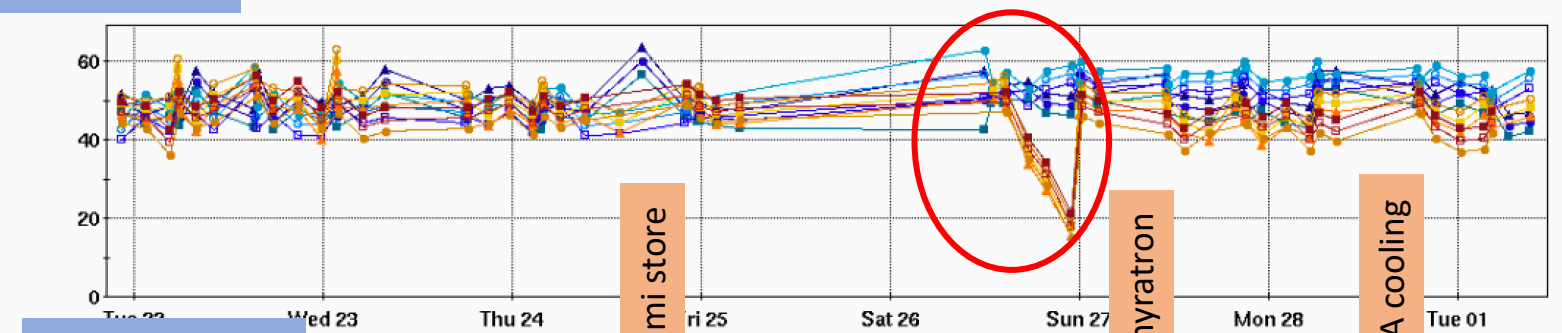


# RHIC Run 22 Run Status

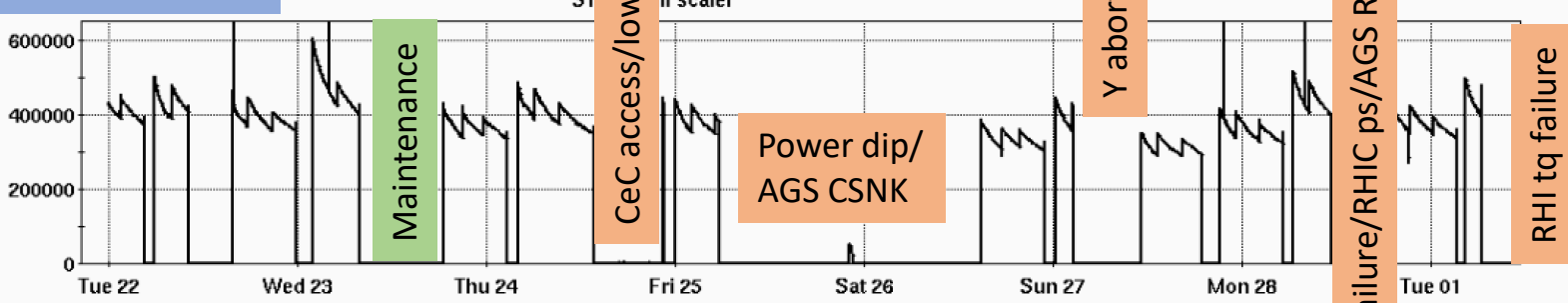
3/01/2022, V. Schoefer

- Limited uptime over the last week
- Power dip 2/25: significant He purge from AGS cold snake, long cooldown
  - >24 hours without polarized beam
- Multiple (possibly unrelated) abort kicker issues, mistimed pulses (thyatron replaced), several trips
- AGS RF power amplifier fan failure 2/28:
  - Serious limitation to operations
  - < 1hr with AGS beam from completely cool to over temp limit
- Spin direction
  - Fill 33130: altered Y9 snake current (based on earlier snake scan).
    - Bad pol lifetime, need to control spin tune better

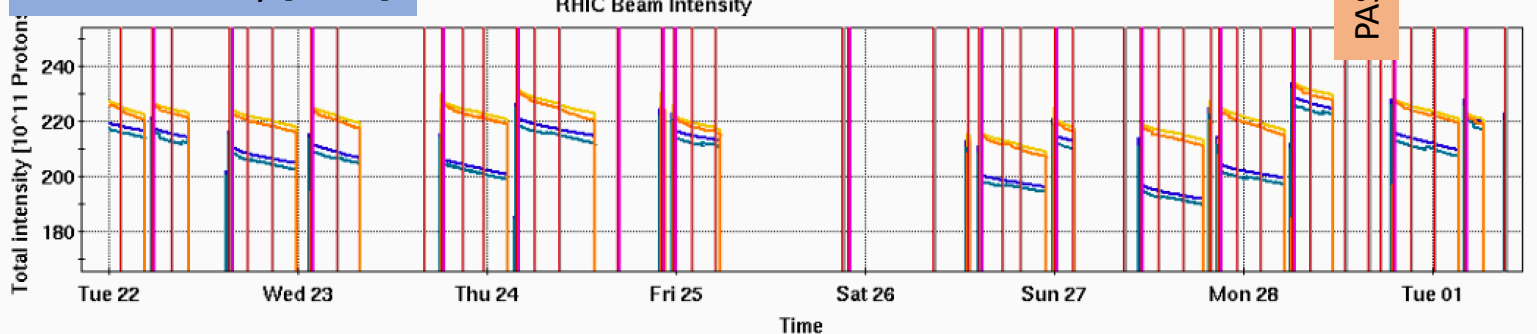
RHIC pC [%]



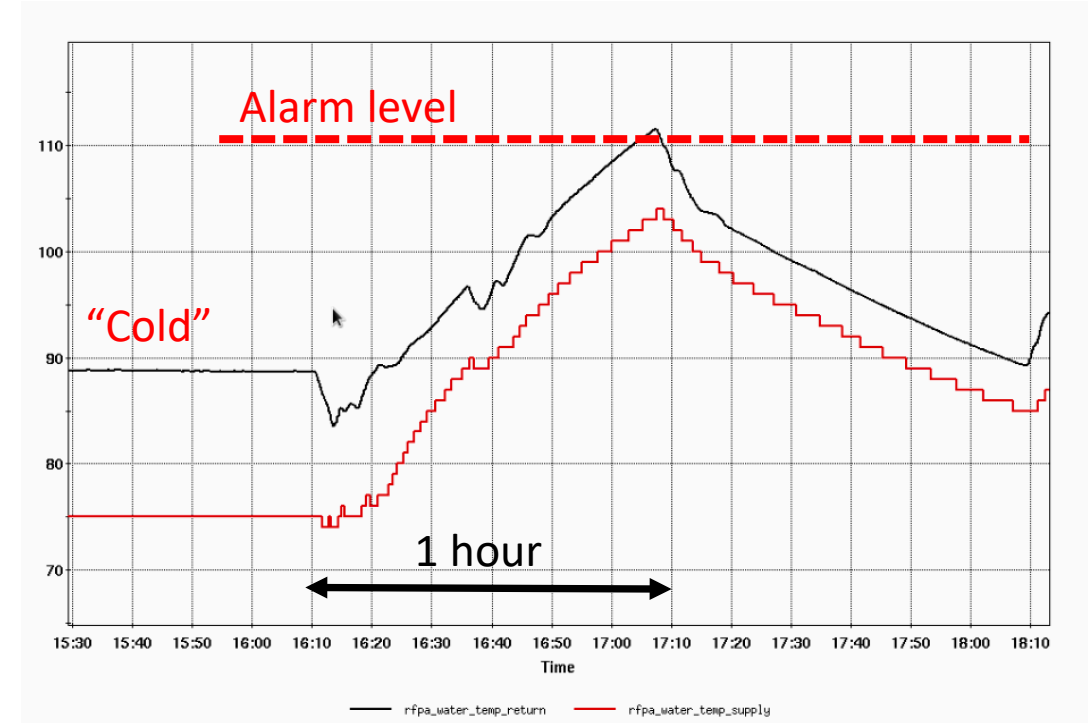
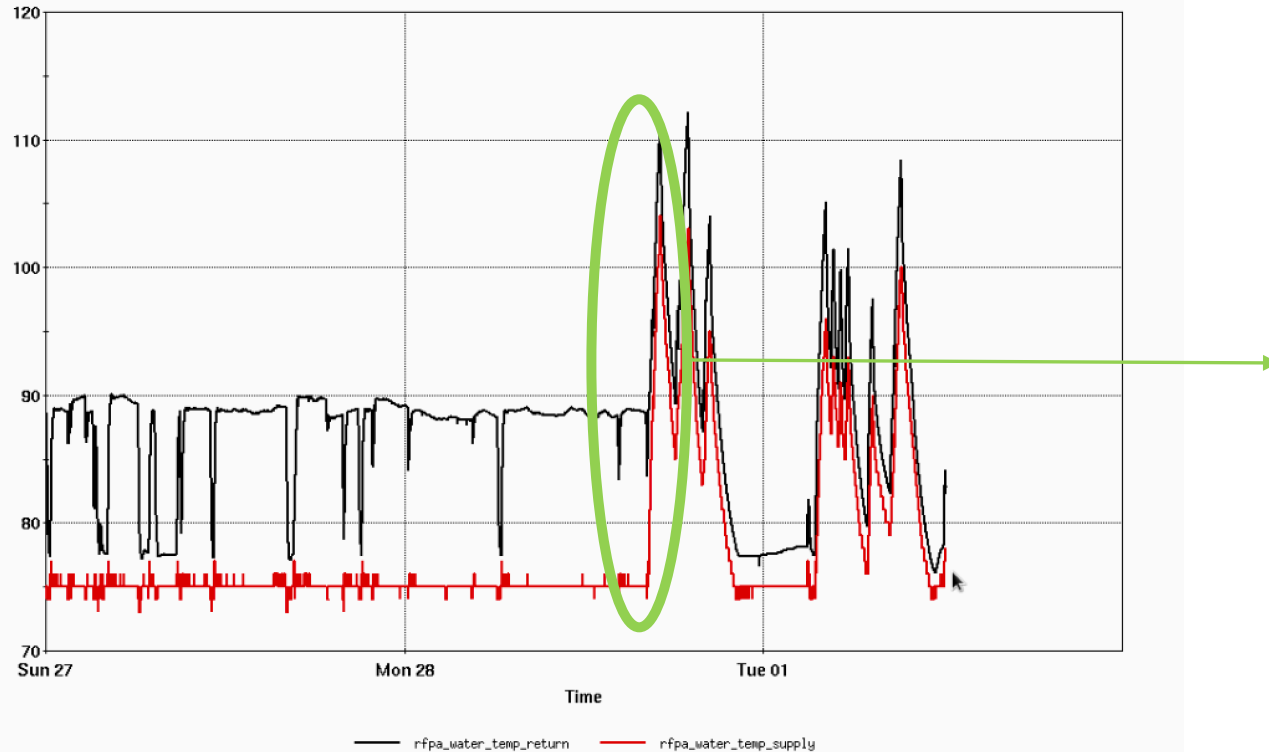
STAR ZDC [Hz]



RHIC Intensity [1e11]



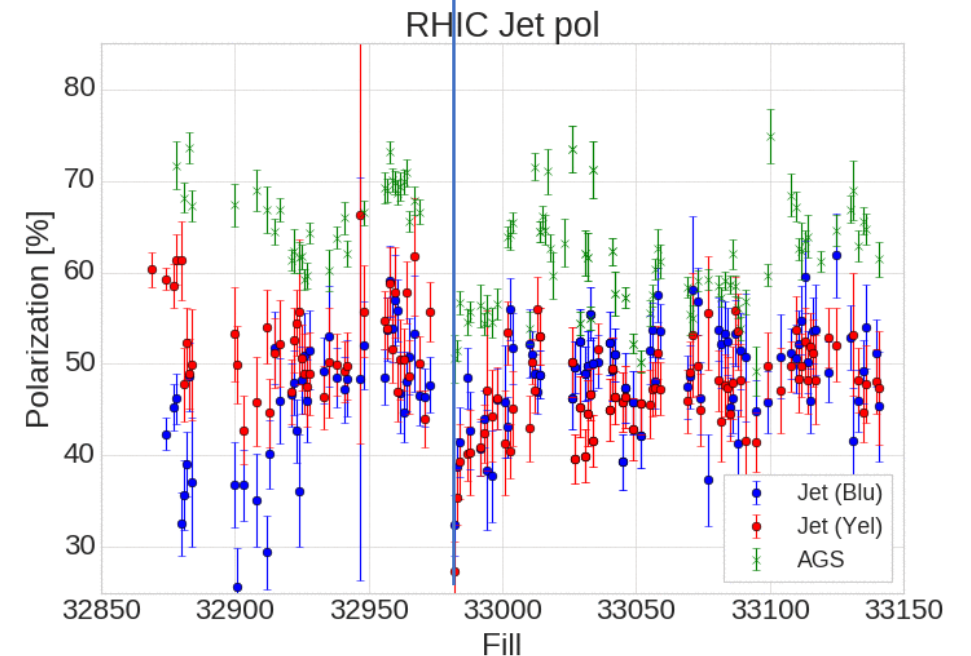
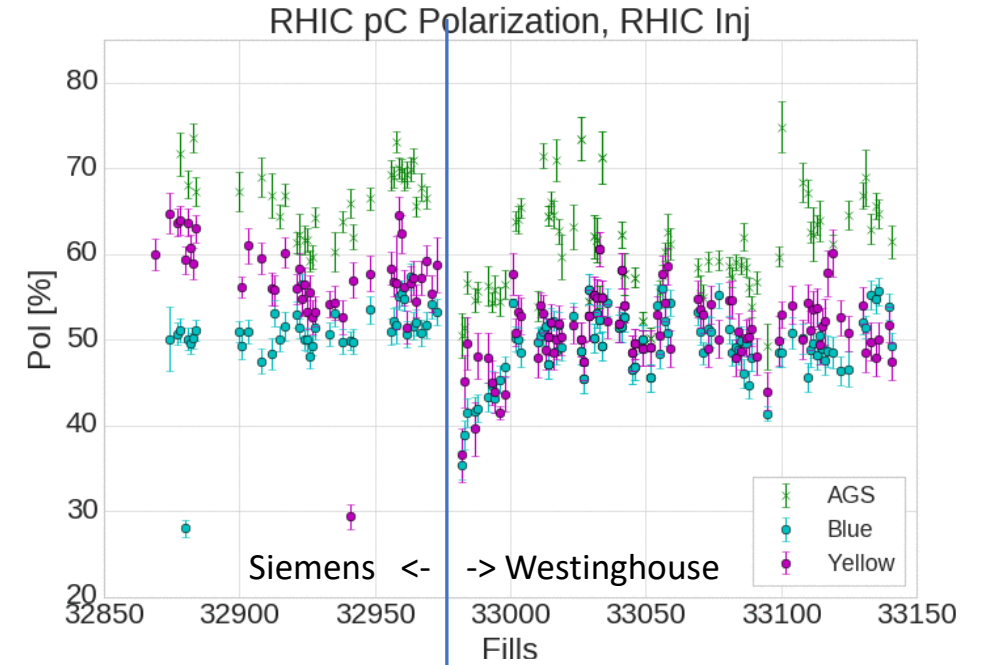
## AGS RF PA cooling water temp



Just filling takes  $\frac{1}{2}$  hour  
Significantly slows AGS studies and prevents some altogether

# RHIC Polarization

- Recent Jet polarization just under 50%
  - Reduced a few percent since the 2/25 power dip
- Recent uptick in AGS polarization not reflected in RHIC (neither at injection nor store)
  - Probably reflective of target and analysis changes rather than change in polarization



# RHIC Emittance

- Had been decreasing steadily
- Trend has reversed, especially in blue over the last ~10 stores

