NORTH INDIAN OCEAN EXTENDED RANGE OUTLOOK
FOR CYCLOGENESIS

Week1:06.08.2021-12.08.2021   Week2: 13.08.2021-19.08.2021

PROBABILITY OF CYCLOGENESIS
(FORMATION OF DEPRESSION OR HIGHER INTENSITY)
LOW   (1-33% PROBABILITY)
MODERATE   (34-67% PROBABILITY)
HIGH   (68-100% PROBABILITY)

CONFIDENCE

The Index of Madden Julian Oscillation (MJO) currently lies in Phase 8 with amplitude less than 1. It is likely to traverse across Phase 1 with gradual increase in amplitude from the middle of Week 1. It would enter in Phase 2 with amplitude more than 1 from the beginning of Week 2 and further propagate eastwards towards Phase 3 during this period. Hence the Phase of MJO would support enhanced convection over the north Indian Ocean (NIO) only towards the end of Week 2.

Currently southwest monsoon in general is entering into a subdued Phase over major parts of the Arabian Sea (AS) and the Bay of Bengal (BoB). However, dynamic model guidance indicate that active monsoon conditions and associated squally weather are likely to develop over the Bay of Bengal during Week 2 and over the Arabian Sea during the later part of Week 2.This may be attributed to synoptic scale developments along with other modes of Intra-seasonal variability other than MJO.

Most of the numerical models including IMD GFS, GEFS, NCUM & NEPS and ECMWF deterministic models are not indicating any fresh cyclogenesis over NIO during their respective forecast periods. ECMWF EPS is indicating a very low probability of cyclogenesis over the north BoB during the latter half of week 2. Also NCEP GFS is indicating the development of a fresh low pressure area over west-central BoB towards the middle part of Week 2. The cyclogenesis and evolution probability based on MME (CFSV$_2$) is not indicating a genesis potential 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.

Verification of forecast issued during last two weeks:

The forecast issued on 22nd July for week 2 (30.07.2021- 05.08.2021) and the forecast issued on 29th July for week 1(30.07.2021- 05.08.2021) 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: 12.08.2021