

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

# Tropical Cyclone Forecast Programme Report Dated 14<sup>th</sup> November 2025

Time of Issue: 1430 UTC

# Synoptic features (based on 1200 UTC analysis):

- ❖ The **upper air cyclonic circulation** over southwest Bay of Bengal off south Sri Lanka coast persists over the same region at 1200 UTC of today.
- ❖ The **upper air cyclonic circulation** over Comorin Area between 3.1 & 4.5 km above mean sea level has merged with the above cyclonic circulation over south Sri Lanka and adjoining southwest Bay of Bengal.

# **Environmental Features based on 0900 UTC:**

Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)				
Sea Surface Temperature (SST) °C	Around 28 - 30°C over entire BoB.	Around 27 - 29°C over entire Arabian Sea.				
Tropical Cyclone Heat Potential (TCHP) kJ/cm <sup>2</sup>	<ul> <li>100-125 over south BoB.</li> <li>120-130 over eastcentral, adjoining northeast BoB and over Andaman Sea.</li> </ul>	120-130 over southeast Arabia Sea.				
Cyclonic Relative - vorticity (X10 <sup>-6</sup> s <sup>-1</sup> )	> 20-40 over some parts southeast Arabian Sea adjoining southwest Arab Sea.					
Low-Level convergence (X10-6 s-1)	5 over some parts of southwest and adjoining southeast Bay of Bengal.	<ul><li>5-15 over south Sri Lanka.</li><li>5 over Comorin Area.</li></ul>				
Upper-Level divergence (X10-6 s-1)	05 – 10 over southwest Bay of Bengal and over east Sri 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 Sri Lanka, Tamil Nadu coast and adjoining sea area.	Decreasing over north, eastcentral and southwest Arabian sea.				

Upper tropospheric Ridge	Ridge is running along 14°N at 92°E.	A ridge is running along 15°N at 68°E.
GPP	Not available	Not available

Regional dynamical features are similar to yesterday, and these supports the cyclonic circulation over southwest Bay of Bengal to persist over the region.

### M.J.O. Index:

Madden Julian Oscillation (MJO) index is presently in phase 6 with an amplitude close to 1.5 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 20<sup>th</sup> 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 18<sup>th</sup> to 20<sup>th</sup> November. The Equatorial Rossby Wave (ERW) is likely to be moving westwards across peninsular India and then central AS till 17<sup>th</sup>. During 18<sup>th</sup> to 20<sup>th</sup>, 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 17<sup>th</sup> 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 intense to very intense convection over south Bay of Bengal and Andaman Sea. Scattered low and medium clouds with embedded moderate to intense convection lay over Central Bay of Bengal.

# Over the Arabian Sea:

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

# 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 15.0°S and longitude 60.0°E to 120.0°E.

# NWP Guidance for FDP Cyclone:

MODEL GUIDANCE	Bay of Bengal (BoB)	Arabian Sea (AS)			
IMD-GFS	Existing cyclonic circulation over southwest BoB to persist and moving nearly westwards till 16/00 UTC and less marked thereafter. A fresh upper air cyclonic circulation is likely to emerge into South Andaman Sea on 19/00 UTC. To intensify into an LPA over Southeast BoB 20/00 UTC. To move nearly westwards and intensify into a depression over southeast BoB on 21/00 UTC. To move in same direction and reach South Sri Lanka coast by 23/00 UTC as a depression.	No significant system is indicated during next 7 days.			
IMD-GEFS	Not available	Not available			
IMD-WRF	Not available	Not available			
BFS	Existing cyclonic circulation over southwest BoB to persist and moving nearly westwards till 16/00 UTC and less marked thereafter. A fresh upper air cyclonic circulation is likely to emerge into South Andaman Sea on 18/00 UTC. To intensify into an LPA over further to depression over South Andaman Sea on the same day. To move nearly westnorthwestwards and intensify into a deep depression over southeast BoB on 20/00 UTC. To move in same direction and reach north Sri Lanka coast by 22/00 UTC, and react south Tamil Nadu coast on 23/00 UTC as CS or more intensity. It lay over interior Tamil Nadu on 24/00 UTC as a deep depression.	indicated during next 7 days.			
NCMRWF- NCUM(G)	Existing cyclonic circulation over southwest BoB to persists till 18/00 UTC and less marked thereafter.	Upper air cyclonic circulation over southeast Arabian Sea close to Kerala coast on 20/00 UTC, having nearly westward movement till 24/00 UTC.			
NCMRWF- NCUM(R)	An upper air cyclonic circulation over southwest BoB as on today, having nearly westward movement towards south Sri Lanka coast till 15/00 UTC, less marked thereafter.	No significant system is indicated during next 3 days.			
NEPS	An LPA over southwest BoB on 14/00 UTC, having nearly west-northwestward movement towards Sri Lanka coast till 17/00 UTC, less marked thereafter.  A fresh LPA over southeast & adjoining southwest BoB on 20/00 UTC, having west-northwestwards movement till 24/00 UTC without further intensification.	No significant system is indicated during next 3 days.			

ECMWF	Existing cyclonic circulation over southwest and adjoining southeast BoB to persist till 16/00 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 24/00 UTC over southwest BoB. Moving nearly west-northwestward and intensify into depression on 24/12 UTC over the same region. Moving in the same direction as depression till 27/00 UTC.	No significant system is indicated during next 7 days.
NCEP-GFS	An upper air cyclonic circulation over southwest BoB on today UTC, having nearly westward movement towards south Sri Lanka coast till 15/00 UTC, less marked thereafter. Emergence of an upper air cyclonic circulation over South Andaman Sea & adjoining southeast BoB around 18/06 UTC. To move northwestwards and become LPA on 19/00 UTC over southeast BoB. To move then nearly west-northwestwards slowly and intensify into depression over southwest & adjoining westcentral BoB on 26/00 UTC. It will move in same direction towards north Tamil Nadu - south Andhra Pradesh coast while intensify slightly.	No significant system is indicated during next 7 days.
EC-AIFS	Existing cyclonic circulation over southwest and adjoining southeast BoB to persist till 16/00 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 cyclonic circulation over southwest BoB as of today, moving west-northwestwards during next 2 days. Further, the models are also indicating the emergence of a fresh cyclonic circulation into South Andaman Sea around 19th November. There is a good consensus among various models with respect to the formation of low pressure area and its further intensification into a depression. However, 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 upper air cyclonic circulation over southwest Bay of Bengal is likely to move nearly westwards across the southwest Bay of Bengal towards south Sri Lanka coast

during the next 48 hours. Further intensification of this system is ruled out.

**b.** another upper air cyclonic circulation is likely to emerge over the South Andaman Sea around 19th November. Under its influence, a low-pressure area is likely to form over the southeast Bay of Bengal around 21<sup>st</sup> November and there is also low probability of it's further intensification into a depression over the same region around 22nd November.

# <u>Probability of cyclogenesis (formation of depression and above intensity systems)</u> <u>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	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

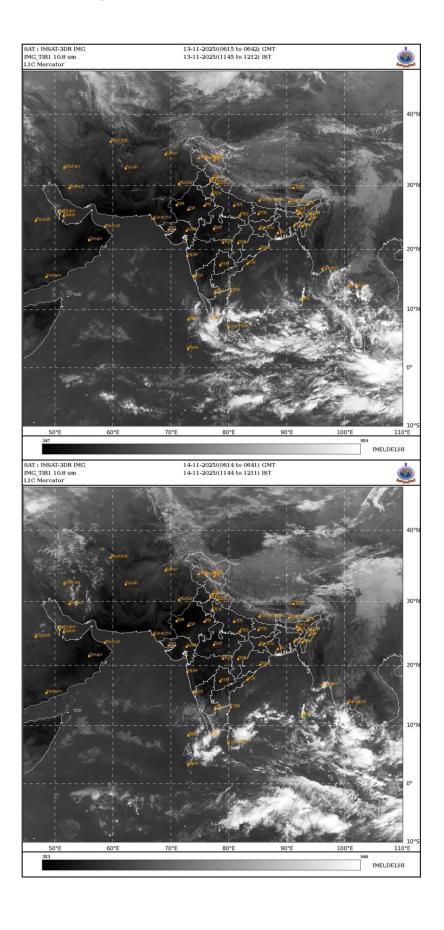
<sup>&</sup>quot;- "indicates genesis has already occurred.

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.

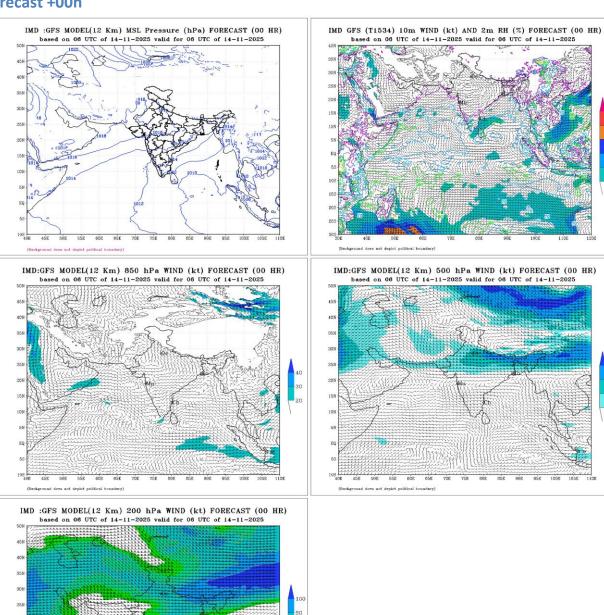
Intense Observation Period (IOP): NIL.

# INSAT 3DS imageries at 0600 UTC of 13<sup>th</sup> & 14<sup>th</sup> November



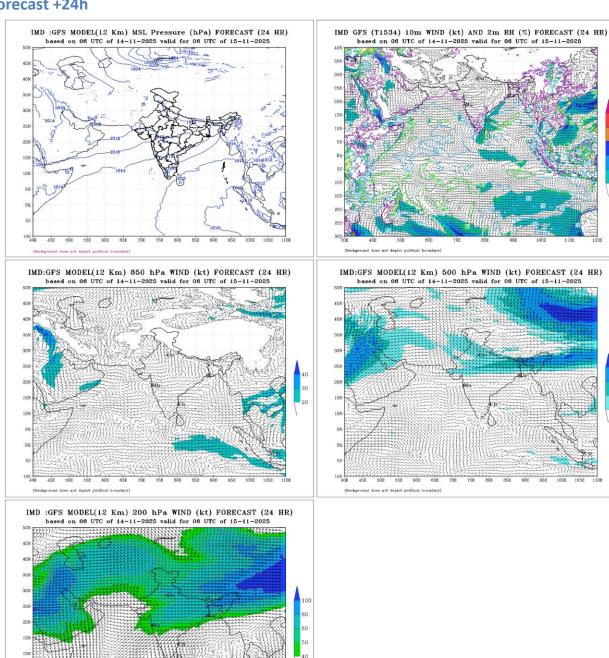
# **Annexure**

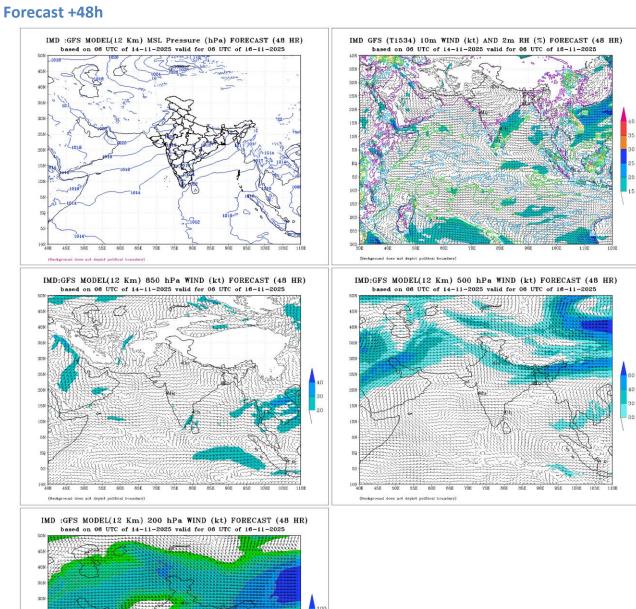
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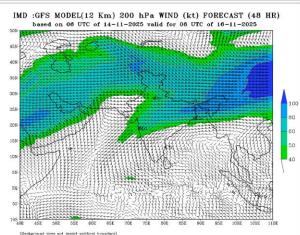


# Forecast +24h

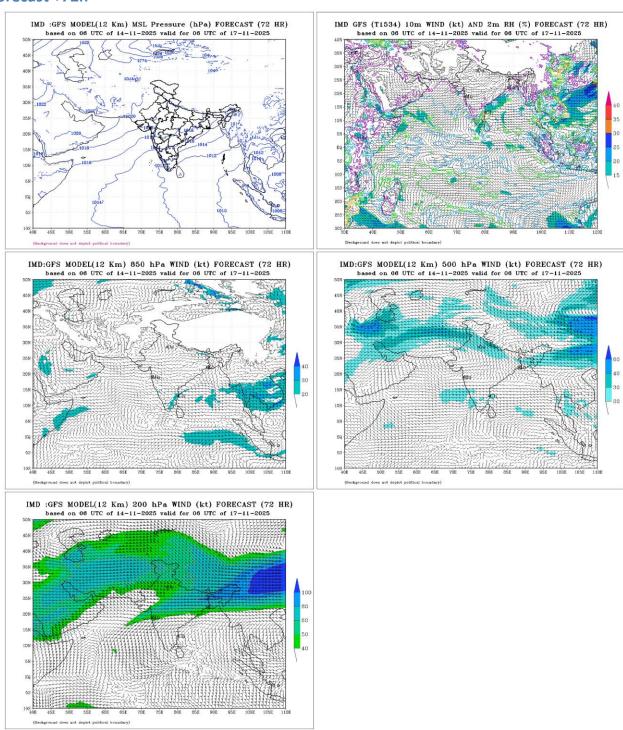
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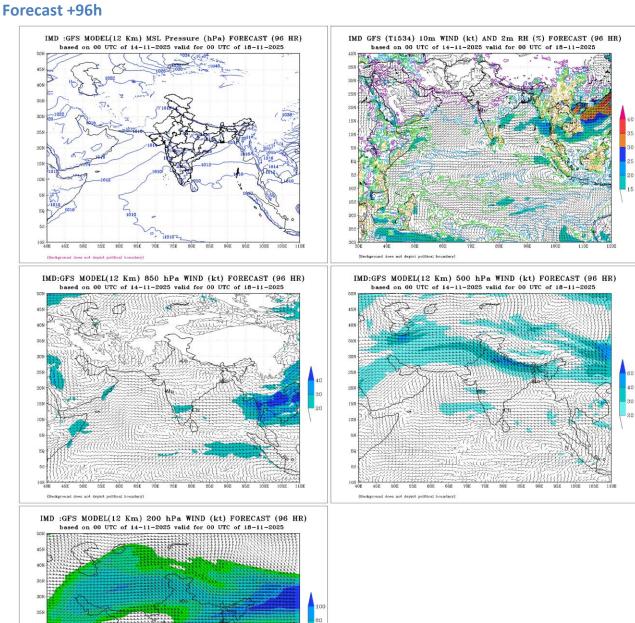




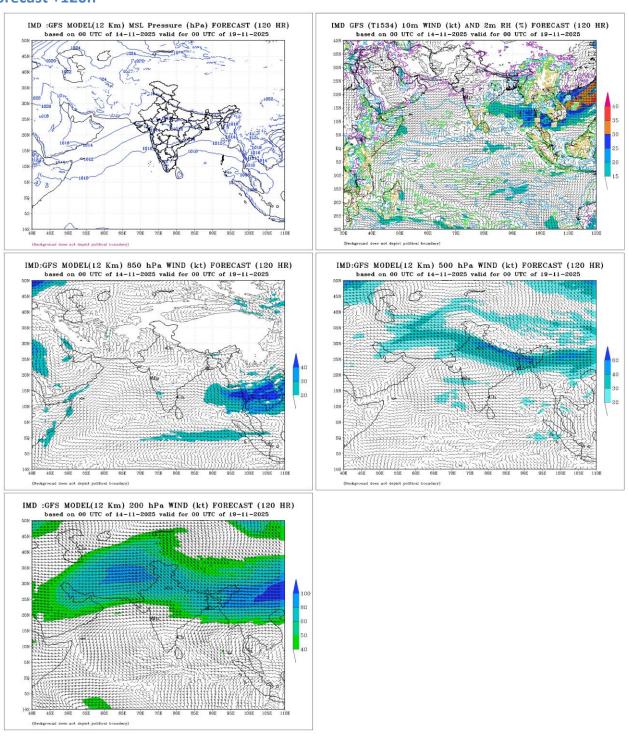


# Forecast +72h

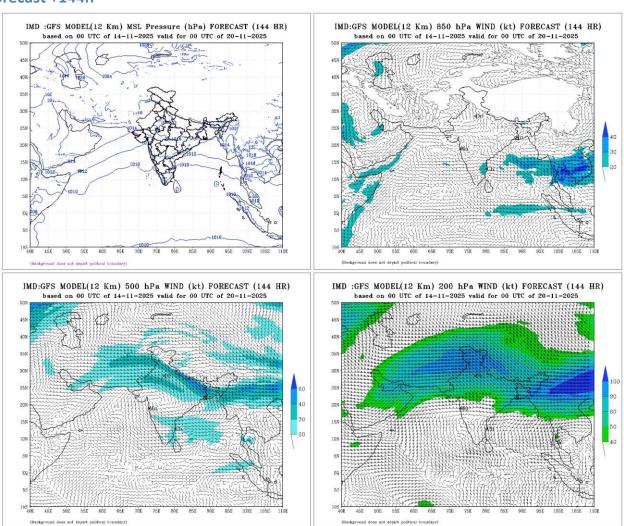




# Forecast +120h



# Forecast +144h



# Forecast +168h

