

Radio observatory report and current LOFAR issues

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LOFAR Status Meeting 20091104

ASTRON

- 1 Observatory status
- 2 Status of issues
- 3 Observation queue

System

- CS030 operating nominally
- X/Y phase difference of 180 degrees on CS302
- RS307 not reachable across network
- Sometimes electric fence at RS106
- list nodes are being phased out. All data recording on lsexxx nodes from now on
- lifs nodes will be phased out by November 30

Observations

SAS/MAC various experiments

PSR Past weekend

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- CS030 is now in phase

Bug list ((almost) EXPLAINED)

- Writing to new storage abysmally slow for cross correlation products (speed increased by factor of 6)
- Signal paths of even RCUs can jump between a high and low state (LBL/LBH switch broken (by ESD?)). New RCU: ESD diode, and no trafo's. Needs more research. Switches are of same type as faulty HBA delay boards. Why only even RCUs: unexplained.
- Phase jumps in waveform generator test at 200 MHz clock (Eric Kooistra, Brentjens) Test observation in queue.
- Non-hermiticity in ACM blocks of intra-RSP board visibilities in waveform generator tests (Overeem, Kooistra, will be fixed in RSPDriver)
- HBA AC oscillations (Wijnholds)

Bug list (OPEN)

- Timestamps of LofarStMan are beginning of integration, not middle.
- SAS/MAC and/or beamctl do not always switch RCU mode correctly
- Discrete jumps in HBA power and RMS
- HBAs take minutes to reach full sensitivity
- Occasional timestamp jumps of 1 in CS302/RSP0 data sent to CEP. Due to CRC errors? (Kooistra, Romein)
- Steps in delay w.r.t. Nancay
- TP variations/ionospheric absorption (Ger de Bruyn)
- AC oscillations Pandey (nobody working on this)
- AC dips (Michiel Brentjens, PSR group. Useful data taken in second psr busy week)

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- POlarization busy week observations