



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 0630 UTC OF 20.11.2022 BASED ON 0300 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 REMAINED PRACTICALLY STATIONARY AND LAY CENTRED AT 0300 UTC OF TODAY, THE 20TH NOVEMBER, 2022 OVER THE SAME REGION, 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 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 ASSSOCIATION 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°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.

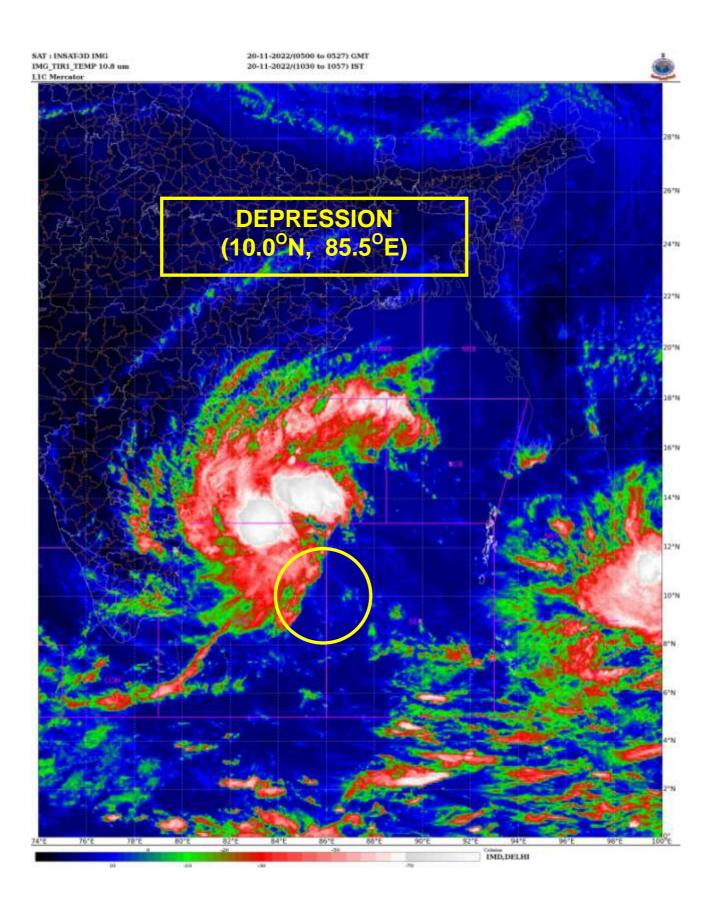
THERE IS NO SUPPORT OF EQUATORIAL WAVES INTO THE REGION FOR FURTHER INTENSIFICATION OF THE SYSTEM. SEA SURFACE TEMPERATURE (SST) IS AROUND 28-29 $^{\circ}$ C OVER SOUTHWEST BOB.

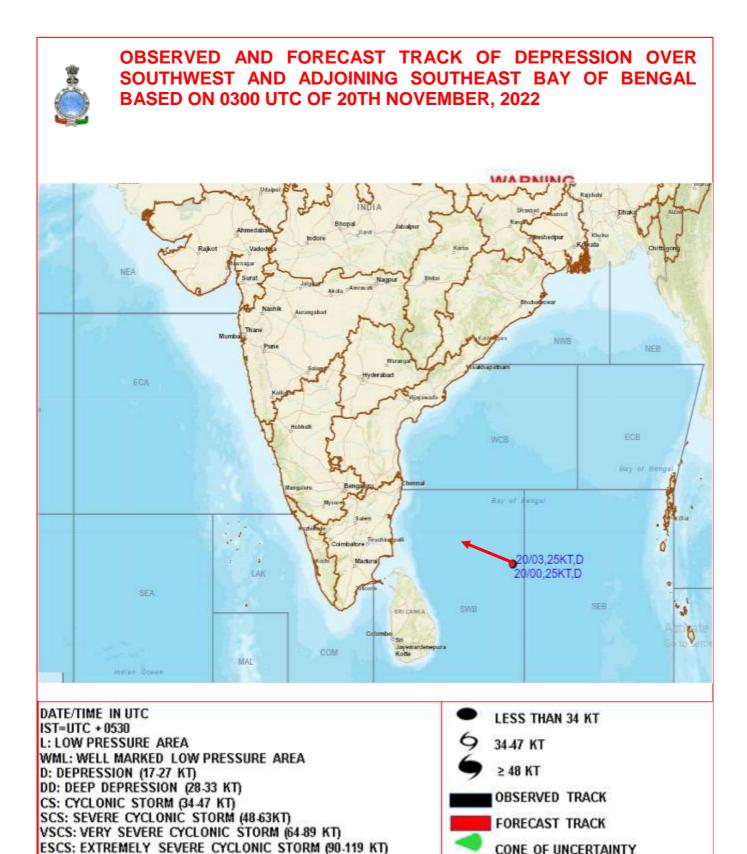
THE LOW LEVEL RELATIVE VORTICITY WHICH WAS EAST-WEST ORIENTED YESTERDAY HAS BEEN ORINTED FROM SOUTHEAST TO NORTHWEST. IT IS ABOUT 100 X10⁻⁶ S^{-1.} VERTICALLY IT IS EXTENDING UPTO 300 HPA LEVEL, TILTING SOUTHWEST WARDS WITH HEIGHT. LOW LEVEL CONVERGENCE IS AROUND 10 X10⁻⁵ S⁻¹ TO THE NORTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE HAS INCREASED AND IS AROUND 40 X10⁻⁵ S⁻¹ TO THE NORTHWEST OF SYSTEM CENTRE. BOTH LOW LEVEL CONVERGENCE AND UPPER LEVEL DIVERGENCE ALLINGED VERTICALLY OVER THE SYSTEM AND THUS THE SYSTEM WOULD MAINTAIN

ITS INTENSITY OF DEPRESSION FOR SOMETIMES. UPPER TROPOSPHERIC RIDGE ROUGHLY RUNS ALONG 18°N OVER BAY OF BENGAL AND THE SYSTEM IS UNDER MID-TRPOSPHERIC EAST-SOUTHEASTERLY MEAN WINDS WHICH WOULD STEER THE SYSTEM TOWARDS WEST-NORTHWEST WARDS DIRCTION. 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.

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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

SuCS: SUPER CYCLONIC STORM (2 120 KT)

