



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

#### DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 16.11.2022

# 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 16.11.2022 BASED ON 0300 UTC OF 16.11.2022.

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

YESTERDAY'S CYCLONIC CIRCULATION OVER SOUTH ANDAMAN SEA & NEIGHBOURHOOD PERSISTS AT 0300 UTC OF TODAY, THE 16<sup>TH</sup> NOVEMBER, 2022. UNDER ITS INFLUENCE, A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTHEAST BAY OF BENGAL & ADJOINING ANDAMAN SEA DURING NEXT 24 HOURS. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND GRADUALLY CONCENTRATE INTO A DEPRESSION OVER CENTRAL PARTS OF SOUTH BAY OF BENGAL DURING SUBSEQUENT 48 HOURS AROUND 19TH NOV.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER EASTCENTRAL & ADJOINING SOUTHEAST BAY OF BENGAL, ANDAMAN SEA AND GULF OF MARTABAN. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER WESTCENTRAL & SOUTHWEST BAY OF BENGAL. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED WEAK CONVECTION LAY OVER NORTH BAY OF BENGAL.

## **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         | LOW         | MOD         | MOD          |

#### ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL & SOUTH ARABIAN SEA AND COMORIN AREA.

## **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:**

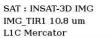
THE MADDEN JULIAN OSCILLATION (MJO) INDEX CURRENTLY LIES IN PHASE 5 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE IN SAME PHASE FOR NEXT 4 DAYS. MJO INDEX IS THUS CONDUCIVE FOR ENHANCEMENT OF CONVECTIVE ACTIVITY OVER BAY OF BENGAL. SEA SURFACE TEMPERATURE (SST) IS AROUND 28-29°C OVER MAJOR PARTS OF BOB AND 29-30°C OVER A SMALL POCKET SOUTHEAST BOB AND OFF

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 TAMILNADU AND SRI LANKA COAST. THE OCEAN HEAT CONTENT (OHC) IS >110 KJ/CM<sup>2</sup> OVER SOUTH ANDAMAN SEA AND 80-100 KJ/CM<sup>2</sup> OVER CENTRAL ADJOINING SOUTH BOB AND LESS THAN 40 KJ/CM<sup>2</sup> OVER WESTCENTRAL AND SOUTHWEST BOB ALONG EAST COAST OF INDIA.

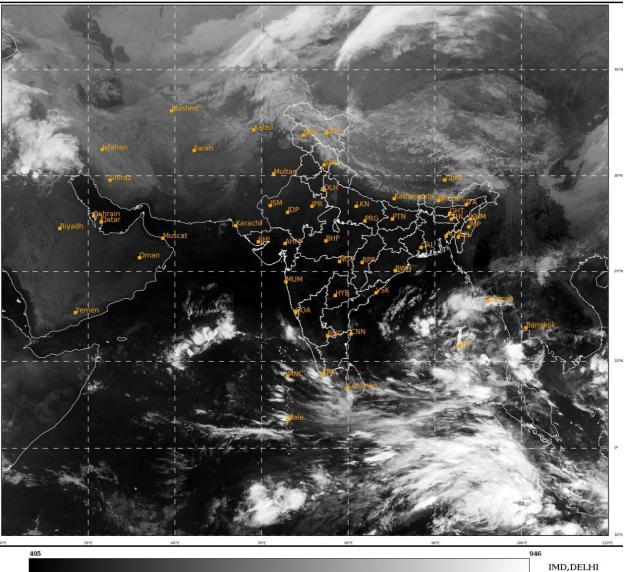
LOW LEVEL VORTICITY IS AROUND 40-50 X10<sup>-6</sup> S<sup>-1</sup> OVER SOUTH ANDAMAN SEA, SOUTHWEST BOB & ADJOINING EQUATORIAL INDIAN OCEAN. LOW LEVEL CONVERGENCE IS AROUND 10 X10<sup>-5</sup> S<sup>-1</sup> OVER SOUTH ANDAMAN SEA AND ADJOINING SOUTHEAST BOB. UPPER LEVEL DIVERGENCE IS AROUND 05-10 X10<sup>-5</sup> S<sup>-1</sup> OVER SOUTHEAST BOB. WIND SHEAR IS MODERATE (10-20 KNOTS) OVER CENTRAL & ADJOINING SOUTH BOB AND OVER ANDAMAN SEA.THERE EXIST A UPPER TROPOSPHERIC RIDGE ALONG 16.0°N OVER THE BOB.

MOST OF THE MODELS ARE INDICATING DEVELOPMENT OF DEPRESSION OVER CENTRAL PARTS OF SOUTH BOB DURING 18-19 NOVEMBER. MODELS ARE ALSO INDICATING THAT THE SYSTEM WOULD MOVE WEST-NORTHWESTWARDS AND REACH NORTH TAMIL NADU-ANDHRA PRADESH COASTS DURING 21/0300 UTC TO 22/0000 UTC. GFS, GEFS, NCUM, ECMWF ARE INDICATING SYSTEM TO REACH COAST AS A LOW PRESSURE AREA AND NCEP GFS & NEPS ARE INDICATING THE SYSTEM TO REACH COAST AS A DEPRESSION.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT UNDER THE INFLUENCE OF CYCLONIC CIRCULATION OVER SOUTH ANDAMAN SEA & NEIGHBOURHOOD, A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTHEAST BAY OF BENGAL & ADJOINING ANDAMAN SEA DURING NEXT 24 HOURS. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND GRADUALLY CONCENTRATE INTO A DEPRESSION OVER CENTRAL PARTS OF SOUTH BAY OF BENGAL DURING SUBSEQUENT 48 HOURS AROUND 19TH NOV.



16-11-2022/(0330 to 0356) GMT 16-11-2022/(0900 to 0926) IST



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