ASTRON

Netherlands Institute for Radio Astronomy

Programme:

1. *Array status & Observatory update – M. Iacobelli*

2. *COBALT update – M. Brentjens*

3. *LTA status update - A. Renting*

4. *CITT update – T.J. Dijkema*

5. *Working towards deterministic scientific pipelines – G. Molenaar*
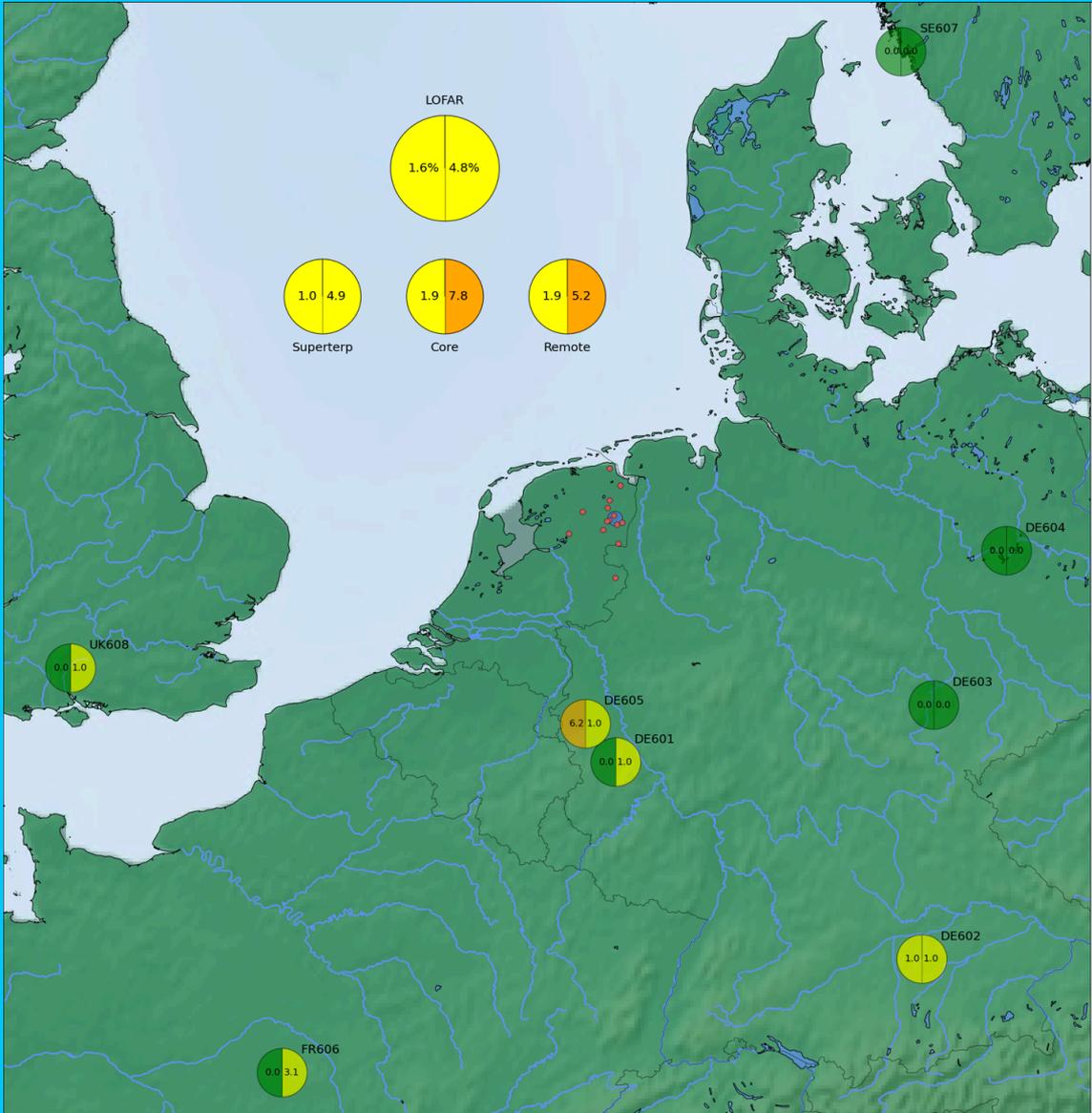
Array Status

- 38 operational NL stations
  - 24 CSs
  - 14 RSs
- 8 Is

- Maintenance/Repair ongoing on several stations. Tiles/antennas repaired for stations: RS306, RS503, RS307, CS302, CS004, CS301, CS101

- Hardware maintenance for DE602, DE605 antennas and clock boards changed

- Stations performance affected by high temperatures in the cabinets; air-inlets and air-guides installed on CS007, CS028, CS101, RS307.
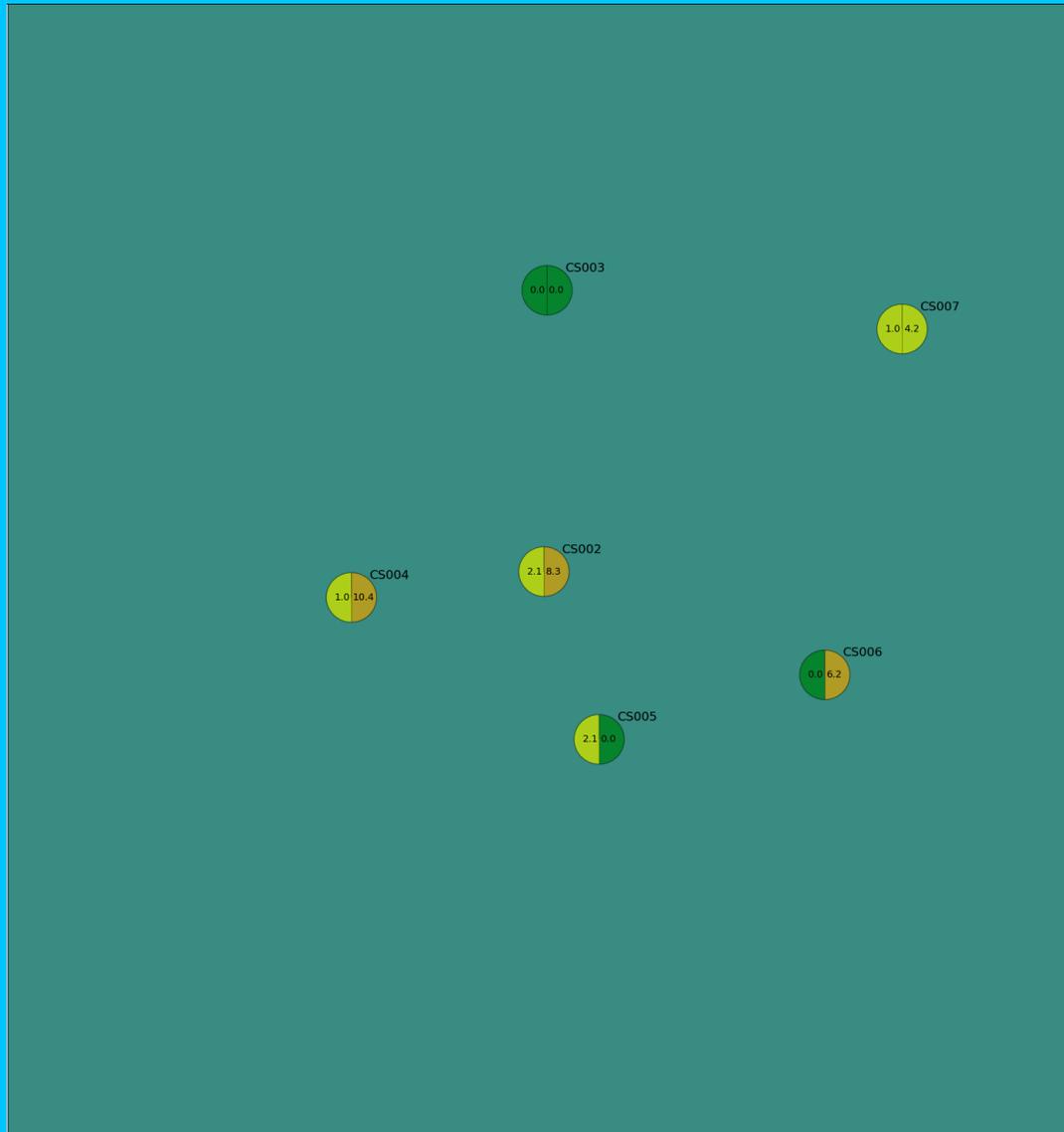
Overview, including IS

LBA: 1.6%; HBA: 4.8%

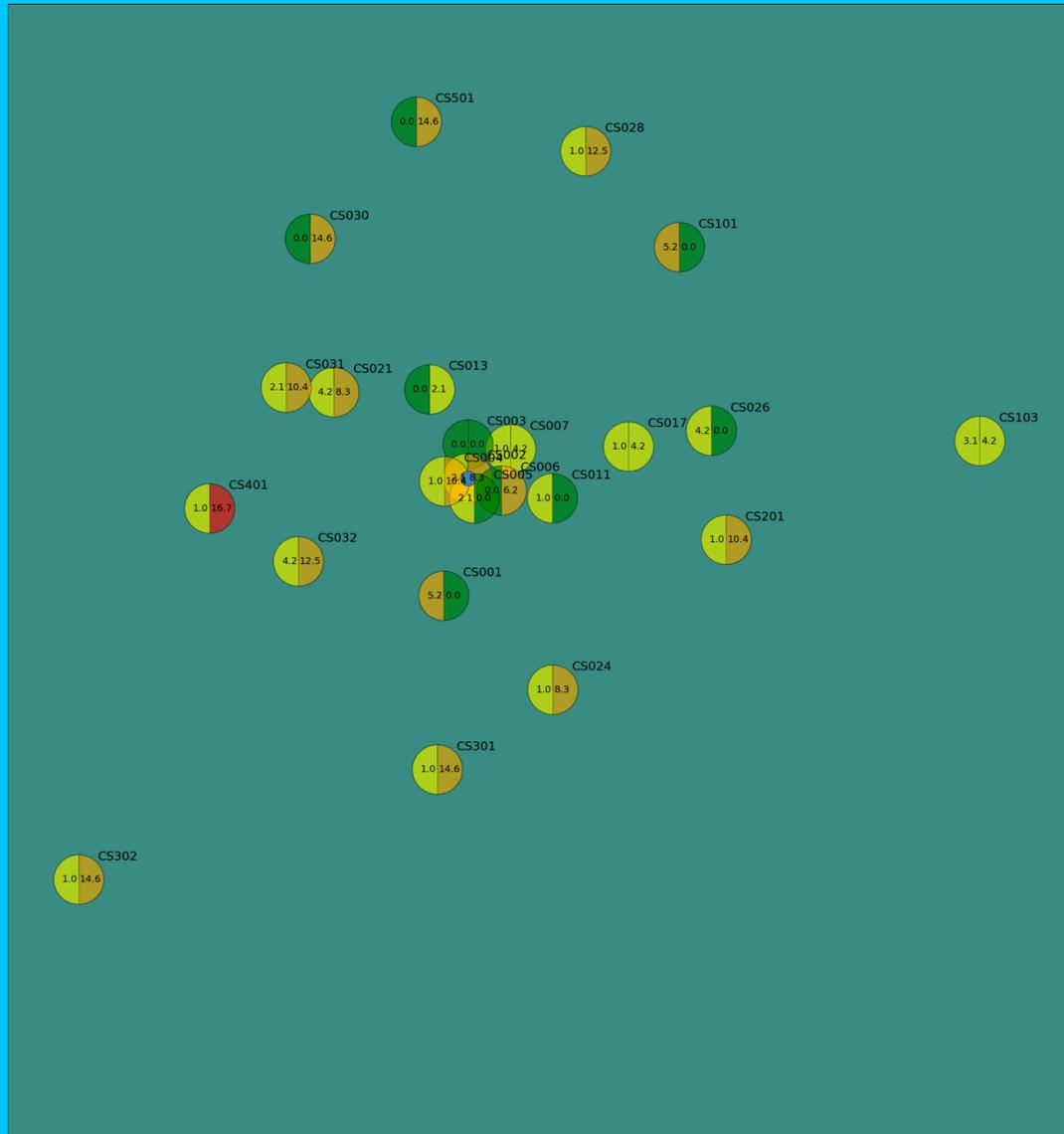*see https://proxy.lofar.eu/array_status/*
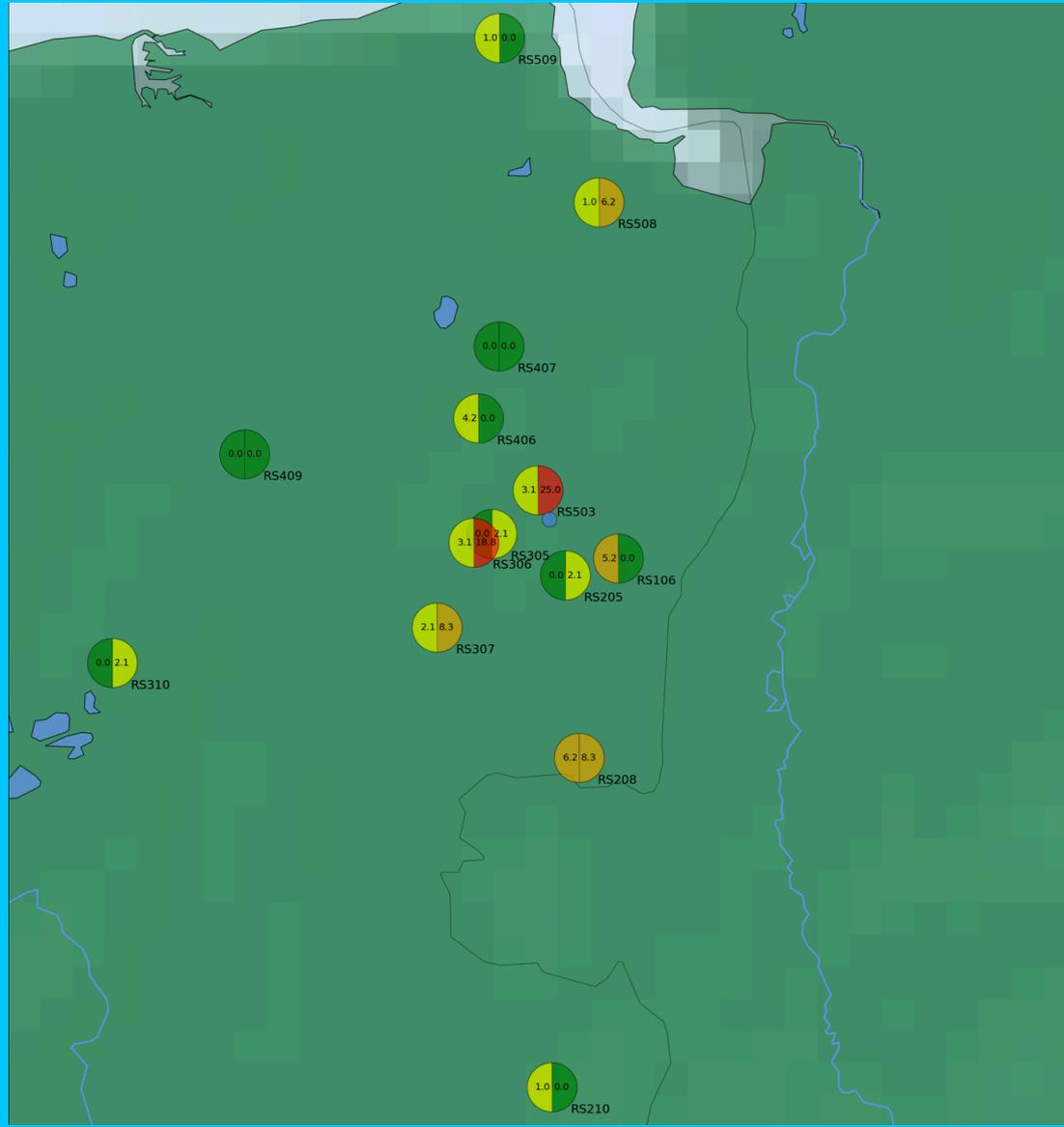
Superterp

LBA: 1.0%; HBA: 4.9%

Core Stations

LBA: 1.9%; HBA: 7.8%

Remote Stations

LBA: 1.9%; HBA: 5.2%

News regarding the observing system

- ➢ High rate of flagging with international stations now solved. Monitor is ongoing and a final report will appear at the end of the summer.

- ➢ Processing of observations with setup of 256 channels not supported by the current system and not characterized.

  - ➢ setup changes: contact science support

- ➢ Pipelines: no long processing queue but processing had some delays due to a few failures experienced during the past 2 weeks:

  - ▪ hanging locus nodes,

  - ▪ processes being swapped out to prevent memory issues.

News regarding Cycle2 observations

Week 28			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	Network
			Approximate LST	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
July	7	Mon		Stress system runs					LC2_007 - LSTs 0,4	Stress system runs	LC2_032 - LSTs 2,7	LC2_028 - Sun - 7hrs; all international stations (except DE604) switched to ILT mode at 9 UTC							LC2_038 - Bootes - 8hrs									RAF	JRP	LTA database maintenance BST (UT+1) and between public event at UK608. R stations at risk 0
	8	Tue		Stress system runs + TBB runs			LC2_032 - LST 22	Stress system runs		STOP DAY										Stress system runs + TBB runs				LC2_032 - LST 16	LC2_036 - G33a - 4.25hrs			RAF or nobody	NV	
	9	Wed		LC2_036 - G33a - 4.25hrs			Stress system runs + TBB runs								LC2_038 - HEXDET21 - 8hrs									Stress system runs + TBB runs		MI	PD	
	10	Thu		Stress system runs + TBB runs; UK608 switched to local mode at 9 UTC											LC2_026 - RAs 09,10,11			Stress system runs + TBB runs			LC2_015 - NCP - 5hrs			MI	WK	
	11	Fri		LC2_015 - NCP - 5hrs		STATIONTEST				Stress system runs + TBB runs; all international stations (except DE604 and UK608) switched to local mode at 9 UTC						LC2_010 - Pulsar Timing								MI	AR	
	12	Sat		LC2_010 - Pulsar Timing												Stress system runs			LC2_00 - LSTs 15-19	LC2_036 - G33a - 4.25hrs			GK (RAF)		
	13	Sun		LC2_036 - G33a - 4.25hrs		TBB	LC2_007 - LSTs 21,23	Stress system runs + TBB runs		LC2_007 - LSTs 0,2,4,5	Stress system runs + TBB runs		LC2_007 - LSTs 6,7,9,11	Stress system runs + TBB runs				LC2_010 - Pulsar Timing		GK (RAF)		

Week 29			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	Network
			Approximate LST	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
July	14	Mon		LC2_010 - Pulsar Timing; LC2_007 - RAs 19,21			Stress system runs + TBB runs; all international stations (except DE604) switched to ILT mode at 9 UTC			LC2_038 - HEXDET10 - 8hrs - repeat									Stress system runs		LC2_026 - RAs 18,19,21,2	RAF	AdJ	
	15	Tue		LC2_026 - RAs 18,19,21,23,00					Stress system runs + TBB runs													RAF	AS (...)	
	16	Wed		LC2_026 - RAs 18,19,21,23,00								LC2_015 - Zenith Strip - 24hrs									CT	JDM (...)	
	17	Thu		LC2_015 - Zenith Strip - 24hrs; UK608 switched to local mode at 9 UTC				STATIONTEST			LC2_038 - Bootes - 8hrs										MI	JRP	
	18	Fri		LC2_030 - NGC7618 - 10hrs; all international stations (except DE604 and UK608) switched to local mode at 9 UTC							Stress system runs + TBB runs							LC2_036 - G33b - 4.25hrs			MI	NV	
	19	Sat		LC2_036 - G33b - 4.25hrs	Stress system runs + TBB runs		LT2_003 - LOTAAS							LC2_037 - WISE1506 - 8.5hrs					RB (CT)		

➢ Detailed Cycle 2 schedule available here:

➢ https://docs.google.com/spreadsheet/pub?key=0AtnmDczhIbEtdF9TT3RnX0xOSEZ1TWtOaWdILUVIVXc&output=html

➢ Contact Science Support in case of questions/issues

➢ **Always cc sciencesupport@astron.nl and include the proposal code in the subject line** 8

News regarding the observing system : Archive

➢ Some delays with the ingest of data towards Julich: investigations ongoing

➢ Issues with the download of data from the LTA:

  ▪ Investigations pointed out an error in the configuration files (more details in Adrian's talk): now dolved.

CEP news:

- ➢ CEP2
  - • Several locus nodes hanging.

- ➢ CEP-3

  - ▪ Delays in the commissioning of the new cluster. **Testing of software and login environment is ongoing. Since the next LSM will be after the summer break any update will be provided by email.**

- ➢ CEP 1 users:

  - ▪ **BACK UP YOUR DATA 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**

- ➢ 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-processing*

CALENDAR LOFAR activities

➢ Next LSM : 20 August 2014

➢ Next Stop day : 05 August 2014

➢ Cycle 3 proposal submission deadline : Wednesday 10 September, **12 UT**

➢ LOFAR Data Processing School : 17-21 November