

Programme:

1. *Array status & Observatory update – R. Fallows*
2. CITT progress – G. Heald
3. Status update from the LOFAR Polarization Busy Week - D. Mulcahy

International LOFAR Telescope (ILT)



Onsala



Dutch stations



Chilbolton

Norderstedt

LOFAR Core (NL)

Potsdam

Jülich

Effelsberg

Tautenburg



Unterweilenbach

Nançay



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

ASTRON

Netherlands Institute for Radio Astronomy

Array Status

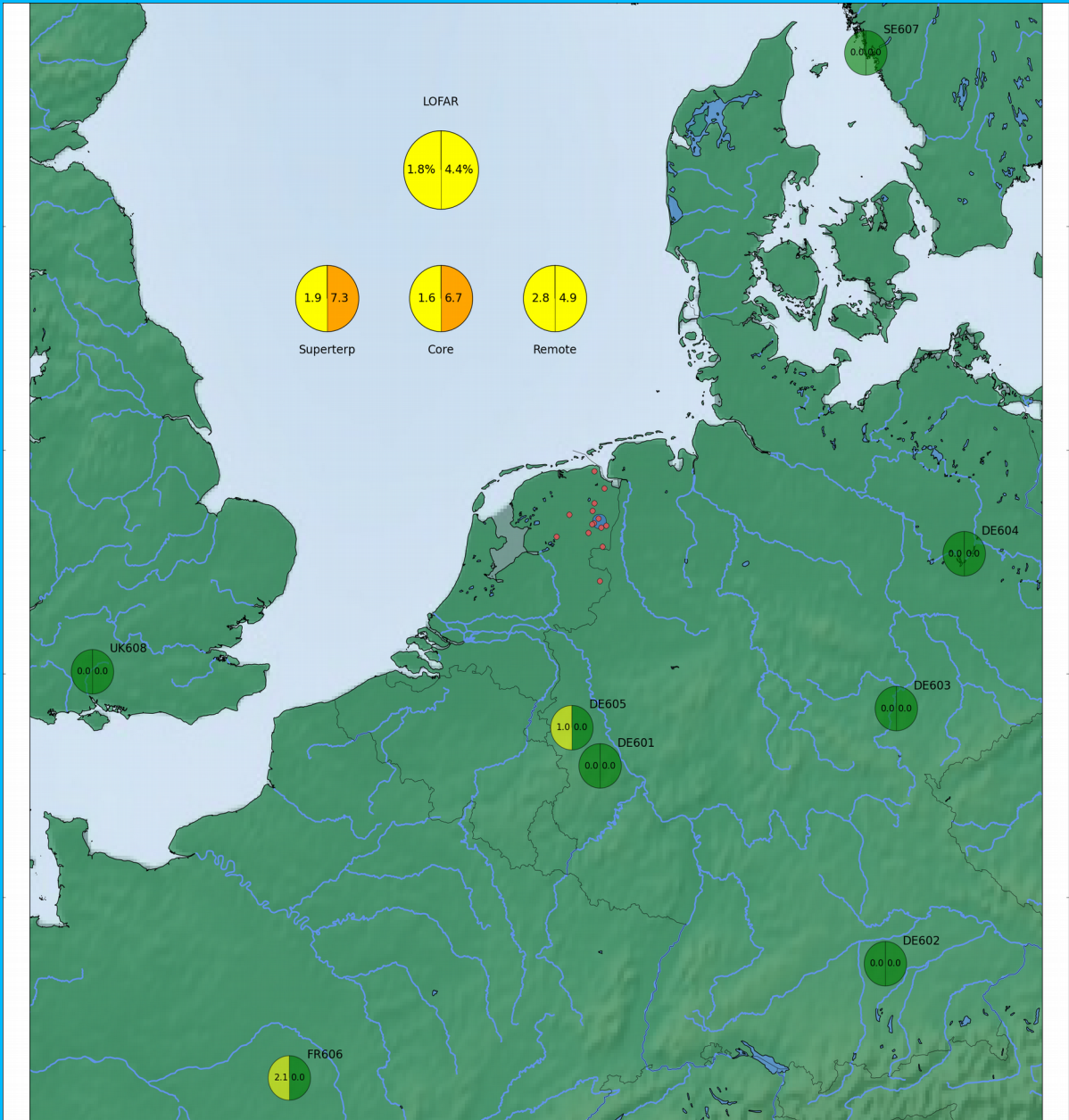


- CS004 – network issue, fibers cleaned.
- DE603 – summator noise, some repaired. Likely to be an issue with other stations as well.
- DE609 – Various RFI sources identified: electric fences, high-voltage power line, others. Analysis on-going.
- New caltables in progress.
- Maintenance season started. Stations might be missing from observing run. RO will check original proposal to assess if scientific goals could be achieved.

Overview, including IS

LBA: 1.8%; HBA: 4.4%

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

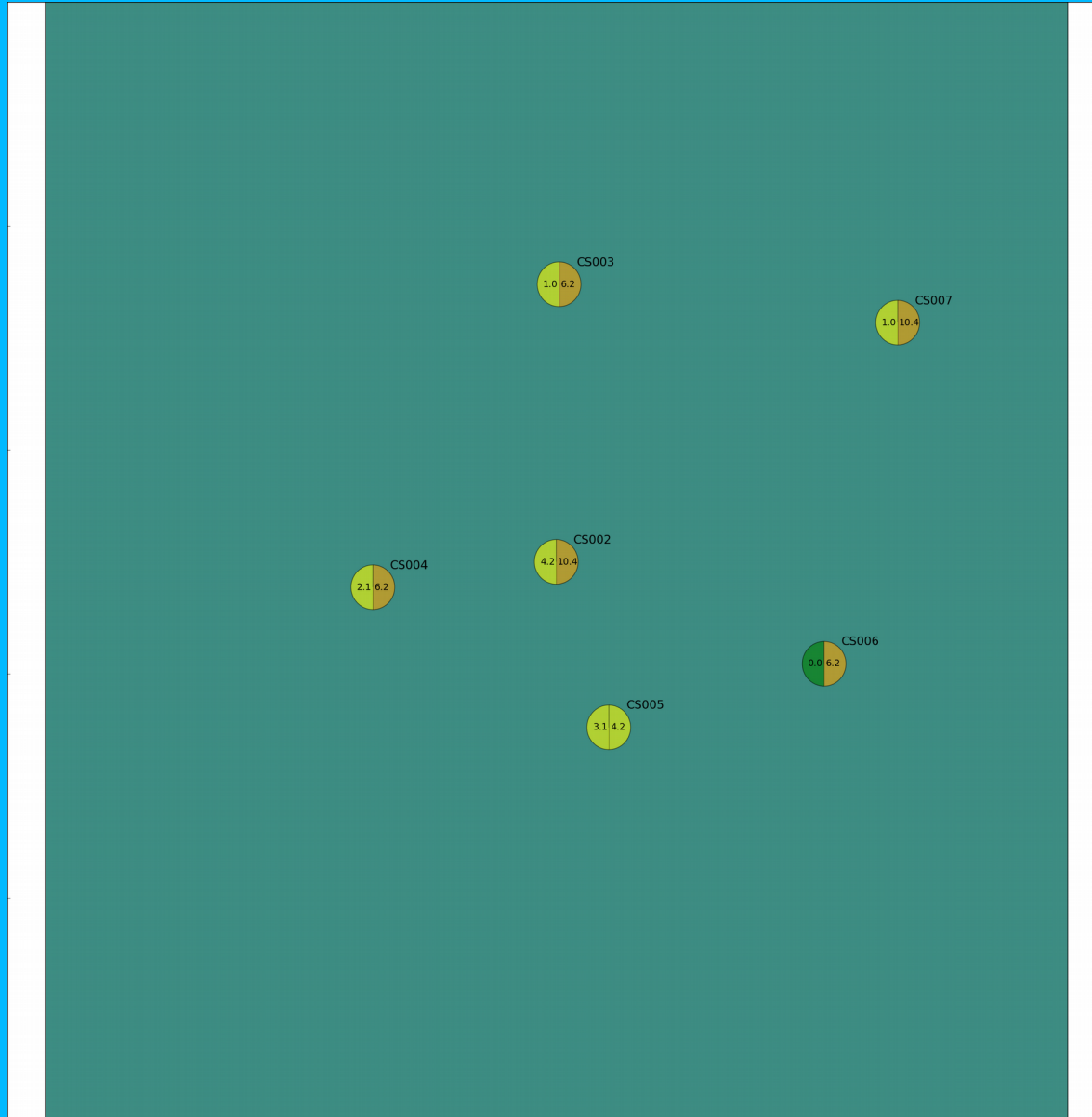


➤ Color coding for non-operational elements at the various stations

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

Superterp

LBA: 1.9%; HBA: 7.3%



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

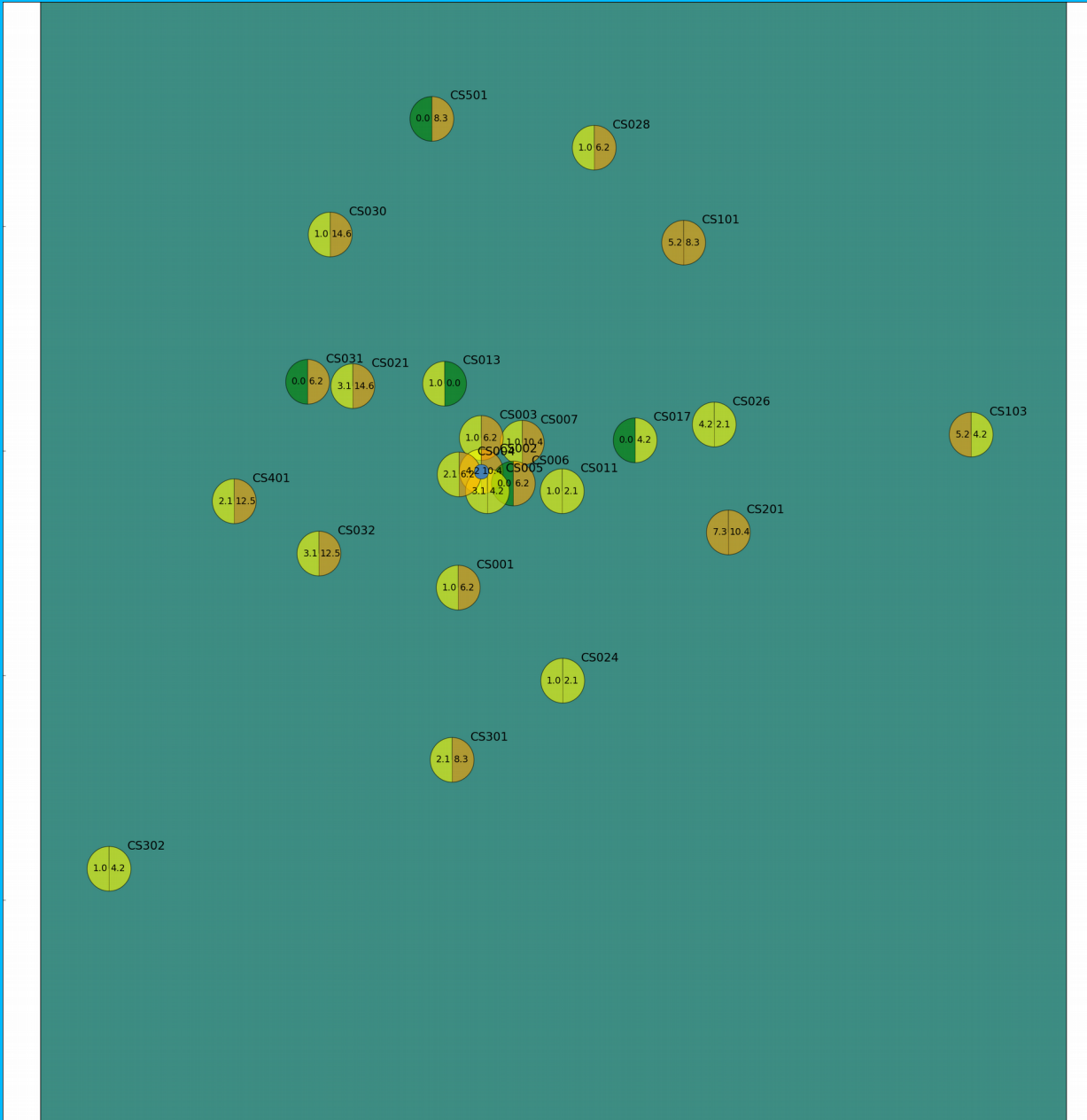
- All operational
- < 5% not operational
- < 15% not operational
- > 15% not operational

Core Stations

LBA: 1.6%; HBA: 6.7%

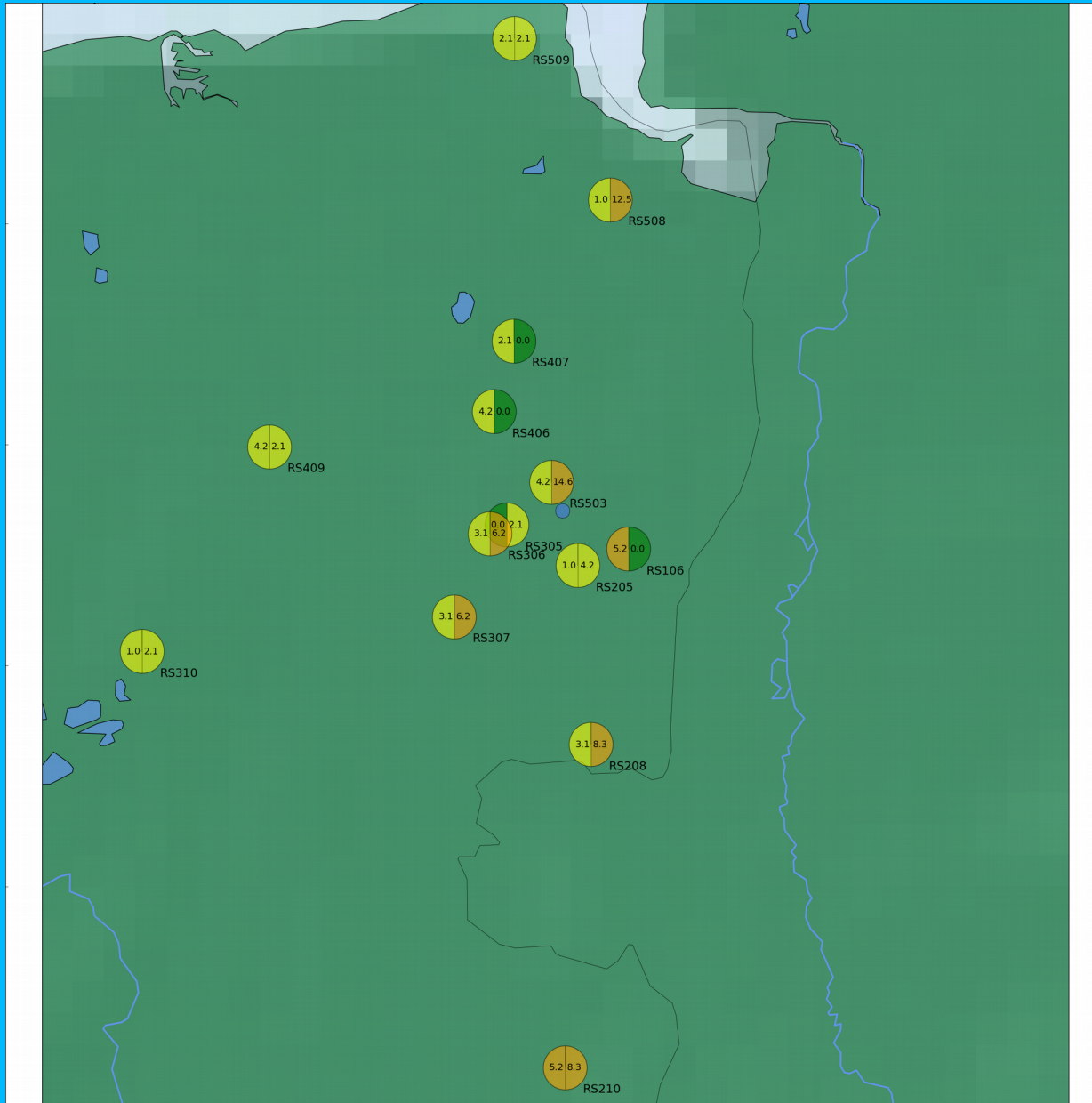
Color coding for non-operational elements at the various stations

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



Remote Stations

LBA: 2.8%; HBA: 4.9%



➤ 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, Pipelines and Ingest



- Observations – relatively stable in the past two weeks.
 - The schedule is very challenging and if observations fail they need to be postponed to Cycle 4 with low priority.
 - CEP2 is full and RO decide by the day if observations can be performed
- Pipelines: queue get processed smoothly.
- Ingest: instability experienced during the last two weeks. Long ingest queue and CEP2 disk space issues experienced. Troubles with staging experienced by users.

News regarding the observing system

Station Calibration



- Mode 7 tables updated for all stations in Feb 2015. New data will be collected when maintenance is completed.
- Mode 5 tables installed for RS and some IS (those available at that moment) 20/04/2015.
- Mode 3 data are being processed at the moment.
- Mode 1 data have been collected.

- Status station calibration:
<http://www.astron.nl/radio-observatory/astronomers/current-status>

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

News regarding the observing system COBALT



- Some network issues with a couple of nodes:
 - Data flagging on a few remote and international stations
 - Data writing to higher CEP2 nodes severely affected, resulting in space issues on the lower ones.

News regarding the observing system CEP



- NFS server crash on Sunday meant all CEP systems were inaccessible.
- CEP2:
 - No major issues.
- CEP3:
 - CEP3 info and users schedule available at <http://www.lofar.org/operations/doku.php?id=cep3:star>
 -

News regarding the observing system CEP3



- Over the last semester:
 - Access to 21 CEP3 working nodes by 120 users spread over 32 projects:
 - 'limbo' (i.e. Cycle0/1), Cycle2, Cycle3 data/users
 - special groups of users (e.g. LOFAR data school, Leiden extreme peeling workshop, MKSP busy week, LOFAR France data school, Tutorials of Radio Astronomy MSc course)
 - 2 long standing groups: MSSS (2 working nodes) and Commissioning (1 working node)
 - 2 node major failures: lof009 broken on 18th March and back on 20 March with no impact on users data; lof011 broken on 07th April and back on 17th April with data lost for user fdg.
 - More than 92TB of data were copied from CEP2 to CEP3.
 - 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 the observing system CEP3

- Heavy demand:
 - 27 requests of extension accepted
 - An increased number of Cycle proposals request access to CEP3 for post-processing/testing/commissioning activities:
 - 10 LC3 projects granted access to CEP3.
 - 16 LC4 projects granted access to CEP3.

Users are expected to make **full** use of the resources assigned to them within the period for which they are granted! The granting of extensions is **not** the default...

LOFAR Network Reconfiguration

18-29 May 2015



- 18 – 29 May 2015
- Access to / functionality of any system in the LOFAR domain is not guaranteed – but note that data retrieval from the LTA will remain functional
- **Access to CEP (CEP2 and CEP3) will not be possible during the reconfiguration period.**
- **You will be promptly notified at the end of the first week of activities in case the progress with the reconfiguration will allow to bring back online the CEP systems during the second week of the reconfiguration period.**
- **We invite all LOFAR users who plan to present their results at the upcoming LOFAR meetings (June 1-3, Assen) to take these timelines into account for the preparation of their presentations.**

2nd LOFAR Users Meeting and 2015 LOFAR Science Workshop

<http://www.astron.nl/lofarscience2015/>

- Registration and Abstract submission now closed.

- **User meeting:**
 - **RO updates**
 - **User feedback:**
 - A representative from each KSP is asked to give a short report.
 - We invite all users to highlight changes or improvements they would like to see.

News regarding Cycle observations



CYCLE 4

| Week 20 | | UT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | |
|-----------------|--------|--|-------------|--------------|--------------|----|----|---|--|----|---------------------------|---|----------------------------|--------------|--------------|----------------------------|----------------------------|--------------|---------------------|----------------------------|----|----|----|----|----|----|--|--|
| Approximate LST | | | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | | |
| May | 11 Mon | LC3_008 - P90 - 9hrs FAILED | | | IoS/TBB runs | | | System tests; all international stations switched to ILT mode at 9 UT | | | | | LC3_008 - P90 - 9hrs --REP | System Tests | | | | | | | | | | | | | | |
| | 12 Tue | LC3_008 - P93 - 9hrs --REP | | StationTest | | | | | System tests | | Maintenance check (Henri) | | LC3_014 - LOTAAS | | System tests | | LC3_008 - P90 - 9hrs --REP | | | | | | | | | | | |
| | 13 Wed | LC3_008 - P90 - 9hrs --REP | StationTest | | | | | System tests | | | LC3_014 - Follow-up | | System tests | | | | | IoS/TBB runs | LC3_014 - Follow-up | LC3_008 - P87 - 9hrs --REP | | | | | | | | |
| | 14 Thu | LC3_008 - P87 - 9hrs --REP | | | IoS/TBB runs | | | LC4_019 - B0031-07 - 4hrs HBA - joint WSRT | | | | | System tests | | | | | | | | | | | | | | | |
| | 15 Fri | LC4_014 - J1429 - 6hrs HBA | | IoS/TBB runs | | | | | LC4_019 - B0031-07 - 4hrs HBA - joint WSRT; all international stations to local mode at 9 UT | | | | | System tests | | LC4_008 - J1429 - 6hrs HBA | | System tests | | | | | | | | | | |
| | 16 Sat | Pipeline clearance ready for network reconfiguration | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 Sun | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Week 21 | | UT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | |
| Approximate LST | | | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | | |
| May | 18 Mon | Network reconfiguration - *** NO ACCESS TO CEP SYSTEMS *** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 19 Tue | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 20 Wed | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 21 Thu | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 Fri | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 Sat | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 Sun | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Week 22 | | UT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | |
| Approximate LST | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | |
| May | 25 Mon | Network reconfiguration - *** NO ACCESS TO CEP SYSTEMS *** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 Tue | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 Wed | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 Thu | | | | | | | | | | | | | | | | | | | | | | | | | | | |

➤ 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****

- Next LSM : 27 May – volunteers welcome!!!
- Start of Cycle 4 : 15 May
- 2nd LOFAR Users Meeting : 1 June, Assen
- The 2015 LOFAR Community Science Workshop : 2 – 3 June, Assen
- MSSS workshop : 4 - 5 June, ASTRON

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

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