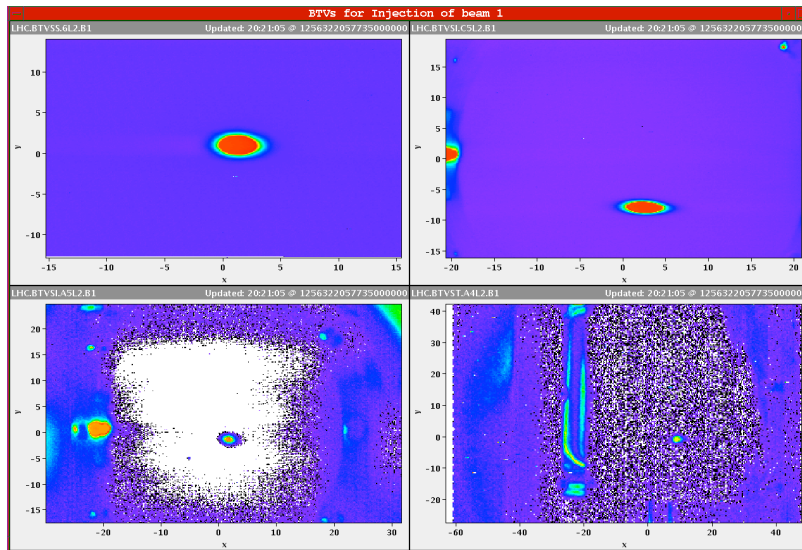
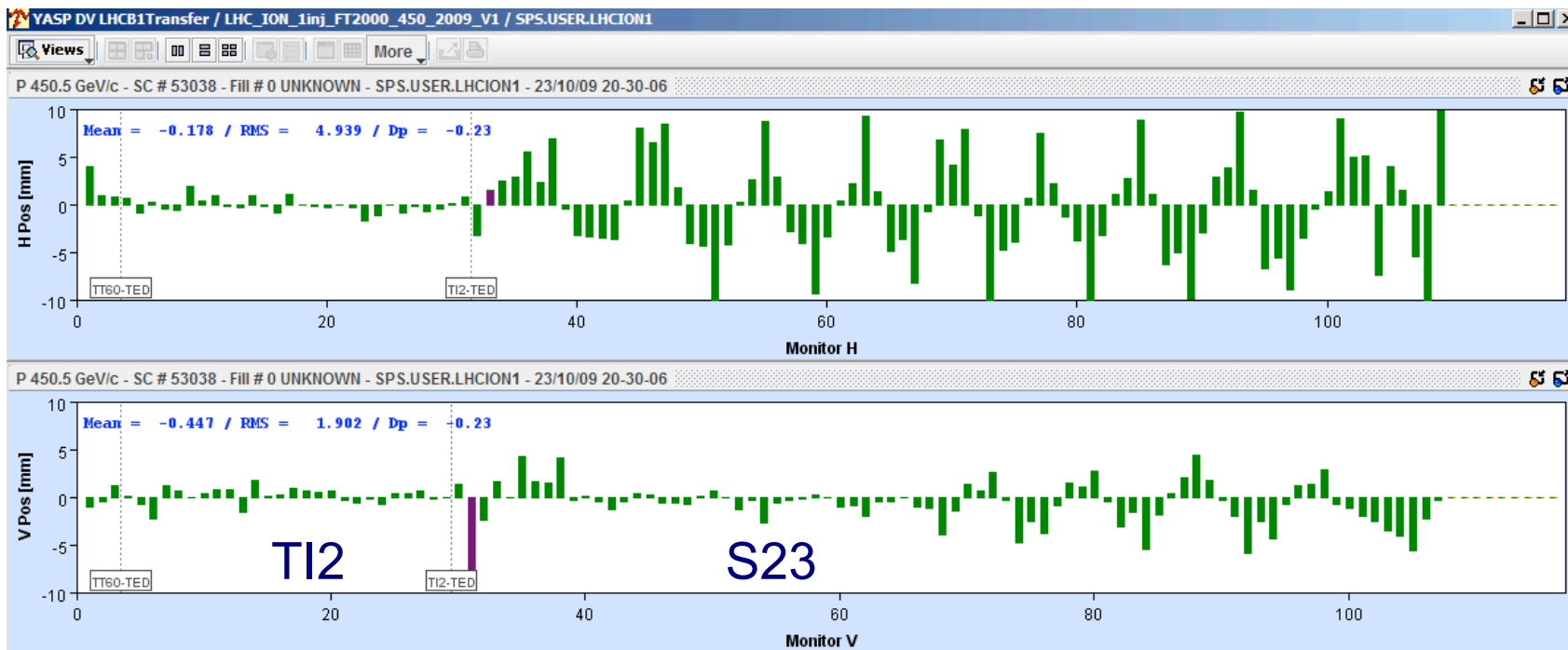


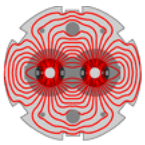
# First lead ions in LHC



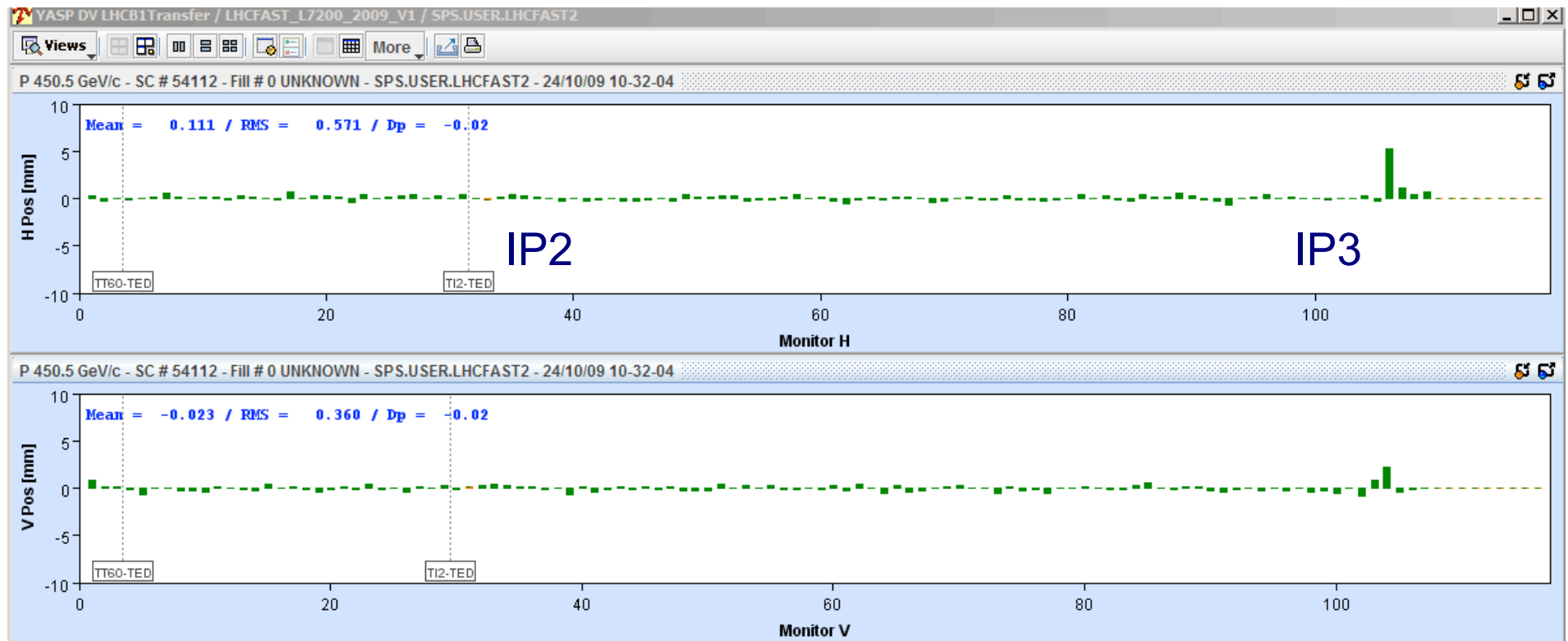
← Injection region  
screens

TI2/S23 – first trajectory

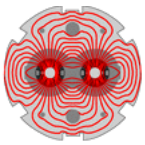




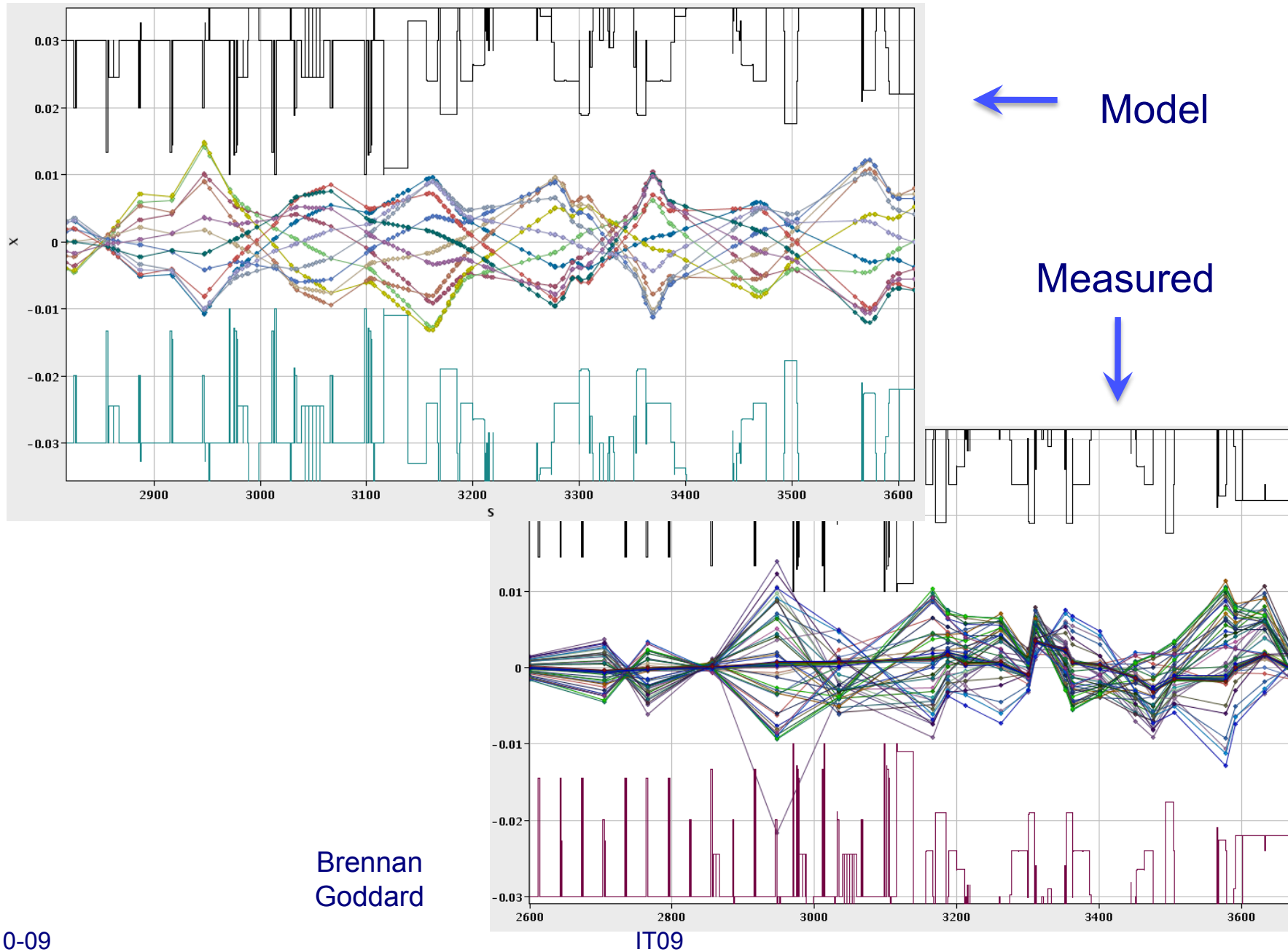
# Trajectory difference before/after precycle

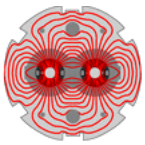


Reproducibility looks very good

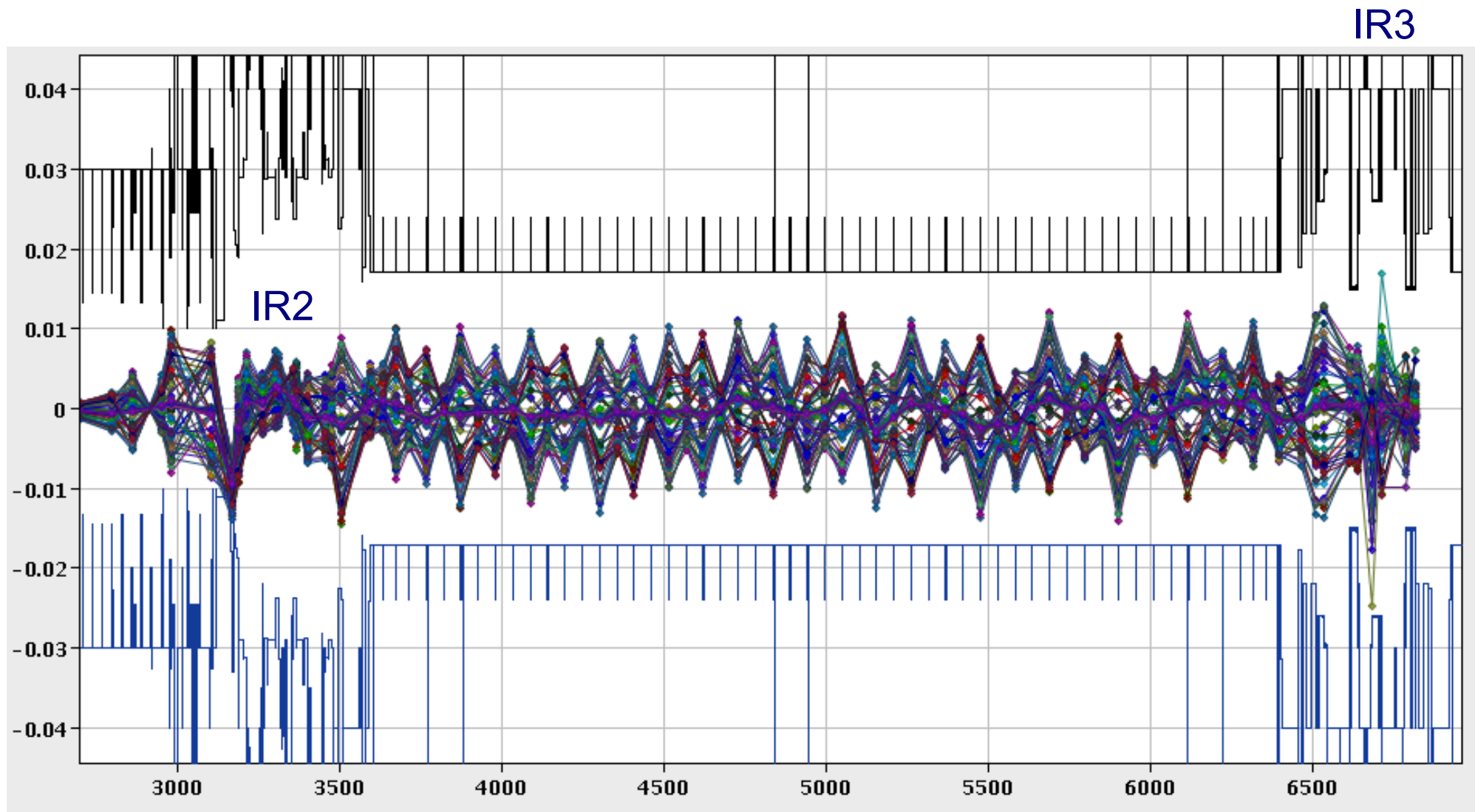


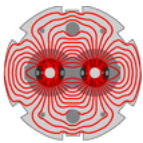
# Injection region aperture



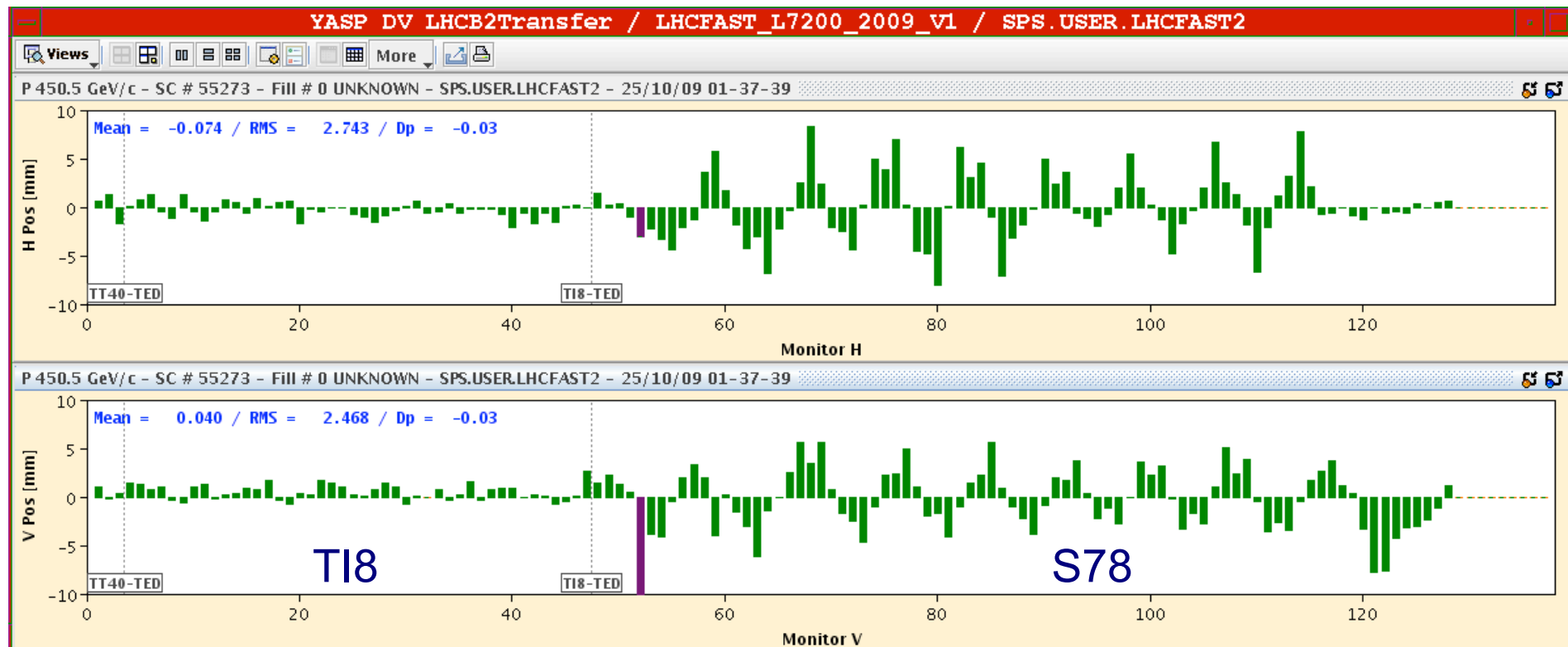


# Injection region trajectories through arc

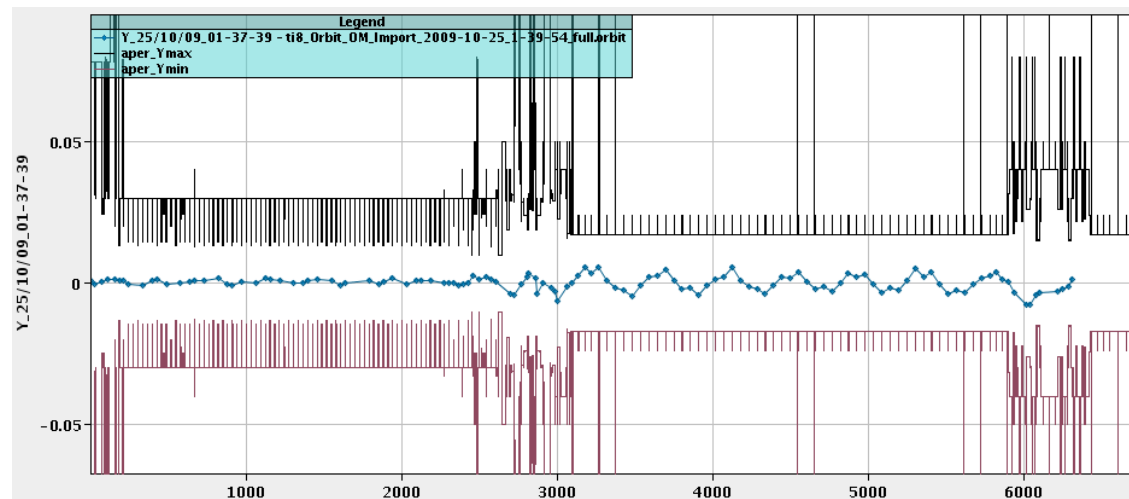


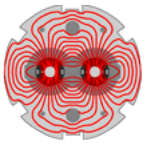


# First beam to point 7

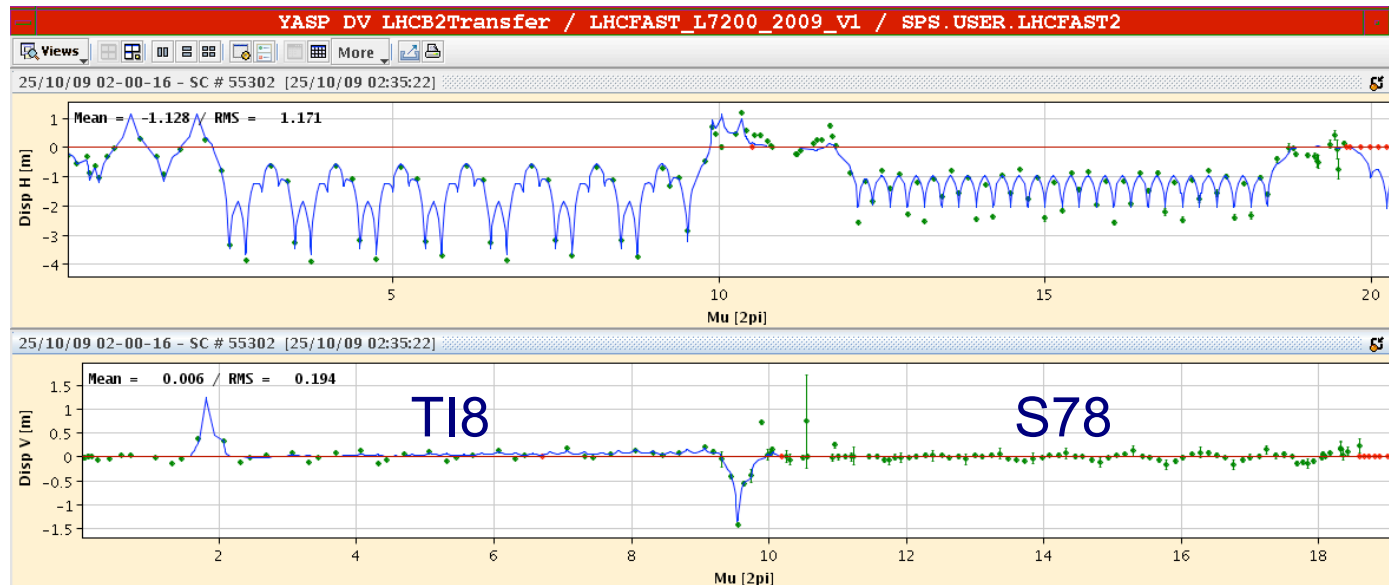


In the aperture →  
model

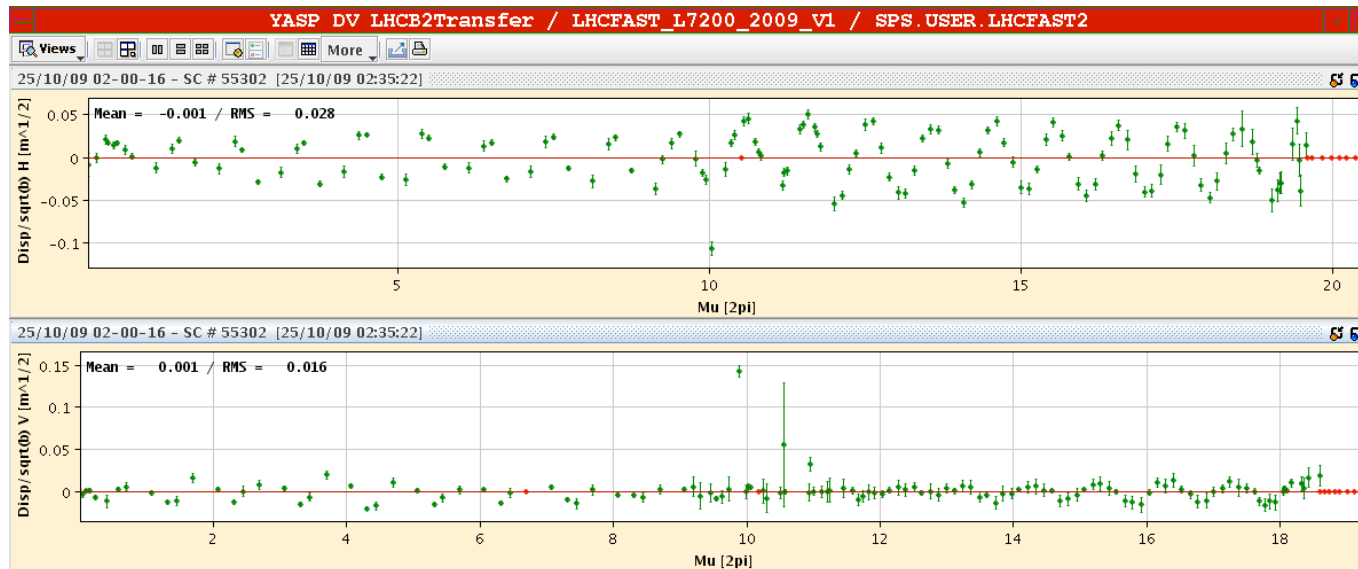




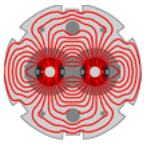
# Dispersion TI8/S78



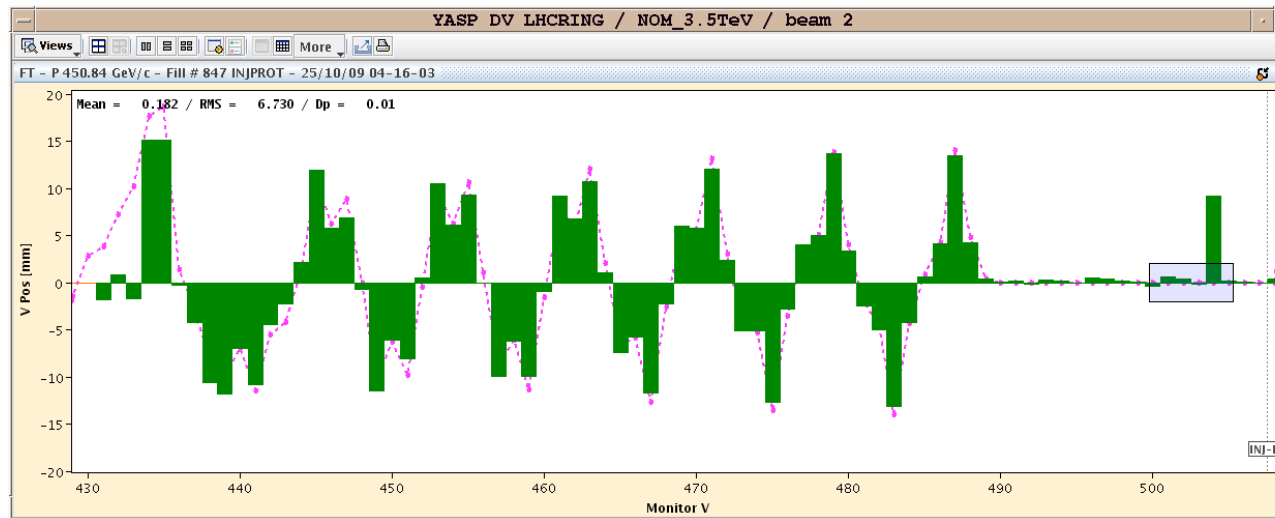
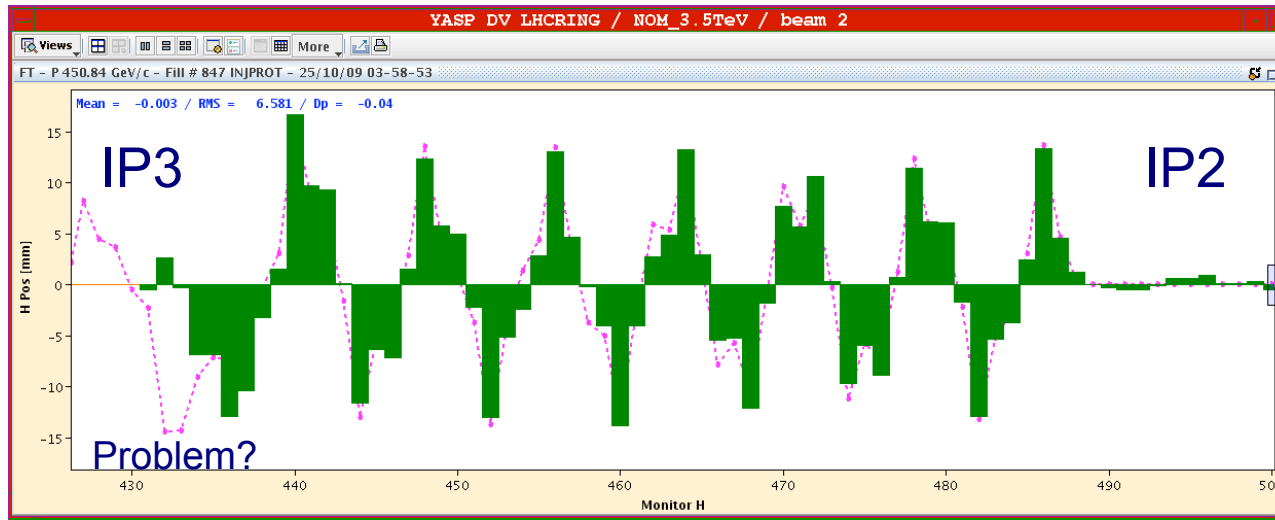
Measured  
v. model



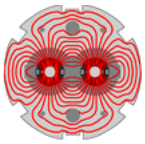
Normalized



# Kick response

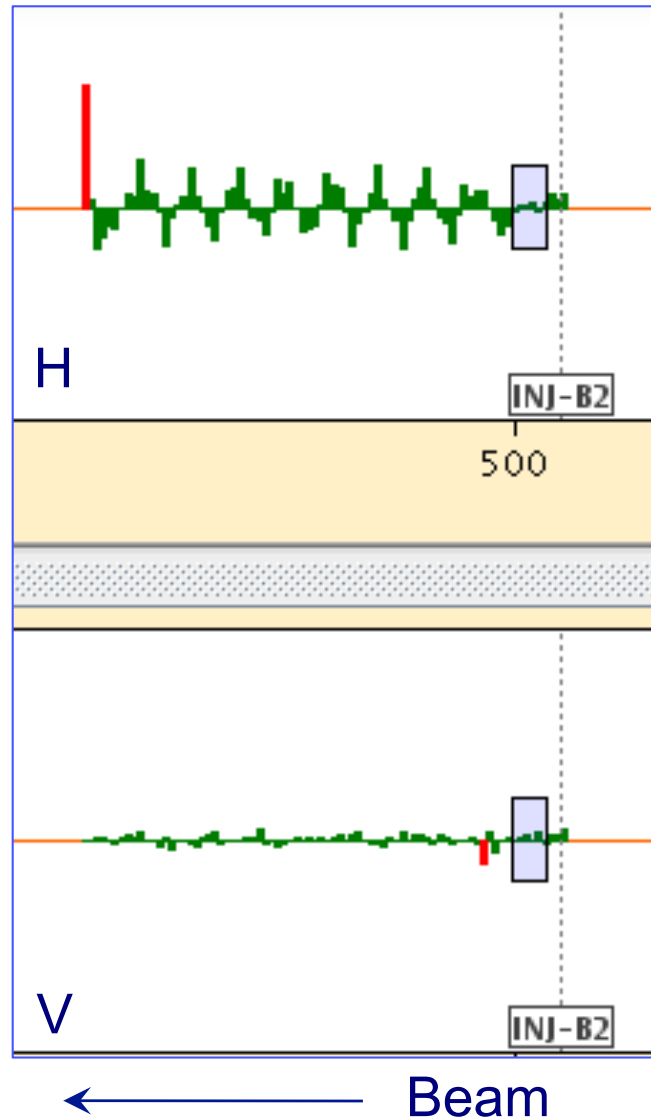


Green – Measured  
Purple - model

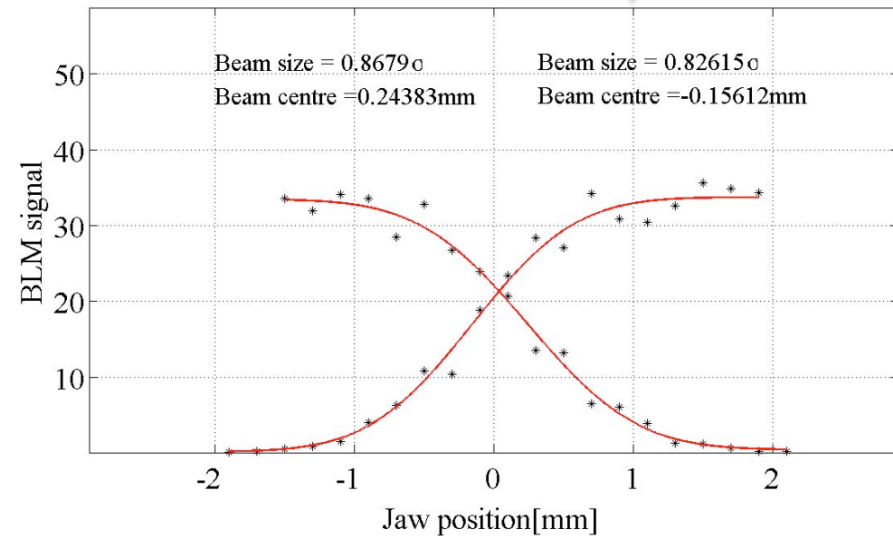


# Sunday – Walter starts early...

```
56 06:10 Walter (with an old clock): after the first moments of dismay, start pre cycle of s23.  
For this we need to coordinate with the aperture measurements in s78, because the sequence changes the beam process
```



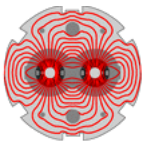
Collimator scan



Non-closure of LHCb dipole and compensators with LHCb dipole at full field (rms ~ 1 mm)







# Aperture

