

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

Tropical Cyclone Forecast Programme Report Dated 25th November 2025

Time of Issue: 1430 UTC

Synoptic features (based on 0600 UTC analysis):

1. (A) Depression over Strait of Malacca

The depression over Strait of Malacca moved nearly westwards in past 3 hours with a speed of 05 kmph and lay centered at 0600 UTC of today, the 25th November, 2025 over the same region near latitude 5.3°N and longitude 99.5°E, about 90 km west of George Town (Malaysia), 270 km east of Kuta Makmur (Indonesia), 720 km east-southeast of Nancowry (Nicobar Islands) and 850 km east-southeast of Car Nicobar (Nicobar Islands).

It is very likely to intensify further and move nearly westwards during next 24 hours and then west-northwestwards during subsequent 24 hours.

(B) Low pressure area over southwest Bay of Bengal and adjoining areas of South Sri Lanka & Equatorial Indian Ocean

The low-pressure area over southwest Bay of Bengal and adjoining areas of South Sri Lanka & Equatorial Indian Ocean persisted over the same region at 0600 UTC of today, the 25th November, 2025. It is very likely to move north-northwestwards and become well marked low pressure area during next 24 hours and intensify further into a depression during subsequent 24 hours.

(C) Yesterday's upper air cyclonic circulation over southeast Arabian Sea persisted over the same region at 0600 UTC of today, the 25th November.

Environmental Features based on 0900 UTC:

Environmental reactives based on 6500 616.					
Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)			
Sea Surface Temperature (SST) °C	Around 30°C over south Andaman Sea adjoining Malacca Strait and southeast Bay of Bengal (BoB). Around 29-30°C over south BoB, along and off Sri Lanka coast, 27°C over Gulf of Mannar.	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)	 ➤ 100 over Malacca Strait and adjoining Indonesia extending upto 200 hPa, tilting northwestward with height and about 50 along the system forecasted path. ➤ 100-150 over Comorin area off southwest Sri Lanka coast and 50-100 over southwest BoB adjoining EIO extending upto 200 hPa. 	➤ 25-30 southeast AS and adjoining EIO.
Low-Level convergence (X10-6 s-1)	 Around 30-40 over Indonesia adjoining Malacca Strait and 10-20 over the Malacca Strait and systems forecasted path. 05-10 over southeast BoB. 20-30 over EIO and adjoining Comorin Area. 10 over the southwest BoB, Comorin area. 	> 05-10 over southeast Arabian sea.
Upper-Level divergence (X10-6 s-1)	 20 over Indonesia and adjoining Malacca Strait. 05 - 10 over the southeast BoB and 05 over the Andaman Sea. 05-10 over Comorin area. 20 over the south Sri Lanka and adjoining southwest BoB. 	5 over southeast Arabian Sea.
Vertical Wind Shear (VWS knots) Low: 05-10 knots Moderate: 10-20 knots High: >20 knots	Deep layer vertical wind shear is Low-Moderate & anticyclonic over the Malacca Strait and high & anti-cyclonic over northern parts of Malacca Strait. Moderate & anti-cyclonic over south Andaman and high & cyclonic over north Andaman Sea. Low-moderate over southeast BoB. Mid layer vertical wind shear is low-moderate & anti-cyclonic over Malacca Strait and Andaman Sea. Low & anticyclonic over southeast BoB. Deep layer vertical wind shear is ryclonic over southeast BoB. Deep layer vertical wind shear is moderate-high & anticyclonic over Comorin area & Gulf of Mannar. Low to moderate over southwest BoB, south Sri Lanka and adjoining Comorin area.	Deep layer vertical wind shear is moderate & anti-cyclonic over southeast Arabian Sea. Mid layer vertical wind shear is low & anti-cyclonic over southeast & adjoining southwest AS.

	Mid layer vertical wind shear is low & anti-cyclonic over western parts of Comorin area, gulf of Mannar and southern parts of southwest BoB.	
Wind Shear Tendency (knots)	Increasing over Malacca Strait, south Andaman Sea and adjoining southeast & eastcentral BoB. Increasing over Gulf of Mannar. Decreasing over southwest and adjoining southeast & westcentral BoB. Decreasing over Comorin area, south Sri Lanka. Unchanged over along & off north Sri Lanka and Tamil Nadu coasts.	Decreasing over southern parts of southeast AS and adjoining EIO. Unchanged over northern parts of southeast Arabian Sea.
Upper tropospheric Ridge	 Ridge is running along 13°N at 82°E. Ridge is running along 13°N at 89°E. 	at 72oE.

Summary of dynamic and thermodynamic features:

Depression over strait of Malacca: The low level relative vorticity at 850 hPa is about 100 × 10⁻⁶ s⁻¹ over Malacca Strait. Vertically, the positive vorticity zone over Malacca Strait is extending upto 500 hPa. Upper-level divergence is around 20×10⁻⁶ s⁻¹ over Malacca Strait and adjoining Indonesia, south Andaman Sea. Low-level convergence is around 20×10⁻⁶ s⁻¹ over Malacca Strait and adjoining south Andaman Sea. Mid-level vertical wind shear (VWS) of horizontal wind is low-moderate & anti-cyclonic over Malacca Strait and Andaman Sea. Low & anti-cyclonic over southeast BoB. Upper tropospheric ridge runs along 12°N across the BoB. The system is lying to the south of ridge. East-southeasterly winds prevailing to the south of ridge is likely to steer the system nearly west-northwestwards.

Low pressure area over southwest Bay of Bengal and adjoining areas of South Sri Lanka & Equatorial Indian Ocean: The low level relative vorticity at 850 hPa has increased and is about 150 × 10⁻⁶ s⁻¹ over Comorin Area and adjoining southwest Sri Lanka. Vertically, the positive vorticity zone is extending up to 200hPa. Upper-level divergence is around 05-10×10⁻⁶ s⁻¹ over Comorin Area and 20×10⁻⁶ s⁻¹ over south Sri Lanka. Low-level convergence is around 20-30×10⁻⁶ s⁻¹ lay over Comorin and adjoining areas. Mid-level vertical wind shear (VWS) of horizontal wind is low & anti-cyclonic over western parts of Comorin area, gulf of Mannar and southern parts of southwest BoB.

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 signal, 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) to its north over south & adjoining central parts of BoB during 25th – 28th November. These features indicate a favorable environment for cyclogenesis (development of depression) over south BoB and south Andaman Sea during this period. The signature of Kelvin Wave (KW) propagating eastward gradually across central AS and south BoB during 25th November to 1st December which will be active over south BoB along with other convectively coupled equatorial waves during 26th November to 1st December.

This is likely to oppose the normal easterly flow over central parts of BoB. The environmental condition is likely to remain favourable for further intensification of the system over southwest & westcentral BoB till 1st December. Model is also indicating weakening of easterlies thereafter from 2nd December onwards, which may lead to weakening of system as it moves northwards to reach central & adjoining North BoB.

Satellite based cloud observation

Over vortex over Strait of Malacca & neighbourhood:

As per INSAT 3DS at 0600 UTC, vortex over Strait of Malacca & neighbourhood centered within half a degree of 5.0°N/99.7°E. Intensity T1.5. Associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over south Andaman Sea, north Sumatra, Strait of Malacca adjoining Malaysia & neighbourhood (minimum CTT minus 70-90 degree Celsius). 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 moderate to intense convection lay over westcentral Bay of Bengal and north Andaman Sea.

Over southwest Bay of Bengal & adjoining south Sri Lanka and Equatorial Indian Ocean:

As per INSAT 3DS at 0600 UTC, Low Level Circulation (LLC) over southwest Bay of Bengal & adjoining south Sri Lanka and Equatorial Indian Ocean. The associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over southwest Bay of Bengal, Comorin area, Gulf of Mannar, Sri Lanka and Equatorial Indian Ocean (minimum CTT minus 70-90 degree Celsius).

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 eastcentral Arabian Sea off Karnataka coast, south Arabian Sea, Lakshadweep Islands, Maldives and Comorin area.

Outside India:

As per INSAT 3DS at 0600 UTC, vortex over Philippines Sea & N/Hood centered near 10.7°N / 121.5°E. Intensity T2.0/2.0 (.) Maximum Sustained Winds 28-33 KTS. Associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over latitude 8.0°N to 18.0°N longitude 118.0°E to 130.0° & Philippines. Scattered low and medium clouds with embedded moderate to intense convection lay over Sri Lanka, Palk Strait, Gulf of Mannar, Maldives, Tibet, China, Yellow Sea, east China Sea, south Myanmar, Thailand, Gulf of Thailand, Cambodia, 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 5.0°S to 10.0°S longitude 50.0°E to 110.0°.

NWP Guidance for FDP Cyclone:

MODEL	Bay of Bengal (BoB)	Arabian Sea (AS)
IMD-GFS	Depression (D) over Malacca Strait as of today. It will move slowly west-northwestwards and depression over the same region by 29 th November. Low Pressure Area (LPA) over southwest Bay of Bengal (BoB) as of today moving NNW and becoming D close to southeast Sri Lanka coast. Moving in the same direction till 01 st December and lay over southwest BoB as Severe Cyclonic storm (SCS) or above moving then NEwards towards Bangladesh coast till 5 th December while weakening.	Model is indicating an upper air cyclonic circulation over southeast Arabian Sea as of today. Moving nearly eastwards and becoming LPA over the same region on 27/00 UTC. Moving in the same direction and becoming D on 28/00 UTC over same region. Then move NEwards towards Kerala coast while intensifying further till 02 nd December. Weakening gradually thereafter.
IMD-GEFS	Not available	Not available
IMD-WRF	Not available	Not available
BFS	Depression (D) over Malacca Strait as of today. It will move slowly west-northwestwards and depression over the same region by 29 th November. Low Pressure Area (LPA) over southwest Bay of Bengal (BoB) as of today moving NNW and becoming D close to southeast Sri Lanka coast. Moving in the same direction till 01 st December and lay over southwest BoB as Severe Cyclonic storm (SCS) or above moving then NEwards towards Bangladesh coast till 5 th December while weakening.	Model is indicating an upper air cyclonic circulation over southeast Arabian Sea as of today. Moving nearly eastwards and becoming LPA over the same region on 27/00 UTC. Moving in the same direction and becoming D on 28/00 UTC over same region. Then move NEwards towards Kerala coast while intensifying further till 02 nd December. Weakening gradually thereafter.
NCMRWF- NCUM(G)	Model is indicating an upper air cyclonic circulation over southwest and adjoining Sri Lanka coast as of today. LPA over the same region on 26/00 UTC. Moving nearly northwards and becoming D over south Sri Lanka and adjoining areas. Thereafter moving in the same direction and becoming Deep Depression (DD) over Sri Lanka. Moving in the same direction and lay over east Sri Lanka coast & adjoining southwest BoB on 29 th November. Continue to move in the same direction and reach Tamil Nadu coast on 30 th November and gradually thereafter.	Model is indicating an upper air cyclonic circulation over southeast Arabian Sea as of today. LPA over southeast Arabian sea on 27/00 UTC. It will then move westwards and become less marked by 30 th November.

NCMRWF-		No significant system is
NCUM(R)	LPA over Comorin area and adjoining Sri Lanka coast as on today. Moving ENEwards and intensify into depression on 26 th November over southwest BoB and adjoining south Sri Lanka coast, moving in the same direction and becoming DD over southwest BoB & adjoining southeast Sri Lanka coast on 27/00 UTC. It will then move northeastwards and becoming CS over southwest BoB off southeast Sri Lanka coast on 28 th November.	indicated during next 3 days.
NEPS	Depression over Malacca Strait on today, to move WNW while weakening gradually and less marked by 29/00 UTC over the same region. LPA over southwest BoB & adjoining south Sri Lanka coast on 26/00 UTC. Becoming WML on 27th November over southwest BoB adjoining southeast Sri Lanka while moving ENEwards. Then moving NNWwards and becoming Depression over southwest BoB adjoining Sri Lanka coast on 29/00 UTC. Moving in the same direction while weakening and lay close to the north Tamil Nadu coast as a WML on 01st December and less marked thereafter.	LPA over southeast AS adjoining Equatorial Indian Ocean (EIO) on 27/00 UTC. Moving nearly eastwards till 28 th while weakening and less marked by 29/00 UTC over the same region.
ECMWF	ECMWF is showing Depression/WML over Malacca Strait as of today. It will move WNW across Indonesia till 27/00 UTC. Thereafter ENEwards towards Malaysia and becoming less marked on 30/00 UTC. Model is indicating another LPA over southwest BoB & adjoining Sri Lanka-Comorin area. It will intensify into a D on 26/09 UTC over southwest BoB off west coast of Sri Lanka. It will then skirt along the Sri Lanka coast and intensify further into DD on 28/00 UTC and Cyclonic Storm (CS) over southwest Bay of Bengal close to northeast Sri Lanka coast on 29/00 UTC. It will then move NNWwards while weakening and crossing Tamil Nadu coast on 30/03 UTC. Less marked thereafter.	No significant system is indicated during next 7 days.
NCEP-GFS	Depression over Malacca Strait as of today, to move WNWwards and intensify into CS by 25/12 UTC. Moving in the same direction across Malacca, Indonesia as a CS/DD. It will emerge into south Andaman Sea on 26/00 UTC while moving NNWwards. It will then move NEwards towards north Andaman Sea while weakening. WML over Comorin area as of today, to move ENEwards towards Sri Lanka till 29/00 UTC with intensification, crossing Sri Lanka coast as a CS. It will emerge into southwest BoB on 30/00 UTC as a CS. It will then move ENEwards till 03 rd	No significant system is indicated during next 7 days.

	December while intensifying rapidly.	
EC-AIFS	Depression over Malacca Strat as on today, moving WNWwards while weakening and lay over the same region as LPA on 27/00 UTC. Less marked thereafter.	, ,
	WML over Comorin area adjoining south Sri Lanka coast as on today, moving ENEwards & becoming depression over southwest BoB adjoining southeast Sri Lanka coast on 26/06 UTC. It will skirting along the coast and intensify into CS on 27/06 UTC. Continue skirting along the Sri Lanka coast till 28/00 UTC while intensifying slightly and lay over south Sri Lanka and adjoining southwest BoB. It will then move NNWwards while weakening and reach north Tamil Nadu coast as a depression on 01/18 UTC. Weaken rapidly thereafter.	

Summary of models guidance:

(a) Bay of Bengal:

Depression over Strait of Malacca

The models are varying in terms of their forecasts as there are multiple systems along the ITCZ evolving together. The GFS group of models (IMDGFS & NCEP GFS) are indicating the depression to move nearly northwestwards with further intensification during next 24 hours. Thereafter, NCEP GFS is indicating north-northeastwards movement with gradual weakening whereas IMD GFS is indicating northwestwards with gradual intensification up to 28th November. The ECMWF model is indicating depression over Malacca Strait with initial northwestwards movement till 26th November. It is likely to further move east-northeastwards across Malaysia and gradually weaken thereafter during subsequent 72 hours.

Low pressure area over southwest Bay of Bengal and adjoining areas of South Sri Lanka & Equatorial Indian Ocean:

ECMWF model is indicating a low pressure area over Comorin and adjoining south Sri Lanka. It is forecasted to intensify into a depression during 24 hours over the same region. It will then skirt Sri Lanka coast and intensify further during subsequent 72 hours. Thereafter, the model is indicating northwestwards towards north Tamil Nadu coast with gradual weakening. NCEP GFS is indicating a well-marked low pressure area over Comorin region and forecasted to move east-northeastwards across Sri Lanka during next 72 hours with gradual intensification and emerge into southwest Bay of Bengal during subsequent 24 hours. Thereafter, it will move northwards with gradual intensification. NCUM model is indicating a low pressure area over southwest Bay of Bengal off south Sri Lanka coast with initial eastward movement during next 24 hours. Thereafter, the model is indicating northwestward movement with gradual intensification during subsequent 48 hours. Most of the models are indicating low pressure area/ well marked low pressure area over Comorin area and adjoining Sri Lanka coast on 25th. All the models are in agreement regarding further intensification upto depression during subsequent 24 hours. The models exhibit large variability in the track and further intensification thereafter.

In view of above, the depression over Strait of Malacca is very likely to slowly move west-northwestwards and intensify further during next 48 hours.

(b) Arabian Sea

Most of the numerical models are indicating the upper air cyclonic circulation over southeast Arabian Sea to move east-northeastwards slowly during next two to three days and lead to formation of low pressure area.

Inference:

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

- (a) **Depression over strait of Malacca**: In view of above, the depression over Strait of Malacca is very likely to slowly move west-northwestwards and intensify further during next 24 hours.
 - (i) Confidence level in determination of location of depression: Moderate
 - (ii) Confidence level in determination of intensity of depression: High
 - (iii) Confidence level in forecast of intensification: High
- (iv) Confidence level in forecast of location of Depression: Moderate
- (b) The Low pressure area over southwest Bay of Bengal and adjoining areas of South Sri Lanka & Equatorial Indian Ocean: The Low pressure area over southwest Bay of Bengal and adjoining areas of South Sri Lanka & Equatorial Indian Ocean is very likely to move north-northwestwards and become well marked low pressure area during next 24 hours and intensify further into a depression during subsequent 24 hours.
 - (i) Confidence level in location of Low Pressure Area: High
 - (ii) Confidence level in estimation of intensity: High
 - (iii) Confidence level in forecast of intensification: High
 - (iv) Confidence level in forecast of track: Moderate

<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
-	-	-	-	-	-	_

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

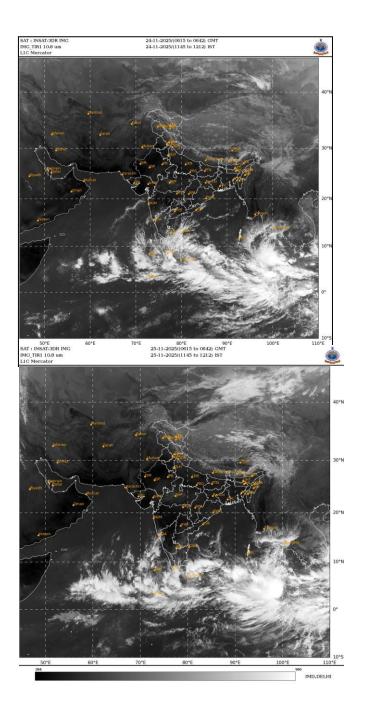
NIL	NIL	NIL	NIL	NIL	NIL	NIL
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
24	24-48	48-72	72-96	96-120	120-144	144-168

[&]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.

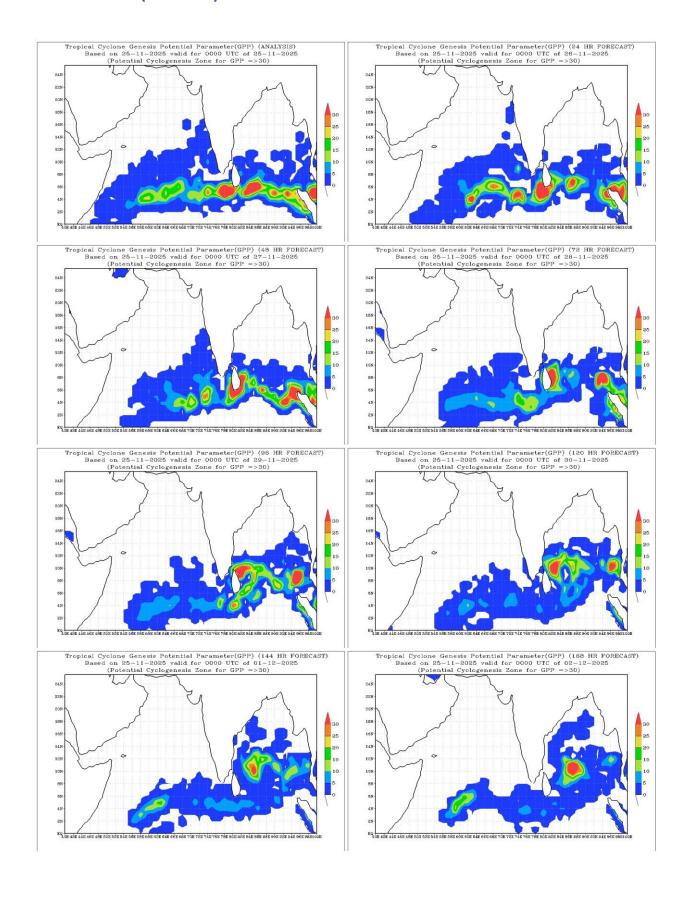
Intense Observation Period (IOP): Andaman & Nicobar Islands during 25th to 28th; Sri Lanka, Tamil Nadu coasts during 25th to 29th; Kerala during 25th – 27th; Lakshadweep during 25th – 27th, south Andhra Pradesh during 27th to 29th.

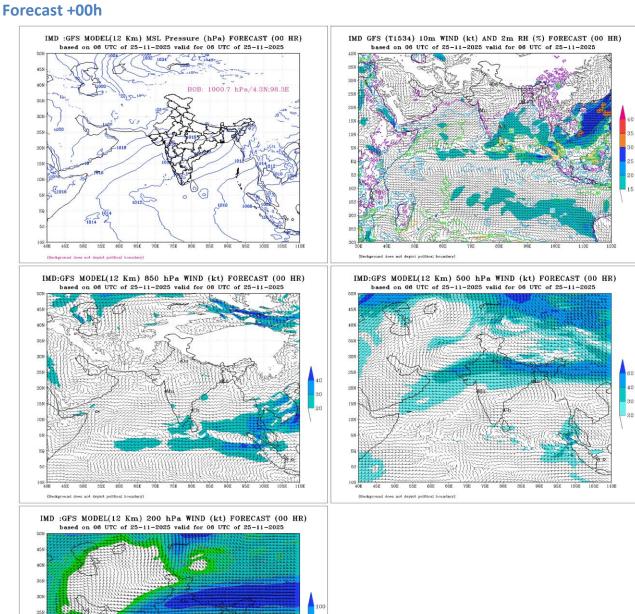
INSAT 3DS imageries at 0600 UTC of 24th & 25th November

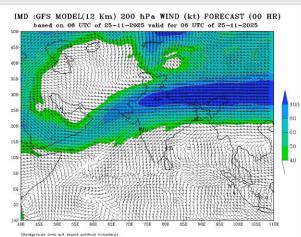


Annexure

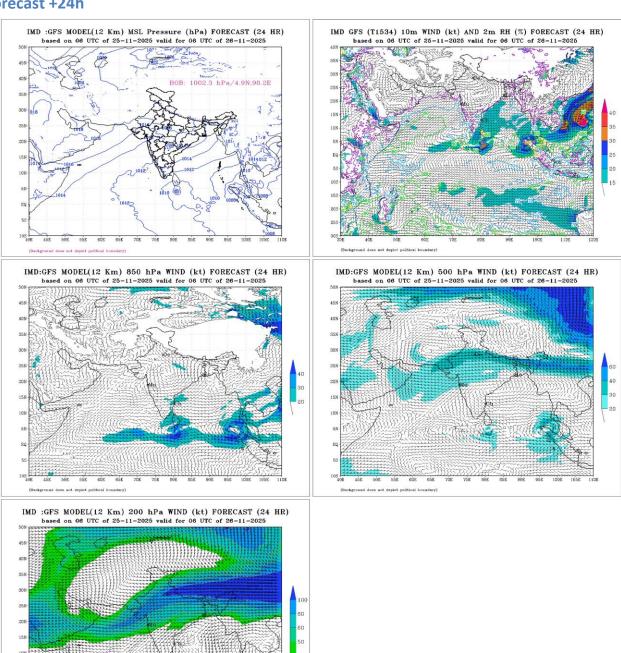
GPP Forecast (00 -168h)

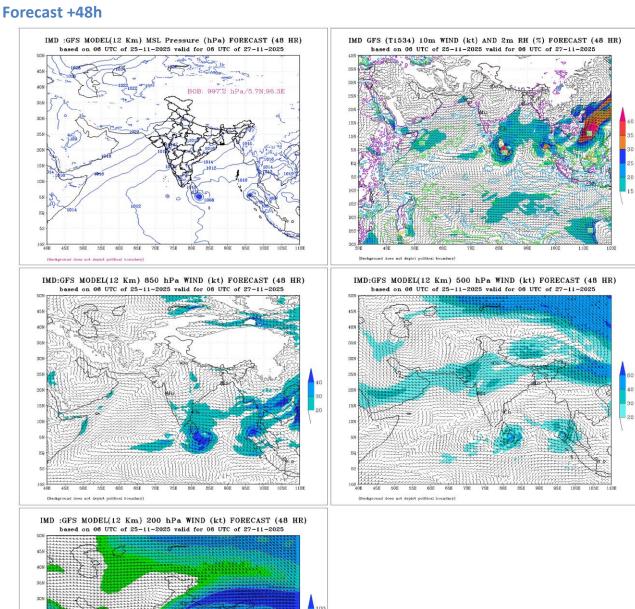


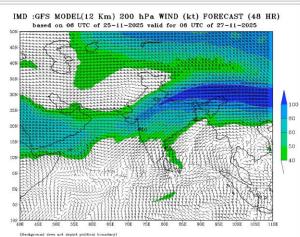


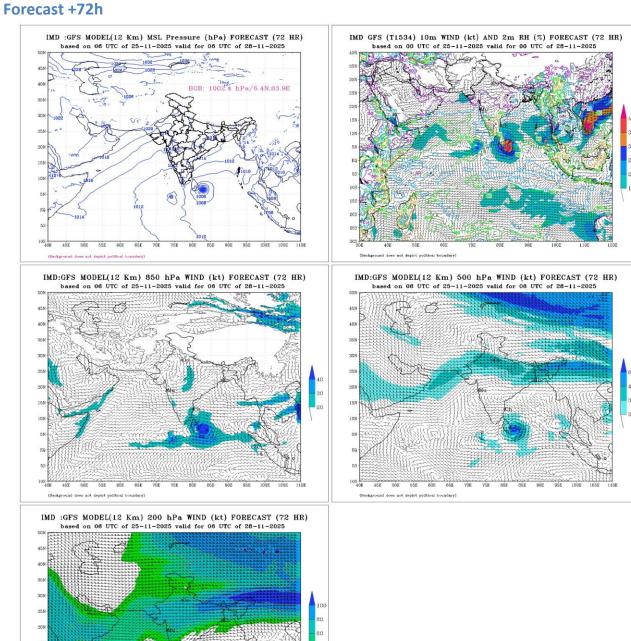


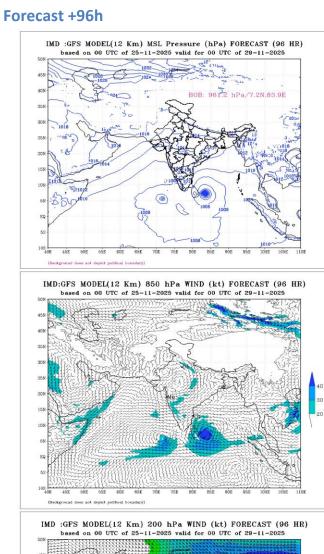
Forecast +24h

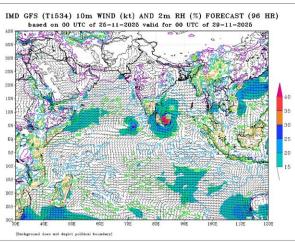


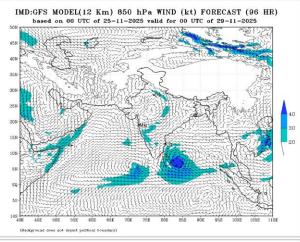


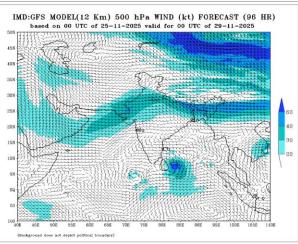


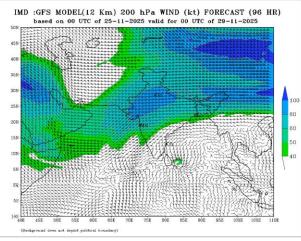


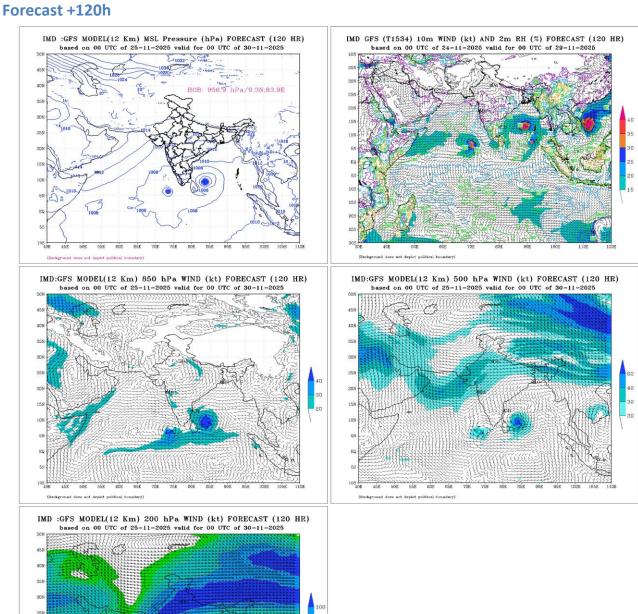


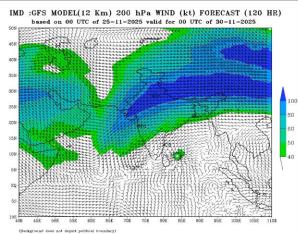




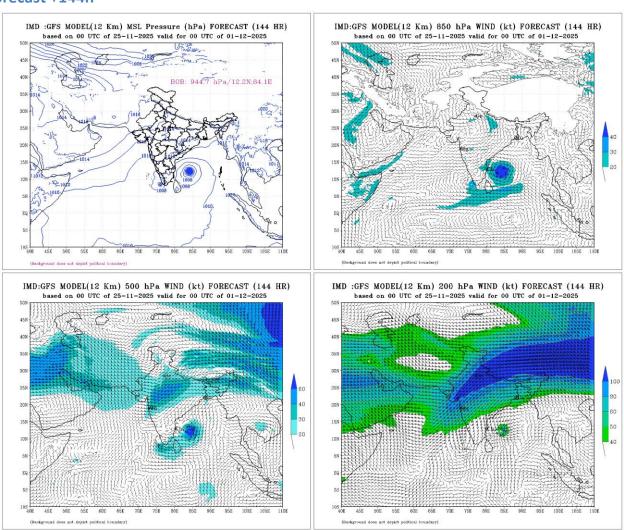








Forecast +144h



Forecast +168h

