

General (Stefan/Kin)

- The automatic transfer test didn't seem to affect us (Good !).
- vacuum will be bad when we come back tonight (for a couple days)
- wondering why de-bunched beam at end of store
 - in past runs continuous gap-cleaning had been on
 - Should switch back to continuous gap cleaning
 - Otherwise beam loss will lead to non-clean dump
- last night accidentally gap cleaning was turned on before prepare-to-dump was issued

Current Priority Items (PC)

- Include MVTX in big partition
- Beam studies for MVTX background
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Work Control Coordinators (Chris/Joel)

- Yellow "Entry Requires Permission" has been placed on the 3rd level platform at the North West corner and North East corner. This is to prevent inadvertent contact with the temporary SEPD electronics box. If access to the North aisle on level 3 is required, to gain entry into racks, please contact Frank Toldo (contact information on barricaded area tag) so he can inform you of the hazard.
- NE/SE/SW AHUs have bad heater elements. Parts will be ordered.
- INTT Chiller monitoring alarms are configured. CR will be notified if the unit stops.

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

- Before beam comes back:
 - HCal test of 12 or 16 samples with random trigger
 - JaeBeom tests Big Partition in global mode (DAQ development)
 - If INTT cooling is back (very unlikely): INTT pedestal run
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- Beam: Take calorimeter only data with no prescale to maximize rate and shake out any DAQ issues: G11, LI1, ZDC, MBD, HCal, (INTT if it doesn't slow down the DAQ)
 - Possibly also with number of samples reduced to 12 or 16
- HCal only cosmics if no beam
- INTT: if back: 4 h scan in local mode: during 100 Hz running
- Tomorrow 10-3: TPC laser test with collisions leveled to 100 Hz -> 1 kHz (on GTM1)
- Single yellow, no crossing angle
 - 3:00pm-4:00pm: Angelika will visit our control room to steer/collimate based on MBD singles trigger
 - Take data with this trigger for MBD, INTT; take data with MVTX

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Evening (Xiaochun/Takao)

- Inherited a physics store that was to dump at 21:20. Indeed the store was extended until 21:40 since the MCR wants to do some tests with the beam. Meanwhile, we struggled to start a big partition run due to multiple issues.

- Jaebeom spent quite a bit of time helping us start up. Eventually, we could start a big partition run at around 21:00, but there was an issue that half of the MBD north was not readout. We called Lameck who came into 1008 to help us. He said that this is an issue with DAQ, and a new run would help solve the issue.
- In the background, Martin successfully started RunControl DB.
- Around 21:40, MCR called us that they will keep the beam as they have a problem with injection. They eventually dumped the beam around 22:30.
- There was a major incident before the dump. RHIC played with the beam before they asked us to prepare for the dump. This caused a huge background. We called MCR and they said that they were cleaning up the gap. We told them that they should let us know before they do that, they agreed and said that they will change the sequence from the next store.
- After some problems at RHIC side regarding injection, Finally a new store came and clogged at 23:45pm. The store was inherited by the next shift. Throughout the shift, we had DAQ issues, which was also inherited to the next shift.

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Night (Rosi Reed)

- We inherited beam and issues from the evening shift
- MBD issues (bottom half of north MBD not showing up, other distributions are weird)
 - Did not really take great data from this, should've switched to zdc trigger
- Initially TPC was not in big partition, we were able to include it.
- RHIC was having issues with storage cavities, so luminosity was low
- Dumped and refilled at 3 am
- Dumped and started access at 7 am

Day (Jaebeom acting Tristian)

- RA during the entire shift
- Electric test on the generator at 10AM & 11AM
 - Switched to SA two times
 - Turned off bias voltages for safety
 - Ended with no issues found
- Multiple activities in the IR : sepd / mbd / intt / tpc / emcal / hcal etc.
- DAQ work in parallel
 - Found issue regarding the time-off yesterday : reboot of GTM (reset timing on triggers)
 - HCal cosmic data taking

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Magnet (Kin)

- Nothing new to report.

MBD (Mickey, Lameck)

- Yesterday during the night shift the MBD rate was as low as 20 Hz and also missing hit-map in the North bottom.
- During the restricted access this morning, Mickey did a series of Laser runs and swapped around disc/shaper board clock cables, and improved the strain relief on the meritec cables going into the ADC boards.
- The misalignment in the time waveforms by one 6x clock tick did seem better, but was still not perfect. It's not clear if it's better just because these are Laser runs with no beam, or whether the cable swaps and strain relief actually did help.?
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Trigger (Dan)

- Didn't make an elog last night, but Cosmic trigger was out of commission for testing.
- Pushing the LUT database ...
- Tomorrow at 3 pm, MBD single with 32 hits.

GTM/GL1 (Martin/Dan/John K)

- Still some manual-only settings that are not restored in our setup scripts (delay that made all timing to be off after the GTM reboot)
- GI1/GTM1 is now at v44. Fixes (not all checked out yet):
 - No more “global” global/local mode setting - on a per-GTM basis now
 - L1 holdoff now works in any mode, and is no longer a countdown timer but a switch (reg 15). No more diddling with disabling triggers.
 - Reg 7 , “Softbusy” now working



The tentative new GUI

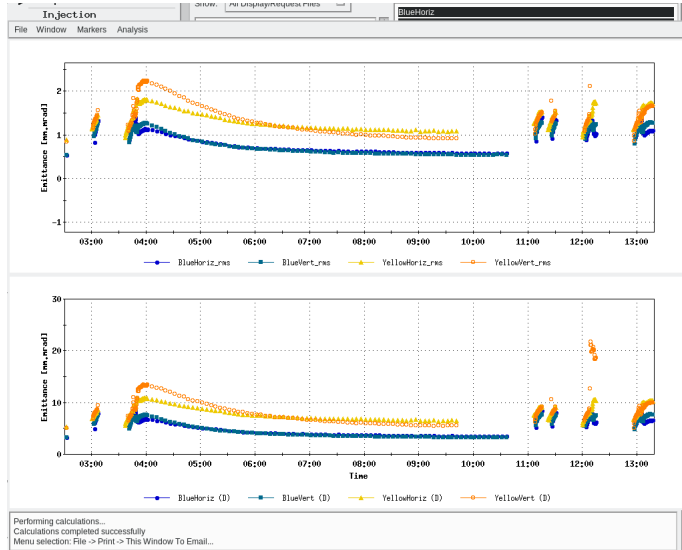
DAQ (Martin/John H)

- I enabled the database writing. It flushed out a bug (fixed) and looks generally ok. The structure:
 - Run entry
 - Host entry
 - File entry
 - File entry
 - ...

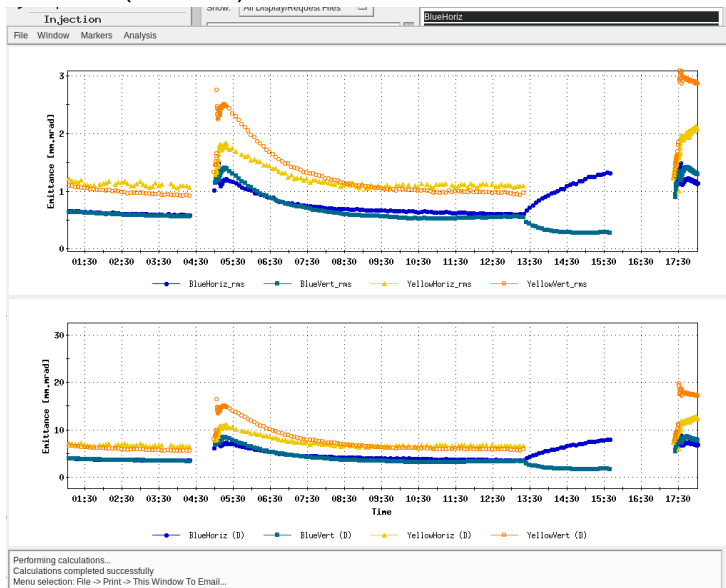
- Host entry
 - File entry
 - File entry
 - ...

MVTX (Michael Peters)

- Auto-recovery logs, quick look:
 - Looks like 12 seconds per recovery
 - Large variance in number of recoveries as a function of stave/position
 - More detailed analysis ongoing
- Investigating ways to shorten auto-recovery time, if possible
- Kin: Hopefully, tomorrow we have this (like June 23):



instead of this (June 29):



TPC (Luke, Charles, Evgeny, Ross, John K., Takao, Jin)

- Shift crew: please exclude TPC from big partition data taking today (Wed) and tomorrow (Thu) during the on-going laser tests
- LV debug during access
- John K. moved TPC+laser to gtm1.sphenix.bnl.gov for an isolated env for laser testing. Expect to be using gtm1 for both Wed (beam-off field-on) and Thu (beam-on field-on) data.
- Spark detection chassis removed from IR to be ready for pick-up board installation. Takao managing the production
- Auto stuck FEE protection ready for full deployment, to try out after laser tests.
- Laser test still on-going

HCal (Virginia)

- Evening shift noted HCal timing looked wrong- due to problem with trigger delay
- DAQ log notes that the number of events between SEBs is different in LED runs- this is not a problem since we don't actually need to correlate the events
- Shift crew successfully ran HCal only cosmics with no scaledown (in global mode)- took data at ~1.9kHz
 - Would like to test out running solo HCal with fewer samples some time soon to see how high we can increase the rate, preferably with beam so we can also quantify how this will affect the waveform processing

EMCal (Tim)

- Used the access to swap out the 3 problematic MPOD boards.
 - Successfully recovered 3 "dead" interface boards!
 - Removed board needs to be checked by HP
- Removed non-functioning controller board (formerly for Sector 25) from rack 3C8 - needs to be checked by HP

TPOT (Bade)

- Monitoring FEE12 temperature change. Contacted Rob P.

INTT (Jaein/Rachid)

- During the access:
 - Rob worked on the ladders cooling CDUs on the platform as well flashing the air from the pipes using the panels in the IR.
 - Rachid replaced the INTT temperature patch panel southside in the IR.
 - Raul was working on the Felix firmware (detector LV/HV was OFF)
 - Lee worked on updating the INTT cooling alarms on the big screen monitor based on the inputs from last few days meetings
- Next step: waiting on the ladder's chillers to reach 5 lpm to turn ON the INTT detector
- With no beam, we would like to take the pedestal run once chiller is ready.

sEPD(Rosi)

- Efforts ongoing to install prototype box
- Various issues fixed - still on target to finish so we will have beam data when that returns
- See Chris's note about caution tape - We needed to put this up as our box is a trip hazard. If people need to access the racks in that row, they need to contact Frank.

Gas/Cooling (

- Kin: 2 dehumidifiers are ordered for sPHENIX.
- Found INTT East CDU off when I got in., been trying all day to recover its flow.
- Repaired original CDU and reinstalled it on the INTT West ladders in hopes it would improve flow.
- After spending about 8 hours of purging and draining, flows are still not where they should be. System was purged globally as well as individual channels to remove air. Flows are coming back slowly, but are still below 3.5lpm.

ZDC (Peter)

- Damon working hard on terminating ZDCN SMD cables. Wasn't finished as of 3pm - will need to actually cable up the SMD before we close up.
- There appear to be 6 cables with connectors from the bundle that we could use for ZDCS (need to confirm with John)
- ZDC S seems to have a bad coffee addiction, and apparently tends to overheat

Background Counters (

- Just for the record, Angelika suspects that the ZDCN (yellow) counters by Q1 and Q3 are swapped.

Online Monitoring (Chris)

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