



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 2100 UTC OF 01.12.2025 BASED ON 1800 UTC OF 01.12.2025.

Sub: Deep Depression (Remnant of Cyclonic Storm Ditwah) over westcentral and adjoining areas of southwest Bay of Bengal and North Tamil Nadu & South Andhra Pradesh coasts

The Deep Depression (Remnant of Cyclonic Storm Ditwah) over westcentral and adjoining areas of southwest Bay of Bengal and North Tamil Nadu & South Andhra Pradesh coasts remained practically stationary during past 6 hours and lay centered at 1800 UTC of today, the 01st December 2025 over the same region, near latitude 13.0°N and longitude 80.6°E, about 50 km east of Chennai (43279), 140 km northeast of Puducherry (43331), 160 km north-northeast of Cuddalore (43329), 170 km south-southeast of Nellore (43245). The minimum distance of the centre of the deep depression from north Tamil Nadu-Puducherry coasts is about 35 km.

It is very likely to recurve slowly southwestwards and weaken into a depression during next 12 hours.

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

Forecast track and intensity are given in Table below

Date/Time (UTC)	Position (Lat. °N/ Long. °E)	Maximum Sustained Surface Wind Speed (Kmph)	Category Of Cyclonic Disturbance
01.12.25/1800	13.0/80.6	50-60 gusting to 70	Deep Depression
02.12.25/0000	12.9/80.5	45-55 gusting to 65	Depression
02.12.25/0600	12.8/80.4	40-50 gusting to 60	Depression

As per INSAT 3DR at 1800 UTC, the clouds are organized in shear pattern. The intensity is characterized as T2.0. Intense convection is seen in northern sector. During past 3 hours, the convection has increased. The associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over westcentral Bay of Bengal and adjoining coastal Andhra Pradesh, North Tamil Nadu, Odisha, Jharkand, Gangeic West Bengal with minimum cloud top temperature (CTT) as minus 70-90 degree Celsius. Moderate to intense convection lay over East Bihar, Chattisgarh, southwest BoB (minimum CTT minus 50-70 degree Celsius) and weak to moderate convection lay over Telangana, Rayalaseema, South Interior Karnataka and southwest Bay of Bengal with minimum CTT minus 25-40 degree Celsius.

The estimated central pressure is about 1002 hPa. The associated maximum sustained wind speed is about 30 knots gusting upto 40 knots.

Sea condition is very rough to rough over southwest & adjoining westcentral Bay of Bengal & adjoining areas of north Sri Lanka, Gulf of Mannar, Comorin area and along & off 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 5 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), Kelvin wave (KW) and low frequency background wave (LW) over the southern parts of the Bay of Bengal (BoB) and easterly wind anomaly (3-5 mps) to its north over southwest BoB near Tamil Nadu-Andhra Pradesh coasts indicating, slight weakening of these features is indicated from 2nd December onwards. Various equatorial waves which are currently prevalent over southwest Bay of Bengal are also likely to move away.

The Low level relative vorticity at 850 hPa is about $80-100 \times 10^{-6} \text{ s}^{-1}$ over southwest Bay of Bengal over system centre. Vertically the positive vorticity zone is extending up to 500 hPa. Upper-level divergence is around $10 \times 10^{-6} \text{ s}^{-1}$ over the system centre. 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 north. System is currently in moderately favorable environment and hence would weaken slowly.

There is good consensus among various models with respect to maintenance of intensity of the system as a deep depression/ depression during next 24 hours and also slow movement over southwest & adjoining Westcentral Bay of Bengal along & off Tamil Nadu coast. There is uncertainty with respect to forecast movement.

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

- i) Confidence level in estimation of current location of Cyclonic Storm: 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

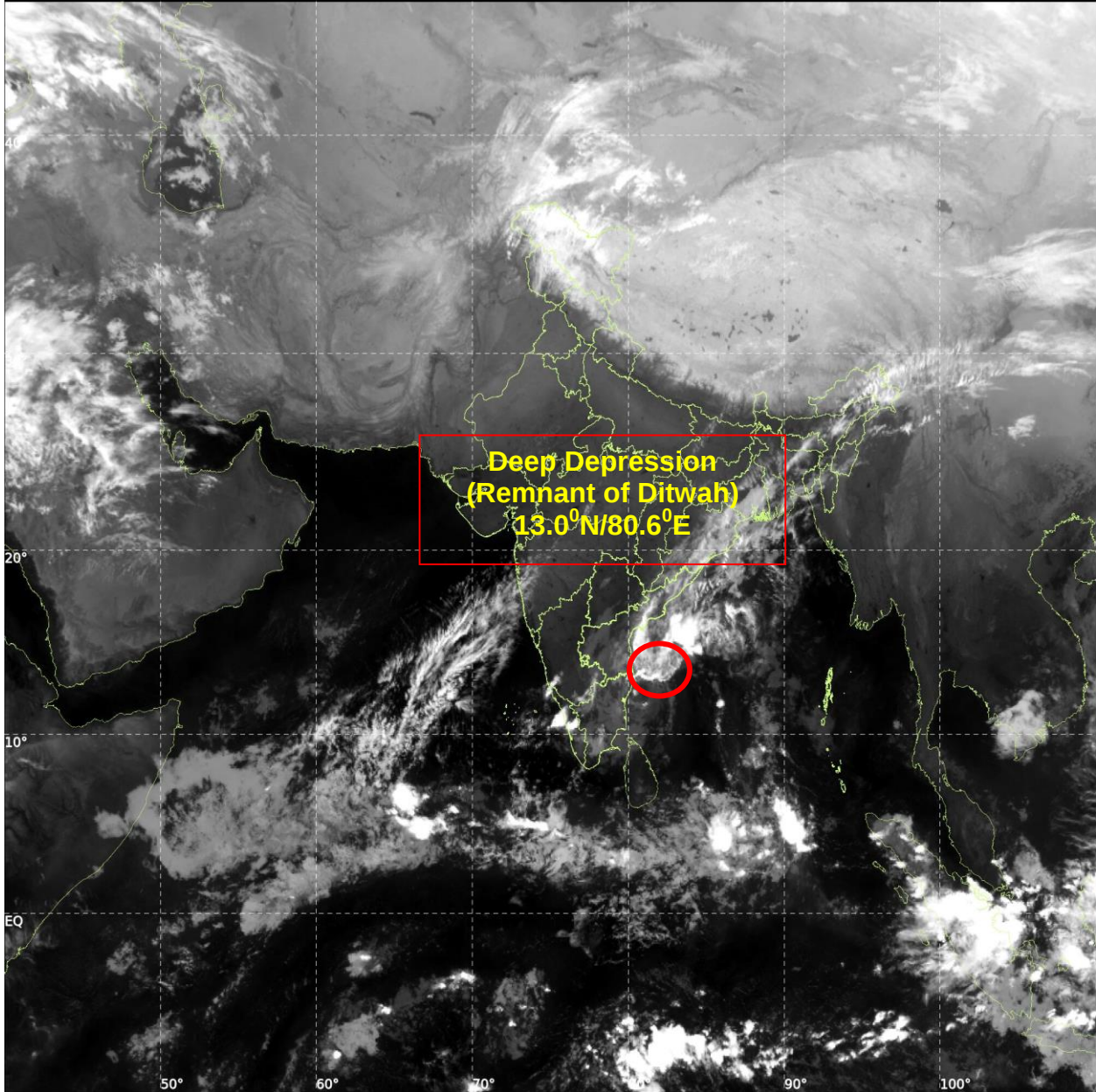
Umasankar Das
Scientist-D



INSAT-3DS IMG, Thermal Infrared1 Count @ 10.83 μm
GMT:01-12-2025/(2000-2027) IST:02-12-2025/(0130-0157)
LIC MERCATOR (LINEAR STRETCH: 1%)

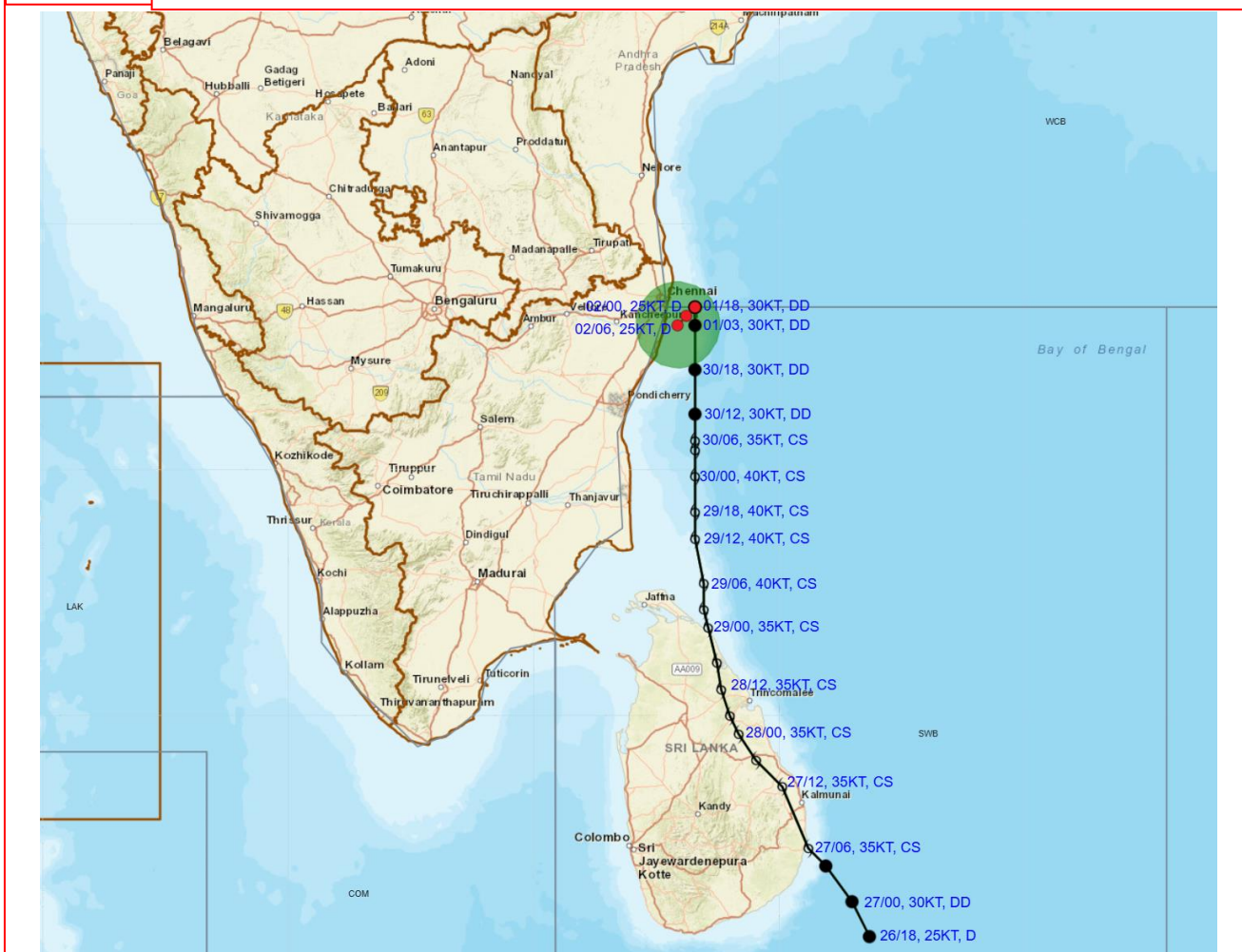
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OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION (REMNANT OF CYCLONIC STORM "DITWAH") OVER WESTCENTRAL AND ADJOINING AREAS OF SOUTHWEST BAY OF BENGAL, NORTH TAMILNADU & SOUTH ANDHRA PRADESH COASTS BASED ON 1800 UTC (2330 Hrs. IST) OF 1ST DECEMBER 2025



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

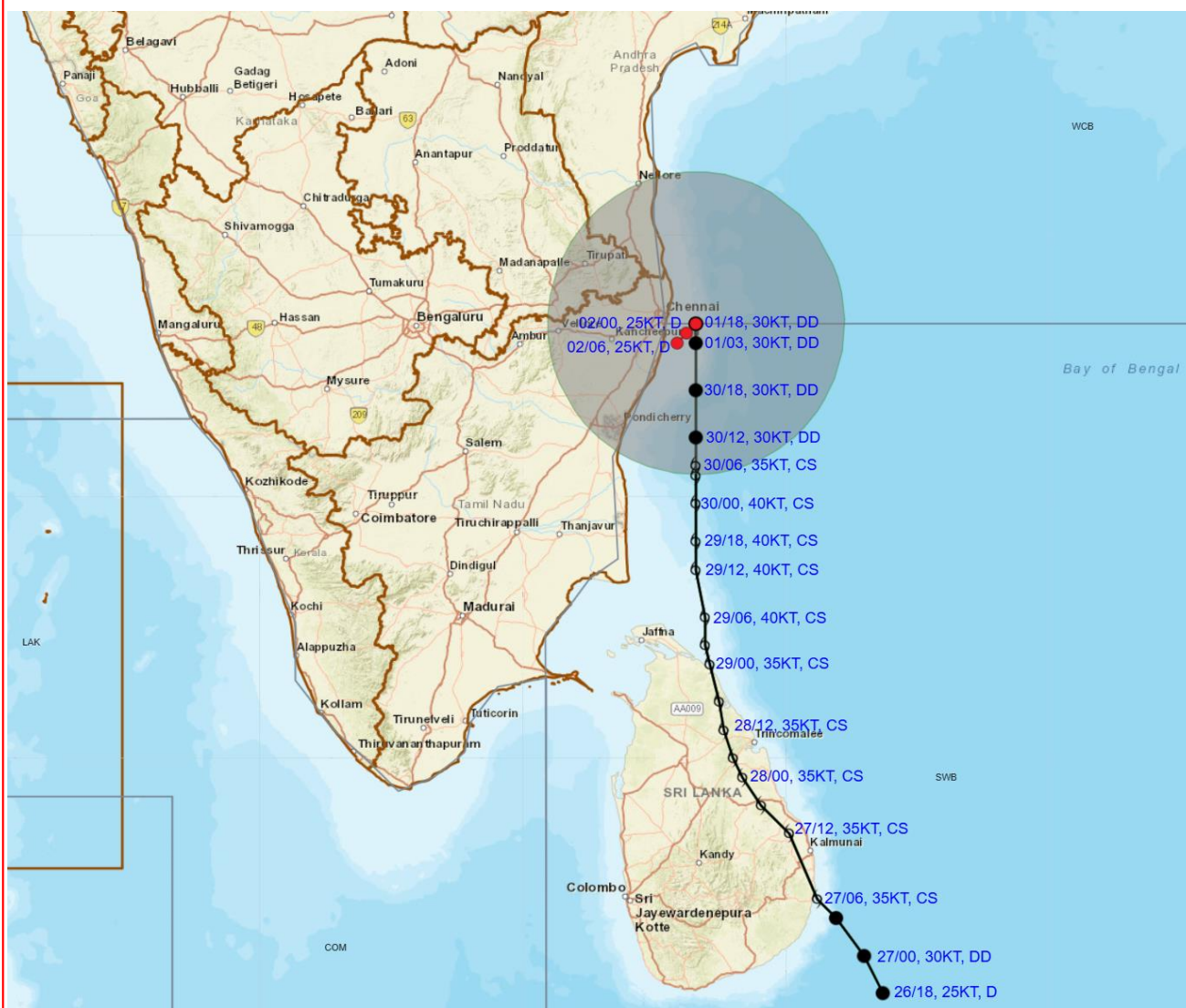
● CONE OF UNCERTAINTY

Forecast distance (km) and direction of the centre from nearest 5 coastal stations

Forecast Date and Time	Station 1	Station 2	Station 3	Station 4	Station 5
01.12.25/1800	NUMGAMBAKKAM (44,E)	CHENNAI/MINAMBAKKA M (45,E)	TIRUTTANI (117,E)	TIRUPATHI (133,SE)	MO PONDICHERRY (143,NE)
02.12.25/0000	CHENNAI/MINAMBAKKA M (36,ESE)	NUMGAMBAKKAM (37,ESE)	TIRUTTANI (108,ESE)	MO PONDICHERRY (128,NE)	TIRUPATHI (131,SE)
02.12.25/0600	CHENNAI/MINAMBAKKA M (32,SE)	NUMGAMBAKKAM (37,SE)	TIRUTTANI (102,ESE)	MO PONDICHERRY (112,NE)	TIRUPATHI (131,SE)



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION (REMNANT OF CYCLONIC STORM "DITWAH") OVER WESTCENTRAL AND ADJOINING AREAS OF SOUTHWEST BAY OF BENGAL, NORTH TAMILNADU & SOUTH ANDHRA PRADESH COASTS BASED ON 1800 UTC (2330 Hrs. IST) OF 1ST DECEMBER 2025



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SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

● LESS THAN 34 KT
○ 34-47 KT
⦿ ≥ 48 KT
— OBSERVED TRACK
— FORECAST TRACK
⦿ CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 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

