



GMRT Observing Preparations

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Overview



Check all tools available at

http://www.gmrt.ncra.tifr.res.in/gmrt_users/help/help.html

Make source list, check rise/set of targets and plan accordingly.

Chose a good secondary calibrator using Calibrator search tool

Decide on Integ time; bandwidth, # of channels etc; compromise between size and resolution.

Command file – how often src+cal? Minimise overheads.

IMP: Good phase calibrator slightly far away is better than bad calibrator nearby

IMP: Good SNR for bandpass calibration is important to minimise the artefacts due to bandpass variations.



Command file preparation etc





Overview



SPECTRAL LINE:

Mostly similar to continuum

Narrow bandwidth --> high spectral resolution – sensitivity vs resolution

Good bandpass calibration (lot of integ on src with poor bandpass is useless).

Overview



MOVING TARGETS (SOLAR SYSTEM OBJECTS)

RA and DEC changes during the observing window.

RA and DEC at $t=t_0$ should be given and then dRA/dt and $dDEC/dt$ is needed assuming linearity over a few hours.



During the Observations



Monitor the observations

Note down dead antennas, RFI channels (approx), etc



After Observations



Convert LTA to FITS file

Analyse the data

Write paper (preferably in *Nature*, *Science*)