

Programme:

- 1. Array status, Radio Observatory update - R. Pizzo*
- 2. LOFAR Software Status update - J. Annyas*
- 3. MSSS update - G. Heald*
- 4. Magnetism Busy Week update - D. Mulcahy*
- 5. AOB*

Array Status



- 50 operational stations
 - 24 CSs
 - 14 RSs
 - 12 Is
- New station to be built in Ireland (IE613)
- **New station will be built in Latvia in 2019**

Array Status

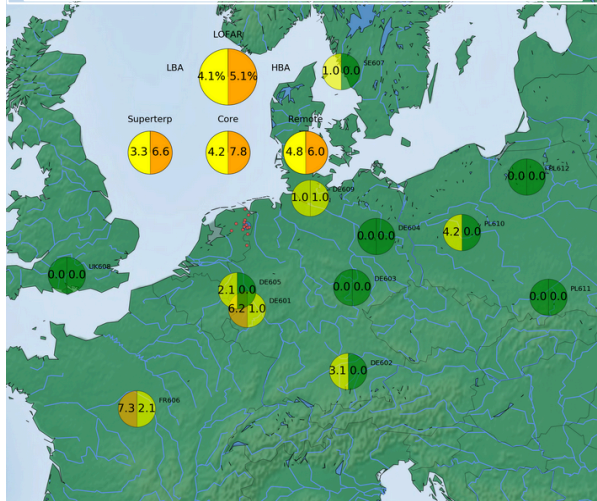


- The LCU's of all Dutch stations were replaced on 15-16 November 2016. The replacement for the international stations completed on 15 December 2016.
- Issues with switching the international stations between ILT - local mode. Under investigation. Workaround available.
- DE603 – broken rubidium end Nov. – replaced
- DE604 – airco issue on 4 Dec. – fixed
- DE601 – broken SPU's – fixed through 48v reset of power supply
- SE607 – crashing RSP driver 11 Dec. – fixed
- CS101 – GSP antenna issues Dec. 1 – fixed
- CS004 – broken power supply on 22 Dec – replaced

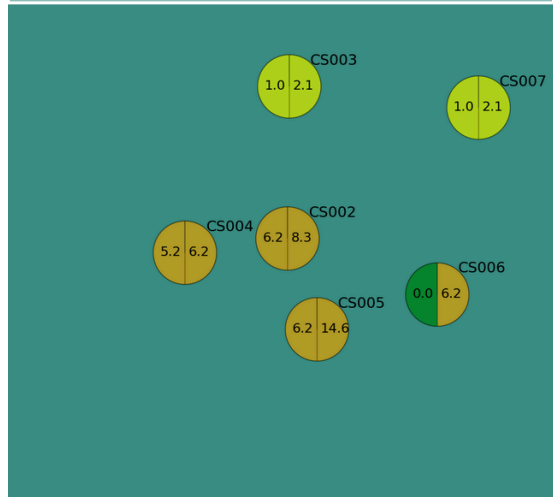
ANTENNA ELEMENTS STATUS



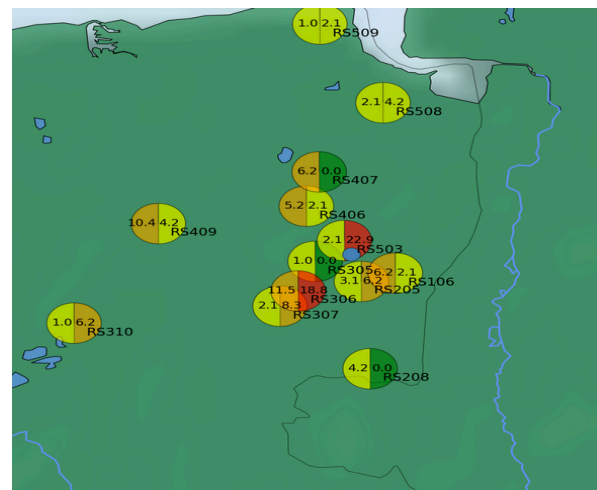
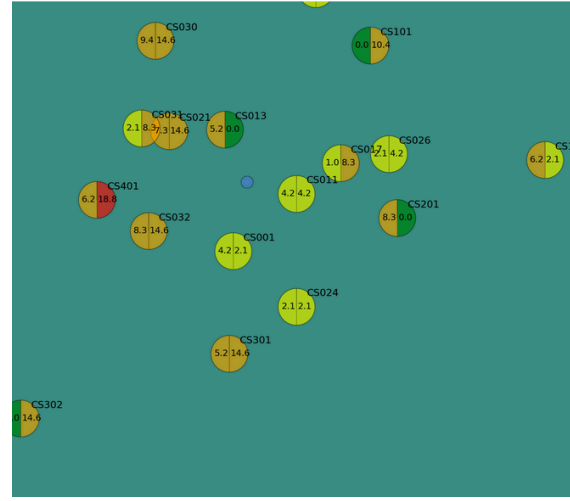
Full array → LBA: 4.1% , HBA: 5.1%



Superterp → LBA: 3.3% , HBA: 6.6%



Core Stations → LBA: 4.2% , HBA: 7.8%



Remote Stations → LBA: 4.8% , HBA: 6.0%

All operational
 < 5% not operational
 < 15% not operational
 > 15% not operational

- Maintenance will start again in the spring
- Current status available at

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

News regarding the observing system: Stability & performance



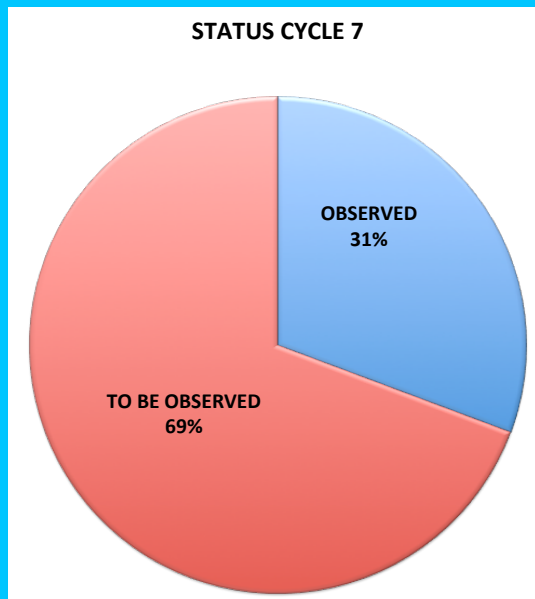
- Nominal system performance during the past month. Debugging activities associated with CEP4 commissioning lowered the observing efficiency during this period.
- CEP4:
 - adopted as THE ONLY operational cluster since beginning of December
 - all observing mode fully commissioned. Pulsar pipelines – some debugging still on going
 - CEP4: data loss still under investigation through a tiger team
 - CEP4: characterization of P/O factors for the various pipelines is on going
- CEP2 has been switched off on 3 January 2017
- CEP3 – /cep3home too large. Heavy users contacted and requested to bring size of their home directory down to max 25 GB

News regarding the observing system: Stability & performance

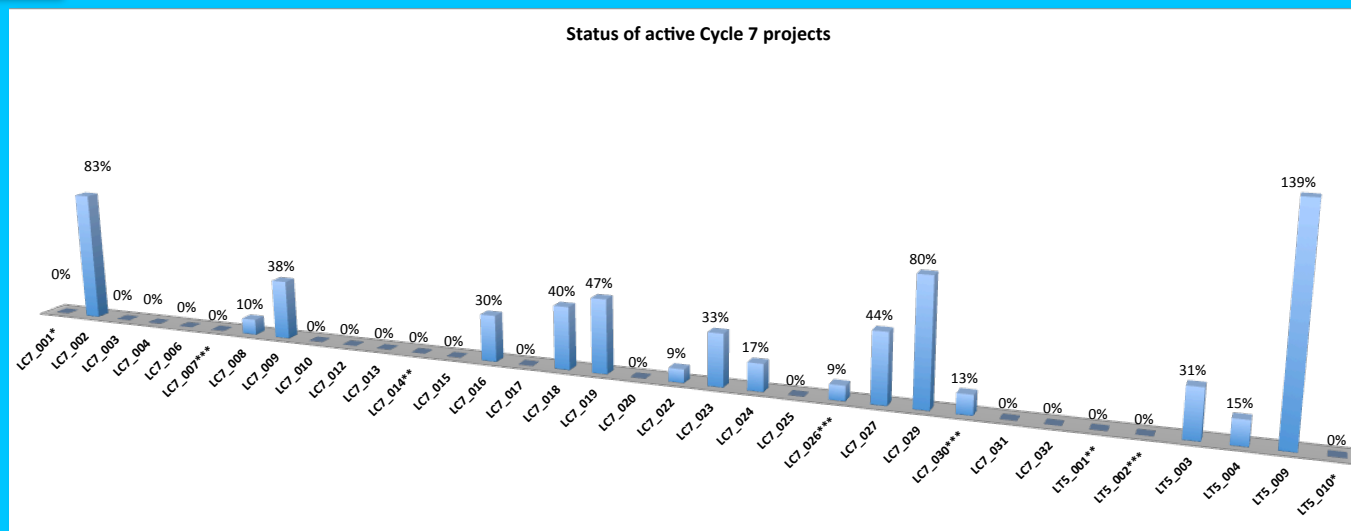


- **LOFAR calibration tables** for some stations for LBA inner (between 21 Sep 2015 and 22 Nov 2016) & LBA outer (between 19 May and 22 Nov 2016) suffered from a **format issue** that prevented proper reading during observations
- No warning/error message propagated to monitoring screens – **alert system now is now in place**
- During the runs, a default empty table was loaded
- On average, in LBA we expect that the lack of calibration would turn into a noise up to about 20% larger than with proper calibration
- PIs of affected projects have been notified – details will be uploaded on the 'System notes' web page (<http://astron.nl/radio-observatory/observing-capabilities/depth-technical-information/system-notes/system-notes>)

News regarding the observing system: Cycle Observations

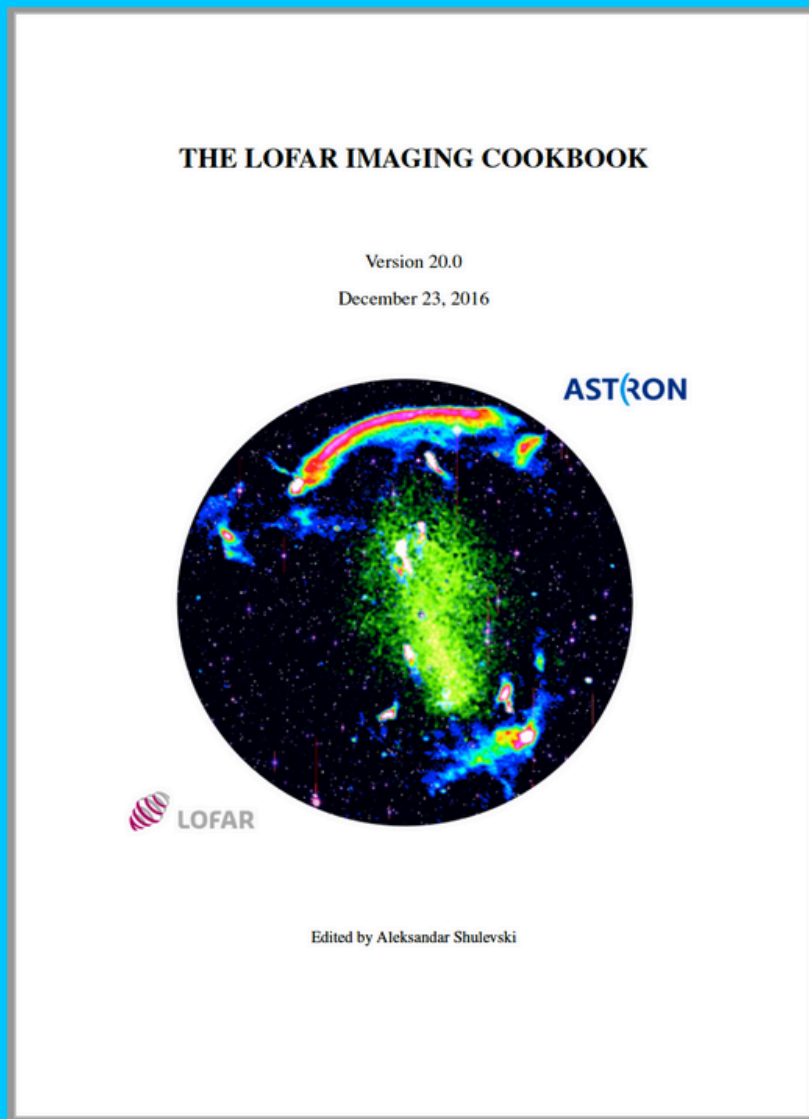


- 31% complete
- Intense EoR observing programme during the first half of the Cycle



LOFAR IMAGING COOKBOOK

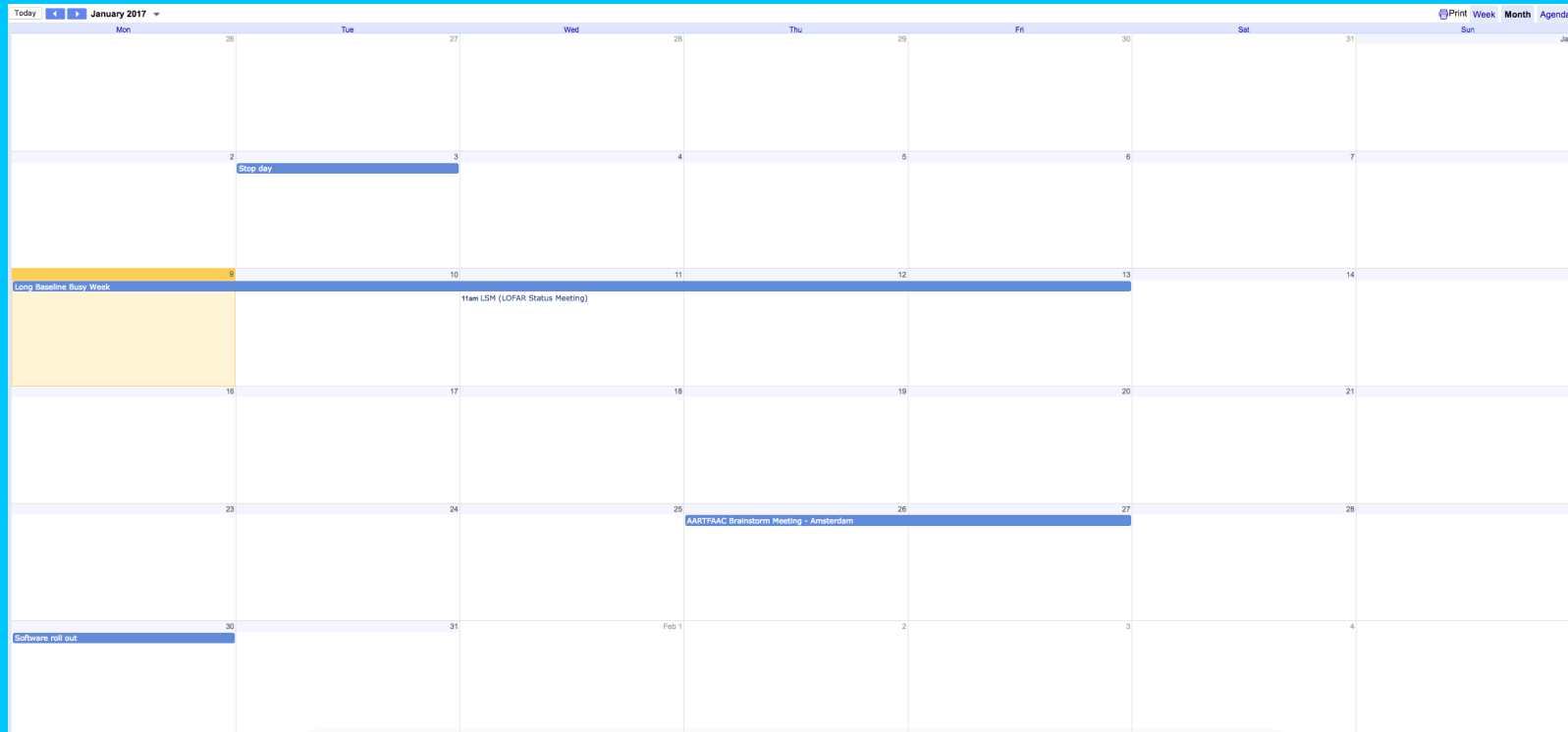
v. 20.0 released



- V. 20.0 released on 23 Dec. 2016
- <http://astron.nl/radio-observatory/lofar/lofar-imaging-cookbook>
- Contains
 - updated the Factor chapter (Chapter 9)
 - updated the Shapelets appendix (Appendix B)
 - updated the Sagecal appendix (Appendix C)

CALENDAR LOFAR activities

<http://www.astron.nl/radio-observatory/calendar-lofar-activities/calendar-lofar-activities>

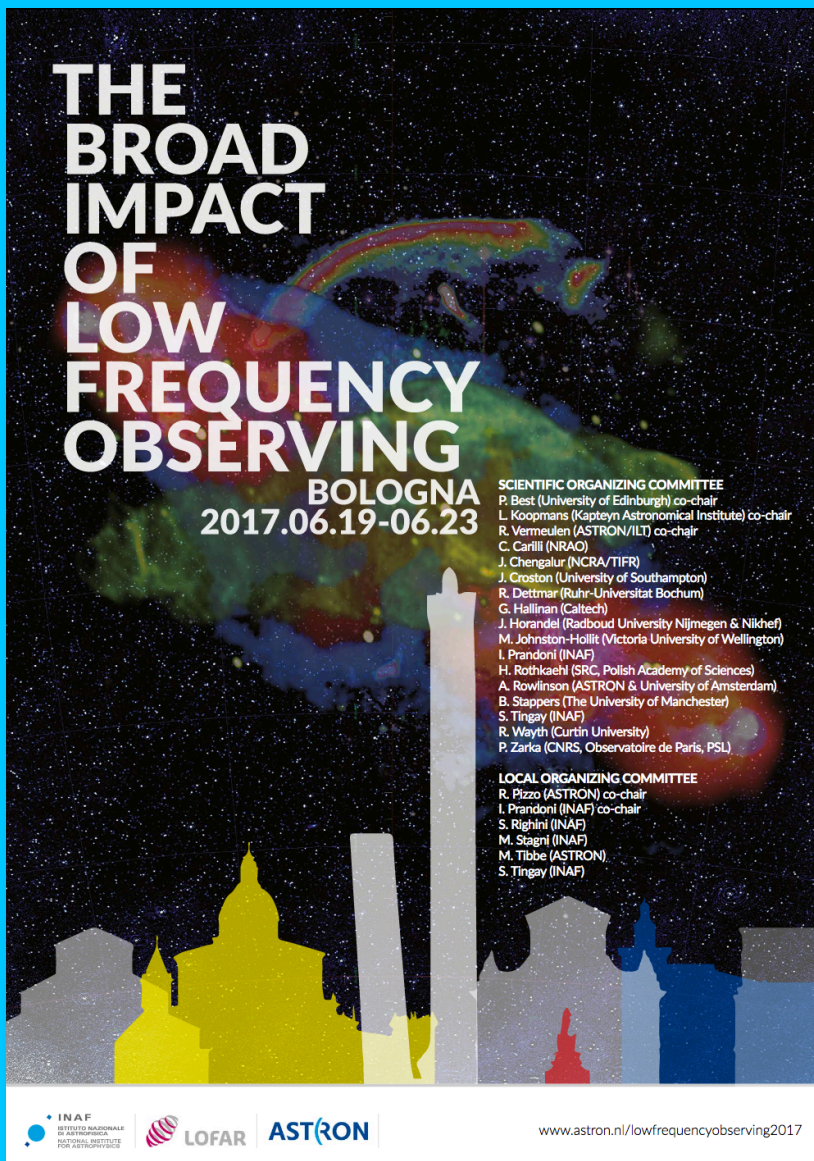


- Cycle 8 call will be advertised at the end of January. Proposal submission deadline will be on Wednesday, 8 March, 12 UT (noon)

LSM presentations:

http://www.lofar.org/wiki/doku.php?id=public:lsm_new:start

THE BROAD IMPACT OF LOW FREQUENCY OBSERVING



THE BROAD IMPACT OF LOW FREQUENCY OBSERVING
BOLOGNA
2017.06.19-06.23

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www.astron.nl/lowfrequencyobserving2017

INAF ISTITUTO NAZIONALE DI ASTRONOMIA E FISICA SPAZIALE NATIONAL INSTITUTE FOR ASTRONOMY
LOFAR ASTRON

- 19-23 June, Bologna, Italy
- Explore relevant links to some of the main facilities complementary to LOFAR including ALMA, the VLA, and VLBI networks in the radio, as well as some of the worlds major observatories at other wavebands
- 23 June afternoon – LOFAR Users Meeting
- Website:
<http://www.astron.nl/lowfrequencyobserving2017>
- Registration now open:
<http://www.astron.nl/lowfrequencyobserving2017/registration.php>
- Deadlines:
 - 2 April – abstract submission deadline; early registration closes
 - 15 May – late registration closes