





LOFAR NEWSLETTERS MAY-JUNE 2018

Previous LOFAR newsletters are collected here.

Announcements:

- 42 proposals (25 single-cycle and 17 long-term) were received at the Cycle 10 proposal submission deadline. In total, 8700 observing and 7800 processing hours were allocated to 13 long-term proposals. Additionally, 670 observing and 920 processing hours were allocated to 21 single-Cycle 10 projects. Allocations, list of successful projects, and observing schedule can be fund here.
- The Cycle 11 proposal call will be advertised at the beginning of July. The proposal submission deadline is Thursday, 6 September, 12 UT (noon).
- Since beginning of May, the Radio Observatory has adopted JIRA as helpdesk system to interface with the users. Therefore, requests for support should be submitted through this system by following the procedure described here.
- Dysco (the visibility compression tool) is under commissioning and we expect to activate it in the Radio Observatory pipelines within a few weeks.
- The 5th LOFAR data processing school will take place between 17-21 September 2018. The <u>registration</u> closes on 12 July.
- The next LOFAR Family Meeting and User Meeting will take place in Spring 2019. Dates and location will be advertised in due course.





The Radio Observatory is looking for a new Junior Telescope Scientist.
The advert can be found here. The deadline for applications submission is 19 August.

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.
- Maintenance is currently active at various Dutch and international stations.
- The overview of non-operational antenna elements for LBA and HBA is available here.

Observing System Status:

- Oscillating tiles have been detected and disabled at various stations and are being maintained in the current maintenance season.
- Warm temperatures caused observing failures, especially at the beginning of June.
- Due to a wire reconnection at the concentrator node, the clock signal for stations CS002..CS007 and CS401 was offset by 1.4 microsec between 24-30 April. This severely affected the sensitivity of interferometric and beamformed observations, which required repetition.
- The Juelich LTA site experienced issues with the staging service over the past 5 weeks. These are now resolved.





Software development status (J. Annyas):

- The LOFAR efficiency project made further progress in its first phase, which is related to the MoM replacement.
- The RO completed the prototype for the new generation inspection plots, which are based on image pattern recognition. After the next necessary development steps, the plots will be rolled out in production for internal use first. It is expected that they will become available to the users before the end of the year.

Data Quality Working Group (M. Iacobelli)

Ongoing efforts on the following topics:

- station clock monitoring: statistics of clocks behaviour of RS have been collected. Time variations highlight the presence of a group of stations with poorer clock stability.
- tracking satellites vs. PSR to assess the performance of the array: analysis of test observations ongoing. Concerns are about the availability of suited satellites for measurements in the LBA band.
- monitoring of RFI environment at stations: scripts have been finalised and tested. Near field (i.e. <200 m) imaging found to be effective to locate RFI sources. Tests of the accuracy of the method on longer distances to be verified.

CITT2 (E. Orru', T. J. Dijkema)

 The CITT has been working on a new version of the direction independent pipeline (Prefactor 3.0). This pipeline will be suitable for initial calibration of HBA, LBA, Long Baselines data, as well as for other applications where interferometric data analysis is needed.





- A new version of WSClean (v. 2.6) has been released. Work on Image Domain Gridding in WSClean continues: a first beta version which includes the correction for the beam while gridding is now being tested.

Observing Programmes

- Cycle 10 observing programme: 24 % complete. The observing schedule can be found here.
- Cycle 9 observing programme: 95% complete. The rest is being observed with second priority during Cycle 10.

CEP news:

- CEP4
 - Nominal performance.
- CEP3:
 - Cluster info and schedule available here.

Calendar next LOFAR activities:

<u>The dates of LOFAR Status Meetings, roll-outs and stop days are listed in an</u> online calendar that is available here. In particular, we emphasize:





- Cycle 11 proposal submission deadline: 6 September, 12 UT (noon).
- 5th LOFAR data processing school: 17-21 September 2018
- Next LOFAR bulletin: August 2018