



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 0900 UTC OF 01.12.2025 BASED ON 0600 UTC OF 01.12.2025.

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

The Deep 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 northwards with the speed of 03 kmph during past 6 hours and lay centered at 0600 UTC of today, the 01st December 2025 over westcentral and adjoining southwest Bay of Bengal and North Tamil Nadu-Puducherry & South Andhra Pradesh coasts, 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 move slowly northwards parallel to North Tamil Nadu and south Andhra Pradesh coasts and maintain the intensity of deep depression till 1200 UTC of today, the 01st December 2025. Thereafter continuing to move slowly northwards, it is very likely to weaken into a depression during subsequent 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
01.12.25/0600	13.0/80.6	50-60 gusting to 70	Deep Depression
01.12.25/1200	13.2/80.6	50-60 gusting to 70	Deep Depression
01.12.25/1800	13.4/80.6	45-55 gusting to 65	Depression

As per INSAT 3DR at 0600 UTC, the intensity is characterized as T2.0. The associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over westcentral Bay of Bengal and adjoining North coastal Andhra Pradesh, Odisha, Jharkand with minimum cloud top temperature (CTT) is minus 70-90 degree Celsius). Moderate to intense convection lay over Chattisgarh (minimum CTT minus 50-70 degree Celsius) and weak to moderate convection lay over Telangana, Rayalaseema, South coastal Andhra Pradesh, Tamil Nadu and southwest Bay of Bengal with minimum CTT minus 25-40 degree Celsius.

There are multiple vorticity centers as seen in the visible imagery. The closest is near 12.8°N/80.8°E. Considering the winds at Ennore port (Northeasterly 35 kt), the intensity is maintained as deep depression. Further, the wind direction has changed from north-northwesterly at 0000 UTC to northerly at 0300 UTC, indicating slight southwards movement of the system. Considering other synoptic observations, the centre has been maintained at the same location at 0300 UTC. A ship near 14.5°N/84.5°E at 0000 UTC is reporting northeasterly wind with a speed of 26 kt and mean sea level pressure of 1012.8 hPa.

The estimated central pressure is about 1004 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 on 1st December. Thereafter, 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 $120-130 \times 10^{-6} \text{ s}^{-1}$ over southwest Bay of Bengal to the south of system centre. Vertically the positive vorticity zone is extending up to 500 hPa, tilting southwestward. Upper-level divergence has decreased and is around $10 \times 10^{-6} \text{ s}^{-1}$ over the system centre. Low-level convergence has increased and is around $10-15 \times 10^{-6} \text{ s}^{-1}$ to the southeast of the system centre. Mid layer shear is high (around 20-25 kts) and anti-cyclonic over the system area and to its north. Cold and dry air incursion has also reached upto northeast sector. 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 depression/deep depression during next 24 hours and also slow movement over southwest & adjoining Westcentral Bay of Bengal along & off Tamil Nadu coast. Thereafter, models are indicating slow southeastwards movement followed by gradual northwestwards movement till 03rd December/ 0000 UTC while weakening.

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: High

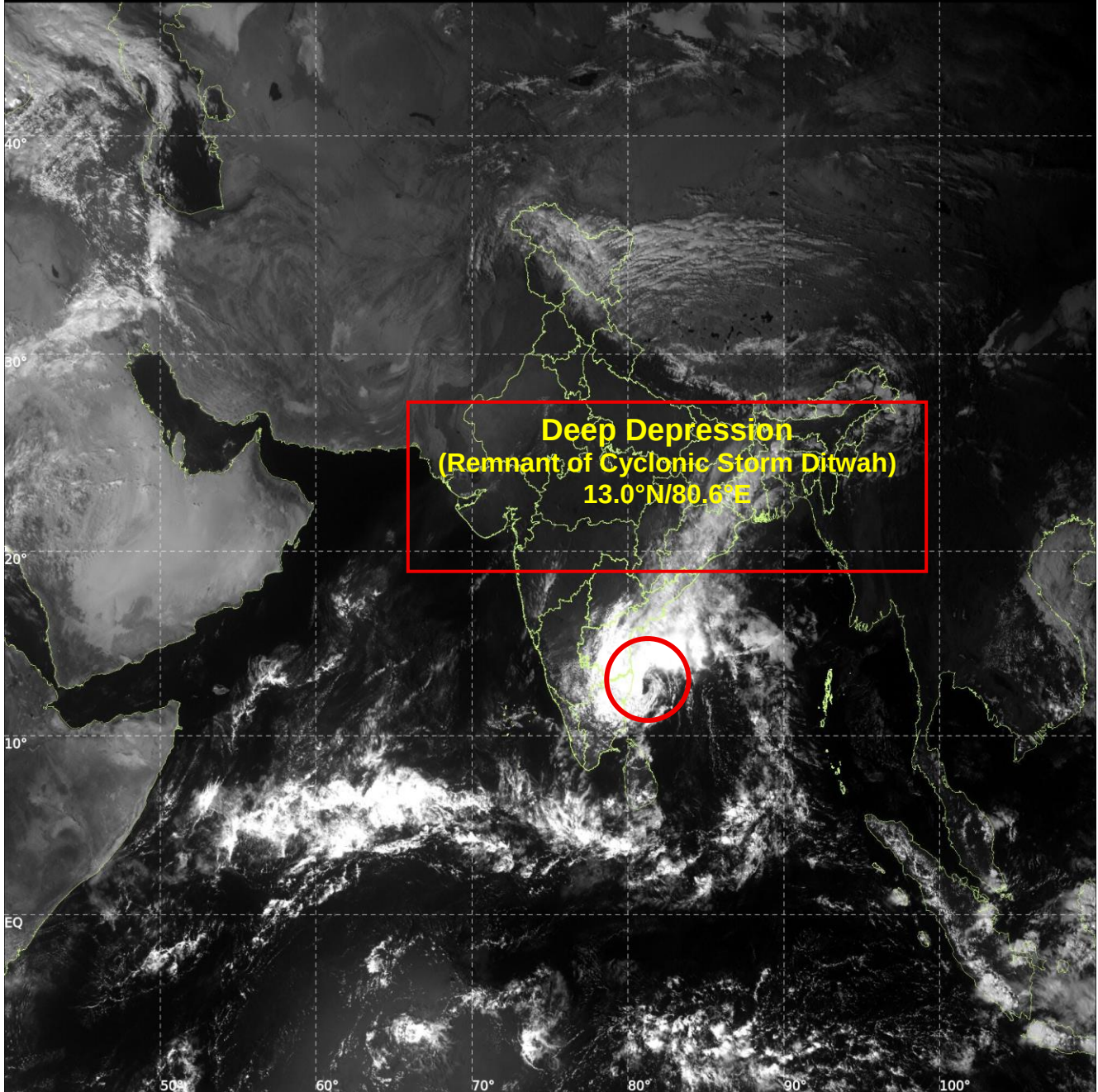
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INSAT-3DS IMG, Visible Count @ 0.65 μm
GMT:01-12-2025/(0830-0857) IST:01-12-2025/(1400-1427)
L1C MERCATOR (LINEAR STRETCH: 0.5%)

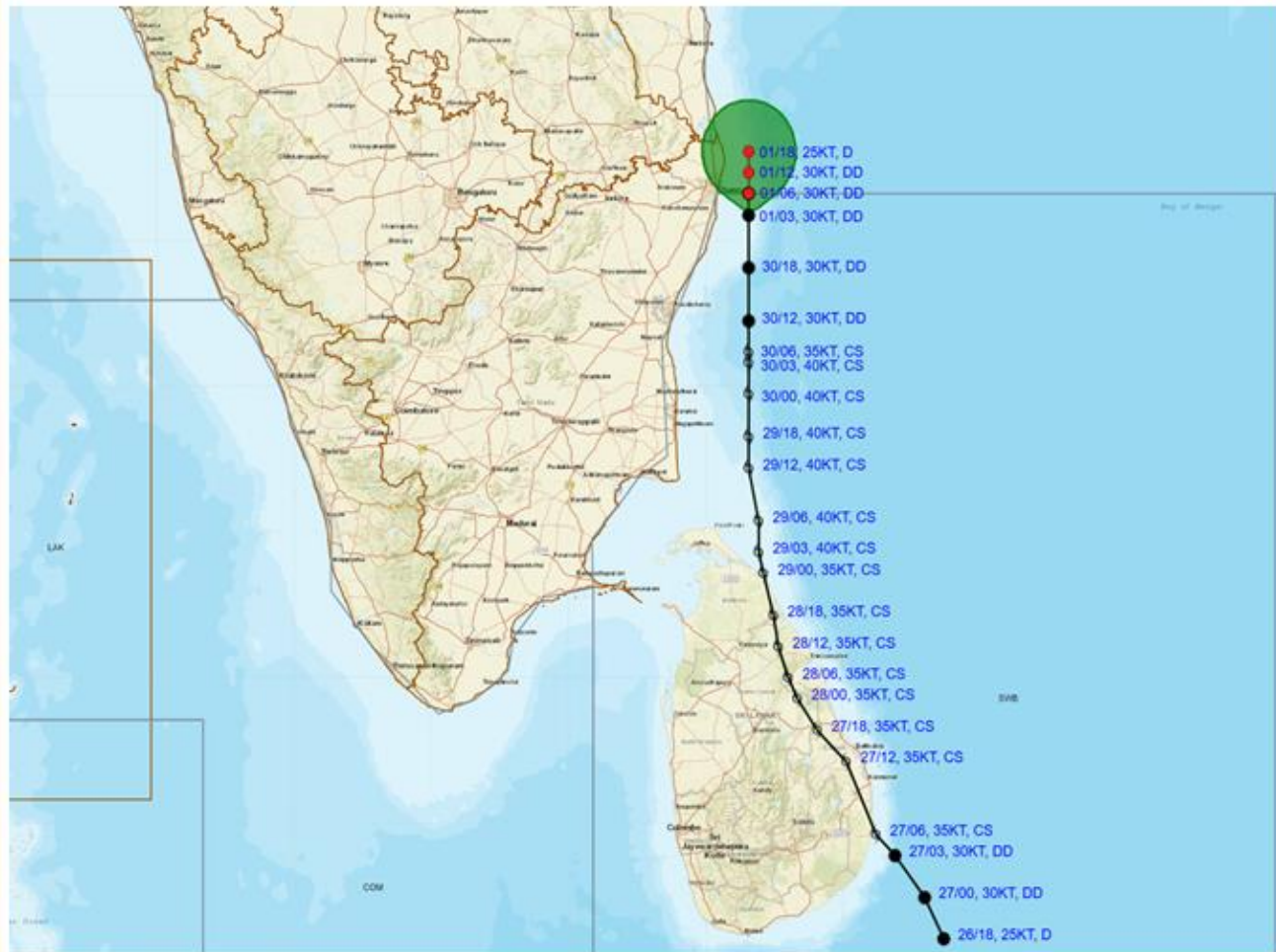
59

297





OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION (REMNANT OF CYCLONIC STORM "DITWAH") OVER WESTCENTRAL AND ADJOINING SOUTHWEST BAY OF BENGAL, NORTH TAMILNADU-PUDUCHERRY & SOUTH ANDHRA PRADESH COASTS BASED ON 0600 UTC (1130 Hrs. IST) OF 1ST DECEMBER 2025

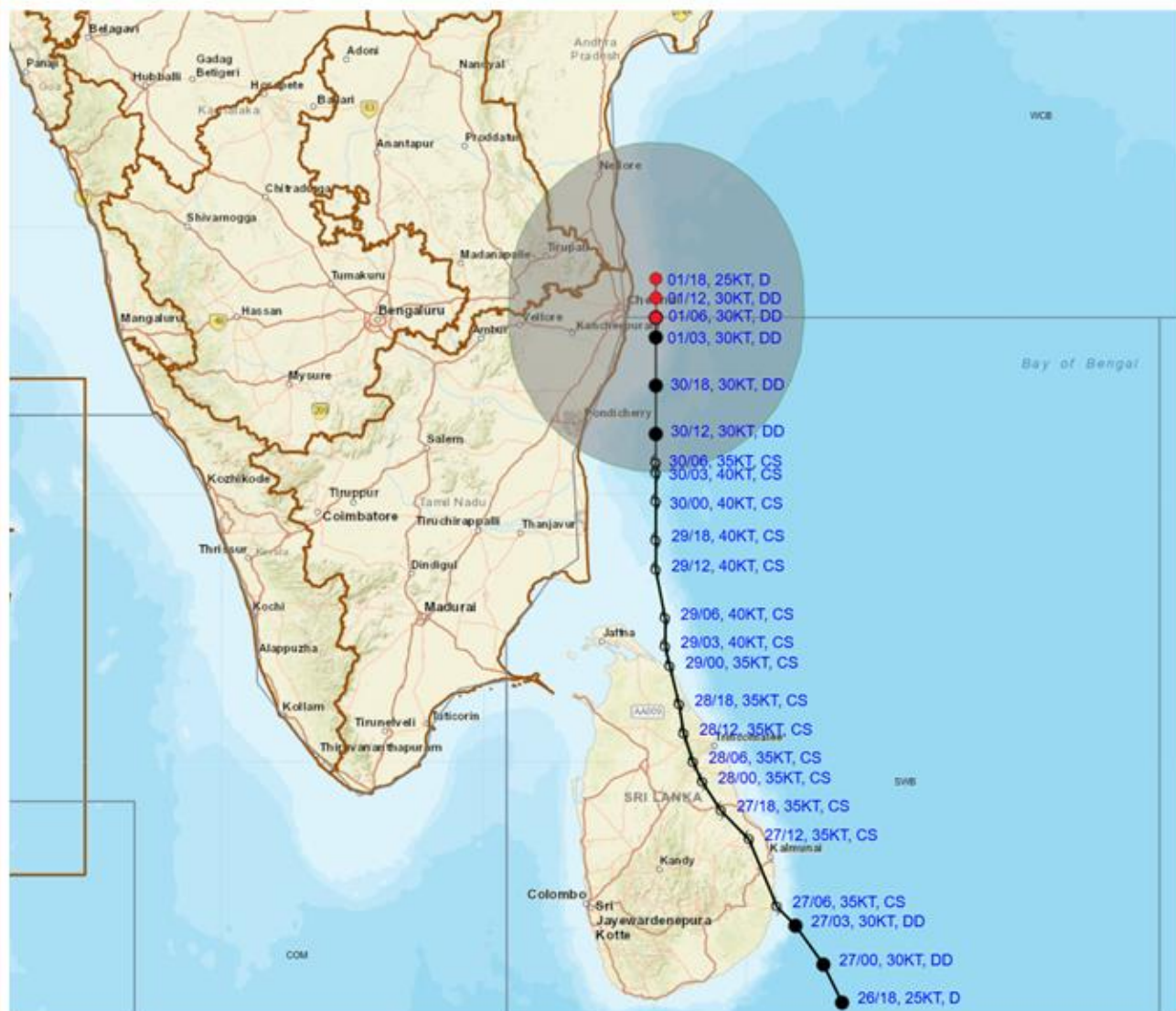


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 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
01.12.25/0600	NUMGAMBAKKAM (44,E)	CHENNAI/MINAMBAKKAM (45,E)	TIRUTTANI (117,E)	TIRUPATHI (133,SE)	MO PONDICHERRY (143,NE)
01.12.25/1200	NUMGAMBAKKAM (46,E,ENE)	CHENNAI/MINAMBAKKAM (50,E,ENE)	TIRUTTANI (116,E)	TIRUPATHI (122,E,SE)	NELLORE (154,SE)
01.12.25/1800	NUMGAMBAKKAM (57,NE)	CHENNAI/MINAMBAKKAM (63,NE)	TIRUPATHI (114,E,SE)	TIRUTTANI (119,E,NE)	NELLORE (135,SE)



SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- 30-63 KT (32-117 KMPH)
 ≥ 64 KT (≥118 KMPH)

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

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°C and (d) Very Intense:Less than -70°C Probability of cyclogenesis (formation of depression) :NIL:0%, LOW:1-33%, MODERATE:34-66% and HIGH:67-100%

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Fishermen Warning Graphics

