

**Some RFI measurements
with the
Tautenburg Lofar Station**

Matthias Hoefft / LSM Aug 19, 2009

2m Schmidt Teleskop

TEST - Teleskop

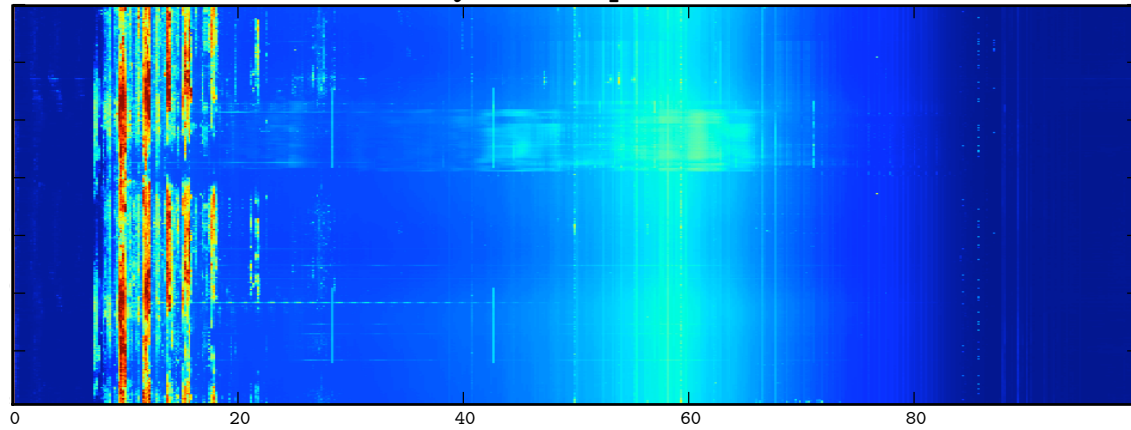
Workshop



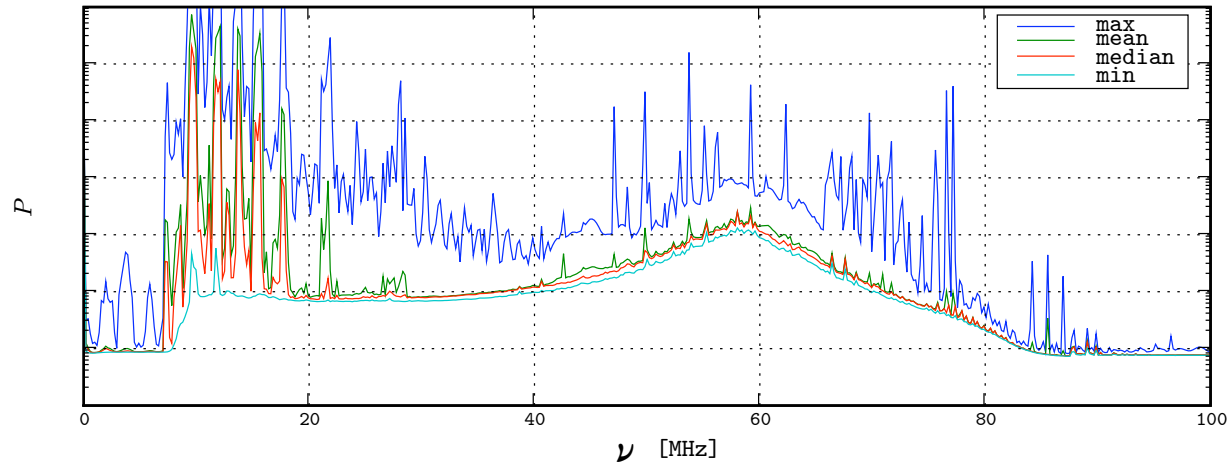
48 hours RFI observation

Start: ~ 9am

dynamic spectrum

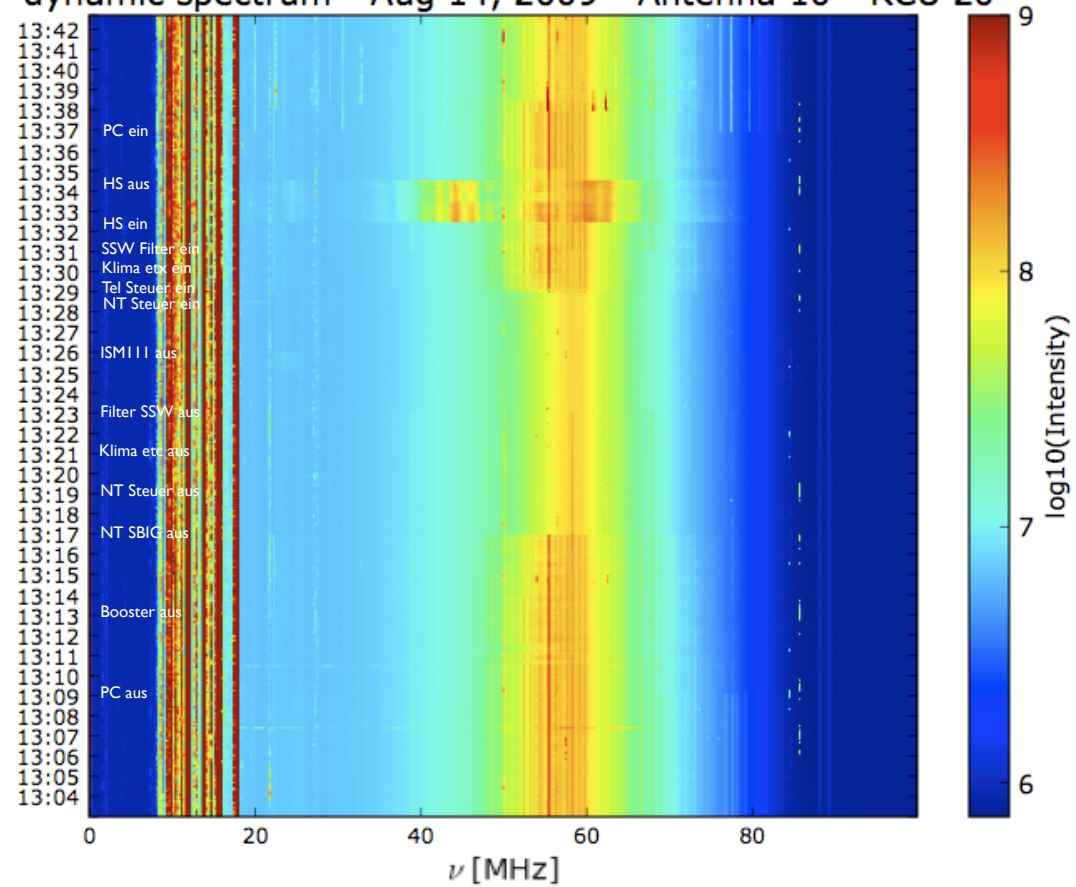


statistics



Identification of sources

dynamic spectrum - Aug 14, 2009 - Antenna 10 - RCU 20



RFI caused by optical telescopes at the TLS

- continuous during optical observations
- broad band and a several lines
- at max about 1 magnitude above sky signal
- decreases rapidly at more distant antennae



Lofar field

600m

Planned tower for
radio communication @ 400 MHz

Sternwarte

RFI situation in Tautenburg

- RFI by optical telescopes (close by antennae affected, 1 mag)
- Radio communication tower planned
(at max $65\text{dB}\mu\text{V}/\text{m}$ at antennae,
detailed RFI test envisaged)
- Cutting trees, mowing the lawn, repairing the dome
→ needs scheduling

Any potential conflict with deep Lofar observations?