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

Tropical Cyclone Forecast Programme
Report Dated 12th December 2025

Time of Issue: 1230 UTC

Synoptic features (based on 0600 UTC analysis):

- Yesterday's upper air cyclonic circulation over southwest Bay of Bengal & adjoining areas of east Equatorial Indian Ocean off south Sri Lanka coast became less marked at 0300 UTC of today, the 12th December, 2025.

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})	20-30 over Myanmar coast	-
Low-Level convergence (X10-6 s-1)	5 over south BoB adjoining Sri Lanka coast	5 over eastcentral AS off Karnataka coast
Upper-Level divergence (X10-6 s-1)	5 over southwest BoB adjoining south Sri Lanka coast	5 over Lakshadweep Islands area
Vertical Wind Shear (VWS knots) **Low: 05-10 knots** **Moderate: 10-20 knots** **High: >20 knots**	Low- moderate over south BoB.	Low- moderate over south AS, Lakshadweep Islands, Comorin and Maldives area.
Wind Shear Tendency (knots)	Decreasing over southwest BoB	Decreasing over south AS
Upper tropospheric Ridge	Ridge is running along 09ºN at 99ºE	-

Tropical cyclone genesis potential parameter(GPP)	GPP not available	

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. It is very likely to remain in phase 8 with gradually increasing amplitude till 18th December. Thereafter, it will move slowly across phases 8 and 7 with amplitude close to 1 during 19th to 25th December. Thus, MJO is not likely to contribute towards enhancement of convective activity over the north Indian Ocean (NIO) region including the Bay of Bengal (BoB) and the Arabian Sea (AS).

Equatorial waves guidance:

The guidance from NCICS model indicating the prevalence of easterly/northeasterly winds over the entire BoB and AS during 11th to 17th December. Thereafter, the model is indicating a cyclonic circulation over southwest BoB during 18th to 20th December and northeasterly flow is indicated over the AS. The 850 hPa anomaly field is indicating an anticyclonic circulation over central AS during 12th to 17th December. However, during 18th to 25th December, the model is indicating cyclonic anomaly over southwest Bay of Bengal. Thus, ERF model (850 hpa mean wind field and anomaly field) is indicating development of some cyclonic circulation/ low pressure area over southeast BoB during 14th to 17th December with nearly westwards movement. The model is also indicating above average rainfall activity over south BoB and Sri Lanka during 12th to 17th December and below average rainfall activity over southern Peninsula. During 18th to 25th December, the model is indicating slightly above average rainfall over south & central BoB and Andaman Sea.

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 south 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

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Outside India:

Vortex over southeast Indian Ocean (area E75) centered near 7.50S / 97.80E (.) IntensityT2.5/2.5. Maximum Sustained Winds 34-47 KTS (.) Associated scattered to broken low and medium clouds with embedded intense to very intense convection over area between latitude 5.00S to 14.00S longitude 93.00E to 100.00E.

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection over Sri Lanka, Palk Strait, Gulf of Mannar, Maldives area, Tibet, China, east China Sea, North Myanmar, Thailand, Gulf of Thailand, Cambodia, Laos, Vietnam, Gulf of Tonkin, 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 20.0°S longitude 50.0°E to 120.0°E and between latitude 20.0°S to 35.0°S longitude 40.0°E to 70.0°E.

NWP Guidance for FDP Cyclone:

MODEL GUIDANCE	Bay of Bengal (BoB)	Arabian Sea (AS)
IMD-GFS	➢ An upper air circulation over Equatorial Indian Ocean (EIO) & adjoining southeast BoB on 19th December having westward movement till 22nd without further intensification. ➢ The trough in easterly wave is running along 14°N at 89°E on 14th December, reaching 14°N and 81°E (off Tamil Nadu – north Andhra Pradesh coast) on 16th December.	No significant system is indicated during next 7 days.
IMD-GEFS	Not available	Not available
IMD-WRF	Not available	Not available
BFS	The trough in easterly wave is running along 10°N at 86°E on 14th December, reaching 10°N and 82°E on 15th December.	No significant system is indicated during next 7 days.
NCMRWF-NCUM(G)	➢ An upper air circulation over EIO & adjoining southeast BoB on 12th, will become less marked by 13th December. ➢ The trough in easterly wave is running along 14°N at 89°E on 14th December, reaching along 10°N and 81°E on 16th December.	No significant system is indicated during next 7 days.
NCMRWF-NCUM(R)	➢ An upper air circulation over EIO & adjoining southeast BoB on 12th, will become less marked by 13th December. ➢ The trough in easterly wave is running along 14°N at 88°E on 14th December, reaching along 12°N and 83°E on 15th December.	No significant system is indicated during next 3 days.
NEPS	The trough in easterly wave is running along 14°N at 85°E on 15th December, reaching along 12°N and 80°E on 16th 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 13.6°N at 89.7°E on 12th December, reaching along 12.6°N at 81.5°E on 16th 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 89.5°E on 14th December, reaching along 12.4°N at 81.7°E on 15th December.	No significant system is indicated during next 7 days.
EC-AIFS	The easterly wave is likely to be active with development of a trough along 9.9°N at 89.5°E on 14th December, reaching along 9.4°N at 86°E on 15th December and reaching along 11.8°N at 80.9°E on 16th December	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 south BoB on 14th December, reaching off Tamil Nadu coast around 16th December. It is likely to cause widespread rainfall over south peninsular India and Sri Lanka during 15th to 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

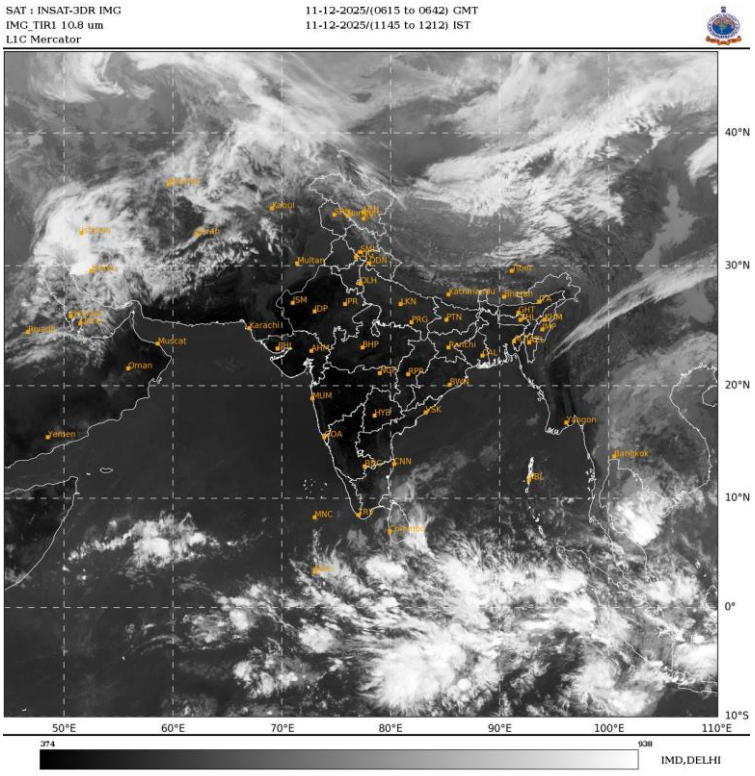
Probability of cyclogenesis (formation of depression and above intensity systems) over the Arabian Sea during next 168 hours:

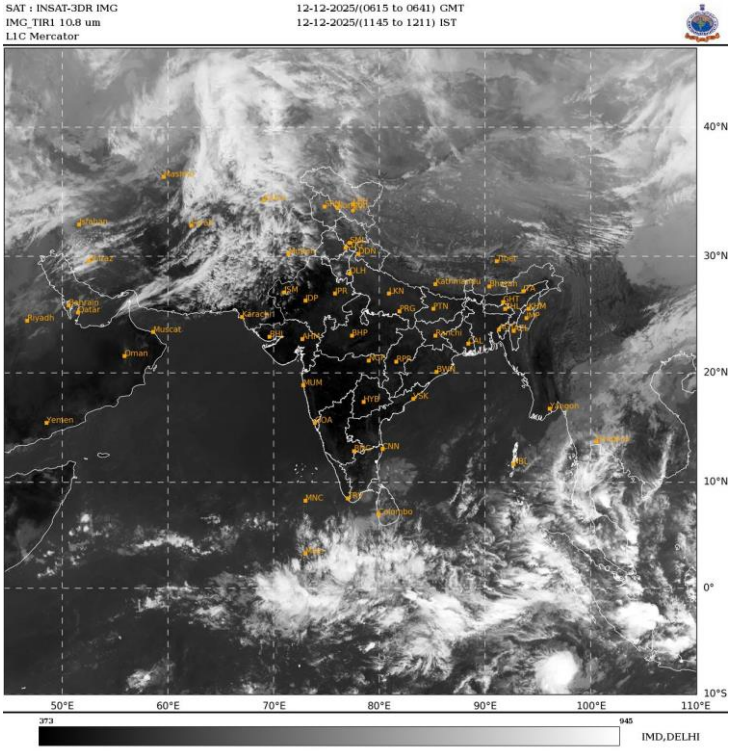
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

"- "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.

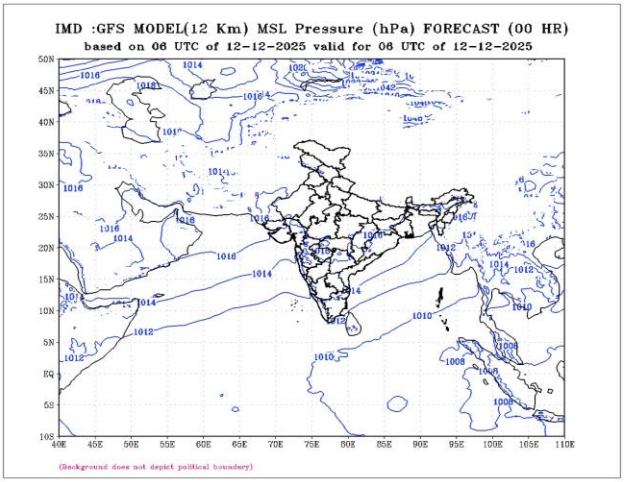
Intense Observation Period (IOP): Nil

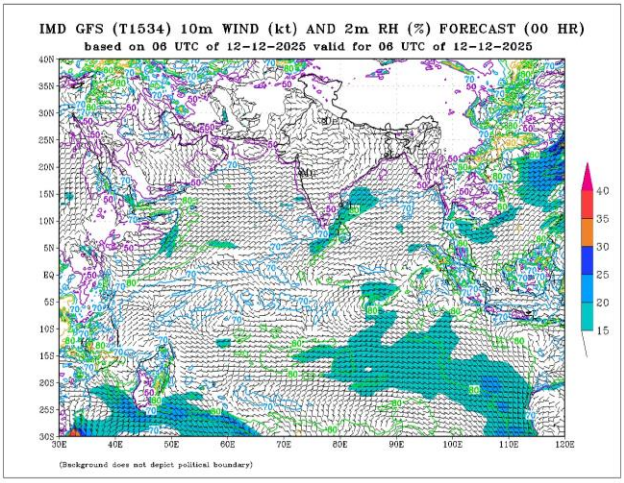
INSAT 3DS imageries at 0600 UTC of 11th & 12th December





Annexure


IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (00 HR)
based on 06 UTC of 12-12-2025 valid for 06 UTC of 12-12-2025
(Background does not depict political boundary)


IMD GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (00 HR)
based on 06 UTC of 12-12-2025 valid for 06 UTC of 12-12-2025
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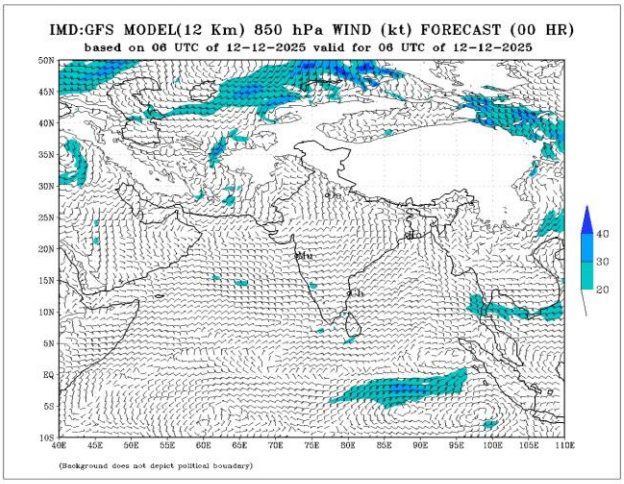
IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (00 HR)
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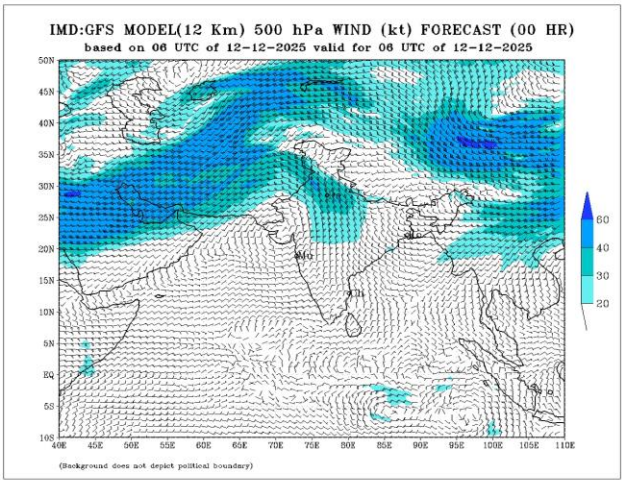
IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (00 HR)
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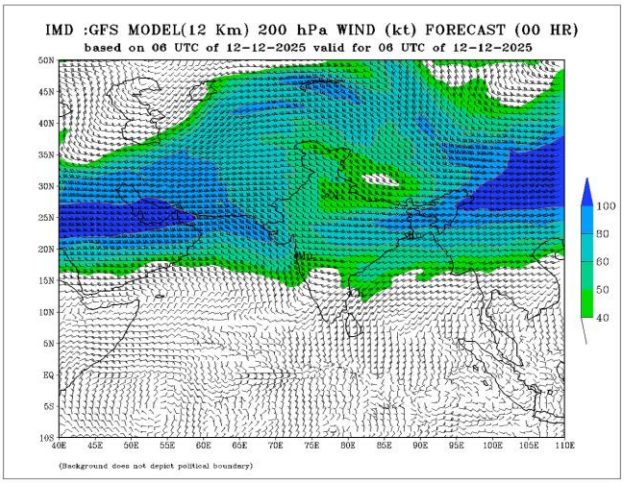
IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (00 HR)
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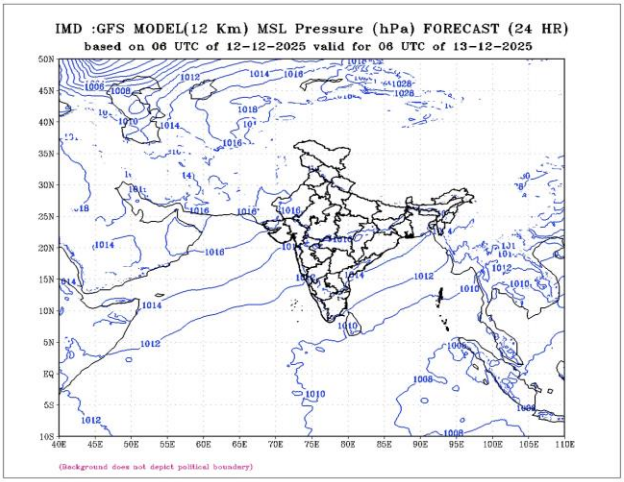
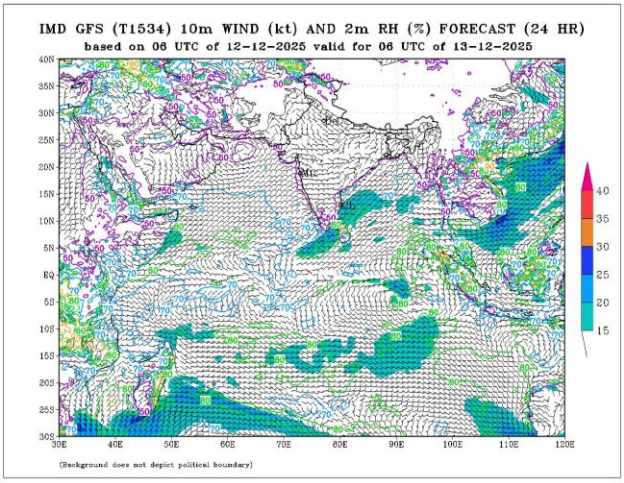
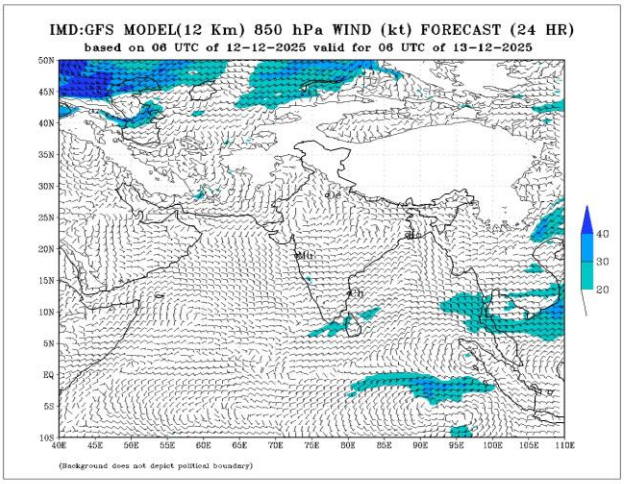
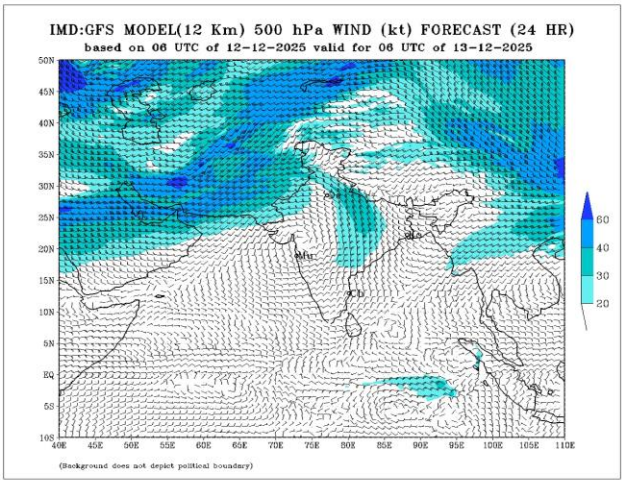
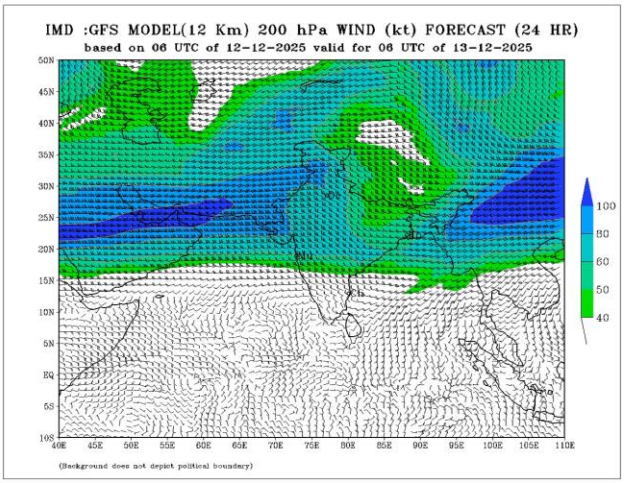
Forecast +24h



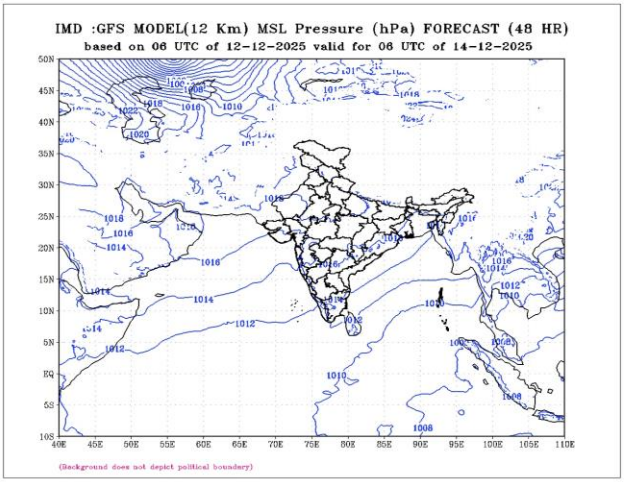


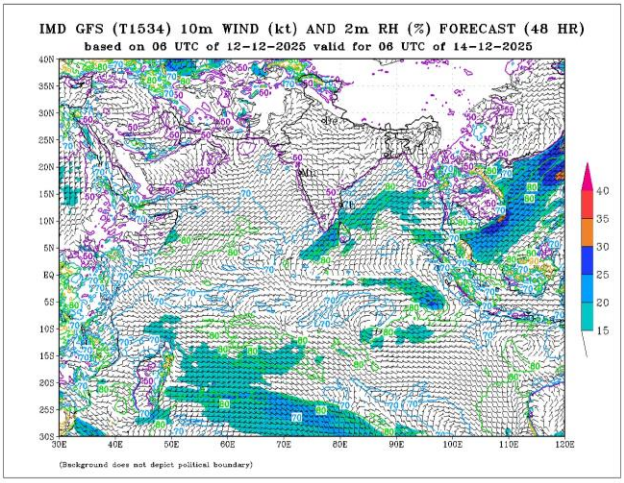


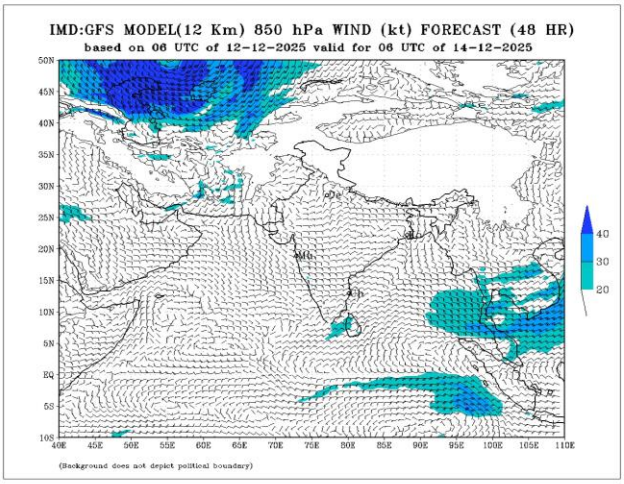


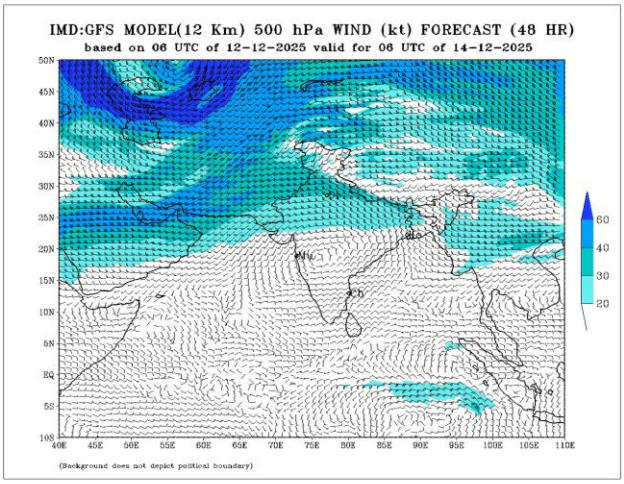


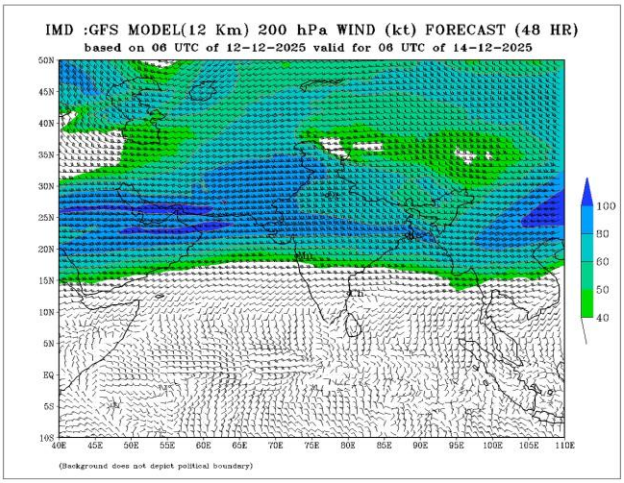
Forecast +48h



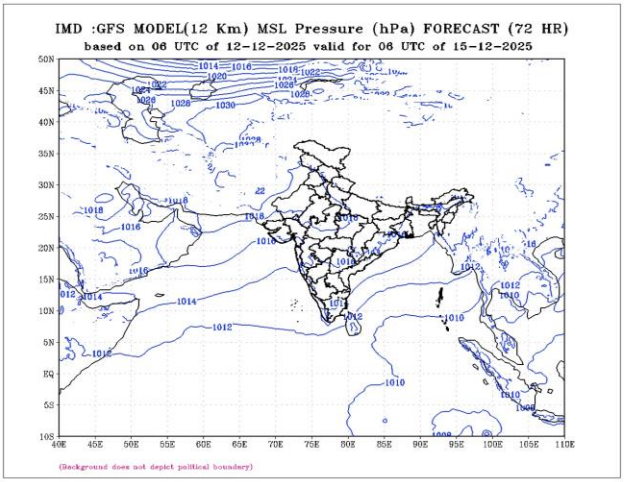


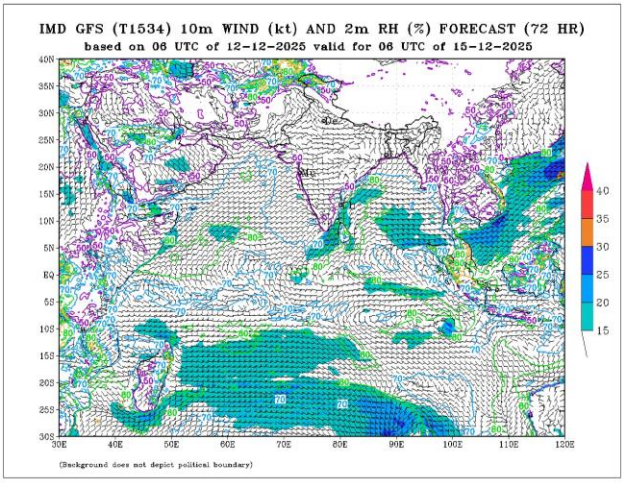


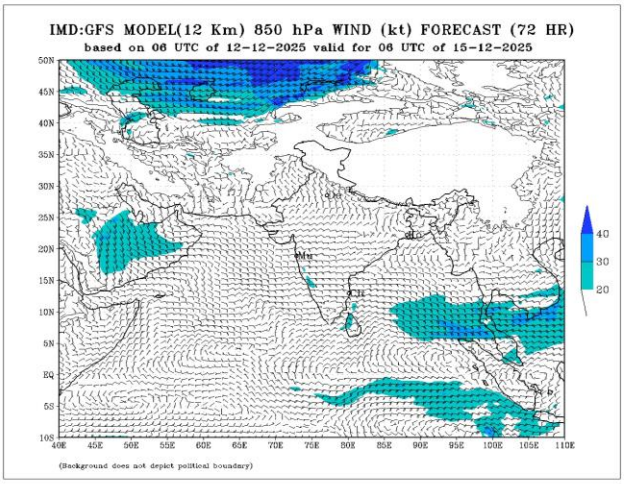


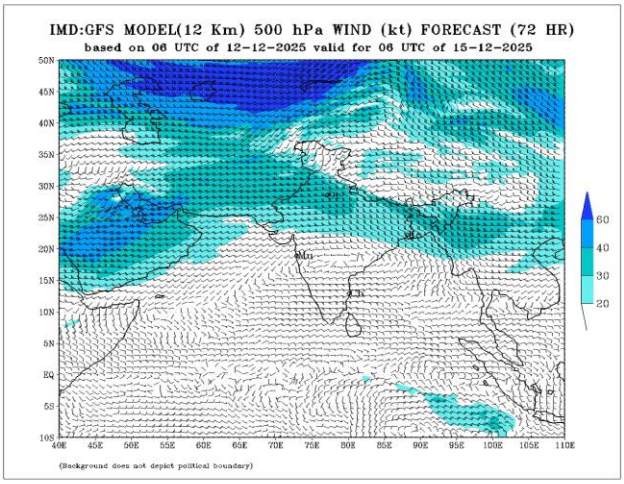


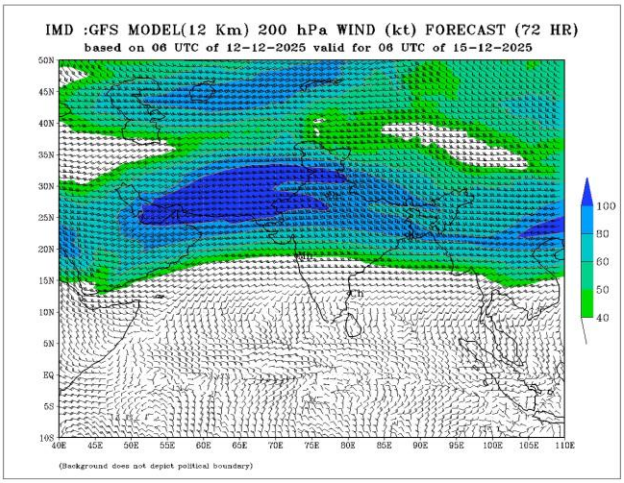
Forecast +72h



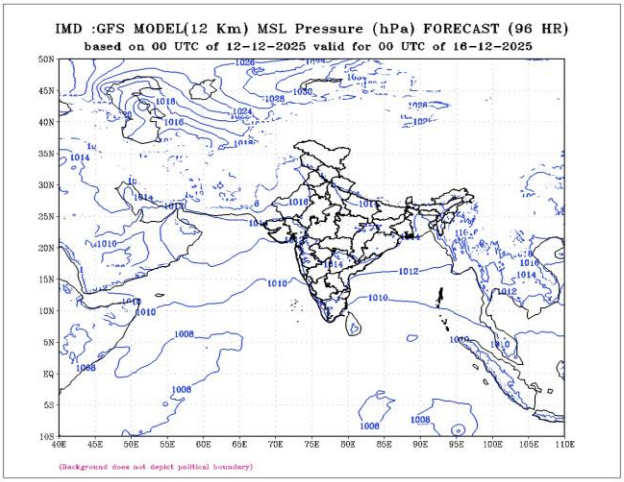


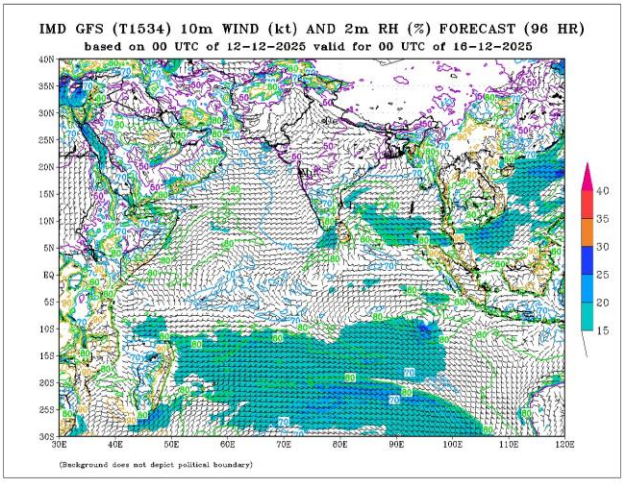


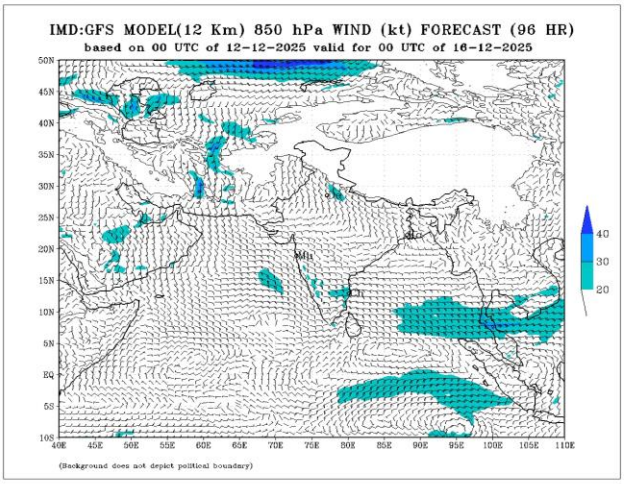


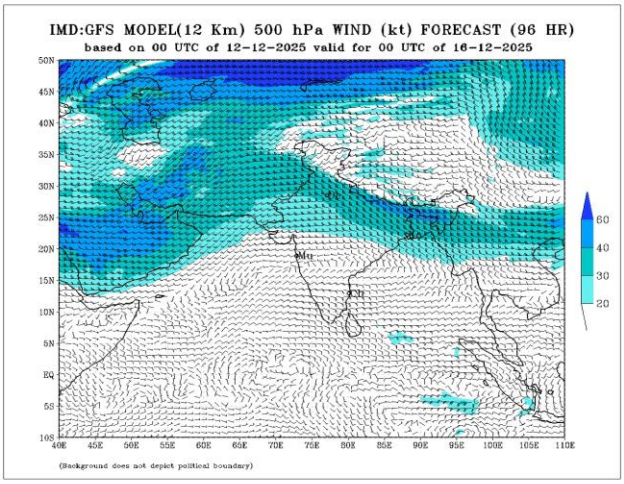


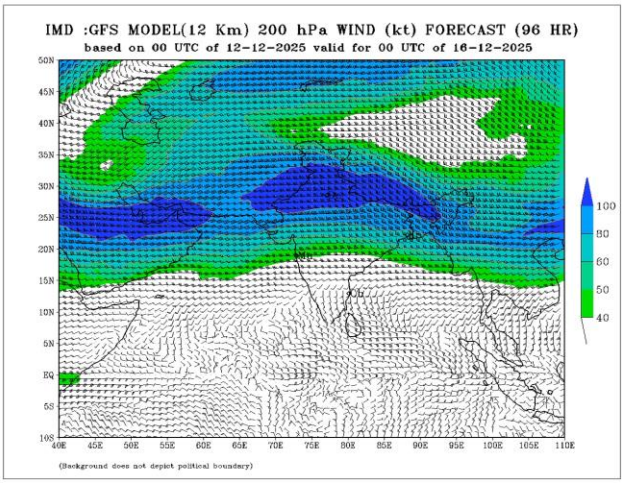
Forecast +96h



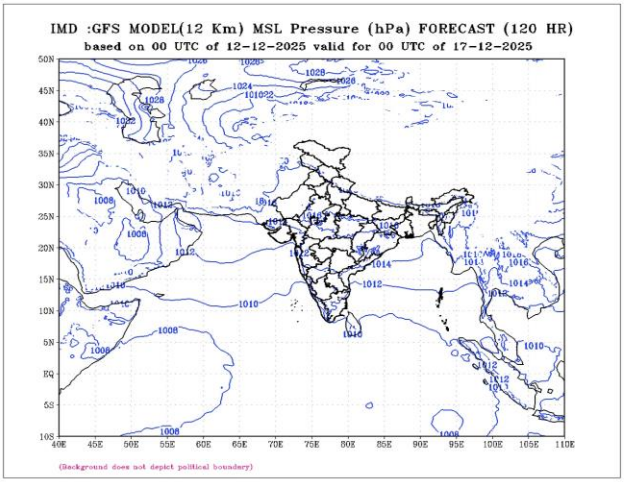


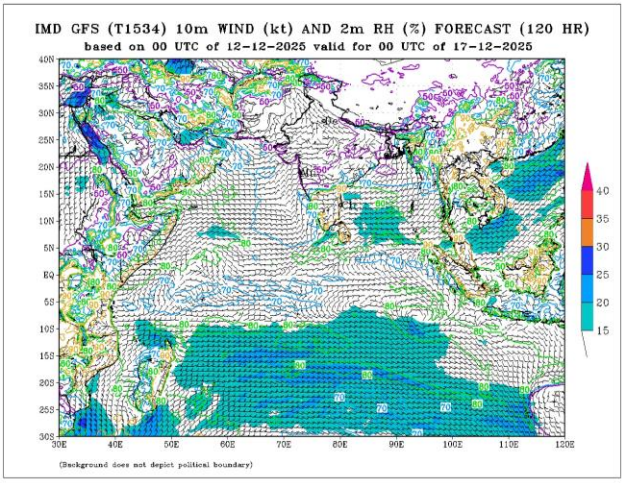


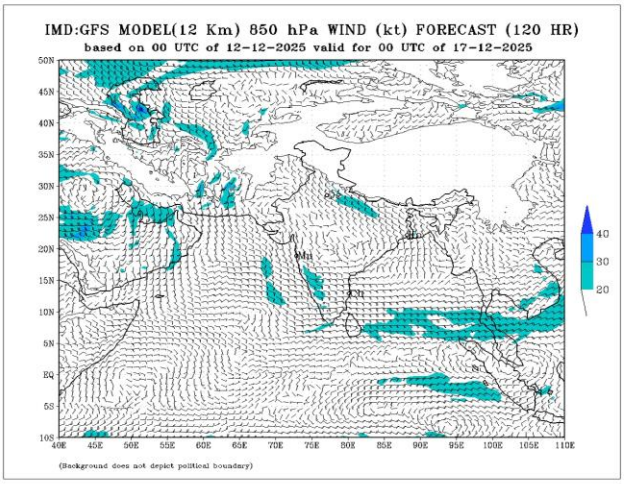


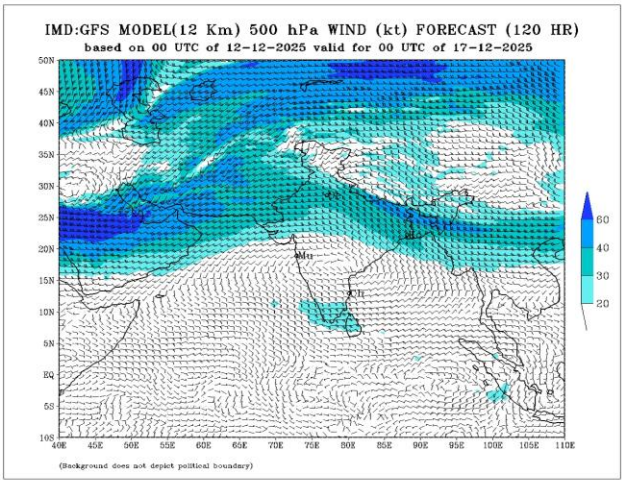


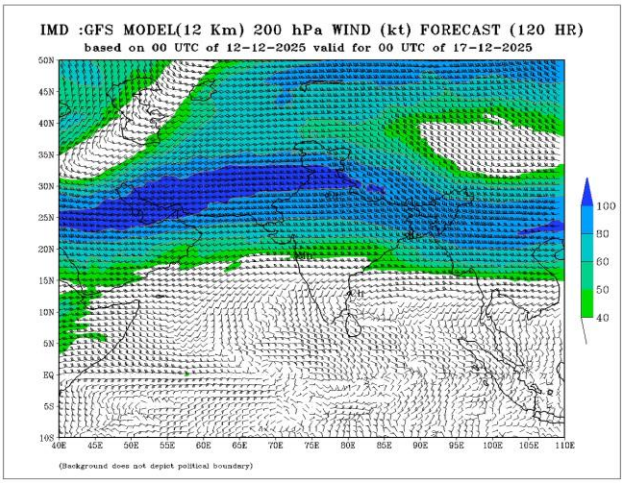
Forecast +120h



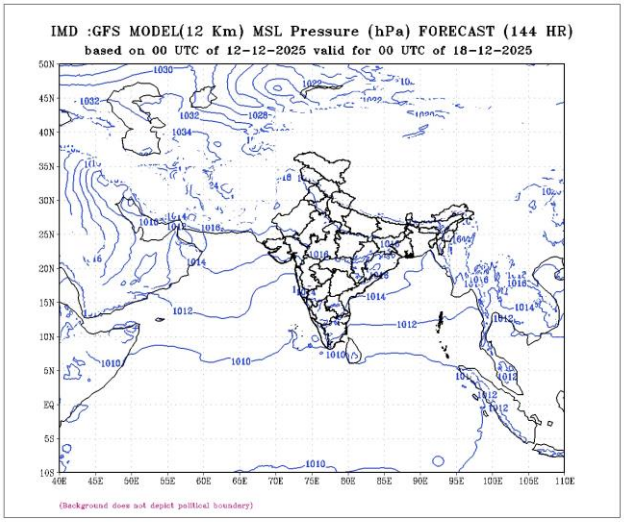


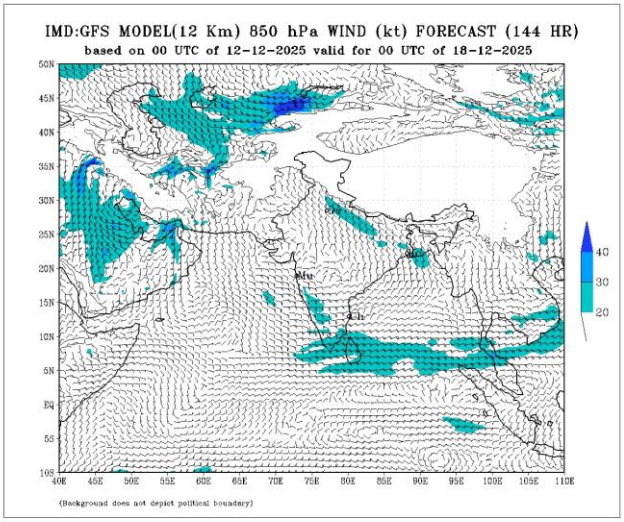


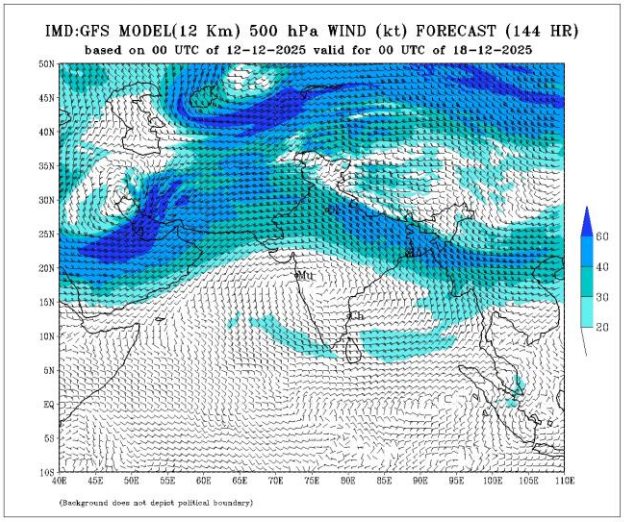


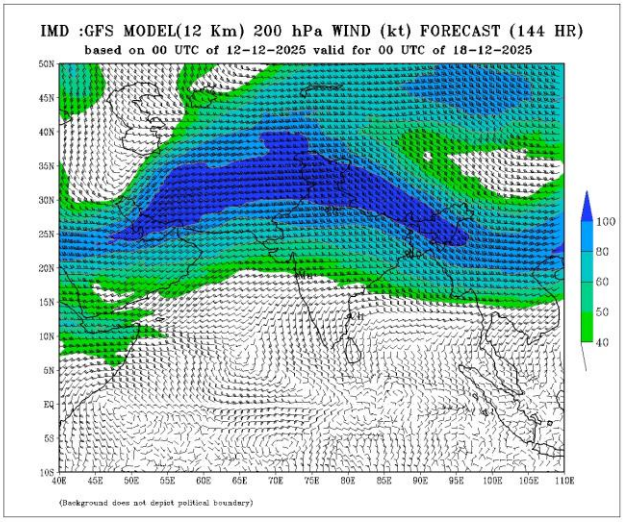


Forecast +144h









Forecast +168h