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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 09.04.2025

TROPICAL WEATHER OUTLOOK FOR THE NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR THE NEXT 168 HOURS ISSUED AT 0600 UTC OF 09.04.2025 BASED ON 0300 UTC OF 09.04.2025.

BAY OF BENGAL:

Yesterday's Well-marked low-pressure area over southwest & adjoining westcentral Bay of Bengal (BoB) moved northwards and lay over westcentral & adjoining southwest BoB at 0300 UTC of today, the 09th April, 2025. It is likely to move nearly northwards during next 12 hours over westcentral BoB, maintaining the intensity of well-marked low-pressure area. Thereafter, it is likely to recurve north northeastwards and weaken gradually over central BoB during subsequent 24 hours.

As per the INSAT 3D(R) imagery at 0300 UTC, the centre of vortex is around 13.2N/85.0E about 135 km (1.2^0) away from the sharp boundary of intense convection. According the associated intensity has been fixed as T1.0. Scattered to broken low and medium clouds with embedded intense to very intense convection lay over central & south BoB between latitude 8^0N to 18^0N and longitude 83^0E to 92^0E. Minimum cloud top temperature is -70^0C to -80^0C. Scattered low and medium clouds with embedded moderate to intense convection over north BoB and Andaman Sea. Multisatellite based winds are indicating stronger winds in northeast sector. Total precipitable water imagery is indicating warm moist air incursion into the core of system. Water vapour imagery is indicating relative humidity (>50%) in the northeast sector.
Latest observations indicate that the associated estimated maximum sustained wind speed is 15-20 kt gusting to 30 kt. The estimated central pressure is 1007 hPa and pressure drop at centre is 2 hPa.

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

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

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

ARABIAN SEA:

Scattered low and medium clouds with embedded moderate to intense convection lay over southeast Arabian Sea, Maldives & Comorin area and isolated weak to moderate convection lay over northwest Arabian Sea, Lakshadweep islands area.

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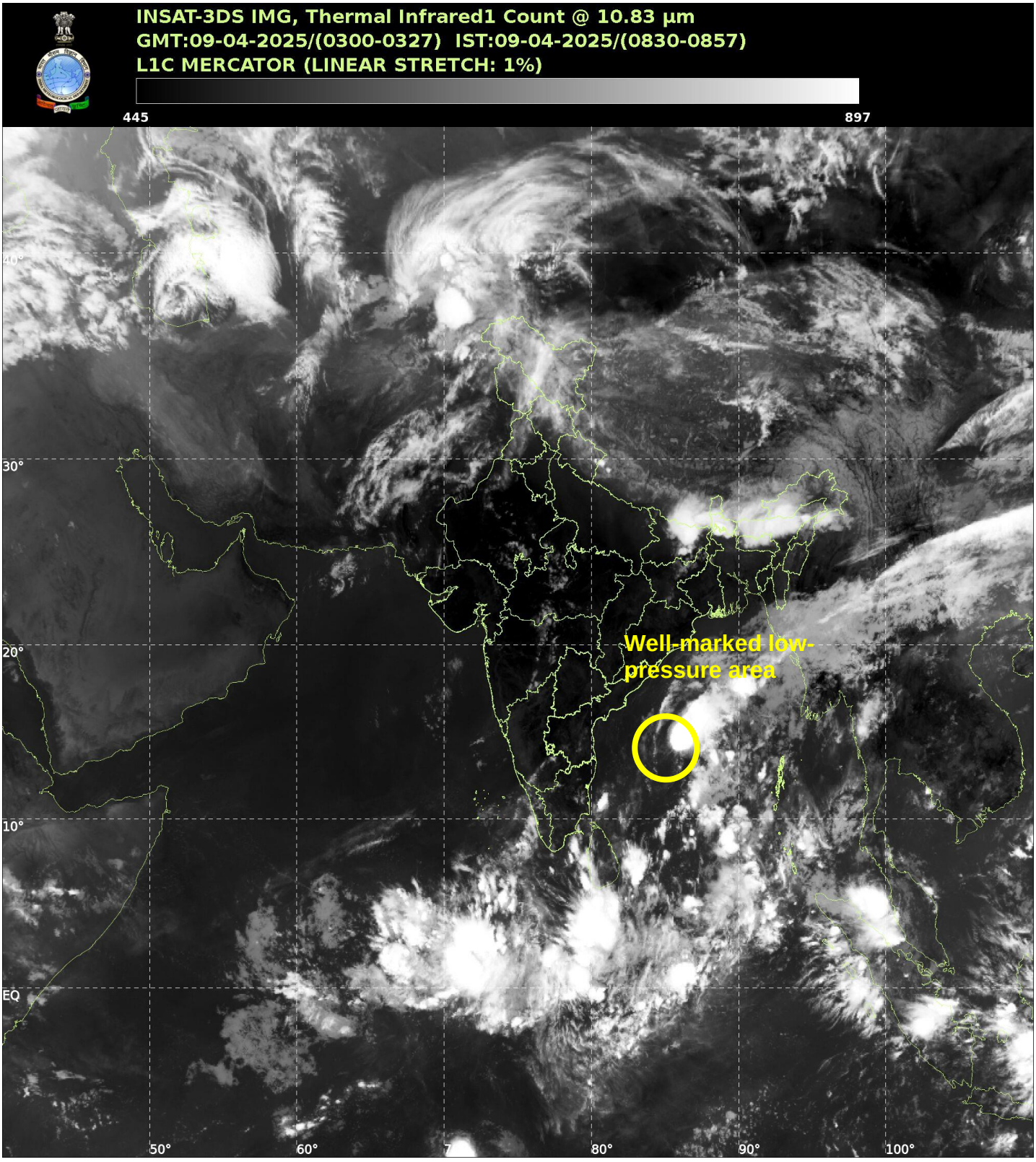
Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature(CTT)>-25°C,(b)Moderate:CTT:-25°Cto-40°C,(c)Intense:CTT: -41°Cto -70°Cand(d)Very Intense::Less than -70°C PROBABILITYOFCYCLOGENESIS(FORMATIONOFDEPRESSION):NIL:0%,LOW:1-33%,,MODERATE:34-66%ANDHIGH:67-100% ThisisaguidanceBulletinforWMO/ESCAPPanelMembercountries.VisitrespectiveNationalwebsitesforCountryspecificBulletins

REMARKS:

Madden Julian Oscillation (MJO) is currently in phase 3 with amplitude less than 1. It is predicted to move across phase 4 during next 2-3 days with amplitude less than 1. The NCICS CFS model is indicating enhanced westerly wind anomaly (5-7 mps), MJO, Equatorial Rossby wave (ERW), and approaching Kelvin wave (KW) over south BoB and strong easterly wind anomaly (5-7 mps) over central BoB. The sea surface temperature is 29-30^{0}C over the south BoB and tropical cyclone heat potential is 130-150 KJ/cm^2. Thus, MJO, Equatorial waves and sea conditions are favourable for development and maintenance of intensity of low-pressure area over the BoB. The low-level vorticity is 40-50X10^{-6}s^{-1} over southeast & adjoining southwest BoB, low level convergence is 10 X 10^{-6}s^{-1} over central and adjoining southeast BoB, upper-level divergence is 05 X10^{-6}s^{-1} over central and adjoining southeast BoB and both are oriented towards north BoB. Wind shear is low to moderate (<20 kt) over southeast parts of the system and is high (>30 kt) over central & north BoB. Under these favourable features, the Well-marked low-pressure area over southwest & adjoining westcentral BoB moved northwards and lay over westcentral & adjoining southwest BoB. The upper-level southwesterly wind would steer system north northeastwards.

Most of the numerical models (ECMWF, NCEP GFS, IMD GFS) are indicating nearly northwards during next 12 hours followed by north-northeastwards movement over westcentral BoB thereafter during subsequent 24 hours. Models are not indicating any further intensification of the system which is also supported by unfavourable wind shear over central BoB.

Considering all the above, the well-marked low-pressure area over westcentral & adjoining southwest BoB is likely to move nearly northwards during next 12 hours over westcentral BoB as a well-marked low-pressure area. Thereafter, it is likely to recurve nearly north-northeastwards and weaken gradually over central BoB during subsequent 24 hours.



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