



Run 25 Status RHIC Coordination

November 4th, 2025

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sPHENIX Run Coordinator

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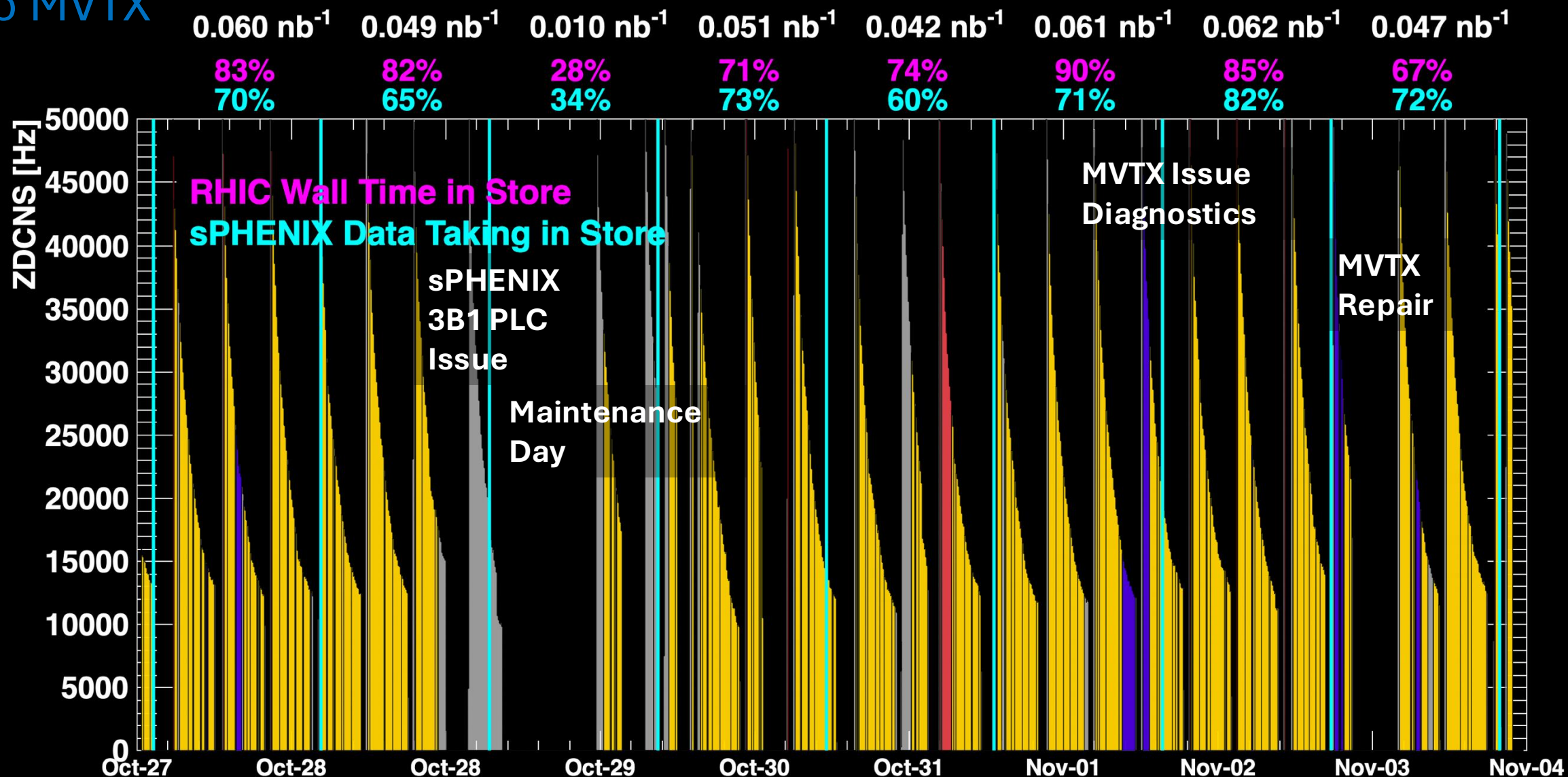
sPHENIX Deputy Run Coordinator



No TPC

No MVTX

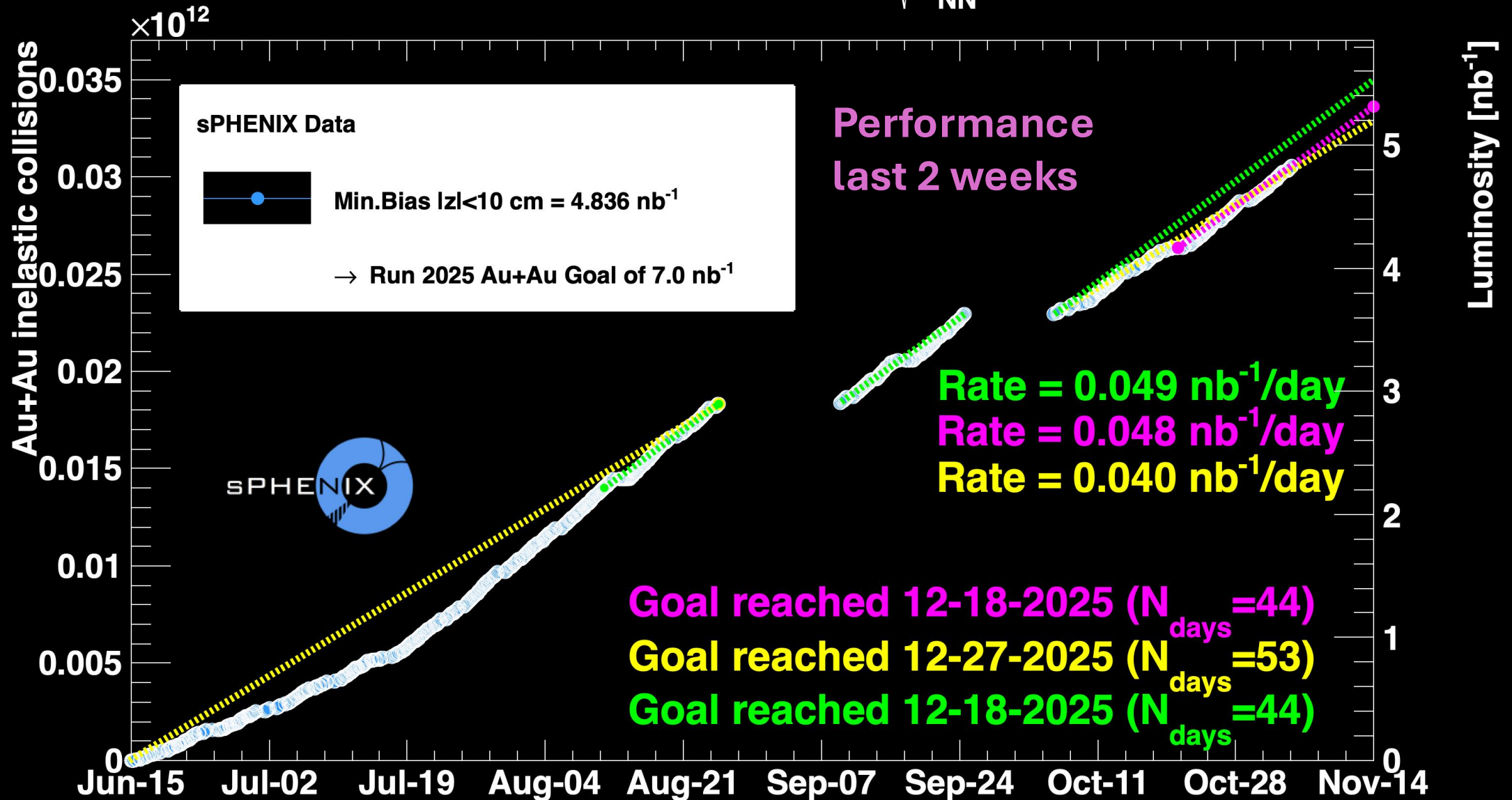
sPHENIX Uptime Time



sPHENIX Luminosity

sPHENIX Run 2025 Au+Au $\sqrt{s_{NN}} = 200$ GeV

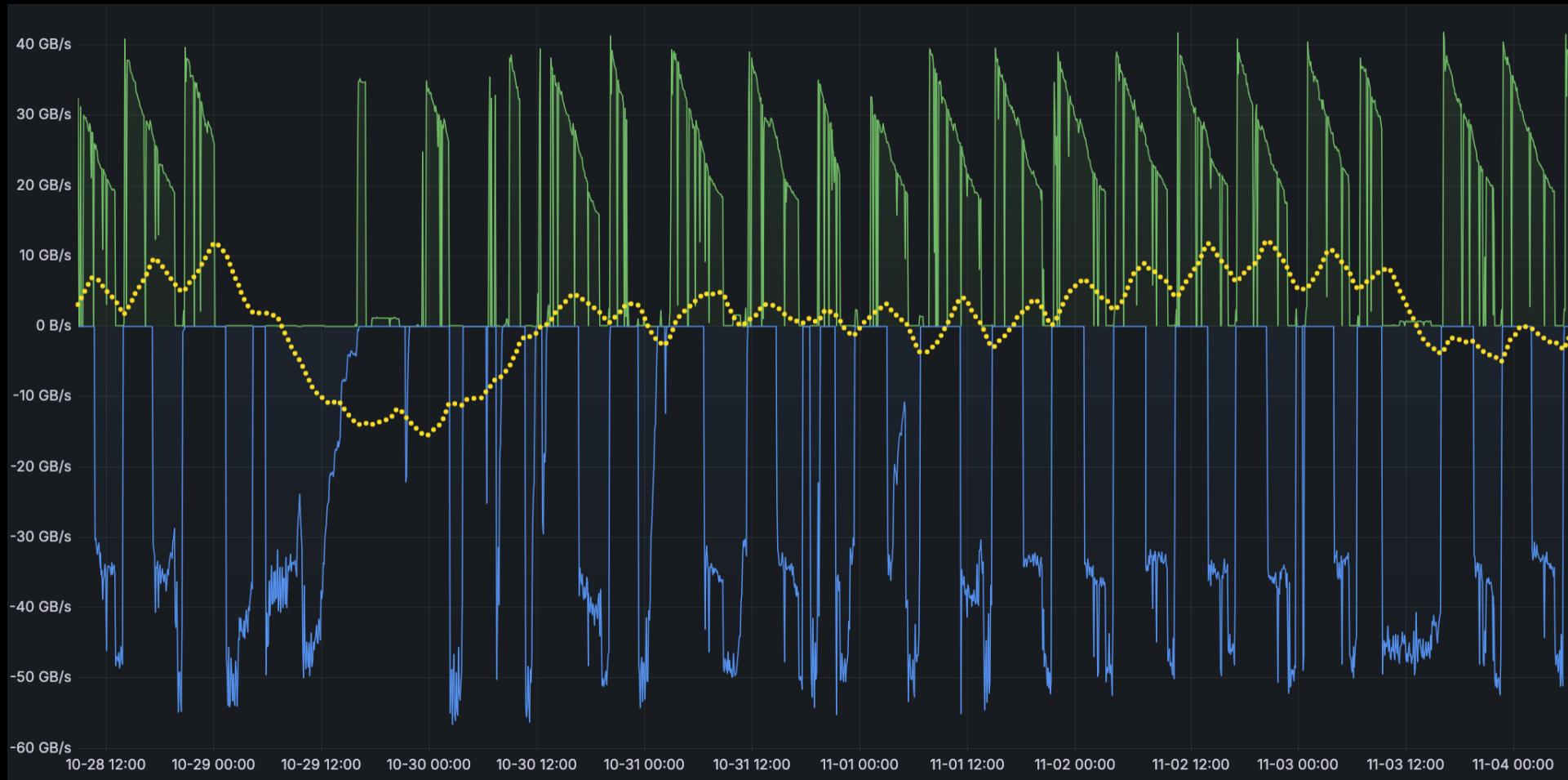
69.1% of our
Au+Au goal



MVTX Repair

- MVTX had developed an issue with the GBT data link for 3 ALPIDEs being in error
 - Belief was the fix would require fix of the transmitter or FELIX (2 hours)
- The issue was the Readout Unit (RU) board
 - More in depth repair than anticipated
 - The RU board in question has been replaced with a spare
 - Only replaced two other boards since the start of operations in 2023 (June '23 and May '24) so it's a rare occurrence
 - The RU data link no longer shows errors
- sPHENIX is running very smoothly now!

sPHENIX Data Performance



Data in

24 Hour Ave
Data in - Data out

Data Out

Running well enough that we have a net increase of data into our buffer boxes!

Conclusions

- We are at **69.1% of our Au+Au goal**
 - Running close to maximum rate over the last 2 weeks!
 - 44 – 53 days (Dec 18 – 27) or 30 – 37 days for 90% goal (Dec 4 – 11)
 - Running well means efficient transfer of data is critical (Thanks to SDCC for their smooth running)
- Internal discussions regarding putting sPHENIX in standby mode have started, will continue this week
 - sPHENIX needs 2 people (2 FTEs) if we go to this mode
 - Need constant N₂ flow for the detectors, as well as running continuous cooling
 - In case of issues, it would be very useful to bring specific non-BNL folks into 1008
- Further discussion with sPHENIX Tracking group has reprioritized running a 6x6 run with magnet on for ~2 hours
 - Thursday afternoon?
 - Still interested in magnet off, but plan for next week
- Oct 28 - Trip in all the racks due to 3B1 PLC rack requiring replacement of two PLC cards
 - Recovered in time for a magnet trip due to quench watchdog timer