ProtoDUNE-SP DAQ support

DUNE DAQ Coordination Team Meeting 2019-07-08

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Short status on PDSP DAQ support

- Operations
 - WIB issues
- Pending tickets (open long time ago)
- DAQ Development Period July
- DAQ on-call shift

Operations

- HV Streamers:
 - \circ $\;$ Auto recovery is on and have continued to took data with 7.5 ms readout window
- Solved the issue with missing data from FEMBs/rate problem on APA-1
- Taking cosmic runs
 - Run 8654: All CEs and SSPs included and they were active during the run

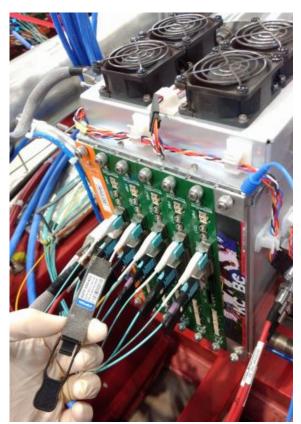


Offline analysis reported missing data from the two FEMBs on APA-1

- Low fragment size on cob4_rce02 (WIB3 on APA-1)
- Following the suggestions of Patrick, Matt, and Roland RCEs and WIBs have been checked
- Issue found to be the transceiver on APA-1, WIB3 and replacing it

with a new one solved the problem

https://pdspelog.web.cern.ch/elisa/display/12479



Pending tickets (long time)

- SSP BoardReader Empty Fragments
 - <u>https://its.cern.ch/jira/browse/NP04DAQ-37</u>
- Disable triggers from DCS
 - <u>https://its.cern.ch/jira/projects/NP04DAQ/issues/NP04DAQ-28</u>
- User friendly configuration tool
 - <u>https://its.cern.ch/jira/projects/NP04DAQ/issues/NP04DAQ-49</u>
- CTB BoardReader to respond to software trigger
 - <u>https://its.cern.ch/jira/projects/NP04DAQ/issues/NP04DAQ-10</u>
- Completion of OnHost FELIX BoardReader
 - <u>https://its.cern.ch/jira/projects/NP04DAQ/issues/NP04DAQ-14</u>

DAQ Development Period

• July sprint:

https://its.cern.ch/jira/projects/NP04DAQ/issues/NP04DAQ-53

- Backlog from May/June period
- Testing tickets will be reorganized:
 - Moved to July ticket or create a testing issue for the sprint
 - <u>https://its.cern.ch/jira/projects/NP04DAQ/issues/NP04DAQ-12</u>

| 1 | | JU | LY 2 | 019 | | | OCTOBER 2019 | | | | | | | |
|-----|-------|-----|--------|------|-----|-----|---------------|-----|------|-----|-----|----|------|---|
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| _ | 1 | 2 | 3 | 1 | 5 | 6 | - | | 1 | 2 | 3 | 4 | 5 | HV+Purity+SCE+T test time |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | DAQ test time |
| 14 | | 10 | - | - | 2.2 | - | 20 | 21 | 22 | 23 | 24 | 25 | 26 | and rear mile |
| 20 | 20 | 20 | 57 | 40 | 20 | 41 | | | | | | 40 | 20 | DD to st the |
| 28 | 29 | 30 | 31 | - | - | | 27 | 28 | 29 | 30 | 31 | - | | PD test time |
| _ | | - | - | _ | _ | _ | _ | - | - | | - | - | - | |
| | 5 | AUG | UST | 2019 |) | | NOVEMBER 2019 | | | | | | | Grounding and Noise |
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| | 1.121 | | | 1 | 2 | 3 | | | | | | 1 | 2 | |
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| | | _ | | _ | - | | _ | | - | | - | - | | *CE tests will proceed in parallel to the |
| | SE | PTE | MBE | R 20 | 19 | | DECEMBER 2019 | | | | | | | other tests |
| Sun | Mon | Tue | Wed | Thu | Ini | Sat | Sun | Mon | -lve | Wed | 1by | N. | lat | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | *CE pulser runs and grounding / noise |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | studies will be accommodates in the |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | schedule upon request |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | |
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2019 Calendar

Planning of activities

We had a really nice summary of our plans during the last Dataflow WG meeting.

Please have a look!

https://indico.fnal.gov/event/21169/

Comments and suggestions are more than welcome!

DAQ "on-call" shift

- Aid ProtoDUNE DAQ users in case of issues
 - Follow the np04-shifterassistant channel during the shift
- Summarize what happened on the given day
 - A wrap up of encountered issues and activities in the form of an Elog entry
- Report issues on JIRA
 - Better tracking
 - Proactive way for development (example on next slide)

To sign-up:

https://docs.google.com/spreadsheets/d/18FFU0NWIfB2YN-nKrFjQ91I9g5L5Zh3N8 hr7guZy4PU/edit?usp=sharing



Thank you for your attention!