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

Tropical Cyclone Forecast Programme
Report Dated 17th October 2025

Time of Issue: 1400 UTC

Synoptic features (based on 0300 UTC analysis):

- Yesterday's upper air cyclonic circulation over Comorin area and neighbourhood extending upto mid tropospheric levels persisted over the same area at 0000 UTC of today, the 17th October, 2025 and then became less marked thereafter.

- Yesterday's upper air cyclonic circulation over southeast Arabian Sea & adjoining Lakshadweep area persisted over the same region at 0300 UTC of today, the 17th October, 2025 and extended upto 5.8 km above mean sea level tilting southward with height. Under its influence, a low pressure area is likely to form over southeast Arabian Sea & Lakshadweep area off Kerala-Karnataka coasts on 18th October, 2025. Thereafter, it is likely to move west-northwestwards and intensify into a depression during subsequent 48 hours.

Environmental Features based on 0300 UTC:

Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)
Sea Surface Temperature (SST) ºC	➢ Around 30°C over northeast and eastcentral BoB, ➢ 28-30°C over rest of the BoB.	➢ Around 28-30ºC over eastcentral Arabian Sea, Lakshadweep Island, Maldives, Comorin areas, along and off Kerala, south Karnataka coast, parts of northwest Arabian Sea. ➢ 26-28°C over rest of the Arabian Sea.
Tropical Cyclone Heat Potential (TCHP) kJ/cm2	➢ 125-150 over northeast BoB, eastcentral BoB, south Andaman Sea and southern parts of south BoB. ➢ 50-100 over rest of BoB.	➢ 100-150 over southeast AS, Lakshadweep Islands, Maldives islands and Comorin area. ➢ 20-70 over rest AS.
Cyclonic Relative - vorticity ($X10^{-6}s^{-1}$)	➢ 60-80 over southwest BoB adjoining to south Sri Lanka coast.	➢ 80-100 over Lakshadweep, Maldives, Comorin areas, and southeast Arabian Sea extending upto 500 hPa. ➢ 20-30 over western parts of AS.
Low-Level convergence (X10-5 s-1)	➢ 5 over westcentral BoB and adjoining Andhra Pradesh-Tamil Nadu coast	➢ 05-20 over southeast AS, Lakshadweep, Maldives areas, Kerala-Karnataka coasts, over Comorin area.
Upper-Level divergence (X10-5 s-1)	➢ 5-10 over westcentral BoB and adjoining Andhra Pradesh-Tamil Nadu coast	➢ 20-30 over Lakshadweep, Maldives, Comorin areas and 5-20 over some parts of southeast, eastcentral AS, Kerala-Karnataka

		coasts, over Gulf of Mannar.
Vertical Wind Shear (VWS knots) **Low: 05-10 knots** **Moderate: 10-20 knots** **High: >20 knots**	➢ Moderate to high over north BoB. ➢ Low over rest of BoB.	➢ Low to moderate over Central AS. ➢ Moderate to high over rest of Arabian Sea.
Wind Shear Tendency (knots)	➢ No data available	➢ No data available
Upper tropospheric Ridge	➢ At 20^0 N.	➢ At 20^0 N.

Satellite observations based on INSAT imagery (0300 UTC):

Over the BoB & Andaman Sea:

Scattered low and medium clouds with embedded isolated intense to very intense convection lay over Bay of Bengal and Andaman Sea.

Over the Arabian Sea:

scattered to broken low and medium clouds with embedded intense to very intense convection lay over eastcentral adjoining southeast Arabian Sea, Lakshadweep Islands and Maldives area (Minimum cloud top temperature is minus 70 to 90 degree Celsius). Scattered low and medium clouds with embedded weak to moderate convection lay over westcentral & southwest Arabian Sea.

Outside India:
Scattered low/medium clouds with embedded moderate to intense convection over Palak Strait, Gulf of Mannar, Maldives, Tibet, China, Yellow Sea, adjoining East China Sea, Myanmar, Thailand, Gulf of Thaailand, Cambodia, Laos, Vietnam, Gulf of Tonkin, Sumatra, Strait of Malacca, Malaysia, Borneo, South China Sea, Java Islands & Sea, Philippines and over Indian Ocean between latitude 5.0N TO 10.0S, longitude 50.0E TO 100.0E & between latitude 10.0S TO 22.0S, longitude 70.0E TO 95.0E.

M.J.O. Index:

The guidance from ECMM model indicates that Madden Julian Oscillation (MJO) index is likely to be in phases 2 & 3 during 17th to 20th October and in phase 4 during 21st to 28th October with amplitude remaining close to 1. Thereafter, it is likely to enter into phase 5. Thus, MJO would support enhancement of convective activity and cyclogenesis over Arabian Sea during 17th to 20th and over the Bay of Bengal during 18th to 26th.

Equatorial waves guidance:

Guidance from NCICS model indicates enhanced cross equatorial flow from 17th October onwards leading to westerly wind burst over southern parts of Arabian Sea and Bay of Bengal and adjoining equatorial Indian Ocean during 18th to 26th October. The Model indicates prevalence of equatorial Rossby wave (ERW) Kelvin wave (KW), MJO, Low frequency Background wave (LW), enhanced westerly wind Anomaly >9mps) over the region during 18th to 26th October. The model is also indicating setting in of easterly wind over the Bay of Bengal and Arabian Sea with enhanced easterly wind anomaly (7-9 mps) over central and adjoining south Bay of

Bengal during 18th to 26th October and easterly wind anomaly (3-5 mps) over southeast Arabian Sea during 17th-21st October and easterly wind anomaly (5-7 mps) during 22nd to 26th October over central Arabian Sea. These features indicate a favourable environment for Cyclogenesis (formation of Depression) over Arabian Sea during 20th to 22nd and over the Bay of Bengal during 24th to 26th October.

MODEL GUIDANCE	Bay of Bengal (BoB)	Arabian Sea (AS)
IMD-GFS	Extended low pressure area over southeast BoB on 20/00, deep depression over southeast BoB on 21/00 UTC. Moving towards Tamil Nadu coast while intensifying further upto severe cyclonic storm till 25th Oct.	LPA over southeast AS on 18/00 UTC over southeast Arabian Sea, intensify into depression over southeast and adjoining southwest Arabian Sea (AS) on 19/00 UTC. Indicating the system to maintain intensity till 20/00 and weaken thereafter while moving towards Gulf of Aden by 21st Oct.
IMD-GEFS	LPA on 19/00 over southwest BoB. Moving north-northwestwards, becoming depression on 23/00 over southwest BoB and crossing North tamil Nadu on 24/00 as a depression.	LPA over southeast AS on 18/00 UTC over southeast Arabian Sea, intensify into depression over southeast and adjoining southwest Arabian Sea (AS) on 20/00 UTC. Indicating the system to maintain intensity till 21/00 and weaken thereafter while moving towards Gulf of Aden by 22nd Oct.
IMD-WRF	The model indicates no significant system over BoB.	LPA over southeast AS on 19/00 UTC. Moving west-northwestwards and becoming depression on 20/00 over southeast Arabian Sea.
BFS	Extended low pressure area over southeast BoB on 20/00, deep depression over southeast BoB on 21/00 UTC. Moving towards Tamil Nadu coast while intensifying further upto severe cyclonic storm till 25th Oct.	LPA over southeast AS on 17/00 UTC. Intensify into depression over southeast AS on 18/00 UTC. Indicating the system to maintain intensity till 20/00 and weaken thereafter while moving towards Gulf of Aden by 22nd Oct.
NCMRWF-NCUM(G)	The model indicates no significant system over BoB.	Extended low on 20/00 over southeast AS, moving westnorthwestwards and becoming low on 21/00 over southwest and adjoining southeast AS, moving in same direction till Gulf of Aden till 23/00 without further intensification.
NCMRWF-NCUM(R)	The model indicates no significant system over BoB.	Extended low on 18/00 & 19/00 over southeast AS.
NEPS	The model indicates no significant system over BoB.	Extended low on 19/00 over southeast AS, moving westnorthwestwards and becoming, WML on 20/00 over southwest and adjoining southeast Arabian Sea.

		moving in same direction without any further intensification towards Somalia coast.
ECMWF	LPA over southwest & adjoining southeast Bay of Bengal (BoB) on 23/18 UTC. No further intensification till 26th Oct.	LPA over southeast AS on 18/00 UTC Moving West-northwestwards movement and becoming depression on 20/00. Thereafter it is showing weakening trend and movement towards Gulf of Aden till 22/00 UTC without and intensification.
NCEP-GFS	LPA over southeast BoB and adjoining south Andman Sea on 20/00, intensify into depression on the same day at 20/12 UTC over southeast BoB. Model is indicating initial intensification further west-northwestwards towards north Tamil Nadu coast. Cross South Andhra Pradesh-north Tamil Nadu coast as severe cyclone on 23/18.	LPA over southeast AS on 19/12 UTC, moving westnorthwestwards and intensifying into depression on 22/06 UTC over southwest & adjoining southeast AS. West-northwestwards movement while weakening towards north Somalia coast till 23rd Oct.
EC-AIFS	LPA on 21/06 over southwest BoB and moving nearly north-northwestwards towards TamilNadu coast till 25th Oct.	LPA over southeast AS on 18/12 UTC, with west-northwestwards movement towards Gulf of Aden and no intensification.

Summary:

(a) Bay of Bengal:

Many of the models (GFS group and ECMWF group) are showing formation of low pressure area (LPA) over southeast Bay of Bengal and adjoining south Andaman Sea during 19th to 23rd October. However, there is large variation w.r.t time of formation of LPA. Further, only GFS group of models is indicating further intensification into depression and above intensity storm. ECMWF and NCUM are not showing any depression.

(b) Arabian Sea

Most of the numerical models are indicating development of low-pressure area over southeast AS around 18th October. There is good consensus among various models in this regards. However, models like GFS, ECMWF group are showing depression around 20th. However, all the models are showing westnorthwestwards movement of the system towards Gulf of Aden.

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Inference:

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

(a) Under the influence of existing upper air cyclonic circulation over southeast Arabian Sea & adjoining Lakshadweep area, a low-pressure area is likely to form over southeast Arabian Sea & Lakshadweep area off Kerala-Karnataka coasts on 18th October, 2025. Thereafter, it is likely to move west-northwestwards and intensify into a **depression** during subsequent 48 hours.

(i) Confidence level in forecast of formation of Low: **High**

(ii) Confidence level in forecast of location area of Low: **High**

(iii) Confidence level in forecast of intensification (formation of Depression): **Moderate**

(iv) Confidence level in forecast of location of Depression: **Moderate**

(b) Another **low-pressure area** is likely to form over southeast Bay of Bengal around 24th October, it is likely to move west-northwestwards and intensify further thereafter.

Both the systems are under continuous watch.

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	LOW	MOD	MOD	-

"- "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): IOP for Kerala, Karnataka, south Tamil Nadu and West Sri Lanka coasts during 18th to 22nd October.

Impact expected:

Squally weather with wind speed reaching 35-45 gusting to 55 kmph is likely over Southeast Arabian Sea, Lakshadweep & Comorin Area and along & off Karnataka, Kerala and adjoining South Tamilnadu coasts during 17th -19th October.

Squally weather with wind speed reaching 40-50 gusting to 60 kmph is likely over central parts of South Arabian Sea on 20th & 21st October and over southwest & adjoining westcentral Arabian Sea during 21st-23rd October.

Anticipatory Actions:

(a) Forecasters may maintain round the clock watch and continuously monitor weather systems over the region as per Standard Operation Procedures during next 2 weeks.

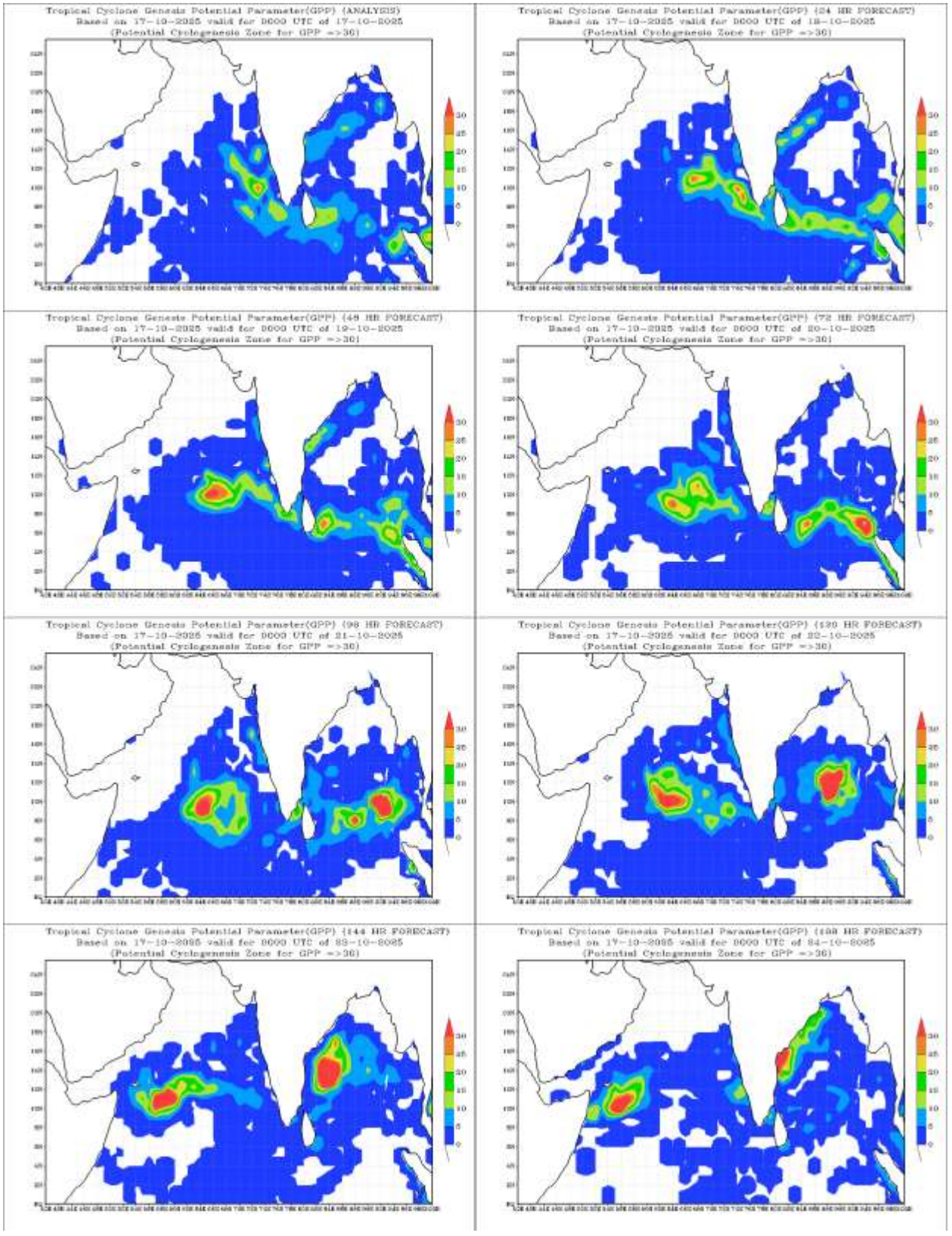
(b) Disaster managers, media and general public are advised to closely monitor official weather forecasts from India Meteorological Department available on websites, social networking channels, face book, X and mobile Apps.

(c) Fishermen are advised not to venture into Southeast Arabian Sea, Lakshadweep & Comorin Area and along & off Karnataka, Kerala and adjoining South Tamilnadu coasts during 16th -19th October.

(d) Fishermen are advised not to venture into central parts of South Arabian Sea on 20th & 21st October and into southwest & adjoining westcentral Arabian Sea during 21st-23rd October.

(e) Judicious regulation of offshore/onshore, ports, recreational and tourism activities.

ANNEXURE


Tropical Cyclone Genesis Potential Parameter(GPP) (ANALYSIS)
Based on 17-10-2025 valid for 0000 UTC of 17-10-2025
(Potential Cyclogenesis Zone for GPP =>30)
Tropical Cyclone Genesis Potential Parameter(GPP) (24 HR FORECAST)
Based on 17-10-2025 valid for 0000 UTC of 18-10-2025
(Potential Cyclogenesis Zone for GPP =>30)
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(Potential Cyclogenesis Zone for GPP =>30)
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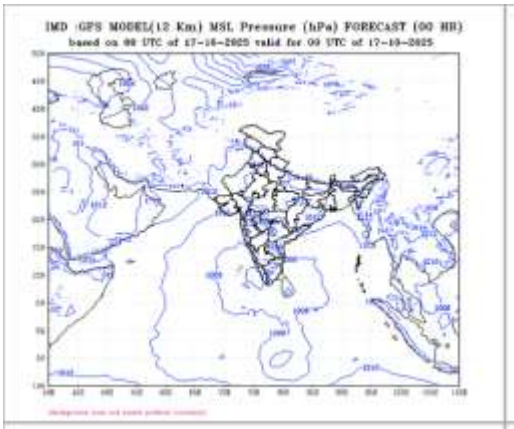
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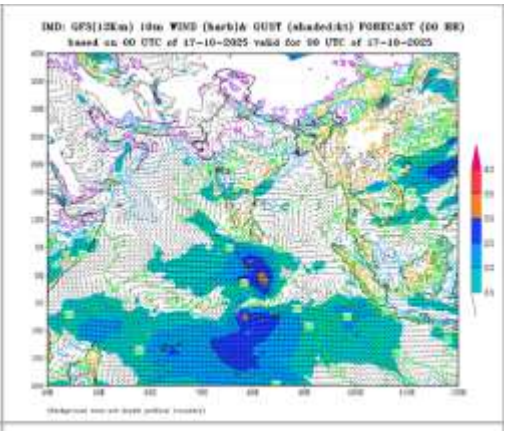
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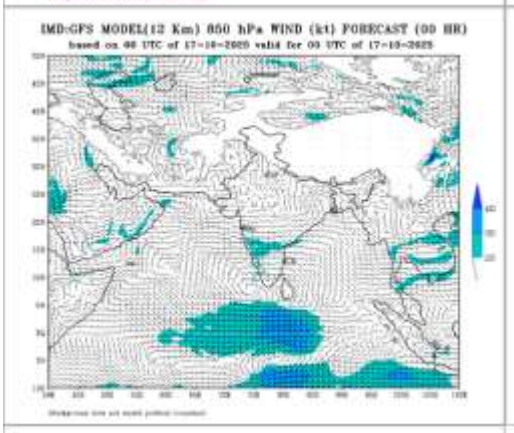
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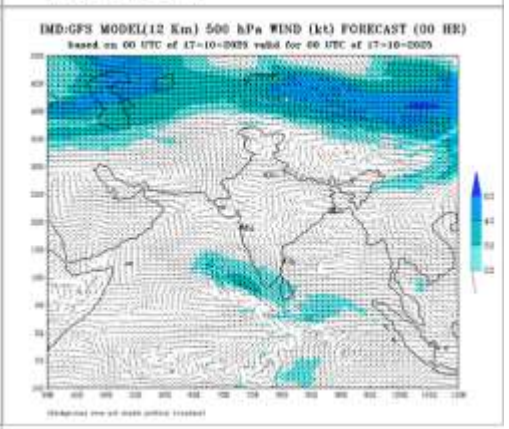
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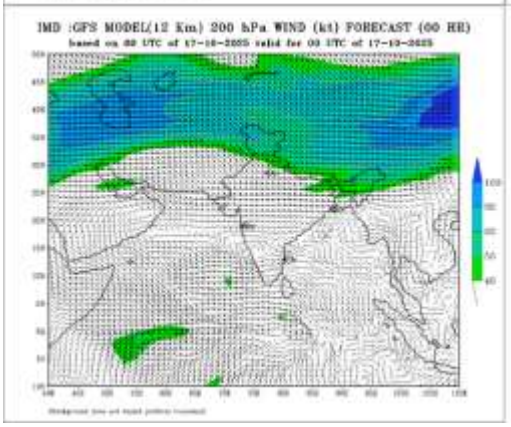
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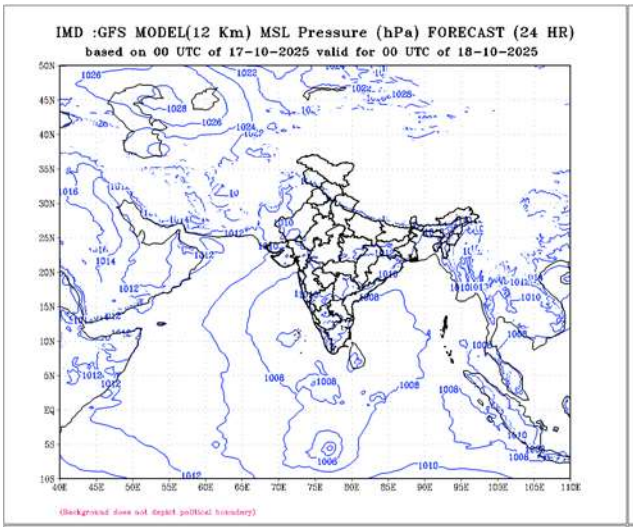
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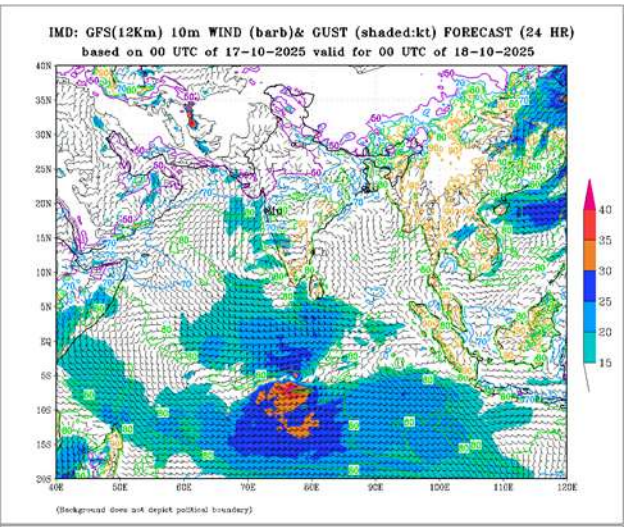
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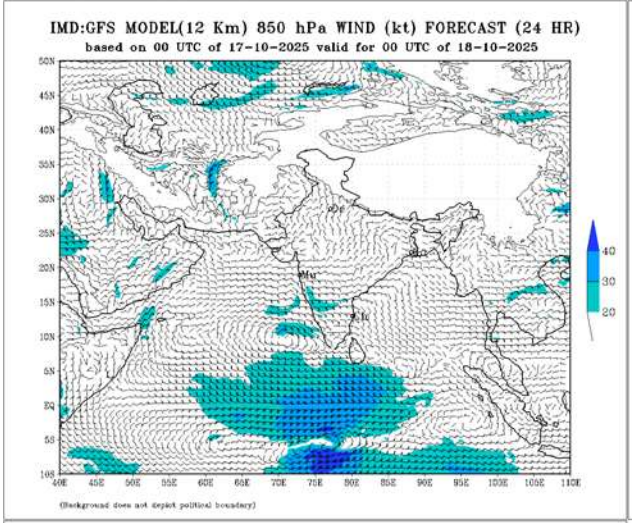
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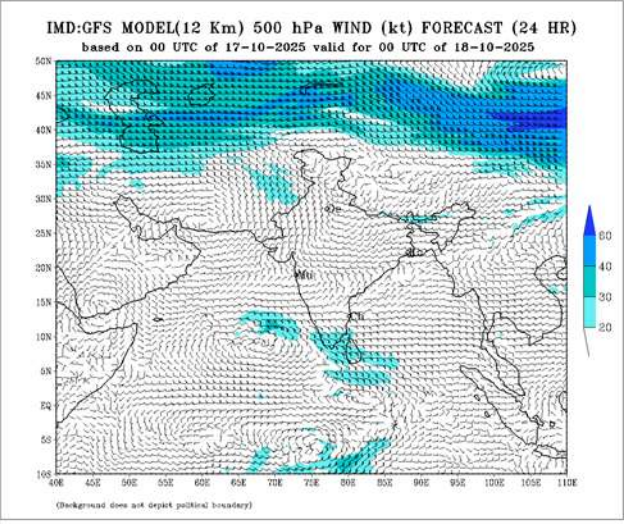
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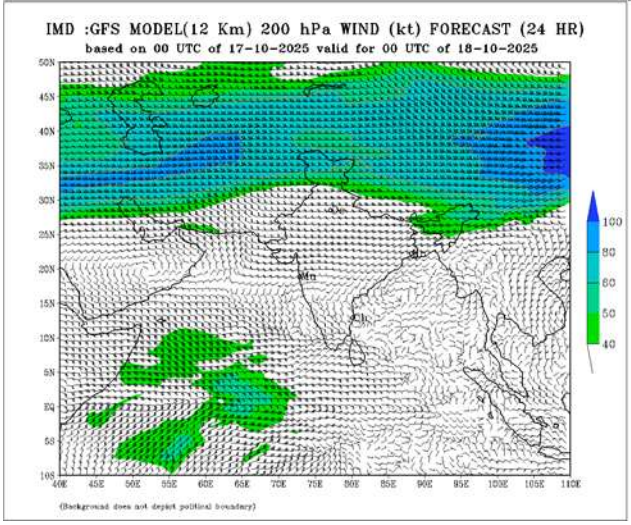
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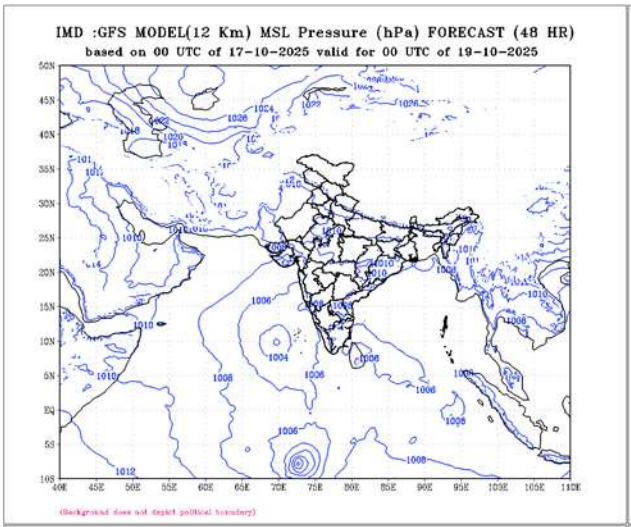
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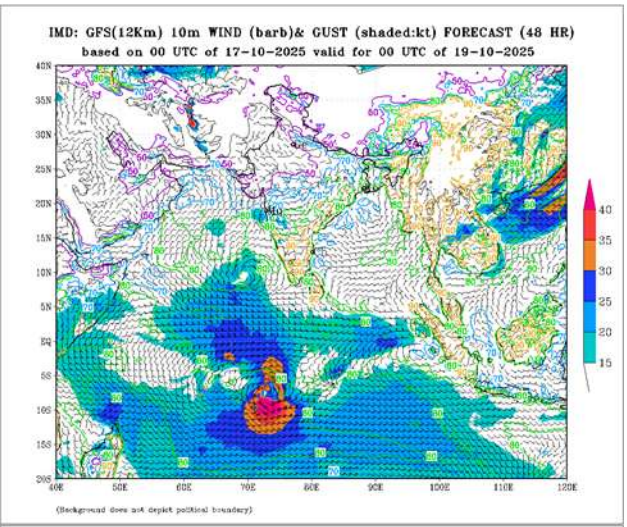
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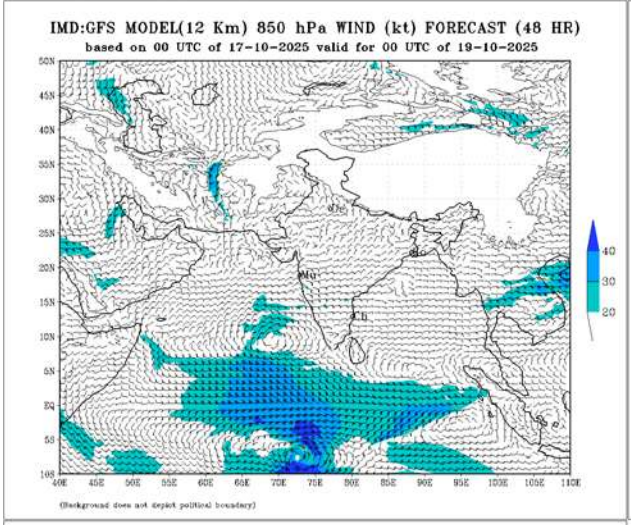
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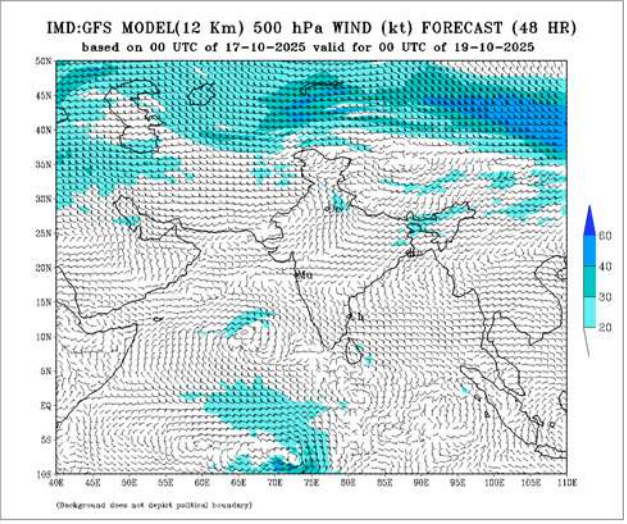
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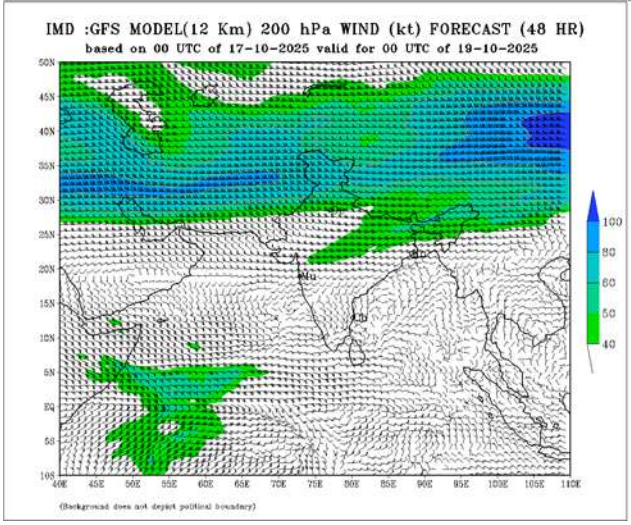
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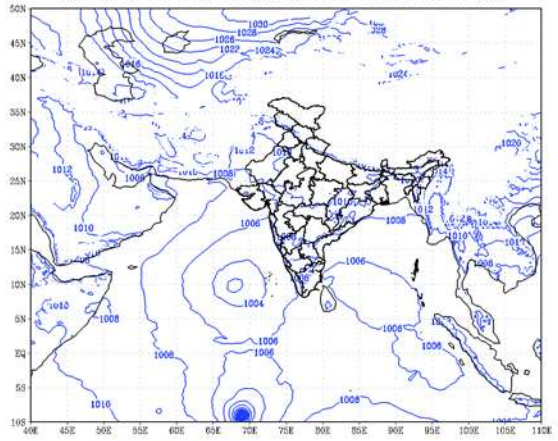

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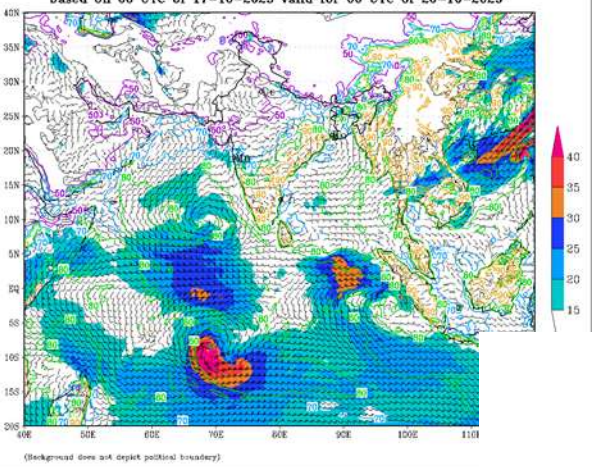

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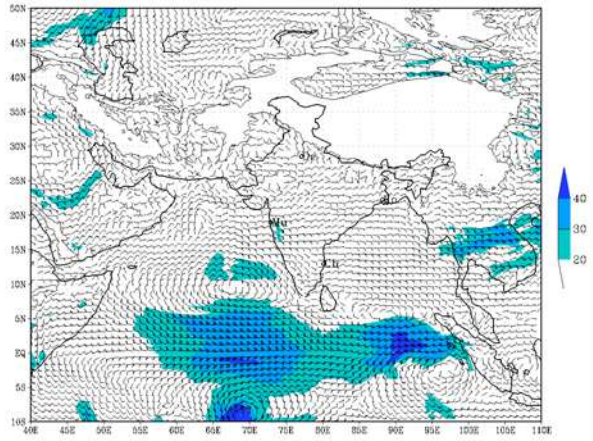

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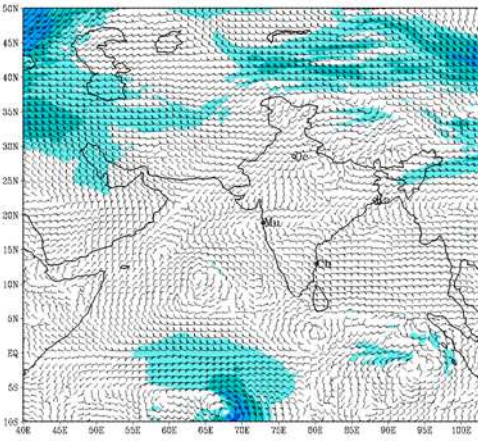

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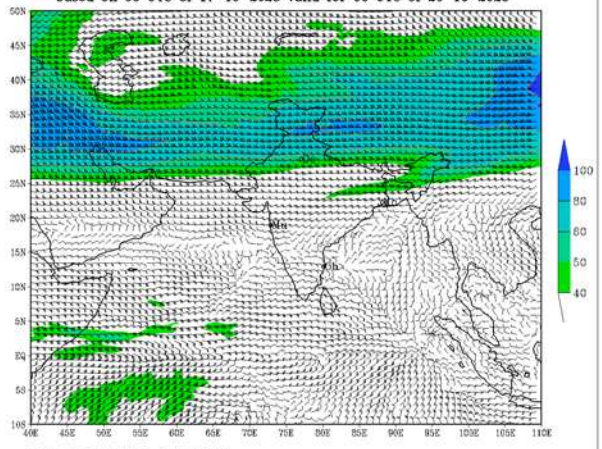

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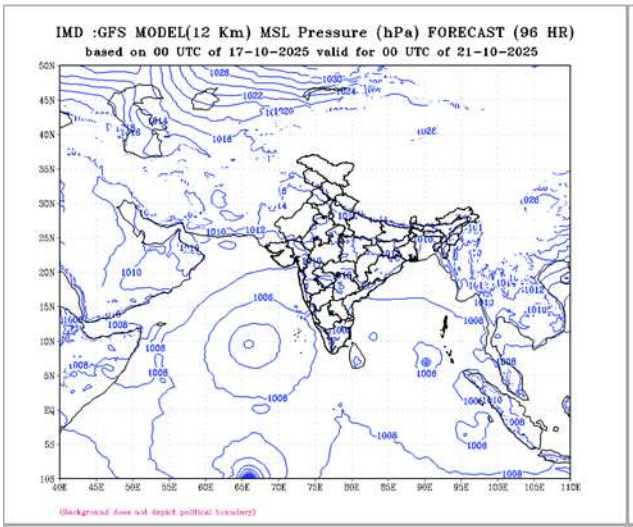
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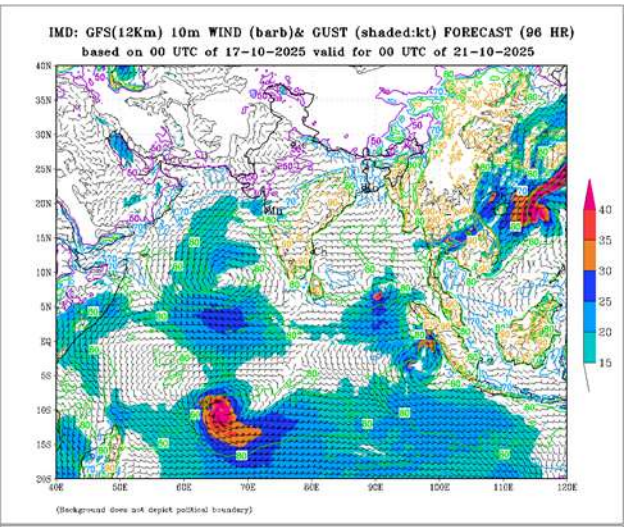
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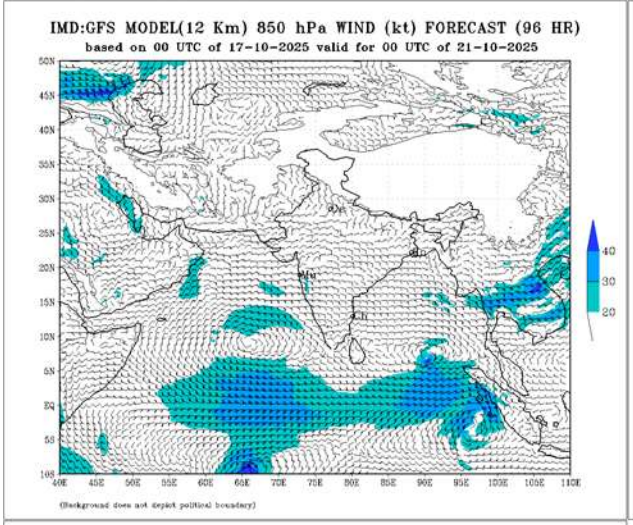
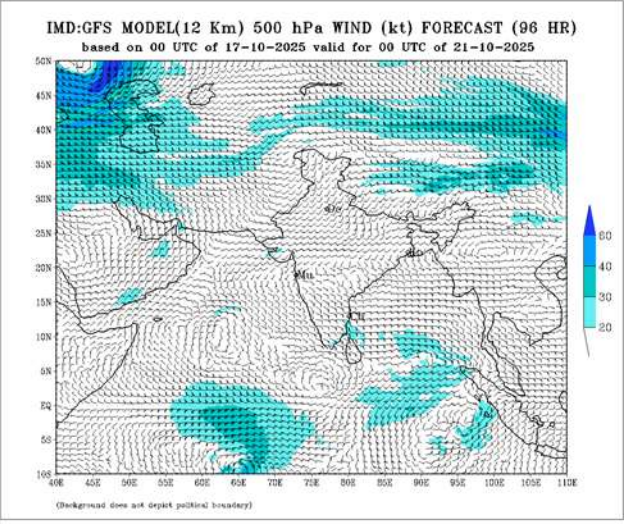
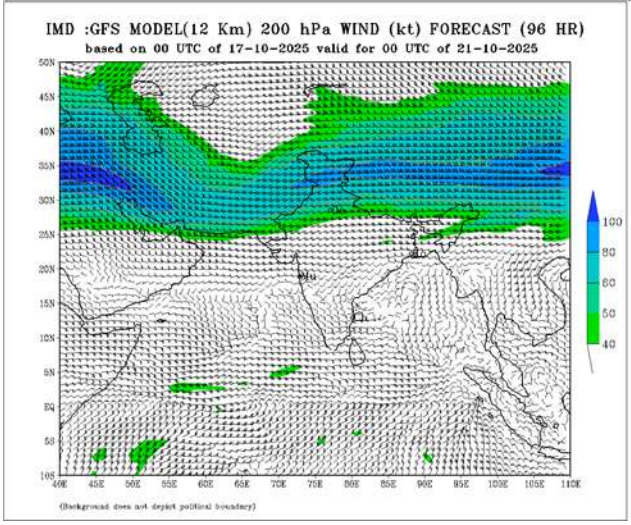
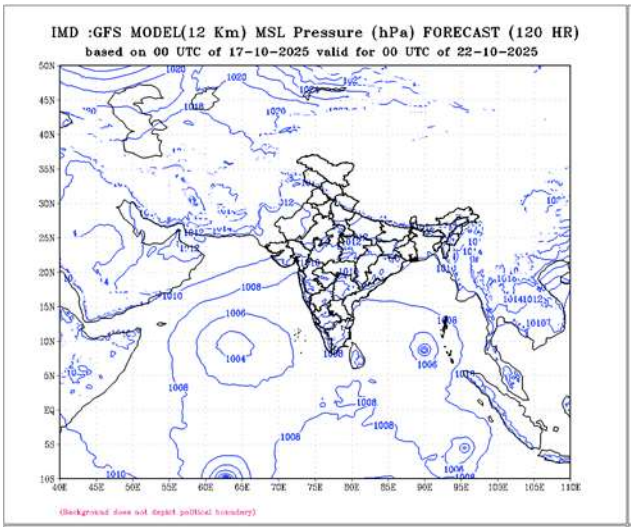
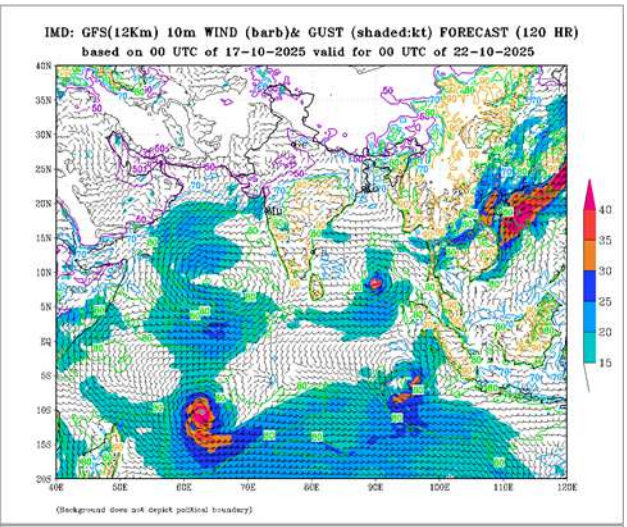
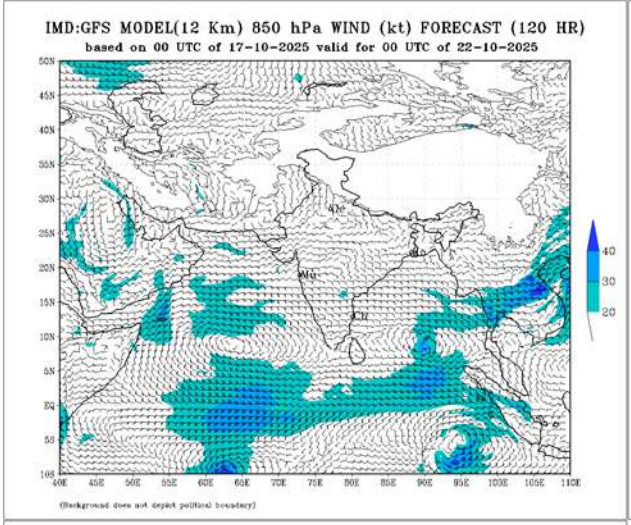

IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (96 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 21-10-2025

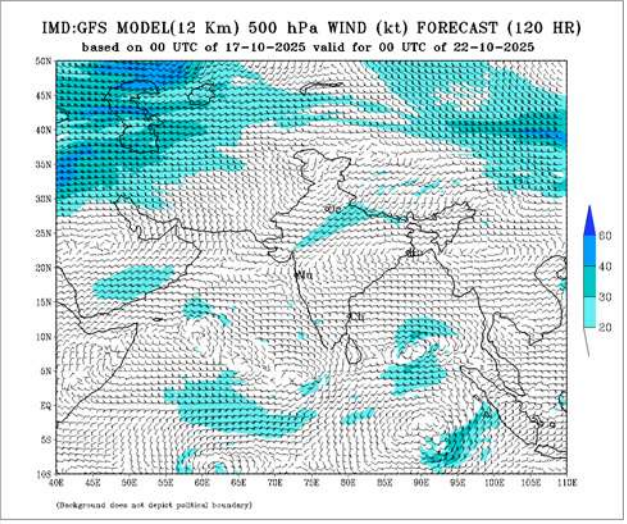

IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (96 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 21-10-2025

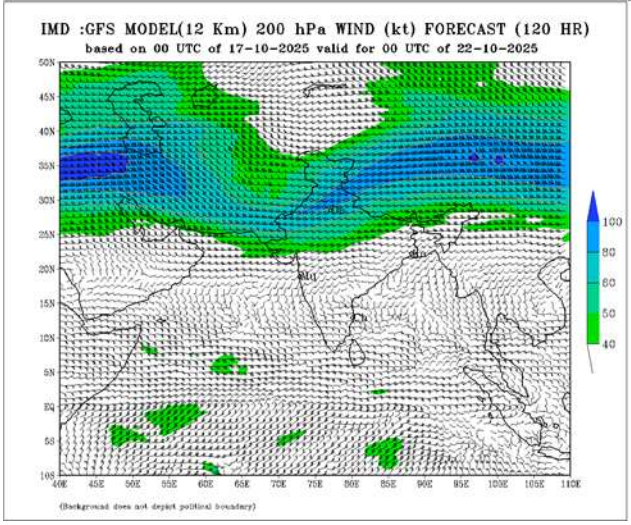

IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (96 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 21-10-2025

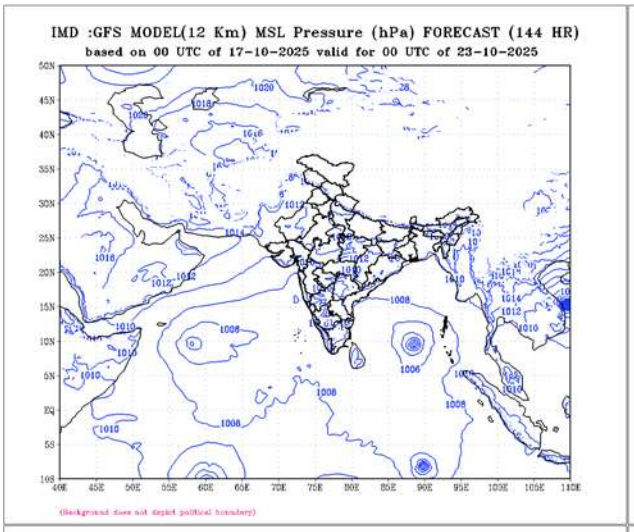

IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (120 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 22-10-2025

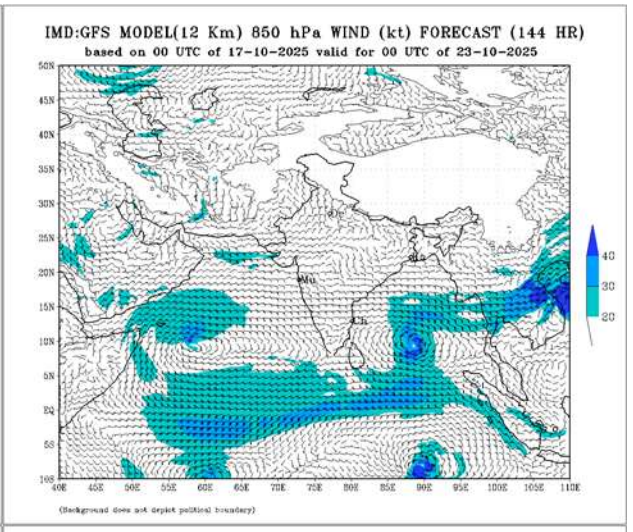

IMD: GFS(12Km) 10m WIND (barb)& GUST (shaded:kt) FORECAST (120 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 22-10-2025

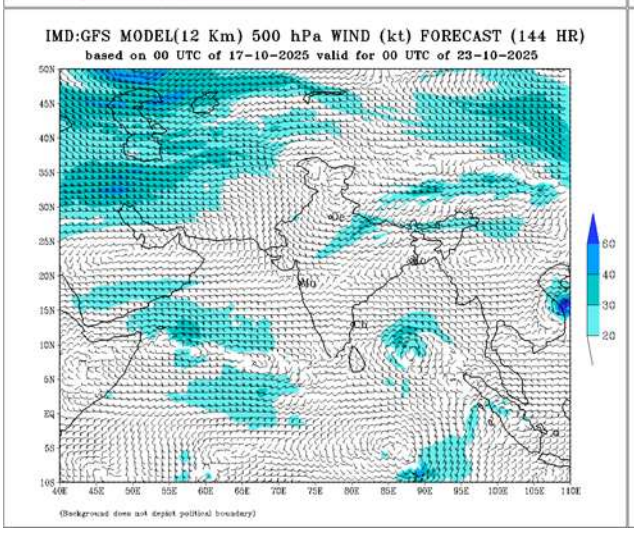

IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (120 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 22-10-2025

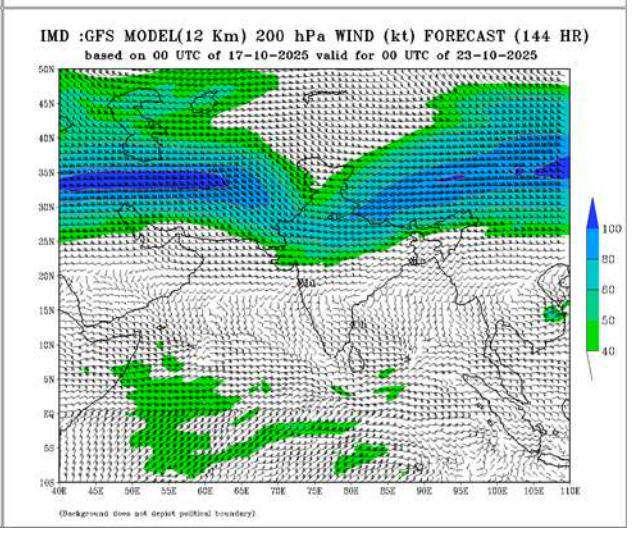

IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (120 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 22-10-2025

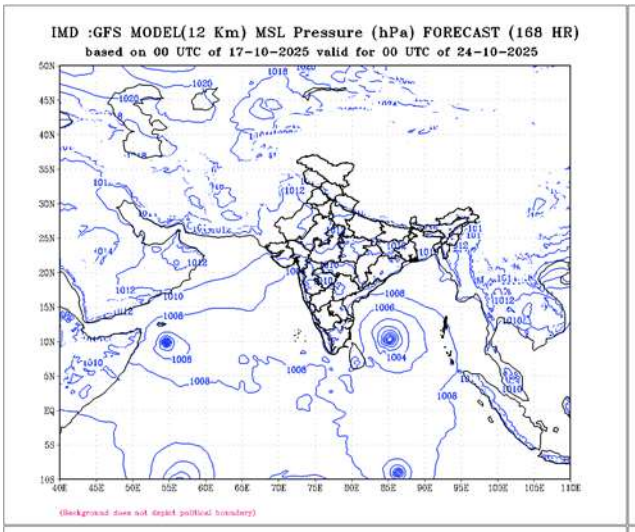

IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (120 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 22-10-2025

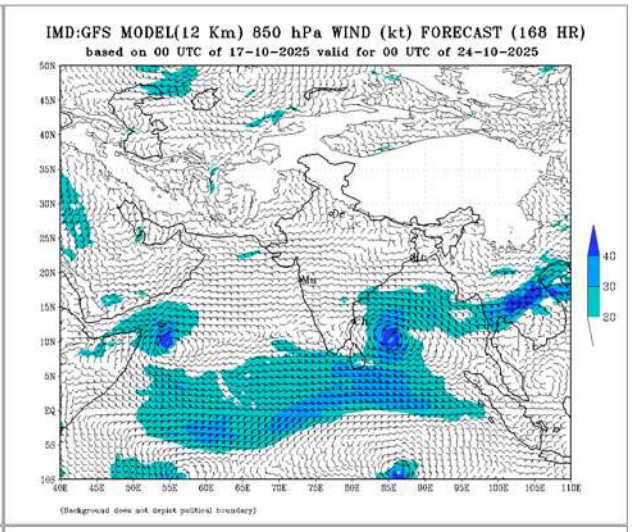

IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (144 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 23-10-2025

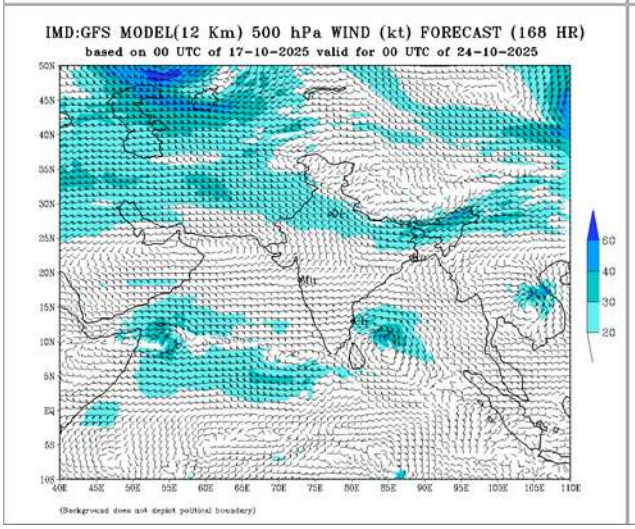

IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (144 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 23-10-2025

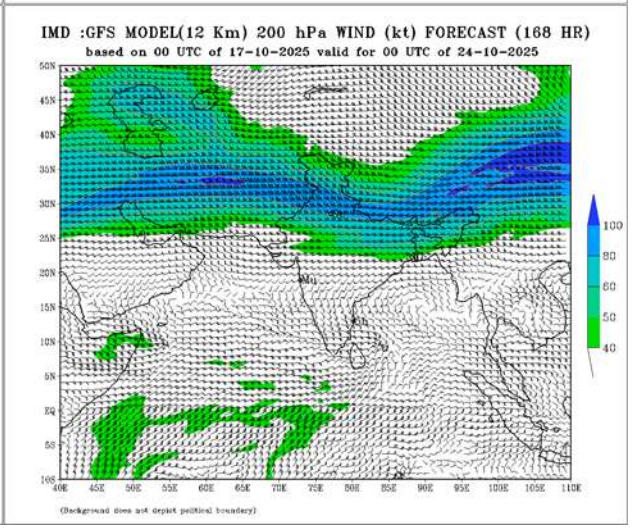

IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (144 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 23-10-2025


IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (144 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 23-10-2025


IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (168 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 24-10-2025
(Background does not depict political boundary)


IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (168 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 24-10-2025
40
30
20
(Background does not depict political boundary)


IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (168 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 24-10-2025
60
40
30
20
(Background does not depict political boundary)


IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (168 HR)
based on 00 UTC of 17-10-2025 valid for 00 UTC of 24-10-2025
100
90
80
50
40
(Background does not depict political boundary)