



- Observatory Status Report (A. Polatidis)
- Software Status Report (M. Wise)
- Fringes with Unterweilenbach (O. Wucknitz)
- •FRAT update (S. ter Veen)



Netherlands Institute for Radio Astronomy

# Radio Observatory Report

Antonis Polatidis

ASTRON is part of the Netherlands Organisation for Scientific Research (NWO)

#### Rollout Status

20 stations validated -CS032 and CS103 added since last meeting

Map of LOFAR stations: "http://www.astron.nl/~heald/lo farStatusMap.html"

RS307 RS503 RS106 RS208 CS030 CS401 CS021 CS032 RS306 CS301 CS501 RS509 CS103 CS001 CS002 2 L nOK 2 H nOl CS003 CS004 CS005 8H nOK CS006 CS007 CS024 CS201 CS101 CS026 RS205 CS017 RS104 RS210 RS310 RS404 RS406 RS407 RS409 RS410 RS508 Effelsberg Tautenburg Garching Potsdam Juelich Nancay Onsala Chilbolton Totals 31 28 25 29 25 20

Cabinet LBA HBA Fibre CEP connection Validated

Station/Item CS302



as of February 17, 2010

**Development Work / Issues** 



- Tautenburg, CS032, CS001 integrated in SAS/MAC
- •SAS/MAC related :
  - Solved problem with using both HBA fields in core stations (tested today)
  - Setting up stations for pulsar observations OK -SAS/MAC can also start CEP
  - Integration of SAS/MAC and MoM tested this week

Sharing 3 stations in Germany and eVLBI can not be combined. When eVLBI is active, stations will be configured to 48 beamlets (<48MHz bandwidth).</li>
When there is no eVLBI, we can do 3 stations at 48MHz.

#### **Current Observations**



- Obs 256 Investigations of ripples seen in XX in HBA observations: *Inconclusive, will be repeated this week*
- Observations with Unterweilenbach, Tautenburg and NL stations (12 Feb -Obs 274 - L2010-16704 )
- "Valentine's" Pulsar LBA observations (Obs 273 Feb 13-14)
- Control and Metadata Busy Week:
  - Test observations described by MoM and executed by SAS/MAC

#### Control and Metadata Busy Week I



 To test the flow of an observation starting with an astronomer defining a project, the interaction with the Radio Observatory, data taking and the flow of process data through the online and offline systems up to the data archive.

• Currently: Simulating an astronomer using MoM to descibe their observation, interaction with RO support scientists and observers, and observation taking place under SAS/MAC.

•Will simulate: scheduling of multiple observations, processing (a "cut down" pipeline), data scrutiny and archiving of data.

#### **Unterweilenbach Connected**

-1

-0.5

0

0.5

-0.5

0

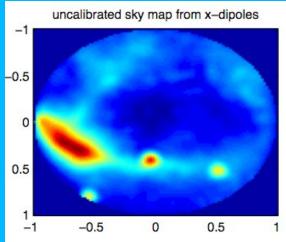
0.5

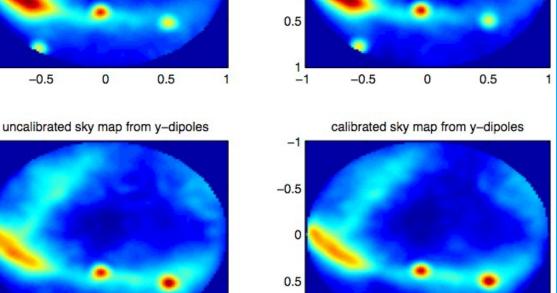


calibrated sky map from x-dipoles

All sky image from the Unterweilenbach LBA field (12 Feb)
Pulsar observations with international stations (see J.

Hessel's talk)





-0.5

0

-0.5

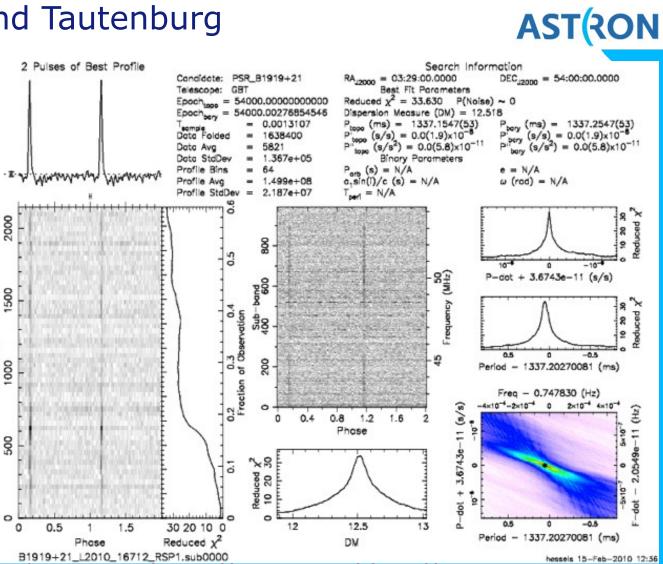
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#### Pulsars with Unterweilenbach, Effelsberg and Tautenburg

Time (s)

J. Hessels



Pulsar LBA observations, incoherently summed together.

Will continue with similar observations; wait for upcoming LSM

LOFAR

## **Unterweilenbach First Fringes**

# LOFAR

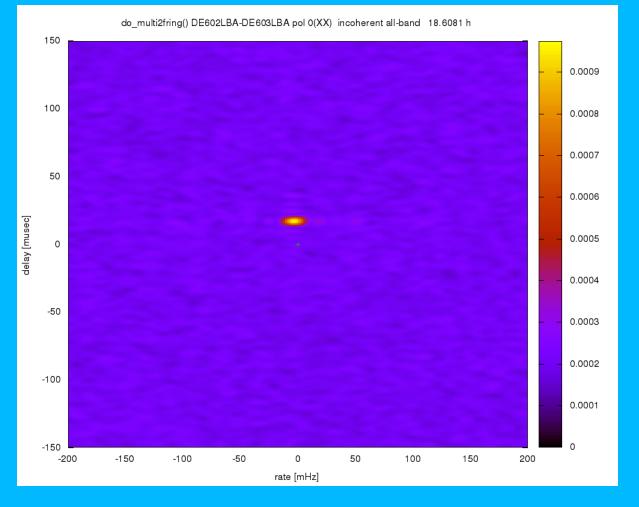
#### L2010\_16704

Observation of 3C196
 with CS005, DE601,
 DE602, DE603, RS503,
 RS307, RS306, RS106

160 Subbands, 6hours

•Fringes to all stations.

 Investigating: Dropout of data, possibly due to RSP boards









•The current schedule of LOFAR can be seen online:

"www.astron.nl/lofar-schedule/schedule/schedule.php"



AST(RON Netherlands Institute for Radio Astronomy

LOFAR Schedule for week 5 (2010)

Hour:	Feb 1 Tue, F	eb 2 Wed, I	 	5 Sat, Fe	b 6 Sun, Fel	2010 :	1
09001						<< today	2 22
CS002					Sector sectors.	Feb	ruary 2010
09003				Concernant of the	Concernance of the	Mo Tu We	Th Fr Se
CS004						1 2 3	4 5 8
CS005						8 9 10	11 12 13
CS006							18 19 20
CS007						22 23 24	25 28 27
CS017							
09021							
CS024					States and the	1.00	
C9026							
CS030						Committee .	
CS032						Concession of Co	
CS 10 1							
CS 103						Contract of Contra	
CS201							
C\$301						Contract of Contra	
C\$302							
CS401					1		
C\$501							
RS 104				Sec. 1	Concernance of the second	Contract of Contra	
RS 106				0		and the second sec	
15205						1000	
15208							
85210					1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	and the second sec	
15306						1000	
\$307						and the second sec	
R\$310					14	Course of the local data	
15404						1000	
15406							
15407						(Constant)	
15409							
R5410			1000 C				
15503		10					
25508					5	Constant of Consta	
\$509						1000	
DE601							
06602							
06603						The second se	
06604		and a second				and the second sec	
06605				14			
R606							
SE607							
JK608						Contract of Contra	

LOFAR schedule tasks for week 5 (2010)												
Project	Task	Type	Stations	Start	Stop	Duration Source						
LEA054	Obs 267	OBSERVATION	CS002;CS003;CS004	02/01/2010 21:50:00	02/02/2010 01:50:00	04:00:00 Moon						
Test RS205	TEST RS205	TEST	RS205	02/02/2010 10:00:00	02/02/2010 16:00:00	06:00:00 Cyg-A						
Obs 145	Obs 145	OBSERVATION	CS003	02/02/2010 10:00:00	02/03/2010 10:00:00	24:00:00						
Coordinates CS501	TEST CS501	TEST	CS501	02/02/2010 11:00:00	02/02/2010 18:00:00	07:00:00 Cyg-A						
LEA054	Obs 269	OBSERVATION	CS302	02/02/2010 16:00:00	02/03/2010 07:00:00	15:00:00						
Test RS205	Test RS205	TEST	RS205	02/03/2010 08:00:00	02/03/2010 16:00:00	00:00:80						

## **Unterweilenbach First Fringes**



#### L2010\_16704

- Observation of 3C196 with CS005, DE601, DE602, DE603, RS503, RS307, RS306, RS106
- I60 Subbands, 6 hours
- Fringes to all stations.
- Investigating: Dropout of data, possibly due to RSP boards

Wait for O. Wucknitz's presentation