3.4.2013

Problem with 160 MHz mode

When trying to do calibration observations in rcumode 6, the RSPDriver kept failing when setting the station clock to 160 MHz. From looking at the logfiles of the RSPDriver it seems to be a problem with the Clock- (TDS-) boards. When taking subrack 5 (in which the TDS board was replaced in March) out of the station config, then the system could be set to the 160 MHz mode.

Monitoring software installed

The iStnMonitor software has been installed. The plots can be viewed at: https://lofarx.mpifr-bonn.mpg.de/cacti/graph_view.php

The LOFAR Environment will be expanded when new sensors for the container monitoring will become available.

2013 Apr 08

Bad (oscillating?) tiles in HBA 5 mode on startup in local mode:

RCUs 18,19,34 are very bad

RCUs 50,51,52 are modestly bad (high ringing around line at 161 MHz)

Tiles 9,17 are very bad

Tiles 25, 26 are modestly bad

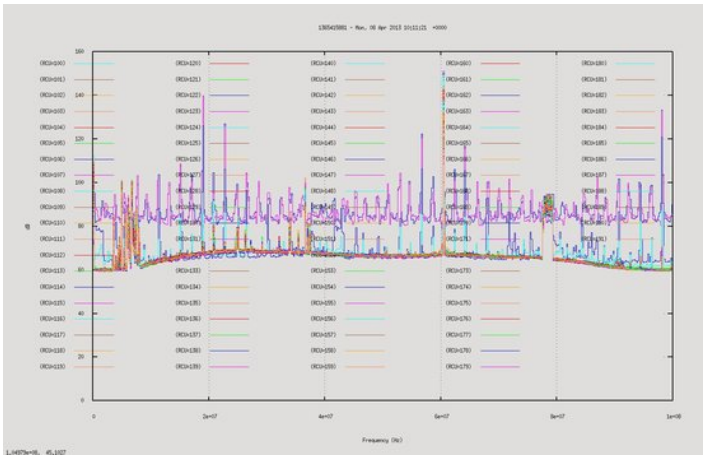
These tiles are neighbors. See tiles.0.pdf

RCU 82 (Tile 41) also has low-level ringing

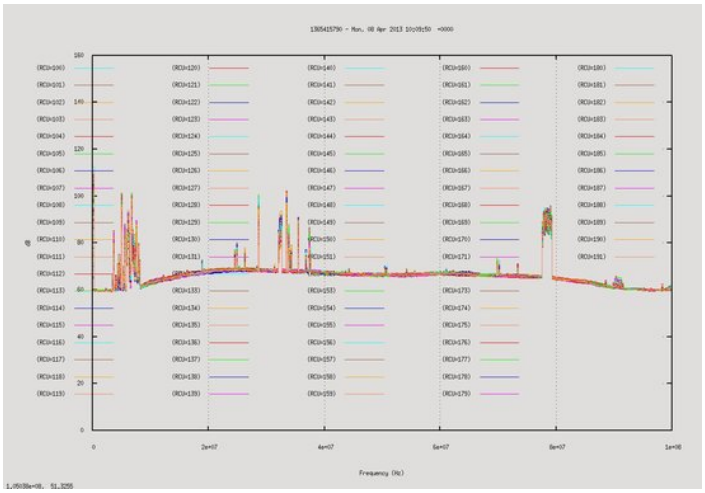
Set pulsar RCU command to 0:17,20:33,36:49,54:81,84:191

With those tiles turned off, there is no more 161 MHz line.

When the bad tiles are in, the spectra from RCUs look like



and when they are not powered up, the spectra of the remaining RCUs look like



James M Anderson

9.4.2013

Oscillating tile(s)

The were no strong oscillations today, as there were yesterday. But tile 9 (RCUs 18, 19) showed a few "bumps" in the spectrum. These went away when FE-module 16 (the last one) was switched off.

So tile 9, FE 16 needs to be replaced.

160 MHz mode

When I tried to switch the station to the 160 MHz clock today there were no apparent problems.

The spectrum in rcumode 6 (with 160 MHz clock) looked as "fine" (i.e. with unly the usual RFI).

15.4.2013

Update on current issues

After handover today one HBA tile was wildly oscillating, after switching off FE-module 16 of tile 9 this was gone. So this is indeed the bad module.

Also the 160 MHz mode worked O.K.

22.4.2013

Update by James M Anderson

After handover today there were still oscillating tiles. I have flagged the bad tiles with the RCU selection 0:17,20:33,36:49,54:81,84:191

There is new station software installed by ASTRON. Local configuration scripts will need to be updated...