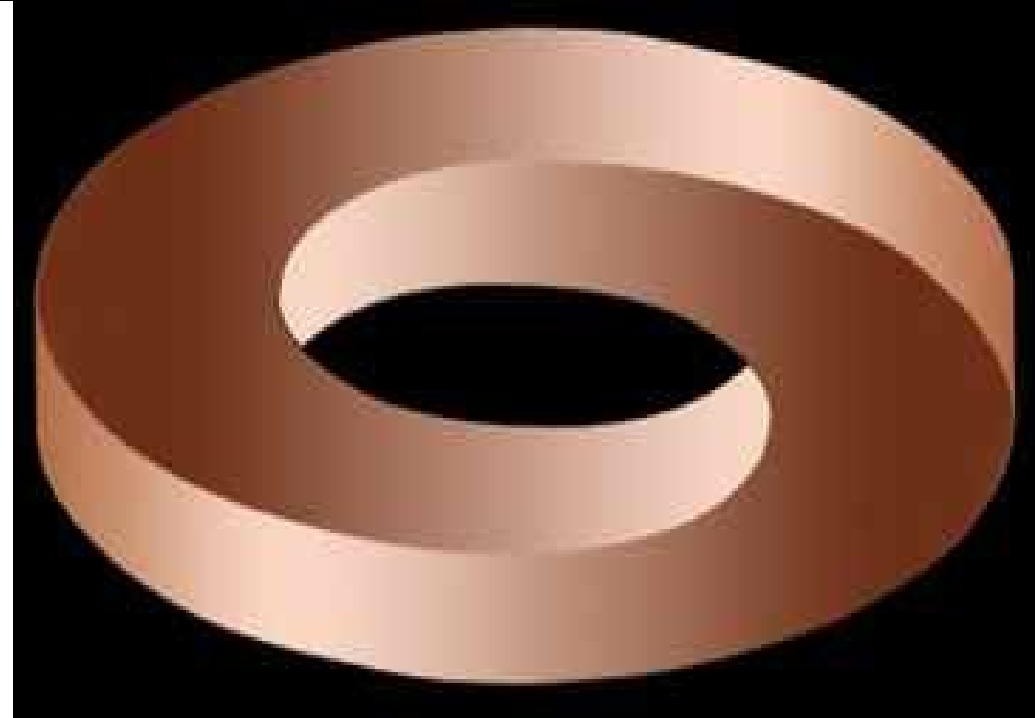


# Run-5 Update



Machine-Experiments  
March 16<sup>th</sup>, 2005

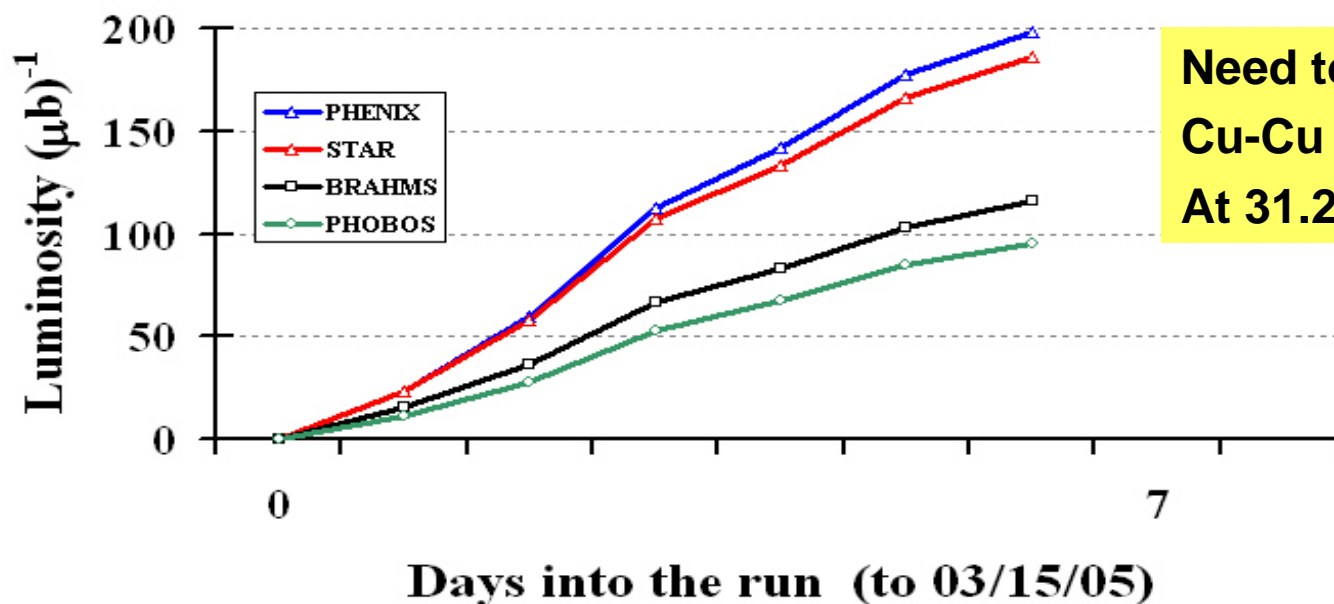




# Status: Cu-LE week 1

date	day number	week number	BRAHMS		PHENIX		PHOBOS		STAR	
			integrated luminosity	luminosity / da	integrated luminosity	luminosity / da	integrated luminosity	luminosity / da	integrated luminosity	luminosity / da
3/9/2005	0		0	0	0	0	0	0	0	0
3/10/2005	1		15.40	15.400	23.22	23.220	11.18	11.180	23.70	23.700
3/11/2005	2		36.39	20.990	59.76	36.540	27.91	16.730	57.79	34.090
3/12/2005	3		66.47	30.080	112.61	52.850	53.21	25.300	107.27	49.480
3/13/2005	4		82.75	16.280	141.70	29.090	67.52	14.310	133.76	26.490
3/14/2005	5		103.38	20.630	177.24	35.540	84.80	17.280	166.65	32.890
3/15/2005	6		115.78	12.399	197.92	20.680	95.11	10.310	186.11	19.460
3/16/2005	7	1								

**RHIC Run 5 (62 GeV) Delivered Cu-Cu Luminosity**



**Need to re-evaluate  
Cu-Cu X section  
At 31.2 GeV/u**



# LE week 1 – summary

Set-up Cu low energy: Monday→Wednesday (including 12h power dip)

Physics starts Wednesday night: lumi counting from **store 6426**

Initial physics store: 37 x 3.0e9→42 x 3.5e9: **1.8 KHz → 3.0 KHz**

Typical ramp trasmission range : **85%-92%**

**Intensity increase**: development Friday afternoon: blue transmission

Improves to 95% but yellow instability → reverted entire ramp

**Increase number of bunches:**

**42X43** 3.4e9 OK (42x43 3.8e9 loses on ramp transmission)

**47x48** 3.5e9 filling problems at injection, Phobos PR



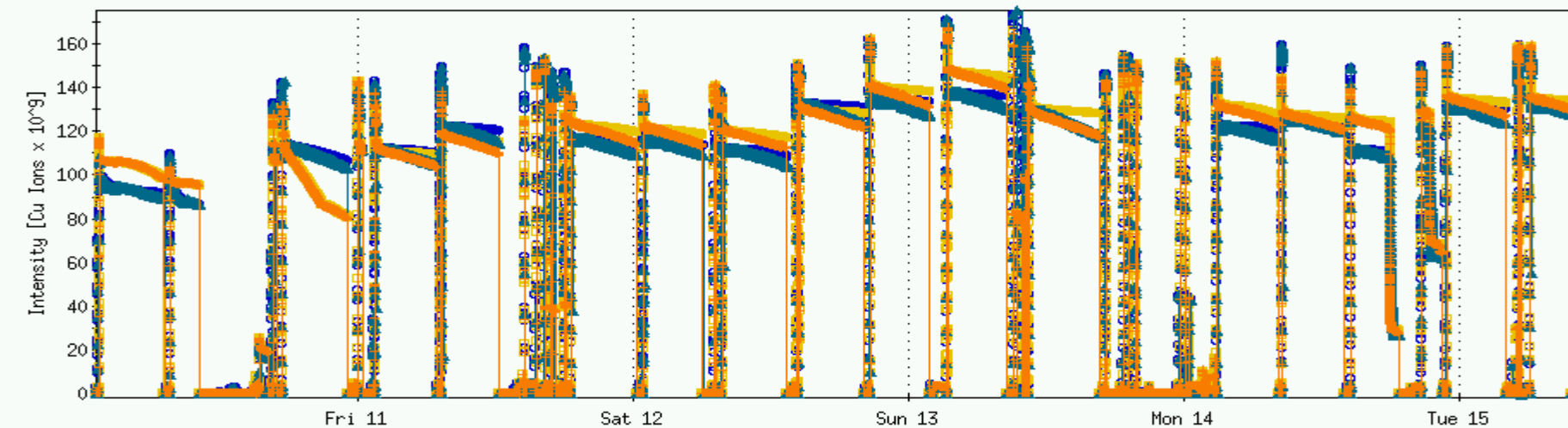
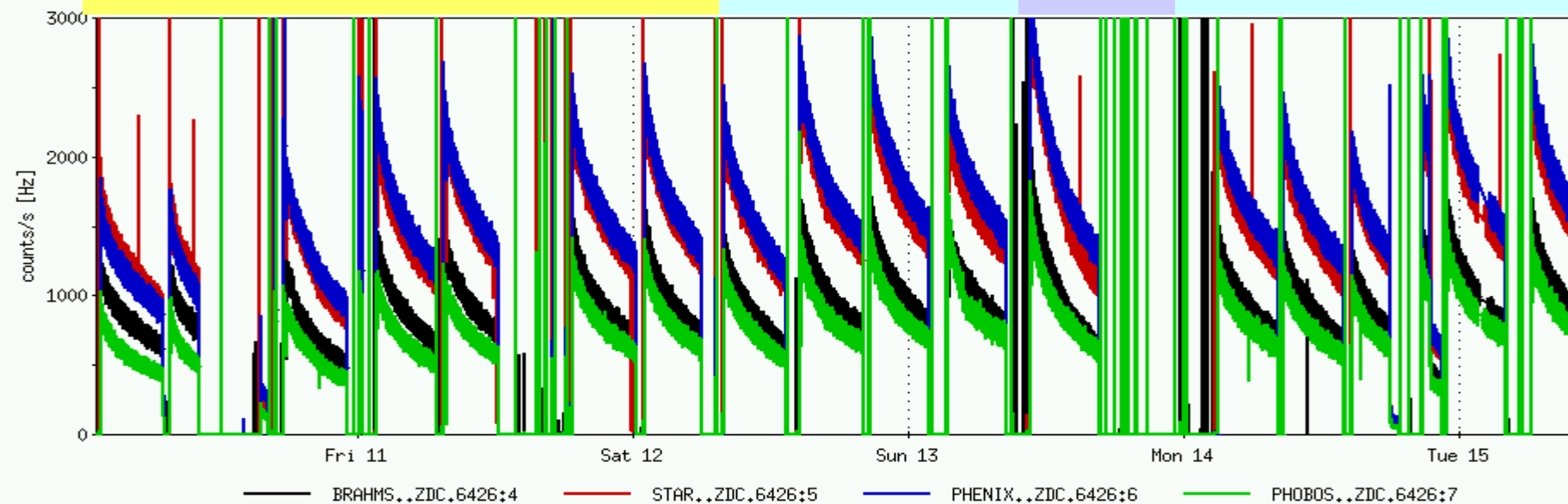
# Stores – LE – week 1

37x37

42x42

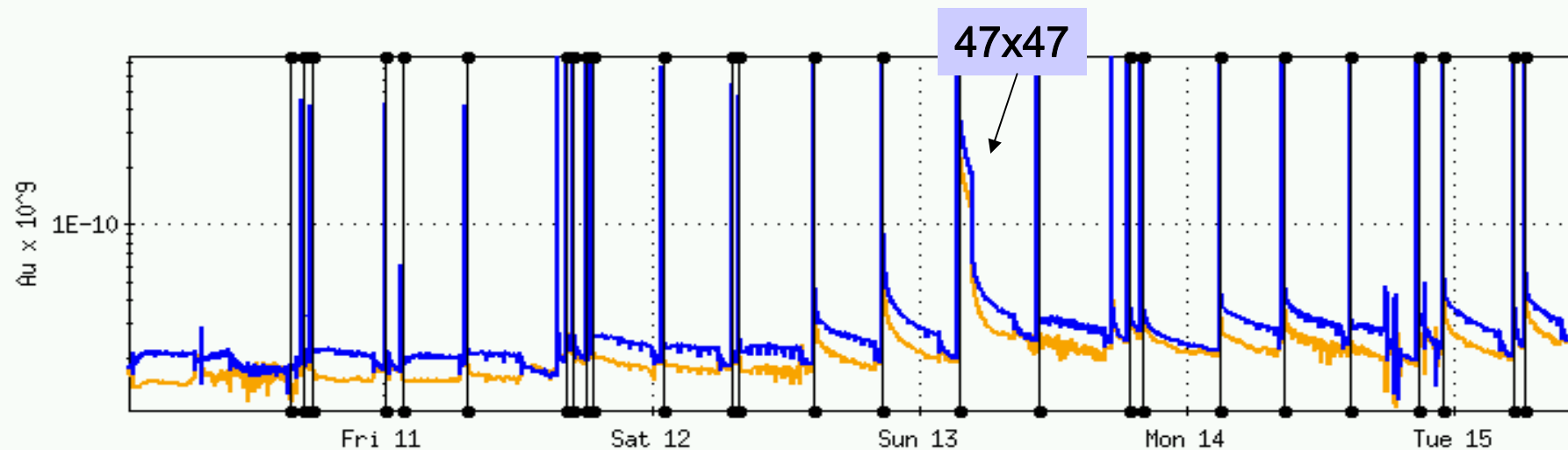
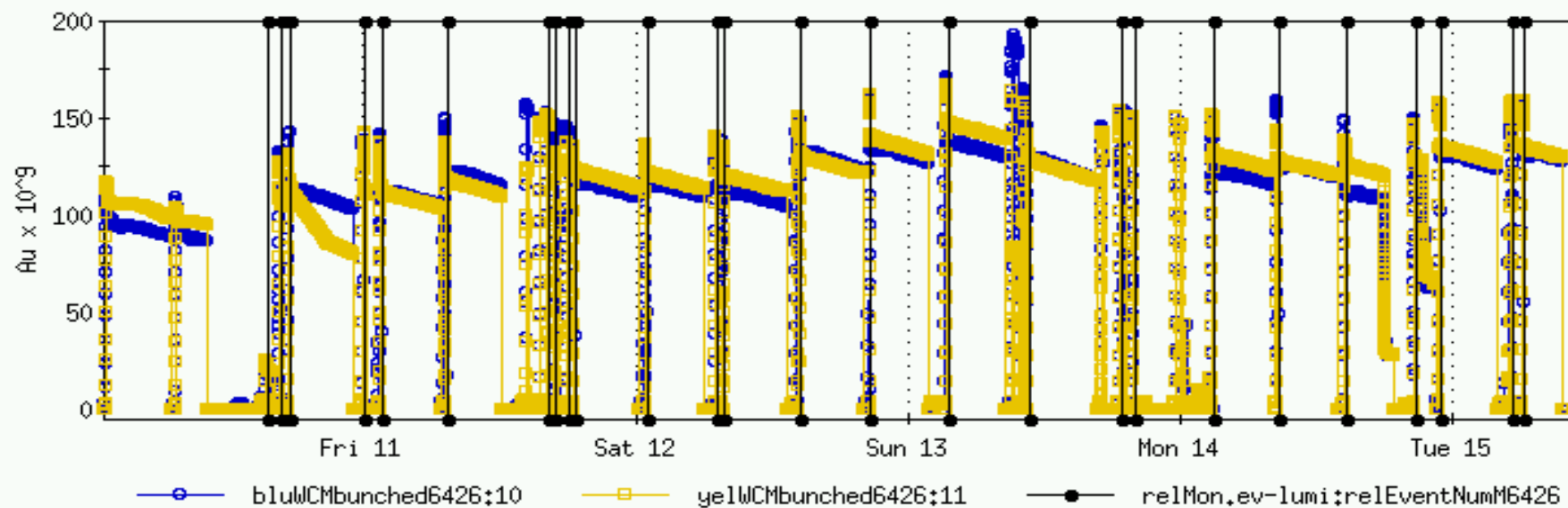
47x47

42x42



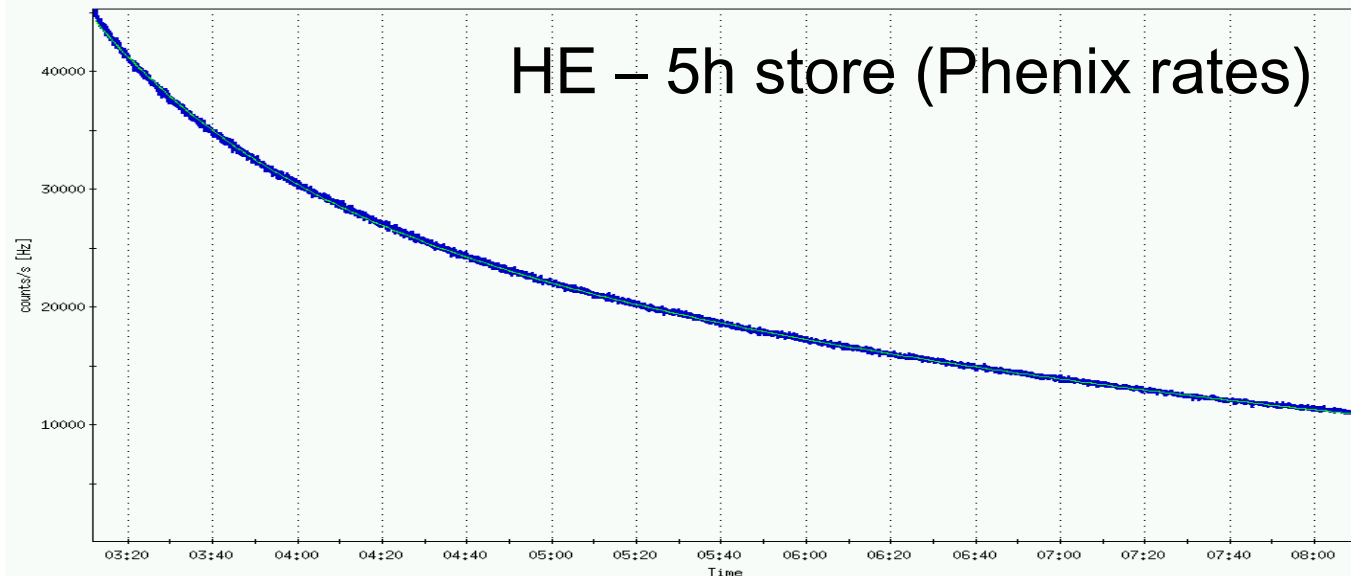
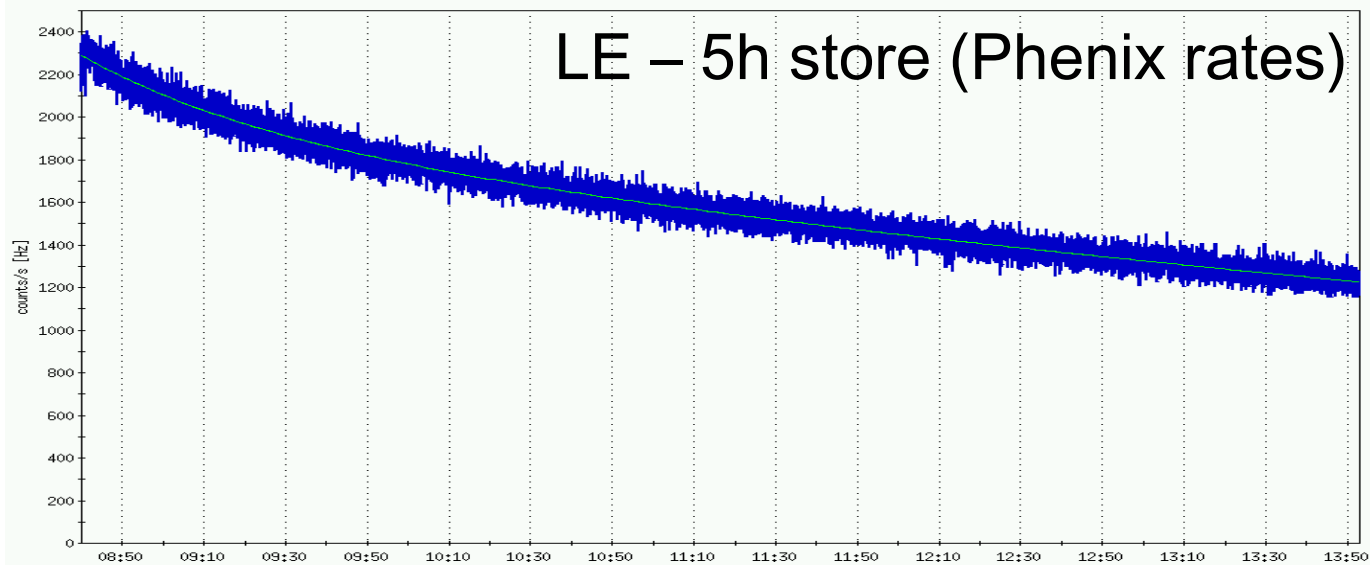


# Phobos – LE week 1



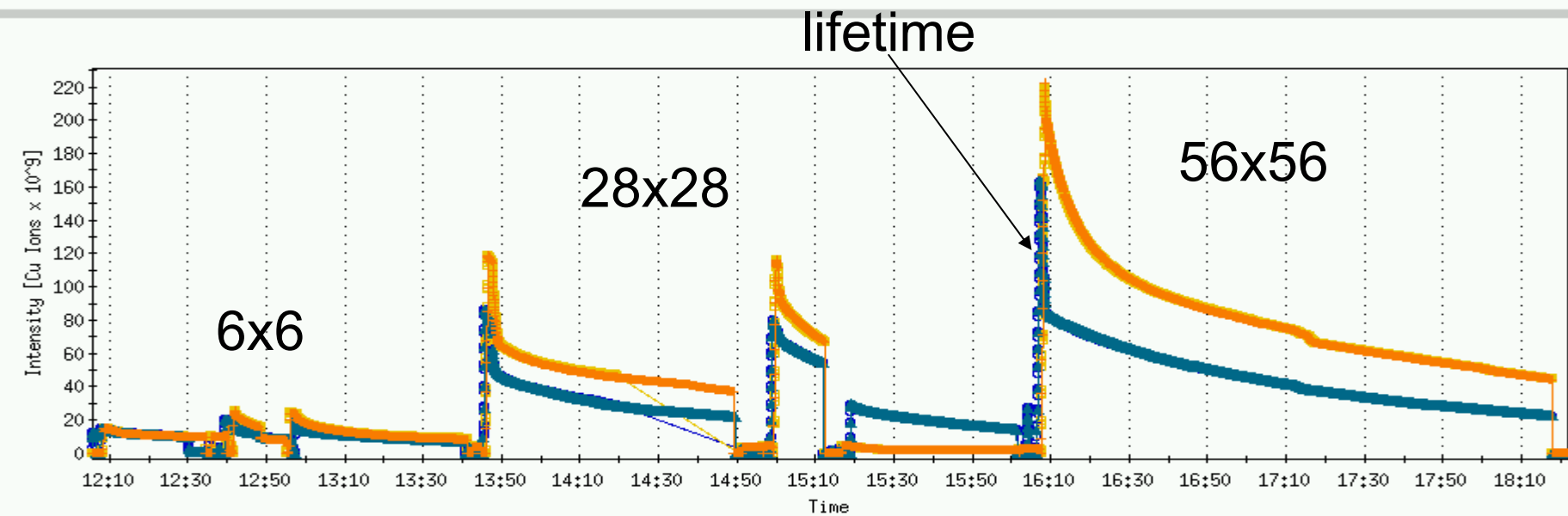
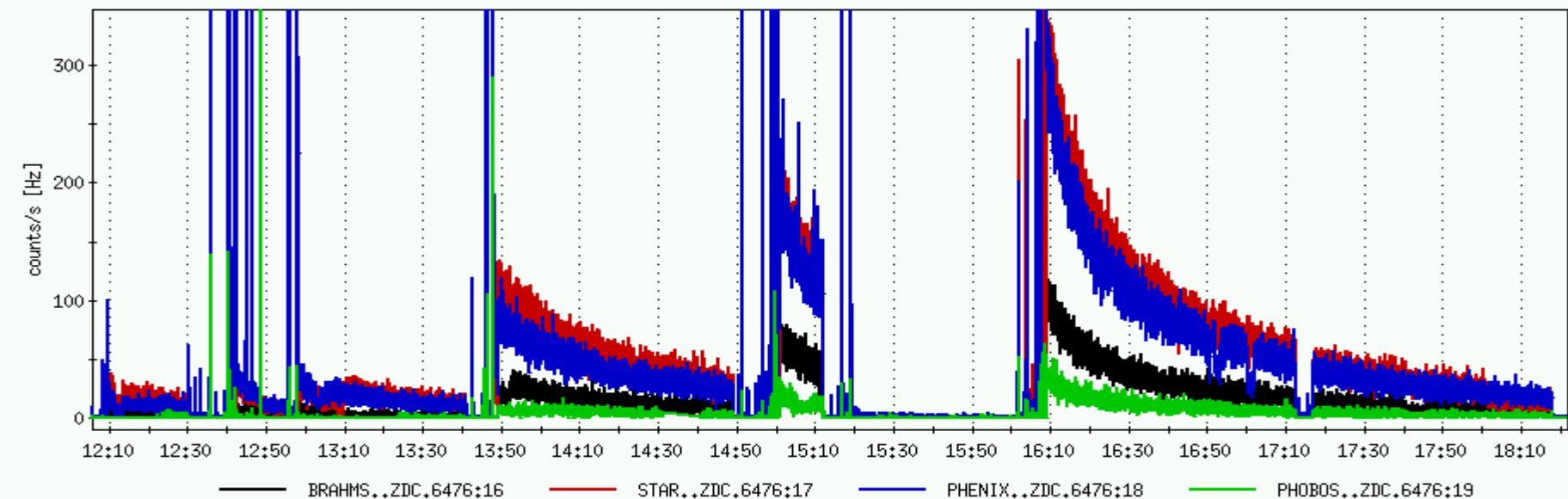


# LE – store: luminosity lifetime





# Collisions at injection - summary





## Collision at injection - status

Machine wise – set-up was fast & good, but work is still needed on **vertex** and **backgrounds**

(Phenix vertex/timing, Phobos masks, STAR vertex off ~18CM....)

More development time ? Disruptive...

→ 18 hours run:

- Fix **vertex**, **background**
- Set up injection with (already) **cogged beams**
- **take data** – refill every 1-2 hours (12 hours)

Questions:

1. Will experiments ramp up and down?
2. Is March 24 8:00am “cast in concrete” ?





# Phobos 0 field and polarity change

## Planned for Thursday: (Yun)

- Ramp with present set-up
- Phobos→0 at store in steps →correction
- Take 0 field data
- Use 0-field settings on t230 and t320
- Tune ramp with new polarity

—————→  
Accidental loss of Phobos  
Magnet at store

