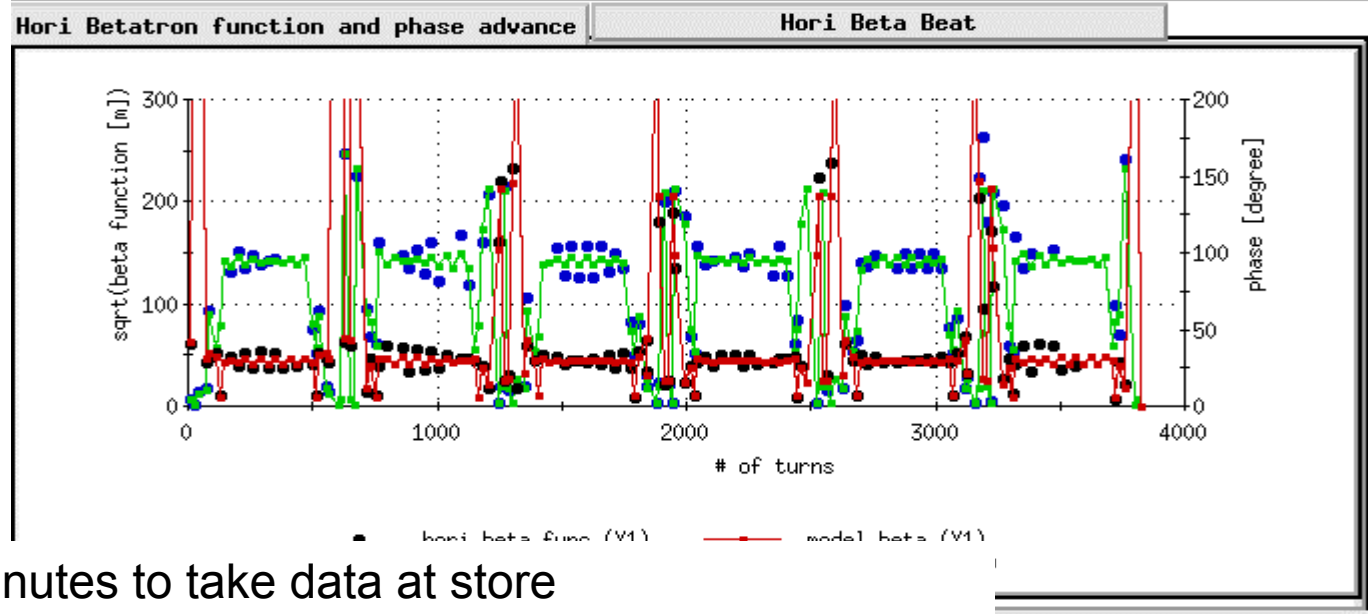
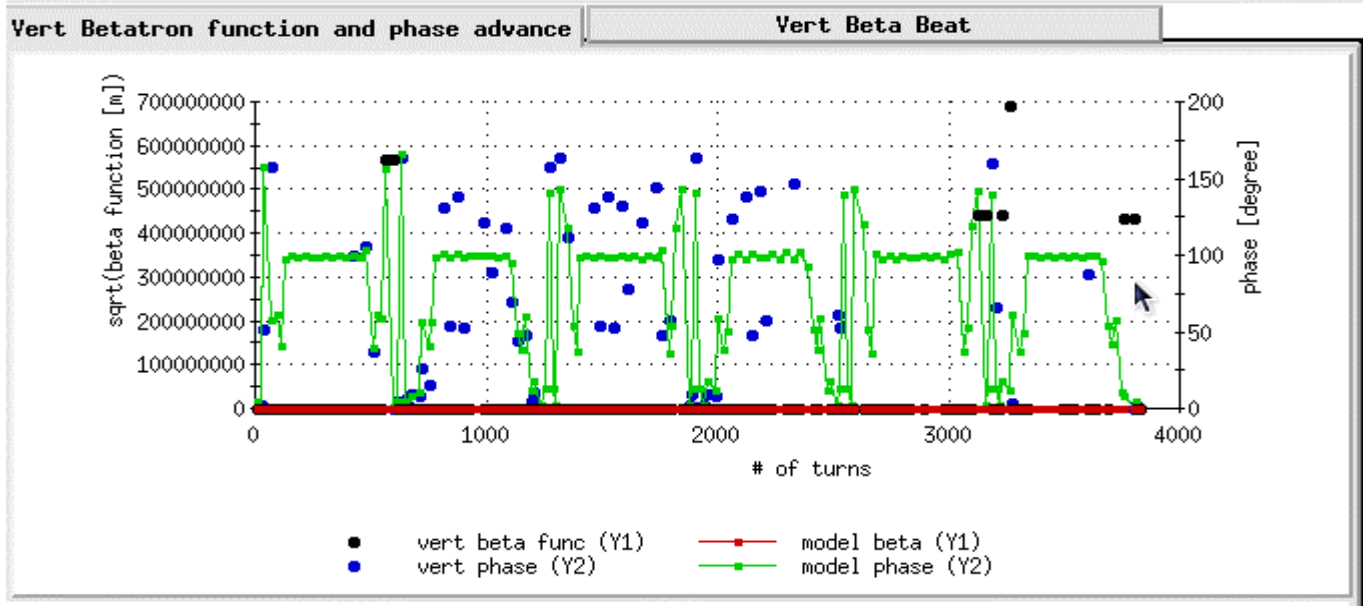
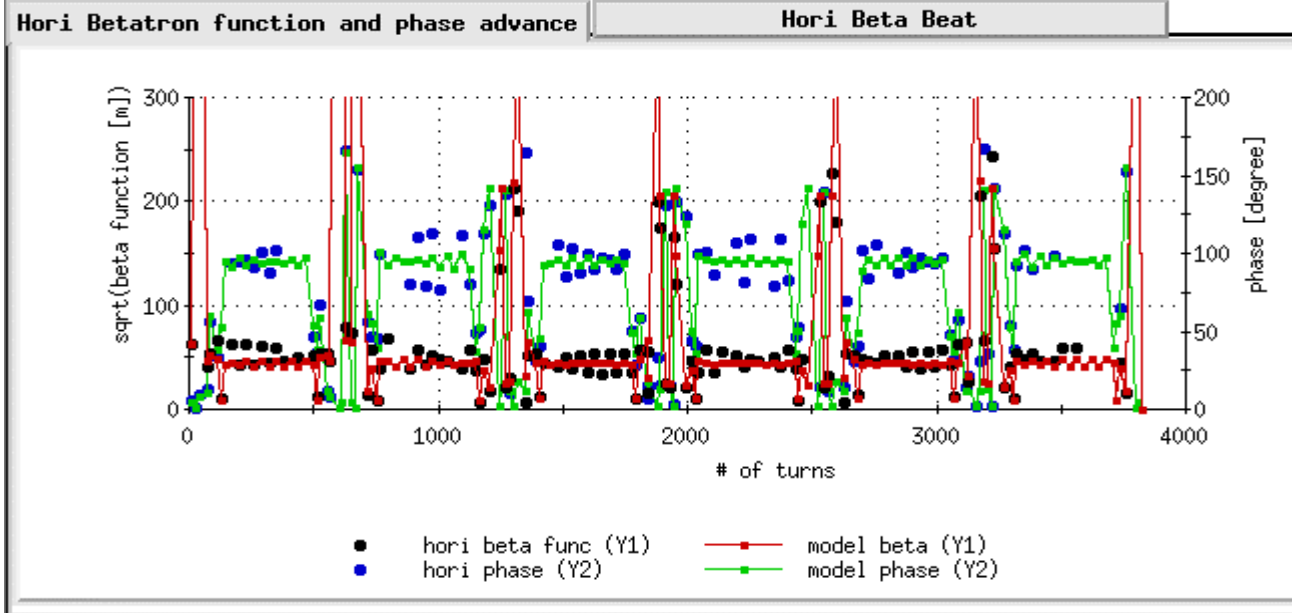
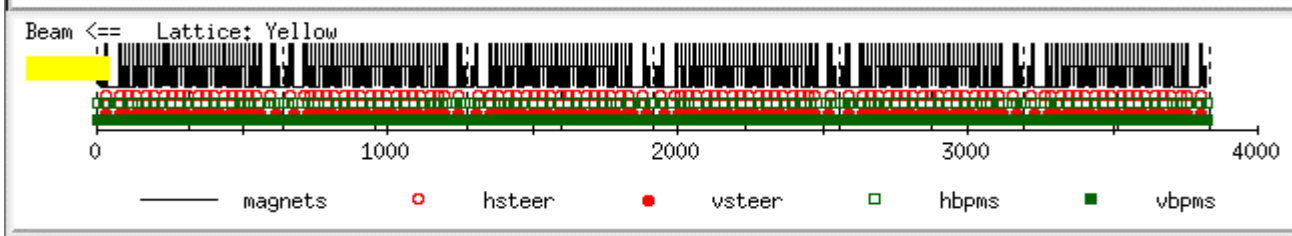


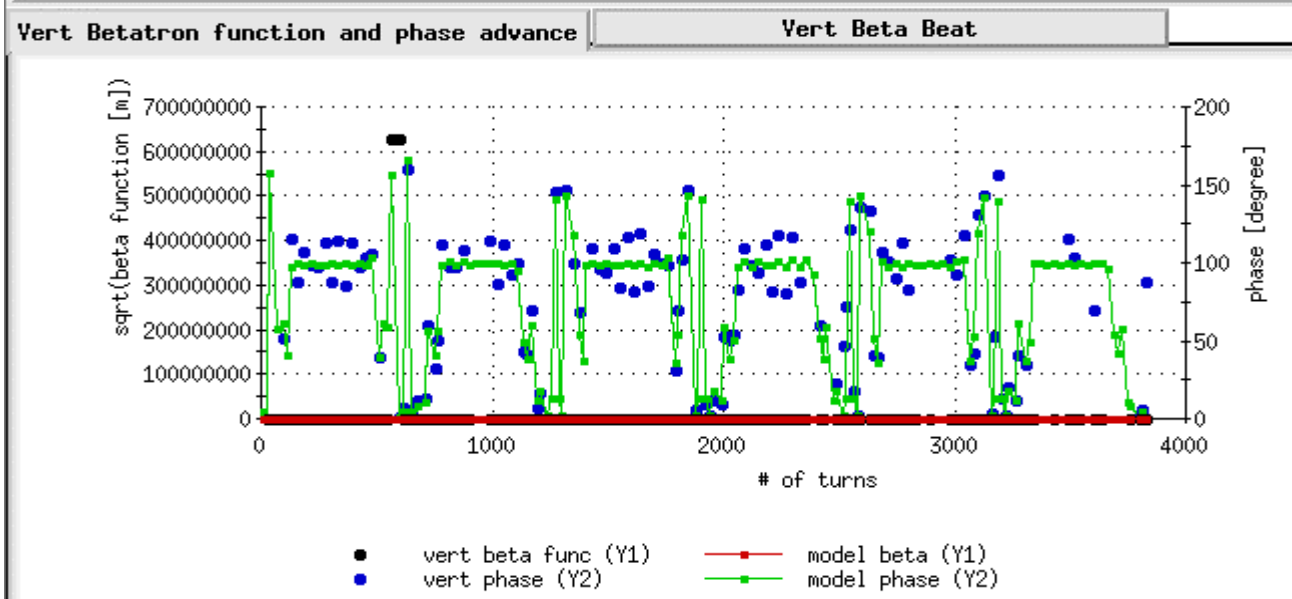
- Only 20 minutes to take data at store
- Three H data sets show: IP8 Beta*: 1.15, 1.06, 1.08
- Have trouble to excite beam more than 0.5mm in vertical when drove the beam at 0.02 away



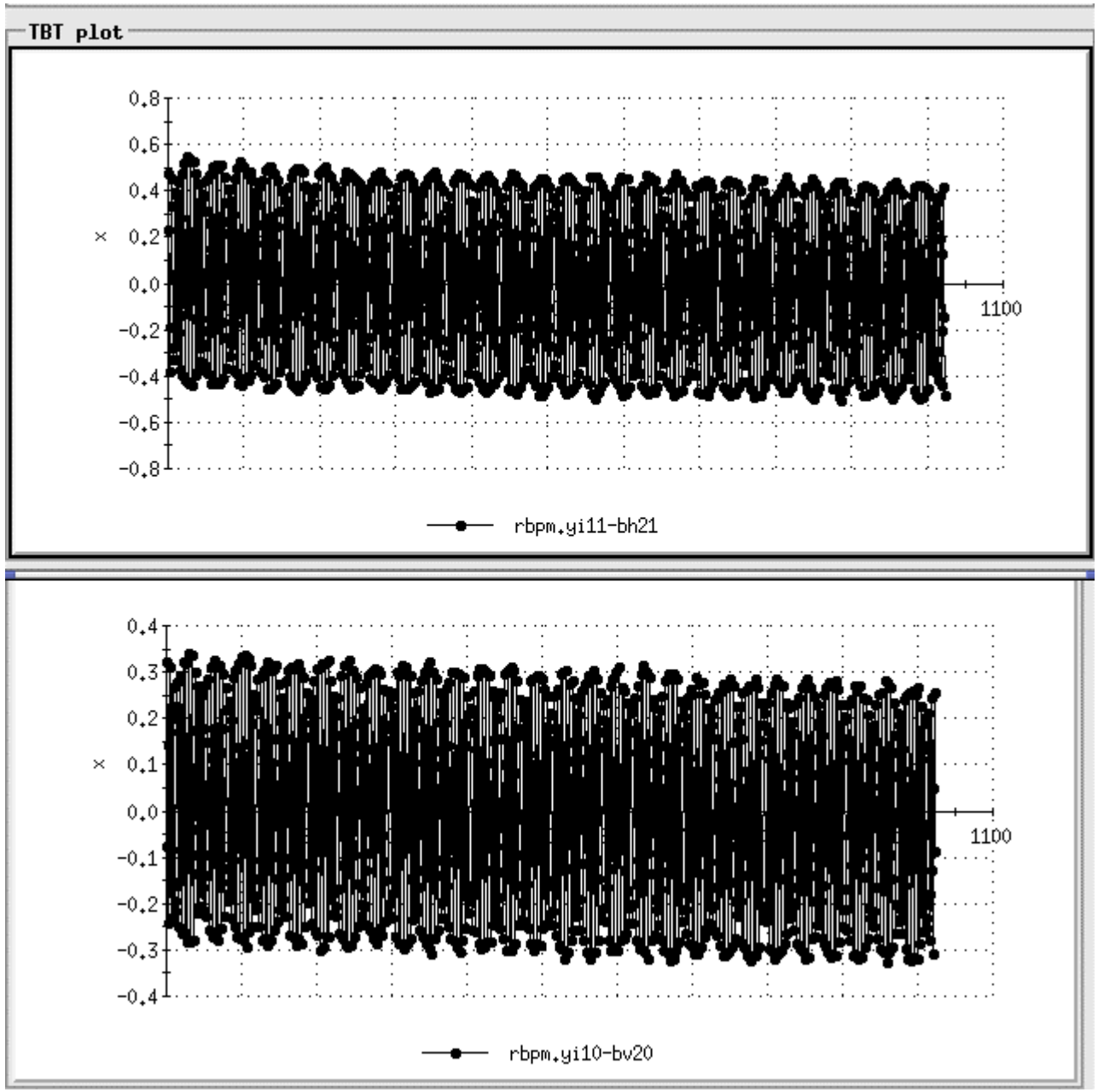
Strong coupling!







Strong coupling!



Status of optics measurements:

- Have data sets in Yellow at store with ac dipole driving tune at 0.02 away from betatron tune to minimize the beam loss. However, the drawback of this method is
  - sensitive to the coupling in the machine
  - the artificial beta beat is larger. Still debugging the algorithm which should remove this effect

- Detailed data analysis is in working progress

- also working on changing the beta* measurement using DX bpms to Q1 bpms

- once we are confident about the linear optics measurements, we will look into the phase response matrix to see the gradient errors.

- would like to repeat the Yellow measurement at store with driving tune closer than 0.01 from betatron tune. Estimate time: 1hr