



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 01.12.2025

SPECIAL TROPICAL WEATHER OUTLOOK FOR THE NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR THE NEXT 168 HOURS ISSUED AT 1500 UTC OF 02.12.2025 BASED ON 1200 UTC OF 02.12.2025.

Sub: Depression (Remnant of Cyclonic Storm Ditwah) over the southwest Bay of Bengal and adjoining North Tamil Nadu-Puducherry coasts

The Depression (Remnant of Cyclonic Storm Ditwah) over southwest Bay of Bengal and adjoining areas of westcentral Bay of Bengal, North Tamil Nadu, Puducherry & South Andhra Pradesh coasts moved slowly south-southwestwards with the speed of 3 kmph during past 6 hours and lay centered at 1200 UTC of today, the 02nd December 2025 over southwest Bay of Bengal and adjoining North Tamil Nadu & Puducherry coasts, near latitude 12.3°N and longitude 80.3°E, about 60 km northeast of Puducherry (43331), 80 km south of Chennai (43279), 80 km northeast of Cuddalore (43329) and 240 km south of Nellore (43245). The minimum distance of the Centre of the depression from north Tamil Nadu-Puducherry coasts is about 25 km.

It is very likely to move slowly southwestwards towards the north Tamil Nadu-Puducherry coasts and weaken into a Well-marked low-pressure area during next 12 hours.

The system is being monitored by the Doppler Weather Radars (DWR) at Chennai and Sriharikota.

As per INSAT 3DS at 1200 UTC, the clouds are organized in shear pattern. The convective cloud mass associated with the LLCC is decreasing gradually, indicating weakening of the system. The intensity of the system is characterized as T1.5. The associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over westcentral adjoining southwest Bay of Bengal, coastal Andhra Pradesh, North coastal Tamil Nadu. Though the minimum cloud top temperature (CTT) is minus 70-90 degree Celsius, the area of convection has decreased. Moderate to intense convection over east Odisha (minimum CTT as minus 50-70 degree Celsius)

The estimated central pressure is about 1005 hPa. The associated maximum sustained wind speed is about 25 knots gusting upto 35 knots.

Sea condition is very rough to rough over southwest & adjoining westcentral Bay of Bengal and along & off North Tamil Nadu-Puducherry & South Andhra Pradesh coasts.

REMARKS:

The guidance from various models indicates that the Madden Julian Oscillation (MJO) index is presently in phase 7 with amplitude more than 1 and is likely to continue in same phase during next 3 days. The sea surface temperature (SST) is around 28°C over southwest Bay of Bengal and along & off Sri Lanka, Tamil Nadu & South Andhra Pradesh coast along the forecast track. The SST reduces to the north (North of 15°N) being 27°C.

The guidance from NCICS model indicates westerly wind anomaly (7-9 mps) along with prevalence of Equatorial Rossby Wave (ERW), low frequency background wave (LW) over the southern parts of the Bay of Bengal (BoB), south peninsular India & Comorin area and easterly wind anomaly (3-5 mps) to its north over southwest BoB off North Tamil Nadu-Andhra Pradesh coasts & central India on 2nd December. These features will support the depression to maintain its intensity during next 12 hours. Thereafter, slight weakening of these features is indicated with prevalence of westerly wind anomaly (5-7 mps), ERW, LW over the southern parts of the Bay of Bengal (BoB) and easterly wind anomaly (3-5 mps) to its north over central parts of India on 3rd December. These features indicate feeble support from equatorial waves to maintain the intensity of the low pressure area while it moves southwestwards across South Peninsular India.

The Low level relative vorticity at 850 hPa is the same and is about $60-70 \times 10^{-6} \text{ s}^{-1}$ over southwest Bay of Bengal to the southwest of system centre. The depth of convection has decreased and vertically the positive vorticity zone is extending up to 700 hPa. Upper-level divergence is around $10 \times 10^{-6} \text{ s}^{-1}$ over the system centre and is northeast-southwest oriented. Low-level convergence is around $10 \times 10^{-6} \text{ s}^{-1}$ over system centre. Mid layer shear is moderate to high (around 20-25 kts) and anti-cyclonic over the system area and to its south. The high wind shear to the north would further lead to shearing of convective clouds associated with the system and hence subsequent weakening.

Land interactions, slow movement, moderate to high vertical wind shear, decrease in warm moist air into the core, dry cold air entrainment from northwest and decrease in various thermodynamical features indicate weakening of the system during next 12 hours.

There is good consensus among various models with respect to weakening of the system into a well marked low pressure area during next 12 hours and also slow movement over southwest & adjoining Westcentral Bay of Bengal off Tamil Nadu coast.

The forecast is based on the initial conditions and the consensus model guidance.

- i) Confidence level in estimation of current location: High
- ii) Confidence level in estimation of estimation of current intensity: High
- iii) Confidence level in forecast track: Moderate
- iv) Confidence level in forecast intensity: Moderate

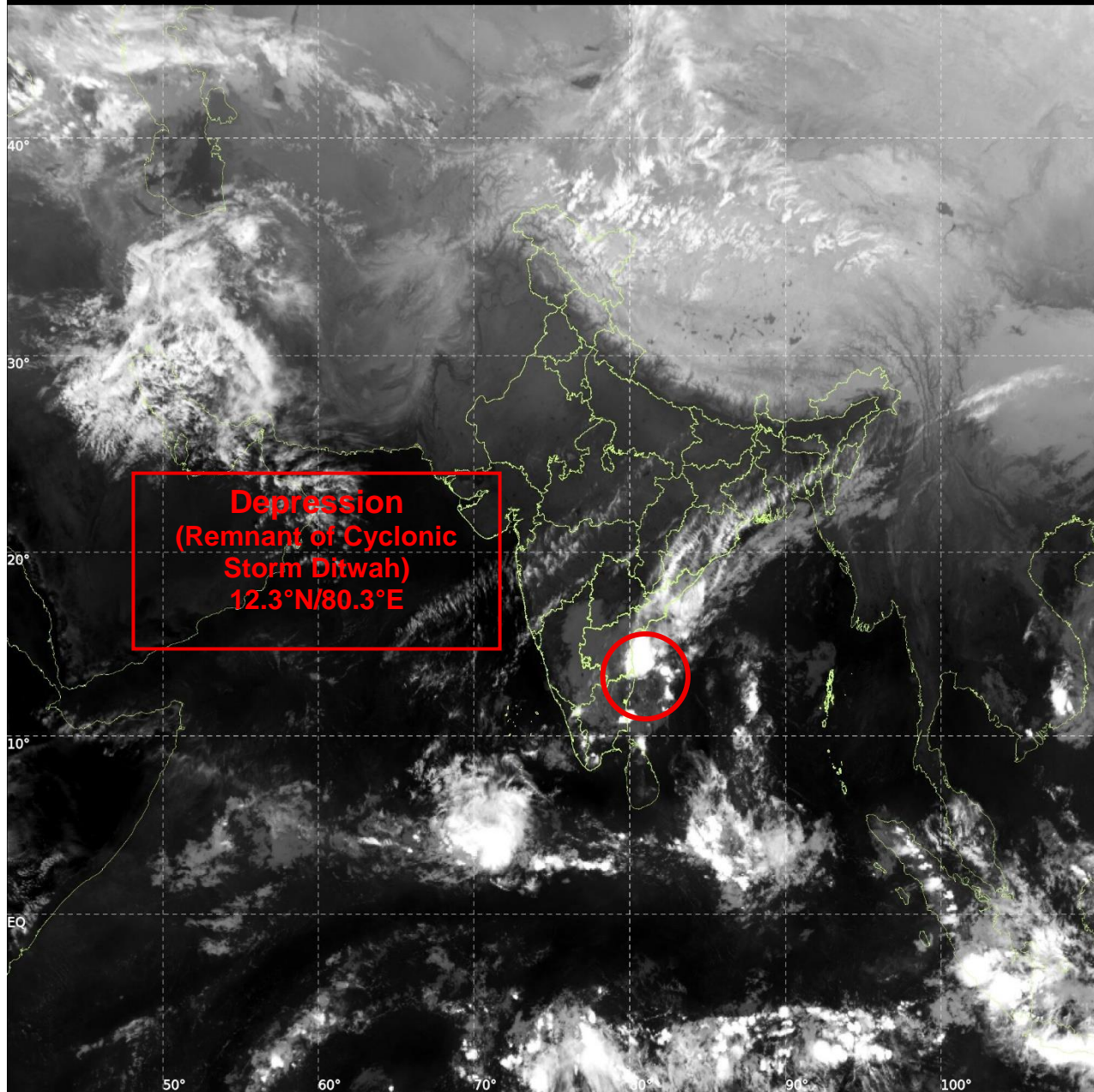
Monica Sharma
Scientist-E



INSAT-3DS IMG, Thermal Infrared1 Count @ 10.83 μm
GMT:02-12-2025/(1330-1357) IST:02-12-2025/(1900-1927)
L1C MERCATOR (LINEAR STRETCH: 1%)

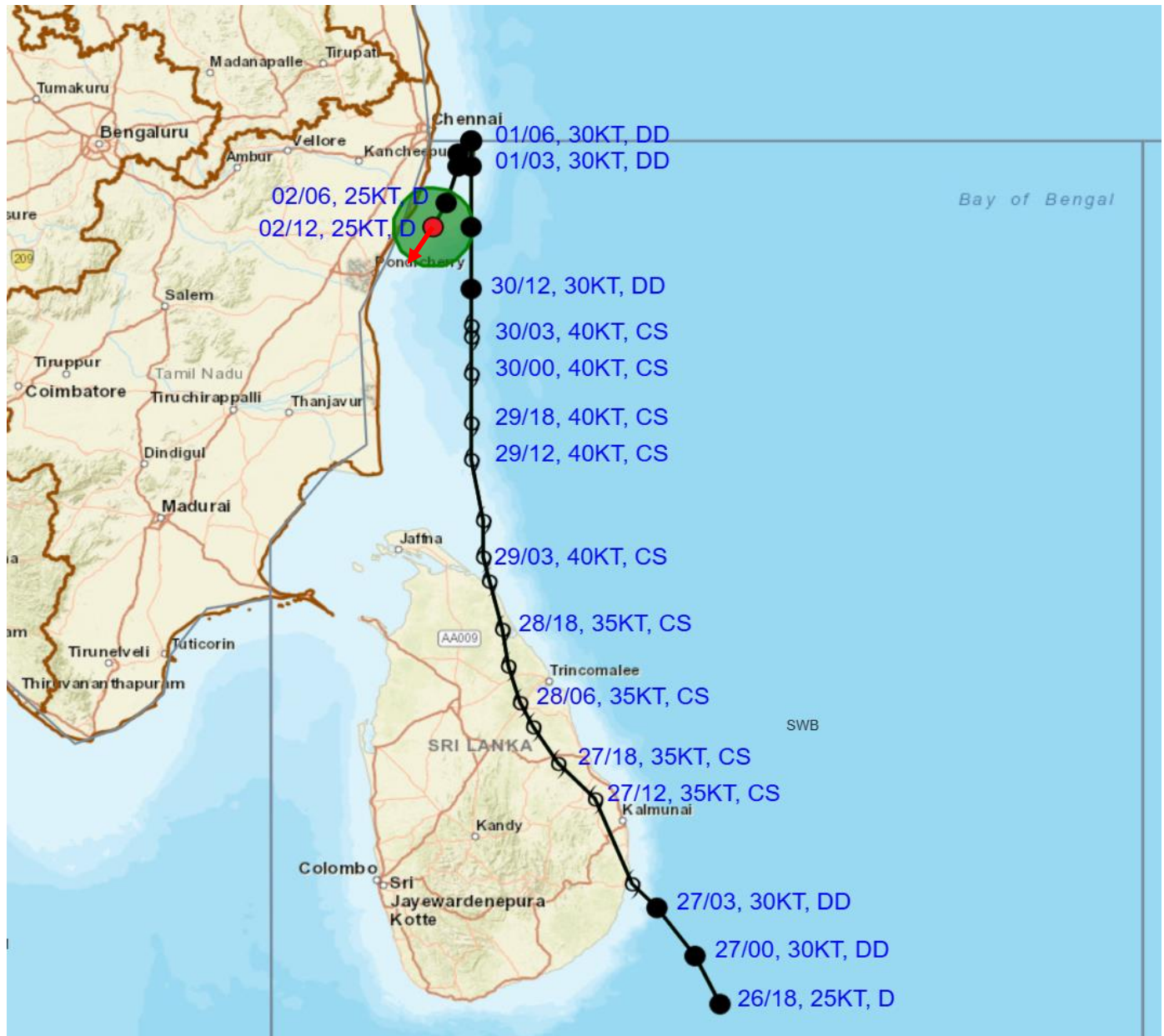
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OBSERVED AND FORECAST TRACK OF DEPRESSION (REMNANT OF CYCLONIC STORM "DITWAH") OVER SOUTHWEST BAY OF BENGAL AND ADJOINING TAMILNADU & PUDUCHERRY COASTS BASED ON 1200 UTC (1730 Hrs. IST) OF 2ND DECEMBER 2025

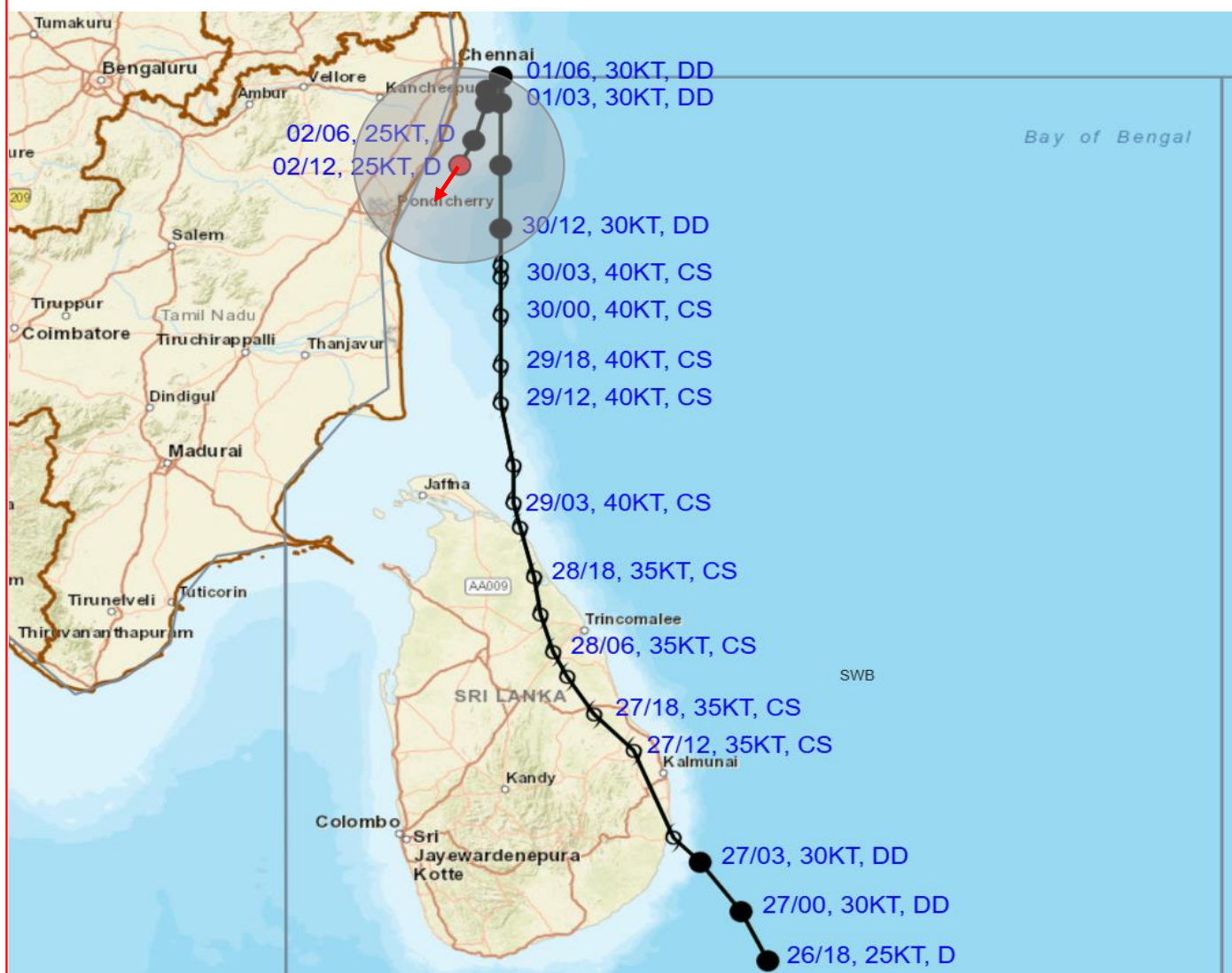


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

● LESS THAN 34 KT
● 34-47 KT
● ≥ 48 KT
■ OBSERVED TRACK
■ FORECAST TRACK
▲ CONE OF UNCERTAINTY



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION (REMNANT OF CYCLONIC STORM “DITWAH”) OVER SOUTHWEST BAY OF BENGAL AND ADJOINING TAMILNADU & PUDUCHERRY COASTS BASED ON 1200 UTC (1730 Hrs. IST) OF 2ND DECEMBER 2025



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● LESS THAN 34 KT
○ 34-47 KT
● ≥ 48 KT
— OBSERVED TRACK
— FORECAST TRACK
▲ CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
■ ≥ 25 KT (45-55 KMPH)
■ 34-49 KT (62-91 KMPH)
■ 50-63 KT (92-117 KMPH)
■ ≥ 64 KT (≥ 118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥ 118)	Phenomenal	Total suspension of fishing operations

Fishermen Warning Graphics

