





## **LOFAR NEWSLETTERS JANUARY - FEBRUARY 2018**

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

#### **Announcements:**

- Version 22 of the LOFAR Imaging Cookbook has been released. The manual now has both a web and a pdf version – see <u>here</u>. The next version of the Cookbook will include an enhanced tutorial section.
- The Cycle 10 proposal submission deadline will be on 7 March, 12 UT (noon). Both long-term (15 May 2018 – 14 May 2020) and single-Cycle (15 May – 14 November, 2018) proposals can be submitted in answer to this call. In particular, note the opportunity to apply for GENERAL, EXPERT SHARED-SUPPORT, and FILLER projects. Details about available observing time as well as project types are extensively described in the <u>call</u>.
- The 5<sup>th</sup> LOFAR Data Processing School will take place in Dwingeloo coming 17-21 September. The preliminary website is available <u>here</u>. The second announcement will be advertised in March when the registration will be opened.
- A Data quality Working Group (chair: M. Iacobelli) is active defining procedures to better monitor and assess the quality of LOFAR data.
- JIRA is the new ticketing system used by the Radio Observatory. Users will be exposed to the new service likely at the beginning of Cycle 10, once the RO will have gained adequate experience.
- The Dysco data compression tool is being commissioned within the RO pipelines. Following that, it will be adopted in production.





### 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 overview of non-operational antenna elements for LBA and HBA is available <u>here</u>.
- Station calibration:
  - new calibration data were taken and successfully processed for most stations in HBA LOW and HIGH.

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

- The system performance has been nominal during the past two months.

#### Software development status (J. Annyas):

- Preparing project plan for MoM replacement.
- Working on C++11, Git and DYSCO.
- In the EOSCpilot project three pipelines have been implemented using the Common Workflow Language see <u>here</u>.
- Further implementation of Jira; transferring backlogs

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





 The CITT2 team has been working on streamlining the Factor and Prefactor pipelines. Also, work is ongoing on LBA pipelines (PiLL). On a lower level, DPPP will get a feature to calibrate for rotation angle. Work on Image Domain Gridding continues: a first version that does not apply a beam correction is already available in wsclean.

MSSS Update (J. Broderick)

Solutions have been proposed and implemented for issues that remained concerning the flux scale accuracy and uniformity of the angular resolution across the survey area. Re-imaging and quality control efforts continue, with particular focus on a 500 deg^2 region of sky for verification purposes. Work also continues in the MSSS 'MAPS' polarisation survey project, with early results available from MAPS-Low, and preparatory investigations taking place for MAPS-Mid and MAPS-High.

#### Data Quality Working Group (M. Iacobelli)

A Data Quality Working Group was formed with the aim of defining procedures to better monitor and assess the quality of LOFAR data. The group had its kick off meeting last December. The following main topics have been identified:

- Monitoring & tools (current status, limitations, ideas for new tools)
- Procedures (for enabling / disabling hardware elements, to improve coordination between RO teams)
- Array performance (how to define and assess the benchmark performance, list of identified but not understood issues)
- A work plan was setup after collecting inputs from all members and sub-groups focusing on specific tasks were formed.





#### **Observing Programmes**

- Cycle 9 observing programme: 60% complete. The observing schedule can be found <u>here</u>.
- Cycle 8 observing programme: 97% complete. The rest is being observed with second priority during Cycle 9.

#### **CEP** news:

- CEP4
  - System performance has improved as a consequence of the partition of CEP4 into nodes reserved for data writing and for pipeline processing.
- 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: 14/03, 11/04





(all presentations given at the LSM and video recordings are available <u>here</u>).

- Next Stop days: 10+11/04
- Next software roll outs: 16/04
- Next LOFAR bulletin: April 2018