



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

**DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 20.11.2022**

**SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0830 UTC OF 20.11.2022 BASED ON 0600 UTC OF 20.11.2022.**

**SUB: DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL**

THE DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL MOVED NEARLY NORTHWESTWARDS WITH A SPEED OF 6 KMPH DURING LAST 6 HOURS AND LAY CENTRED AT 0600 UTC OF TODAY, THE 20TH NOVEMBER, 2022 OVER THE SAME REGION, NEAR LATITUDE  $10.3^{\circ}$  N AND LONGITUDE  $85.3^{\circ}$  E, ABOUT 580 KM EAST OF JAFFNA (43404), 600 KM EAST OF KARAIKAL(43346) AND 630 KM SOUTHEAST OF CHENNAI (43279).

IT IS VERY LIKELY TO MAINTAIN ITS INTENSITY OF DEPRESSION AND MOVE SLOWLY WEST-NORTHWESTWARDS TOWARDS NORTH TAMILNADU-PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS DURING NEXT 48 HOURS.

AS PER INSAT 3D IMAGERY, THE INTENSITY OF THE SYSTEM IS CHARACTERISED AS T.1.5. THE SYSTEM SHOWS SHEAR PATTERN WITH CONVECTIVE CLOUD SHEARED TO THE NORTHWEST OF SYSTEM CENTRE. THE CLOUD MASS SHOWS FURTHER ORGANIZATION. IN ASSOCIATION WITH THE SYSTEM, ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL. MINIMUM CLOUD TOP TEMPERATURE IS  $-93^{\circ}$ C. THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH OVER SOUTHWEST AND ADJOINING WEST CENTRAL BAY OF BENGAL . THE ESTIMATED CENTRAL PRESSURE IS 1005 HPA.

**REMARKS:**

THE MADDEN JULIAN OSCILLATION INDEX (MJO) CURRENTLY LIES IN PHASE 5 WITH AMPLITUDE GREATER THAN 1. IT WOULD CONTINUE IN SAME PHASE DURING NEXT 5 DAYS WITH GRADUALLY INCREASING AMPLITUDE.

THERE IS NO SUPPORT OF EQUATORIAL WAVES INTO THE REGION FOR FURTHER INTENSIFICATION OF THE SYSTEM. SEA SURFACE TEMPERATURE (SST) IS AROUND  $28-29^{\circ}$ C OVER SOUTHWEST BOB.

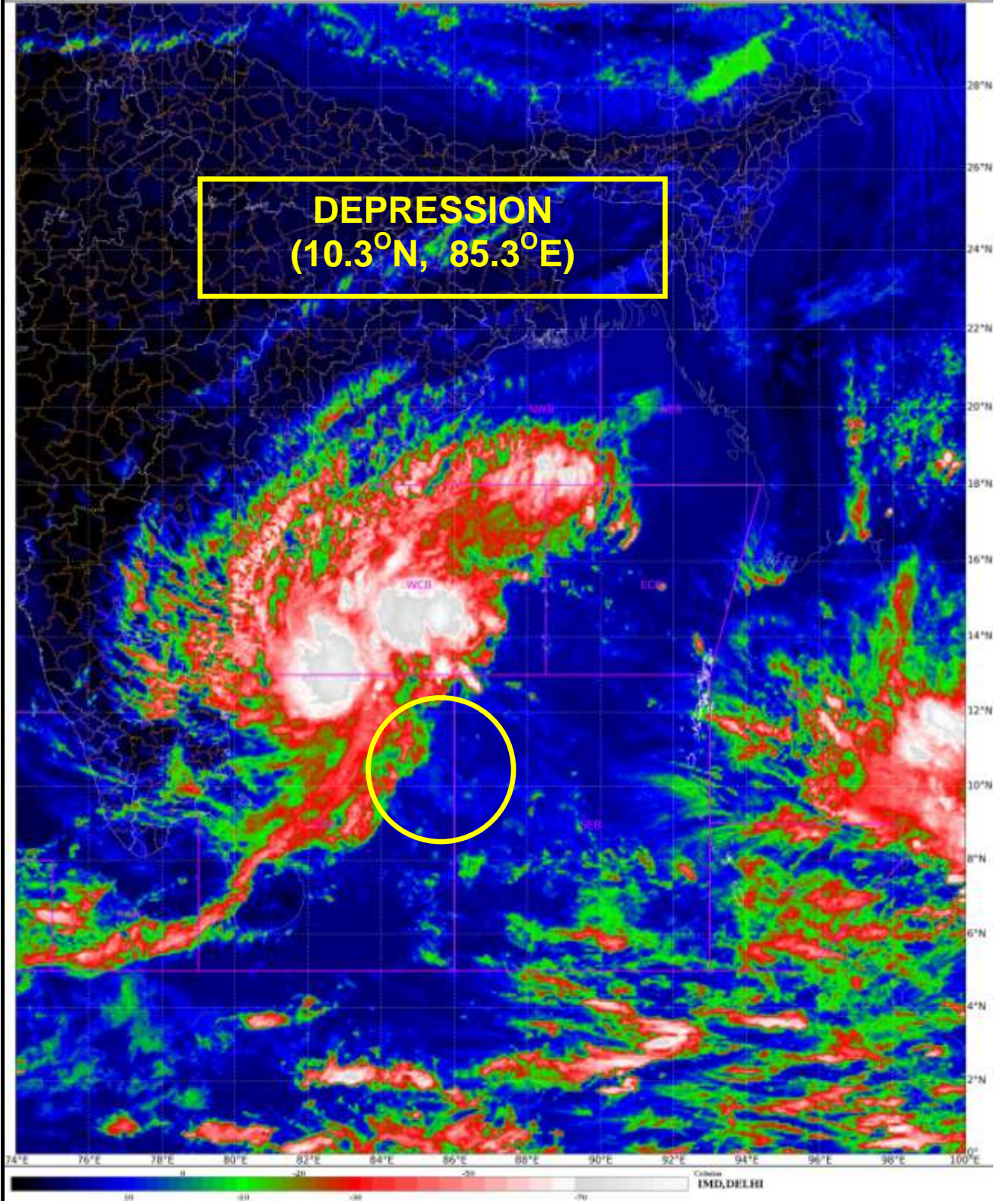
THE LOW LEVEL RELATIVE VORTICITY WHICH WAS EAST-WEST ORIENTED YESTERDAY HAS BEEN ORIENTED FROM SOUTHEAST TO NORTHWEST. IT IS ABOUT  $100 \times 10^{-6} \text{ S}^{-1}$ . VERTICALLY IT IS EXTENDING UPTO 300 HPA LEVEL, TILTING SOUTHWEST WARDS WITH HEIGHT. LOW LEVEL CONVERGENCE IS AROUND  $10 \times 10^{-5} \text{ S}^{-1}$  TO THE NORTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE HAS INCREASED AND IS AROUND  $40 \times 10^{-5} \text{ S}^{-1}$  TO THE NORTHWEST OF SYSTEM CENTRE. BOTH LOW LEVEL CONVERGENCE AND UPPER LEVEL DIVERGENCE ALLIGNED VERTICALLY OVER THE SYSTEM AND THUS THE SYSTEM WOULD MAINTAIN ITS INTENSITY OF DEPRESSION FOR SOMETIMES. UPPER

Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT)  $>-25^{\circ}$ C, (b) Moderate: CTT:  $-25^{\circ}$ C to  $-40^{\circ}$ C, (c) Intense: CTT:  $-41^{\circ}$ C to  $-70^{\circ}$ C and (d) Very Intense: : Less than  $-70^{\circ}$ C  
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-33%, , MODERATE: 34-66% AND HIGH: 67-100%  
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TROPOSPHERIC RIDGE ROUGHLY RUNS ALONG 18°N OVER BAY OF BENGAL AND THE SYSTEM IS UNDER MID-TROPOSPHERIC EAST-SOUTHEASTERLY MEAN WINDS WHICH WOULD STEER THE SYSTEM TOWARDS WEST-NORTHWESTWARDS DIRECTION. WIND SHEAR IS MODERATE (10-15 KNOTS) AROUND THE SYSTEM CENTER AND IS HIGH OF 25-30 KTS TOWARDS TAMILNADU-PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS.

MOST OF THE MODELS ARE INDICATING, NO FURTHER INTENSIFICATION OF THE SYSTEM. THE MODELS ARE ALSO INDICATING GRADUAL WEST-NORTHWESTWARD MOVEMENT. IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT IT IS VERY LIKELY TO MAINTAIN ITS INTENSITY OF DEPRESSION AND MOVE SLOWLY WEST-NORTHWESTWARDS TOWARDS TAMILNADU-PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS DURING NEXT 48 HOURS.

(AMIT BHARDWAJ)  
RSMC NEW DELHI

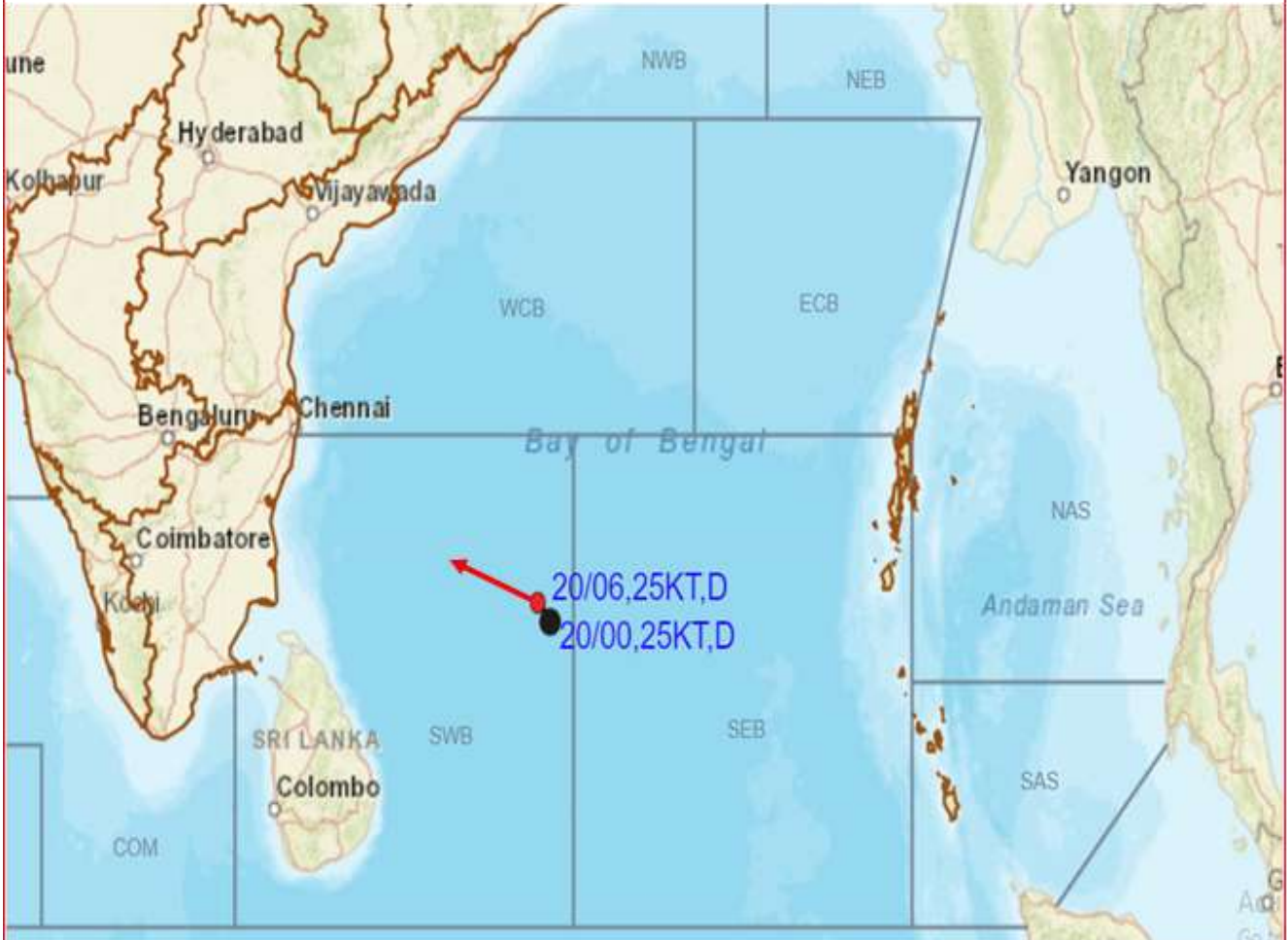


Cloud distribution. (a) Isolated. <25%, Scattered. 25-50%, Broken. 51-75%, Solid. >75%, Convection intensity. (a) weak. Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very Intense: : Less than -70°C  
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**OBSERVED AND FORECAST TRACK OF DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL BASED ON 0600 UTC OF 20TH NOVEMBER, 2022**



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 (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)  
 SuCS: SUPER CYCLONIC STORM ( $\geq$  120 KT)

- LESS THAN 34 KT
- 34-47 KT
- $\geq$  48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

## Fishermen warning graphics



	Squally weather with wind speed 40-45 kmph gusting to 55 kmph
	Squally wind speed with wind speed 45-55 kmph gusting to 65 kmph

Fishermen are advised not to venture into the marked areas.

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