

MicroBooNE Status

Kevin Wierman

PNNL

06/02/17

Status of Drift HV and FT1

- Jan 28 - Jan 29
 - Shifters notice activity on Drift HV current readback and pickoff point
 - Increased TPC noise and FT1 LV fluctuations
 - HV ramped down from 70 kV to 65 kV
 - Then again to 0 kV
- Jan 30
 - Begin diagnostic process with drift HV power supply
 - Null-field TPC Data and PMT data taken
 - Added more monitoring variables for shifters
- Jan 31
 - Started running the detector at 7 kV
 - Completed PMT and TPC health checks
- Feb 1 - Feb 2
 - Exhaustive systematic check of warm side HV components
 - Checks out
- Feb 3
 - Ramp to 20 kV, then 35 kV
 - See the same problems at lower voltage
 - TPC ramped back down for the weekend
- Currently:
 - Taking continuous stream data
 - Analyzing TPC data to investigate anode side of the system

DAQ Uptime

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88.5%

BNB Uptime

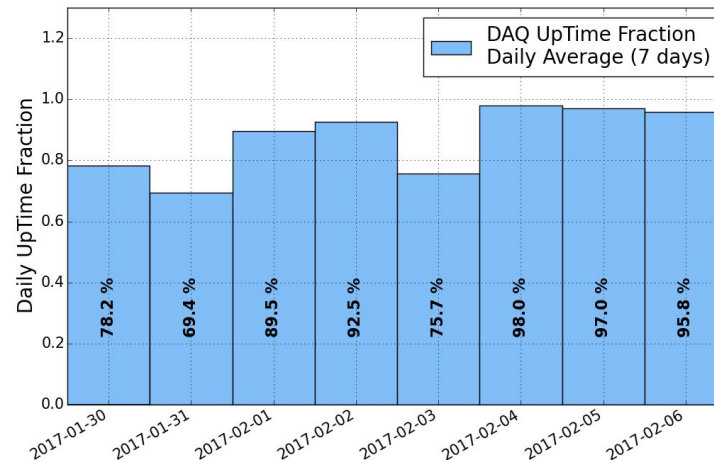
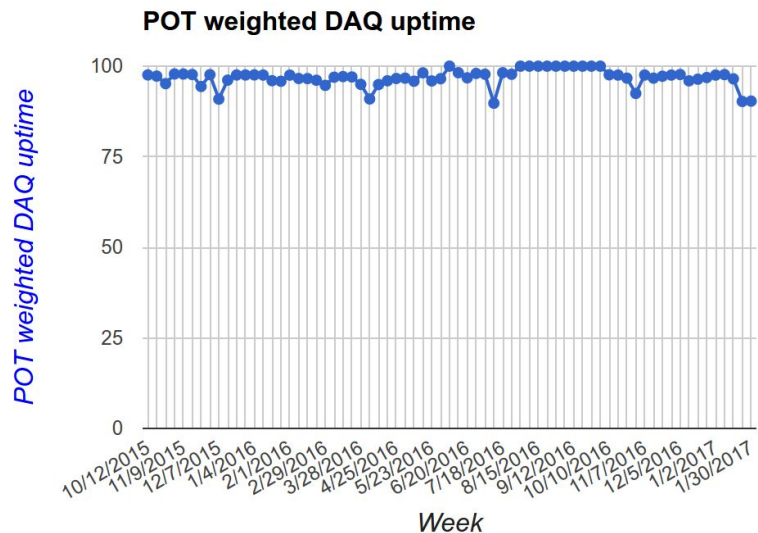
98.5%

POT Delivered

5.2E20 (6.3E18 this week)

POT Recorded

5.0E20 (5.7E18 this week)

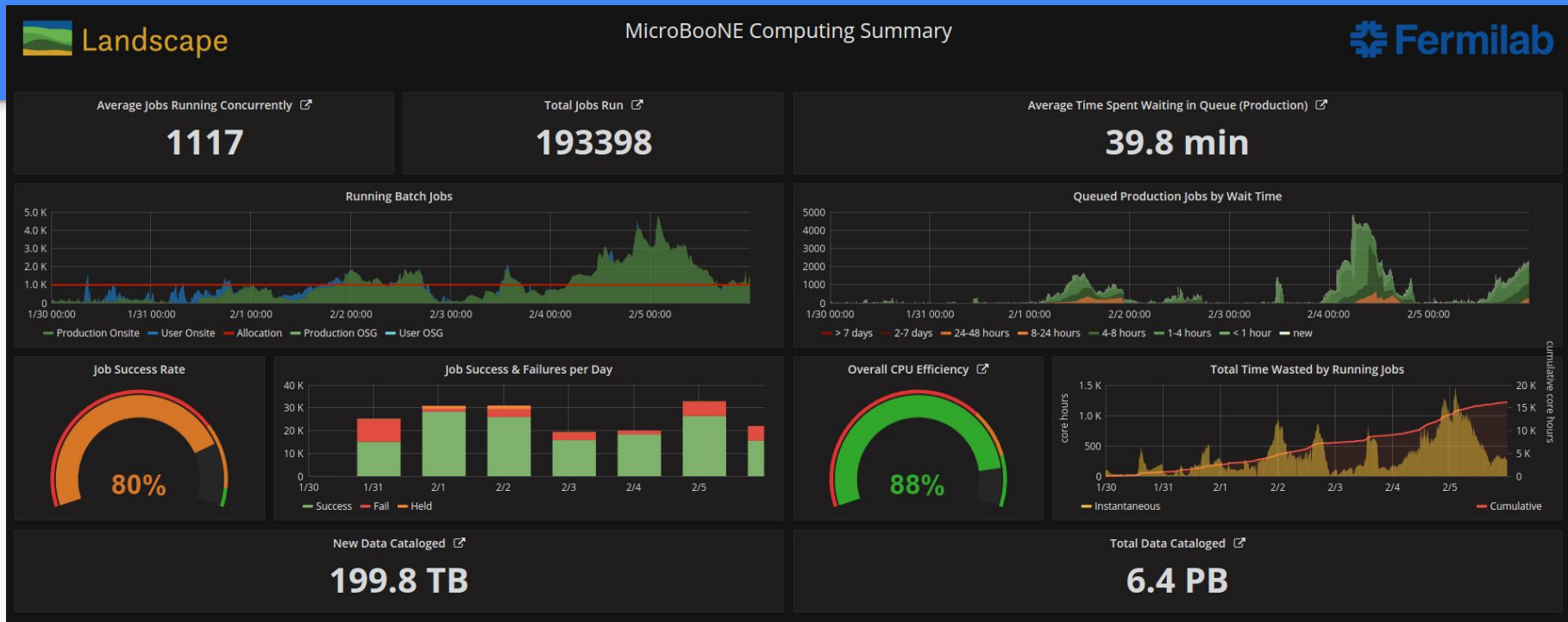


Note: Results here reflect DAQ weighted uptime. BNB to ANNIE and MiniBooNE.

Kevin Wierman, Feb 6, 2017

Computing Summary

- Running smoothly



Kevin Wierman, Feb 6, 2017

Summary

Many thanks to everyone helping with the HV issues!

- Relevant diagnostic facts
 - Warm side of HV system appears OK
 - Problem appears to be inside vessel or on anode side
 - Other detector subsystems also OK
 - Exception: 7 new unresponsive channels and 1 unresponsive ASIC
- Currently at 0 kV drift field
 - Operations team and collaboration continuing investigations
 - Many thanks to FNAL personnel working the problem
 - Analysis teams digging deeper into data to determine cause
 - Investigating anode side of the detector