



The Madden Julian Oscillation (MJO) index lies currently in phase 1 with amplitude more than 1. It will move to phase 2 from tomorrow and continue in same phase during next two days. It will propagate eastwards and move to phase 4 across phase 3 in the later part of week 1 with amplitude becoming less than 1. Thereafter it will move across phases 5 and 6 during week 2. Thus, the phase and amplitude of MJO will support enhancement of convective activity over the north Indian Ocean (including Bay of Bengal and Arabian Sea) only during week 1.

Most of the numerical models including IMD GFS, GEFS, ECMWF, NEPS, NCUM & NEPS are not indicating any cyclogenesis during the forecast period. CGEPS (MME) indicates low probability of cyclogenesis (10-20%) over south Bay of Bengal during the forecast period. The Genesis Potential Parameter (GPP) based on IMD GFS is not indicating any potential zone for cyclogenesis over the north Indian Ocean during the forecast period. However, it is seen that the northern hemispheric near equatorial trough is likely to become convectively active over the south Arabian Sea in the beginning of week 2. Under it's influence, a 'Low pressure area' is likely to form over central parts of south Arabian Sea and there is a 'low' probability of its intensification and Cyclogenesis over the same region during later part of week 2.

Considering all the above, it may be concluded that there is low probability of cyclogenesis over central parts of south Arabian Sea during later part of week 2.

Verification of forecast issued during last two weeks:

The forecast issued on 22nd April for week 2 and the forecast issued on 29th April for week 1 for the period (30.04.2021-06.05.2021) indicated no cyclogenesis over the north Indian Ocean and no cyclogenesis occurred over the region during the forecast period. Thus non-occurrence of cyclogenesis could be correctly predicted two weeks in advance.