AST(RON

Netherlands Institute for Radio Astronomy

Programme:

- 1) Array status and Observatory Update E. Orru'
 - 2) MSSS status update G. Heald
- 3) Results of applying MWA's WSClean imager to LOFAR data -A. Offringa
 - 4) Parametrizing the radio signal of cosmic ray induced air showers as measured with LOFAR A. Nelles

ASTRON is part of the Netherlands Organisation for Scientific Research (NWO)

Array Status





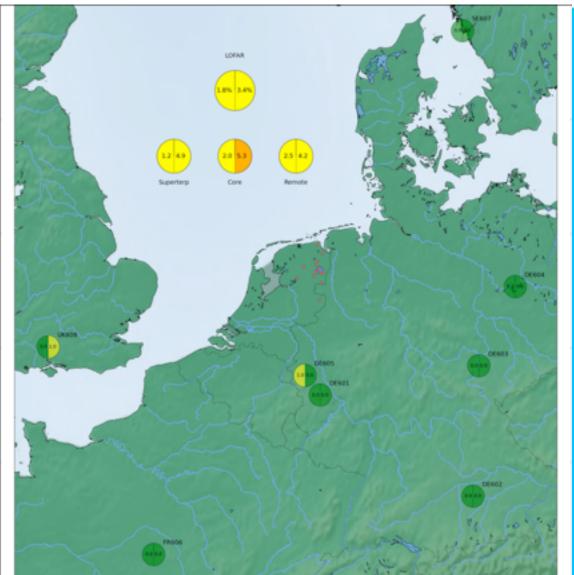
Almost 47 operational stations

- 38 NL stations9 international stations4 new stations to come: Poland (3)
- TBB board broken on RS509
- CS501 HBA1: problem in 8 bit mode on subbands 244-365 giving high visibility amplitude
- > DE604: broken airco
- DE609: Station calibration is ongoing for all the modes. Source of RFI unidentified prevents the LBA data recording for station calibration. The station is already included in the validation runs.

Overview, including IS

LBA:1.8 %; HBA: 3.4%

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

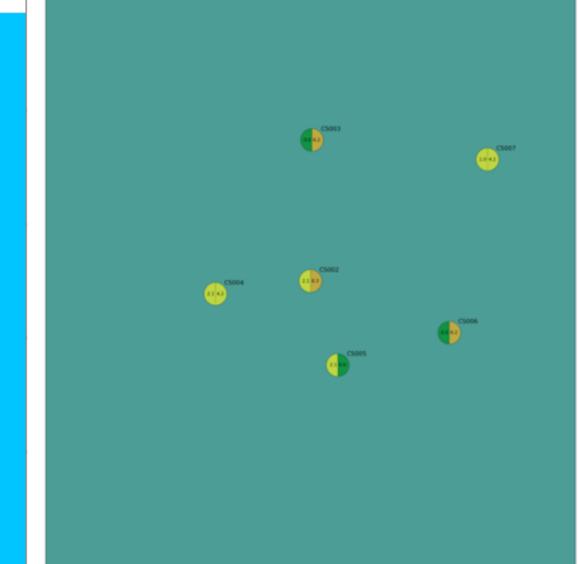


LOFAR

Superterp

LBA: 1.2%; HBA: 4.9%

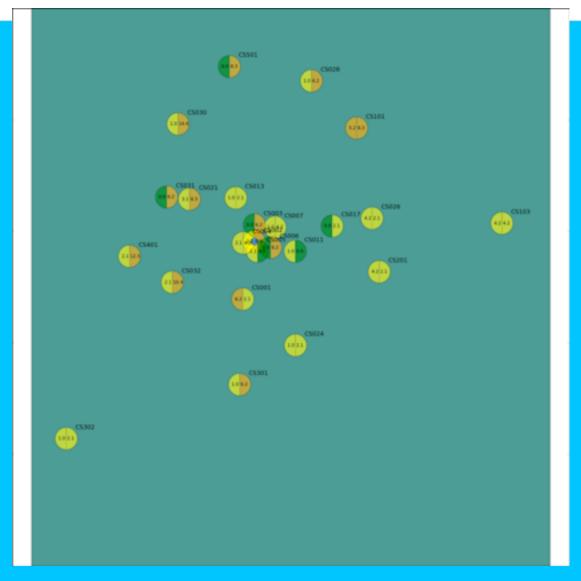




Core Stations

LBA: 2.0%; HBA: 5.3%

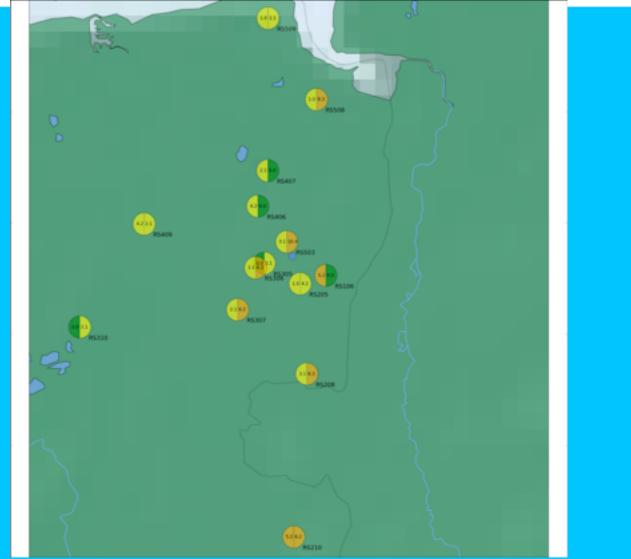




Remote Stations

LBA: 2.5%; HBA: 4.2%





News regarding the observing system

- LOFAR
- Observing system performed relatively fine during the last two weeks. Mostly EoR, PSR observations and TBB runs.
- Software rollout 26th of January
- 20-2-2015 connection problems with all stations due to a change in DNS. Situation is back to normal.
- 20-2-2015 connection problems with international stations, solved just resetting the connection

News regarding the observing system Pipelines



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* MAC bug: If a pipeline ObservationXXXABC is running and another pipeline Observation YYYABC starts, where ABC is the same for both pipelines, there will be a collision in MAC and both pipelines might or might not correctly report back their status to OTDB/MAC/MoM

Pipelines scheduled at a reduced rate during last two weeks

On Monday a semi-fix has been rolled out, this will reduce the occurrence of a factor of 7.

* Long pipeline queue to digest due to some demanding PSR projects (e.g. LC2_025)

* RO Self-calibration pipeline is being commissioned and characterized at the moment. This is the first order version that reaches 10" resolution, the only parameter is number of major cycles.

* Update of webpages in view of Cycle 4.

New policies



http://www.astron.nl/radio-observatory/observing-capabilities/depthtechnical-information/cycle-1-observing-and-processin

In case of unavailable stations, a planned observation will be performed when: A. it requests only the **Superterp** stations and no more than 1 station is unavailable B. it requests only the **Core** Stations and no more than 4 stations are unavailable C. it requests only the **Dutch** stations (CR+RS) and no more than 4 stations are unavailable

D. it requests **Dutch (CS+RS) and international** stations and no more than 4 Dutch and/or 2 international stations are unavailable

Note that in HBA_DUAL mode, HBA0 and HBA1 fields *do not* count as separate stations in this policy, i.e. if CS007HBA0 and CS0007HBA1 are unavailable, they together count as one station.

In all other cases, the observing run will proceed as planned and the final data will be subject to the acceptance of the already known criteria. **Note: if specific stations are necessary to achieve the scientific goals of a project, this should be explicitly mentioned in the proposal (proposal section 'Other Scheduling Constraints Requirement').**

News regarding Cycle2 observations



- > Detailed Cycle 3 schedule available here:
- https://docs.google.com/spreadsheets/d/ 1jDWvZmpH0ycusJTwBsMU6SxQYK5efawtk0jHSxMbo9M/pubhtml
- Changes can be applied on daily base: in case of questions/issues contact Science Support
- **Always cc sciencesupport@astron.nl and include the proposal code in the subject line** 8





- CEP2 Space disk remain critical specially after weekends.
- > CEP3 Is now the only commissioning cluster supported by RO.
- CEP1 head nodes (lfe###) will be switched off very soon. Users tried to connect were requested to copy their home directories on CEP3.

Calendar LOFAR activities:



- >Next stop day 03 March 2015 1.1
- >Next Rollout
- ➢Next LSM
- Call for Cycle 4 proposal
- >MKSP meeting

- : 26 January 2015
- : 4 February 2015
- : 11 March 2015
 - : 9-13 March 2015, Nijmegen/NL

>LOFAR news email list: http://www.astron.nl/radio-observatory/subscribe-lofar-news/subscribe-lofarnews