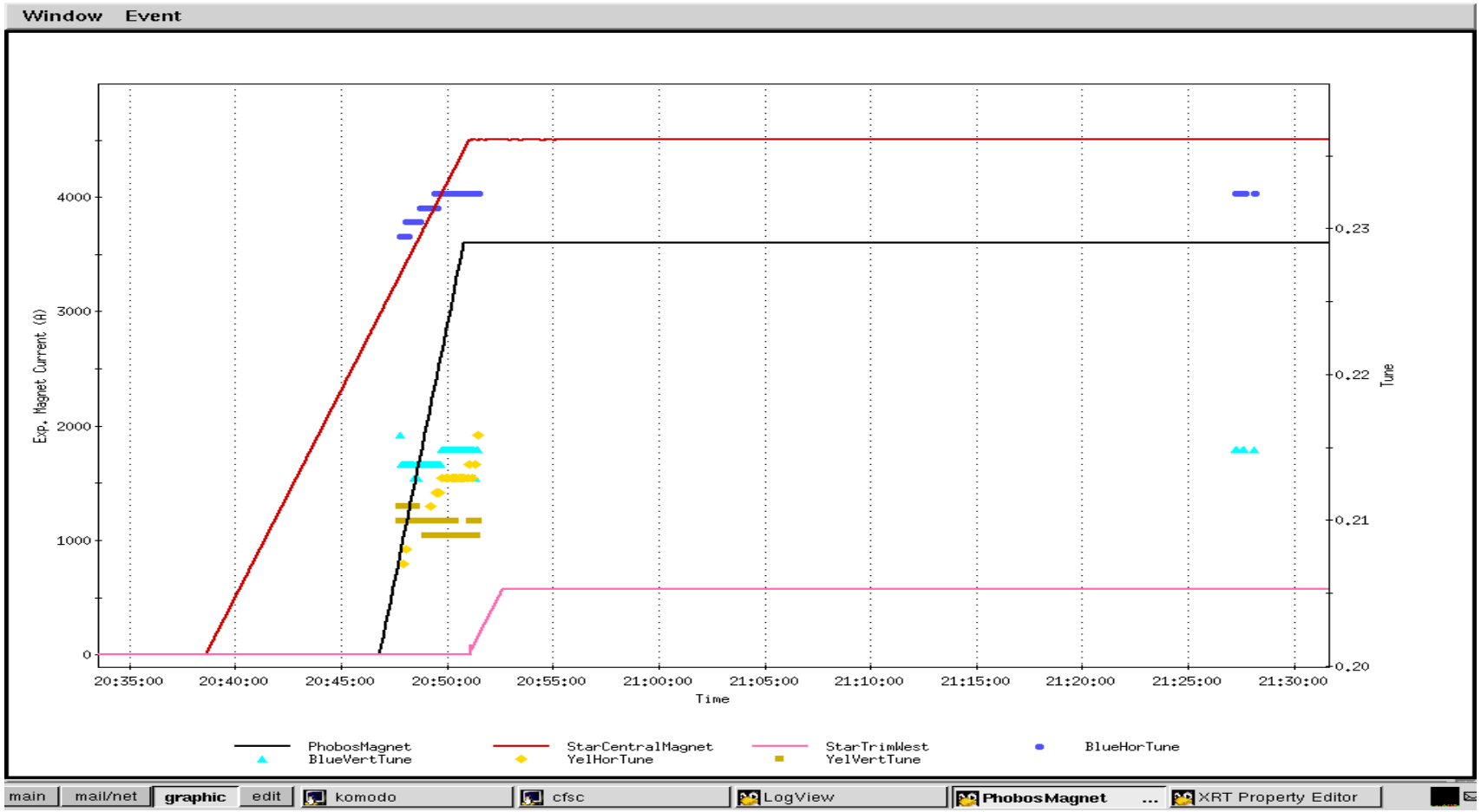
RHIC Experiments Integration

- **Experimental Magnets**
- **CDEV Server and links**
- **Direct Signals**

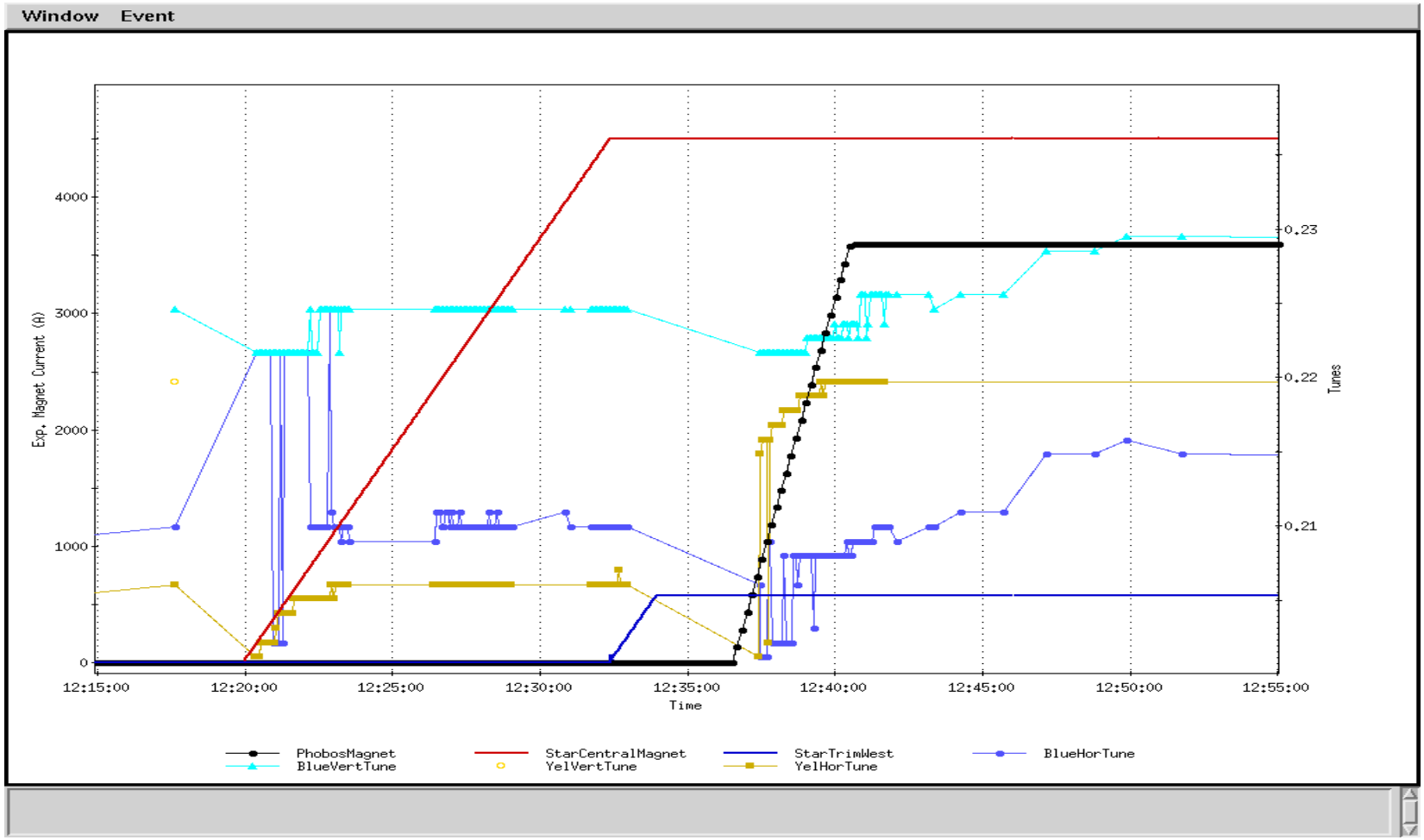
Exp. Magnets (# 2269)



Blue horiz.: +0.003
Blue vert.: +/− 0

Yel horiz.: +/− 0
Yel vert.: + 0.006

Exp. Magnets (# 2246)



Blue horiz.: +0.002 ?

Blue vert.: + 0.004

Yel horiz.: +0.005 (STAR) +0.005 (PHOBOS)

Yel vert.: no data

Exp. Magnets

- **exp. magnets have strong effect on machine tunes**
- **compensation is time consuming**
- **need to know the plan in <u>advance</u>**
- **<u>minimize</u> list of scenarios**
- **prepare compensation in advance**
- **MCR controls exp. magnets ?**

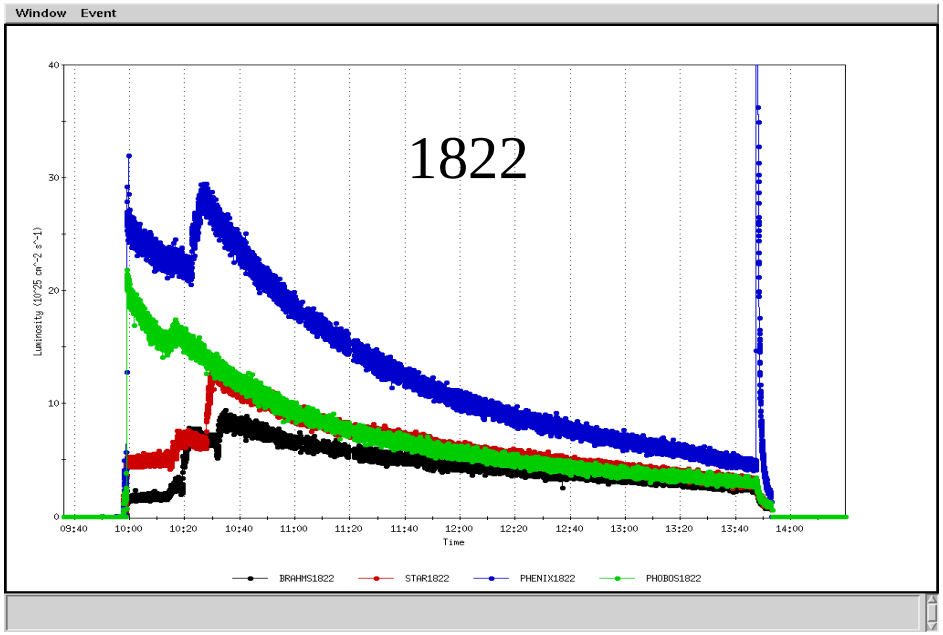
CDEV data exchange

- **Is the data we send via CDEV usefull?**
- **How reliable is this?**
- **Is the list complete?**
- **Other ways of exchange?**
- **Could data be sent from Exp−>MCR?**

RHIC events

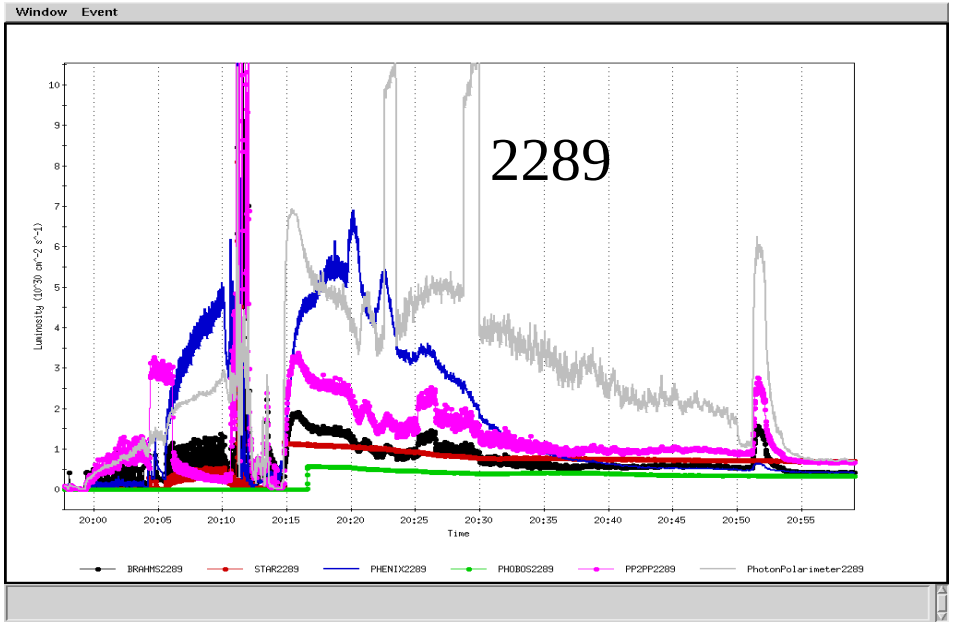
- **book keeping (delivered luminosity, list of fills, etc.) is important!**
- **we need more dedicated events (target, lumi, cogged ...)**
- **(lumi) event sending strategies:**
  - **automated: overestimates real use**
  - **manual: underestimates real use**
  - **how about other events?**
  - **we need some intelligence for sending**

Direct Signals

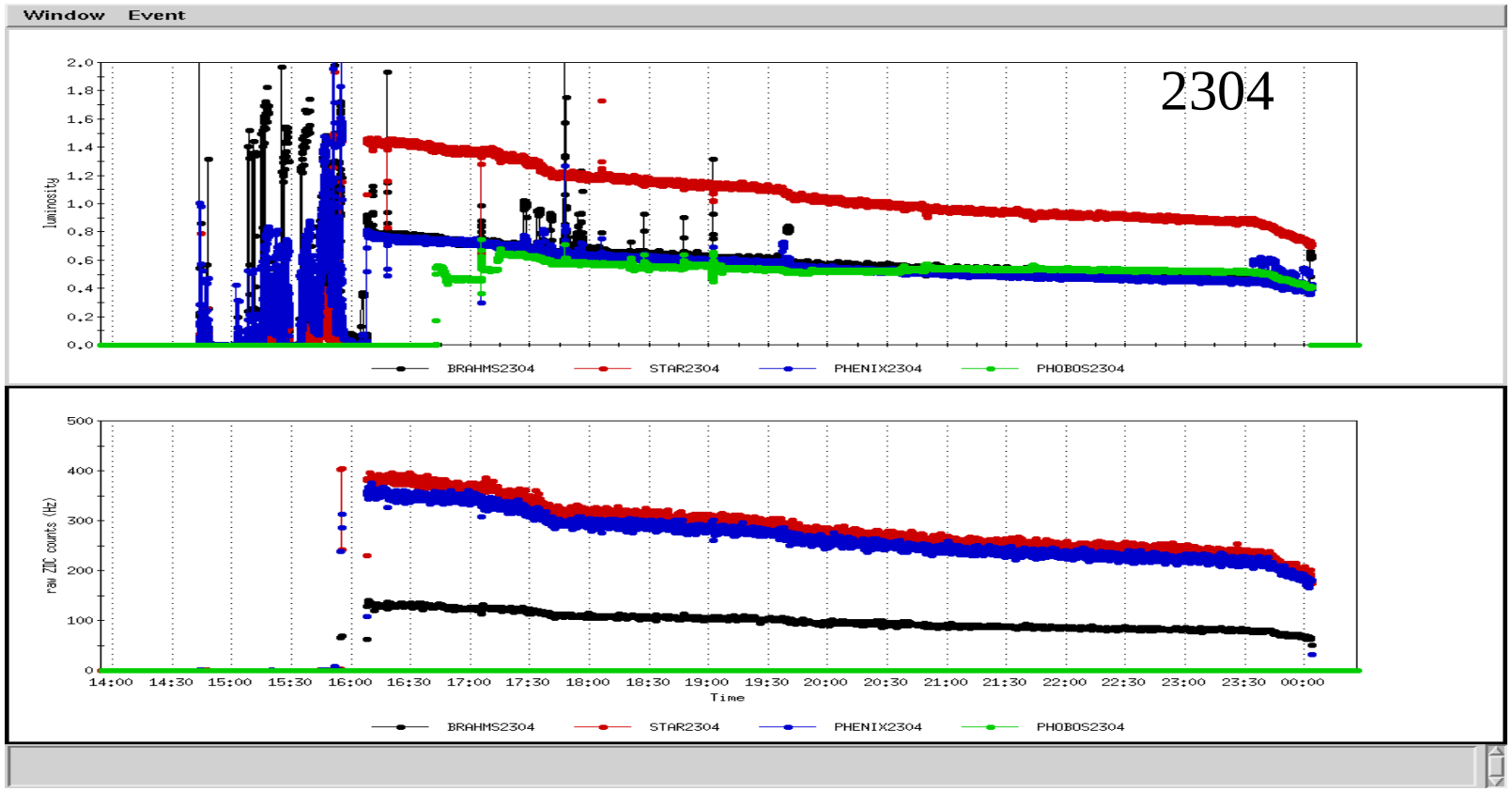


au−au:
clean and reliable signal from ZDCs

pp:
noisy/contaminated signal
"acceptance" needs more study
signal needs to be calibrated



Direct Signals cont.



BBC

ZDC

- ZDCs are useful for pp luminosity monitoring
- much less background/noise
- reveal relative differences between IRs better (except BRAHMS)

Direct Signal cont.

Au−Au and pp

- **We need more direct signals (such as MuID from PHENIX) for background monitoring/tuning**

pp

- **Use and maintain ZDCs**
- **Dedicate time to understand/calibrate BBC signals (vs. bunch length etc.)**

other

- **Are BBC or ZDC useful with d−Au or other species?**