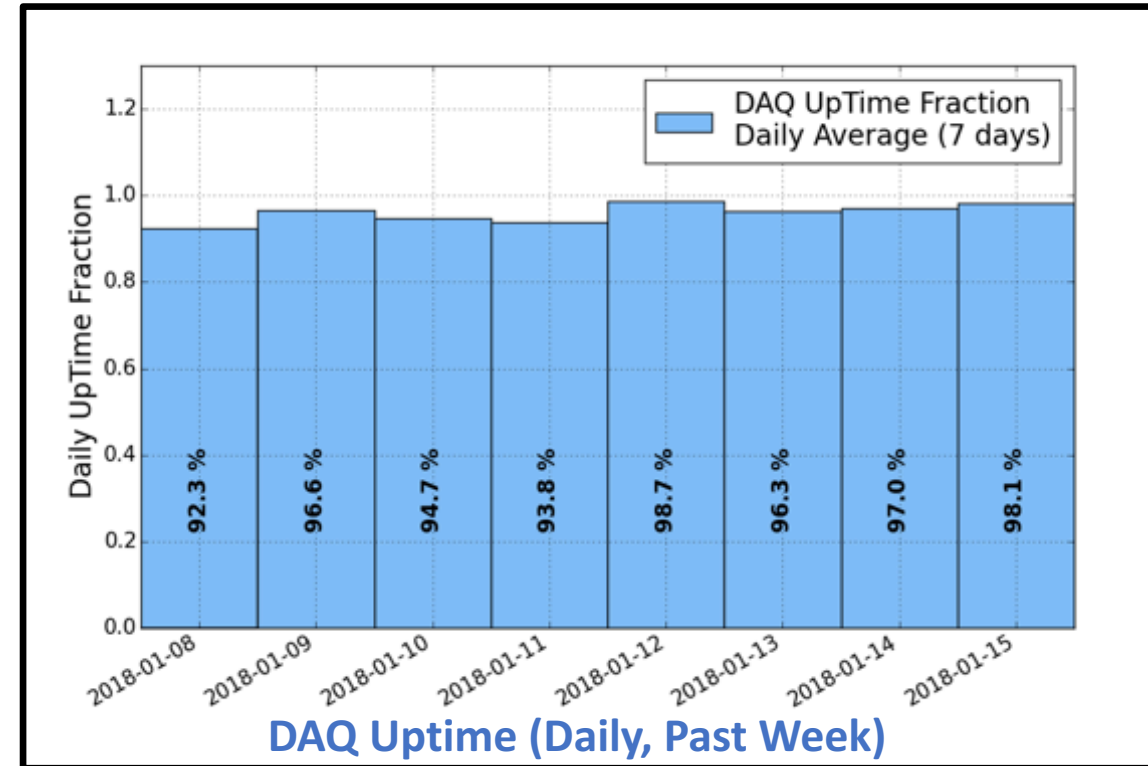
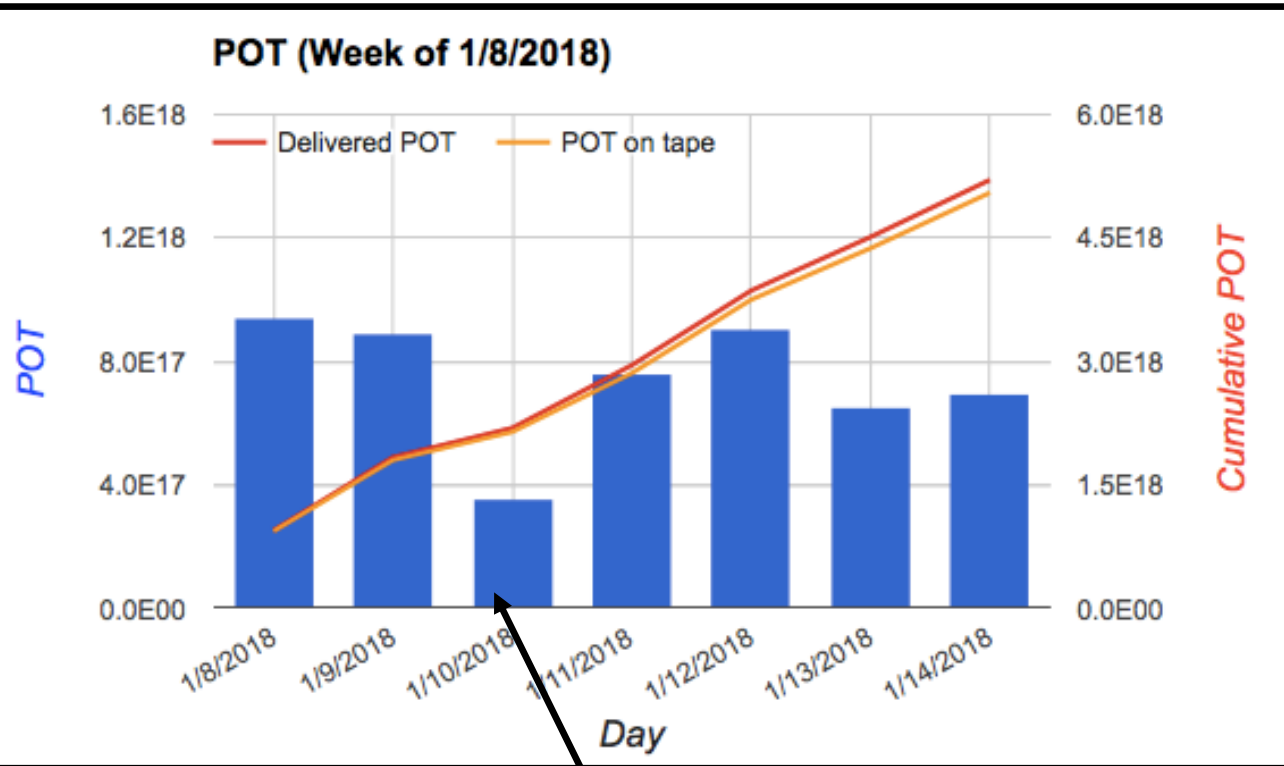




**MicroBooNE Experiment report  
(2018/01/08 – 2018/01/22)**

# Beam Statistics (2018/01/08 - 2018/01/15)



**Beam went down for maintenance**

Total POT delivered :  $5.203 \times 10^{18}$

Total POT recorded on the tape :  $5.0468 \times 10^{18}$

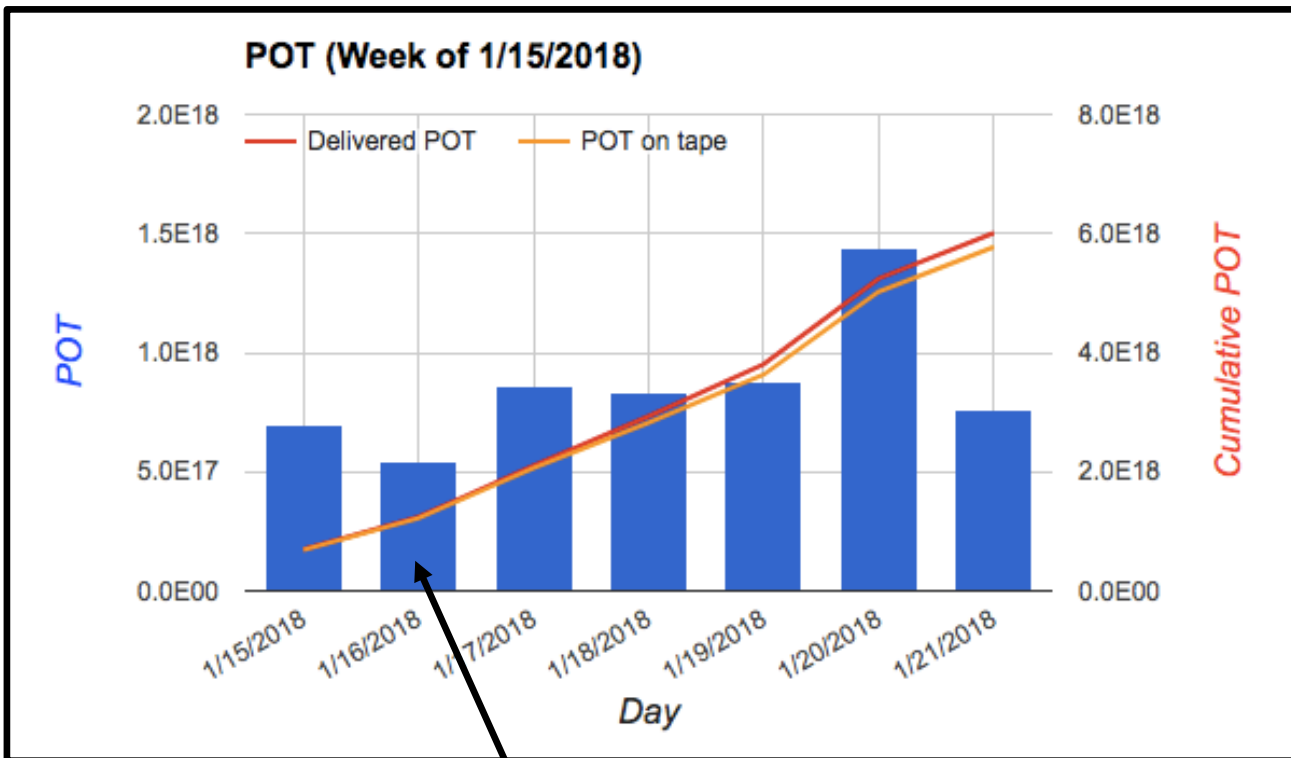
Average BNB Uptime : **91%**

Average POT-Weighted DAQ Uptime : **97%**

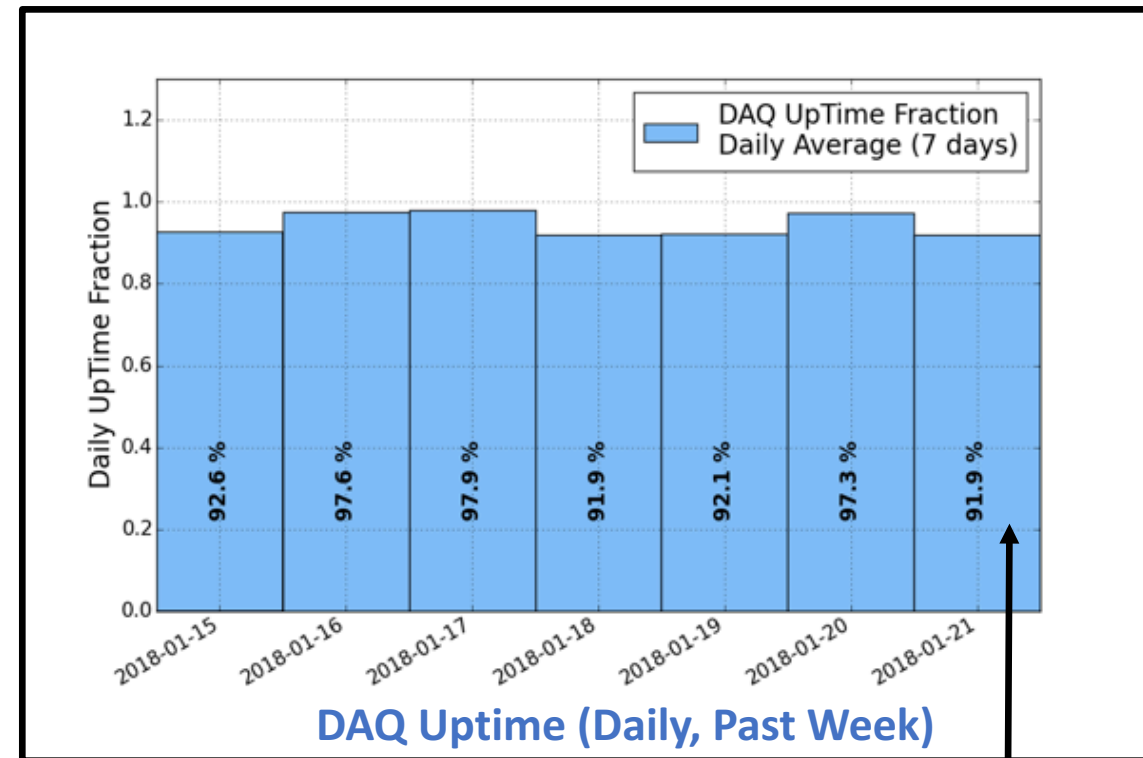
# During beam down time (5.30 AM – 5.00 PM on Jan.10)

- Some DAQ stability test were performed to see the impact of increasing the cosmic ray data collection for physics analyses
- Tried to reach the target ratio of 4:1 EXT : BNB
- When the external trigger rate was 10 Hz or 12 Hz, average time duration of a run dropped down to ~100 minutes (not helping to get higher DAQ uptime).
- MicroBooNE run coordination team met Bonnie King and SLAM team
  - Discussed lessons learned from last week DAQ downtime due to DAQ RAID rebuild
  - Discussed options available for the MicroBooNE once the service warranty expires for DAQ computers on April 26 th

# Beam Statistics (2018/01/16 - 2018/01/22)



**Beam went down**



Not updated properly ~ 98%

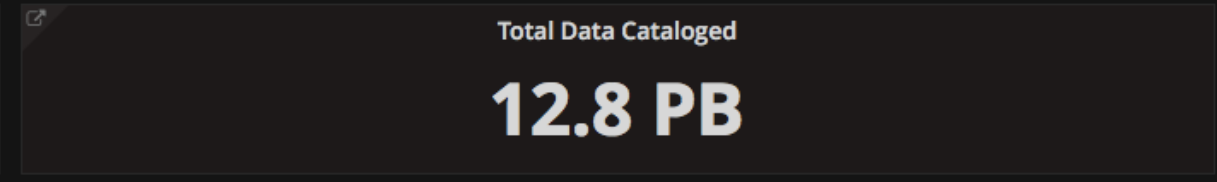
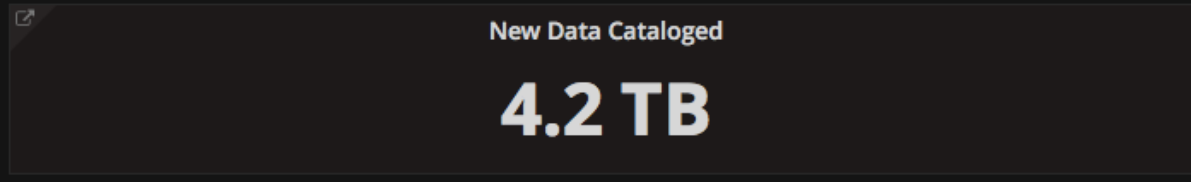
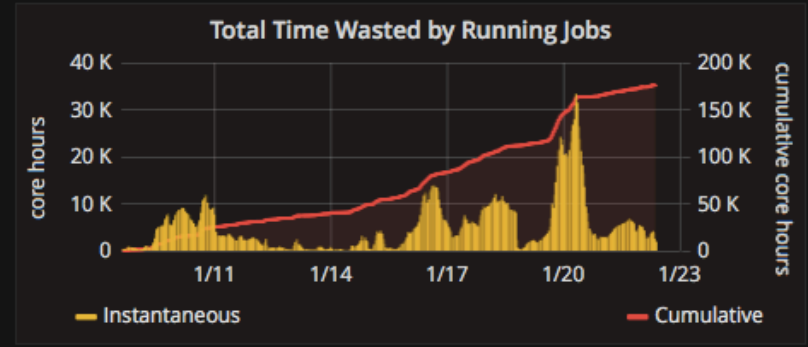
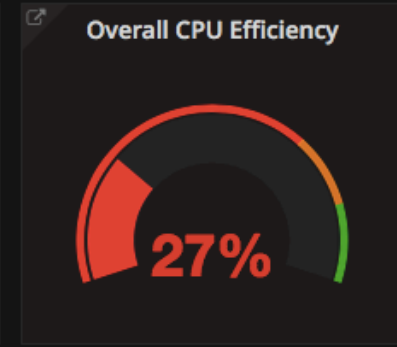
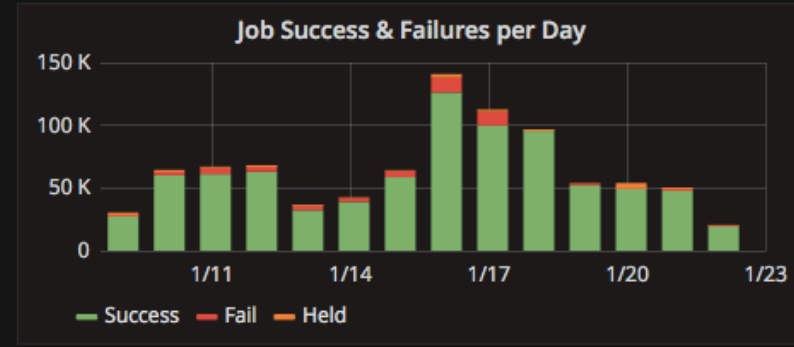
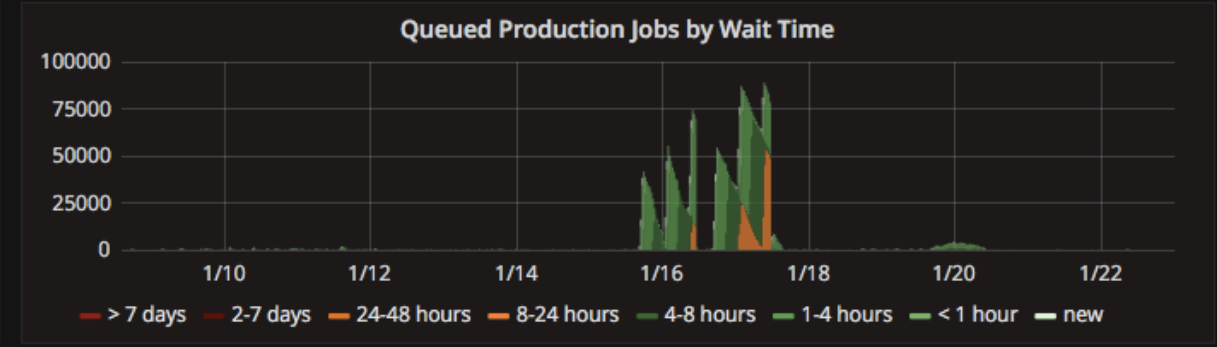
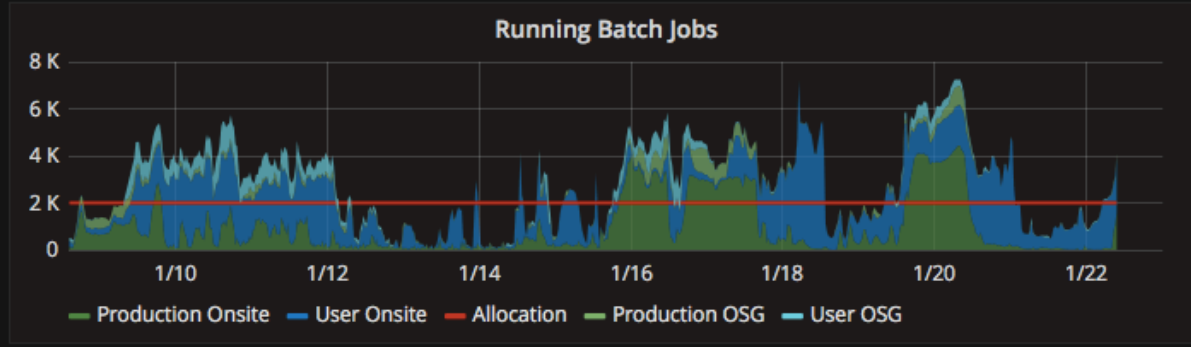
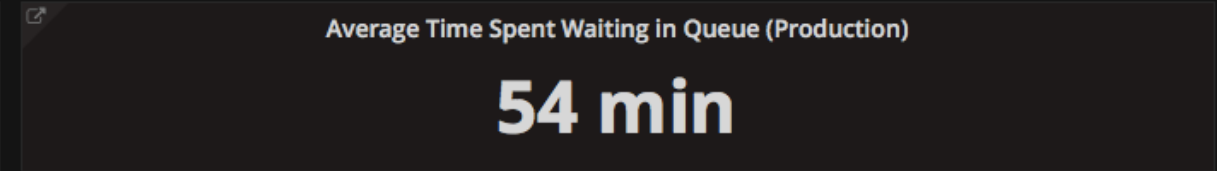
Total POT delivered :  $6.0075 \times 10^{18}$

Total POT recorded on the tape :  $5.7738 \times 10^{18}$

Average BNB Uptime : **92%**

Average POT-Weighted DAQ Uptime : **96.1%**

# Computing Summary(2018/01/08 – 2018/01/22)



# Low CPU Efficiency

- Processing campaign which launched ~ 170 K+ jobs without any files to be processed
- A few processing campaigns which ran out of files to be processed but still kept submitting files
- dCache slow down which caused inefficiency in copying files in and out of worker nodes
- In-time anatree processing failed over the week end

# During the week

- Beginning of the year during the weekly cryo walk through Carrie McGivern (ELO), Bryan Johnson noticed liquid Ar pump No. 1 was about to fail
- Planned to switch to liquid Ar pump No.2 on Tuesday (Jan. 16)
- Pump No. 1 failed on Monday, but the cryo operation was performed on Tuesday as planned by the cryo team (failure on Monday didn't create any additional problems)
- High voltage was ramped down for repair work and asked for a beam down time on Tuesday (back to normal 4.30 pm on same day)
- Had early signs of possible disk failure again in event builder machine (We are keeping a close eye)

# Summary

- MicorBooNE is running smoothly with continuous neutrino data taking
- Switched to liquid Ar pump No.2 from liquid Ar pump No.1
- MicroBooNE's large scale Monte-Carlo and data production continues