ASTRON

Netherlands Institute for Radio Astronomy
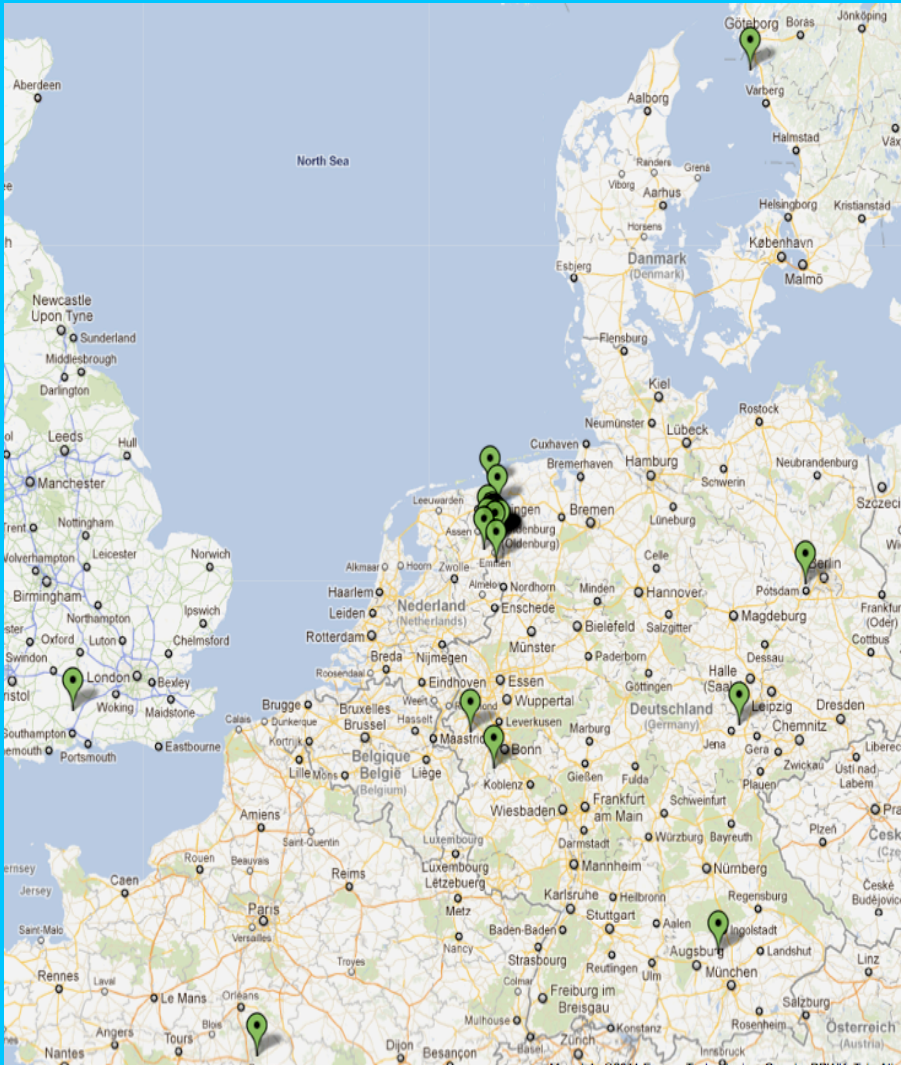
MUTE YOUR MICROPHONES!
(and switch off your cameras)

ASTRON

Netherlands Institute for Radio Astronomy

Programme:

1. *Array status – H. Munk*

2. *Observatory update – R. Pizzo*

3. *LTA update – H. Holties*

4. *MSSS update – C. Ferrari*

5. LC0_012 (Nearby AGN): progress report - R. Morganti

6. LC0_043 (LOFAR Survey of nearby galaxies): progress report - R. Beck and A. Horneffer

Array Status

Current Status:

- 37 operational NL stations
- 24 CSs
- 13 RSs
- 8 ISs

- NL stations TBB memory upgrade installation delayed to June
- RS210: network connected, but problematic; validation expected to be finished on July 12
- EC hangs on several stations: firmware problem; new firmware installed
- RS306, RS307: maintenance last week
- Up to 25 stations dropped out due to high temperature
- Power outage due to lightning on several (NAA) stations
- DE601 maintenance this week

www.astron.nl/radio-observatory/astronomers/current-status

Network, CEP Status

Network
- Connection to RS210 problematic
- Outage on CS024 connection: nw switch problem?
- Still unresolved network problems on the link from DE601
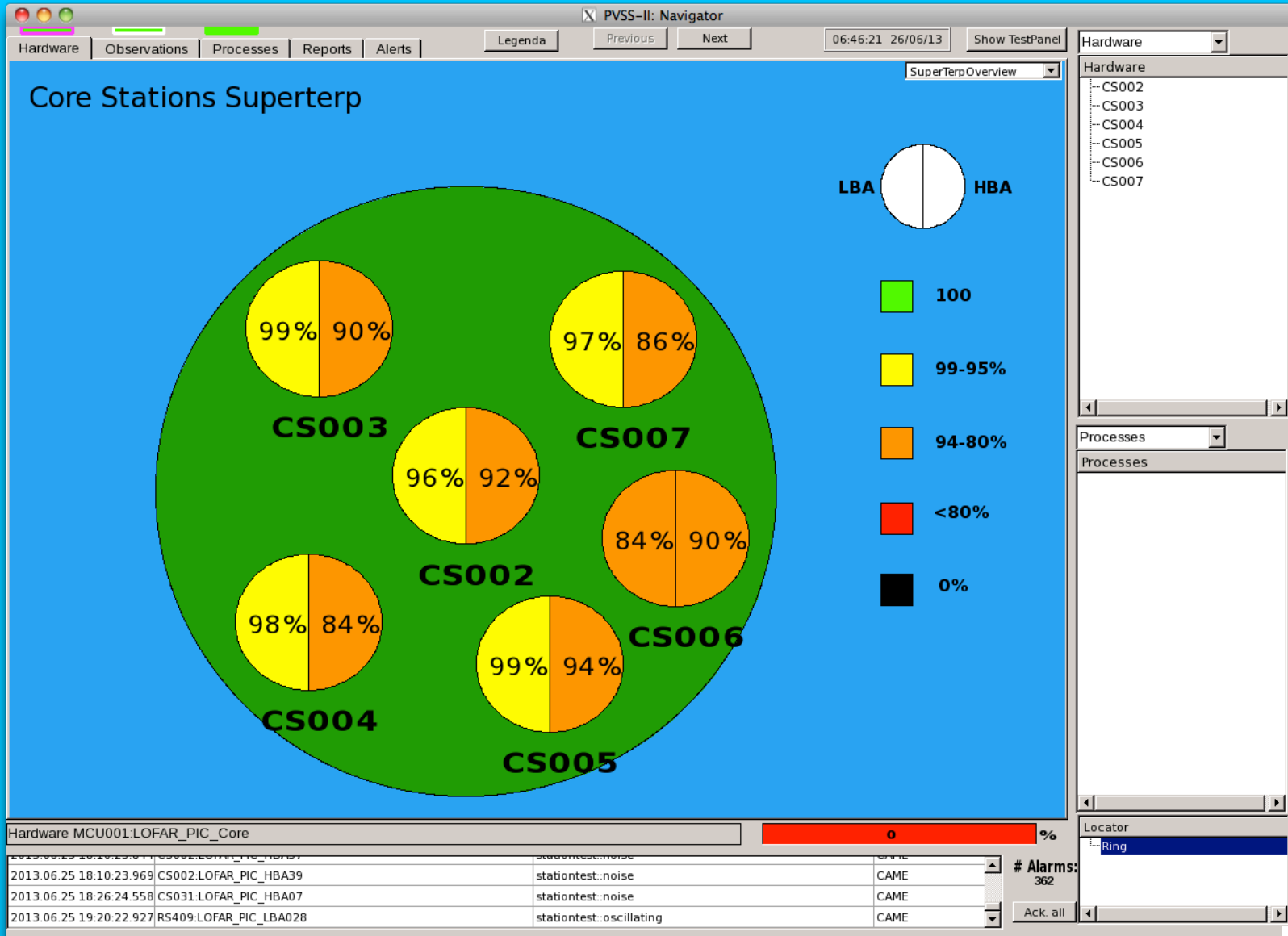 - Extensive test planned for week Mid July

BG/P
- Internal comm problem during observation on two occasions: no cause found, but very probably a sw problem
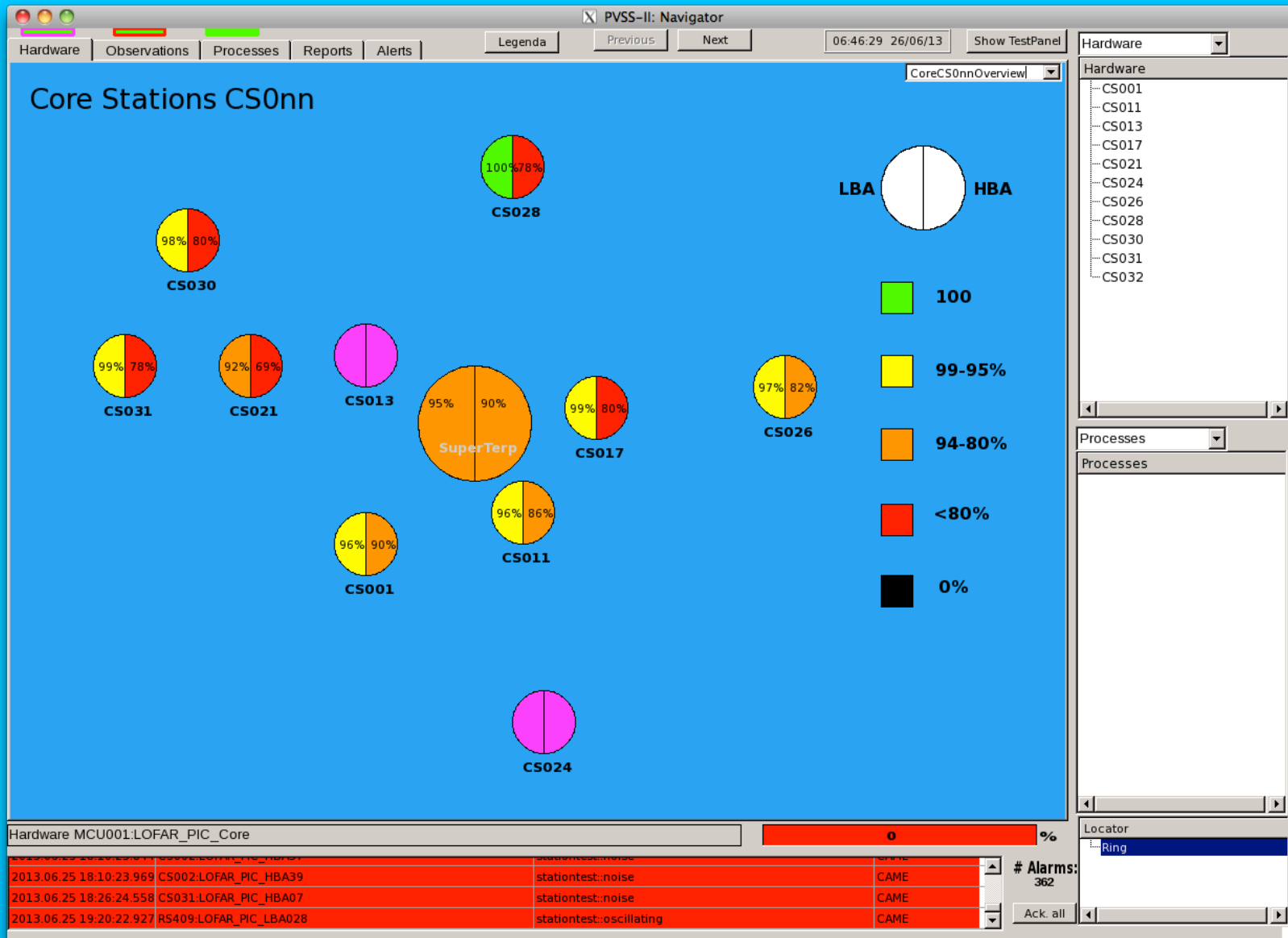
CEP-I/II
- Several CEP-II nodes hanging due to AWImager high memory usage

- Status of CEP-I disks deteriorating; CEP-III expected to be operational October 2013

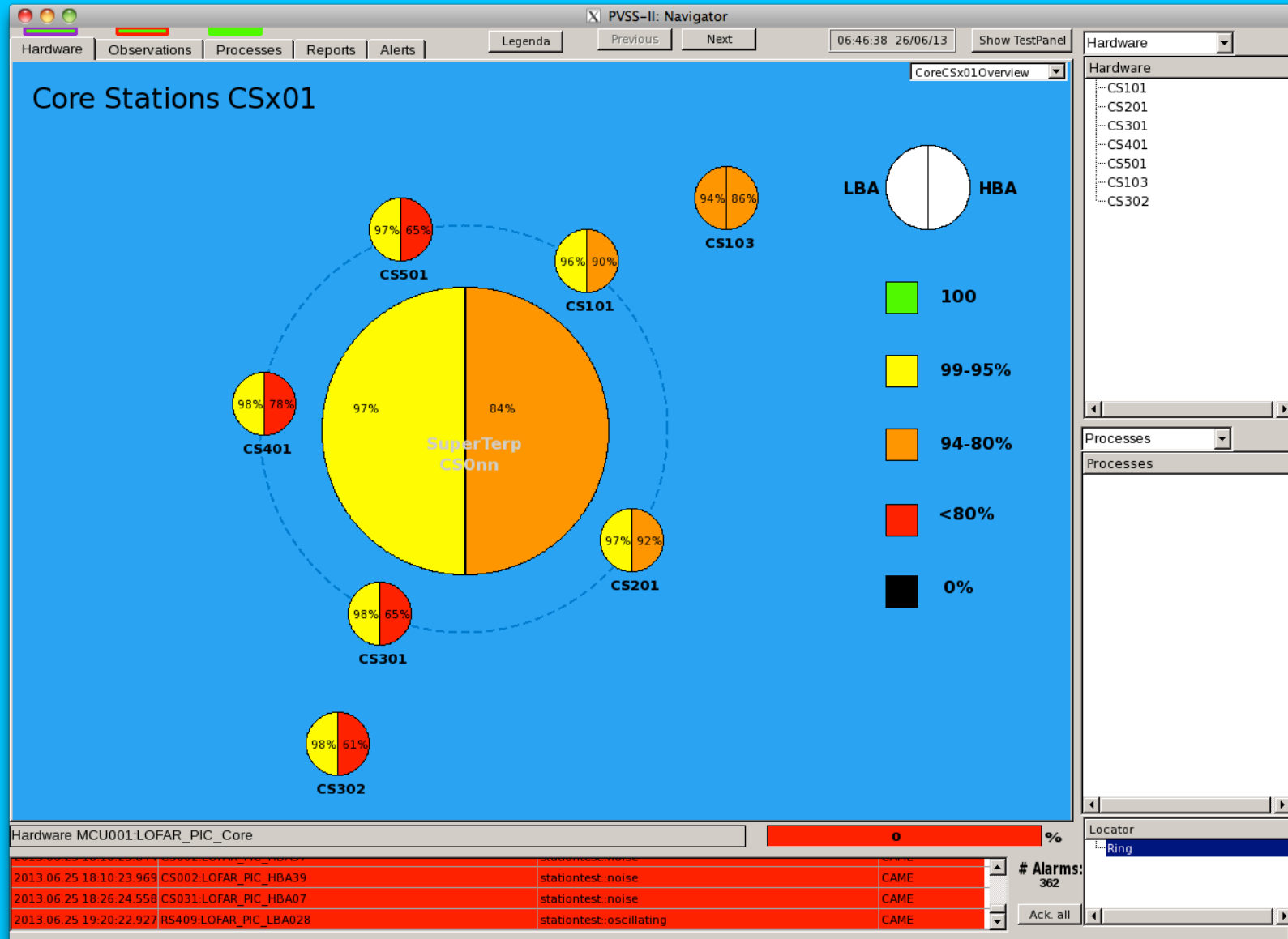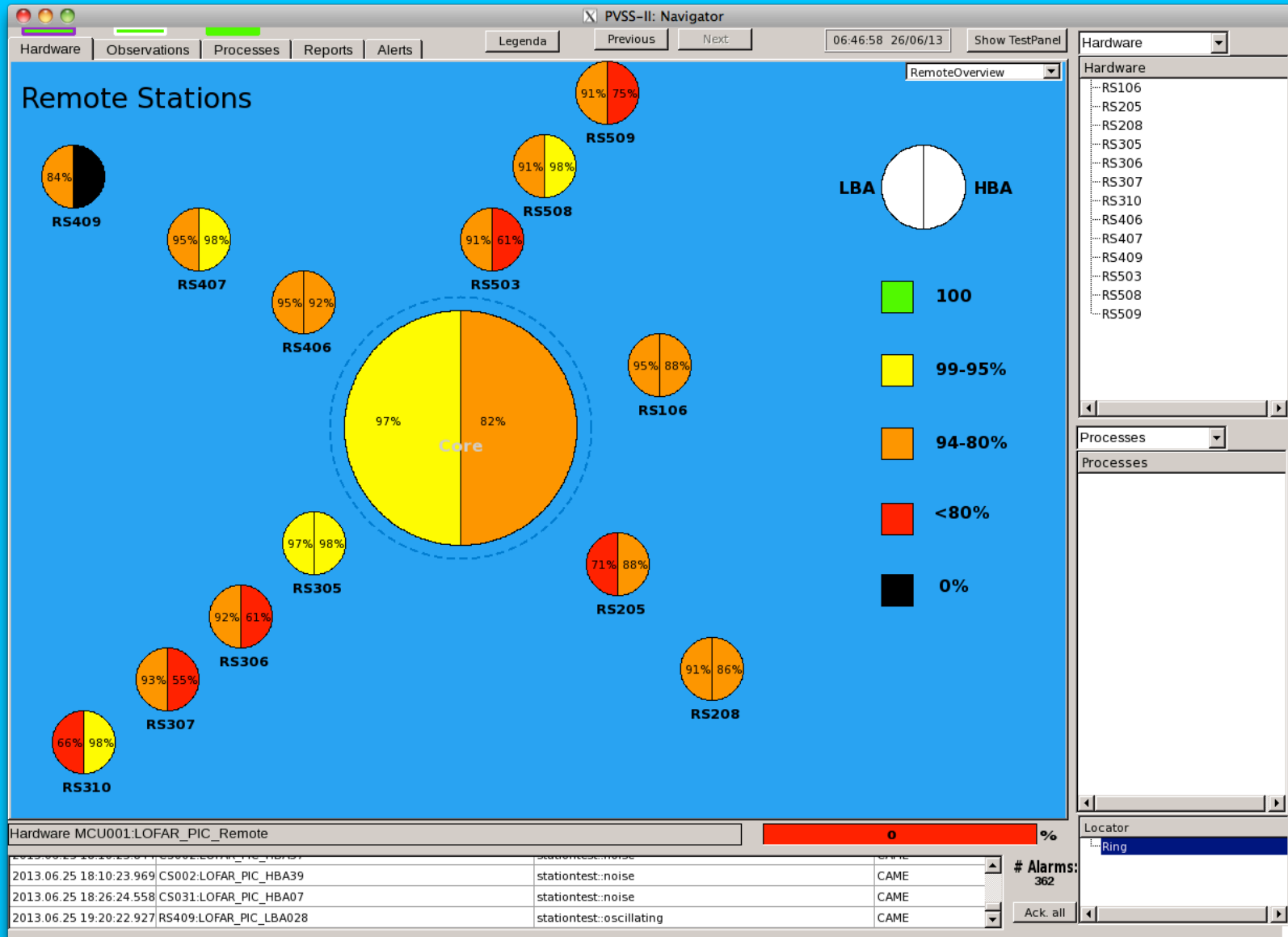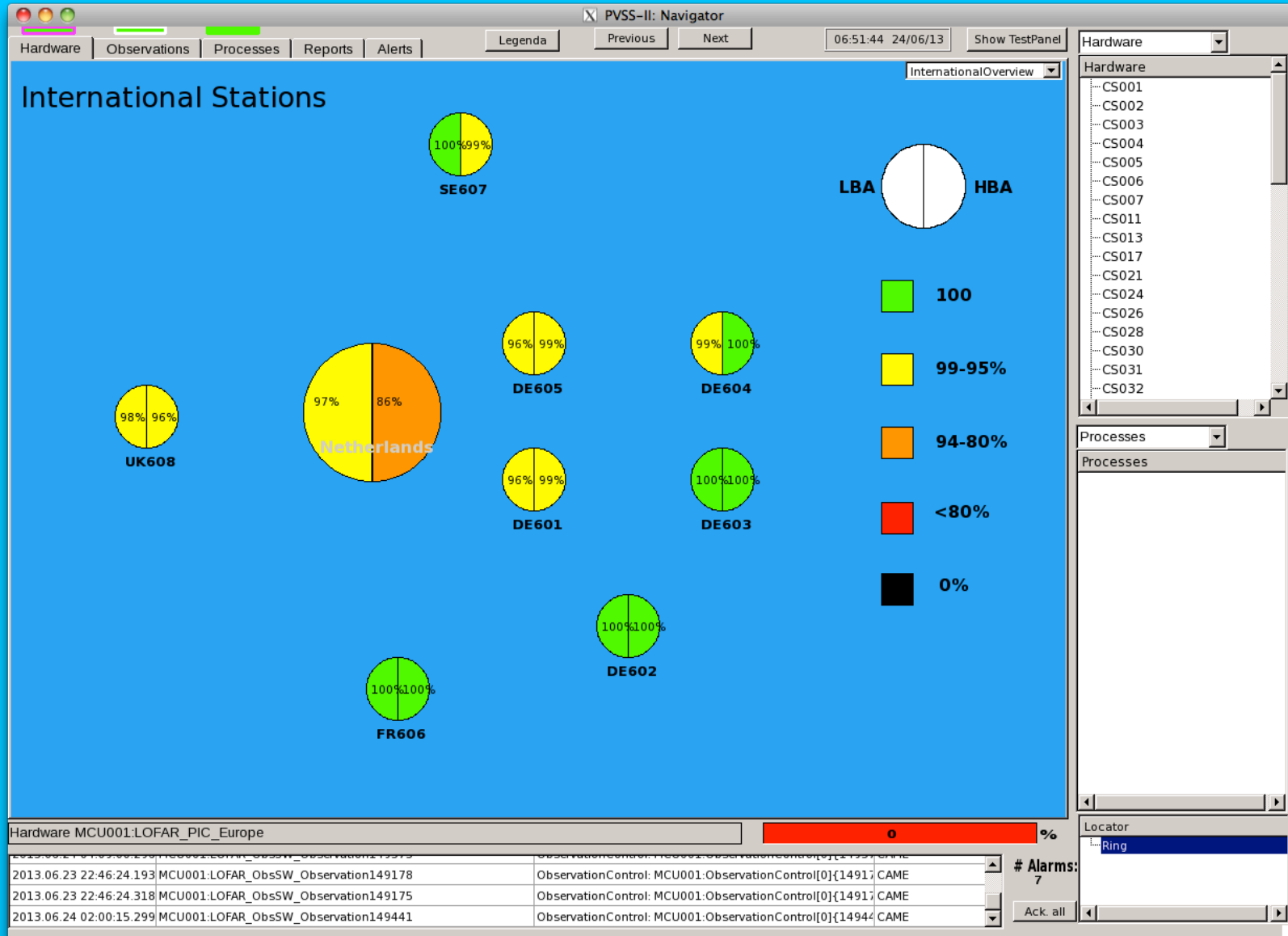Next stop day: Tuesday, July 2: minimal stopday

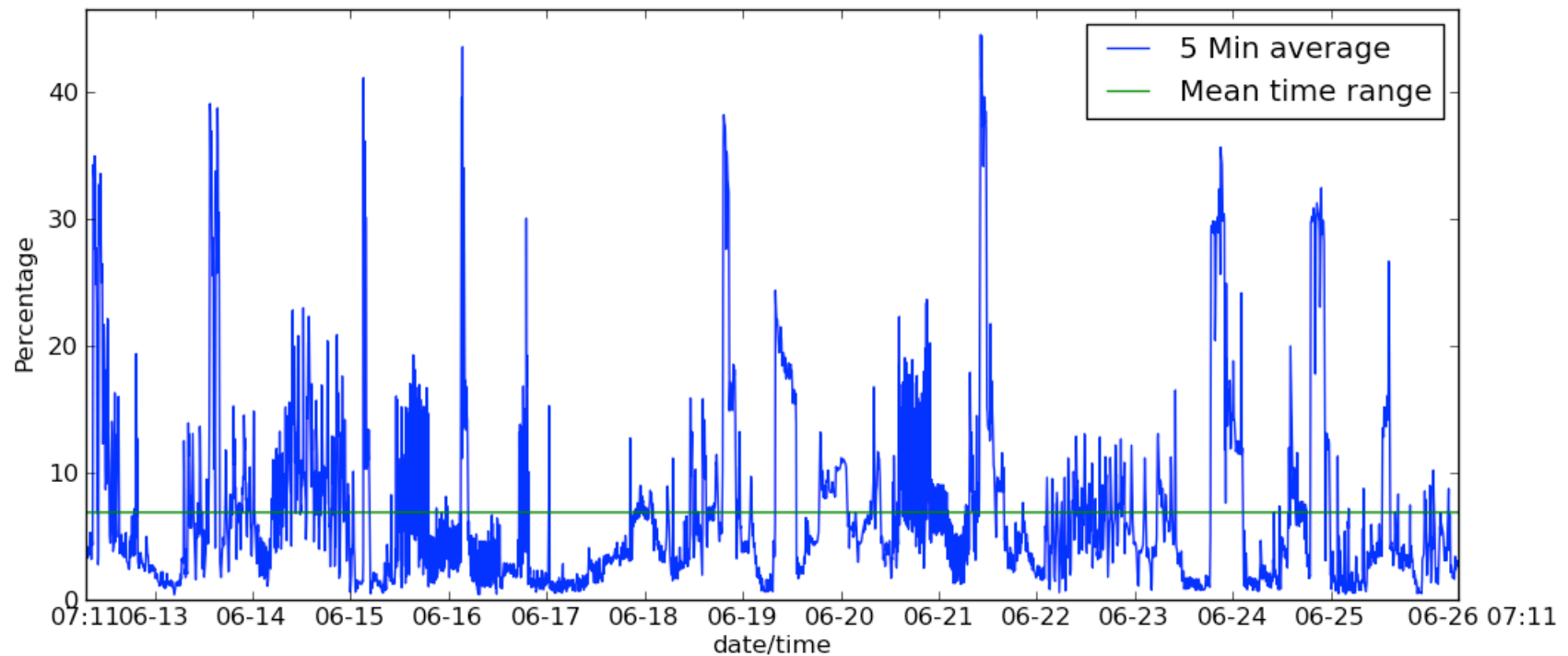# Superterp

Core

Core x01 and outside

Remote

International

CEP usage last two weeks

Averaged CPU usage Locus nodes in % for 14 days.
Created at UTC 2013-06-26 07:12

News regarding the observing system
Station calibration

- Station calibration:

  ➢ Following station maintenance, calruns are performed for the involved stations. Recently: DE603, DE604.

- Updated status available at

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

- Effort starting on July 1st to make station calibration procedures more automatic (Matthijs Eikelboom, Carmen Toribio, Stephan Wijnolds, Michiel Brentjens)

News regarding the observing system
Stations

- Various stations have been failing during the last two weeks because of the extreme temperatures (inside the cabinets)

- BG/P failed two times last week because of a network problem – issue is currently unresolved, but being looked into

- Good data from the International stations during the last Cycle 0 runs. Note: international station tests will be performed intensively during week 29 (July 15th) - involvement of network experts, Science Support, Observers, LTA experts. Coordination: Michiel Brentjens

- Station test being performed regularly two times per week. Results analyzed and made input for station maintenance

News regarding the observing system: Stability & performance

- Overall stability is good:
  - Observations stable
  - Pipelines:
    - Occasional swapping caused by 'snapshot processing' and Awimager (chracterization)

- Issues:
  - Because of too many processes (ObservationControl) active on the MCU, system hanged (experienced twice already)
  - Communication problems between various parts of the system – feedback not reliable and incomplete metadata -> significant delays with ingestion
  - Unreliable status for various observations in MoM -> contributes to delays with ingestion
  - Double MoM ID's -> also delays with ingestion (repair action for all existing double MoM ID's early this week)

News regarding Cycle 1 preparations: Characterization & NorthStar updates

- 3C48 & L227+69 (empty field) being used to characterize the LOFAR system:

  - Processing times

  - Noise levels

  - Resolutions

  - Bug when querying MonetDB caused a delay of more than a week in the production of the final images – it has been eventually solved by Bart Scheers

  - Results will be available on the ASTRON web pages by July 15th

- NorthStar is being updated and more functionality will be included in preparation for Cycle 1. Beta testers will be contacted this week and will be kindly asked to test the tool and get back to us during the coming two weeks

News regarding the observing system : Archive

- Archiving of raw MSSS LBA data has completed – only processed data left on CEP2

- MSSS HBA experienced delays with the ingestion because of double MoM ID's

- Cycle 0 data ingest – queue of 'problematic' data is getting shorter, but old data from last February still present on CEP2

- 'Relaxed ingest' being worked on – see Hanno's talk for details

News regarding Cycle 0 observations

- Detailed Cycle 0 schedule till the end of the Cycle available on ASTRON website:

    https://www.astron.nl/radio-observatory/lofar/cycle-0-schedule/cycle-0-schedule

- Check the schedule and inform Science Support in case of issues

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News regarding Cycle 0 observations

- During the last two weeks:

  - Cycle 0 – EoR, Pulsars, long baselines (successful!), RRL

  - MSSS – HBA (16 hours per week)

  - DDT_003 – Elais – completed

  - DDT_004 – 1713 global observations – completed

  - AARTFAAC experiments

  - Commissioning - 3C268.3 – Morabito et al.

CEP news:

- CEP-2: fairly stable

  - ➢ Various locus nodes hanged due to AWimager jobs demanding 70 GB of memory -> currently, AWimager processes are being run under SS surveillance…

- CEP-1:

  - ➢ Staging areas in the process of being cleared up – remember that Cycle 0 data have a grace period of 4 weeks in these areas…after this, they may be removed.

  - ➢ Ice nodes – various users did not react to last ultimatum. Their old data has been cleared up last Wednesday.

CALENDAR of requested busy weeks and other LOFAR activities

http://www.astron.nl/radio-observatory/astronomers/commissioning/commisioning-plan

- 2 July : CEP Stop day
- 6 September : Cycle 1 - proposals submission deadline