

Netherlands Institute for Radio Astronomy

# Radio Observatory Report

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

Station/Item	Cabinet	LBA	HBA	Fibre	CEP connection	Validated
CS302						
RS307						
RS503						
RS106						
RS208						
CS030						
CS401						
CS021						
CS032						
RS306						
CS301						
CS501						
RS509						
CS103						
CS001						
CS002						
CS003						
CS004						
CS005						
CS006						
CS007						
CS024						
CS201						
CS101						
CS026						
RS205						
CS017						
CS011						
CS013						
CS028						
CS031						
RS305 (RS104)						
RS210						
RS310		1				1
RS404		- -				
RS406						
RS407						
RS409						
RS410						
RS508						
Effelsberg						
lautenburg						
Garching						
Potsdam						
Juelich						
Nancay						
Onsala						
Chilbolton						
Totals	40	40	40	38	36	36



#### Current Status:

27 operational NL stations
20 core + 7 remote
6 stations partially constructed
(4 core, 2 remote)

7 remote stations planned for 2011

- 6 International stations fully constructed 5 International stations operational
- 1 Partially constructed (DE605 Juelich) 1 (SE607) planned for 2011

### Observations



- LEA128: Observations of 3C196 and NCP to monitor the performance of the array
- LEA052: HBA observation of Abell 2255
- LEA064: HBA observation of Virgo A
- LEA032: HBA observation of J0329+54
- LEA032: HBA monitoring of Cygnus X3 in "rising" state
- Imaging BW: 3C196 observations 10-90 MHz
- MSSS : test HBA observations of Cygnus A at 120-190 MHz
- Pulsar observations

Observations are processed through RFIConsole and averaged to the compute nodes.

Contact: sciencesupport @astron.nl for more information.



# Issues affecting the observing System



- **CEPII Cluster:** H/W delivery & installation is progressing.
  - This week: Setting up for test observations with part of the cluster.
  - On track for parallel use during April.
  - (hold your breath for next LSM)
- CEP stopday April 4:
  - New portal is use transparent to users
  - First time login may get warning:

"WARNING: POSSIBLE DNS SPOOFING DETECTED"

Clear out with:

'ssh-keygen -R portal.lofar.eu'

#### Or

remove the 'portal.lofar.eu' entry from your ~/.ssh/known\_hosts file and accept the new hosts key.

Old portal is now: oldportal.lofar.eu

## Issues affecting the observing System



- LSE014:Repaired and used again.
- Repairs of broken LBAs ongoing.
- CS501: Network connection is monitored.
- DE604 Potsdam: network repaired will integrate in the array
- RSP boards jump to ERROR state: Monitored

# Issues affecting the observing System: UVW mislabeling



All data sets before **L2011\_24246 (March 15)** have the UVW coordinates incorrectly labeled as ITRF, instead of J2000. This leads to a small, but noticeable field rotation.

A Python script repairs the problem. Please apply it to all your data with SAS IDs smaller than 24246 before starting calibration and imaging.

Details and Python script in the LOFAR Forum (General Category>System Alerts>UVW mislabelling)

http://usg.lofar.org/forum/index.php?topic=653.0

Issues affecting the observing System: LOFAR NL stations: gain change



As of data set **L2011\_24547 (March 24)**, the digital voltage gain at all LOFAR-NL stations is increased by a factor of two, to reduce numerical noise in the beamformer.

The consequence is that the correlation coefficients of all Dutch baselines are increased by a factor of 4, and of all Dutch-International baselines by a factor 2.

International stations will be updated soon. Please watch your data flux scale carefully over the next week.

Details in the LOFAR Forum (General Category>System Alerts>LOFAR-NL station gain change) http://usg.lofar.org/forum/index.php?topic=654.0

# CALENDAR of requested busy weeks and other LOFAR activities



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

- -11-15 April: Pulsar Busy Week in Dwingeloo(use of Phase I cluster)
- 02-06 May : Imaging Busy Week in Leiden (register at:

http://www.lc.leidenuniv.nl/lc/web/2011/461/info.php3?wsid=461)



