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

Tropical Cyclone Forecast Programme
Report Dated 09th December 2025

Time of Issue: 1315 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) ºC	➢ 28°C over south adjoining central BoB. ➢ 27°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/cm^2	➢ 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})	➢ 30-40 over Sri Lanka	➢ 20-30 over Kerala-Karnataka coast
Low-Level convergence (X10-6 s-1)	➢ 5-10 over south Andaman Sea, south BoB adjoining Equatorial Indian Ocean (EIO)	➢ 5-10 over Kerala-Karnataka coast,
Upper-Level divergence (X10-6 s-1)	➢ 5-10 over south BoB adjoining EIO and over southwest BoB	➢ 5-10 over south AS
Vertical Wind Shear (VWS knots) **Low: 05-10 knots** **Moderate: 10-20 knots** **High: >20 knots**	➢ Low- moderate & anti-cyclonic over the southwest BoB adjoining Sri Lanka.	➢ Low- moderate over south AS
Wind Shear Tendency (knots)	➢ Increasing over entire BoB	➢ Decreasing over southwest, westcentral AS, Gujarat – Maharashtra coast adjoining northeast AS
Upper tropospheric Ridge	➢ Ridge is running along 10^{o}N at 99^{o}E	-
Tropical cyclone genesis potential parameter(GPP)	GPP around 30 over the southwest BoB on 15th; over southeast & adjoining EIO,	No significant GPP over the AS for the next seven days

	southwest BoB & adjoining EIO on 16th.	

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) 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 along with 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 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 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection lay over westcentral & southwest Bay of Bengal. Scattered low and medium clouds with embedded isolated weak to moderate convection lay over the rest parts of Bay of Bengal and 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 south Arabian Sea, Maldives and Comorin area. Scattered low and medium clouds with embedded isolated weak to moderate convection lay over Lakshadweep Islands area.

Outside India:

As per INSAT 3DS at 0600 UTC, scattered low & medium clouds with embedded moderate to intense convection over Sri Lanka, Gulf of Mannar, Maldives area, north Pakistan, Tibet, China, Yellow Sea, east China Sea, Myanmar, Thailand, Gulf of Thailand, Cambodia, Laos, Vietnam, Gulf of Tonkin, Hainan, 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 120.0°E and between latitude 15.0°S to 35.0°S longitude 40.0°E to 90.0°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 12°N at 81°E on 9th Dec, (off Tamil Nadu coast) on 9th December. ➢ An upper air circulation over Equitorial Indian Ocean (EIO) & adjoining southeast	An upper air circulation emerged into EIO & adjoining southeast AS on 17th will have westward

	BoB on 15th, having westward movement till 17th, reaching EIO & adjoining southeast AS without intensification further.	movement till 19th December without intensification further.
IMD-GEFS	Not available	Not available
IMD-WRF	Not available	Not available
BFS	➢ The trough in easterly wave is running along 14°N at 85°E on 8th Dec, reaching along 12°N at 80°E (off Tamil Nadu coast) on 9th December. ➢ Another easterly wave is likely to be active with development of a trough along 11°N at 85°E on 14th Dec.	An upper air cyclonic circulation over southwest AS, adjoining EIO on 8th Dec, moving nearly west-southwestward (WSW) till 10th, less marked thereafter.
NCMRWF-NCUM(G)	The trough in easterly wave is running along 9°N at 80°E (off Tamil Nadu coast) on 9th December.	An upper air cyclonic circulation over southwest AS, adjoining EIO on 9th Dec, moving nearly west-southwestward (WSW) slowly till 11th, less marked thereafter.
NCMRWF-NCUM(R)	The trough in easterly wave is running along along 9°N at 81°E (off Tamil Nadu coast) on 9th December.	No significant system during next three days.
NEPS	The easterly wave is likely to be active with development of a trough along 9°N at 80°E (off Tamil Nadu coast) on 9th 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°N at 82°E on 9th December. ➢ Another easterly wave is likely to be active with development of a trough along 13°N at 91°E on 14th December, reaching along 10°N at 83°E on 16th December, reaching off Tamil Nadu coast on 17th December.	No significant system is indicated during next 7 days.
NCEP-GFS	➢ The trough in easterly wave is running along 12°N at 80°E (off Tamil Nadu coast) on 9th December. ➢ Another easterly wave is likely to be active with development of a trough along 12.4°N at 88.1°E on 14th December, reaching along 10.5°N at 85.5°E on 15th December. The induced low pressure area (LPA) is seen on 15th over southwest BoB.	No significant system is indicated during next 7 days.
EC-AIFS	The trough in easterly wave is running along 13°N at 85°E on 9th December.	No significant system is indicated during next 7 days.

Summary of models guidance:

Bay of Bengal:

Most of the models indicate the signature of easterly waves over southwest BoB off North Sri Lanka and adjoining off Tamil Nadu coasts on 9th December, persisting with weakening trend over the same region till 11th 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.

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) An active easterly wave is likely to persist over southwest BoB off north Sri Lanka and off Tamil Nadu coast with weakening trend till 11th December. It is very likely to impact coastal Tamil Nadu and Sri Lanka.

(b) Models are also indicating another active easterly wave over southeast BoB region from 14th December. The associated trough is likely to reach southwest BoB off north Sri Lanka coast on 17th 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

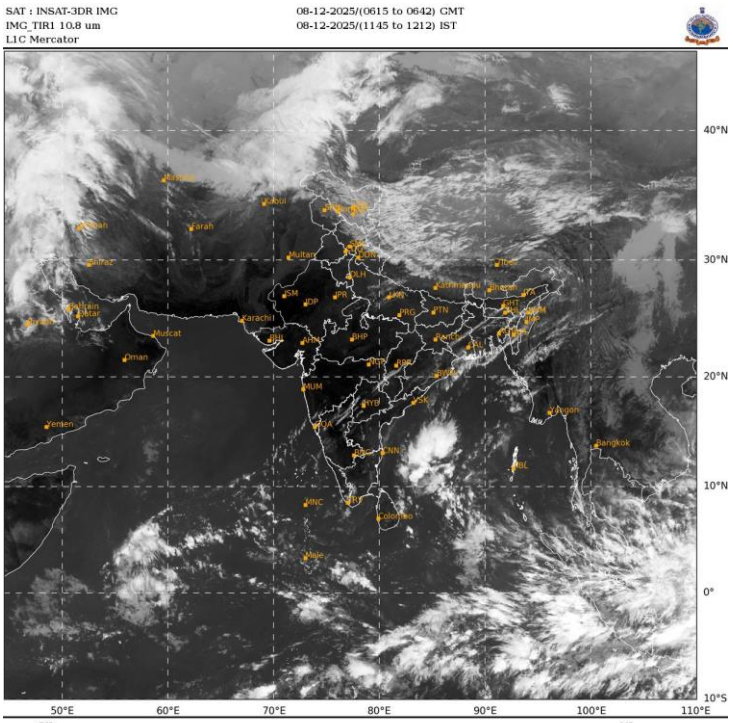
Probability of cyclogenesis (formation of depression and above intensity systems) over the Arabian Sea during next 168 hours:

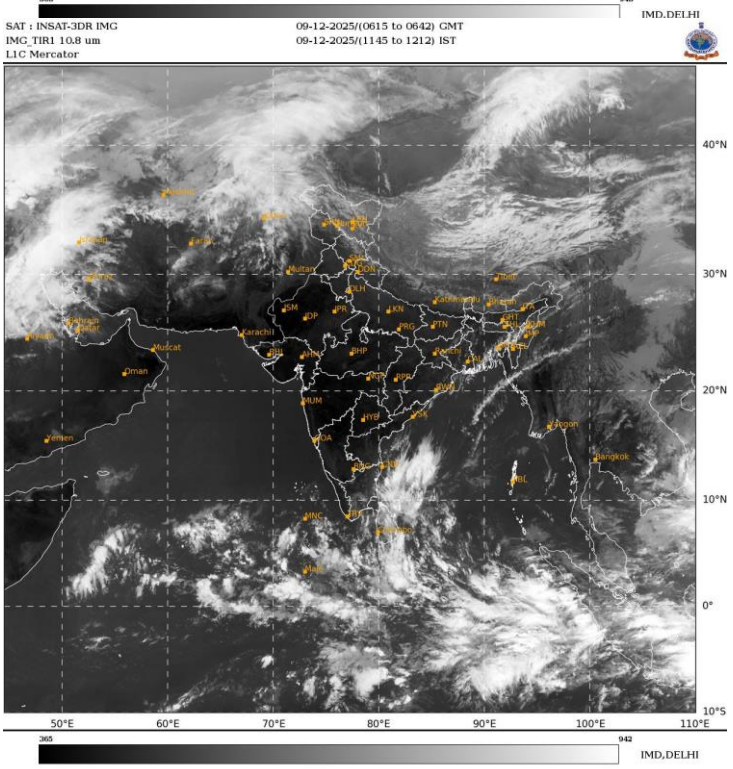
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

"- "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.

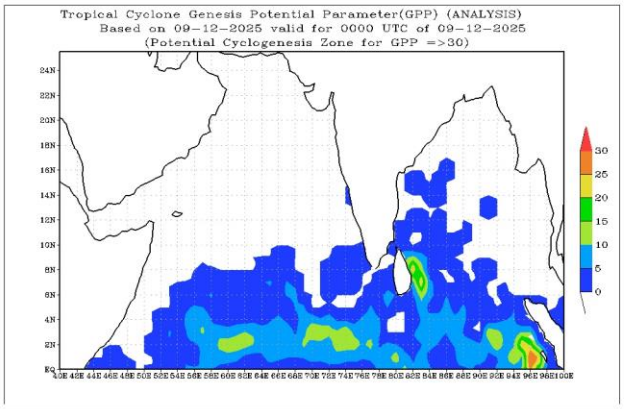
Intense Observation Period (IOP): Nil

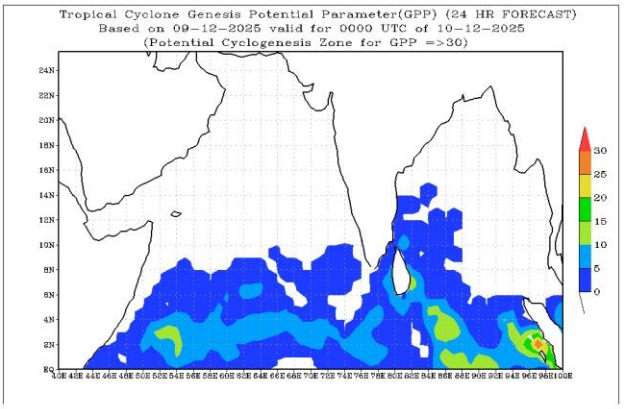
INSAT 3DS imageries at 0600 UTC of 8th & 9th December

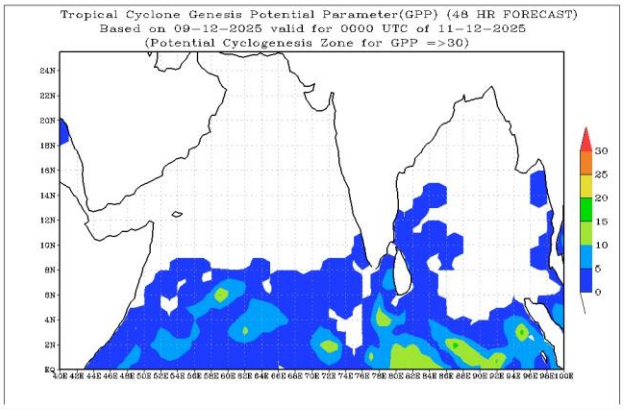


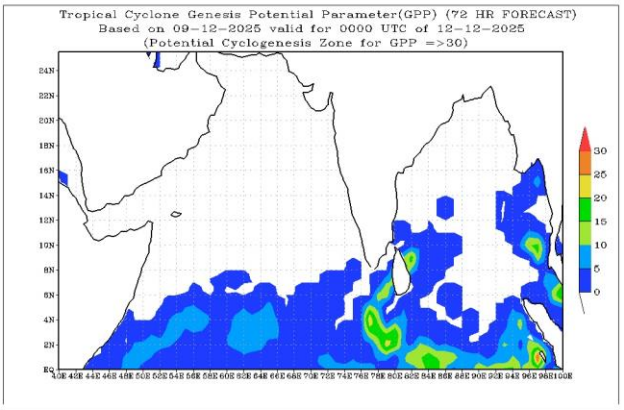


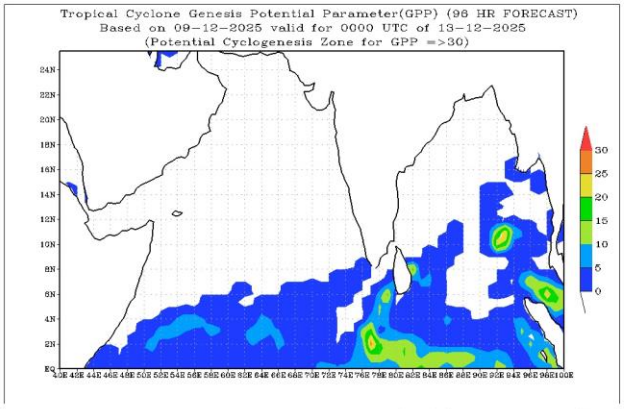
GPP Forecast (00–168h)

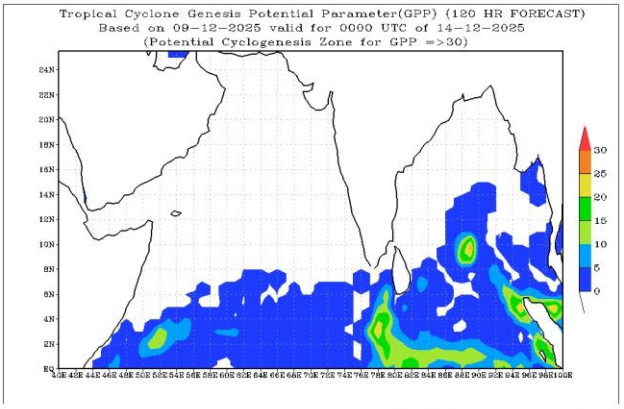


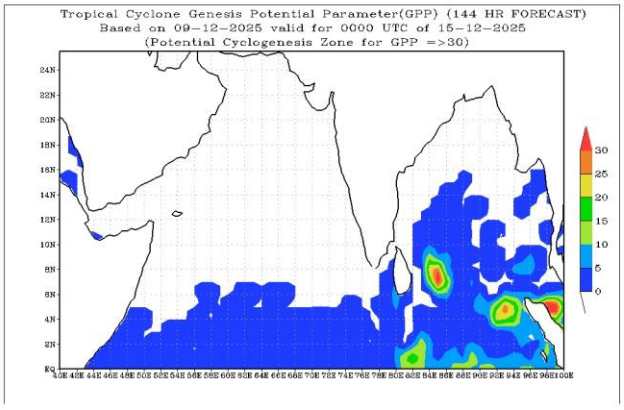


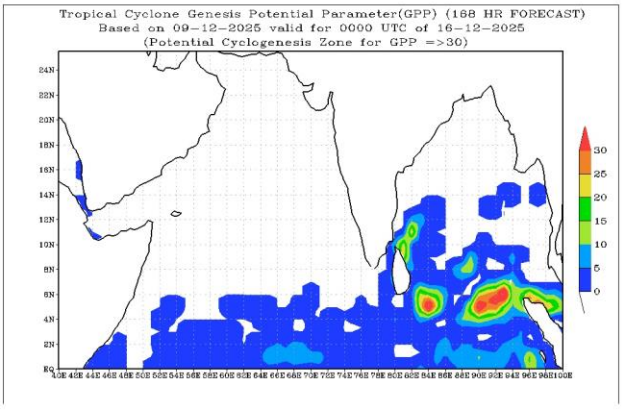




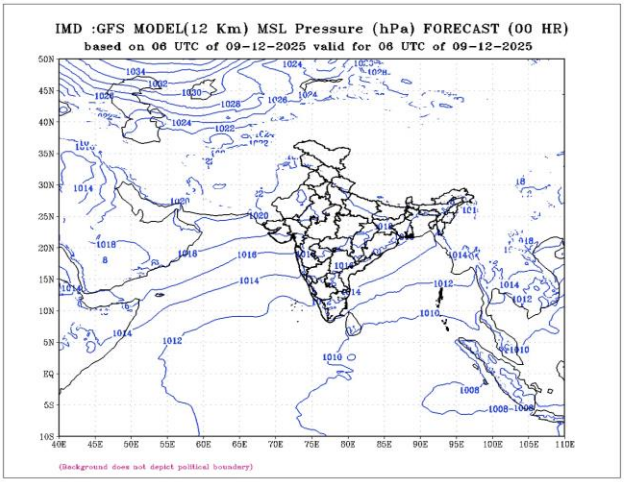


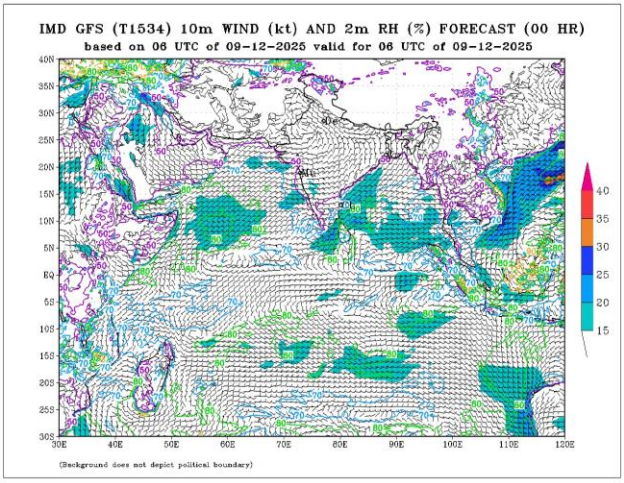


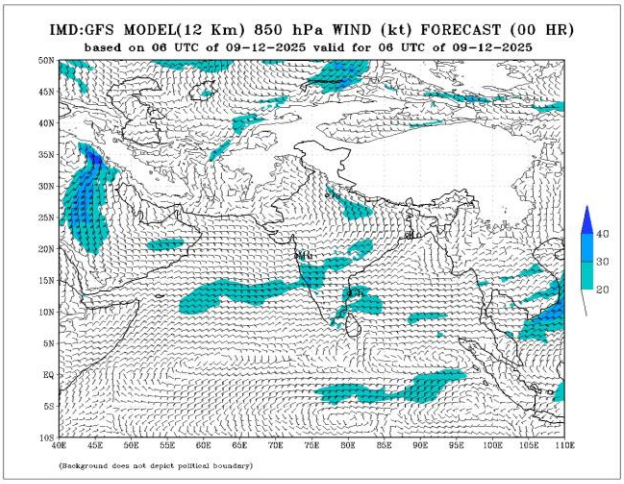


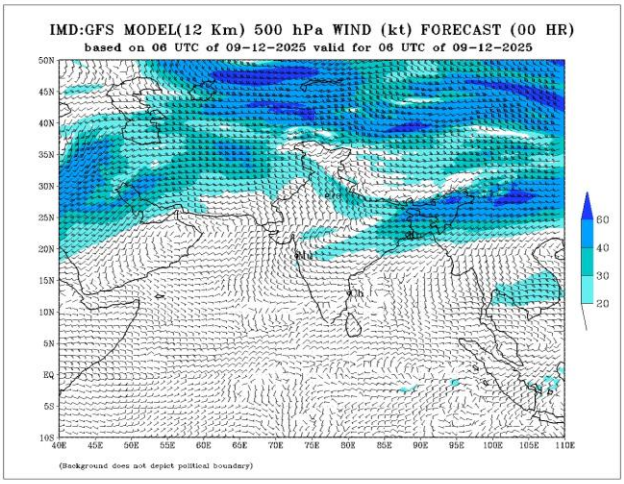


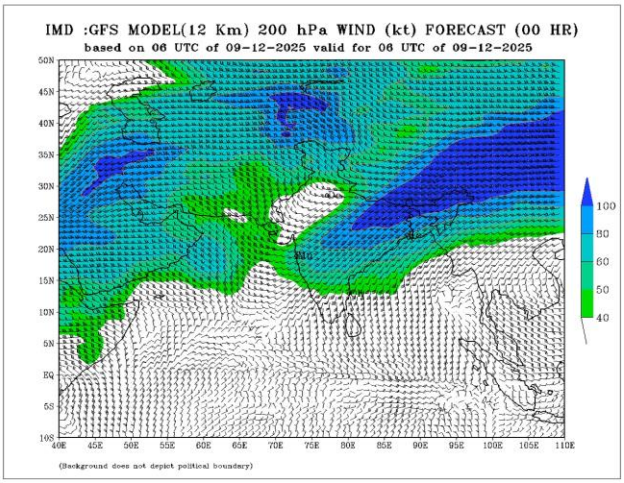
Forecast +00h



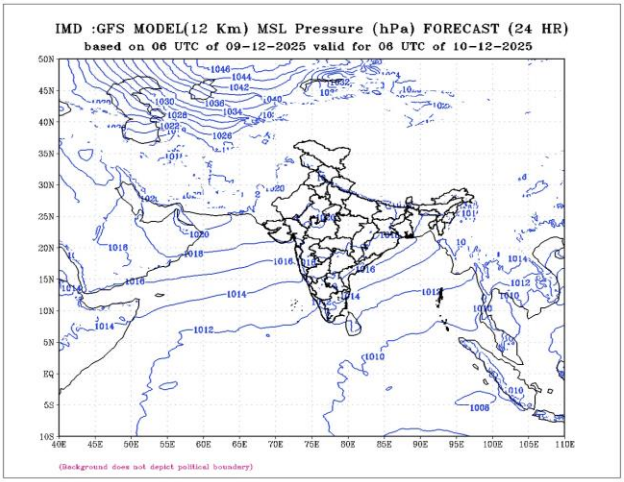


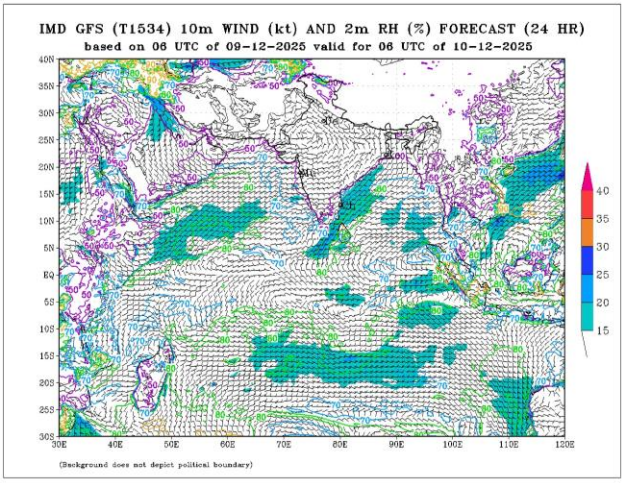


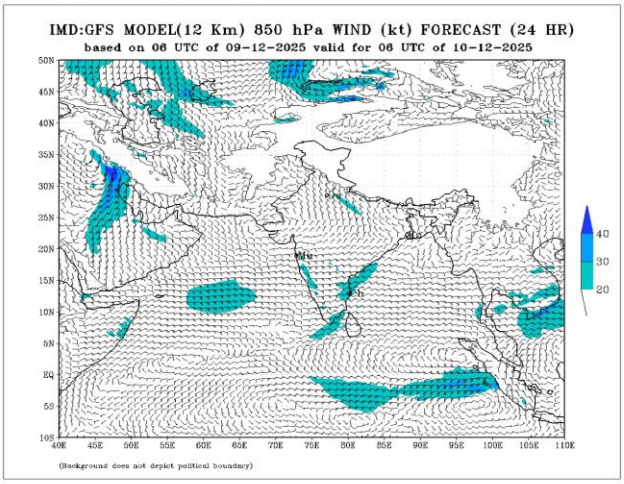


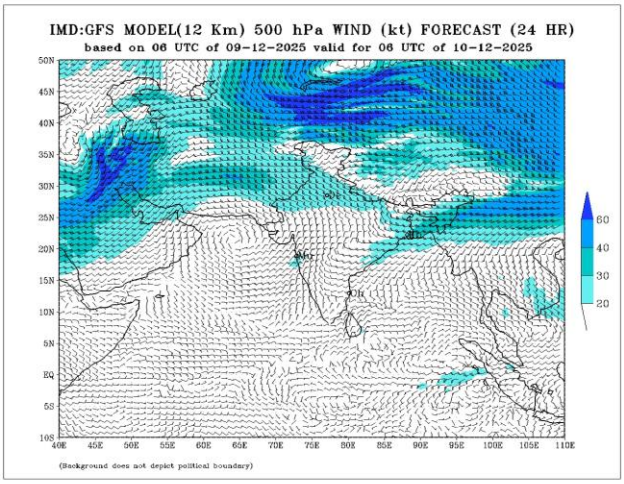


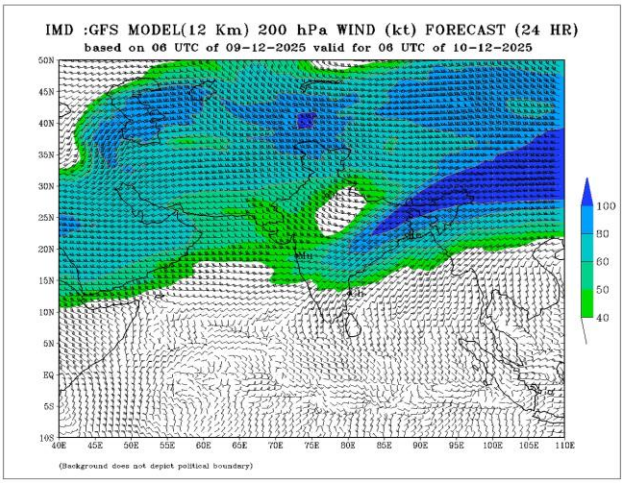
Forecast +24h



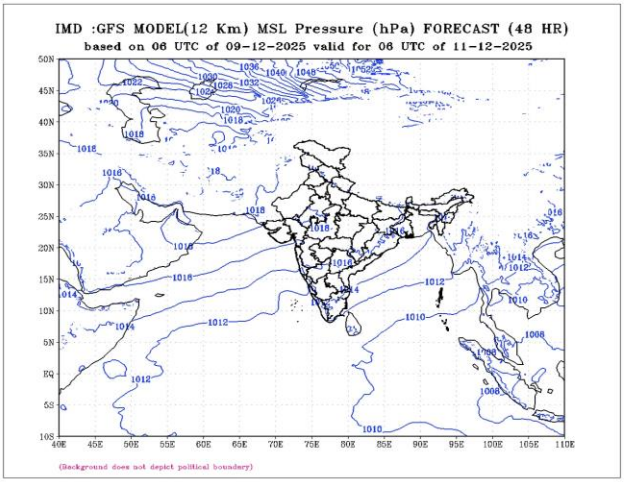


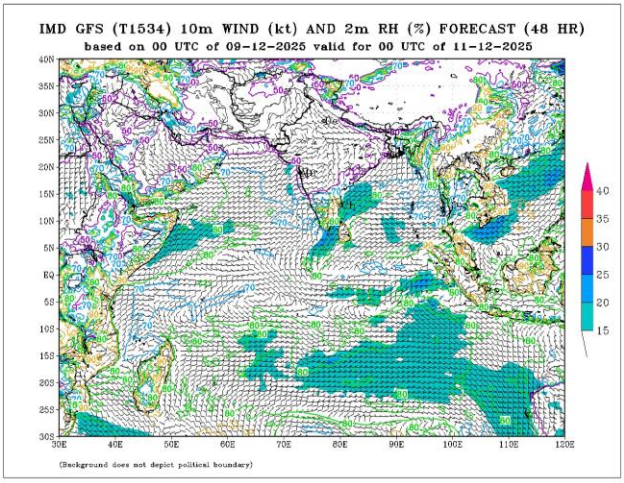


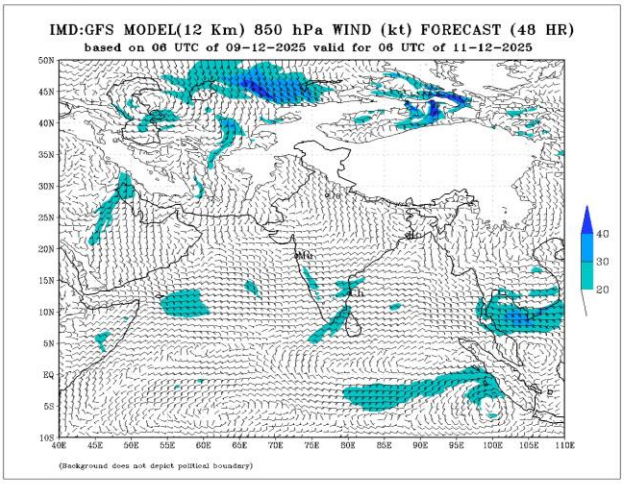


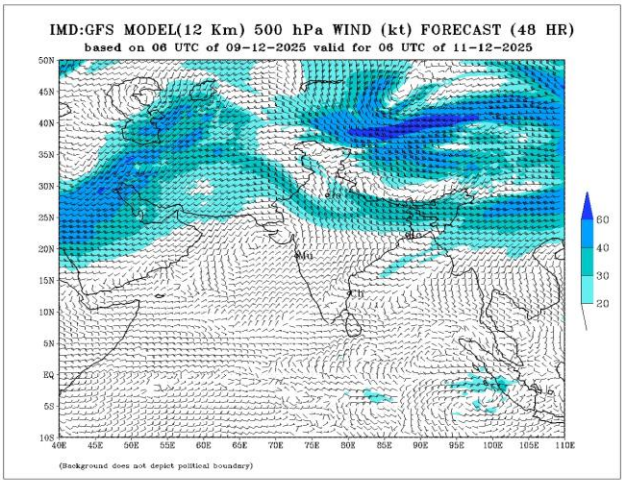


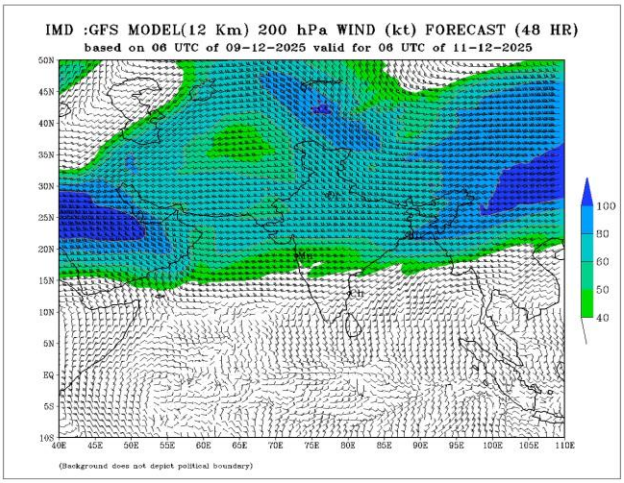
Forecast +48h



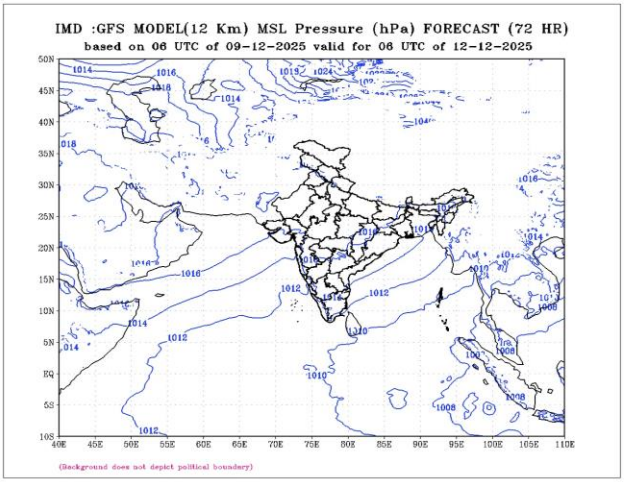


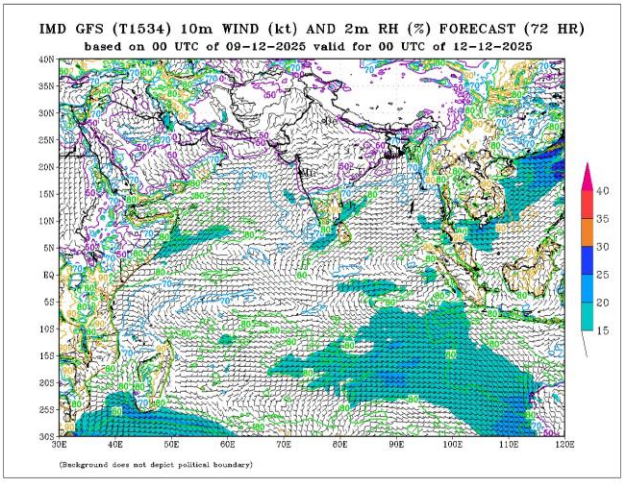


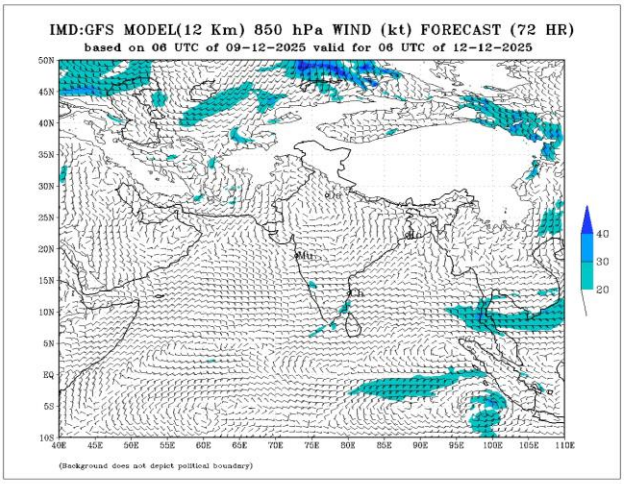


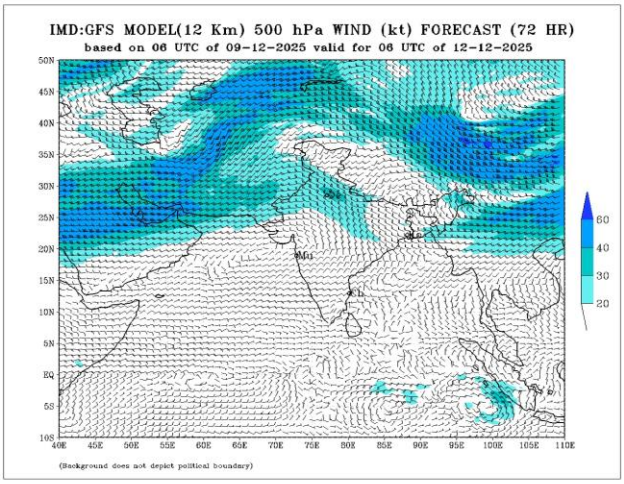


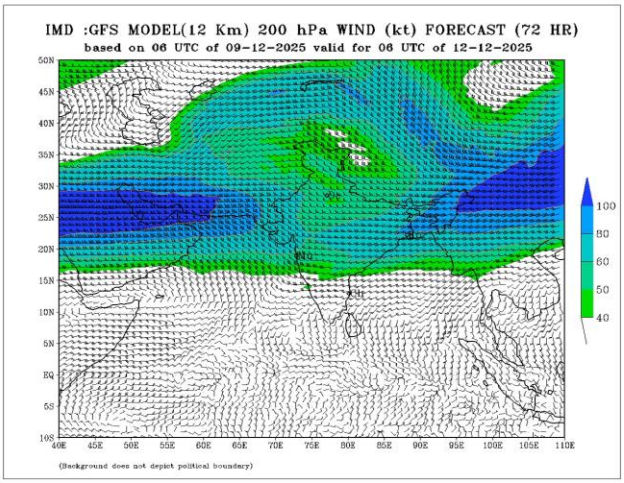
Forecast +72h



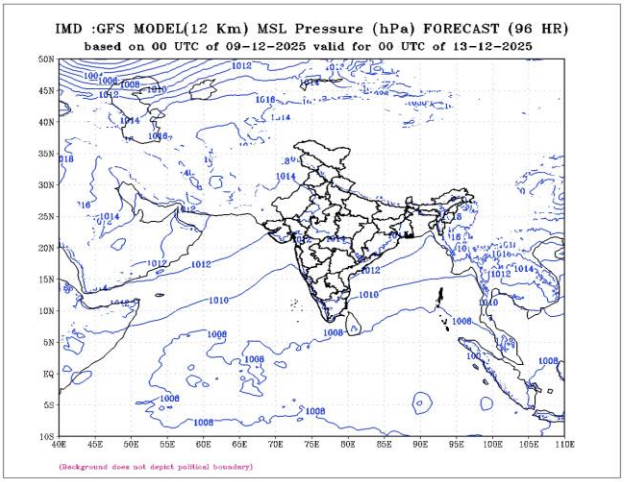


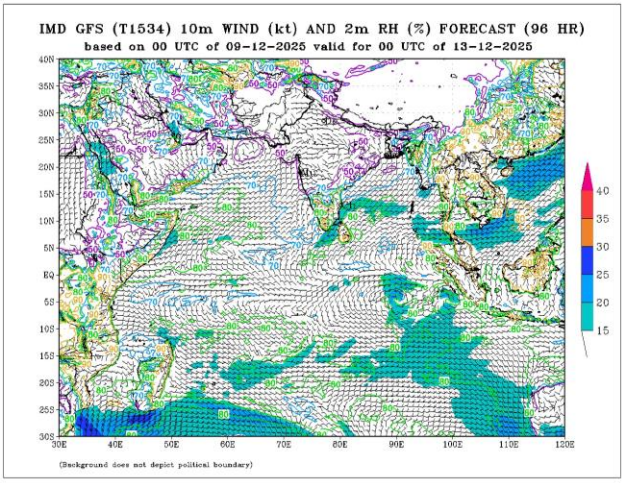


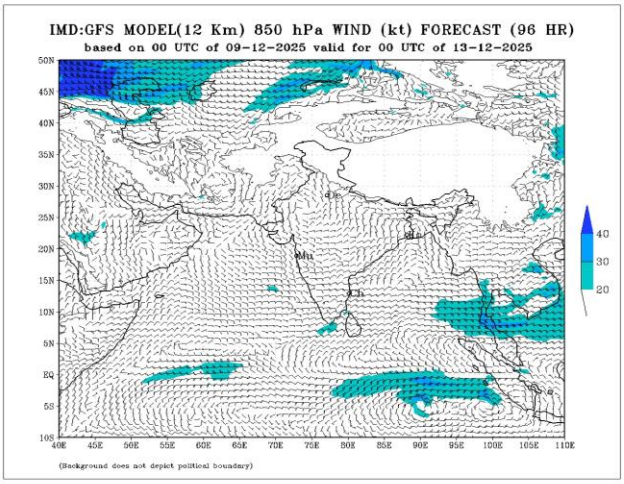


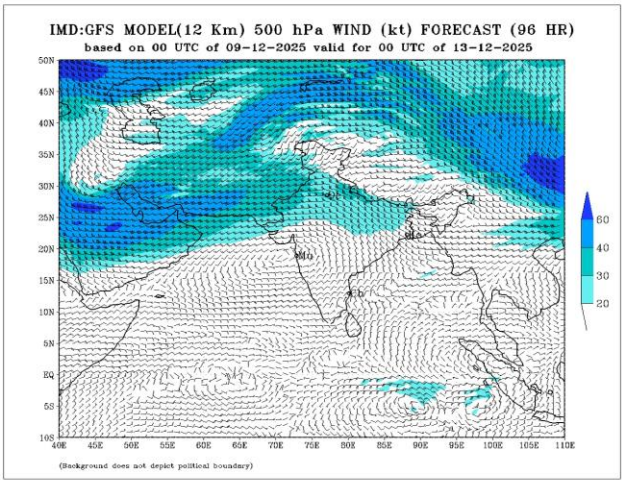


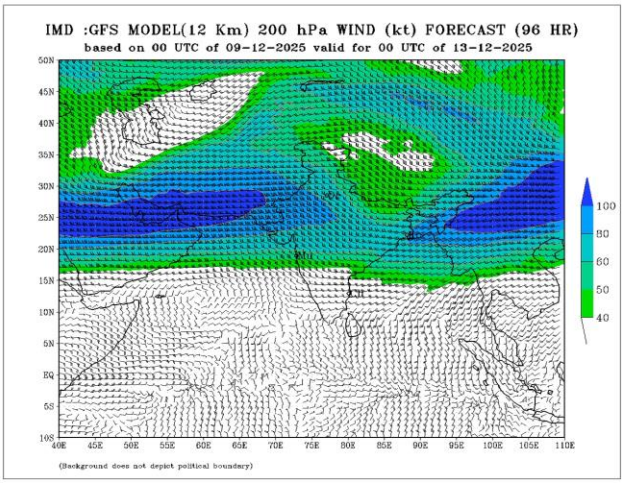
Forecast +96h



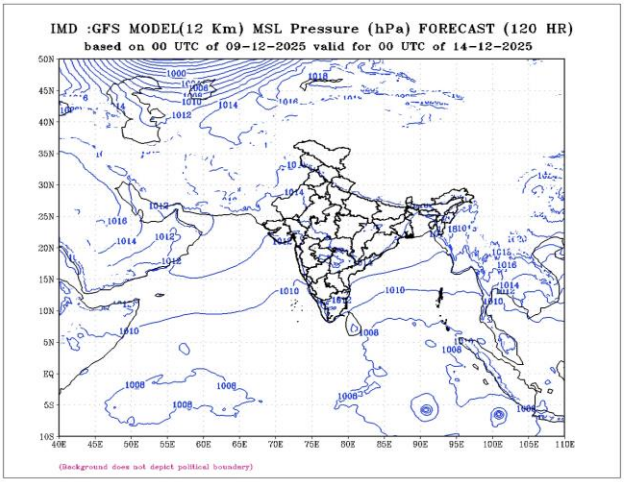


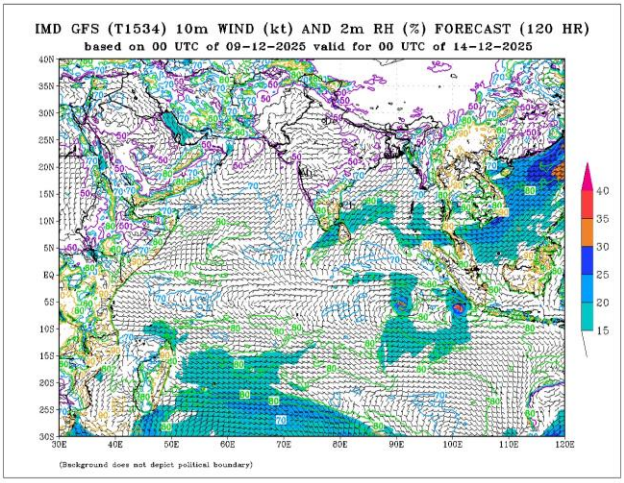


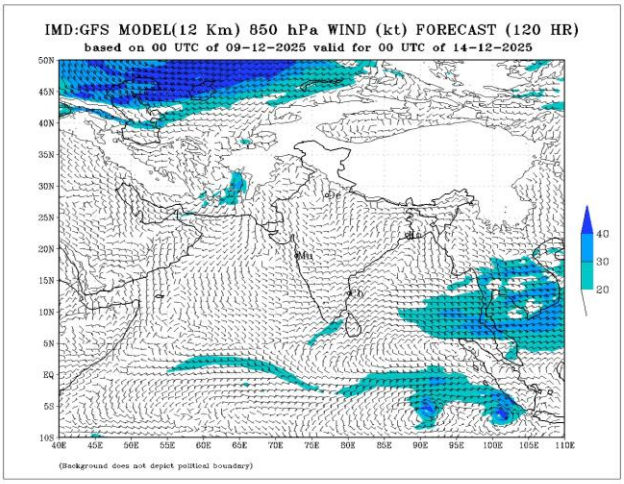


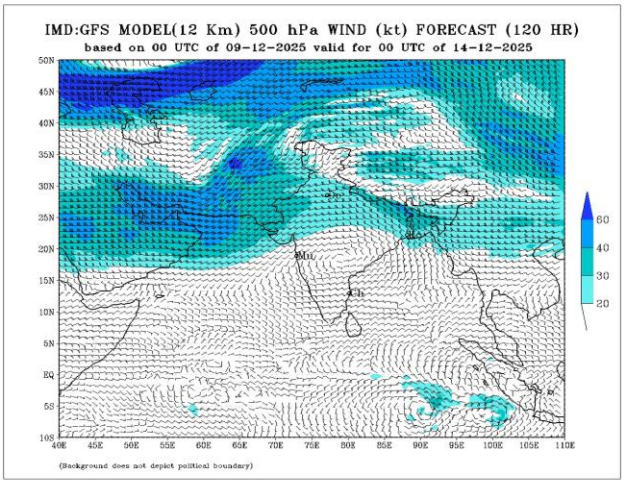


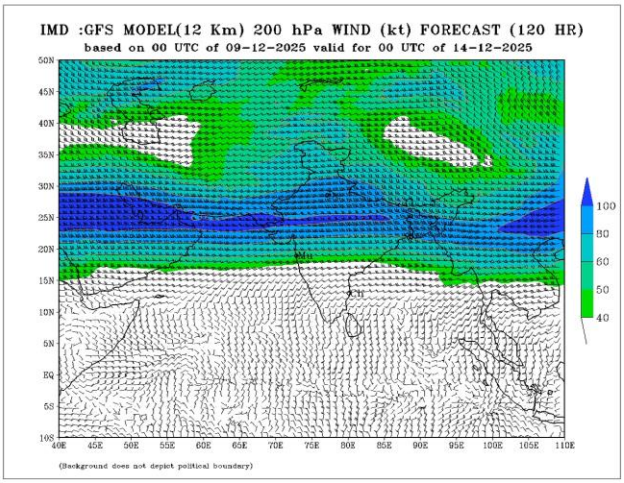
Forecast +120h



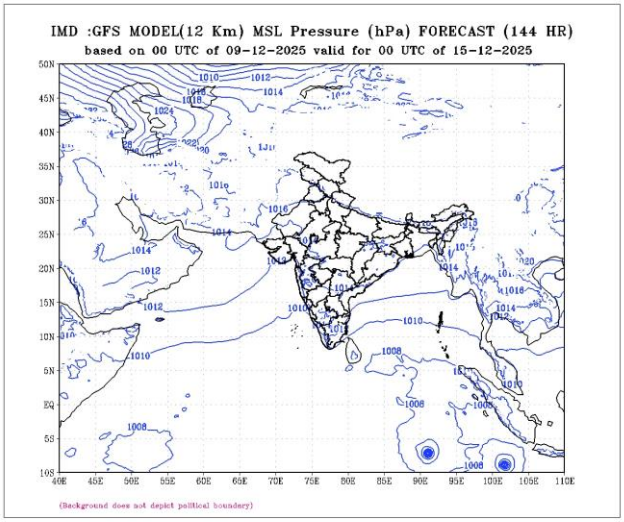


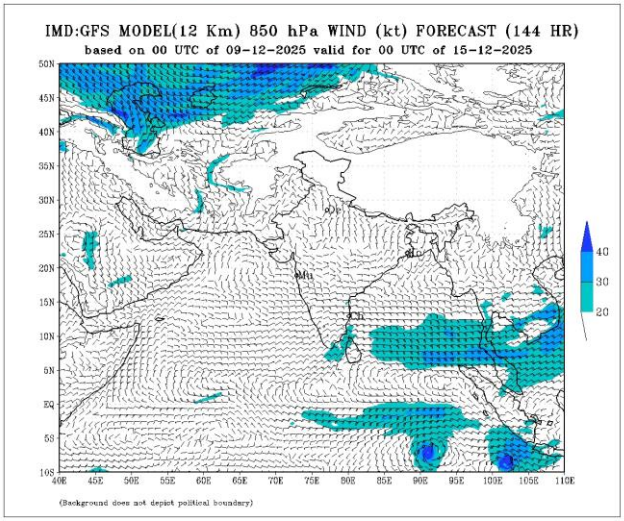


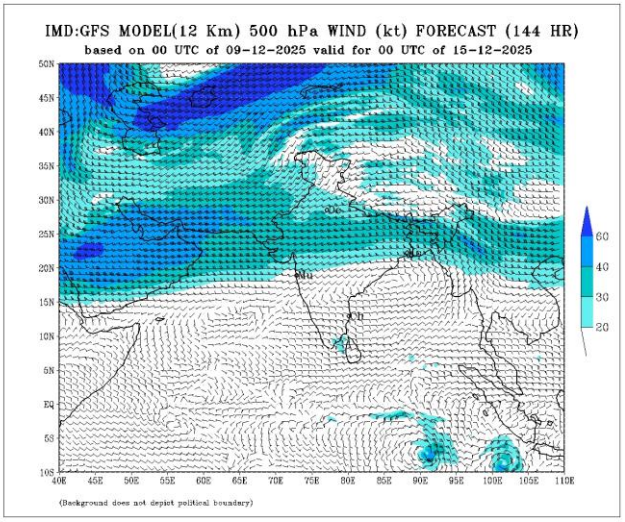


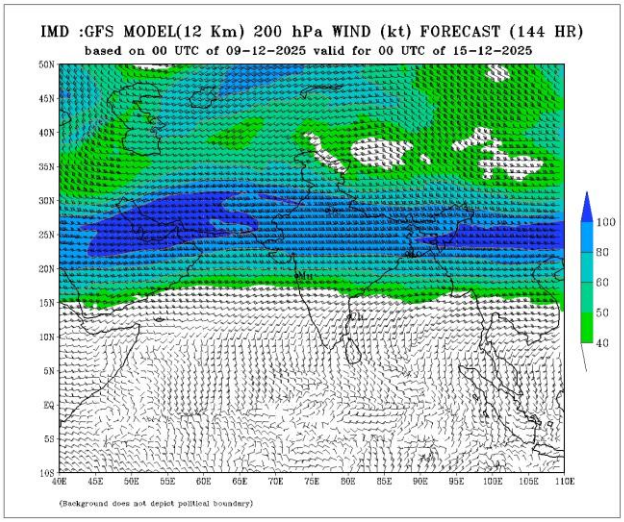


Forecast +144h









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