



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

**DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 25.11.2023**

**TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 0600 UTC OF 25.11.2023 BASED ON 0300 UTC OF 25.11.2023.**

**BAY OF BENGAL:**

A CYCLONIC CIRCULATION IS LIKELY TO EMERGE INTO SOUTH ANDAMAN SEA AND NEIGHBOURHOOD BY 26<sup>TH</sup> NOVEMBER. UNDER ITS INFLUENCE, A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTH ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL AROUND 27<sup>TH</sup> NOVEMBER. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEPRESSION OVER SOUTHEAST BAY OF BENGAL AROUND 29<sup>TH</sup> NOVEMBER, 2023.

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH ANDAMAN SEA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL AND WEAK TO MODERATE CONVECTION LAY OVER CENTRAL & SOUTHWEST BAY OF BENGAL.

**\*PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:**

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	LOW	MOD	HIGH	HIGH

**ARABIAN SEA:**

YESTERDAYS CYCLONIC CIRCULATION OVER SOUTHEAST AND ADJOINING SOUTHWEST ARABIAN SEA EXTENDING UPTO 1.5 KM ABOVE MEAN SEA LEVEL PERSISTS OVER THE SAME REGION.

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER EASTCENTRAL & REST OF SOUTH ARABIAN SEA AND COMORIN AREA.

**\*PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:**

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

**\*NOTE: EVERY 24HR FORECAST IS VALID UPTO 0300 UTC (0830 IST) OF NEXT DAY**

## Remarks:

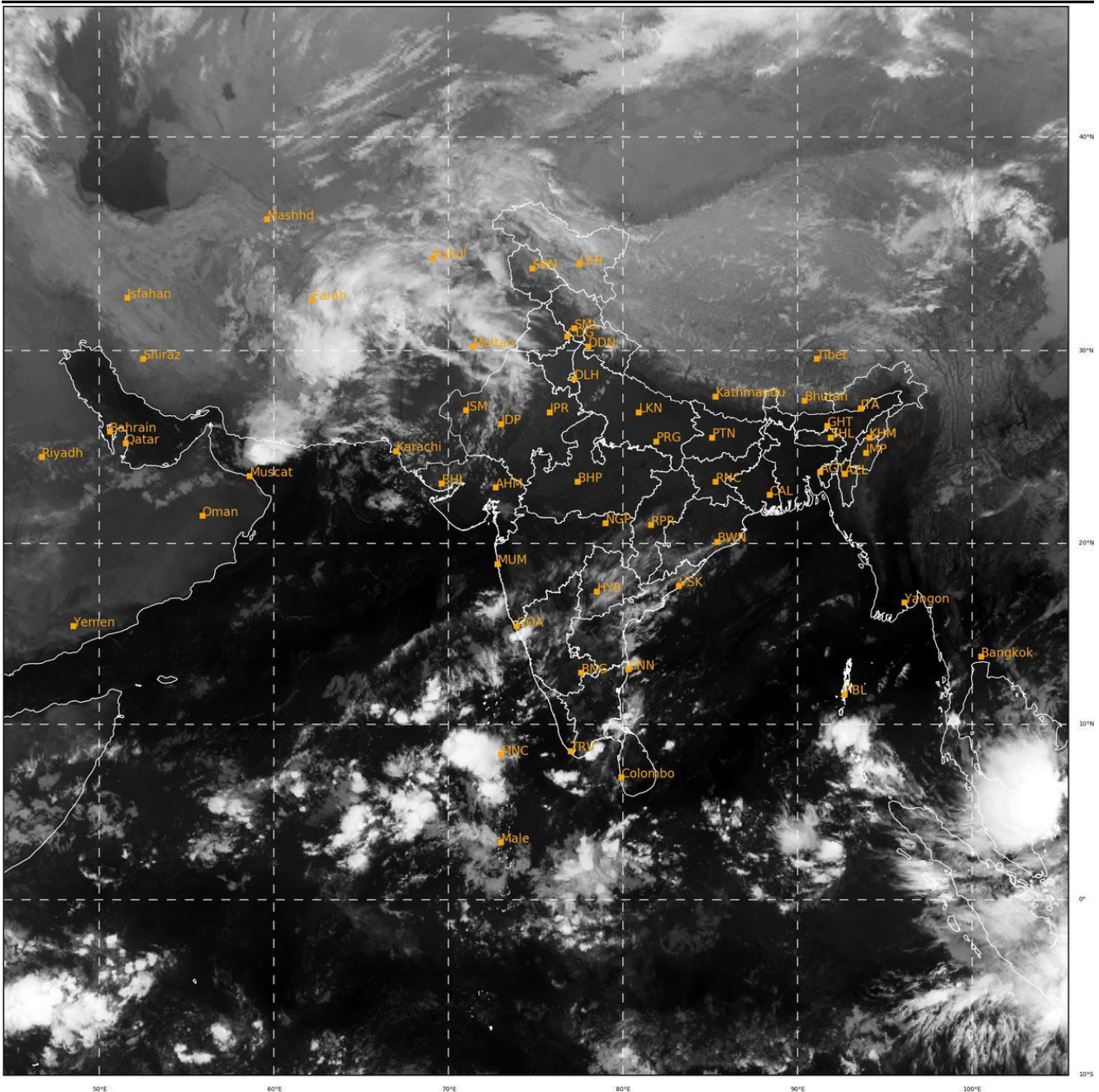
MADDEN JULIAN OSCILLATION (MJO) IS CURRENTLY IN PHASE 2 WITH AMPLITUDE GREATER THAN 1. IT WOULD MOVE ACROSS PHASE 3 AND 4 WITH AMPLITUDE GREATER THAN 1 DURING 26<sup>TH</sup> NOVEMBER TO 6<sup>TH</sup> DECEMBER. THUS, MJO WOULD SUPPORT CYCLOGENESIS OVER THE BAY OF BENGAL (BOB) REGION TILL 6<sup>TH</sup> DECEMBER. SEA SURFACE TEMPERATURE IS 28-30<sup>0</sup>C OVER MAJOR PARTS OF BOB. TROPICAL CYCLONE HEAT POTENTIAL IS 80-100 KJ/CM<sup>2</sup> OVER SOUTH ANDAMAN SEA, 100-120 KJ/CM<sup>2</sup> OVER PARTS OF EASTCENTRAL AND ADJOINING SOUTHEAST BOB. THE NCICS BASED FORECASTS FOR EQUATORIAL WAVES INDICATE STRENGTHENING OF WESTERLY WINDS OVER SOUTH BOB ALONGWITH PRESENCE OF EQUATORIAL ROSSBY WAVES AND MJO. EASTERLY WINDS (1-3 MPS) ARE LIKELY OVER CENTRAL BOB. ALL THESE LARGE SCALE FEATURES IS FAVOURABLE FOR CYCLOGENESIS (FORMATION OF DEPRESSION) OVER SOUTHEAST BOB AND ADJOINING ANDAMAN SEA.

CURRENT ENVIRONMENTAL FEATURES INDICATE, POSITIVE LOW LEVEL VORTICITY OF 60-80X10<sup>-6</sup>S<sup>-1</sup> OVER GULF OF THAILAND WITH HORIZONTAL EXTENSION UPTO ANDAMAN SEA REGION AT 850 HPA LEVEL. VERTICALLY, IT IS EXTENDING UPTO 500 HPA LEVEL. POSITIVE LOW LEVEL CONVERGENCE HAS INCREASED OVER THE REGION AND IS ABOUT 30 X 10<sup>-5</sup> S<sup>-1</sup> OVER THE REGION. POSITIVE UPPER LEVEL DIVERGENCE HAS INCREASED SIGNIFICANTLY AND IS ABOUT 60 X 10<sup>-5</sup> S<sup>-1</sup> OVER THE REGION.

MOST OF THE MODELS ARE INDICATING FORMATION OF DEPRESSION OVER SOUTH BAY OF BENGAL DURING 28<sup>TH</sup> -30<sup>TH</sup> NOVEMBER. HOWEVER, THERE IS LARGE VARIATION AMONG VARIOUS MODELS WRT AREA OF FORMATION AND TIME OF FORMATION. GFS GROUP OF MODELS (IMD & NCEP) ARE INDICATING LIKELY EMERGENCE OF A CYCLONIC CIRCULATION/LOW PRESSURE AREA INTO SOUTH ANDAMAN SEA AROUND 26<sup>TH</sup> WITH FORMATION OF DEPRESSION OVER SOUTH ANDAMAN SEA AROUND 28<sup>TH</sup>, WITH FURTHER INTENSIFICATION INTO CYCLONIC STORM AND ABOVE INTENSITY STORM. THESE MODELS ARE INDICATING INITIAL NORTHWESTWARDS MOVEMENT TILL 3RD DECEMBER, FOLLOWED BY NORTHEASTWARDS MOVEMENT THEREAFTER TOWARDS BANGLADESH COAST. THESE MODELS ARE ALSO INDICATING RAPID WEAKENING OF SYSTEM BEFORE REACHING BANGLADESH-WEST BENGAL COASTS OVER NORTH BAY OF BENGAL. ECMWF IS INDICATING DEPRESSION OVER SOUTHEAST BOB ON 29<sup>TH</sup>,/ 1200 UTC. IT IS ALSO INDICATING FURTHER INTENSIFICATION INTO A SEVERE CYCLONIC STORM AND MOVEMENT TOWARDS WESTCENTRAL BAY OF BENGAL TILL 4<sup>TH</sup> DECEMBER. WHEREAS, NCUM IS INDICATING DELAYED FORMATION OF A CYCLONIC CIRCULATION OVER SOUTHEAST BAY ON 29<sup>TH</sup>, WITH WEST-NORTHWESTWARDS MOVEMENT AND INTENSIFICATION INTO A DEPRESSION OVER SOUTHEAST BAY ON 2<sup>ND</sup> DECEMBER. IT IS INDICATING FURTHER INTENSIFICATION OF THE SYSTEM INTO A CYCLONIC STORM AND MOVEMENT TOWARDS WESTCENTRAL BAY TILL 5<sup>TH</sup> DECEMBER.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THERE IS LIKELIHOOD OF EMERGENCE OF A CYCLONIC CIRCULATION OVER SOUTH ANDAMAN SEA AND NEIGHBOURHOOD BY 26<sup>TH</sup> NOVEMBER. UNDER IT'S INFLUENCE, A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTH ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL AROUND 27<sup>TH</sup> NOVEMBER . IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEPRESSION OVER SOUTHEAST BAY OF BENGAL AROUND 29<sup>TH</sup> NOVEMBER, 2023.

(M. SHARMA)  
SCIENTIST-D  
RSMC NEW DELHI



510

938

IMD, 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