T5 imaging André Offringa & Emanuela Orru'

Observation set up









L456102

L456106

get



L456136

Observation set up



goal

- In Ihd001:/data/scratch/DATASCHOOL2016 you can find L456110 L456114 L456118 L456122 L456126 L456130
- Pick three more fields (on top of the central field) that are adjacent, and select one subband (If you finish early, you can try and process more – but this will likely take already the full tutorial).
- flag and average (T1)
- calibrate (transfer the calibrator solutions)
- calibrate with the gsm
- Image
- mosaic

Mosaicing

For mosaicing, you need two programs: makeavgpb and mos-wsclean.py

You will need the beam corrected images ("...-image-pb.fits") and the beam images ("-beam-XX.fits" et al.), and have imported the Lofar environment ("use Lofar"). Makeavgpb is used for creating a "Stokes I" beam response image:

```
$ ~offringa/bin/makeavgpb Field0-beam
$ kvis Field0-beam-avgpb.fits
```

Replace "Field0" by the name you have specified to WSClean. Do this for each field that you want to mosaic.

Create a file "input.txt" that lists all the "prefixes" of the fields to be imaged:

```
$ emacs input.txt {or use your favourite editor}
$ cat input.txt
Field0-
Field1-
$
```

Note the dashes at the end. Now you can run the mosaicing script:

~offringa/bin/mos-wsclean.py input.txt -x image-pb.fits -a beam-avgpb.fits

Warnings can be ignored as long as it continues. The end result is "mosaic.fits" !

Mosaicing example



