



U.S. DEPARTMENT
of **ENERGY**

Time Meeting 01-27-2026 SCDF

X f i @BrookhavenLab

Jan. 21 - Data Center Cooling Event

- Loss of cooling in the Bldg 725 data center
 - All three chillers in Bldg 725 shutdown
 - Data center switched over to backup site chilled water heat exchange
 - Cooling capacity equivalent to one chiller.
- Net Effect
 - Thermal shutdown of multiple compute racks
 - Infrastructure and storage racks remained on line
 - Network and tape libraries remained operational

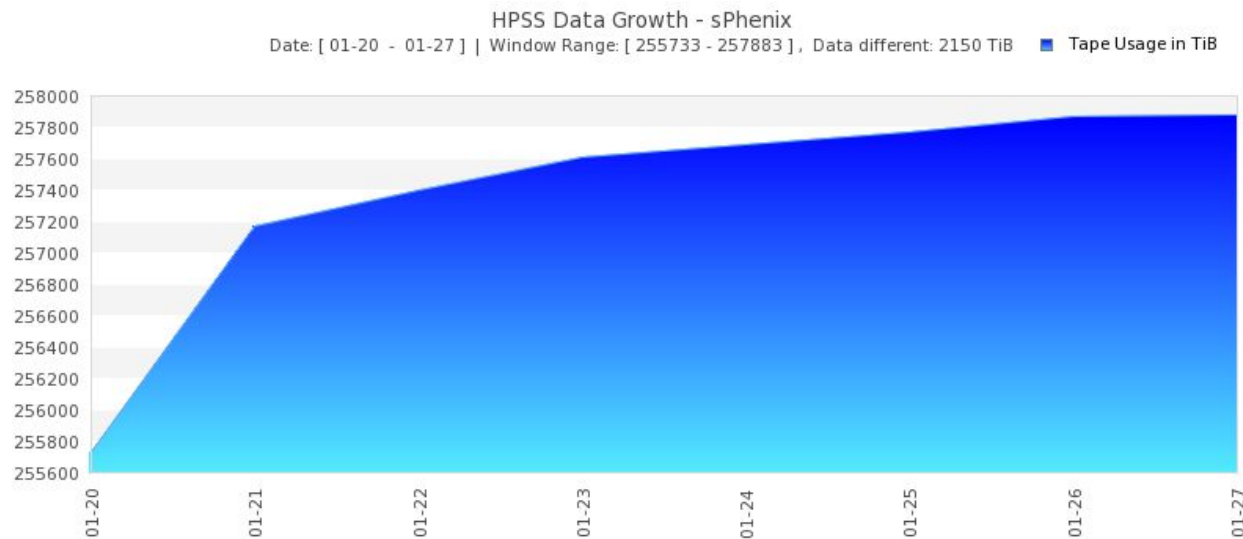
Jan. 21 - Data Center Cooling Event

- Timeline
 - 3:30 PM sPHENIX compute nodes started shutting down
 - 4:00 PM Gas alarms trigger evacuation of Bldg 725
 - 6:00 PM Building cleared for occupancy
 - ~7:00PM All services except compute verified as unaffected and fully operational. A few racks of compute shutdown
 - 1:00PM (Next Day)
 - All compute resources operational before event brought back online
- Root cause
 - Accidental discharge of Novec fire suppression agent tripped broad spectrum gas alarm system used to detect chiller refrigerant leaks
- Post-mortem analysis in progress
 - Multiple action items in the queue

Network Maintenance

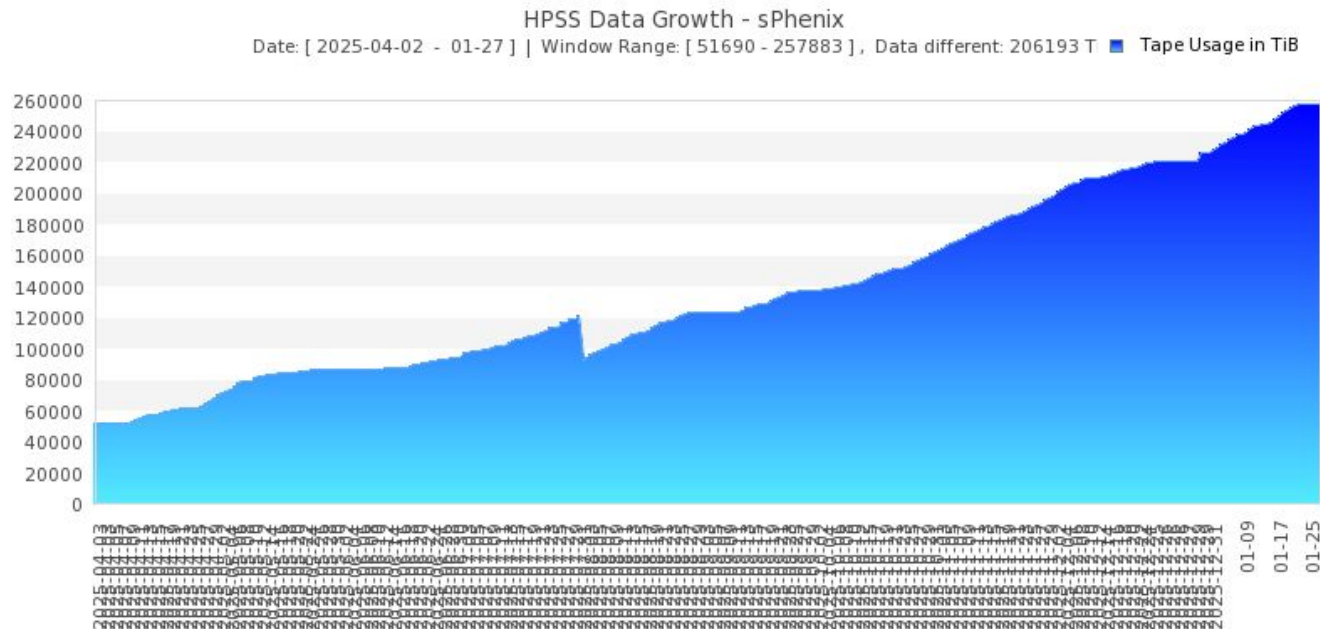
- Post run network upgrades scheduled for the 3rd week of February
 - 8:00AM Feb 17 - Storage Services Network in Bldg 515 data center
 - Expect connectivity loss to storage servers lasting < 5 minutes
 - If problems encountered, up to 2 hours of network instability to diagnose.
 - 6:00AM Feb 17 and 18 SCDF external firewall upgrade
 - Two network events
 - Feb 17 First event - shutdown of one firewall module - established connections should migrate transparently to second module
 - Second event (24 hours later)
 - Shutdown of 2nd module and “cold” start of upgraded module
 - All established connections will break

sPHENIX Data Volume Past 7 Days



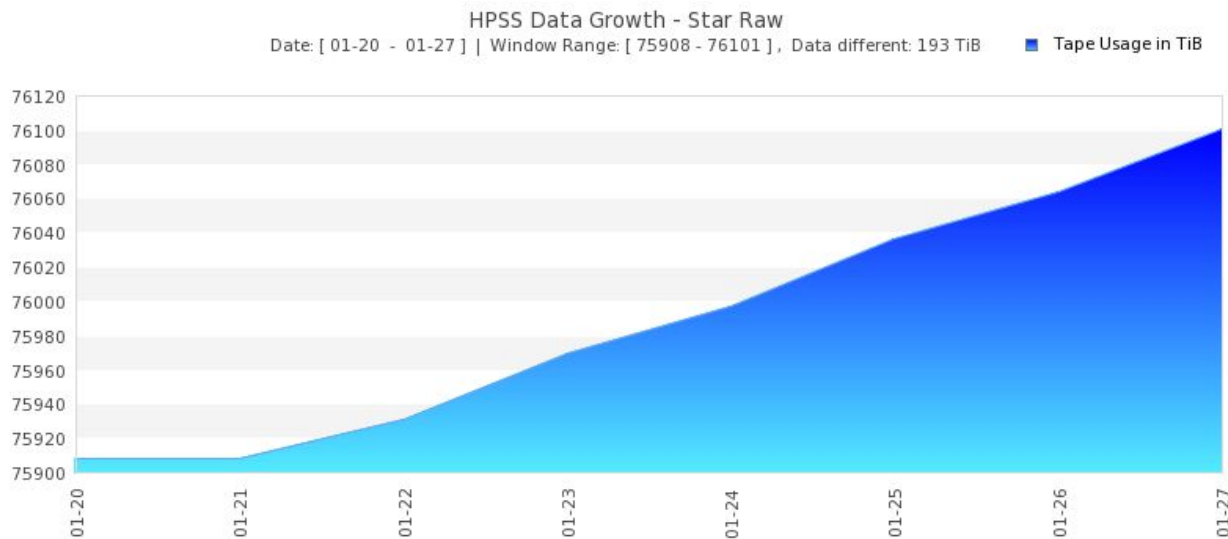
2.36 PB written to tape in the last 7 days

sPHENIX Data Volume Since April 1



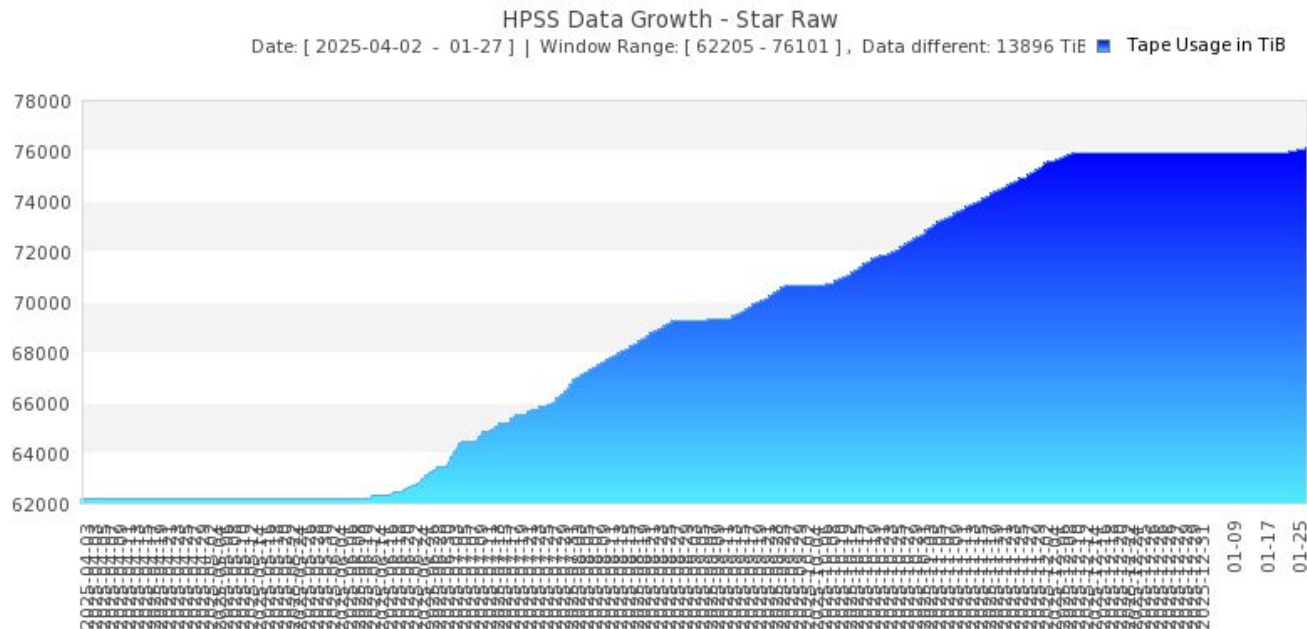
226.7 PB written to tape since April 1 2025

STAR Data Volume Past 7 Days



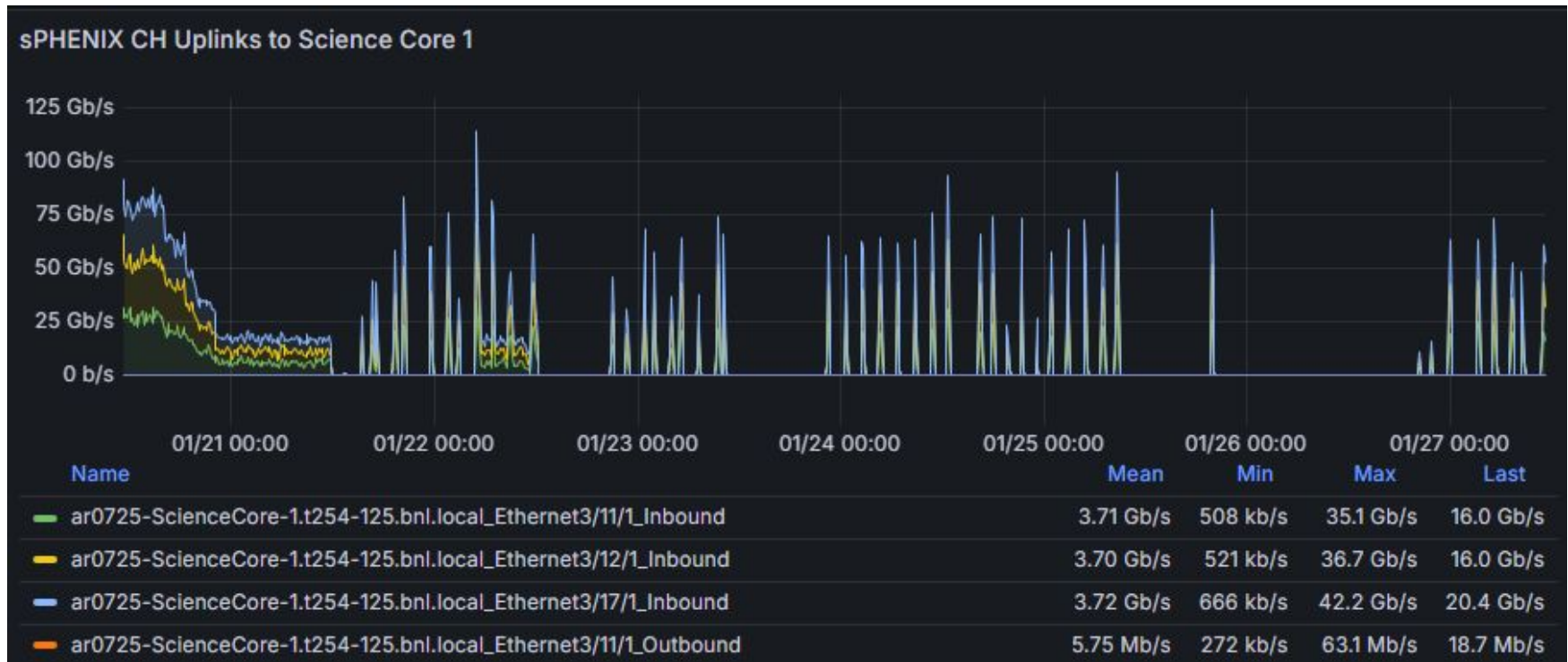
212 TB written to tape in the last 7 days

STAR Data Volume Since April 1



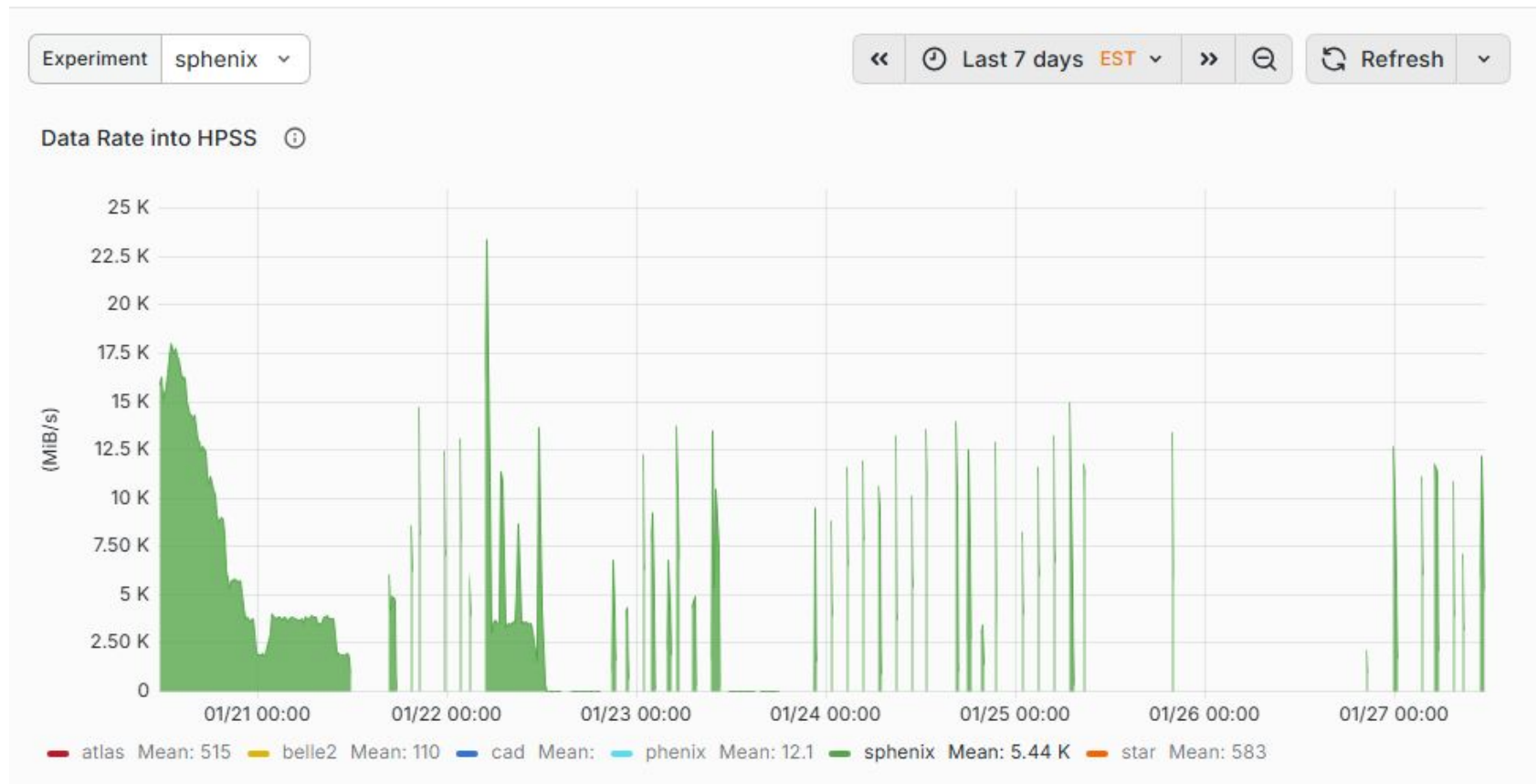
15.27 PB written to tape since April 1 2025

Network Traffic from sPHENIX to SCDF



Network traffic on one of two LACP links between sPHENIX and SCDF. (Transfers to HPSS and Lustre).

sPHENIX Data to HPSS



STAR Data to HPSS

