



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 1500 UTC OF 11.11.2021 BASED ON 1200 UTC OF 11.11.2021.

SUB: DEPRESSION CROSSED NORTH TAMIL NADU COAST CLOSE TO CHENNAI DURING 1200 & 1300 UTC OF TODAY, THE 11TH NOVEMBER.

THE DEPRESSION OVER SOUTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST 06 HOURS AND LAY CENTRED AT 1200 UTC OF TODAY, THE 11TH NOVEMBER 2021, OVER SOUTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL, NEAR LAT. 12.9°N AND LONG. 80.3°E, ABOUT 15 KM SOUTHEAST OF CHENNAI (43279).

LATEST OBSERVATIONS INDICATE THAT THE DEPRESSION HAS CROSSED NORTH TAMIL NADU & ADJOINING SOUTH ANDHRA PRADESH COASTS CLOSE TO CHENNAI (43279), NEAR LAT. 12.95°N AND LONG. 80.25°E DURING 1200 AND 1300 UTC WITH A MAXIMUM SUSTAINED SURFACE WIND SPEED OF 45 – 55 KMPH GUSTING TO 65 KMPH. IT LAY CENTERED AT 1300 UTC OF TODAY, THE 11TH NOVEMBER OVER NORTH COASTAL TAMIL NADU NEAR LAT. 13.0°N AND LONG. 80.2°E, CLOSE TO CHENNAI (43279). IT IS VERY LIKELY TO MOVE WESTNORTHWESTWARDS AND WEAKEN GRADUALLY INTO A WELL MARKED LOW PRESSURE AREA BY 0000 UTC OF 12TH NOVEMBER.

AS PER INSAT 3D IMAGERY AT 1200UTC, THE CLOUDS SHOW DISORGANISATION. THE SYSTEM IS OVER LAND. THE MAXIMUM CONVECTION IS SHEARED TO THE NORTHWEST OF SYSTEM CENTRE. BROKEN LOW & MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHWEST & ADJOINING WESTCENTRAL BOB BETWEEN LATITUDE 11.0N & 19.0N, LONGITUDE 80.0E & 90.0E, OVER NORTH TAMIL NADU, COASTAL ANDHRA PRADESH AND NEIGHBOURHOOD. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEGREE CELCIUS. THE ABOVE MODERATE TO INTENSE CLOUD MASS TO THE NORTHEAST OF SYSTEM CENTRE OVER THE SOUTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL IS LIKELY TO MOVE WEST-NORTHWESTWARDS TOWARDS SOUTH ANDHRA PRADESH AND ADJOINING NORTH TAMILNADU.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME (UTC)	POSITION (LAT. ⁰ N/ LONG. ⁰ E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
11.11.21/1200	12.9/80.3	45-55 gusting to 65	Depression
11.11.21/1800	13.1/80.0	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.

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

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 HAS DECREASED AND IS ABOUT (120 X10-6 S-1) AROUND THE SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. POSITIVE LOW LEVEL CONVERGENCE HAS DECREASED AND IS AROUND 10-15 X10-5 S-1 AROUND SYSTEM CENTRE. THE POSITIVE UPPER LEVEL DIVERGENCE HAS DECREASED AND IS AROUND 05-10 X10-5 S-1 TO THE NORTHWEST OF SYSTEM CENTRE. WIND SHEAR IS HIGH (>25 KT) OVER TAMILNADU-ANDHRA PRADESH. IN ASSOCIATION WITH ABOVE UNFAVOURABLE ENVIRONMENTAL CONDITIONS AND LAND INTERACTIONS THE SYSTEM WILL WEAKEN GRADUALLY DURING NEXT 12 HOURS. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 15°N OVER BOB. HENCE, THE SYSTEM WOULD BE STEERED WEST-NORTHWESTWARDS UNDER THE INFLUENCE OF EAST-SOUTHEASTERLY WINDS PREVAILING IN THE SOUTHERN PERIPHERY OF UPPER TROPOSPHERIC RIDGE.

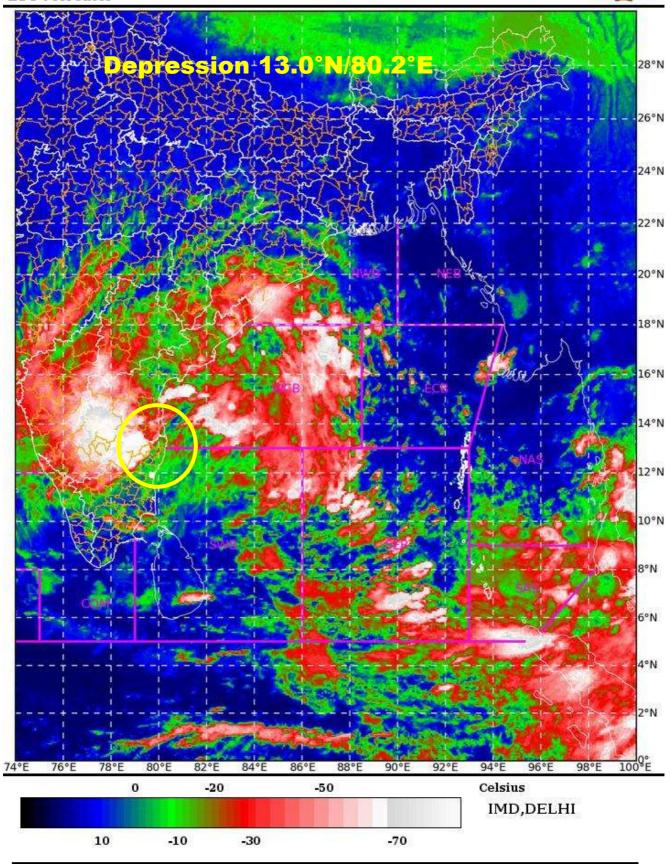
(B) LIKELY FORMATION OF FRESH LOW PRESSURE AREA OVER SOUTH ANDAMAN SEA AND NEIGHBOURHOOD

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.

(SUNITHA DEVI S.) SCIENTIST-F, RSMC, NEW DELHI SAT : INSAT-3D IMG IMG_TIR1_TEMP 10.8 um 11-11-2021/(1400 to 1426) GMT 11-11-2021/(1930 to 1956) IST



L1C Mercator





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEPRESSION OVER NORTH COASTAL TAMILNADU BASED ON 1200 UTC 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)