



The Index of Madden Julian Oscillation (MJO) currently lies in Phase 2 with amplitude close to 1. It is likely to move to Phase 3 with reduced amplitude (<1) during second half of Week 1 and remain in Phase 3 with slight increase in amplitude during entire period of week 2. Hence the phase of MJO could favor the convective activity over the North Indian Ocean (NIO) from the later part of Week 1 and entire period of week 2.

Most of the numerical models including IMD GFS, GEFS, NCUM, NEPS, ECMWF, NCEP-GFS, MME (CFSV₂) and the coupled NCUM based extended range forecasts are not indicating any cyclogenesis over NIO during their respective forecast periods. However, majority of them like IMD GFS, GEFS, NCUM, NEPS & ECMWF are indicating development of a low pressure area over northwest & adjoining west-central Bay of Bengal (BoB) off south Odisha – north Andhra Pradesh coasts around 29th August. ECMWF EPS is also indicating likely formation of low pressure system over west-central & adjoining northwest BoB during first half of week 1. Further, the models like NCEP-GFS & NCUM are indicating the formation of another Low pressure area over west-central & adjoining northwest BoB off north Andhra Pradesh – south Odisha coasts around 5th September. However, neither of the two Low pressure areas is getting reflected in the composite flow pattern anomalies predicted by the extended range forecasts based on CFSV₂ and NCUM coupled with NEMO. This implies that these Low pressure areas, once formed could be short-lived and weak.

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 northwest & adjoining west-central BoB off south Odisha- north Andhra Pradesh coasts during the first half of Week 1, followed by another one over west-central & adjoining northwest BoB off north Andhra Pradesh – south Odisha coasts during the second half of Week 2.

Verification of forecast issued during last two weeks:

The forecast issued on 12th August for week 2 (20.08.2021- 26.08.2021) and the forecast issued on 19th August for week 1(20.08.2021- 26.08.2021) indicated no cyclogenesis over the north Indian Ocean. Hence no cyclogenesis could be predicted correctly two weeks in advance.

Next update: 02.09.2021