

General (Stefan/Kin)

- Kin: Please make sure that you ask the HP (x4660) to scan for anything that you want to take out from the IR, which may have been in contact with the RHIC beam directly/indirectly and hasn't been scanned before.

Current Priority Items (PC)

- Cosmics with all subsystems on, EMCal in high gain
- Characterize TPC behavior - Canary chamber, pulser tests etc.
- DAQ development: fix event counts; test compressed format, zero suppression, multi-event buffering

Work Control Coordinators (Chris/Joel)

- Stefan - Jim Mills, Frank, other techs met to discuss accessing bore. Week of QM and week after QM + 2 additional days (Sept 19th) to give TPC access 7 and 8 o'clock access on the north. Middle of QM week is timeline for south access (MVTX)

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

- Cosmics, all subsystems on
- TPC work

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Evening (Shuhang)

- Runs with all detectors included (not including ll1 due to an error regarding seb15 during rcdag setup).
- Short single HCal cosmic trigger run, stopped since single cosmic trigger run at 20Hz is not useful for anyone. Then switched to the vertical north/south trigger.
- Two short cosmic runs, both stopped for adjusting TPC voltage
- A stable long run(25952) started around 9pm
- 1 TPC GEM spark protection trip around 11:10 pm. (Jin updated the shift-crew monitor page to show #tripped channels)
- TPC experts reduced the conversion time around 11:30 pm and live rate 15->55Hz

Night (Chris McGinn)

- Stable running all night long, 1 (inherited) run of cosmics passed to next shift
 - Some # of TPC trips, logged in elog shift summary
 - No MVTX clock errors
- 2 INTT Lad1 alarms, both cleared w/in 1 minute after acknowledge
 - Notice on 2nd (happened to be watching board) that flow jumped to 12 Lpm before alarm, then dropped to sub 5 (~4.5?)

Day (Veronica Verkest)

- Continued running with all (including TPC) and got over 2M events
 - Got some with EMCal in high gain (this resets to normal when you set up the BP!)
- TPC did some testing, so we continued to run cosmics with all (minus TPC) after
- Humidity alarm in the IR. Acknowledged and eventually went back to normal

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Magnet (Kin)

- Magnet temperature drifts up and is waiting for the Cryo to finish the paperworks/installation for LN2 operation.

MBD (Mickey)

- Nothing to report

Trigger (Dan)

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GTM/GL1 (Martin/Dan/John K)

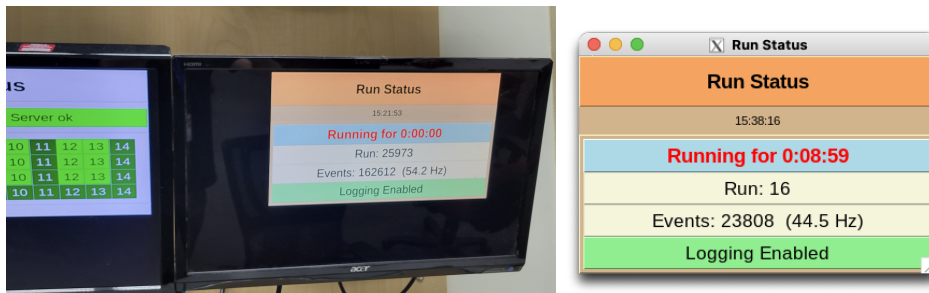
- Figuring out the one-off evt count of GL1 vs others.

DAQ (Martin/John H)

- Some stability and GUI improvements. New "Status" gui (RunStatus.py) with lots of options to place it properly on remote displays (such as the overhead above the DO) Don't be alarmed that rc_status has picked up a new column that gives the current run length in seconds (needed for better "situational awareness")

```
$ rc_status
gl1daq 25973 213574 417.136 1 0 0
seb00 25973 213573 30418.1 1 0 0
seb01 25973 213573 30418.1 1 0 0
seb02 25973 213574 30418.3 1 0 0
```

New GUI on the overhead -



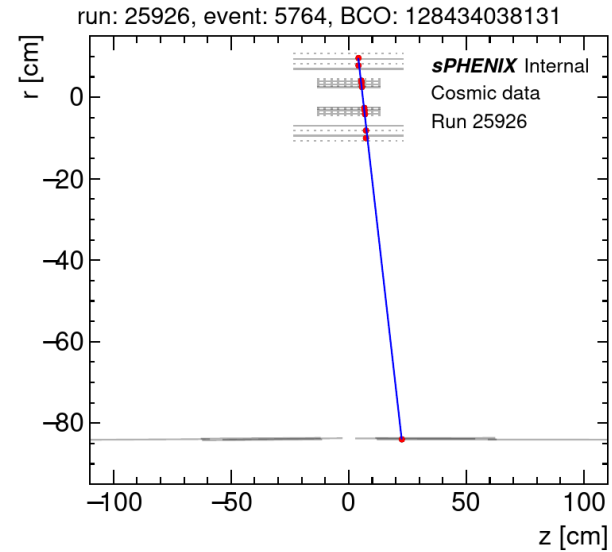
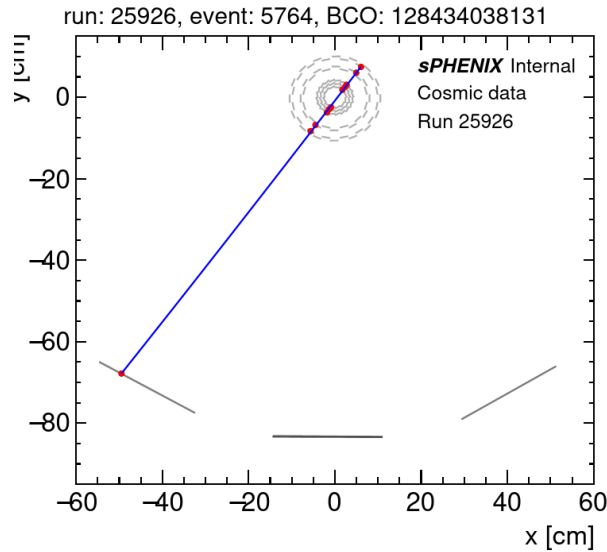
(it will soon show the right run time as on the right)

If the overhead display goes away, do on operator1: `bash ~/bin/right_display.sh`
(in the process of adding a section with more how-to's to the instructions, more over the weekend)

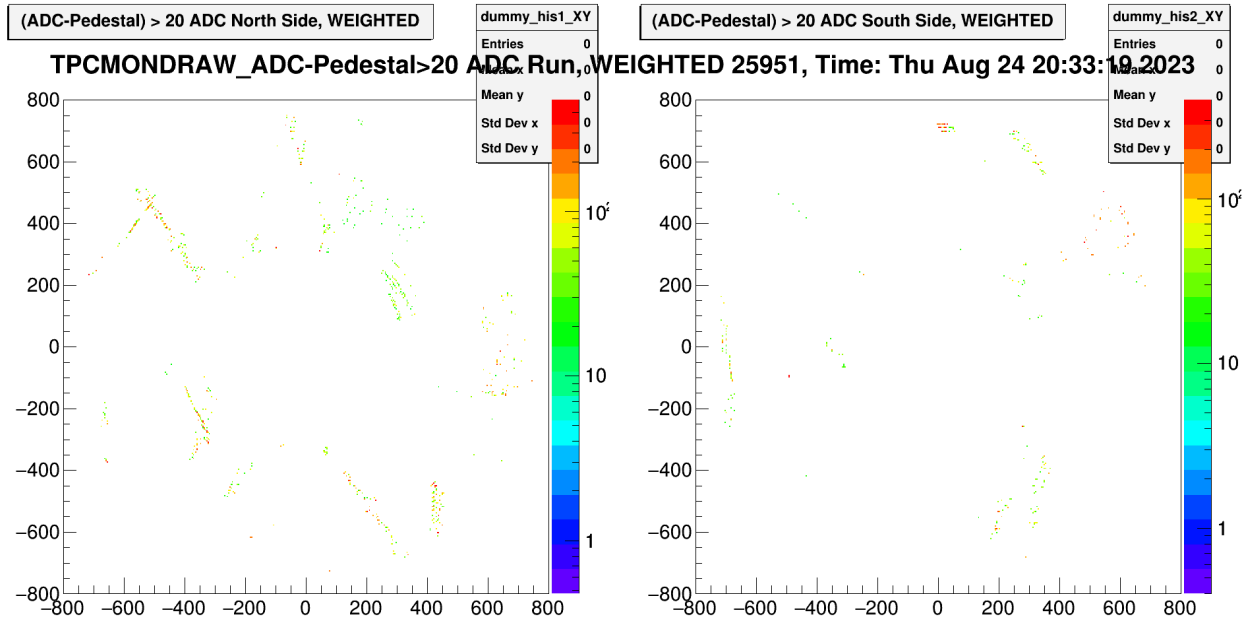
- Work on the observed BCO delta=1 between MVTX and others for other systems, getting all the tools in place right now. Is it MVTX vs all others, or is it +-1 for individual systems? Monday we should know
- More PHENIX "safe-delete"-style /bbox cleaning happened last night, more over the weekend, have been tying in the database into that for better management
- We decided not to take the risk of changing the TPC plugin on a Friday, Monday.

MVTX (Zhaozhong)

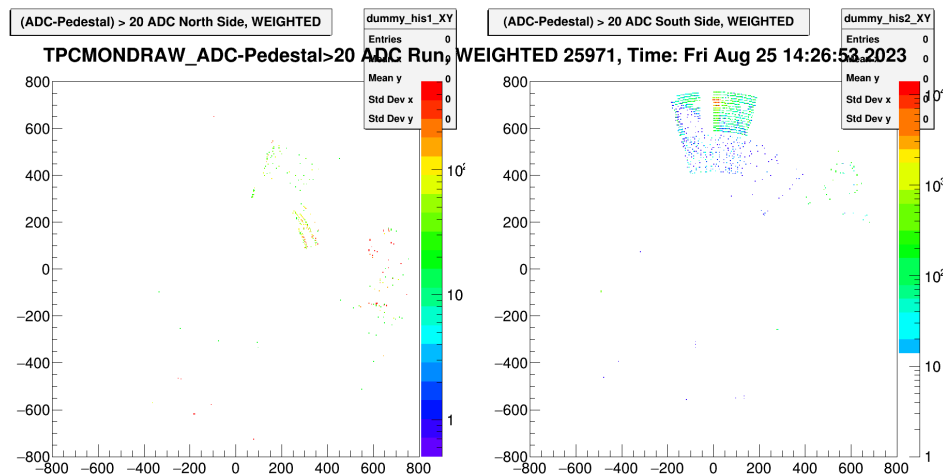
- Found a set of BCOs in Run 25926 for TPC to look at
 - Reduce from 238 down 6 BCOs thanks to INTT and TPOT help



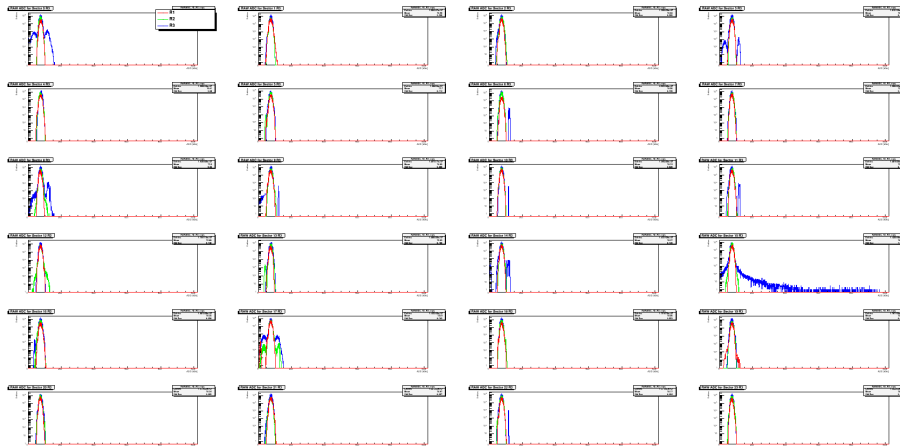
- - Current decoding the new run (Run 25952) with all subsystem in the big partition TPC (Tom Hemmick, Jin, Takao, Evgeny, Charles, John K., Bob, Ross)
 - General:
 - Thomas Marshall trying to look through TPC event displays at BCOs from ZhaoZhong
 - Yesterday after SCM:
 - Martin helped us find the problem with the laser timing on GTM0
 - Turns out, we were also accepting cosmic trigger, so effectively had rando triggers
 - This explains why multiple laser peaks were in 1 window and why it did not happen on GTM1
 - Thanks Martin
 - Brought TPC into big partition at 4700 V - left there all night



- 7 trips / 13 hours - most fast protection
- No new damage from these trips
- Today:
 - Left TPC in big partition with EMCAL at high gain for some time this morning
 - Ramped down TPC HV to do pulser test
 - Finished pulsing all the SS R3s - $\frac{2}{3}$ of TPC is pulsed (module x module)



TPCMONDRAW_RAWADC Run 25971, Time: Fri Aug 25 14:26:13 2023



- SS 12 o'clock Sec 15 R3 - permanently touching padplane
- Response to pulse was very different from others
- Evgeny worked on canary module
 - Discovered some problems with HV cable
- This evening:
 - Right now TPC is parked at 4600 V on GEMS, 45 kV on CM
 - Will raise higher, than put in Big Partition for cosmic data taking
 - Instructions to shift crews will remain the same as last night:
 - TPC will trip, leave it tripped (don't try to recover)
 - Don't end the run for TPC trips
 - If ending run for some other reason, KEEP TPC IN (regardless of # of trips)
 - No need to log trips - we have a record through our prometheus page
 - Experts will monitor and recover trips remotely throughout weekend

HCal (Shuhang)

- Nothing

EMCal (Sean)

- Nothing new to report
- Please return to NORMAL gain and SiPM Bias OFF when cosmic runs are complete

TPOT ()

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INTT (Genki)

- The detector is stable.
- 🎉 See the plots in MVTX's report. 4 of 11 points are from INTT 🎉

sEPD()

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Gas/Cooling ()

-

ZDC ()

-

Background Counters ()

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Online Monitoring (Chris)

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