ASTRON

Netherlands Institute for Radio Astronomy

Programme:

1. *Array status & Observatory update – M. Iacobelli*
2. *COBALT status update – H. Holties*
3. *MSSS update - G. Heald*
4. *CITT update – T.J. Dijkema*
5. *First results of the absolute calibration campaign at LOFAR – T. Karskens*

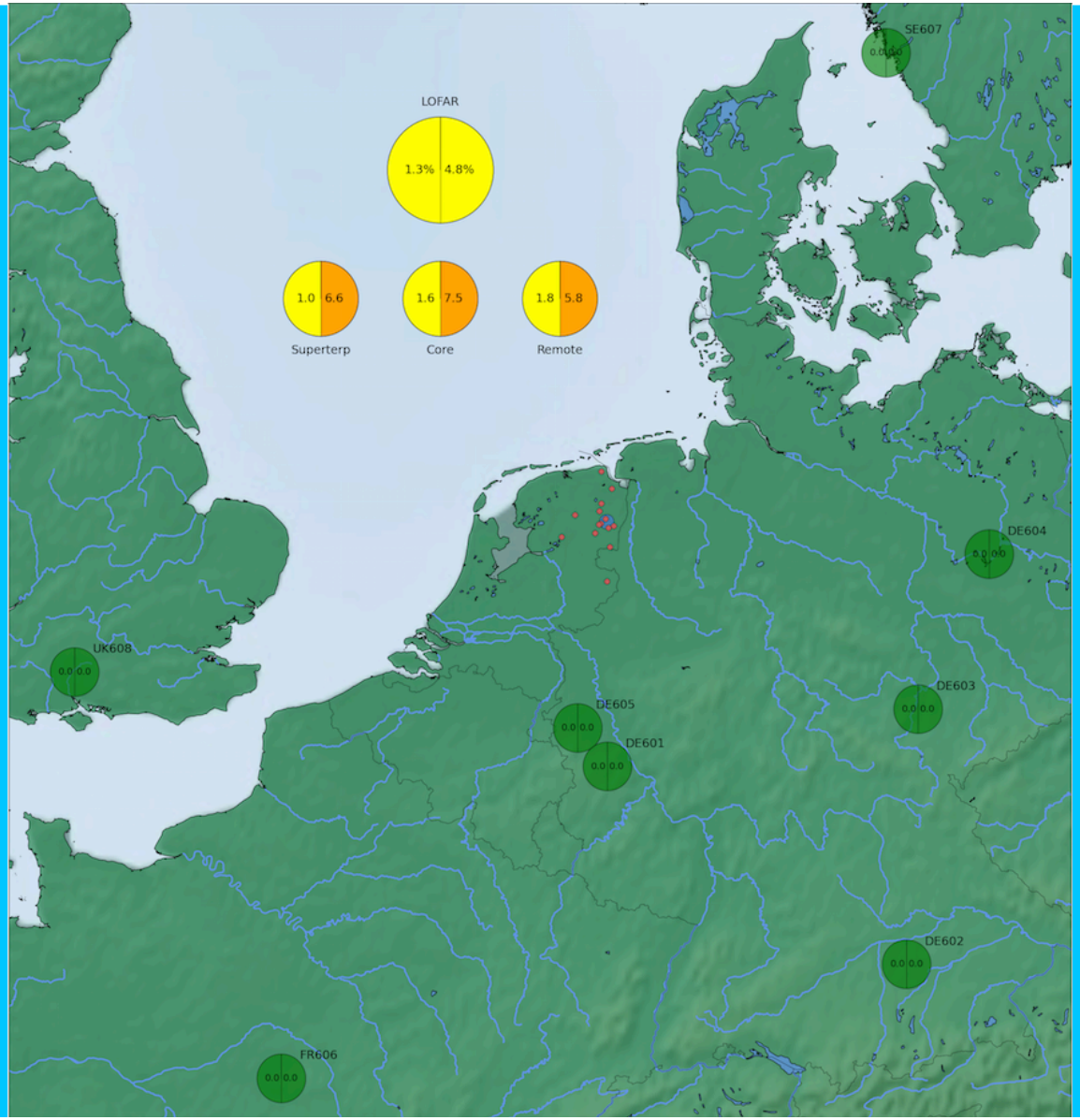
Array Status

- 38 operational NL stations
  - 24 CSs
  - 14 RSs
- 8 Is
- Maintenance/Repair ongoing on several stations
- Connection problems at stations CS013, CS501 solved by Klaas and system support in Groningen
- Stations CS007,CS026,CS103,RS210,RS306 are affected by high temperatures in the cabinets.
- International stations high rate of flagging: testing heavy data transport to Julich vs stations performance.
- DE601: amplitude much higher than others international stations: investigations ongoing.

Overview, including IS

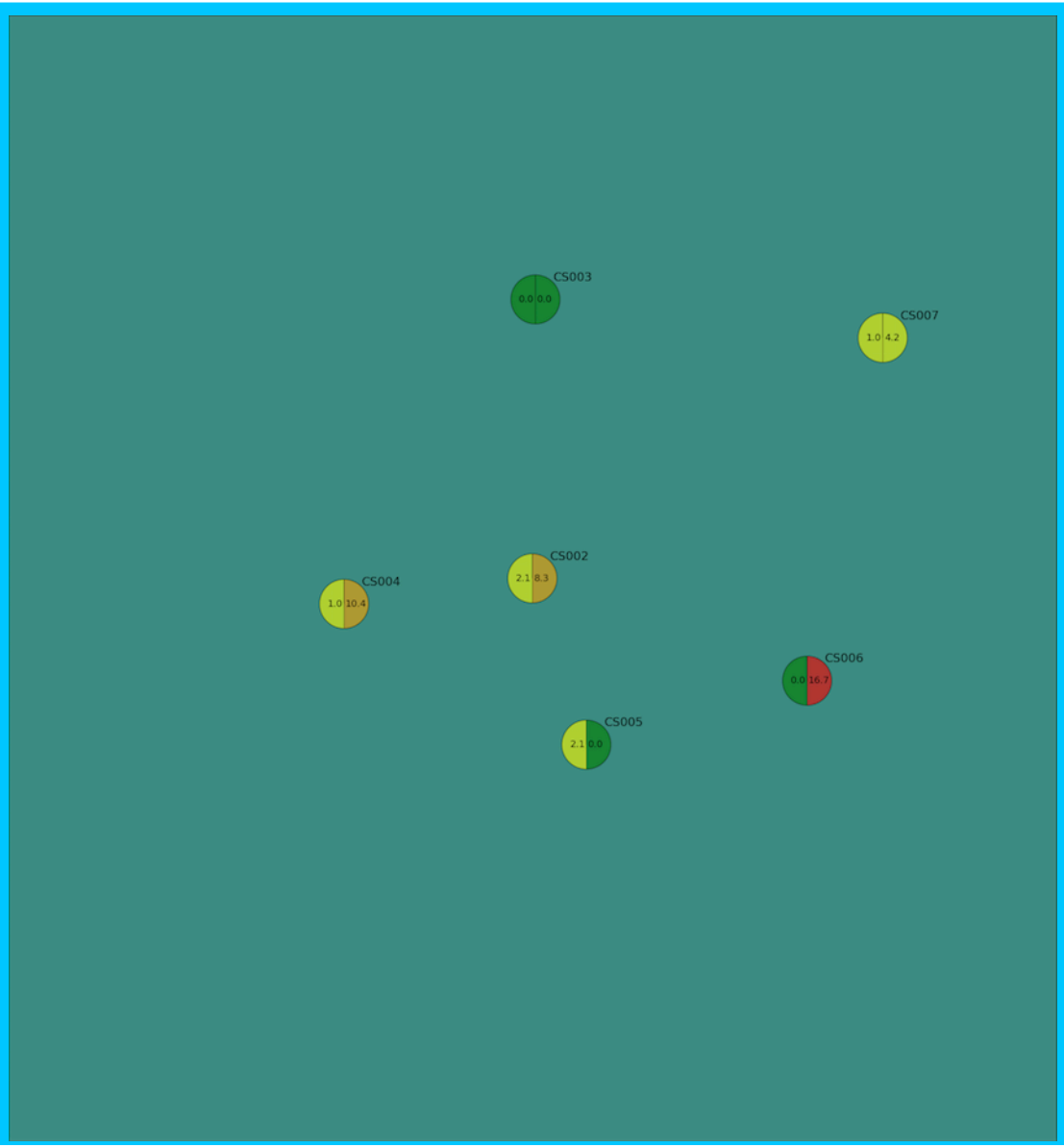
LBA: 1.3%; HBA: 4.8%

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



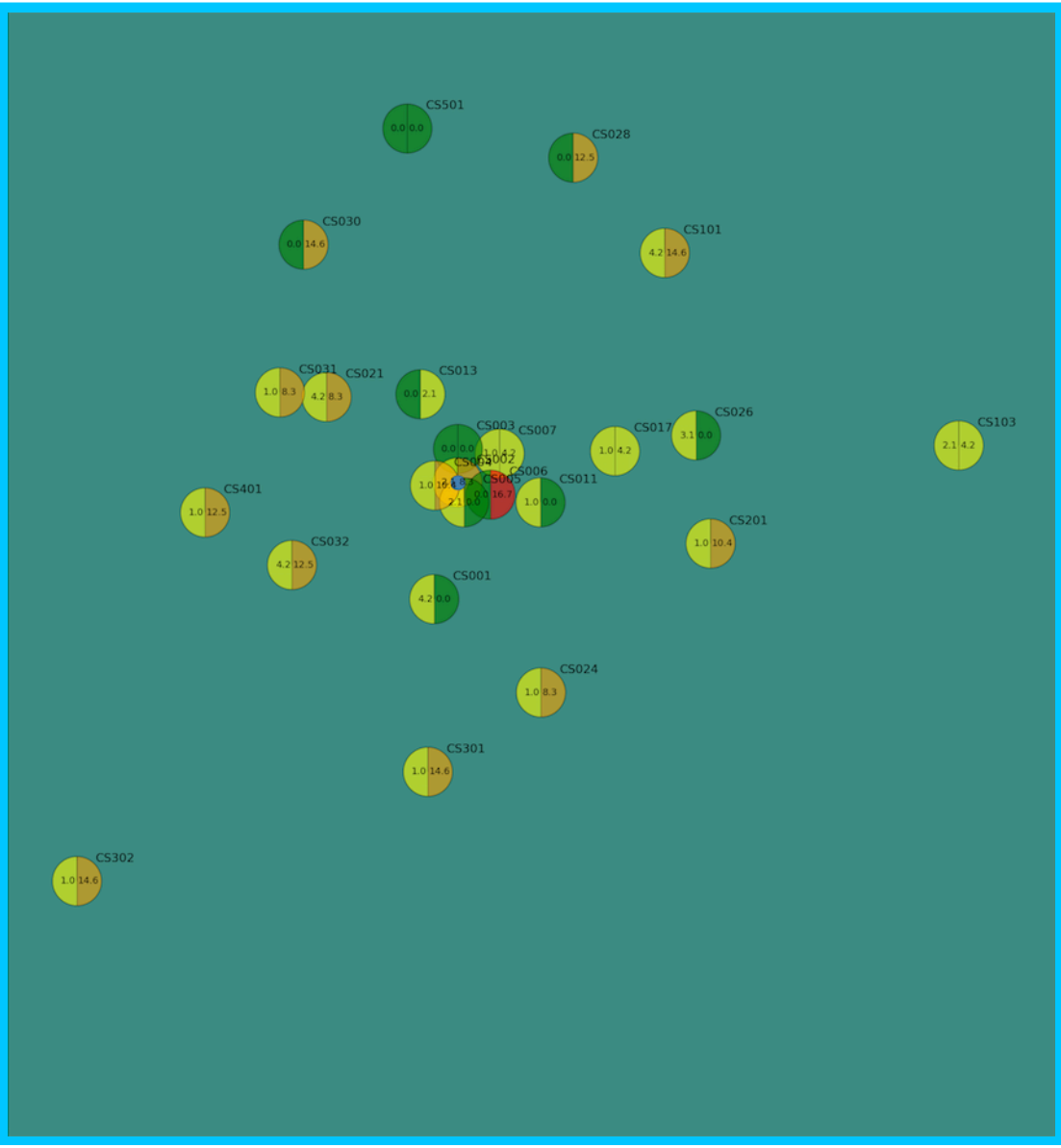
Superterp

LBA: 1.0%; HBA: 6.6%



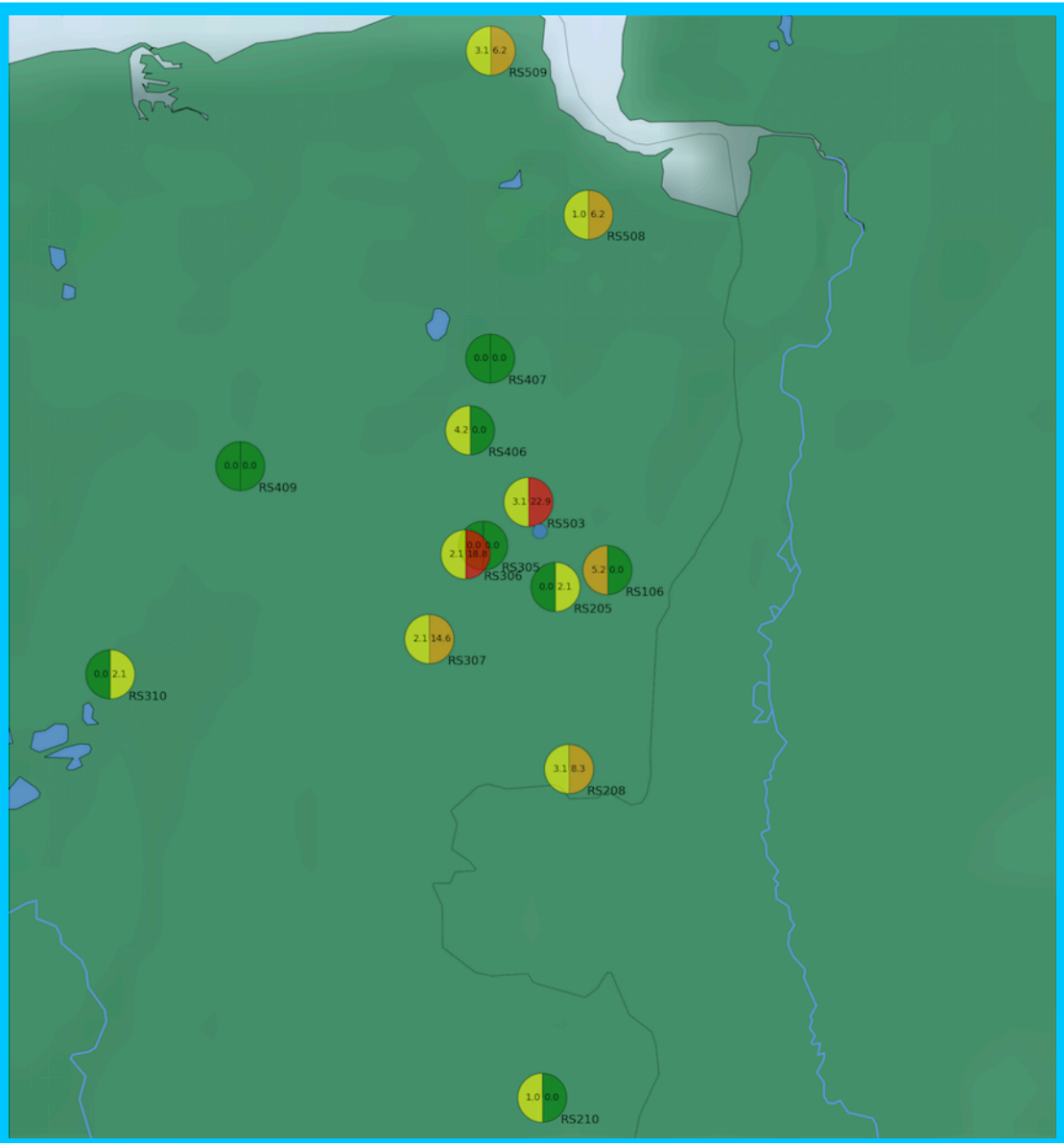
Core Stations

LBA: 1.6%; HBA: 7.5%



Remote Stations

LBA: 1.8%; HBA: 5.8%



News regarding the observing system

- Station calibration:

  Today installation of tables:

  - Mode 7: CS+RS
  - Mode 3: Superterp

  - The rest of mode 3 and 7 tables for the international stations need some manual flagging
  - For further details see *http://www.astron.nl/radio-observatory/astronomers/current-status*

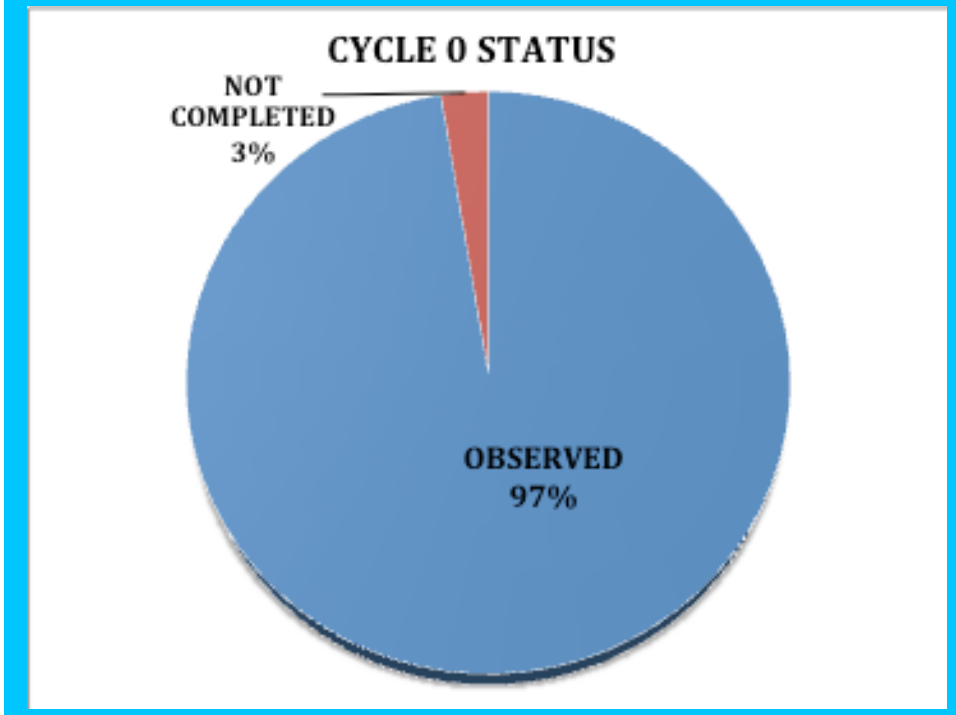
- System performed relatively fine during the last two weeks – COBALT being used for correlator and BF mode successfully
- Issue related to Pulsar gridding observations -> with COBALT all beams point towards the same position in the sky - solved
- FE observations with COBALT ran into problems. Jan David examining the log files

News regarding the observing system

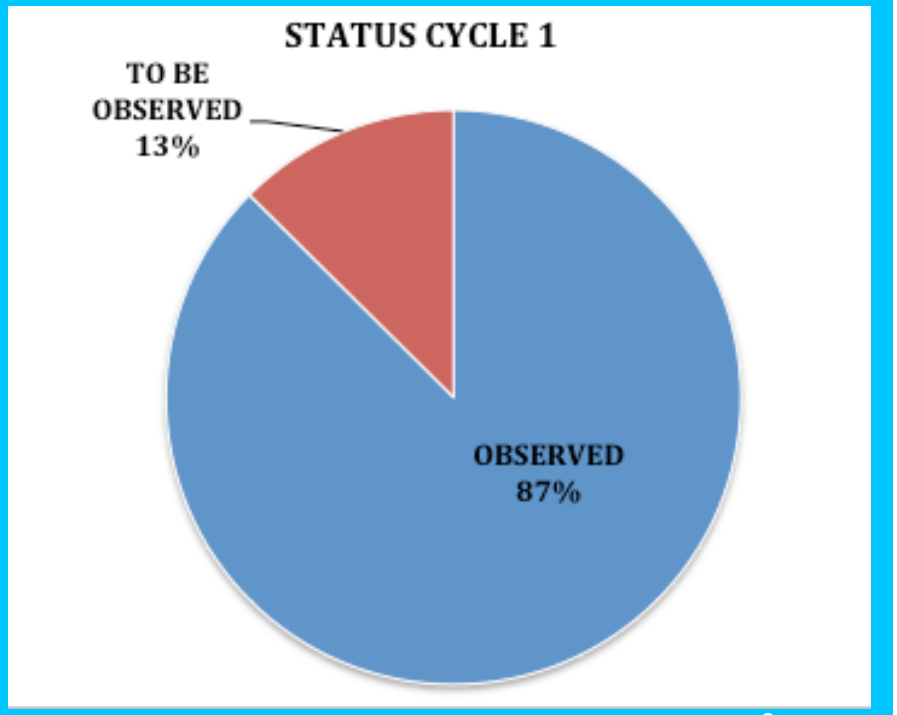
- Observations aborted at the end: the observatory can fix this issue with a script properly adding metadata
- Some observing and processing setups cannot be supported by the current system; e.g. the demixing of 3 A-team sources
- Pipelines: no long processing queue but processing had some delays due to
  - a few failures experienced during the past 2 weeks -> hanging locus nodes – rebooted

News regarding the observing system: Cycle 0/1 Observations

- 37 projects completed – 2320 hours observed *successfully*
- 1 project not finished ➔ will not continue during Cycle 2

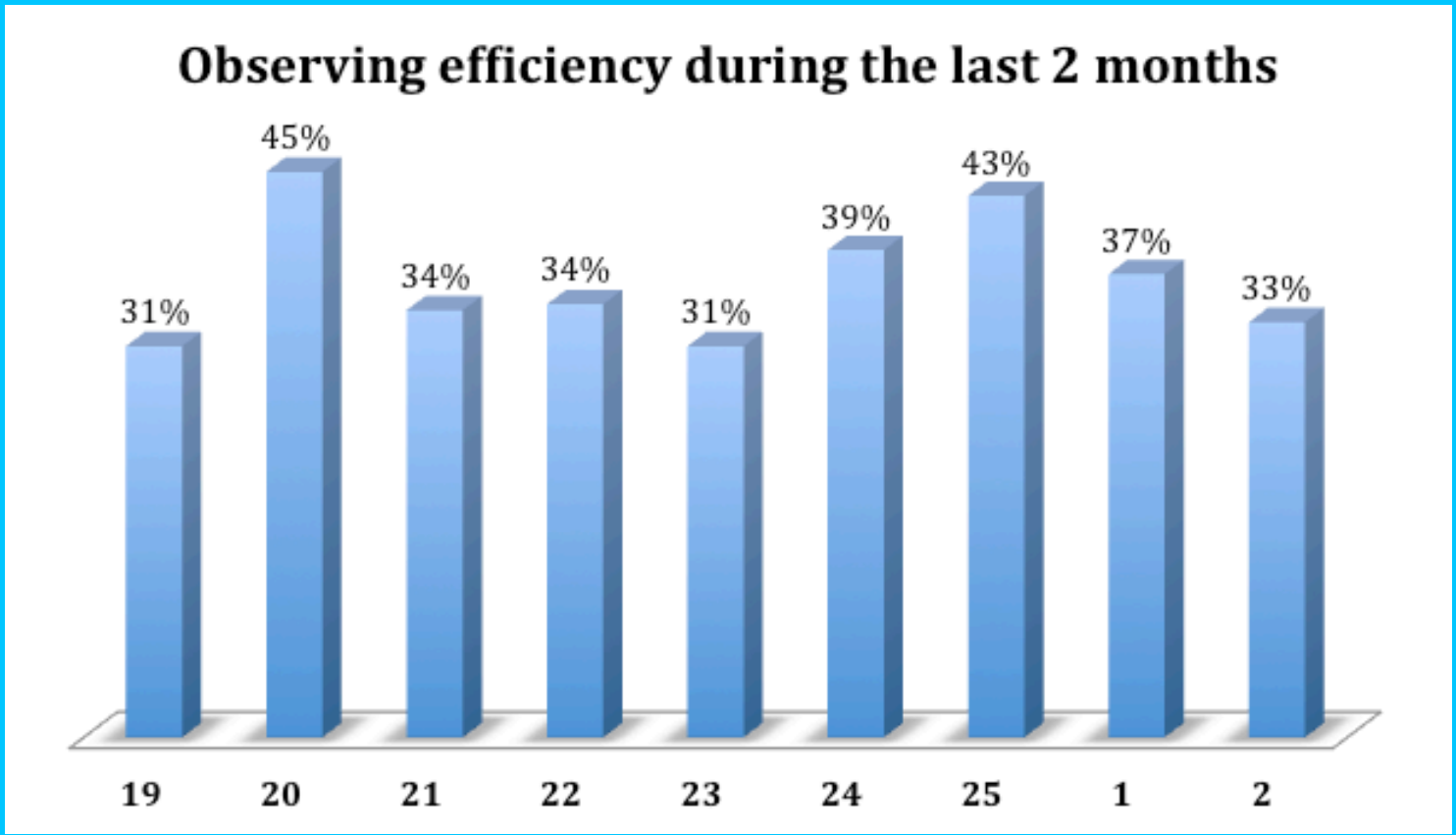


- 35 projects completed – 1400 hours observed *successfully*
- Some projects not finished ➔ will continue during Cycle 2

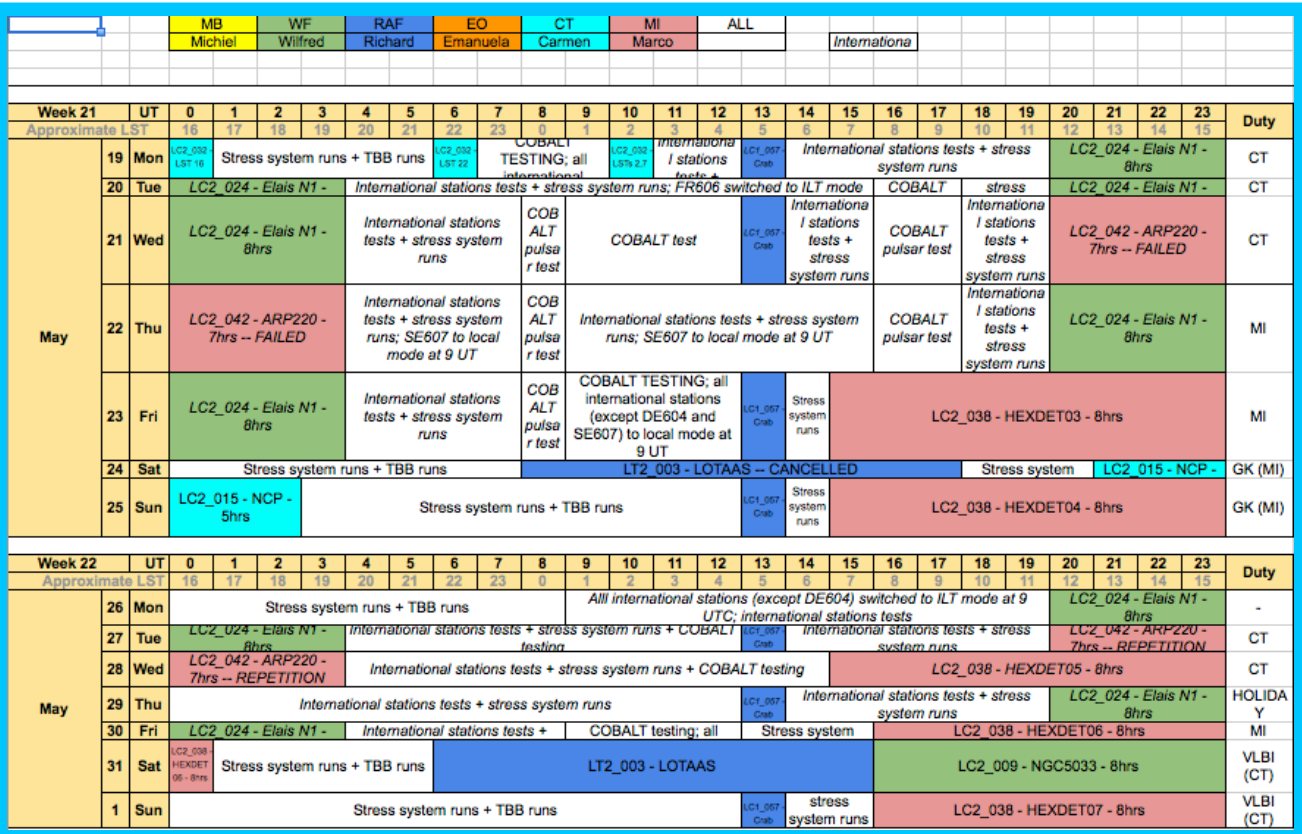


News regarding the observing system: Cycle 2 Observations

- 45 projects accepted – Observing -> 1612 h – Processing -> 1702 h
- Minor observing failures ➔ 7-8% observed over past 2 weeks
- MSSS HBA completed!



News regarding Cycle2 observations



	MB	WF	RAF	EO	CT	MI	ALL
	Michiel	Wilfred	Richard	Emanuela	Carmen	Marco	

Internationa

Week 21		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	Duty
Approximate LST			16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
May	19	Mon	LC2_032 LST 16	Stress system runs + TBB runs					LC2_032 LST 22	COBALT TESTING; all international			LC2_032 LSTs 2,7	International stations tests +		LC1_057 Crab	International stations tests + stress system runs						LC2_024 - Elais N1 - 8hrs				CT
	20	Tue	LC2_024 - Elais N1 -				International stations tests + stress system runs; FR606 switched to ILT mode												COBALT		stress		LC2_024 - Elais N1 -				CT
	21	Wed	LC2_024 - Elais N1 - 8hrs				International stations tests + stress system runs				COB ALT pulsa r test		COBALT test			LC1_057 Crab	International stations tests + stress system runs		COBALT pulsar test		International stations tests + stress system runs		LC2_042 - ARP220 - 7hrs -- FAILED				CT
	22	Thu	LC2_042 - ARP220 - 7hrs -- FAILED				International stations tests + stress system runs; SE607 to local mode at 9 UT				COB ALT pulsa r test		International stations tests + stress system runs; SE607 to local mode at 9 UT						COBALT pulsar test		International stations tests + stress system runs		LC2_024 - Elais N1 - 8hrs				MI
	23	Fri	LC2_024 - Elais N1 - 8hrs				International stations tests + stress system runs				COB ALT pulsa r test		COBALT TESTING; all international stations (except DE604 and SE607) to local mode at 9 UT			LC1_057 Crab	Stress system runs	LC2_038 - HEXDET03 - 8hrs								MI
	24	Sat	Stress system runs + TBB runs								LT2_003 - LOTAAS -- CANCELLED										Stress system		LC2_015 - NCP -				GK (MI)
	25	Sun	LC2_015 - NCP - 5hrs				Stress system runs + TBB runs									LC1_057 Crab	Stress system runs	LC2_038 - HEXDET04 - 8hrs									GK (MI)

Week 22		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	Duty
Approximate LST			16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
May	26	Mon	Stress system runs + TBB runs									All international stations (except DE604) switched to ILT mode at 9 UTC; international stations tests											LC2_024 - Elais N1 - 8hrs				-
	27	Tue	LC2_024 - Elais N1 - 8hrs				International stations tests + stress system runs + COBALT testing									LC1_057 Crab	International stations tests + stress system runs						LC2_042 - ARP220 - 7hrs -- REPETITION				CT
	28	Wed	LC2_042 - ARP220 - 7hrs -- REPETITION				International stations tests + stress system runs + COBALT testing										LC2_038 - HEXDET05 - 8hrs										CT
	29	Thu	International stations tests + stress system runs													LC1_057 Crab	International stations tests + stress system runs						LC2_024 - Elais N1 - 8hrs				HOLIDAY
	30	Fri	LC2_024 - Elais N1 -				International stations tests +						COBALT testing; all			Stress system			LC2_038 - HEXDET06 - 8hrs								MI
	31	Sat	LC2_038 - HEXDET 06 - 8hrs	Stress system runs + TBB runs					LT2_003 - LOTAAS										LC2_009 - NGC5033 - 8hrs								VLBI (CT)
	1	Sun	Stress system runs + TBB runs													LC1_057 Crab	stress system runs		LC2_038 - HEXDET07 - 8hrs								VLBI (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**

News regarding the observing system : Archive

- Smooth operations with some delays with the ingest of data because of tests ongoing to check the impact of data transfer on the international stations

CEP news:

- CEP2
  - Several locus nodes hanging
- CEP-3
  - Delays in the commissioning of the new cluster. Current timeline: cluster installed in early June; CEP3 available to users at the end of June/beginning of July. More info at the next LSM.
- 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-processin*

CALENDAR LOFAR activities

- Next LSM : 11 June 2014
- Next Stop day : 3 June 2014
- Cycle 3 proposal call : July 2014
- Cycle 3 proposal submission deadline : Wednesday 10 September, **12 UT**