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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 07.04.2025

TROPICAL WEATHER OUTLOOK FOR THE NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR THE NEXT 168 HOURS ISSUED AT 0630 UTC OF 07.04.2025 BASED ON 0300 UTC OF 07.04.2025.

BAY OF BENGAL:

Under the influence of yesterday's upper air cyclonic circulation over southeast Bay of Bengal & neighbourhood, a low-pressure area formed over central parts of South Bay of Bengal (BoB) at 0300 UTC of today, the 07th April, 2025. It is likely to move northwestwards over southwest BoB till 8th April and thereafter it is likely to move nearly northwards over westcentral BoB during subsequent 48 hours.

Scattered to broken low and medium clouds with embedded moderate to intense convection lay over south Bay of Bengal (minimum CTT minus 60-70^{0}C). Scattered low and medium clouds with embedded weak to moderate convection lay over eastcentral BoB, Andaman Sea and North BoB.

Latest observations indicate that the associated estimated maximum sustained wind speed is 10-15 kt and the estimated central pressure is 1009 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 off Kerala coast, Lakshadweep Island area and Maldives & Comorin area.

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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

REMARKS:

Madden Julian Oscillation (MJO) is currently in phase 7 with amplitude less than 1. It is

predicted to move across phases 2 & 3 during next 3-4 days and across phases 4 & 5 during subsequent 3-4 days with amplitude less than 1. Thus, MJO is likely to support enhancement of convective activity over the North Indian Ocean (NIO) during next 7 days. The NCICS CFS model forecast indicates westerly wind anomaly (3-5 mps) over south Bay of Bengal (BoB) with approaching MJO from west and easterly wind anomaly over north Andaman Sea and adjoining eastcentral BoB on 7th April. Thereafter during 8th – 13th April, the model is indicating enhanced westerly wind anomaly (5-7 mps), MJO, Equatorial Rossby wave (ERW), Kelvin wave (KW) over south BoB and easterly wind anomaly over north BoB. The sea surface temperature is 29-30 ^{0}C over the south BoB and tropical cyclone heat potential is 120-150 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 50-70X10^{-6} s^{-1} over southeast & adjoining southwest BoB, low level convergence is 15 X10^{-6} s^{-1} over central and adjoining southeast BoB, upper level divergence is 20 X10^{-6} s^{-1} over central and adjoining southeast BoB and both are oriented towards northeast BoB. Wind shear is low to moderate (<20 kt) over the region and is high (>30 kt) over central & north BoB.

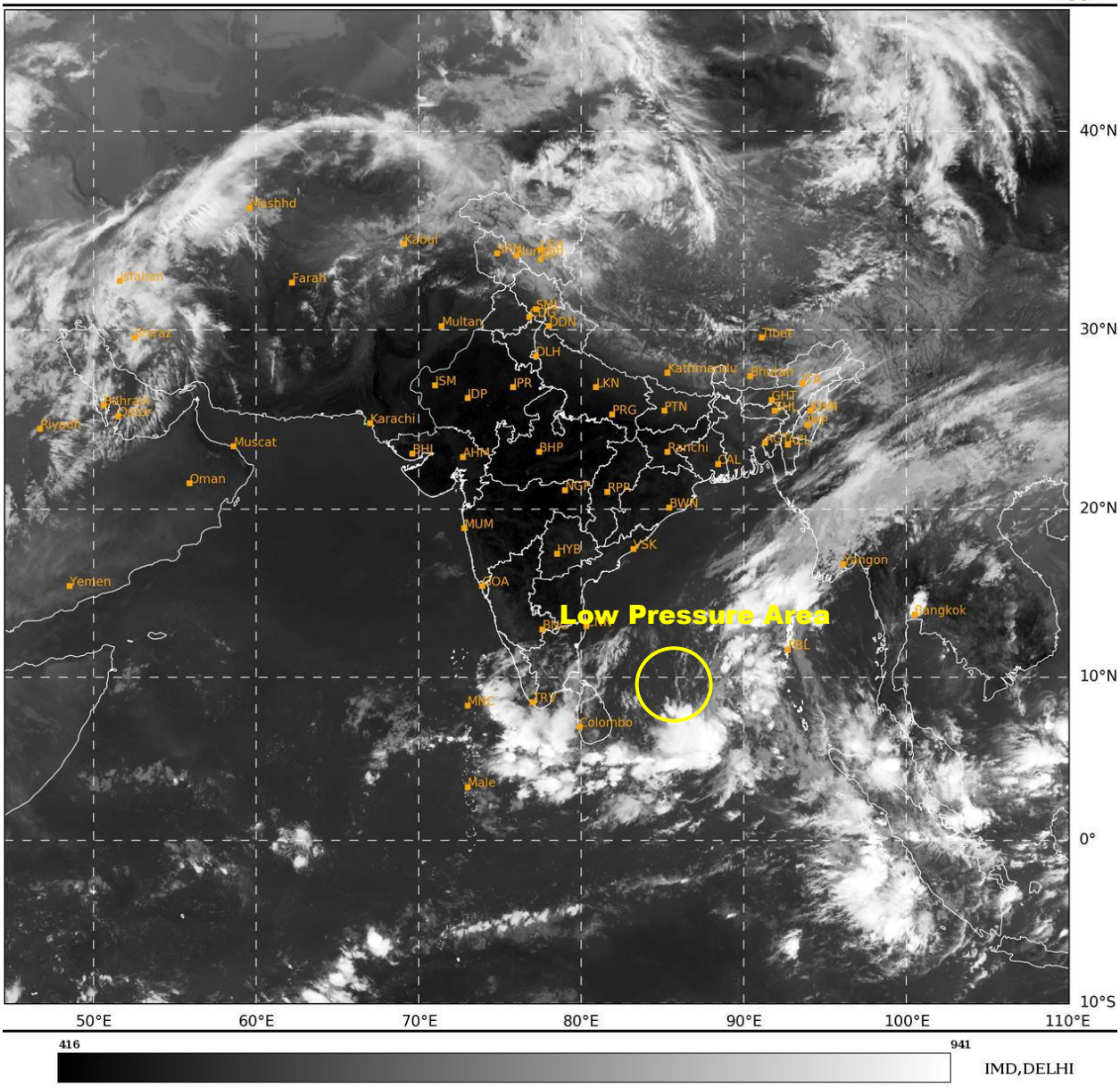
Under the influence of favourable thermodynamic features and sea conditions, the cyclonic circulation over southeast BoB & neighbourhood lay as a low pressure area over central parts of south BoB.

Most of the numerical models (ECMWF, NCEP GFS, IMD GFS) are indicating feeble low pressure area over central parts of South BoB. Models are indicating northwestwards movement of the system during next 2-3 days followed by northwards movement over westcentral BoB thereafter during subsequent 2 days. 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 Low-Pressure Area over central parts of south Bay of Bengal is likely to move northwestwards over southwest BoB till 8th April and thereafter it is likely to move nearly northwards over westcentral BoB during subsequent 48 hours.

SAT : INSAT-3DR IMG
IMG_TIR1 10.8 um
L1C Mercator

07-04-2025/(0315 to 0342) GMT
07-04-2025/(0845 to 0912) IST



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)VeryIntense::Lessthan -70°C PROBABILITYOFCYCLOGENESIS(FORMATIONOFDEPRESSION):NIL:0%,LOW:1-33%,,MODERATE:34-66%ANDHIGH:67-100% ThisisaguidanceBulletinforWMO/ESCAPPanelMembercountries.VisitrespectiveNationalwebsitesforCountryspecificBulletins