

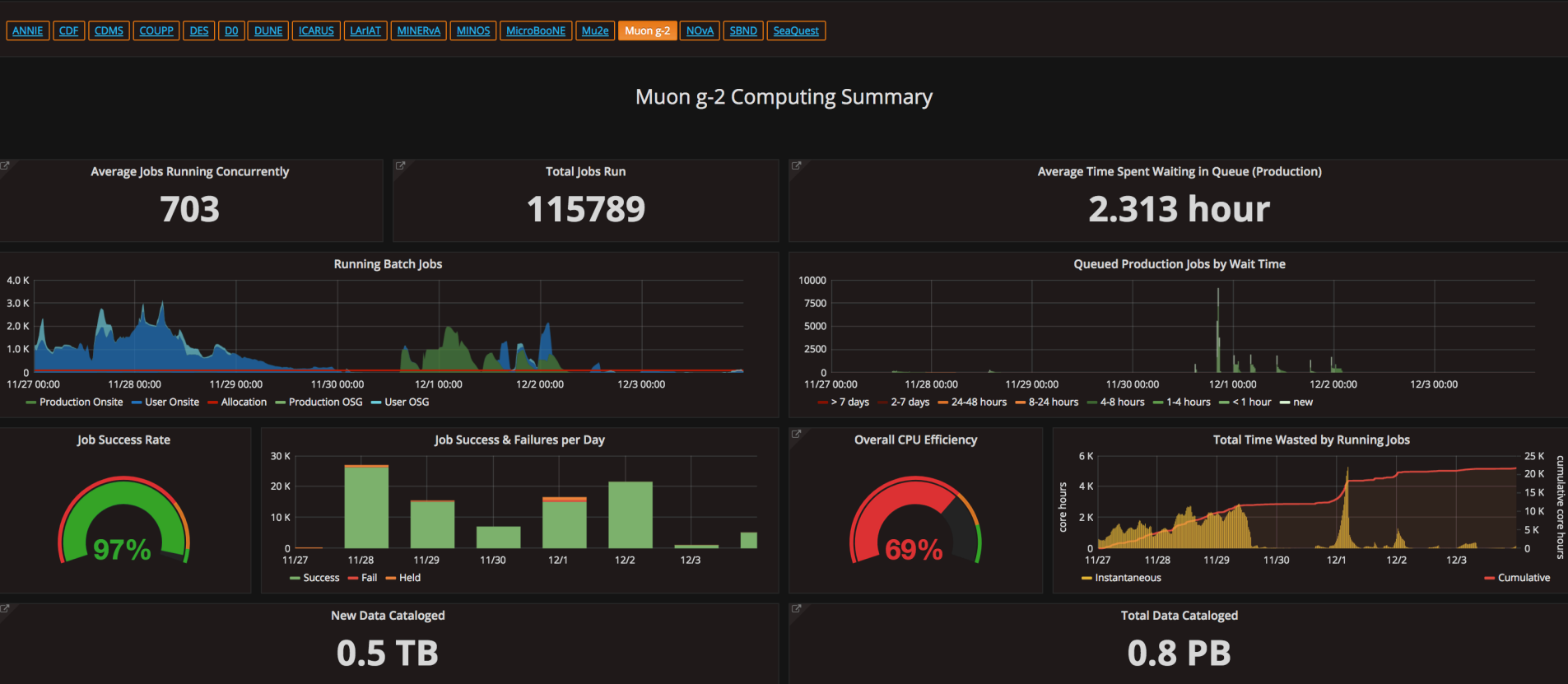
Muon $g-2$ AEM Update

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Computing Update

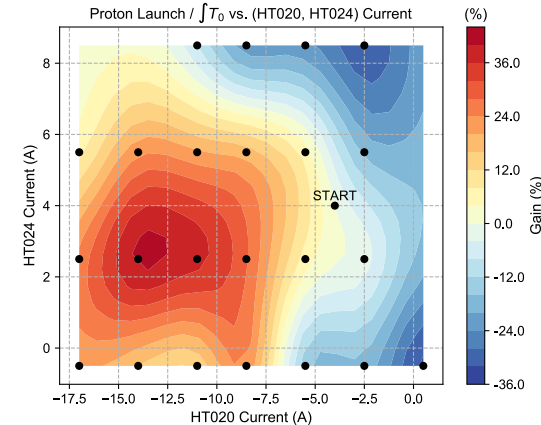
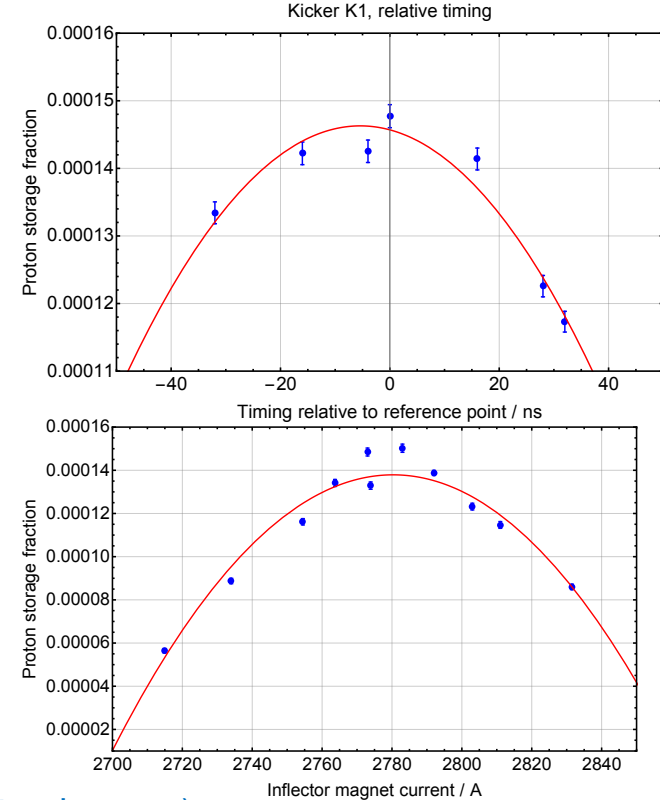
- Some high-rate data reprocessing



- physics runs, interleaved with high rate laser studies

Shutdown update week of 11 / 27

- Inflector (magnet to inject beam into ring)
 - replaced control board, improved trip electronics
 - current scans to optimize storage fraction
- Kicker and Quads (Injection systems to put/keep muons on proper orbit in ring)
 - timing scans, and alignment; kicker strength scan
 - fixed Fluorinert leaks, repairing one pump
 - quads operated stably at 20.5 kV
 - first tests of RF system
- Calorimeter (measure decay positrons from muons)
 - Operating 24 / 24 calorimeters.
- Tracker (measures spatial profile of decay positrons)
 - Installed all 16 modules, connected to infrastructure (LCW, air, tracker gas).
 - DAQ integration in progress
- Trolley (Maps the magnetic field when the muon beam is off)
 - Took partial field map.
- Beam Tuning (An iterative procedure optimizing storage fraction)
 - Peak performance of 35 %, with respect to desing



Plan Forward

- Main focus for Week of Nov 13th:
 - In vacuum work
 - Trolley tuning
 - Remeasure Kicker 1 pulse using Magnetometer
 - Install (3) Cryopump gate valves.
 - Install 2 non-retractable cryo pumps
 - Complete cryopump infrastructure
 - More iterations on beam, injection, and detector tuning
 - New trigger system commissioning