



The Index of Madden Julian Oscillation (MJO) currently lies in Phase 2 with amplitude more than 1. It is likely to propagate eastwards into Phase 3 with gradual reduction in amplitude during the later part of Week 1 and further into Phase 4 with amplitude less than 1 towards the end of Week 2. Hence the phase of MJO is likely to favour enhancement of convection over the North Indian Ocean (NIO) from the second half of Week 1 and whole of Week 2.

Though the southwest monsoon covered the entire north Indian Ocean on 19th June, soon after the monsoon flow in general had weakened. Subdued convection and weaker than normal cross equatorial flow are prevailing over the region. However, the forecast atmospheric flow pattern, in tune with the MJO forecast indicates a revival of active monsoon conditions during Week 2.

Most of the numerical models including IMD GFS, NCEP GFS, GEFS, NCUM, NEPS & ECMWF are not indicating any cyclogenesis over the north Indian Ocean during their respective forecast periods. The genesis potential parameter (GPP) based on IMD GFS as well as by MME (CFSV₂) is also not indicating any potential zone for cyclogenesis over NIO during their forecast periods. However IMD GFS and ECMWF models indicate that a low pressure area could form over north coastal Andhra Pradesh & adjoining south coastal Odisha around 11th July and NCEP GFS indicates that a Low pressure area could form over west-central Bay of Bengal (BoB) around 12th July, which could become more marked over west-central & adjoining northwest BoB during the subsequent 2 days and its moving inland and weakening thereafter.

Considering all the above, it may be concluded that no cyclogenesis is likely over the north Indian Ocean during the ensuing 2 weeks. However, a low pressure area is likely to form over west-central & adjoining northwest BoB off north Andhra Pradesh – south Odisha coasts during the middle to later part of Week 2.

Verification of forecast issued during last two weeks:

The forecast issued on 17th June for week 2 (25.06.2021- 01.07.2021) and the forecast issued on 24th June for week 1(25.06.2021- 01.07.2021) indicated no cyclogenesis over the north Indian Ocean during the period. No cyclogenesis occurred during the period which could be correctly predicted 2 weeks in advance.

Next update: 08.07.2021