

Please mute your  
microphone and turn off  
your webcam

## Programme:

- 1. Array status and Observatory update - R. Fallows*
- 2. Report from Imaging Busy Week 22 - T. J. Dijkema*
- 3. Progress report from the EoR Key Science Project - G. de Bruyn*
- 4. LOFAR Pulsar Census (HBA) - A. Bilous*

# International LOFAR Telescope (ILT)



Onsala



Dutch stations



Chilbolton

Norderstedt

LOFAR Core (NL)

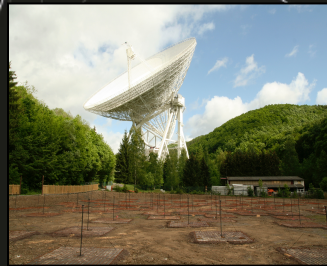
Potsdam

Poland funded & in progress

Jülich

Effelsberg

Tautenburg



Unterweilenbach

- 46 operational stations completed
- 38 NL stations, 8 international stations
- 4 new stations to come: Germany (1), Poland (3)



Nançay

# ASTRON

Netherlands Institute for Radio Astronomy

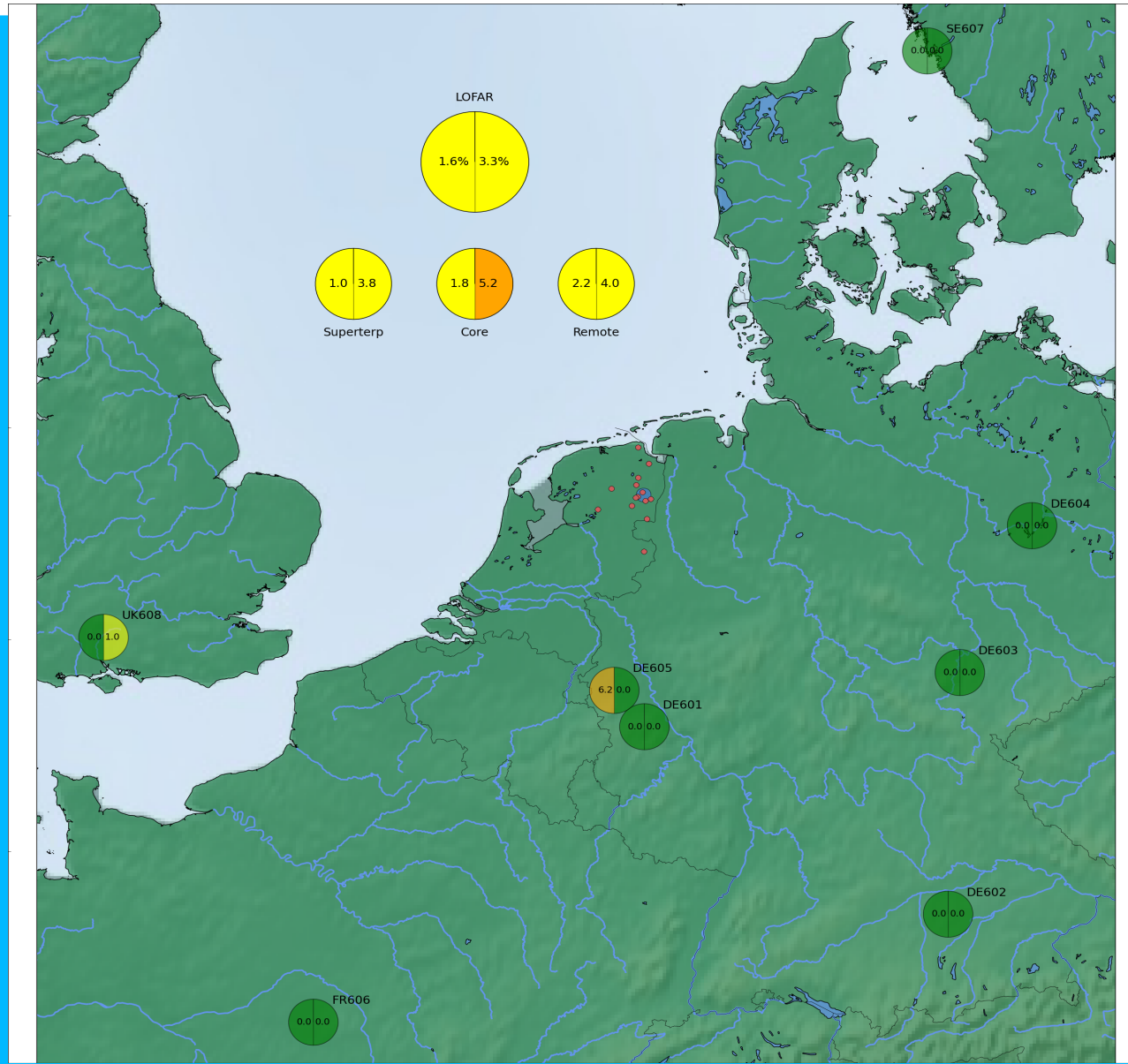
# Array Status



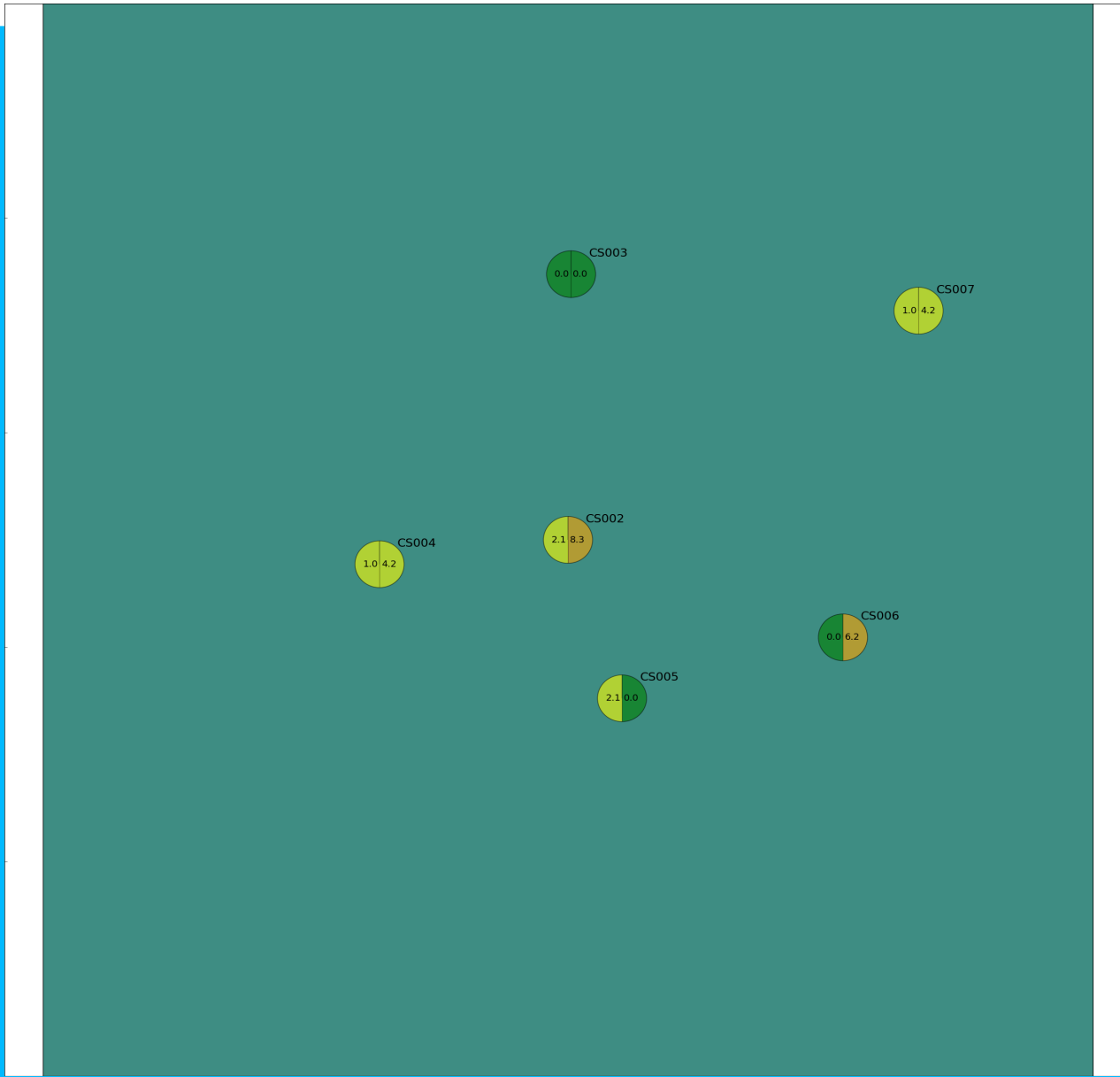
- CS002: broken 8v module repaired
- CS003: Broken uniboard, replaced.
- CS007: Firmware issue, resolved.
- RS310: Firmware issue, resolved by reset.
- CS501: High amplitude visibility issue: Fix implemented in RSPdriver.conf, but this can be overwritten. To be resolved.
- DE604: Aircon problem.
- Occasional connection problems to DE stations, usually due to announced network maintenance.
- Norderstedt almost ready to be commissioned.

Status of stations and calibration available from <http://www.astron.nl/radio-observatory/astronomers/current-status>

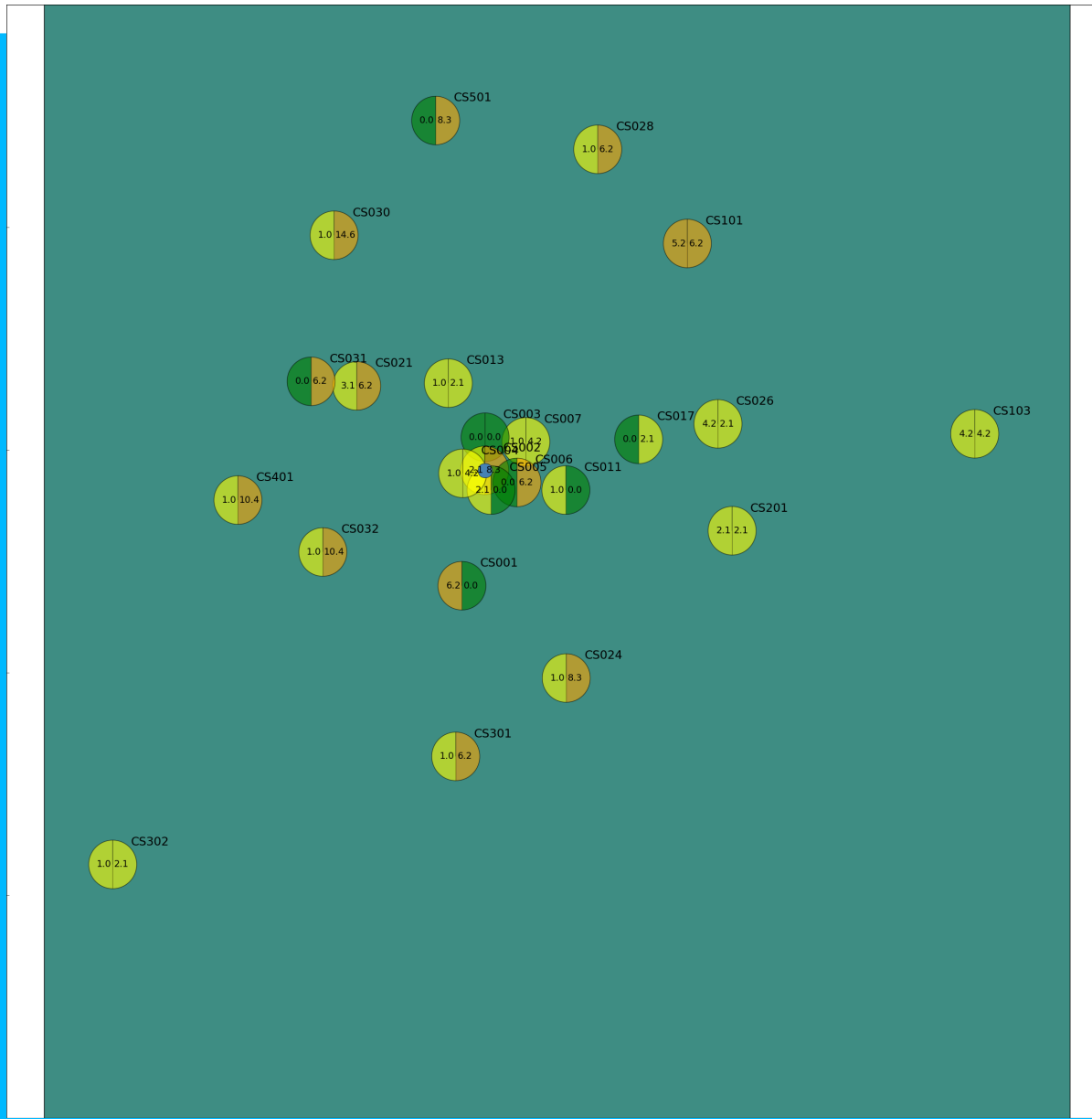
# Overview, including IS (LBA: 1.6%, HBA 3.3%)



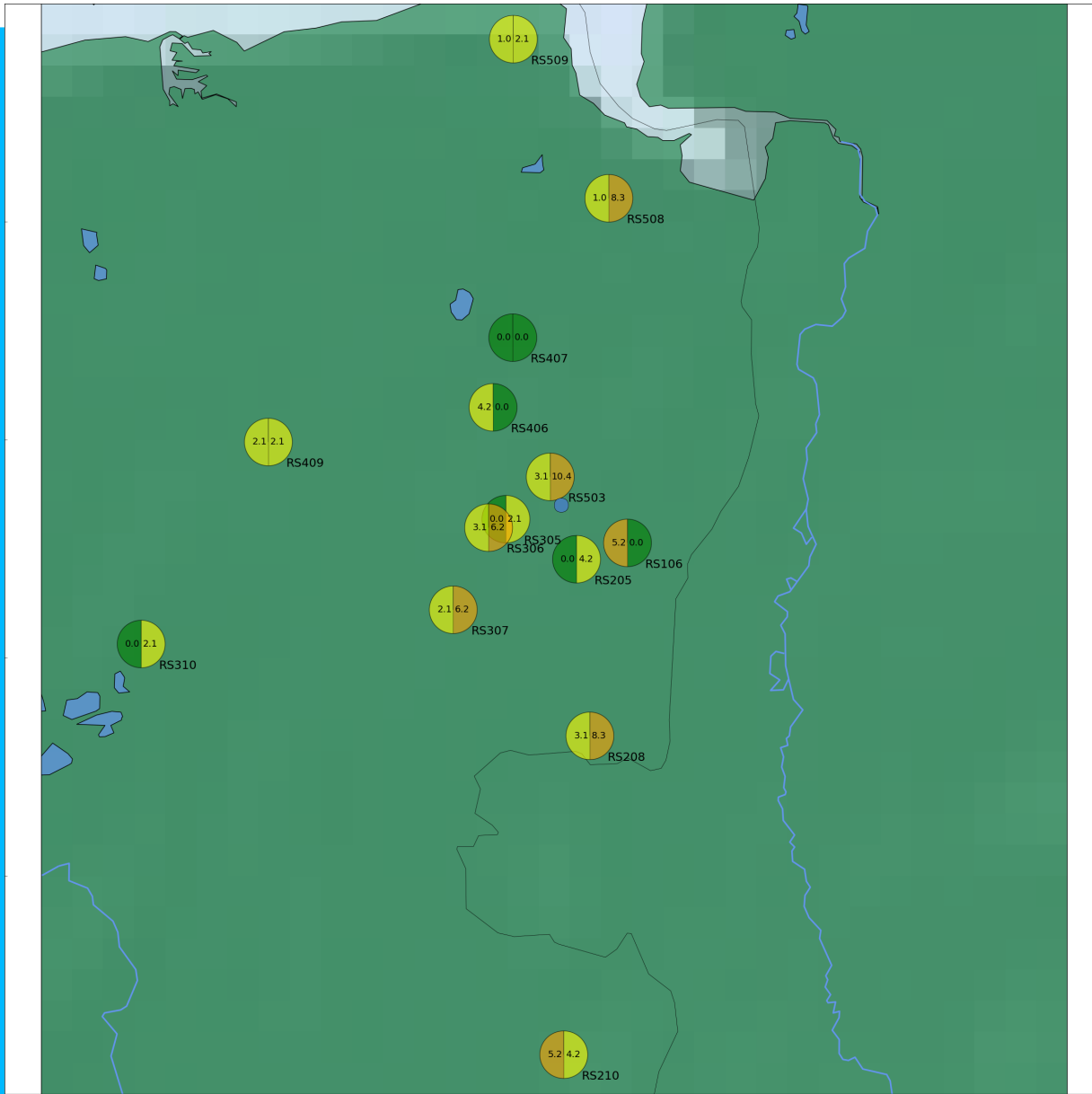
# Superterp (LBA: 1.0%, HBA: 3.8%)



# Core Stations (LBA: 1.8%, HBA: 5.2%)



# Remote Stations (LBA: 2.2%, HBA:4.4%)





# News regarding the observing system: Observations



Over the last two weeks:

- System performance: Generally good
- Observations being performed with few problems
- Issue with recent Moon observation where HBA1 stations have significantly higher amplitudes than HBA0 stations. Under investigation.
- Occasional missing data for files written to locus080. Network connection re-seated.

# News regarding the observing system: Observations

- Weights for [partly] flagged stations recorded incorrectly by COBALT between 19<sup>th</sup> March and 31<sup>st</sup> October 2014.
- As a result, baselines involving these stations were not being flagged correctly during processing.
- This does not affect the recorded visibilities and methods of fixing the Measurement Sets have been detailed in an email to affected users.

# News regarding the observing system: Pipelines



- Pulsar pipelines generally taken over by the RO.
- Current setup means several pipelines, both interferometer and pulsar, are run in parallel.
- Long queue of pipelines to run, including many long-duration pulsar pipelines.
- Basic characterisation of pulsar pipeline durations underway to attempt better estimation of durations required.

## CEP2

- Disk space has been problematic due to large raw data sets from a variety of projects waiting for processing and/or transfer to the LTA.
- Analysis of **all** data on CEP2 underway to see what can be removed.

## CEP3

- First users now processing data on CEP3.
- 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>

## CEP1:

**Access to CEP1 now restricted and it will be switched off soon.**

# Cycle 3 Observations



Week 50		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
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	8	Mon	Stress system run + loS/TBB runs	LC3_028 - EoR 3C196						Stress system run + loS/TBB runs; all international stations switched to ILT mode at 9UTC	<b>SOFTWARE ROLL OUT</b>						Stress system run + loS/TBB runs						LC3_034 - Moon - 6hr			
	9	Tue	LC3_034 - Moon - 6hr						LC2_026 - RAs 9-11		Stress system run + loS/TBB runs														LC3_034 - Moon - 6hr	
	10	Wed	LC3_034 - Moon - 6hr						LC2_007 - LSTs 6,7,9,11	Stress system run + loS/TBB runs										LC3_028 - EoR NCP						
	11	Thu	LC3_028 - EoR NCP						Stress system run + loS/TBB runs			LC2_007 - LSTs 15, 19	LC3_030 - RA 16	Stress system run + loS/TBB runs	LC2_007 - LSTs 19	Stress system run + loS/TBB runs		LC3_030 - RAG 22	LC2_007 - LSTs 21,23	Stress system run + loS/TBB runs		LC3_030 - RAG 2,7	Stress system run + loS/TBB runs	LC2_007 - LSTs 0,2,4,5		
	12	Fri	LC3_028 - EoR 3C196				STATIONTEST; all international stations switched to local mode at 9 UTC			LC3_014 - LOTAAS			LC2_039 - J2129-0428 - 8.9hrs						Stress system run + loS/TBB runs							
	13	Sat	Stress system run + loS/TBB runs												LC3_024 - G049.2-0.7 - 3hrs		LC3_028 - EoR NCP									
	14	Sun	LC3_028 - EoR NCP						Stress system run + loS/TBB runs			LC3_014 - LOTAAS			Stress system run + loS/TBB runs											
Week 51		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
Approximate LST			6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5
December	15	Mon	LC3_028 - EoR 3C196						Stress system run + loS/TBB runs			Lobos test		LC2_025 - RAs 19-21												
	16	Tue	LC2_026 - RAs 9-11						Lobos test		LC3_027 - 1807+698			LC3_028 - EoR NCP												
	17	Wed	LC3_028 - EoR NCP						Lobos test		LC3_014 - LOTAAS						LC3_027 - 0716+714									
	18	Thu	LC3_027 - 0716+714		LC2_025 - RAs 11-17									LC2_039 - J2215+5135 - 4.9hrs												
	19	Fri	LC3_028 - EoR 3C196						LC3_014 - LOTAAS																	
	20	Sat	LC2_025 - RAs 6-9			LC3_028 - EoR NCP																				
21	Sun	LC3_028 - EoR NCP						LC3_030 - RA 16		LC3_030 - RAG 22						LC3_030 - RAG 2,7										

Detailed Cycle 3 schedule available here:

<https://docs.google.com/spreadsheets/d/1jDWvZmpH0ycusJTwBsMU6SxQYK5efawtk0jHSxMbo9M/pubhtml>

Changes can be applied on daily base: in case of questions/issues contact Science Support

**\*\*Always email sciencesupport@astron.nl and include the proposal code in the subject line\*\***

# CALENDAR of requested busy weeks and other LOFAR activities



- Next Stop Day: Tuesday 6<sup>th</sup> January
- Next LSM: 7<sup>th</sup> January 2015
- LOFAR Users Meeting: 1<sup>st</sup> June 2015, Assen
- LOFAR Science Meeting: 2-3rd June 2015, Assen
- LOFAR news email list:  
<http://www.astron.nl/radio-observatory/subscribe-lofar-news/subscribe-lofar-news>