

## Minutes Busy Wednesday Videocon of November 24<sup>th</sup>

**Present: Roberto, Emanuela, Andreas, Ilse, Aleksandar, Huub, Bas, Gabriele, Rosita, Jana, Francesco, Annalisa, Joris, Cyril, Chiara, David, Reinout, Laura, Matthias.**

### Progresses with the commissioning:

1. The 3C196 HBA observation performed with the new beam server (L2010\_20852) has been properly analyzed and compared with a previous observation done with the old beam server. The improvement is clear. Many source are detected already in a 10 min snapshot. See report\_3C196.pdf in attachment.

Working group: Annalisa, Rosita, Cyril

2. The Virgo group made significant progress with the data reduction of L2010\_20313. Preliminary images have been made and they have been shown during the telecon. The VLA map at 74 MHz was used as a model. In the final wide field map, together with Virgo A also other sources are detected.

Working group: Roberto, Manu, Francesco, Chiara

3. The status of the **facet-based** imager (developed by Bas) is as follows:

- Bas added support for the casapy imager. The imager now supports

- 1) CImager
- 2) lwimager
- 3) casapy imager

- The casapy imager allows to use robust weighting, so both CS and RS can be included and still have a reasonable psf.

Now some useful tests on real data can be done. Bas will start with the 6hour 3C196 observation in L2010\_20852.

Working group: Bas

4. There hasn't been a lot of progress with testing of RFIconsole since last time, but Andre' did alter the default flagging strategy to greatly reduce the flagging of periods when a strong source passes through the

sidelobes. Previously, >7 baselines (of 231) of the recent 6-hour Virgo A dataset were affected. Now, just 2 are affected, so less than 1% of all baselines. Therefore, this problem, while not completely solved, is a fairly minor one. Ken was going to look at some of the other 6-hour datasets (where we might also expect strong sources moving through the side lobes), so we will have a better idea of how prevalent this problem really is once he's finished

Working group: David, Ken

4. ~100 images of 3C380 made by the pipeline have been inspected by Aleksandar. These were the corrected images, not the ones in which the source is subtracted. Everything looked normal. The only abnormality seems to be that the cell-size parameter for the imager is the same for all images, so the beam is under-sampled at higher frequencies (this is noticeable).

Working group: Aleksandar, Laura, Giulia

5. Cyril concatenated ~200 sub bands of the 6 hours HBA observation of 3C196 (L2010\_20852). The data were processed by the pipeline through RFIconsole, NDPP, and BBS. He sliced them in time intervals of 2 minutes to investigate the time varying phenomena. He showed a movie on which he is going to work together with Bas.
6. A new observation has been performed in HBA. It will be used to test the transfer of the solutions from a calibrator to the target source (see point 6 in the document Available\_data.pdf). **This task has TOP priority.**

Working group: Annalisa, Rosita, Ilse, and Cyril

## Issues

### solved:

1. The problem with tracking the target source in long LBA observations is solved. In MoM templates, it is important to specify a beam duration equal to the length of the observation.
2. HBA1 corruption solved after the adoption of the new beam server.

## Opened:

1. A log file out of RFIconsole has been partly implemented, but further work needs to be done. It would be good to have in output flagging statistics and a completion bar in the same fashion as NDPPP. **The commissioners have to participate to the discussion with Andre' in the forum (location: software testing->standard imaging pipeline->Logging in the AOFlagger tools).**
2. A weighting scheme after BBS needs is being worked on.
3. About having to run clearcal before BBS if planning to use CASA at some point, see the discussion in the forum (Software testing -> Standard imaging pipeline -> open issues after the busy Wednesday of November 3<sup>rd</sup>). **Please participate to the discussion, as we need to give feedbacks to Joris.**
4. The commissioners requested a completion bar in BBS. It is not trivial, but Joris promised to look into it.

## Announcements:

1. I and Adriaan Renting are **collecting scripts** made by the commissioners for LOFAR data reduction. They will end up in a common location: opt/tools/cookbook. They will be described both in the README file (also at this location) and in the wiki webpage

<http://www.lofar.org/operations/doku.php?id=engineering:software:tools#>

The scripts will be presented and discussed in the next version of the Lofar Imaging Cookbook.

2. It is important to collect the best **skymodels** that we have available for the A-team and 3C sources. Please, if you have better models than those available in /home/pizzo/EXAMPLES/Models, send them to me.
3. We will meet in Leiden in December (14 till 16) to test Bas's imager. We will arrange an EVO session for the people who would like to participate in remote. I will send an e-mail around with the details.

The next busy Wednesday will take place after the Christmas holidays, on January 12<sup>th</sup> 2011.

