

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

Tropical Cyclone Forecast Programme Report Dated 07th December 2025

Time of Issue: 1030 UTC

Synoptic features (based on 0900 UTC analysis):

The upper air cyclonic circulation over south Kerala coast & neighborhood became less marked at 0000 UTC of today, the 07th December 2025.

Environmental Features based on 0600 UTC:

Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)			
Sea Surface Temperature (SST) °C	 28°C over south adjoining central BoB. 25°C over north BoB. 	 ➢ Around 28-29°C over southeast adjoining eastcentral Arabian Sea, Maldives and Lakshadweep area. ➢ Around 26°C-27°C over rest of Arabian Sea. 			
Tropical Cyclone Heat Potential (TCHP) kJ/cm²	 125-150 over eastern parts of southeast BoB, Andaman Sea, About 100-120 over some parts of south, eastcentral and northeast BoB. About 50 over northwest BoB, Comorin area, Gulf of Mannar. 	➤ 120-130 over southeast Arabian Sea, Lakshadweep area and Maldives area.			
Cyclonic Relative - vorticity (X10 ⁻⁶ s ⁻¹)	25-35 over south Andaman Sea & southeast Bay of Bengal and adjoining Indonesia	➤ 10-20 over part of westcentral AS			
Low-Level convergence (X10-6 s-1)	➤ 5 over south Andaman Sea	> 5 over southwest AS			
Upper-Level divergence (X10-6 s-1)	➤ 5 – 10 over entire BoB	10 over northwest AS, Comorin area and adjoining Maldives.			
Vertical Wind Shear (VWS knots) Low: 05-10 knots Moderate: 10- 20 knots High: >20 knots	 Low- moderate & anti-cyclonic over the south BoB and Andaman Sea. High over rest of BoB. 	 Low- moderate over south AS High over rest of AS 			
Wind Shear Tendency (knots)	Decreasing over BoB	Decreasing over entire AS except westcentral AS			

Upper	➤ Ridge is running along 11°N at 98°E	-
tropospheric		
Ridge		

M.J.O. Index:

The guidance from various models indicates that the Madden Julian Oscillation (MJO) index is presently in phase 8 with amplitude more than 1 and is likely to continue in same phase during the next 7 days.

Equatorial waves guidance:

The guidance from NCICS model indicates weak easterly wind anomaly (3-5 mps) is likely to prevail over south and central parts of Bay of Bengal (BoB) during next 3 days. During the same period weak westerly is indicated over south & central Arabian Sea (AS) with Equatorial Rossby Wave (ERW) over southeast AS & adjoining areas of Comorin and southwest BoB alongwith Kelvin wave (KW). During 9th-14th December, the easterly wind anomalies are likely to weaken (1-3 mps) gradually over the south and adjoining central BoB. Thereafter, the easterly wind anomaly is likely to strengthen againfrom 15th December. During 15th -17th December, enhanced westerly wind anomaly (7-9 mps) over south BoB & adjoining Equatorial Indian Ocean (EIO) alongwith prevalence of ERW, KW, MJO and LW. These features indicate a favourable environment for development of a cyclonic disturbance over the south BoB during 15th-17th December.

Satellite based cloud observations

Over Bay of Bengal & Andaman Sea:

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection lay over central & south Bay of Bengal and south Andaman Sea. Scattered low and medium clouds with embedded isolated weak to moderate convection lay over north Andaman Sea.

Over the Arabian Sea:

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection lay over eastcentral & south Arabian Sea, Lakshadweep Islands, Maldives and Comorin area. Scattered low and medium clouds with embedded isolated weak to moderate convection lay over northwest & westcentral Arabian Sea.

Outside India:

As per INSAT 3DS at 0600 UTC, scattered low & medium clouds with embedded moderate to intense convection over Sri Lanka, Palk Strait, Gulf of Mannar, Maldives area, Pakistan, Nepal, Tibet, China, Yellow Sea, east China Sea, 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 15.0°S longitude 40.0°E to 120.0°E and between latitude 15.0°S to 35.0°S longitude 40.0°E to 80.0°E.

NWP Guidance for FDP Cyclone:

MODEL GUIDANCE	Bay of Bengal (BoB)	Arabian Sea (AS)
IMD-GFS	➤ The trough in easterly wave is running along 14°N at 88°E on 7 th Dec, an embedded upper air cyclonic circulation over southeast BoB & adjoining Equatorial Indian Ocean on 7 th Dec. The wave is	next seven days.

IMD-GEFS IMD-WRF BFS NCMRWF- NCUM(G)	reaching along 12°N at 80°E on 8th December. Development of a low pressure area on 15th December over southeast BoB with westwards movement till 17th December. Another easterly wave is likely to be active with development of a trough along 14°N at 91°E on 15th December. Not available Not available Not available Not available The trough in easterly wave is running along 10°N at 88°E on 7th Dec, an embedded upper air cyclonic circulation over southeast BoB & adjoining Equatorial Indian Ocean on 7th Dec. The wave is reaching along 10°N at 79°E on 9th December and along 12°N at 70°E on 10th December. Another easterly wave is likely to be active with development of a trough along 14°N at 92°E with an embedded cyclonic circulation on 13th Dec, reaching along 12°N at 79°E on 16th December. Development of a low pressure area on 14th December over southeast BoB with westwards movement till 16th December. Easterly wave is likely to be active with development of a trough along 12°N at 91°E on embedded upper air cyclonic circulation over southeast BoB & adjoining EIO on 7th December. The wave is reaching along 11°N at 79°E on 9th December. Another easterly wave is likely to be active with development of a trough along 14°N at 92°E with an embedded cyclonic circulation on 14th December. The wave is reaching along 11°N at 79°E on 9th December. Another easterly wave is likely to be active with development of a trough along 14°N at 92°E with an embedded cyclonic circulation on 14th Dec. becoming less marked thereafter.				
NCMRWF- NCUM(R)	The easterly wave is likely to be active with development of a trough along 14°N at 92°E on	No significant system during next three days.			
NCOW(R)	7 th December raeching along 12°N at 84°E on 10 th December.	next tillee days.			
NEPS	The easterly wave is likely to be active with development of a trough along 10°N at 86°E on 7th December, reaching along 11°N at 82°E on 9th December.				
ECMWF	➤ The easterly wave is likely to be active with development of a trough along 11°N at 91°E on 7 th December, reaching along 10°N at 84°E on 9 th December.	No significant system is indicated during next 7 days.			

EC-AIFS	No significant system	No significant system is indicated during next 7 days.
NCEP-GFS	active with development of a trough along 12°N at 93°E on 14 th December, reaching along 10°N at 83°E on 16 th December. Development of a low pressure area on 14 th December over southeast BoB with westwards movement further intensification into depression around 15 th December. The trough in easterly wave is running along 14°N at 88°E on 7 th Dec, an embedded upper air cyclonic circulation over southeast BoB & adjoining Equatorial Indian Ocean on 7 th Dec. The wave is reaching along 12°N at 80°E on 8 th December. Development of a low pressure area on 15 th December over southeast BoB with westwards movement till 17 th December. Another easterly wave is likely to be active with development of a trough along 14°N at 91°E on 13 th Dec, reaching along 15°N at 84°E on 15 th December.	Model is not indicating any significant system.
	Another easterly wave is likely to be	

Summary of models guidance:

Bay of Bengal:

Most of the models indicate the signature of easterly waves over Southeast BoB & adjoining Andaman Sea around 7th December which is likely to propagate westwards and reach over southwest BoB off North Sri Lanka and adjoining Tamil Nadu coasts by around 9th/10th December.

Models like IMD-GFS, NCEP-GFS, NCUM (G) are also indicating the formation of an upper air cyclonic circulation over the southeast BoB around 7th December till 9th December.

Models are also indicating another active easterly wave over southeast BoB on 14th December which is indicated to impact south peninsular India and Sri Lanka around 17th December.

Models are also indicating the formation of a low pressure area over the southeast BoB around 14th December with westwards movement towards Sri Lanka till 16th December.

Arabian Sea:

No significant system is indicated

Inference:

Considering various large-scale environmental features, climatology and model guidance, it is inferred that there is no probability of cyclogenesis during next 7 days. However, there is likelihood of following:

(a) An active easterly wave is very likely to pass through southeast Bay of Bengal around 7th/8th December, reaching Tamil Nadu coast around 9th/10th December.

- (b) There is also a low probability of an upper air cyclonic circulation over southeast BoB during on 7th December.
- (c) Models are also indicating another active easterly wave over south BoB region from 14th December. There is also likelihood of formation of a low pressure area over southeast boB around 15th December.

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

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

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

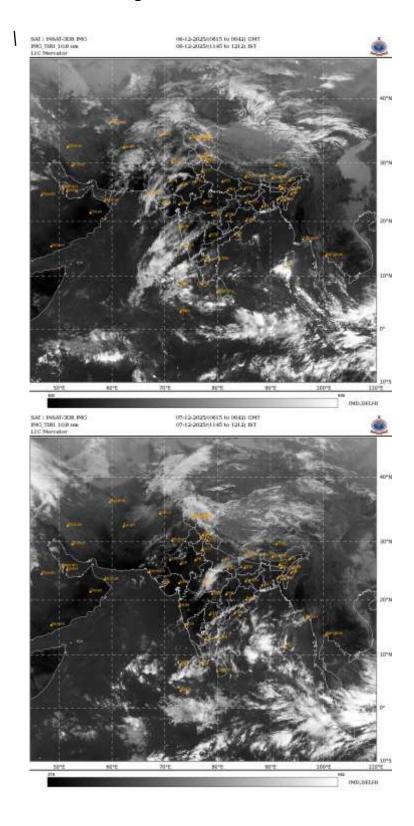
24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

[&]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.

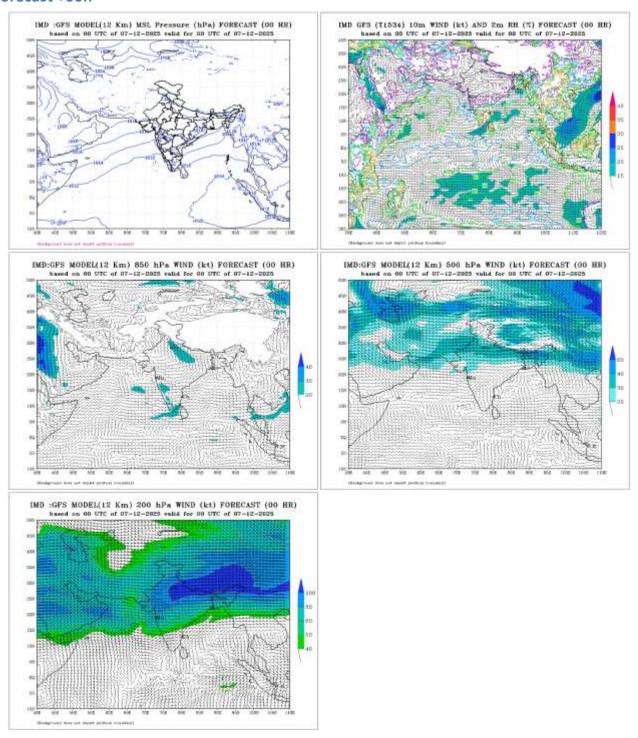
Intense Observation Period (IOP): Nil

INSAT 3DS imageries at 0600 UTC of 6th & 7th December

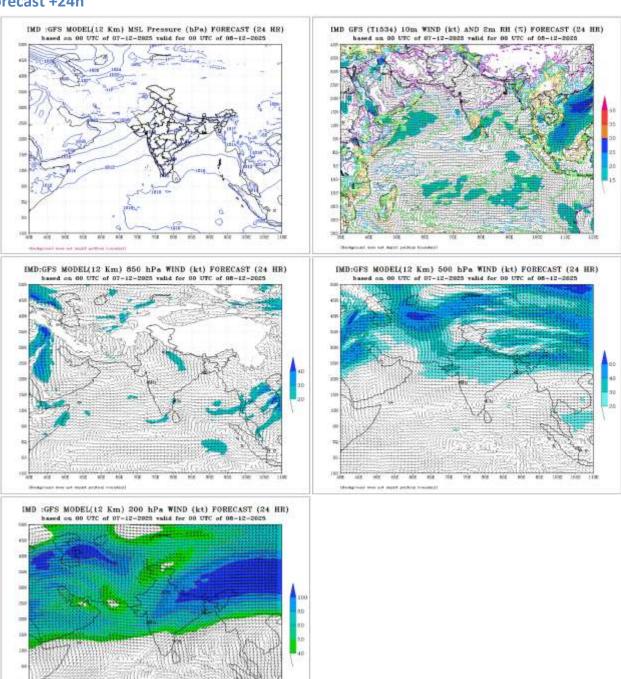


Annexure

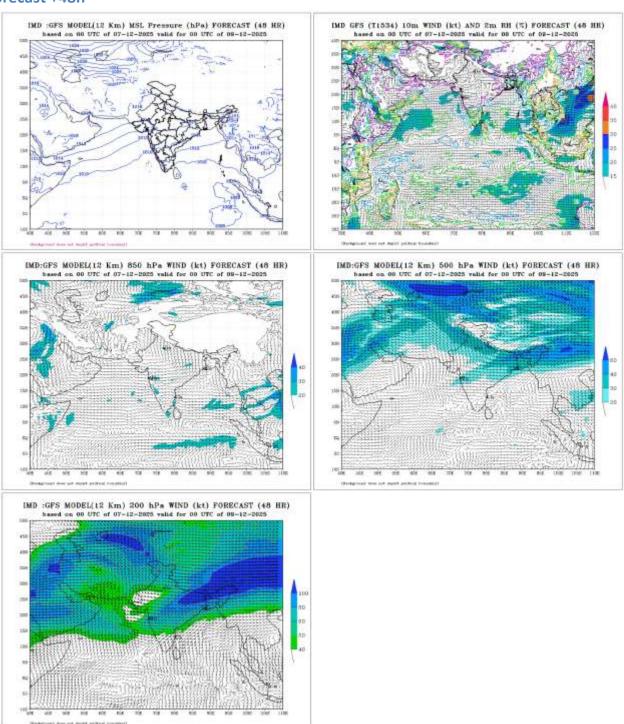
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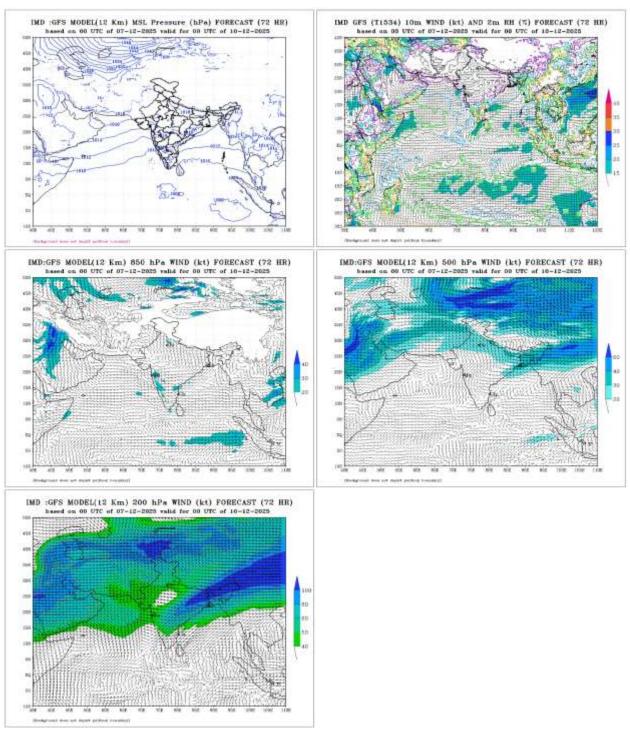
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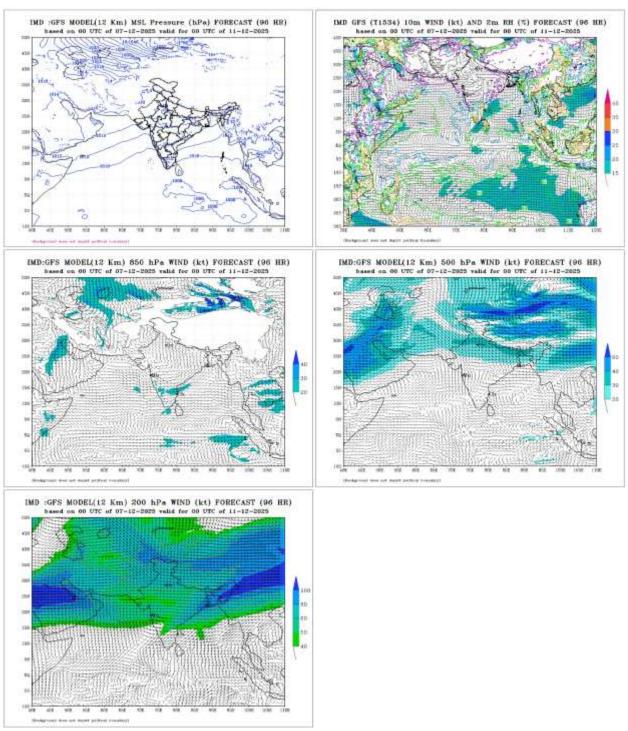
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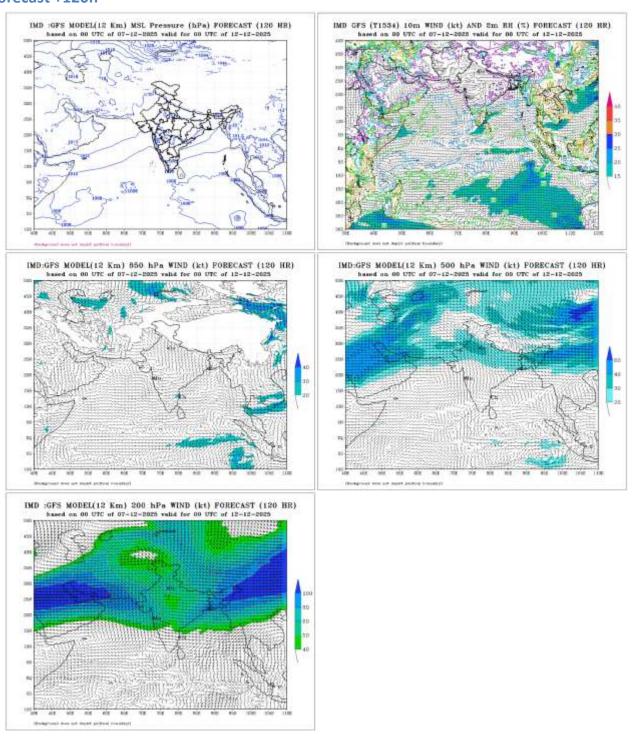
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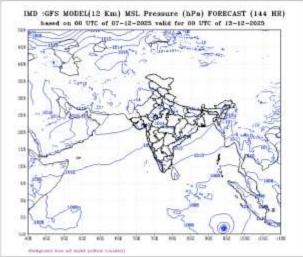
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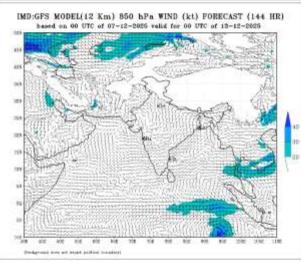


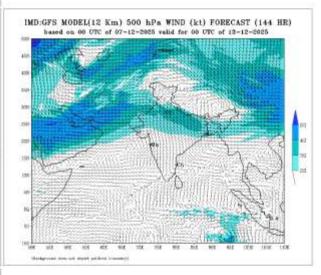
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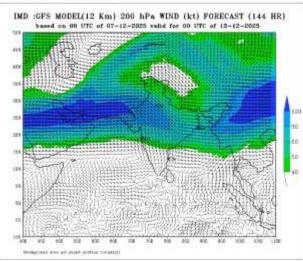


Forecast +144h









Forecast +168h

