

Began with latest version of cookbook

setup database and keyless entry

Focusing on raw HercA data:

```
L2010_22120 0-61
L2010_22121 186-247
L2010_22123 186-247
L2010_22124 186-247
```

I'm going to work with:

```
lse018 /data1/L2010_22123/L22123_SB216_uv.MS
lse018 /data1/L2010_22124/L22124_SB216_uv.MS
```

Nope... Cyril already looked at those. Judith is working with 207. I'll go for 20 down from the end of each band...41 and 227

The data is located at:

```
golofar
ssh -Y lfe001
ssh -Y lce022
cd scratch
scp -r cavagnol@lce012:/data/scratch/pipeline/L2010_22120/L22120_SB041_uv.MS.dppp .
scp -r cavagnol@lce070:/data/scratch/pipeline/L2010_22121/L22121_SB227_uv.MS.dppp .
scp -r cavagnol@lse022:/data1/L2010_22123/L22123_SB227_uv.MS .
scp -r cavagnol@lse022:/data1/L2010_22124/L22124_SB227_uv.MS .
```

Are these channels RFI-free? I'm experimenting with Offringa's new 'rfigui'. They look fairly good.

Running NDP3 on all channels with time and freq averaging.

used Cyril's sim's of CygA and VirA to compare with actual data

```
~/scripts/uvplot.py -i VirA_CygA_model.MS -d vira.ps/cps -x time -y amp -c \
  DATA_SIM_VIRA -e 0,10,22,5
```

```
~/scripts/uvplot.py -i VirA_CygA_model.MS -d cyga.ps/cps -x time -y amp -c \
  DATA_SIM_CYGA -e 0,10,22,5
```

```
~/scripts/uvplot.py -i L22121_SB227_uv.MS.dppp -d L22121_SB227.ps/cps \  
-x time -y amp -e 0,10,22,5
```

Step 1? Step 2? Why?

Step 1: solve for casa cyga
amp and phase
sub casa cyga

Step 2: field correction for known sources
from VLSS? Will be fixed with MSSS

Calibrate command:

```
calibrate -f --key test --cluster-desc ~/sub3.clusterdesc \  
--db ldb001 --db-user postgres /data/scratch/cavagnol/L22121_SB227.gds \  
bbs_step1.parset Ateam_LBA_CC.skymodel /data/scratch/cavagnol/
```

seemed to work

step 2 fails if beam is enabled

Imaging:

```
mwimager mwimager.parset ~/imaging.clusterdesc
```

Doesn't work. Some shit about patches.

Communique:

Cyril's helpful comment:

“In multibeam observations, each subband is a beamlet (a beam in a subband, and time intervals). It's just set by the observer, but the frequencies should be the same. If you just want to make an image without peeling just as I did, you should average to one channel, the calibrate with bbs each subband, then concatenate with Casa (BBS won't work on concatenated dataset)...”

Judith asked:

“What’s the best starting point for A-team (relative) flux values to put into a sky model? Is there a first bash global sky model to use, or do I need to go off and e.g. look at VLSS?”

Cyril replied:

“Starting point can be the Ateam model Reinout gave me last week:
/home/tasse/BWJan11/3C348/Ateam_LBA.skymodel

I think fluxes were extracted from higher frequency images. Fluxes ratio will be wrong, but as far as you do dde calibration, this is not a problem.

As to the distances to the different Ateam sources to the field center:

CygA 55.2 deg

VirA 64

CasA 89.9

TauA 150.9

I will run a simulation to know which is stronger across the observation, and if needed peel it. Just give me a little time (I’ll try to do that by tomorrow, as I’m working on the Ateam removal using the other method). You can start inspect the short baselines, see if you see any flux variations (which is the signature of a bright source passing in and out the sidelobes). You can start doing no peeling, just pick a subband, compress to 1 channel with NDPPP, and make an image, or start a dde calibration, and peeling on CygA and VirA.”

Hello,

Here are the instructions to run the faced based imager:

The imager has need been added yet to the LofIm package. Instead of 'use Lofim' use one of the following commands:

```
source /home/vdtol/lofar/lofarinit.sh    ( for bash )
source /home/vdtol/lofar/lofarinit.csh  ( for tcsh )
```

This will also add to path to the correct casapy version. Do NOT use 'use Casa' because this will change the path to the latest casapy version that does not work for the imager.

The imager can be started with:

```
mwimager <parset file> <cluster desc> <workdir>
```

<workdir> is the directory where all temporary results will be stored.

In my home directory there is a subdirectory 'imagtest' with a few tests. To run the test with 3C196 data I do:

```
cd imagtest  
mwimager mwimager-3C196.parset ~/clusterdesc/sub8.clusterdesc $PWD/workdir
```

See /home/vdtol/imagtest/mwimager-3C196.parset for an example of how to configure the imager.

Cheers, Bas
