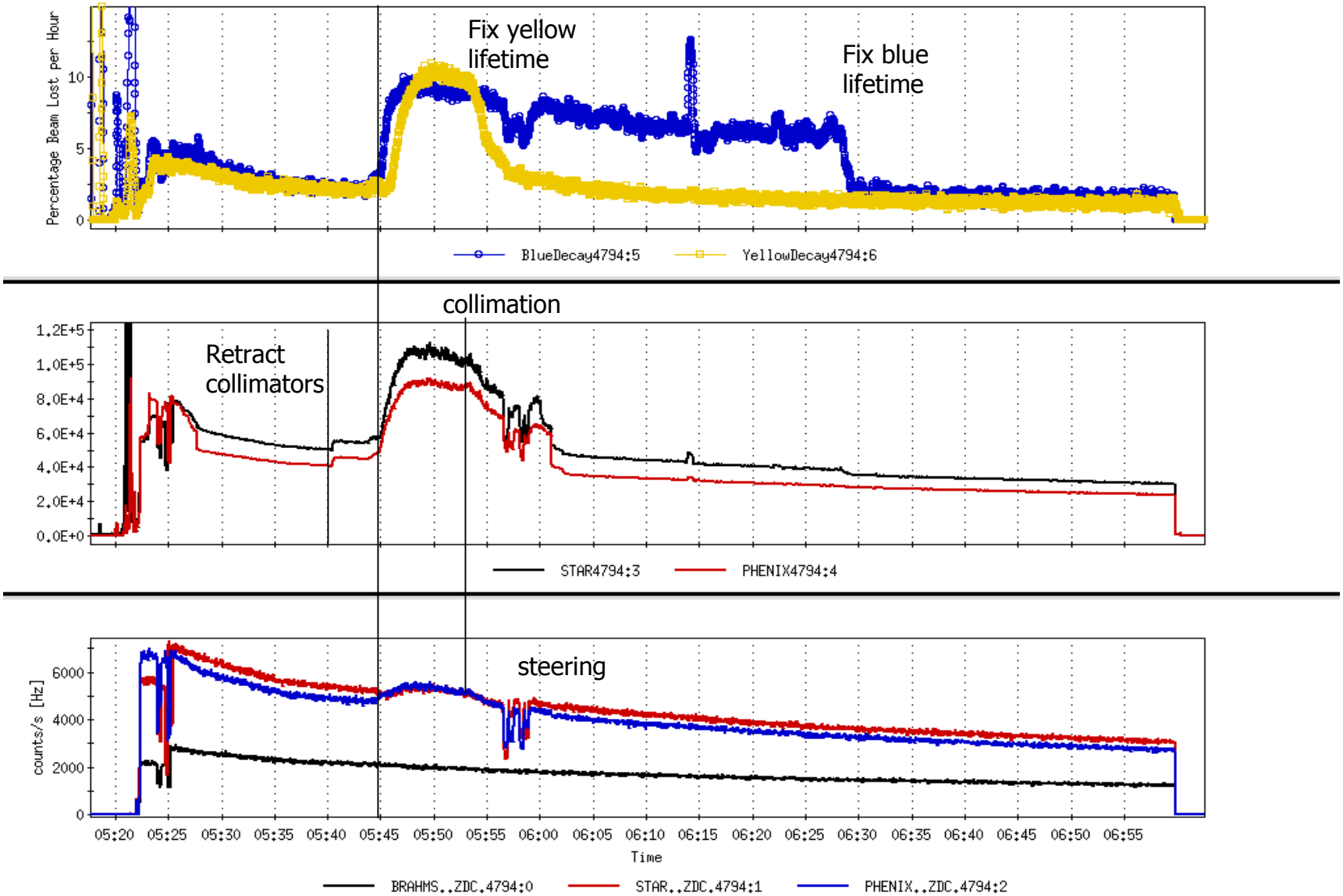
Beta* squeeze part 3

PROCEDURE:

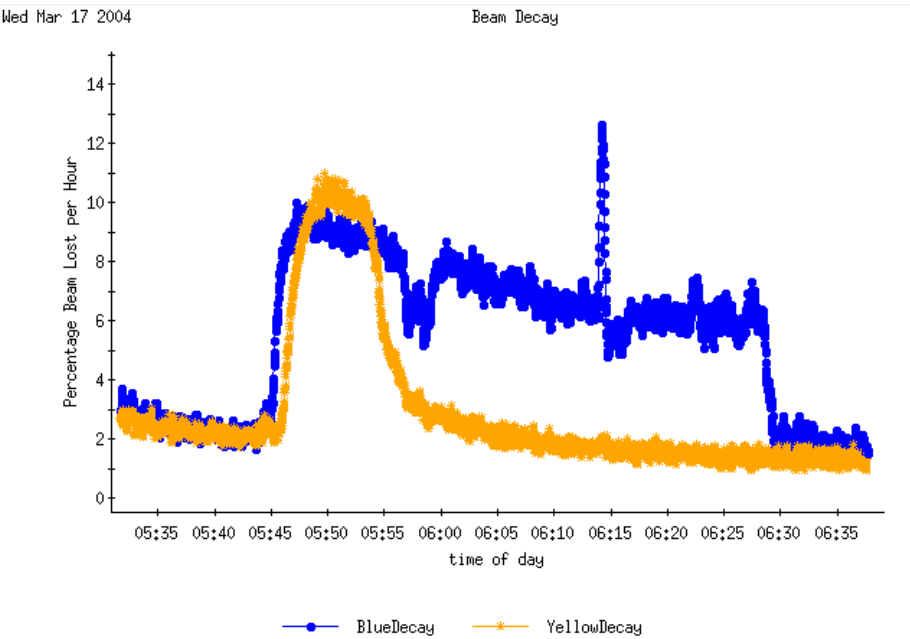
- Ramp 45x45 – normal physics conditions
- Steering, collimation→STAR and PHENIX data taking ~10-15 min
- Take collimator out
- Squeeze 12% (both beams)
- Fix lifetime (yellow→0.003 retuning, blue→decoupling+tune fix)
- Auto-steering, collimation

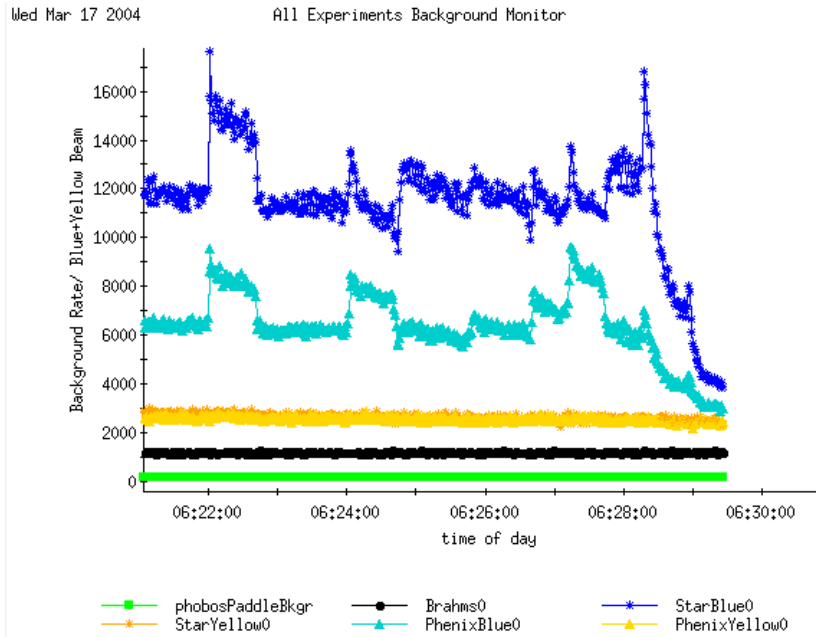
  → STAR and PHENIX data taking (STAR TPC included)

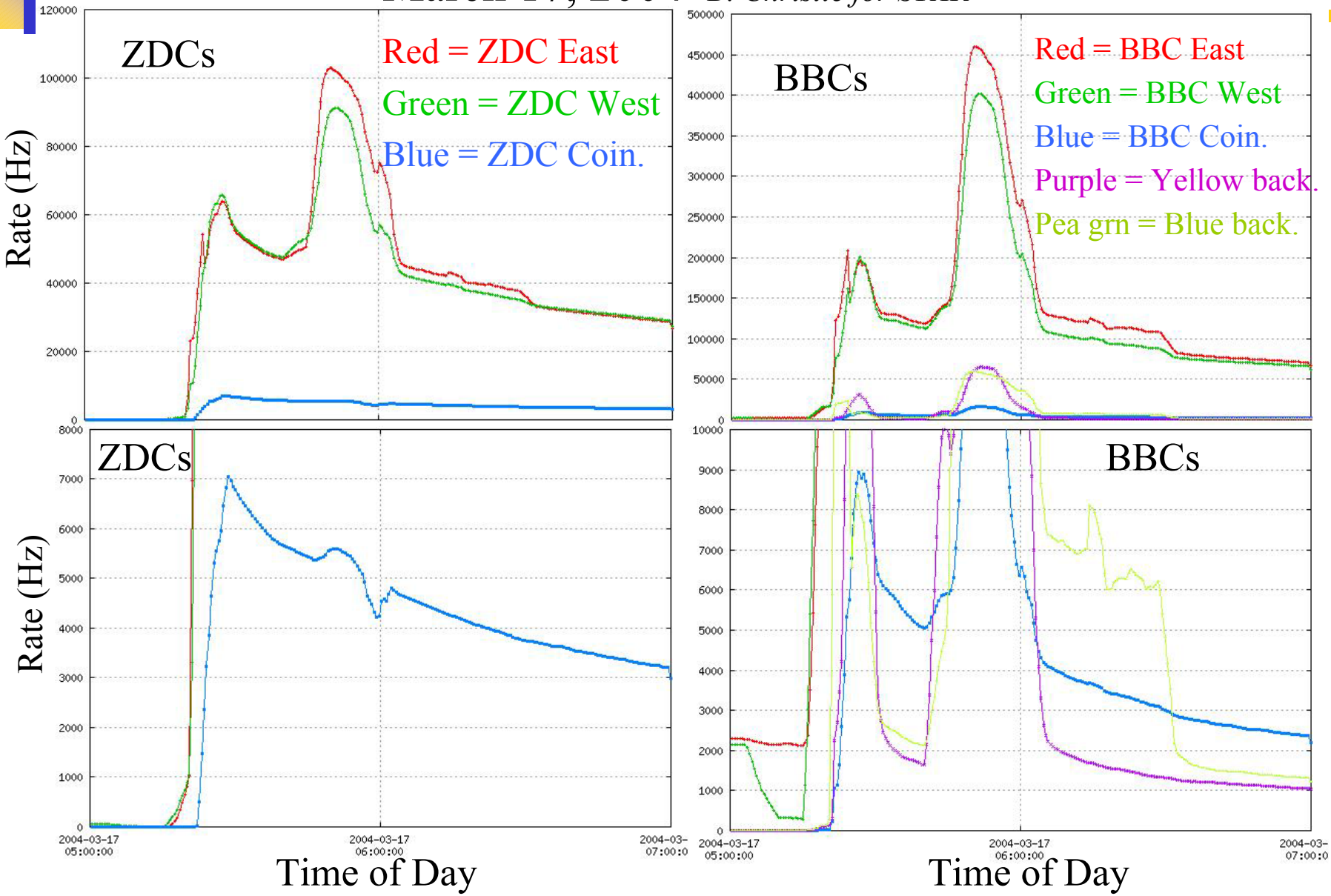
overview


Fix yellow lifetime
Fix blue lifetime
Percentage Beam Lost per Hour
BlueDecay4794:5
YellowDecay4794:6
collimation
Retract collimators
STAR4794:3
PHENIX4794:4
steering
counts/s [Hz]
Time
BRAHMS..ZDC.4794:0
STAR..ZDC.4794:1
PHENIX..ZDC.4794:2

Beam Ex 2004


Wed Mar 17 2004
Beam Decay
Percentage Beam Lost per Hour
0
2
4
6
8
10
12
14
05:35 05:40 05:45 05:50 05:55 06:00 06:05 06:10 06:15 06:20 06:25 06:30 06:35
time of day
BlueDecay
YellowDecay


Wed Mar 17 2004
All Experiments Background Monitor
Background Rate/ Blue+Yellow Beam
0
2000
4000
6000
8000
10000
12000
14000
16000
06:22:00 06:24:00 06:26:00 06:28:00 06:30:00
time of day
phobosPaddleBkgr
StarYellow0
Brahms0
PhenixBlue0
StarBlue0
PhenixYellow0

Quick Look at Beam Experiment to Decrease β* from 1 to ~ .88

March 17, 2004 *B. Christie for STAR*