





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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 01.10.2024

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 0600 UTC OF 01.10.2024 BASED ON 0300 UTC OF 01.10.2024.

BAY OF BENGAL:

SCATTERED LOW & MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTHEAST ADJOINING EASTCENTRAL BAY OF BENGAL, NORTH ANDAMAN SEA, GULF OF MARTABAN, TENASSERIM COAST & ARAKAN COAST (MINIMUM CLOUD TOP TEMPERATURE MINUS 75-93 DEG CELCIUS). SCATTERED LOW & MEDIUM CLOUDS WITH EMBEDDED ISOLATED WEAK TO MODERATE CONVECTION LAY OVER NORTHWEST & SOUTH BAY OF BENGAL AND SOUTH ANDAMAN SEA.

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

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

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

ARABIAN SEA:

A FRESH CYCLONIC CIRCULATION LAY OVER COMORIN AREA & ADJOINING EQUATORIAL INDIAN OCEAN AND EXTENDS UPTO 1.5 KM ABOVE MEAN SEA LEVEL AT 0300 UTC OF TODAY, THE 01ST OCTOBER, 2024.

SCATTERED LOW & MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER LAKSHADWEEP ISLANDS AREA, SOUTHEAST ARABIAN SEA, MALDIVES & COMORIN AREA ADJOINING EQUATORIAL INDIAN OCEAN (MINIMUM CLOUD TOP TEMPERATURE MINUS 75-90 DEG CELCIUS). SCATTERED LOW & MEDIUM CLOUDS WITH EMBEDDED ISOLATED WEAK TO MODERATE CONVECTION OVER SOUTHWEST ARABIAN SEA.

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REMARKS:

THE MADDEN-JULIAN OSCILLATION (MJO) IS CURRENTLY IN PHASE 2, WITH AN AMPLITUDE CLOSE TO 1, AND IS EXPECTED TO REMAIN IN THIS PHASE FOR THE NEXT 4 TO 5 DAYS.

BAY OF BENGAL (BOB)

IN THE BAY OF BENGAL, THE SEA SURFACE TEMPERATURE (SST) MORE THAN 28°C OVER ENTIRE PARTS OF THE REGION. THE TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS GREATER THAN 100 KJ/CM² OVER THE NORTHERN AND WEST-CENTRAL BOB AND OFF THE COASTS OF NORTH TAMIL NADU AND SOUTH ANDHRA PRADESH, WHILE IT IS BELOW 50 KJ/CM² IN THE REST OF THE BOB AND THE ANDAMAN SEA. THERE IS NO SIGNIFICANT POSITIVE ZONE OF CYCLONIC RELATIVE VORTICITY OBSERVED. LOW-LEVEL CONVERGENCE IS RECORDED AT 5 - 10 X10⁻⁵ S⁻¹ OVER THE NORTH ANDAMAN SEA. UPPER-LEVEL DIVERGENCE REACHES 30 X10⁻⁵ S⁻¹ OVER THE NORTH ANDAMAN SEA. VERTICAL WIND SHEAR (VWS) IS CLASSIFIED AS HIGH (>20 KNOTS) OVER THE ENTIRE BOB, AND AN UPPER TROPOSPHERIC RIDGE IS POSITIONED ALONG 28°N.

ARABIAN SEA (AS)

IN THE ARABIAN SEA, THE SEA SURFACE TEMPERATURE (SST) IS ABOVE 28°C IN THE EASTERN PART BUT DROPS BELOW 26°C IN THE WEST-CENTRAL AND SOUTHWEST AREAS. THE TCHP EXCEEDS 100 KJ/CM² IN THE CENTRAL PARTS OF THE AS BUT IS BELOW 50 KJ/CM² IN THE REMAINING AREAS. A CYCLONIC RELATIVE VORTICITY VALUE OF 50 IS OBSERVED OVER OMAN AND ADJACENT WEST-CENTRAL AS. LOW-LEVEL CONVERGENCE IS RECORDED AT 5 X10-5 S-1 OVER THE SOUTHEAST AS AND THE LAKSHADWEEP AREA. UPPER-LEVEL DIVERGENCE IS NOTED AT 20 X10-5 S-1 OVER THE SOUTHEAST AS AND LAKSHADWEEP AREA. VERTICAL WIND SHEAR (VWS) VARIES FROM 5-20 KNOTS IN THE SOUTHEAST AS AND LAKSHADWEEP AREA.

POSITIVE VORTICITY OF 50-60 X 10^{-5} IS SEEN OVER WEST EQUATORIAL INDIAN OCEAN AND ADJOINING SOUTHEAST AS.



