# ASTRON

Netherlands Institute for Radio Astronomy

## Programme:

1) Array status, Radio Observatory update - E. Orru

2) The LOFAR visibility calculator - A. Shulevski
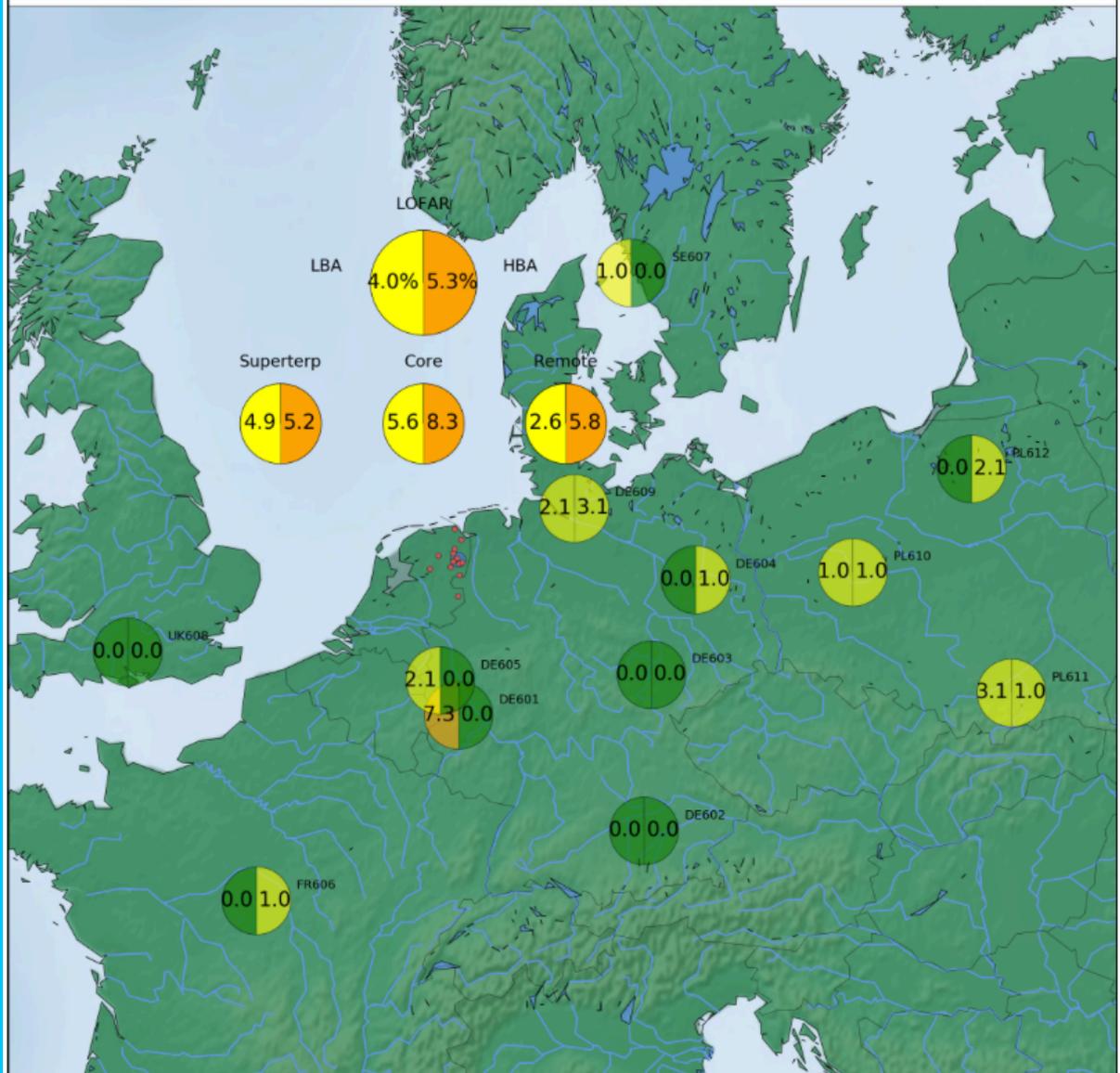
3) CITT2 update - E. Orru'

# Array Status



International LOFAR Telescope (ILT)

➢ 50 operational stations

24 CSs

14 RSs 12Is

➢ New station to be built in Ireland (IE613)

➢ 27/8 DE604 local mode software completely gone.

➢ 28/8 CS501,RS305,RS407 power failure due to heavy thunderstorm.

➢ RS503, and RS310 power switched off by the obs temp sensor.

➢ All NL station switched off during hot days.

➢ RS407 broken power supply of rubidium clock due to lightning

# Heavy lightning

# Overview, including IS

LBA: 4.0%; HBA: 5.3%

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



Color coding of non-operational components per stations:

- all operational
- <5% non-operational
- <15% non-operational
- >15% non-operational

# News regarding the observing system

- ➢ Few observations failed due to high number of stations due to failures
  - ▪ among these some PIs accepted observation with less than nominal amount of antennas.
- ➢ CEP4:
  - ▪ since Wednesday 24th crashes happened without apparent explanation on computing nodes. Kernel OS has being updated an tests are on going to assess if this would fix the issues.
  - ▪ Data loss was recorded during these crashes.
  - ▪ Data loss was recorded in the beginning of the run when initialization of the bandwidth is assigned. Some tuning is being done to avoid this problem.
  - ▪ PSR successful manual run. No successful run through the full system so far.
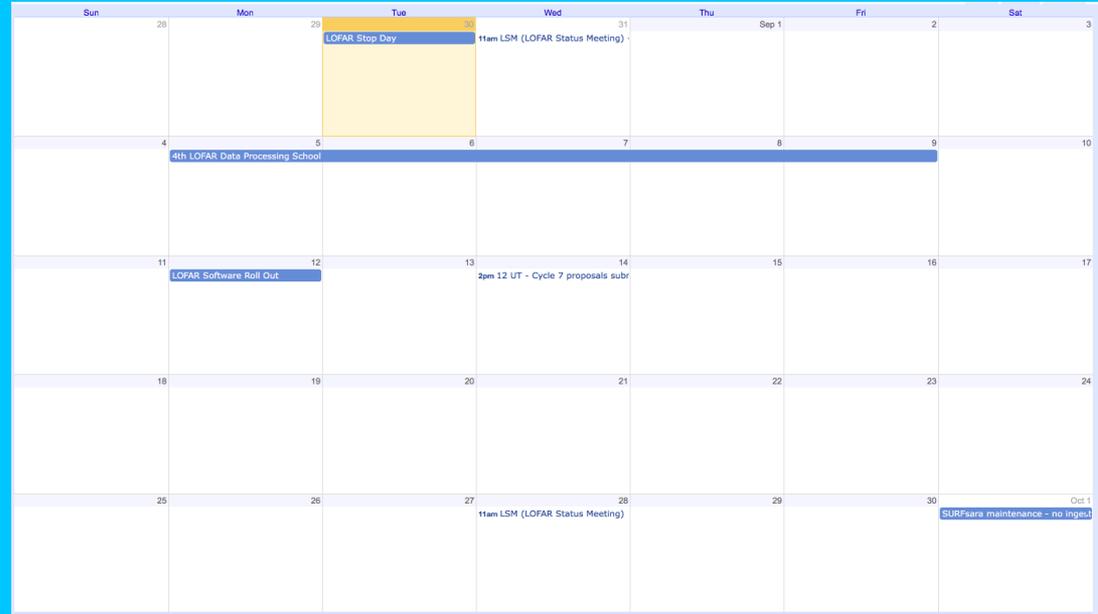  - ▪ Two stop days to allow DELL to update power volt on luster system.

# Preliminary...but really very preliminary characterization

**LOFAR**

**AST(RON**

- ➢ Some production projects run on CEP4 (LC6_006, LC6_007, LC6_015)

- ➢ For these we calculate the P/O.

- ➢ **CAVEAT:** The pipeline run with the cluster free from other pipelines or heavy observations.

- ➢ Data loss in recording observation occurred with this set up.

- ➢ P/O in this conditions is much lower than in CEP2

- ➢ E.G. P/O of flag and averaging for 244 SB in cep 2 is 1 while on CEP4 is ~ 0.5.

- ➢ A new script for characterization is being worked out at the moment. We will repeat this exercize when CEP4 will be working on regime.

# Calendar LOFAR activities:

http://www.astron.nl/radio-observatory/calendar-lofar-activities/calendar-lofar-activities



➢ Call Cycle 7

http://www.astron.nl/radio-observatory/observing-proposals/regular-proposal-call-instructions/regular-proposal- call-instr

➢ NorthStar how to:

http://www.astron.nl/sites/astron.nl/files/cms/PDF/LOFARPSP.pdf

➢ LSM presentations list & users suggestions:

*http://www.lofar.org/operations/doku.php?id=public:lsm_new:start*