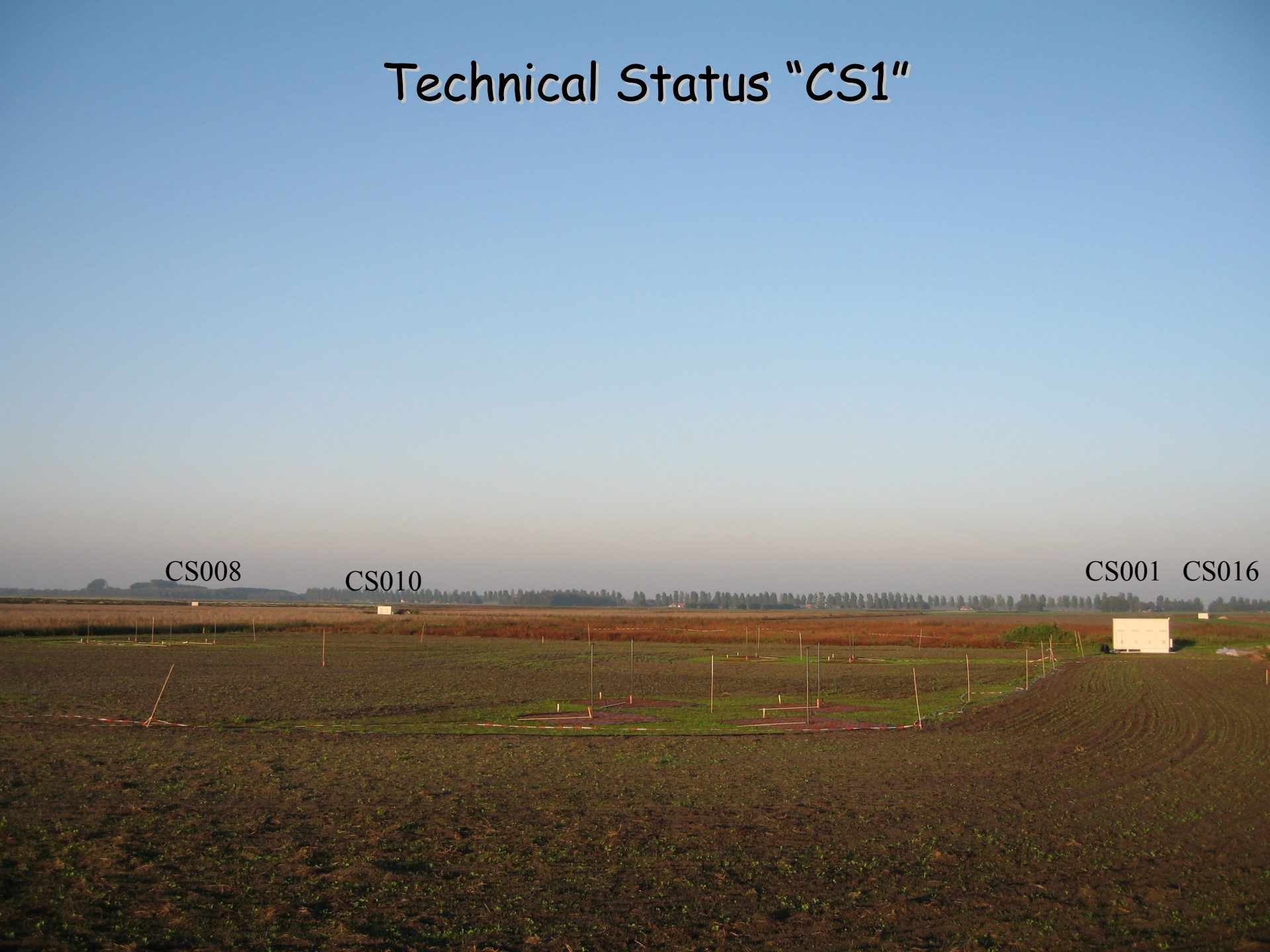
Technical Status "CS1"

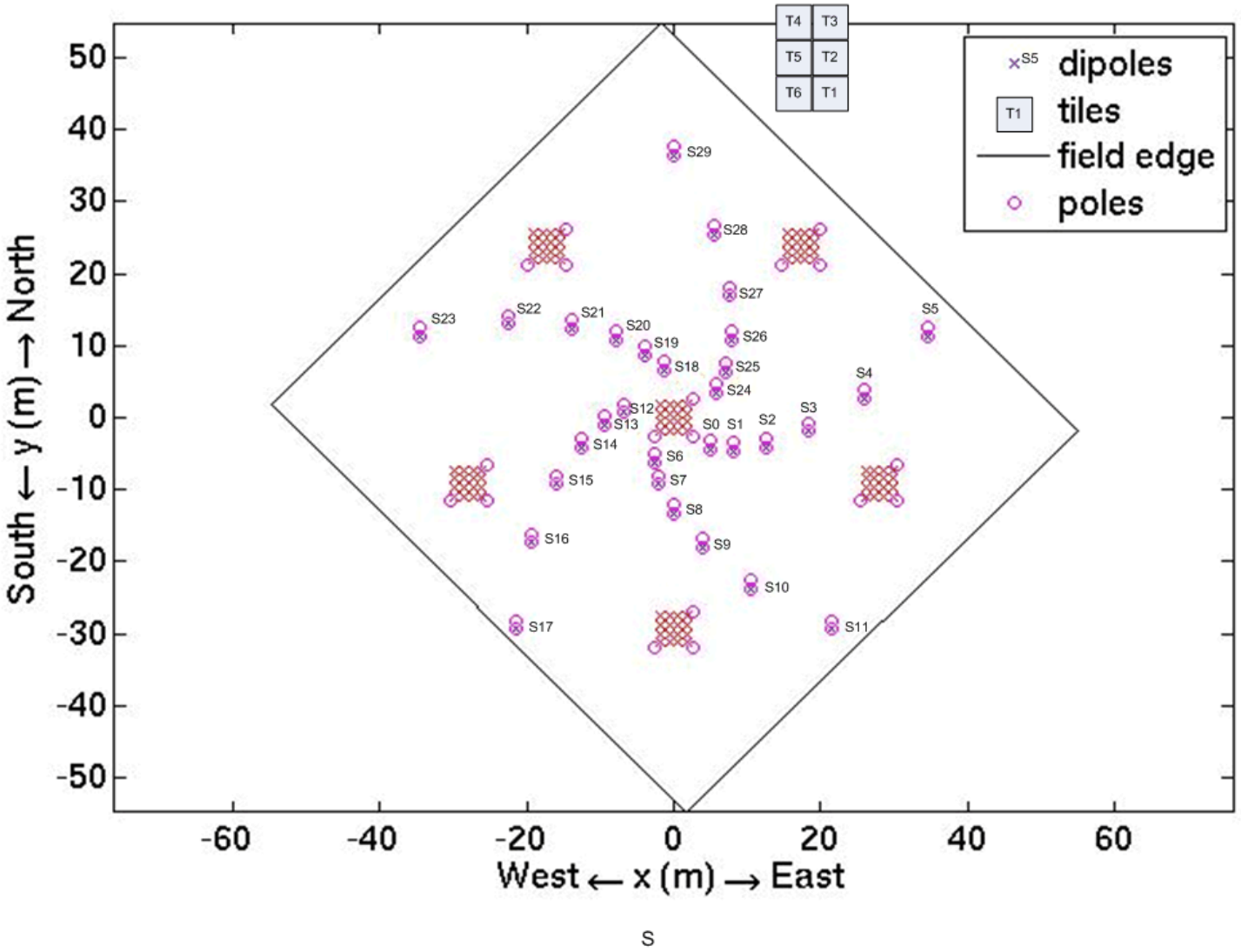


HBA status

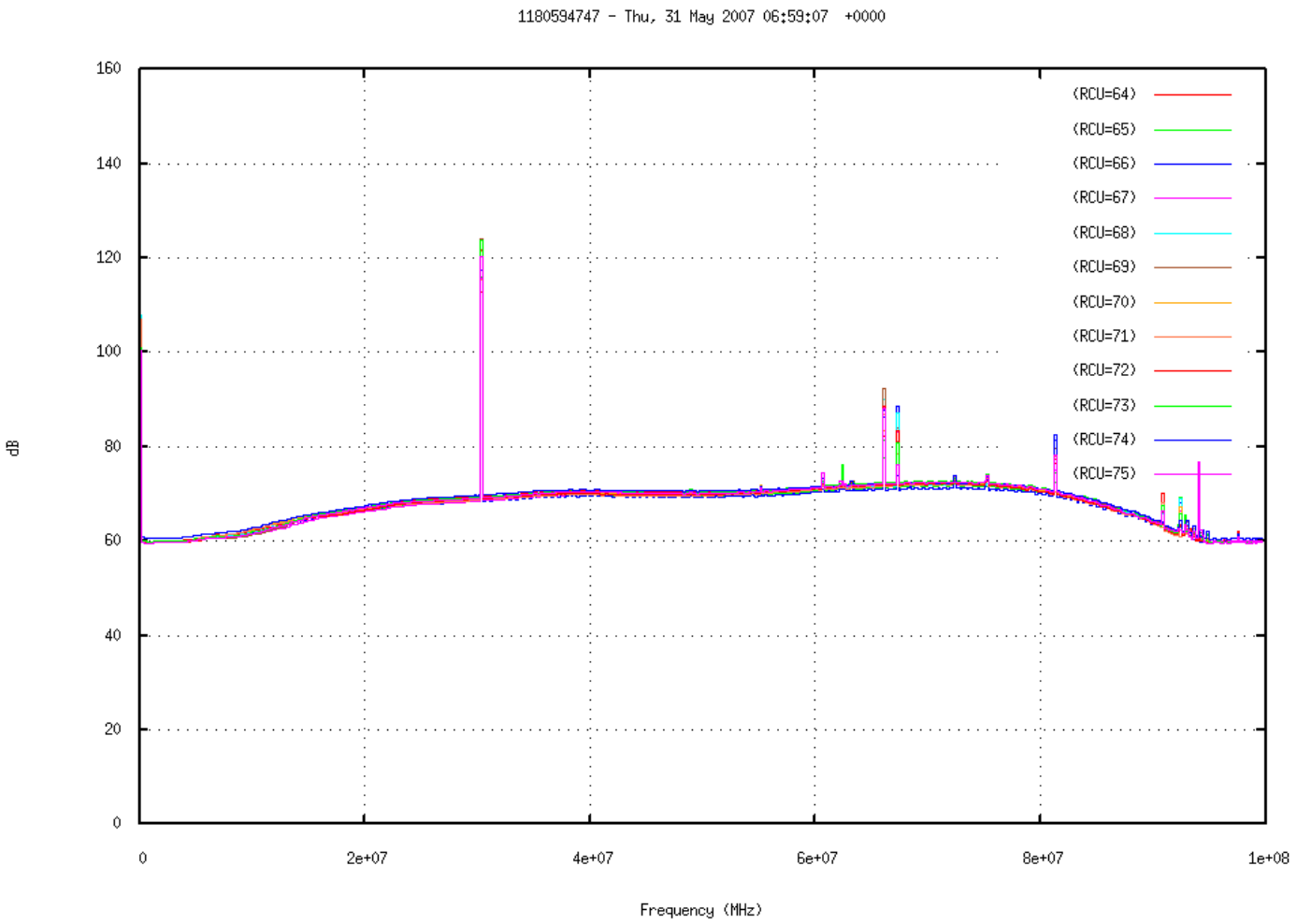
- 24 Single dipoles are placed (S6..S29)
  - 6 dipoles (S0 …S5) next week
  - Frontends need to be tested and assembled (WSRT)
  - Later repair of the poor single dipoles (switches)
- All 6 tiles are working
  - Only 3 modems are placed
  - Rest is waiting for some components

LOFAR

HBA status


T4
T3
T5
T2
T6
T1
dipoles
tiles
field edge
poles
S29
S28
S27
S26
S25
S24
S23
S22
S21
S20
S19
S18
S5
S4
S3
S2
S1
S0
S12
S13
S14
S6
S7
S8
S15
S16
S9
S10
S17
S11
50
40
30
20
10
0
-10
-20
-30
-40
-50
-60
-40
-20
0
20
40
60
South ← y (m) → North
West ← x (m) → East
S

HBA status



1.55863e+07, 148.301

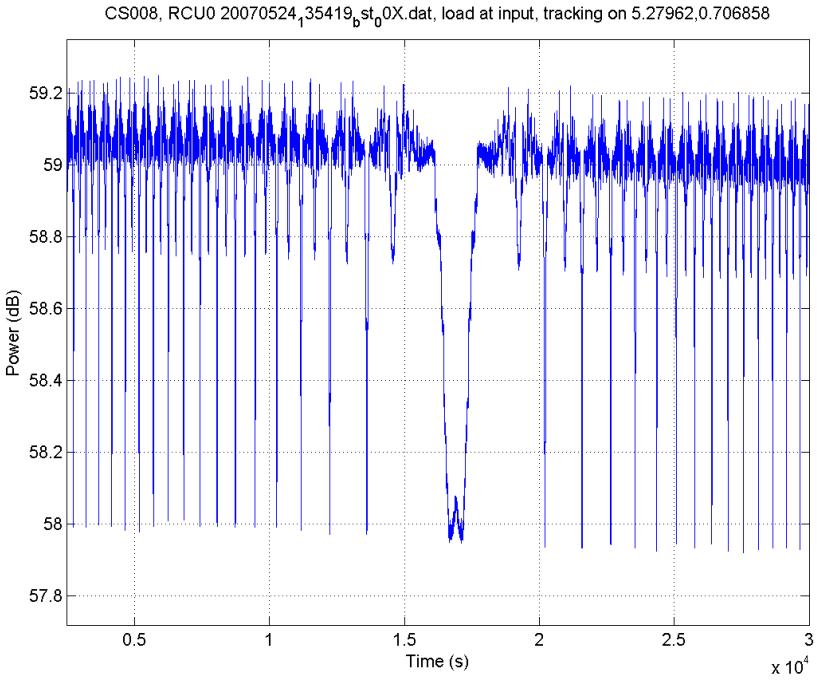
RSP III status

- 36 RSP III boards in assembly
  - First prototype boards are tested and ok (Gijs)
  - Upgrade of one station (CS-001c) with 4 * RSP III
  - RSP II boards used in CS-001t (Dwingeloo testsystem)

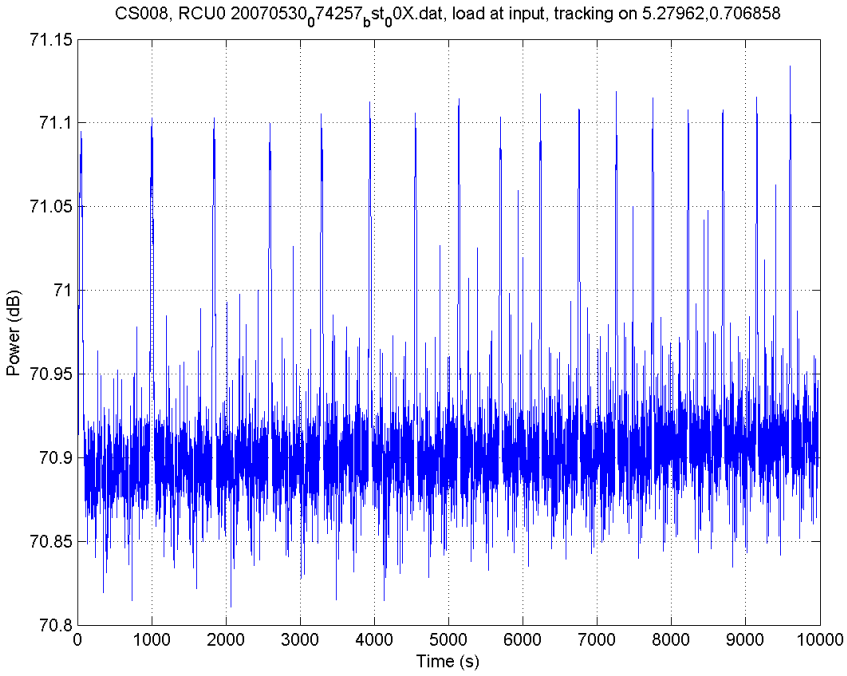
LOFAR

Crosscorr dips test (75 ohm load LBL, RCU0)

Subband 288 BFgain=8000



Subband 288 BFgain=32000



- BFgain factor 4 higher = 12 dB (20 log 4)
- Dip/peaks from 1 dB to 0.2 dB
- Dip/peaks are beamformer phase dependent

LOFAR

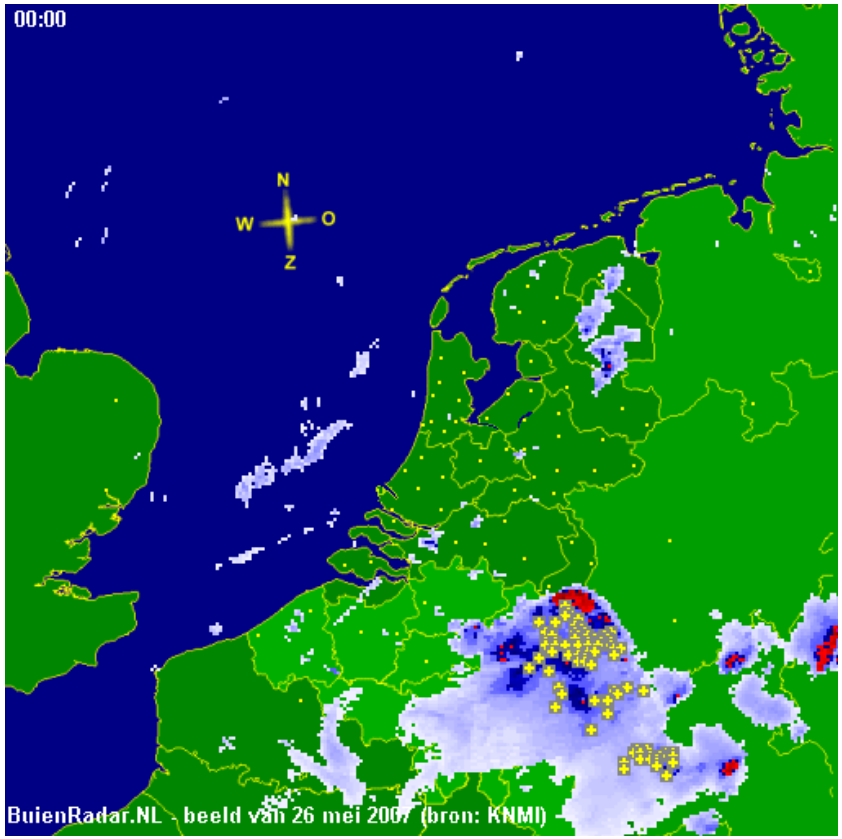
Antenna 8 (RCU 24,25) on CS001c

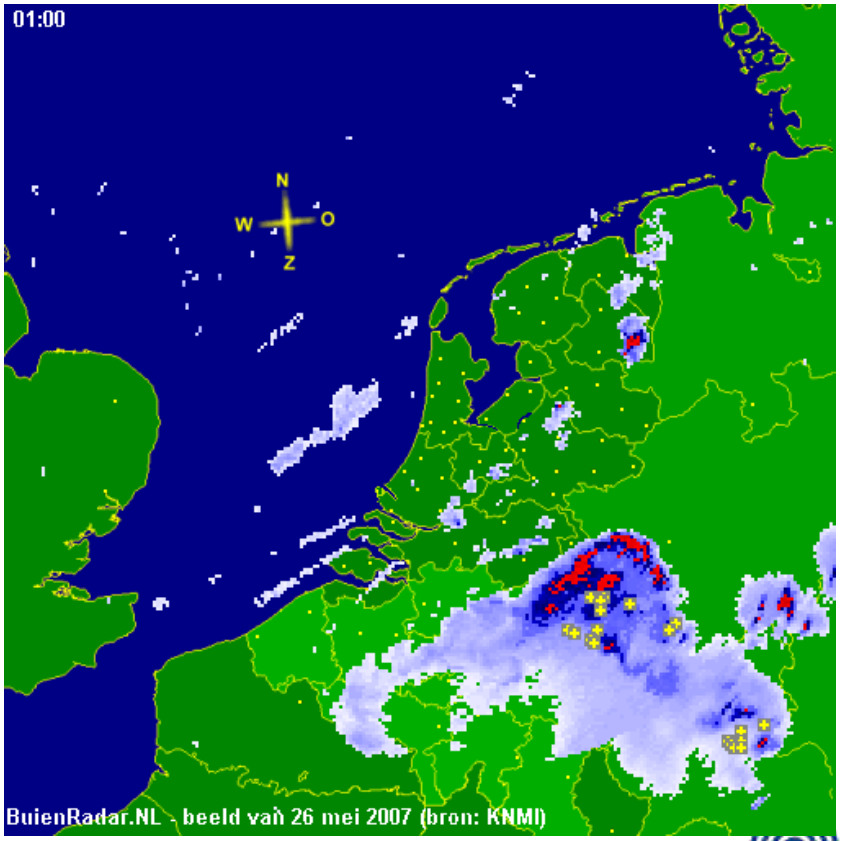
- plastic sleeves around dipole wires & tension cord [new]

LOFAR

Rain results

- 26 May 2007 00:00 very light rainfall (0-10mm/hour)
- 26 May 2007 01:00 heavy rainfall (10-100mm/hour)

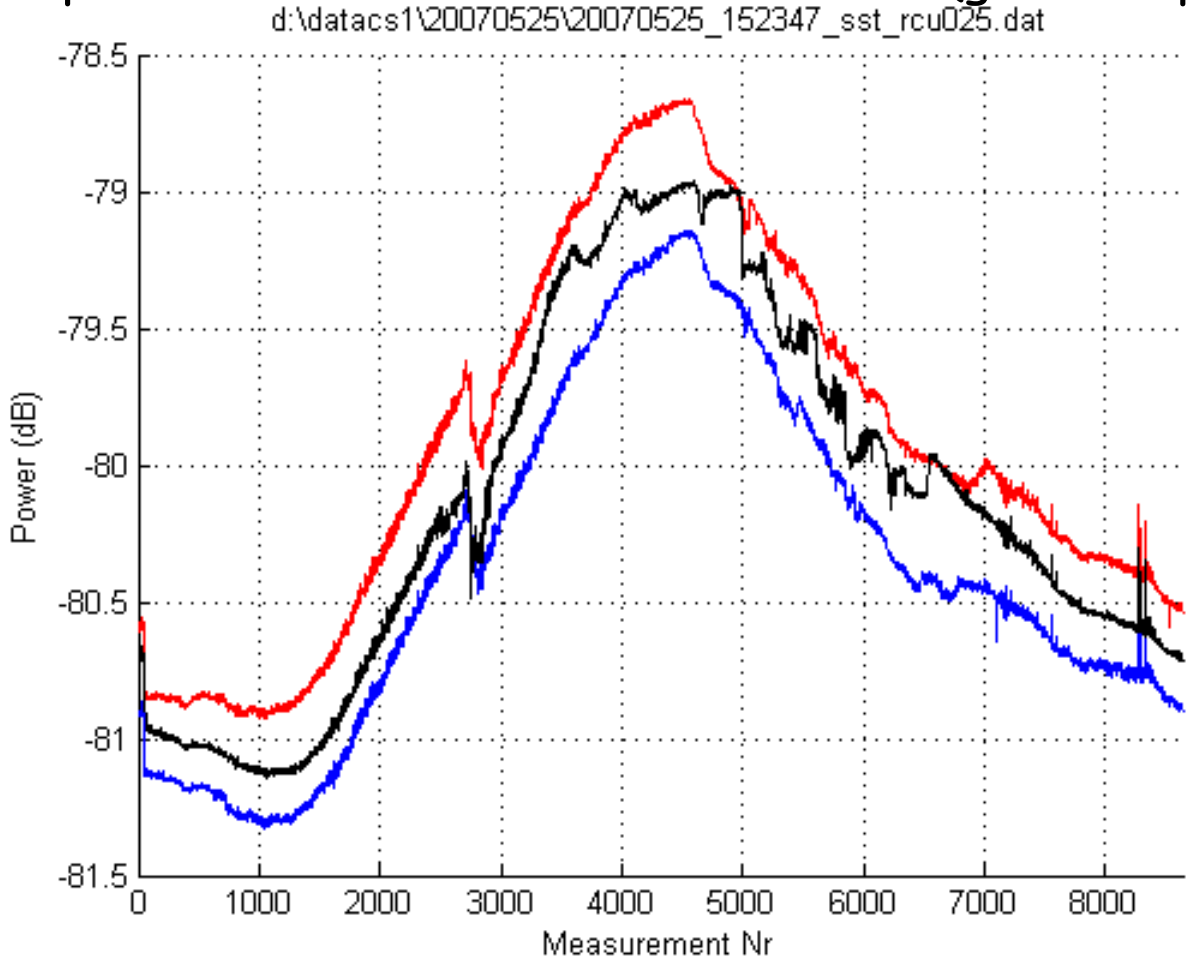




LOFAR

Rain results (24 hours measurement)

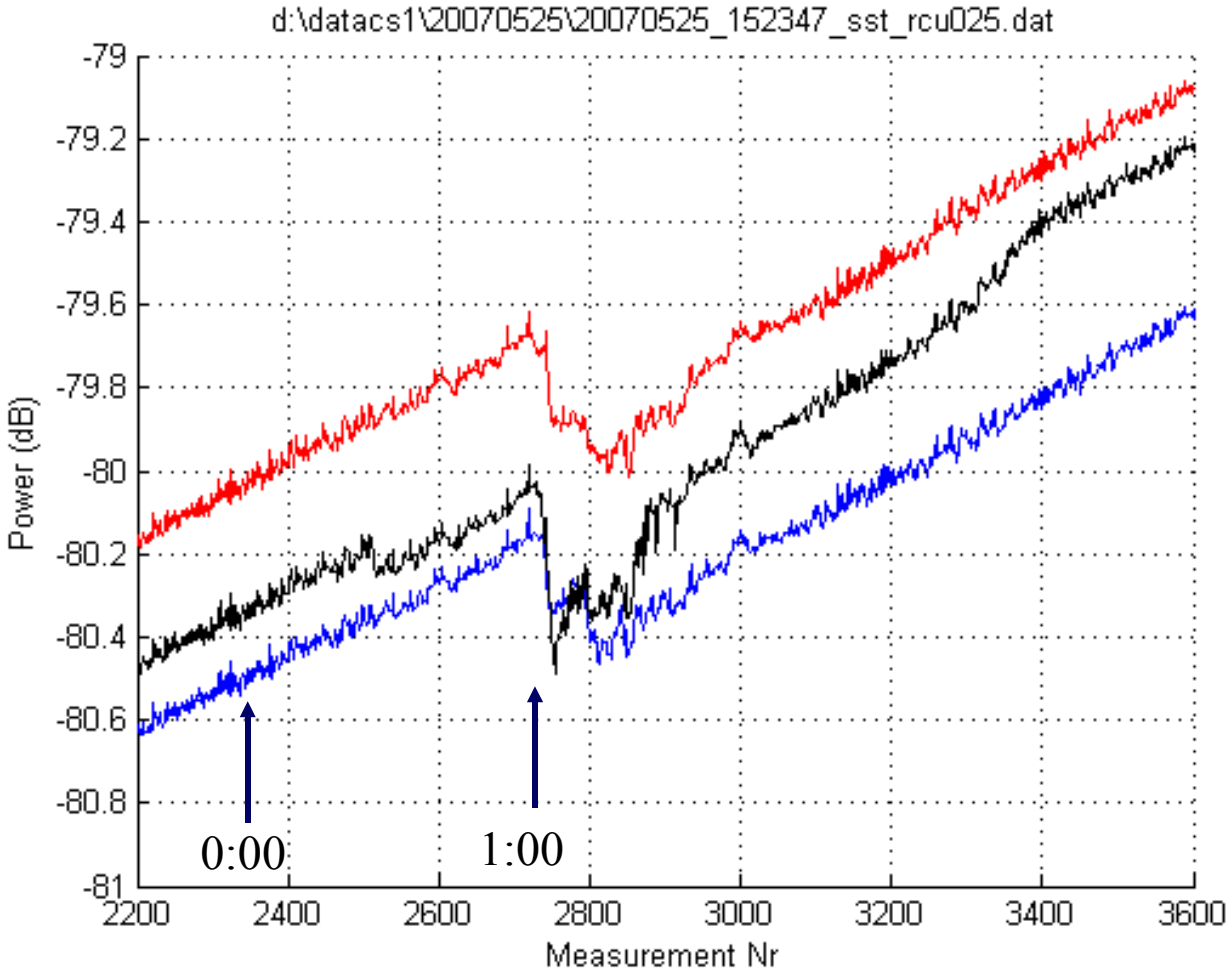
- black: original LBA
- blue: plastic sleeves around dipole wires & tension cord [new]
- red: plastic sleeves around tension cord (gain compensation)



LOFAR

Rain results (24 hours measurement)

- black: original LBA
- blue: plastic sleeves around dipole wires & tension cord [new]
- red: plastic sleeves around tension cord



LOFAR

Rain results

- blue: plastic sleeves around dipole wires & tension cord [new]
- red: plastic sleeves around tension cord (gain compensation -0.5dB)