ASTRON

Netherlands Institute for Radio Astronomy

Programme:

1. Array status & Observatory update – *R. Fallows*
2. LTA status update - *A. Renting*
3. MKSP polarisation imaging busy week – *H. Junklewitz*
4. The 2015 V404 Cyg outburst: detecting radio oscillations with LOFAR
   – *J. Broderick*
5. AOB

International LOFAR Telescope (ILT)

Onsala

Dutch stations

Norderstedt

LOFAR Core (NL)

Potsdam

Chilbolton

Jülich

Effelsberg

Tautenburg

- 47 operational stations completed
- 38 NL stations, 9 international stations
- 3 new stations to come in Poland

Unterweilenbach

Nançay

ASTRON

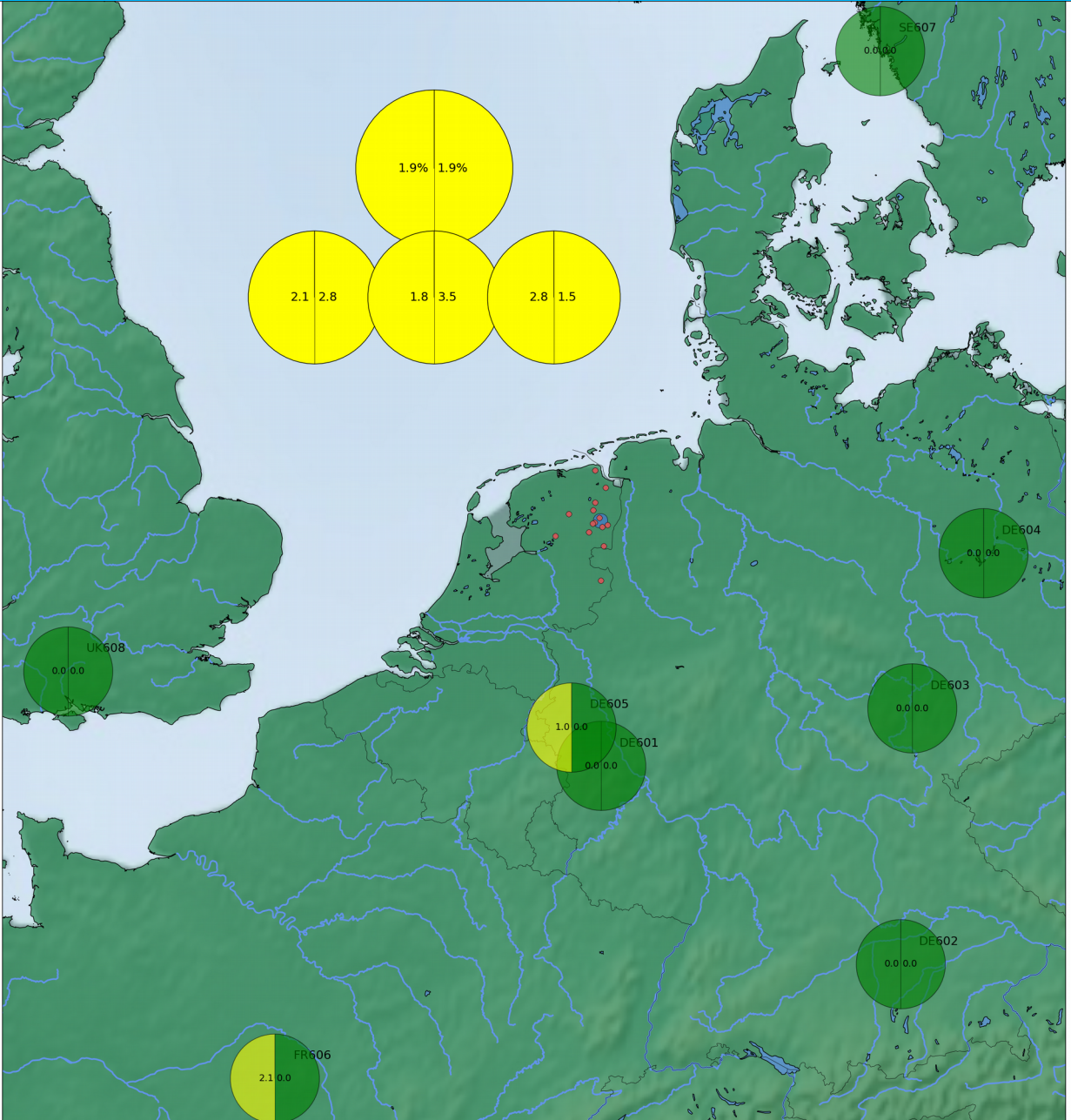Netherlands Institute for Radio Astronomy

Array Status

➢ Remote stations affected by thunderstorm now repaired.

➢ CS201 suffered a broken 8V power supply affecting RCUs 0-31 (repaired).

➢ CS031 had RSP board issues following the Stop Day, now resolved.

➢ RS210 – broken relay, only affects automatic reset of LCU due to temperature.

➢ RS503 – broken disk, to be repaired tomorrow.

➢ A few network issues affected international stations, mainly due to fiber cuts.

➢ Maintenance season underway. Stations might be missing from observing run. RO will check original proposal to asses if scientific goals could be achieved.

Overview, including IS

LBA: 1.9%; HBA: 1.9%

see https://proxy.lofar.eu/array_status/
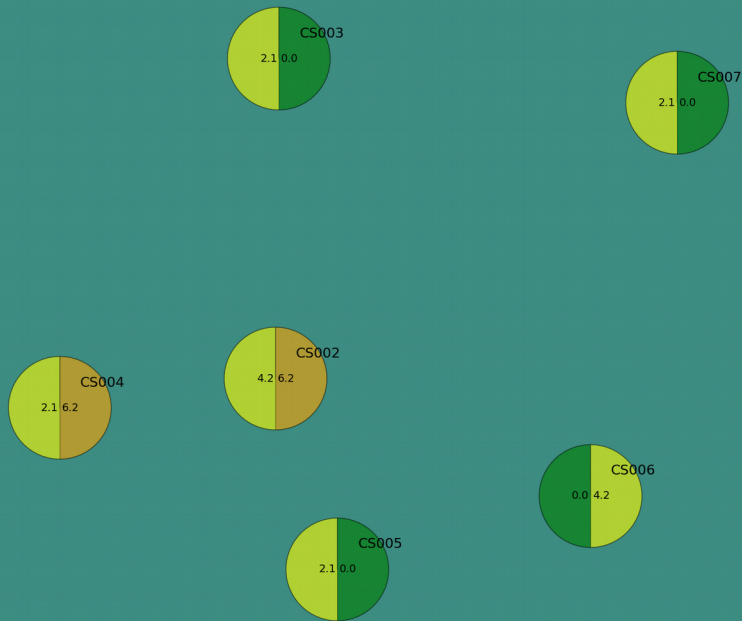

> Color coding for non-operational elements at the various stations

- All operational
- < 5% not operational
- < 15% not operational
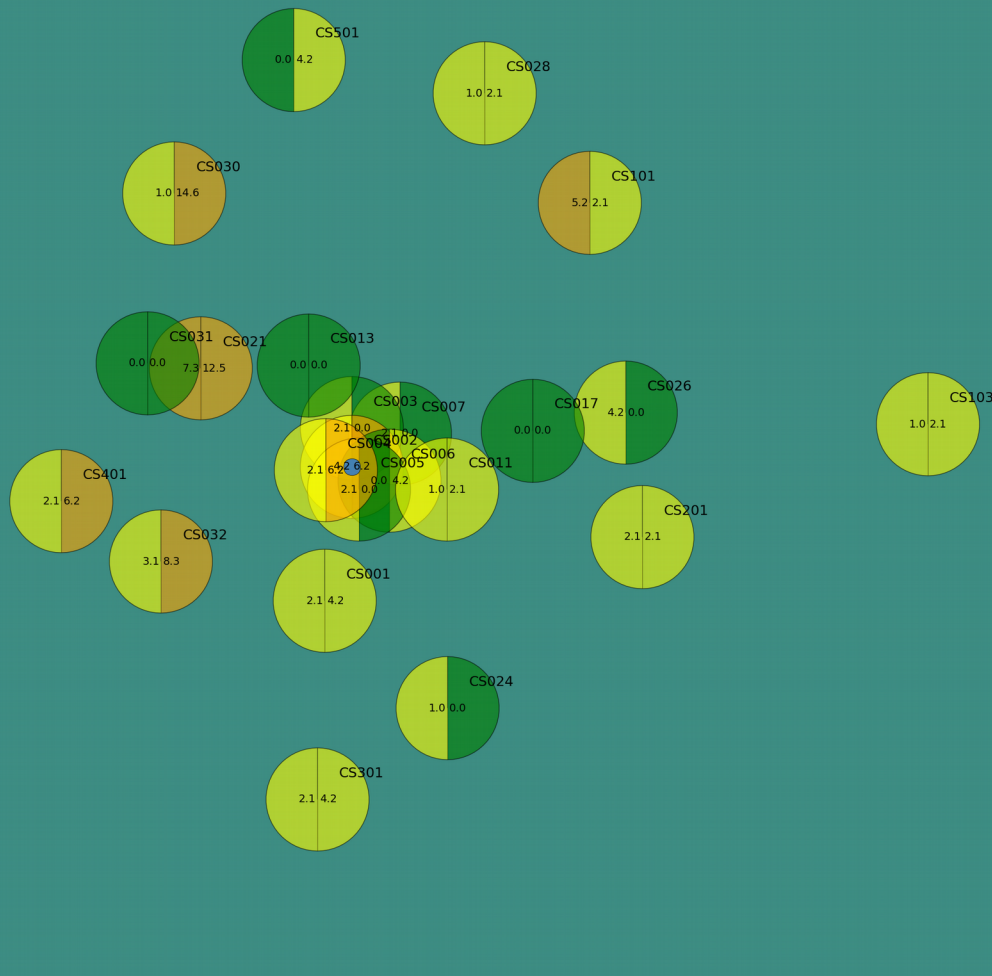- > 15% not operational

Superterp

LBA: 2.1%; HBA: 2.8%

> Color coding for non-operational elements at the various stations

- **All operational**
- **< 5% not operational**
- **< 15% not operational**
- **> 15% not operational**

Core Stations

LBA: 1.8%; HBA: 3.5%
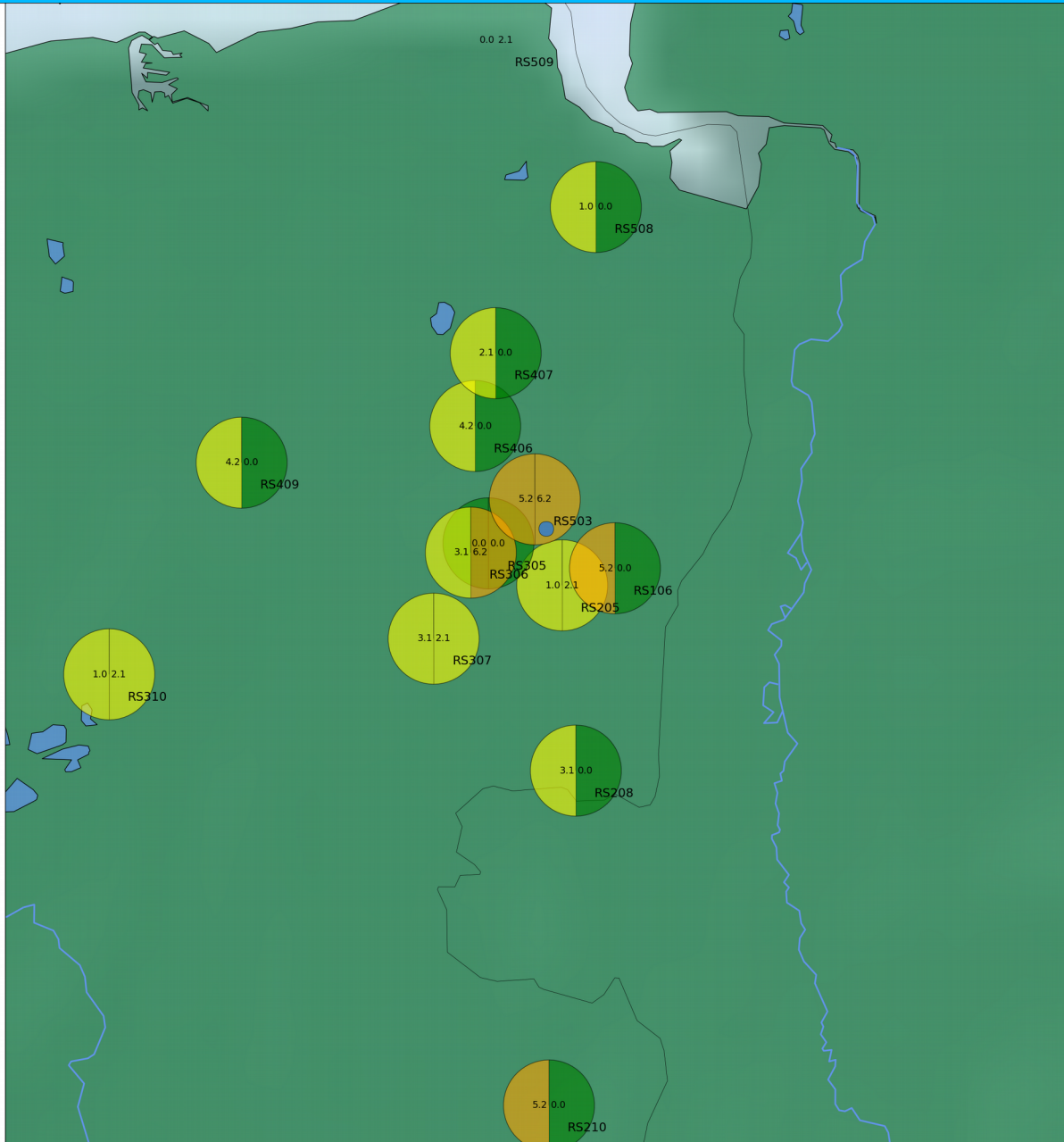

➤ Color coding for non-operational elements at the various stations

- ▪ All operational
- ▪ < 5% not operational
- ▪ < 15% not operational
- ▪ > 15% not operational

Remote Stations

LBA: 2.8%; HBA: 1.5%

➢Color coding for non-operational elements at the various stations

- ▪ All operational
- ▪ < 5% not operational
- ▪ < 15% not operational
- ▪ > 15% not operational

News regarding the observing system

➢ Observations – relatively stable in the past two weeks.

- The schedule is challenging and if observations fail, it may not be possible to repeat them quickly, especially if they require night-time.

➢ Pipelines:

- Bug in station adder of NDPPP, used for combining core stations into one when processing long baseline observations: weights not applied to the new MS when combining. Fixed in branch.

- Casacore version issue means long baseline pipeline cannot be run by the Observatory currently. Only pre-processing steps can be applied.

- Both issues will be rolled out in August when required personnel return from holiday.

➢ Ingest: No issues above usual.

➢ COBALT: Node 8 did not come back properly after the Stop Day resulting in use of node 9 for a few days. Issues now resolved.

News regarding the observing system

- Mode 7 tables will be updated for all international stations this week.

- Mode 3 data are being processed at the moment.

- Mode 1 tables were updated for most Dutch stations in mid-June.

- Status station calibration:

   http://www.astron.nl/radio-observatory/astronomers/current-status

- Note: Contact point from Science Support for station calibration is L. Cerrigone

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News regarding the observing system CEP

- CEP2:
  - locus032 needed repairs with spare parts taken from locus100. As CEP2 nears end of life, and is now out of support contract, other nodes may need to be similarly taken out of use for spare parts.
- CEP3:
  - CEP3 is meant for commissioning and advanced processing, thus it offers users a large amount of computing resources but for a limited amount of time.
  - CEP3 info and users schedule available at
    - http://www.lofar.org/operations/doku.php?id=cep3:start
  - Policy regulating access to CEP3 and data handling available via ASTRON website.
  - Many requests of extensions to access CEP3: monitoring of node usage during allocated time is ongoing. The evaluation of future requests will be based on such statistics.

News regarding Cycle observations CYCLE 4

> Detailed Cycle 4 schedule available here:

https://docs.google.com/spreadsheets/d/14JsjFkFxSrK1vzYzaFhZH3jTeFbFHt5GyuF3NyI3Qdw/pubhtml

> Changes can be applied on a daily basis! Contact Science Support in case of questions/issues

> **Always email 'sciencesupport@astron.nl' and include the proposal code in the subject line**

News regarding Cycle observations
CYCLE 5 Proposal Call

- Cycle 5 proposal call is now open, deadline

  ** **Wednesday 9 September 2015, 10:00 UT** **

- ASTRON web pages have been updated; please review them. In particular review

  - **http://www.astron.nl/radio-observatory/astronomers/asking-time/asking-time-0**

    including sections detailing elevation limitations and priority of targets.

- LOFAR tools pages:

  - http://www.astron.nl/radio-observatory/lofar/lofar-tools/lofar-tools

    including a new frequency-to-SB converter which also presents bandpass plots for most modes.

- Please be aware that no bugfixes have been made to Northstar this Cycle.

CALENDAR LOFAR activities

- **Next LSM** : **19 August – volunteers welcome!!!**

- **Long-baseline busy week** : **24-28 August**

- **Cycle 5 proposal deadline** : **9 September 2015**

Note: to subscribe to the lofar-news mailing list:

http://www.astron.nl/radio-observatory/subscribe-lofar-news/subscribe-lofar-news