



The Index of Madden Julian Oscillation (MJO) currently lies in Phase 2 with amplitude less than 1. It is likely to retreat towards Phase 8, across Phase 1 during the first half of Week 1 with gradual increase in amplitude and remain there with amplitude more than 1 during the rest of week 1. It would then propagate eastwards into phase 1 with amplitude more than 1 and remain there during major part of week 2. Hence the phase of MJO is not favorable for cyclogenesis over the North Indian Ocean (NIO) during next 2 weeks.

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

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. However, a few of them like NCEP GFS & ECMWF indicate brief formation of Low pressure areas at the eastern end of the seasonal Sea level trough over northwest BoB during the initial parts of Weeks 1 & 2. The genesis potential parameter (GPP) based on IMD GFS indicates a potential area over northeast BoB off Bangladesh coast on 18th & 19th June. MME (CFSV₂) is also indicating potential zone with 60-70 % probability for cyclogenesis over northeast BoB during the initial days of week 1.

Considering all the above, it may be concluded that no cyclogenesis likely over the north Indian Ocean during the ensuing 2 weeks. However, there could be formation of short-lived low pressure areas, one each over north BoB and northwest BoB respectively during the initial parts of weeks1 & 2.

Verification of forecast issued during last two weeks:

The forecast issued on 3rd June for week 2 (11.06.2021- 17.06.2021) indicated that a monsoon depression could form over northwest BoB with moderate probability and the forecast issued on 10th June for week 1(11.06.2021- 17.06.2021) indicated likely formation of a low pressure area over northwest BoB, with a 'low' probability of its intensification into a Depression. A low pressure area formed over northwest BoB & adjoining coastal areas of Odisha & West Bengal on 11th June. It persisted there till 13th June and moved inland subsequently, without any further intensification.

Next update: 24.06.2021