



The Madden Julian Index (MJO) currently lies in phase 1 with amplitude less than 1. It is likely to move into phase 2 and remain there with weak amplitude during week 1. It would then re-trace back into phase 1 with gradual increase in amplitude during week 2. Hence the phase of MJO is not favorable for cyclogenesis over the North Indian Ocean (NIO) during next 2 weeks. However, there are certain other wave perturbations like Rossby & Kelvin waves contributing to the convection over the north Indian Ocean and maintaining the monsoon activity over the region during the ensuing two weeks.

Southwest monsoon has further advanced and has covered major parts of the Arabian Sea and the Bay of Bengal, except the northern most parts.

Most of the numerical models including IMD GFS, NCEP GFS, GEFS & ECMWF are indicating likely formation of a Low pressure system over northwest Bay of Bengal (BoB) off Odisha – West Bengal coasts during the beginning of week 1. NCUM & NEPS are indicating formation of a Depression during the first half of week 1, but after moving inland (over Gangetic West Bengal). The genesis potential parameter (GPP) based on IMD GFS indicates a potential area over northeast BoB & its shifting over to northwest BoB during the first half of week 1. It also indicates a fresh potential area over northeast BoB towards the later part of week 1, which NCEP GFS also does. MME (CFSV₂) is indicating potential zone with 30-40 % probability for cyclogenesis during the first half of week 1.

Considering all the above, it may be concluded that a low pressure area could form over northwest BoB during next 24 hours, which could become more marked over the same region during the subsequent 24 hours. Also there is 'Low' probability for it to become a monsoon Depression during the first half of week 1.

Another Low pressure area could form over North Bay of Bengal towards the beginning of week 2.

Verification of forecast issued during last two weeks:

The forecast issued on 27th May for week 2 (03.06.2021- 10.06.2021) and the forecast issued on 03rd June for week 1(03.06.2021- 10.06.2021) 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: 17.06.2021