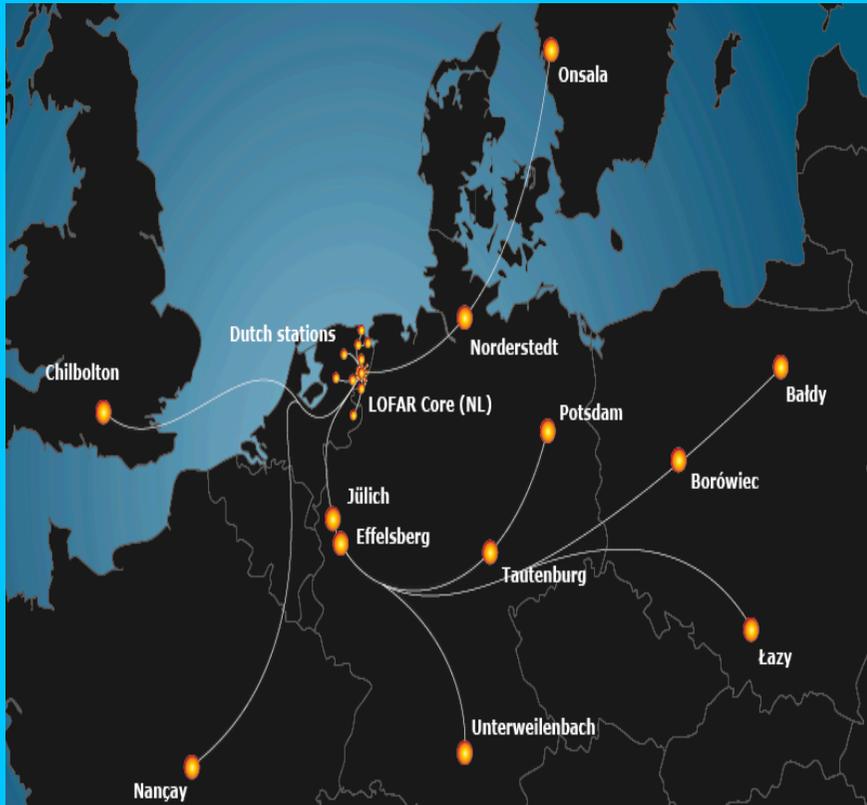


## Programme:

1. *Array status & Observatory update – R. Pizzo*
2. *The Calibration and Imaging Tiger Team 2 – E. Orru'*
3. *Overview of Polarisation Busy week – D. Mulcahy*
4. *Testing Ionospheric Faraday Rotation correction for LOFAR – C. Vaneck*
5. *AOB*

# Array Status

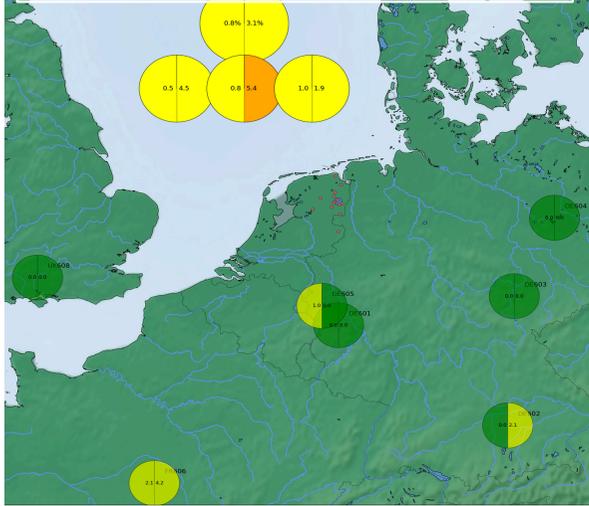


- 47 operational stations
  - 24 CSs
  - 14 RSs
  - 9 Is
- 3 new stations being built in Poland
- CS013 operational again – included in test runs.
- SE607 had a broken rubidium clock. Replaced.
- Station maintenance is on going – details in Telescope schedule

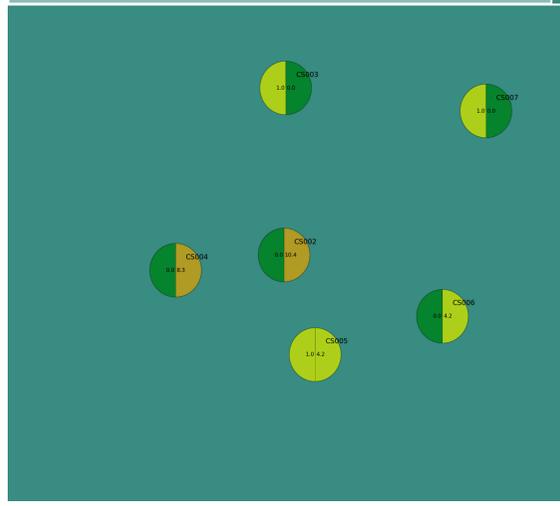
# ANTENNA ELEMENTS STATUS



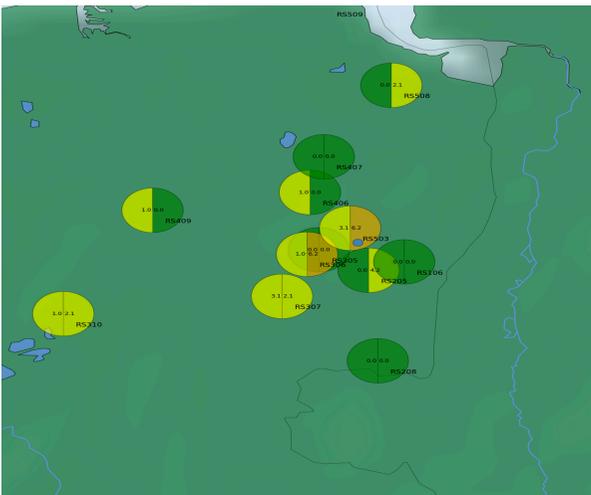
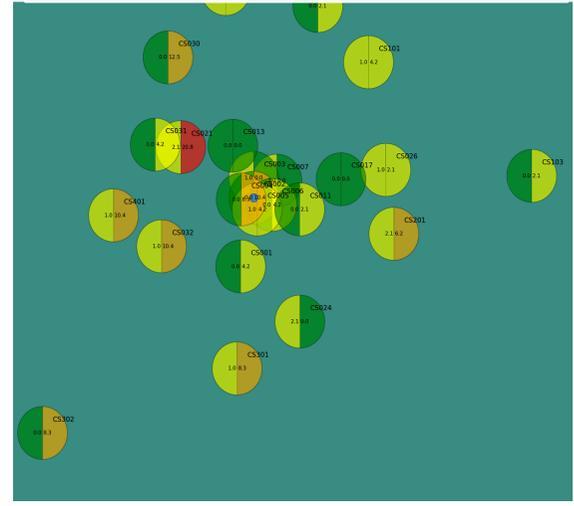
Full array → LBA: 0.8% , HBA: 3.1%



Superterp → LBA: 0.5% , HBA: 4.5%



Core Stations → LBA: 0.8% , HBA: 5.4%



Remote Stations → LBA: 1.0% , HBA: 1.9%

All operational

< 5% not operational

< 15% not operational

> 15% not operational

➤ Current status available at

[https://proxy.lofar.eu/array\\_status/](https://proxy.lofar.eu/array_status/)

# STATION CALIBRATION



Station	mode 1/2	mode 3/4	mode 5	mode 6	mode 7
CS001	23-06-15	21-09-15	19-02-15		11-02-15
CS002	23-06-15	21-09-15	11-02-14		24-02-15
CS003	18-06-15	21-09-15	11-02-14		24-02-15
CS004	18-06-15	21-09-15	11-02-14		19-02-15
CS005	18-06-15	21-09-15	11-02-14		19-02-15
CS006	18-06-15	13-07-15	11-02-14		19-05-14
CS007	18-06-15	21-09-15	11-02-14		24-02-15
CS011	18-06-15	21-09-15	19-02-15		24-02-15
CS013	17-09-14	05-08-14	19-02-15		19-02-15
CS017	18-06-15	13-07-15	19-02-15		24-02-15
CS021	18-06-15	05-08-14	19-02-15		19-02-15
CS024	18-06-15	21-09-15	19-02-15		19-05-14
CS026	18-06-15	21-09-15	19-02-15		19-02-15
CS028	18-06-15	21-09-15	19-02-15		24-02-15
CS030	18-06-15	21-09-15	19-02-15		19-02-15
CS031	20-09-12	05-08-14	19-02-15		24-02-15
CS032	18-06-15	13-07-15	19-02-15		24-02-15
CS101	18-06-15	21-09-15	19-02-15		24-02-15
CS103	13-07-15	21-09-15	19-02-15		24-02-15
CS201	18-06-15	21-09-15	19-02-15		19-02-15
CS301	18-06-15	21-09-15	19-02-15		24-02-15
CS302	18-06-15	21-09-15	19-02-15		19-02-15
CS401	18-06-15	15-10-12	19-02-15		24-02-15
CS501	18-06-15	21-09-15	19-02-15		24-02-15
RS106	18-06-15	21-09-15	20-04-15		24-02-15
RS205	18-06-15	21-09-15	20-04-15		24-02-15
RS208	18-06-15	12-11-13	20-04-15		24-02-15
RS210	18-06-15	22-07-14	11-02-14		24-02-15
RS305	13-07-15	21-09-15	20-04-15		24-02-15
RS306	18-06-15	21-09-15	20-04-15		24-02-15
RS307	18-06-15	21-09-15	20-04-15		24-02-15
RS310	18-06-15	22-07-14	20-04-15		19-02-15
RS406	18-06-15	21-09-15	20-04-15		24-02-15
RS407	18-06-15	21-09-15	21-09-15		21-09-15
RS409	18-06-15		20-04-15		24-02-15
RS503	18-06-15	21-09-15	20-04-15		24-02-15
RS508	18-06-15	21-09-15	20-04-15		19-02-15
RS509	18-06-15	21-09-15	20-04-15		24-02-15
DE601		11-11-14	20-04-15		24-08-15
DE602		13-07-15	20-04-15		24-08-15
DE603		13-07-15	20-04-15		24-08-15
DE604		03-10-13	13-07-15		24-08-15
DE605		13-07-15	13-07-15		19-02-15
FR606		13-07-15	20-04-15		24-08-15
SE607		13-07-15	20-04-15		24-08-15
UK608		13-07-15	13-07-15		24-02-15
DE609		03-04-15	21-09-15		21-09-15

- Mode 3 tables updated on all stations (with a few exceptions) on Sep 21
- Mode 5 and 7 updated on DE609
- New mode 5 and mode 7 data collected on Sep 19 and 21. Reduction going on.
- Current status

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

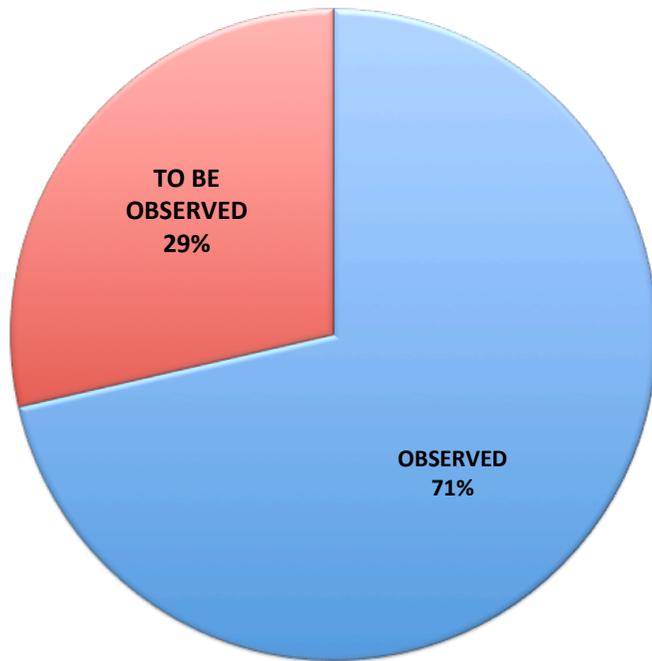
# News regarding the observing system: Stability & performance



- A few issues experienced by the observing and processing system.
  - On 19 September (week-end), the central NFS server lcs015 broke – manual intervention needed to solve the situation.
  - Issues at the end of calrun scripts -> several stations did not come back properly and they did not participate to observations
  - Pipeline processing very slow – seems to be related to pipelines of project LC4\_012. Cause found.
  - Ingest: no issues above usual.
  - A few locus nodes experienced issues and were temporarily taken out of production.

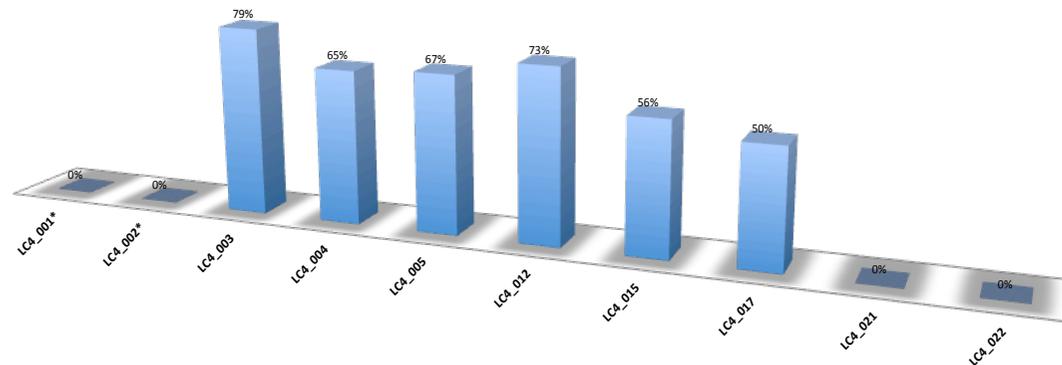
# News regarding the observing system: Cycle Observations

STATUS CYCLE 4



- 17 projects completed – 1060 hours observed successfully
- ~ 424 hours scheduled for completion by 14 November
- Unfinished projects will continue during Cycle 5 with second priority

Status of active Cycle 4 projects

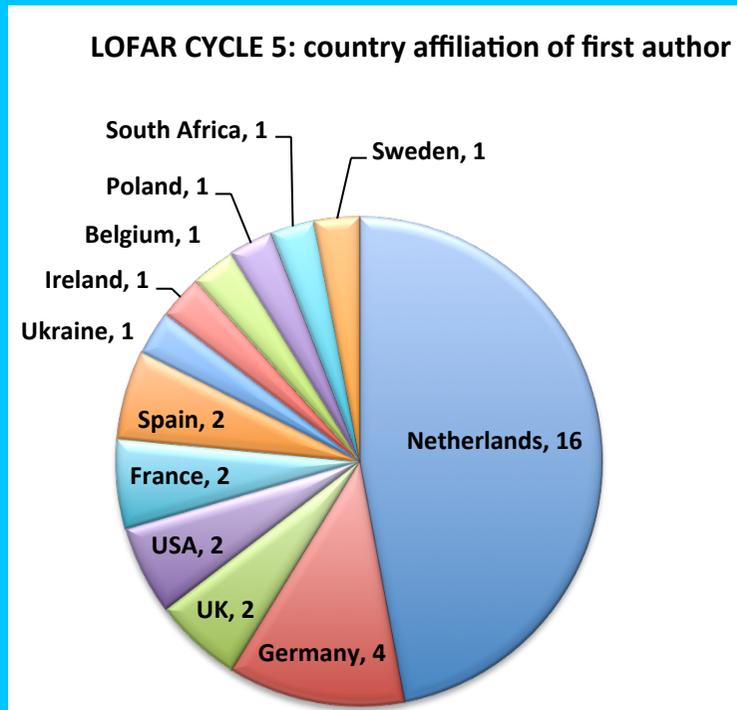


# CYCLE 5 PROPOSALS



- 34 proposals received – 24 regular and 10 long-term
- Technical review meeting last week -> oversubscription factors:
  - 1.8 observing
  - 1.6 processing

Observing mode	Fraction of proposals
IM	61%
BF	24%
BF+IM	9%
TBB	3%
Stand alone	3%



Science Area	Fraction of proposals
Extragalactic	32%
Transients	32%
Galaxy	12%
Stellar	9%
Planets	6%
Solar	3%
Ionosphere	3%
Cosmic Rays	3%

# News regarding Cycle 4 observations



Week 40	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	Sup Sci on Duty	Softw. Eng. on Duty	eVLBI / unavailable stations	Network Issues	MAINTENANCE	Mowing
Approximate LST		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1						
September	28 Mon	LC4_012 - HD17156 ref. - 6hrs LBA - CEP3 including parmdb files!				TBB + test runs				All international stations switched to ILT mode at 9 UT				LC4_026 - 1641+399 - 4hrs HBA - CEP3				TBB + test runs				AS	JDM			CS024/CS031	-				
	29 Tue	TBB + test runs				System tests				LC4_034 - P220+35 - 8hrs HBA				TBB + test runs				StV	JRP			CS101/CS302		Filming Crew at Superlep between 8:30 - 11 UT							
	30 Wed	TBB + test runs				LC4_030 - LOTAAS - 3hrs HBA		System tests		LC4_034 - P240+43 - 8hrs HBA - rescheduled				TBB + test runs				LC	AR			RS205/CS103									
	1 Thu	STATION TEST		TBB + test runs		System tests		LC4_034 - P219+37 - 8hrs HBA				TBB + test runs		LC4_007 - 3C9 - 9hrs HBA ALL-INT repeat		Manu	PD			CS301											
	2 Fri	LC4_007 - 3C9 - 9hrs HBA ALL-INT repeat		TBB + test runs		All Int. Stations switched to local mode at 9 UT - LC4_017 - NGC5055 - 9hrs LBA - CEP3 - REPETITION				System tests		TBB + test runs				RAF	AS			CS501											
	3 Sat	LC4_004 - Pulsar Timing HBA																													
	4 Sun	TBB + test runs				LC4_030 - LOTAAS - 3hrs HBA		Open day				LC4_004 - Pulsar Timing HBA + 1809+17				TBB + test runs															
Week 41	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	Sup Sci on Duty	Softw. Eng. on Duty	eVLBI / unavailable stations	Network Issues	MAINTENANCE	Mowing
Approximate LST		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	1						
October	5 Mon	TBB + test runs				LC4_030 - LOTAAS - 3hrs HBA		System tests; all international stations switched to ILT mode at 9 UT				LC4_034 - P223+42 - 8hrs HBA				TBB + test runs				AS											
	6 Tue	TBB + test runs				STOP DAY				System tests				EMPTY FOR TESTS				LC		eVLBI 06-OCT 09:00 UT - 07-OCT 11:30 UT	All ILT stations 05-OCT 23:00 - 06-OCT 05:00 UT Fiber maintenance			Filming Crew at LOFAR Core							
	7 Wed	EMPTY FOR TESTS				CaIRun mode 3 - only INT - 24hr		LC4_030 - LOTAAS - 3hrs HBA		CaIRun mode 3 - only INT - 24hr				TBB + test runs				LC		eVLBI 06-OCT 09:00 UT - 07-OCT 11:30 UT											
	8 Thu	CaIRun mode 3 - only INT - 24hr				System tests		LC4_034 - P217+35 - 8hrs HBA				STATION TEST		TBB + test runs				StV													
	9 Fri	TBB + test runs				System tests		LC4_035 - 3C226 - 3hrs HBA - repeat		LC4_036 - 3C418/2C454 - 12x0.5hrs each in interleaved HBA - CEP3				TBB + test runs				MI													
	10 Sat	LC4_036 - 3C418/2C454 - 12x0.5hrs each interleaved HBA - CEP3		TBB + test runs		LC4_035 - 3C243 - 3hrs HBA - DO NOT MOVE!		TBB + test runs				LC4_007 - 3C9 - 9hrs LBA ALL-INT																			
	11 Sun	LC4_007 - 3C9 - 9hrs LBA ALL-INT		TBB + test runs		LC4_030 - LOTAAS - 3hrs HBA		LC4_034 - G12CD(2) - 4hrs HBA		TBB + test runs		LC4_004 - 1809+17		TBB + test runs		LC4_005 - UpsAnd - 9hrs LBA *															

- Detailed Cycle 4 schedule available here:
  - <https://docs.google.com/spreadsheets/d/14JsjFkFxFxSrK1vzYzaFhZH3jTeFbFht5GyuF3NyI3Qdw/pubhtml>
- Contact Science Support in case of questions/issues
- \*\*Always cc 'sciencesupport@astron.nl' and include the proposal code in the subject line\*\*

# CALENDAR LOFAR activities



- Next Stop day : 6 October 2015
- Next LSM : 14 October 2015
- LOFAR Cycle 5 PC meeting : 28 – 29 October 2015
- Start Cycle 5 : 15 November 2015

Note: subscribe to lofar-news and lsm mailing lists:

<http://www.astron.nl/radio-observatory/subscribe-lofar-news-and-lsm-mailing-lists/subscribe-lofar-news-and-lsm-mailing-li>

LSM presentations:

[http://www.lofar.org/wiki/doku.php?id=public:lsm\\_new:start](http://www.lofar.org/wiki/doku.php?id=public:lsm_new:start)