

Recommended LO settings for the uGMRT observations

This document is for the users planning to make 400 / 200 / 100 MHz bandwidth full-band (and NOT sub-band!) continuum observations at (i) 1050-1450 MHz, L-band (band-5), (ii) 550-850 MHz (band-4) and (iii) 250-450 MHz (band-3).

Important note for the operators:

1. Stokes parameters to be selected as either “Total Intensity” or “Full Stokes”.
2. Observers requesting any other LO settings, observatory is not responsible for quality of data, e.g., drop in cross-correlation, etc.
 1. In such cases, non-recommended use of LO settings, operators, please do inform the users of the consequences, and include the note, “non-recommended use of LO settings, observatory is not responsible for the quality of data” in the observations-log.

Band-5 (1050-1450 MHz):

LO = 1460 MHz

bandwidth = 400 / 200 / 100 MHz

no. of spectral channels = 2k / 4k / 8k / 16k

Side-band FLAG to be used is LSB.

Band-4 (550-850 MHz):

LO = 550 MHz

bandwidth = 400 / 200 / 100 MHz

no. of spectral channels = 2k / 4k / 8k / 16k

Side-band FLAG to be used is USB.

Note: Here the usable part of the band is from 550 MHz (= channel-0) to 850 MHz.

Band-3 (250-500 MHz):

LO = 500 MHz

bandwidth = 400 / 200 / 100 MHz

no. of spectral channels = 2k / 4k / 8k / 16k

Side-band FLAG to be used is LSB.

Note: Here the usable part of the band is from 500 MHz (= channel-0) to 250 MHz.