Station Monitoring

Monitoring of the station environment and the status of the LCU can be found at: https://lofarx.mpifr-bonn.mpg.de/cacti/graph_view.php?action=tree&tree_id=1

Hardware Status as of 4. June 2013

Electronics:

All RCU modules plugged in.

High Band Antennas:

All tiles are working.

In tile 54 (RCUs 108/109) the element 9 is not communicating.

In tile 9 (RCUs 18,19) the element 16 shows strange features in the spectrum even though it has been recently replaced.

Low Band Antennas:

A number of LBAs show too little power, two show too high power (especially at low frequencies). This needs to be addressed at the next maintenance session.

Some (even-numbered) dipoles show little to no power in the spectrum (like as if the LNA is not working). The problem is not always consistent: some seem to recover without active intervention, some seem to recover after pulling and re-connecting the RCU.

Date	RCUs with low power in rcumode 3																
Maintenance 16.10.2012	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wed 1.02.2012					68[4]	72[4]		78				104[4]	130[4]	138	148[2]	150	152[4]
Wed 18.01.2012	*	*		*		72		78					130	138	148	150	152
Wed 21.9.2011	8	12	*	54[2]	68	72		78	82	*			130	138[1]	148	150	152[1]
Thu 11.8.2011	8	12	44	54		72		78	82	86			130	138[1]	148	150	152[1]
Fri. 8.7.2011[A]	8	12	44		68	72	74[3]	78	82	86			130		148	150	152[2]
Mon 4.7.2011	8	12	44			72	74[1]	78	82[2]	86			130		148	150	

Date	RCUs with low power in rcumode 3															
Fri 1.7.2011[A]	8	12	44		68	72		78		86			130		148	150	
Wed 29.6.2011[A]	8		44			72		78		86	92			138	148	150	

Notes:

[A] No attempt to recover signal by switching rcumodes done.

[1]Recovered after switching to rcumode 1 and back (a number of times)

[2]Showed changing power levels.

[3] At 50-50 MHz about 10-15 dB reduced at 20 MHz about 30 dB reduced.

[4] Normal power at some times, reduced power at others

* Replaced during maintenance visit, or before

Computer Status as of 4. June 2013:

Data Taking PCs

All lofarAN machines have new RAID disks configured ad RAID5 (12.7 TB storage space in total per machine).

The lofar BN machines have their disks in a RAID0 configuration, with the system as part of the RAID0.

Right now (4. June 2013) lofarB1 is offline due to a broken disk.

Server

lofarsrv is up

List of spares as of 4. June 2013:

Description	Quantity (Note)
spare disks (2TB)	7
RCU - Modules	8 + 1 with broken LBH connector (used for demonstrations)
HBA FE - Modules	0
HBA Summators	1 (communication, without voltage regulator)
"good, old style" LBA heads	8
good, new-style LBA heads	0
"LBA, HBA mechanics goodie bag"	1

Description	Quantity (Note)
4 GByte TBB Memory modules	4 (spare, surpuls ???)
2 GByte TBB Memory modules (old modules)	48 (DDR 2, 667, CL5, ECC, Reg)

Important or Interesting Webpages

- The effelsberg station monitoring page: https://lofarx.mpifr-bonn.mpg.de/cacti/graph_view.php
- The page of the Barix device in the container: http://lofar-brix.mpifr-bonn.mpg.de/
- The LOFAR Wiki: http://www.lofar.org/wiki/doku.php?id=start
  Needs a login to see anything. If simply registering is not enough, contact Arno Schoenmakers for more access.
  - Single station use at the LOFAR Wiki: http://www.lofar.org/wiki/doku.php?id=singlestation:start
    With quite a bit of information on dealing with a station, but rather unstructured.
  - Technical operations contacts at the LOFAR Wiki: http://www.lofar.org/wiki/doku.php?id=operator:ilt_to_contacts
- The international LOFAR schedule: http://www.astron.nl/lofar-schedule/schedule/schedule.php
  (Stations not scheduled for an ILT observations are usually free for local observations)