

## 2012 October 15 -- October 17: Maintenance Visit

Menno Norden and Henri Meulman visited from ASTRON to work on the station

### Updates etc. in the Container:

- RCU modem firmware upgrade to version V12. This removes the DC from the communication line when it is not used.
- Upgrade of the firmware of the TBB boot-loader. This is to improve the stability of the boards. (Less TBBs stuck in "not available" and needing a 24V reset.)
- RCU number 10 replaced, it had low gain in LBH

### LBA work:

- replaced the antennas number: 4, 6, 19, 22, 27, 34, 35, 36, 37, 38, 39, 41, 43, 46, 52, 65, 69, 74, 75, 76, 82, 89, 92 (to get the RCU number multiply by two)
- LBA 19 has one broken cable.

### HBA work:

- Replaced HBA frontend boards (tile-number - FE-number): 19 - 15, 20 - 7, 20 - 11, 34 - 7, 52 - 15, 53 - 14, 71 - 9, 89 - 16

### Tests

- Tested all antennae and elements with a test transmitter.
- Polarization tests of the HBA did not work, there is not enough space to put the test transmitter at the right distance in the right direction.

## 2012 October 22

### Testing the station:

HBAs are all fine as far as I can test:

- modemtest without errors
- all tiles gave a good looking signal

### LBAs:

- RCU 74: low-power
- RCU 119: high power at low frequencies, went away after going to rcumode 2 and back
- all other LBAs are fine.

## 2012 October 23

### Olaf's cross-correlation tests:

The HBAs seem fine.

At the LBAs there are the following problems:

- rcu 39 sometimes high
- rcu 68 low (but stable)
- rcu 74 low (but stable)
- rcu 119 often high