ASTRON

Netherlands Institute for Radio Astronomy

Programme:

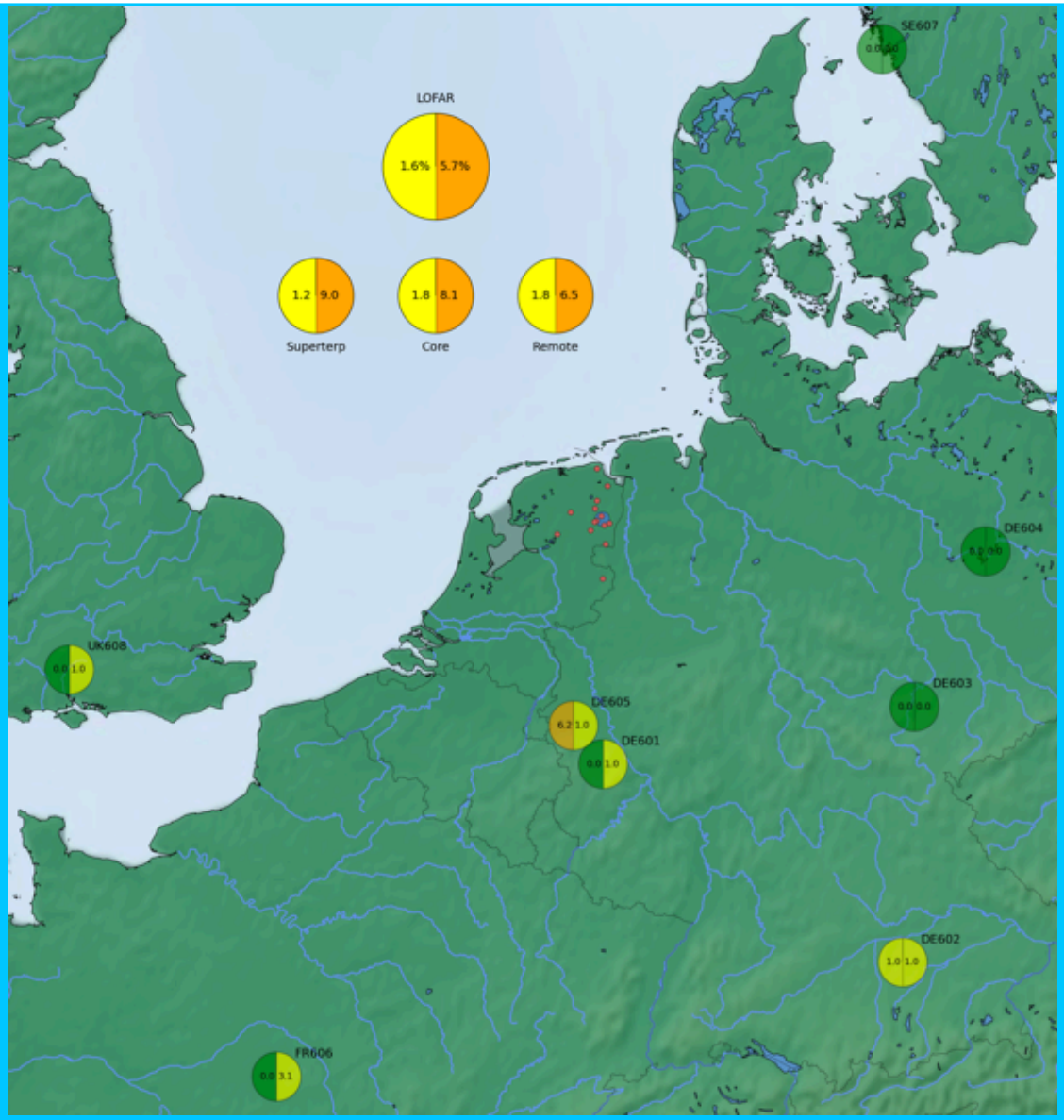
1. *Array status & Observatory update – R. Pizzo*
2. *COBALT update – H. Holties*
3. *LTA status- A. Renting*
4. *Results and plans of the Calibration and Imaging Tiger Team – T. J. Dijkema*

Array Status

- 38 operational NL stations
  - 24 CSs
  - 14 RSs
- 8 Is
- RS503 was found unexpectedly without power. No problems found after startup station
- CS201 TDS board replaced with 200MHz-PLL lock problem
- Maintenance/Repair started 1 April (started on worse stations CS002, CS006 and CS501)
- Maintenance visit DE603 and DE604. Only minor HBA repairs (a few elements). The status of the station is very good
- 160<->200 MHz mode switching under test

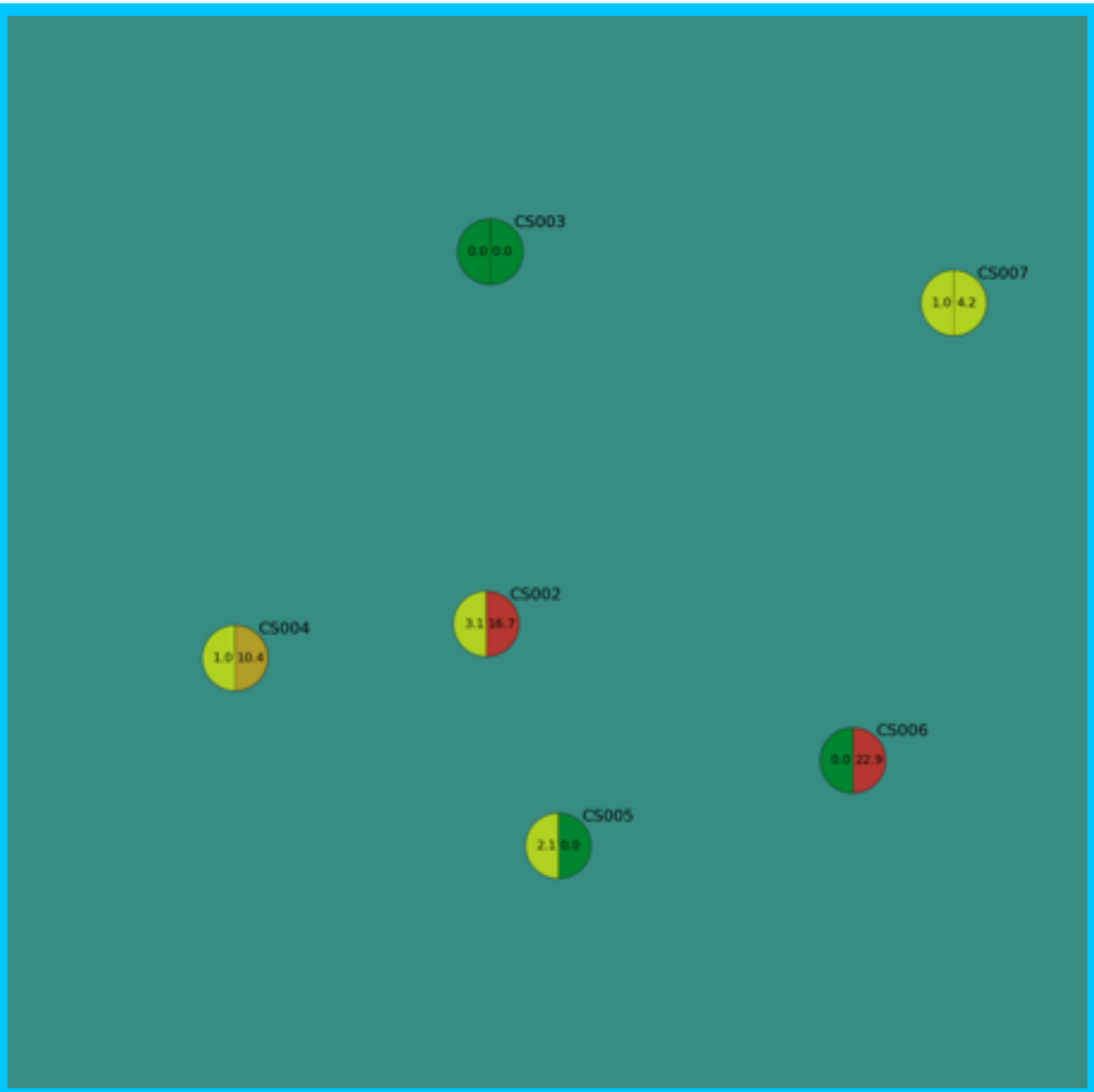
Overview, including IS

LBA: 1.6%; HBA: 5.7%



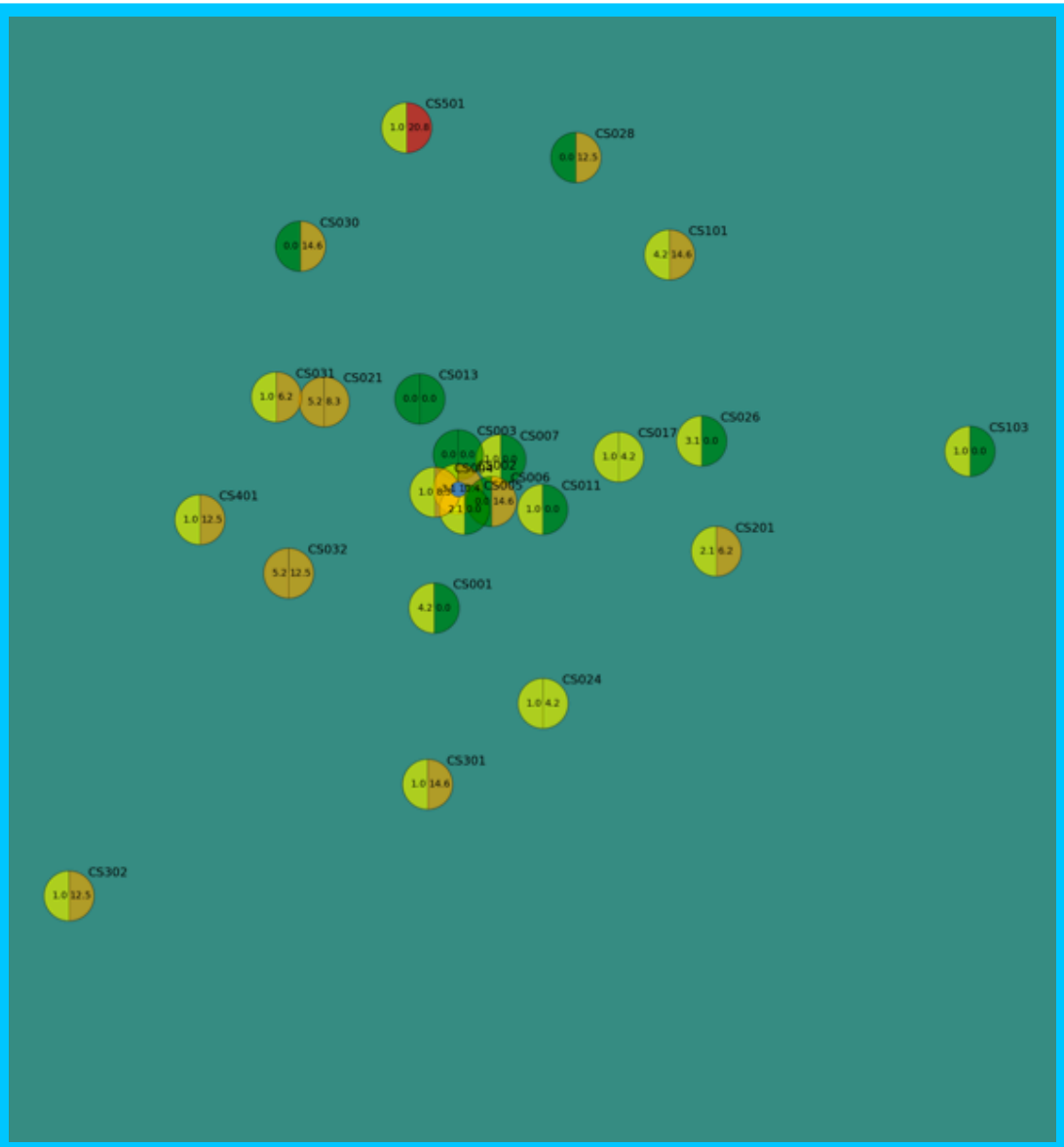
Superterp

LBA: 1.2%; HBA: 9.0%



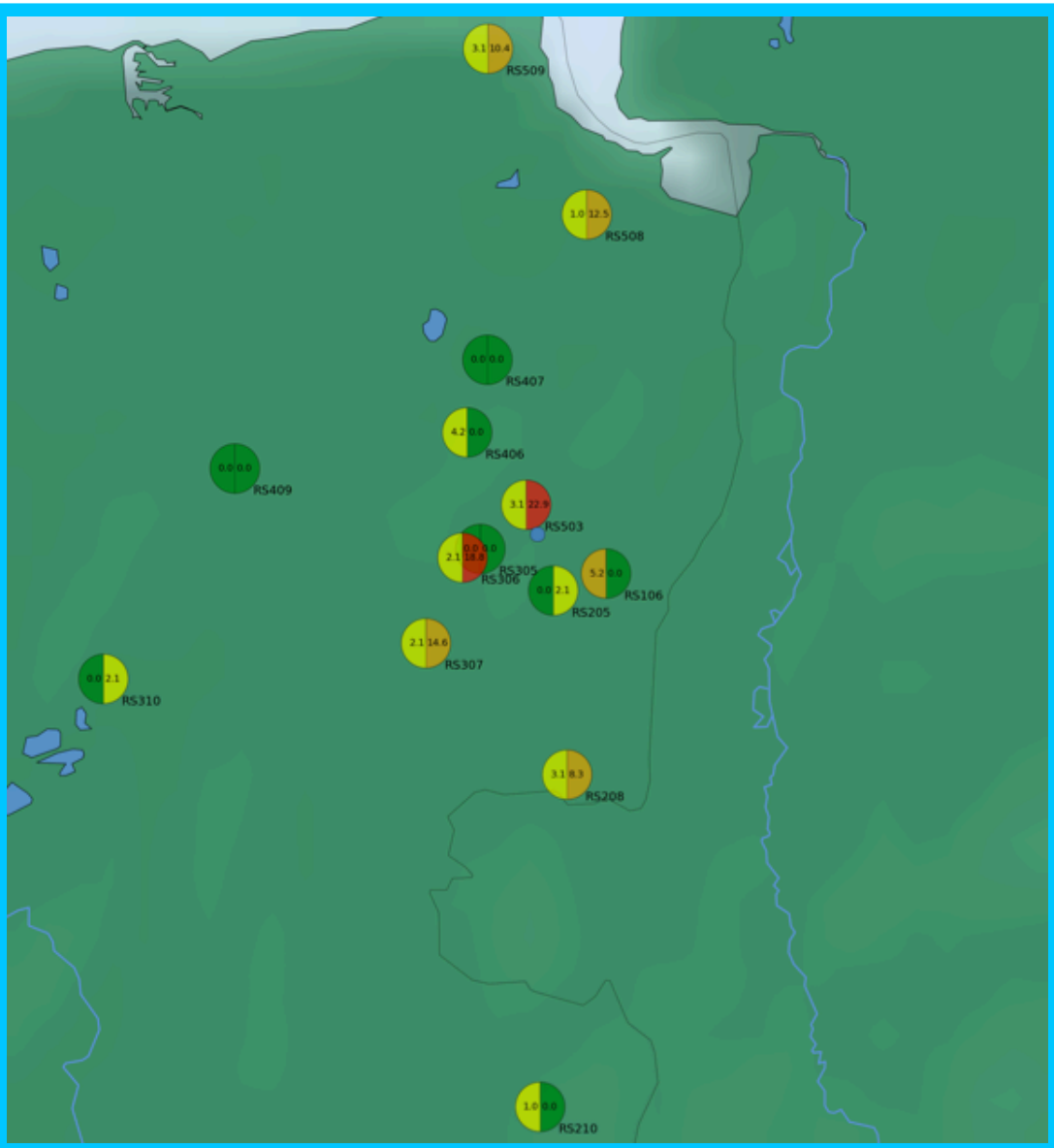
Core Stations

LBA: 1.8%; HBA: 8.1%



Remote Stations

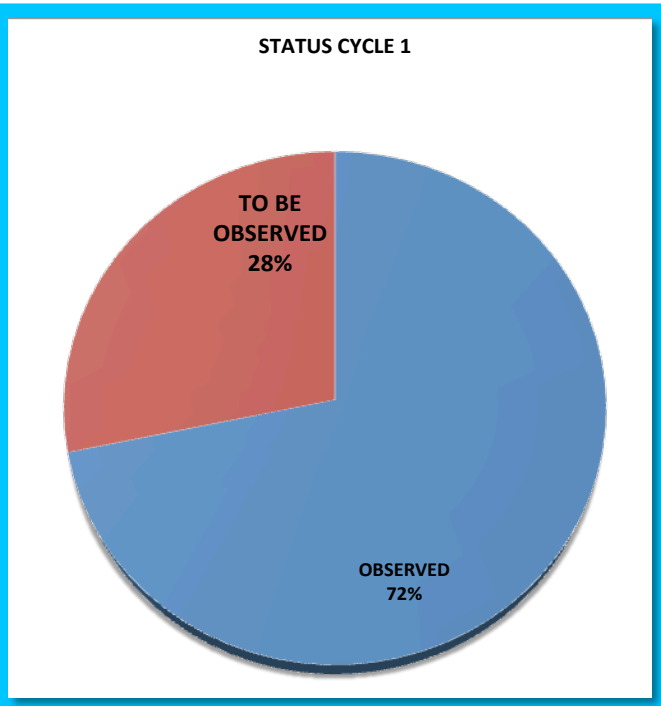
LBA: 1.8%; HBA: 6.5%



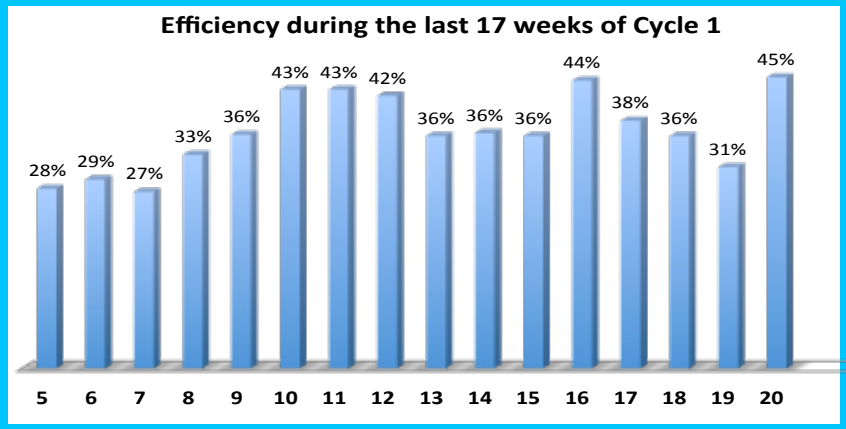
News regarding the observing system: Stability & performance

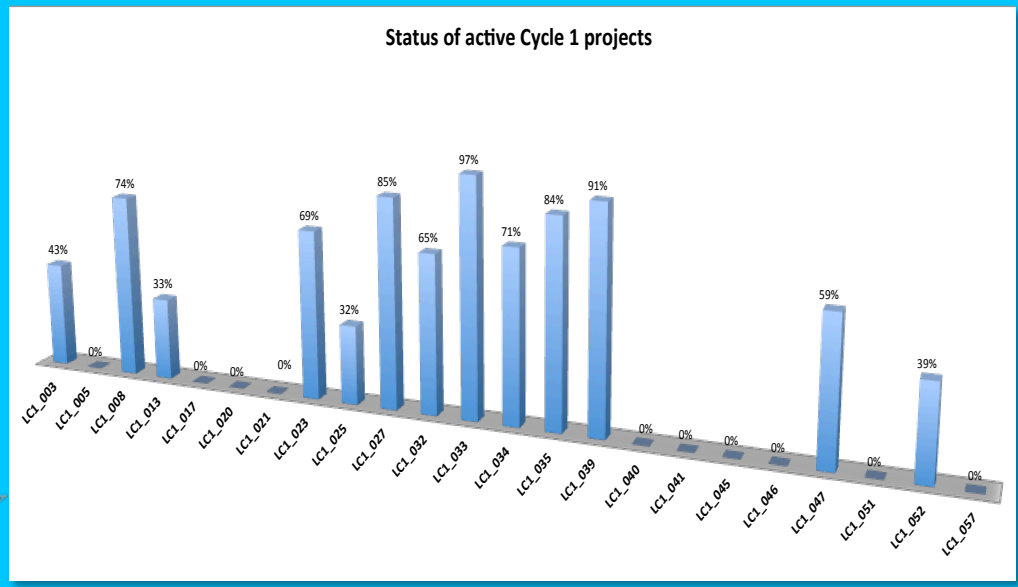
- Intermittent oscillating HBA tiles more under control thanks to test FE observations during and in between production runs – work in progress
- Interferometric observations performed fine (till Monday this week) – COBALT adopted in this case, on a best effort basis -> manual action needed to switch between BG/P and COBALT
- BG/P still available, but without a service contract
- Recurrent issues with ILT runs involving international stations – Installed latest flash image version on all switches. Verification in progress
- Roll out software version 2.2 -> issues in production have been experienced. *Investigations in progress*
- Pipelines:
  - a few failures experienced during the past 3 weeks -> hanging locus node – rebooted
  - swapping on a few CEP2 nodes due to processes running longer than expected

News regarding the observing system: Cycle Observations



- 19 projects completed – 1150 hours observed successfully
- ~ 330 hours scheduled for completion by 14 May
- LC1_039, 052, 020, 051 will not finish ➔ will continue during Cycle 2

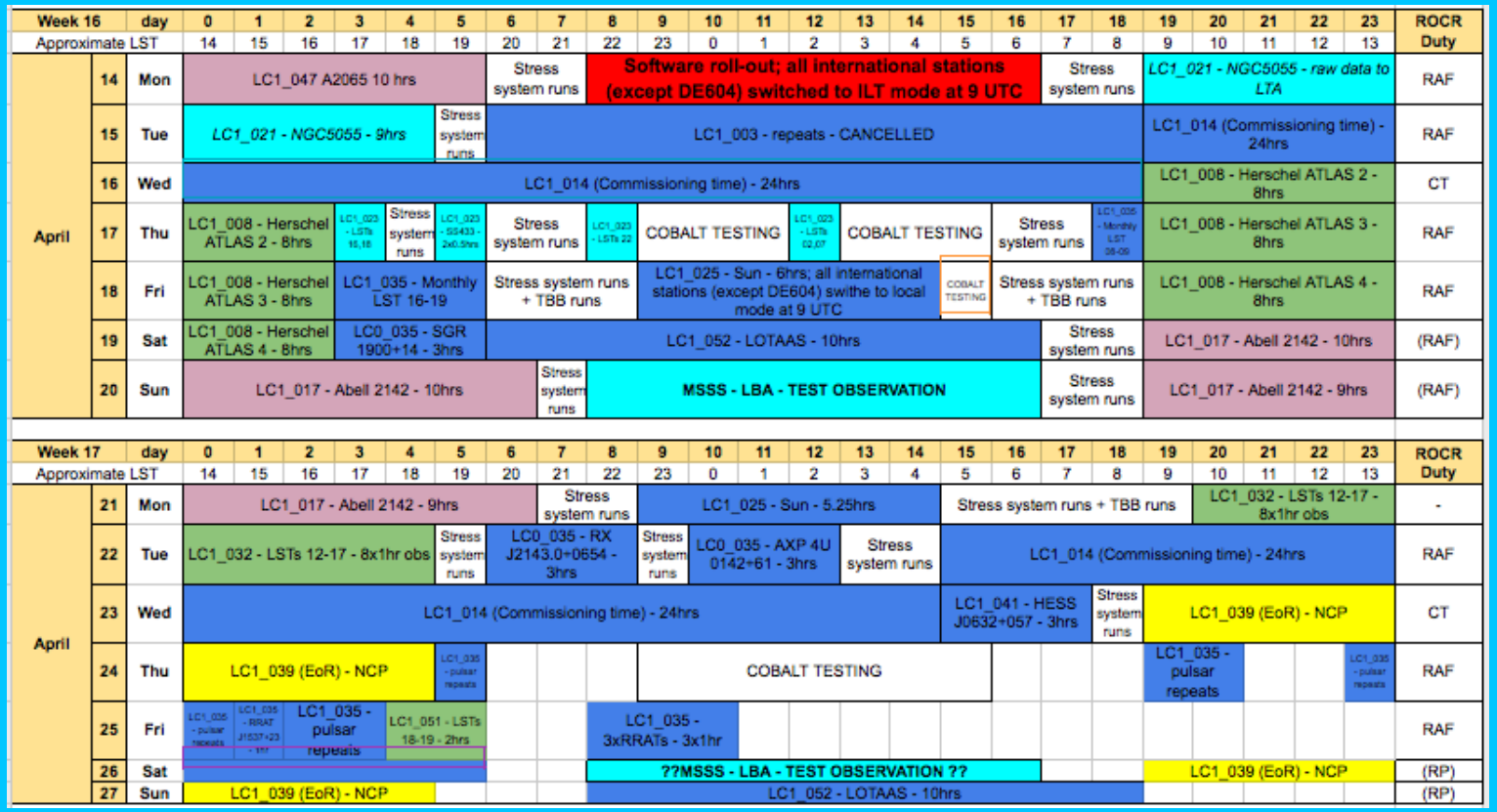




News regarding the observing system : Archive

- Issues with download server at Juelich (etc…) affecting users trying to retrieve data
- Issues with a few ingests initiated during the last few weeks – manual action was needed to fix the problems – in progress
- More in Adriaan’s talk

News regarding Cycle 1 observations



Week 16		day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	ROCR Duty
Approximate LST			14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
April	14	Mon	LC1_047 A2065 10 hrs						Stress system runs		Software roll-out; all international stations (except DE604) switched to ILT mode at 9 UTC									Stress system runs		LC1_021 - NGC5055 - raw data to LTA						RAF
	15	Tue	LC1_021 - NGC5055 - 9hrs					Stress system runs	LC1_003 - repeats - CANCELLED													LC1_014 (Commissioning time) - 24hrs					RAF
	16	Wed	LC1_014 (Commissioning time) - 24hrs																			LC1_008 - Herschel ATLAS 2 - 8hrs					CT
	17	Thu	LC1_008 - Herschel ATLAS 2 - 8hrs	LC1_023 - LSTs 16,18		Stress system runs	LC1_023 - SS433 - 2x0.5hrs		Stress system runs	LC1_023 - LSTs 22	COBALT TESTING				LC1_023 - LSTs 02,07	COBALT TESTING			Stress system runs	LC1_035 - Monthly LST 08-09		LC1_008 - Herschel ATLAS 3 - 8hrs					RAF
	18	Fri	LC1_008 - Herschel ATLAS 3 - 8hrs			LC1_035 - Monthly LST 16-19			Stress system runs + TBB runs			LC1_025 - Sun - 6hrs; all international stations (except DE604) swithe to local mode at 9 UTC						COBALT TESTING	Stress system runs + TBB runs			LC1_008 - Herschel ATLAS 4 - 8hrs				RAF
	19	Sat	LC1_008 - Herschel ATLAS 4 - 8hrs			LC0_035 - SGR 1900+14 - 3hrs			LC1_052 - LOTAAS - 10hrs											Stress system runs		LC1_017 - Abell 2142 - 10hrs				(RAF)
	20	Sun	LC1_017 - Abell 2142 - 10hrs							Stress system runs	MSSS - LBA - TEST OBSERVATION									Stress system runs		LC1_017 - Abell 2142 - 9hrs				(RAF)

Week 17		day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	ROCR Duty
Approximate LST			14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
April	21	Mon	LC1_017 - Abell 2142 - 9hrs							Stress system runs		LC1_025 - Sun - 5.25hrs						Stress system runs + TBB runs					LC1_032 - LSTs 12-17 - 8x1hr obs				-
	22	Tue	LC1_032 - LSTs 12-17 - 8x1hr obs					Stress system runs	LC0_035 - RX J2143.0+0654 - 3hrs		Stress system runs	LC0_035 - AXP 4U 0142+61 - 3hrs			Stress system runs			LC1_014 (Commissioning time) - 24hrs									RAF
	23	Wed	LC1_014 (Commissioning time) - 24hrs															LC1_041 - HESS J0632+057 - 3hrs		Stress system runs	LC1_039 (EoR) - NCP							CT
	24	Thu	LC1_039 (EoR) - NCP					LC1_035 - pulsar repeats				COBALT TESTING										LC1_035 - pulsar repeats				LC1_035 - pulsar repeats	RAF
	25	Fri	LC1_035 - pulsar repeats	LC1_035 - RRAT J1537+23		LC1_035 - pulsar repeats		LC1_051 - LSTs 18-19 - 2hrs			LC1_035 - 3xRRATs - 3x1hr																RAF
	26	Sat									??MSSS - LBA - TEST OBSERVATION ??											LC1_039 (EoR) - NCP					(RP)
	27	Sun	LC1_039 (EoR) - NCP																			LC1_052 - LOTAAS - 10hrs					(RP)

- Detailed Cycle 1 schedule available here:
  - https://docs.google.com/spreadsheet/ccc?key=0AtnmDczhIbEtdGQ4enZicHpGREpGYm1Pc2JrQWlZWmc&usp=sharing#gid=0
- Contact Science Support in case of questions/issues
- **Always cc 'sciencesupport@astron.nl' and include the proposal code in the subject line**

CEP news:

- CEP2
  - Locus012,030,038,052,073,093,099 -> minor issues
- CEP-3
  - Delays in the commissioning of the new cluster due to failing hardware components and developments w.r.t the scheduler that will be part of the access system – expected delivery middle of May, first for Beta testers
  - 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*

NEW SUPPORT SCIENTIST & NEW OPERATOR:

Marco Iacobelli
Support Scientist

Richard Blaauw
Operator

CALENDAR LOFAR activities

- Next LSM : 30 April 2014
- LOFAR Cycle 2 PC meeting : 29 – 30 April 2014
- Next Stop day : 6 May 2014
- Start Cycle 2 : 15 May 2014
- Cycle 3 proposal call : July 2014
- Cycle 3 proposal submission deadline : Early September 2014