



**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 0330 UTC OF 20.11.2022 BASED ON 0000 UTC OF 20.11.2022.

SUB: DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL

YESTERDAY'S WELL MARKED LOW PRESSURE AREA OVER CENTRAL PARTS OF SOUTH BAY OF BENGAL MOVED WEST-NORTHWESTWARD, CONCENTRATED INTO A DEPRESSION AND LAY CENTRED AT 0000 HOURS IST OF TODAY, THE 20TH NOVEMBER, 2022 OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL, NEAR LATITUDE 10.0° N AND LONGITUDE 85.5° E, ABOUT 600 KM EAST OF JAFFNA (43404), 630 KM EAST-SOUTHEAST OF KARAIKAL(43346) AND 670 KM EAST-SOUTHEAST OF CHENNAI(43279).

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.

AS PER INSAT 3D IMAGERY, THE INTENSITY OF THE SYSTEM IS CHARACTERISED AS T.1.5. IN ASSOCIATION WITH THE SYSTEM, ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH AND ADJOINING CENTRAL BAY OF BENGAL. MINIMUM CLOUD TOP TEMPERATURE IS -93°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 6 WITH AMPLITUDE GREATER THAN 1. IT WOULD CONTINUE IN SAME PHASE DURING NEXT 5 DAYS WITH GRADUALLY INCREASING AMPLITUDE. HENCE MJO IS NOT LIKELY TO INFLUENCE THE SYSTEM.

SEA SURFACE TEMPERATURE (SST) IS AROUND $28-29^{\circ}\text{C}$ OVER SOUTHWEST BOB.

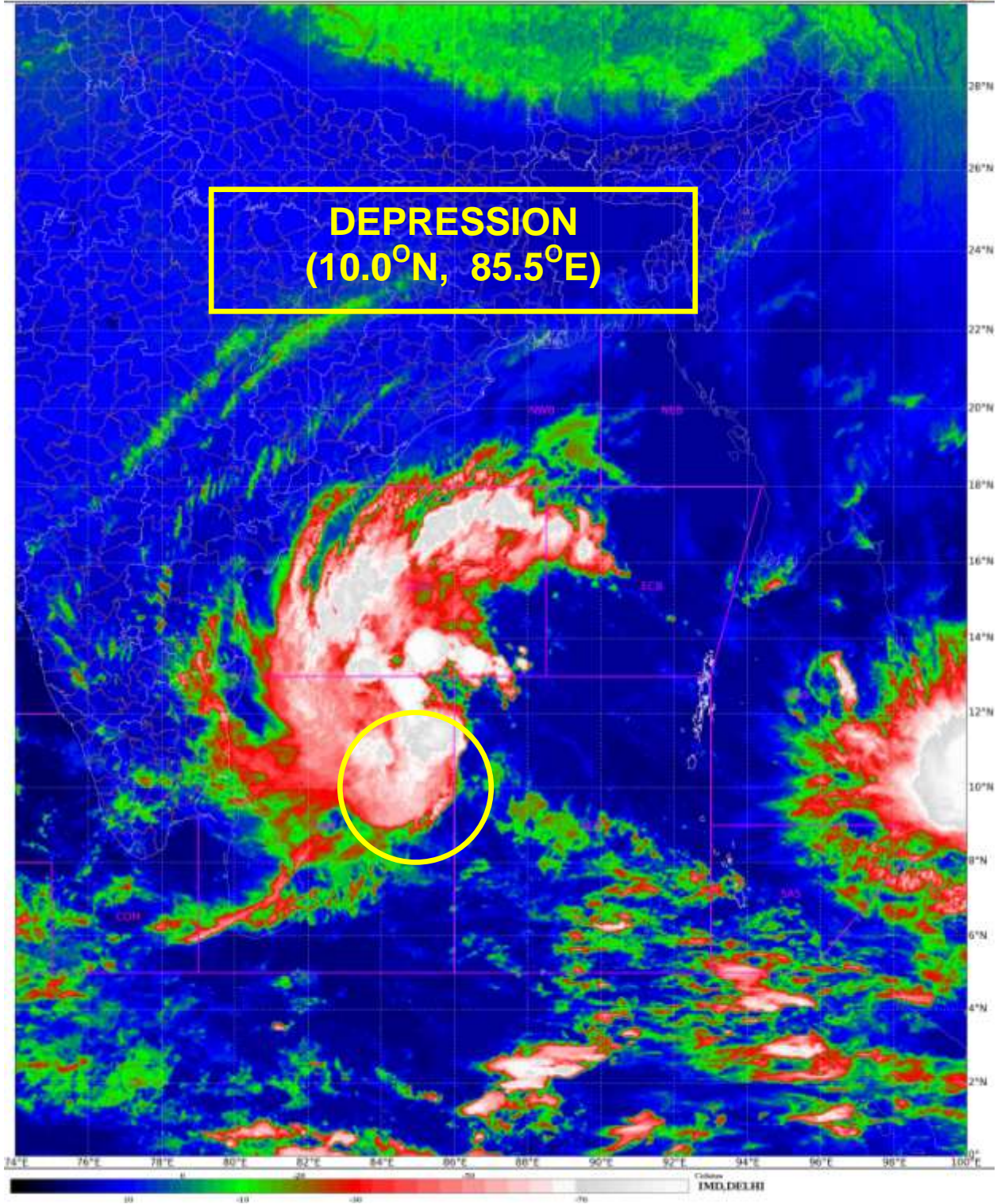
LOW LEVEL VORTICITY IS ABOUT $100 \times 10^{-6} \text{ s}^{-1}$ AROUND SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE IS AROUND $10 \times 10^{-5} \text{ s}^{-1}$ TO THE NORTH OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE HAS INCREASED AND IS AROUND $40 \times 10^{-5} \text{ s}^{-1}$ TO THE NORTH OF SYSTEM CENTRE. WIND SHEAR IS MODERATE (10-15 KNOTS) AROUND THE SYSTEM CENTER AND IS HIGH TOWARDS TAMILNADU-PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS.

THE DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL, LIKELY TO MOVE WEST-NORTHWESTWARD DUE TO UPPER LEVEL EAST-SOUTHEASTERLY WIND AT MID AND UPPER TROPOSPHERE LEVELS. UPPER TROPOSPHERIC RIDGE ROUGHLY RUNS ALONG 18°N OVER BAY OF BENGAL.

MOST OF THE MODELS ARE INDICATING, NO FURTHER INTENESIFICATION OF THE SYSTEM. THE MODELS ARE ALSO INDICATING GRADUAL WEST-NORTHWESTWARD MOVEMENT.

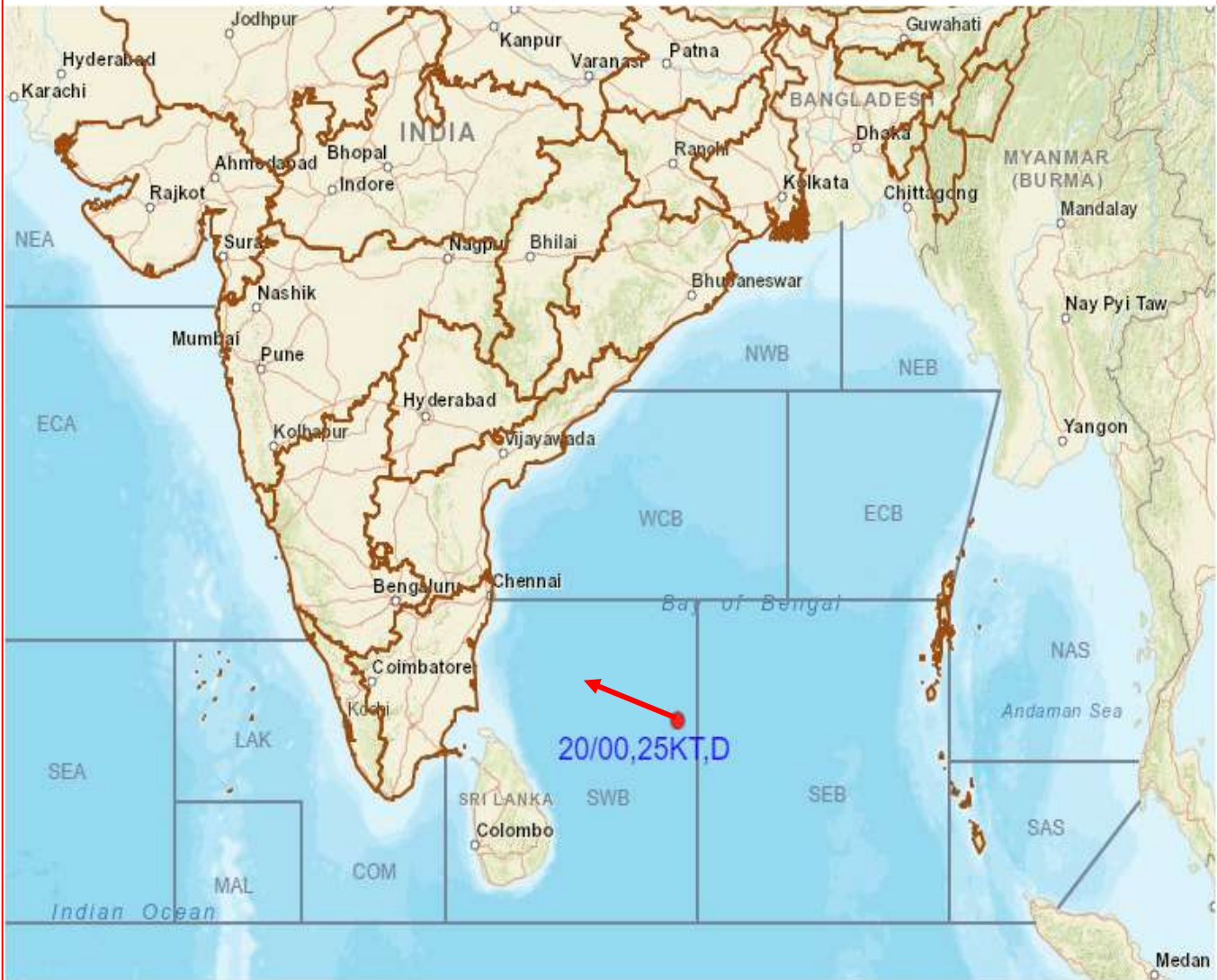
IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT IT IS VERY LIKELY TO MAINTAIN ITS INTENSITY OF DEPRESSION AND MOVE SLOWLY WEST-NORTHWESTWARDS TOWARDS TAMILNADU-PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS DURING NEXT 48 HOURS.

(RK JENAMANI)
RSMC NEW DELHI





OBSERVED AND FORECAST TRACK OF DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL BASED ON 0000 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