2011 June 30

K. Schlich and A. Horneffer did the following:

1) Re-connect pulled RCUs:

30: -> 10638002094

31: -> 10638002062

64: -> 10638002001

65: -> 10638001026

178: -> 10638001092

179: -> 10638002005

2) Checked RCUs

The spectra from channels 30, 31, 178 and 179 look O.K.

The HBA-led of RCU 64 is always "half-lit". The in rcumode 5 and 7 the channels 64 and 65 show only the receiver noise. In rcumode 3 the two channels show mostly a normal spectrum, except that channel [corrected:]65 has a higher noise-floor. Exchanging the RCU module does not change that behavior. Measuring the output voltage (the antenna power supply) gives:

	rcumode 5		rcumode 3	
	HBA	**LBH**	**HBA**	**LBH**
RCU 64	**2.9 V**	0.01 V	2.9 V	7.8 V
RCU 70	48.1 V	0.06 V	0.0 V	7.8 V

We then connected the cable that belongs to 64 to another (even-numbered) RCU. When we did this the modemtest for channel 65 passed. (I don't remember if we looked at the spectrum then.)

My (AH) assumption is, that there is something more serious wrong. (E.g. on the backplane.)

3) Exchanged HBA Frontend Modules

The impedance of the cable of channel 31 was 80 Ohm (a opposed to ca. 5 kOhm).

Testing at the tile showed that FE module 12 (counting starts at 1) was broken, replaced this FE module.

We also replaced FE module 12 in tile 50/51.

P.S.) HBA Frontend Modules Configured

Menno Norden configured the two FE modules we exchanged. Now tiles 30/31 and 50/51 work again.