

Radio Observatory Report

Station/Item	Cabinet	LBA	HBA	Fibre	CEP connection	Validated
CS302						
RS307						
RS503						
RS106						
RS208						
CS030						
CS401						
CS021						
CS032						
RS306						
CS301						
CS501						
RS509						
CS103						
CS001						
CS002						
CS003						
CS004						
CS005						
CS006						
CS007						
CS024						
CS201						
CS101						
CS026						
RS205						
CS017						
CS011						
CS013						
CS028						
CS031						
RS305 (RS104)						
RS210						
RS310						
RS404						
RS406						
RS407						
RS409						
RS410						
RS508						
Effelsberg						
Tautenburg						
Garching						
Potsdam						
Juelich						
Nancay						
Onsala						
Chilbolton						
Totals	40	40	40	38	36	36

} Expect availability in February

← Part of the array and fringes Jan 27

Observations

- LEA128: Observations of 3C196 and NCP to monitor the performance of the array
- LEA080: Polarization observations of NGC4631

Observations from the past two weekends are processed through RFIconsole and averaged to the compute nodes.

Last week we faced delays in the processing, some causes identified, other are investigated.

Processed data can be moved to the LTA in SARA for archiving or retrieval to other computing facilities

Contact: sciencesupport@astron.nl & holties@astron.nl
for more information

Issues affecting the observing System

- 61 BEAMLETS: System was moved to 61 beamlets by Feb 4. This yields 244 subbands (cf 248).
- Problem with the network was identified on Fri 4 Feb. It affected communications between the online computers and the offline cluster.
Cause: a failed Foundry Networks Switch Fabric Module. The module needs to be replaced.

Hardware:

Stopday Feb 7: offline cluster moved network switch

Repairs of broken LBAs in CS001, CS011, CS017, CS021, CS026, CS101

DE604: (Potsdam): Problems with the fiber link.

RS205: Environment control problem.

CS501: Bad network connection (investigated today)

Issue: Probable effect of RSP synchronisation on Calibration files

Due to clock skew, the Antenna Processors on the RSP boards do not all start at the same time.

Which AP starts a little bit too late this varies a little bit resulting in a non optimum use of the static calibration tables (estimated 0-5% of the AP's).

Working on a script to find a stable input delay configuration for all AP's to input in a configuration file.

As this effect has been in the system for a long time, we cannot be sure that the current calibration tables are all correct.

We assume that it affects a small portion at the moment.

This problem will most likely not be present at the superterp stations, they use different clock distribution boards which have better synchronisation between the cable outputs for the time distribution.

Reminder: Imaging Busy Week & Busy Wednesdays

Reports:

www.lofar.org/operations/docu.php?id=commissioning:imag_busy_week_9

www.lofar.org/operations/docu.php?id=commissioning:busy_wednesdays

A common disk area `/globaldata` is mounted on all the compute nodes.

`/globaldata/gsm` can be used to deposit images that may be included in the GSM. Email `heald@astron.nl` for more information.

CALENDAR of requested busy weeks and other LOFAR activities

<http://www.astron.nl/radio-observatory/astronomers/commissioning/commissioning-plan>

- 14 February : CEP stopday – Mainly changes in the network.
Phase I cluster will be available (but no guarantees)
- 21-25 March : Magnetism KSP Busy Week in Bonn
(use of Phase I cluster)
- 28 Mar-1 Apr : Imaging Busy Week in Dwingeloo
(use of Phase I cluster)

Updates:

Installation of CEP Phase II cluster started

C. Broekema's talk

LTA: ready to push datasets to SARA and Jülich

Caveats: Only for archiving purposes.

No h/w to further process data yet.

Can be used as area from KSPs to download data to their own processing facilities.

Designed for "averaged" data. If raw data we must plan carefully.