

2024 4 15



RHIC Status

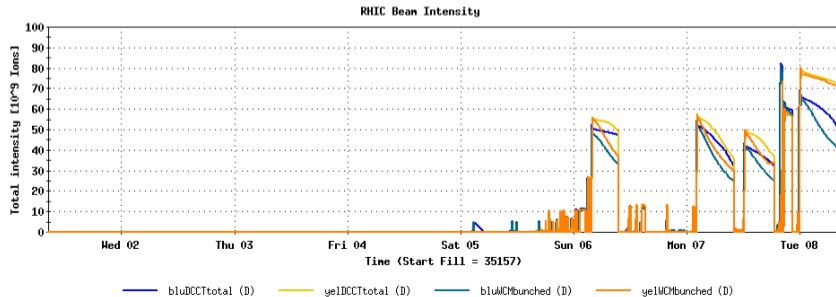
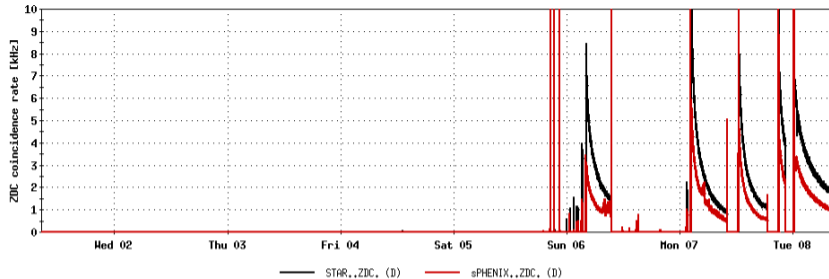
Kiel Hock

Time Meeting

October 8, 2024



Last Week at RHIC



RHIC Status

- RHIC has finished the switch to Au with physics running at 111x111 bunches and up to 0.7e9/bunch.
- Intensity in AGS was up to 2e9/bunch until
- g9-blw-ps failed 10/1
 - ▶ several days of diagnostics, eventually found 50 blown fuses and almost 50 blown MOSFETs
 - ▶ fuses and MOSFETs replaced, PS still non-functioning
 - ▶ Decided to connect h11-blw-ps to both g9-blw and h11-blw.
- Current AGS support supports up to 1e9/bunch in RHIC due to g9-blw-ps issue.
 - ▶ h11-blw-ps when powering both BLWs can be powered to 80% of its nominal setpoint, resulting in a weaker bu p
 - ▶ Setup Friday night and into early Saturday AM.
- Injection setup for blue on morning of 10/5. Setup from injection to store (!!!) evening of 10/5 to early morning of 10/6.
- Yellow abort kicker failed 9/30
 - ▶ 500 foot of coax cable from service building to ring failed, new cable pulled (not exact match)
 - ▶ feed through in ring replaced
 - ▶ tooling developed to mate new cable to existing system
 - ▶ Returned afternoon of 10/5.
 - ▶ Tripped several times on 10/5. Replaced ALE PS.
- RF conditioning and DX training done while waiting for abort kicker.
- Stochastic cooling setup continues. yellow longitudinal running.

Au Run Status

- 1 of 6 stochastic cooling systems running, looking to set remainder up today and tomorrow.
- 6x6 running for sPHENIX for them to commission their silicon detectors.
- STAR needs a minimum of 70 hours at store with minbias rate at 4 kHz.
- 56 MHz commissioning tomorrow or Thursday.
- Intensity currently limited by AGS setup → need g9-blw-ps to be repaired to achieve nominal intensity.
- Looking to reach $1.5e9/\text{bunch}$ at RHIC.
- sPHENIX needs additional stores with increasing bunch number for TPC+mVTX commissioning.