



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 11.11.2021

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 11.11.2021 BASED ON 0300 UTC OF 11.11.2021.

(A) DEPRESSION OVER SOUTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL

THE DEPRESSION OVER SOUTHWEST BAY OF BENGAL (BOB) MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 04 KMPH DURING PAST 06 HOURS AND LAY CENTRED AT 0300 UTC OF TODAY, THE 11TH NOVEMBER 2021, OVER SOUTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL, NEAR LAT. 12.3°N AND LONG. 81.2°E, ABOUT 130 KM EAST-SOUTHEAST OF CHENNAI (43279) AND 150 KM EAST-NORTHEAST OF PUDUCHERRY (43331). IT IS VERY LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS AND CROSS NORTH TAMIL NADU & ADJOINING SOUTH ANDHRA PRADESH COASTS AROUND CHENNAI (43279) DURING EVENING (1200-1500 UTC) OF 11TH NOVEMBER 2021.

AS PER INSAT 3D IMAGERY AT 0300UTC, THE CLOUDS ARE ORGANISED IN SHEAR PATTERN. THE CONVECTIVE CLOUD MASS IS SHEARED IN THE NORTHWEST OF SYSTEM CENTRE. THE INTENSITY OF THE SYSTEM IS CHARACTERISED AS T 1.5. BROKEN LOW & MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHWEST & ADJOINING WESTCENTRAL BOB BETWEEN LATITUDE 11.5N & 18.0N, LONGITUDE 80.0E & 89.0E, OVER NORTH TAMIL NADU, COASTAL ANDHRA PRADESH AND NEIGHBOURHOOD. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEGREE CELCIUS.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME (UTC)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
11.11.21/0300	12.3/81.2	45-55 GUSTING TO 65	DEPRESSION
11.11.21/1200	13.0/80.4	45-55 GUSTING TO 65	DEPRESSION
12.11.21/0000	13.4/80.0	40-50 GUSTING TO 60	DEPRESSION

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE WINDS ARE STRONGER IN NORTHERN SECTOR.

AT 0300 UTC, A BUOY LOCATED NEAR 13.4°N/84.1°E REPORTED MEAN SEA LEVEL PRESSURE (MSLP) OF 1005 HPA AND MAXIMUM SUSTAINED WIND SPEED (MSW) OF 14KT/150°. THE HIGHEST FALL OF MSLP BY ABOUT 9.1 HPA AND LOWEST P24 BY ABOUT -8.3 HPA REPORTED OVER CHENNAI IN NORTH COASTAL TAMILNADU AT 0300 UTC. THE PAST 24 HOUR FALL OF MEAN SEA LEVEL PRESSURE IS -8.3 HPA AND MAXIMUM DEPARTURE FROM NORMAL MSLP IS -9.1 HPA OVER CHENNAI (TAMILNADU).

REMARKS:

SEA SURFACE TEMPERATURE (SST) IS ABOUT 29-30°C OVER SOUTHWEST & ADJOINING WESTCENTRAL BOB. TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 80-100 KJ/CM² OVER THE SYSTEM REGION. POSITIVE LOW LEVEL VORTICITY IS ABOUT (150 X10⁻⁶ S⁻¹) AROUND THE SYSTEM CENTRE AND IS ORIENTED SLIGHTLY TO THE WEST WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. POSITIVE LOW LEVEL CONVERGENCE IS AROUND 30 X10⁻⁵ S⁻¹ TO THE NORTHWEST OF SYSTEM CENTRE. THE POSITIVE UPPER LEVEL DIVERGENCE HAS INCREASED AND IS AROUND 40 X10⁻⁵ S⁻¹ TO THE EAST OF SYSTEM CENTRE. WARM MOIST AIR INCURSION IS SEEN INTO THE CORE OF SYSTEM AS PER TOTAL PRECIPITABLE WATER IMAGERY. WIND SHEAR IS LOW TO MODERATE (15-20 KTS) OVER THE SYSTEM REGION AND CONTINUES TO REMAIN HIGH (>25 KT) NEAR TAMILNADU-ANDHRA PRADESH COASTS. THIS HIGH VERTICAL WIND SHEAR WILL OFF-SET THE OTHER FAVOURABLE ENVIRONMENTAL CONDITIONS AND HENCE THE DEPRESSION IS NOT LIKELY TO INTENSIFY FURTHER. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 17°N OVER BOB. HENCE, THE SYSTEM IS STEERED WEST-NORTHWESTWARDS UNDER THE INFLUENCE OF EAST-SOUTHEASTERLY WINDS PREVAILING IN THE SOUTHERN PERIPHERY OF UPPER TROPOSPHERIC LEVEL.

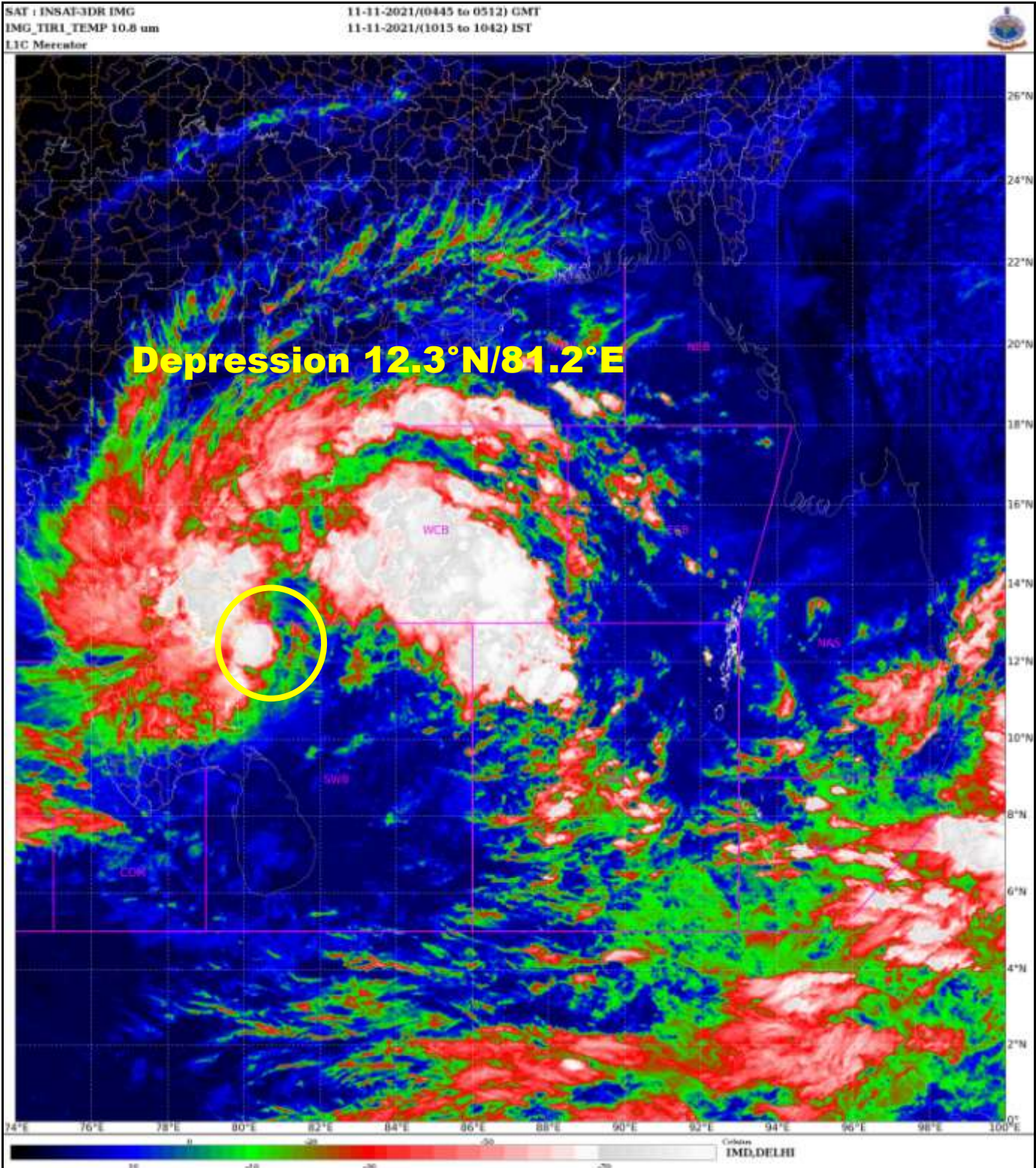
MODELS ARE ALSO INDICATING THAT THE SYSTEM WOULD MOVE WEST-NORTHWESTWARDS TOWARDS NORTH TAMIL NADU & ADJOINING SOUTH ANDHRA PRADESH COASTS CLOSE TO CHENNAI. HOWEVER, THERE IS LARGE DIVERGENCE AMONG VARIOUS MODELS W.R.T. LANDFALL TIME VARYING FROM 1200 UTC OF 11TH TO 0000 UTC OF 12TH, NOVEMBER.

HENCE, THE DEPRESSION OVER SOUTHWEST BOB WOULD MOVE WEST-NORTHWESTWARDS AND CROSS NORTH TAMIL NADU & ADJOINING SOUTH ANDHRA PRADESH COASTS AROUND CHENNAI (43279) DURING THE EVENING (1200-1500 UTC) OF 11TH NOVEMBER 2021.

(B) LIKELY FORMATION OF FRESH LOW PRESSURE AREA OVER SOUTH ANDAMAN SEA AND NEIGHBOURHOOD

A FRESH LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTH ANDAMAN SEA AND NEIGHBOURHOOD AROUND 13TH NOVEMBER. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND BECOME MORE MARKED DURING SUBSEQUENT 48 HOURS.

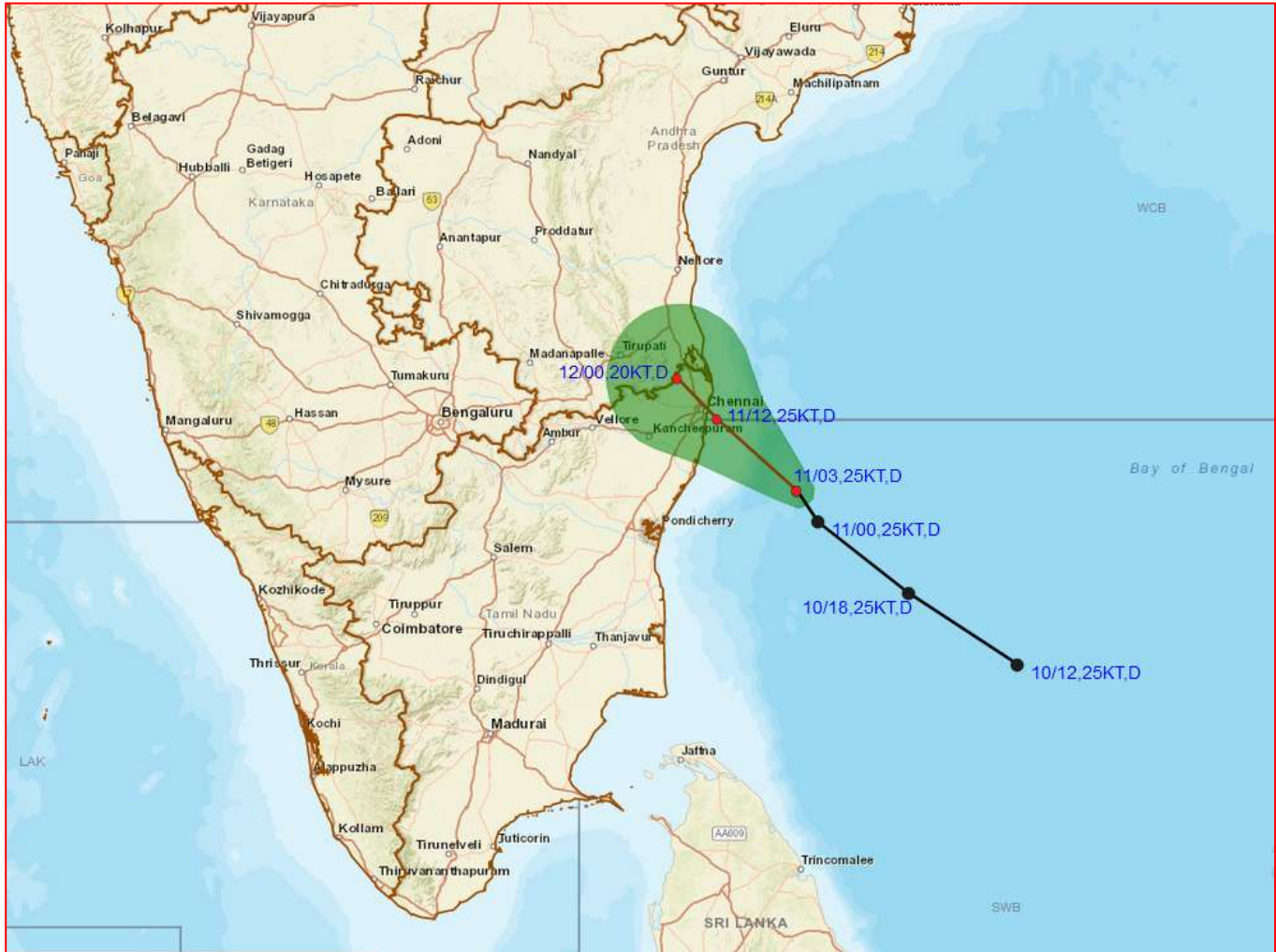
(R.K.JENAMANI)
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PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%
 This is a guidance Bulletin for the WMO/ESCAP Panel Member countries,. Please visit respective National websites for Country specific Bulletins



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER SOUTHWEST & ADJOINING WEST-CENTRAL BAY OF BENGAL BASED ON 0300 UTC (0830IST) OF 11TH 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 ≥ 120 KT

● LESS THAN 34 KT

○ 34-47 KT

○ ≥ 48 KT

— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY