



## REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI SPECIAL TROPICAL WEATHER OUTLOOK

**DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 20.07.2024**

**SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0800 UTC OF 20.07.2024 BASED ON 0600 UTC OF 20.07.2024.**

### **BAY OF BENGAL:**

THE DEPRESSION OVER ODISHA COAST NEAR CHILIKA LAKE MOVED NORTHWESTWARDS WITH A SPEED OF 3 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 20TH JULY, 2024 OVER THE SAME REGION NEAR LATITUDE 19.7°N AND LONGITUDE 85.4°E, ABOUT 50 KM WEST-SOUTHWEST OF PURI (ODISHA, 43053) AND 70 KM NORTHEAST OF GOPALPUR (ODISHA, 43049).

IT IS LIKELY TO MOVE FURTHER NORTHWESTWARDS ACROSS ODISHA & CHHATTISGARH AND WEAKEN GRADUALLY INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

AS PER INSAT-3D IMAGERY, INTENSITY OF THE SYSTEM IS T1.5/C.I.1.5. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER WESTCENTRAL AND ADJOINING NORTHWEST BAY OF BENGAL OFF SOUTH ODISHA & ADJOINING NORTH ANDHRA PRADESH COASTS AND SOUTH ODISHA & NORTH COASTAL ANDHRA PRADESH. MINIMUM CLOUD TOP TEMPERATURE IS -93°C.

AS PER OBSERVATIONS AT 0600 UTC, ESTIMATED CENTRAL PRESSURE IS 992 HPA AND THE PRESSURE DROP AT CENTRE IS 4 HPA. AT 0600 UTC, LOWEST MEAN SEA LEVEL PRESSURE (MSLP) OF 991.9 HPA IS OBSERVED AT PURI (43053).

### **WIND WARNING**

SQUALLY WEATHER WITH WIND SPEED REACHING 40-50 KMPH GUSTING TO 55 KMPH IS VERY LIKELY TO PREVAIL OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL AND ALONG & OFF NORTH ANDHRA PRADESH, ODISHA, WEST BENGAL & ADJOINING BANGLADESH COASTS ON 20<sup>TH</sup> JULY AND WOULD DECREASE GRADUALLY THEREAFTER.

**SEA CONDITION:** ROUGH TO VERY ROUGH SEA CONDITION IS VERY LIKELY TO PREVAIL OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL AND ALONG AND OFF NORTH ANDHRA PRADESH, ODISHA, WEST BENGAL & ADJOINING BANGLADESH COASTS ON 20<sup>TH</sup> JULY AND WOULD IMPROVE GRADUALLY THEREAFTER.

### **FISHERMEN WARNING**

FISHERMEN ARE ADVISED NOT TO VENTURE INTO NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL AND ALONG & OFF NORTH ANDHRA PRADESH, ODISHA,

WEST BENGAL & ADJOINING BANGLADESH COASTS ON 20<sup>TH</sup> JULY.

**ARABIAN SEA:**

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER EAST ARABIAN SEA, LAKSHADWEEP ISLANDS AND COMORIN. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER REST OF ARABIAN SEA AND MALDIVES.

**\*PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:**

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

**\*NOTE: EVERY 24HR FORECAST IS VALID UPTO 0300 UTC (0830 IST) OF NEXT DAY**

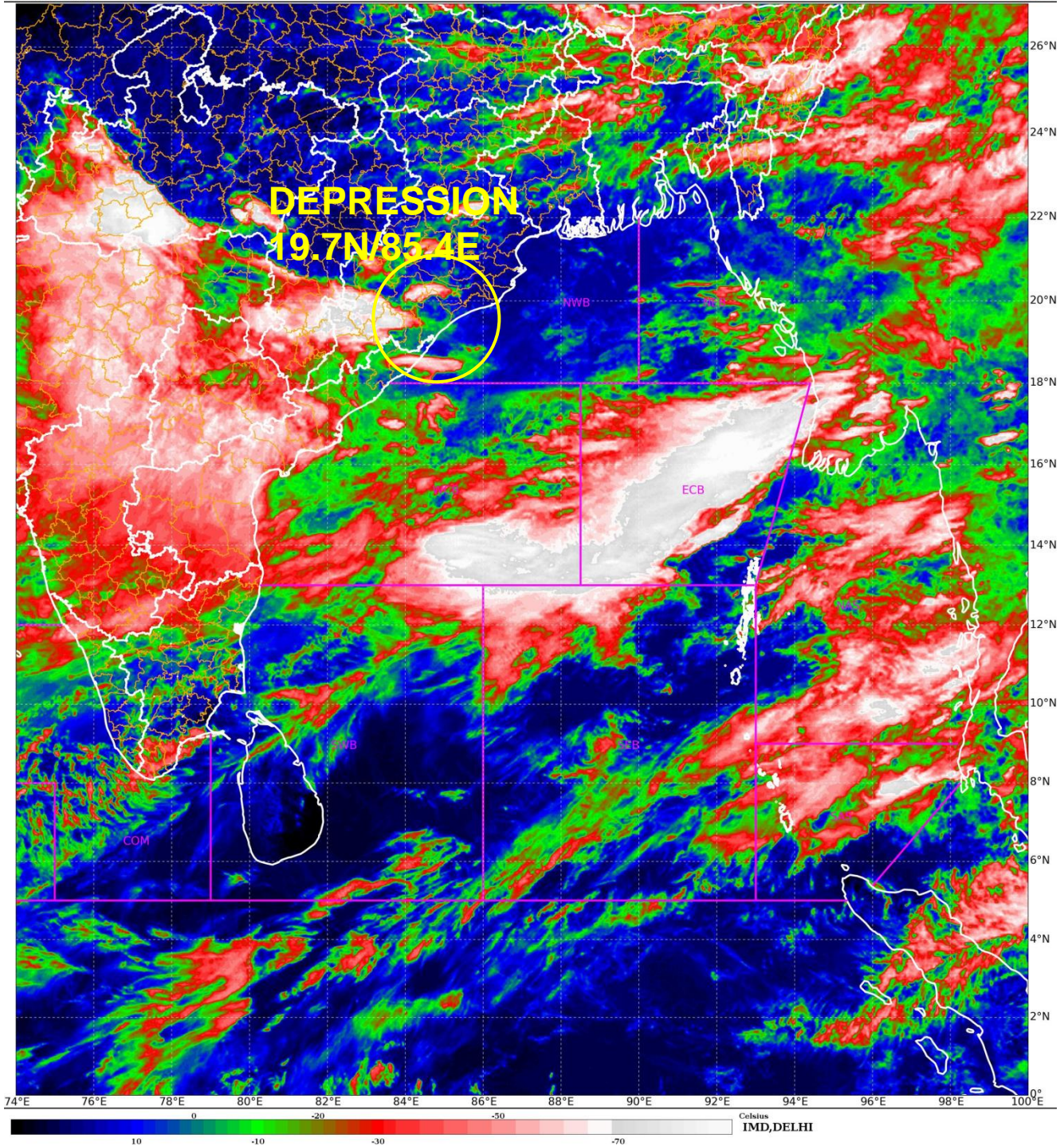
**REMARKS:**

CONSIDERING THE ENVIRONMENTAL CONDITIONS, LOW LEVEL VORTICITY IS ABOUT  $100 \times 10^{-5} \text{S}^{-1}$  OVER NORTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL TO THE EAST OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 200 HPA LEVELS. LOW LEVEL CONVERGENCE IS CIRCULAR AND IS ABOUT  $30 \times 10^{-5} \text{S}^{-1}$  TO THE NORTHWEST OF THE SYSTEM CENTER. UPPER LEVEL DIVERGENCE HAS DECREASED AND IS ABOUT  $20 \times 10^{-5} \text{S}^{-1}$  TO THE NORTHWEST OF SYSTEM CENTER. VERTICAL WIND SHEAR (VWS) IS HIGH (40 KT) ALONG THE PREDICTED PATH.

VARIOUS NUMERICAL MODELS ARE INDICATING THE SYSTEM TO MOVE ACROSS ODISHA AND WEAKEN GRADUALLY AROUND 1200 UTC OF 20TH JULY.

CONSIDERING ALL THE ABOVE, THE DEPRESSION OVER ODISHA COAST NEAR CHILIKA LAKE IS LIKELY TO MOVE NORTHWESTWARDS ACROSS ODISHA & CHHATTISGARH AND WEAKEN GRADUALLY DURING NEXT 12 HOURS.

MONICA SHARMA  
SCIENTIST D  
RSMC, NEW DELHI



Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very Intense: : Less than -70°C  
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-33%, , MODERATE: 34-66% AND HIGH: 67-100%  
This is a guidance Bulletin for WMO/ESCAP Panel Member countries. Visit respective National websites for Country specific Bulletins



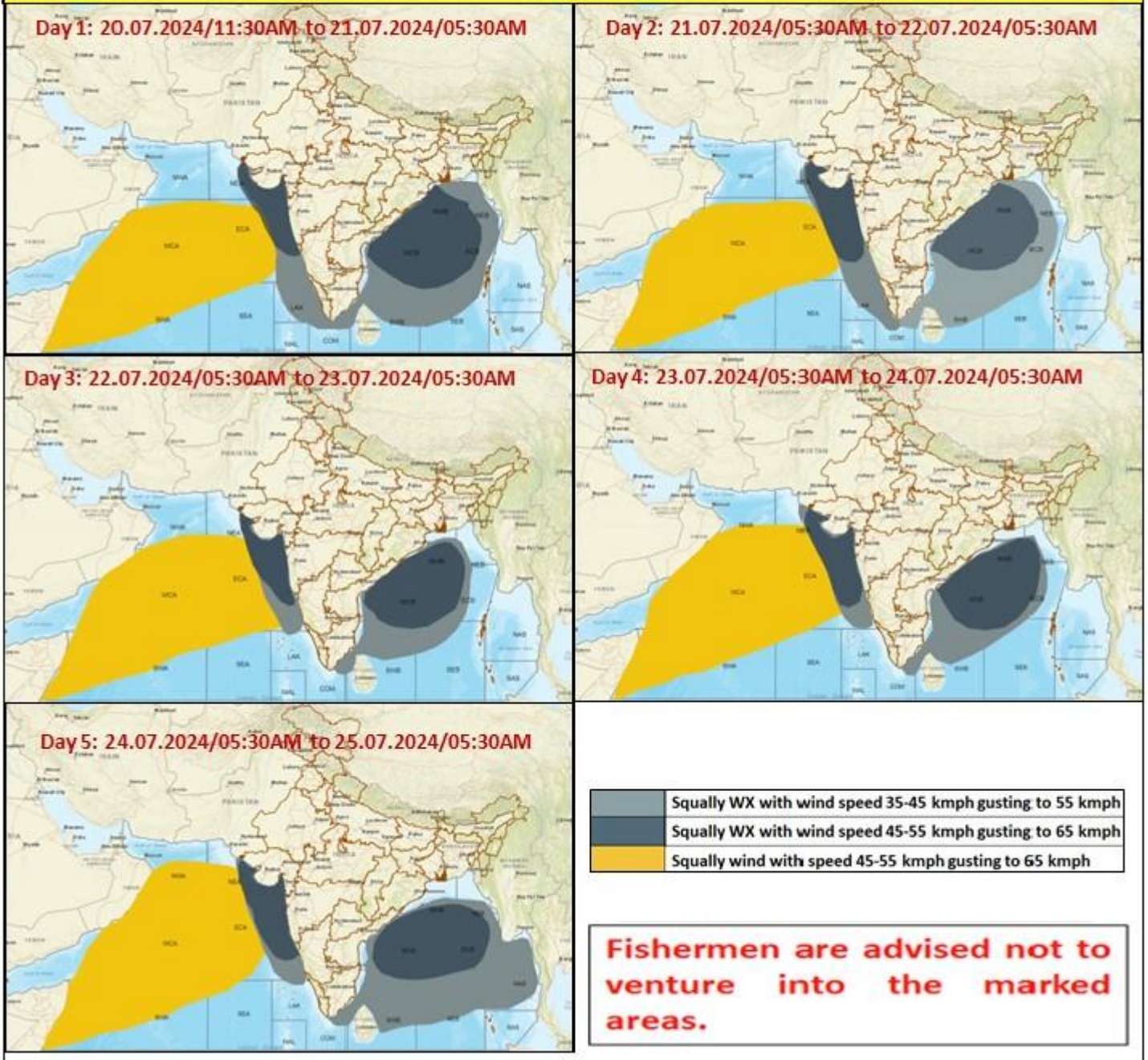
**OBSERVED AND FORECAST TRACK OF DEPRESSION OVER ODISHA COAST BASED ON 0600 UTC OF 20TH JULY, 2024.**



DATE/TIME IN UTC  
 IST=UTC +0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (40-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)  
 SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 40 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

## Fishermen Warning Graphics



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