

NOvA Experiment Report

Update for NOvA Operations; week of 06/12/2017

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Items of Note

DAQ software crashes:

- unusual number of crashes over the last week
- underlying cause still under investigation
- using beam scan on Wednesday to reboot all nodes to see if there is a lingering instability from the first crash

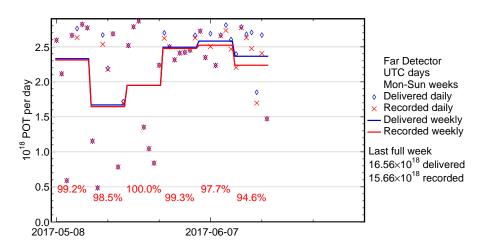
Publications:

- Constraints on Oscillation Parameters from ν_e Appearance and ν_μ Disappearance in NOvA P. Adamson *et al.* (NOvA Collaboration) Phys. Rev. Lett. **118**, 231801
- Search for active-sterile neutrino mixing using neutral-current interactions in NOvA https://arxiv.org/abs/1706.04592, submitted to PRD RC

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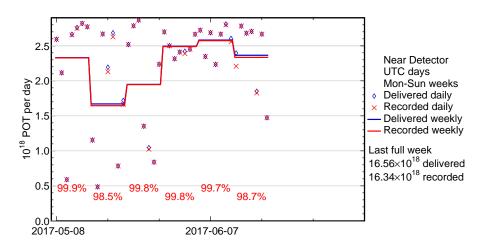
DAQ Status and Uptime: FarDet

97.9% POT-weighted uptime for the last 4 weeks (FarDet)

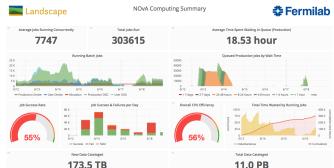


DAQ Status and Uptime: NearDet

99.5% POT-weighted uptime for the last 4 weeks (NearDet)







Low success rate:

- We introduced a check into our jobs to make sure CVMFS is up-to-date to avoid producing junk files.
- BNL appears to be having some CVMFS issues.
- We have tickets open to fix the issue at BNL and to move this check into job matching to avoid large numbers of spurious failures.

· Low efficiency:

- We are still investigating. We believe this is related to file pre-staging. Running into 2 issues:
- No simple way to know when the pre-staging of a dataset is complete.
- Job restarts on the OSG appear to seriously confuse cluster-by-cluster efficiency reporting in Fifemon
 - We have seen >1000% efficiency for a cluster on occasion

