

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

Tropical Cyclone Forecast Programme Report Dated 15th November 2025

Time of Issue: 1300 UTC

Synoptic features (based on 1200 UTC analysis):

➤ Under the influence of the upper air cyclonic circulation over southwest Bay of Bengal off Sri Lanka coast, a **Low-Pressure area (LPA)** has formed over the same region at 0830 hrs IST of today, and persists over the same region at 1730 hrs IST of today, the 15th November 2025. The associated upper air cyclonic circulation extends upto 5.8 km above mean sea level, tilting west-northwest with height. It is likely to move slowly west-northwestward during next 24 hours.

Environmental Features based on 0600 UTC:

Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)			
Sea Surface Temperature (SST) °C	Around 28 - 30°C over entire BoB.	Around 28-29°C over eastern Arabian Sea. Around 27°C over rest AS			
Tropical Cyclone Heat Potential (TCHP) kJ/cm ²	 150-175 over south south Andaman Sea and southeast BoB. 100-120 over eastcentral, adjoining northeast BoB and over north Andaman Sea. 	120-130 over southeast Arabian Sea.			
Cyclonic Relative - vorticity (X10 ⁻⁶ s ⁻¹)	30-40 over southwest BoB and extending upto 500hPa.	30-40 over southwest adjoining southeast Arabian Sea.			
Low-Level convergence (X10-6 s-1)	10-15 over southwest Bay of Bengal	5 over southeast ArabianSea along Kerala coast.			
Upper-Level divergence (X10-6 s-1)	20-30 over southwest Bay of Bengal and over east Sri Lanka.	5 over Comorin Area, Lakshadweep Islands and Maldives area.			
Vertical Wind Shear (VWS knots) Low: 05-10 knots Moderate: 10-20 knots High: >20 knots	Deep layer vertical wind shear is Low- Moderate over central & south BoB and high over north and adjoining westcentral BoB. Mid layer vertical wind shear is Low-moderate over entire BoB.	Deep layer vertical wind shear is Low - Moderate over south, Arabian Sea, Lakshadweep islands & Comorin area and high over rest of Arabian Sea. Mid layer vertical wind shear is Low - Moderate over south, central Arabian Sea and moderate-high over north Arabian Sea.			

Wind Shear Tendency (knots)	Increasing over central BoB, Sri Lanka, Tamil Nadu coast and adjoining sea area.	
Upper tropospheric Ridge	Ridge is running along 12°N at 85°E.	A ridge is running along 15°N at 68°E.
GPP	Not available	Not available

Regional dynamical features support the existing low pressure area over southwest Bay of Bengal off Sri Lanka coast to persist during next 24 hours. With the expected west-northwestward movement, it will interact with land surface and also will experience increasing wind shear. Hence it is not likely to intensify further. The upper level wind based on satellite suggests initial westward movement and then the northwestward movement under the influence of the ridge lying to the north of the system centre.

There is a trough in mid-tropospheric westerlies along 80 deg. E to the north of 25 deg. N. It suggested that the LPA will move slowly initial westward movement and then the northwestward.

Considering low level vorticity, it is oriented from east-southeast to west-northwest towards Sri Lanka coast. The relative vorticity is increasing with height and extends upto 500 hPa level. It is maximum at 500 hPa level.

The lower level convergence and upper level divergence have increased significantly during past 24 hours. The upper level divergence i.e., being higher than lower level convergence, it supports deep convection. Further, there is a vertical alignment of centre of convergence and divergence supporting the enhanced convective activity.

Low to moderate clockwise wind shear prevails over the LPA region supporting intensification. As the system moves initially westwards and then northwestward, it will experience moderate to high wind shear from 17th. There is no change in wind shear during past 24 hours. However, there is fall in wind shear along coastal Tamil Nadu and extreme north Sri Lanka.

M.J.O. Index:

Madden Julian Oscillation (MJO) index is presently in phase 6 with amplitude greater than 1 in the phase diagram. It will be in the same phase during next seven days. MJO is not likely to support convective activity over the North Indian Ocean region.

Equatorial waves guidance:

The tropical monitoring guidance from the NCICS indicates westerly wind anomaly (3-5 mps) over the southern parts of the North Indian Ocean (NIO), including the south Arabian Sea (AS) and south Bay of Bengal (BoB) adjacent to the North Equatorial Indian Ocean (NEIO) during next seven days. A comparatively weaker westerly wind anomaly is likely to prevail over the central parts of AS, southern peninsular India and the central parts of BoB till 17th. The easterly wind anomaly (1-3 mps) is likely over the northern parts of AS and BoB till 20th November. The easterly wind anomaly is likely to appear gradually over central BoB and adjacent parts of south BoB, whereas the westerly wind anomaly strengthened (5-7 mps) over south & central AS and the southern part of BoB adjacent to NEIO during the 18th to 20th November. The Equatorial Rossby Wave (ERW) is likely to be moving westwards across peninsular India and then central AS till 17th. During 18th to 20th, another spell of ERW is likely to propagate across the south BoB and adjoining NEIO. Thus, equatorial waves are likely to support the cyclonic circulation over southwest BoB to maintain its intensity or become a low till 17th November. During 18th to 20th, conditions are favourable for development of a cyclonic circulation over south Andaman Sea.

Over the Bay of Bengal & Andaman Sea:

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection over southwest adjoining southeast & westcentral Bay of Bengal and Andaman Sea. Scattered low and medium clouds with embedded isolated weak to moderate convection lay over eastcentral Bay of Bengal. The convective cloud mass in association with the LPA has moved northwestwards. Maximum convection lies in the northern sector, especially in the right forward sector of the LPA. There is poleward outflow as seen in cloud imagery suggesting intensification of the system. There is increased clustering of convective clouds in association with LPA.

Over the Arabian Sea:

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with moderate to intense convection lay over southeast Arabian Sea off Kerala coast, Lakshadweep islands area, Maldives & Comorin area. Scattered low to medium clouds with embedded isolated weak to moderate convection over central & rest south Arabian Sea.

Outside India:

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection lay over Sri Lanka, Gulf of Mannar, Palk Strait, Gulf of Mannar, China, east China sea, Thailand, Gulf of Thailand, Cambodia, Laos, Sumatra, Strait of Malacca, Malaysia, Borneo, south China sea, Java islands & sea, Celebes islands & sea, Philippines, north Madagascar, Mozambique channel and over Indian Ocean between latitude 5.0°N to latitude 12.0°S and longitude 55.0°E to 105.0°E.

NWP Guidance for FDP Cyclone:

MODEL	Bay of Bengal (BoB)	Arabian Sea (AS)		
GUIDANCE				
IMD-GFS	Existing upper air cyclonic circulation over southwest BoB off Sri Lanka coast as of today, will move west-northwestwards towards north Sri Lanka slowly till 16 th and less marked thereafter. A fresh upper air cyclonic circulation is likely to emerge into South Andaman Sea & adjoining southeast BoB on 18/00 UTC. LPA over southeast & adjoining southwest BoB on 19/00 UTC. Moving west-northwestwards and become depression over southwest BoB off Sri Lanka coast on 21/00 UTC. Move across Sri Lanka and reach south Tamil Nadu coast north of Kanyakumari as depression on 22/00 UTC.	Emergence of BoB depression into southeast Arabian Sea as WML/D on 23/00 UTC. It will move northwestwards with further intensification till 25/00 UTC.		
IMD-GEFS	Not available	Not available		
IMD-WRF	Not available	Not available		
BFS	Existing upper air cyclonic circulation over southwest BoB off Sri Lanka coast as of today, will move west-northwestwards north Sri Lanka slowly till 16 th and less marked thereafter.	No significant system is indicated during next 3 days.		
NCMRWF- NCUM(G)	Existing upper air cyclonic circulation over southwest BoB to move west-northwestwards till 17/00 UTC and less marked thereafter.	Upper air cyclonic circulation over southeast Arabian Sea		

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	A fresh upper air cyclonic circulation over south BoB on 19/00 UTC. It will move west-northwestwards and reach north Tamil Nadu coast as an LPA on 25//00 UTC.	UTC, having nearly westward movement till 22/00 UTC.			
NCMRWF- NCUM(R)	An upper air cyclonic circulation over southwest BoB off south Sri Lanka coast as on today likely to move nearly westward-northwestwards towards Sri Lanka coast till 16/00 UTC, less marked thereafter. A fresh upper air cyclonic circulation over south Andaman Sea & adjoining southeast BoB on 17/00 UTC, to move nearly westwards till 18/00 UTC.	No significant system is indicated during next 3 days.			
NEPS	A fresh LPA over southeast & adjoining southwest BoB on 20/00 UTC, having west-northwestwards movement till 25/00 UTC and lie over southwest BoB & adjoining Tamil Nadu coast as LPA.	No significant system is indicated during next 7 days.			
ECMWF	Existing upper air cyclonic circulation over southwest BoB off south Sri Lanka coast as on today, to move west-northwestwards till 17/09 UTC and less marked thereafter. A fresh upper air cyclonic circulation is likely to emerge into South Andaman Sea & adjoining southeast BoB on 19/09 UTC. Formation of LPA on 21/18 UTC over southeast BoB & adjoining south Andaman Sea. Moving nearly west-northwestward likely to intensify into well marked low (WML) on 23/18 UTC over southwest BoB. Moving in the same direction and it may intensify into depression on 24/18 UTC close to Sri Lanka coast.	No significant system is indicated during next 7 days.			
NCEP-GFS	Existing upper air cyclonic circulation over southwest BoB off south Sri Lanka coast as on today, to move west-northwestwards till 16/18 UTC and less marked thereafter. Emergence of an upper air cyclonic circulation over South Andaman Sea & adjoining southeast BoB around 18/12 UTC. To move northwestwards and become LPA on 19/00 UTC over southeast BoB. To move then nearly west-northwestwards till 25/18 UTC as LPA and lie over southwest BoB.	No significant system is indicated during next 7 days.			
EC-AIFS	Existing upper air cyclonic circulation over southwest BoB of south Sri Lanka coast till 17/00 UTC and less marked thereafter.	No significant system is indicated during next 7 days.			

Summary:

(a) Bay of Bengal:

Most of the numerical models indicate the prevalence of existing LPA over southwest BoB off Sri Lanka coast as of today, moving west-northwestwards during next 24 hours. Further, the models are also indicating the emergence of a fresh cyclonic circulation into South Andaman Sea around 18th November. There is a good consensus among various models with respect to the formation of low pressure area. However, only two models

(IMD-GFS, ECMWF) models are indicating its further intensification into a depression. Also, there is a large variation in area and timing of formation. Considering the consensus, there is likelihood of formation of low pressure area over the southeast Bay of Bengal around 20th November and depression over the same region around 23rd November.

(a) Arabian Sea

Most of the models are indicating no significant system over the Arabian Sea during next 7 days.

Inference:

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

- **a.** the existing low pressure area over southwest Bay of Bengal off Sri Lanka coast is likely to move nearly west-northwestwards during the next 24 hours, less marked thereafter.
- **b.** another upper air cyclonic circulation is likely to emerge over the South Andaman Sea & adjoining southeast BoB around 19th November. Under its influence, a low-pressure area is likely to form over the southeast Bay of Bengal around 21st November and there is also low probability of it's further intensification into a depression over the same region around 23rd November.

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

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

<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

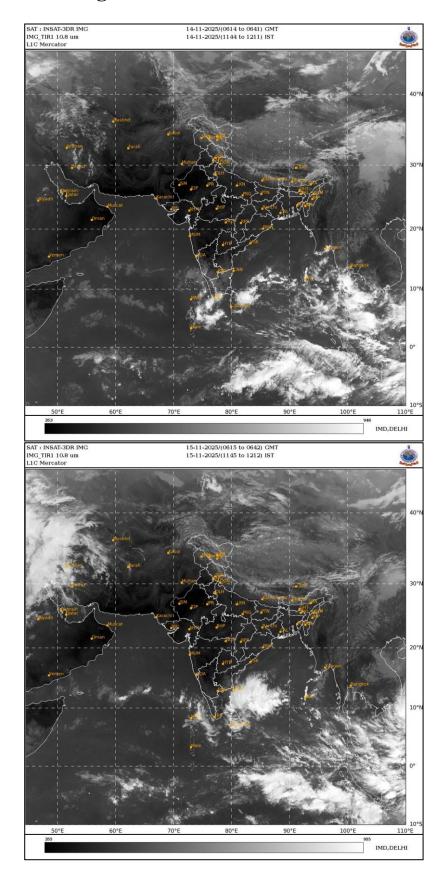
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Probability is indicated as NIL for 0%, LOW for 1-33%, MOD for 34-67% and High for 68-100%.

Every 24 hrs forecast ends at the 0300 UTC of date.

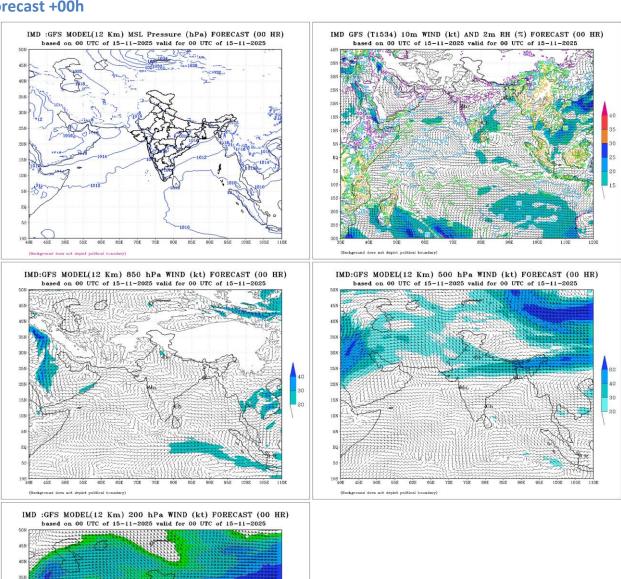
Intense Observation Period (IOP): Sri Lanka, Tamil Nadu for 15th; Sri Lanka, Tamil Nadu & south Andhra Pradesh for 16th November.

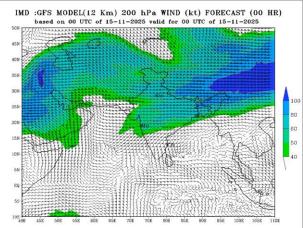
INSAT 3DS imageries at 0600 UTC of $14^{th}\ \&\ 15^{th}$ November

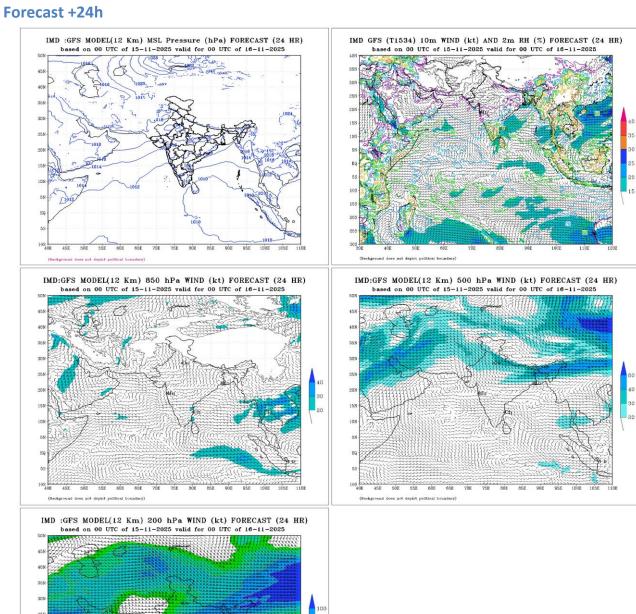


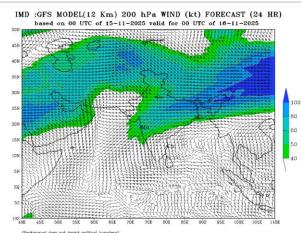
Annexure

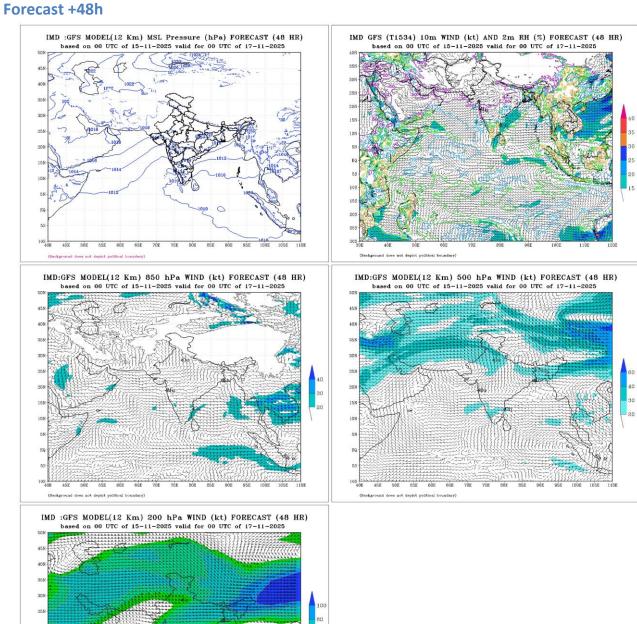
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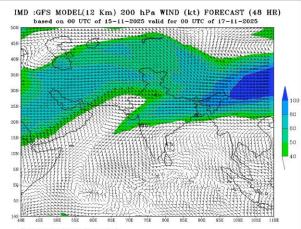




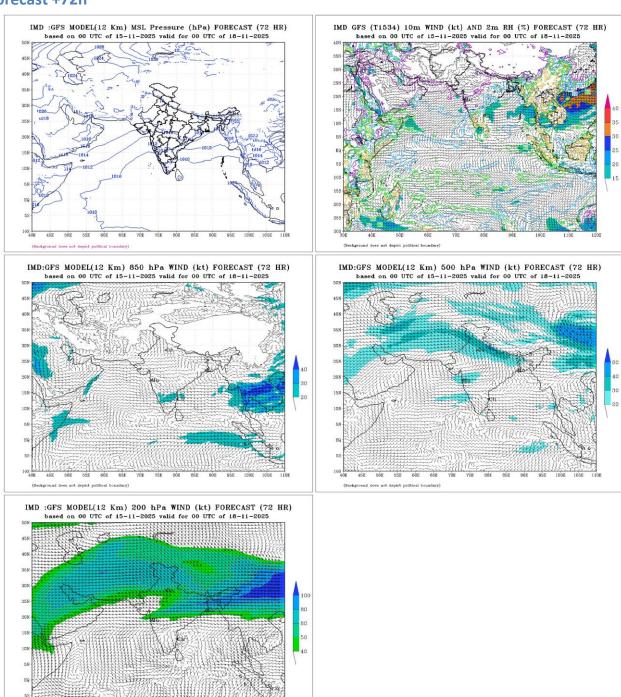


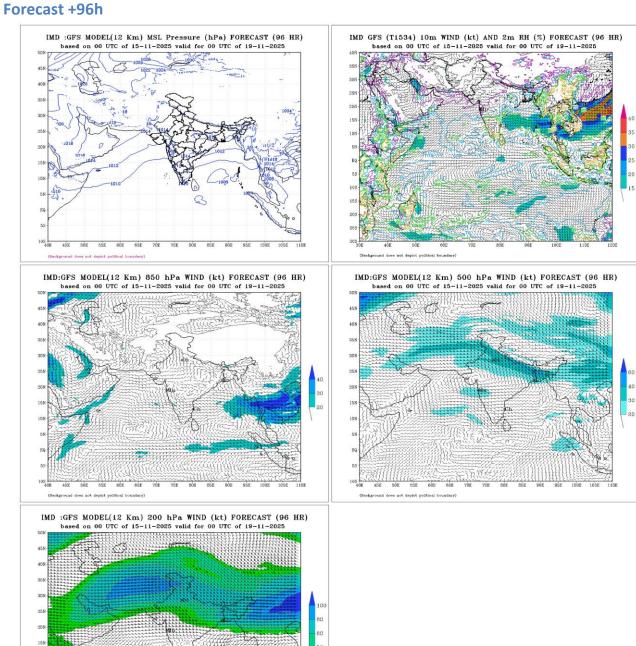




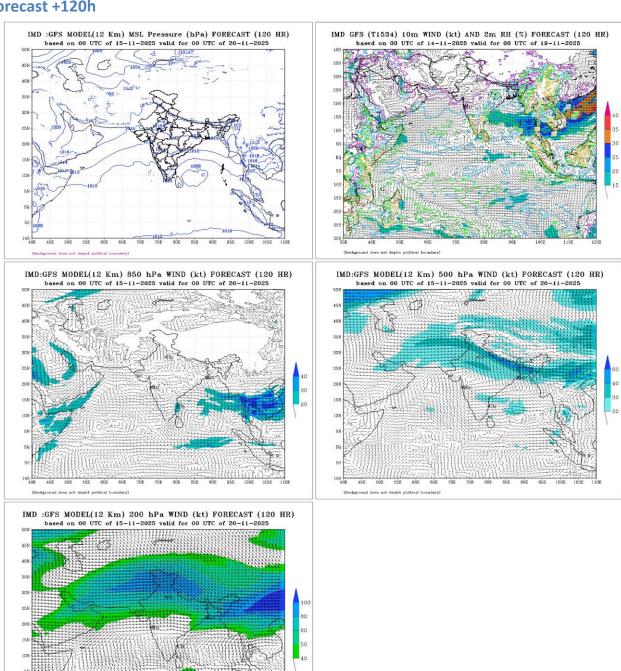


Forecast +72h

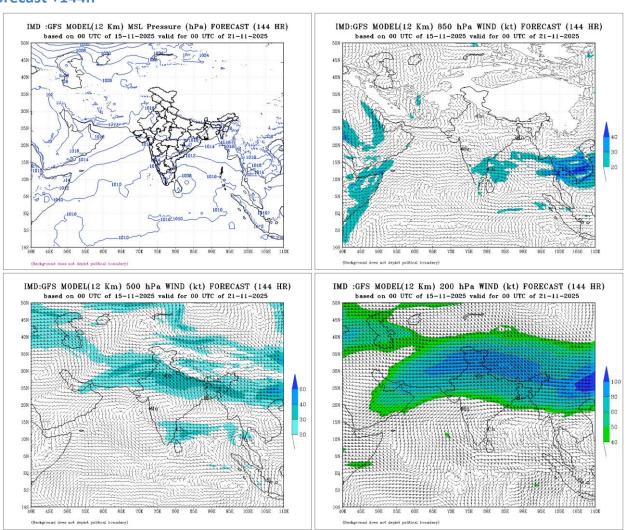




Forecast +120h



Forecast +144h



Forecast +168h

