



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

#### DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 31.03.2021

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 31.03.2021 BASED ON 0300 UTC OF 31.03.2021.

#### **BAY OF BENGAL:**

UNDER THE INFLUENCE OF THE CYCLONIC CIRCULATION OVER THE SOUTHEAST BAY OF BENGAL (BOB) & ADJOINING SOUTH ANDAMAN SEA, A LOW PRESSURE AREA FORMED OVER THE SAME REGION AT 0000 UTC OF TODAY, THE 31<sup>ST</sup> MARCH 2021. AT 0300 UTC OF TODAY, THE 31<sup>ST</sup> MARCH 2021, IT PERSISTED OVER THE SAME REGION. IT IS LIKELY TO BECOME MORE MARKED OVER CENTRAL PARTS OF ANDAMAN SEA & NEIGHBOURHOOD DURING NEXT 24 HOURS AND LIKELY TO CONCENTRATE INTO A DEPRESSION OVER THE SAME REGION DURING SUBSEQUENT 24 HOURS.

AS PER SATELLITE IMAGERY AT 0300 UTC OF 31<sup>ST</sup> MARCH, SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST BOB AND ADJOINING ANDAMAN SEA BETWEEN LATITUDE 5.0°N & 10.0°N AND LONGITUDE 90.0°E & 96.0°E IN ASSOCIATION WITH THE LOW PRESSURE AREA OVER SOUTHEAST BOB & ADJOINING SOUTH ANDAMAN SEA. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93°C. SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST BOB AND ANDAMAN 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	LOW	LOW	NIL	NIL

# **ARABIAN SEA:**

YESTERDAY'S, LOW PRESSURE AREA OVER SOUTHEAST ARABIAN SEA & ADJOINING EQUATORIAL INDIAN OCEAN BECAME LESS MARKED AT 0000 UTC OF TODAY, THE 31<sup>ST</sup> MARCH 2021.

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER SOUTHCENTRAL 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 LIES CURRENTLY IN PHASE 5 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE IN SAME PHASE DURING NEXT 2 DAYS. THEREAFTER, IT WILL MOVE TO PHASE 6 WITH AMPLITUDE REMAINING MORE THAN 1 AND WILL REMAIN IN SAME PHASE FOR SUBSEQUENT 3 DAYS. THUS, MJO PHASE AND AMPLITUDE WILL SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE BAY OF BENGAL (BOB) DURING NEXT 2-3 DAYS. IT IS NOT CONDUCIVE FOR ENHANCEMENT OF ANY CONVECTIVE ACTIVITY OVER THE ARABIAN SEA (AS).

THE LOW LEVEL POSITIVE VORTICITY HAS INCREASED & FURTHER ORGANISED DURING PAST 24 HOURS AND IS ABOUT 80-90 X10<sup>-6</sup>SEC<sup>-1</sup> OVER SOUTH ANDAMAN SEA. POSITIVE LOW LEVEL CONVERGENCE ZONE IS SAME DURING PAST 24 HOURS (5-10X10<sup>-5</sup> SEC<sup>-1</sup>) OVER SOUTH ANDAMAN SEA. POSITIVE ZONE OF UPPER LEVEL DIVERGENCE HAS INCREASED (10-15X10<sup>-5</sup> SEC<sup>-1</sup>) OVER SOUTH ANDAMAN SEA. VERTICAL WIND SHEAR IS MODERATE (10-20 KTS) OVER ANDAMAN SEA AND ADJOINING EASTCENTRAL BOB. THE UPPER TROPOSPHERIC RIDGE RAN ALONG 10.5°N OVER THE BOB.

THE LOW PRESSURE AREA OVER SOUTHEAST BOB & ADJOINING SOUTH ANDAMAN SEA IS CURRENTLY LYING IN A FAVOURABLE ENVIRONMENT. SOME MODELS ARE INDICATING FURTHER INTENSIFICATION OF THE SYSTEM INTO A DEPRESSION DURING SUBSEQUENT 48 HOURS WITH NORTH-NORTHEASTWARDS MOVEMENT TOWARDS NORTH ANDAMAN SEA AND WEAKENING THEREAFTER.



