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

Tropical Cyclone Forecast Programme
Report Dated 02nd December 2025

Time of Issue: 1400 UTC

Synoptic features (based on 1200 UTC analysis):

The Depression (Remnant of Cyclonic Storm Ditwah) over southwest Bay of Bengal:

The Depression (Remnant of Cyclonic Storm Ditwah) over southwest Bay of Bengal and adjoining areas of westcentral Bay of Bengal, North Tamil Nadu, Puducherry & South Andhra Pradesh coasts moved slowly south-southwestwards with the speed of 3 kmph during past 6 hours and lay centered at 1200 UTC of today, the 02nd December 2025 over southwest Bay of Bengal and adjoining North Tamil Nadu & Puducherry coasts, near latitude 12.3°N and longitude 80.3°E, about 60 km northeast of Puducherry (India), 80 km south of Chennai (India), 80 km northeast of Cuddalore (India) and 240 km south of Nellore (India). The minimum distance of the Centre of the depression from north Tamil Nadu-Puducherry coasts is about 25 km.

It is very likely to move slowly southwestwards towards the north Tamil Nadu-Puducherry coasts and weaken into a Well-marked low-pressure area during next 12 hours.

The system is being monitored by the Doppler Weather Radars (DWR) at Chennai and Sriharikota.

Environmental Features based on 0900 UTC:

Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)
Sea Surface Temperature (SST) ºC	➢ 28°C over southwest BoB and along & off Sri Lanka, Tamil Nadu & South Andhra Pradesh coast along the forecast track. ➢ The SST reduces to the north (North of 15^0N) being 27^0C.	➢ 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, ➢ About 125 over some parts of south, eastcentral and northeast BoB. ➢ About 50 over westcentral, 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})	➢ 70-80 over southwest BoB to the southwest of the system centre. The depth of convection has increased vertically the positive vorticity zone is extending upto 700 hPa. ➢ 30-40 over eastcentral BoB	➢ 40-50 southwest AS and adjoining EIO and extending upto 700 hPa.
Low-Level convergence (X10-6 s-1)	➢ 10-15 to over the system centre	➢ 5 over eastcentral AS
Upper-Level divergence (X10-6 s-1)	➢ 10 over the system and is northeast-southwest oriented.	➢ 10-20 over southeast AS ➢ 10 over eastcentral AS

Vertical Wind Shear (VWS knots) Low: 05-10 knots Moderate: 10-20 knots High: >20 knots	➢ Deep layer vertical wind shear is moderate to high & anti-cyclonic over the system area. Mid layer vertical wind shear is moderate to high & anti-cyclonic over the system area and to its south.	➢ Deep layer vertical wind shear is low to moderate over south Arabian Sea.
Wind Shear Tendency (knots)	➢ Decreasing over the southern Peninsular region along the forecasted path	➢ Decreasing over parts of north & southeastAS
Upper tropospheric Ridge	➢ Ridge is running along 10^{o}N	-

Summary of dynamic and thermodynamic features:

The Depression (Remnant of Cyclonic Storm Ditwah) over southwest Bay of Bengal:

The Low level relative vorticity at 850 hPa is the same and is about 70-80×10^{-6} s^{-1} over southwest Bay of Bengal to the southwest of system centre. The depth of convection has increased and vertically the positive vorticity zone is extending up to 700 hPa. Upper-level divergence is around 10×10^{-6} s^{-1} over the system centre and is northeast-southwest oriented. Low-level convergence is around 10×10^{-6} s^{-1} over system centre. Mid layer shear is moderate to high (around 20-25 kts) and anti-cyclonic over the system area and to its south. The high wind shear to the north would further lead to shearing of convective clouds associated with the system and hence subsequent weakening. The system is very close to Tamil Nadu coast and interacting with land, which will further lead to weakening of the system. System is currently in moderately favorable environment and hence would weaken during next 06 hours.

The system moved slowly nearly northwards till 1st December evening, and gradually recurved southwestwards from midnight of 1st December. The opposing forces due to westerly trough and the easterly flow resulted in slow movement of system. As it was lying close to the ridge, it moved nearly northwards along the ridge. However, as the system remained almost practically stationary, close to coast, persistent rainfall led to lowering of SST. Further the system exhibited weakening due to land interactions, increase in cold dry air incursion, and lack of warm moist air into the core region and increased vertical wind shear. Consequently, the depth of convection has reduced. Currently the system is steered southwestwards by the northeasterly winds in the mid-tropspheric levels.

M.J.O. Index:

The guidance from various models indicates that the Madden Julian Oscillation (MJO) index is presently in phase 7 with amplitude more than 1 and is likely to continue in same phase during the next 3 days.

Equatorial waves guidance:

The guidance from NCICS model indicates westerly wind anomaly (7-9 mps) along with prevalence of Equatorial Rossby Wave (ERW), low frequency background wave (LW) over the southern parts of the Bay of Bengal (BoB), south peninsular India & Comorin area and easterly wind anomaly (3-5 mps) to its north over southwest BoB off North Tamil Nadu-Andhra Pradesh coasts & central India on 2nd December. These features will support the depression to maintain its intensity till 1200 UTC of 2nd December. Thereafter, slight weakening of these features is indicated with prevalence of westerly wind anomaly (5-7 mps), ERW, LW over the southern parts of the Bay of Bengal (BoB) and easterly wind

anomaly (3-5 mps) to its north over central parts of India on 3rd December. These features indicate feeble support from equatorial waves to maintain the intensity of the low pressure area while it moves southwestwards across South Peninsular India.

Satellite based cloud observation

As per INSAT 3DR at 0600 UTC, the clouds are organized in shear pattern. The well defined low level cyclonic circulation (LLCC) as seen yesterday has been diffused today. The convective cloud mass associated with the LLCC is decreasing gradually, indicating weakening of the system. The intensity of the system is characterized as T1.5. The associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over westcentral adjoining southwest Bay of Bengal, coastal Andhra Pradesh, North coastal Tamil Nadu. Though the minimum cloud top temperature (CTT) is minus 70-90 degree Celsius), the area of convection has decreased. Moderate to intense convection over east Odisha (minimum CTT as minus 50-70 degree Celsius)

Over 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 southeast & adjoining westcentral Bay of Bengal. Scattered low and medium clouds with embedded moderate to intense convection lay over northwest & rest parts of the Bay of Bengal.

Over the Arabian Sea:

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

Outside India:

Scattered low & medium clouds with embedded moderate to intense convection over Maldives, Nepal, Bhutan, Tibet, China, east China Sea, north Myanmar, 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 50.0°E to 110.0°E

NWP Guidance for FDP Cyclone:

MODEL GUIDANCE	Bay of Bengal (BoB)	Arabian Sea (AS)
IMD-GFS	➢ Depression over southwest BoB and adjoining areas of westcentral BoB as on 02/00 weakening into a well marked low pressure area over interior Tamil Nadu on 03/00. ➢ Model is also indicating that, a number of small scale feeble upper air cyclonic circulations are likely to develop embedded with ITCZ, running between equator and 5^{o}N on 8th and 9th Dec.	No significant system during next 10 days
IMD-GEFS	Not available	Not available
IMD-WRF	Not available	Not available
BFS	➢ Depression over southwest BoB and adjoining areas of westcentral BoB as on 02/00, moving west-southwestwards and weakening into a well-marked low	No significant system

	pressure area over North coastal Tamil Nadu and adjoining southwest BoB on 03/00. ➢ An easterly wave is likely to be active with development of a trough along $12^{o}N/85^{o}E$ on 7th December, reaching along $10^{o}N/80^{o}E$ on 10th December and moving westwards towards southeast AS. ➢ An upper air cyclonic circulation over southeast BoB & adjoining Equatorial Indian Ocean on 9th & 10th Dec.	
NCMRWF-NCUM(G)	➢ Upper air cyclonic circulation over southwest BoB off TamilNadu coast on 02/00 with nearly westwards movement on 03/00. ➢ The easterly wave is likely to be active with development of a trough along $12^{o}N/86^{o}E$ on 7th December, reaching along $12^{o}N/82^{o}E$ on 10th December and move westwards towards southeast AS.	No significant system
NCMRWF-NCUM(R)	➢ Depression over southwest & adjoining Westcentral BoB on 02/00 UTC with slow southwards movement over the same region and weakening on 03/00 and less marked on 04/00 UTC.	No significant system is indicated during next 3 days.
NEPS	➢ Depression over southwest BoB on 02/0000 UTC with slow movement southwestwards movement and weakening on 03/00. ➢ The easterly wave is likely to be active with development of a trough along $13^{o}N/88^{o}E$ on 7th December, reaching along $12^{o}N/84^{o}E$ off Sri Lanka on 10th December and moving westwards towards Comorin area on 11th Nov and less marked thereafter.	No significant system is indicated during next 7 days.
ECMWF	➢ Depression over westcentral & adjoining southwest Bay of Bengal at 02/00 UTC to move slowly southwestwards with gradual weakening into a well-marked low pressure area on 02/21 UTC.	No significant system is indicated during next 7 days.
NCEP-GFS	❖ Depression over westcentral & adjoining southwest Bay of Bengal at 02/00 UTC to move slowly over the same region with gradual weakening into a well marked low pressure area on 03/00. ❖ The easterly wave is likely to be active with development of a trough along $10N/88^{o}E$ on 9th December, reaching along $11N/86^{o}E$ on 10th December reaching Sri Lanka coast near $9^{o}N/80^{o}E$ on 12th Dec. ❖ Model is also indicating a feeble cyclonic	Model is not indicating any significant system.

	circulation over southwest BoB on 10th December.	
EC-AIFS	➢ Low pressure area over westcentral & adjoining southwest Bay of Bengal at 02/00 UTC to move slowly southwestwards over the same region and weaken gradually by 3rd/ 0600.	No significant system is indicated during next 7 days.

Summary of models guidance:

Bay of Bengal:

There is good consensus among various models with respect to maintenance of intensity of the system as a depression during next 12 hours and also slow movement over southwest & adjoining Westcentral Bay of Bengal off Tamil Nadu coast. There is uncertainty with respect to forecast movement.

Most of the models are indicating slow southwestwards movement and weakening into well marked low pressure area by 03/00 UTC.

Models are also indicating an active easterly wave passing through southeast BoB with trough reaching near 10°N /86°E around 9th/10th December.

Some of the models are also indicating an upper air cyclonic circulation over southeast BoB during 8th to 10th December.

Arabian Sea:

Models are indicating no significant system over Arabian Sea during next seven days.

Inference:

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

(a) The Depression (Remnant of Cyclonic Storm Ditwah) over southwest Bay of Bengal and adjoining areas of westcentral Bay of Bengal, North Tamil Nadu, Puducherry & South Andhra Pradesh coasts is very likely to move slowly southwestwards towards the north Tamil Nadu-Puducherry coasts and weaken into a Well-marked low-pressure area during next 12 hours.

The forecast is based on the initial conditions and the consensus model guidance.

(i) Confidence level in estimation of current location of: High
(ii) Confidence level in estimation of estimation of current intensity: High
(iii) Confidence level in forecast track: Moderate
(iv) Confidence level in forecast intensity: Moderate

(b) There is low probability of an active easterly wave passing through southeast BoB with trough reaching near 10°N /86°E around 9th/10th December.

(c) There is also low probability of an upper air cyclonic circulation over southeast BoB during 8th to 10th December.

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

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

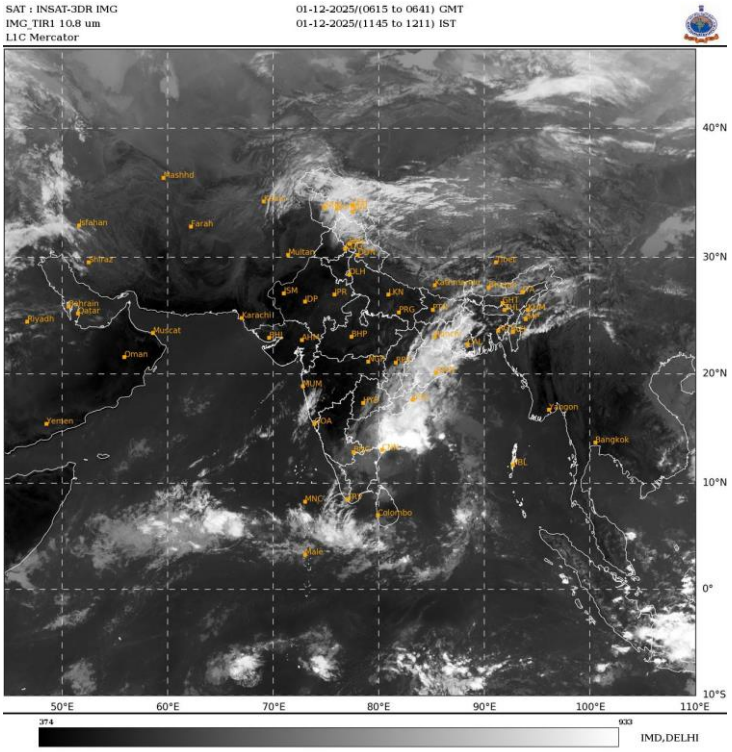
Probability of cyclogenesis (formation of depression and above intensity systems) over the Arabian Sea during next 168 hours:

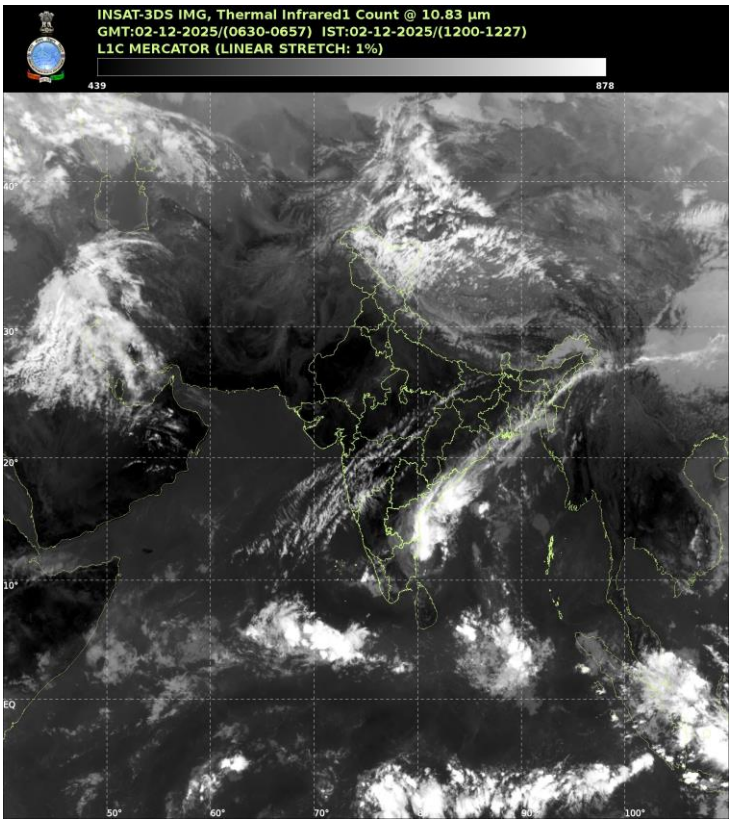
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

"- "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.

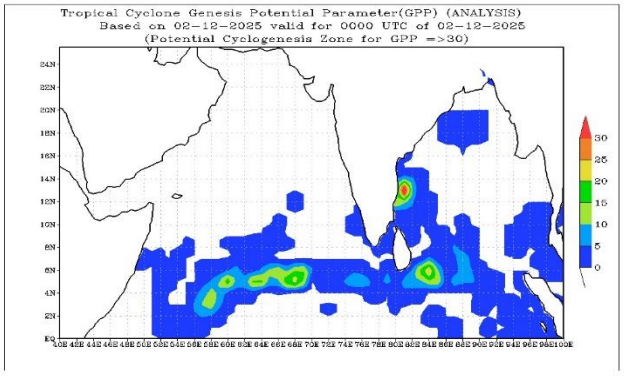
Intense Observation Period (IOP): Sri Lanka, Tamil Nadu, Puducherry, Andhra Pradesh on 02nd December.

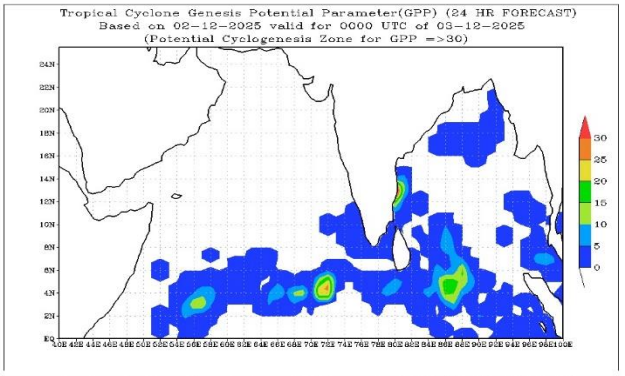
INSAT 3DS imageries at 0600 UTC of 01st and 2nd December

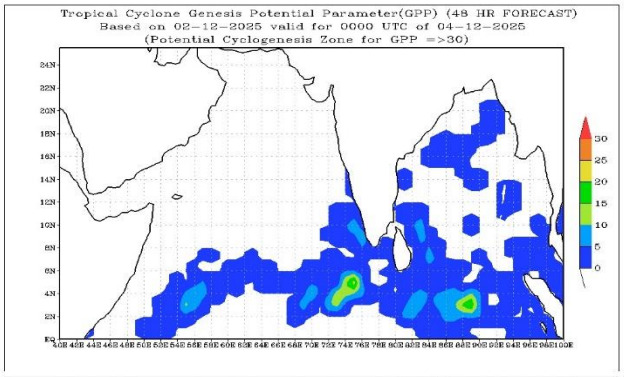




Annexure


Tropical Cyclone Genesis Potential Parameter(GPP) (ANALYSIS)
Based on 02-12-2025 valid for 0000 UTC of 02-12-2025
(Potential Cyclogenesis Zone for GPP =>30)


Tropical Cyclone Genesis Potential Parameter(GPP) (24 HR FORECAST)
Based on 02-12-2025 valid for 0000 UTC of 03-12-2025
(Potential Cyclogenesis Zone for GPP =>30)


Tropical Cyclone Genesis Potential Parameter(GPP) (48 HR FORECAST)
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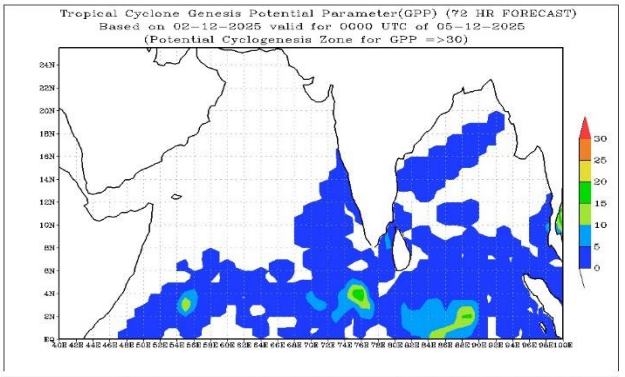
(Potential Cyclogenesis Zone for GPP =>30)


Tropical Cyclone Genesis Potential Parameter(GPP) (72 HR FORECAST)
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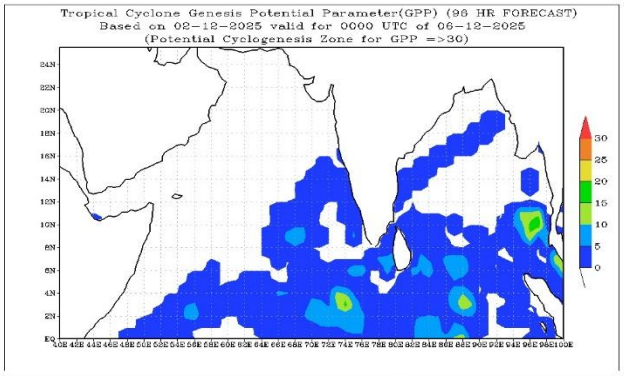
(Potential Cyclogenesis Zone for GPP =>30)


Tropical Cyclone Genesis Potential Parameter(GPP) (96 HR FORECAST)
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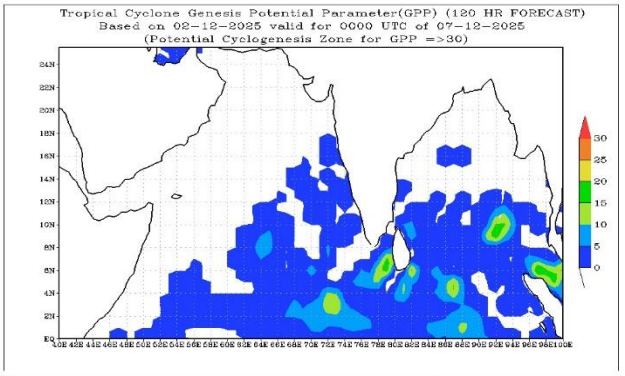
Tropical Cyclone Genesis Potential Parameter(GPP) (120 HR FORECAST)
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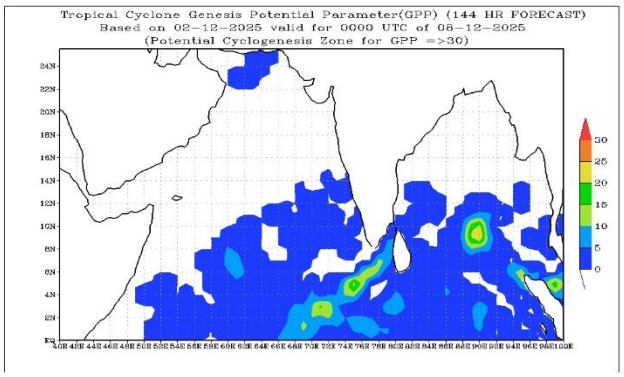
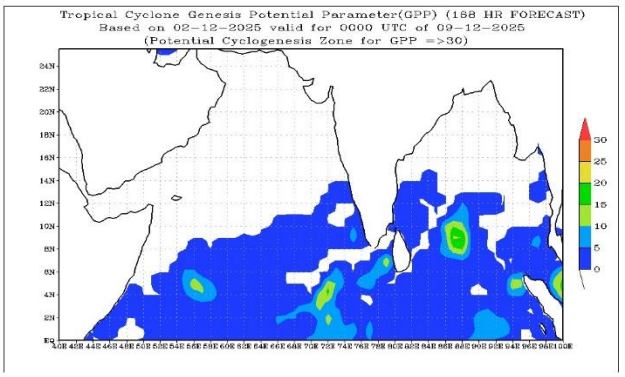

Tropical Cyclone Genesis Potential Parameter(GPP) (144 HR FORECAST)
Based on 02-12-2025 valid for 0000 UTC of 08-12-2025
(Potential Cyclogenesis Zone for GPP =>30)


Tropical Cyclone Genesis Potential Parameter(GPP) (168 HR FORECAST)
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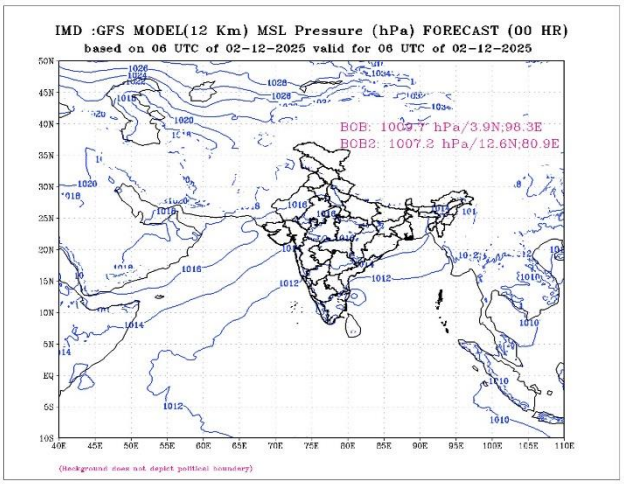
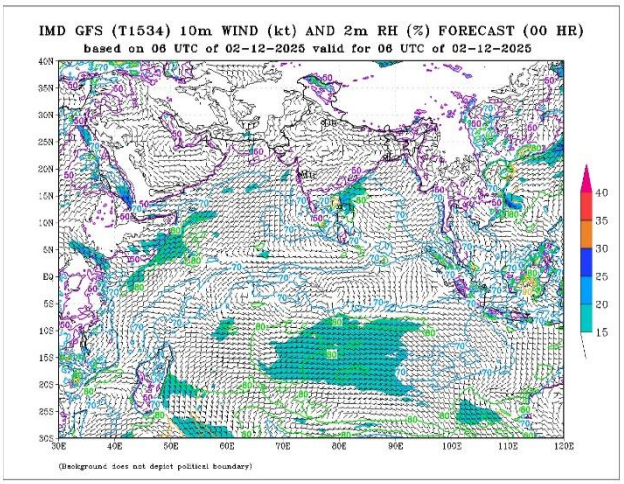
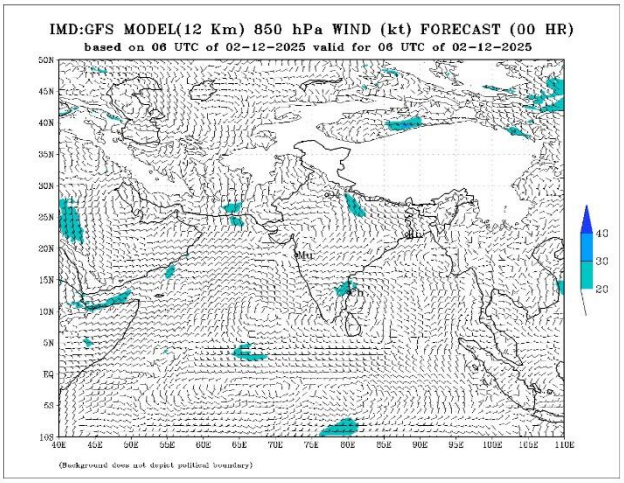
(Potential Cyclogenesis Zone for GPP =>30)


IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (00 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 02-12-2025
BOB: 1002.7 hPa/3.9N;96.3E
BOB2: 1007.2 hPa/12.6N;80.9E
(Background does not depict political boundary)


IMD GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (00 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 02-12-2025
(Background does not depict political boundary)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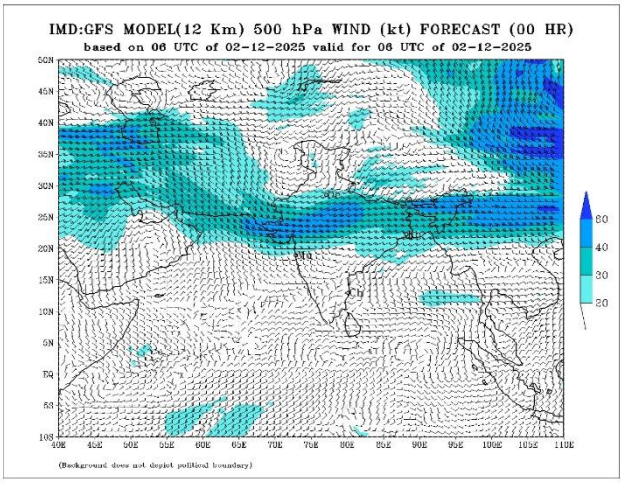
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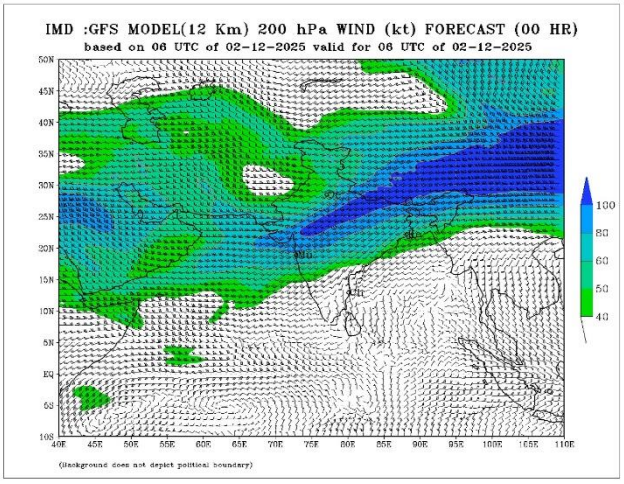
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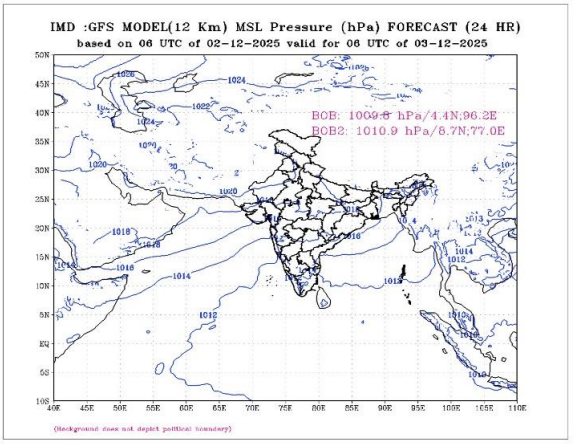
IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (24 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 03-12-2025
BOB: 1009.6 hPa/4.4N;96.2E
BOB2: 1010.9 hPa/8.7N;77.0E
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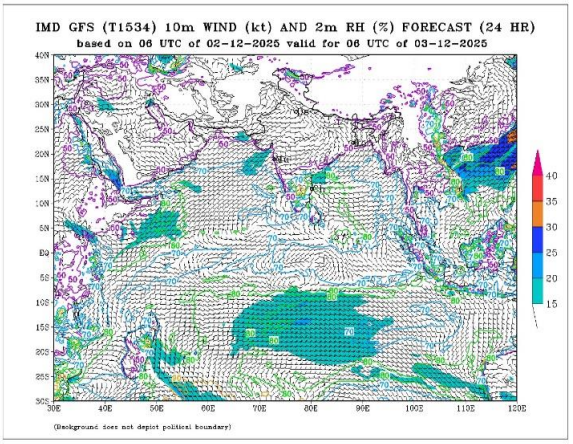
IMD GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (24 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 03-12-2025
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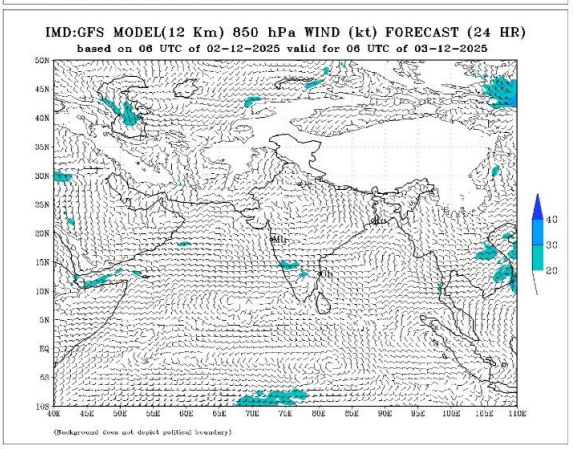
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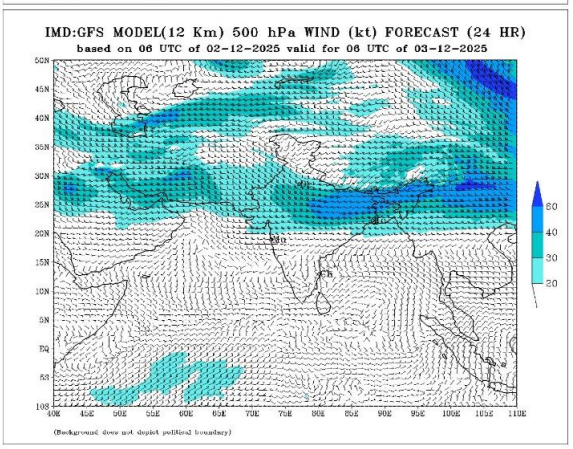
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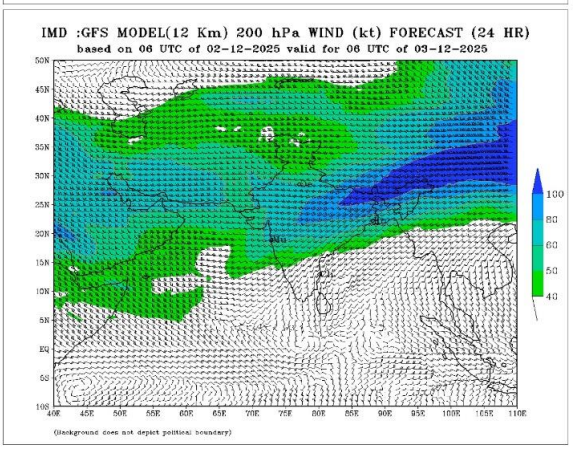
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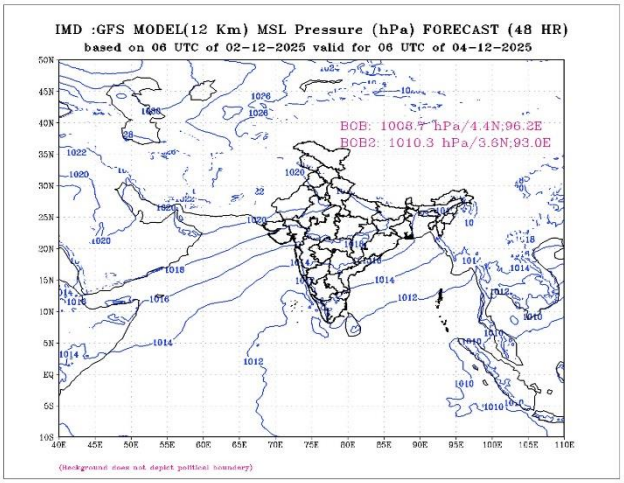
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based on 06 UTC of 02-12-2025 valid for 06 UTC of 04-12-2025
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BOB2: 1010.3 hPa/3.6N;93.0E
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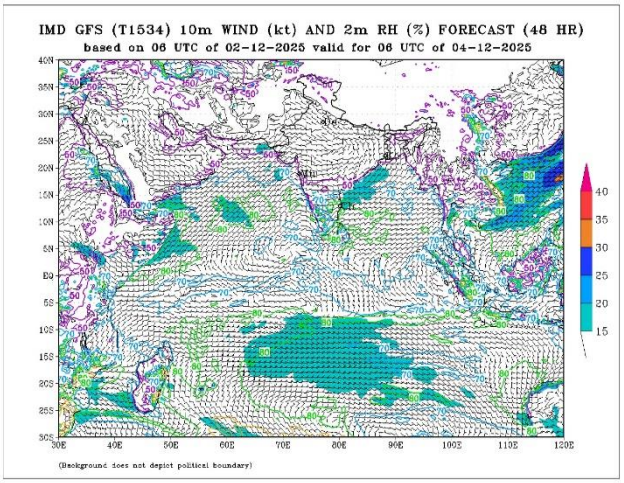
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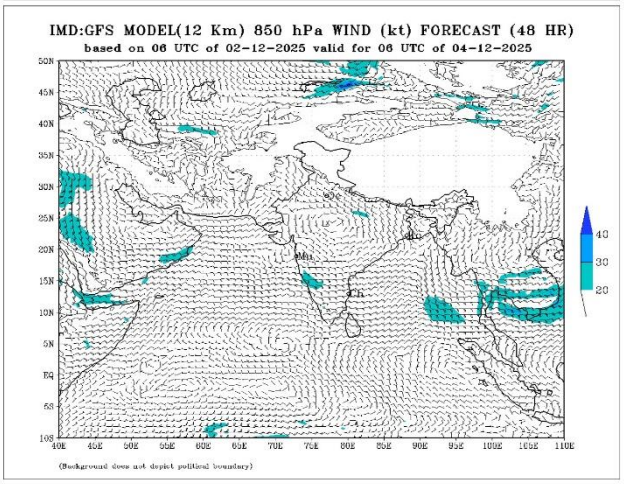
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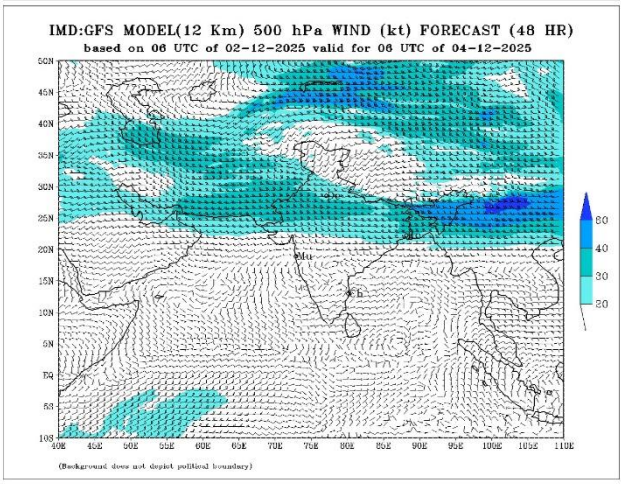
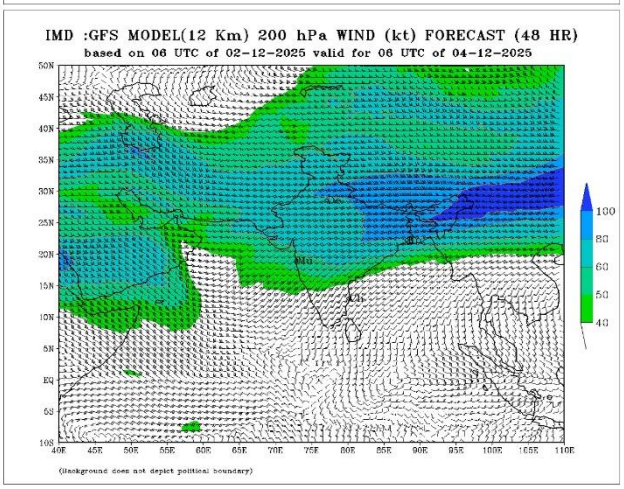
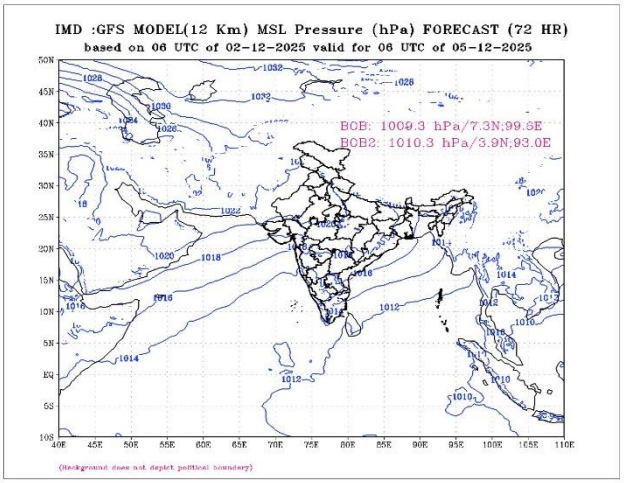
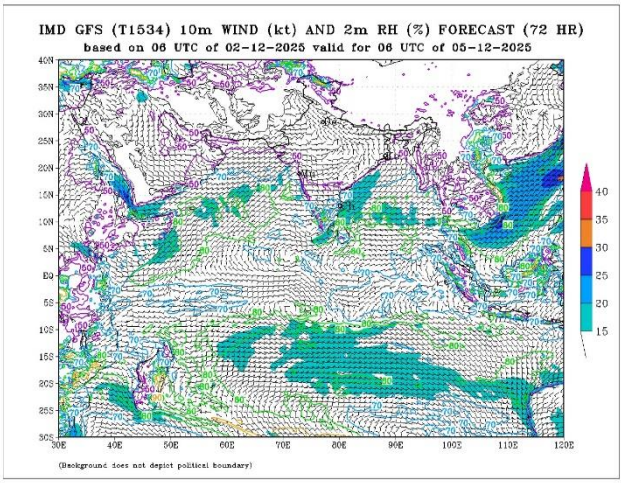
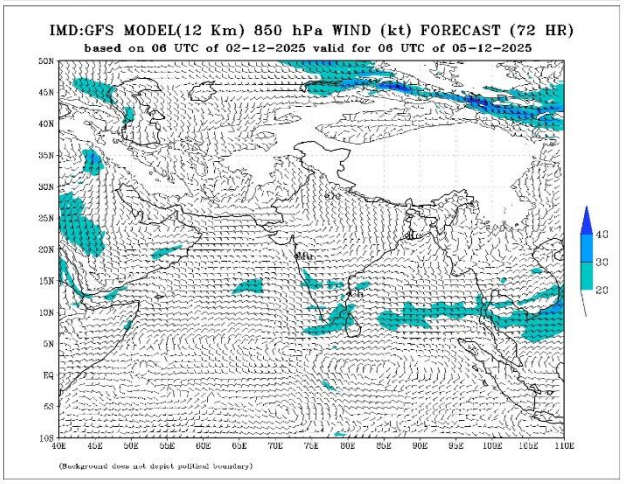
(Background does not depict political boundary)

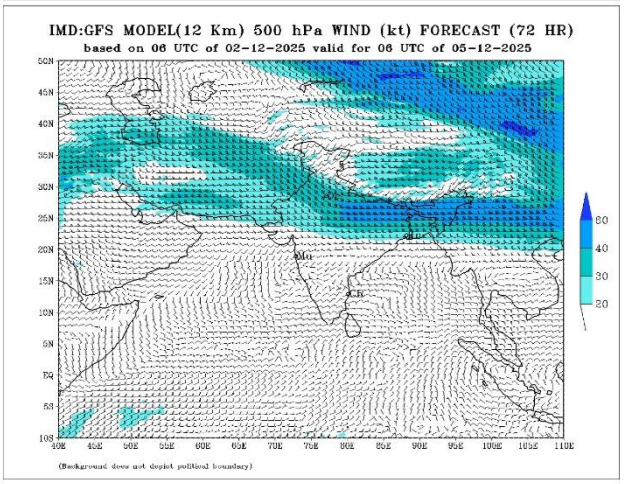

IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (48 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 04-12-2025
(Background does not depict political boundary)

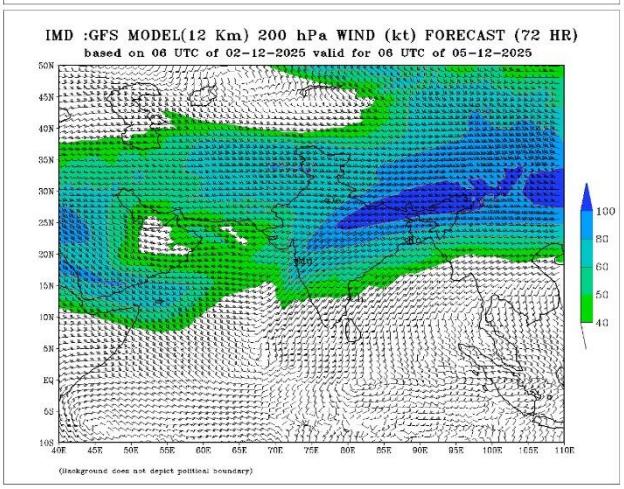

IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (48 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 04-12-2025
(Background does not depict political boundary)

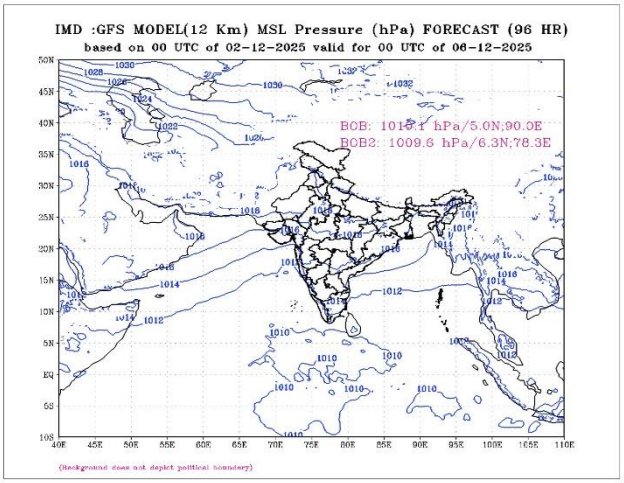

IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (72 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 05-12-2025
BOB: 1009.3 hPa/7.3N;99.8E
BOB2: 1010.3 hPa/3.9N;93.0E
(Background does not depict political boundary)

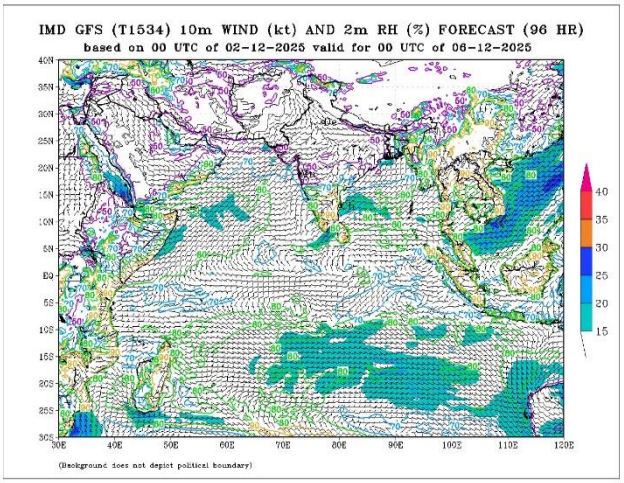

IMD GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (72 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 05-12-2025
(Background does not depict political boundary)

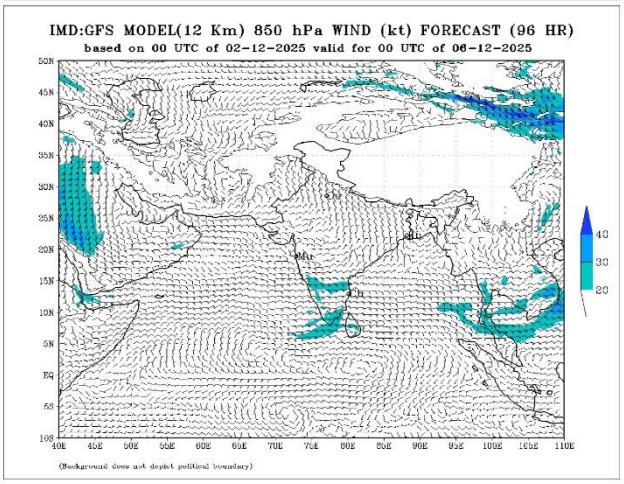

IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (72 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 05-12-2025
(Background does not depict political boundary)

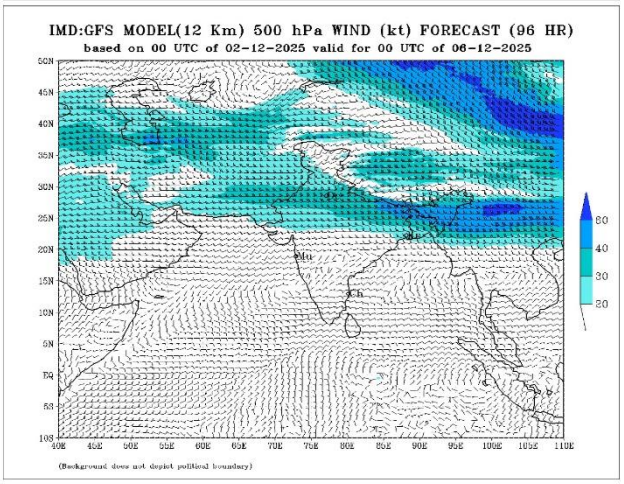

IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (72 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 05-12-2025
(Background does not depict political boundary)

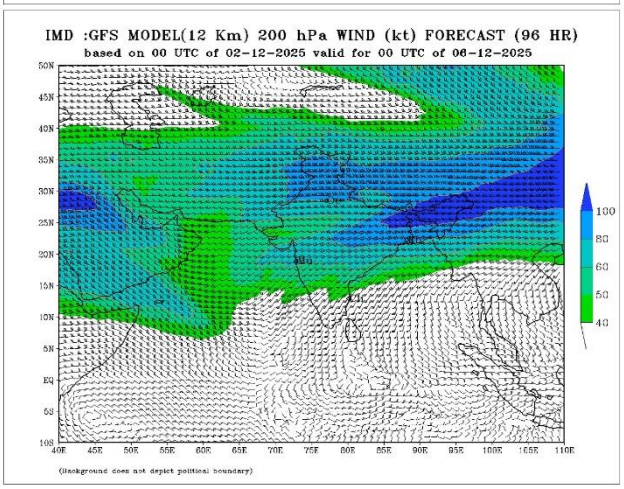

IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (72 HR)
based on 06 UTC of 02-12-2025 valid for 06 UTC of 05-12-2025
(Background does not depict political boundary)

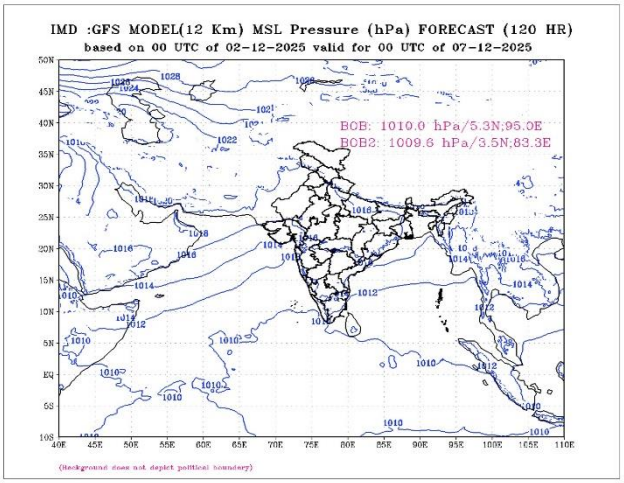

IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (96 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 06-12-2025
BOB: 1013.1 hPa/5.0N;90.0E
BOB2: 1009.6 hPa/6.3N;78.3E
(Background does not depict political boundary)

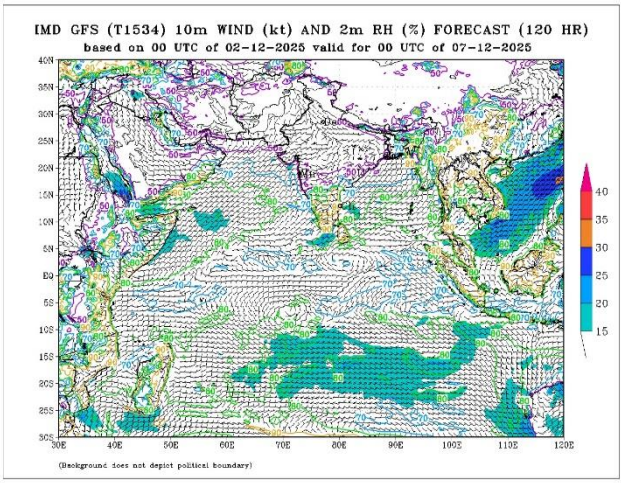

IMD GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (96 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 06-12-2025
(Background does not depict political boundary)

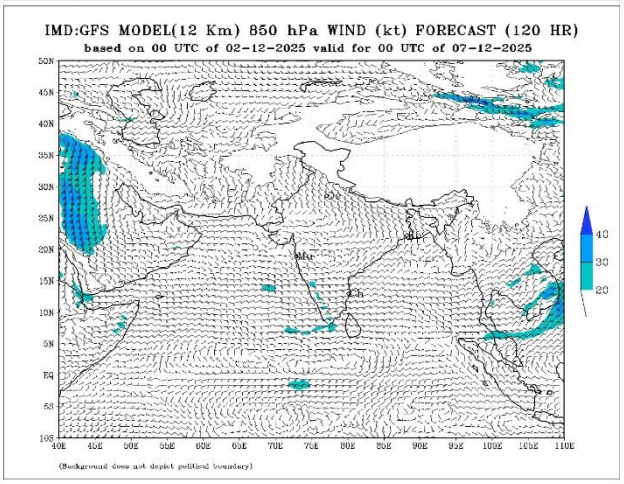

IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (96 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 06-12-2025
(Background does not depict political boundary)

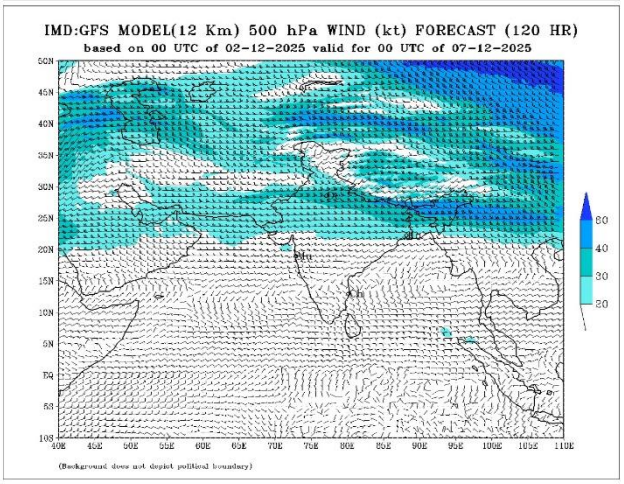

IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (96 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 06-12-2025
(Background does not depict political boundary)

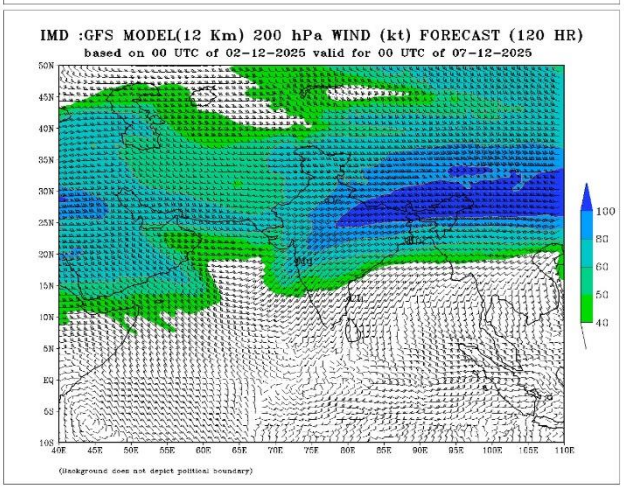

IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (96 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 06-12-2025
(Background does not depict political boundary)

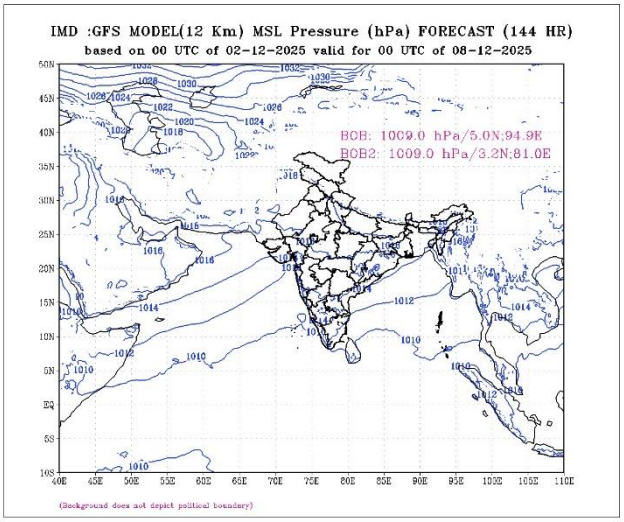

IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (120 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 07-12-2025
BOB: 1010.0 hPa/5.3N;95.0E
BOB2: 1009.6 hPa/3.5N;83.3E
(Background does not depict political boundary)

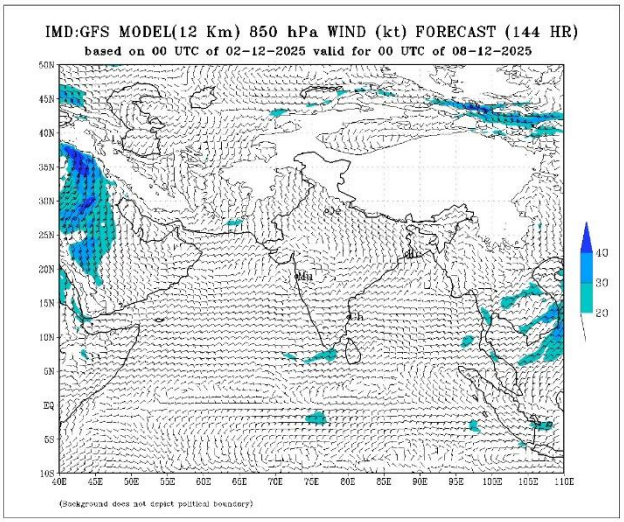

IMD GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (120 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 07-12-2025
(Background does not depict political boundary)

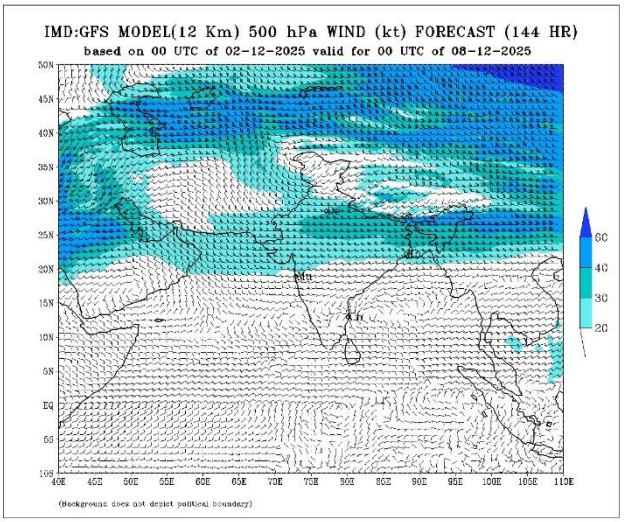

IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (120 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 07-12-2025
(Background does not depict political boundary)

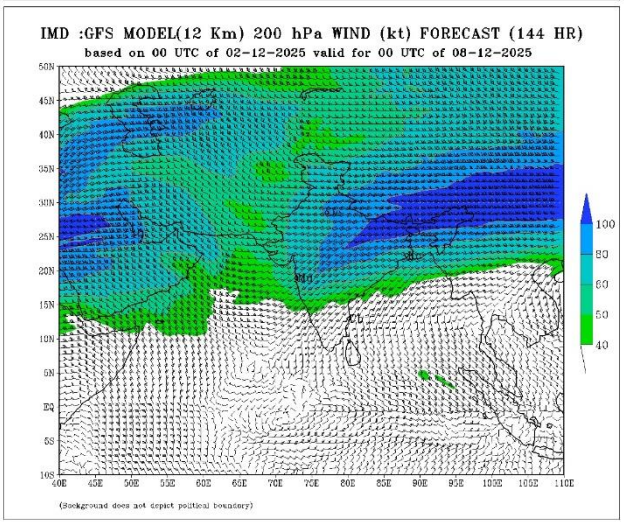

IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (120 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 07-12-2025
(Background does not depict political boundary)

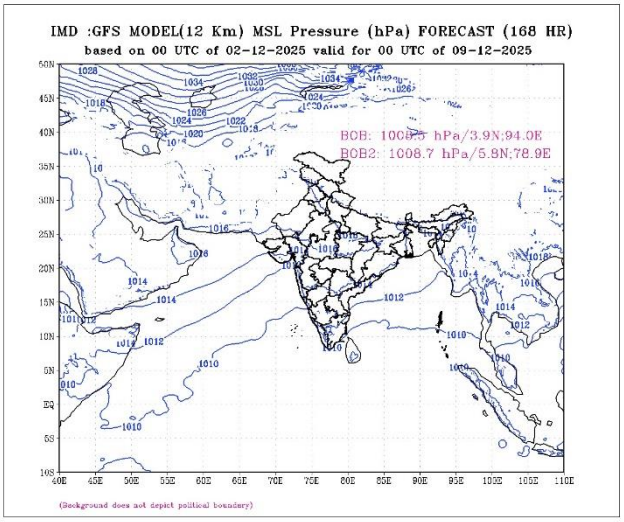

IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (120 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 07-12-2025
(Background does not depict political boundary)

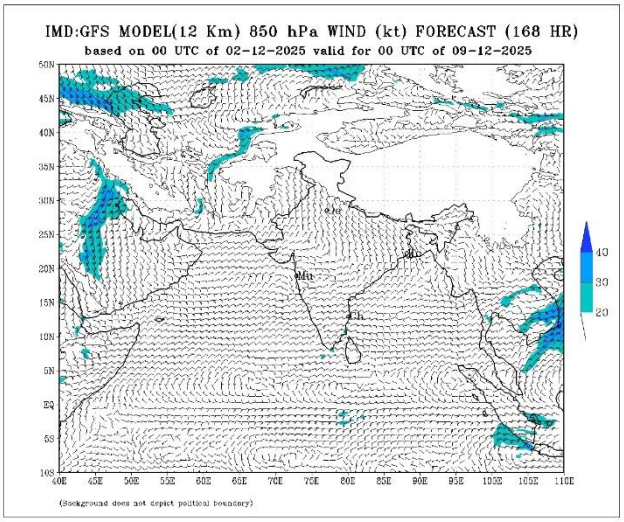

IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (144 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 08-12-2025
BOB: 1009.0 hPa/5.0N:94.9E
BOB2: 1009.0 hPa/3.2N:81.0E
(Background does not depict political boundary)


IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (144 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 08-12-2025
40
30
20
(Background does not depict political boundary)


IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (144 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 08-12-2025
60
40
30
20
(Background does not depict political boundary)


IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (144 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 08-12-2025
100
80
60
50
40
(Background does not depict political boundary)


IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (168 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 09-12-2025
BOB: 1008.5 hPa/3.9N;94.0E
BOB2: 1008.7 hPa/5.8N;78.9E
(Background does not depict political boundary)


IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (168 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 09-12-2025
40
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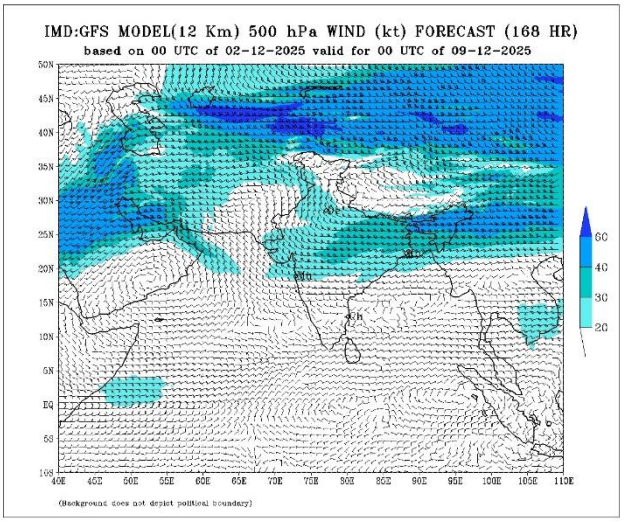
20
(Background does not depict political boundary)


IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (168 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 09-12-2025
60
40
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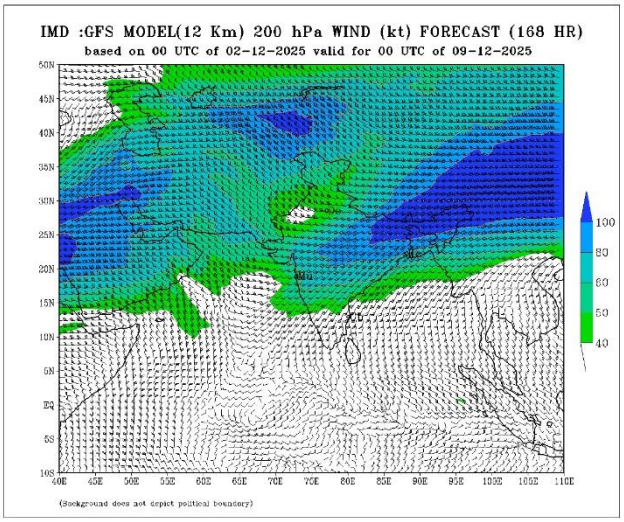
(Background does not depict political boundary)


IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (168 HR)
based on 00 UTC of 02-12-2025 valid for 00 UTC of 09-12-2025
100
80
60
50
40
(Background does not depict political boundary)