



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

Tropical Cyclone Forecast Programme
Report Dated 10th December 2025

Time of Issue: 1300 UTC

Synoptic features (based on 0600 UTC analysis):

- No significant system

Environmental Features based on 0600 UTC:

Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)
Sea Surface Temperature (SST) °C	<ul style="list-style-type: none">➤ 28°C over south adjoining central BoB.➤ 27°C over north BoB.	<ul style="list-style-type: none">➤ 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	<ul style="list-style-type: none">➤ 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.	<ul style="list-style-type: none">➤ 120-130 over southeast Arabian Sea, Lakshadweep area and Maldives area.
Cyclonic Relative vorticity ($\times 10^{-6} \text{s}^{-1}$)	<ul style="list-style-type: none">➤ 20-30 over south Andaman sea.	-
Low-Level convergence ($\times 10^{-6} \text{s}^{-1}$)	-	-
Upper-Level divergence ($\times 10^{-6} \text{s}^{-1}$)	<ul style="list-style-type: none">➤ 5 over north Andaman Sea and adjoining eastcentral BoB.	<ul style="list-style-type: none">➤ 5-10 over southern parts of southwest AS and adjoining EIO.➤ 5 over westcentral and adjoining northwest AS.
Vertical Wind Shear (VWS knots) Low: 05-10 knots Moderate: 10-20 knots High: >20 knots	<ul style="list-style-type: none">➤ Low- moderate over south Andaman Sea.	<ul style="list-style-type: none">➤ Low- moderate over south AS.
Wind Shear Tendency (knots)	<ul style="list-style-type: none">➤ Decreasing over south Andaman sea and adjoining southeast AS.	<ul style="list-style-type: none">➤ Increasing north & adjoining eastcentral AS and Gujarat coast.➤ Decreasing over central & adjoining south AS, Lakshadweep area and Comorin area.

Upper tropospheric Ridge	➤ Ridge is running along 9°N at 99°E	-
Tropical cyclone genesis potential parameter(GPP)	GPP of >30 over the southwest BoB on 15 th and over southeast & adjoining EIO on 16 th & 17 th December.	No significant GPP over the AS for the next seven days

M.J.O. Index:

The guidance from various models indicates that the Madden Julian Oscillation (MJO) index is presently in phase 8 with amplitude less than 1 and is likely to continue in same phase during the 3-4 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) and 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 along with Kelvin wave (KW). During 10th-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 again from 15th December. During 15th-17th December, enhanced westerly wind anomaly (7-9 mps) over south BoB & adjoining Equatorial Indian Ocean (EIO) along with prevalence of ERW, KW, MJO and LW. These features indicate a favourably 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 0900 UTC, scattered low and medium clouds with embedded moderate to intense convection over west-central & south Bay of Bengal. Scattered low and medium clouds with embedded isolated weak to moderate convection over north & eastcentral Bay of Bengal and Andaman Sea.

Over the Arabian Sea:

As per INSAT 3DS at 0900 UTC, scattered low and medium clouds with embedded moderate to intense convection over south Arabian Sea, Maldives area and Comorin area.

Outside India:

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection over Maldives area, extreme north Pakistan, Tibet, China, 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 latitude 15.0°S longitude 40.0°E to 120.0°E and between latitude 20.0°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	<ul style="list-style-type: none"> ➤ An upper air circulation over Equatorial Indian Ocean (EIO) & adjoining southeast BoB on 10th, will lie over the same region till 11th December, less marked thereafter. ➤ The trough in easterly wave is running along 10°N at 86°E on 14th December, reaching 12°N and 79°E (off Tamil Nadu) 	An upper air circulation emerged into EIO & adjoining southwest AS on 11 th will have west-southwestward (WSW) movement slowly till 17 th

	coast) on 16 th December.	December without intensification further.
IMD-GEFS	Not available	Not available
IMD-WRF	Not available	Not available
BFS	Not available	Not available
NCMRWF-NCUM(G)	The trough in easterly wave is running along 13°N at 88°E on 14 th December, reaching 10°N at 81°E on 16 th December. An embedded low pressure area (LPA) is seen over southwest BoB & adjoining EIO on 16 th December & less marked by 17 th December.	An upper air cyclonic circulation over southwest AS, adjoining EIO on 10 th Dec, moving nearly WSW till 12 th December, less marked thereafter.
NCMRWF-NCUM(R)	The trough in easterly wave is running along 9°N at 81°E (off Tamil Nadu coast) on 9 th December.	An upper air cyclonic circulation over EIO & adjoining Comorin area on 10 th Dec, less marked by 11 th December.
NEPS	The trough in easterly wave is running along 13°N at 90°E on 14 th December, reaching 13°N at 80°E on 17 th December.	No significant system is indicated during next 7 days.
ECMWF	The easterly wave is likely to be active with development of a trough along 11.1°N at 90°E on 14 th December, reaching along 12.8°N at 81°E on 17 th December.	No significant system is indicated during next 7 days.
NCEP-GFS	The easterly wave is likely to be active with development of a trough along 12.4°N at 89.7°E on 14 th December, reaching along 13.8°N at 81.7°E on 16 th December. An induced LPA is seen on 14 th December over southeast BoB and adjoining south Andaman Sea, while moving west-northwestwards (WNW) it will reach southwest BoB on 16 th December.	An upper air cyclonic circulation over southwest AS, adjoining EIO on 10 th Dec, less marked by 11 th December.
EC-AIFS	No significant system is indicated during next 7 days.	No significant system is indicated during next 7 days.

Summary of models guidance:

Bay of Bengal:

Most of the models are indicating an active easterly wave over southeast BoB on 14th December, it will reach off Tamil Nadu coast around 16th December which could impact south peninsular India and Sri Lanka around 17th 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 there is no probability of cyclogenesis during next 7 days. However, there is likelihood of following:

- (a) There will be an active easterly wave likely over southeast BoB region from 14th December. The associated trough is likely to reach southwest BoB off north Tamil Nadu coast around 16th and impact south peninsular India and Sri Lanka around 17th 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	NIL

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

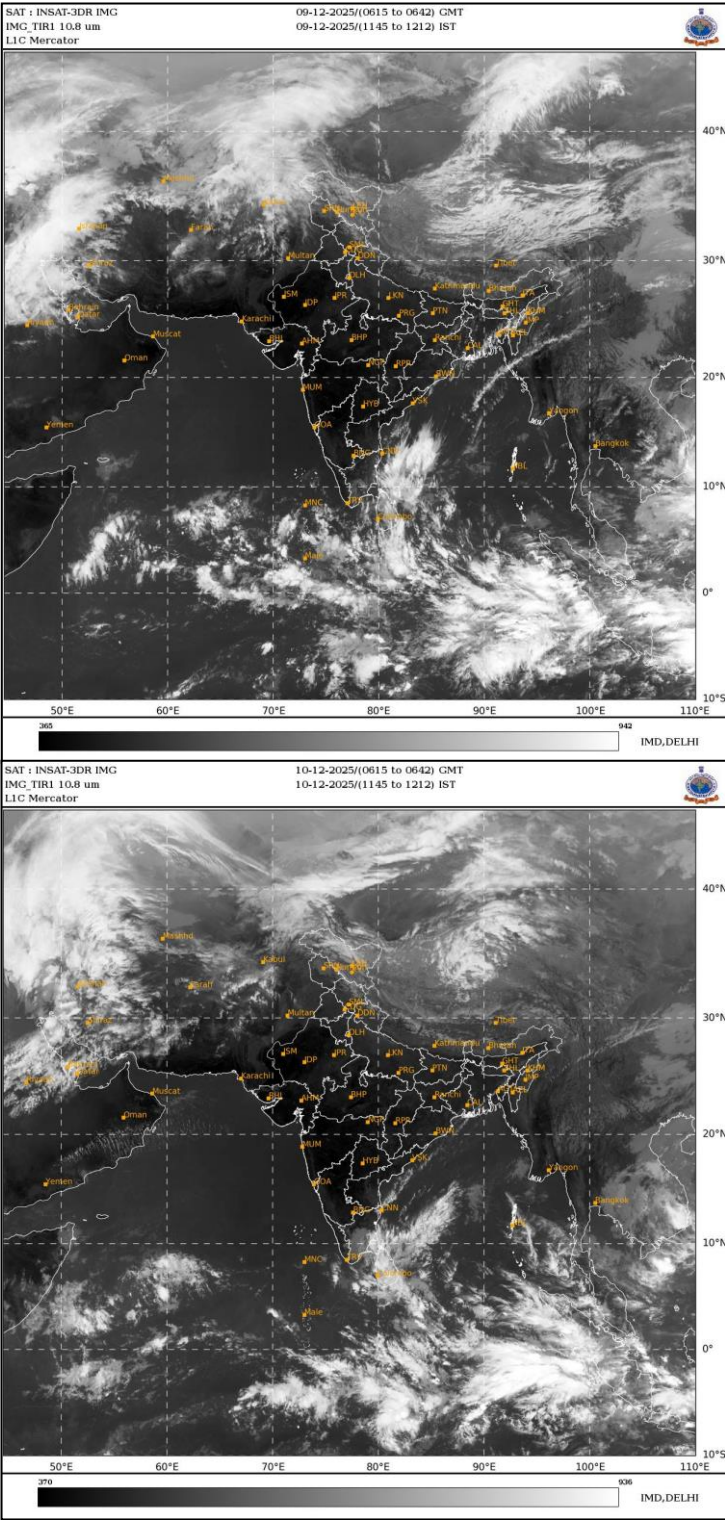
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

“- “indicates genesis has already occurred.

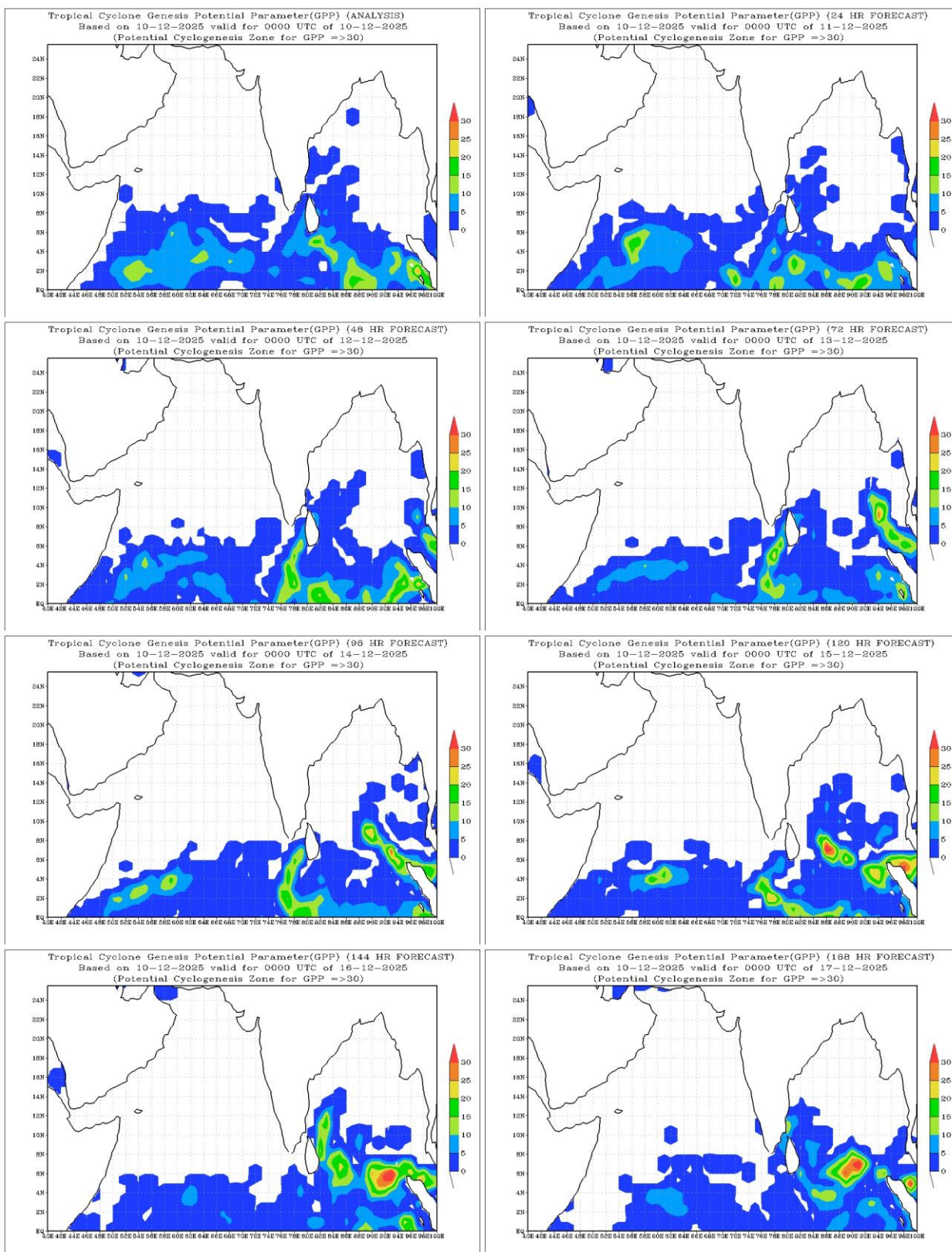
Probability is indicated as NIL for 0%, LOW for 1-33%, MOD for 34-67% and High for 68-100%. Every 24 hrs forecast ends at the 0300 UTC of date.

Intense Observation Period (IOP): Nil

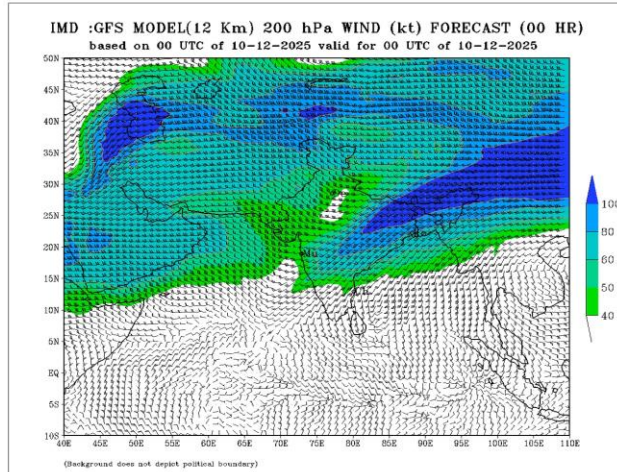
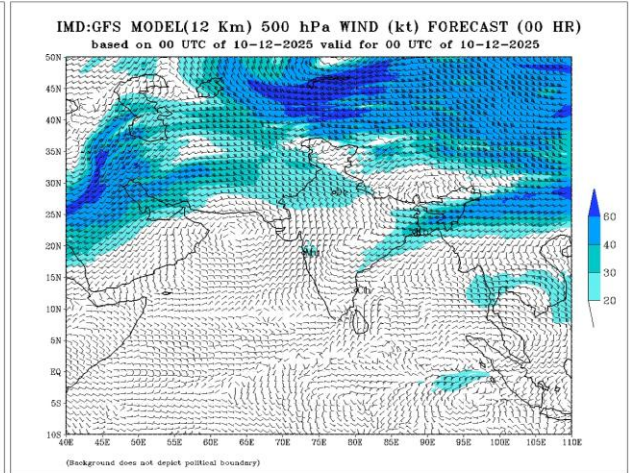
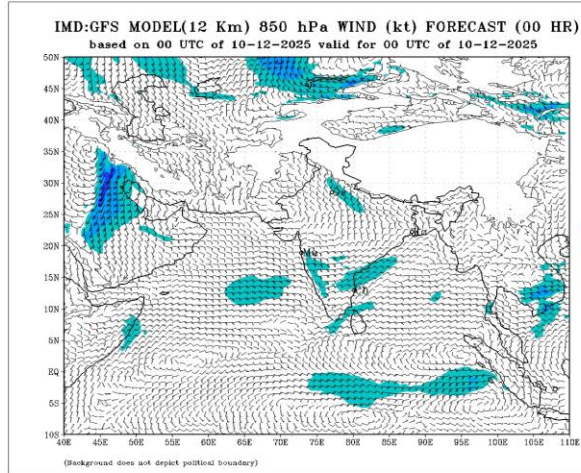
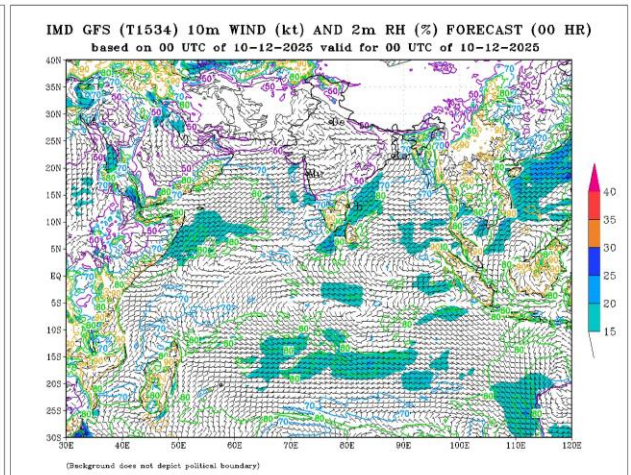
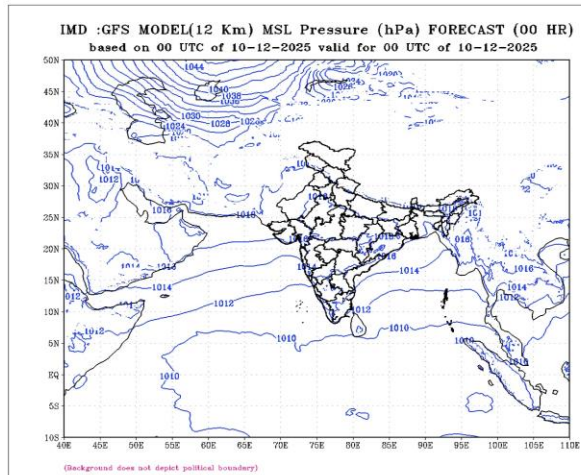
INSAT 3DS imageries at 0600 UTC of 9th & 10th December



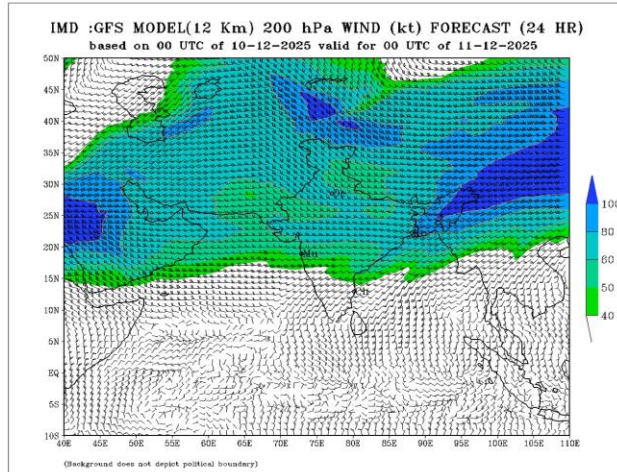
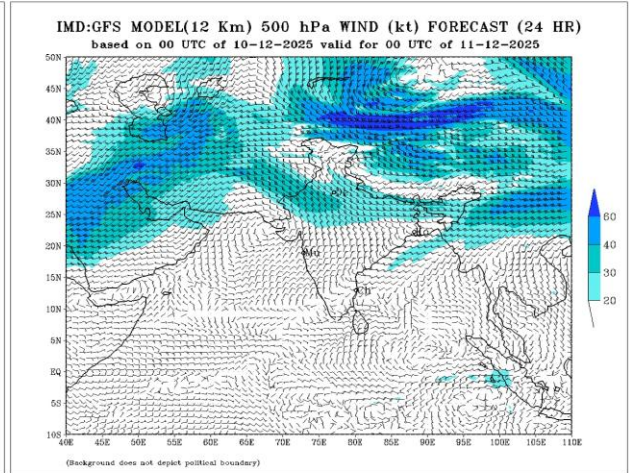
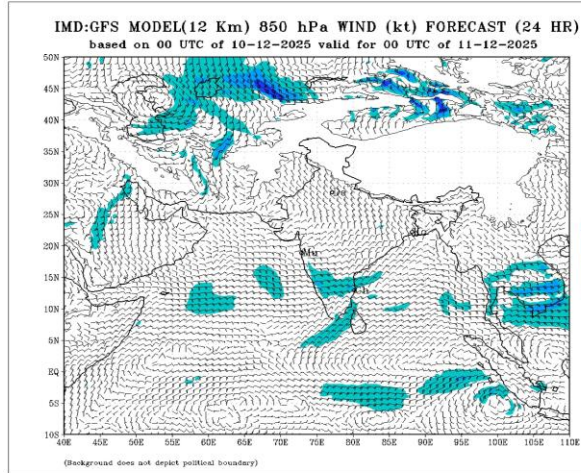
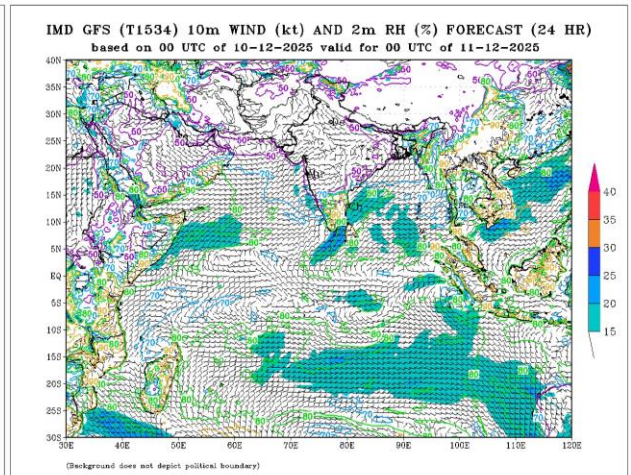
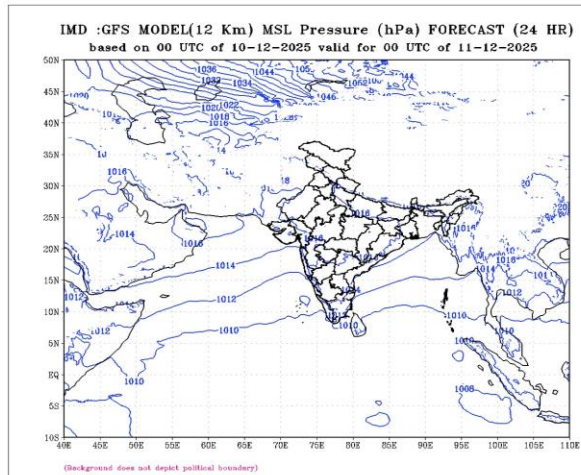
GPP Forecast (00–168h)



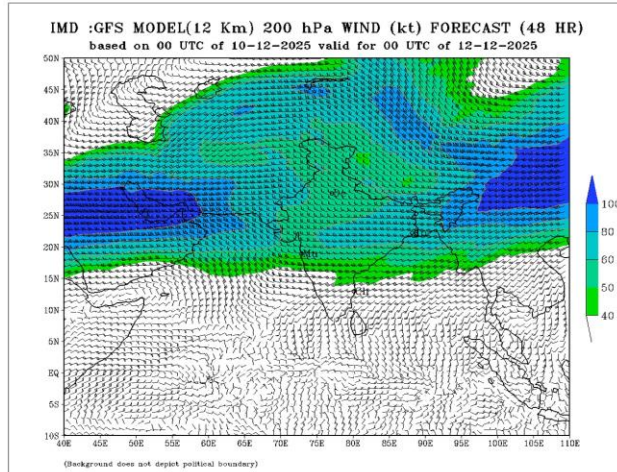
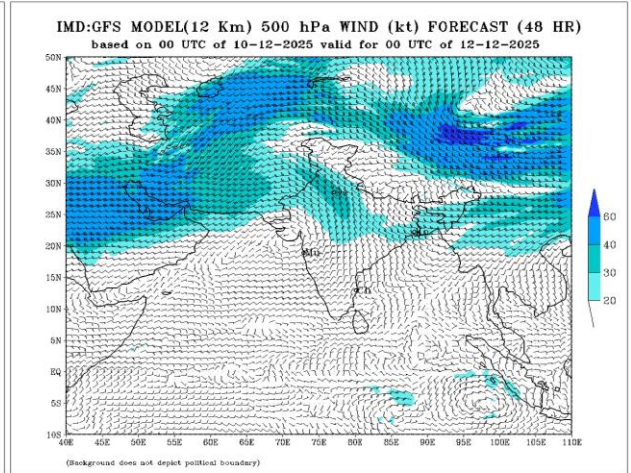
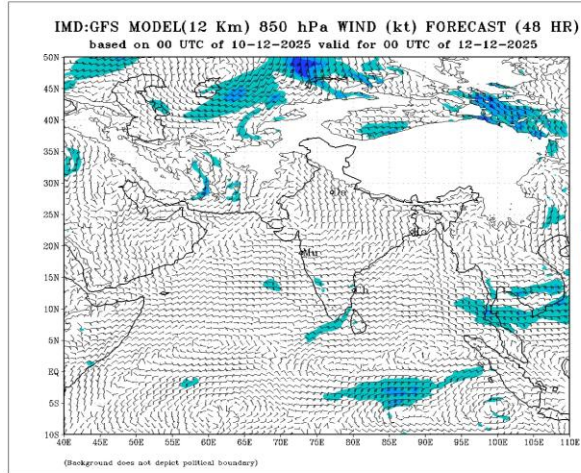
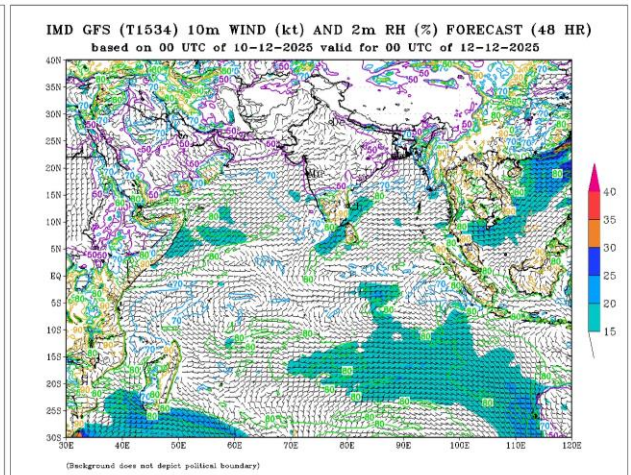
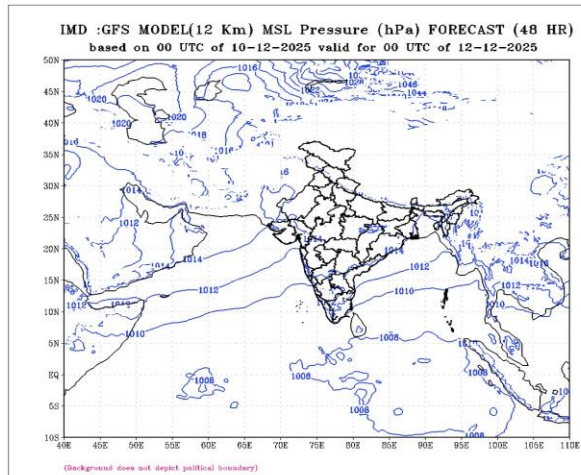
Forecast +00h



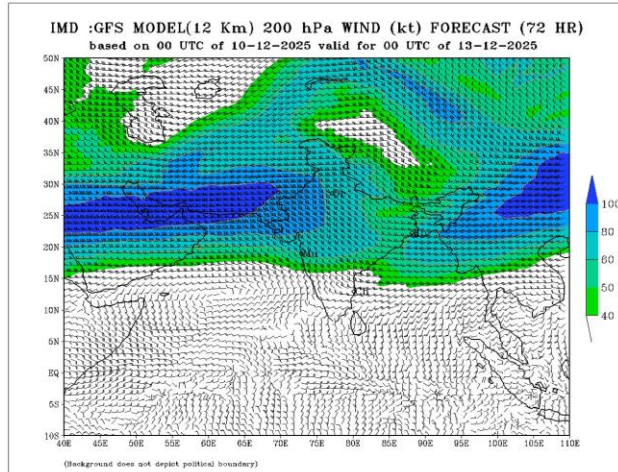
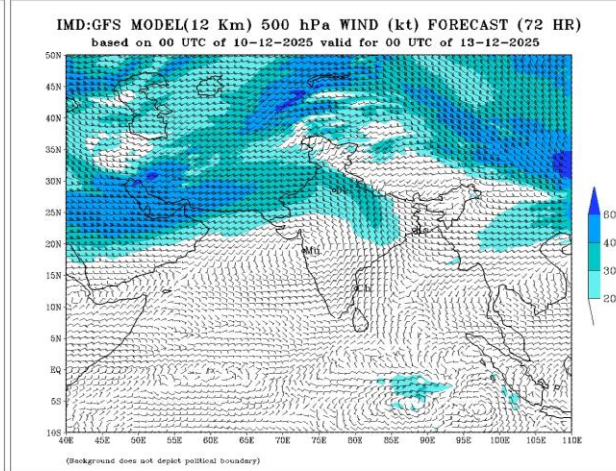
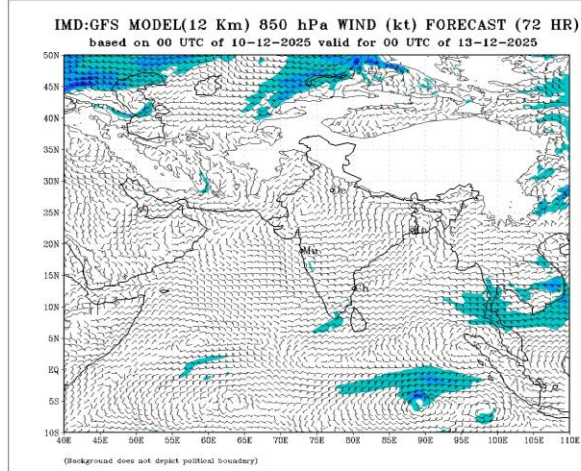
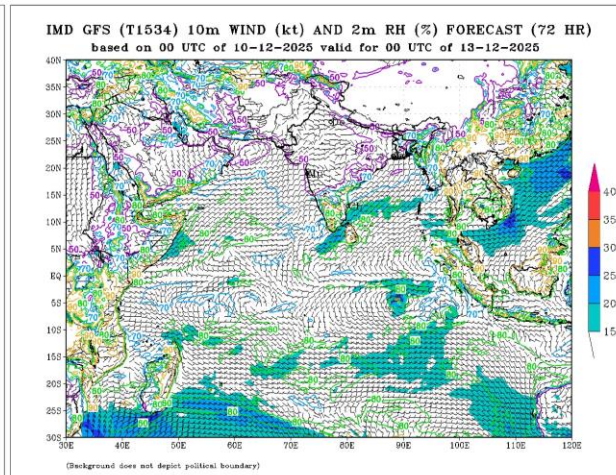
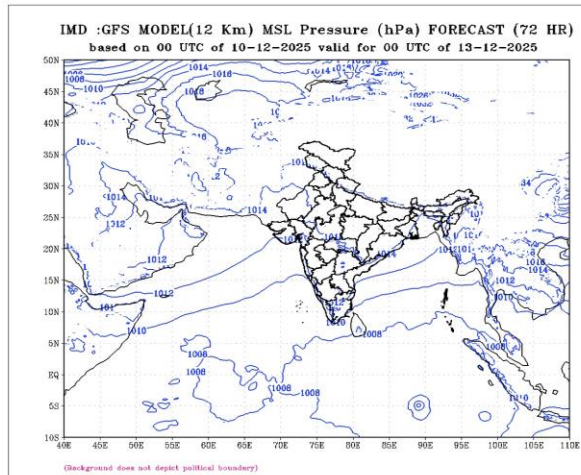
Forecast +24h



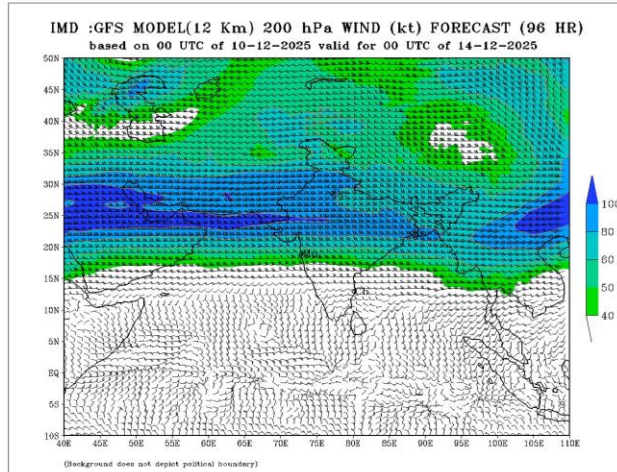
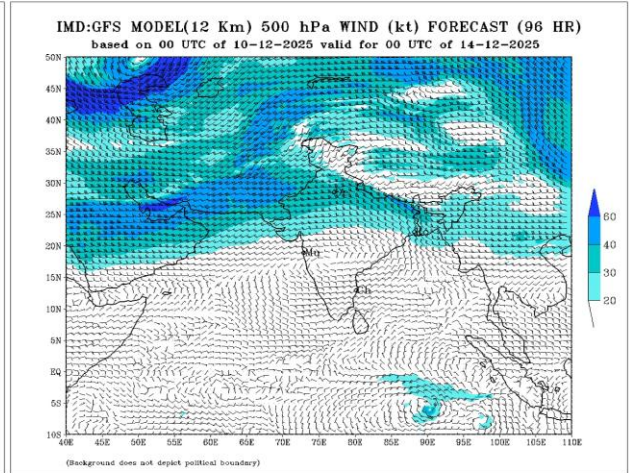
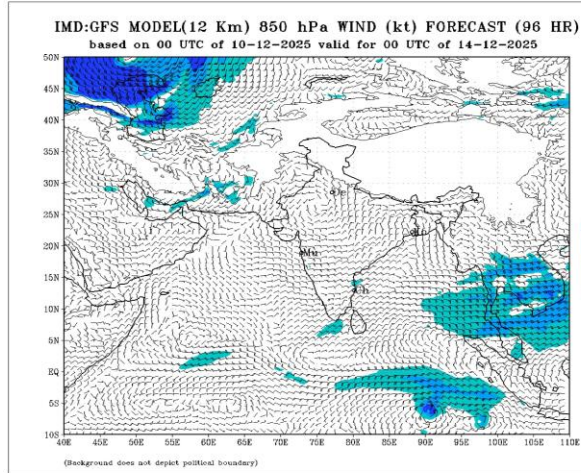
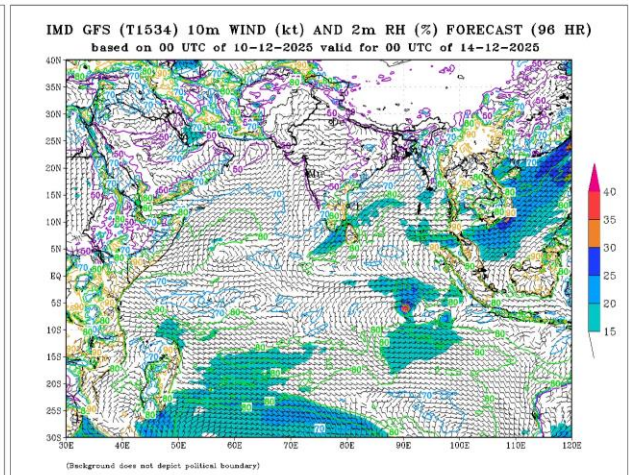
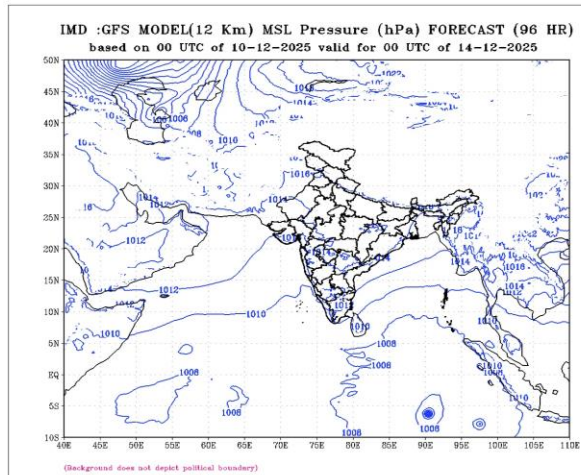
Forecast +48h



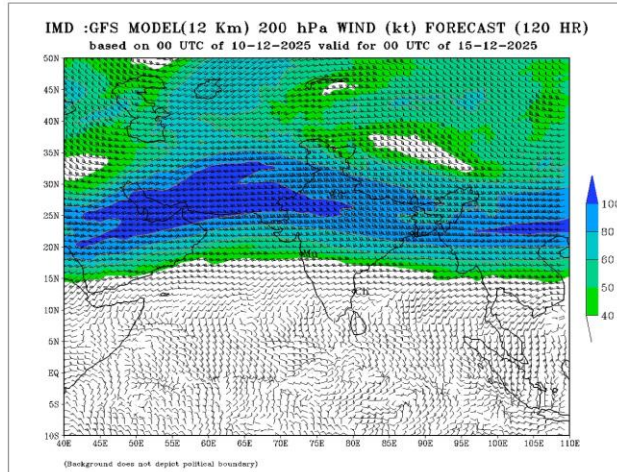
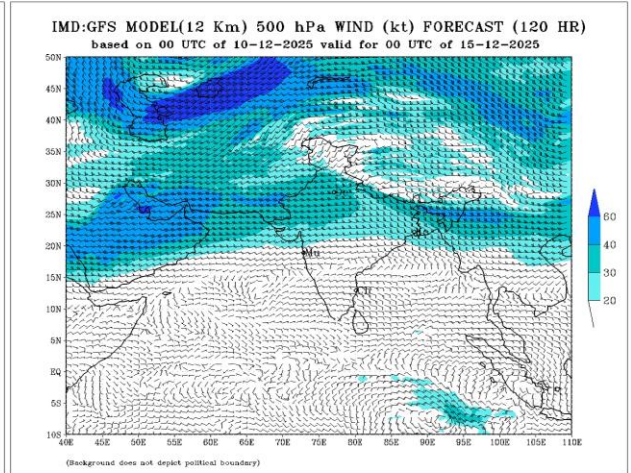
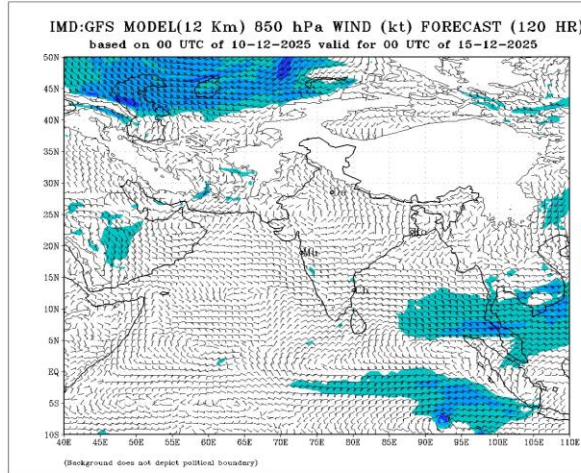
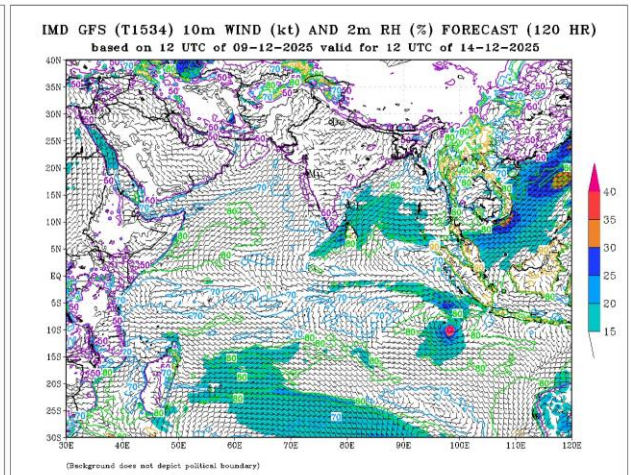
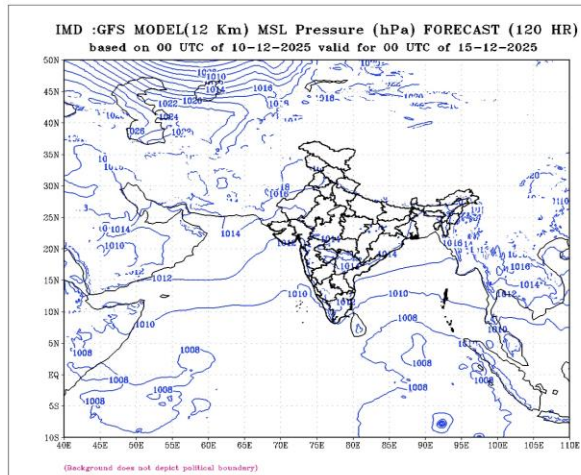
Forecast +72h



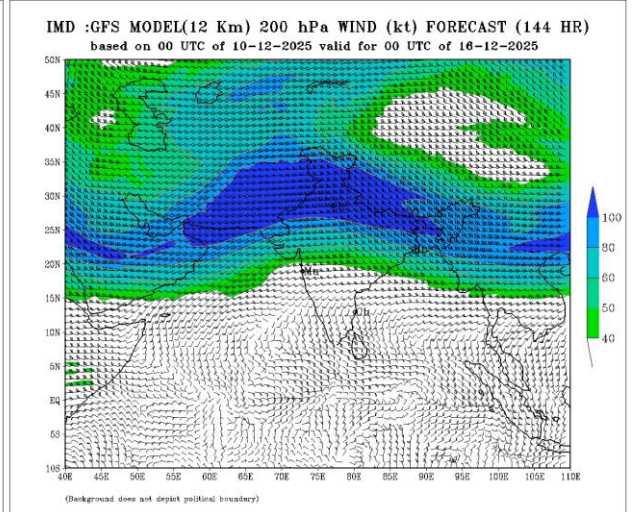
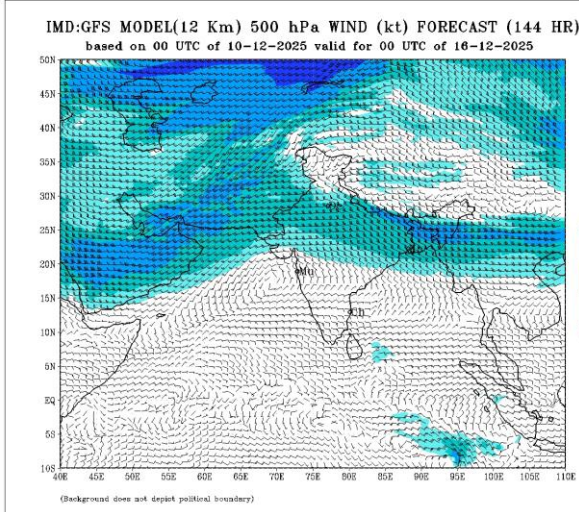
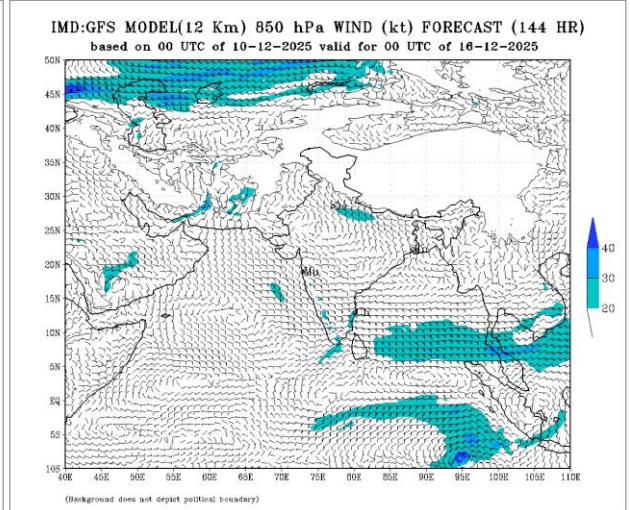
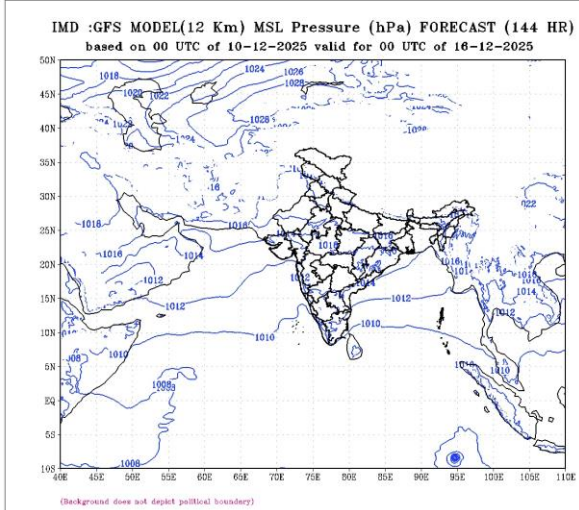
Forecast +96h



Forecast +120h



Forecast +144h



Forecast +168h

