

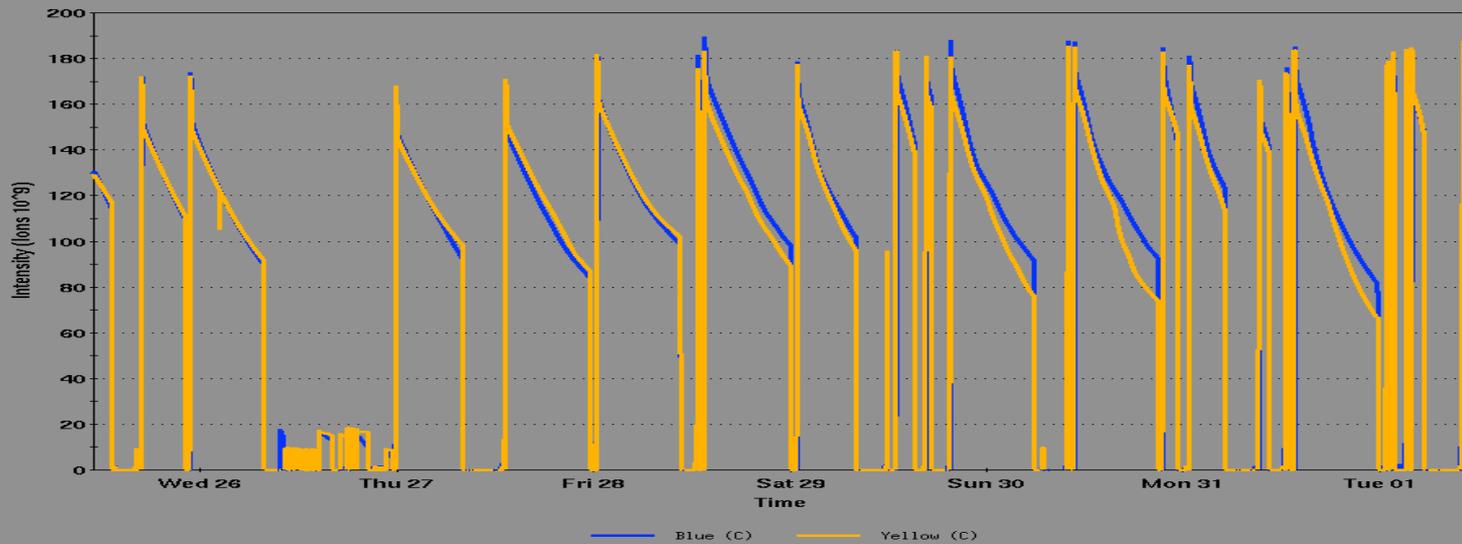


RHIC Run 14 Time Meeting

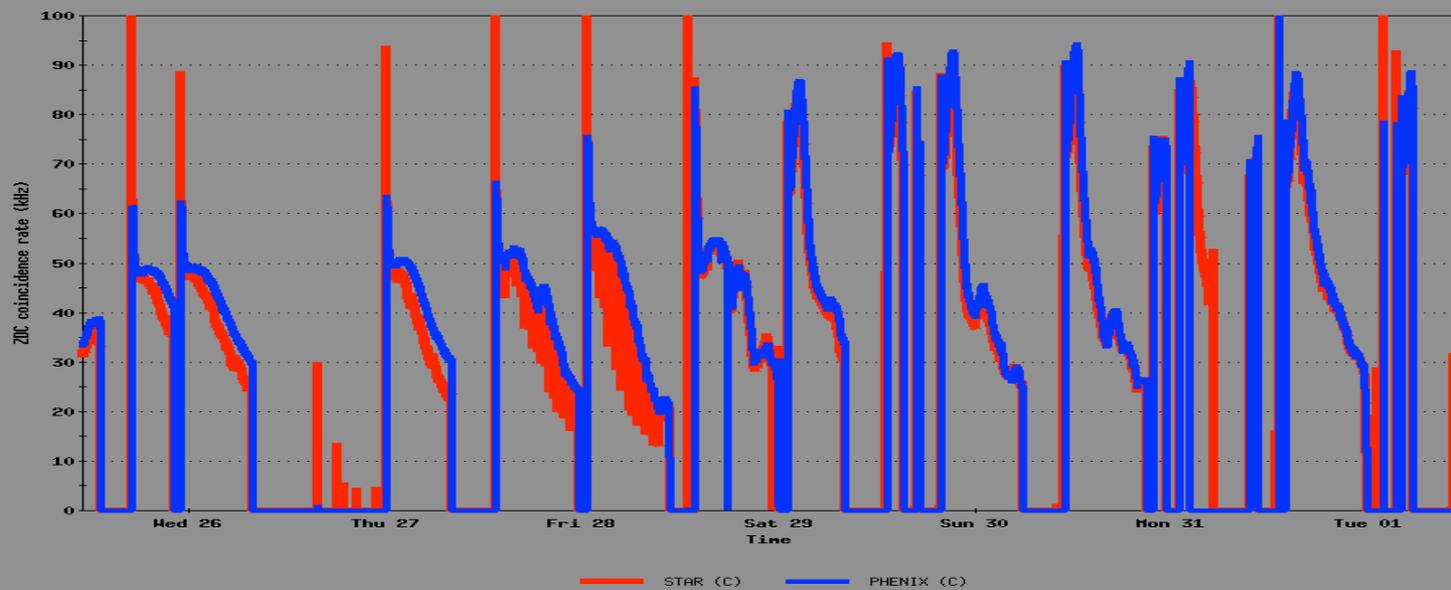
Run I 4 Status – Apr. I

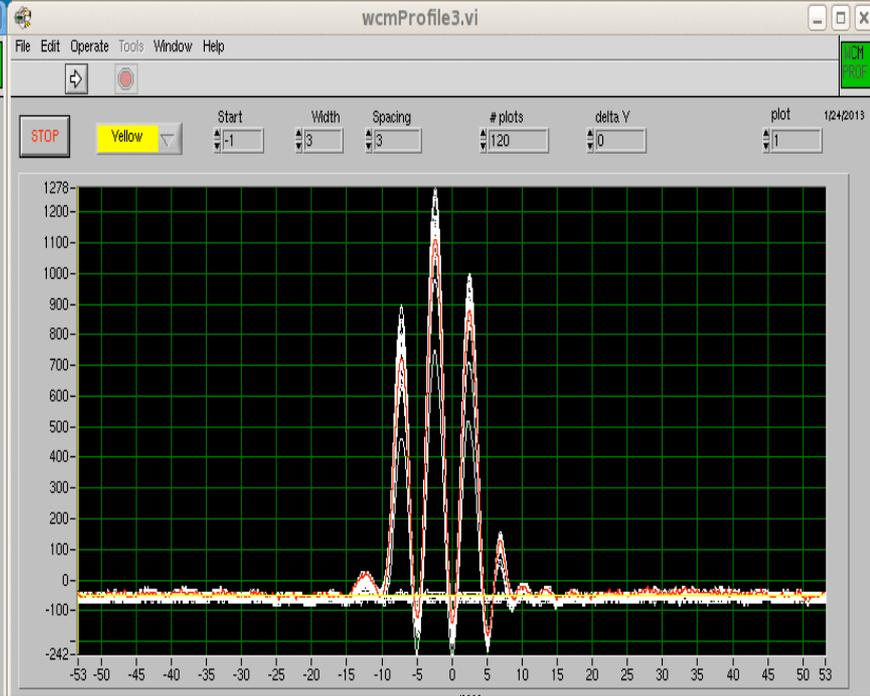
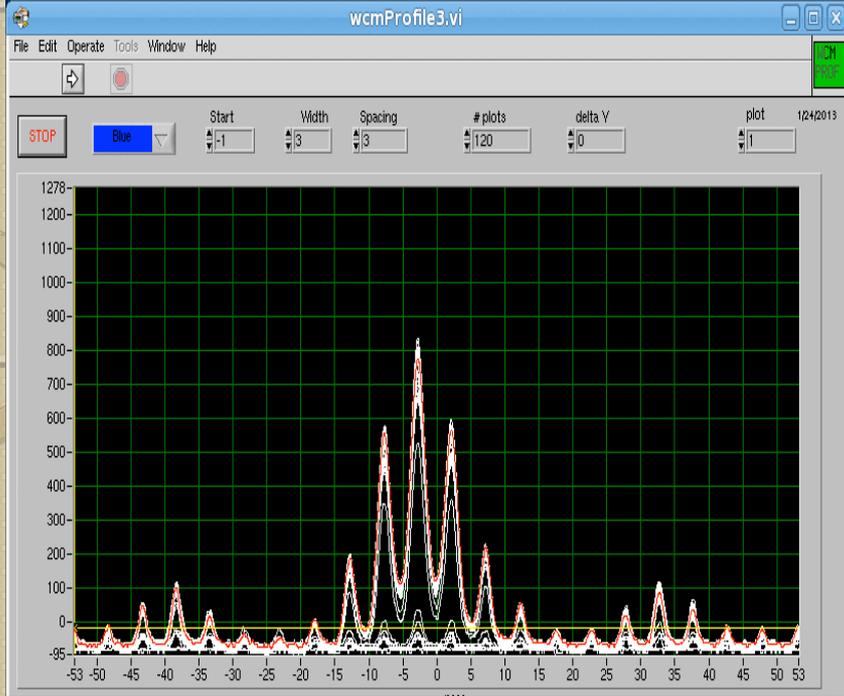
- Stochastic Cooling: all 3 planes B+Y since 3/28; monitoring the effect of Yellow cooling on Blue emittances as the store progresses. Additionally, yesterday (3/31) the fast gate for longitudinal cooling in Yellow was turned on: main bunch and first 2 satellites only are being cooled
- First APEX on 3/26 was a success; dynamic β^* squeeze tested, will turn operational.
- First commissioning test of e-lens with beam, using last bunch(es) of train.
- Investigated Blue QLI's on the down ramp: no conclusive results, diagnostics hard considering the low frequency of events.
- Corrected store orbit feedback procedure to reduce orbit drift and seesaw ZDC rates.
- Recorded 2 Yellow Abort Kicker prefires.
- AC problems in 6 buildings: main problem was on 3/29, causing 2 QLI's at store due to a quench detector in I006B affected to the AC tripping.
- Maintenance tomorrow, APEX on 4/9.

RHIC Beam Intensity, Tue Apr 1 10:59:42 EDT 2014

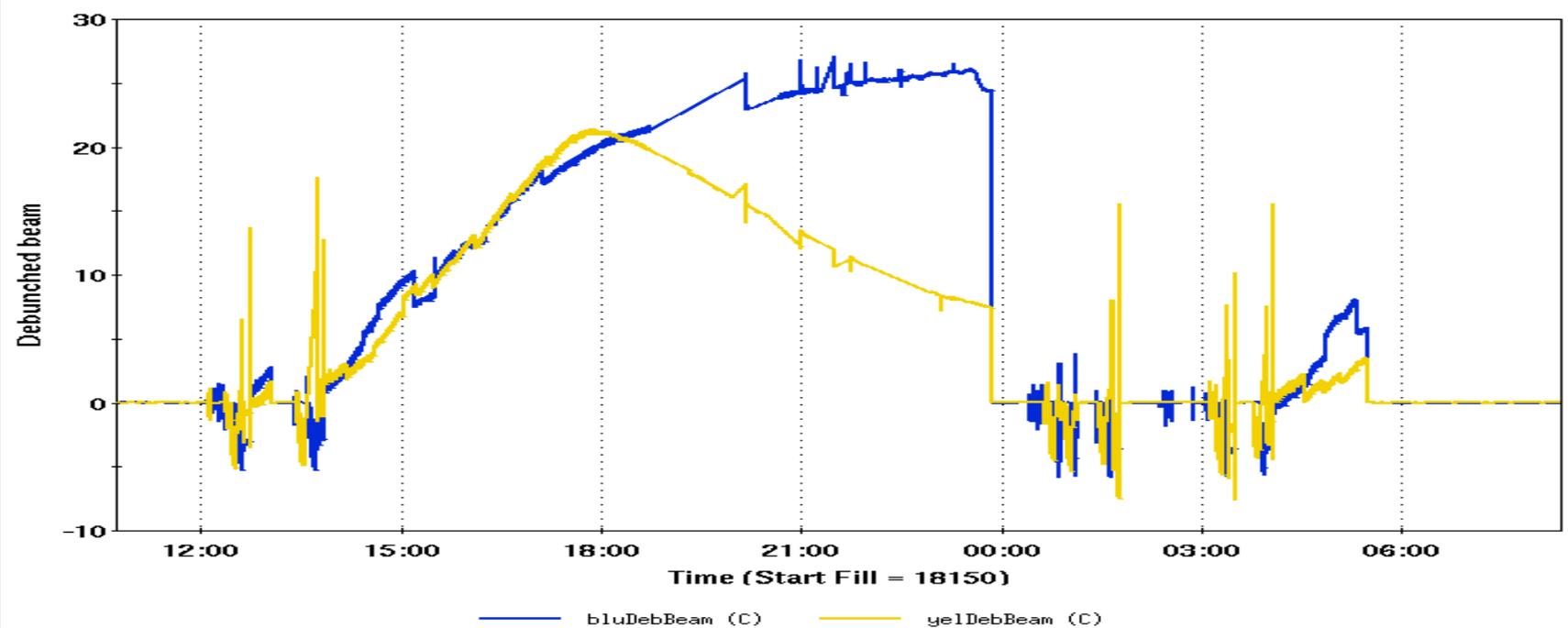


Experimental Event Rates, Tue Apr 1 10:59:57 EDT 2014





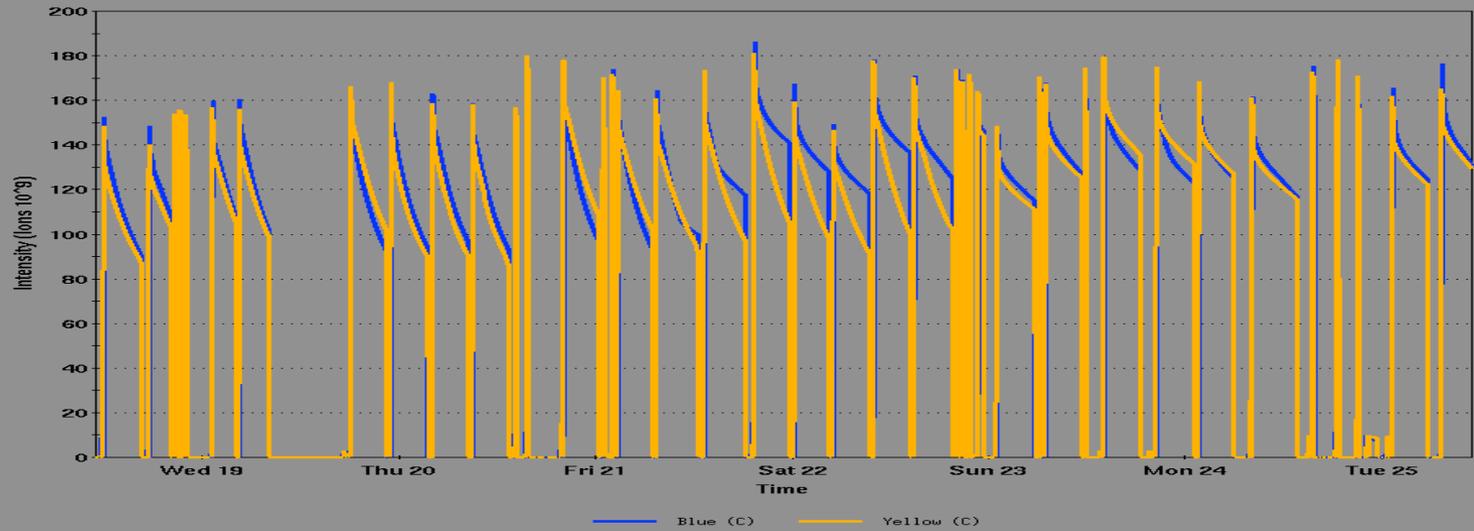
RHIC - debunched Beam (DCCT-WCM)



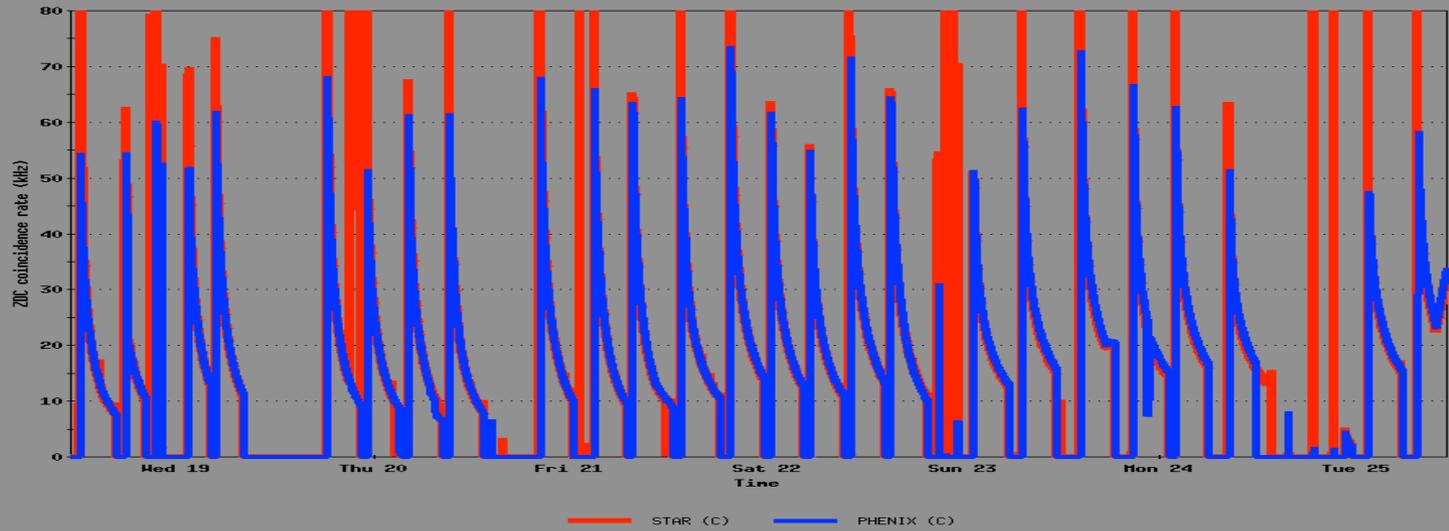
Run 14 Status – Mar. 25

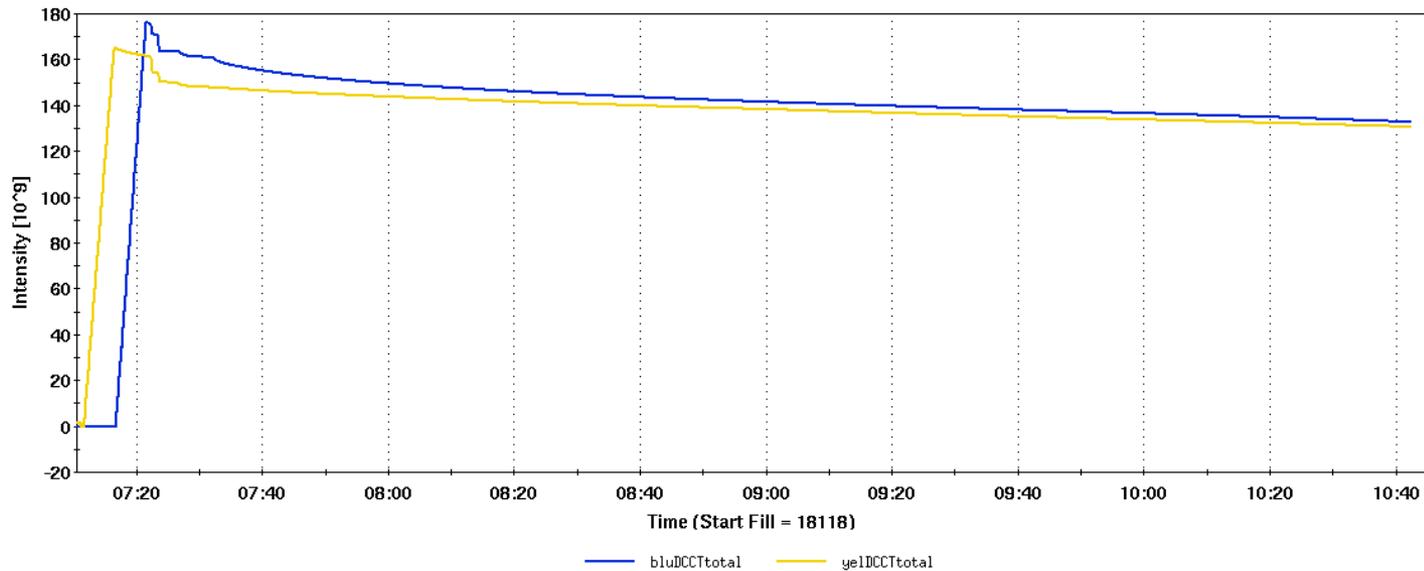
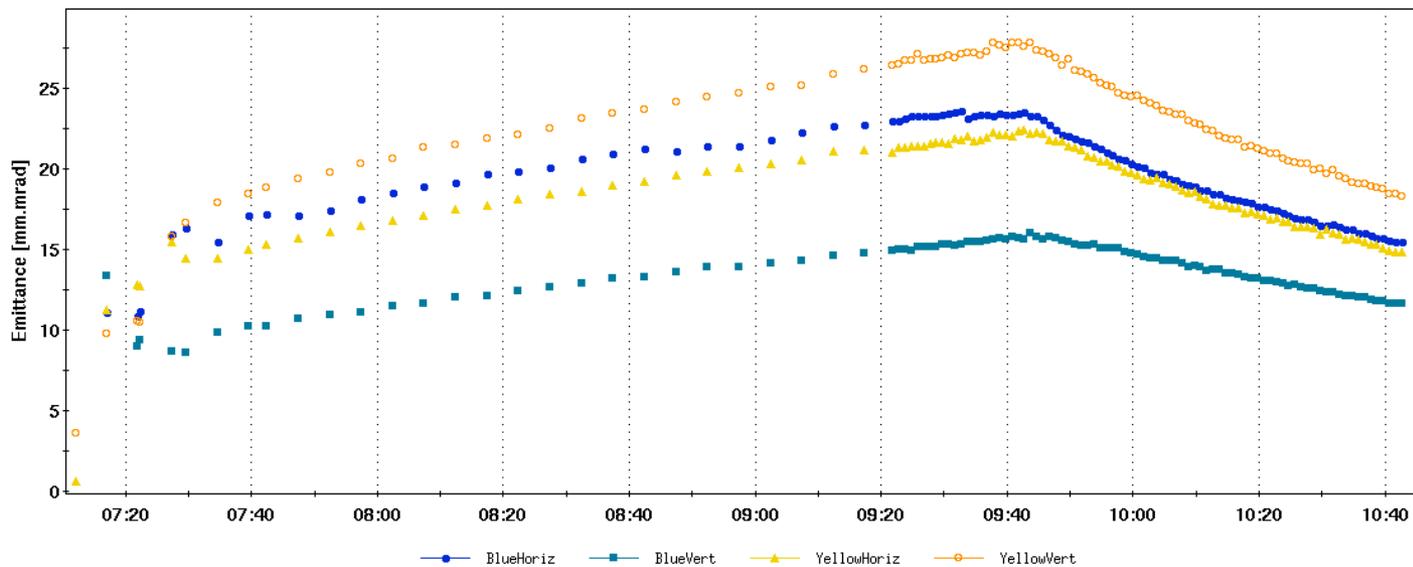
- 111x111 fills at $1.6e9$ ions/bunch w/ rebucketing at store; scrubbing essentially done.
- New record peak luminosity for Fill 18093 with $L > 60e26 \text{ cm}^{-2}\text{s}^{-1}$.
- Stochastic Cooling: longitudinal in B+Y since 3/21, horizontal just about operational.
- Few hiccups with intensities from EBIS.
- Sat. to Sun. (from eLog): “2 failed ramps due to Landau trips, a bad BPM messing up orbit, and a blue [QLI] that occurred when yellow feedback was engaged at store”.
=> all problems were addressed and solved/understood
- BS3-4 storage cavities tripping; work ongoing to troubleshoot, solution imminent.
- Fix for main magnet regulator loop card, to reduce risks of QLI on up/down ramps.
- First APEX: 16 hours tomorrow (3/26), back in physics for the following OWL shift.

RHIC Beam Intensity, Tue Mar 25 10:59:42 EDT 2014

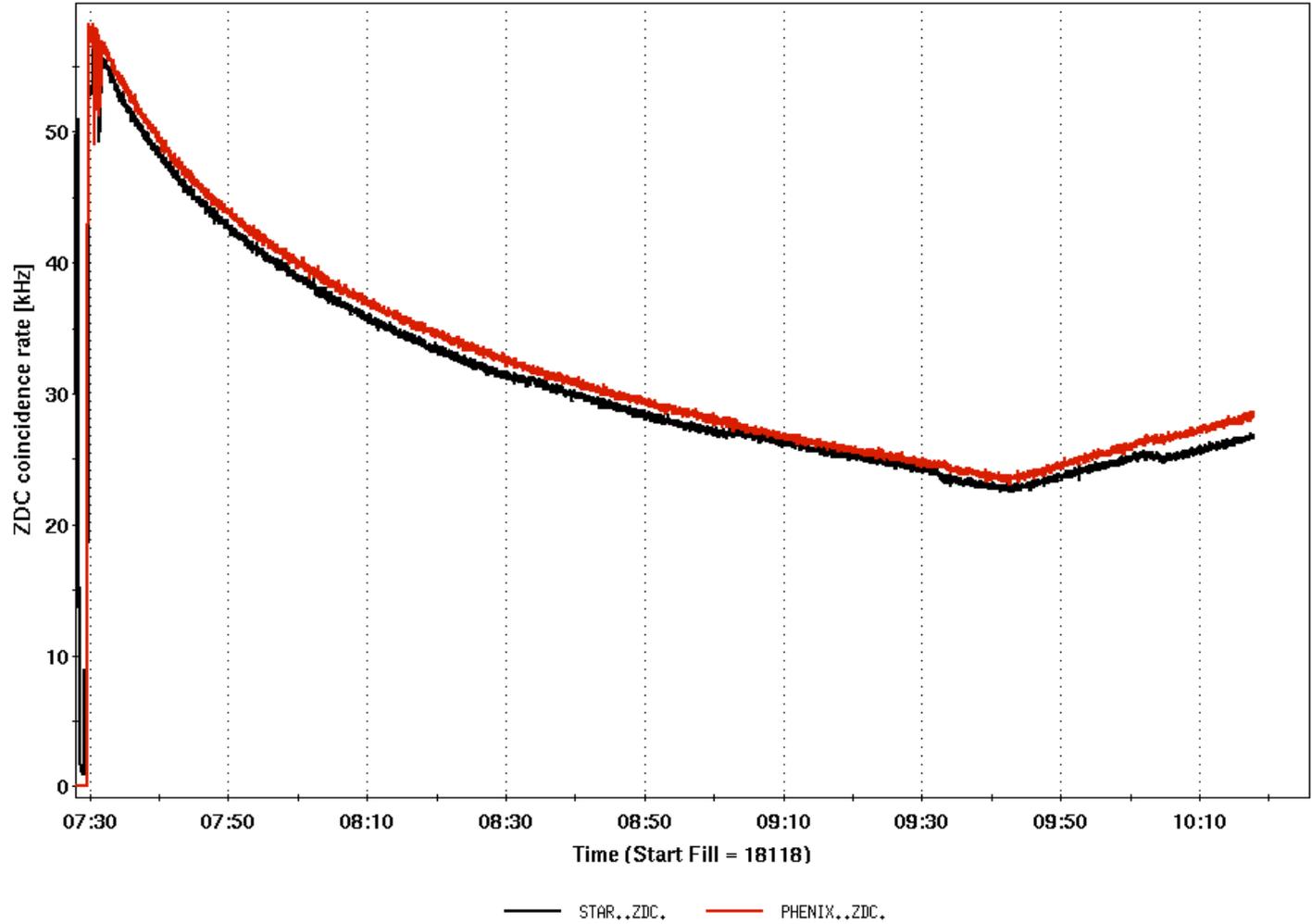


Experimental Event Rates, Tue Mar 25 10:59:58 EDT 2014





Experimental Coincidence Signals



Run 14 Status – Mar. 18

- Switched over from Low Energy Run on 3/11, with first beam circulating in RHIC at regular injection energy at 04:00 on 3/12. First 6x6 ramp at 11:30 on 3/13.
- Set up orbit bumps for pre-fire protection in both rings: initial peak amplitude was 30mm, but caused repeated QLI's with every regular beam dump. Amplitude scaled down to 20mm after careful aperture scan on 3/13-14.
- 111x111 fills at $0.8e9$ ions/bunch w/ rebucketing at store since 3/15 at 02:00. **Physics declared with Fill 18046, 14:10 on 3/15.**
- Slowly increasing the bunch intensity for scrubbing; goal is $1.3e9$ by 3/19 at 08:00 (prior to Maintenance Day).
- Continuing work on Landau cavities; Stochastic Cooling commissioning (all 3 planes) should start right after we recover from Maintenance.
- Chromaticity measured at injection, store and along the ramp (via radial offset); linear optics measured at injection and store.
- eLens commissioning running in parallel to operations.

