

2012 February 1st

A. Horneffer did:

1) 1st 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) 2nd LBA test

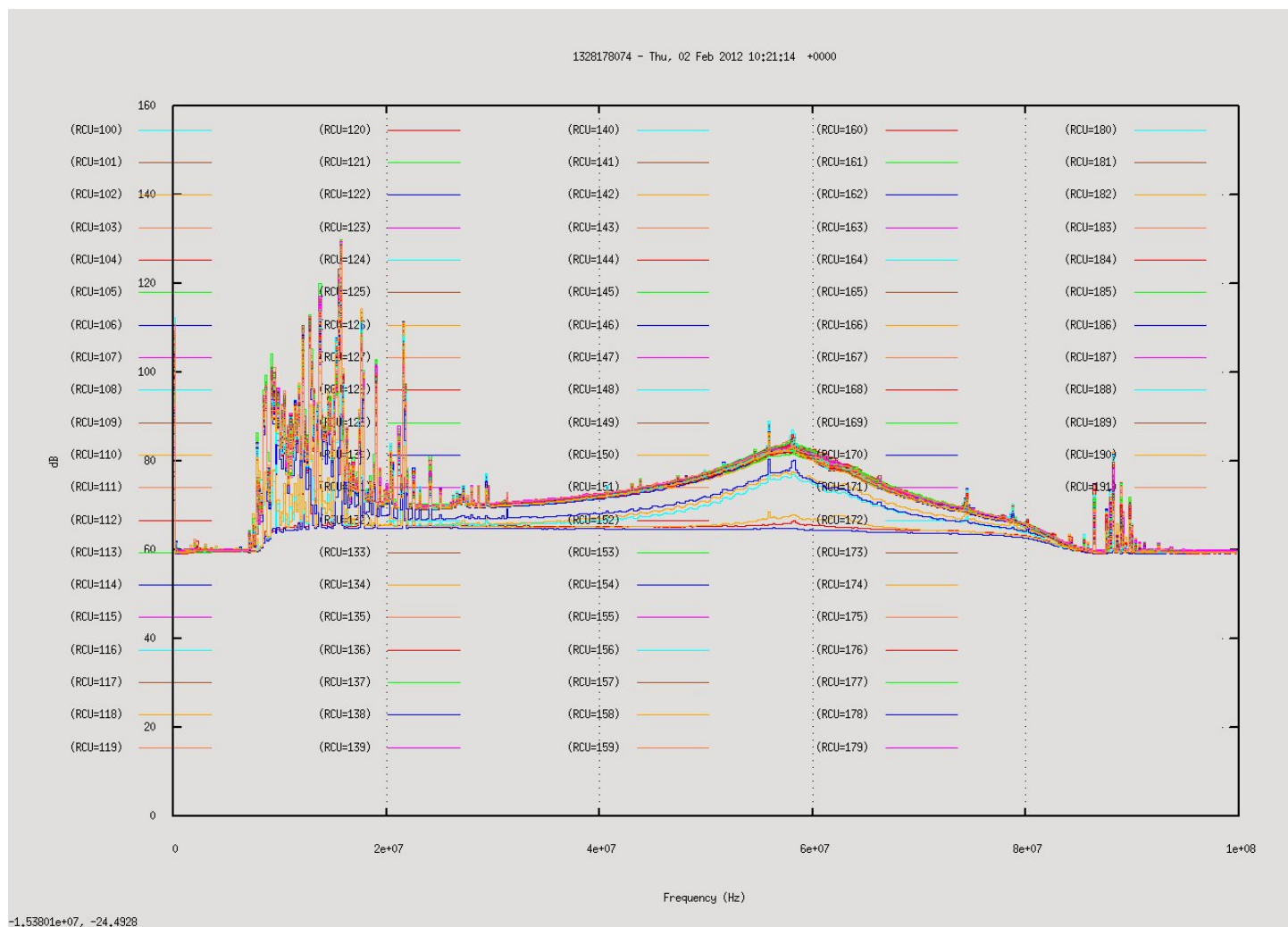
Did the "standard" test (ca. 4 h after the first), the following antennas had reduced power some with changing power levels: 68, 72, 78, 104, 130, 138, 148, 150, 152, 178

2012 February 2nd

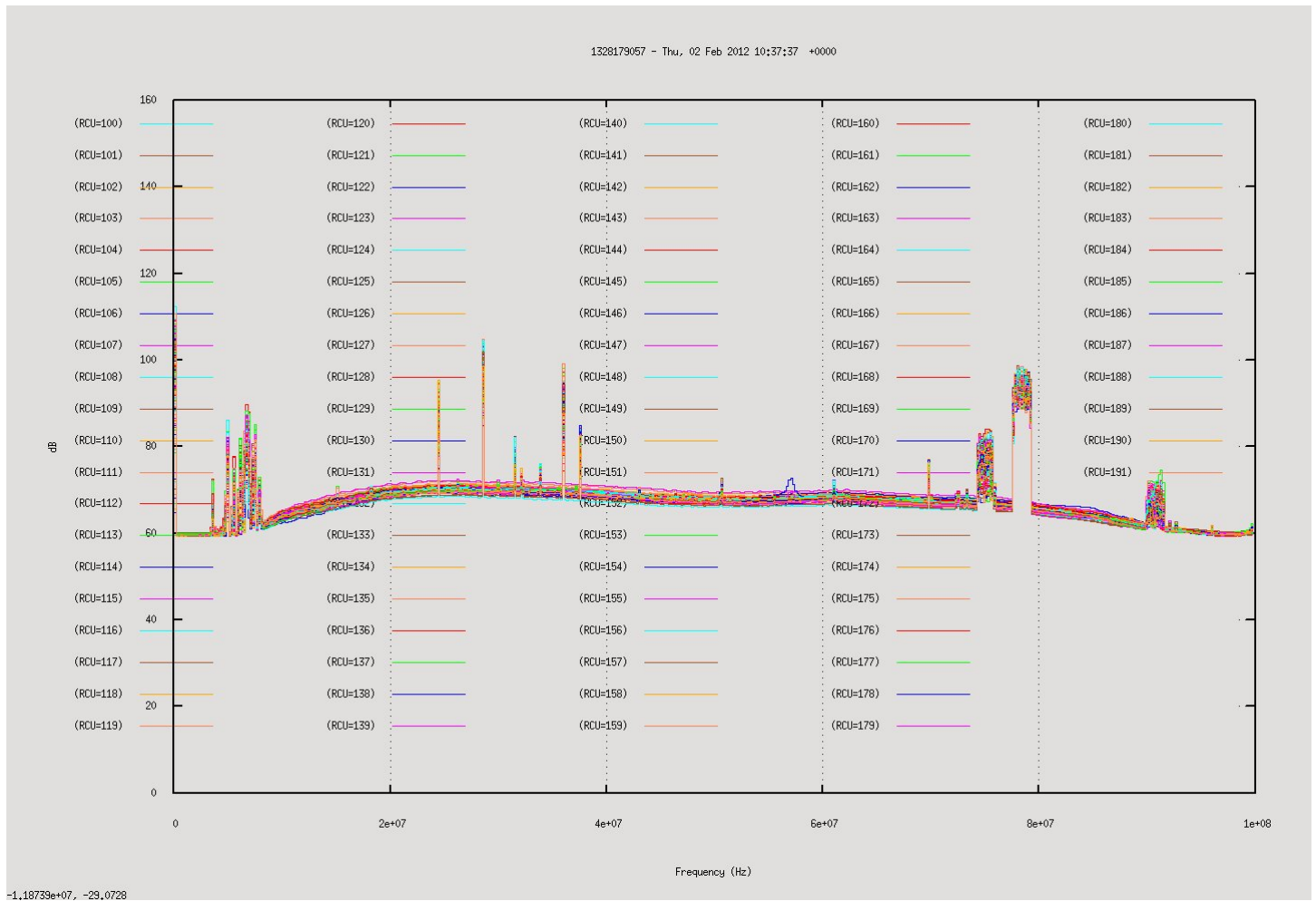
James M Anderson

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.

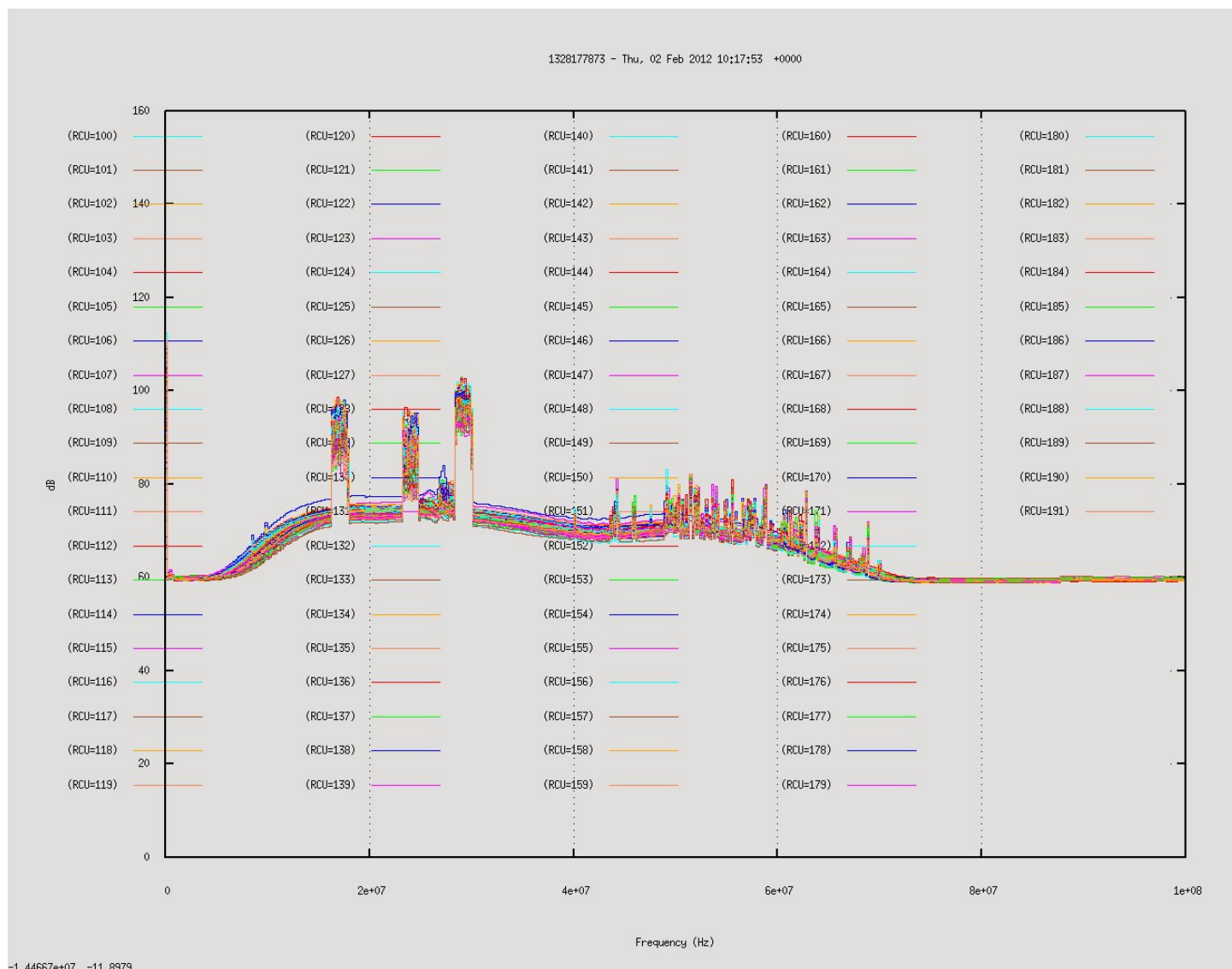
RCUMODE 3



RCUMODE 5



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).