

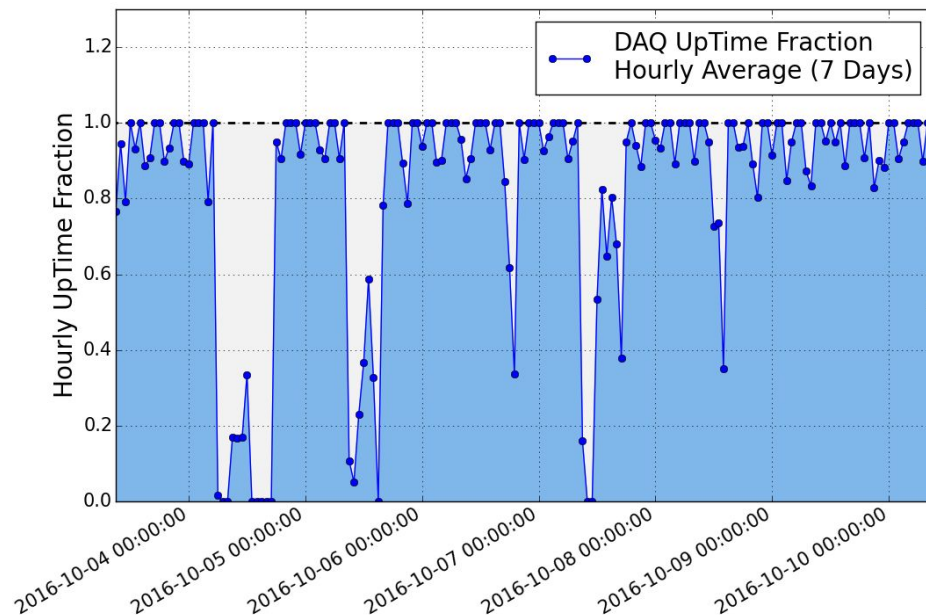
MicroBooNE AEM Report

Corey Adams, Yale University

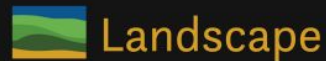
Supernova Readout and Uptime

MicroBooNE recently commissioned its continuous “Supernova” stream readout, which runs in addition to the triggered readout.

DAQ Uptime remains good.



MicroBooNE Computing



MicroBooNE Computing Summary



Average Jobs Running Concurrently [↗](#)

849

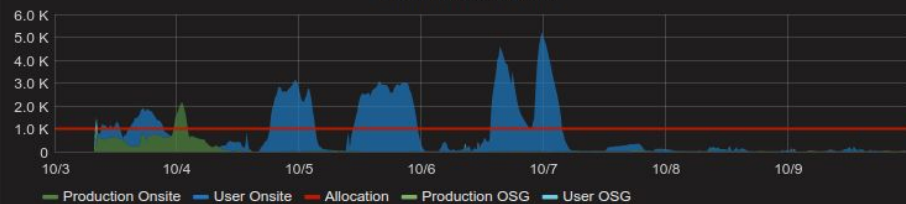
Total Jobs Run [↗](#)

91019

Average Time Spent Waiting in Queue (Production) [↗](#)

1.171 hour

Running Batch Jobs



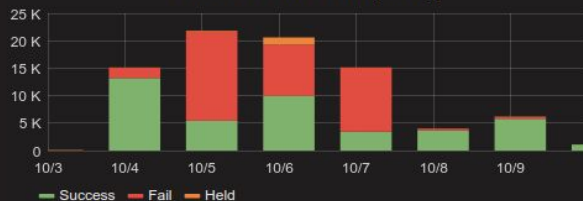
Queued Production Jobs by Wait Time



Job Success Rate



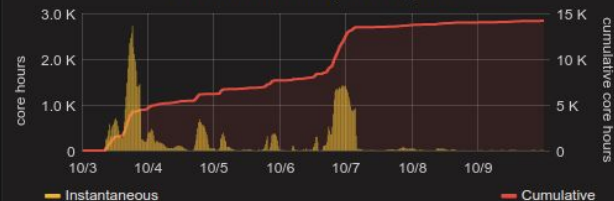
Job Success & Failures per Day



Overall CPU Efficiency [↗](#)



Total Time Wasted by Running Jobs



New Data Cataloged [↗](#)

0.9 TB

Total Data Cataloged [↗](#)

4.7 PB

Additional Updates

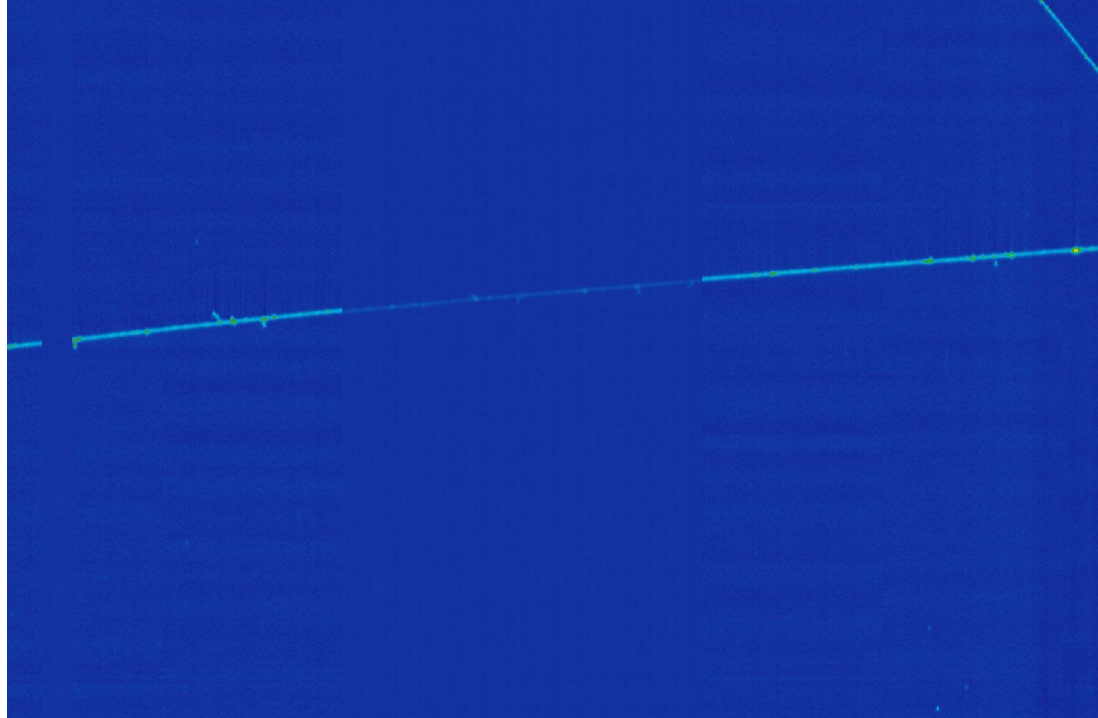
- Microboone replaced all of its service boards and added an additional filter for the HV supply.
 - This significantly reduces two dominant sources of noise in the detector with hardware improvements
- Beam timing upgrade has been performed to simplify and improve the beam signals at Microboone
- Supernova stream successfully commissioned and running
- Discussion of Trigger cocktail to be concluded today prior to return of beam - balancing required measurements of cosmic background with computing resources.

Additional Updates - CRT

- The Cosmic Ray Tagger racks have received ORC and commissioning of the system has begun.
 - Installation of bottom and both sets of side panels is complete.
- Work on the CRT system continues during beam running. We anticipate no issues with detector stability while the CRT is commissioned.
 - Anticipate approximately two weeks of work after beam returns

Additional Updates - Misconfigured Feed Through

- One half of one feedthrough in the detector is misconfigured. This manifests as a lower-gain set of channels. This is **correctable in software** with a targeted deconvolution, so we have opted to not attempt a hardware fix at this time.



Current MicroBooNE Status

- Drift High Voltage running at 70kV uninterrupted since last Tuesday (10/4/16), and with only brief downtime since 9/30/16.
- PMT system is on and running.
- 2 shifters per 8 hour period since Monday, 10/3/16.
- Purity is high ($> 6\text{ms}$) with nearline monitoring running smoothly.

MicroBooNE is ready for beam!