



The Madden Julian Oscillation (MJO) index currently lies in Phase 6 (West Pacific) with amplitude close to 1. It is likely to move in same phase during entire forecast period with amplitude remaining more than 1 till middle of week 2. Thereafter, during later part of week 2, the amplitude will become slightly 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 eastcentral BoB during week 1. Strengthening (5-7 mps) of easterlies with increase in area of extension is predicted 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 prevail over the NIO region during the entire forecast period. Thus, various broad scale features including MJO, westerlies, easterlies, ERW, KW and ITCZ etc. are not likely to contribute towards enhancement of convective activity 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 06th January for week 2 (14.01.2022-20.01.2022) and on 13th January for week 1 (14.01.2022-20.01.2022) indicated no cyclogenesis over the region during the forecast period. Hence non-occurrence of cyclogenesis was correctly predicted in the two weeks forecast.