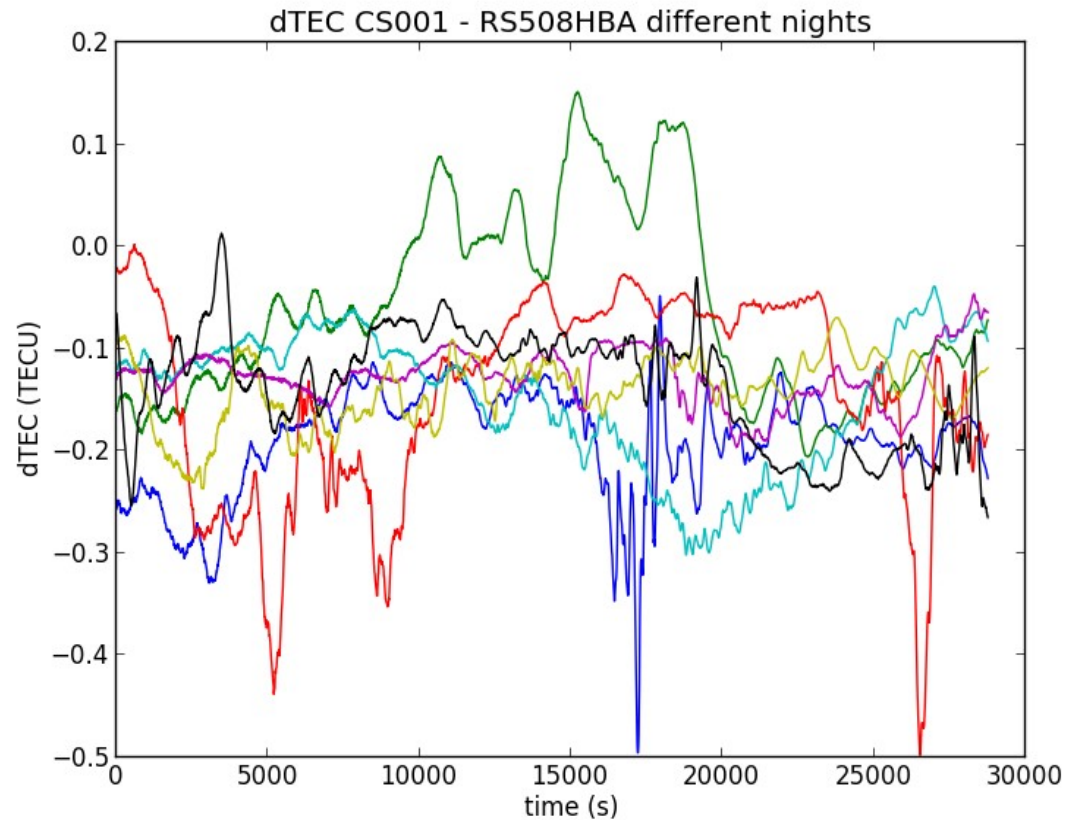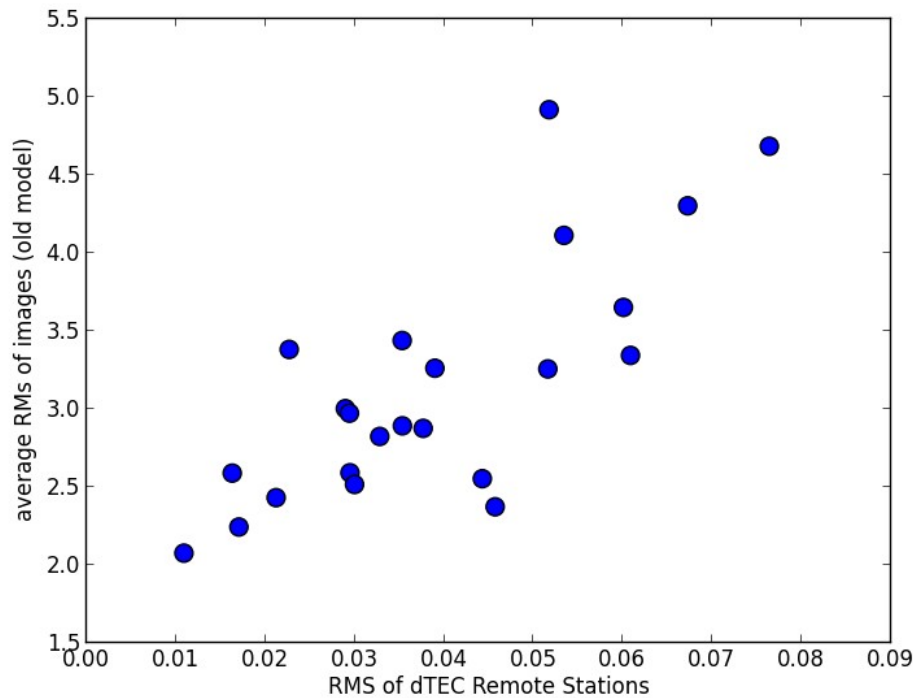# Ionospheric phasescreens HBA

M.Mevius

V. Pandey

S.vd Tol

3C196

- HBA – bright calibrator

  - easiest case

- Automatic procedure for clock/TEC separation

- Applied on ~25 8hr night observations

  - BBS solutions by V. Pandey

- fit TECscreen for all observations

  - method by S. vd Tol

- Lot of statistics on ionosphere
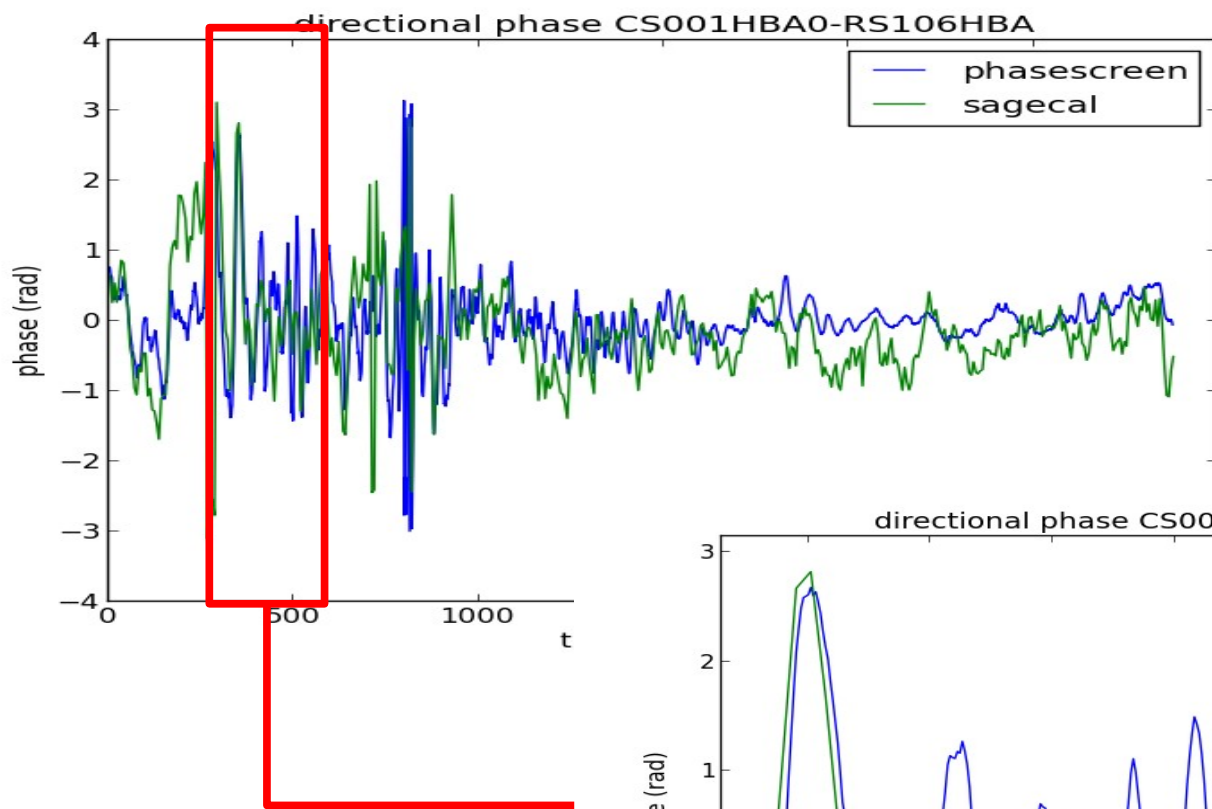

dTEC CS001 - RS508HBA different nights
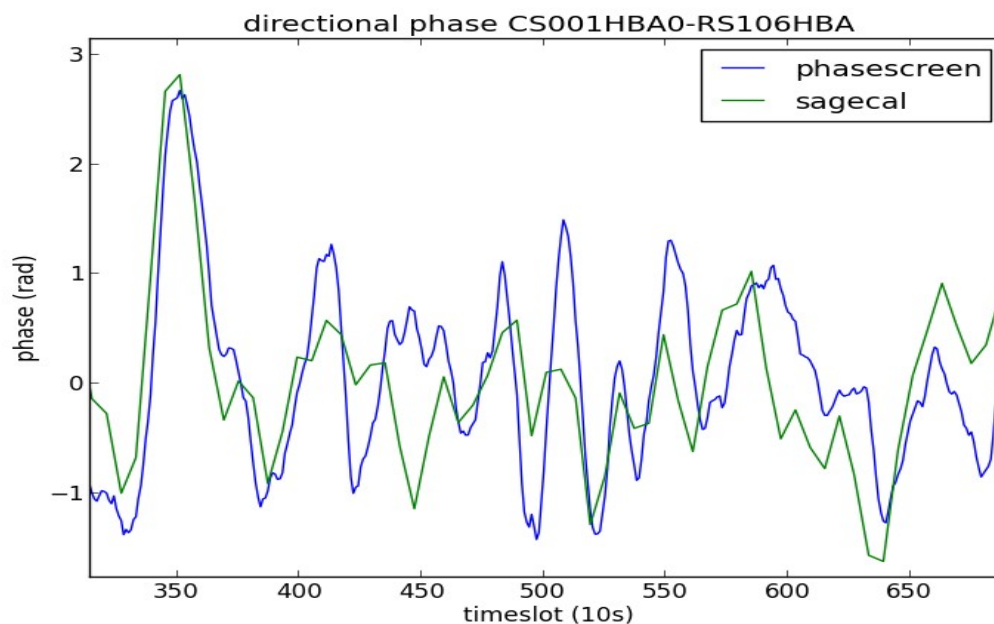
Image noise variation

- RMS noise of images vary from night to night

- Calculate ionospheric variance as average rms of TEC (vs. time) of all RS-CS001 baselines

- Clear correlation between image noise and ionospheric variation
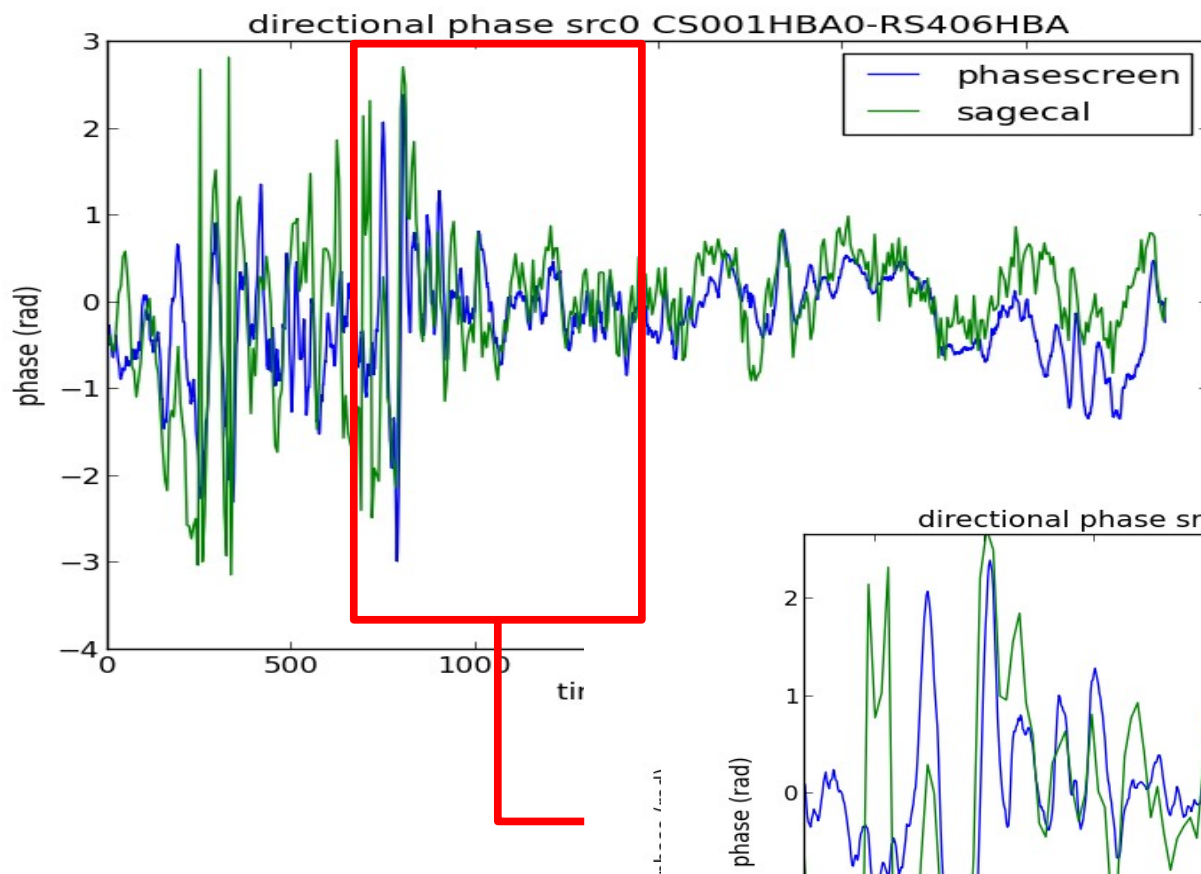
- Comparison with sagecal solutions

ddTEC:

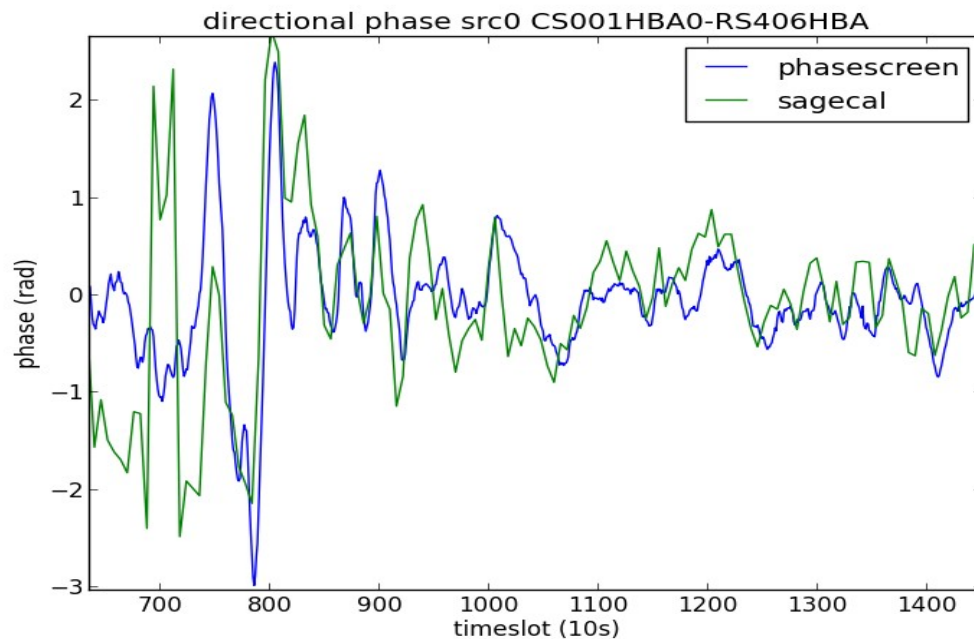dTEC for central source already applied in BBS calibration

- Comparison with sagecal solutions

directional phase src0 CS001HBA0-RS406HBA

ddTEC:

dTEC for central source already applied in BBS calibration

Applying phasescreen

- First attempt:

  - In BBS: subtract bright sources with directional phases (from screen)

  - Add uncorrupted back

  - Needs very good model, since largest effects expected on long baselines

- A-Projection (AWimager):

  - Ongoing: hint of higher peak flux for some sources