

# CS-1 operations

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# Instrument status

## Stations

- As of yesterday: 3 working HBA tiles and four working (WHAT) dipoles on CS010
- Some cables and RCUs were replaced on CS001, CS008, and CS016
- CS001: LBA antennae 1, 2, and 3 modified to reduce rain effect (Menno Norden)

# Instrument status

## Network and CEP

- Fixed  $n \times 29 \mu\text{s}$  delay error on CEP, where  $n$  is ID of station,
- Stability of zero-copy implementation is improved
- There is now a tool to read/copy UDP, TCP, and disk signals to and from each other.
- Main software being switched to Step 3. Old software still available.
- Baseband observations are conducted using SAS/MAC.
- Could not automatically execute two consecutive observations in SAS/MAC. Fixed now (Martin)

# Instrument plans

## Stations

- Install remaining three tiles and 30 single dipoles

## Network/CEP

- prepare for accepting data from Dwingeloo and Effelsberg (update: unlikely that there is a network available. Will probably have to be done off-line)
- prepare for Dwingeloo/Exloo baseband recording

# Observations

## hba-holog

- station correlator
- scan entire sky in different subbands during 60 hours
- two runs: 20071123 (1 tile) and 20071130 (2 tiles)

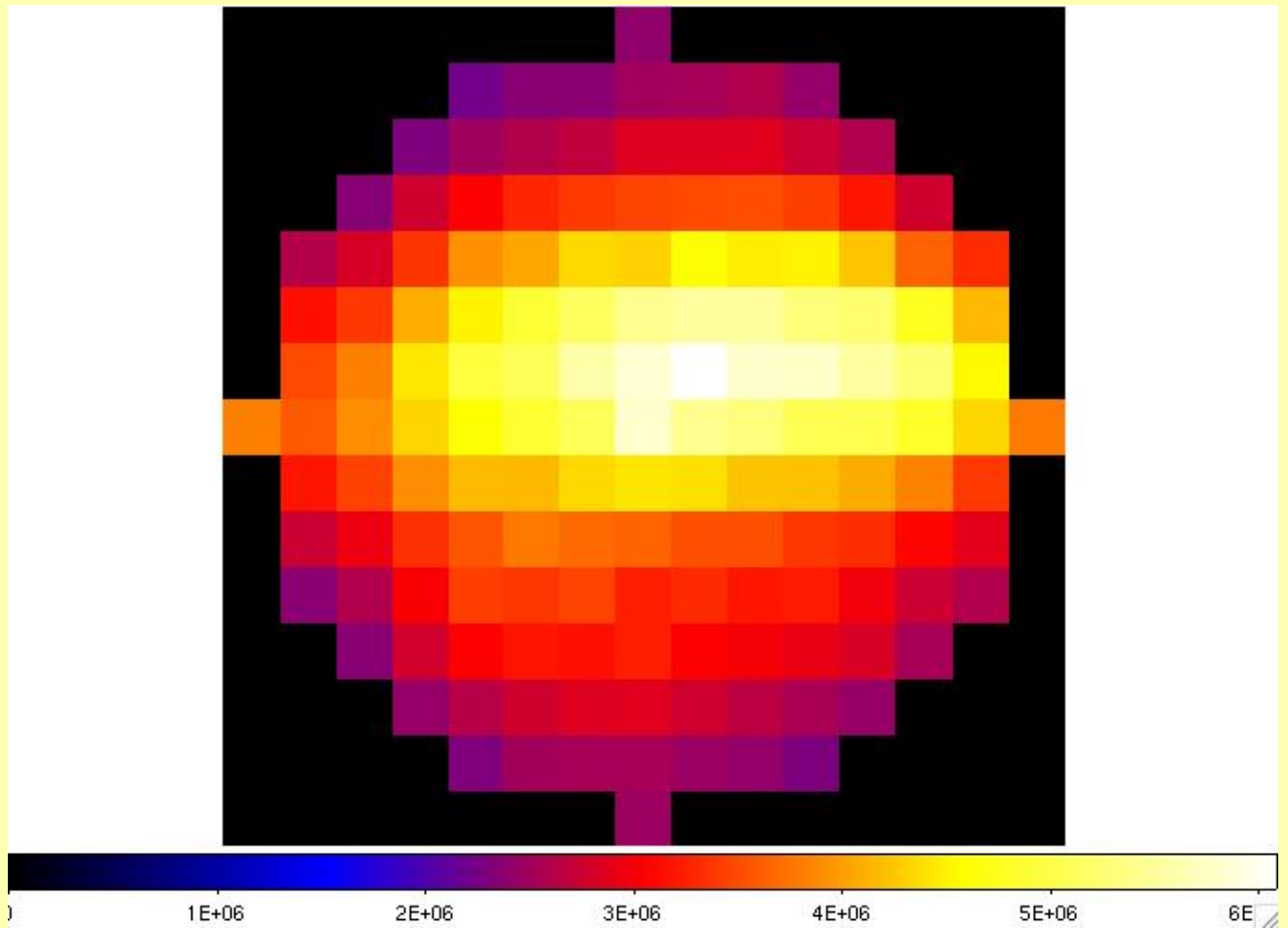
## Jupiter

- with Nancay (offline correlation)
- 2007-11-29, 2 hours, LBA
- 46 dipole station on CS010

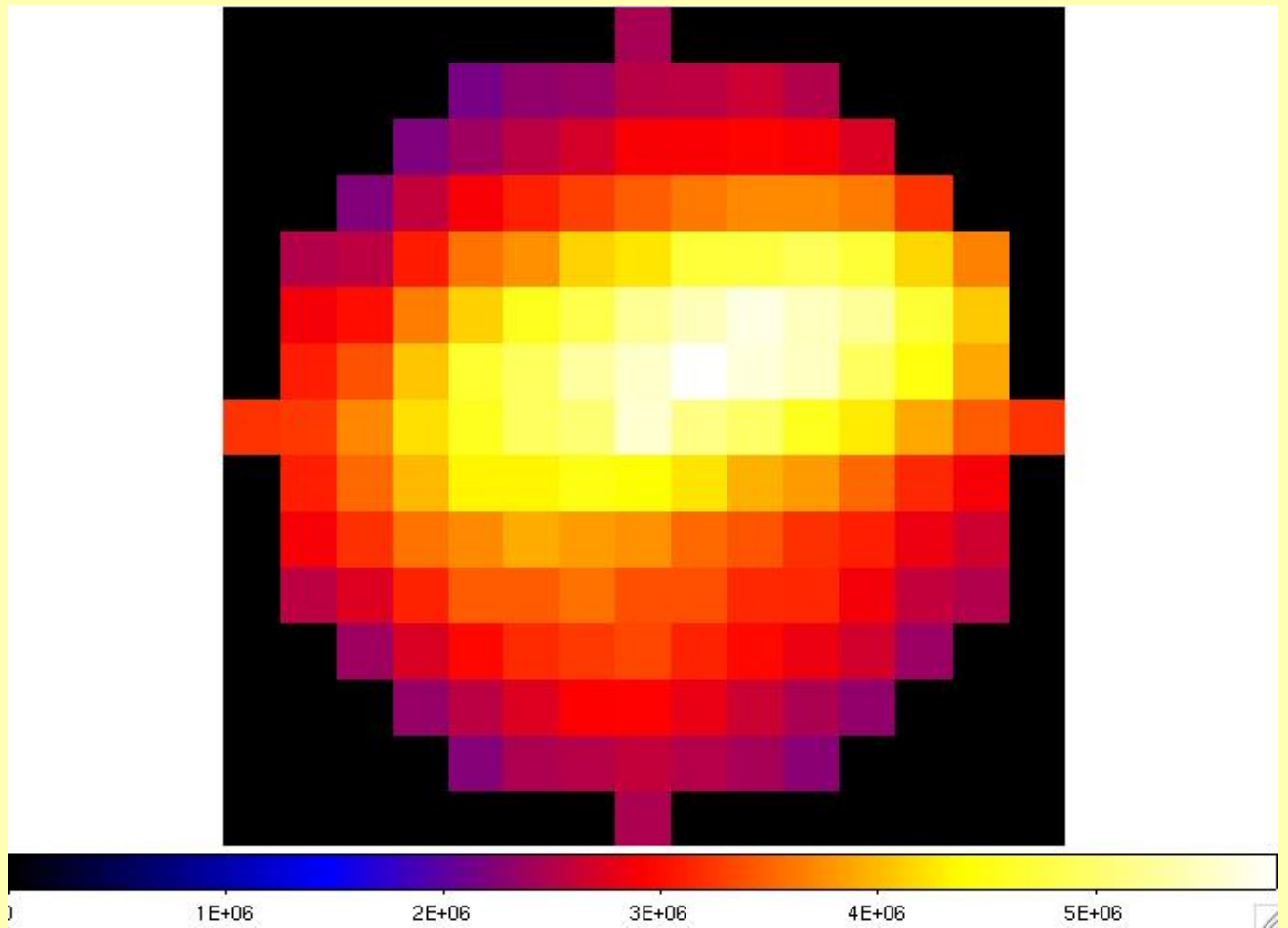
## Pulsar

- observation with 1 tile: no detection
- observation with three tiles done last night. No results yet.
- meridian transit experiment.

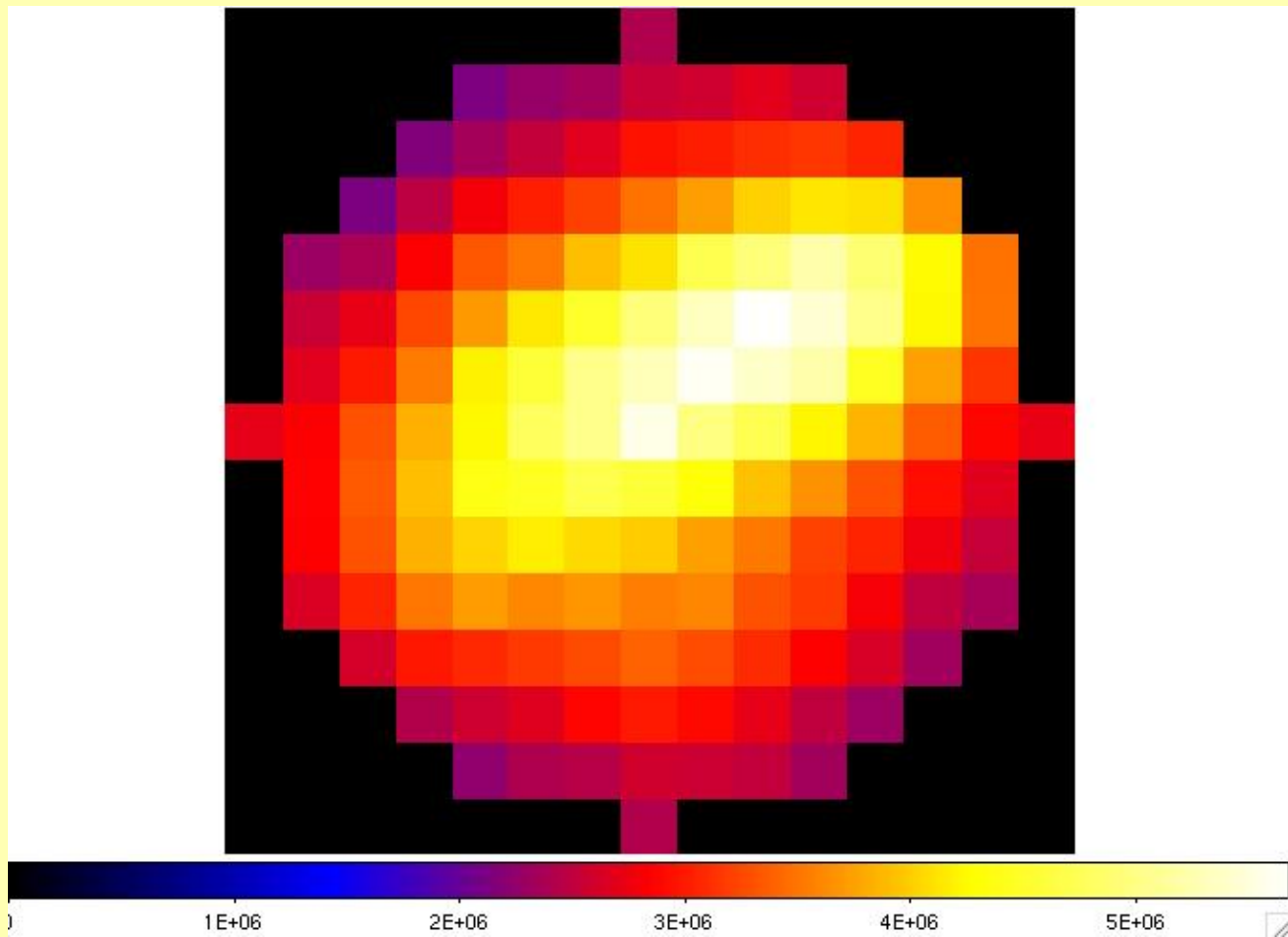
# SKY SCAN



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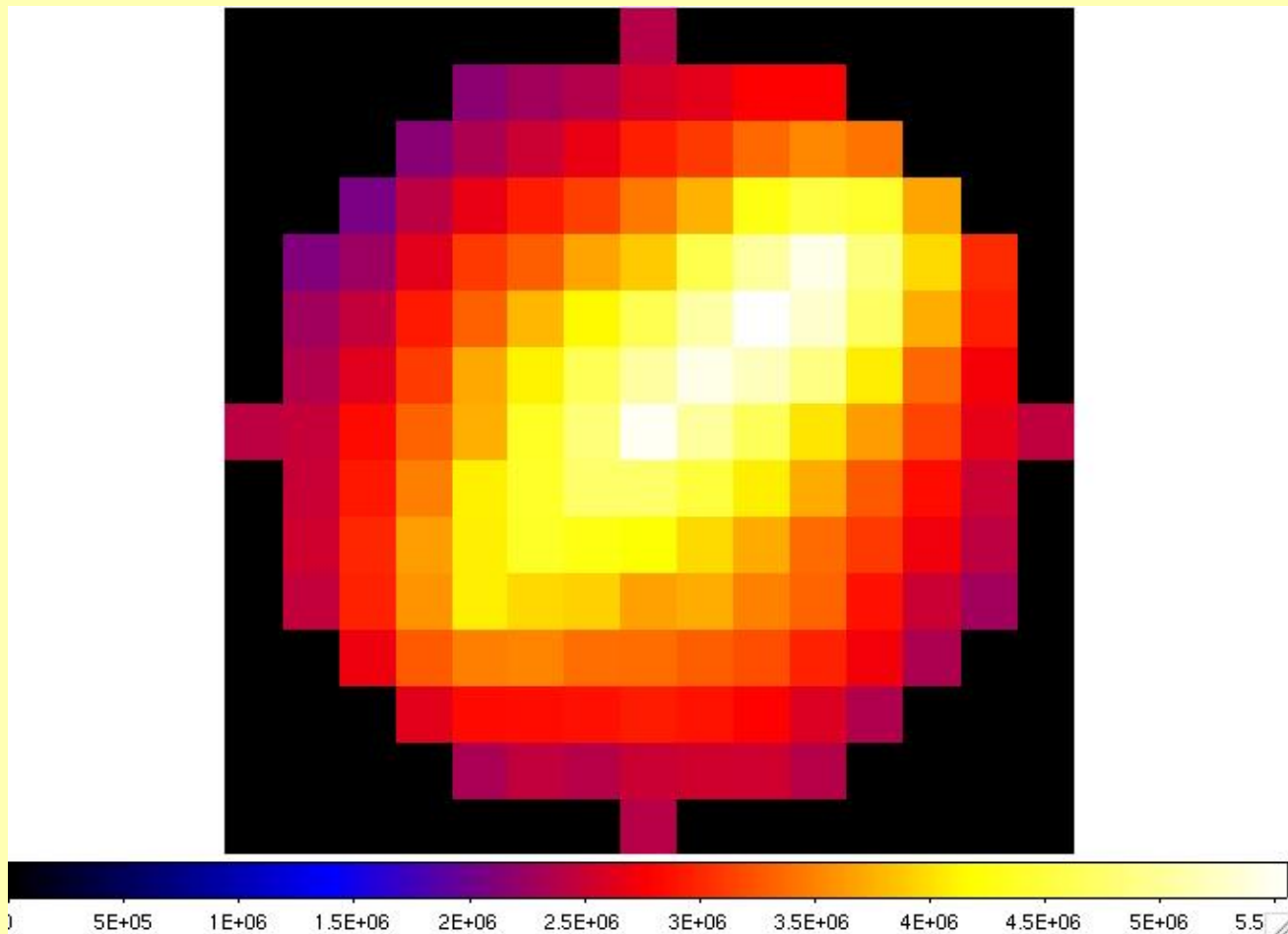


# SKY SCAN

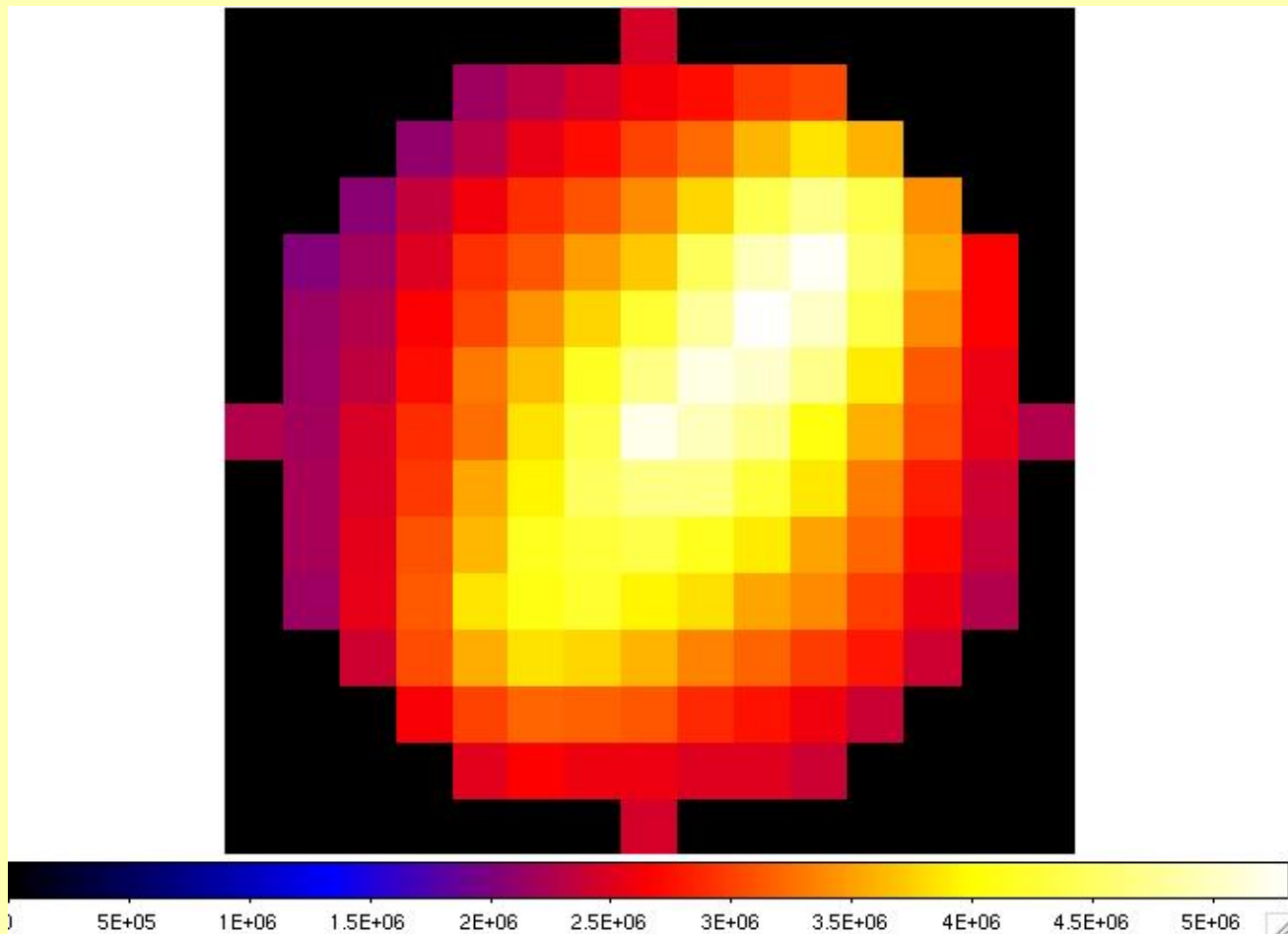




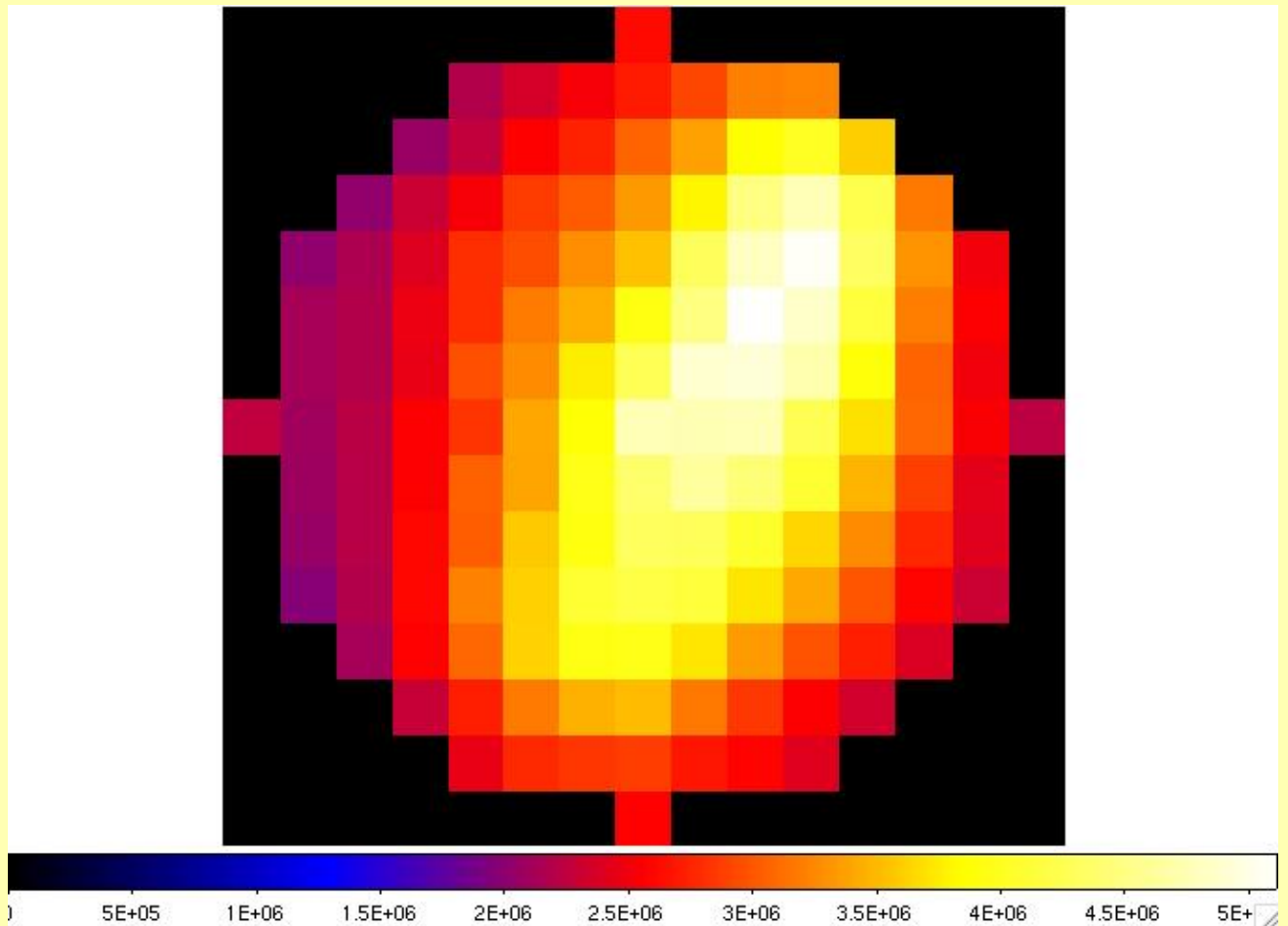
# SKY SCAN



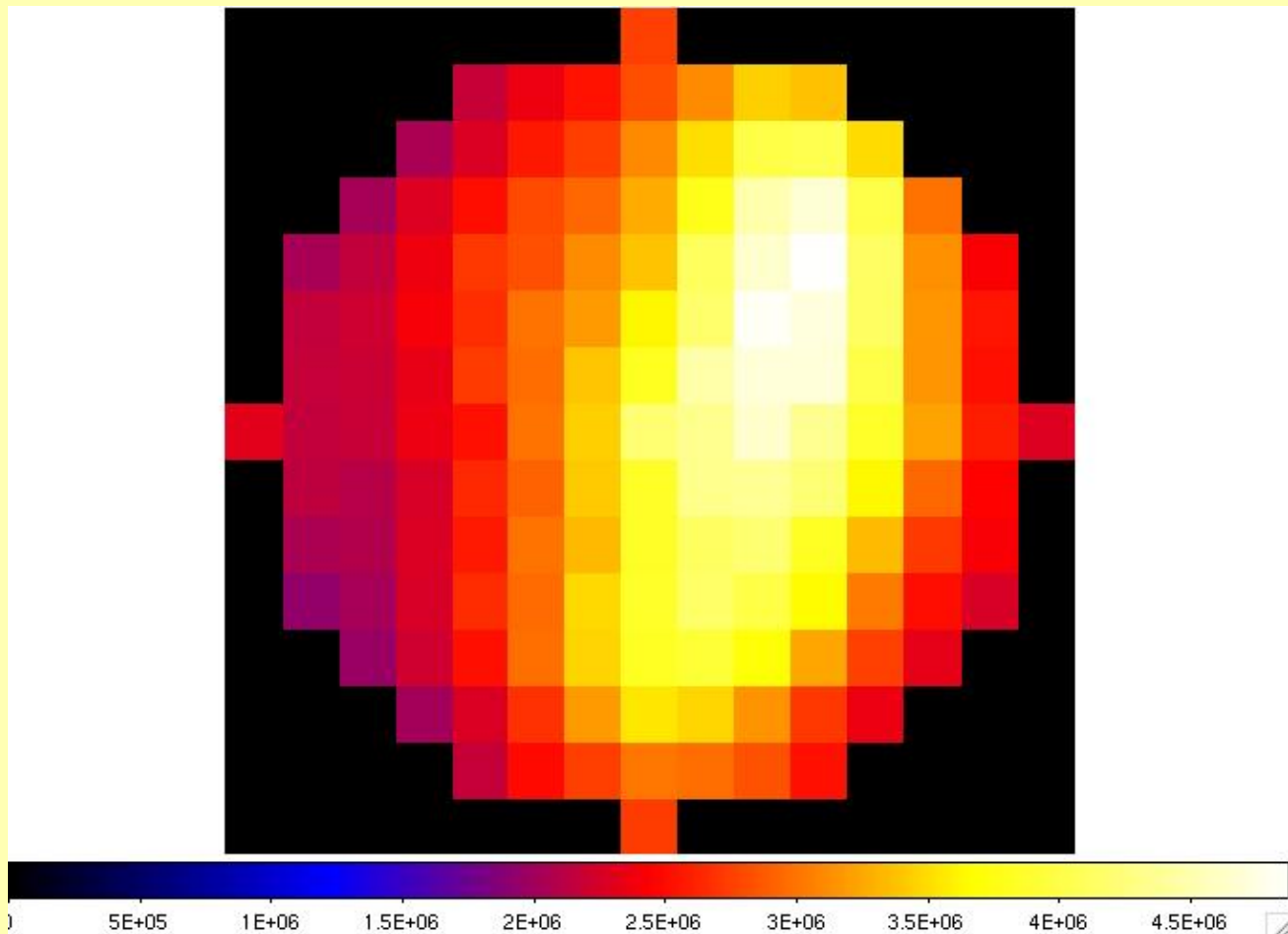
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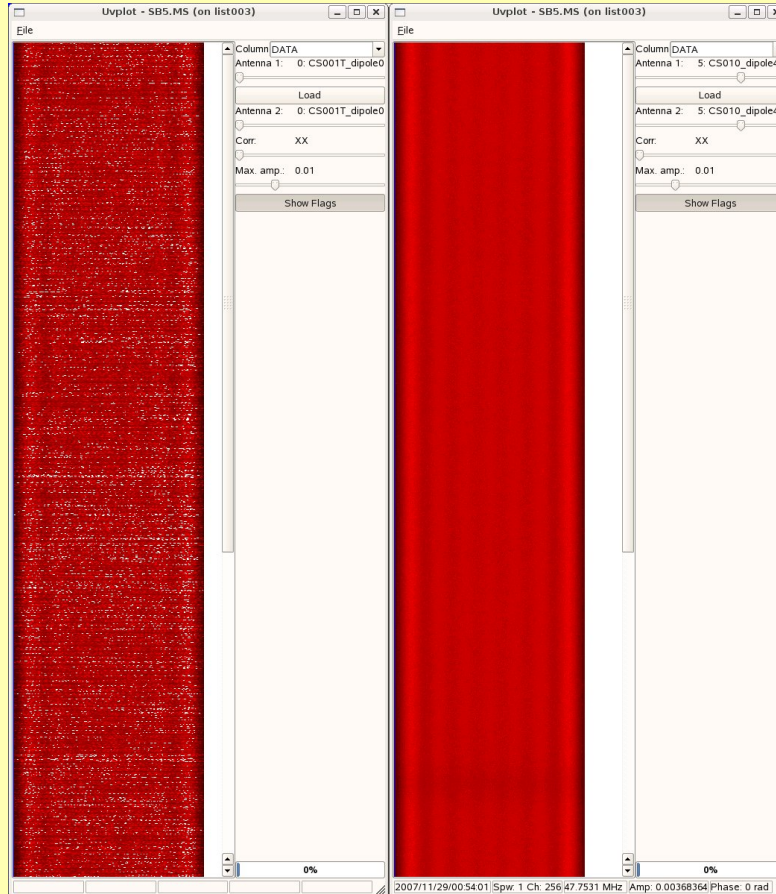


# Observations

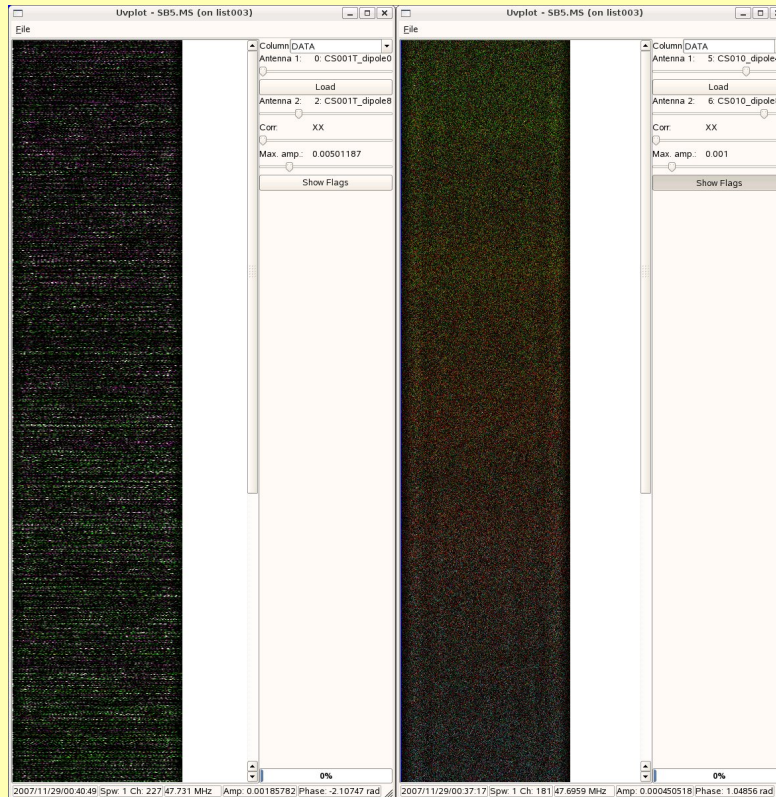
Exloo–Dwingeloo: Tau A

- several short observations.
- no detection
- lots of RFI

# RFI Dwingeloo vs. Exloo(autocor)



# RFI Dwingelloo vs. Exloo(crosscor)



# Now what?

- main candidate: electric fence.
- if so: see if it can be switched off and repeat experiment.
- if not: plan RFI free night somewhere between Christmas and New Year in which we try to switch off and disconnect the entire building (all computers, wireless networks, DECT phones, bluetooth devices, parts of normal network, electromotors, lab equipment, power supplies, you name it).
- please help thinking about what can be switched off safely and how to do it.
- could we for example power down the JIVE correlator?



# Observation plans for the coming weeks

- Basic validation of HBA tile (all sky maps with autocorrelations)
- HBA observation of Cyg A with three tiles and 16 dipoles (check positions in CEP)
- Pulsar observation with HBA tiles
- LBI Exloo-Dwingeloo (thursday night)
- eVLBI Exloo-Effelsberg
- 72 h monitoring and calibration campaign with CS010 (Stefan Wijnholds)