



The Index of Madden Julian Oscillation (MJO) currently lies in Phase 1 with amplitude more than 1. It is likely to move into Phase 2, from the beginning of Week 1 maintaining the amplitude and propagate eastwards into Phase 3 with amplitude less than 1 during the initial part of Week 2. It is likely to remain in Phase 3 with amplitude less than 1 during Week 2. Hence the phase of MJO would become favorable for enhanced convection over the North Indian Ocean (NIO) during Week 2.

Currently southwest monsoon in general is in a subdued Phase over major parts of the Arabian Sea (AS) and the Bay of Bengal (BoB), barring the southern parts where an active convergence zone and hence convection is present. The prevailing surface winds are also weaker than normal (of the order of 10-15 knots). However, dynamic model guidance indicates a likely strengthening of the monsoon conditions over the NIO from the latter half of Week 1.

Most of the numerical models including IMD GFS, GEFS, NCUM & NEPS, NCEP-GFS and ECMWF deterministic models are not indicating any cyclogenesis over NIO during their respective forecast periods. However, all these models are indicating likely formation of a low pressure area over west-central & adjoining northwest BoB off north Andhra Pradesh – south Odisha coasts during the latter half of Week 1. The cyclogenesis and evolution probability based on MME (CFSV₂) is not indicating any significant genesis potential zones over the NIO for the forecast period.

Considering all the above, it may be concluded that no cyclogenesis is likely over the north Indian Ocean during the forecast period. However, a Low Pressure Area is likely to form over west-central & adjoining northwest BoB off north Andhra Pradesh – south Odisha coasts during the latter half of Week 1.

Verification of forecast issued during last two weeks:

The forecast issued on 29th July for week 2 (06.08.2021- 12.08.202) and the forecast issued on 05th August for week 1(06.08.2021- 12.08.2021) indicated no cyclogenesis probability over the north Indian Ocean. No Depression or intense Low pressure system formed over NIO during the period which could be correctly predicted 2 weeks in advance.

Next update: 19.08.2021