

Netherlands Institute for Radio Astronomy

# Programme:

1. Array status & Observatory update – M. Iacobelli

2. Results from the LTA survey – L. Cerrigone

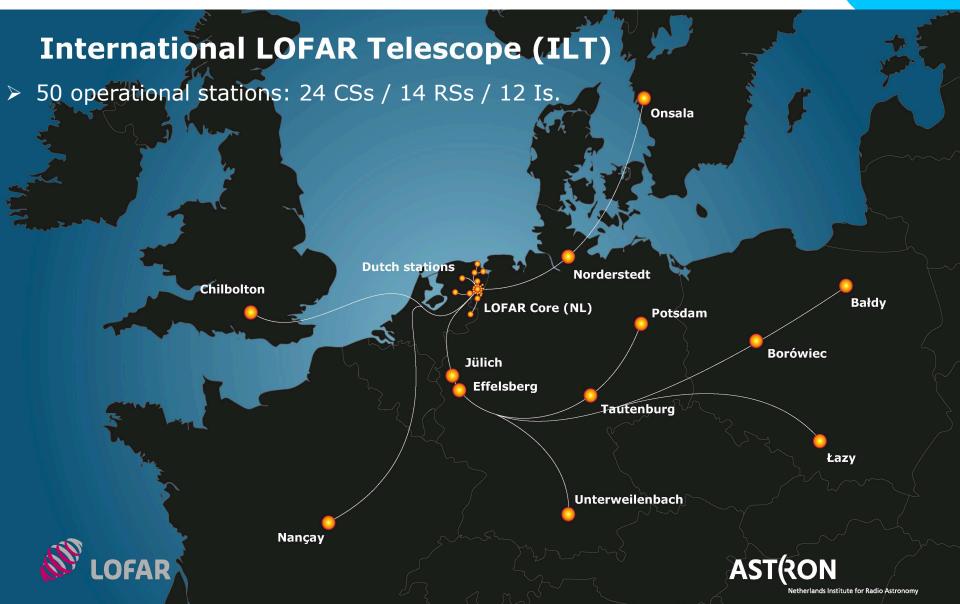
3. Exacopter tests – preliminary results – S. Wijnolds

*4. AOB* 

ASTRON is part of the Netherlands Organisation for Scientific Research (NWO)

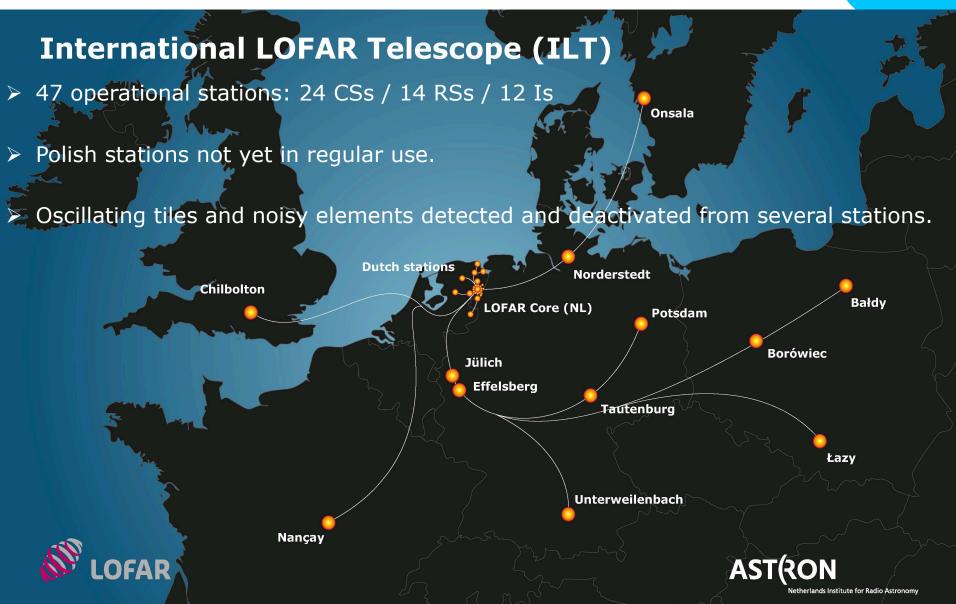












### **Array Status**



### International LOFAR Telescope (ILT)

- > 47 operational stations: 24 CSs / 14 RSs / 12 Is
- Polish stations not yet in regular use.

> Oscillating tiles and noisy elements detected and deactivated from several stations.

- Station maintenance progressing slow because of Mains and strong wind:
  - CS401 replaced GPS coax
    LOFAR Core (NL)
    Potsdam
  - CS026 & CS101 SPU fail; 8V module replaced.
  - CS013 software updated; older LOFÄR<sup>h</sup>MAC version 2\_15\_0 was incompatible with the installed Beamserver, preventing the beams to start.
  - DE609 air conditioning is temporary fixed. Waiting for new controller board.
  - FR606 maintenance completed. Station is working 100% again.

Unterweilenbach

Onsala



Nançay



Łazy

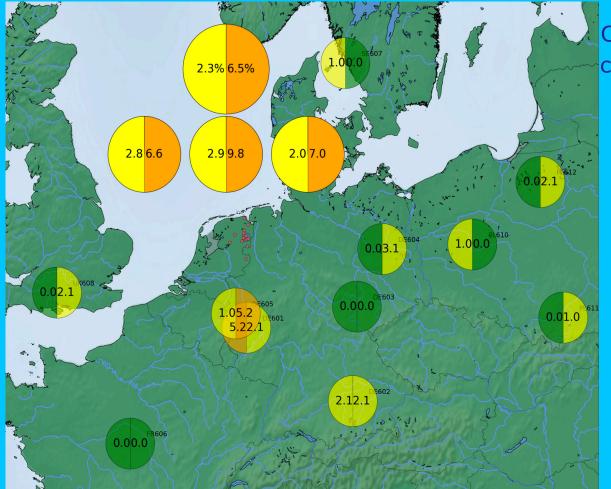
Bałdy

# **Overview, including IS**

LBA: 2.3%; HBA: 6.5%

see https://proxy.lofar.eu/array\_status/





Color coding of non-operational components per stations:

- all operational
- <5% non-operational
- <15% non-operational</li>
  <u>HBA</u>: CS001,CS002, CS004,
  CS005, CS006, CS017, CS021,
  CS032, CS101, CS201, CS501,
  RS210, RS307, RS310, DE605
  <u>LBA</u>: CS002, CS021, CS030,
  CS032, CS401, RS210, RS306,
  DE601

>15% non-operational
 HBA: CS030, CS301, CS302,
 CS401, RS306, RS503

# News regarding the observing system



- > Minor delay with processing. Minor issues with the ingest.
- Station sensitivities issue: bug in BeamServer/RSP software fixed, with final round of tests ongoing this week.
- Station calibration status:

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

- Calibration tables LBA outer for Dutch stations.
- PL610: calibration tables all modes for HBA; LBA delayed because of RFI.
- Calibration tables LBA sparse for Dutch stations in progress.

# News regarding the observing system



#### Software roll-out May 23rd 2016: LOFAR release 2.16.3

- Changes / fixings for BBS, NDPPP.
- Inspection plots Link in MoM.
- Implementation of automated release date in MoM
- RTCP bug (causing outputproc crashes in casacore code) fixed

Release notes available at: http://www.lofar.org/operations/doku.php? id=engineering:release\_notes\_lofar\_2.16

Upcoming Stop Day June 7th 2016

# **News regarding Cycle 6 observations**



Week 22		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
Approxim	.ST	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	23	Mon	A: LT5_008 - J1525 - 6hrs HBA				BB + tests SOFTWARE R			VARE RO	OLLOUT; all international stations to ILT mode a					at 9 UT System tests			A: LC6_020 - FRB - 2hrs - DO NOT MOVE!			System tests				
	24	Tue	SYSTEM TESTS & STATIONTEST													B: LC6_02 8 - B0943 15min HBA	твв	A: LT5_007 - P24; P232+58 - 8hrs								
Мау	25	Wed	A: LT5_007 - P243+50 & P232+58 - 8hrs HBA				TBB + tests				System tests								твв -	+ tests	B: LC6_02 8 - J1022 15min HBA	TBB + tests	A: LT5_007 - P239+50 & P236+55 - 8hrs HBA			
	26	Thu	A: LT5_007 - P239+50 & P236+55 - 8hrs HBA				TBB + tests LT5_004 - LOTAAS - 4hr			AS - 4hrs	rs HBA System tests + 160-200 MH						1Hz test	Hz tests			TBB + tests			Commissioning - 3hrs		TBB + tests
	27	Fri	STATIONTES TE			3B + tests			В	B: LC6_027 - 0206+35 - 8hrs LBA						TBB + tests			A: LC6_020 - FRB - 2hrs - DO NOT MOVE!			LC5_014* - 3C293 - 4hrs HBA repetition				
	28	Sat	LC5_0 14* - 3C293 - 4hrs HBA repetiti on					TBB + tests		В	3: LC6_(	C6_027 - 0206+35 - 8hrs HBA								TBB ·	TBB + tests			LC5_014 3C293 - 4 HBA repet		- 4hrs
	29	Sun	LC5_014* - 3C293 - 4hrs HBA repetition				A: LC6_030 - B1919+21 B1937+21 B2016+28/B2020+28 B2111+46 118 - 6hrs HBA				A: LC6_030 - B0114+58 J0218+423 2 B0329+54- 3hrs HBA					TBB +				) - B0809+74 50+08- 3hrs HBA			TBB + tests		A: LC6_030 - B1508+55 - 1hrs HBA	

> Cycle 6 observing program ongoing:

Detailed Cycle 6 schedule available here: <u>http://www.tiny.cc/LC6</u>

- 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 has started! First observing, next processing.
- > CEP2
  - Disk space situation not concerning.
  - Locus096 and 099 used for spare parts (raid controller).
- ≻ CEP3
  - Disk space of CEP3 commissioning node lof021 75% full !
  - 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-technicalinformation/cep-and-lta-computing-facilitie

Many requests of extensions to access CEP3: monitoring of node usage during allocated time is ongoing. The evaluation of future requests will be based on such statistics.

### **Calendar LOFAR activities:**



- Next LSM
- LOFAR Ionospheric Workshop : 2-3 June 2016, Warsaw
- Long-Baseline Busy Week : 13-17 June 2016
- LOFAR Data Processing School : 5-9 September 2016
- > 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-lofarnews

- 8 June2016 (volunteers welcome) 11