



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

**DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 01.08.2023**

**SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0400 UTC OF 01.08.2023 BASED ON 0000 UTC OF 01.08.2023.**

YESTERDAY'S WELL-MARKED LOW PRESSURE AREA OVER CENTRAL PARTS OF NORTH BAY OF BENGAL CONCENTRATED INTO A DEPRESSION AND LAY CENTERED AT 0000 UTC OF TODAY, THE 1<sup>ST</sup> AUGUST, 2023 OVER NORTHEAST BAY OF BENGAL (BOB) NEAR LATITUDE 20.5°N AND LONGITUDE 91.5°E ABOUT 200 KM SOUTHEAST OF KHEPUPARA (41984, BANGLADESH) AND 430 KM EAST-SOUTHEAST OF DIGHA (42901, WEST BENGAL).

IT IS LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION AND MOVE NORTHWESTWARDS AND CROSS BANGLADESH COAST NEAR KHEPUPARA AROUND 1200 UTC OF TODAY, THE 1<sup>ST</sup> AUGUST. THEREAFTER, IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS GANGETIC WEST BENGAL DURING SUBSEQUENT 24 HOURS

AS PER INSAT-3D IMAGERY, INTENSITY OF THE SYSTEM IS T1.5. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH ADJOINING CENTRAL BAY OF BENGAL. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEGREE CELSIUS.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. ESTIMATED CENTRAL PRESSURE IS 990 HPA. SEA CONDITION IS LIKELY TO BE ROUGH TO VERY ROUGH OVER NORTH BOB AND ADJOINING CENTRAL BOB AND ALONG & OFF ALONG & OFF MYANMAR-BANGLADESH-WEST BENGAL-NORTH ODISHA COASTS TILL 0600 UTC OF 2<sup>ND</sup> AUGUST.

**REMARKS:**

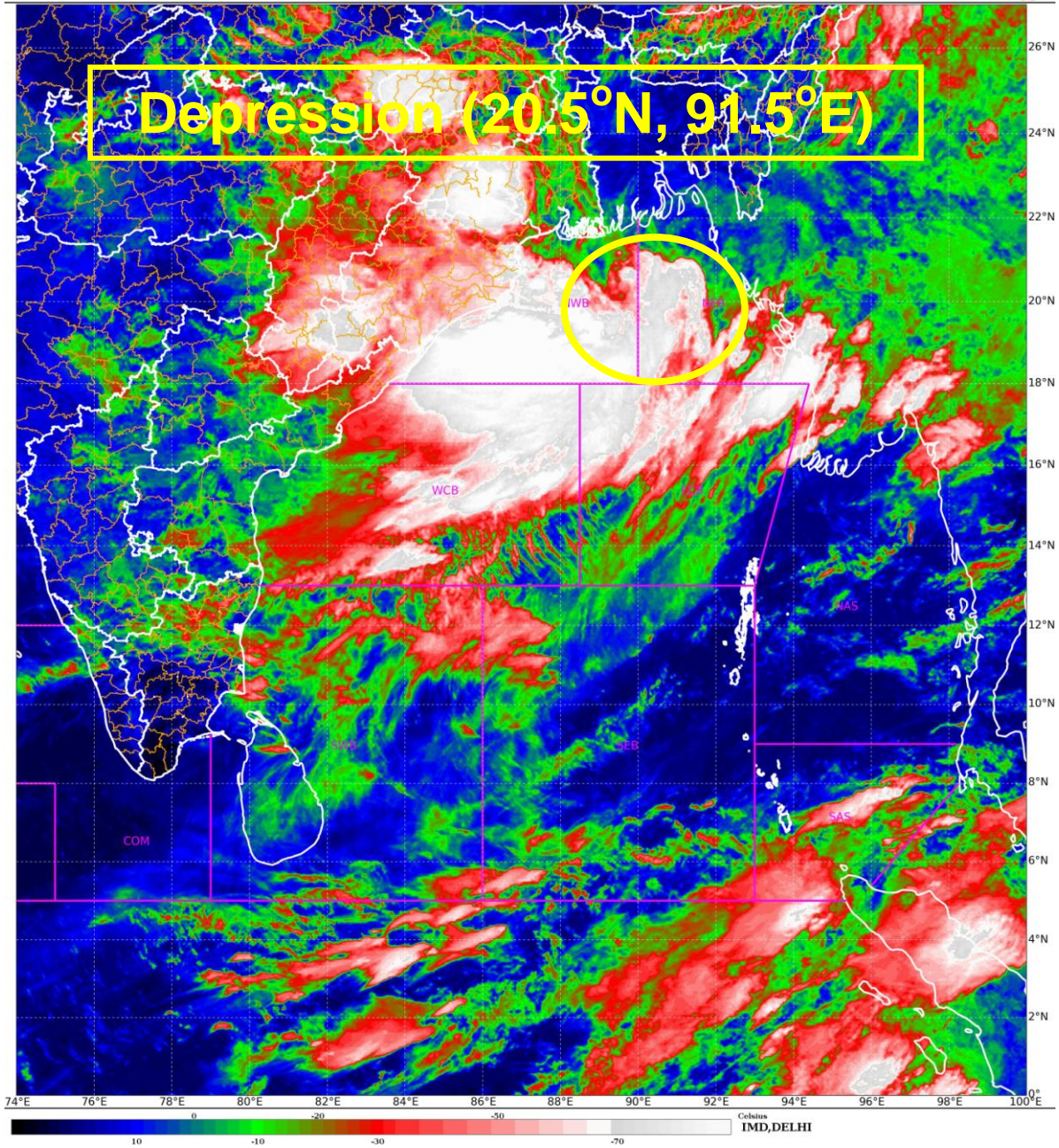
MADDEN JULIAN OSCILLATION IS IN PHASE 8 WITH AMPLITUDE LESS THAN 1 AND WOULD MOVE TO PHASE 1 FROM 1<sup>ST</sup> AUGUST ONWARDS WITH AMPLITUDE REMAINING LESS THAN 1. IT WOULD CONTINUE IN SAME PHASE DURING NEXT 4-5 DAYS. HENCE MJO IS NOT LIKELY TO SUPPORT CONVECTIVE ACTIVITY OVER THE BAY OF BENGAL (BOB). HOWEVER, EQUATORIAL WAVES INDICATE WESTERLY WINDS (1-3 MPS) OVER CENTRAL & SOUTH BOB AND EASTERLY WINDS (1-3 MPS) OVER NORTH BOB, ALONG WITH PRESENCE OF ROSSBY WAVES OVER CENTRAL BOB. THUS EQUATORIAL WAVES ARE LIKELY TO SUPPORT CYCLOGENESIS OVER THE BOB REGION. TOTAL PRECIPITABLE WATER IMAGERY INDICATES WARM MOIST AIR INCURSION INTO THE CORE AND AROUND THE SYSTEM AREA. SEA SURFACE TEMPERATURE IS AROUND 29°C OVER NORTH BOB, BECOMING 30°C OFF NORTH ODISHA & ADJOINING GANGETIC WEST BENGAL COASTS. THE LOW LEVEL VORTICITY IS AROUND  $150 \times 10^{-6} \text{S}^{-1}$  OVER EASTCENTRAL BOB TO THE SOUTHEAST OF SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS ABOUT  $30 \times 10^{-5} \text{S}^{-1}$  TO THE EAST AND  $20 \times 10^{-5} \text{S}^{-1}$  TO THE OF SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND  $30 \times 10^{-5} \text{S}^{-1}$  TO THE SOUTHWEST AND  $20 \times 10^{-5} \text{S}^{-1}$  TO THE SOUTHEAST OF SYSTEM CENTRE. VERTICAL WIND

SHEAR IS HIGH ABOUT 20-30 KNOTS AROUND SYSTEM AREA AND OVER NORTH BAY OF BENGAL.

VARIOUS DETERMINISTIC MODELS INDICATE THAT THE SYSTEM WOULD INTENSIFY FURTHER AND MOVE NORTHWESTWARDS & CROSS BANGLADESH COAST NEAR KHEPUPARA AROUND 1200 UTC OF TODAY, THE 1<sup>ST</sup> AUGUST.

HENCE, IT IS INFERRED THAT THE DEPRESSION OVER NORTHEAST BAY OF BENGAL IS LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION AND MOVE NORTHWESTWARDS AND CROSS BANGLADESH COAST NEAR KHEPUPARA AROUND 1200 UTC OF TODAY, THE 1<sup>ST</sup> AUGUST. THEREAFTER, IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS GANGETIC WEST BENGAL DURING SUBSEQUENT 24 HOURS.

**(M. SHARMA)**  
**SCIENTIST-D**  
**RSMC NEW DELHI**



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



## OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHEAST BAY OF BENGAL BASED ON 0000 UTC (0530 IST) OF 01<sup>ST</sup> AUGUST 2023.



**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

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