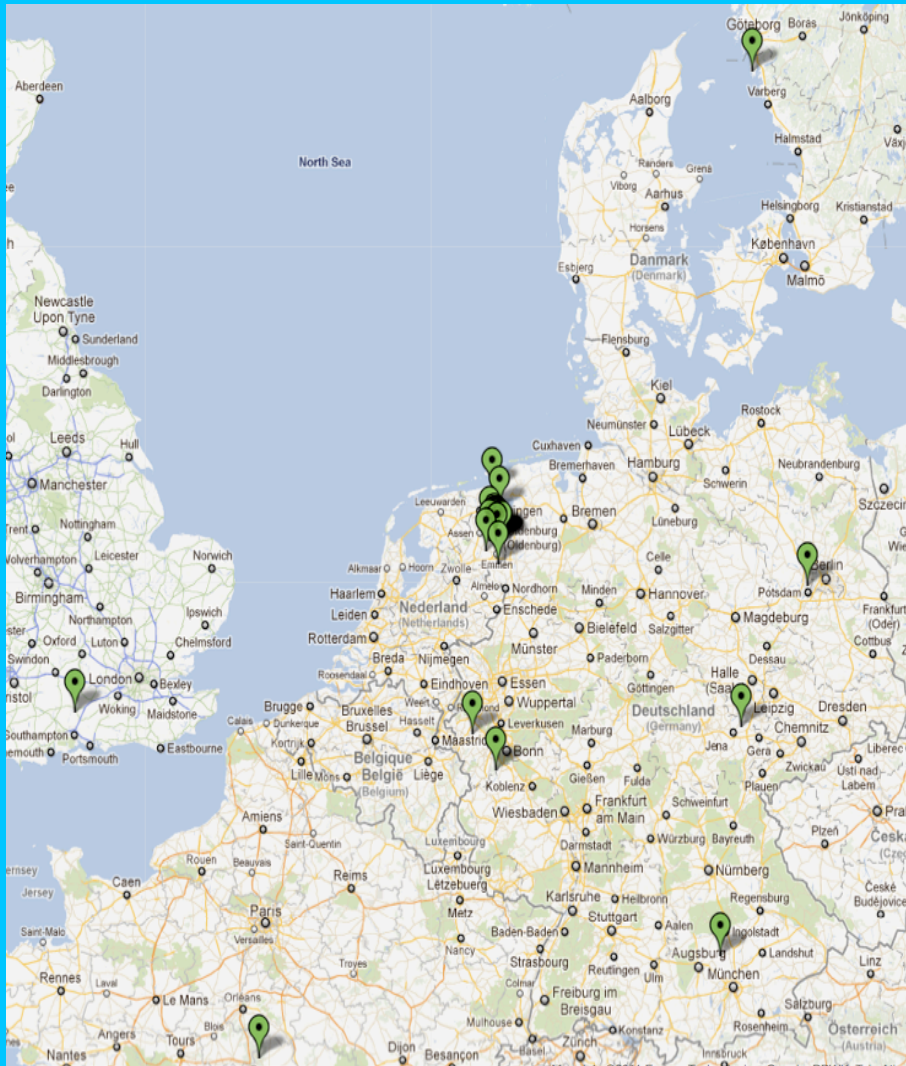


Programme:

- 1) *Array status - H. Munk*
- 2) *Observatory update - E. Orru'*
- 3) *COBALT status update - R. Nijboer*
- 4) *Report from Imaging Busy Week 20 - E. Orru'*
- 5) *Progress report on solar imaging - F. Breitling*
- 6) *LTA status update - A. Renting*

Array Status



- 38 operational NL stations
 - 24 CSs
 - 14 RSs
- 8 ISS
- Feb 18: RS310 broken TBB replaced
- Feb 17: modification to clock distribution CSs: delays re-checked
- Feb 15/16: Calibration runs caused problems (disk space)
- Feb 15 Minor storm, minimal damage
- Feb 14: All TDS boards in NL stations replaced
- Feb 12: RS503 power supply in one sub rack repaired
- Feb 10: RS307 broken Rb-clock, replaced
- Feb 10 LOFAR-2.1 sw roll-out NL; Feb 12 on ISS

Network, CEP Status



Network

- Feb 5, Feb 10: network blocks due to sw/conf problems/errors

BG/P

- Performance is nominal

Cobalt

- Hw performance is nominal

CEP-I/II

- No issues

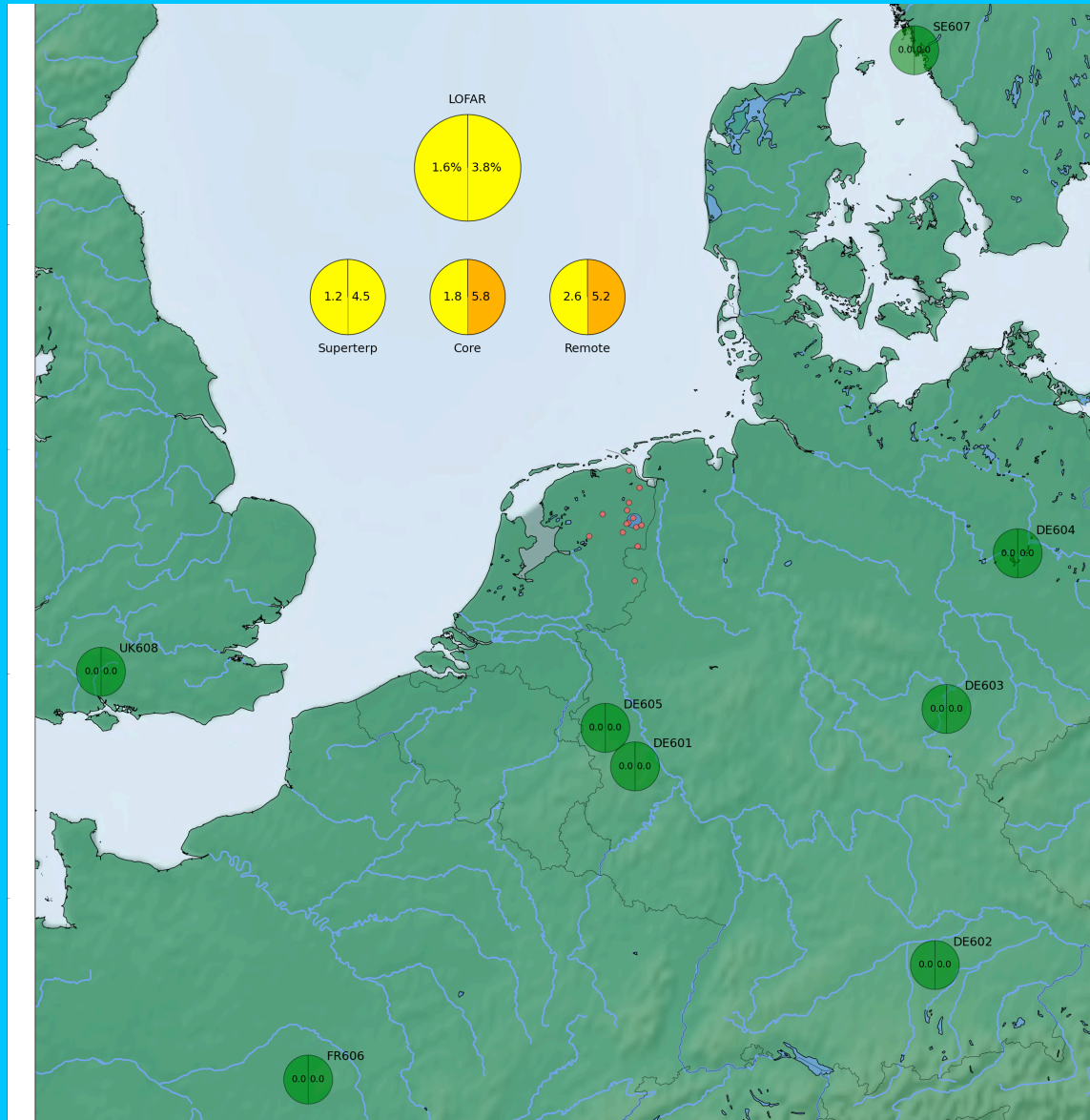
CEP-III

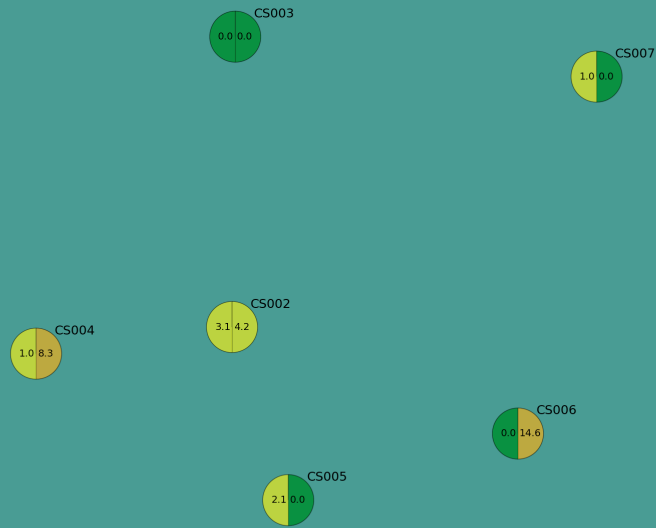
- System installation to be finished by Feb 21
- Batch queue-ing system will be tested and installed

Next stop day

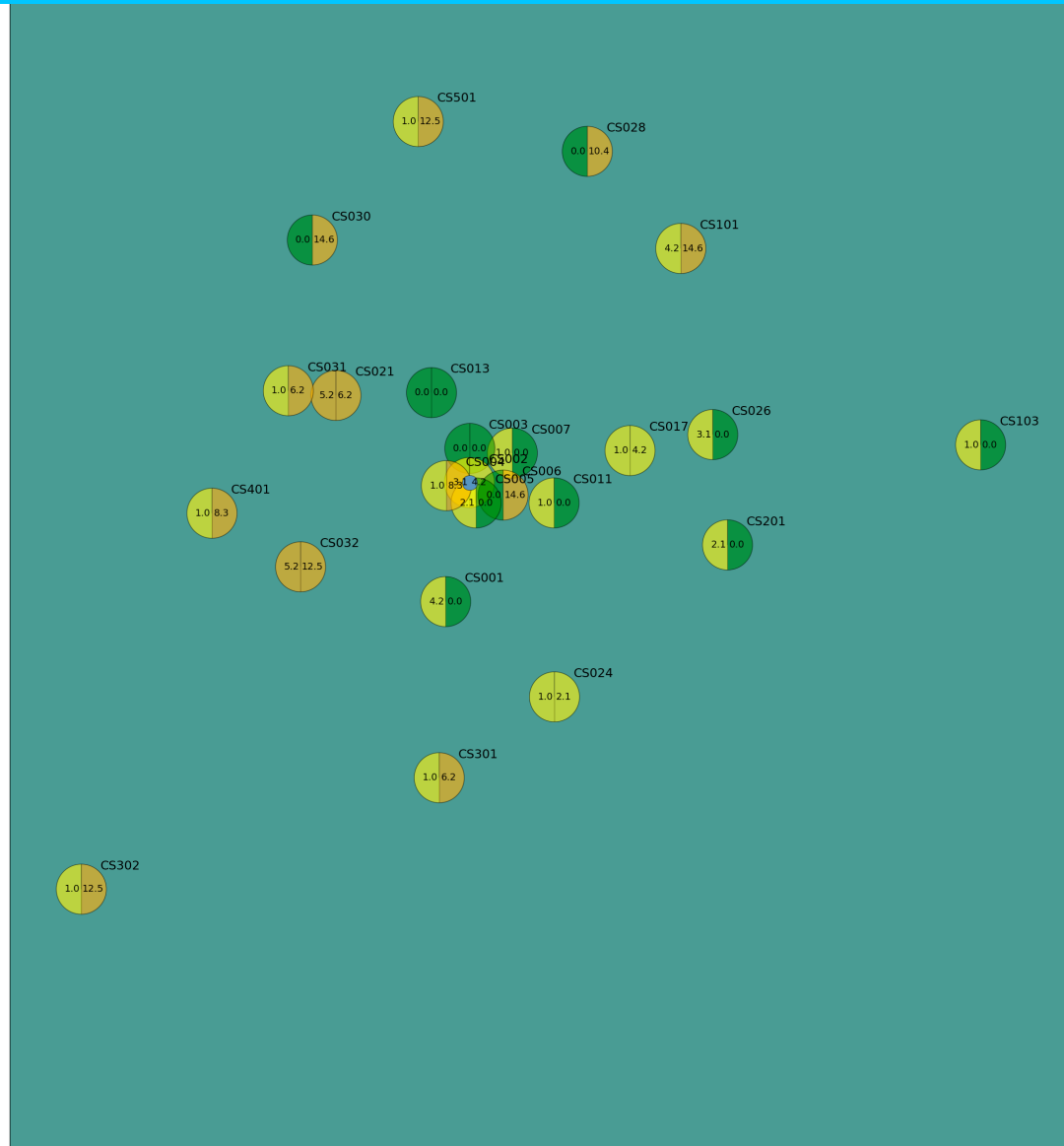
- March 4, 2014

Overview, including IS

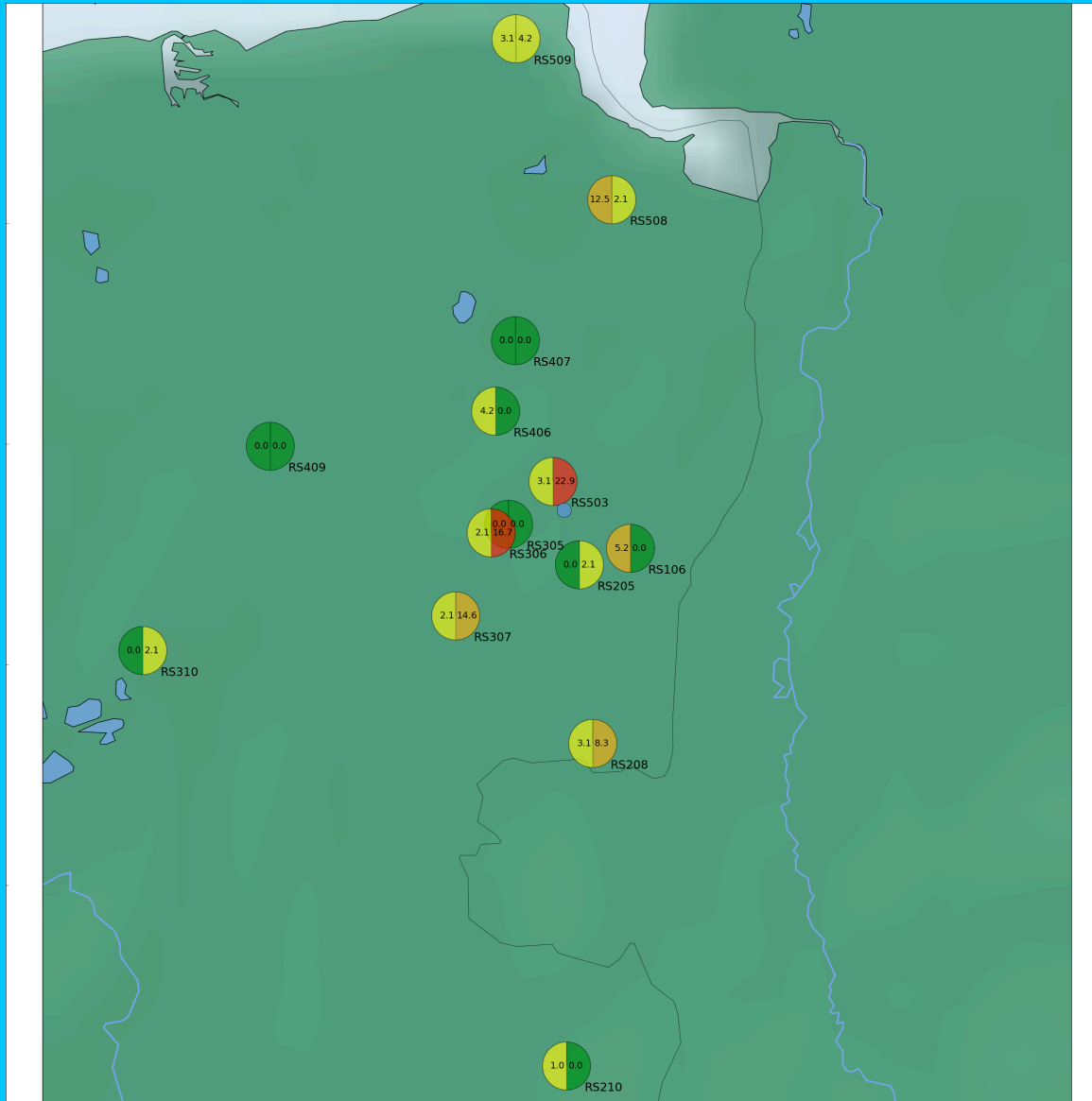




Core Stations



Remote Stations



Short news regarding the observing system:



- Software rollout 10 February 2014: all new functionalities have been tested and work as expected.
- 1 COBALT production observation was attempted unfortunately the results did not produced satisfactory data, investigation is on going (see Ronald's talk).
- Ionospheric scintillation not so severe last week.
- LTA undergoing bug fix, is off line no ingestions since few days (see Adrian's talk).

Cycle 1 Observations

Week 8		day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Approximate LST			10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9			
February	17	Mon	LC1_031 - NGC4449 - 9hrs						Stress system runs	COBALT TESTING; all international stations switched to local mode at 9 UTC								Tests night observ	LC1_039 (EoR) - NCP										
	18	Tue	LC1_039 (EoR) - NCP						LC1_023 - LSTs 16,18	COBALT testing			LC1_023 - LSTs 22	COBALT testing		Tests night observ	LC1_023 - LSTs 02,07	Stress system runs		LC1_039 (EoR) - 3C196									
	19	Wed	LC1_03 (EoR) - 3C196	Stress system runs + TBB runs						COBALT TESTING					test pipelin cobalt Manu	COBA TEST	Tests night observ	LC1_039 (EoR) - NCP											
	20	Thu	LC1_039 (EoR) - NCP						COBALT TESTING; all international stations switched to ILT mode at 9 UTC								Tests night observ	Stress system runs		LC1_039 (EoR) - 3C196									
	21	Fri	LC1_03 (EoR) - 3C196	Stationtest				LC1_035 - Monthly LST 16-19			COBALT testing					Tests night observ	Stress system runs	MSSS	Stress system runs		MSSS	LC1_035 - Monthly LST 08-09	Stress system runs						
	22	Sat	LC1_003 - Pulsars										Stress system runs + TBB runs					LC1_039 (EoR) - NCP											
	23	Sun	LC1_039 (EoR) - NCP						LC1_052 - LOTAAS - 10hrs								Stress system runs		LC1_024 - NGC4258 - 9hrs										
Maintenance DE602 on 27/02 from 23:00 till 07:00 LT																													
Week 9		day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Approximate LST			11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10			
February	24	Mon	LC1_024 - NGC4258 - 9hrs						Stress system runs	LC1_039 (EoR) - 3C196																			
	25	Tue	LC1_035 - RRAT J1537+23 - 1hr						MoM upgrade					LC1_035 - 3xRRATs - 3x1hr			LC1_039 (EoR) - NCP												
	26	Wed	LC1_039 (EoR) - NCP										LC1_003 - Pulsars																
	27	Thu	LC1_039 (EoR) - 3C196																										
	28	Fri	LC1_03 (EoR) - 3C196	LC1_028 - 4C39.37 - 8.5hrs																									
	1	Sat	LC1_028 - 4C39.37 - 8.5hrs						LC1_039 (EoR) - 3C196																				
	2	Sun	LC1_03 (EoR) - 3C196	LC1_052 - LOTAAS - 10hrs								LC1_039 (EoR) - 3C196																	

CEP Status

Replacement of CEP1 with CEP3 (March 2104)



CEP3 will be used for commissioning processing routines, testing production software and, in selected cases, to perform advanced Cycle processing by the Cycle users. The data currently present on CEP1 (both on the Ice nodes and on the staging areas) **will be deleted on March 24 2014 at 12 UT**. Back up your data and if you still need to do processing contact R. Pizzo

Beta testers have been contacted in order to test the software and performances.

Station calibration

- Mode 5 tables have been installed on all CS and RS (except for few that gave problems). New delays have been fitted
- Mode 3 and 7 were recorded the new tables will be installed next week.

Station Calibration status

Station	mode 1/2	mode 3/4	mode 5	mode 6	mode 7
CS001	08-06-12	18-07-12	11-02-14		22-06-12
CS002	08-06-12	30-05-12	11-02-14		08-04-13
CS003	08-06-12	30-05-12	11-02-14		08-04-13
CS004	08-06-12	30-05-12	11-02-14		08-04-13
CS005	08-06-12	30-05-12	11-02-14		08-04-13
CS006	08-06-12	30-05-12	11-02-14		08-04-13
CS007	08-06-12	30-05-12	11-02-14		08-04-13
CS011	25-10-12	18-07-12	11-02-14		12-06-13
CS013			11-02-14		
CS017	25-10-12	01-10-12	11-02-14		12-06-13
CS021	25-10-12	01-10-12	11-02-14		12-06-13
CS024	01-10-12	01-10-12	11-02-14		25-06-12
CS026	25-10-12	29-11-12	11-02-14		25-06-12
CS028	01-10-12	01-10-12	11-02-14		25-06-12
CS030	25-10-12	01-10-11	11-02-14		25-06-12
CS031	01-10-12	01-10-12	11-02-14		25-06-12
CS032	25-10-12	30-05-12	11-02-14		12-06-13
CS101	15-06-12	01-10-12	11-02-14		26-06-12
CS103	15-06-12	21-03-12	11-02-14		26-06-12
CS201	26-10-12	29-11-12	11-02-14		12-06-13
CS301	26-10-12	29-11-12	11-02-14		12-06-13
CS302	25-10-12	29-11-12	11-02-14		26-06-12
CS401	26-10-12	15-10-12	28-03-13		26-06-12
CS501	25-10-12	29-11-12	11-02-14		12-06-13
RS106		14-10-11	11-02-14		12-11-13
RS205		12-11-13	11-02-14		12-11-13
RS208	18-07-12	12-11-13	11-02-14		12-09-12
RS210			11-02-14		
RS305		29-11-12	11-02-14		12-11-13
RS306	18-07-12	08-06-12	11-02-14		29-06-12
RS307	18-07-12	12-11-13	12-11-13		12-11-13
RS310			11-02-14		12-11-13
RS406	18-07-12	12-11-13	11-02-14		12-11-13
RS407		12-11-13			
RS409			11-02-14		
RS503	18-07-12	12-11-13	12-11-13		12-09-12
RS508	18-07-12	11-02-14	11-02-14		29-06-12
RS509	18-07-12	27-06-12	11-02-14		29-06-12
DE601		26-10-12	15-03-13		30-05-12
DE602		03-10-13	03-10-13		25-06-12
DE603		03-10-13	03-10-13		25-06-12
DE604		03-10-13	03-10-13		25-06-12
DE605		26-10-12	03-10-13		29-06-12
FR606		13-09-12	16-09-13		12-06-12
SE607		03-10-13	14-03-13		29-06-12
UK608		01-10-12	03-10-13		30-05-12

Yellow: Measurements taken and under analysis
 Red: Measurement needs to be repeated

<http://www.astron.nl/radio-observatory/astronomers/current-status>

13th February **2013**, a bug was inadvertently introduced in a procedure used to store information in the LOFAR internal database (LOFAR_4 OTDB). This bug was related to a function called 'getbrokenhardware', used by the system to store in the Measurement Sets (MS's) information about malfunctioning antenna elements.

The recorded visibilities are corrected; only the information stored in the Antenna Table is wrong.

Wrong information in antenna tables..

This issue **does not** affect:

- Products of Radio Observatory pre-processing, calibrator, and target pipelines;
- Solution transfer to the target field from calibrators observed with dedicated bandwidth;
- Calibration results at the field center obtained adopting an external model of the sky, unless your science case requires thermal noise limited maps where the positions and fluxes of off-axis sources become important.

This issue affects only interferometric observations that have been processed using:

- Products of the Radio Observatory imaging pipeline;
- The 'smart demix' (currently not available in the Standard Imaging Pipeline);
- BBS (used for wide-field self calibration);
- AWImager.

Wrong information in antenna tables..

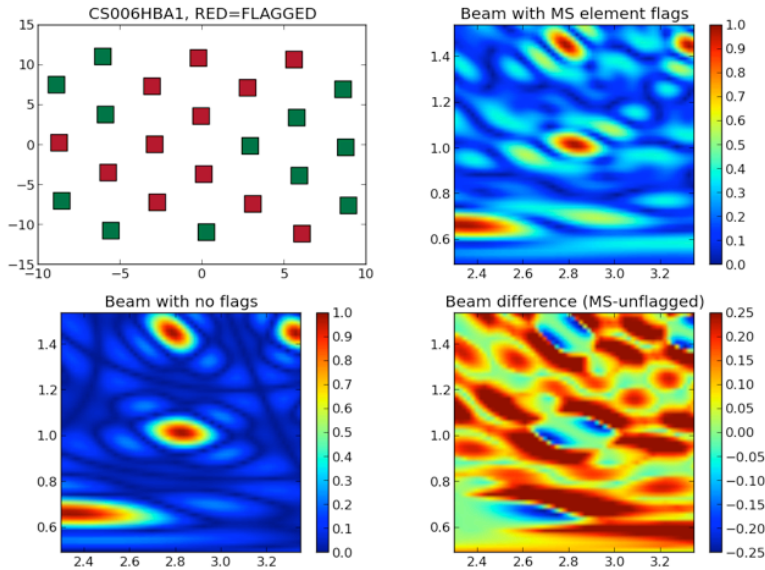
- This problem was solved during a software roll out on 10th February **2014**. From that date onward all MS's antenna tables report the correct information again.

- Luckily it is possible to extract a history of broken and repaired antenna elements. The Radio Observatory provided a script which can be applied to the MS's to correct them according to such a history. **New web page will be created with the history of the broken/fixed antenna element**

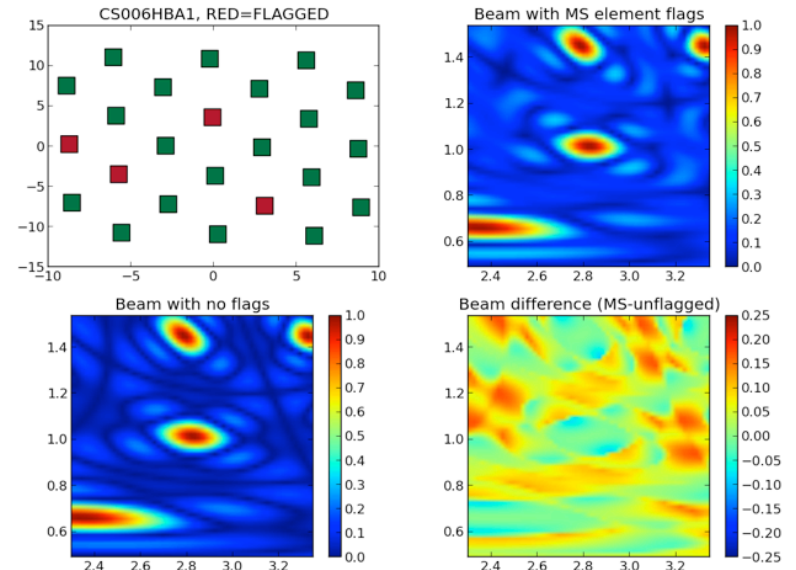
➡ The script and a detailed explanation on how to use it can be found in:

<https://www.astron.nl/radio-observatory/observing-capabilities/depth-technical-information/system-notes/wrong-information->

Wrong information in antenna tables..



before fix



after fix

Curtesy of E. Mahony Script by M. Mevius

CALENDAR of requested busy weeks and other LOFAR activities

- Next Stop Day: 4th of March
- Next LSM 5th of March