

Programme:

- 1. Array status & Observatory update – R. Pizzo*
- 2. COBALT update – H. Holties*
- 3. LTA status- H. Holties*
- 4. Millisecond Pulsar Spectral Analysis: a First Result - D. Stinebring*

Array Status

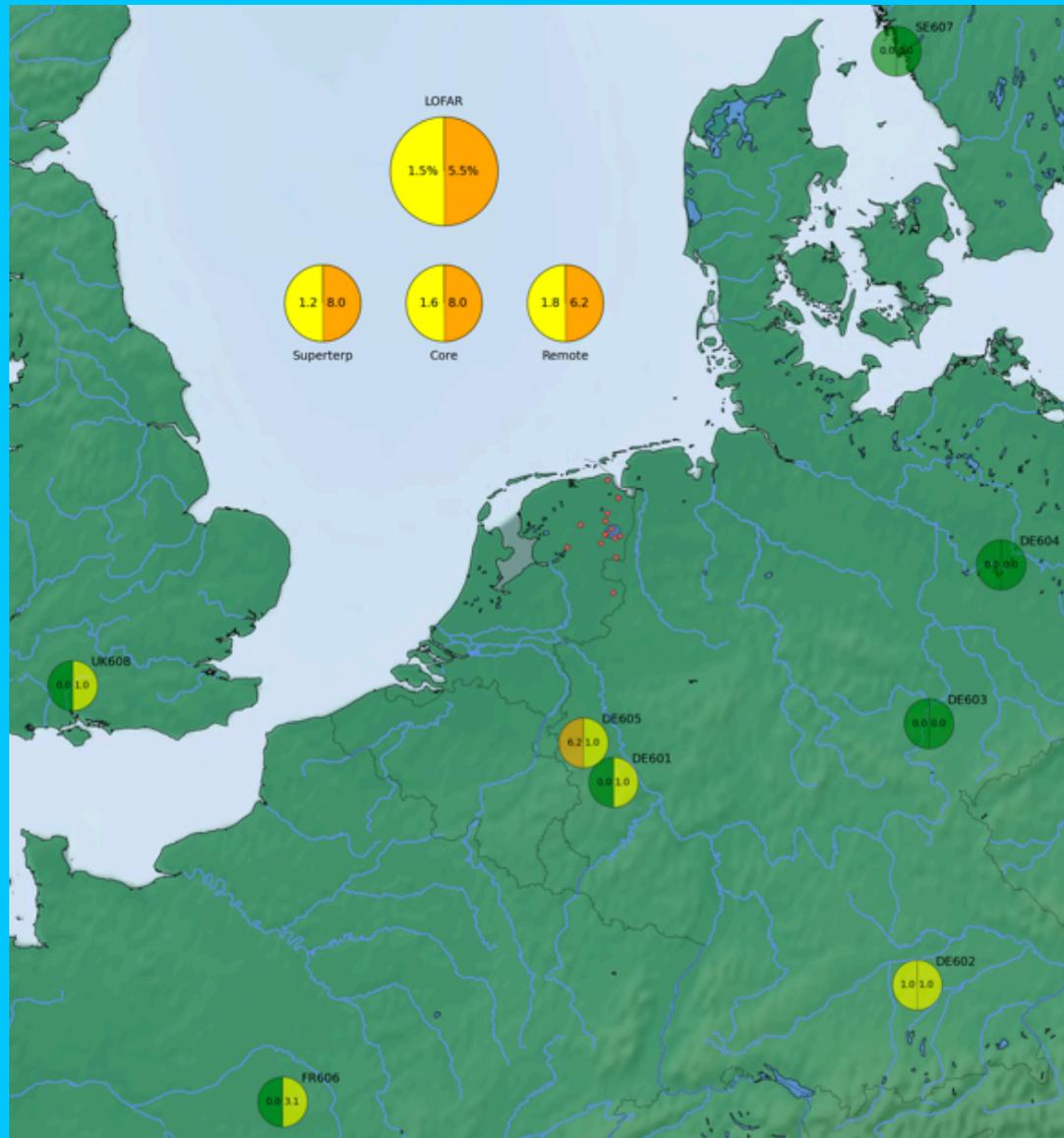


- 38 operational NL stations
 - 24 CSs
 - 14 RSs
- 8 Is
- Payload errors at some stations. CS103 solved. CS006: LCU needs to be replaced today
- CS302 broken SPU1 board - replaced
- Mowing at CS has started – but fields are very wet
- HBA Maintenance/Repair ongoing on several stations
- UK608 remote maintenance successful. Two oscillating tiles and one element with communication problems repaired (A. Doo). TDS boards
- FR606: replacement TDS boards; remote maintenance later

Overview, including IS

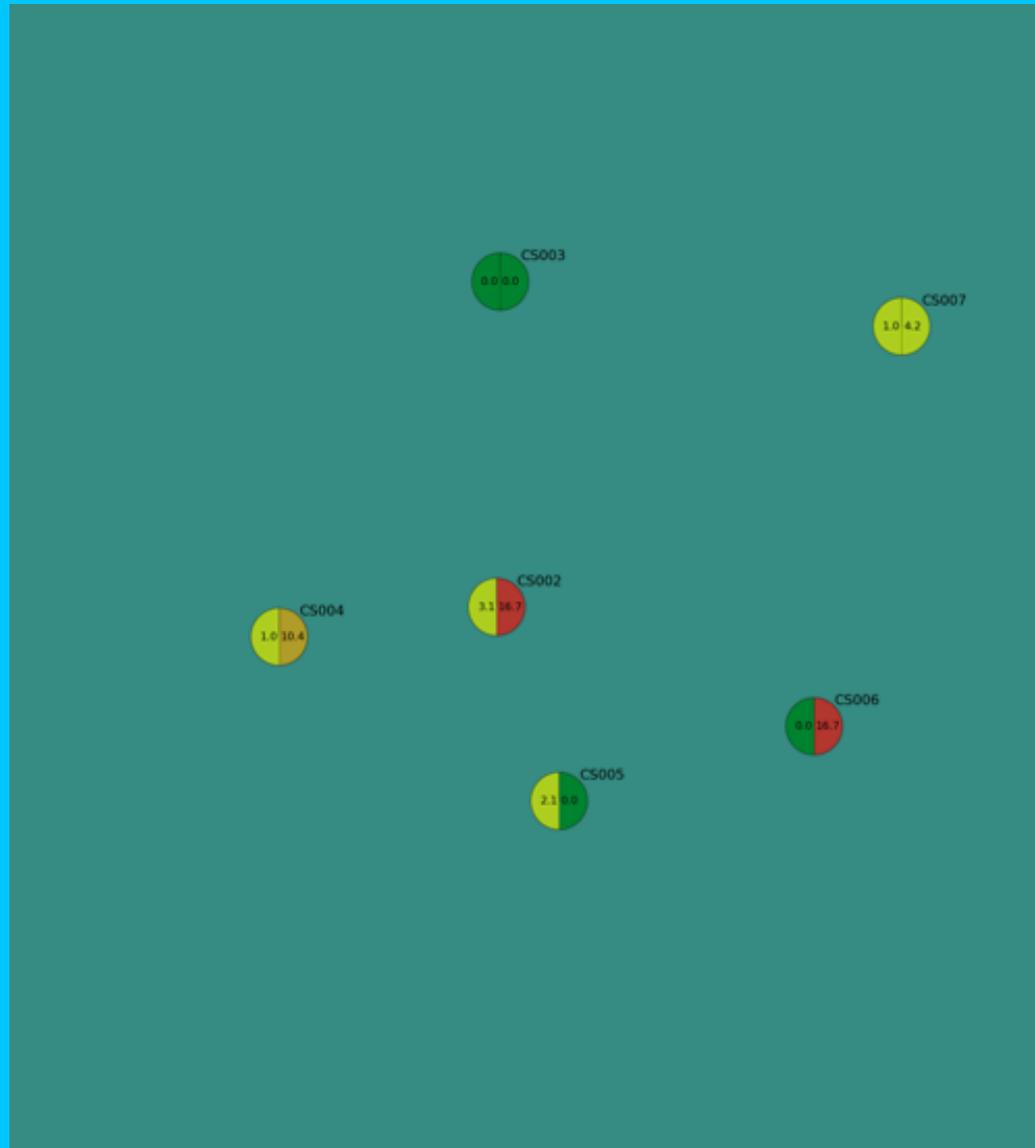
LBA: 1.5%; HBA: 5.5%

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



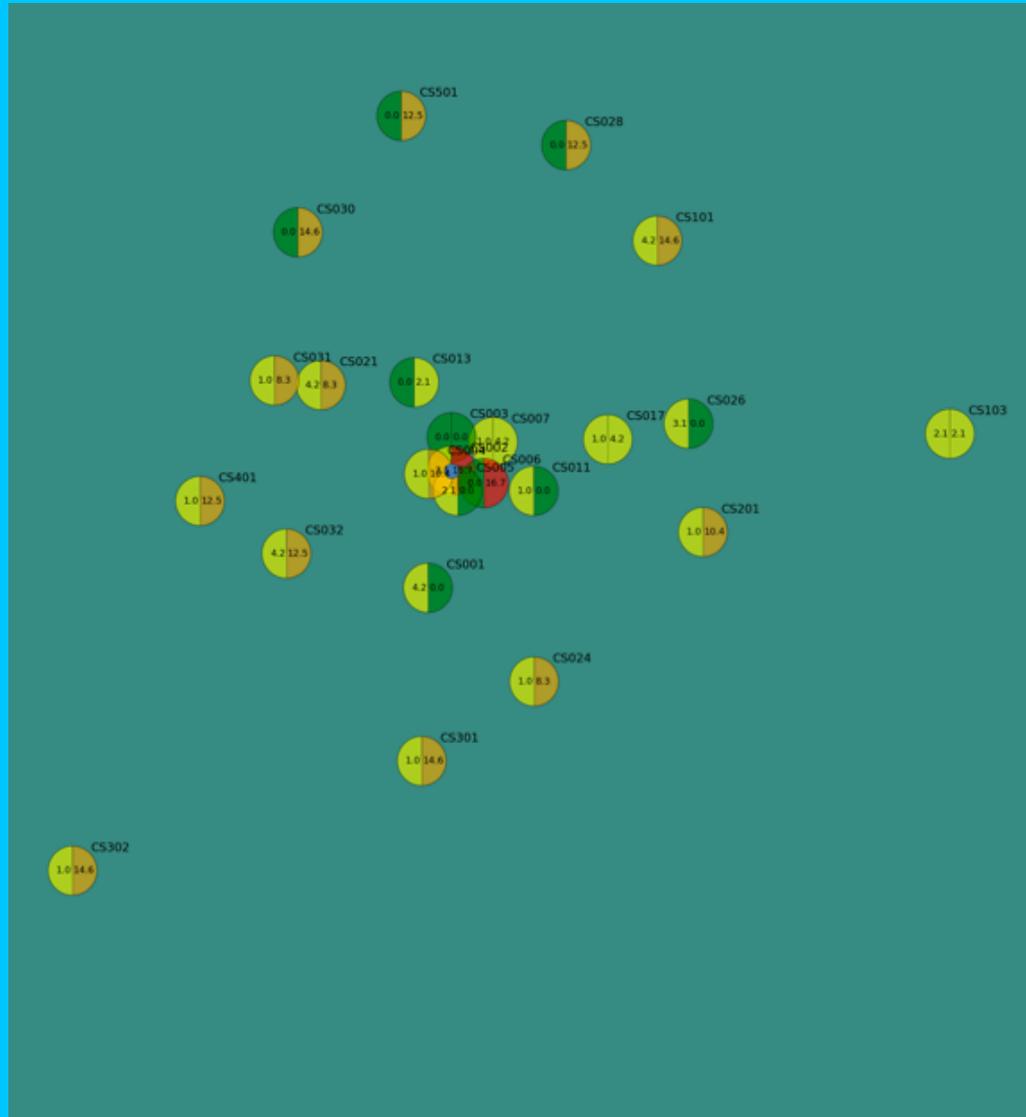
Superterp

LBA: 1.2%; HBA: 8.0%



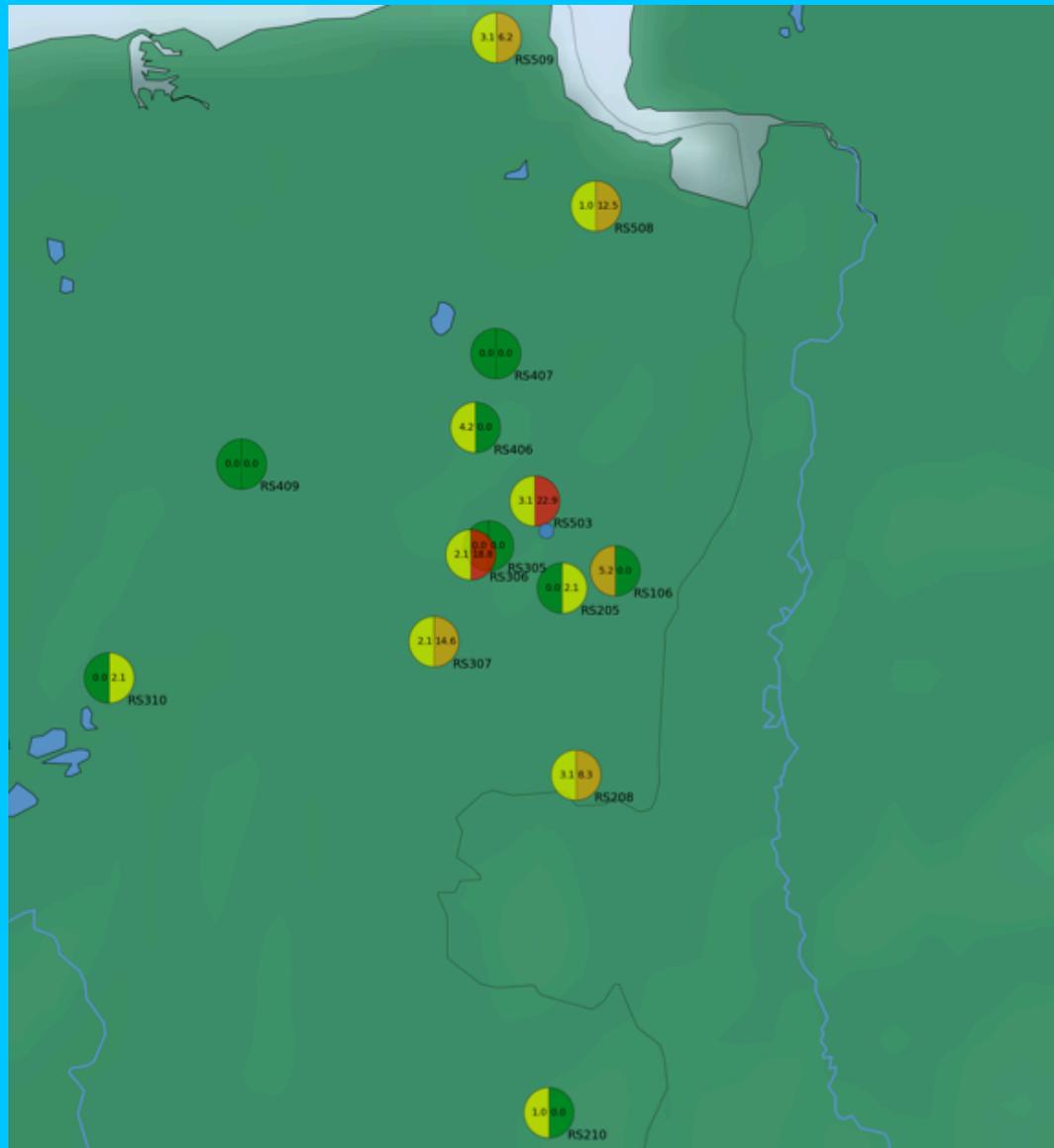
Core Stations

LBA: 1.6%; HBA: 8.0%



Remote Stations

LBA: 1.8%; HBA: 6.2%



News regarding the observing system



- Station calibration:
 - today installation of
 - 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
- Only remaining issue is related to Pulsar gridding observations -> with COBALT all beams point towards the same position in the sky - fix will be rolled out asap.
- Recently discovered a bug affecting the broken element information that is used when recording data for the *LBA inner* configuration – some of the elements were mistakenly turned on. Few affected users have been notified. Fix in progress.

News regarding the observing system

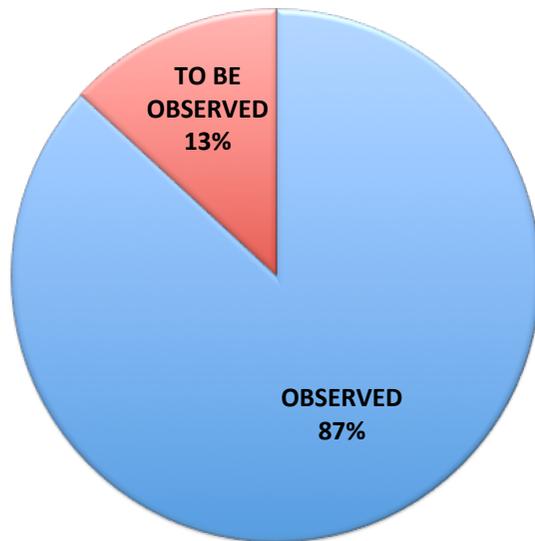


- Issues with ILT runs involving international stations – tiger team activities started this week. Action: ping from COBALT to international stations solved double IP addresses. *Good performance during the last 2 nights*
- Roll out software version 2.3 -> Performance of the system is nominal
- Pipelines:
 - a few failures experienced during the past 2 weeks -> hanging locus nodes – rebooted
 - swapping on a few CEP2 nodes due to processes running longer than expected

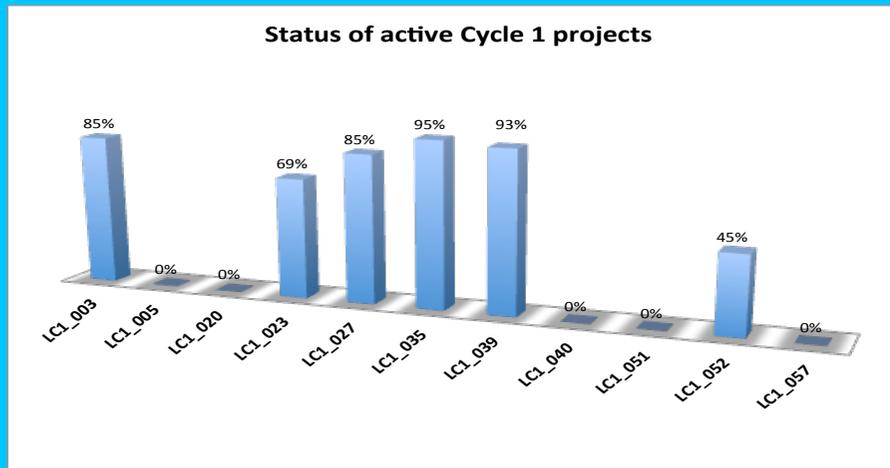
News regarding the observing system: Cycle Observations

- 35 projects completed – 1400 hours observed *successfully*
- Some projects will not finish → will continue during Cycle 2
- MSSS HBA completed

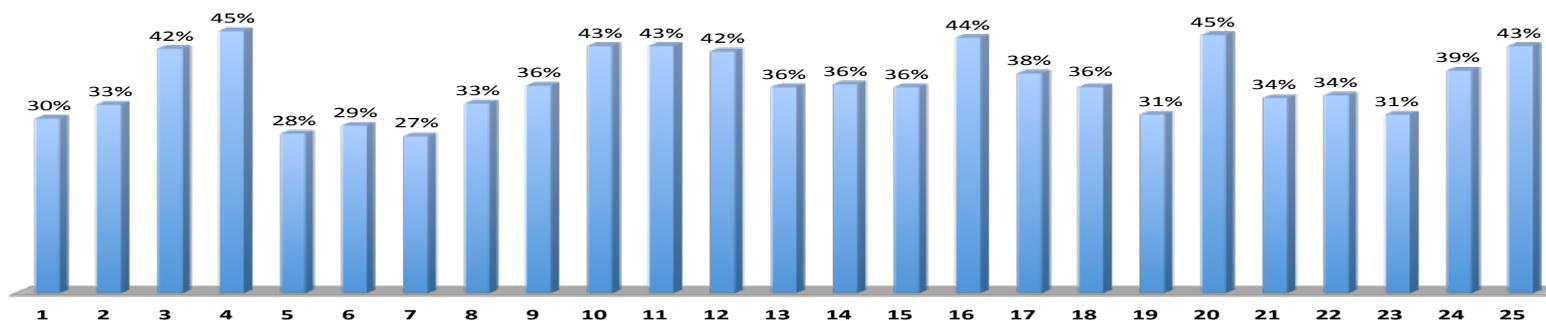
STATUS CYCLE 1



Status of active Cycle 1 projects



Observing efficiency during Cycle 2



CYCLE 2 ALLOCATIONS



Proposal Code	PI	Proposal title	Total observing hours	Total processing hours
LC2_001	R. Fallows	Investigating Refraction Through the Solar Wind using Intensity and Phase Scintillation	5	0
LC2_002	R. Fallows	Probing a Coronal Mass Ejection with Scintillation Arcs	12	0
LC2_003*	R. Fallows	Monitoring Ionospheric Scintillation above LOFAR	-	0
LC2_004	J.M. Griessmeier	Measuring the energy of Saturn's lightning	24	18
LC2_005	F. Govoni	Large-scale magnetic field connecting A399-A401	10	18
LC2_006	A. Ginsburg	A search for p-H2CO, a potential EoR contaminant, toward the Galactic Center, W43, W44, W49, and M82	8	4
LC2_007	R. Lynch	Continued LOFAR Timing of Discoveries from the GBNCC Pulsar Survey	29	3
LC2_008	G. Giovannini	The mysterious giant radio source 0917+75	8	21,6
LC2_009	K. Sendlinger	Cosmic ray propagation in NGC 5033	8	14
LC2_010	J. Verbiest	Pulsar Timing with LOFAR	105	30
LC2_011**	M. Serylak	Studying Pulsars and the Interstellar Medium using International LOFAR Stations	624 (max)	0
LC2_012	R. Osten	Probing the Stellar Flare-Coronal Mass Ejection Relationship	12	18
LC2_013	A. Miskolczi	Extended radio continuum halo in the edge-on galaxy NGC5907	12	17
LC2_014	M. Brienza	Exploring radio-loud AGN recurrent activity with LOFAR	64	112
LC2_015	R. Fender	Wide-field searches for image-plane radio transients	82	132,3
LC2_016	G. Ramsay	The first MHz observations of an ultra cool dwarf star	3,5	10
LC2_017	D. Mulcahy	LBA observations of M51 and NGC891	18	25
LC2_018	P. Zarka	Search of radio emission from the 55 Cnc exoplanetary system	32	0
LC2_019	A.G de Bruyn	The LOFAR EoR project	204	0
LC2_020	E. Enriquez	First detection of brown dwarfs with LOFAR	12	16,5
LC2_021*	S. ter Veen	FRATS: Commensal Real-Time Searches and localization of Fast Radio Bursts	-	37
LC2_022**	A. Karastergiou	ARTEMIS on LOFAR: real-time searches for Fast Radio Bursts with international LOFAR stations	624 (max)	0
LC2_023*	S. Buitink	Radio detection of cosmic ray air showers	-	0
LC2_024	P. Best	A joint LOFAR deep field: ELAIS-N1	100	0
LC2_025	A. Blious	A Full Census of the Known Pulsar Population: Extension to the Lowest Radio Frequencies	38	10
LC2_026	D. Stinebring	Millisecond Pulsar Scintillation: a Pilot Study	37,5	9,2
LC2_027	G. Mann	Energetic electron propagation in solar flares	24,2	75,6
LC2_028	G. Mann	Solar coronal mass ejections	35	36,5
LC2_029	G. Milley	Long Baseline Studies of High-Redshift Radio Sources: Constraining particle acceleration and cold gas	17	50
LC2_030	I. Mitsuiishi	Exploring Merger-Induced Diffuse Radio Emissions in Groups of Galaxies	10	14,1
LC2_031	C. Marque	Solar noise storms in the decametric and metric range: a study with LOFAR and the Nançay Radioheliograph	22	22,9
LC2_032	S. Turiziani	BLAZAR MONITORING WITH LOFAR	5	9,2
LC2_033	J. Magdalenic	Observations of solar type II radio bursts by LOFAR	16	48,7
LC2_034	J. Miller-Jones	Low-frequency radio emission from X-ray binaries	14	56,7
LC2_035	H. Reid	The LOFAR Quiescent Sun	12	15
LC2_036	R. Oonk	Probing the Galactic Interstellar Medium on Unprecedented Scales	70	110
LC2_037	B. Burningham	A low-frequency survey for extrasolar auroral emission	25,5	76,7
LC2_038	H. Rotgering	LOFAR surveys: Opening up a new window on the Universe	275	468
LC2_039	R. Breton	LOFAR Observation of Eclipsing Binary Pulsars	50,6	102
LC2_040	E. Enriquez	A panchromatic search for advanced intelligence around nearby stars.	15	5
LC2_041	I. Hoffman	Search for OH Maser Emission at 54 MHz in Galactic Star-forming Regions and Supernova Remnants	8	10
LC2_042	Eskil Varenis	Mapping spectral turnovers in AMI 220 as a test-case for low-frequency studies of local (U)LIRGs	7	10
LT2_001	L. Gurvits	Study of atomic hydrogen at z>5	12	6
LT2_002	R. Oonk	Extragalactic Radio Recombination Lines: An LTA resource project	0	0
LT2_003	J. Hessels	LOTAAS: The LOFAR Tied-Array All-Sky Survey for Pulsars and Fast Transients	170	90,4

* observations for this project are performed in standalone mode

** observations for this project are performed in piggyback mode (amount of observing hours cannot be specified)

- 45 projects accepted
- Observing -> 1612 h
- Processing -> 1702 h

<http://www.astron.nl/radio-observatory/cycles/cycle-2-final-allocations/cycle-2-final-allocations>

News regarding Cycle observations



		MB	WF	RAF	EO	CT	MI	ALL	International Stations																			
		Michiel Brentjens	Wilfred Frieswijk	Richard Fallows	Emanuela Orru'	Carmen Toribio	Marco Iacobelli																					
Week 20	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																										
		15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14			
May	12 Mon	LC1_003 pulsars										SOFTWARE ROLL OUT; all international stations (except DE604) switched to ILT mode at 9 UTC						Stress system runs + TBB runs				LC2_008 - J1251-141 - 20m	Stress system runs		LC2_008 - J1251-141 - 20m	CT		
	13 Tue	LC1_013 - Cygnus A - 12hrs -- REPETITION										LC2_008 - J0427+182 - 20m	TBB tests				LC1_057 - Crab	Stress system runs + TBB runs										CT
	14 Wed	LC1_013 - Cygnus A - 12hrs -- REPETITION										TBB tests				LC1_057 - Crab	Stress system runs		LC1_040 - 4C19.44 - 9hrs -- REPETITION						CT			
	15 Thu	LC1_040 - 4C19.44 - 9hrs -- REPETITION				Stress system runs		COBALT TESTING; FR606 in local mode between 12 - 15 UTC				LC1_057 - Crab	Stress system runs + TBB runs				LC2_024 - Elais N1 - 8hrs				MI							
	16 Fri	LC2_024 - Elais N1 - 8hrs				Stress system runs		COBALT TESTING; all international stations (except DE604) switched to local mode at 9 UTC						LC1_057 - Crab	LC2_038 - HEXDET01 - 8hrs										MI			
	17 Sat	Stress system runs + TBB runs				LT2_003 - LOTAAS										Stress system runs + TBB runs				LC2_017 - M51 - 9hrs				JS (RP)				
	18 Sun	LC2_017 - M51 - 9hrs				Stress system runs + TBB runs										LC1_057 - Crab	LC2_038 - HEXDET02 - 8hrs										JS (RP)	
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					LC2_032 - LST 22				LC2_020 - LSTs 2,7			LC1_057 - Crab												LC2_024 - Elais N1 - 8hrs	CT	
	20 Tue	LC2_024 - Elais N1 - 8hrs													LC1_057 - Crab												LC2_024 - Elais N1 - 8hrs	CT
	21 Wed	LC2_024 - Elais N1 - 8hrs													LC1_057 - Crab												LC2_042 - ARP220 - 7hrs	CT
	22 Thu	LC2_042 - ARP220 - 7hrs													LC1_057 - Crab												LC2_024 - Elais N1 - 8hrs	MI
	23 Fri	LC2_024 - Elais N1 - 8hrs													LC1_057 - Crab	LC2_038 - HEXDET03 - 8hrs										MI		
	24 Sat														LT2_003 - LOTAAS										LC2_015 - NCP - 5hrs	GK (MI)		
25 Sun	LC2_015 - NCP - 5hrs													LC1_057 - Crab	LC2_038 - HEXDET04 - 8hrs										GK (MI)			

- 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



- Some delays with the ingest of data because of hanging locus nodes
- More in Hanno's talk

CEP news:



- CEP2
 - Locus074,081: hanging likely due to swapping
 - Locus072: defect memory caused a boot problem

- CEP-3
 - Delays in the commissioning of the new cluster. Current timeline: CEP3 available in 2 weeks. 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



- Start Cycle 2 : 15 May 2014
- Next LSM : 28 May 2014
- Next Stop day : 3 June 2014
- Cycle 3 proposal call : July 2014
- Cycle 3 proposal submission deadline : **Wednesday** 10 September, **12 UT**