



The Madden Julian Oscillation (MJO) index currently lies in Phase 1 with amplitude nearly 1. It will meander in same phase during the entire forecast period. Thus, MJO phase will not contribute towards enhancement of convective activity over the north Indian Ocean (NIO) during the entire forecast period.

Most of the numerical models including IMD GFS, NCEP-GFS, GEFS, NCUM, NEPS, ECMWF are indicating no cyclogenesis over the region during entire forecast period. IMD GPP index is also not indicating any significant zone for cyclogenesis over the region. ECMWF Multi Model Ensemble is indicating 20-30% probability of cyclogenesis over south Bay of Bengal (BoB) and southeast BoB. MME CFSV<sub>2</sub> Model is indicating 30-40% probability of cyclogenesis over south BoB and southeast Arabian Sea (AS).

In view of above, no cyclogenesis is predicted over the north Indian Ocean during the forecast period.

**Verification of forecast issued during last two weeks:**

The forecast issued on 07<sup>th</sup> October for week 2 (15.10.2021-21.10.2021) indicated formation of a low pressure area over east-central AS with west-northwestwards movement towards Oman coast and no intensification. Also another Low Pressure area was predicted over north Andaman Sea & adjoining Myanmar coast towards the middle of week-2 without significant intensification. Actually, the predicted low pressure area over AS didn't form. A low pressure area formed over Gangetic West Bengal and neighbourhood on 18<sup>th</sup> October and became less marked over Bihar on 20<sup>th</sup>.

The forecast issued on 14<sup>th</sup> October for week 1 (15.10.2021-21.10.2021) indicated the low pressure area over northern parts of central BoB and another over east-central and adjoining southeast AS off Lakshadweep area over the NIO would move cyclonically without any intensification. Actually these low pressure areas moved cyclonically and weakened over central parts of Madhya Pradesh (Central India) on 19<sup>th</sup> morning (0000 UTC) and the other over southeast AS off Kerala coast on 17<sup>th</sup> morning (0000 UTC).