



The Madden Julian Oscillation (MJO) index is currently in Phase 4 with amplitude slightly less than 1. It is likely to move over to Phase 5 and remain there till the beginning of week 2 with amplitude more than 1 and then move into Phase 6 with further increase in amplitude during rest part of week 2. Hence the MJO will support convection over the Indian Seas (Bay of Bengal & Arabian Sea) during week 1 and in the first half of week 2.

A few of the ensemble model products like GEFS, ECMWF & CGEPS (MME) are indicating varied probability for Cyclogenesis over the southern parts of north Indian Ocean (NIO) on a lower range mainly during later part of week 1. CGEPS (MME) shows 40-50% probability over southeast Bay of Bengal (BoB) and adjoining Andaman Sea and also 30-40% probability over Equatorial Indian Ocean (EIO) to the south of Maldives during the latter half of week 1. ECMWF cyclogenesis probability product shows a very low likelihood of 10-30% over south BoB during later part of week 1. IMD GFS & GEFS indicates likely genesis over south Arabian Sea during the end of week 1 till the first half of week 2 while NCEP GFS shows the genesis area as southeast BoB during the same period. NCUM and deterministic ECMWF are not indicating any probability of genesis over NIO.

Considering all the above, it may be concluded that there is a low probability of cyclogenesis over southeast BoB during the latter half of week 1.

Verification of forecast issued during last two weeks:

The forecast issued on 11th March for week 2 and the forecast issued on 18th March for week 1 for the period (19.03.2021-25.03.2021) indicated no cyclogenesis over the north Indian Ocean. No cyclogenesis occurred during the period which could be correctly predicted 2 weeks in advance.