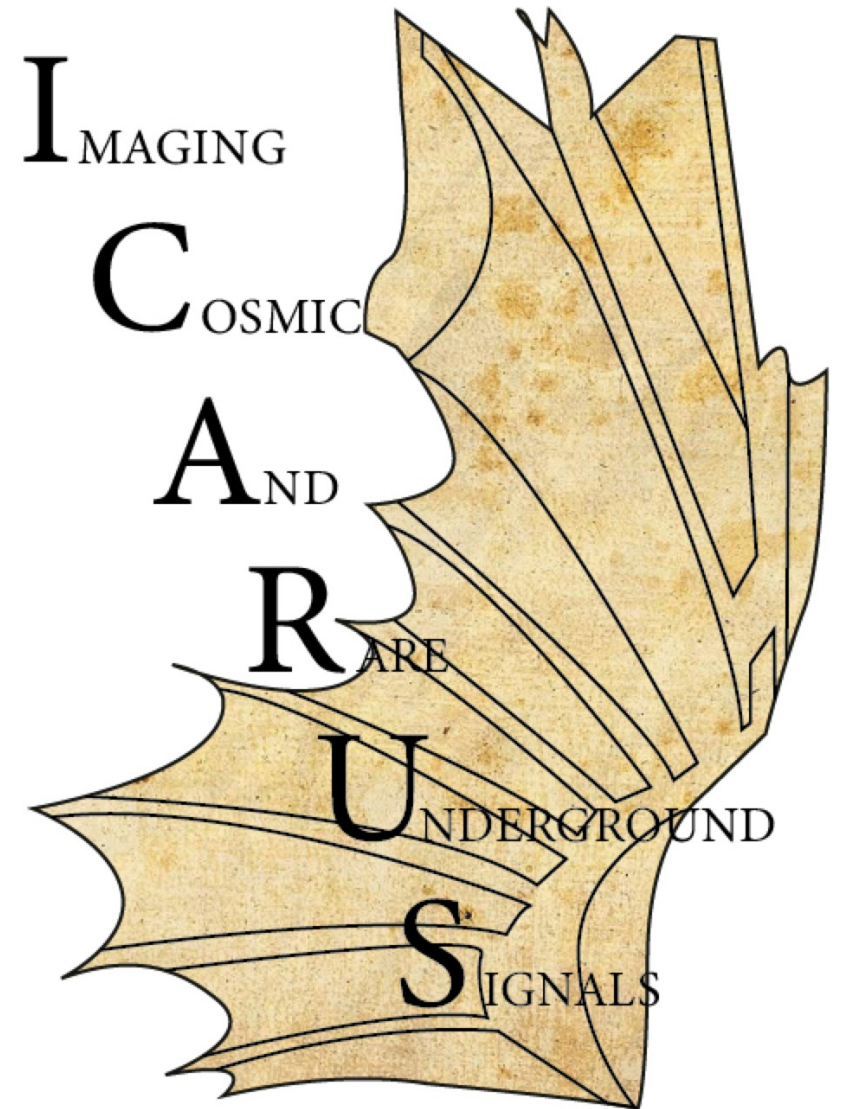


ICARUS Update

Jacob Larkin and Anna Heggestuen

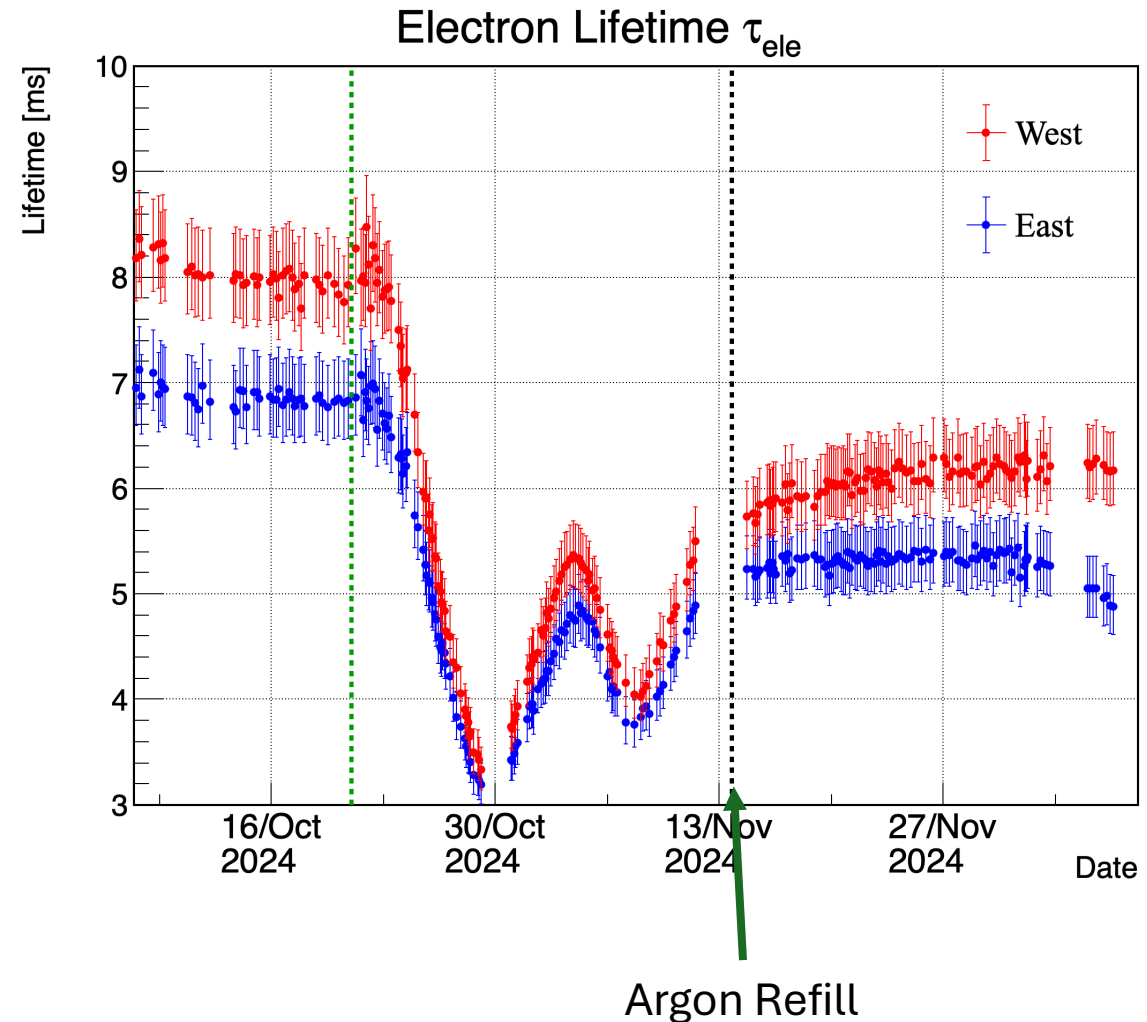
Proton PMG Meeting

December 12, 2024



ICARUS Status

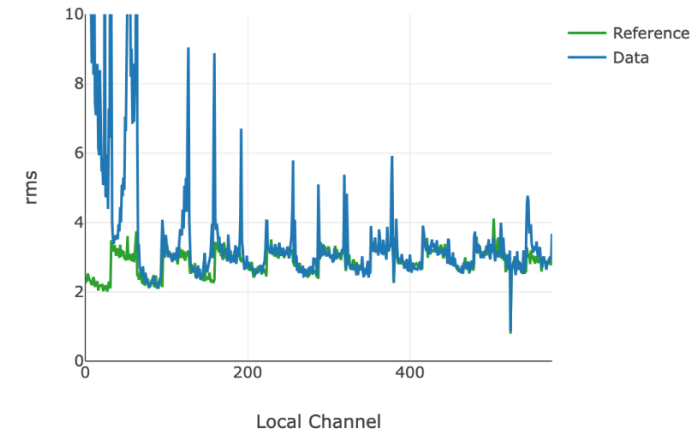
- Argon refill in November completed without issue
- Argon purity lower than during Run 3, but still above threshold needed for physics data (will increase over time)
- Finalized DAQ and trigger configurations for Run 4
- Gas leak at building, we've been on electric heaters since last week
- Ready to start physics run



Argon Refill and TPC Noise

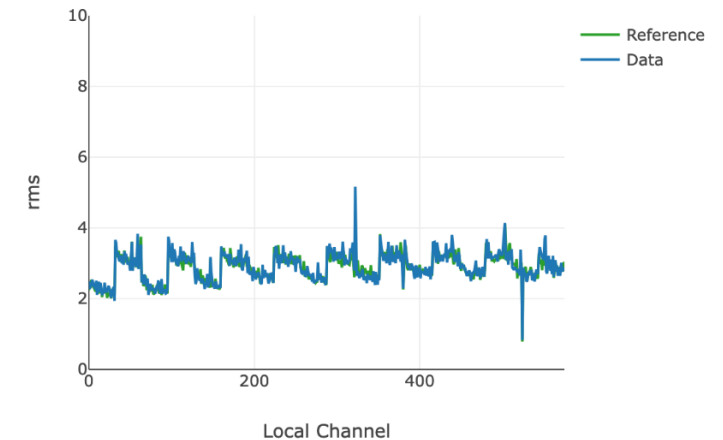
- Argon delivered Mon, Nov 11, refill started Tues evening, finished Wed morning
 - No issues with refill
- 1 day of downtime while we addressed issues from a server OS update
- High TPC noise while argon level monitors were installed (this is expected), and noise went away after level monitors removed
 - Noise on 2 TPC crates still present, but seems to have been there for a while

Flange Pos At Chimney WW02 -- TPC Channel Rms
At 11-17-2024 21:29:34 (CST/GMT-6)



Local Channel

Flange Pos At Chimney WW02 -- TPC Channel Rms
At 11-20-2024 13:03:54 (CST/GMT-6)

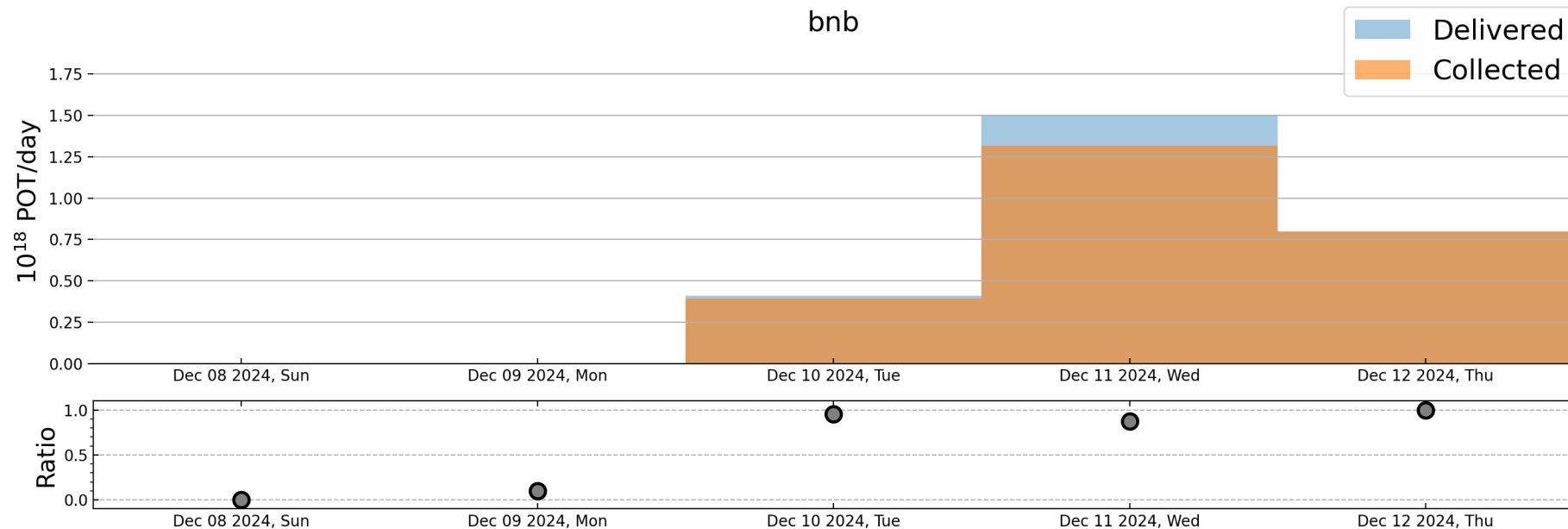


DAQ/Trigger

- DAQ updated to the latest version (same version used by SBND)
- Running and stable for >2 weeks
- Trigger configuration for Run 4 set
- Most servers on AL9, but bottom CRT, white rabbit, and event builders still on SL7
- Some issues seeing the BES from BNB just before Thanksgiving
 - Problem was with a NIM module in the setup at M112 which we inherited from MicroBooNE
 - Fixed for now, but in the long term we would like to replace this setup

First Beam

- A few runs crashed Tues and Wed, resolved by power cycling PMT digitizers
- Couldn't see BES signal in PMT system, resolved issue by unplugging fiber and plugging back in
- Several short runs Tues and Wed as beam was starting and we were dealing with PMT and BES issues
- 13 hr run Tues night, 20 hr run Wed afternoon to Thurs morning



Summary

- Only minor changes over the last month and nothing planned during beam run
- Stable conditions since yesterday afternoon, and mostly stable Tues and Wed morning
- Ready to begin taking physics data for Run 4