

Netherlands Institute for Radio Astronomy

Programme:

- Array status H. Munk
 Observatory update R. Fallows
 MSSS update G. Heald
 Atomic hydrogen at z > 5 L. Gurvits
- 6. Low-frequency investigation of the Super-CLASS supercluster – C. Riseley

Array Status





- 38 operational NL stations
 - 24 CSs
 - 14 RSs
- 8 ISs
- Superterp+CS001: all TDS-boards exchanged: should solve overheating prob's
- RS210: RSP problems: under investigation
- DE603: Clock problems solved
- DE604: broken airco
- UK608: one broken RSP board
- Storm damage NL-stations LBAs to be repaired, req's for quotations send out
 - CS021: 1 LBA, CS201: 1 LBA, CS501: 1 LBA, RS508: 22

Network, CEP Status



Network •RS210: network provider problems •DE607: network provider problems

BG/P •Nominal •Note that we cannot use R01 anymore (Cobalt)

Cobalt •First fringes November 1

CEP-I/II(/III) •CEP-II: locus44 two broken disks: 14 TB recovered, 10 lost? •CEP-III: order placed

• 24 nodes, CPU-only nodes

Next stopdayDecember 3

Superterp and Core





Remote





International





News regarding the observing system: Calibration



- Station calibration:
 - No further news
 - Remote stations: mode 3, 5 & 7 installed
 - Core stations to follow next
 - Improved station calibration
 - more automated
 - handed over to operators
- Updated status available at:

http://www.astron.nl/radio-observatory/astronomers/current-status

News regarding the observing system: Stability and performance



- Overall stability is good:
 - Observations are stable, few station failures
 - Pipelines are stable, occasional swapping from too many processes

News regarding the observing system: LOFAR Status





- Issues:
 - Degradation of HBA tiles
 - Slight modifications to optimise station tests
 - New tiles are identified and maintenance performed as necessary
 - Live station test in progress

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

News regarding the observing system: Updates, issues and tests



- Development:
 - Next software rollout: LOFAR release 1.18 Monday 2nd December.
 - Cycle 1 and COBALT:
 - Beamformed+interferometer mode including pipelines and ingest
 - XML generator, PVSS/Navigator, MoM, pipelines all on-going

News regarding the observing system: Archive



- Raw and processed data ingestion on-going.
- Now possible to copy processed pulsar data to LTA, but available only as 'unspecified' and with no meta-data.

- Issues:

- Data may be in LTA labelled as 'Unspecified'
- Some meta-data may be incomplete or incorrect
- Jűlich server is under maintenance this week
- Target is down until further notice, impacting on EoR observations
- LTA database and UI unavailable for scheduled maintenance on 10th December.

Cycle Observations



https://www.astron.nl/radio-observatory/lofar/cycle-1-schedule/cycle-1-schedule

Week 48 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
Approximate LST			5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4
November	25	Mon	LC1_039 (EoR) - 3C196						Str syster and ru	ess MoM roll out + tests; COBALT testing; Clockboard n runs upgrades (Isiterra in coord operations); DE601, TBB DE602, DE603, DE605, FR606, SE607, UK608 Ins switched to local mode at 9 UTC																
	26	Tue	Stress system runs and						BB runs CC				OBALT testing; Clockboard upgrades (Isiterra in coord operations)						LC1_039 (EoR) - 3C196							
	27	Wed	LC1_039 (EoR) - 3C196							COBALT testing; Clockboard upgrades (Isiterra in coord operations); DE601, DE602, DE603, DE605, FR606, SE607, UK608 switched to ILT mode at 9 UTC									LC1_047 - CIZA J2242.8+5301 - 9hrs							
	28	Thu	LC1_04 - CIZA J2242. 8+5301 - 9hrs		Stres	s syster	n runs	and TE	3B runs	5	COE tes	BALT	station tests station tests					LC1_023 - LSTs 22	Stress	syster TBB r	m runs LC1_039 Cuns CC1_039 (EoR) - 3C196					
	29	Fri	LC1_039 (EoR) - 3C196							COBALT testing; Stress system runs and TBB runs											LC1_001 - T Tau - 8hrs					
	30	Sat	LC1_001 - T Tau - 8hrs					Stre	Stress system runs and TBB runs					MSSS - 8rs							Stress system runs	LC1_001 - DG Tau - 8hrs				
	1	Sun	LC	LC1_001 - DG Tau - 8hrs sy ru						ss er LC0_034 s				- LOTAAS - 9hrs Stree					s syst TBB	em run runs	sand	LC1_028 - 4C60.07 - 8.5hrs				ōhrs
e-VLBI: UTC 0900 03 Dec - UTC 1300 04 Dec																										
Week 49 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
Approximate LST			5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4
December	2	Mon	LC1	1_028 -	4C60	0.07 - 8.	5hrs					5	OFTWARE ROLL-OUT											LC1_ (Eol 3C1	_039 R) - 196	
	3	Tue	LC1_039 (EoR) - 3C196							STOP DAY									LC1_039 (EoR) - NCP							
	4	Wed	LC1_039 (EoR) - NCP							LC1_027/035 - Mor									- Mont	thly Pulsars - all LSTs						
	5	Thu	LC1_027/035 - Monthly Pulsars - all							III LSTs							LC1_039 (EoR) - NCP									
	6	Fri	LC1_039 (EoR) - NCP								LC1_036 - 105+00 - 4hrs LC1_036 -								036 - 1	65+00	- 4hrs					
	7	Sat	- 165+00 - 4hrs	.01_036 185+00 - 4hrs																	LC	1_047	- Pers	eus - 91	nrs	
	8	Sun	LC1_ Pers 9h	047 - eus - nrs				MSS	MSSS - 8rs					LC1_052 - LOTAAS - 8hrs							LC1_032 - LSTs 22-02 - 4x1hr					

- Cycle 1 is underway; remaining Cycle 0 observations also scheduled.
- Contact Science Support in case of issues.
- ** Always cc sciencesupport@astron.nl and include the proposal code in the subject line **





- CEP2 very full due to backlog of data to ingest to the LTA.
 - EoR and pulsar observations on hold until data levels on CEP2 can be reduced.
- CEP1: Degrading...
 - Backup your data elsewhere!
 - Staging areas cleared every week: Data may remain there for up to four weeks only.
- Stop day: Minimal maintenance planned.

CALENDAR of requested busy weeks and other LOFAR activities



http://www.astron.nl/radio-observatory/astronomers/commissioning/commisioning-plan

- Next LSM: 11th December
- Next Stop Day: Tuesday 3rd December
- LTA UI maintenance: Tuesday 10th December