



The Madden Julian Oscillation (MJO) index currently lies in Phase 7 with amplitude more than 1. It is likely to continue in same phase during next 2 weeks. Thus, MJO phase is not conducive for enhancement of convective activity and hence cyclogenesis over the Bay of Bengal (BoB) and the Arabian Sea (AS) during entire forecast period. Currently the northern hemispheric near equatorial trough is active only to the south of the Arabian Sea (AS) and further over west Pacific region. The pre-dominant flow pattern over the Bay of Bengal (BoB) region is westerlies.

All the numerical models analysed including IMD GFS, IMD GPP, NCEP GFS, GEFS, NCUM, NEPS, ECMWF and ECMWF ensemble, CFSV₂, are not indicating any cyclogenesis over the north Indian Ocean (BoB and AS) during their respective forecast periods.

In view of the above, it may be concluded that no cyclogenesis is likely over the north Indian Ocean during the ensuing 2 weeks.

Verification of forecast issued during last two weeks:

The forecast issued on 9th December for week 2 (17.12.2021-23.12.2021) indicated no cyclogenesis. The forecast issued on 16th December for week 1 (17.12.2021-23.12.2021) indicated likely formation of a low pressure area (LPA) over Equatorial Indian Ocean (EIO) and adjoining southwest BoB during first part of week with east-northeastwards movement subsequently with a low probability of its intensification into a depression during later part of the week. Actually, an LPA formed over southeast BoB & adjoining EIO on 17th evening. It moved east-northeastwards and became well marked over south Andaman Sea off north Sumatra coast in the early morning of 20th, moved further east-northeastwards across Malacca Strait and weakened gradually by the evening of 21st. Thus, likely formation of LPA and its marginal intensification & movement was correctly captured 1 week in advance.

Next update: 30.12.2021