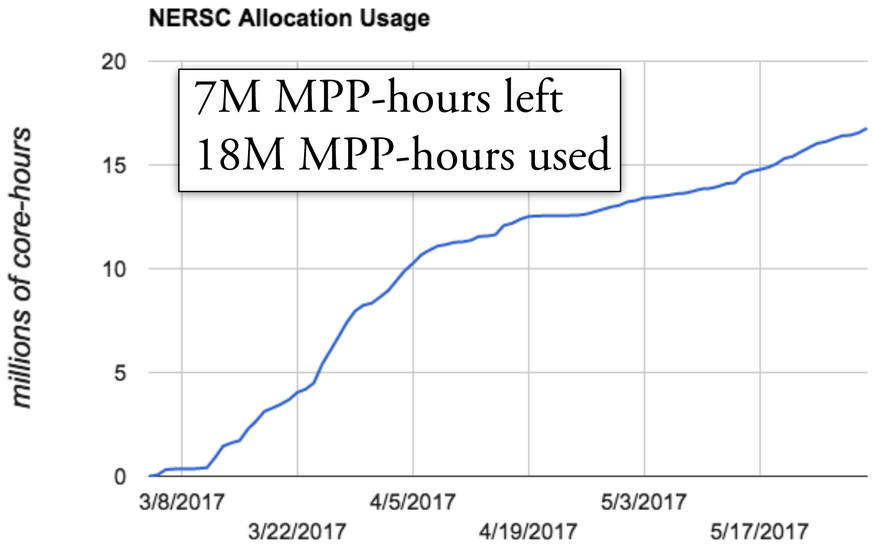
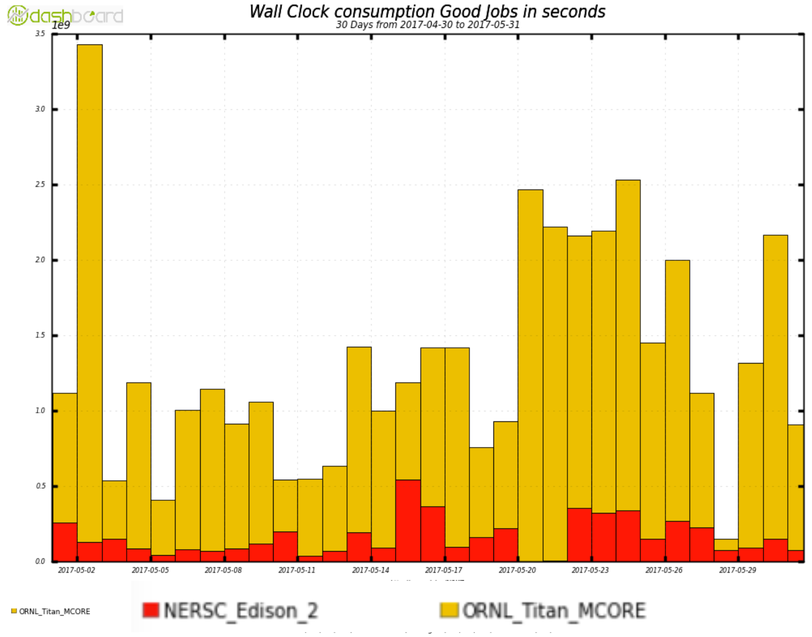
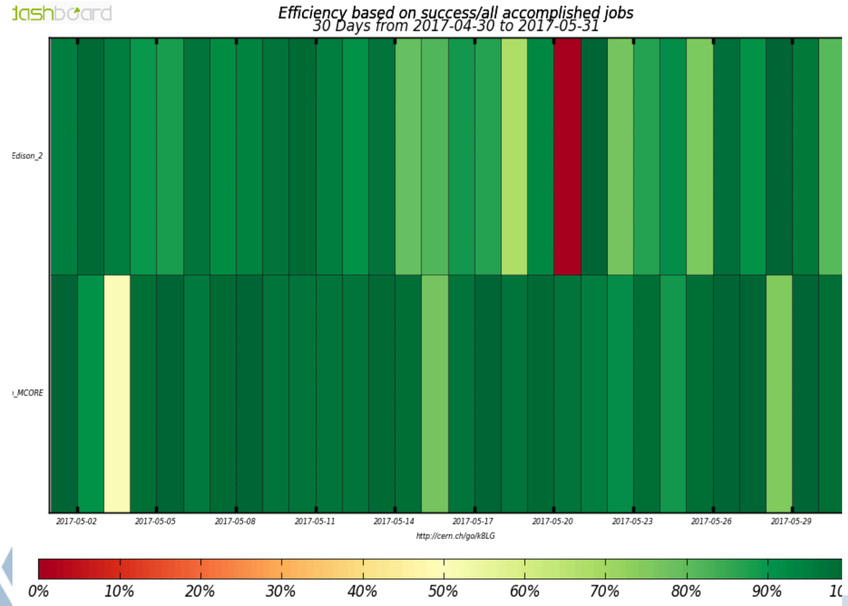
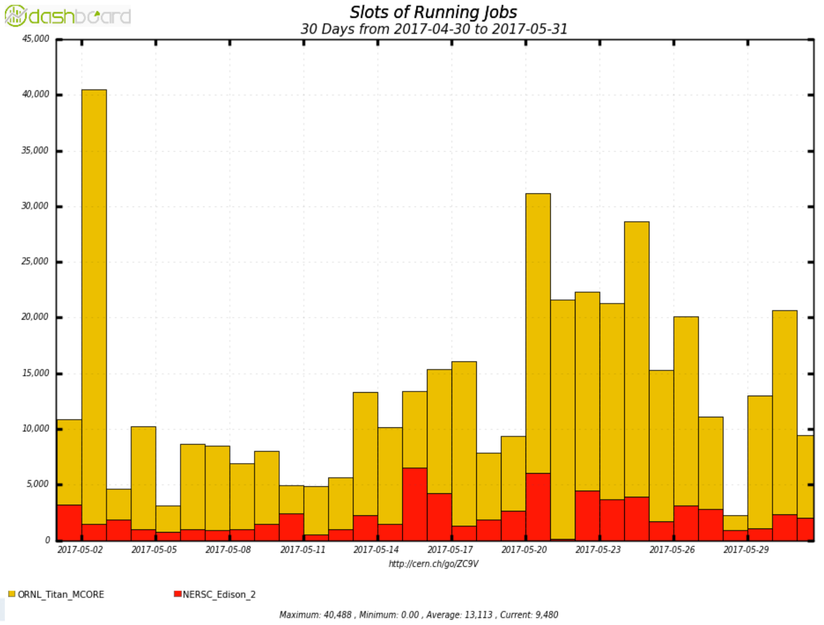
Titan/NERSC Running Summary









Cori Phase-2: KNL Validation

- Running Validation jobs to validate KNL
- Frequently running into system-level problems that impede work
- Vakho going to start monitoring jobs to understand failures.
- After validation, production jobs will be run.

Cori Phase-2 is the new Intel Xeon Phi (KNL) machine. Currently, free to use. #5 on Top500

Theta Integration with Harvester

- Theta is the Argonne test system for Aurora (due in late 2018). It is KNL like Cori Phase 2.
- Theta was down for a week and was just back last week.
- Doug is deploying Harvester on Theta without Event Service (without Yoda)
  - Harvester core components deployed and performed unit tests provided
  - Doug wrote a stage-in/out plugin which can be used for both Theta/Titan
  - Completed working on details of understanding the job submission using Cray tools.
  - Debugging stage-out, and updating submitter due to local scheduler upgrade
- Taylor is refactoring Yoda (the MPI application that runs AthenaMP on each node) to interface with Harvester.
  - Redesigned my implementation 1.5 weeks ago. New designed implemented, beginning unit tests
  - Then tests with Harvester on Theta, then passing on to Danila for tests on Titan

Titan Harvester Deployment

- Danila and Sergey have deployed Harvester on Titan and performed the unit tests provided
- submitter and monitoring components will be deployed this week.
- Stage-out is waiting for pilot 2.0 API
- Preparing the payload (Yoda) environment
- Preparing the post-processing, e.g. recording exit-codes, messages, etc.
- Then waiting for Yoda payload.

Weekly US HPC Facilities Meeting

- We've started having weekly US ATLAS HPC facilities meetings on Friday's at 11:00 US Central Time
- https://indico.cern.ch/event/640717/
- The goal is to coordinate our efforts to deploy Harvester and unify our infrastructure as much as possible.
- Currently mainly attended by those working to employ DOE leadership machines, but would welcome input from other sites as well, Blue Waters & Stampede, for instance.