ASTRON

Netherlands Institute for Radio Astronomy

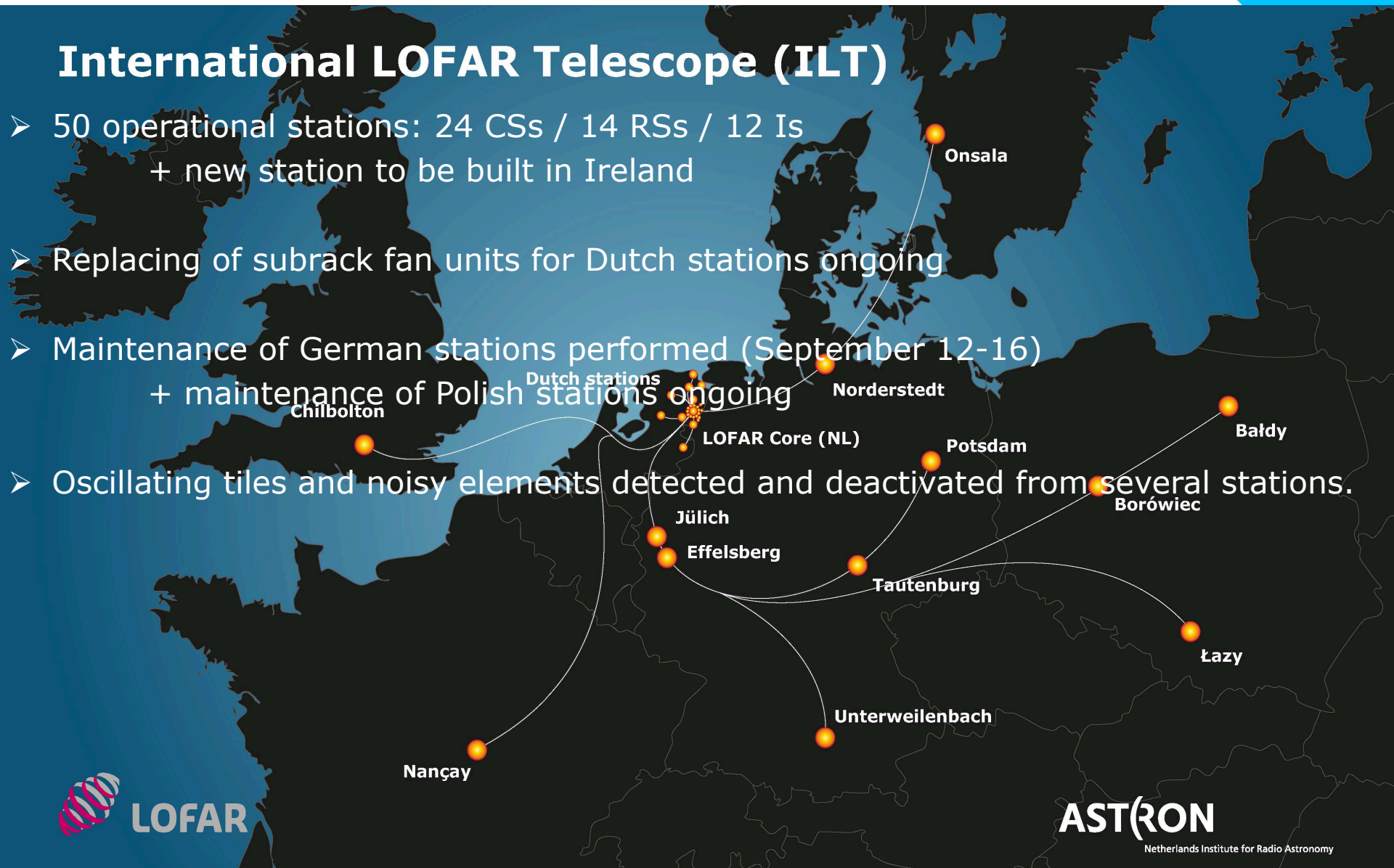
Programme:

1. *Array status & Observatory update – M. Iacobelli*
2. *DAB-related RFI in LOFAR's HBA band and ways to mitigate it – G. de Bruyn*
3. *Total power spectroscopy - CRRLs resolved on 10 arcmin scales – R. Oonk*
4. *LOFAR daily images – J. Noordam*

Array Status

International LOFAR Telescope (ILT)

- 50 operational stations: 24 CSs / 14 RSs / 12 Is
  + new station to be built in Ireland
- Replacing of subrack fan units for Dutch stations ongoing
- Maintenance of German stations performed (September 12-16)
  + maintenance of Polish stations ongoing
- Oscillating tiles and noisy elements detected and deactivated from several stations.



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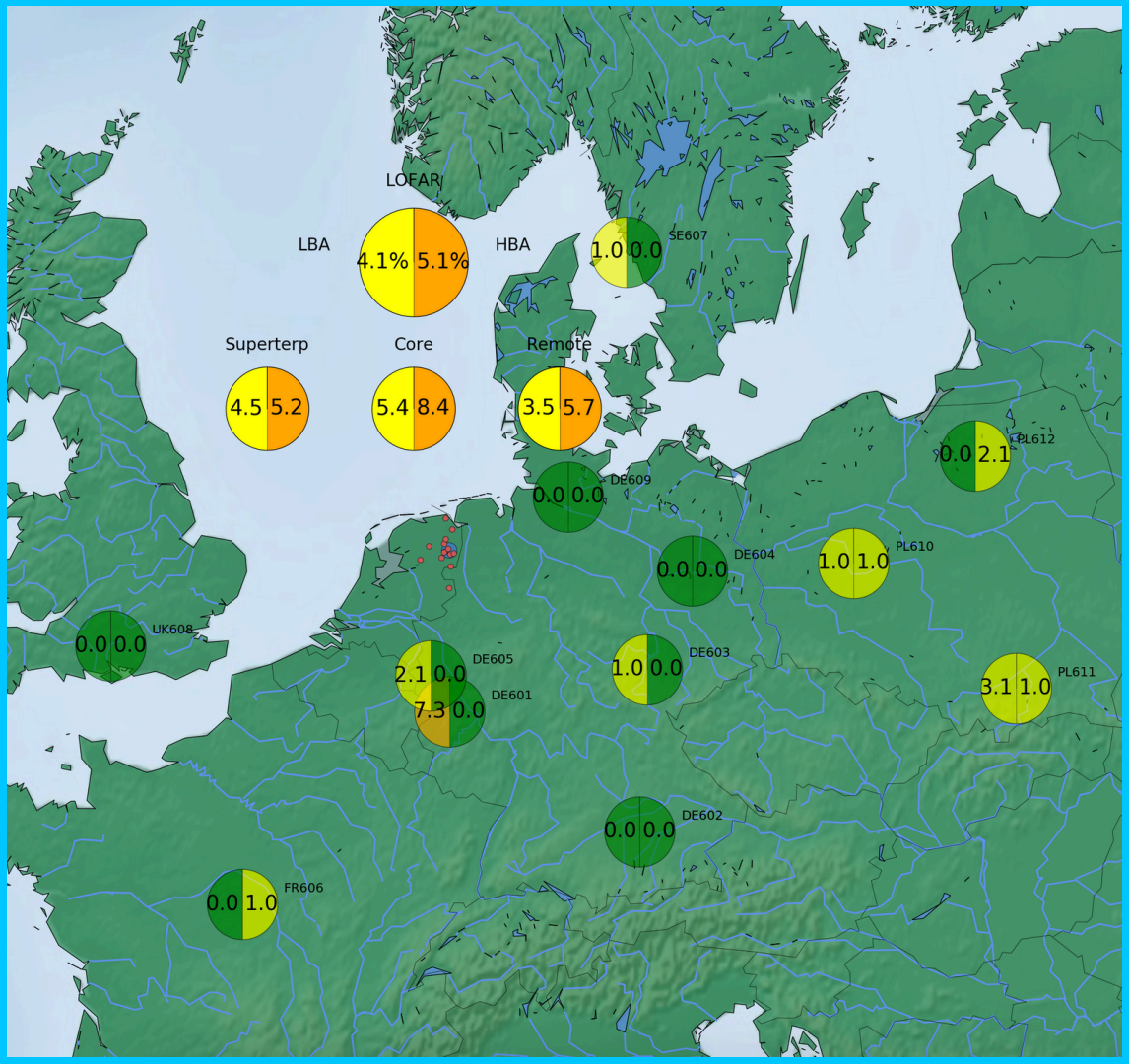
Overview, including IS

LBA: 4.1%; HBA: 5.1%

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



- Color coding of non-operational components per stations:
  - all operational
  - <5% non-operational
  - <15% non-operational

  HBA: CS002, CS004, CS005, CS030, CS032, CS101, CS103, CS301, CS401, CS501, RS205, RS307, RS508

  LBA: CS001,CS002, CS007, CS013,CS030, CS032, CS103, CS301, CS401, CS501, RS205, RS210, DE601
  - >15% non-operational

  HBA: CS021, CS302, RS306, RS503

News regarding the observing system

- Minor delay with processing. Minor issues with the ingest.
  - Maintenance activities at SURFsara in October: Central Grid-processing facility will be moved to the new data center

    + Unavailability of data ingest/retrieval services over 1-16 Oct!

- Station sensitivities issue when observing using HBA mode.
  - Bug in BeamServer/RSP software fixed and deployed during software roll-out: September 12th 2016 (LOFAR 2.17.6)
- Upcoming Stop Day October 4th 2016 (release of LOFAR 2.18)

- Station calibration status:

  Overview available at: *http://www.astron.nl/radio-observatory/astronomers/current-status*

  - Calibration tables LBA inner to be finalized.
  - New data being recorded for HBA mid / high.

News regarding Cycle 6 observations

Week 39		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			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
September	26	Mon	A: LC6_010* - Ups And - 5hrs LBA				TBB + tests				B: LC6_028 - B0820 15min HBA	all international stations to ILT mode at 9 UT	LT5_004 - LOTAAS - 4hrs HBA				TBB + tests								A: LC6_010* - Ups And - 5hrs LBA	
	27	Tue	A: LC6_010* - Ups And - 5hrs LBA			TBB + tests			A: LC6_015 - P122+34 & P124+39- 8hrs HBA								TBB + tests				A: LC6_030 - B1919+21 B1937+21 B2016+28/B2020+28 B2111+46 118 - B2217+47 6hrs HBA - CEP2					TBB + tests
	28	Wed	TBB + tests				A: LT5_007 - P119+34 & P124+32- 8hrs HBA - repet								Ventilator CS 4x + Tests			LT5_004 - LOTAAS - 4hrs HBA			STATIONS TESTS				A: LC6_010* - Ups And - 5hrs LBA	
	29	Thu	A: LC6_010* - Ups And - 5hrs LBA				TBB + tests		A: LC6_015 - P126+47 & P138+50 - 8hrs HBA								TBB + tests				A: LT5_009 - NCP - HBA					
	30	Fri	A: LT5_009 - NCP - HBA						TBB + tests		B: LC6_028 - B0919 15min HBA	B: LC6_028 - J1022 15min HBA	TBB + tests												A: LC6_007 - planet c ph=90 - 30min HBA CEP3	A: LC6_007 - planet b ph=180 - 30min HBA CEP3
	1	Sat	TBB + tests			LT5_004 - LOTAAS - 4hrs HBA				TBB + tests	B: LC6_028 - B0943 10min HBA	TBB + tests			B: LC6_028 - J1400 30min HBA		A: LT5_003 - Pulsar Timing - HBA									
	2	Sun	A: LT5_003 - Pulsar Timing - HBA																						TBB + tests	

- Cycle 6 observing program ongoing (~55% completed):
  - Minor impact of stations dropout due to heat.
  - Major impact of CEP4 commissioning
  - Detailed Cycle 6 schedule available here: http://www.tiny.cc/LC6
- Changes can be applied on daily base: in case of questions/issues contact Science Support
- *Always cc sciencesupport@astron.nl and include the proposal code in the subject line*

CEP news:

- CEP4
  - The commissioning of the cluster is ongoing. Some issues with inspection plots tool. Debugging of PSR pipeline ongoing.
- CEP2
  - Disk space situation not concerning.
  - Crashes of a few locus nodes with no major consequences.
- CEP3
  - Disk space of CEP3 head nodes (/data and /home) concerning!
  - Two more working nodes reserved for MSSS processing.
  - CEP3 info, new policy and users schedule available at:

http://www.lofar.org/operations/doku.php?id=cep3:start

  - New policy regulating access to CEP3 and data handling also available at:

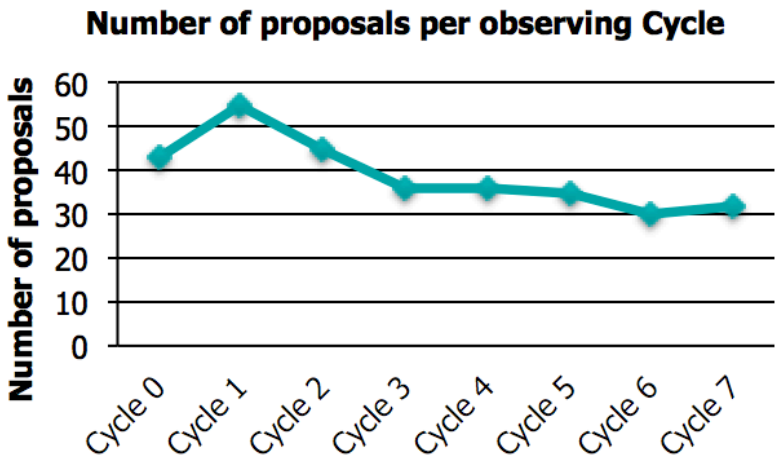
http://www.astron.nl/radio-observatory/observing-capabilities/depth-technical-information/cep-and-lta-computing-facilitie

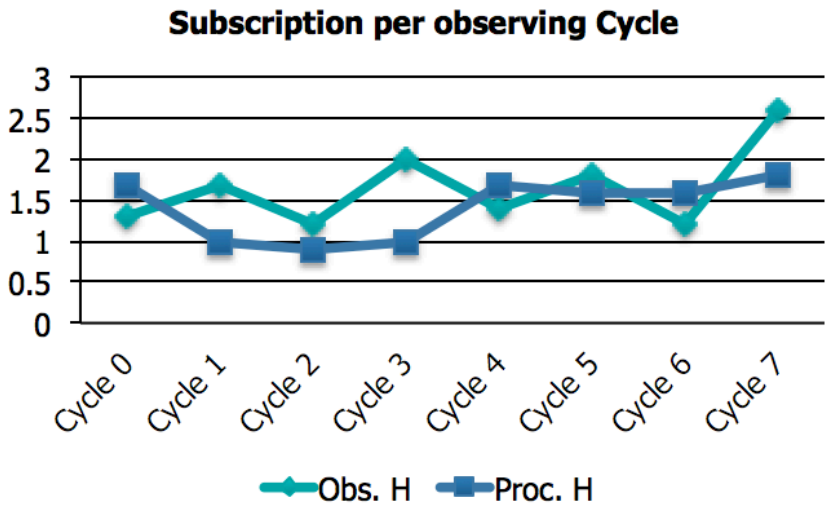
4th LOFAR Data School

- 5-9 September 2016
- 47 participants

Cycle 7 proposals

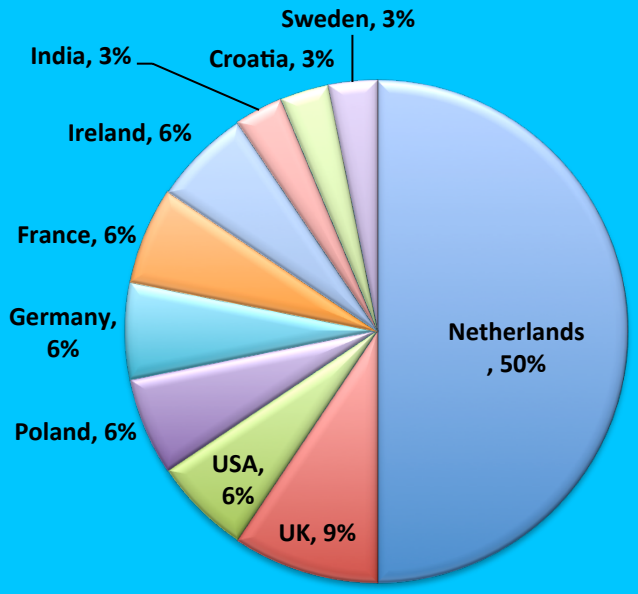
Cycle	Offered Observing hours	Offered Processing hours	Oversub. Observing	Oversub. processing	Number of proposals (reg +LT)
0	2400	2400	1.3	1.7	43
1	1600	2400	1.7	1	55
2	1600	2400	1.2	0.9	45
3	1600	2400	2	1	36
4	1600	2400	1.4	1.7	36
5	1600	2400	1.8	1.6	35
6	2000	2400	1.2	1.6	30
7	1600	2400	2.6	1.8	32



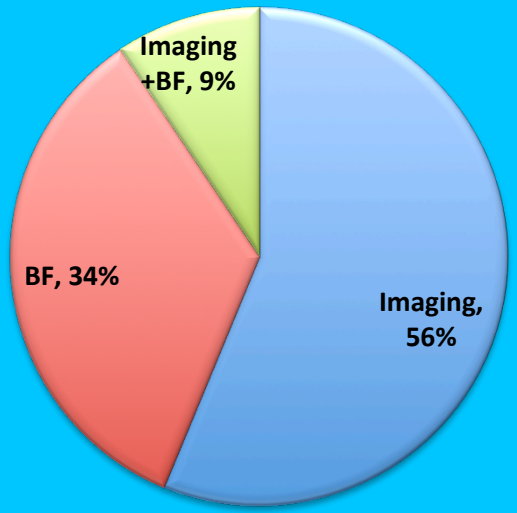


Cycle 7 proposals

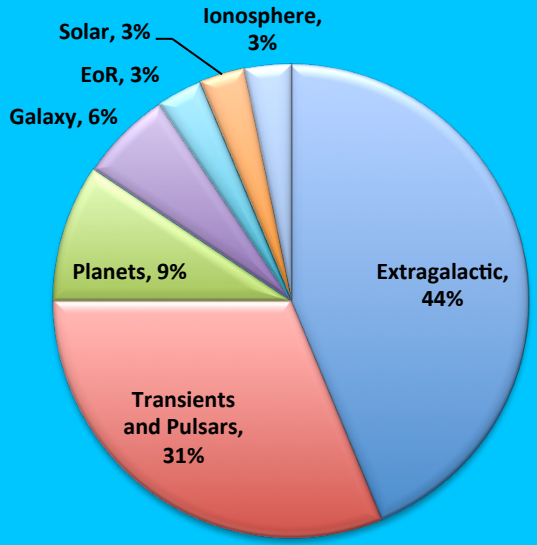
LOFAR CYCLE 7: country affiliation of first author



LOFAR CYCLE 7:Proposed Observing Modes



LOFAR CYCLE 7:Proposed Science Areas



Calendar LOFAR activities:

- Next LSM : 26 October 2016 (volunteers welcome)

- LOFAR Papers:
  http://www.astron.nl/radio-observatory/lofar-science/lofar-papers/lofar-papers
- All accepted LOFAR DDT projects list:
  http://www.astron.nl/radio-observatory/cycles/accepted-ddt-projects/accepted-ddt-projects
- LSM presentations list & users suggestions:
  http://www.lofar.org/operations/doku.php?id=public:lsm_new:start
- LOFAR news email list:
  http://www.astron.nl/radio-observatory/subscribe-lofar-news/subscribe-lofar-news