





# LOFAR NEWSLETTERS MARCH-APRIL 2018

Previous LOFAR newsletters are collected <u>here</u>.

#### **Announcements:**

- 42 proposals (25 single-cycle and 17 long-term) have been received at the Cycle 10 submission deadline. In addition to the allocations for the next semester starting on 15 May, at this round more than 8000 observing hours will be allocated to the long-term queue, which will remain active for the next 4 Cycles, till Cycle 13.
- As of 11 April, a Docker image exists containing all software needed to process LOFAR interferometric data. The Docker image is available through Docker Hub, and is offered by ASTRON RO on a best-effort basis. Documentation is in the LOFAR imaging cookbook.
- A restricted set of users have been asked to start using our new helpdesk ticketing system, JIRA. The aim to release it to all users as soon as possible. A walk-through introduction will be given at the next LSM, on May 9th.
- Dysco (the visibility compression tool) has been rolled out in production on 23 April. It will be become active as soon as some final testing is completed. Dysco will be applied by default to all visibility data.
- The ASTRON RO in collaboration with JIVE will offer a 'traineeship in Science Operations with massive arrays'. Two trainees from Africa will visit ASTRON and JIVE starting on 7 May to be exposed to LOFAR and EVN operations. The traineeship will give great visibility to the techniques the RO has pioneered and adopts daily to operate LOFAR and that will with no





doubt be reference for next generation facilities, such as SKA. The programme will last for 12 weeks. The traineeship is sponsored by ASTRON and the Jumping Jive project.

- The 5<sup>th</sup> LOFAR data processing school will take place between 17-21 September 2018. The registration is now <u>open</u>.

# 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.
- LORA particle detectors are being extended to additional core stations: CS017, CS001, CS013, CS021, and CS032.
- The overview of non-operational antenna elements for LBA and HBA is available <u>here</u>.
- Station calibration:
  - HBA-low (110-190 MHz): new calibration tables are available for all remote and international stations; core stations will follow after the corresponding Cobalt delay values have been calculated.
  - New HBA-high and LBA Outer calibration tables, based on data taken in January and February, are currently in progress.

#### **Observing System Status:**

- An above average number of oscillating tiles has been detected and disabled and will be subject of maintenance in the next season.
- General network connection issues affected sporadic observations.





# Software development status (J. Annyas):

- Technology research started for the replacement of MoM.

- A busy week on the new generation of data inspection tools (ADDER project) is currently in progress.

# Data Quality Working Group (M. Iacobelli)

Based on the work plan setup after collecting inputs from all members, three sub-groups have worked on the following topics:

- o station clock monitoring
- assess how much improvement tracking satellites instead of PSR is achievable to determine the performance of the array
- monitoring of RFI environment at stations
- generating databases & visualization interfaces for data quality monitoring

An overview of ongoing activities and results will be provided in a upcoming LSM.

#### **Observing Programmes**

- Cycle 9 observing programme: 88% complete. The observing schedule can be found <u>here</u>.
- Cycle 8 observing programme: 93% complete. The rest is being observed with second priority during Cycle 9.





#### **CEP news:**

- CEP4
  - Nominal performance.
- CEP3:
  - Cluster info and schedule available <u>here</u>.

# **Calendar next LOFAR activities:**

Note: the following events are marked on an online calendar that is available <u>here.</u>

- Next LSM's: 09/05, 06/06 (all presentations given at the LSM and video recordings are available <u>here</u>).
- Next Stop days: 05+06/06
- Next software roll outs: 18/06
- Next LOFAR bulletin: June 2018