

MicroBooNE Update

Proton Management Group Meeting

Kreswell Neely

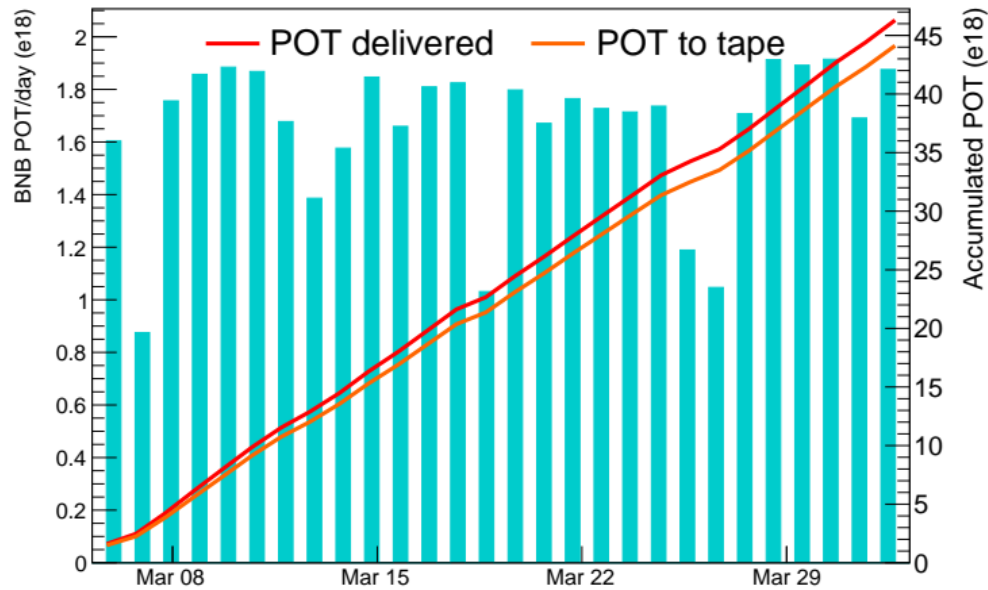
April 4, 2019

April 4, 2019

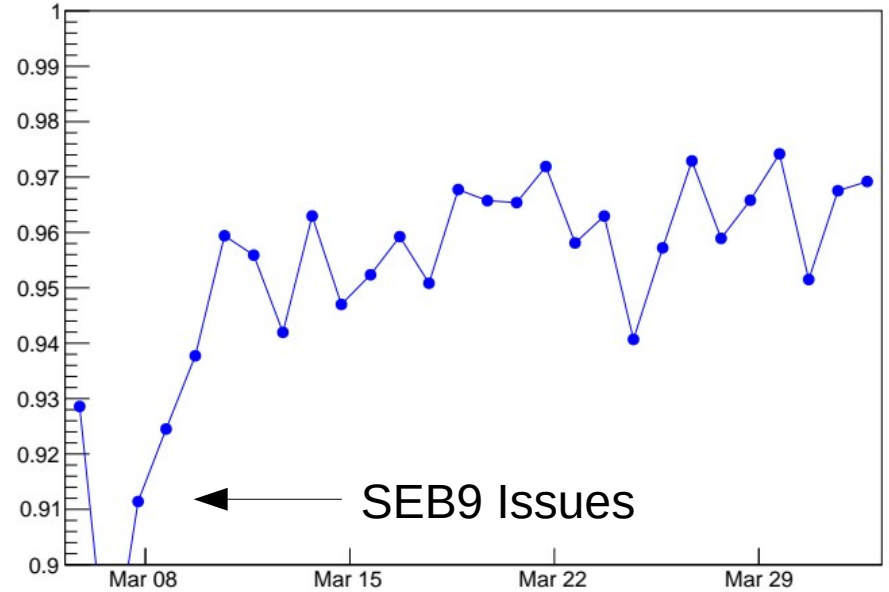
KANSAS STATE
UNIVERSITY



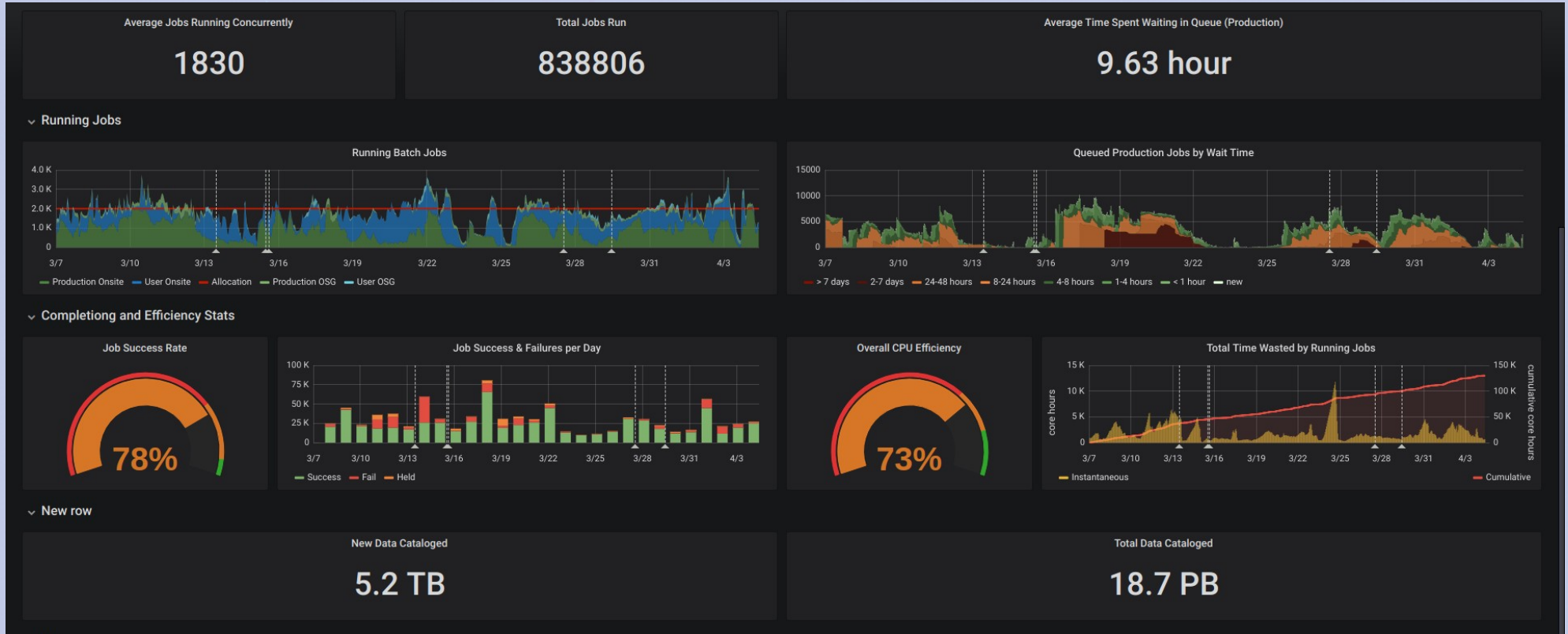
DAQ Efficiency



POT-weighted DAQ uptime



Computing Resources



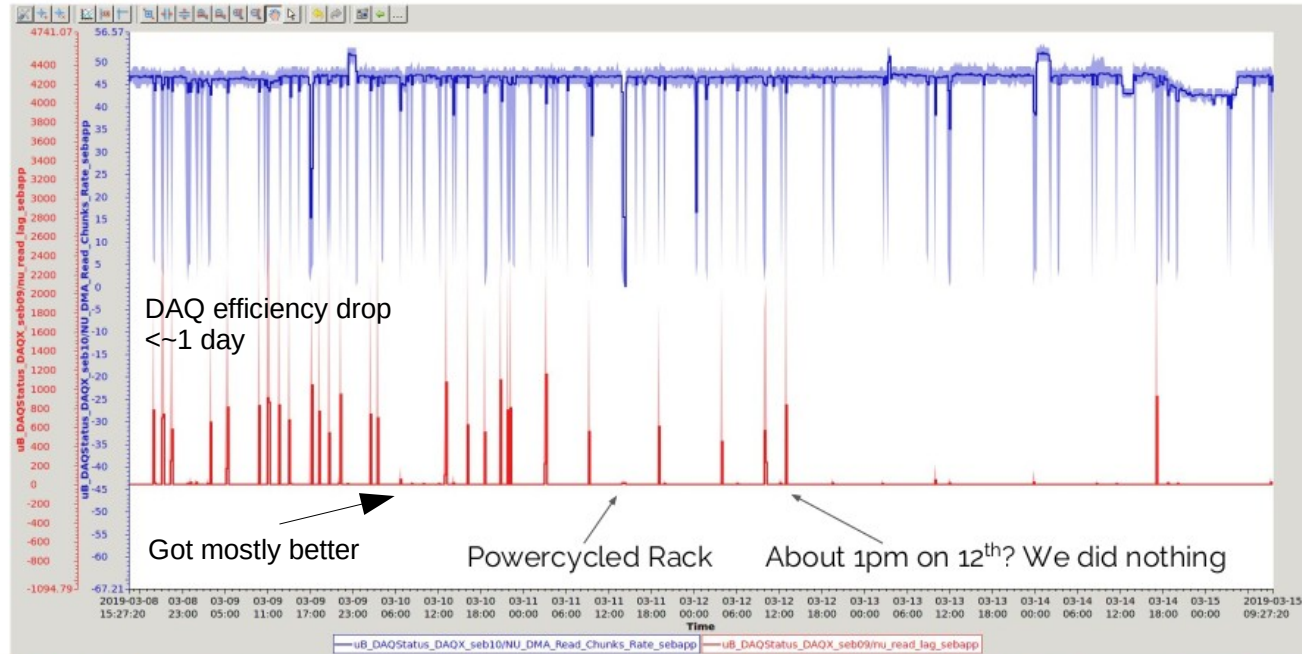
Colorado Retreat, March 18-22

- Week long workshop hosted by Colorado State University, Fort Collins, CO.
- Validate MCC9 simulation and reconstruction software stack for upcoming release.
- Introduce samples generated by MCC9 into analysis software chain. Mark the beginning of “MCC9 era” for analyses.
- Accelerate development of analyses for physics results in Summer 2019 and beyond.



SEB9 Instability

Sebog Driven Crashes (red trace)



Mark Ross-Lonergan 15th March 2019

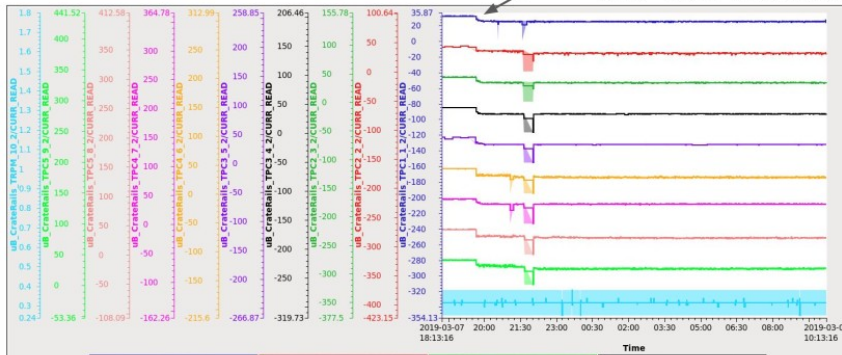
April 4, 2019

KANSAS STATE
UNIVERSITY

μBooNE

SEB Current Fluctuation

TPC Crate Current drop



Elog: <http://dbweb6.fnal.gov:8080/ECL/uboone/E/st>

Mark Ross-Loneragan 15th March 2019



- 7:38PM March 7: Drop in current in all nine SEB crates simultaneously.
- Initially suspected external 330V power.
- Discovered power supply for NIM analog logic crate was in a strange state. Both +/- 6V rails read -6V.
- ~12PM March 8: Fixed by power cycle.
- No issues since.
- Plan: Replace power supply during BNB downtime/Summer.

April 4, 2019

KANSAS STATE
UNIVERSITY

μBooNE

Recent Publications

Comparison of ν_μ -Ar multiplicity distributions observed by MicroBooNE to GENIE model predictions

MicroBooNE Collaboration: Adams, C., An, R., Anthony, J. et al. Eur. Phys. J. C (2019) 79: 248. <https://doi.org/10.1140/epjc/s10052-019-6742-3>

Design and construction of the MicroBooNE Cosmic Ray Tagger system

MicroBooNE Collaboration: Adams, C., Alrashed M., An, R. et al. arXiv:1901.02862v2, Submitted to JINST.