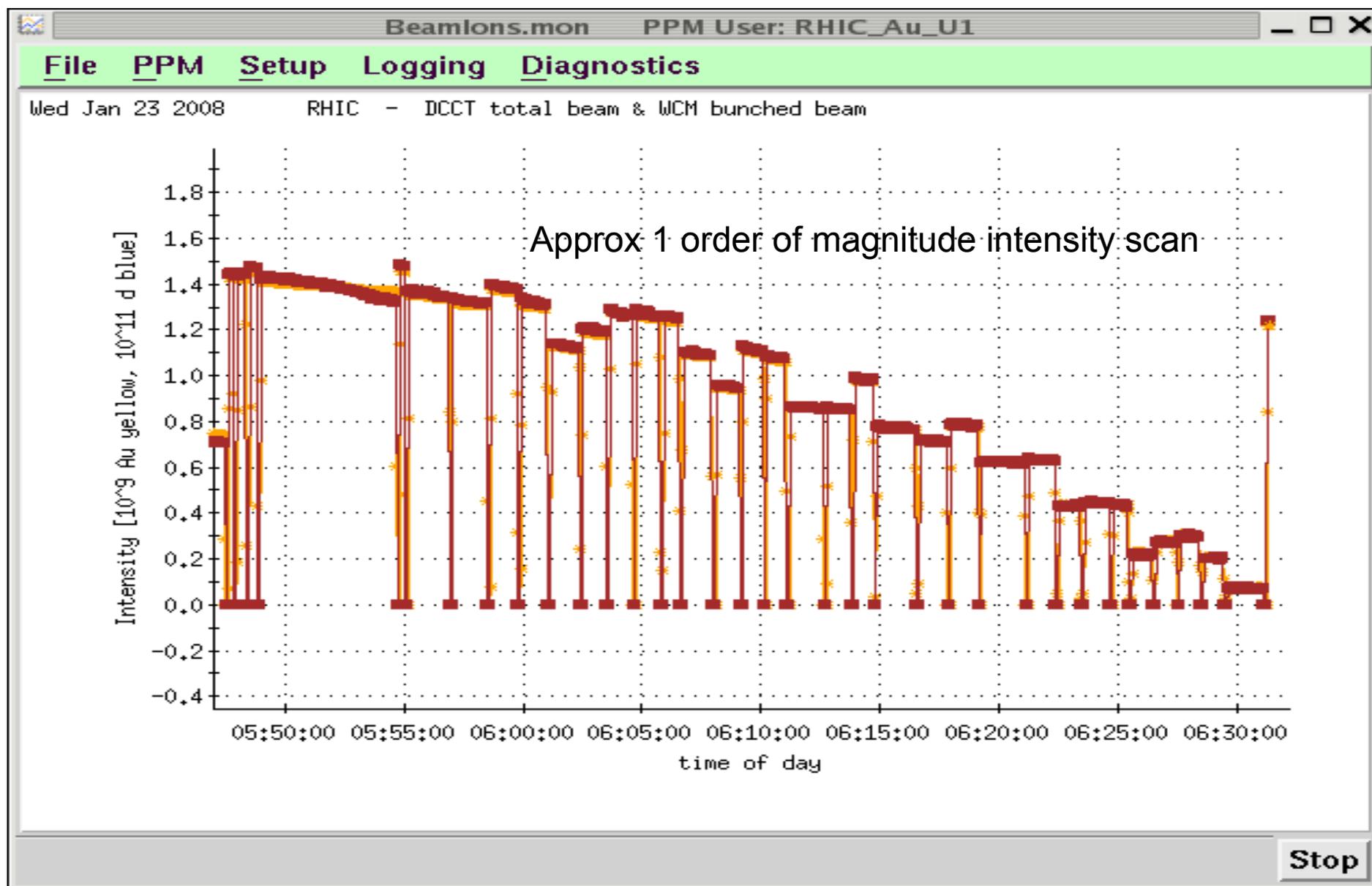

RHIC Impedance Localization & Optics Correction

Exps: Jan 24, 2008

Rama Calaga

Ack: Operations

RHIC Impedance Studies



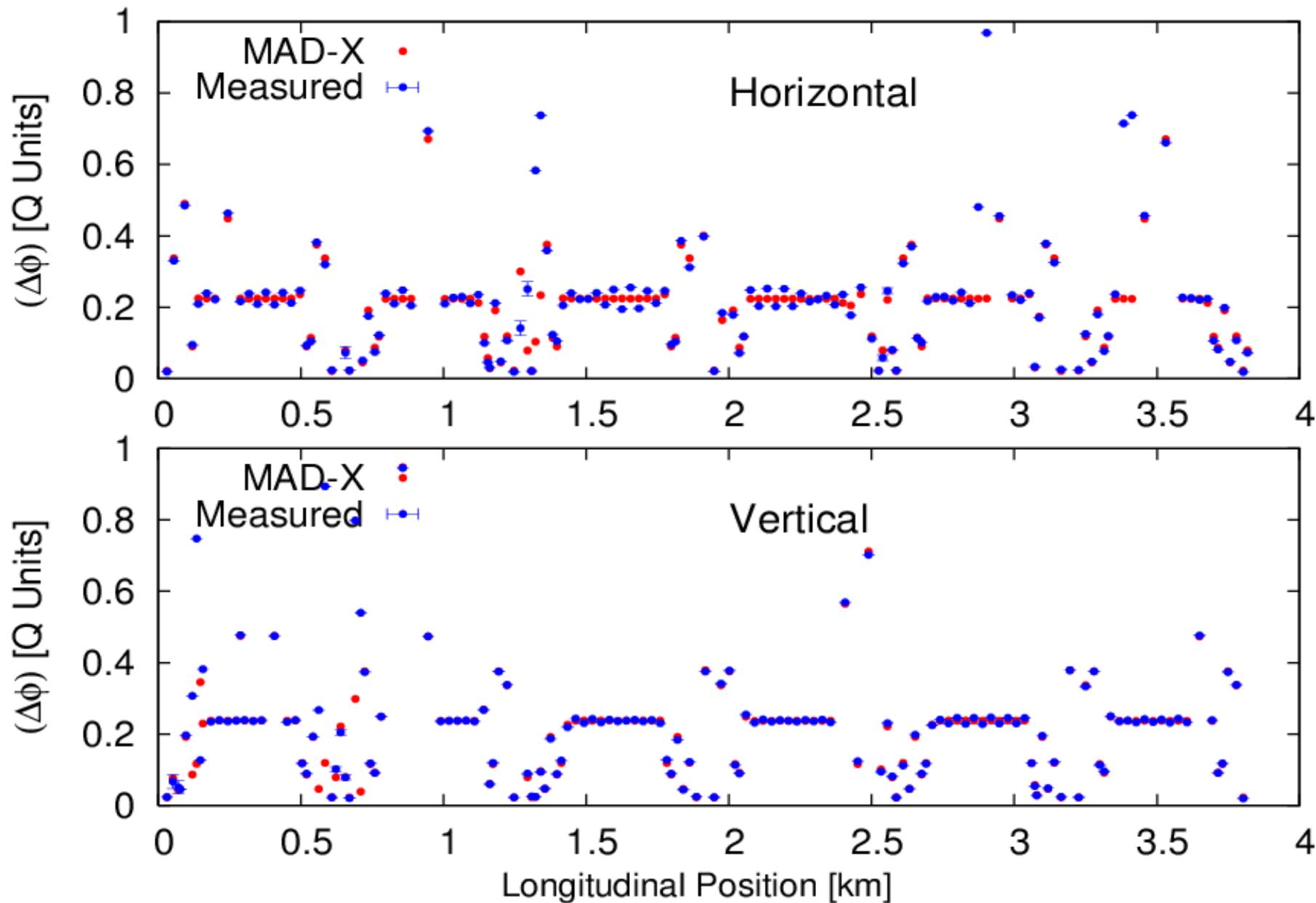
Data Analysis under progress...

Next Imp Exp....

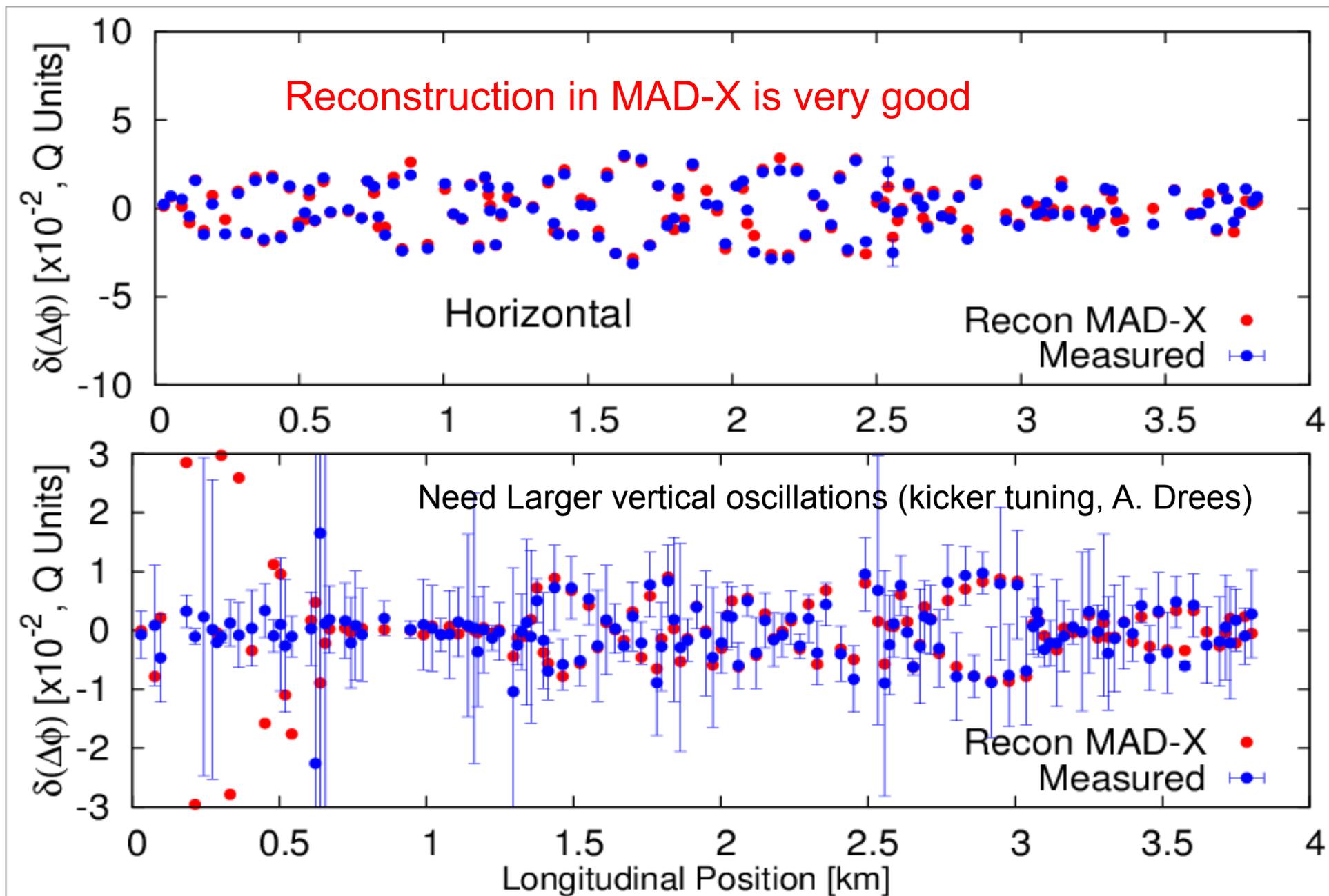
- Repeat the experiment in Yellow but with Tunes swapped or moved far away
 - Tune shift is mainly vertical
 - Should avoid ****coupling effects**** during intensity scan
 - Vertical kicker tuning for higher amplitudes (A. Drees)
 - Identify good intensity point for BPM gain change from this data
- Do the experiment in Blue ring also (1 Hr)

Ph. Adv @Injection (Blue, 2008)

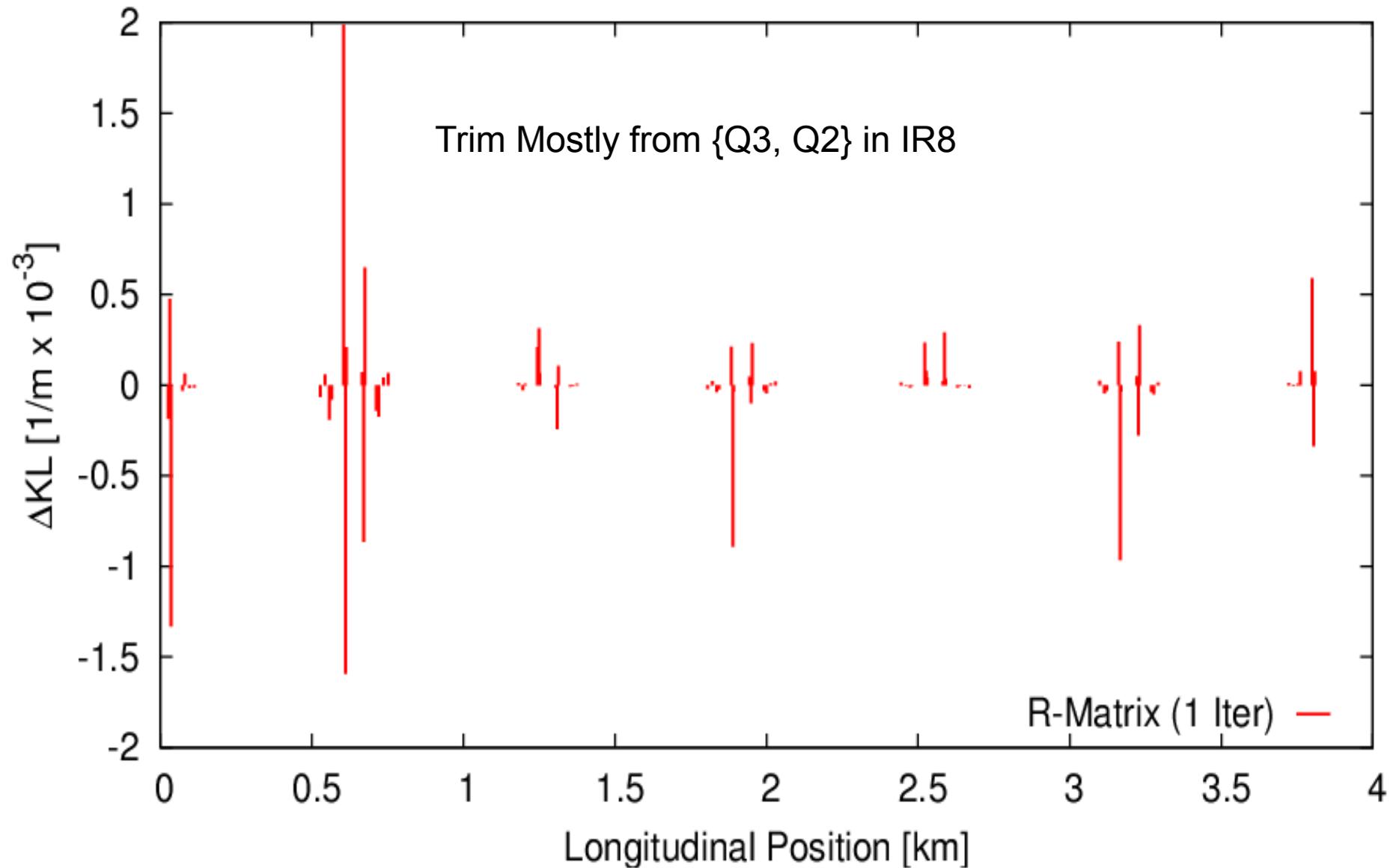
Kicked Data: 4 Data Sets (Averaged)



Phase Beat @Injection (Blue)



Trims Required to Correct Beat



Optics Correction Status

- Demonstrated FULLY automated measurement of phase-beat
- Online calculation of trims for correction (2 min's)
- Final step: Exporting trims settings to RampEditor
 - A preliminary script to export MAD-X trims to CDEV is developed
 - “May” to debug the **nomenclature difference** between MADX & RampEditor

- A GUI to run the automated optics measurements is almost ready
- Would like to do another beam exp. in Feb 25-26 (both injection & store, 2 Hrs)
- Will also include DISPERSION correction simultaneously

Ph Adv at Store (Blue, 2008)

