





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 0700 UTC OF 01.12.2025 BASED ON 0300 UTC OF 01.12.2025.

Sub: 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

The Deep Depression (Remnant of Cyclonic Storm Ditwah) over southwest Bay of Bengal and adjoining north Tamil Nadu-Puducherry coasts moved slowly northwards with the speed of 05 kmph during past 6 hours and lay centered at 0300 UTC of today, the 01st December 2025 over southwest Bay of Bengal and adjoining areas of westcentral Bay of Bengal, North Tamil Nadu-Puducherry & South Andhra Pradesh coasts, near latitude 12.8°N and longitude 80.6°E, about 50 km east-southeast of Chennai (India), 130 km northeast of Puducherry (India), 150 km northeast of Cuddalore (India), 200 km south-southeast of Nellore (India). The minimum distance of the centre of the deep depression from north Tamil Nadu-Puducherry coasts is about 40 km.

It is very likely to move slowly northwards parallel to North Tamil Nadu-Puducherry and south Andhra Pradesh coasts and weaken into a depression during next 12 hours. The system will be centered over southwest & adjoining west central Bay of Bengal within a minimum distance of 30 km from the Chennai coast by 0600 UTC of 01st December.

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
01.12.25/0300	12.8/80.6	50-60 gusting to 70	Deep Depression
01.12.25/0600	13.0/80.6	50-60 gusting to 70	Deep Depression
01.12.25/1200	13.2/80.6	45-55 gusting to 65	Depression

As per INSAT 3DR at 0300 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.

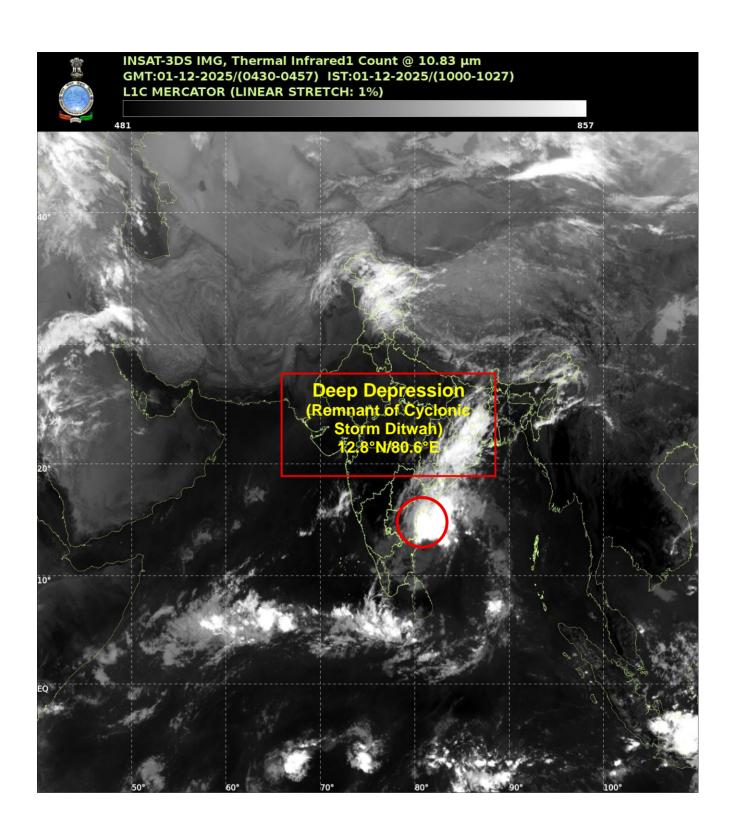
The Low level relative vorticity at 850 hPa has decreased and is about 120-130×10⁻⁶ s⁻¹ over southwest Bay of Bengal to the south of system centre. Vertically the positive vorticity zone is extending up to 500 hPa, tilting southwestward. Upper-level divergence is around 20×10⁻⁶ s⁻¹ over the system centre. Low-level convergence has increased and is around 10-15×10⁻⁶ 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.

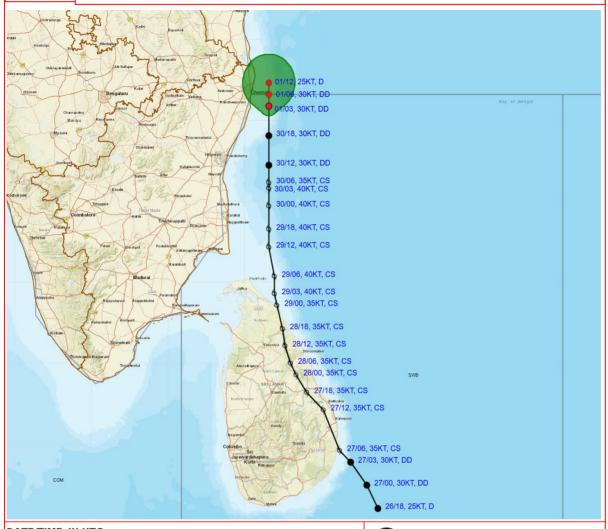
- (i) Confidence level in estimation of current location of Cyclonic Storm: High
- (ii) Confidence level in estimation of estimation of current intensity: High
- (iii) Confidence level in forecast track: Moderate
- (iv) Confidence level in forecast intensity: High

DR. PLN Murty Scientist-E RSMC, New Delhi





OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION (REMNANT OF CYCLONIC STORM "DITWAH") OVER SOUTHWEST AND ADJOINING AREAS OF WESTCENTRAL BAY OF BENGAL, NORTH TAMILNADUPUDUCHERRY & SOUTH ANDHRA PRADESH COASTS BASED ON 0300 UTC (0830 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 (48-63KT)

ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)

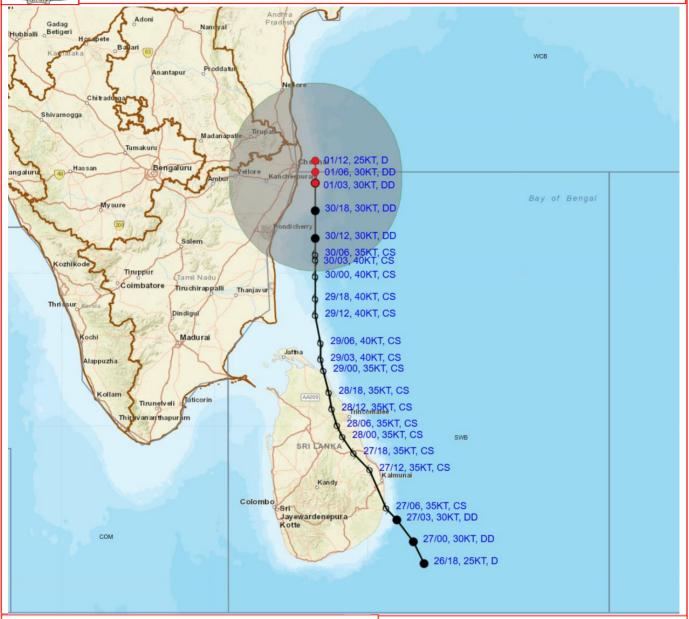
SuCS: SUPER CYCLONIC STORM € 120 KT)

•	LESS THAN 34 KT
9	34-47 KT
9	≥ 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
01.12.25/0300	CHENNAI/MINAMBAKKA M (50,ESE)	NUMGAMBAKKAM (53,SE)	TIRUTTANI (122,ESE)	MO PONDICHERRY (126,NE)	TIRUPATHI (146,SE)
01.12.25/0600	NUMGAMBAKKAM (44,E)	CHENNAI/MINAMBAKKA M (47,ENE)	TIRUTTANI (116,E)	TIRUPATHI (127,ESE)	MO PONDICHERRY (152,NE)
01.12.25/1200	NUMGAMBAKKAM (57,NE)	CHENNAI/MINAMBAKKA M (63,NE)	TIRUPATHI (114,ESE)	TIRUTTANI (119,ENE)	NELLORE (135,SSE)



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION (REMNANT OF CYCLONIC STORM "DITWAH") OVER SOUTHWEST AND ADJOINING AREAS OF WESTCENTRAL BAY OF BENGAL, NORTH TAMILNADU-PUDUCHERRY & SOUTH ANDHRA PRADESH COASTS BASED ON 0300 UTC (0830 Hrs. IST) OF 1ST DECEMBER 2025



DATE/TIME IN UTC IST=UTC + 0530

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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)

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6 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	SFΔ
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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		



