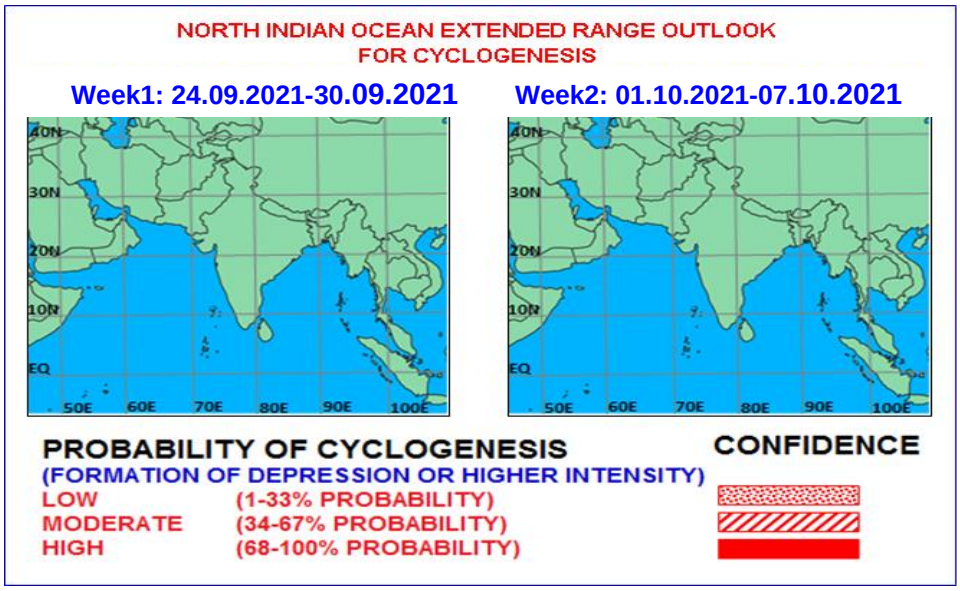
India Meteorological Department
Ministry of Earth Sciences
Mausam Bhawan, Lodhi Road, New Delhi-110003

Issued on 23.09.2021



The Madden Julian Oscillation (MJO) index currently lies in Phase 4 with amplitude more than 1. It is likely to meander in Phase 4 with reduced amplitude (<1) during week 1. Then it is likely to propagate eastwards and enter Phase 5 from the beginning of week 2 & further into Phase 6 towards the end of week 2 with amplitude remaining less than 1. Thus the MJO phase will support enhancement of convective activity over the Bay of Bengal (BoB) during the forecast period.

Most of the numerical models including IMD GFS, NCEP-GFS, GEFS, NCUM, NEPS, ECMWF and MME ($CFSV_2$) are indicating emergence of the cyclonic circulation over Myanmar coast and adjoining areas as a low pressure area over central parts of the BoB during beginning of week 1. It is likely to move west-northwestwards towards northwest and adjoining westcentral BoB with no further intensification. Models are also indicating development of another cyclonic circulation (from remnant of tropical storm Dianmu over West Pacific) over east-central BoB during the second half of week 1 with west-northwestwards movement towards northwest BoB and no further intensification. Only the cyclogenesis potential derived from MME ($CFSV_2$), indicates about 50-60 % probability of cyclogenesis over north & adjoining central BoB during 27th – 28th Sept.

As on today, a cyclonic circulation persists over Myanmar coast & adjoining Gulf of Martaban. It is likely to move northwestwards and emerge into east-central & adjoining northeast BoB. Under its influence, an LPA is likely to form over the same region during 24th evening. It is likely to move west-northwestwards towards Odisha coast during the subsequent 48 hours. There is also likelihood of development of another cyclonic circulation over east- central BoB during the second half of week 1 with a near similar pattern of movement as the previous one. However, the probability of cyclogenesis is NIL over the region during the forecast period.

Verification of forecast issued during last two weeks:

The forecast issued on 9th September for week 2 (17.09.2021- 23.09.2021) indicated formation of LPA over central parts of the BoB during the first half of the week 2. The forecast issued on 16th September for week 1 (17.09.2021- 23.09.2021) indicated formation of cyclonic circulation over eastcentral BoB during the first half of the week1 with northwestwards movement. An LPA formed over southern parts of Gangetic west Bengal & neighbourhood on 20th, moved west-northwestwards across central parts of India and became less marked on 23rd. Hence, formation of low pressure area could be predicted correctly two weeks (14 days) in advance and no cyclogenesis could be predicted correctly two weeks in advance in the extended range outlook bulletin.

Next update: 30.09.2021