Minutes from the RG1a analysis of August 8, 2024 Notes by Casey Morean

Please remember to post your slides on the ELOG at <u>ELOG NPS-RG1a-Analysis (ilab.org)</u>

Meeting Recording:

https://jlab-org.zoomgov.com/rec/share/gMZI09M28JxILqMwPcr12DfskoQIPxwd83J5cnnqkaA7 Eqaj9ONQiaQndPXT3tA_.vTYRHGgB8x7tz6ie

Passcode: ^m0skE@3

Present:

Carlos Ayerbe, Joshua Crafts, Wassim Himdi, Tanja Horn, Charles Hyde, Hao Hyang, Mitch Kerver, Ed Kinney, Po-Ju Lin, Mark Mathison, Hamlet Mkrtychyan, Casey Morean, Christine Ploen, Yaopeng Zhang

Mark Mathison:

On-going yield for each kinematic as well as when we revisited it at the end of the experiment.

Joshua Crafts:

Version 0.1.0 - 3 numbers main production (tied to pass), Minor updates that change the format. Patches will be added. No major changes.

Run manager API that will be a bit of code that can give a runlist based on prompts. Interface to runlist. Option to select older runlists, but will default to default runlist.

Location: group disk, access only read-only. Runlists. Will also have API.

Google spreadsheet is available, but please don't edit it.

Q - Mitch: Towards Reference times Avnish / Casey

Casey for Avnish

Update on reference times and meeting with Mark Jones, Bill Henry, Chandan Gosh.

The reference times are completed. Avnish had connection troubles and will post his ELOG final report on Reference times.

Wassim

Working on the best way to extract the reference time based on the waveform analysis.

Extraction of reference shapes is from elastics. Works well on kinematics he has used.

Working on getting reference shapes from elastic runs.

Working on checks on identifying problems with blocks when crates are down or VTP is down. May present stuff on that next week.

Hao

Working on tracking noise working with Wassim. Looking at fADC and VTP information for each block. Wassim saw some weird waveforms, so Hao will work from those runs and blocks first. Look at if his script can identify problems. Goal is to build up a script to run over all runs and pull out run number and block number without checking thousands of plots.

Wassim addition

For a run that Julie put in, all events have the same event. It has the same waveform for all events! This is not physical. There are a couple other blocks with similar behavior. The

waveform was stuck for the one block was stuck, but the others were not stuck. Checking VTP and fADC at the same time could give us hints. Check if there is a correlation.

Taehee Song

Working on pi0 coefficient. Trying to apply pi0 calibration. Working on pi0 calibration. Issue with a script. Meeting with Wassim next week

Yaopeng

Pull request for timing windows submitted. Expanded range for calorimeter and Cherenkov PMTs. Moving toward DC calibrations for next week(s).

Mitch

Continue moving on Cherenkov and Calorimeter. Script working for calibration plots. Working on electron detection efficiency and pion rejection - one or two weeks from now. Working on e/p stability plot for efficiency plots. Low amplitude plot for Cherenkov plot.

Christine

Resolved discrepancy with BPM_C with Dave Gaskell. A PR was submitted and accepted to correct the ~0.45cm offset. Re-running calibration(s) for that.

Please refer to the TO-DO list for more tasks! NPS analysis to-do (May 2024) - Google Docs

Keep up the good work! $\stackrel{\bullet}{\cup}$