Radio observatory report and current LOFAR issues

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LOFAR Status Meeting 20090923

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Outline

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Observatory status

System

- BG/P "forgot" IP addresses of list nodes if no data was being sent to them
- Workaround: disable Effelsberg–BG/P connection for next two days.
- Problems on RSP board 3 of CS302 (headers of packets are wrong)
- For work on lse007–009, log in to ssh://portal.lofar.eu. For lioff nodes: keep using listfen.
- All other stations operating nominally

Observations

SAS/MAC/SHM busy week

   Pulsars busy week

L2009_14473 observation167, Cyg A with NL stations and Effelsberg (48 h, 3.5 TB)

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Bug list ((almost) EXPLAINED)

- Signal paths of even RCUs can jump between a high and low state (LBL/LBH switch broken (by ESD?)). New RCU: ESD diode, and no trafo's. Needs more research. Switches are of same type as faulty HBA delay boards. Why only even RCUs: unexplained.
- Phase jumps in waveform generator test at 200 MHz clock (Eric Kooistra, Brentjens) Test observation in queue.
- Non-hermiticity in ACM blocks of intra-RSP board visibilities in waveform generator tests (Overeem, Kooistra, will be fixed in RSPDriver)
- No fringe at long baselines (James Anderson, Jean-Mathias Griessmeier, Nicolas Pradel)
- HBA AC oscillations (Wijnholds)

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Bug list (OPEN)

- Occasional timestamp jumps of 1 in CS302/RSP0 data sent to CEP. Due to CRC errors? (Kooistra, Romein)
- Steps in delay w.r.t. Nancay
- TP variations/ionospheric absorption (Ger de Bruyn)
- AC oscillations Pandey (nobody working on this)
- AC dips (Michiel Brentjens, PSR group. Useful data taken in second psr busy week)

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Outline

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Observation queue

ID	Title	PI
	now	
168	PBW4 - First Incoherent Summation of Stations	hessels
151	Pulsar Busy Week (Sept 2009)	asgekar
	coming-days	
169	Reprocessing data of observation 97 for Crab pulsar trigger development	terveen
161	48h HBA monitoring - RCU mode 7	wijnholds
160	48h HBA monitoring - RCU mode 6	wijnholds
137	LBA SKYMAP EFFELSBERG	wreich