

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

Tropical Cyclone Forecast Programme Report Dated 22nd November 2025

Time of Issue: 1300 UTC

Synoptic features (based on 0900 UTC analysis):

Under the influence of the upper-air cyclonic circulation over the central parts of Strait of Malacca, a low pressure area formed over Strait of Malacca and adjoining south Andaman Sea at 0300 UTC of today, the 22nd November, 2025. It is very likely to move west-northwestwards and intensify into depression over southeast Bay of Bengal and adjoining south Andaman Sea around 24th November 2025. Continuing to move west-northwestwards, it is very likely to intensify further over southwest Bay of Bengal during subsequent 48 hours.

Upper air cyclonic circulation over southeast Arabian Sea persisted over the southeast Arabian Sea persisted over the same region and extended upto 3.1 km above mean sea level at 1200 UTC of today, the 22nd November.

Environmental Features based on 0600 UTC:

Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)				
Sea Surface Temperature (SST) °C	Around 27-28°C over eastern coast and adjoining sea area. Around 29 - 30°C over rest of BoB and Andaman sea.	Around 28-29°C over southeast Arabian Sea and Lakshadweep area. Around 27°Cover rest of Arabian Sea.				
Tropical Cyclone Heat Potential (TCHP) kJ/cm ²	150-175 over Andaman Sea and southeast and eastcentral BoB. 100-120 over rest of BoB.	120-130 over southeast Arabian Sea.				
Cyclonic Relative - vorticity (X10 ⁻⁶ s ⁻¹)	40-50 over south Andaman Sea and adjoining southeast BoB extending upto 500 hPa level. 25-35 over southwest BoB along Sri Lanka coast.	30-40 over southeast adjoining southwest Arabian Sea, Lakshadweep islands and Maldives area extending upto 500 hPa level.				
Low-Level convergence (X10-6 s-1)	20-30 over southeast Bay of Bengal along Strait of Malacca and 5 over southwest Bay of Bengal.	10-15 over southeast adjoining southwest Arabian Sea, Lakshadweep islands and Maldives area				
Upper-Level divergence (X10-6 s-1)	10-20 over southeast Bay of Bengal along Strait of Malacca.	30-40 over southeast adjoining southwest Arabian Sea, Lakshadweep islands and Maldives area.				
Vertical Wind Shear (VWS knots) Low: 05-10 knots Moderate: 10-20 knots	Deep layer vertical wind shear is Low-Moderate over south Andaman Sea & adjoining southeast Bay of Bengal and High over rest of BoB.	Deep layer vertical wind shear is Low - Moderate over southeast , eastcentral Arabian sea and adjoining many parts of southwest & westcentral Arabian sea,				

High: >20 knots	Mid layer vertical wind shear is Low-Moderate over westcentral, south BoB and Andaman Sea. High over rest of BoB. Mid layer vertical wind shear area. High over rest of Area Sea. Mid layer vertical wind shear Sea. Mid layer vertical wind shear Sea. Moderate-High over north Area Sea & adjoining parts eastcentral Arabian Sea. over rest of Arabian Sea an anticyclonic.			
Wind Shear Tendency (knots)	Decreasing over southeast Bay of Bengal along Strait of Malacca.	Decreasing over southeast Arabian sea, Comorin area and adjoining Equatorial Indian Ocean.		
Upper tropospheric Ridge	 Ridge is running along 14°N at 95°E. Ridge is running along 14°N at 85°E. 	A ridge is running along 14°N at 65°E.		
GPP	GPP is greater than 30 over the Malacca Strait, and about 20 over parts of the southern Bay of Bengal on 22nd and 23rd November. It increases to around 30 over many parts of the southern Bay of Bengal on 25th November. The region of high GPP gradually shifts northnorthwestwards from 26th to 29th November, lying over the southeastern Bay of Bengal on 26th and over the westcentral BoB on 29th November.	No significant GPP during next seven days		

M.J.O. Index:

The guidance from various models indicates that the Madden Julian Oscillation (MJO) index is presently in phase 6 with amplitude more than 1. Most of the models suggest that the MJO index is likely to remain in phase 6 with a slow eastward propagation and increasing amplitude during the next six days.

Equatorial waves guidance:

The guidance from NCICS model indicates westerly wind anomaly (5-7 mps) alongwith prevalence of MJO, Equatorial Rossby wave (ERW), low frequency background wave (LW) over the southern parts of the North Indian Ocean (NIO) including south BoB and southeast Arabian Sea (AS) and easterly wind anomaly (3-5 mps) over central parts of BoB during 22nd - 24th November. These features indicate a favorable environment for cyclogenesis (development of depression) over southeast BoB around 24th November. During 25th-26th November, the model is indicating prevalence of westerly wind anomaly (5-7 mps) alongwith MJO, ERW, LW over south BoB and prevalence of easterly wind anomaly (1-3 mps) over northern parts of BoB. Thus, during 25th-26th November, the equatorial waves may support further intensification of system over the southwest & Westcentral BoB. Model is also indicating weakening of easterlies during 30th November to 2nd December over northern parts of BoB, which may lead to weakening of system as it recurves north-northeastwards and reaches central & adjoining North BoB.

Considering various thermo-dynamical features, low level relative vorticity at 850 hPa is about 90-100 × 10-6 s-1 over Malacca Strait and another positive vorticity zone (50-60×10-6 s-1) is seen over south Andaman Sea. Vertically, the positive vorticity zone over Malacca Strait is extending upto 500hPa. Upper-level divergence around 20×10-6 s⁻¹ lay over Malacca Strait and another zone of 20×10-6 s-1 over south Andaman Sea. Low-level convergence around 20×10-6 s⁻¹ lay over Malacca Strait and another zone of 15×10-6 s⁻¹ over south Andaman Sea. Mid-level vertical wind shear (VWS) of horizontal wind is low (5-10 kt) and cyclonic over entire south Bay & south Andaman Sea. Upper tropospheric ridge runs along 10°N over the BoB. The system is lying to the south of ridge. East-southeasterly winds prevailing to the south of ridge are steering the system nearly westwards.

Over the Bay of Bengal & Andaman Sea:

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

Over the Arabian Sea:

As per INSAT 3DS at 0600 UTC, scattered to broken low and medium clouds with embedded intense to very intense convection lay over Comorin area. Scattered low and medium clouds with embedded moderate to intense convection lay over south adjoining central Arabian Sea.

Outside India:

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection over Palk Strait, Gulf of Mannar, Maldives, China, Thailand, Cambodia, Laos, Vietnam, 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 05.0°S to 10.0°S longitude 55.0°E to 120.0°E.

NWP Guidance for FDP Cyclone:

MODEL	Bay of Bengal (BoB)	Arabian Sea (AS)		
GUIDANCE				
IMD-GFS	Low pressure area (LPA) over Malacca Strait & adjoining south Andaman Sea as on today. It will move west-northwestwards (WNW) and will intensify into depression on 25/00 UTC over south Andaman Sea & adjoining Malacca Strait. Moving in the same direction and becoming cyclonic storm (CS) on 26/00 UTC. Model is indicated to move in the same direction and becomes severe cyclonic storm (SCS) over southeast BoB on 27/00 UTC. Model is indicated to move then northwestwards (NW) towards south Odisha coast while intensifying further till 02 nd December/00 UTC.	Model is indicating the upper air cyclonic circulation over southeast Arabian sea to move nearly WNW till 25 th November without intensification.		
IMD-GEFS	Not available	Not available		
IMD-WRF	Not available	Not available		
BFS	Low pressure area (LPA) over Malacca Strait & adjoining south Andaman Sea on 23/00 UTC. It will move west-	Model is indicating the upper air cyclonic circulation over southeast Arabian sea to move nearly WNW		

	northwestwards (WNW) and will intensify into depression on 26/00 UTC over equirtorial Indian Ocean & adjoining south Andaman See, adjoining Malacca Strait.	
	Moving in the same direction and becoming cyclonic storm (CS) on 27/00 UTC. Model is indicated to move in the same direction and becomes severe cyclonic storm (SCS) over southeast BoB	
	on 28/00 UTC. Model is indicated to move then northwestwards (NW) towards south Odisha coast while intensifying further till 01 st December/00 UTC.	
NCMRWF- NCUM(G)	Low pressure area (LPA) over Malacca Strait & adjoining south Andaman Sea on	Model is indicating the upper air cyclonic circulation over southeast
	23/00 UTC. It will move west- northwestwards (WNW) and will intensify into depression on 27/00 UTC over southeast BoB, CS on 28/00 UTC over the same region, SCS on 29/00 UTC over	Arabian sea as of today to move nearly WNW till 24/00 UTC without intensification.
	the same region. Model is indicated to move then in NW towards Odisha coast while intensifying till 01 December/00 UTC, then it will recurve and move towards Bangladesh coast.	
NCUM(R)	An upper air cyclonic circulation over Malacca Strait as on today, to move slowly westwards till 25/00 UTC.	cyclonic circulation over southeast Arabian sea to move WNW till 24/00 UTC.
NEPS	LPA over Malacca Strait on 25/00 UTC, WML over the south Andaman Sea on 26/00 UTC and depression over the southeast Arabian Sea on 27/00 UTC. The system is indicated to move slowly WNW and intensify into a CS on 30/00 UTC over westcentral and adjoining southwest BoB. It then recurve northeastwards (NE) while weakening till 02 December/00 UTC.	•
ECMWF	LPA over Malacca Strait on 21/00 UTC. It is indicated to move WNW and intensify into a depression over south Andaman Sea & adjoining southeast Bay on 26/12 UTC. It is indicated to intensify further and move NW and become CS on 28/00 UTC over southeast BoB, SCS on 29/00 UTC over southeast BoB. Moving in the same direction towards south Odisha – north Andhra Pradesh coasts till 01 December/06 UTC. It then moves in NE towards Bangladesh coasts.	No significant system for the next 7 days.
NCEP-GFS	LPA over Malacca Strait on 21/00 UTC. It is indicated to move WNW and intensify into a depression over south Andaman Sea on 25/00 UTC, CS on 26/00 UTC	No significant system for the next 7 days.

over southeast Bay Andaman Sea. It is in further and move NW on 28/00 UTC ove Moving towards sout Andhra Pradesh December/06 UTC. It towards Bangladesh co	dicated to integrand become and become southeast and Odisha — coasts till then moves in pasts.	ensify SCS BoB. north 02 n NE	N		
EC-AIFS Model is indicating southwest BoB adjoini			•	•	s indicated
on 25/00 UTC. It is	•		during next 7 da	ays.	
along south Sri Lanka					
into a depression Thereafter, it is indica					
along Sri Lanka coast		-			
Tamil Nadu coast til	-				
UTC as DD. It will the coast while weakening		g the			

Summary:

(a) Bay of Bengal:

Most of the models are indicating an LPA over Malacca Strait as on today the 22nd November 2025. Models are also indicating its west-northwestward movement and intensification into a depression during 24th/25th November over south Andaman Sea & adjoining southeast Bay of Bengal. Models are also indicating initial west-northwestward movement till 27th November towards southwest Bay, followed by north-northwestwards movement till 30th November, as it is expected to be closer to the south of ridge and gradual northeastwards re-curvature thereafter towards northeast Bay, as it crosses the ridge. However, there is variation among various models with respect to point and time of recurvature. Models are also indicating slight weakening of the system before landfall as diagnosed in the previous paragraph.

(a) Arabian Sea

Most of the numerical models are indicating the upper air cyclonic circulation over southeast Arabian Sea to move west-northwestwards slowly during next 2 - 3 days.

Inference:

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

- ❖ Upper air cyclonic circulation over southeast Arabian Sea persisted over the southeast Arabian Sea persisted over the same region at 1200 UTC of today, the 22nd November.
- ❖ Under the influence of the upper-air cyclonic circulation over the central parts of Strait of Malacca, a low pressure area formed over Strait of Malacca and adjoining south Andaman Sea at 0830 hours IST of today, the 22nd November, 2025. It is very likely to move west-northwestwards and intensify into depression over southeast Bay of Bengal and adjoining south Andaman Sea around 24th November 2025. Continuing to move west-northwestwards, it is very likely to intensify further over southwest Bay of Bengal during subsequent 48 hours.

- (i) Confidence level in determination of location of low pressure area: High
- (ii) Confidence level in determination of intensity low pressure area: High
- (iii) Confidence level in forecast of intensification (formation of Depression): High
- (iv) Confidence level in forecast of location of Depression: Moderate

<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	LOW	MOD	HIGH	-	-

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

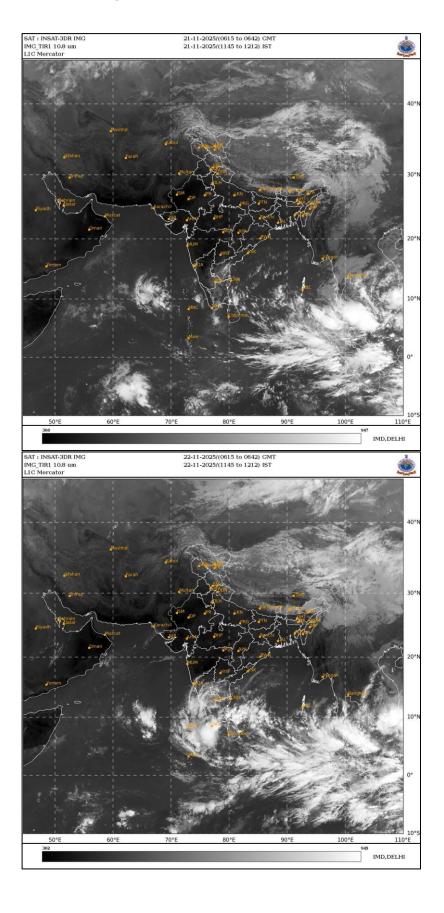
24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

[&]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.

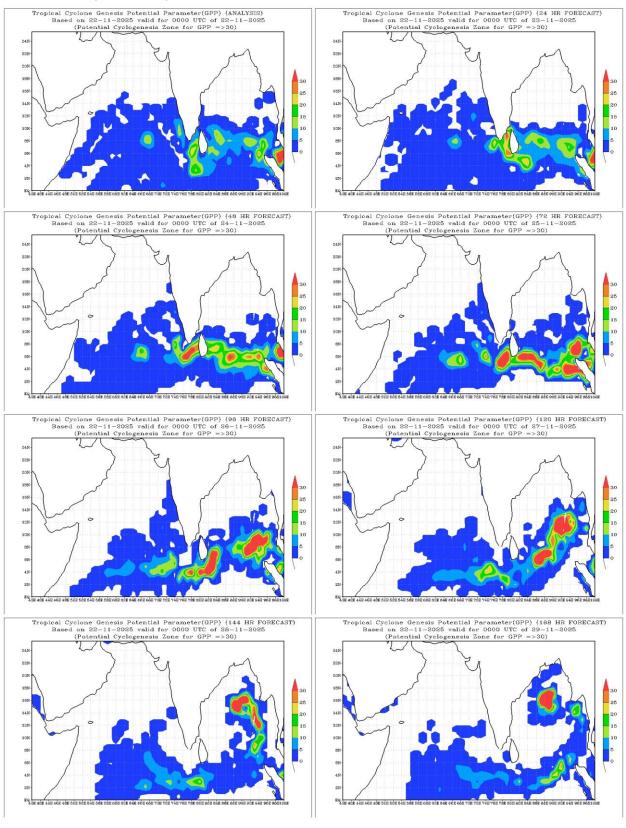
Intense Observation Period (IOP): Nil.

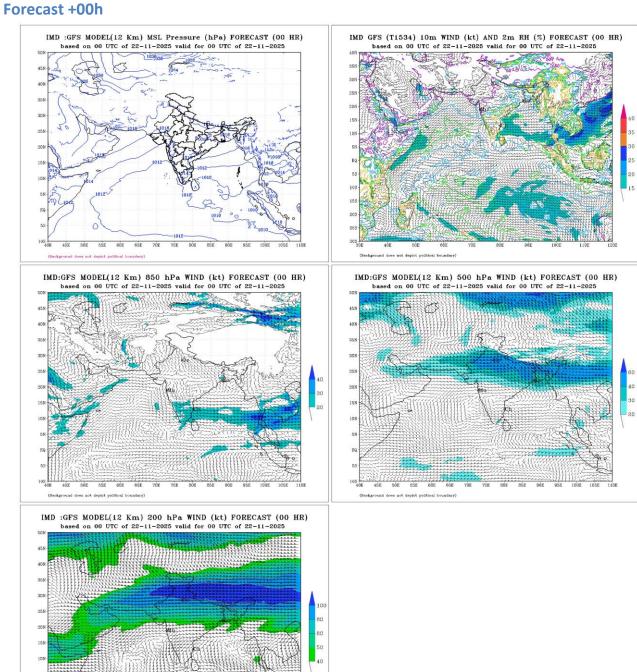
INSAT 3DS imageries at 0600 UTC of 21th & 22nd November



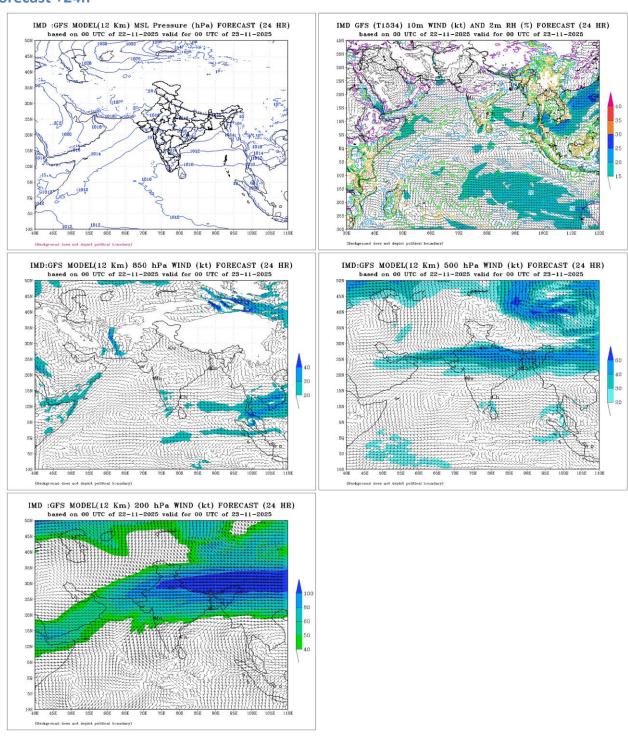
Annexure

GPP Forecast (00–168h)



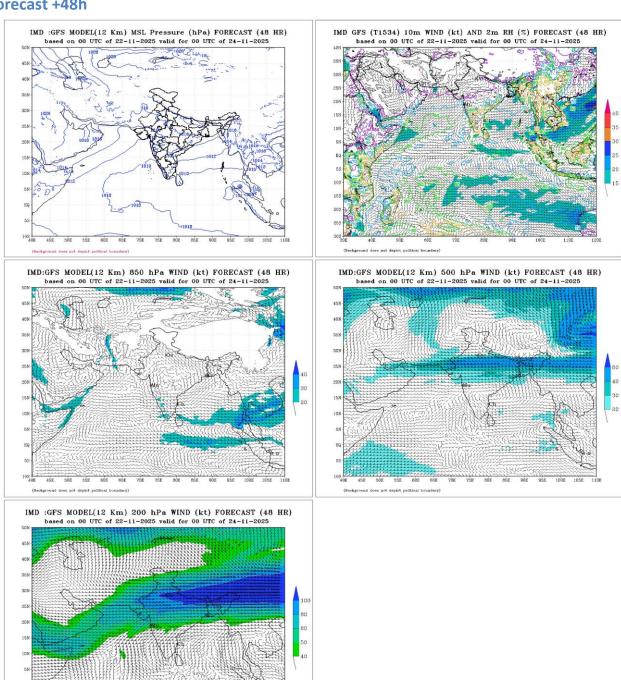


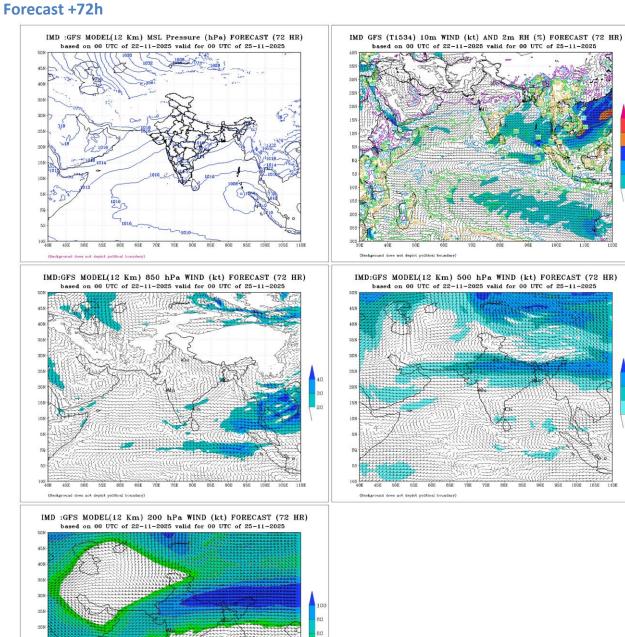
Forecast +24h



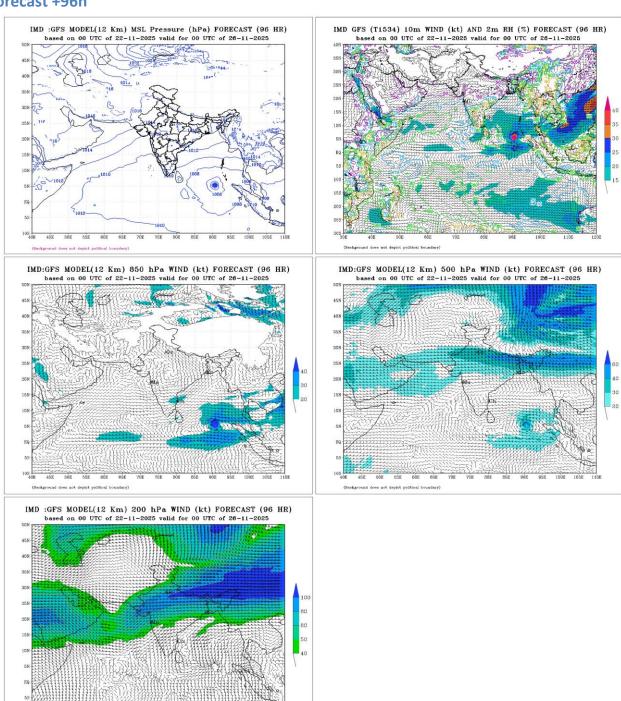
Forecast +48h

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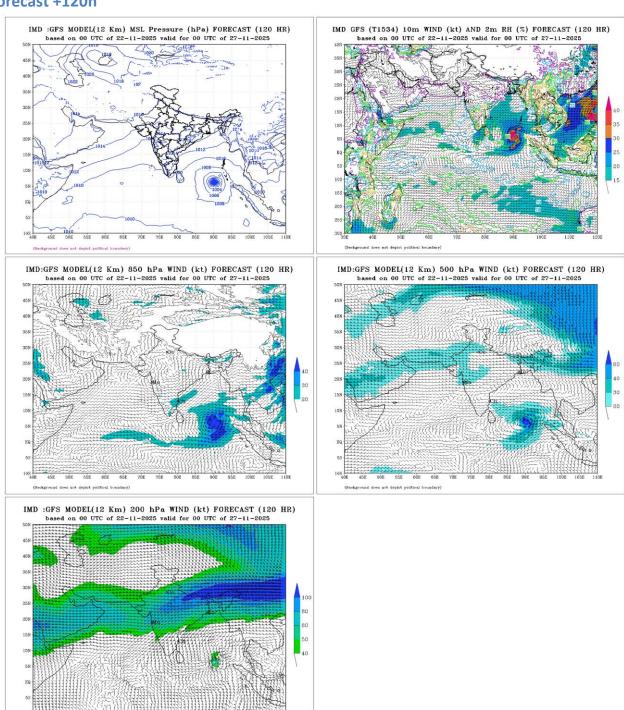




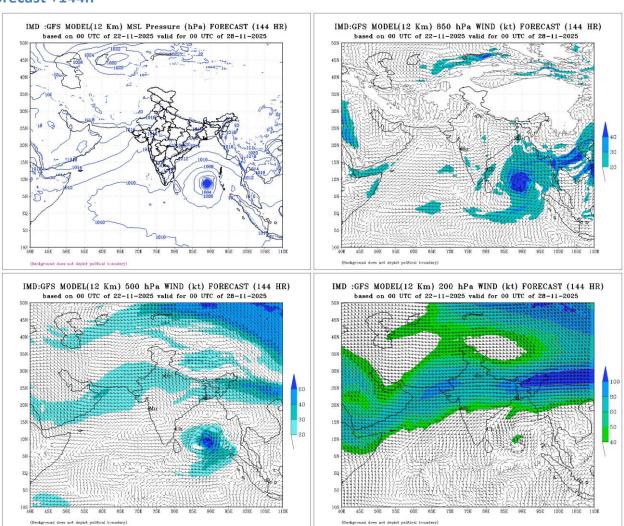
Forecast +96h



Forecast +120h



Forecast +144h



Forecast +168h

