

Ministry of Earth Sciences India Meteorological Department Cyclone Warning Division, New Delhi

Tropical Cyclone Forecast Programme Report Dated 28th November 2025

Time of Issue: 1500 UTC

Synoptic features (based on 1200 UTC analysis):

Cyclonic Storm Ditwah over southwest Bay of Bengal and adjoining Sri Lanka Coast

The Cyclonic Storm Ditwah [Pronunciation: Ditwah] over coastal Sri Lanka and adjoining southwest Bay of Bengal moved north-northwestwards with the speed of 7 kmph during past 6 hours and lay centered at 1200 UTC of today, the 28th November 2025 over the same region, near latitude 8.7°N and longitude 80.9°E, about 40 km west-northwest of Trincomalee (Sri Lanka), 140 km northwest of Batticaloa (Sri Lanka), 270 km south-southeast of Karaikal (India), 380 km south-southeast of Puducherry (India) and 490 km south of Chennai (India).

It is very likely to continue to move north-northwestwards across Sri Lanka coast & adjoining southwest Bay of Bengal and reach over southwest Bay of Bengal near North Tamil Nadu, Puducherry and adjoining south Andhra Pradesh coasts by 0000 UTC of 30th November.

Environmental Features based on 0900 UTC:

	Elivironinental reatures pased on 0500 orc.								
Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)							
Sea Surface Temperature (SST) ⁰C	Around 28°C over southwest Bay of Bengal and along & off Sri Lanka, Tamil Nadu & South Andhra Pradesh coast along the forecast track.	Around 28-29°C over southeast Arabian Sea and Lakshadweep area. Around 27°C over rest of Arabian Sea.							
Tropical Cyclone Heat Potential (TCHP) kJ/cm ²	 125-150 over eastern parts of southeast BoB, Andaman Sea, Malacca Strait. About 125 over many parts of south, eastcentral and northeast BoB. About 50 over westcentral, northwest BoB, Comorin area, Gulf of Mannar, Westcoast of Sri Lanka. 	120-130 over southeast Arabian Sea, Lakshadweep area and Maldives area.							
Cyclonic Relative - vorticity (X10 ⁻⁶ s ⁻¹)	140-150 over coastal Sri Lanka adjoining southwest BoB to the southwest of system centre and extending upto 200 hPa.	 40-50 southeast AS and adjoining EIO and extending upto 500 hPa. 							
Low-Level convergence (X10-6 s-1)	 60 to the southwest of system centre 20-30 over the southwest Bay, south Tamil Nadu coast, over Gulf of Mannar. 	 5 over southwest Arabian Sea. 10 over southern parts of southeast AS. 							
Upper-Level divergence (X10-6 s-1)	> 40 to the southwest of system centre.	> 10 over southern parts of southeast AS							
Vertical Wind Shear	 Deep layer vertical wind shear is moderate & anti-cyclonic over coastal 	 Deep layer vertical wind shear is low to 							

(VWS knots) Low: 05-10 knots Moderate: 10- 20 knots High: >20 knots	Sri Lanka and adjoining southwest Bay of Bengal however as it move north it may encounter higher wind shear along and off Tamil Nadu coasts, adjoining southwest Bay. Mid layer vertical wind shear is low & cyclonic over the system while magnitude of mid-layer shear is favorable but along the direction of forecasted path is not favorable	moderate over south Arabian Sea.		
Wind Shear Tendency (knots)	Increasing over Sri Lanka and adjoining southwest Bay, along and off south Tamil Nadu coast and adjoining southwest Bay, over Gulf of Mannar.	 Increasing over southeast AS and Lakshadweep, Maldives area. 		
Upper tropospheric Ridge	Ridge is running along 12°N across BoB.	➤ A ridge is running along 13°N at 75°E.		

Summary of dynamic and thermodynamic features:

Cyclonic Storm Ditwah over southwest Bay of Bengal and adjoining areas of Southeast Sri Lanka: The Low level relative vorticity at 850 hPa is about 150 x 10⁻⁶ s⁻¹ over coastal Sri Lanka and adjoining southwest Bay of Bengal to the southwest of system centre. Vertically the positive vorticity zone is extending up to 200 hPa. Upper-level divergence is around 40×10⁻⁶ s⁻¹ to the southwest of system centre. Low-level convergence has increased and is around 60×10⁻⁶ s⁻¹ to the southwest of system centre. Mid layer shear is low (5-10 kts) and cyclonic over the system while magnitude of mid-layer shear is favourable but along the direction of forecasted path is not favourable. The upper level wind shear of horizontal wind is moderate (15-20 kt) and anti-cyclonic over the system area hence favourable to maintain intensity however as it move north it may encounter higher wind shear along and off Tamil Nadu coasts. Warm air advection continuously takes place from south and southeast sector towards the core of the system however cold and dry air from the southern peninsular is touching the northwest sector. As a result with the northward movement of the system there could be more incursion of dry and cold air. At present the cyclonic storm is interacting with the land over Sri Lanka coasts and land-surface interactions will continue till 0000 UTC of 29th November and it will gradually reduce thereafter.

M.J.O. Index:

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 the next 5 days.

Equatorial waves guidance:

The guidance from NCICS model indicates westerly wind anomaly (7-9 mps) alongwith prevalence of Equatorial Rossby Wave (ERW), low frequency background wave (LW) over the southern parts of the Southwest BoB and adjoining southeast Arabian Sea (AS) and easterly wind anomaly (3-5 mps) to its north over southwest BoB off Tamil Nadu coast during 27th to 28th November. Kelwin wave (KW) is also approaching from west. Similar features are likely to continue till 1st December. These features indicate that equatorial waves would contribute to further intensification of system.

Satellite based cloud observation

Deep Depression [Remnant of Cyclonic Storm "Senyar"] over the Strait of Malacca:

As per INSAT 3DS at 0900 UTC, the intensity is characterized as T1.5. Associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over South Andaman Sea and adjoining Southeast Bay of Bengal & adjoining Equatorial Indian

Ocean, north Sumatra, Strait of Malacca & Malay Peninsula (minimum cloud top temperature is minus 70-90 degree Celsius).

Cyclonic Storm "Ditwah" over southwest Bay of Bengal and adjoining Sri Lanka Coast: Cyclonic storm Ditwah over Sri Lanka coast adjoining south-west Bay of Bengal & neighborhood centered near 7.4N / 81.8E overland. Associated scattered to broken low/medium clouds with embedded intense to very intense convection over south-west Bay of Bengal adjoining Indian Ocean, Sri Lanka, Palak Strait, Gulf of Mannar, Comorin area & south Kerala, Tamil Nadu (minimum cloud top temperature is minus 70-90 deg C)

The estimated central pressure is about 1001 hPa. The associated maximum sustained wind speed is about 35 knots gusting upto 45 knots.

Over Bay of Bengal & Andaman Sea:

As per INSAT 3DS at 0900 UTC, scattered to broken low and medium clouds with embedded intense to very intense convection lay over south Bay of Bengal, south Andaman Sea & Strait of Malacca. Scattered low and medium clouds with embedded moderate to intense convection lay over north Andaman Sea and isolated weak to moderate convection lay over central Bay of Bengal.

Over the Arabian Sea:

As per INSAT 3DS at 0900 UTC, scattered to broken low & medium clouds with embedded intense to very intense convection over Comorin area. Scattered low & medium clouds with embedded moderate to intense convection over south Arabian Sea south of latitude 10.0°N & Maldives area.

Outside India:

As per INSAT 3DS at 0600 UTC, vortex (KOTO) over south China Sea & neighborhood (area F5) centered near 13.2N/ 113.7E. Intensity T4.5/5.0. Maximum sustained winds 90-119 kts. Associated scattered to broken low & medium clouds with embedded intense to very intense convection over area between latitude 8.0°N to 20.0°N & longitude 110.0°E to 120.0°E & Philippines.

Scattered low & medium clouds with embedded moderate to intense convection over Sri Lanka, Palk Strait, Gulf of Mannar, Maldives, Tibet, China, Thailand, Gulf of Thailand, Cambodia, Laos, Vietnam, Hainan, Taiwan, Sumatra, Strait of Malacca, Malaysia, Borneo, south China Sea, Java Islands & Sea, Celebes Islands & Sea, Philippines, Sulu Sea, Madagascar, Mozambique channel and over Indian Ocean between latitude 5.0°N to 10.0°S longitude 50.0°E to 120.0°E.

NWP Guidance for FDP Cyclone:

MODEL GUIDANCE	Bay of Bengal (BoB)	Arabian Sea (AS)
IMD-GFS	Cyclonic storm (CS) over Sri Lanka and adjoining southwest BoB as on 00 UTC of today, to move in north-northwestward (NNW) across Sri Lanka and reach south Tamil Nadu coast close to Adirampattinam as a deep depression (DD) on 29/00 UTC. It will become lessmarked thereafter.	,
IMD-GEFS	Not available	Not available
IMD-WRF	Not available	Not available

BFS NCMRWF-	Cyclonic storm (CS) over Sri Lanka and adjoining southwest BoB as on 00 UTC of today, to move in north-northwestward (NNW) across Sri Lanka and reach south Tamil Nadu coast close to Nagapattinam as a depression on 29/00 UTC. It will become lessmarked thereafter. DD over southwest BoB and adjoining Sri Lanka	No significant system is indicated during next 7 days. No significant system is
NCUM(G)	coast as on 00 UTC of today, to move in NNW along Sri Lanka coast and then towards Tamil Nadu coast, lay off Karaikal coast, Tamil Nadu as a WML/Depression on 30/00 UTC. It will continue to move in same direction while weakening and cross north Tamil Nadu coast near Chennai as an LPA by 01 December/00 UTC, less marked thereafter.	No significant system is indicated during next 7 days.
NCMRWF- NCUM(R)	CS over southwest BoB and adjoining Sri Lanka coast as on 00 UTC of today, to move in NNW along Sri Lanka coast towards Tamil Nadu coast, till 01 December/00 UTC.	No significant system is indicated during next 3 days.
NEPS	CS over southwest BoB and adjoining Sri Lanka coast as on 00 UTC of today, to move in NNW along Sri Lanka coast towards Tamil Nadu coast and lay off Karaikal coast, Tamil Nadu as a DD on 30/00 UTC. It will continue to move in same direction while weakening and reach north Tamil Nadu coast as an LPA by 01 December/00 UTC, less marked thereafter.	No significant system is indicated during next 7 days.
ECMWF	CS over southwest BoB and adjoining Sri Lanka as on 00 UTC of today, to move in NNW along Sri Lanka coast towards Tamil Nadu coast while weakening and lay close to Tamil Nadu coast, north of Karaikal as a depression/deep depression on 29/21 UTC. It will move in same direction and cross Tamil Nadu coast close to Cuddalore as a well marked low (WML) on 30/21. Less marked thereafter.	No significant system is indicated during next 7 days.
NCEP-GFS	CS over Sri Lanka and adjoining southwest BoB as on 00 UTC of today, to move in NNW along Sri Lanka coast towards Tamil Nadu coast and lay close to Tamil Nadu coast, north of Chidambaram as an LPA on 30/06 UTC. It will weaken near coast gradually and less marked by 01 December/00 UTC.	No significant system is indicated during next 7 days.
EC-AIFS	CS over Sri Lanka and adjoining southwest BoB as on 00 UTC of today, to move in NNW along Sri Lanka coast towards Tamil Nadu coast and reach Tamil Nadu coast, close to Mahabalipuram as an WML on 01 December/00 UTC. It will weaken near coast gradually and less marked by 02 December/00 UTC.	No significant system is indicated during next 7 days.

Summary of models guidance:

Bay of Bengal:

There is good consensus among various models w.r.t north-northwestwards (NNW) movement across Sri Lanka towards Tamil Nadu coast during next 48 hours while weakening. Most of the models are also indicating the system to reach close to Tamil Nadu coast as a depression/Well marked low pressure area.

Arabian Sea:

Models are indicating no significant system over Arabian Sea during next seven days.

Inference:

Considering various large-scale environmental features, climatology and model guidance, it is inferred that:

The Cyclonic Storm Ditwah [Pronunciation: Ditwah] over coastal Sri Lanka and adjoining southwest Bay of Bengal is very likely to continue to move north-northwestwards across Sri Lanka coast & adjoining southwest Bay of Bengal and reach over southwest Bay of Bengal near North Tamil Nadu, Puducherry and adjoining south Andhra Pradesh coasts by 0000 UTC of 30th November.

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

<u>Probability of cyclogenesis (formation of depression and above intensity systems) over the Bay of Bengal during next 168 hours:</u>

24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
-	-	-	NIL	NIL	NIL	NIL

<u>Probability of cyclogenesis (formation of depression and above intensity systems) over the Arabian Sea during next 168 hours:</u>

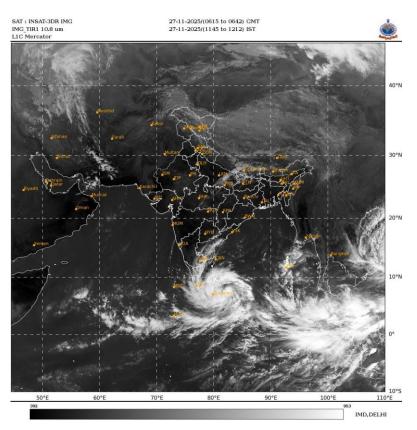
24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

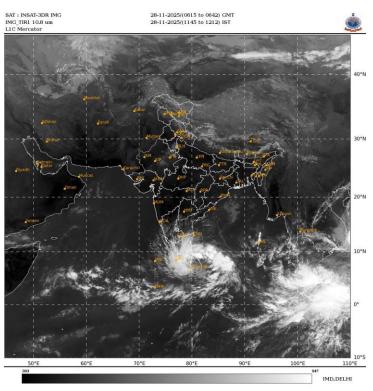
[&]quot;- "indicates genesis has already occurred.

Probability is indicated as NIL for 0%, LOW for 1-33%, MOD for 34-67% and High for 68-100%. Every 24 hrs forecast ends at the 0300 UTC of date.

Intense Observation Period (IOP): Sri Lanka, Tamil Nadu, Puducherry during 28th November to 01st December; Kerala during 28th – 30th; Andhra Pradesh during 28th November to 01st December.

INSAT 3DS imageries at 0600 UTC of 27th & 28th November





Annexure

