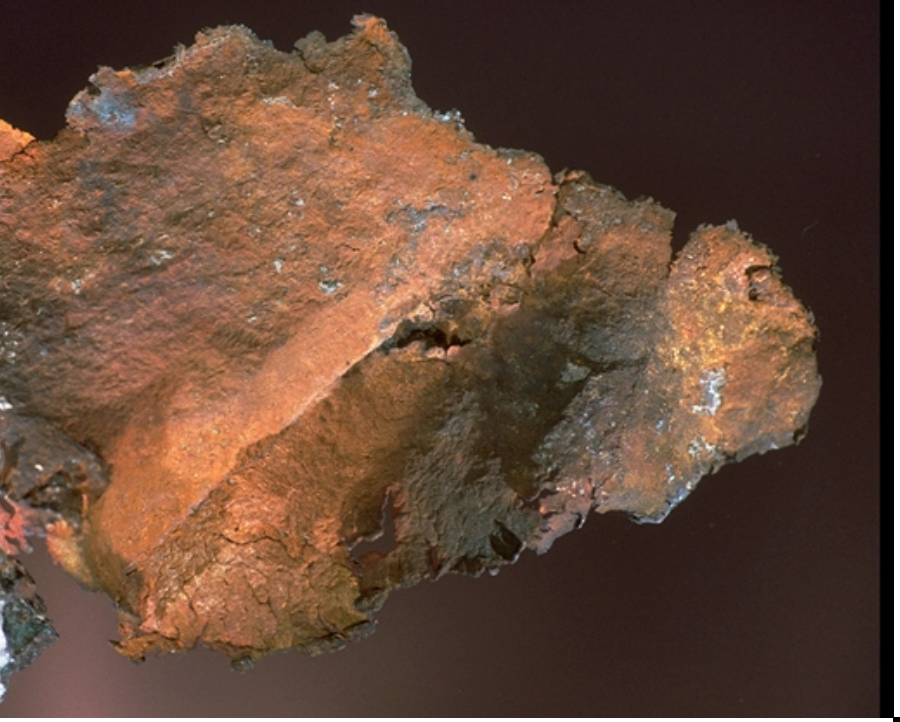
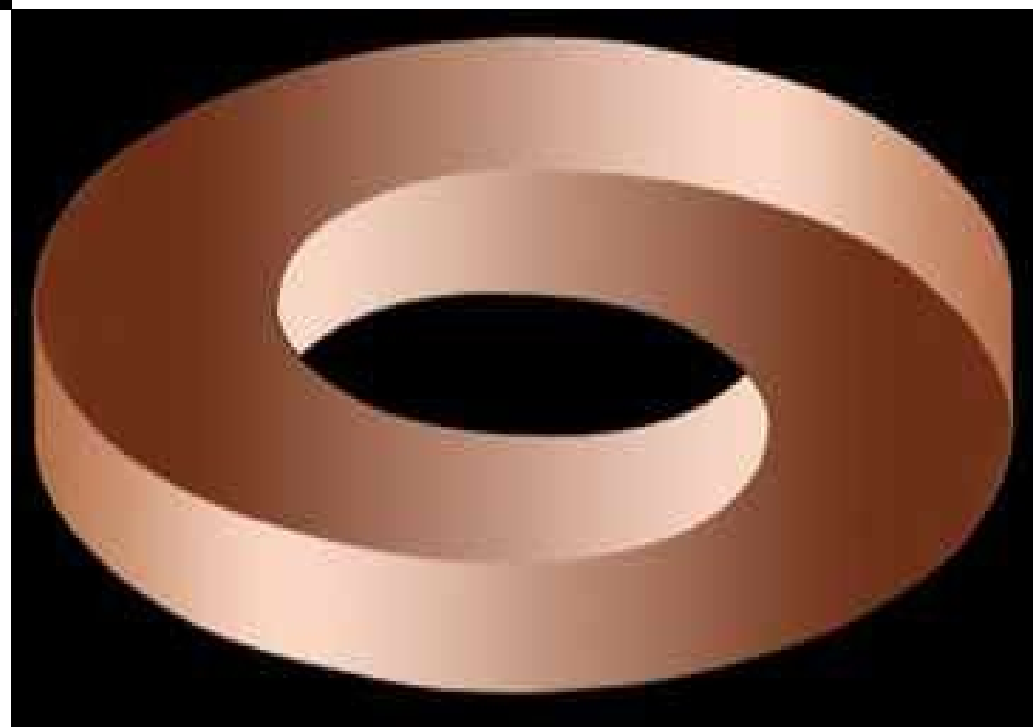


# Machine status

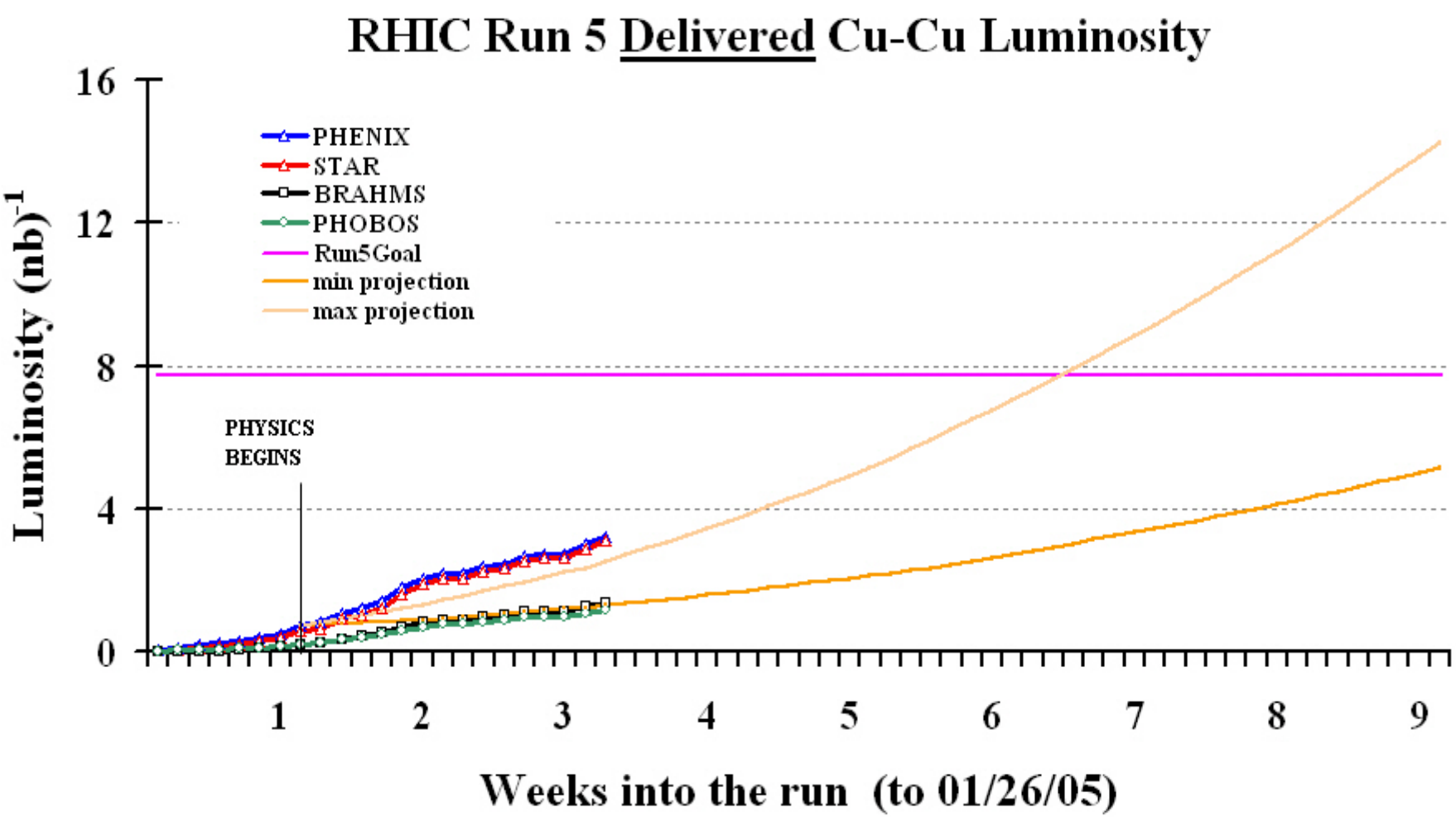
BROOKHAVEN
NATIONAL LABORATORY

Machine Experiments
January 26, 2005



# Status – 2 weeks

| Total from January 11 (nbarn-1) | |
|---|---|
| Phenix: | 2.48 |
| STAR: | 2.54 |
| Brahms: | 1.10 |
| Phobos: | 0.96 |



# Week 2 challenges

**Access 18+ hours**→ 1.5-2 days to recover beam operations

**Snow storm**→ beam operations off from owl of Sunday till Monday 7:30pm

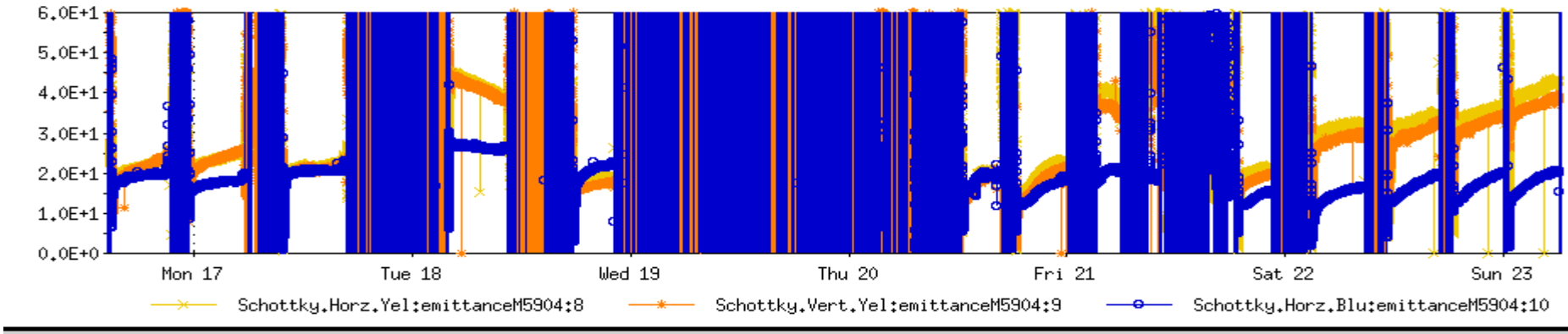
assessment of response→ plan for future

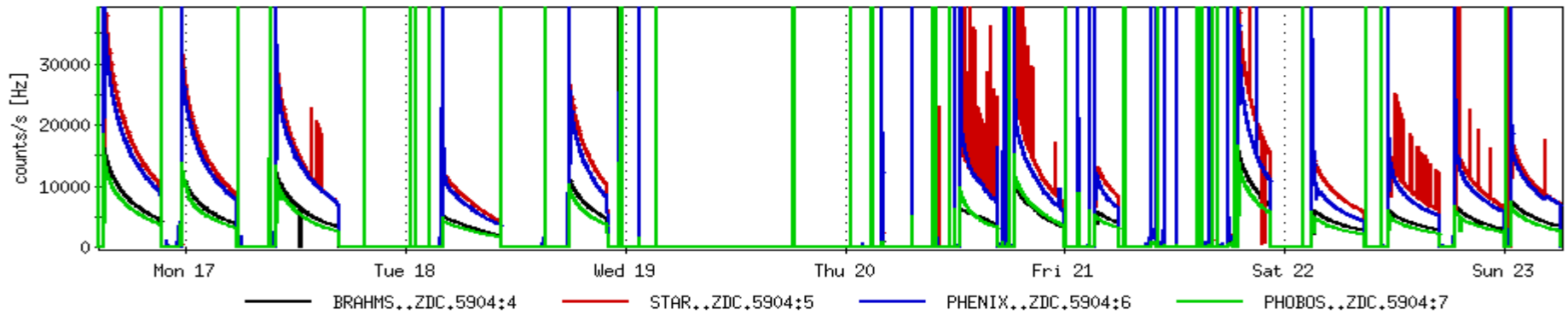
**Instability** ~0.5sec after transition

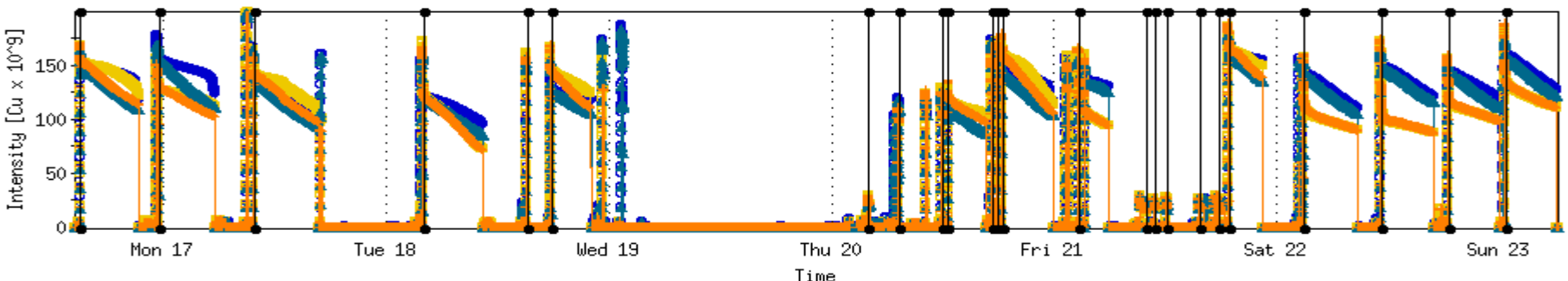
→emittance blow-up, transmission, low rates, background

- Move chromataicity zero crossing early at transition (raise chrom just after transition)
- Work on collimation, background

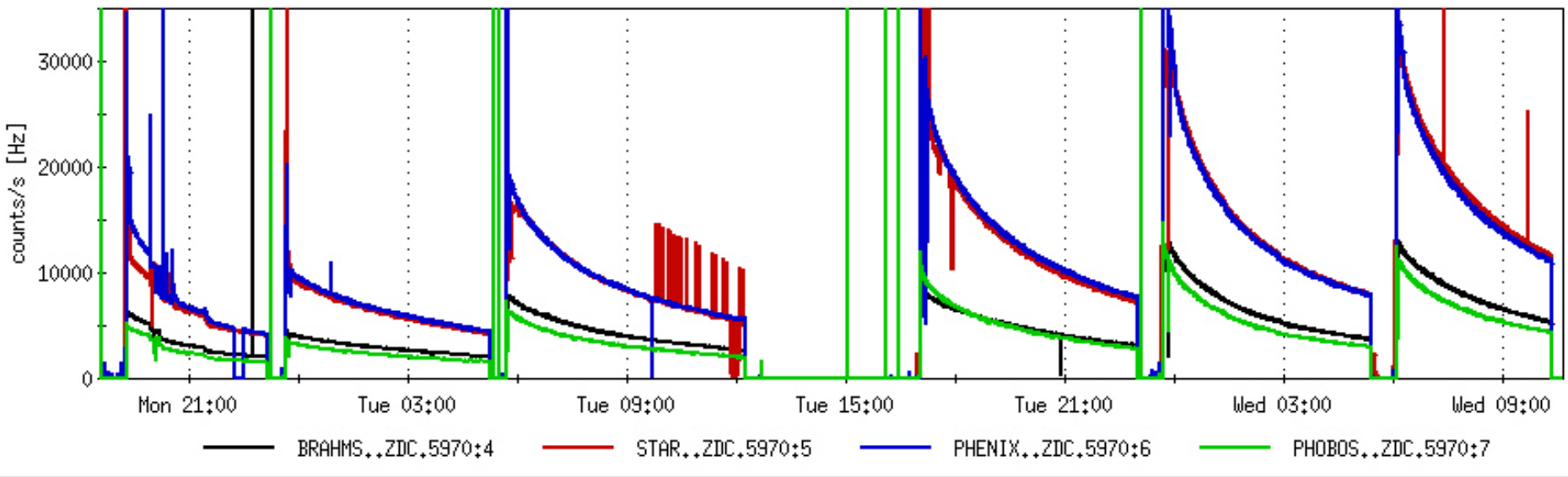
# Intensity/collisions – Week 2

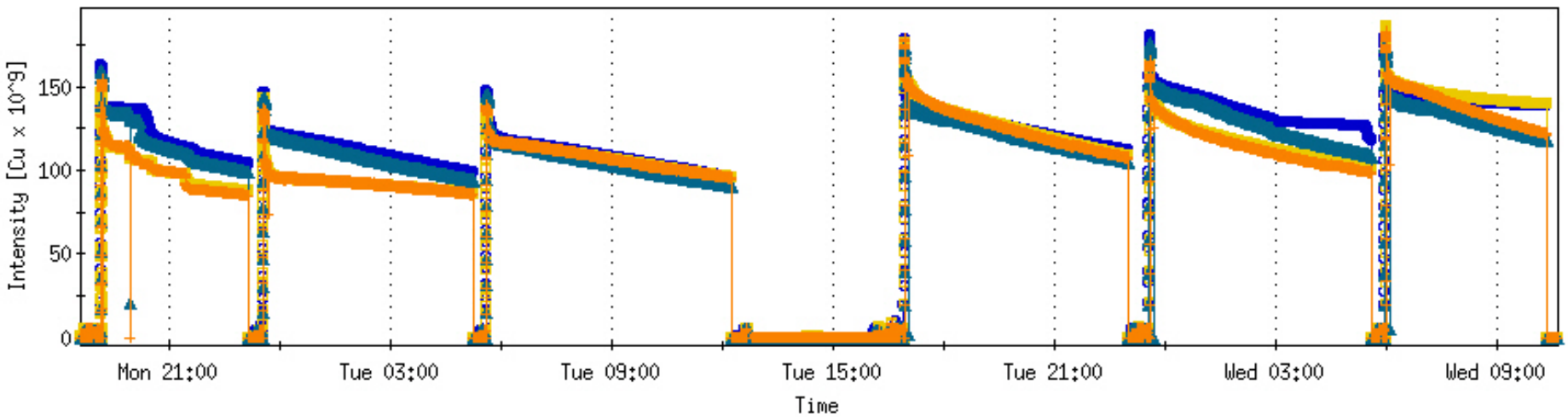


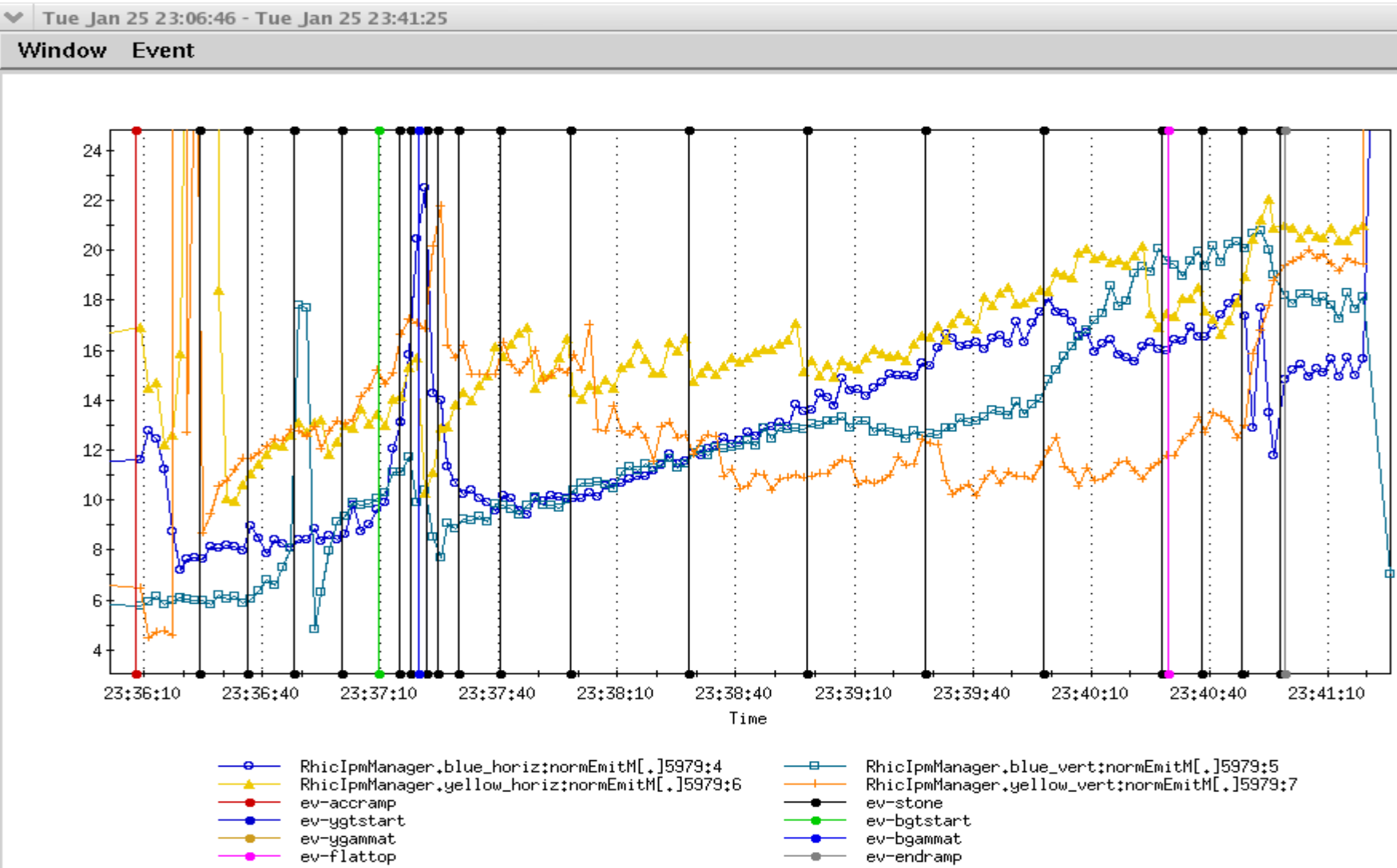



# Stores after snow storm



# Emittance on the ramp



# Work on store luminosity

- ✓ Priority: getting rid of **transition instability**

- ❑ Optimize **collimation** set-up→automatic collimation
- ❑ Automatic LISA **steering** – 4 experiments

**Re-bucketing, common cavities**

**IR corrections** (yellow)

- ❑ Increase **bunch intensity** to 5.5-6e9
- ❑ Increase progressively **number of bunches**
- ❑ Commission ramp for **new working point**