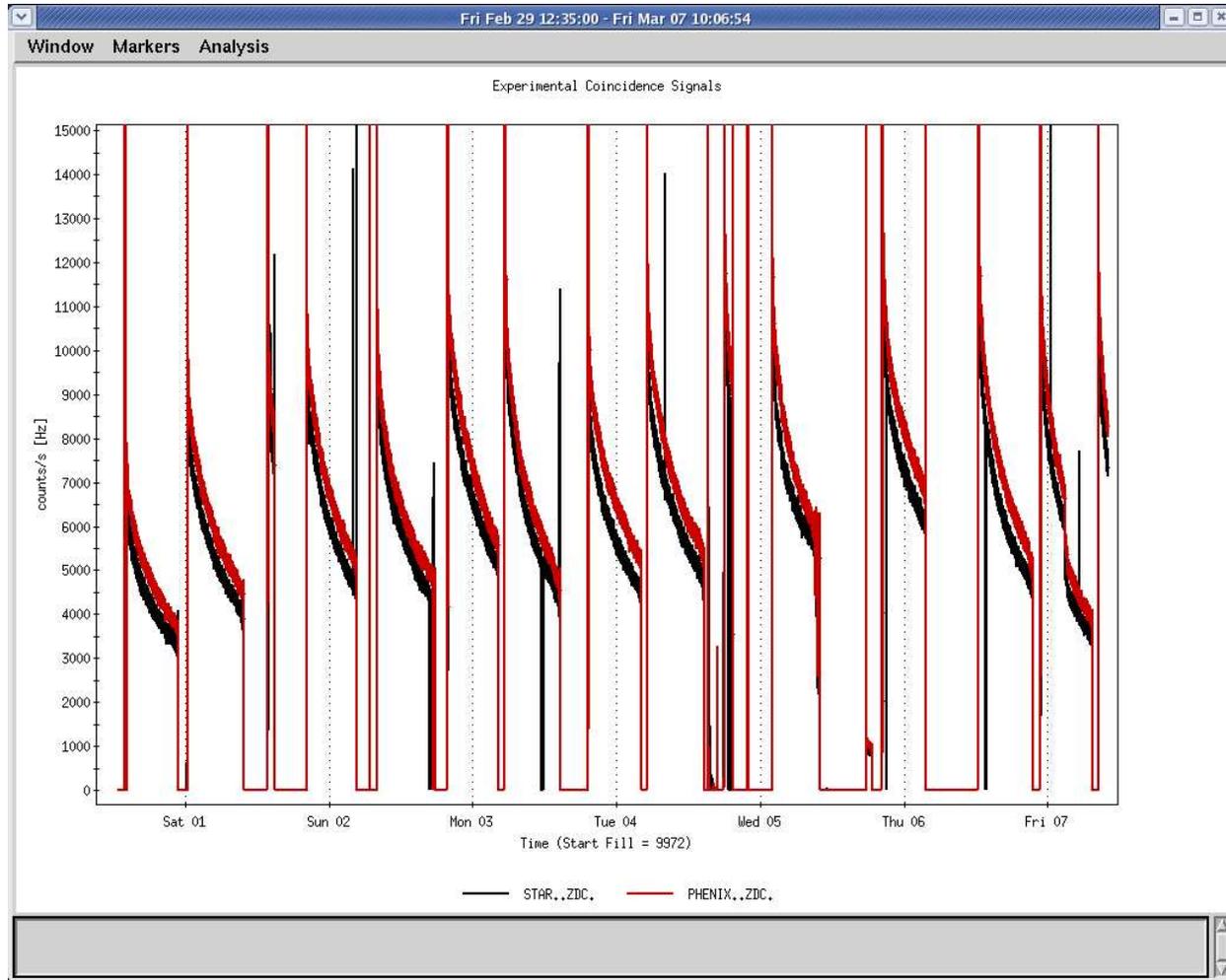


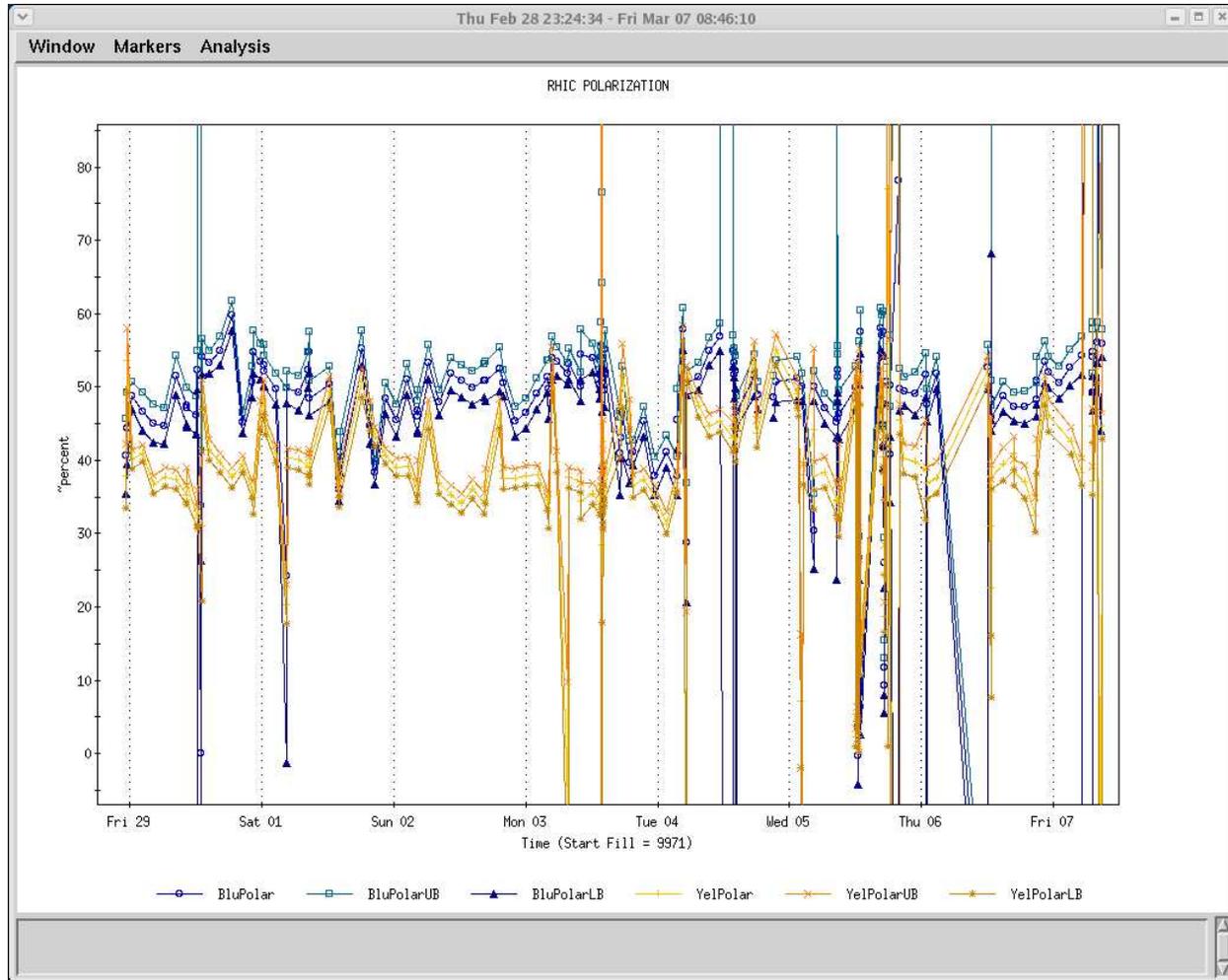
# Polarized Proton Run

March 7, 2008

# ZDC rates Feb. 29 – Mar. 7



# Polarization (CNI) Feb. 29 – Mar. 7



- **Mar. 1:** No extraction from AGS due to Booster-to-AGS phase shift.  
Quench protection problems.
- **Mar. 2:** Increased intensities to  $1.6e11$  (injection). 12.5 kHz ZDC rates.
- **Mar. 3:** Set Yellow snakes to same currents as Blue (= nominal currents).  
First fill after the change (9980) still has low polarization.

- **Mar. 4:** Fill 9981 has good polarization ( $> 50$  percent), with YA2 tripped before start of ramp.  
May indicate a chromaticity problem on the ramp.  
Started Yellow snake scan.
- **Mar. 5:** Fill 9983 (the “Monster Store”):  $1.84/1.76e11$ ,  $14.5\text{kHz}$  ( $37 \cdot 10^{30} \text{ cm}^{-2}\text{sec}^{-1}$ ).  
Lost due to human error after Vernier scan.
- **Mar. 6:** Fill 9989:  $1.72/1.64e11$ ,  $13 \text{ kHz}$ .  
 $10 \text{ Hz}$  cryo test:  $30 \text{ sec}$  beating disappears at low helium flow.  
Jet orbit scan; two-beam mode test.

- **Mar. 7:** Yellow polarization has improved, intensity is lower ( $1.4e11$ ).

Still need to understand Yellow polarization loss on the ramp. Preparing for ramp polarization measurement tonight.

Ramp chromaticity measurements.

Plan to decrease vertical separation at Jet from 6 to 5 mm for two-beam mode.

Will run in two-beam mode over the weekend.