



The Madden Julian Oscillation (MJO) index is currently in phase 4 with amplitude greater than 1 and will continue in same phase during first half of week 1. Thereafter, it will move to phases 5 and 6 with amplitude remaining greater than 1 during later half of week 1 & week 2. Thus MJO phase and amplitude are favourable for enhancement of convective activity over Bay of Bengal (BoB). However, ocean thermal energy and SST values are favourable for cyclogenesis over south BoB but their value is decreasing towards the east coast of India and Sri Lanka.

Most of the numerical models like IMD Global Forecast System (GFS), NCEP GFS, Global Ensemble Forecasting System (GEFS), and ECMWF are indicating no cyclogenesis during next 10 days. However, models like NCMRWF Unified Model (NCUM), NCMRWF EPS (NEPS) are indicating development of depression over southeast Bay of Bengal (BoB) during first half of week 1 with gradual intensification and movement towards Andhra Pradesh coast. The genesis potential parameter based on IMD-GFS model is indicating no cyclogenesis during next 7 days. The extended range forecast by the MoES CFS model also indicates 30-40% probability of cyclogenesis over south BoB during week 1.

Hence, there is low probability of formation of low pressure area over the southeast BoB during second half of week 1.

Verification of forecast issued during last two weeks:

The forecast issued on 03rd January for week 2 (11-17 January) indicated no probability of cyclogenesis over north Indian Ocean.

The forecast issued on 10th January for week 1 (11-17 January) indicated no probability of cyclogenesis over north Indian Ocean.

Hence, the non occurrence of cyclogenesis over the Bay of Bengal was correctly predicted for week 1 & 2.