



LOFAR NEWSLETTERS SEPTEMBER-OCTOBER 2018

Previous LOFAR newsletters are collected [here](#).

Announcements:

- In total, 2800 observing and 2700 processing hours have been allocated for Cycle 11, which will start on 15 November and will last till 31 May 2019. The observing schedule and the allocations will be made available [online](#) next week.
- Dysco (the visibility compression tool) has been activated in production on 10 September for HBA data. Commissioning on LBA data is currently on going.
- The CITT2 project has concluded. A new larger project (SDF – Science Delivery Framework) has been defined. Among other crucial activities aimed at improving the efficiency of the observing system and at delivering science-ready data to the users, it involves the implementation in the production environment of the advanced reduction pipelines developed during the past year, such as Prefactor. The project will also include a discussion forum where the development of advanced algorithms for LOFAR data reduction will continue.
- The next LOFAR Family and Users Meetings will take place in The Netherlands between 20-23 May 2019. The first announcement and further details about the meetings will be distributed soon.
- The [5th LOFAR data processing school](#) took place at ASTRON between 17-21 September 2018. The slides of the lectures as well as the video recordings are available [online](#).

- The list of LOFAR papers shows a significant increase of the scientific productivity of the instrument. Relevant figures are presented [here](#).

Array status:

- 38 stations operational in the Netherlands: 24 core and 14 remote stations. 13 international stations operational: DE601, DE602, DE603, DE604, DE605, FR606, SE607, UK608, DE609, PL610, PL611, PL612, IE613.
- The maintenance season is ending and will start again in the next spring.
- The overview of non-operational antenna elements for LBA and HBA is available [here](#).
- Station calibration:
 - New delay values for LBA core stations were implemented on Cobalt as of 2018 Oct 12th. They were calculated from tied array holography observations. Tests show that this improves the instantaneous coherence of core stations in LBA Outer mode. Similar improvements for HBA are being worked on.
 - The calibration table for LBA Outer of station RS407 was removed as of 2018 Sep 24th. The phase solutions obtained are of insufficient quality, and the station does not provide useful visibilities when operating without a calibration table.

Observing System Status:

- At the end of July, several CEP4 systems crashed due to a Lustre bug. the Robinhood Policy Engine has been temporarily disabled to speedily bring the system back to an operational mode. A successful upgrade of the

CEP4 Lustre filesystem was performed on 1 October. To allow this, production observing has been put on hold between 30 September and 4 October

- Oscillating tiles at a few stations were detected during BF observations and were disabled.

Software development status (J. Annyas):

Progress has been made in the definition of the requirements for the replacement of MoM, which represents the first phase of the LOFAR Efficiency Improvement project.

Data Quality Working Group (M. Iacobelli)

A first version of the new web-based tool presenting the latest station tests and real time station monitoring results is now available for the Radio Observatory. This allows better monitoring of the system and identification of station issues. The development of the tool is still ongoing and additional views are in progress.

Observing Programmes

- Cycle 10 observing programme: ~90% complete. The observing schedule can be found [here](#).
- Cycle 9 observing programme: 96% complete. The rest is being observed with second priority during Cycle 10.

CEP news:

- CEP4
 - See above
- CEP3:
 - Cluster info and schedule available [here](#).

Calendar next LOFAR activities:

The dates of LOFAR Status Meetings, roll-outs and stop days are listed in an online calendar that is available [here](#). In particular, we emphasize:

- Cycle 11 start: 15 November, 12 UT (noon)
- LOFAR Family and Users Meetings: 20-23 May 2019
- Next LOFAR bulletin: December 2018