





REGIONAL SPECIALISED METEOROLOGICAL CENTRE -TROPICAL CYCLONES, NEW DELHI TROPICAL WEATHER OUTLOOK

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 17.08.2025

TROPICAL WEATHER OUTLOOK FOR THE NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR THE NEXT 168 HOURS ISSUED AT 0800 UTC OF 17.08,2025 BASED ON 0300 UTC OF 17.08,2025.

BAY OF BENGAL:

Under the influence of an upper air cyclonic circulation over westcentral and adjoining northwest Bay of Bengal off north Andhra Pradesh and south Odisha coasts, a low pressure area formed over the same region at 0300 UTC of today, the 17th August, 2025.

It is likely to move west-northwestwards and concentrate into a depression during next 24-hours and cross south Odisha-north Andhra Pradesh coasts around 0300 UTC of 19th August, 2025.

Associated maximum sustained wind speed is 10-15 kt gusting to 25 kt and the estimated central pressure is 998 hPa. Sea condition is rough over central & adjoining northwest & southwest BoB.

Kalingapatnam (43105) reported mean sea level pressure (MSLP) of 999.1 hPa and pressure change in past 24 hours (P24) as -0.4 hPa. Visakhapatnam (43150) reported MSLP of 999.1 hPa and P24 as -0.2 hPa.

The convective clouds are sheared to southwest of system centre. Equatorward outflow is seen in satellite imagery. Associated low level circulation (LLC) lay over west central & adjoining northwest Bay of Bengal off north Andhra Pradesh & south Odisha coasts and neighbourhood. Associated broken low and medium clouds with embedded intense to very intense convection lay over central & adjoining south Bay of Bengal, coastal Andhra Pradesh, north coastal Tamil Nadu (Minimum cloud top temperature is minus 70 to 90 Degree Celsius) and moderate to intense convection lay over north Bay of Bengal (Minimum cloud top temperature is minus 40 to 60 Degree Celsius).

Scattered to broken low and medium clouds with embedded intense to very intense convection lay over central & south Bay of Bengal and Andaman Sea. Scattered low and medium clouds with embedded moderate to intense convection lay over north Bay of Bengal.

*PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:

24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
MOD	HIGH	NIL	NIL	NIL	NIL	NIL

*NOTE: EVERY 24HR FORECAST IS VALID UPTO 0300 UTC (0830 IST) OF NEXT DAY

ARABIAN SEA:

Yesterday's upper air cyclonic circulation persisted over Northeast Arabian Sea & adjoining south Gujarat and Konkan & Goa coasts at 0300 UTC of today, the 17th August between 1.5 & 5.8 km above mean sea level.

Scattered to broken low and medium clouds with embedded intense to very intense convection lay over eastcentral Arabian Sea and Gulf of Cambay. Scattered to broken low and medium clouds with embedded moderate to intense convection lay over rest parts of the Arabian Sea, Lakshadweep Islands, Maldives & Comorin area.

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24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

*NOTE: EVERY 24HR FORECAST IS VALID UPTO 0300 UTC (0830 IST) OF NEXT DAY

REMARKS: Madden Julian Oscillation (MJO) is likely to be in phase 4 with amplitude more than 1 during next 5 days favouring increase in convective clouds. As per guidance from NCICS model, there is likelihood of prevalence of westerly wind anomaly (7-9 mps) over south Bay of Bengal (BoB), easterly wind anomaly (7-9 mps) over north BoB alongwith Equatorial Rossby wave (ERW) over central BoB during 16th-18th August. As per guidance from CIMSS, the low level winds (800-950 hPa) indicate a broad scale circulation over westcentral and adjoining southwest BoB. The low level vorticity is positive and is about 70-80 X 10⁻⁶ s⁻¹ over westcentral BoB and is extending upto 500 hPa level. The low level convergence is 10X 10⁻⁶ s⁻¹ to the southwest of system centre and upper level divergence is also positive (around 30X 10⁻⁶ s⁻¹) to the southwest of system centre. Mid-level vertical wind shear (VWS) of horizontal wind is moderate to high 20-25 kt over westcentral BoB. Most of the environmental features except VWS indicate a favourable environment for further intensification of the system.

Most of the models including IMD GFS, IMD WRF, BFS, NCEP-GFS, ECMWF, ECAI, NCUM-R and NCUM (G) is indicating a low pressure area over westcentral BoB and adjoining AP-Odisha Coast on 17th August with nearly northwards movement along the coast. However, ECMWF and BFS are also indicating marginal intensification of the system into a depression by 18th August/0000 UTC, move slowly along the coast and cross South Odisha-North Andhra Pradesh coasts around 19th/0600 UTC.

Considering all the above, the low pressure area over westcentral and adjoining northwest Bay of Bengal (BoB) is likely to move west–northwestwards and concentrate into a depression during next 24-hours and cross south Odisha-north Andhra Pradesh coasts around 0300 UTC of 19th August, 2025.

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