



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 19.11.2022

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 19.11.2022 BASED ON 0300 UTC OF 19.11.2022.

BAY OF BENGAL:

YESTERDAY'S LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL & NEIGHBOURHOOD MOVED WEST-NORTHWESTWARDS AND CONCENTRATED INTO A WELL-MARKED LOW PRESSURE AREA OVER CENTRAL PARTS OF SOUTH BAY OF BENGAL IN THE MORNING OF TODAY, THE 19TH NOVEMBER, 2022. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND GRADUALLY CONCENTRATE INTO A DEPRESSION OVER SOUTHWEST BAY OF BENGAL AND ADJOINING WESTCENTRAL BAY OF BENGAL DURING NEXT 24 HOURS. THEREAFTER, IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS TOWARDS TAMILNADU-PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS DURING SUBSEQUENT 2 DAYS.

ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL & SOUTH BAY OF BENGAL. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEGREE CELSIUS.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER BAY OF BENGAL. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION LAY OVER ANDAMAN SEA AND TENASSERIM COAST.

THE ESTIMATED CENTRAL PRESSURE IS 1007 HPA. ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS ABOUT 15-20 KNOTS. SEA CONDITION WILL BE ROUGH OVER SOUTHEAST BAY OF BENGAL AND ADJOINING AREAS OF SOUTHWEST & WESTCENTRAL BAY OF BENGAL ON 19TH NOVEMBER. AT 03000 UTC, A BUOY LOCATED NEAR 16.1N/87.9E REPORTED MEAN SEA LEVEL PRESSURE OF 1011 HPA, MAXIMUM SUSTAINED WIND SPEED 40/20KT AND SEA SURFACE TEMPERATURE OF 28.6°C.

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	MOD	LOW	NIL	NIL

ARABIAN SEA:

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHWEST ARABIAN SEA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA.

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 MADDEN JULIAN OSCILLATION (MJO) INDEX CURRENTLY LIES IN PHASE 5 WITH AMPLITUDE MORE THAN 1. IT WILL MOVE TO PHASE 6 THEREAFTER. THUS MJO INDEX MAY SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY DURING NEXT 24 HOURS. SEA SURFACE TEMPERATURE (SST) IS AROUND 28-29°C OVER MAJOR PARTS OF BOB. THE OCEAN HEAT CONTENT (OHC) IS 80-100 KJ/CM² OVER CENTRAL & ADJOINING SOUTH BOB AND LESS THAN 40 KJ/CM² OVER WESTCENTRAL AND SOUTHWEST BOB ALONG THE EAST COAST OF INDIA.

LOW LEVEL VORTICITY IS $50 \times 10^{-6} \text{ S}^{-1}$ AROUND SYSTEM CENTRE AND IS EXTENDING UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE IS $10 \times 10^{-5} \text{ S}^{-1}$ TO THE WEST OF SYSTEM CENTRE OVER SOUTHWEST BOB AND ANOTHER OVER EAST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS $20 \times 10^{-5} \text{ S}^{-1}$ OVER SOUTHWEST BOB TO THE SOUTHWEST OF SYSTEM CENTRE AND ANOTHER ZONE OF $10 \times 10^{-5} \text{ S}^{-1}$ TO THE NORTHEAST OF SYSTEM CENTRE. POLEWARD AND EQUATORWARD OUTFLOW IN UPPER LEVELS, LIKELY TO SUPPORT FURTHER INTENSIFICATION OF THE SYSTEM. MID LEVEL (850-500 HPA) WIND SHEAR IS MODERATE (15-20 KNOTS) OVER CENTRAL & ADJOINING SOUTH BOB AND ALONG THE EXPECTED TRACK. UPPER TROPOSPHERIC RIDGE IS RUNNING ALONG 18.0°N OVER THE BOB. **ENVIRONMENTAL CONDITIONS ARE GENERALLY FAVORABLE WITH BROAD POLEWARD & EQUATORWARD DIVERGENCE IN UPPER LEVELS, LOW VERTICAL WIND SHEAR AND WARM SST.**

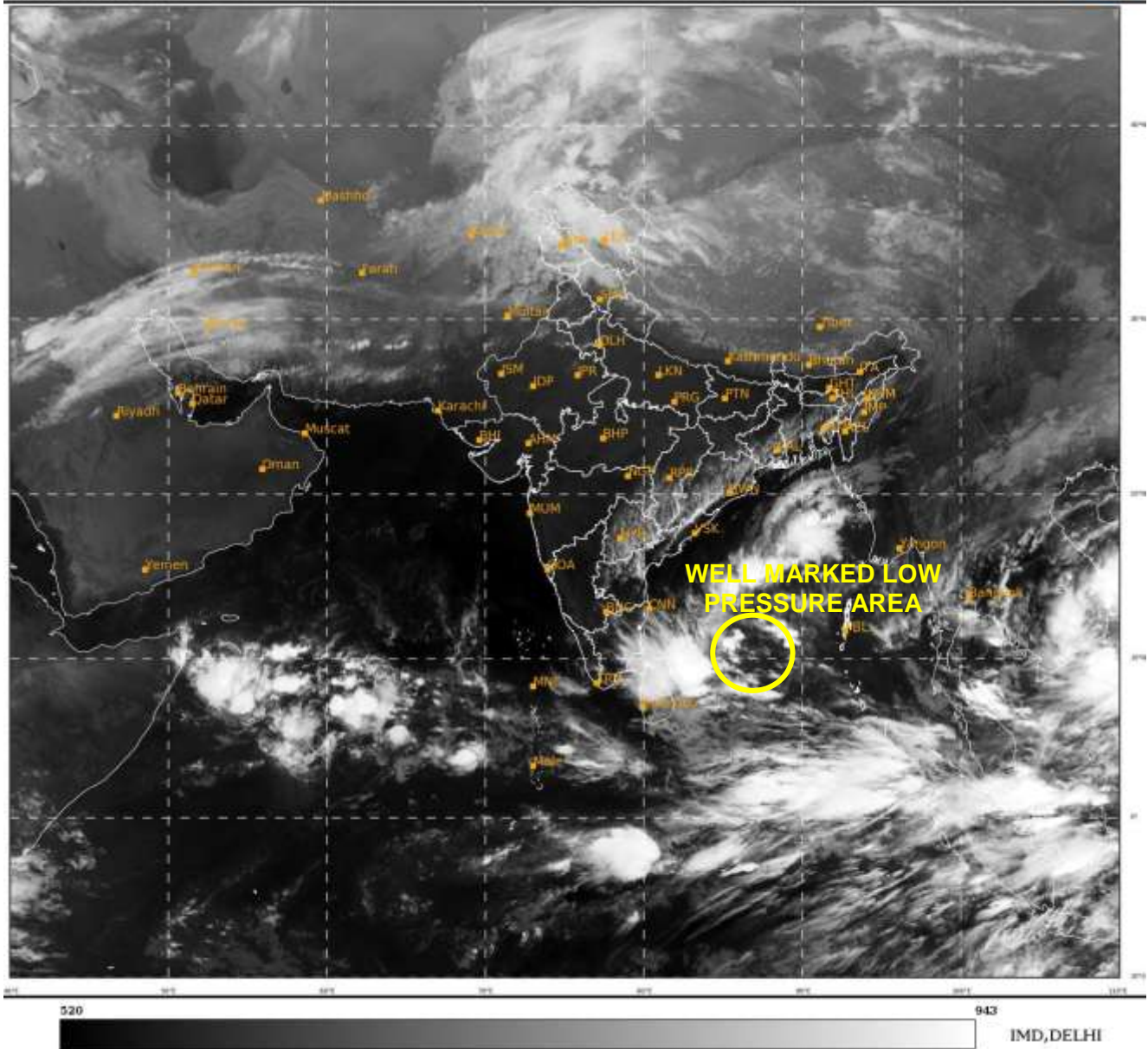
MOST OF THE MODELS ARE INDICATING DEVELOPMENT OF DEPRESSION OVER CENTRAL PARTS OF SOUTH BOB AROUND 20TH NOVEMBER. MODELS ARE ALSO INDICATING THAT THE SYSTEM WOULD MOVE SLOWLY WEST-NORTHWESTWARDS TOWARDS NORTH TAMIL NADU-SOUTH ANDHRA PRADESH COASTS DURING 20TH TO 23RD WITH WEAKENING BEFORE REACHING THE COAST.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE WELL MARKED LOW PRESSURE AREA CENTRAL PARTS OF SOUTH BAY OF BENGAL IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND GRADUALLY CONCENTRATE INTO A DEPRESSION OVER SOUTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL DURING NEXT 24 HOURS. THEREAFTER, IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS TOWARDS TAMILNADU-PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS DURING SUBSEQUENT 2 DAYS.

(M. SHARMA)
SCIENTIST-D
RSMC NEW DELHI

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
LIC Mercator

19-11-2022/(0300 to 0327) GMT
19-11-2022/(0830 to 0857) IST



WML: WELL MARKED LOW PRESSURE AREA

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%
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