MicroBooNE Status

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February 13th 2017
AEM meeting.

Activities during the week

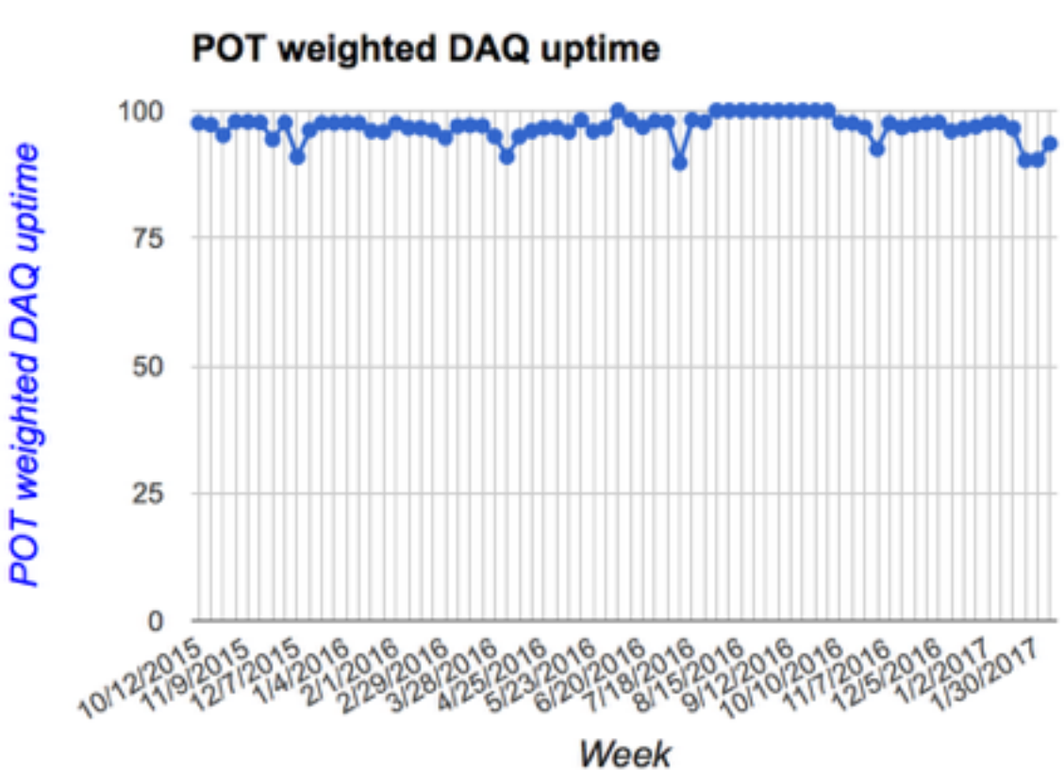
- We found a RC (charged - discharge) in the pickoff point after turn off the power button on the HV power supply (PS). Ground our cathode and the RC disappear.
- Analysis of "burst" events: More frequent at higher voltage applied to the cathode. No correlation with PMT activity. Proportional relation of amplitude in function of voltage.
- Turn off the PMT voltage. Continuing seeing blips in the pick off point.
- SPICE simulation of the detector failure modes.
- We attached a pulser to the HV cable into HV FT and drove pulses into the cathode. Characteristics of our artificial "burst" events differ from the original "burst" events.
- V vs I. V applied to the HV FT to test the connection from the HV FT to the cup attached to the cathode. We do not see a stable linear relation between V vs I up to 8 kV but plan to test at higher voltages.
- Ramp Up drift HV up to 8 kV. While ramping up we observe a rise in the current of FT1. After we decide to ramp down to 0 kV.
- We calculated the resistance for the field cage, 20 GOhm (observed) 16 GOhm (expected). We did change the method by which we are measuring current so this difference may be a calibration effect. Previous drift HV ramps we do recover the expected resistance (17 GOhm which is 6% greater than 16GOhm, due to operation of resistors in cold)
- On the weekend we ramp down the wire bias. Continuing seeing blips in the pick off point.

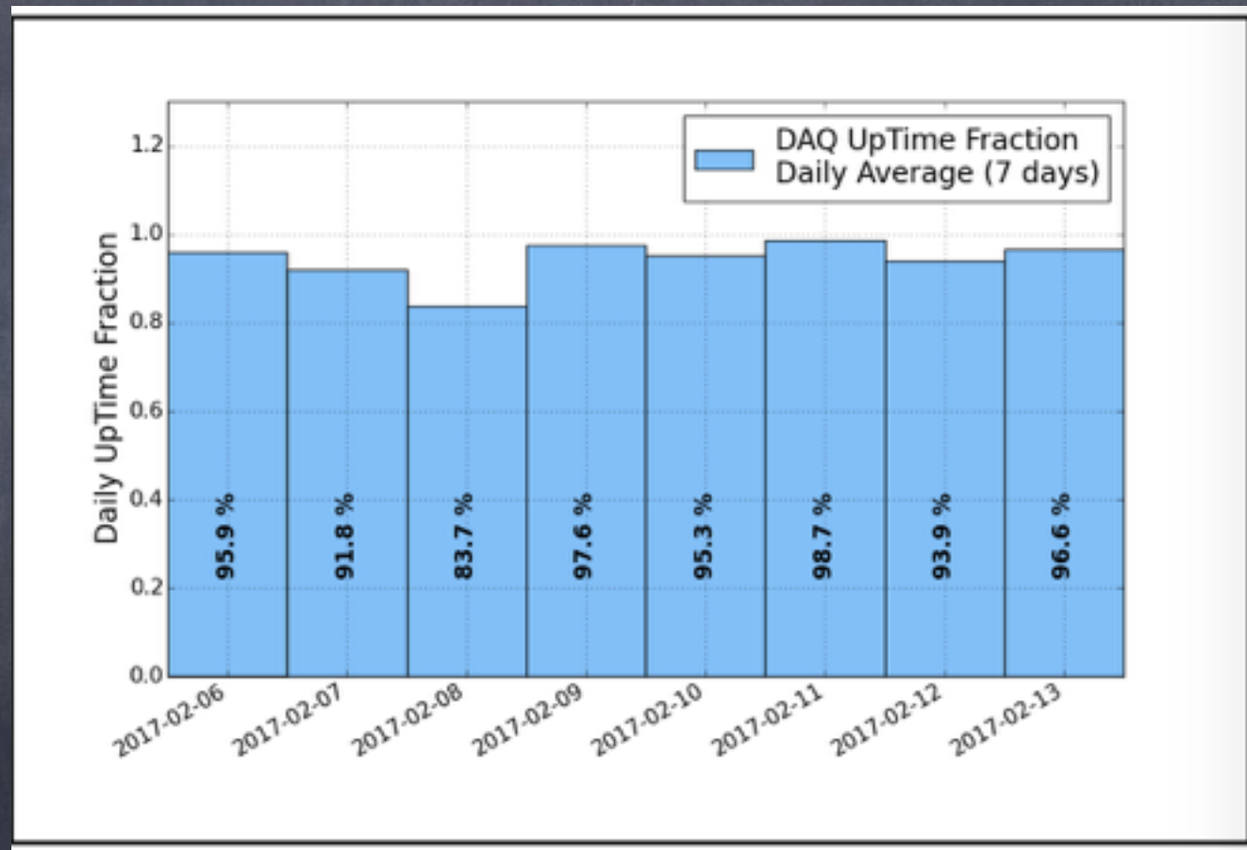
DAQ Uptime: 93.5 %

BNB Uptime: 92.6 %

POT Delivered: 5.26 E20 (5.9 E18 this week)

POT Recorded: 5.05 E20 (5.5 E18 this week)





DAQ UpTime (Daily, Past Week)

Computing Summary

Average Jobs Running Concurrently

1120

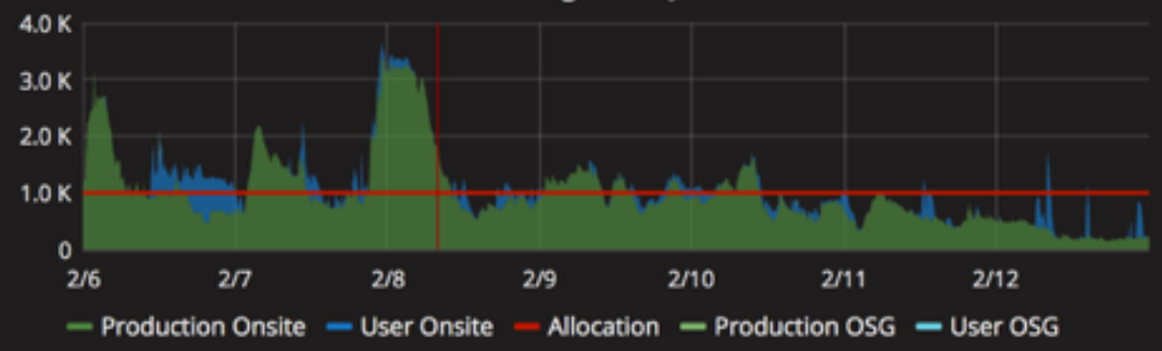
Total Jobs Run

128707

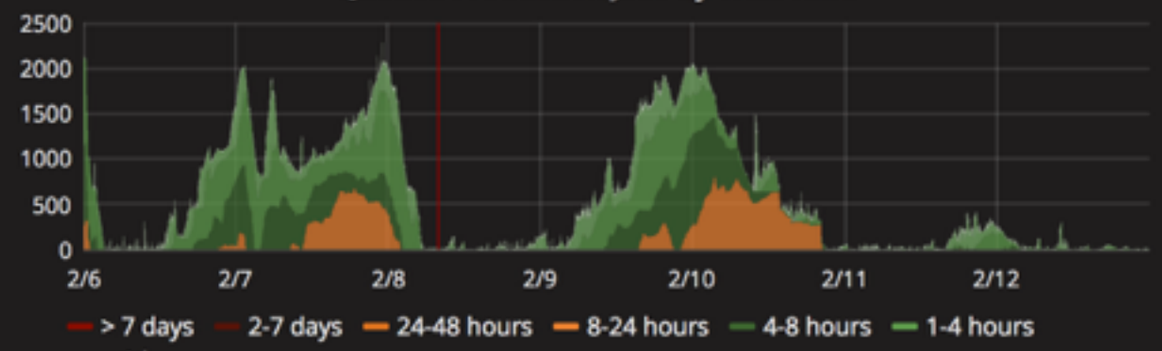
Average Time Spent Waiting in Queue (Production)

1.292 hour

Running Batch Jobs

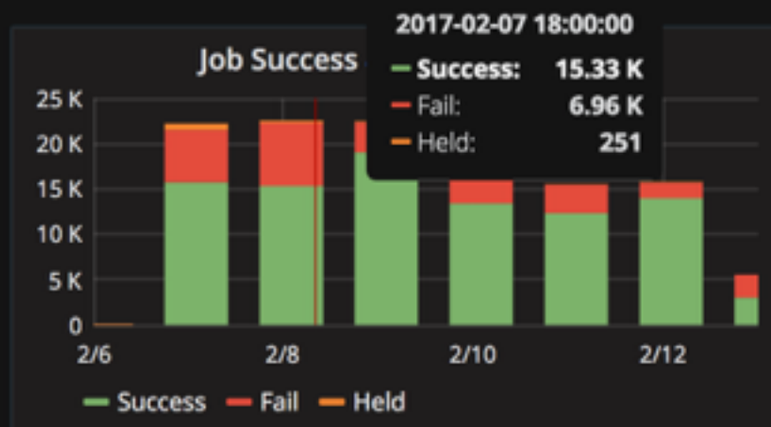


Queued Production Jobs by Wait Time

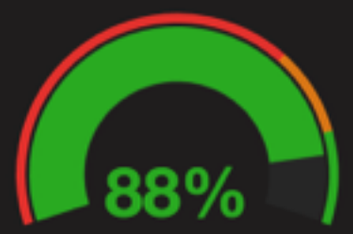


Job Success Rate

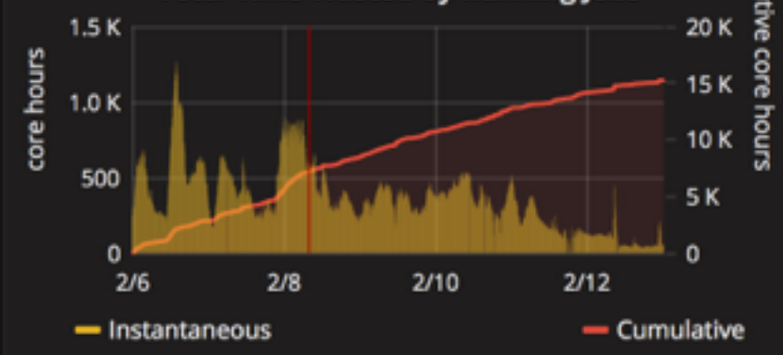
Job Success



Overall CPU Efficiency



Total Time Wasted by Running Jobs



New Data Cataloged

262.0 TB

Total Data Cataloged

6.7 PB

Summary

- Operations team and collaboration continues investigation.
- Many thanks to Fermilab personnel working on the problem
- Daily meetings continue until problem resolved.