

General (Stefan/Kin)

- TPC works again

Current Priority Items (PC)

- Cosmics data with TPC with clean trigger
- Characterize TPC behavior
- DAQ development: fix event counts; test compressed format, zero suppression, multi-event buffering
- **Identify work plan for subsystem maintenance, please report today**

Work Control Coordinators (Chris/Joel)

- Stefan: where does the installation of the canary chamber stand?
- Charles: rack done; cover status unclear; chamber not moved to 1008 yet b/c of radiation safety

Plan of the Day (Stefan/PC/all—to be revisited at end of meeting)

- Random triggers with EMCal/HCal on (Shuhang pedestal study)
- Undo grounding and re-test TPC laser
- Night, i.e. otherwise: cosmics data with TPC with clean trigger

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Evening (Shuhang)

- DAQ testing, RCDAQ logging rate is low (20MB/s)
- INTT LAD1 chiller had an alarm, the flow rate went back to around 5 after that

Night (Owl)

- DAQ testing, RCDAQ logging rate is low (20MB/s), intermittently high before low again
- INTT LAD2 chiller had an alarm at shift exchange, the flow rate went back to around 5 after that

Day (Veronica)

- DAQ folks have been running a test since ~7:40AM; likely switch to cosmics after SCM
- R. Pisani did some INTT LAD work (hopefully might solve semi-regular alarms)
- TPOT Grafana sometimes seems to lose communication, says “no data” (minor/observation; reported to experts)
- TPC saw laser signal; to be included in next cosmics runs

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Magnet (Kin)

- Nothing has really changed (except temperature drifting up slightly). Cryo group will have a walkthrough tomorrow and after that the LN2-related work for sPHENIX will hopefully be done in a day or so.

MBD (Mickey)

- Nothing to report
- No maintenance needed

Trigger (Dan)

- Going to switch back to vertical coincidence trigger, but with the additional z sign flip GTM/GL1 (Martin/Dan/John K)

- Suspended the gtm (1) work for the day to give the TPC group access

DAQ (Martin/John H)

- Bufferbox cleaning going on, minor TPC work
- Looking into DAQ logging rate

MVTX (Cameron)

- I couldn't recover one FELIX server into detector control last week and had to wait until the next morning. This was because ITSCommLayer needed to be restarted and system controls are password protected. Can Martin and I have a chat about what the password is? (I spoke to Dan and the password we thought it would be didnt work)

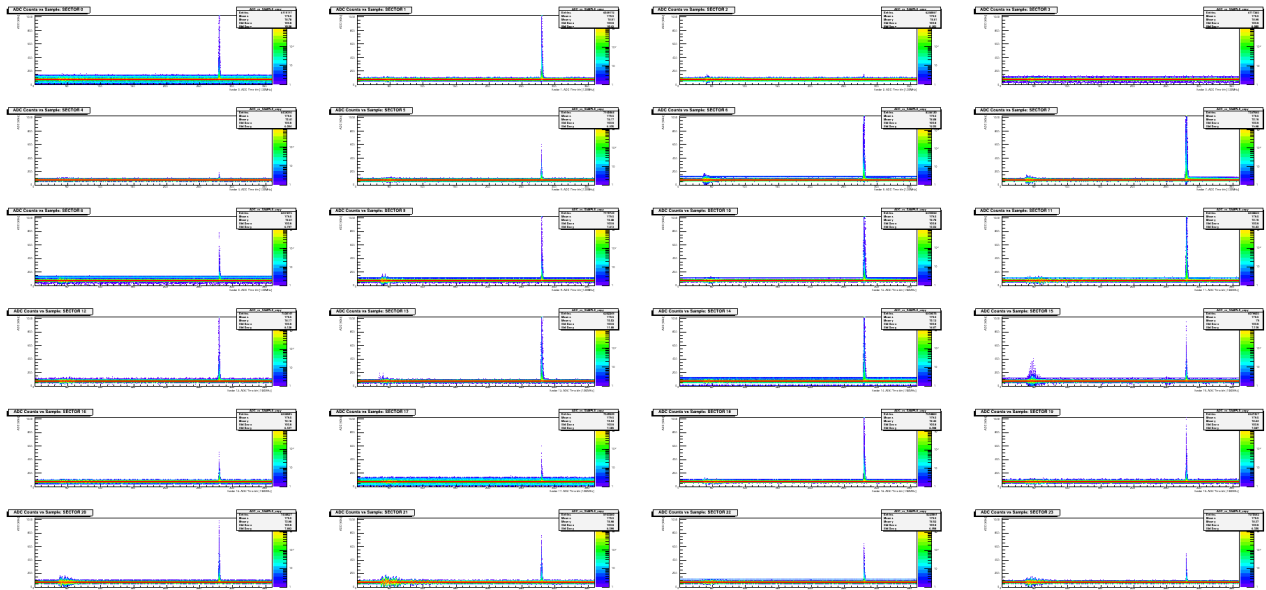
```
(python_env) [phnxrc@mvtx-flx0 ~]$ systemctl restart ITSCommLayer@MVTX
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ====
Authentication is required to manage system services or units.
Multiple identities can be used for authentication:
1. phnxrc
```

### Plans for bore access

- We have one stave that we can't communicate with. We've excluded the issue occurring from our 2E1 rack to the rack room so the issue is in the bore. There are 3 possibilities:
  1. Loose cable at the detector patch panel
  2. Broken cable between the patch panel and rack
  3. Damaged stave
- We will tackle the possibilities in the above order. We would need to have the diving boards replaced and the sEPD removed so there's no confined space. The time required for each fix, after the diving board and sEPD tasks are completed are:
  1. Loose cable. 1 hour to power off the MVTX, reconnect the cable then power on the MVTX and see if the stave responds
  2. Broken cable. 1.5 hours to power off the MVTX, route the new cable then power on the MVTX and see if the stave responds
    - a. We already have the spare cable routed from 2E1 to the bore, it just needs routed into the right part of the rack and patch panel
  3. Damaged stave. 3 hours to power off the MVTX, get MOSAIC equipment from 510 onto the scaffolding and run a diagnostic test
- Note that if it's a damaged stave, extend repairs up to 10 weeks! We would need to remove the MVTX, take it back to 510, replace the stave with a spare, bring it back to 1008 and reinsert it.
  - Probably takes 1 month to coordinate experts from BNL, LANL and MIT to be at 1008.
  - Probably takes 1 or 2 weeks for the replacement

- Add another month to get all experts back to BNL at the same time to reinsert the MVTX
    - Many MVTX experts have small children, other experiments or are no longer funded for sPHENIX so it takes some paperwork and logistics to get everyone together, one month is a reasonable assumption
  - Kin: shielding simulations: 40 % reduction in background flux with 2,000 kg shielding around beam pipe at PHENIX MuID
- TPC (Tom Hemmick, Jin, Takao, Evgeny, Charles, Bob, Ross, John K.)
- Start of day:
    - Charles + Takao continued to take pulser data starting with NS R3s - only got to Sec 2 R3
    - Evgeny + Bob preparing the canary for transport - still waiting on permit to move into IR
  - Middle of day:
    - John Haggerty got very excited about running laser test. Tom agreed
    - We put down pulser test and got started running the diffuse laser test
    - Initially - some difficulties but Martin helped us get setup on GTM 1
    - IMMEDIATELY SAW LASER PULSE:
      - ALL TIMED IN:

TPCMONDRAW\_ADC\_vs\_SAMPLE Run 25522, Time: Wed Aug 23 14:18:14 2023



- Why can we see signals now but not before:
  - What changed?
    - 1) 08/14 - Sal fixed issue in TPC LV rack 3C3-2 with unplugged MegaPack
    - 2) 08/22 - Evgeny found disconnected “return ground” in HV rack for CM power supply
    - Testing # 2) - Note, we confirmed we had CM under high voltage before
- Canary Chamber Install:

- Rack mounted in 2nd Floor IR, including cover
- Setup on platform in IR as well.
- Waiting on permits to move canary in
- Once in, Frank estimates 1 hour for gas hookup and for Bob to connect the HV/signal cables

- Maintenance plan: address shorted strips at the minimum (not clear if all of them)

HCal (Shuhang)

- Short low gain hcal& emcal random trigger run if possible during the DAQ development

EMCal (Sean)

- Nothing new to report

TPOT (Hugo)

- No news

INTT (Genki)

- No news

sEPD(Rosi)

- No update

Gas/Cooling ()

- 

ZDC ()

- 

Background Counters ()

- 

Online Monitoring (Chris)

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