

## 2012 February 1st

A. Horneffer did:

### 1) 1<sup>st</sup> LBA Test

Did the "standard" test with `rspctl --stati`, the following antennas had reduced power: **104, 138, 148, 150**

104 switched a number of times between power levels I consider "normal" and "LNA not powered".

148 showed changing power levels.

### 2) HBA Modem and Oscillation Test

The modems 68/68-7 and 40/41-11 are broken

The modem 166/167-12 reports back "???" in the first test of `modemtest`.

At the beginning tile 178/179 was oscillating with high power (like Joris has reported), that also transmitted to tile 180/181. After switching off all LNAs of tile 178/179 (with `"rspctl --hbadelays=2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2"`) the strong oscillations were gone and stayed gone after switching the LNAs back on.

A noise line at about 156 MHz was present in tile 178/179, and weakly visible in tiles 176/177 and 180/181. After switching off LNA 178/179-16 that line is gone, also in the neighboring tiles. So that FE module is bad, it may also be the cause for the strong oscillations.

### 3) 2<sup>nd</sup> LBA test

Did the "standard" test (ca. 4 h after the first), the following antennas had reduced power some with changing power levels: 68, 72, 78, 104, 130, 138, 148, 150, 152, 178

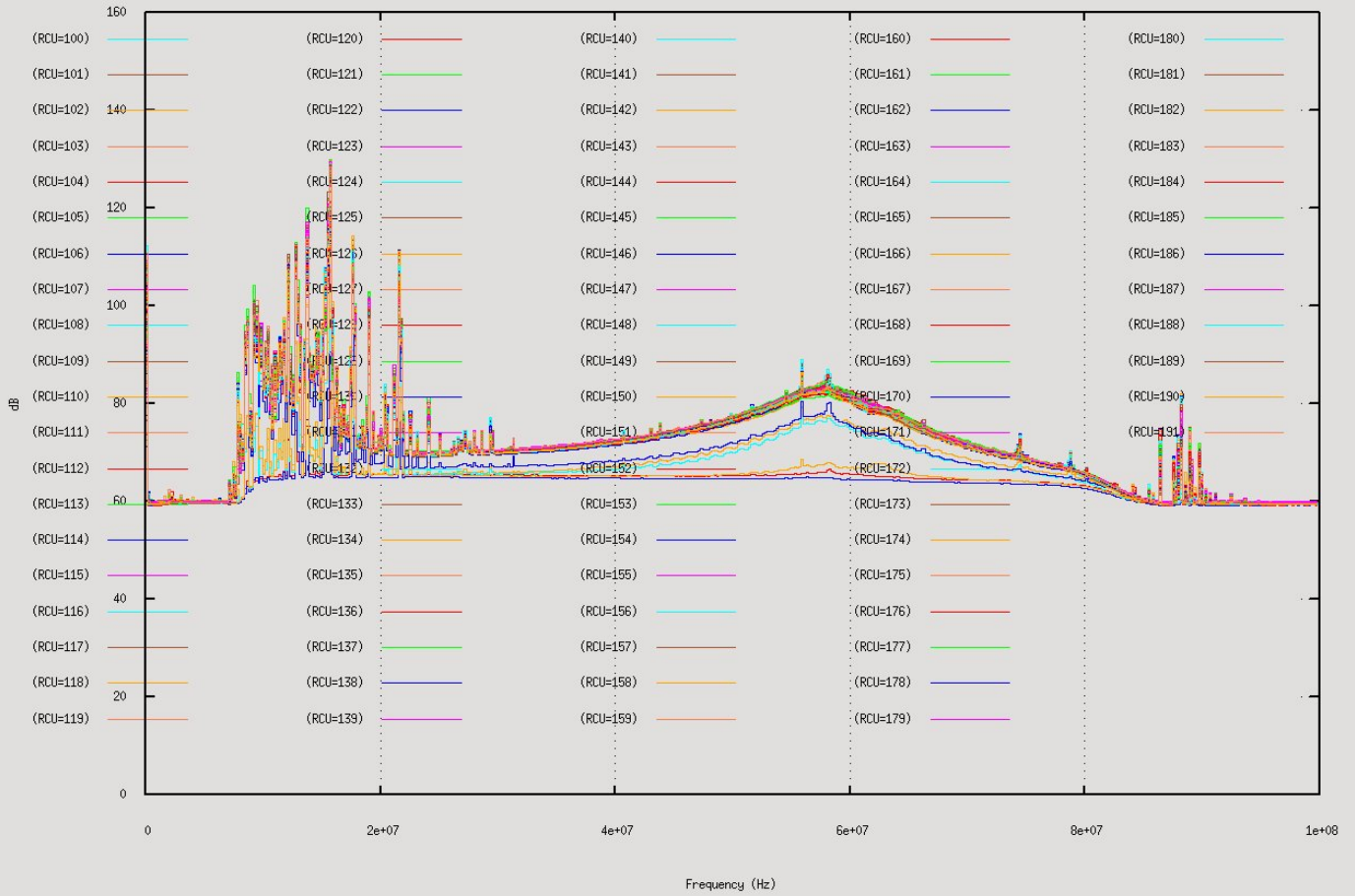
## 2012 February 2nd

James M Anderson

While testing the beam calibration performance for RCUMODEs 3, 5, and 7, I used `rspctl --stati` to make plots of the overall spectrum, showing major locations of RFI. This was done at approximately 11:30 local time. The DAB+ situation is getting worse.

RCUMODE 3

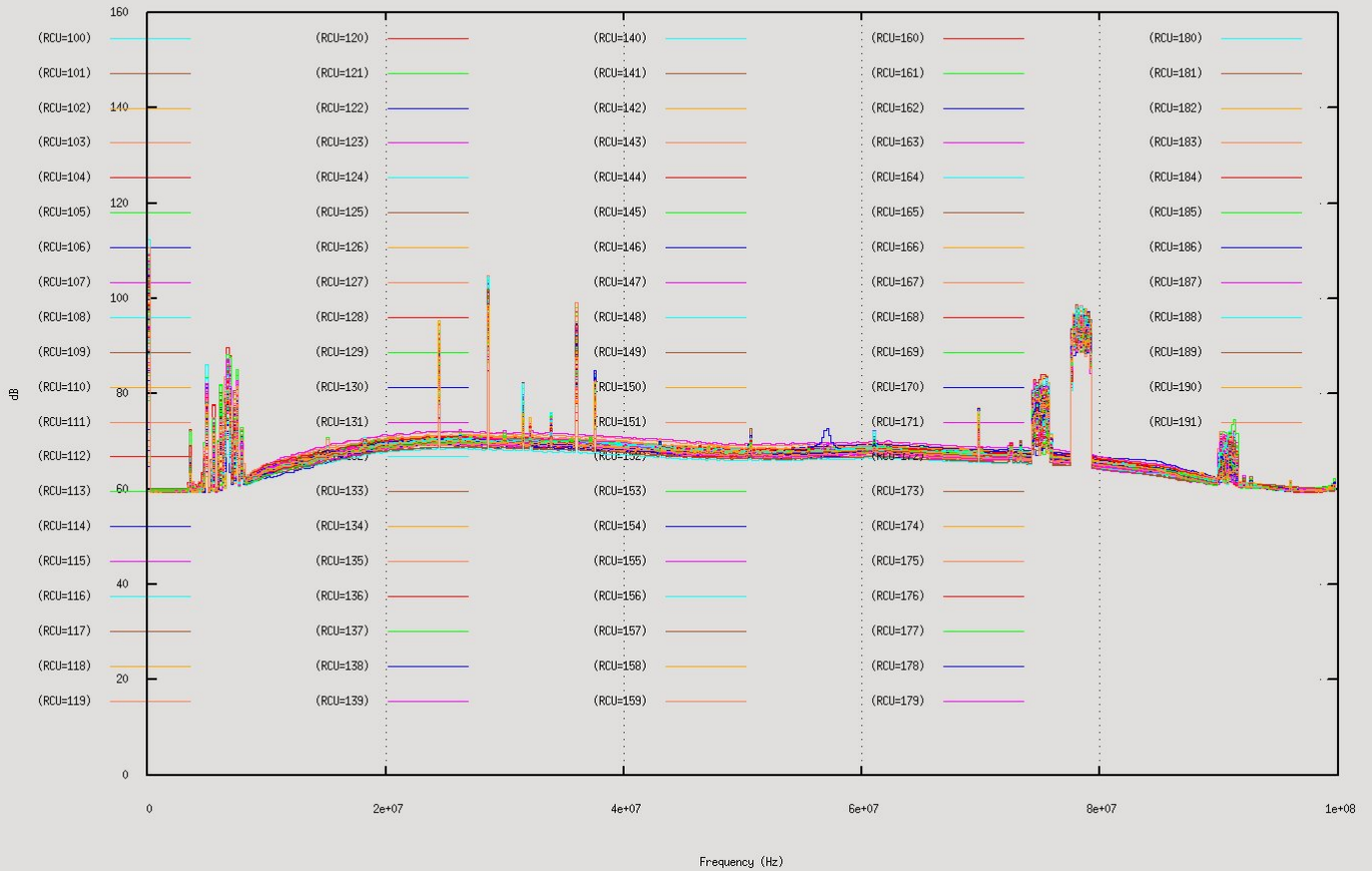
1328178074 - Thu, 02 Feb 2012 10:21:14 +0000



-1.53801e+07, -24.4928

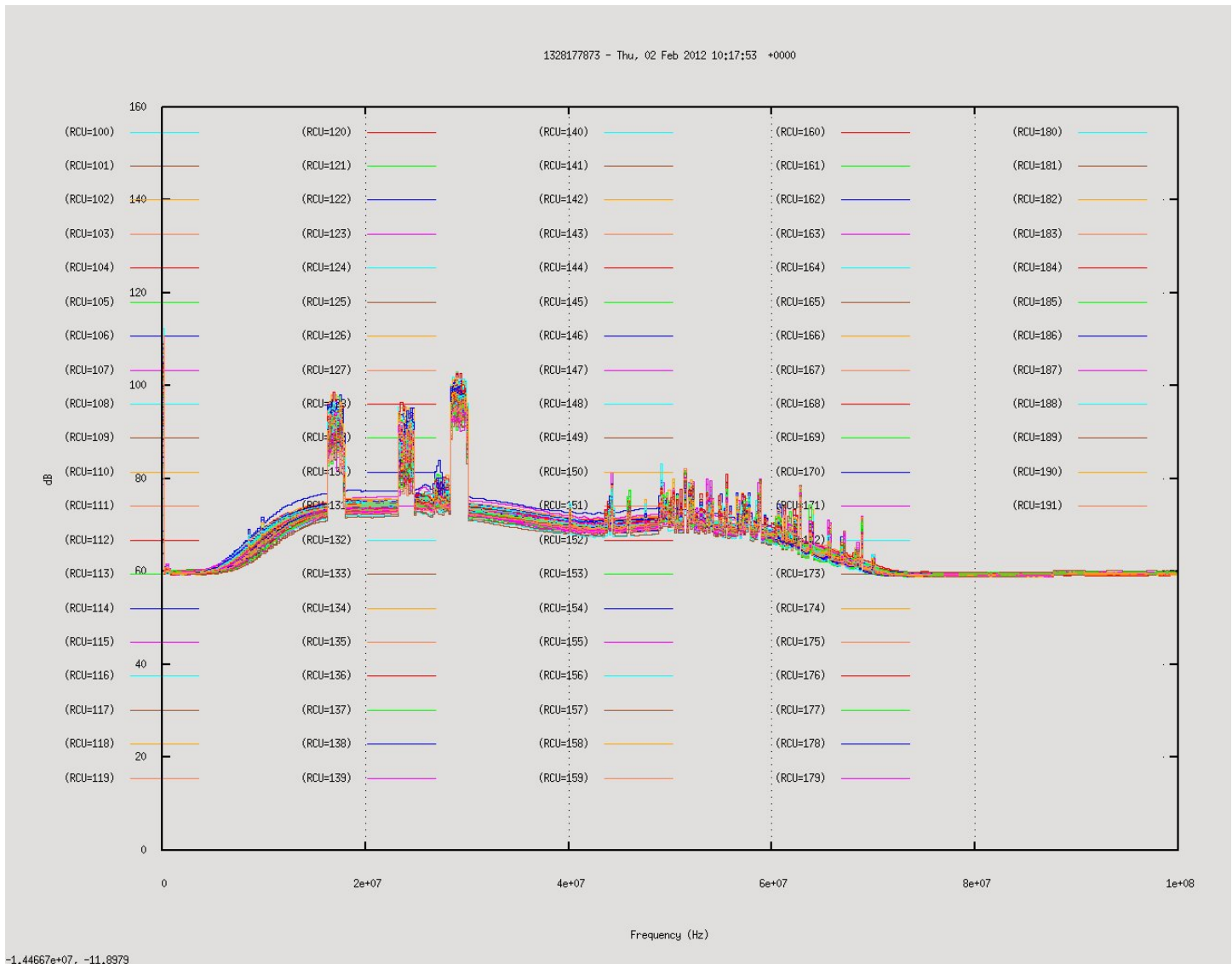
RCUMODE 5

1328179057 - Thu, 02 Feb 2012 10:37:37 +0000



-1.18739e+07, -29.0728

RCUMODE7



## 2012 Feb 24: RFI measurements and the 100 m Telescope

Karl Grypstra took measurements of the low frequency RFI environment around the 100 m telescope. His report from 2012 Feb 27 is available at [Emissionsmessungen am LOFAR-Feld und am Teleskop 120224.doc](#) (in German).