

# CS-1 problems 20080206

# Bug list (solved)

## Station

- Strange oscillations in autocorrelations
- Zero phases in all intra-station baselines
- Sometimes signal paths do not start synchronously, resulting in phase differences of  $n \times \nu_{\text{clk}}^{-1}$ . Can now be detected easily by observers. Workaround: reset RSP board until all is fine: Needs to be rolled out.
- HBA tracking experiment L2007\_04783 not understood

## Coordinates

- Beamformer: stations located at 50 m from earth centre: fixed, not yet rolled out

# Bug list (open)

## Waveform generator test on CS010

- Somewhat irregular phases
- Sometimes a blocked structure in cross correlation matrix (no idea yet, but we will monitor stations closely in order to catch it when it returns)
- Sometimes CRC errors on RSP ring.

# Bug list (open)

## Coordinates

- Stations think that antenna position offsets are in local system with  $x \rightarrow$  east and  $y \rightarrow$  north, while in reality offsets are in RD (Hans v.d. Marel)

## Other

- No pulsar detections with HBA tiles
- No LBA fringes between Exloo and Dwingeloo

# What is next

- Roll out new RSP firmware
- Compensate station coordinates by rotation of numbers in `AntennaArrays.conf`
- Tracking observation on Cyg A with tiles 1, 2, 3, 4
- Pulsar observation
- Remove input cluster at CEP
- Upgrade station software