



The Madden Julian Oscillation (MJO) index currently lies in Phase 7 with amplitude less than 1. It is likely to move to phase 5 across phase 6 by later part of week 1. Thereafter, it is likely to continue in same phase for rest of the forecast period, with amplitude remaining less than 1. MJO phase is thus not favourable for enhancement of convective activity over the North Indian Ocean (NIO). Based on CFS forecast, no westerly flow is predicted over both the basins including the Arabian Sea (AS) and Bay of Bengal (BoB) during the entire forecast period. Weak easterlies (1-3 mps) are likely to prevail over the southeast AS & adjoining southwest BoB and most parts of BoB during week 1. Strengthening (3-5 mps) of easterlies is likely over both the regions during week 2. As per the available forecast, other waves including Equatorial Rossby Waves (ERW), Kelvin Waves (KW) and Inter Tropical Convergence Zone (ITCZ) are not likely to be favourable over the NIO region during the entire forecast period. Thus, various broad scale features including MJO, westerlies, easterlies, ERW, KW and ITCZ are not in phase and thus not likely to contribute towards enhancement of convective activity leading to cyclogenesis over the NIO region during entire forecast period.

The forecast fields of various numerical models including IMD GFS, IMD GPP, NCEP GFS, GEFS, NCUM, NEPS, ECMWF, ECMWF ensemble and CFS-V2, are not indicating any cyclogenesis over the NIO region during next two weeks.

Hence, various broad scale features and model guidance indicate that cyclogenesis is not likely over the North Indian Ocean during the ensuing 2 weeks.

**Verification of forecast issued during last two weeks:**

The forecast issued on 13<sup>th</sup> January for week 2 (21.01.2022-27.01.2022) and on 20<sup>th</sup> January for week 1 (21.01.2022-27.01.2022) indicated no cyclogenesis over the region during the forecast period. Hence non-occurrence of cyclogenesis was correctly predicted in the two weeks forecast.