

# MicroBooNE Status

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AEM meeting.

# Activities during the week

- We conclusively determine that burst events are due to HV transients to the cathode.
- Analysis of "burst" events: Frequent "burst" events is a key symptom of identifying the detector instability. Higher cathode HV leads to more frequent and severe bursts. PMT signal correlation indicates that the source of the problem was at the downstream end of the detector.
- We positioned a fan on the HV FT to remove ice accumulation.
- We used the wire planes as a real-time measure of high voltage connectivity by applying a pulse to the HV FT and watching for signals on the wires as we adjusted the bellows.
- Immediately after adjusting the screws on the bellows we restored a good connection between the HV FT and the cup attached to the cathode.
- Possible reason: Ice formation at the bottom of the HV feedthrough flange had possibly exerted enough pressure on the top of the flange to cause the HV FT to develop an intermittent connection with the cathode cup.
- We ran stably over the weekend at 15 kV and have slowly started ramping up the detector to higher drift voltages.

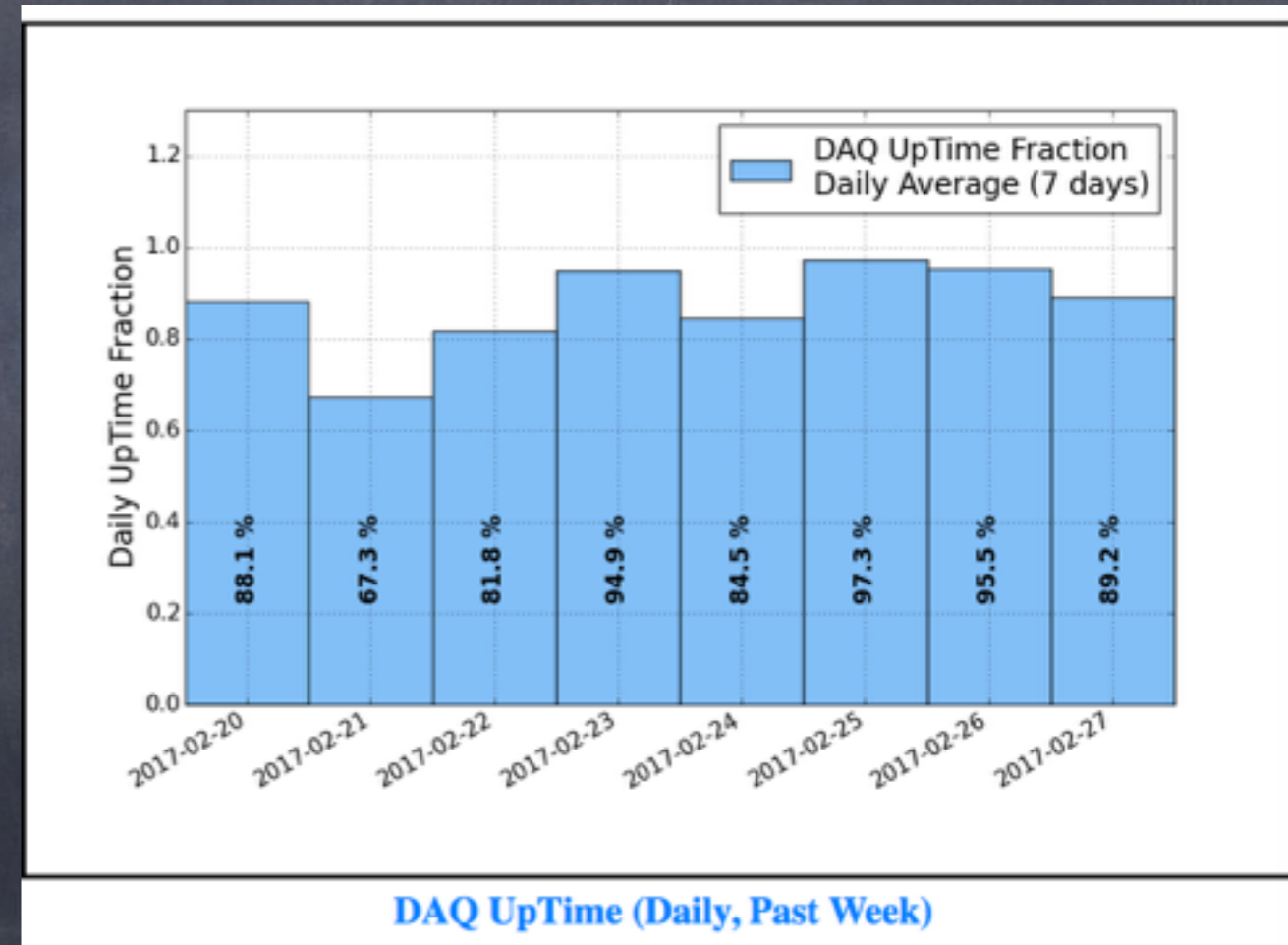
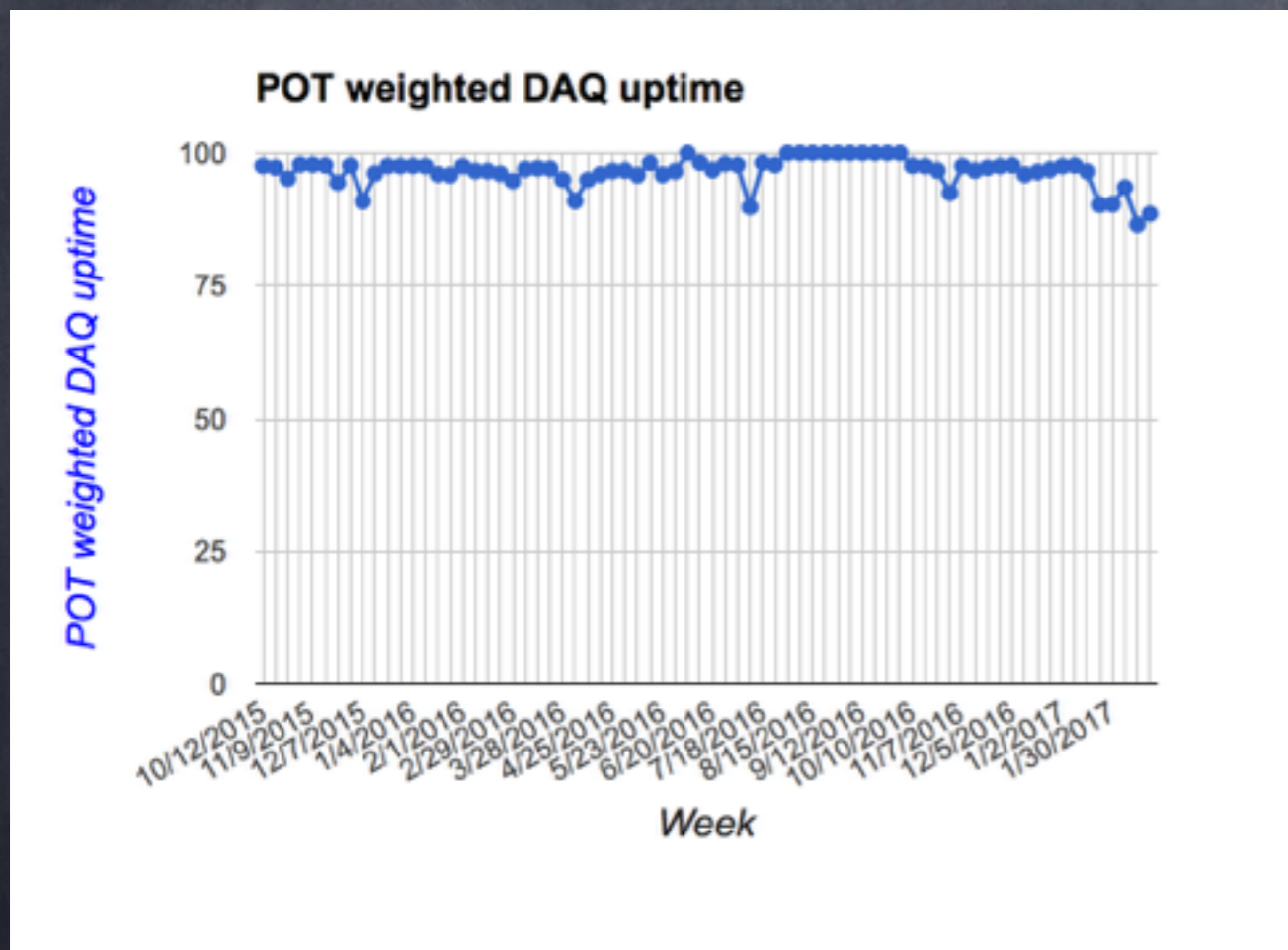


DAQ Uptime: 88.5 %

BNB Uptime: 95.35 %

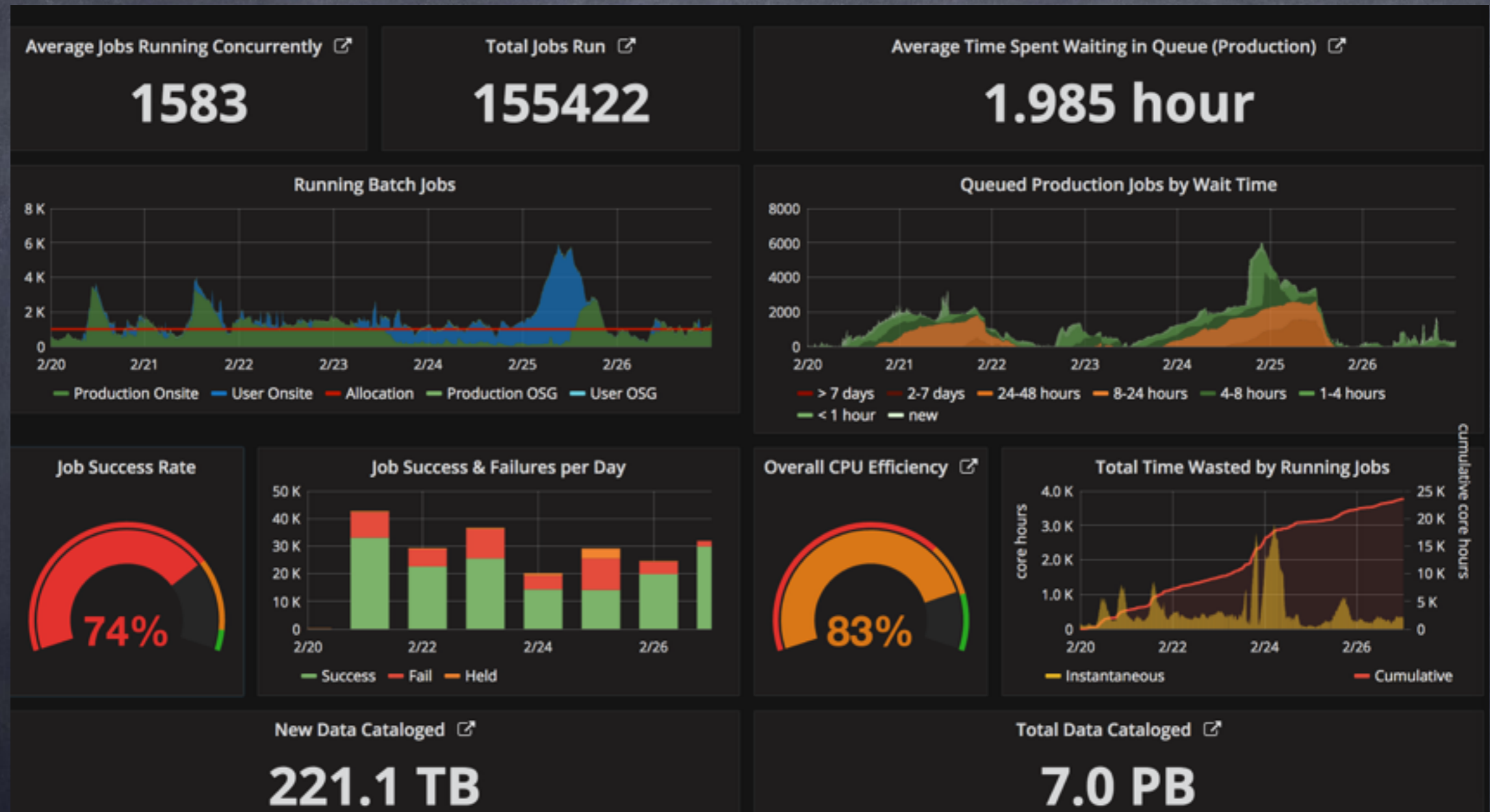
POT Delivered: 5.4 E20 (6.1 E18 this week)

POT Recorded: 5.15 E20 (5.4 E18 this week)



# Computing Summary

- We are working on validation samples.
- We will be sure to increase the job success rate once the official production jobs begins.



# Summary

- We are now at drift HV 30 kV and we plan to ramp up until reach our nominal 70 kV.
- We are cautiously optimistic that we have fixed our detector.
- Operations team and collaboration has shown a great team effort to solve our detector issues during the past month.
- HUGE! thanks to Fermilab personnel working on the problem.
- CRT Top Panel: Complete pergola installation during the week.
- We anticipate to be fully operational when beam comes back next week.