



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

Tropical Cyclone Forecast Programme
Report Dated 13th December 2025

Time of Issue: 1130 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.➤ 26-27°C over north BoB.	<ul style="list-style-type: none">➤ Around 28-30°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	<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.	140-160 over southeast Arabian Sea, Lakshadweep area and Maldives area.
Cyclonic Relative vorticity ($\times 10^{-6} \text{s}^{-1}$)	20-30 over eastern parts of southeast BoB, Andaman Sea.	-
Low-Level convergence ($\times 10^{-6} \text{s}^{-1}$)	10-15 over eastern parts of southeast adjoining eastcentral BoB, Andaman Sea.	5 over eastcentral AS off Karnataka coast
Upper-Level divergence ($\times 10^{-6} \text{s}^{-1}$)	5-10 eastern parts of southeast adjoining eastcentral BoB, Andaman Sea	-
Vertical Wind Shear (VWS knots) Low: 05-10 knots Moderate: 10-20 knots High: >20 knots	Low- moderate over eastern parts of southeast BoB. High over rest parts of BoB.	Low- moderate over south AS, Lakshadweep Islands, Comorin and Maldives area. High over rest parts of AS
Wind Shear Tendency (knots)	Decreasing over southwest BoB	Decreasing over south AS
Upper tropospheric Ridge	Ridge is running along 10°N at 97°E	-
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 26th 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 to broken low and medium clouds with embedded moderate to intense convection lay over Andaman Sea. Scattered low and medium clouds with embedded isolated weak to moderate convection lay over south Bay of Bengal.

Over the Arabian Sea:

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection lay over central parts of extreme south Arabian Sea adjoining Equatorial Ocean, Maldives and Comorin area.

Outside India:

Vortex (BAKUNG) over southeast Indian Ocean (area E75) centered near 9.0S / 94.0E (.) Intensity T3.0/3.0. Maximum Sustained Winds 34-47 KTS (.) Associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over area between latitude 7.0S to 12.00S longitude 91.00E to 97.00E.

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection over Maldives, Pakistan, Tibet, China, east China Sea, Yellow Sea, 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 15.0°S longitude 40.0°E to 120.0°E and between latitude 15.0°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	The trough in easterly wave is running along 15°N at 86°E on 14 th December, reaching 12°N and 80°E (off Tamil Nadu coast) on 16 th 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 15°N at 86°E on 14 th December, reaching 15°N and 82°E on 15 th December.	No significant system is indicated during next 7 days.
NCMRWF-NCUM(G)	The trough in easterly wave is running along 15°N at 88°E on 14 th December, reaching along 14°N and 81°E on 16 th December.	No significant system is indicated during next 7 days.
NCMRWF-NCUM(R)	The trough in easterly wave is running along 14°N at 88°E on 14 th December, reaching along 12°N and 80°E on 16 th December.	No significant system is indicated during next 3 days.
NEPS	The trough in easterly wave is running along 14°N at 88°E on 15 th December, reaching along 12°N and 80°E on 16 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 12.9°N at 89.2°E on 14 th December, reaching along 14.0°N at 80.9°E on 16 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 12.6°N at 90.2°E on 14 th December, reaching along 13.4°N at 81.0°E on 16 th 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 11.2°N at 90.5°E on 14 th December, reaching along 12.5°N at 80.9°E on 16 th 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 16th 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:

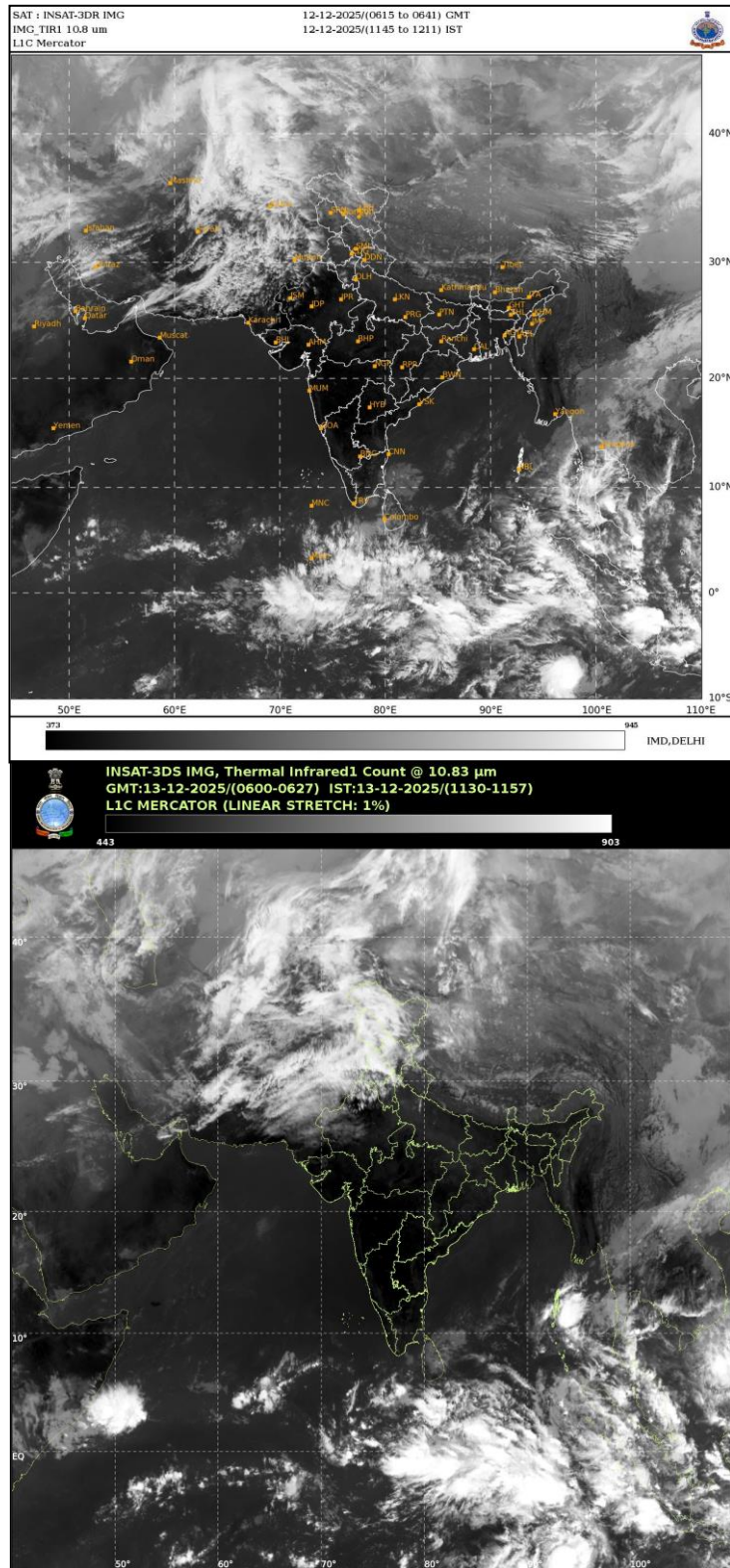
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

“- “indicates genesis has already occurred.

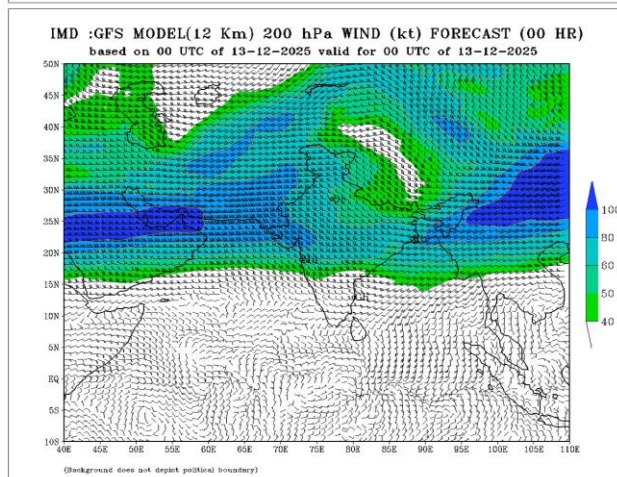
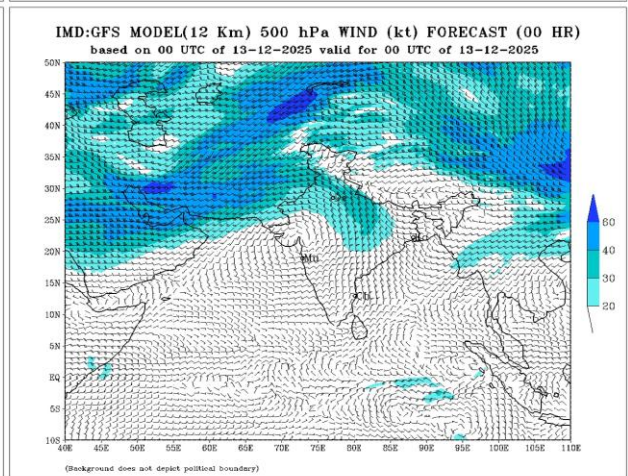
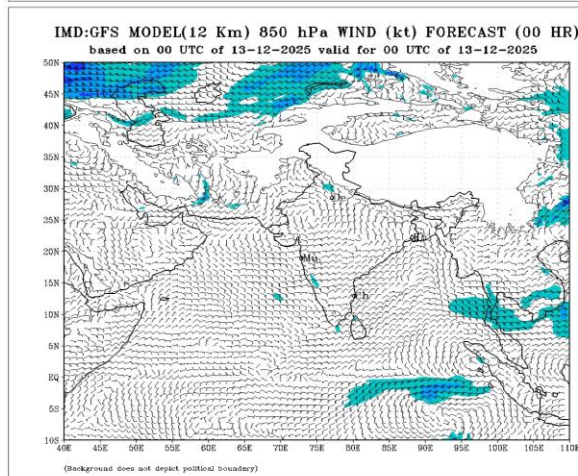
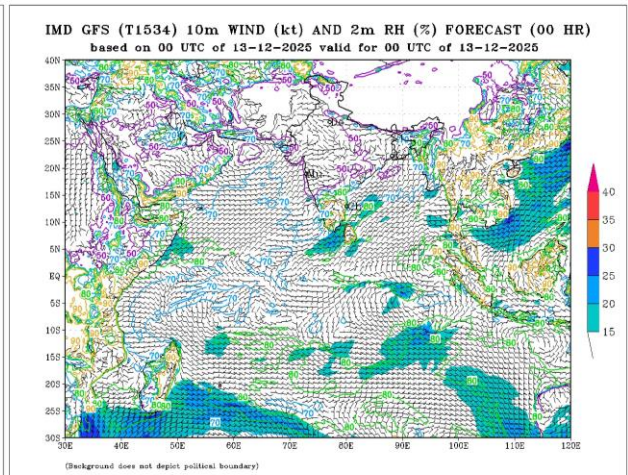
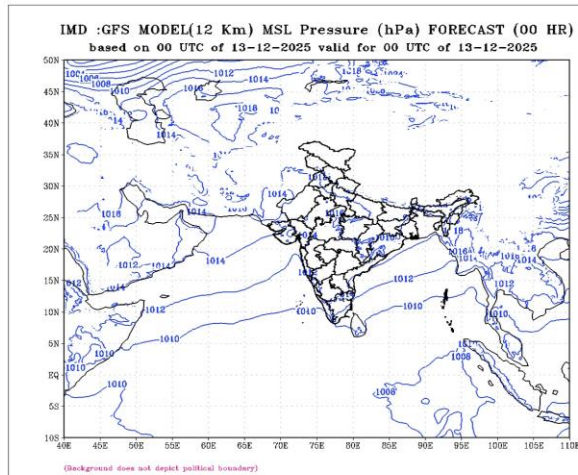
Probability is indicated as NIL for 0%, LOW for 1-33%, MOD for 34-67% and High for 68-100%. Every 24 hrs forecast ends at the 0300 UTC of date.

Intense Observation Period (IOP): Nil

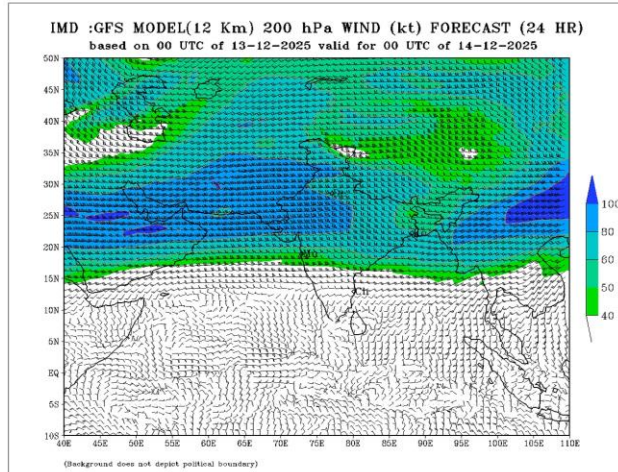
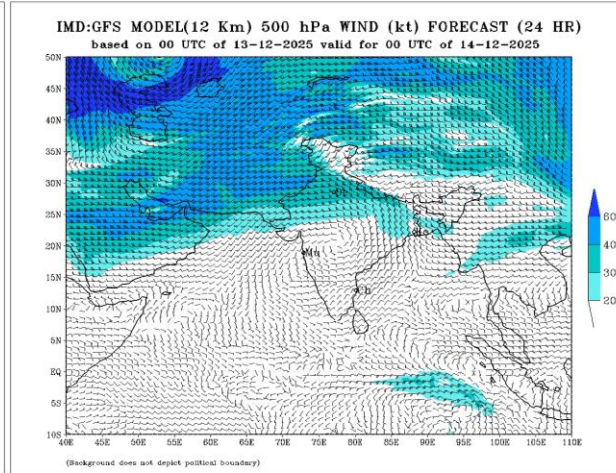
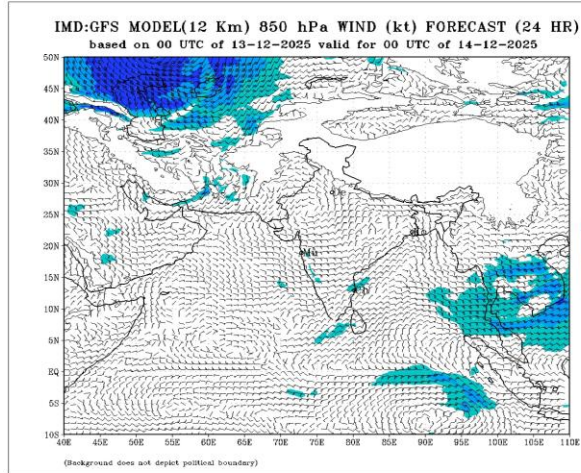
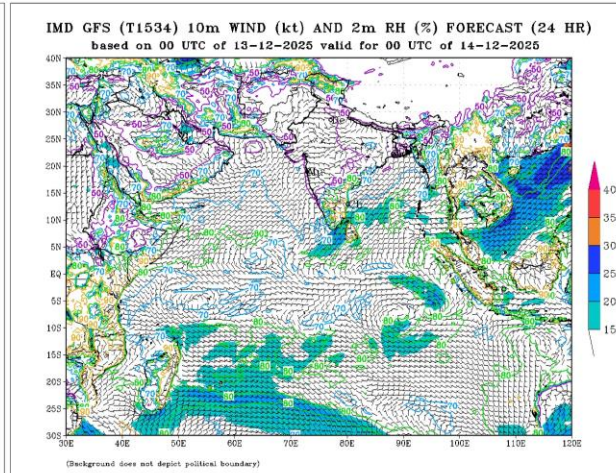
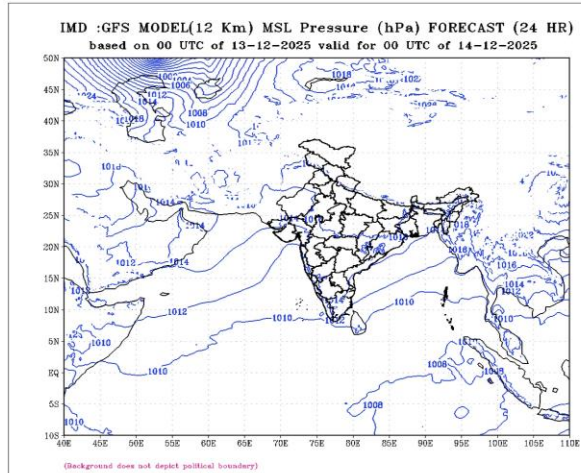
INSAT 3DS imageries at 0600 UTC of 12th & 13th December



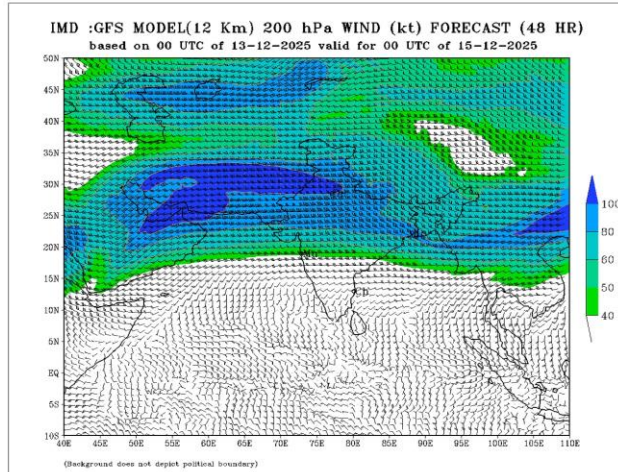
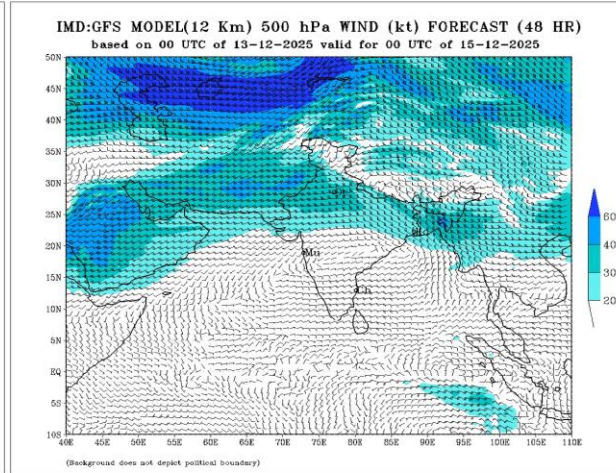
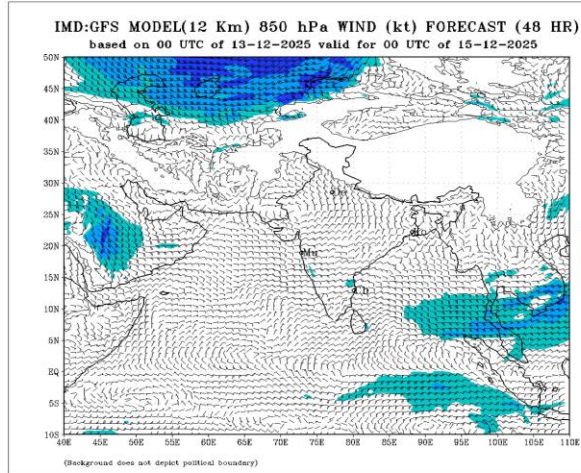
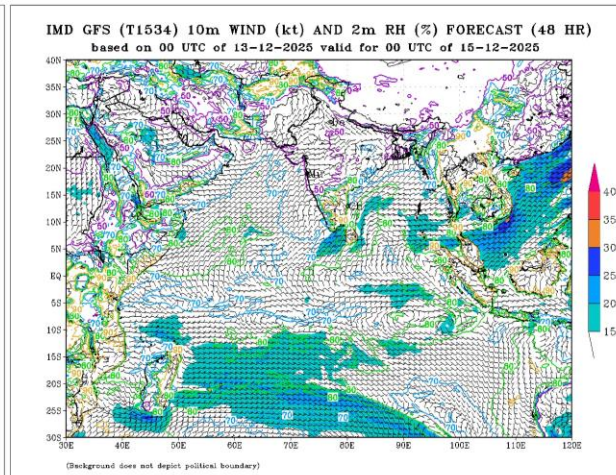
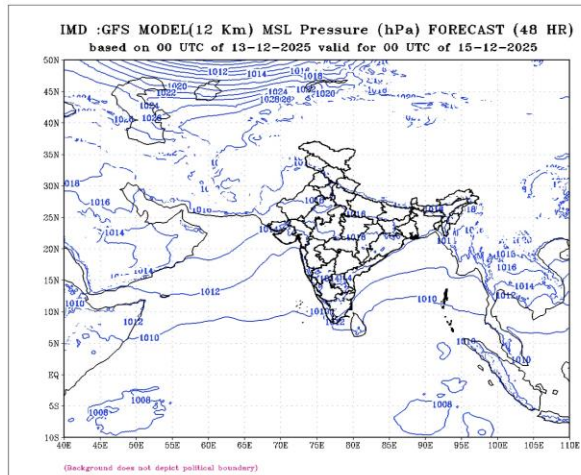
Forecast +00h



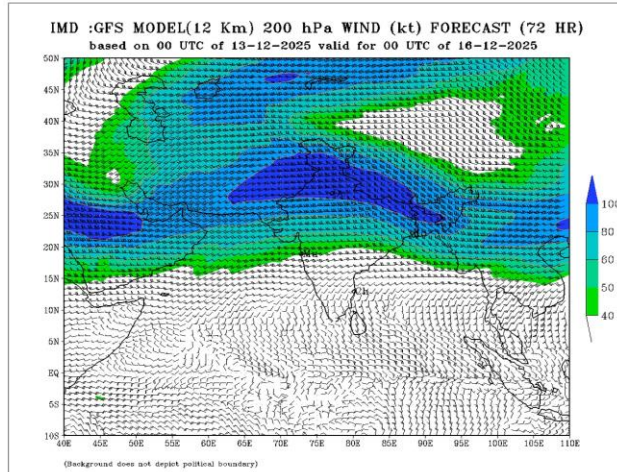
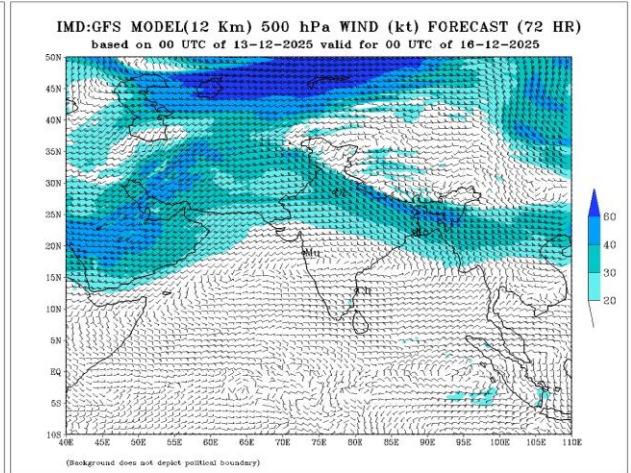
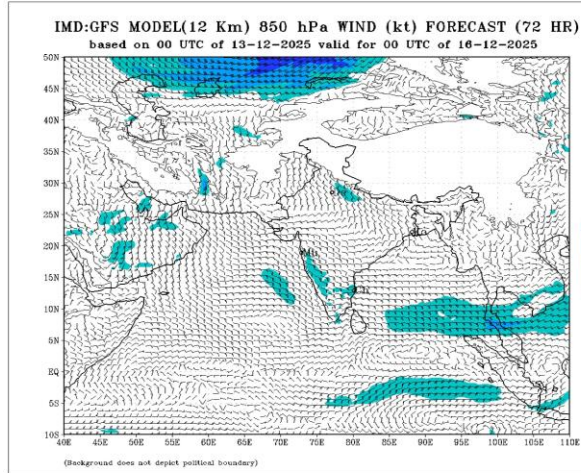
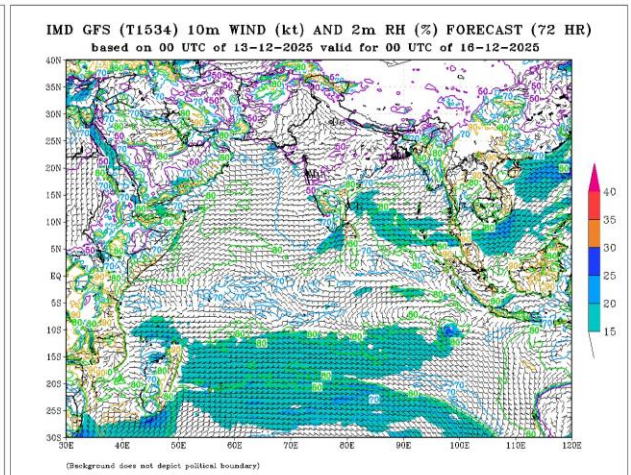
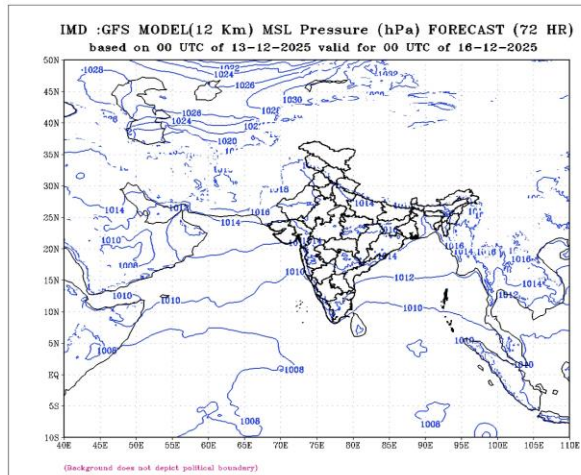
Forecast +24h



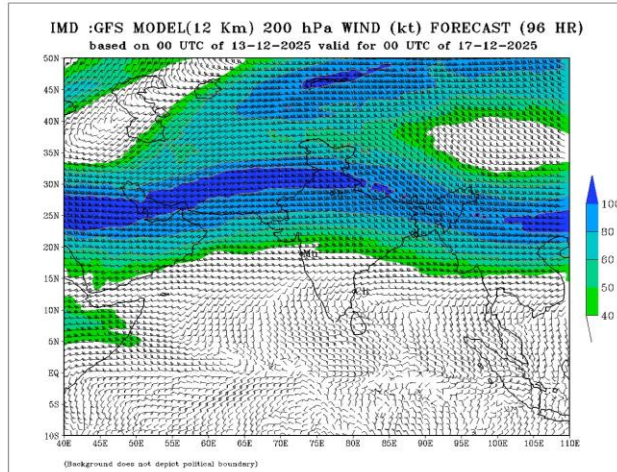
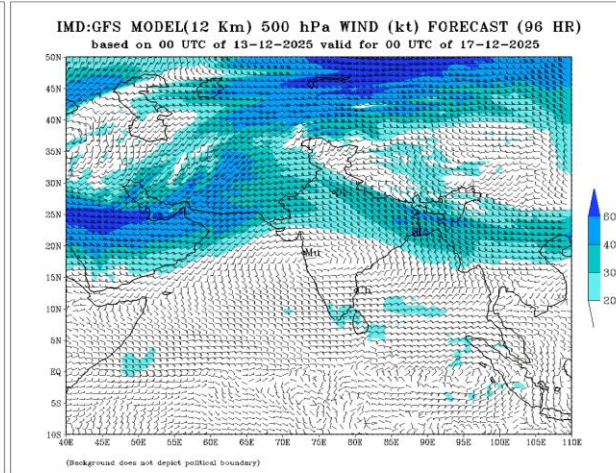
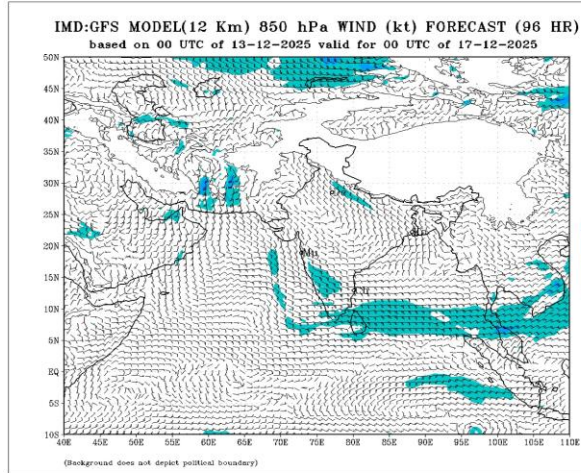
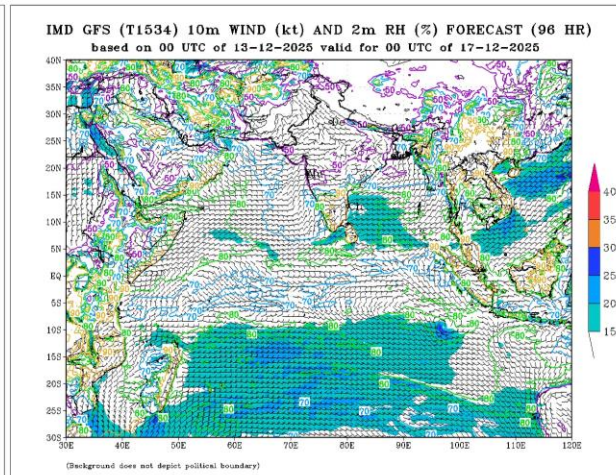
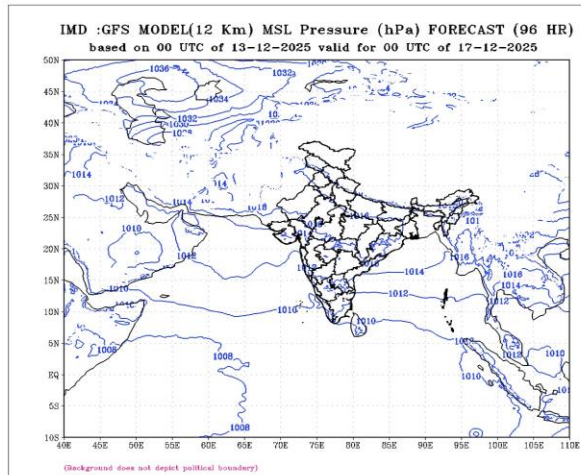
Forecast +48h



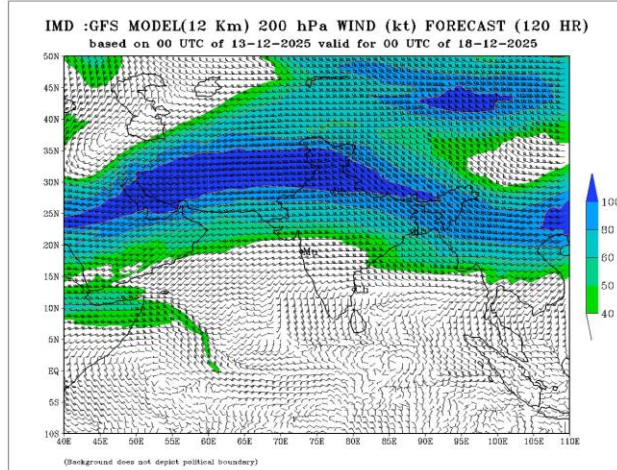
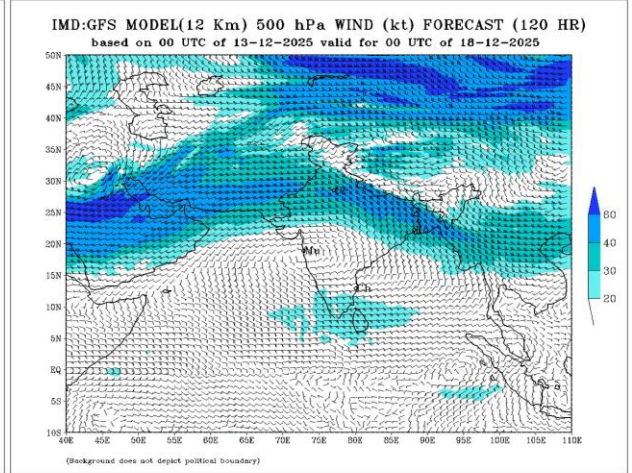
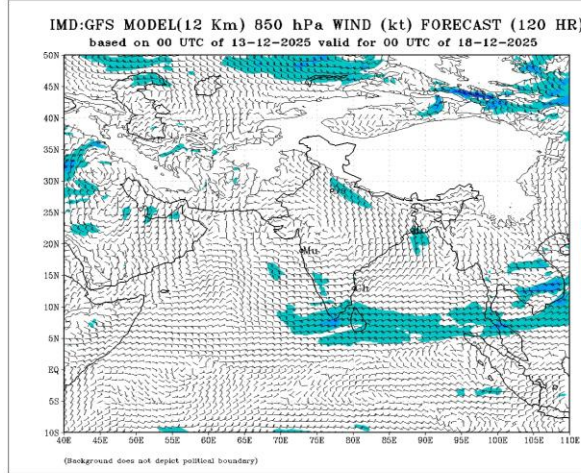
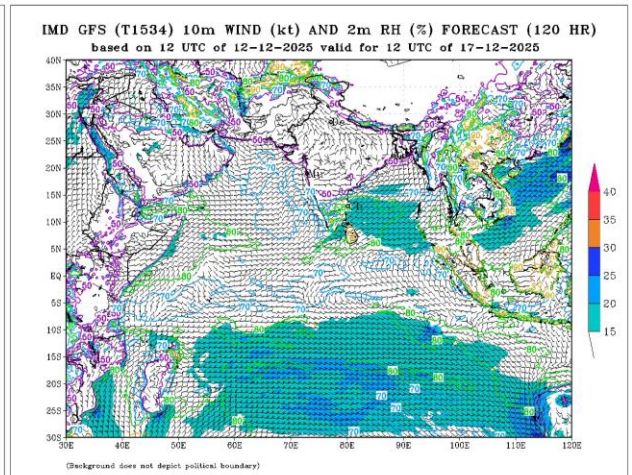
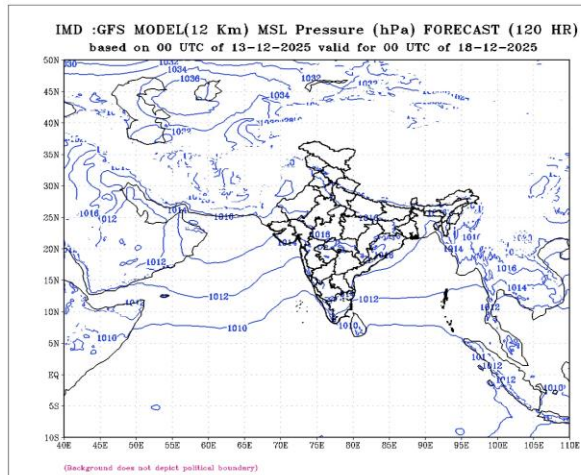
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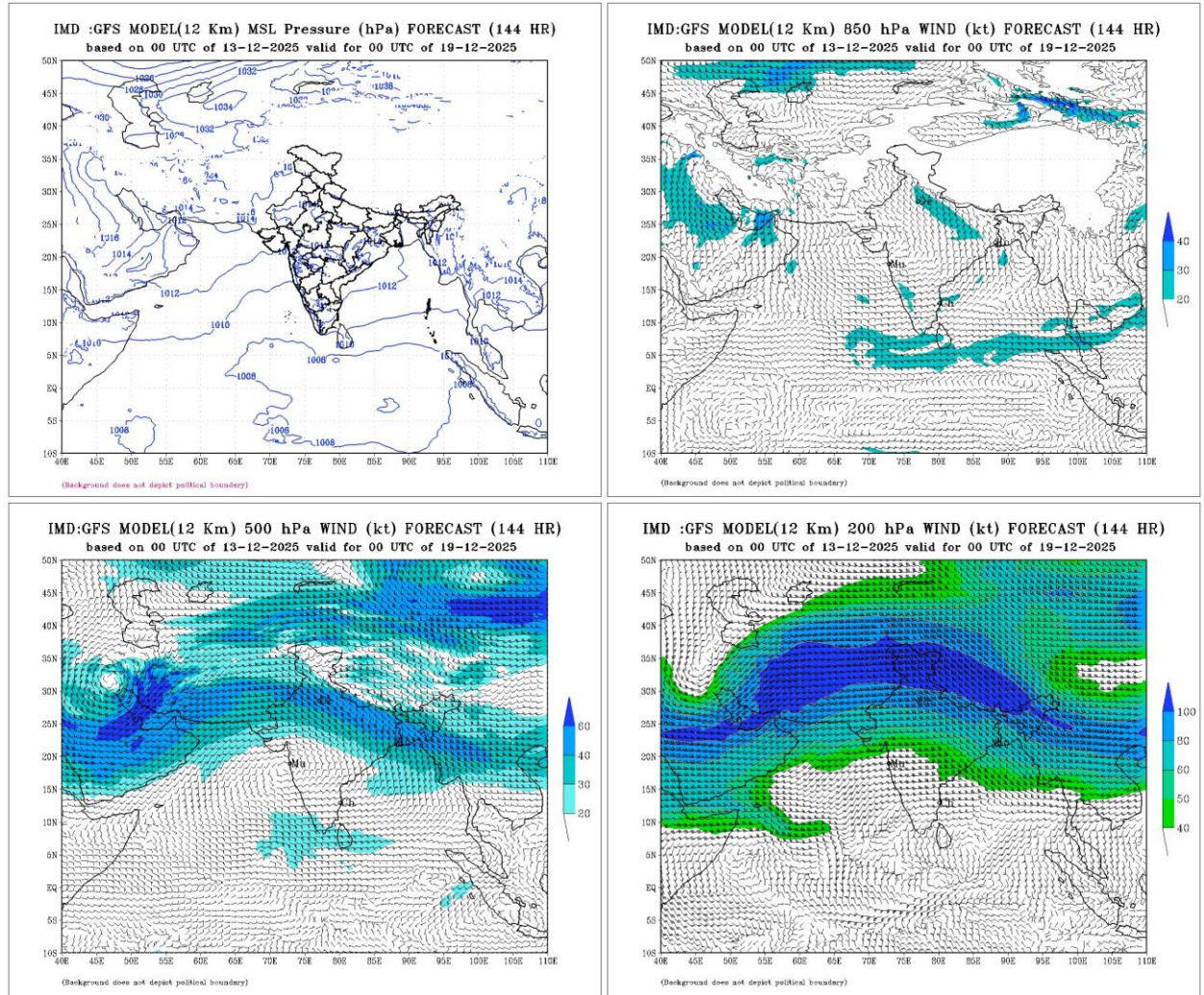
Forecast +96h



Forecast +120h



Forecast +144h



Forecast +168h

