

Experience with LOFAR observatory

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for the Survey KSP*

The Survey KSP

Working groups

- ✦ *High-z radio sources*
- ✦ *Galaxy clusters*
- ✦ *Starforming galaxies*
- ✦ *AGN at moderate z*
- ✦ *Low-z AGN*
- ✦ *Nearby Galaxies*
- ✦ *Gravitational lensing*
- ✦ *Galactic radio sources*
- ✦ *Cosmological studies*
- ✦ *Blank fields*

*Wiki page to coordinate the work, share scripts and strategies
and update each other*

Survey KSP

Observing Strategies

1) *Standard*

Interleaved
calibrator scans to
track amplitude
variations

2) *Non Standard* *attempt clock corrections*

LBA
no interleaved
target and standard calibrators
simultaneously observed

HBA
band split into 2
- non-standard calibrator
($d < 10$ degrees)
- target

Preparing the observation

List of targets reserved by Survey Tier 1 and Tier 2
this info cannot be accessed by outside

Sub-Bands to frequency web calculator (similar to the data size calculator)

Preparing the observation

Info useful for external users

HBA: list of “secondary” calibrators, or specifics about flux and size

HBA and LBA: - list of SB RFI-contaminated

HBA and LBA: defining “Standard observing mode”

SB list,

time and freq averaging in pre-processing

After the observation

Inspection plots are useful + example of what can be considered a standard successful observation (% of good time, band, ...)

ASTRON pipeline

Imaging pipeline: now works with interleaved calibrators scans

- Would be good to have 2 pipelines with/without interleaved calibrators to attempt Clock/TEC separation on the calibrator
- Imaging: possibility to specify fov, stations involved in imaging
 - _ What is the pipeline exactly doing step by step (parameters used in AOflagger, BBS, AWimager, ...)