

Notes of the ILT TO Telephone conference 2015-11-26

Distribution list:

	Organization:	Date:
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1 Attendees

Chair	R. F. Pizzo
Notes	R. F. Pizzo
Participants	DE601: Andreas Horneffer DE602: - DE603: - DE604: - DE605: Arpad Miskolczi FR606: Jean-Mathias Griessmeier SE607: - UK608: Alan Doo DE609: Joern Kuensemoeller KAIRA: - POLFAR: Andrzej Krankowski, Leszek Blaszkiewicz NL: Bianca Bult, Roberto Pizzo, Menno Norden

2 Minutes of the Previous Telephone Conference

- None

3 Announcements

- The Cycle 5 allocations are available here:

<http://www.astron.nl/radio-observatory/cycles-allocations-and-observing-schedules/cycle-5-final-allocations/cycle-5-final>

Relevant for the international station owners: LT5_001 (PI: Serylak) has been accepted for the coming 4 Cycles, i.e. from Cycle 5 till Cycle 8.

- The next LOFAR Science Meeting will take place during the week 4-8 April 2016. It will have the usual setup: Users Meeting on day 1, Science meeting on days 2-3, and the possibility for the KSP's to held intra-KSP's meeting on days 4-5. The venue has not been finalized yet, but we can anticipate that it will be in the West part of the Netherlands, not far from Amsterdam.

The next face-to-face ILT single station owners and technical operations meeting will take place on Thursday 7 April, at the same venue as the other meetings.

- Marco Drost (from ASTRON R&D) started as new head of O&M on 30 November 2015.

4 Action Items

Nr	Description	Assigned to	Due date	Status
19/2	Jean-Matthias will contact Klaas for practical network issues regarding “data-cloning”	J-M. Griessmeier	26/02	Open
21/2	Make usage and error statistics of station switches available on a web-page	K. Stuurwold	23/04	Open
26/1	Compile document on practical guidelines on how to mitigate/deal with DAB issues at DE609	M. Norden	22/10	Open
27/1	Integrate to stationtest webpage answer given to J.-M. Griessmeier about how to decide whether additional elements need to be switched off in local mode. Additionally, develop a general webpage about interpreting system diagnostics.	S. ter Veen	26/11	Open
27/2	Discuss with M. Noorden and H. Meulman the possibility to provide FR606 with a ‘repair procedure’, e.g. a list of things to check and decide which antenna part has to be replaced. Let J.-M. know about the outcome.	B. Bult	26/11	Closed
28/1	Upload on the Wiki scripts by R. Fallows that generate beamlet statistics plots	M Norden	17/12	Open

Comments

19/2: No progress.

Action remains.

21/2: No progress.

Action remains.

26/1: The document is almost ready for internal review.

Action remains.

27/1: Not done yet. A general webpage about interpreting system diagnostics would be more useful and will be pursued as well.

Action remains and has been rephrased.

27/2: Two repair documents describing how to repair the LBA and HBA have been written and have been uploaded on Wiki:

<http://www.lofar.org/wiki/doku.php?id=maintenance:maintenance>

Action closed.

Nr.	Resolution / Decision	Meeting
1	The director ILT will require a written request for data cloning. A permission from the ILT operations is required prior to each data cloning observation.	2014-12-11
2	For proposals requesting the use of the international stations in single-station mode during ILT time, it is the PI's responsibility to verify – before submitting the proposal - that local resources are available to run such projects at the international stations. In its deliberations, the LOFAR Program Committee will assume that the submission of such projects are indicating that local resources will be available to accommodate it.	2014-12-11
3	DE601, Rubidium/ Maser switchover: As long as we switch back to the Rubidium after using the Maser, this will not affect ILT operations. We will use the Maser only very infrequently, so Menno agreed that we will probably manage to remember to switch back to the Rubidium whenever we use the Maser.	2015-01-29
4	Airco unit require a complete overhaul every year including a check on the coolant level	2015-01-29

5 Station Roll Out

POLFAR (Menno Norden / Hanna Rothkaehl/ Andrzej Krankowski)

- PL610: nothing to report.
- PL611: nothing to report
- POLFAR will follow up the request to establish the data connection for their stations with high priority.

6 Station statuses

6.1 Dutch Stations (Menno Norden/Bianca Bult)

- Mid November maintenance was stopped. All LBA's are inspected remotely and are enabled/disabled in PVSS to have an updated array status.
- CS103 had a clock board problem and is replaced.

- The HBA fields of CS013 have been rotated back to their originally planned orientation.
- Monitor of the array takes place regularly and especially before/after strong wind condition.

6.2 DE601 Effelsberg (Andreas Horneffer)

- General Performance:
 - The power distribution module (SPU) for subrack 1 failed apparently on October 22nd. This was replaced with a new module (that we got sent from ASTRON) on October 30th. I plan to bring the broken SPU with me to ASTRON on December 8th.
 - I did not yet find time to replace the LBAs with the new heads that were sent together with the SPU.
- GLOW Observing Network
 - All 6 stations are regularly switched to GLOW mode.
 - According to Klaas the connectivity between the interface computer and the LCU in DE604 has been fixed now. I'll test that on Friday.

6.3 DE602 Unterweilenbach/Garching (Ado Arnolds)

- Nothing to report, everything runs smoothly from our point of view.

6.4 DE603 Tautenburg (Matthias Hoefft)

- No input received

6.5 DE604 Potsdam (Christian Vocks)

- Nothing to report, everything runs smoothly from our point of view.

6.6 DE605 Jülich (Arpad Miskolczi)

- Nothing to report, everything runs smoothly from our point of view.

6.7 FR606 Nançay (Jean-Mathias Griessmeier)

- See Sect. 7

6.8 SE607 Onsala (Tobia Carozzi, Henrik Olofsson)

- Upgraded to latest LCU_MAC_LOFAR 2.13.

6.9 UK608 Chilbolton (Alan Doo)

- Reinstated three LBA fallen due to wind or (possibly) animal damage. A list of what hardware components are needed will be sent to Menno.
- HBA Tile 27 causing local observation difficulties. Communications to 90% of elements failed during observation causing LCU to drop to swlevel 0/1 repeatedly. Summator to be checked this week. T27 disabled in PVSS by Menno.
- No significant damage from winds in week 47, reaching only 50mph on this occasion.

6.10 DE609 Hamburg/Bielefeld Station (Joern Kuensemoeller)

- Initial tests of the recently introduced feature to configure extra attenuation before ADC shows quite some improvement with the RFI situation. With additional 4.5db att., we can get rid of the intermodulation products caused by DAB, but S/N is also affected quite a lot, so we cannot say right now if this is a feasible solution for us. We are undertaking systematic tests of what amount works best for what direction and consider setting attenuation dynamically based on the tile beams.
- GLOW cluster hardware for single station observations has arrived in Jülich. Installation is pending.

6.11 KAIRA (Derek McKay)

- KAIRA is operating and is being run using volunteer effort with the institute only covering the costs of services. The director of SGO has indicated that there are still no funds currently available for support effort.
- There has been a dramatic increase in Dragon-Teeth RFI events in the last month. We believe this may be due to winter equipment. We have still not been able to determine the transmission location.
- On-site data storage (on kaira05) is now running at 80% full, we believe we have sufficient capacity to last until January 2016 without supplementary disk/tape storage. There is a new offsite storage unit attached to kaira07.
- The paper on the interferometric radiometry technique used at KAIRA has been published: doi=10.1002/2015RS005709

Questions, Issues, Remarks

- FR606:
 1. You recently installed files on the LCU which describe which RCUs disabled in INT mode:
 - /localhome/stationtest/DISABLED/disabled-mode1.txt
 - /localhome/stationtest/DISABLED/disabled-mode3.txt
 - /localhome/stationtest/DISABLED/disabled-mode5.txt
 The official statement was that "These contain the RCU numbers for each mode that are disabled in our operational system. These are updated every morning." What does "disabled" mean in this context? Is the data produced by this RCU replaced by "0", or are the corresponding antennas taken out of the beamformer (i.e. removed from some configuration file)?

Answer from M. Noorden: Disabled means that these tiles are flagged in PVSS as broken. The result is that in ILT observations the corresponding receivers are set to rcumode=0 and rcuenable=0. They do not contribute to the beamformed data. In the Metadata these antennas are also noted, so the user can use this information for beam simulation or signal quality check (S/N).

In local mode one could use these file to disable (through scripts) these antennas in a similar way. Also to get an indication how many bad antennas are in the array.

2. FR606 still is on LOFAR 2.0.1. We would gladly change to a more recent version

(e.g. LOFAR 2.13.1), but our last trials failed. Is it possible to get remove assistance for a software update?

Remote assistance will be provided by A. Schoenmakers on Dec 16th.

3. *Beamlet statistics plots are now available after LOFAR observations. The station managers would like to produce them as well during local time. R. Fallows shared the relevant scripts with Jean-Mathias. They will be uploaded on the Wiki by M. Norden (Action 28/1).*

7 AOB

- RP: in the preliminary minutes of the next telecon (Dec 17th), dates for the telecons in 2017 will be proposed. These will then be discussed at the next telecon.
- The next face-to-face ILT single station owners and technical operations meeting will take place on Thursday 7 April, at the same venue as the Users meeting and the 2016 LOFAR Science meeting. The venue will be finalized very soon- we can anticipate that it will be nearby Amsterdam.

8 Date of next conference

Schedule for ILT telephone conferences in 2015:

- Thursday, December 17