



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

**Tropical Cyclone Forecast Programme
Report Dated 26th October, 2023**

Time of Issue: 1200 UTC

Synoptic features (based on 0300 UTC analysis):

- ❖ The cyclonic circulation over Westcentral Bay of Bengal & adjoining south Coastal Andhra Pradesh now lies over Southwest Bay of Bengal off Tamil Nadu coast between 1.5 km & 3.1 km above mean sea level.
- ❖ A cyclonic circulation lies over south Tamil Nadu at 0.9 km above mean sea level.

Dynamical and thermo-dynamical features

Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)
Sea Surface Temperature (SST) °C	28-30°C over major parts of BoB, Andaman Sea, 26-28 over some parts of southwest BoB, Gulf of Mannar and adjoining Comorin area.	29-30°C over southeast and adjoining southwest AS, north AS, along and off Maharashtra and south Gujarat coast, 26-28°C over most parts of AS, along and off Karnataka and Kerala coasts, less than 24 over western parts of westcentral and southwest AS.
Tropical Cyclone Heat Potential (TCHP) kJ/cm ²	100-110 over eastcentral BoB. 50-60 over most parts of BOB and north Andaman Sea, 80-90 over south Andaman Sea. Less than 40 along Andhra Pradesh and Tamil Nadu coasts, adjoining sea areas, less than 20-30 over Gulf of Mannar and adjoining Comorin area, parts of southwest BoB.	60-80 over southeast & adjoining eastcentral, adjoining southwest Arabian Sea. Less than 30 over eastcentral and adjoining northeast and northwest AS, along and off west coast of India, less than 10 over westcentral and southwest AS.
Cyclonic Relative vorticity (X10 ⁻⁶ s ⁻¹)	40-50 over southwest BoB with no vertical extension.	20 over south AS.
Low Level convergence (X10 ⁻⁵ s ⁻¹)	5-10 over the south Andaman Sea.	5 over southeast and adjoining southwest AS. -5 over most parts of AS.
Upper Level divergence (X10 ⁻⁵ s ⁻¹)	-5 over major parts of BoB.	5-10 over central parts of south AS. Negative over major parts of AS.

Vertical Wind Shear (VWS knots)	15-20 over southwest BoB, 20 over Andaman Sea and north BoB, 15 over central BoB.	5-10 over south and adjoining central AS, 20-25 over central AS, 25-23 over north AS.
Wind Shear Tendency (knots)	Decreasing tendency over major parts of BoB.	Decreasing tendency over south and central AS. Increasing tendency over the north and adjoining central AS.
Upper tropospheric Ridge	Along 17°N over BoB	Along 18°N over AS

Satellite observations based on INSAT imagery (0300 UTC):

(a) Over the BoB & Andaman Sea:-

Scattered low & medium clouds with embedded moderate to intense convection lay over southeast Bay of Bengal Andaman Sea, Gulf of Martaban. Scattered low & medium clouds with embedded isolated weak to moderate convection lay over eastcentral Bay of Bengal.

(b) Over the Arabian Sea:-

Scattered Low and Medium Clouds with Embedded Moderate to Intense Convection lay over South and adjoining westcentral Arabian Sea.

(c) Convection outside India:

Scattered Low And Medium Clouds With Embedded Moderate To Intense Convection lay Over Gulf Of Mannar Maldives South Tibet, South China, South Myanmar, Thailand, Gulf Of Thailand, Cambodia, North Vietnam, Gulf Of Tonkin, Hainan Sumatra, Adjoining West Coast, Strait Of Malacca, Malaysia, Borneo, South China Sea, Celebes Islands & Sea, Philippines, East China Sea, Madagascar, and Over Indian Ocean Between Latitude 5.0N To 3.0S Longitude 45.0E To 100.0E and between Latitude 5.0S To 35.0S Longitude 50.0E To 75.0E.

M.J.O. Index:

MJO index is in Phase 8 with amplitude greater than 1 for next 3 days & in phase 1 for next four days with amplitude greater than 1.

Storms and Depression over South China Sea/ South Indian Ocean: NIL

Input for FDP Cyclone based on 0000 UTC for the next 7 days

MODEL GUIDANCE	Bay of Bengal (BoB)	Arabian Sea (AS)
IMD-GFS	No significant system.	No significant system.
IMD-GEFS	No significant system.	No significant system.
IMD-WRF	No significant system.	No significant system.
NCMRWF-NCUM	No significant system.	No significant system.
NCMRWF-NEPS	No significant system.	No significant system.
NCMRWF-UM (Regional)	No significant system.	No significant system.
ECMWF	No significant system.	No significant system.
NCEP-GFS	No significant system.	No significant system.

IMD-Genesis Potential Parameter	No potential zone over Bay of Bengal for next 7 days.	No potential zone over Arabian Sea for next 7 days.
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Summary and conclusion:

1. For the BAY OF BENGAL of Bengal:

Most of the models are indicating that there will be no significant system over Bay of Bengal for the next seven days.

Probability of Cyclogenesis (formation of depression and above intensity systems) over the BAY OF BENGAL OF BENGAL of Bengal and Andaman Sea during next 168 hours:

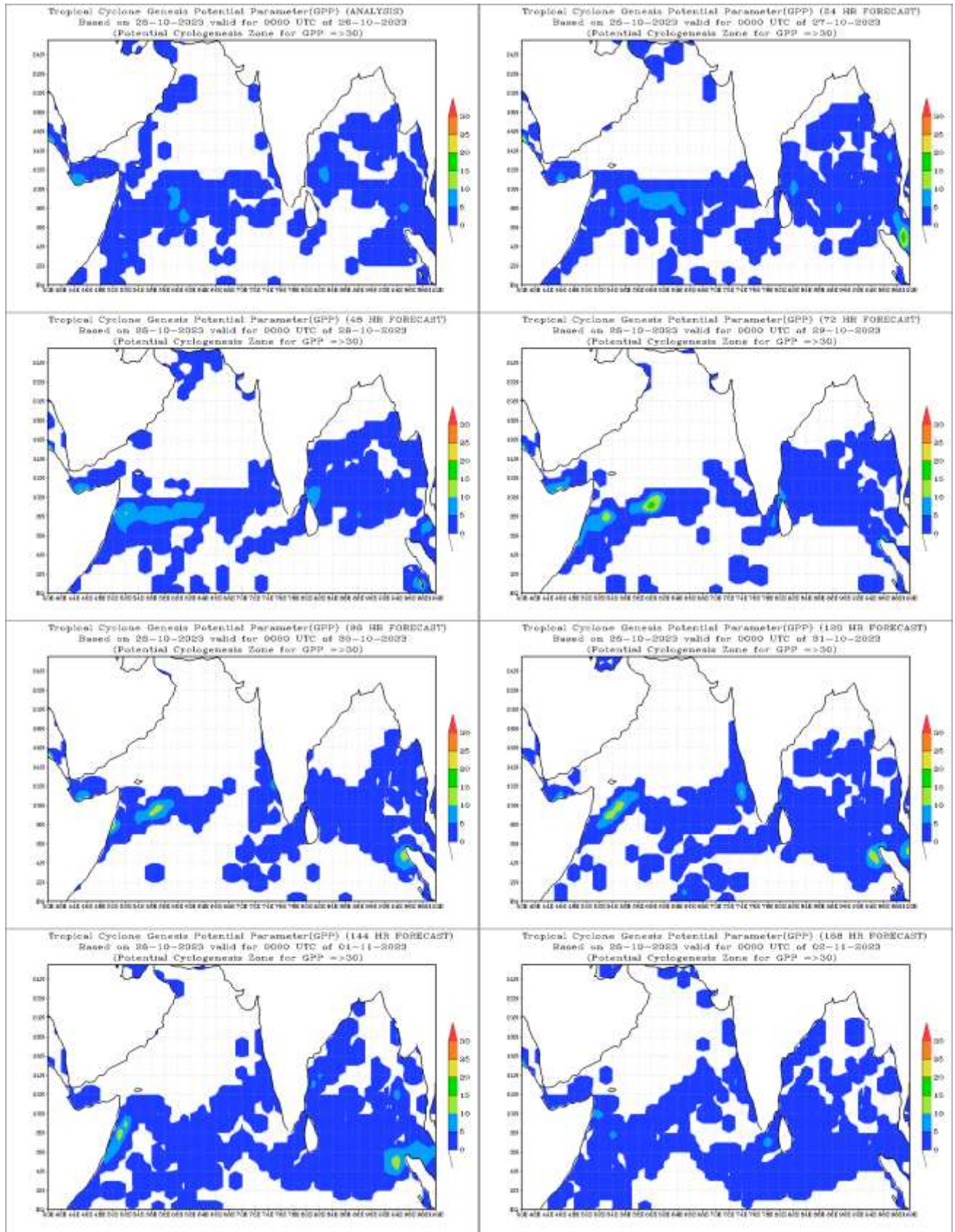
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

2. For the Arabian Sea:

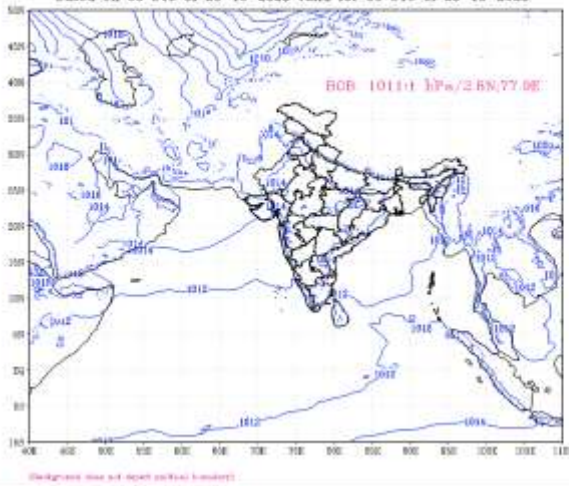
Most of the models are indicating that there will be no significant system over Arabian Sea for the next seven days.

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

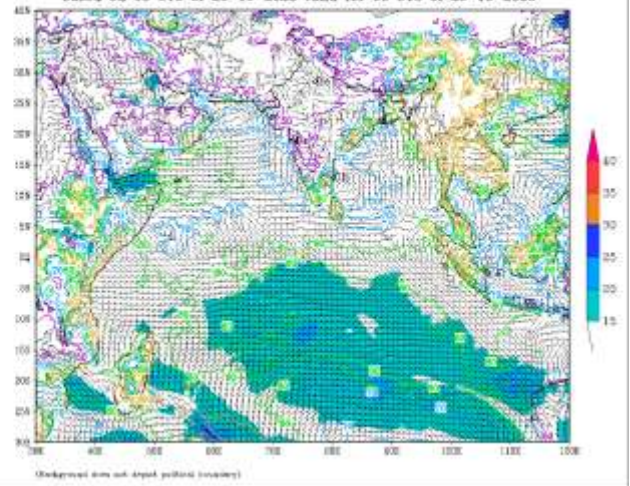
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL



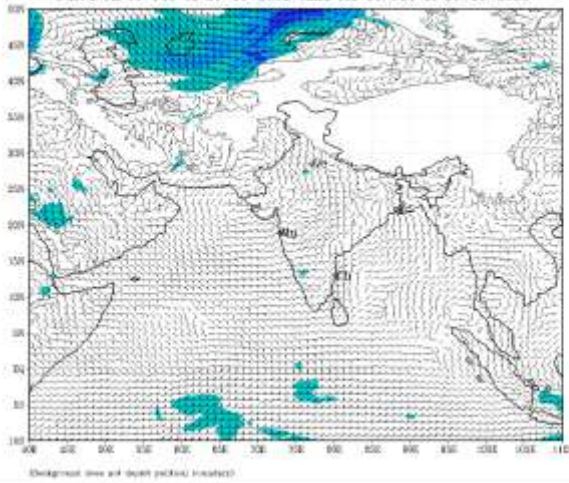
IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (00 HR)
based on 00 UTC of 26-10-2023 valid for 00 UTC of 26-10-2023



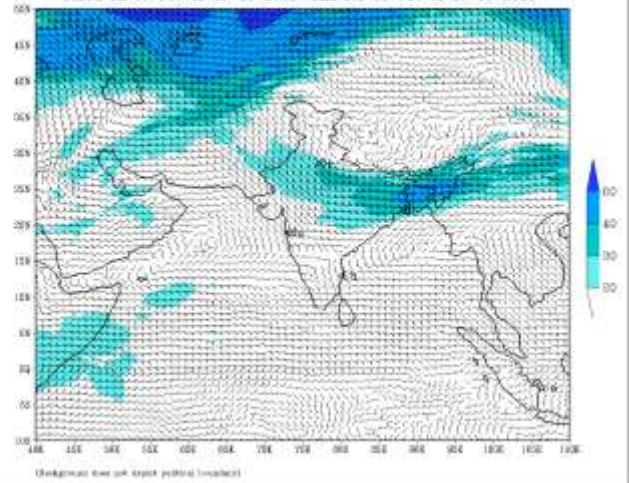
IMD GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (00 HR)
based on 00 UTC of 26-10-2023 valid for 00 UTC of 26-10-2023



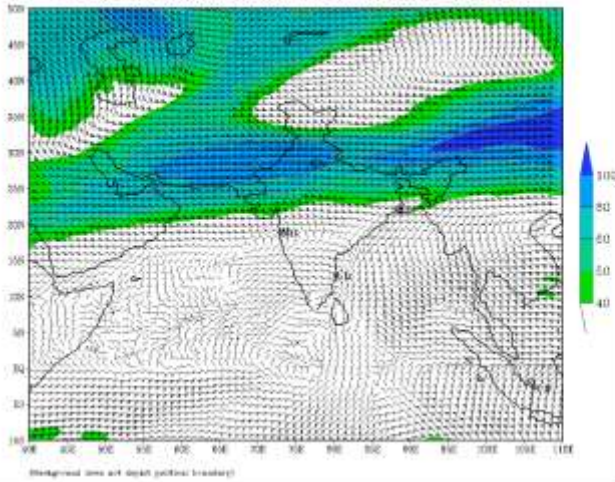
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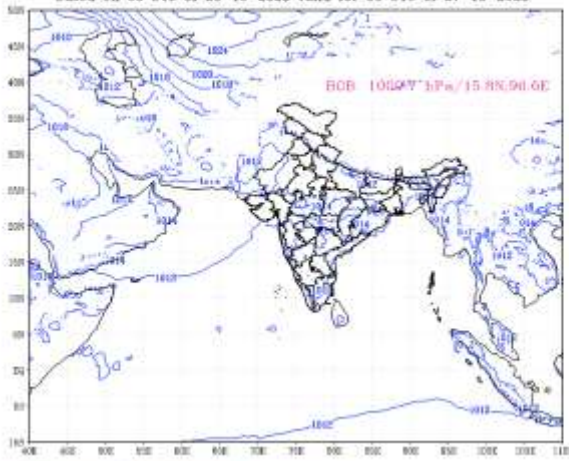
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based on 00 UTC of 26-10-2023 valid for 00 UTC of 26-10-2023



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based on 00 UTC of 26-10-2023 valid for 00 UTC of 26-10-2023

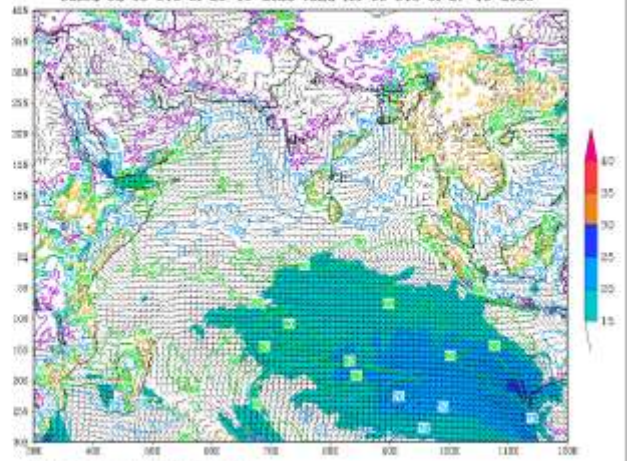


IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (24 HR)
based on 00 UTC of 26-10-2023 valid for 00 UTC of 27-10-2023



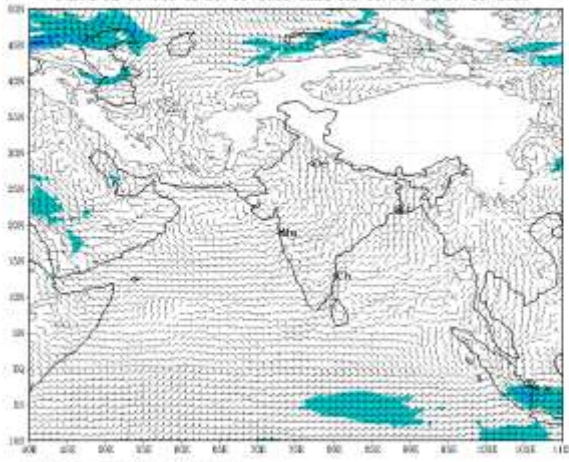
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IMD GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (24 HR)
based on 00 UTC of 26-10-2023 valid for 00 UTC of 27-10-2023



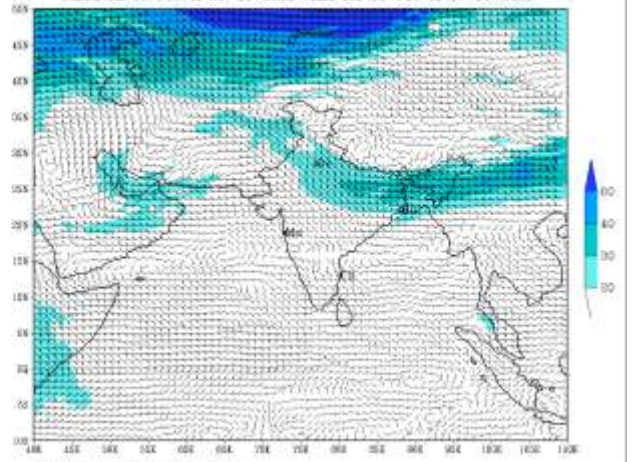
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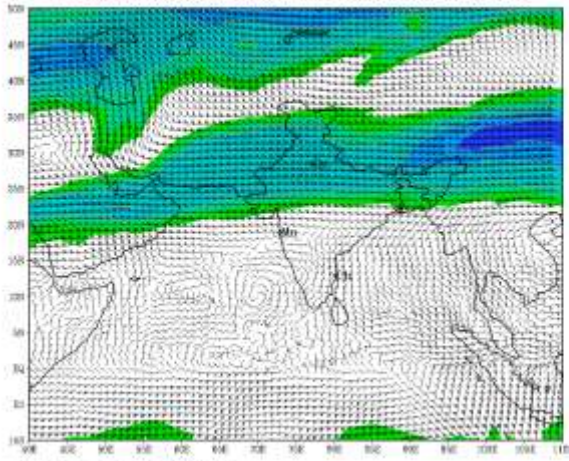
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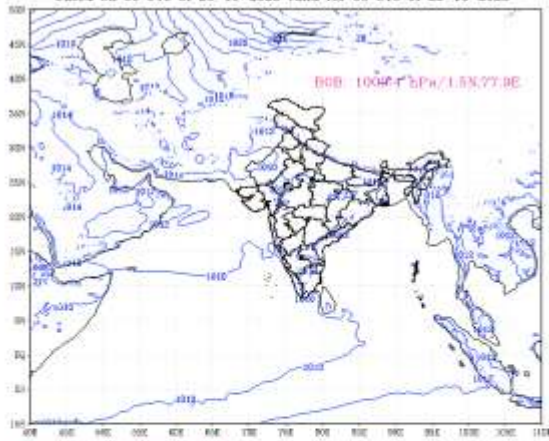
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based on 00 UTC of 26-10-2023 valid for 00 UTC of 27-10-2023



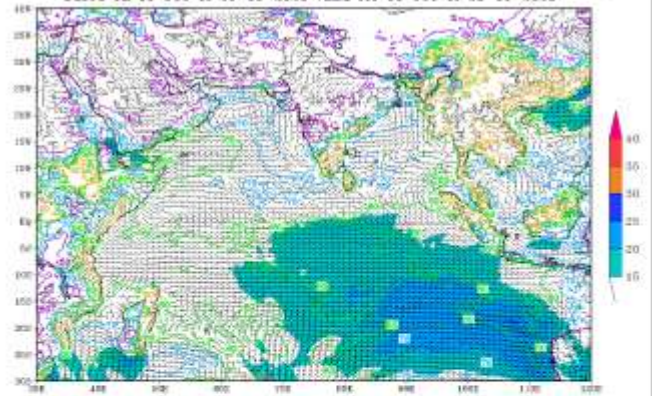
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IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (48 HR)
 based on 00 UTC of 26-10-2023 valid for 00 UTC of 28-10-2023



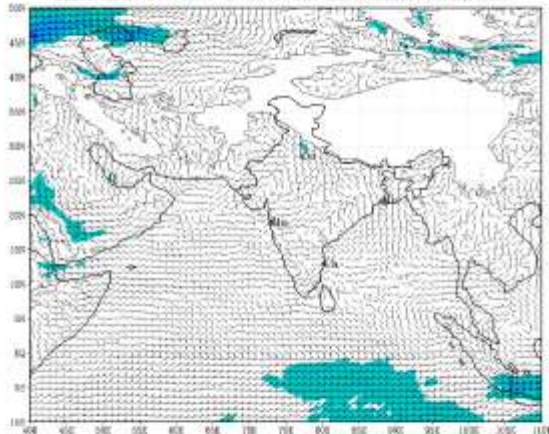
(Background over sea based on bathymetry)

IMD :GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (48 HR)
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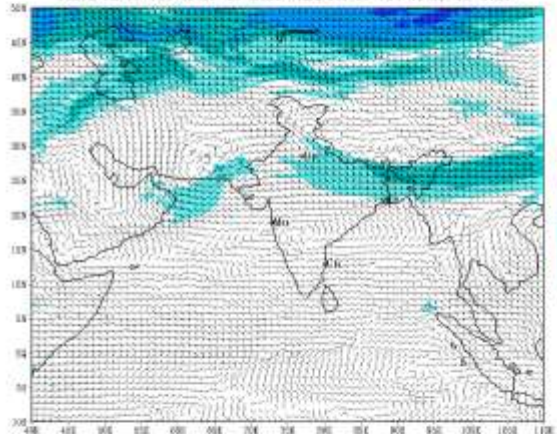
(Background over sea with degree political boundary)

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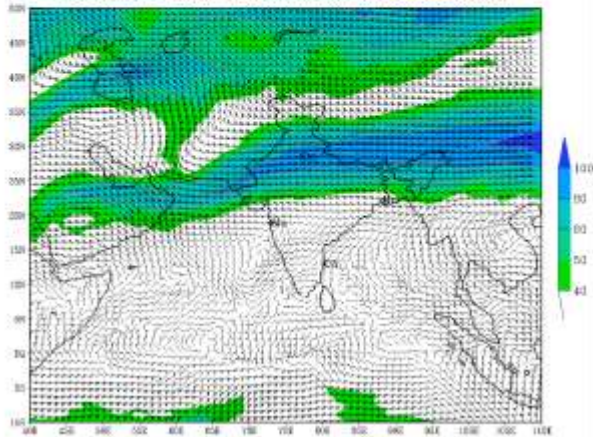
(Background over sea with degree political boundary)

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 based on 00 UTC of 26-10-2023 valid for 00 UTC of 28-10-2023



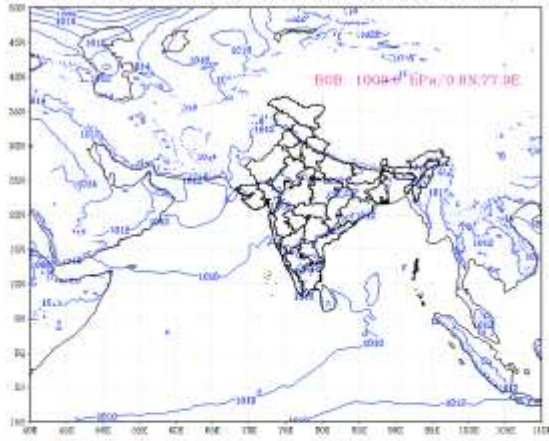
(Background over sea with degree political boundary)

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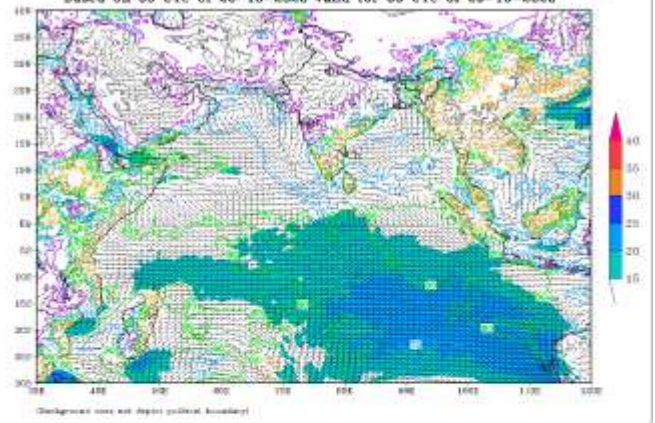


(Background over sea with degree political boundary)

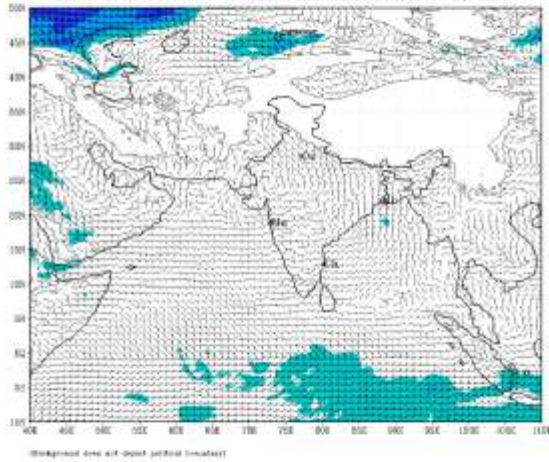
IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (72 HR)
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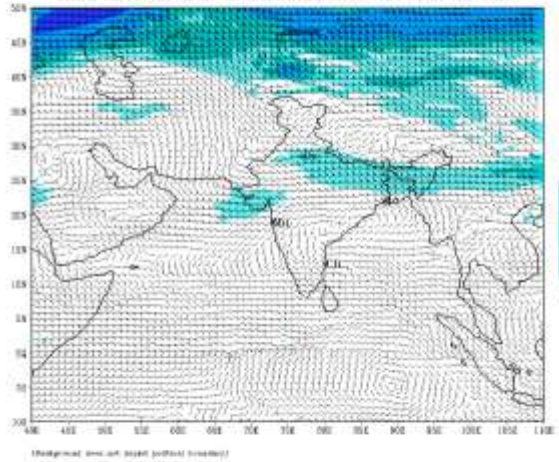
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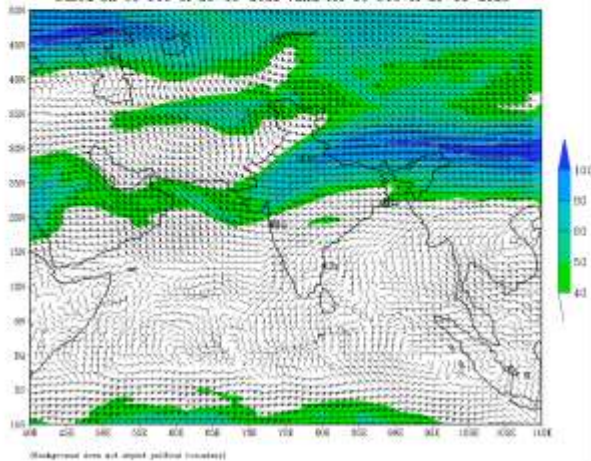
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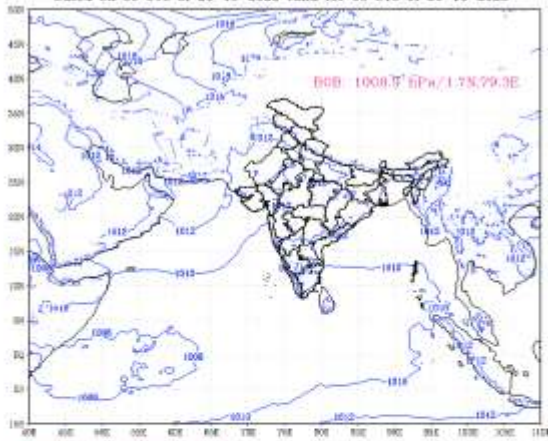
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IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (72 HR)
 based on 00 UTC of 26-10-2023 valid for 00 UTC of 29-10-2023

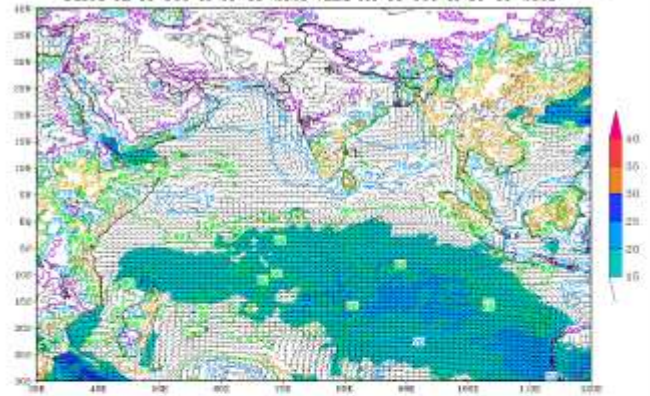


IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (96 HR)
based on 00 UTC of 26-10-2023 valid for 00 UTC of 30-10-2023



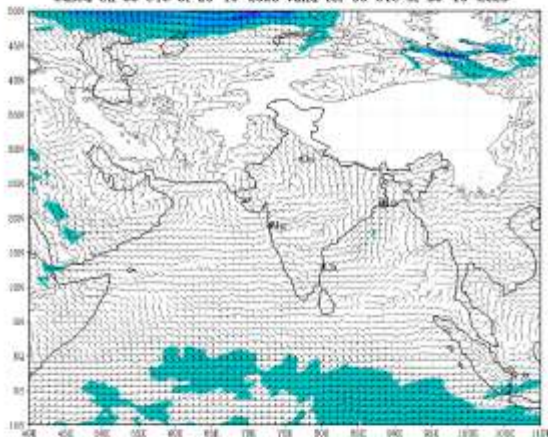
(Background uses not depict political boundary)

IMD GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (96 HR)
based on 00 UTC of 26-10-2023 valid for 00 UTC of 30-10-2023



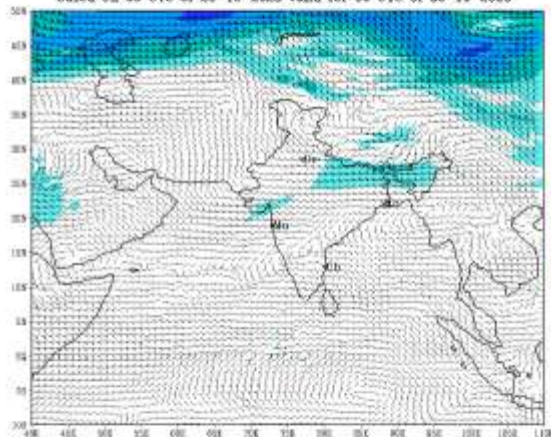
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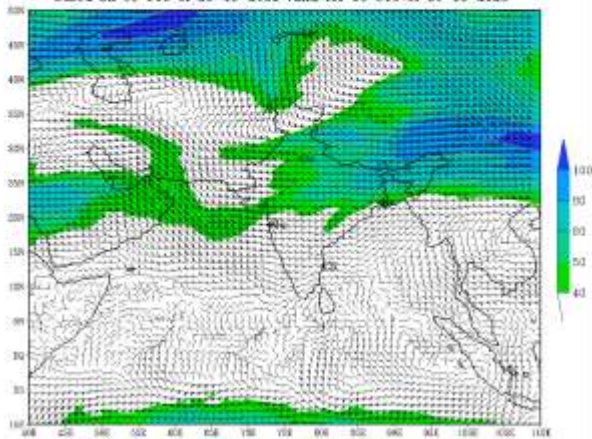
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based on 00 UTC of 26-10-2023 valid for 00 UTC of 30-10-2023



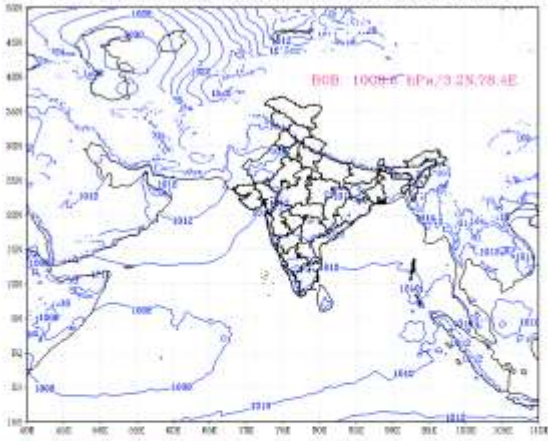
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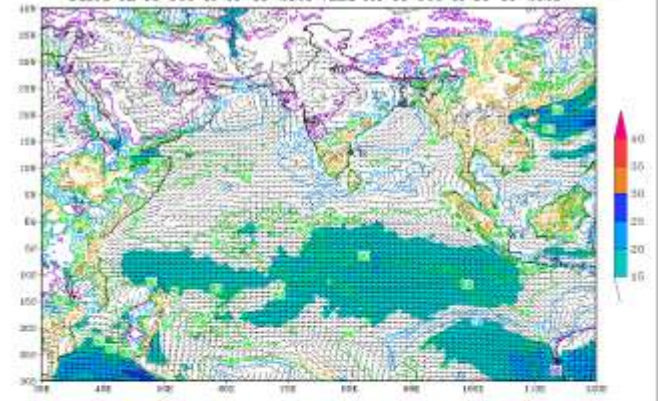
(Background uses not depict political boundary)

IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (120 HR)
 based on 00 UTC of 26-10-2023 valid for 00 UTC of 31-10-2023



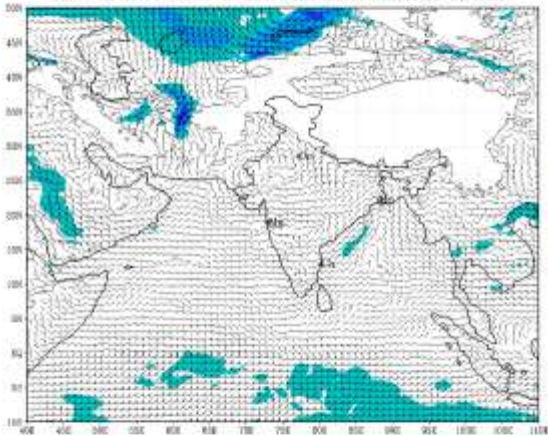
(Background over sea based on sea level)

IMD GFS (T1534) 10m WIND (kt) AND 2m RH (%) FORECAST (120 HR)
 based on 00 UTC of 26-10-2023 valid for 00 UTC of 31-10-2023



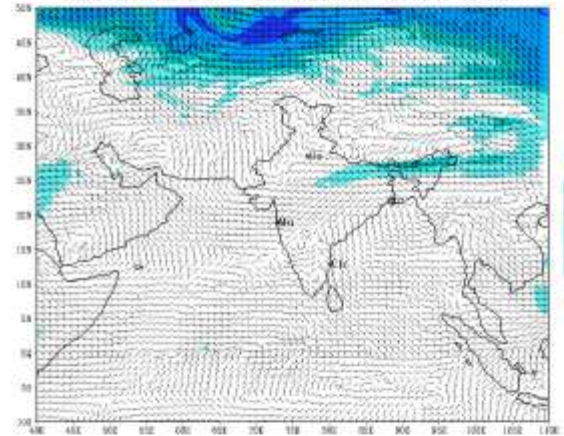
(Background over sea based on political boundary)

IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (120 HR)
 based on 00 UTC of 26-10-2023 valid for 00 UTC of 31-10-2023



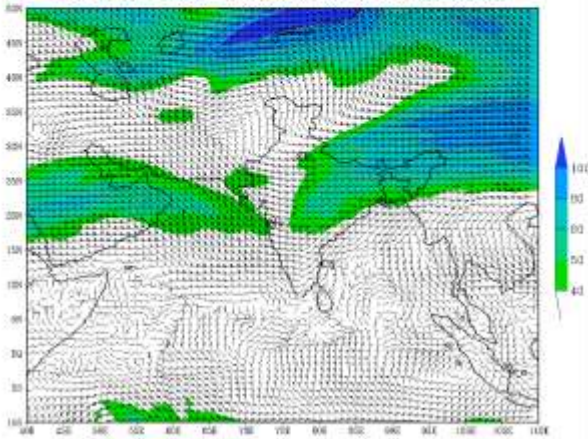
(Background over sea based on political boundary)

IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (120 HR)
 based on 00 UTC of 26-10-2023 valid for 00 UTC of 31-10-2023



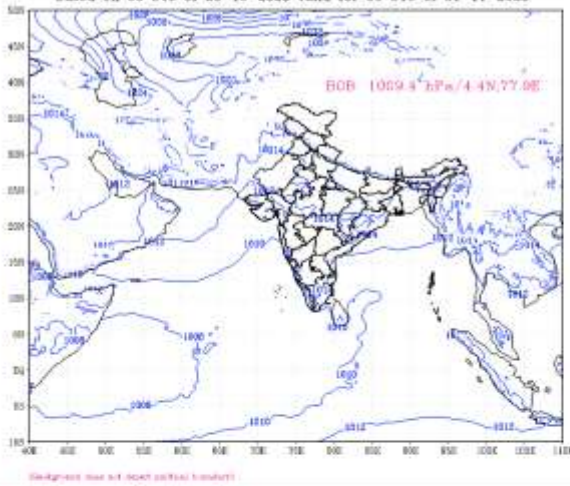
(Background over sea based on political boundary)

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 based on 00 UTC of 26-10-2023 valid for 00 UTC of 31-10-2023

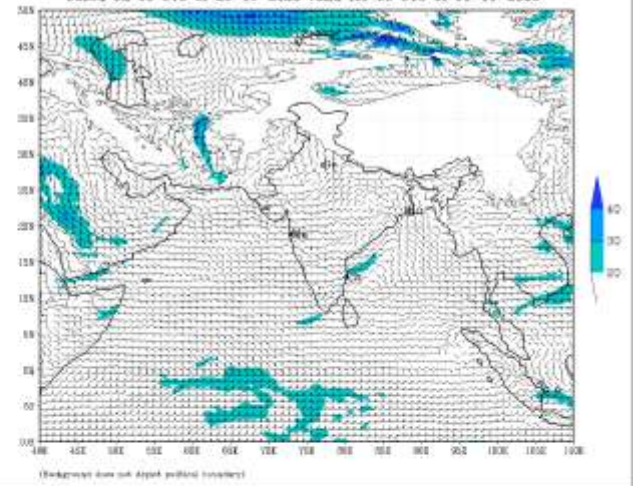


(Background over sea based on political boundary)

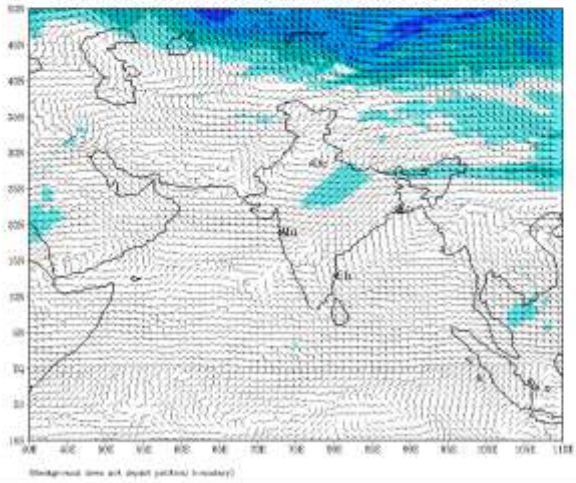
IMD :GFS MODEL(12 Km) MSL Pressure (hPa) FORECAST (144 HR)
based on 00 UTC of 26-10-2023 valid for 00 UTC of 01-11-2023



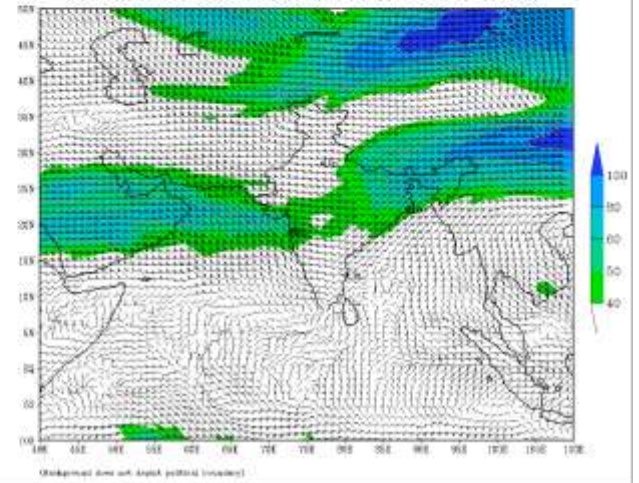
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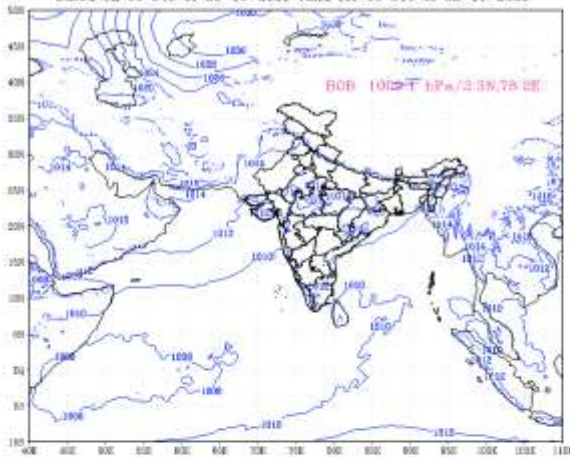
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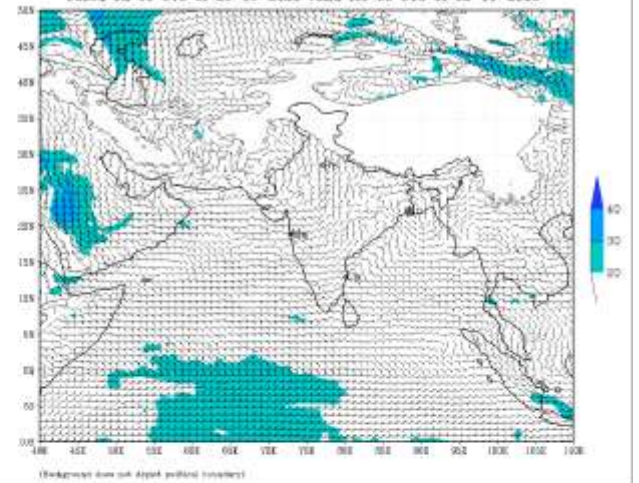
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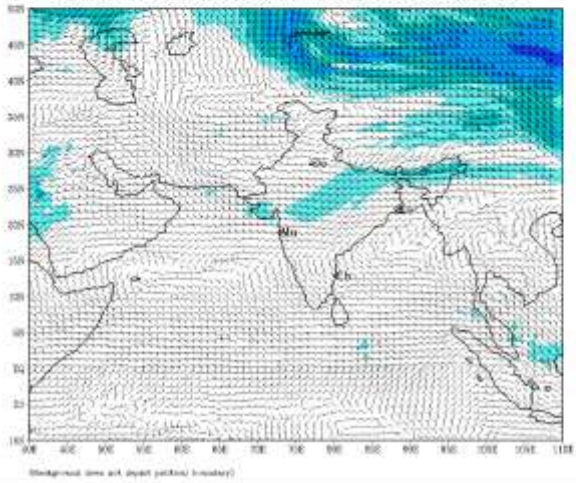
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IMD:GFS MODEL(12 Km) 850 hPa WIND (kt) FORECAST (168 HR)
 based on 00 UTC of 26-10-2023 valid for 00 UTC of 02-11-2023



IMD:GFS MODEL(12 Km) 500 hPa WIND (kt) FORECAST (168 HR)
 based on 00 UTC of 26-10-2023 valid for 00 UTC of 02-11-2023



IMD :GFS MODEL(12 Km) 200 hPa WIND (kt) FORECAST (168 HR)
 based on 00 UTC of 26-10-2023 valid for 00 UTC of 02-11-2023

