



Issued on 13.08.2026

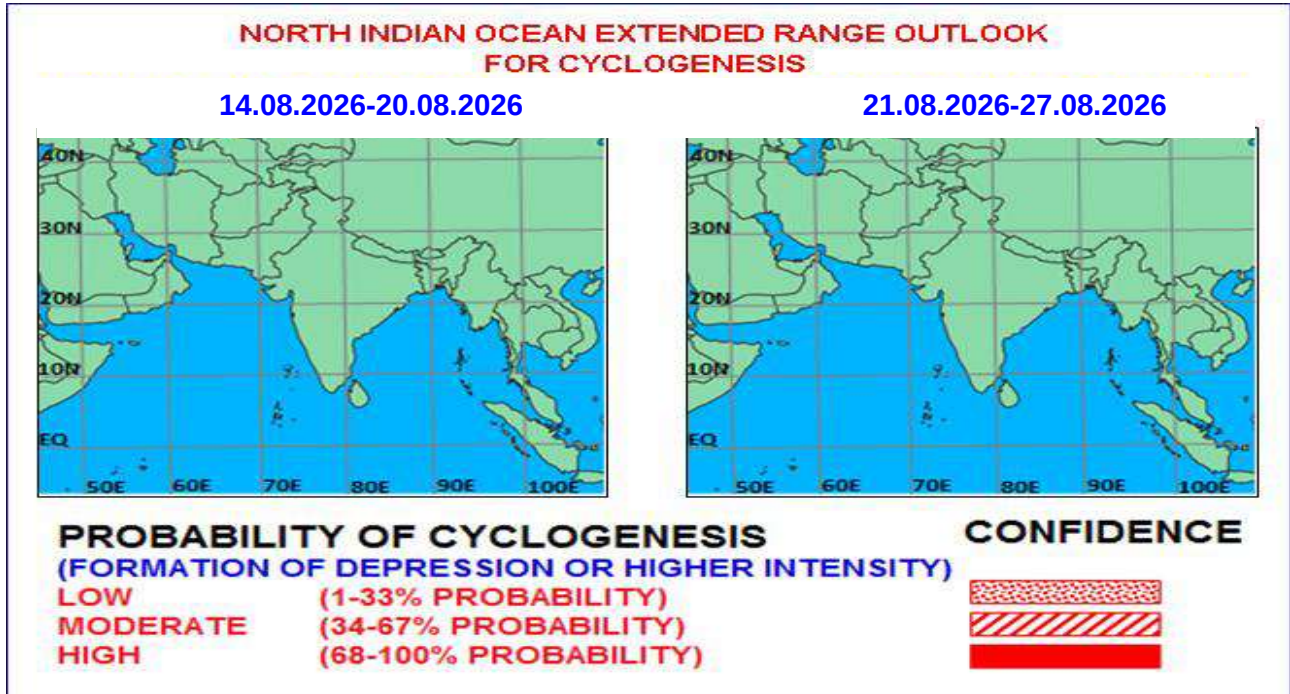


Fig. 1: Graphical Cyclogenesis over the north Indian Ocean during the next two weeks

I. Environmental features:

The guidance from various models (ECMM, GEFSV12, BoMM, NCMRWF) indicates that the MJO is currently in Phase 6, with an amplitude more than 1. It is likely to loop in same phase during entire forecast period with decreasing trend in amplitude during later half of week 1 and amplitude remaining close to 1 during week 2. Thus, MJO is not likely to support enhancement of convective activity over the Bay of Bengal (BoB) and the Arabian Sea during entire forecast period.

The guidance from NCICS model indicates prevalence of westerly wind anomaly (1-3 mps) over central & adjoining north BoB & central parts of India alongwith prevalence of Equatorial Rossby wave (ERW) & Low frequency background wave (LW) and easterly wind anomaly (1-3 mps) is indicated over eastern parts of India during first half of week 1. These features indicate a favourable environment for maintenance of intensity of the existing depression while moving west-northwestwards during next 2 days. Similar features are likely to prevail during later half of week 1 with prevalence of enhanced westerly wind anomaly (3-5 mps) over south & adjoining central BoB alongwith ERW & LW over central parts of BoB and easterly wind anomaly (1-3 mps) over north BoB. These features may support development of another cyclonic circulation/ low pressure area over north BoB during later half of week 1. Similarly, during first half of week 2, enhanced westerly wind anomaly (7-9 mps) alongwith ERW & LW is indicated over central & south BoB with easterly wind anomaly (1-3 mps) over north BoB, indicating a favourable environment for another cyclonic circulation/ low pressure area over north BoB during week 2.

II. Model Guidance:

(a) Guidance from Extended Range models:

The forecast of the mean wind field at 850 hPa pressure level from IMD Extended Range model (MME CFS-V2) indicates southwesterly/west-southwesterly winds extending over the entire AS and BoB during week 1 & 2. The model predicts the western end of the seasonal monsoon trough to be north of its normal position and the eastern end with embedded cyclonic circulations over Gangetic West Bengal & neighbourhood during week 1. Corresponding wind anomaly field during week 1 indicates anomalous upper-air cyclonic circulation over northwest BoB & adjoining north Odisha-Gangetic West Bengal coasts and another weak upper-air cyclonic circulation over Gujarat state along with an east-west trough between them.

During week 2, the western end of the seasonal monsoon trough is again indicated to be north of its normal position and the eastern end embedded with a prominent upper-air cyclonic circulation over Gangetic West Bengal & neighbourhood. Corresponding anomaly field indicates an anomalous upper-air cyclonic circulation over north BoB off Bangladesh & West Bengal coasts. The strength of the cross-equatorial Somali jet during week 2 is likely to be weaker than that during week 1. However, the anomalous westerly winds are likely to prevail over the entire AS except southwest AS, and the entire BoB during week 2.

The model indicates an east-west oriented zone across the northern plains of India with a low-moderate (30-40 %) probability of cyclogenesis during week 1. However, during week 2, there is a zone with a moderate probability (30-50%) of cyclogenesis over eastern India. A very low probability (5-10%) of cyclogenesis is indicated by the ensemble prediction system of ECMWF during 23rd-25th August. The ECMWF sub-seasonal forecast does not indicate any cyclogenesis during two consecutive weeks from 17th to 24th August & 24th to 31st August, 2026.

(b) Guidance from Medium-Range NWP models:

Most of the models are indicating the existing depression over coastal West Bengal to move gradually west-northwestwards across Gangetic West Bengal and Jharkhand during next 24 hours. Thereafter, it is likely to move slowly northwestwards across east Madhya Pradesh and adjoining southeast Uttar Pradesh and weaken gradually into a low pressure area during subsequent 2 days. However, there are variations amongst the models regarding the prevailing intensity of the depression as well as its weakening with time. The NCMRWF Mithuna model is indicating slower weakening of the system after reaching east Uttar Pradesh, contrary to faster weakening by IMD GFS & NCEP GFS. The ECMWF and NCEP GFS models are indicating development of another upper air cyclonic circulation over north BoB around 19th August and under its influence a low pressure area over northwest BoB around 20th August. However, IMD GFS and NCMRWF Mithuna do not indicate any further development at the end of week 1 or in the beginning of week 2.

II. Operational extended forecast for the next two weeks:

Considering various large-scale environmental features, climatology and model guidance, it is inferred that:

- (a) the existing depression over coastal West Bengal is likely to move west-northwestwards across Gangetic West Bengal and Jharkhand during the next 24 hours.
- (b) A fresh upper air cyclonic circulation is likely to develop over north Bay of Bengal off Bangladesh-West Bengal coasts around 19th August, and under its influence a low pressure area is likely to form over the same region around 20th August.
- (c) Another fresh upper air cyclonic circulation/low pressure area is likely to form over the north Bay of Bengal off Bangladesh-West Bengal coasts during the second half of week 2.

IV. Verification of forecast issued during the previous two weeks:

Forecast issued:

- (i) The extended range outlook issued on 30th July for week 2 (07.08.2026-13.08.2026) indicated formation of an upper air cyclonic circulation over northwest Bay of Bengal and adjoining North Odisha-West Bengal at the end of week 1 & the beginning of week 2 with formation of low pressure area over the same region in the middle of week 2.
- (ii) The extended range outlook issued on 07th August for week 1 (08.08.2026-13.08.2026) indicated formation of:
 - ❖ a low-pressure area over the coastal areas of Gangetic West Bengal & adjoining northwest Bay of Bengal during next 24 hours. It was also predicted to move west-northwestwards along the monsoon trough across Gangetic West Bengal & adjoining North Odisha, Jharkhand and North Chhattisgarh during subsequent 1-2 days.
 - ❖ another upper air cyclonic circulation to form over north BoB at the end of week 1 (around 12th August).

Realised:

- (1) Under the influence of the upper air Cyclonic circulation over South Gangetic West Bengal & adjoining North Odisha, a Low Pressure Area formed over the same region at 0830 hours IST/ 0300 UTC of 08th August, 2026. It moved west-northwestwards along the monsoon trough across North Odisha & adjoining Jharkhand, Chhattisgarh, north Madhya Pradesh & East Rajasthan and became less marked at 0530 hours IST / 0000 UTC 13th August, 2026.
- (2) Another upper air cyclonic circulation formed over northwest Bay of Bengal & neighbourhood at (0530 hours IST / 0000 UTC) of 10th August, 2026. Under its influence a Low-Pressure Area formed over the north Bay of Bengal off West Bengal-Bangladesh coasts at (0530 hours IST / 0000 UTC) of 12th August, 2026. It lay as a Well marked low pressure area over North Bay of Bengal & adjoining Bangladesh - West Bengal coasts at (1730 hours IST / 1200 UTC) of same day. It moved northwestwards and concentrated into a Depression at 0830 hrs IST/ 0300 UTC of today, the 13th August, 2026, over coastal West Bengal.

Hence, both the systems were reasonably predicted in the extended range outlook. However, formation of depression over north BoB was not predicted.

Legends: MJO: Madden Julian Oscillation, ERW: Equatorial Rossby Waves, KW: Kelvin Waves, NCICS: North Carolina Institute for Climate Studies (for Equatorial waves Forecast), IMD GFS: India Meteorological Department Global Forecast System, Mithuna: National Centre for Medium-Range Weather Forecasting Centre (NCMRWF) Unified Model, ECMWF: European Centre for Medium-Range Weather Forecasting, BOMM: Bureau of Meteorology, Australia, EC-AIFS: ECMWF Artificial Intelligence Forecasting System, ECMM: ECMWF-Ensemble System Bias Corrected, BFS: Bharat Forecast System, GPP: Genesis Potential Parameter, NCEP GFS/GEFS/CFS: National Centre for Environment Prediction GFS/GEFSv12/CFSv2, CPC: Climate Prediction Center (for MJO update), IMD-GEFS: GFS ensemble forecast system of IMD, NEPS: NCUM ensemble prediction system, CNCUM: Coupled NCUM, CPC: Climate Prediction Centre, NWS: National Weather Service, INCOIS: Indian National Centre for Ocean Information Services.

Next update: 20.08.2026