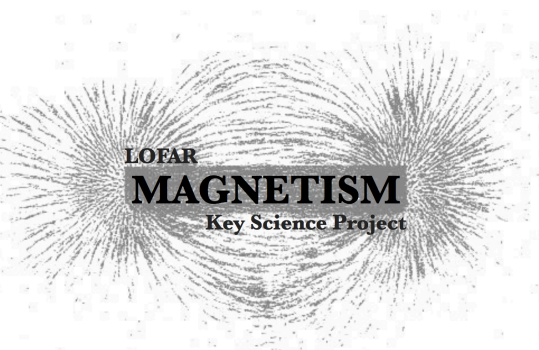


Magnetism Key Science Project

From proposal submission, to LTA retrieval

I got no responses on this issue, and from personal experience I find it to be an efficient process.

One thing came to mind regarding the wrong antenna tables information – can this be implement automatically to data in the LTA? At least for future observations?



Alex Clarke – on behalf of the MKSP

Magnetism Key Science Project

2015 broader issues:

- Station-calibration is done very infrequently:
 - Official policy for the international stations is to re-calibrate when there were changes to the hardware.
 - When the clock-distribution boards in DE601 were changed in 2014 science support took too long to respond.
 - Performing station calibration on a regular basis and checking the results would point out problems in the stations much faster (even if the calibration values don't usually change much).
- Proposals asking for more processing time than can be granted have its observing time is automatically reduced.
- Access to CEP3 is not managed in a way reflecting (student) reality:
 - Assumes that the astronomer works full time on their project for 3 months, and then the project is done. Most people don't work this way...
 - May be better if they didn't get more or less exclusive use of a CEP3 node for a short time, but would get limited storage space and total CPU time but over a significantly longer period.

2016

Improving

A lot of work for science support do to the station calibration, so done infrequently.

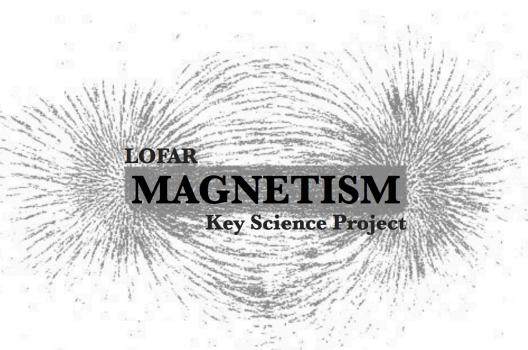
Holography work from Michiel Brentjens is working but not implemented.

4 weeks processing time given, with 'guaranteed' means for extension as required. For someone experienced with facet calibration, dedicating 100% of their time 3-6 months of time needed depending on data quality?

- How many users can process data on CEP3 at once?
- Given the number of students asking for time on CEP3, are the facilities extensive enough?

AWimager - pretty much stopped being used. WSclean and Casa preferred with beam applied afterwards.

Alex Clarke - on behalf of the MKSP



Magnetism Key Science Project

Computers - aiming towards facet calibration

Some MKSP users do not use CEP facilities

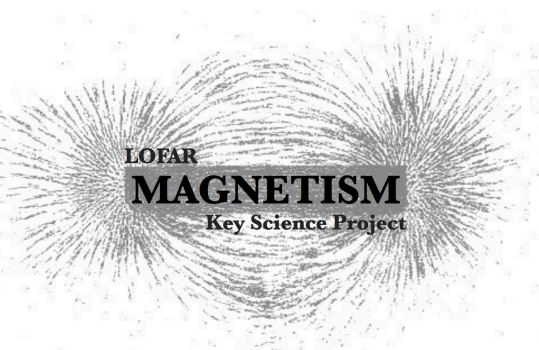
Setting up the basic LOFAR software can be trivial, and software support is generally very helpful, unless it is regarding software not supported at ASTRON (e.g. losoto).

Getting losoto, calibrate, HDF5 libraries, python libraries, all singing and dancing together took **a lot of effort (months)**. Documentation is sparse. Community very helpful if you ask around.

Calibrating a “nice” data set in 4 months:

Using a machine with 8 quad cores (2.71 GHz), 196 GB of RAM, using ~4TB of disk space... after being taut what to do at the facet calibration workshop... I processed 10.8% of a data set through the entire facet calibration procedure in about 1.5-2 months (with ~75% of my time dedicated to this).

Need another ~2 months to process all data and get final images.



Alex Clarke - on behalf of the MKSP

LOFAR Students (not specific to the MKSP)

Lofar wiki → ‘commissioning and msss’ → ‘student telecon reports & info’

- Contact info for participants, and documentation with tutorials/how to
- 7 meetings in the last ~13 months
- A very useful way for students to connect with the wider user base across many institutions.

This is the wiki page for PhD students related to LOFAR

You'll find a list of participants with email contacts and science interests. Links to the minutes from previous telecons. Also a page dedicated to tutorials and code snippets anyone can upload or use themselves (e.g. FACTOR pre-calibration steps, polarisation, etc...). Anyone can edit, so please feel free to add information or documents.

Students

- [Participants](#)

Previous meetings

- [13/2/2015](#)
- [27/2/2015](#)
- [17/4/2015](#)
- [24/7/2015](#)
- [30/10/2015](#)
- [18/12/2015](#)
- [12/2/2016](#)

Additional information, scripts, documents

- [Tutorials/HowTo](#)

Trace: • [commissioning](#) • [tutorial_howto](#) • [students](#)