ASTRON

Netherlands Institute for Radio Astronomy

Programme:

1. *Array status & Observatory update – M. Iacobelli*
2. *LOFAR Cycle 3 proposals – R. Pizzo*
3. *LTA status update - A. Renting*
4. *Update from Imaging Busy Week 21 - G. Heald*

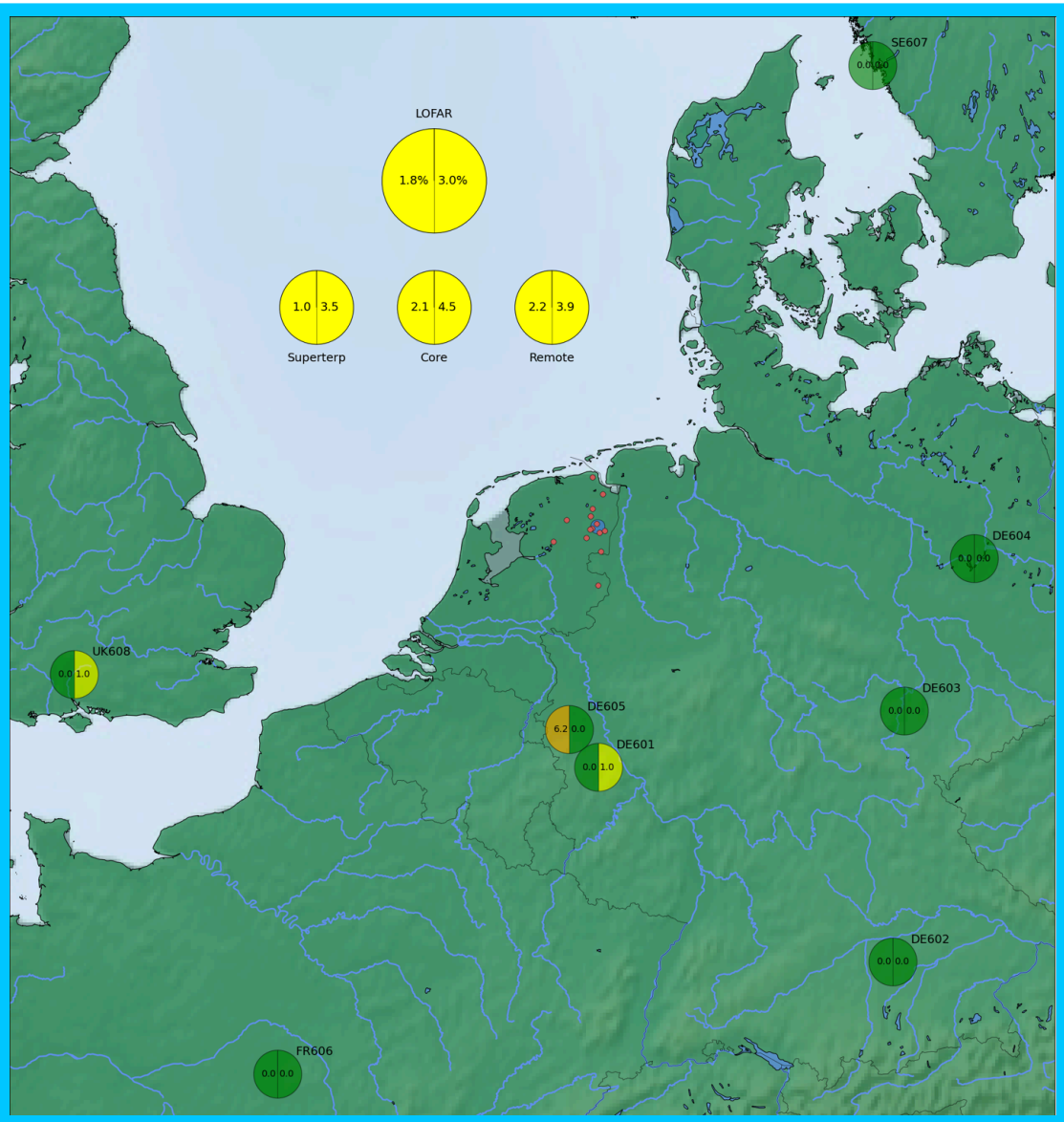
Array Status

- 38 operational NL stations
  - 24 CSs
  - 14 RSs
- 8 Is
- Maintenance/Repair ongoing on several stations.
- Hardware maintenance for DE601 finished.
- Station calibration ongoing:
  - mode1 tables for core and remote stations installed
  - mode 5 tables in progress

Overview, including IS

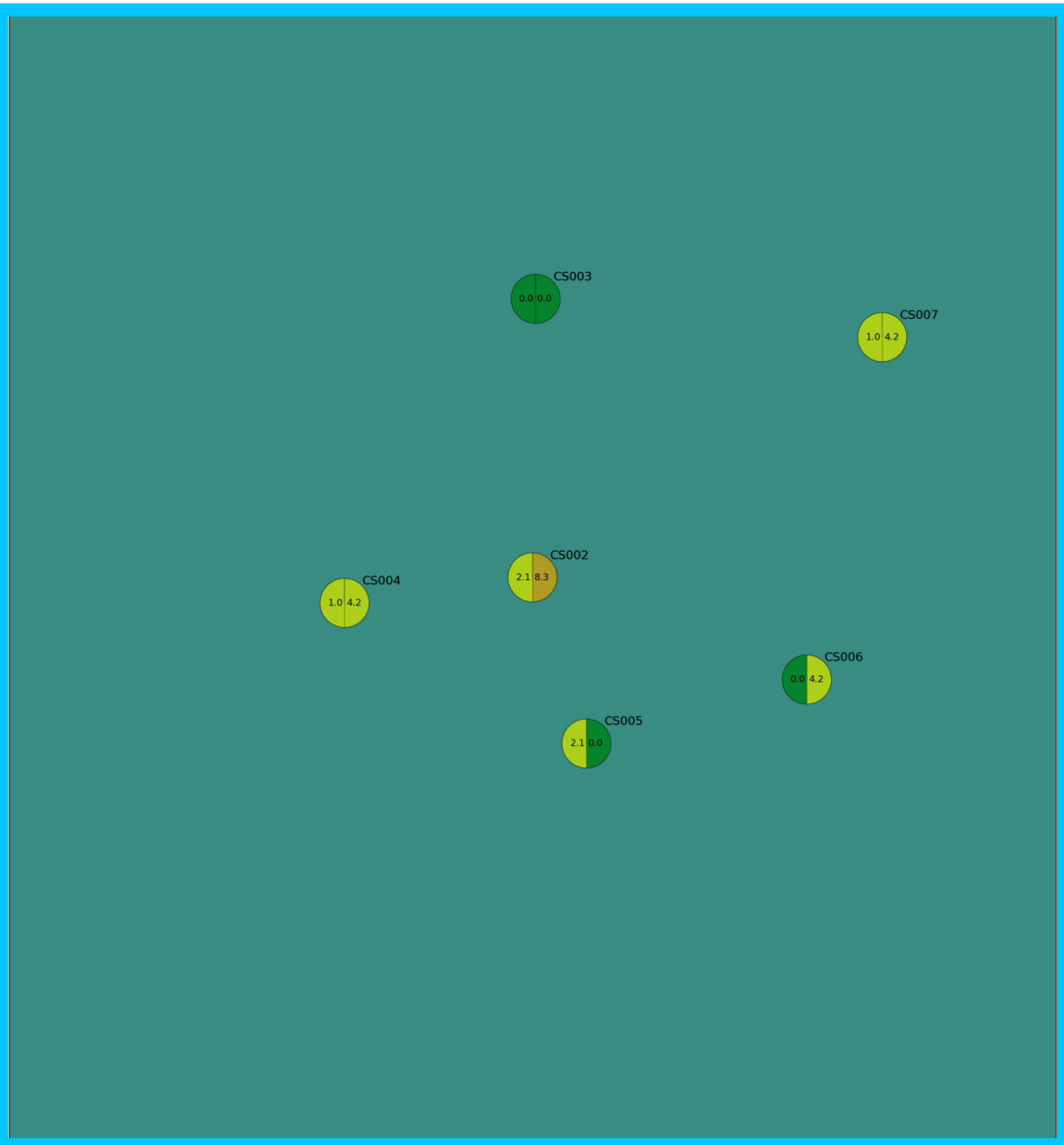
LBA: 1.8%; HBA: 3.0%

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



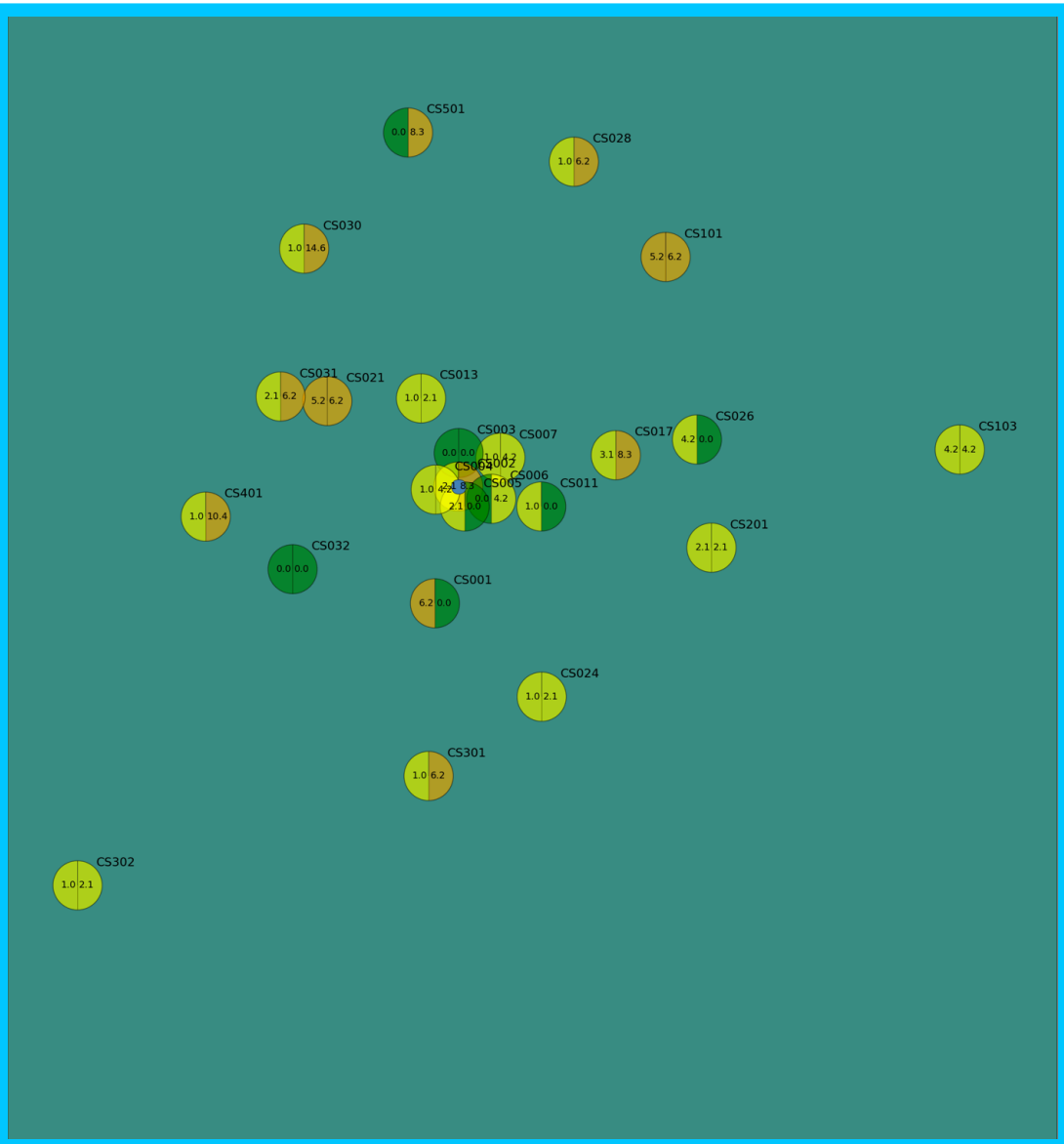
Superterp

LBA: 1.0%; HBA: 3.5%



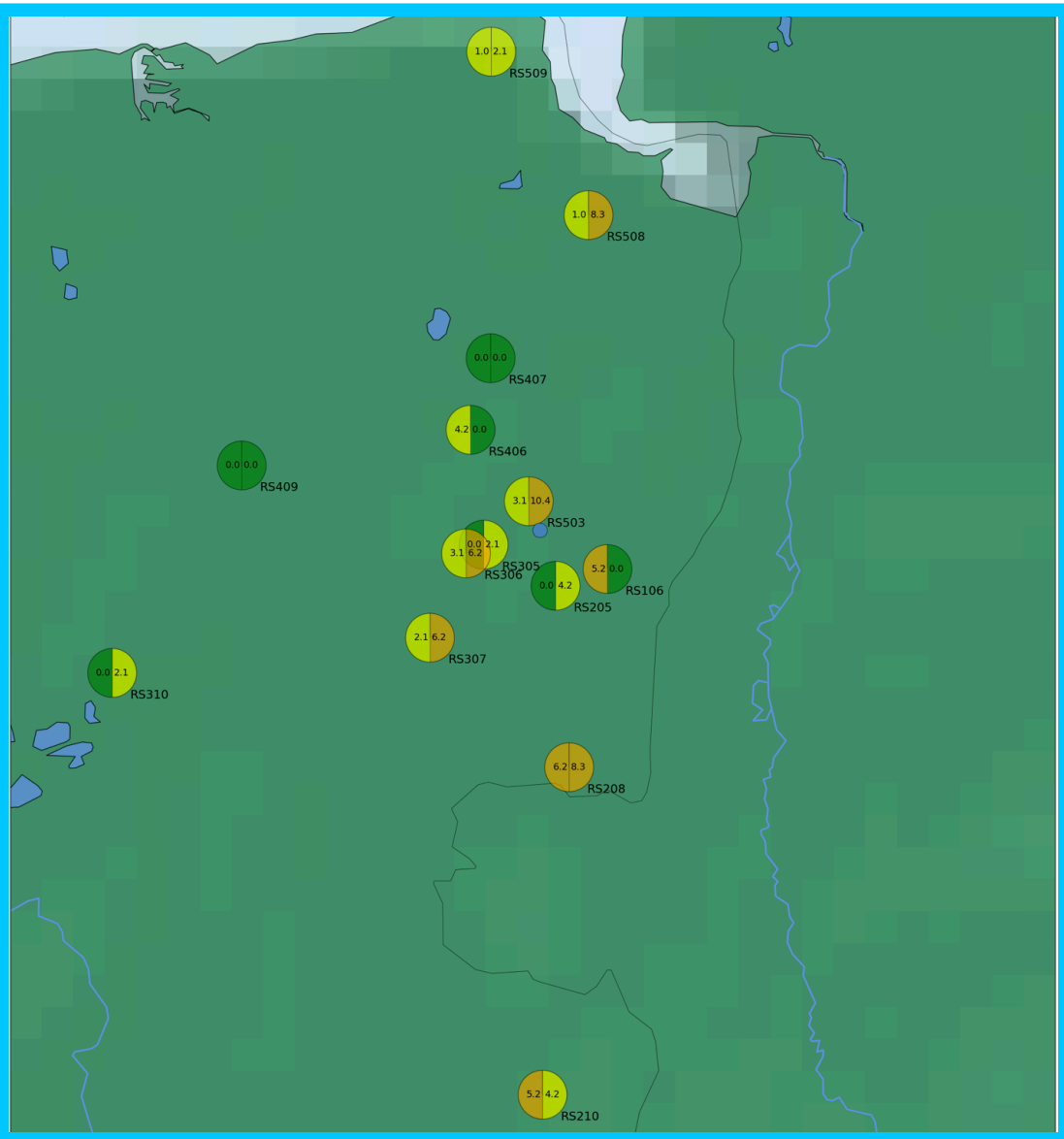
Core Stations

LBA: 2.1%; HBA: 4.5%



Remote Stations

LBA: 2.2%; HBA: 3.9%



News regarding the observing system

- System performed relatively fine during the last month– COBALT being used for correlator and BF mode successfully.
- Due to a SAS/MAC problem (redmine#6192), sometimes observations do not start. This is due to the feedback data flow from Cobalt to CCU/PVSS. PVSS still disabled and a long term solution is to be implemented.
- Pipelines: no long processing queue but processing had some delays due to the currently avoided scheduling in parallel:
  - hanging locus nodes/swapping due to NDPPP high memory usage: a memory limitation during the flagging step is now set up to 10 GB (instead of 35 GB). Monitoring is ongoing by Ger van Diepen & Tammo Jan Dijkema.
  - HBA pipeline runs with demixing of 2 sources display P/O>6, i.e. a factor >2 higher than expected. Possible causes are: the system performance/ stability, the solver algorithm itself. A dedicated working group is investigating the issue.
- LTA performance: some delays with the ingest of data (more info in Adriaan talk).

News regarding Cycle2 observations

Week 38		UT	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sup Sci on Duty	Softw. Eng. on Duty
Approximate LST			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
September	15	Mon	LT2_003 - LOTAAS			Stress system runs + TBB runs; all international stations (except DE604) switched to ILT mode at 9 UTC							LC2_038 - Bootes - 8hrs									Stress system runs + TBB runs		STATIONTEST			EO	PD
	16	Tue	LC2_014 - B2 0258+35 - 8hrs LBA									Stress system runs + TBB runs								LC2_019 - EoR NCP							CT	WK
	17	Wed	LC2_019 - EoR NCP						Stress system runs + TBB runs							Adriaan EoR disk test; run validation observations+pipel at the same time			Stress system runs + TBB runs			LC2_026 - RAs 18,19,21,23,00				EO	AdJ
	18	Thu	LC2_026 - RAs 18,19,21,23,0	Stress system runs + TBB runs		LT2_003 - LOTAAS			Equipment replacement by ICT + AARTFAAC TEST (Superterp; stations back at 13 UTC)							Stress system runs + TBB runs						LC2_026 - RAs 18,19,21,23,00				MI	AR
	19	Fri	LC2_026 - RAs 18,19,21,23,0	Stress system runs + TBB runs						Adriaan test network; all international stations (except DE604) switched to local mode at 9 UTC			Stress system runs + TBB runs														MI	AS
	20	Sat	Stress system runs + TBB runs												LC2_010 repeats												JS (RP)	
	21	Sun	LC2_010 repeats												Stress system runs + TBB runs												JS (RP)	

Week 39		UT	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sup Sci on Duty	Softw. Eng. on Duty
Approximate LST			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
	22	Mon	Stress system runs + TBB runs						LT2_003 - LOTAAS						LC2_015 - Zenith Strip - 24hrs												EO	JDM
	23	Tue	LC2_015 - Zenith Strip - 24hrs																								CT	JRP
	24	Wed								Additional stop day - reboot COBALT systems																	EO	AR

- Detailed Cycle 2 schedule available here:
- https://docs.google.com/spreadsheet/pub?key=0AtnmDczhIbEtdF9TT3RnX0xOSEZ1TWtOaWdILUVIVXc&output=html
- 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**

CEP news:

- CEP2
  - Critical situation for disk space. In particular, large bunch of pulsar data. Removal of pulsar data is ongoing in cooperation with the pulsar working group.

- CEP3
  - Beta-testers access the system this week.
  - New policy regulating access to CEP3 and data handling available at:

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

- CEP1 users:
  - **BACK UP YOUR DATA FROM CEP1 (i.e. lce, staging areas) ELSEWHERE OR GET IN TOUCH WITH SCIENCE SUPPORT AT sciencesupport@astron.nl IF YOU WOULD LIKE TO REQUEST TRANSFER OF DATA TO CEP3 AND HAVE NOT YET DONE SO.**

Calendar LOFAR activities:

- Cycle 3 proposal submission deadline : 10 September, **12 UT**
- Additional Stop (half) day : 24 September 2014
- Next Stop day : 07 October 2014
- Next LSM : 01 October 2014
- LOFAR Data Analysis School : 17-21 November, 2014

- LOFAR news email list:

http://www.astron.nl/radio-observatory/subscribe-lofar-news/subscribe-lofar-news