



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 01.12.2021

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 01.12.2021 BASED ON 0300 UTC OF 01.12.2021.

BAY OF BENGAL:

YESTERDAY'S LOW PRESSURE AREA OVER SOUTH THAILAND & NEIGHBOURHOOD EMERGED INTO CENTRAL ANDAMAN SEA IN THE SAME EVENING (1200 UTC). IT PERSISTED OVER THE SAME REGION AT 0300 UTC OF TODAY, THE 1ST DECEMBER 2021. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND CONCENTRATE INTO A DEPRESSION OVER SOUTHEAST & ADJOINING EAST-CENTRAL BAY OF BENGAL BY TOMORROW, THE 2ND DECEMBER AND INTENSIFY INTO A CYCLONIC STORM OVER CENTRAL PARTS OF THE BAY OF BENGAL DURING THE SUBSEQUENT 24 HOURS. SUBSEQUENTLY, IT IS LIKELY TO MOVE NORTHWESTWARDS, INTENSIFY FURTHER AND REACH NEAR NORTH ANDHRA PRADESH – ODISHA COASTS AROUND 4TH DECEMBER MORNING.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL, ANDAMAN & NICOBAR ISLANDS, ANDAMAN SEA, TENASSERIM COAST, SOUTH THAILAND & ADJOINING GULF OF THAILAND AND NEIGHBOURHOOD. MINIMUM CLOUD TOP TEMPERATURE (CTT) IS MINUS 93 DEG C. CONVECTION OVER THE AREA HAS DEEPENED. LATEST MULTISATELLITE WINDS INDICATE STRONGER WINDS IN THE NORTHWEST SECTOR AND IS ABOUT 15-20 KNOTS.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1008 HPA. SEA CONDITION OVER ANDAMAN SEA IS MODERATE TO ROUGH.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
MODERATE	HIGH	HIGH	HIGH	HIGH

ARABIAN SEA:

YESTERDAY'S CYCLONIC CIRCULATION LAY OVER SOUTHEAST ARABIAN SEA & ADJOINING LAKSHADWEEP AREAS LAY OVER SOUTHEAST AND ADJOINING EASTCENTRAL ARABIAN SEA EXTENDING UPTO 5.8 KM ABOVE MEAN SEA LEVEL.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER EASTCENTRAL ARABIAN SEA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER NORTHEAST ARABIAN SEA, SOUTHEAST ARABIAN SEA AND WEAK TO MODERATE CONVECTION LAY OVER NORTHWEST ARABIAN SEA & COMORIN. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C. CONVECTION OVER NORTHEAST ARABIAN SEA OFF GUJARAT COAST PERSISTS.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	NIL	NIL	NIL

REMARKS:

THE SEA SURFACE TEMPERATURE IS 29-31°C OVER ENTIRE BOB. TROPICAL CYCLONE HEAT POTENTIAL IS 100-120 KJ/CM² OVER SOUTH ANDAMAN SEA & ADJOINING SOUTHEAST BAY OF BENGAL (BOB). IT IS GRADUALLY DECREASING TOWARDS NORTHWEST BECOMING 60-80 OVER WESTCENTRAL & NORTHWEST BOB. DEPTH OF 26°C ISOTHERM IS 100-120 M OVER ANDAMAN SEA AND WESTCENTRAL & ADJOINING NORTHWEST BOB. THE MADDEN JULIAN OSCILLATION INDEX IS CURRENTLY IN PHASE 5 WITH AMPLITUDE MORE THAN 1. THEREAFTER, IT WILL PROPAGATE EASTWARDS INTO PHASE 6 FROM 2ND DECEMBER ONWARDS. WIND SHEAR IS MODERATE 10-15 OVER THE SYSTEM AREA OVER ANDAMAN SEA AND ALSO OVER EASTCENTRAL & ADJOINING WESTCENTRAL BOB. HOWEVER, IT IS BECOMING HIGH (25-30) OVER WESTCENTRAL & NORTHWEST BOB OFF ANDHRA PRADESH-ODISHA-WESTBENGAL COASTS. POSITIVE LOW LEVEL VORTICITY OF 50x10⁻⁶S⁻¹ OVER SOUTH ANDAMAN SEA TO THE SOUTH OF SYSTEM CENTRE. LOW LEVEL CONVERGENCE IS 20x10⁻⁶S⁻¹ OVER SOUTH ANDAMAN SEA TO THE SOUTH-SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE HAS INCREASED DURING PAST 24 HOURS AND IS 30x10⁻⁵S⁻¹ OVER EASTCENTRAL BOB TO THE WEST OF SYSTEM CENTRE. UPPER TROPOSPHERIC RIDGE RUNS ALONG 15°N. A TROUGH IN MID & UPPER TROPOSPHERIC WESTERLIES RUNS ALONG LONG. 63°E TO THE NORTH OF LAT. 15°N. THE EAST-SOUTHEASTERLY WINDS PREVAILING IN THE UPPER LEVELS WILL STEER THE SYSTEM WEST-NORTHWESTWARDS TILL 4TH DECEMBER MORNING. THEREAFTER, THE SYSTEM WILL CROSS THE RIDGE AND WILL BE STEERED NORTH-NORTHEASTWARDS UNDER THE INFLUENCE OF SOUTH-SOUTHWESTERLIES PREVAILING IN THE NORTHERN PERIPHERY OF RIDGE AND THE APPROACHING TROUGH IN WESTERLIES AT MIDDLE AND UPPER TROPOSPHERIC LEVELS.

MAJORITY OF THE MODELS INDICATE INTENSIFICATION OF CURRENT LOW PRESSURE AREA INTO DEPRESSION BY 2ND DECEMBER AND INTO A CYCLONIC STORM BY 3RD DECEMBER. HOWEVER, THERE IS DIVERGENCE AMONG VARIOUS MODELS W.R.T. CROSSING POINT (VARYING FROM NORTH ANDHRA PRADESH TO SOUTH ODISHA COASTS) AND TIME (VARYING BETWEEN 4TH/1200 UTC TO 5TH /0000 UTC). HOWEVER, NCEP GFS IS INDICATING THE SYSTEM TO SKIRT EAST COAST OF INDIA FROM 4TH/0000 UTC ONWARDS. IMD MME IS ALSO INDICATING THE SYSTEM TO SKIRT EAST COAST OF INDIA FROM 4TH/0000 UTC WITH PEAK INTENSITY OF SEVERE CYCLONIC STORM. THUS, ALL MODELS ARE INDICATING NORTH-NORTHEASTWARDS RECURVATURE FROM 4TH MORNING ONWARDS AS THE SYSTEM IS EXPECTED TO CROSS THE RIDGE AND STEERED BY THE WESTERLY TROUGH AND THE ANTICYCLONE TO THE SOUTHEAST. IN VIEW OF ABOVE MODERATE PROBABILITY IS ASSIGNED TO FORMATION OF DEPRESSION OVER BOB ON DAY-1 AND HIGH PROBABILITY DURING DAY 2 TO 5.

UNDER, THESE FAVOURABLE CONDITIONS, THE LOW PRESSURE AREA OVER CENTRAL ANDAMAN SEA IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND CONCENTRATE INTO A DEPRESSION BY TOMORROW, THE 2ND DECEMBER AND INTENSIFY INTO A CYCLONIC STORM DURING THE SUBSEQUENT 24 HOURS. SUBSEQUENTLY, IT IS LIKELY TO MOVE NORTHWESTWARDS, INTENSIFY FURTHER AND REACH NEAR NORTH ANDHRA PRADESH – ODISHA COASTS AROUND 4TH DECEMBER MORNING.

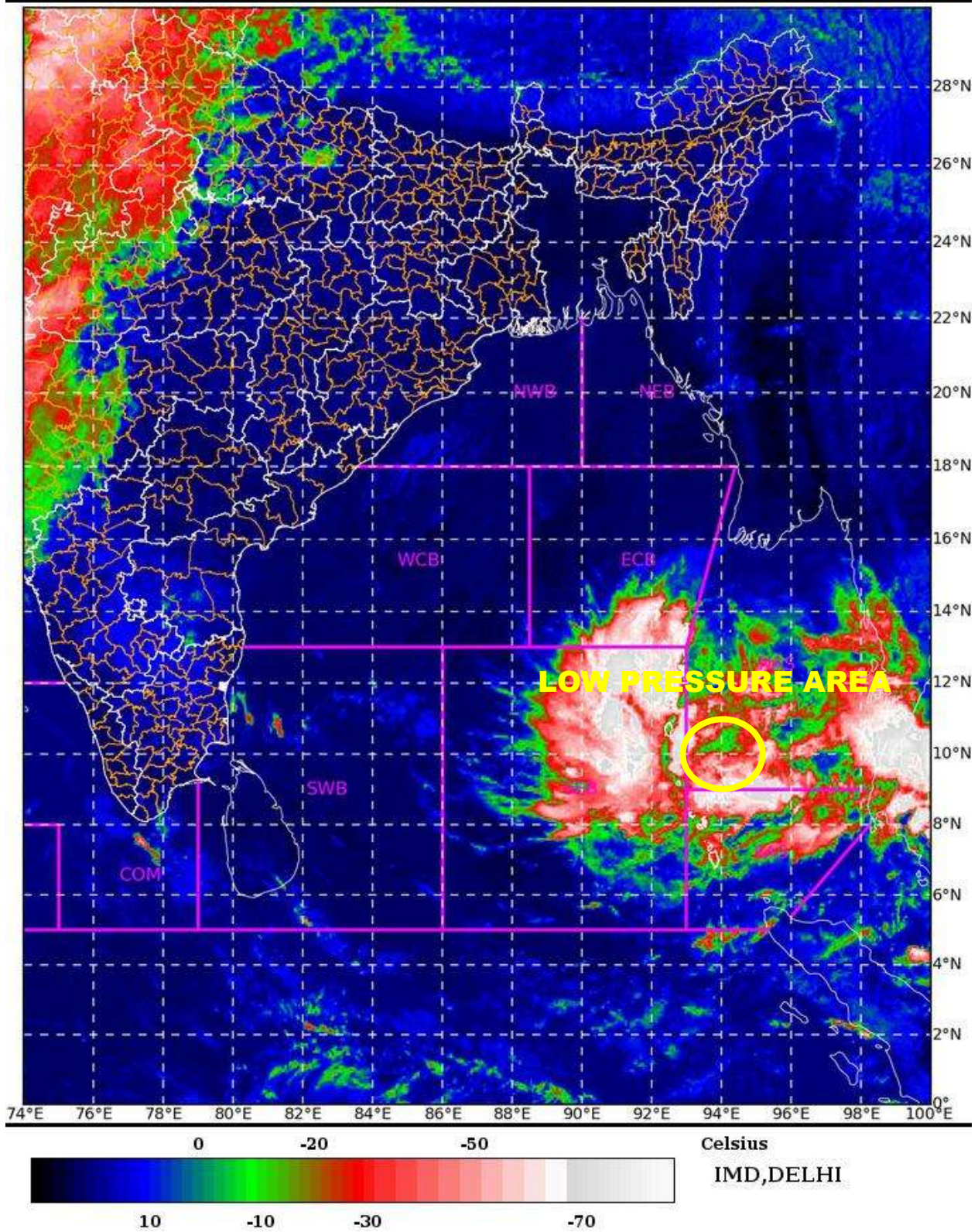
SAT : INSAT-3D IMG

01-12-2021/(0430 to 0457) GMT

IMG_TIR1_TEMP 10.8 um

01-12-2021/(1000 to 1027) IST

L1C Mercator



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%
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