India Meteorological Department
Ministry of Earth Sciences
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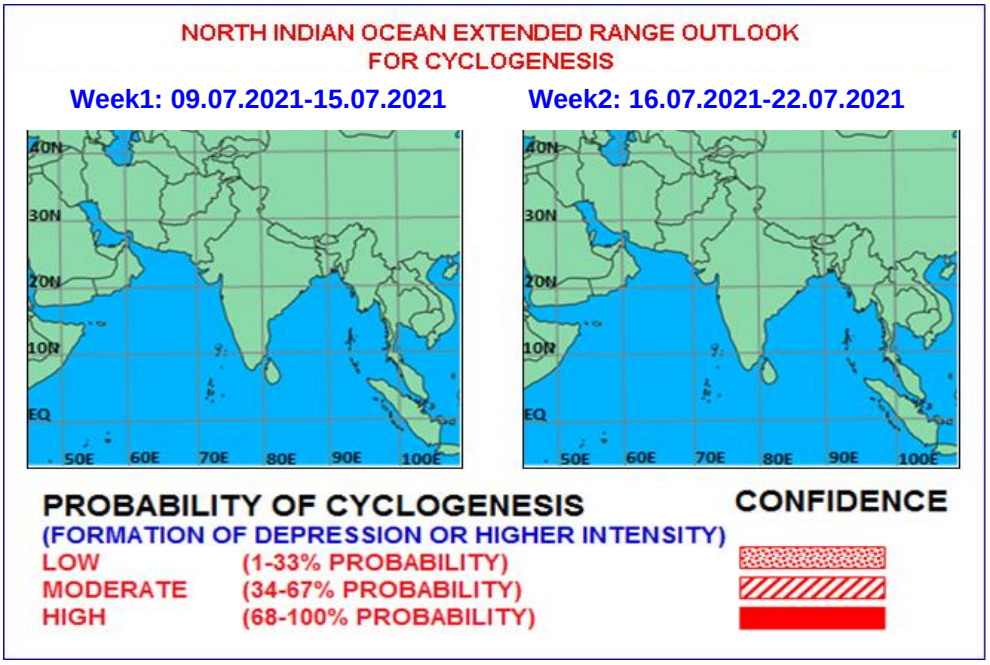

The Index of Madden Julian Oscillation (MJO) currently lies in Phase 2 with amplitude more than 1. It is likely to continue in same phase during first half of Week 1. Thereafter, it will propagate eastwards and move to phase 3 with amplitude gradually decreasing becoming less than 1 during later part of week 1. Thereafter, it will move across phase 4 during week 2 and reach phase 2 during the end of the week 2 with amplitude remaining less than 1. Hence the phase of MJO is likely to favour enhancement of convective activity over the north Indian Ocean during the forecast period.

The southwest monsoon activity remained subdued during last week. However, current environmental conditions are indicating revival of southwest monsoon from 8th July onwards. Due to incursion of moist easterly winds into eastern parts of India from Bay of Bengal and likely formation of low pressure area over northwest & adjoining westcentral BoB, the southwest monsoon is likely to advance further into remaining parts of northwest India from middle of week 1.

Most of the numerical models including IMD GFS, NCEP GFS, GEFS, NCUM, ECMWF & NEPS are indicating formation of a low pressure area over northwest & adjoining westcentral BoB. However, only ECMWF and NCEP GFS are indicating it's intensification into depression during middle of week 1. The genesis potential parameter (GPP) based on IMD GFS is indicating a potential zone for cyclogenesis over BoB during first half of week 1 moving westwards from eastcentral BoB towards northwest & adjoining westcentral BoB. MME (CFSV2) is not indicating any potential zone for cyclogenesis.

Considering all the above, it may be concluded that no cyclogenesis is likely over the north Indian Ocean during the forecast period. However, a low pressure area is likely to form over northwest & adjoining westcentral BoB off south Odisha-north Andhra Pradesh coasts during the middle of Week 1.

Verification of forecast issued during last two weeks:

The forecast issued on 24th June for week 2 (02.07.2021- 08.07.2021) and the forecast issued on 1st July for week 1(02.07.2021- 08.07.2021) indicated no cyclogenesis over the north Indian Ocean during the period. Hence, no cyclogenesis (formation of depression) could be correctly predicted 2 weeks in advance.

Next update: 15.07.2021