
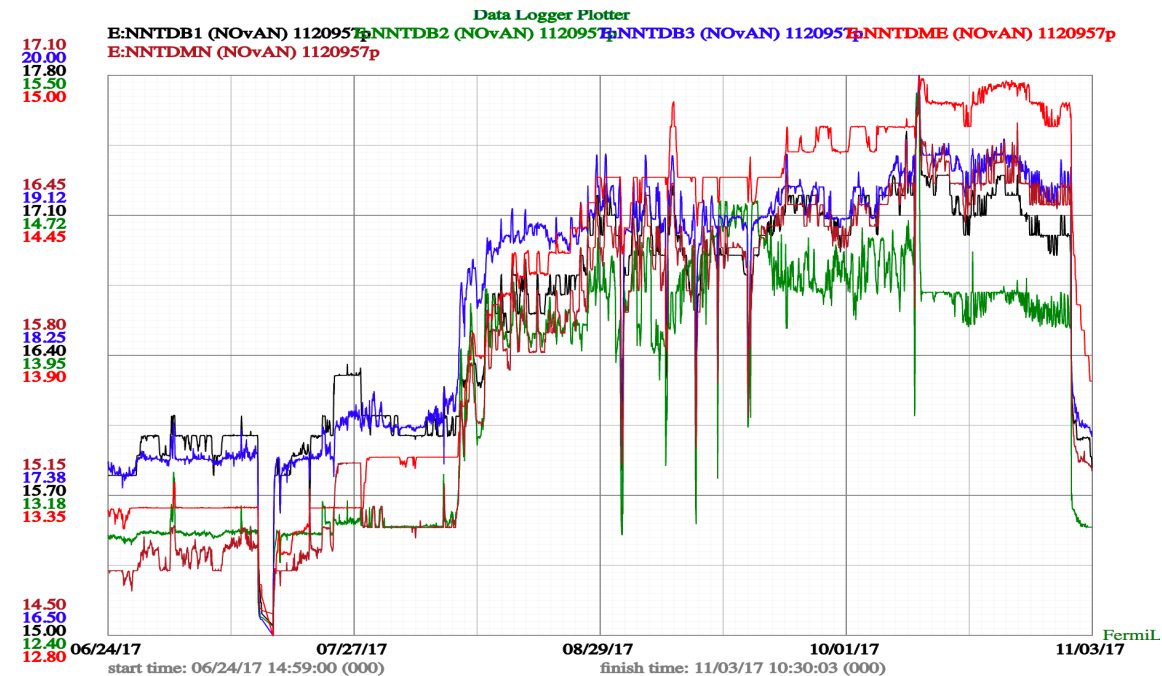
Michael Baird, University of Virginia

AEM Meeting
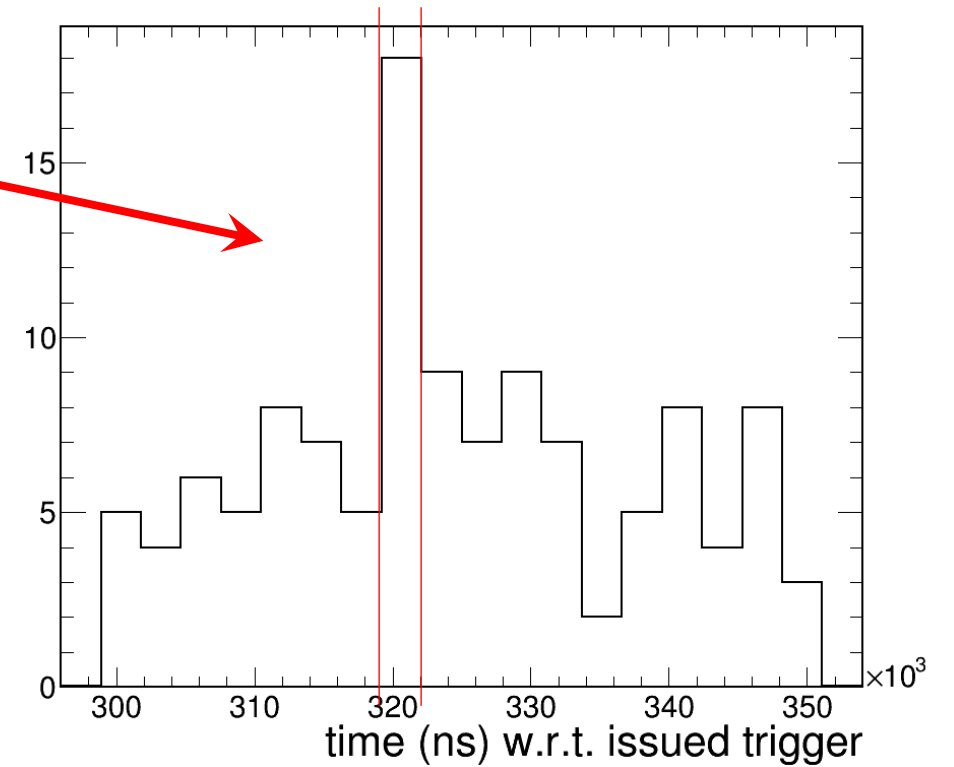
Monday, Nov. 6th 2017

Experimental Status:

- **Both detectors are now running stably.**

- **We are still cleaning up a few scripts etc. and shifting back into "beam-on" mode.**

- **A look into BNB timing peak has begun:**

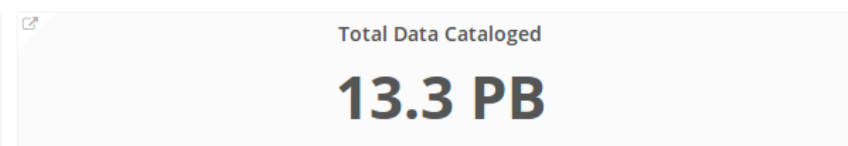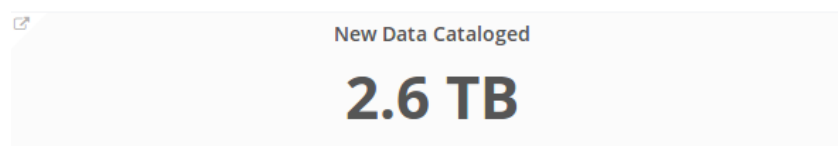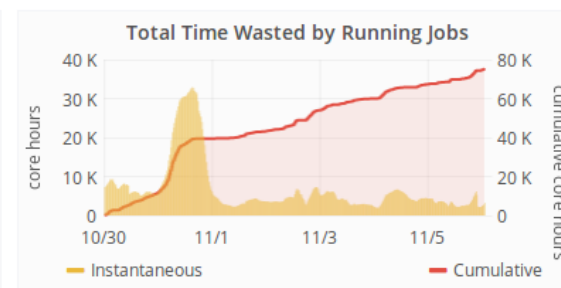- **ND cavern temperatures are back to normal:**
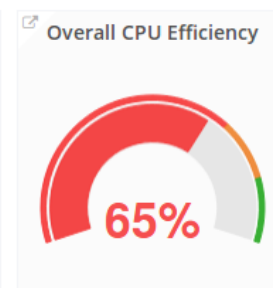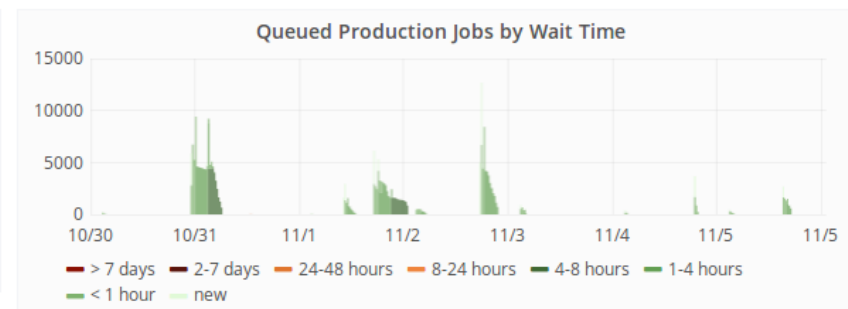
FD Stability:

- On Wed. 10/25, we had a power bump at Ash River due the the first winter storm of the season.

- The FD DAQ was unstable (~3 crashes per day) for the week that followed.

- Suspect that this was caused by a "clean up" script not properly included in a software tag rolled out on the same day. We returned to stable running on Friday and ran through the weekend without any crashes.

- During our investigations, we did a lot of "DAQ-scrubbing" and discovered a possible networking hardware failure on one of our datadisk nodes. We're glad we discovered all of this prior to the return of beam!

Computing Status:

- Slow week production-wise. Next major campaign kicks off next week (11/13)

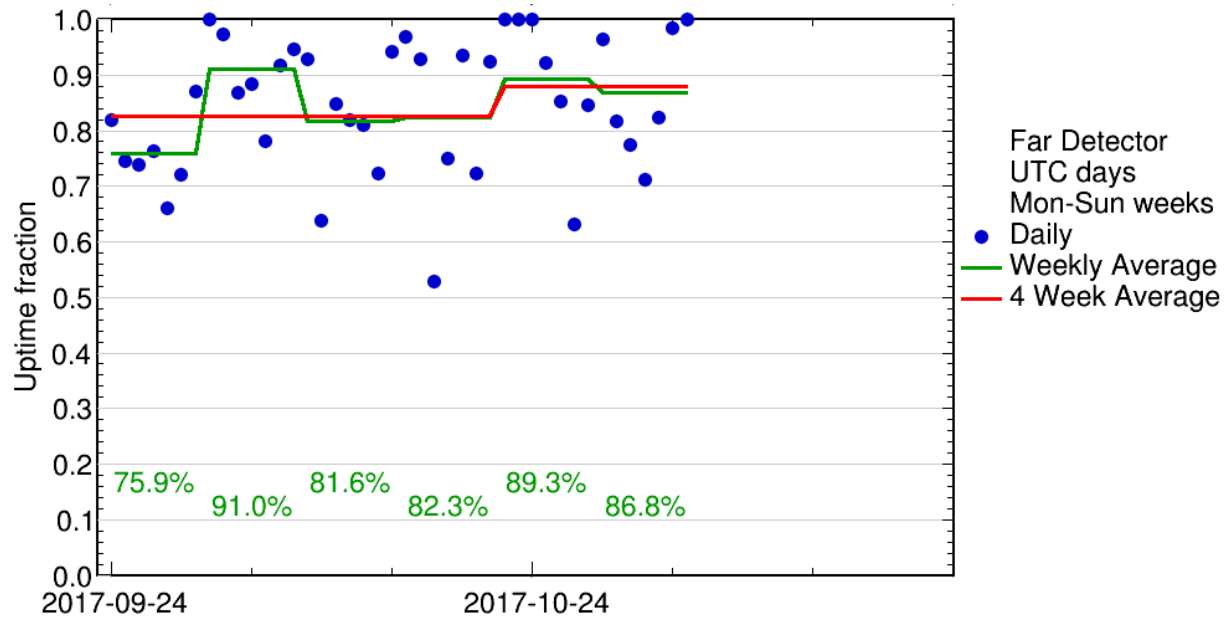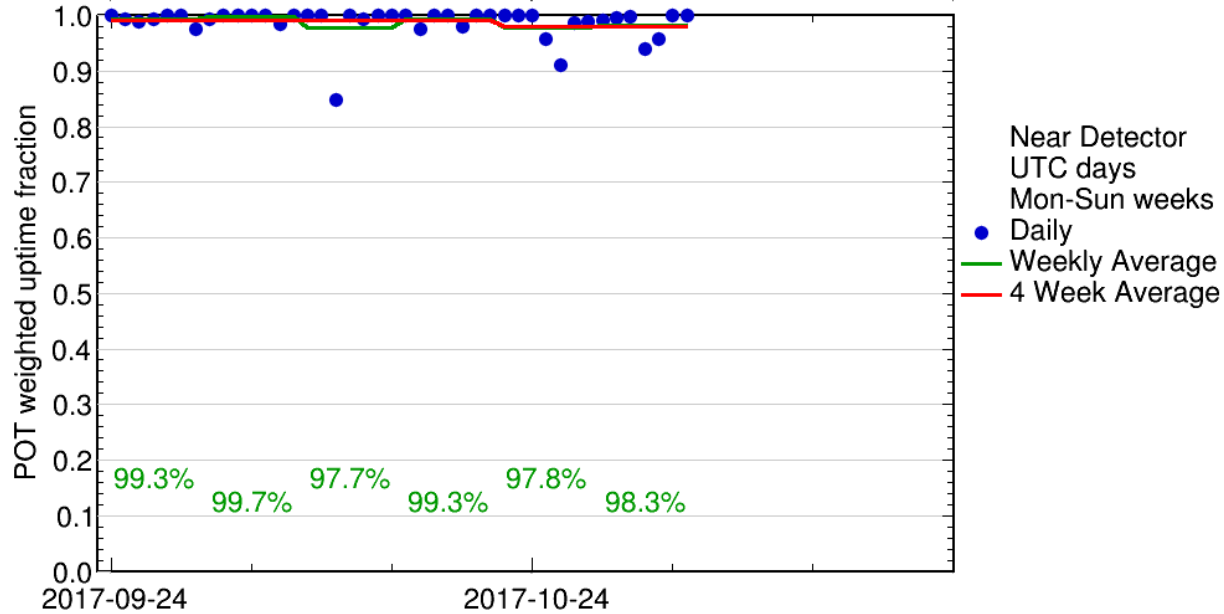- Inefficiency peak 10/31 due to disk issue in dCache [INC000000900157], resolved by Storage

- Heavy user grid use continues (W&C in Dec)

NOvA Computing Summary

Average Jobs Running Concurrently
2974

Total Jobs Run
146364

Average Time Spent Waiting in Queue (Production)
2.792 hour

Running Batch Jobs
— Production Onsite — User Onsite — Allocation — Production OSG — User OSG

Queued Production Jobs by Wait Time
→ > 7 days → 2-7 days → 24-48 hours → 8-24 hours → 4-8 hours → 1-4 hours → < 1 hour → new

Job Success Rate **91%**

Job Success & Failures per Day
— Success — Fail — Held

Overall CPU Efficiency **65%**

Total Time Wasted by Running Jobs
— Instantaneous — Cumulative

New Data Cataloged
2.6 TB

Total Data Cataloged
13.3 PB

Uptime:

Near Detector:

- Some planned downtime to update our trigger software.

Far Detector:

- Most downtime was due to DAQ instabilities, debugging and recovery, testing of loadshed scripts.

- Uptime excluding planned downtime was **95%.**

- Uptime from Friday morning to Sunday night was **100%!**