



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 19.11.2021

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0215 UTC OF 19.11.2021 BASED ON 0000 UTC OF 19.11.2021.

BAY OF BENGAL:

SUB: DEPRESSION OVER NORTH COSTAL TAMIL NADU

THE DEPRESSION OVER SOUTHWEST BAY OF BENGAL OFF NORTH TAMIL NADU COAST MOVED WEST-NORTHWESTWARDS AND CROSSED NORTH TAMILNADU & ADJOINING SOUTH ANDHRA PRADESH COASTS BETWEEN PUDUCHERRY & CHENNAI NEAR LAT. 12.45°N AND LONG., 80.1°E DURING 2130-2230 UTC OF OF THE 18TH NOVEMBER, 2021. THE DEPRESSION LAY CENTRED AT 0000UTC OF 19TH NOVEMBER 2021, OVER NORTH COASTAL TAMIL NADU AND NEIGHBOURHOOD, NEAR LAT. 12.5°N AND LONG. 80.0°E, ABOUT 60 KM SOUTH-SOUTHWEST OF CHENNAI (43279) AND 60 KM NORTH- NORTHEAST OF PUDUCHERRY(43331). IT IS VERY LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS AND WEAKEN GRADUALLY INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

AS PER SATELLITE IMAGERY AT 0000 UTC, THE SYSTEM IS OVER THE LAND. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER OVER NORTH TAMILNADU, RAYALSEEMA, SOUTH COASTAL ANDHRA PRADESH AND INTERIOR KARNATAKA. MINIMUM CLOUD TOP TEMPERATURE (CTT) IS MINUS 93⁰C.

ARABIAN SEA:

SUB: LOW PRESSURE AREA OVER EASTCENTRAL ARABIAN SEA

THE LOW PRESSURE AREA OVER EASTCENTRAL ARABIAN SEA (AS) PERSISTED OVER THE SAME REGION AT 0000 UTC OF TODAY, THE 19TH NOVEMBER 2021. IT IS LIKELY TO MOVE WEST-SOUTHWESTWARDS & BECOME MORE MARKED DURING NEXT 48 HOURS.

AS PER SATELLITE IMAGERY AT 0000 UTC, SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER EASTCENTRAL AS EC ARSEA BET LAT 13.5N TO 19.5N LONG 66.5E TO 70.0E. MINIMUM CTT IS AROUND MINUS 88⁰C. OUTFLOW CLOUD BANDS LAY OVER GUJARAT, EAST RAJASTHAN, NORTHWEST MADHYA PRADESH, UTTAR PRADESH AND ADJOINING NEPAL.

REMARKS:

SEA SURFACE TEMPERATURE (SST) IS ABOUT 28-29°C OVER SOUTHEAST & ADJOINING EASTCENTRAL AS, BECOMING <28°C OVER WESTERN PARTS OF THE AS. TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 60-80 KJ/CM² OVER SOUTHEAST & ADJOINING EASTCENTRAL AS AND IS DECREASING TOWARDS WESTERN PARTS OF AS. POSITIVE LOW

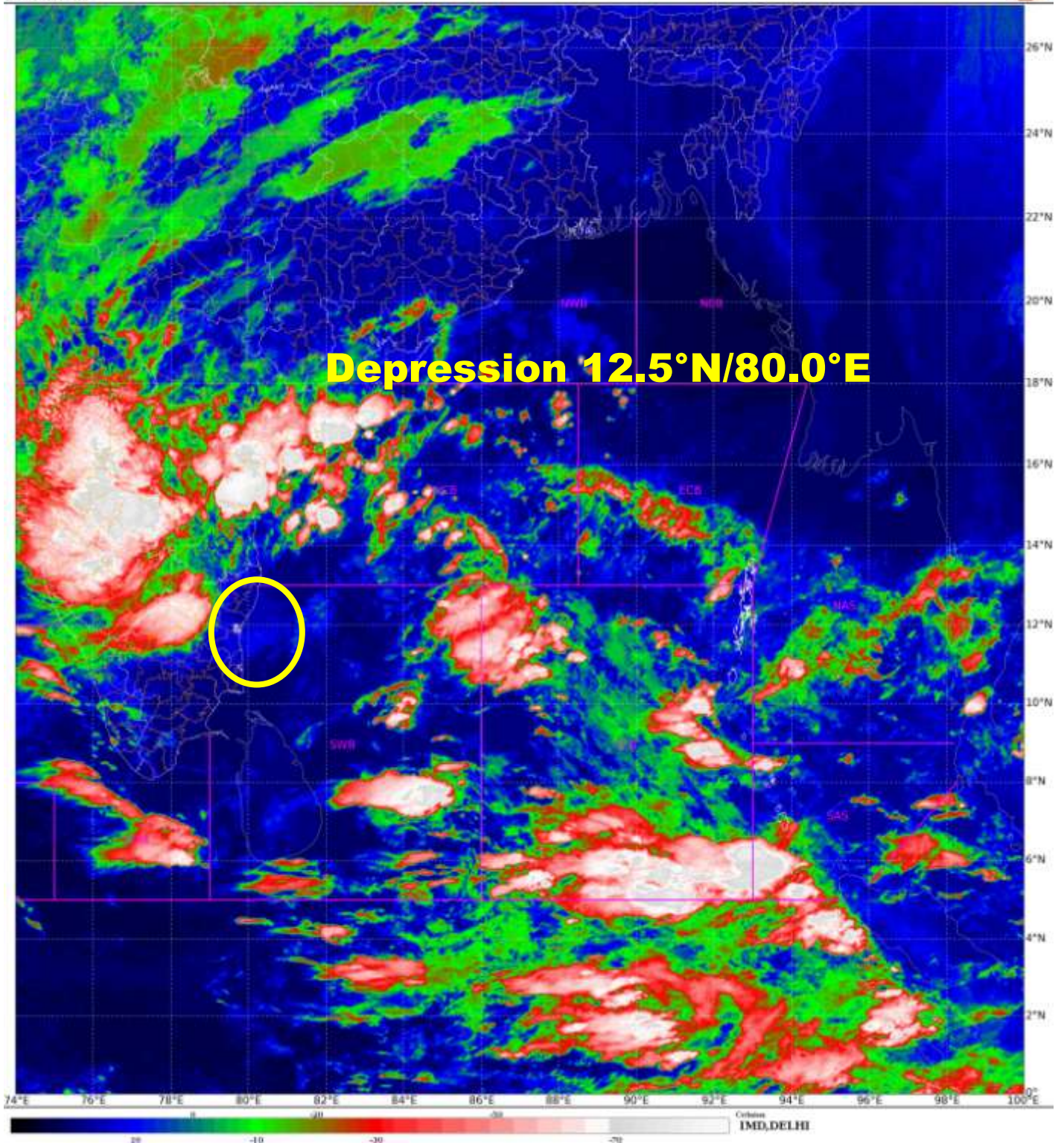
LEVEL VORTICITY IS ABOUT $(80-100 \times 10^{-6} \text{ S}^{-1})$ OVER EASTCENTRAL AS WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. POSITIVE LOW LEVEL CONVERGENCE OF ABOUT $05 \times 10^{-5} \text{ S}^{-1}$ LAY TO THE NORTHEAST OF SYSTEM CENTRE. NO SIGNIFICANT DIVERGENCE ZONE IS SEEN NEAR THE SYSTEM AREA. WIND SHEAR IS LOW TO MODERATE (15-20 KT) OVER EASTCENTRAL AS. IT IS GRADUALLY INCREASING OVER AREAS TO THE WEST OF SYSTEM CENTRE.

MOST OF THE MODELS LIKE IMD GFS, IMD GPP, NCUM, NEPS, NCUM (REGIONAL) AND ECMWF ARE INDICATING PERSISTENCE OF THE LOW PRESSURE AREA OVER EASTCENTRAL AS WITH VERY SLOW WEST-SOUTHWESTWARD MOVEMENT DURING NEXT 4-5 DAYS TOWARDS SOUTHWEST AS. HOWEVER, NCUM GROUP OF MODELS ARE INDICATING MOVEMENT TOWARDS GULF OF ADEN TILL 23RD NOVEMBER.

UNDER THESE CONDITIONS, THE LOW PRESSURE AREA OVER EASTCENTRAL AS IS LIKELY TO MOVE WEST-SOUTHWESTWARDS & BECOME MORE MARKED DURING NEXT 48 HOURS.

NEXT MESSAGE WILL BE ISSUED AT 0600 UTC OF 19TH NOVEMBER, 2021.

(S. P. SINGH)
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OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTH COASTAL TAMIL NADU BASED ON 0000 UTC OF 19TH NOVEMBER, 2021



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