



Issued on 06.02.2025

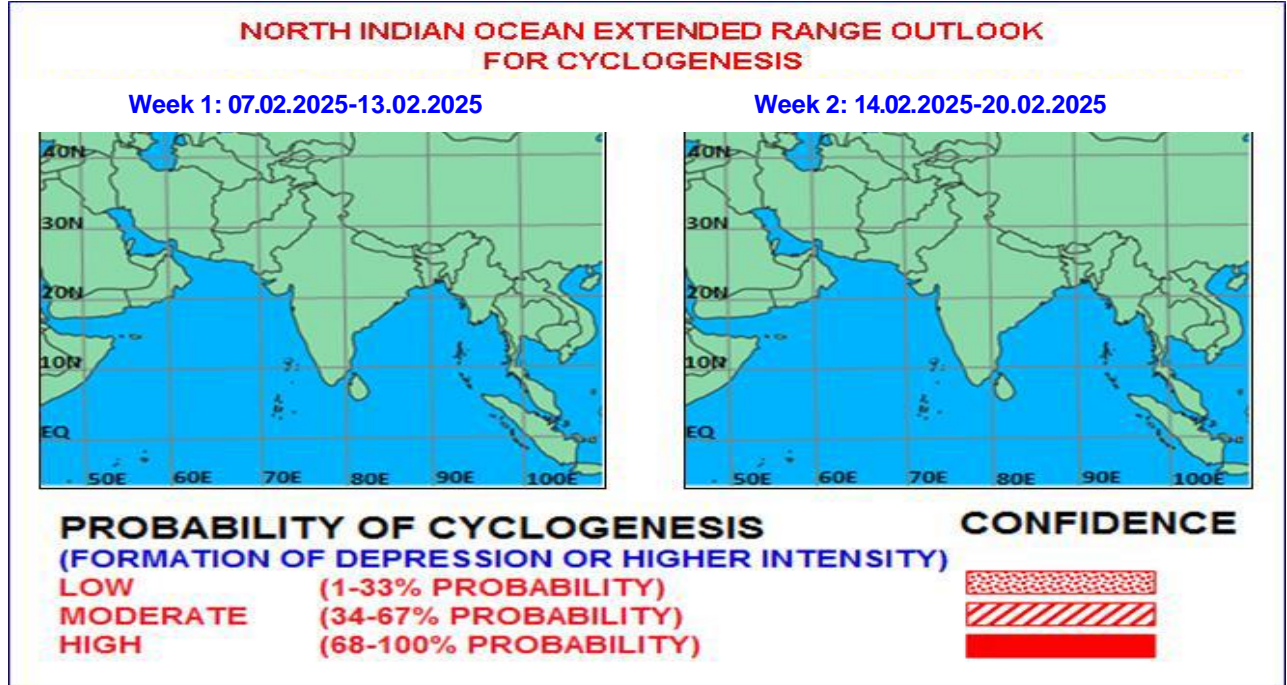


Fig. 1: Graphical Cyclogenesis over the north Indian Ocean during next two weeks

I. Environmental features:

As per ECMM guidance, Madden Julian Oscillation (MJO) is currently in phase 6 with amplitude more than 1. It would continue in same phase during first half of week 1. Thereafter, it would move across phase 7 with gradually decreasing amplitude during remaining part of the forecast period. MJO would not support enhancement of convective activity over the North Indian Ocean (NIO) region including the Bay of Bengal (BoB) and the Arabian Sea (AS).

The NCICS CFS model forecast indicates prevalence of easterly wind anomaly (3-5 mps) over entire BoB and AS during week 1. During week 2, westerly wind anomaly is seen over south Andaman Sea and easterly wind anomaly is seen over the AS. As such, equatorial waves are not likely to contribute to enhancement of convective activity over the NIO region during the entire forecast period.

II. Model Guidance:

Various deterministic models including IMD GFS, IMD GEFS, NCEP GFS, NCUM, NEPS, ECMWF are indicating no significant cyclonic disturbance over the region. Various extended range models including IMD CFS(V2), CNCUM and ECMM are also not indicating any cyclonic disturbance over the region during entire forecast period. IMD GPP is also not indicating any significant zone for cyclogenesis.

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, NCUM: National Centre for Medium-Range Weather Forecasting Centre (NCMRWF) Unified Model, ECMWF:

European Centre for Medium-Range Weather Forecasting, ECMF: ECMWF-Ensemble System, ECMM: ECMWF-Ensemble System Bias Corrected, GPP: Genesis Potential Parameter, NCEP GFS/GEFS/CFS: National Centre for Environment Prediction GFS/GEFSv12/CFSv2, 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.

III. Inference:

Considering various environmental conditions and model guidance it is inferred that there is no likelihood of cyclogenesis over the North Indian Ocean region during the next two weeks.

IV. Verification of forecast issued during last two weeks:

The forecast issued on 23rd January for week 2 (31st January-6th February) indicated no probability of cyclogenesis during the week. The forecast issued on 30th January for week 1 (31st January-6th February) indicated no probability of cyclogenesis during the week. No cyclogenesis occurred during the period.

NCMRWF-IMD satellite gauge merged data plots of realized 24 hours accumulated rainfall from, 30th January to 5th February, 2025 are presented in **Fig. 2**.

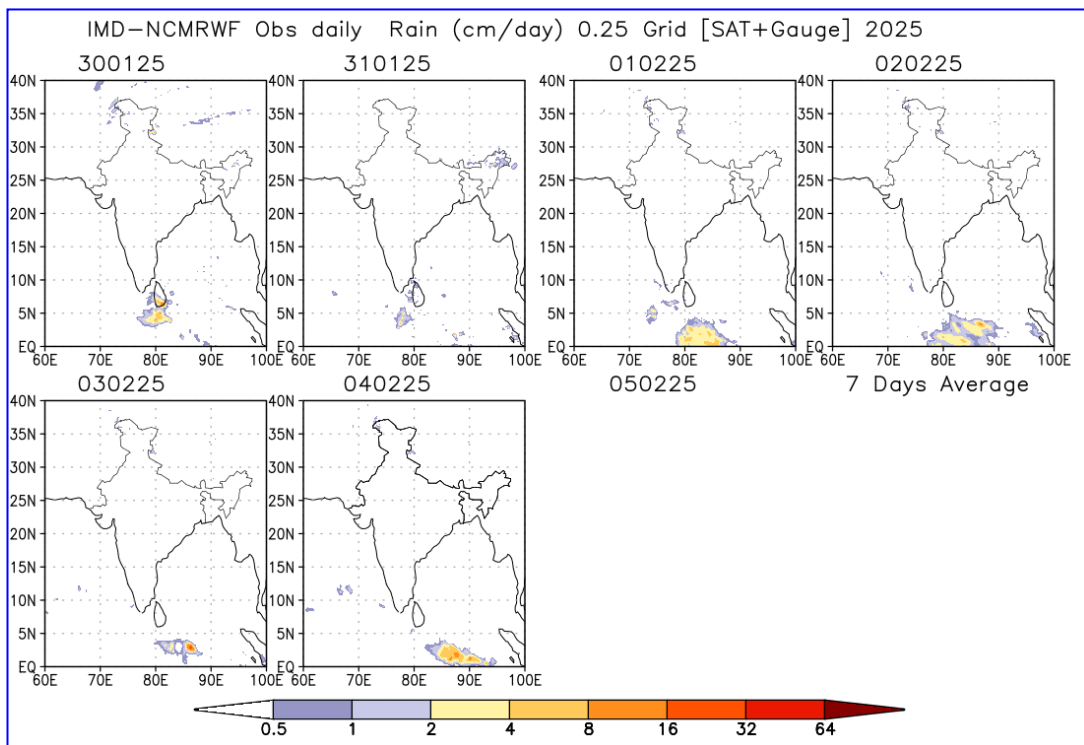


Fig.2: NCMRWF-IMD satellite gauge merged data plots of realized 24 hours accumulated rainfall from 30th January to 4th February, 2025.

Next update: 13.02.2025