

Run 25 Status RHIC Coordination

November 25th, 2025

Rosi Reed

Lehigh University

sPHENIX Run Coordinator

Ron Belmont

UNC Greensboro

sPHENIX Deputy Run Coordinator



No TPC

sPHENIX Uptime Time

0.042 nb⁻¹

0.014 nb⁻¹

0.037 nb⁻¹

0.067 nb⁻¹

0.064 nb⁻¹

0.047 nb⁻¹

0.070 nb⁻¹

80%

20%

84%

90%

88%

71%

92%

57%

58%

57%

85%

83%

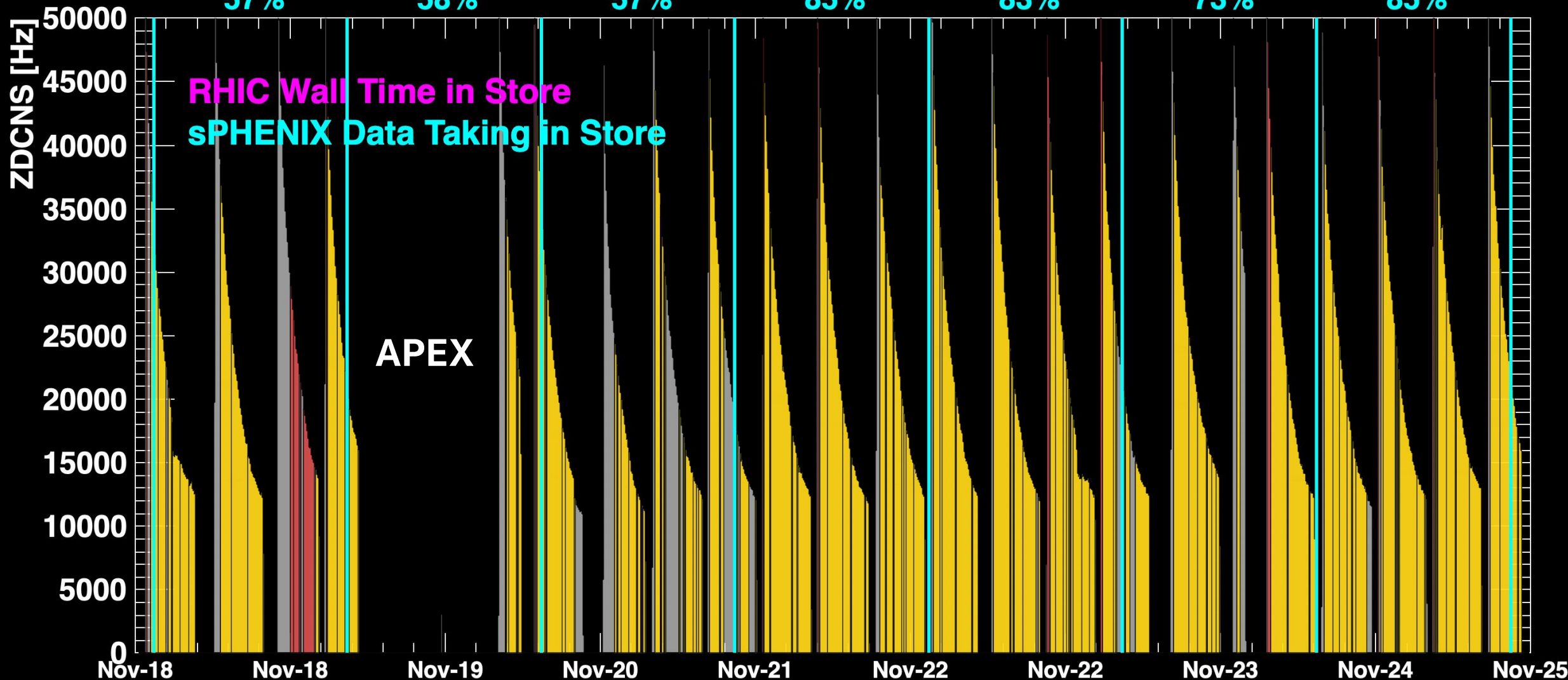
73%

85%

RHIC Wall Time in Store

sPHENIX Data Taking in Store

APEX

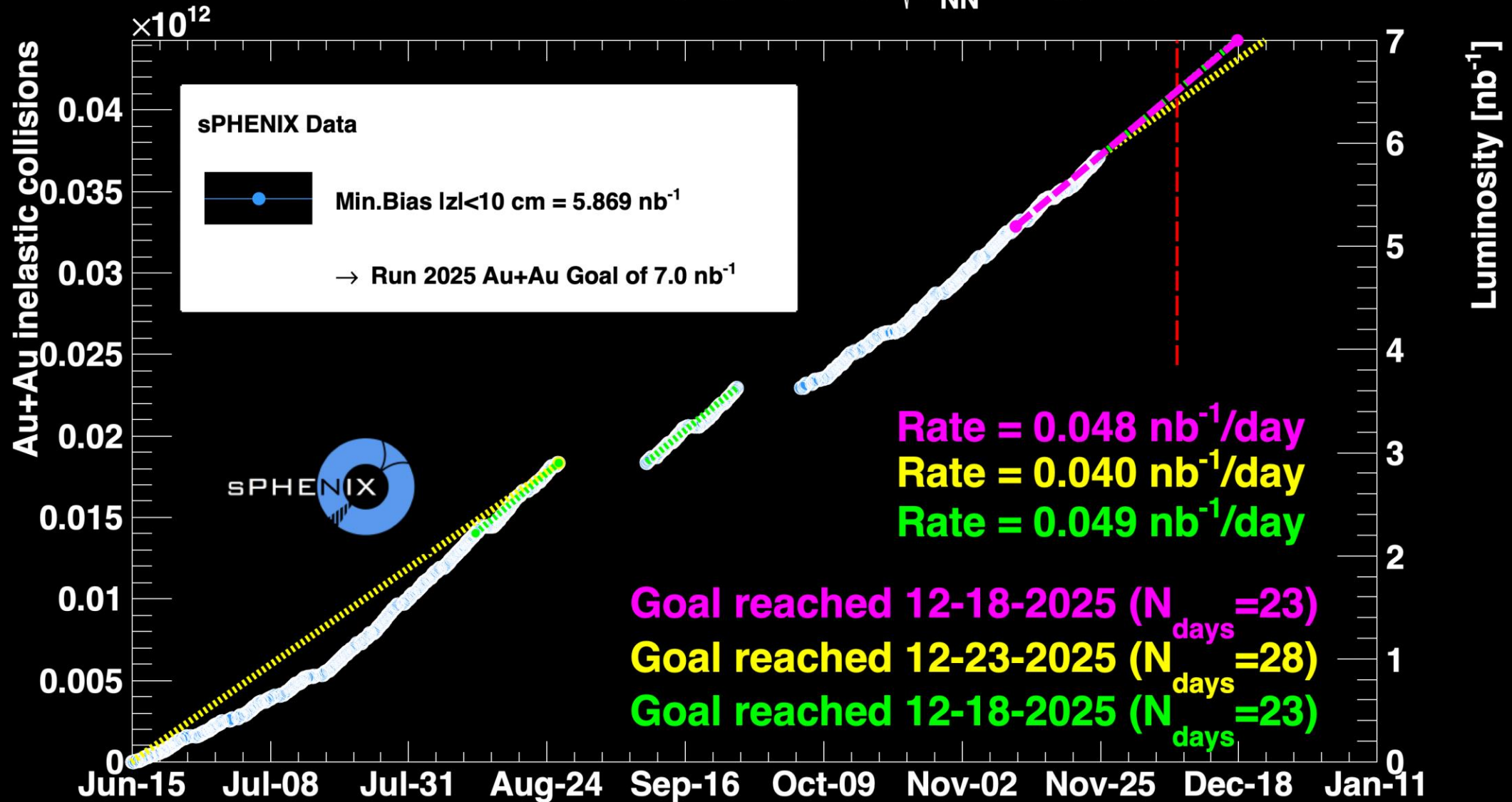


Performance
last 2 weeks

sPHENIX Luminosity

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

83.8% of our
Au+Au goal



Transition from Au+Au \rightarrow p+p

- We are at **83.8% of our Au+Au goal** of 7nb^{-1}
- By December 8th, we will just be reaching 90% of 7nb^{-1} Au+Au, which is the PAC top rated must-do physics
 - 24 days to reach 100%, which would be 12/19
 - Transition on this date will allow all commissioning to be completed prior to the holiday week
- sPHENIX p+p Readiness Review Thursday December 4th
 - Plan on roughly 1 week of commissioning:
 - Photon+Jet Triggers
 - TPC HV System
 - Establish operation of high-fraction streaming read-out
- Propose to limit the APEX in December to December 17th for A rated experiment
 - Only **12 calendar days remaining** to achieve, so Dec 3rd could be critical for achieving the last Au+Au luminosity needed
 - sPHENIX would prefer to run physics 12/24 – 1/1 (traditional BNL quiet week) due to expert availability for both C-AD and sPHENIX

Conclusions

- We are on track to meet 90% of our 7nb^{-1} by December 8 which fulfills the first PAC must-do recommendation
- Preparations for the transition to p+p running are underway in sPHENIX
- Stability during the holiday week will be critical to success
- To meet the second PAC must-do recommendation, we must achieve at least 90% of our 13pb^{-1} goal
 - Projections will be available once we start collecting data (last year was $\sim 2\text{pb}^{-1}$ per week)
 - Indicates that time is very tight to achieve the second PAC must-do recommendation