ASTRON

Netherlands Institute for Radio Astronomy

Programme:

1. *Array status & Observatory update – M. Iacobelli/C. Toribio*

2. *Distributed SAGECal – S. Yatawatta*

3. *A preliminary LOFAR survey strategy - T. Shimwell*

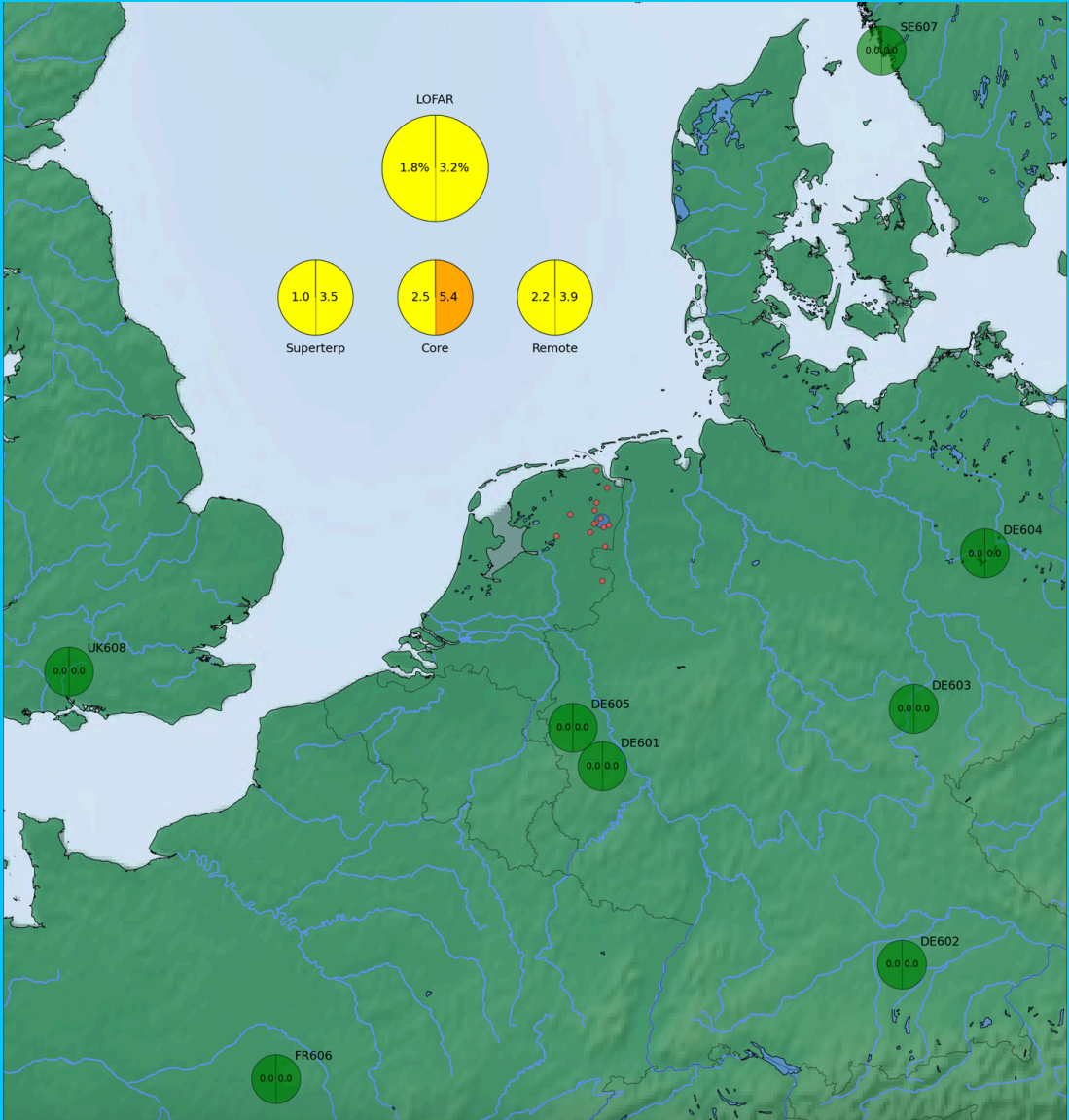4. *Galactic science imaging with bright diffuse emission - J. Gregson*

Array Status

- ➤ 38 operational NL stations
  - ▪ 24 CSs
  - ▪ 14 RSs
- ➤ 8 Is

- ➤ Maintenance/Repair ongoing on several stations.

- ➤ Third (and last) round of mowing the fields for the winter.

- ➤ Placement of the LBA/HBA antennas in Hamburg.
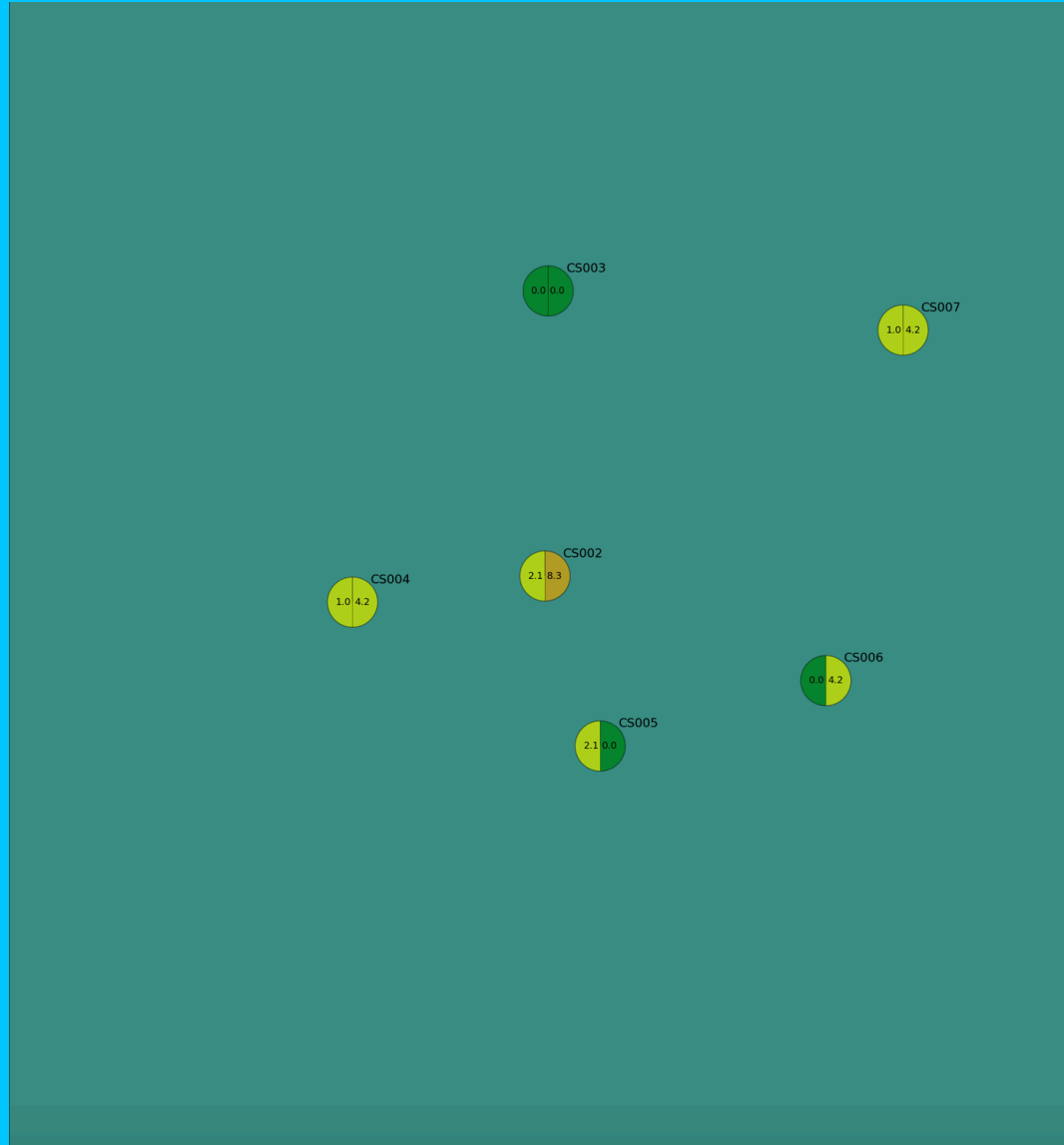
Overview, including IS
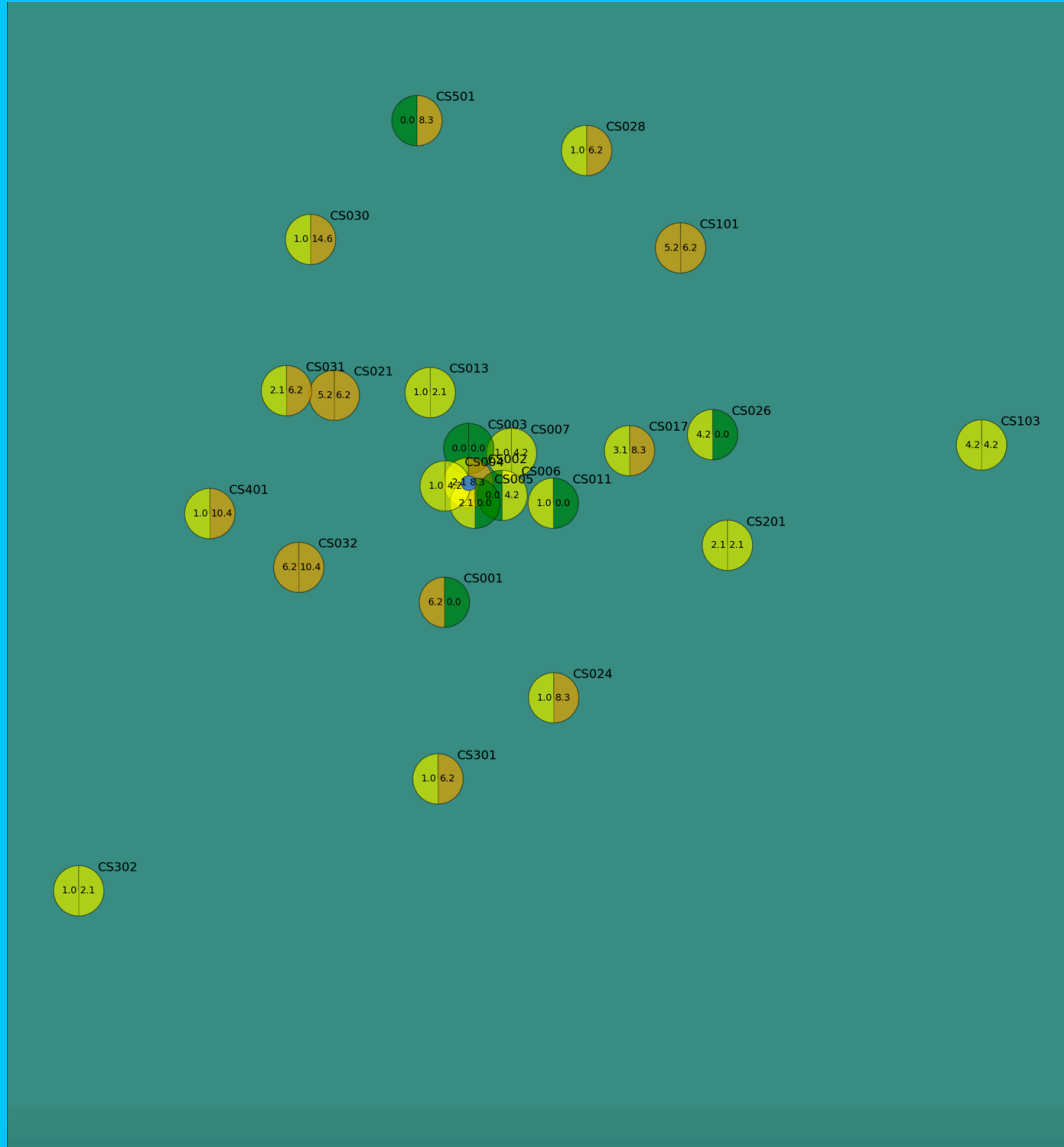
LBA: 1.8%; HBA: 3.2%

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

Superterp

LBA: 1.0%; HBA: 3.5%

Core Stations

LBA: 2.5%; HBA: 5.4%

Remote Stations

LBA: 2.2%; HBA: 3.9%

News regarding the observing system
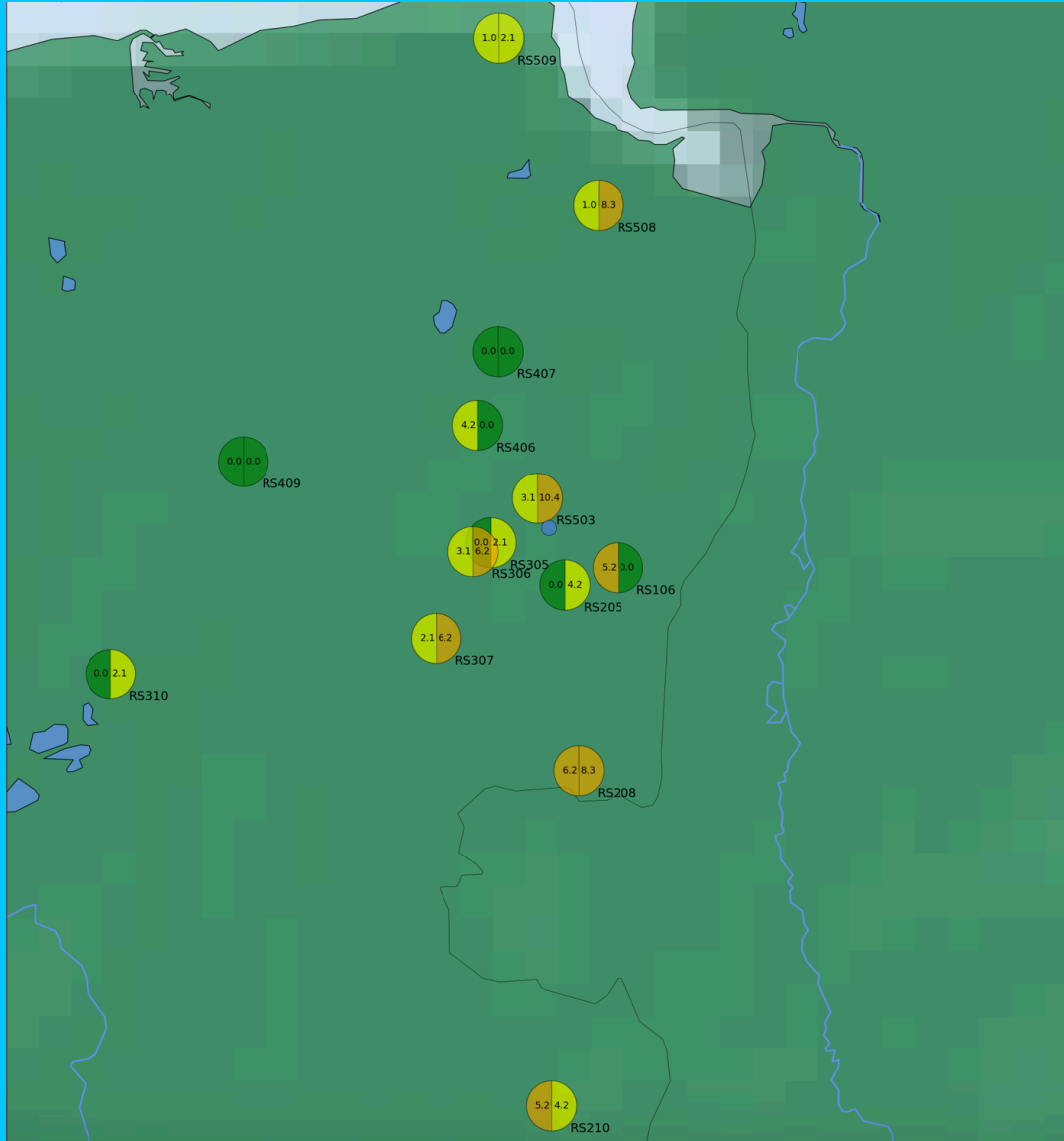
➢ System performed relatively fine during the last 2 weeks.

- ▪ throughput issues to CEP2 locus nodes 051-075.

- ▪ CEP2 headnode needed reboot (one LC2 observing run failed).

➢ LOFAR pulsar archive ingested to the LTA on a regular basis.

➢ Pipelines: currently no processing queue.

- ▪ hanging locus nodes/swapping due to NDPPP high memory usage avoided by a memory limitation set up to 10 GB (instead of 35 GB). Monitoring is ongoing by a dedicated working group.

➢ LTA performance: minor delays with the ingest of data.

News regarding Cycle2/3 observations

LOFAR

ASTRON

Week 46	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		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2

November

10 Mon	IoS/TBB runs	STATION TEST	Stress system runs + TBB runs; all interntional stations switched to ILT mode at 9 UTC	IoS/TBB runs
11 Tue	LC2_008 - 0917+075 - 8hrs	Stress system runs + TBB runs	LC2_00 7 - LSTs 19 / IoS/TBB runs / LC2_00 7 - LSTs 21,23	IoS/TBB runs
12 Wed	IoS/TBB runs / LC2_00 7 - LSTs 0,2,4,5 / IoS/TBB runs / LC2_025 - RAs 6-9 / LC2_00 7 - LSTs 6,7,9,11 / Stress system runs + TBB runs / LT2_003 - LOTAAS / Stress system runs + TBB runs / LC2_007 - LSTs 15-19 / IoS/TBB runs	LC2_005 - A399 - 10hrs
13 Thu	LC2_005 - A399 - 10hrs	LT2_001 - J1026+2542 - 4hrs -- REPETITION - start 2.5h BEFORE TRANSIT	Stress system runs + TBB runs	LC2_039 - J1810+1744 - 4.2hrs	IoS/TBB runs
14 Fri	LC2_025 - All RAs 0-4	IoS/TBB runs	LC2_026 - RAs 9-11	Stress system runs + TBB runs; all international stations switched to local mode at 9 UTC	LC3_028 - EoR NCP
15 Sat	LC3_028 - EoR NCP	IoS/TBB runs	LC3_014 - LOTAAS	IoS/TBB runs
16 Sun	IoS/TBB runs	LC3_030 - RA 16	IoS/TBB runs	LC3_030 - RAs 22	IoS/TBB runs	LC3_030 - RAs 2,7

e-VLBI session 18th November 09:00 UTC to 19th November 13:00 UTC

Week 47	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		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3

November

17 Mon	LC3_028 - EoR 3C196	LC3_001 - M31 -10.5hrs
18 Tue	LC3_001 - M31 -10.5hrs / LC3_014 - LOTAAS	LC3_028 - EoR NCP
19 Wed	LC3_028 - EoR NCP	LC2_039 - J2129-0428 - 8.9hrs
20 Thu	LC3_014 - LOTAAS	LC2_025 - RAs 19-21	LC2_036 - L1407b - LBA 4.25hrs
21 Fri	LC2_036 - L1407b - LBA 4.25hrs / LC2_026 - RAs 9-11	LC3_032 - J2215+5135 - 4.9hrs
22 Sat	LC3_028 - EoR 3C196	LC3_014 - LOTAAS	LC3_028 - EoR NCP
23 Sun	LC3_028 - EoR NCP	

➢ 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 cc sciencesupport@astron.nl and include the proposal code in the subject line**

CEP news:

- ➢ CEP2

  - ▪ <u>Critical situation for disk space</u>. In particular, large bunch of pulsar data. Removal of pulsar data is ongoing in cooperation with the pulsar working group.

- ➢ CEP3

  - ▪ First group of users access the system this week (4 weeks working period).
  - ▪ CEP3 info and users schedule available at:

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

  - ▪ New 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-processin

- ➢ CEP1

  <u>NO USERS ACCESS AFTER NOVEMBER 24TH</u>

  - ▪ **BACK UP YOUR DATA FROM CEP1 ELSEWHERE OR GET IN TOUCH WITH SCIENCE SUPPORT AT sciencesupport@astron.nl IF YOU WOULD LIKE TO REQUEST TRANSFER OF DATA TO CEP3 AND HAVE NOT YET DONE SO.**

  - ▪ <u>Node lce019 broken: data lost!</u>

Calendar LOFAR activities:

- ➤ Start of LOFAR Cycle 3 : 15 November

- ➤ LOFAR Data Analysis School : 17-21 November

- ➤ Next LSM : 26 November

- ➤ Imaging busy week : 1-5 December

- ➤ LOFAR news email list:
http://www.astron.nl/radio-observatory/subscribe-lofar-news/subscribe-lofar-news