

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

**DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 17.12.2021**

**TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 17.12.2021 BASED ON 0300 UTC OF 17.12.2021.**

**BAY OF BENGAL:**

YESTERDAY'S CYCLONIC CIRCULATION OVER EQUATORIAL INDIAN OCEAN (EIO) TO THE SOUTH OF SRI LANKA LAY OVER EIO AND ADJOINING CENTRAL PARTS OF SOUTH BAY OF BENGAL (BOB) AT 1200 UTC OF 16TH DECEMBER. IT PERSISTED OVER THE SAME REGION AT 0300 UTC OF TODAY, THE 17TH DECEMBER, 2021 WITH VERTICAL EXTENSION UPTO 5.8 KM ABOVE MEAN SEA LEVEL. IT IS LIKELY TO MOVE EAST-NORTHEASTWARDS AND CONCENTRATE INTO A LOW PRESSURE AREA OVER EIO & ADJOINING SOUTHWEST BOB DURING NEXT 24 HOURS.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL PARTS OF SOUTH BOB AND ADJOINING EIO, SOUTH OF LAT 10.0N. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 82 DEG C. MODERATE TO INTENSE CONVECTION LAY OVER REST OF SOUTH BAY OF BENGAL. SCATTERED LOW AND MEDIUM CLOUDS WITH WEAK TO MODERATE CONVECTION LAY OVER SOUTH 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	NIL	NIL	LOW	LOW

**ARABIAN SEA:**

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHCENTRAL ARABIAN SEA SOUTH ARABIAN SEA AND COMORIN. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED WEAK TO MODERATE CONVECTION LAY OVER EASTCENTRAL 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 GUIDANCE AVAILABLE FROM VARIOUS MODELS INCLUDING IMD GFS, NCUM GROUP, GEFS AND NEPS IS NOT INDICATING ANY SIGNIFICANT DEVELOPMENT OVER THE BOB. HOWEVER, ECMWF (DETERMINISTIC AND ENSEMBLE) IS INDICATING FORMATION OF DEPRESSION OVER SOUTHEAST BOB AROUND 19<sup>TH</sup> DECEMBER WITH SUBSEQUENT EAST-NORTHEASTWARDS MOVEMENT TOWARDS NORTH ANDAMAN SEA AND MARGINAL INTENSIFICATION ENROUTE TILL 21<sup>ST</sup>

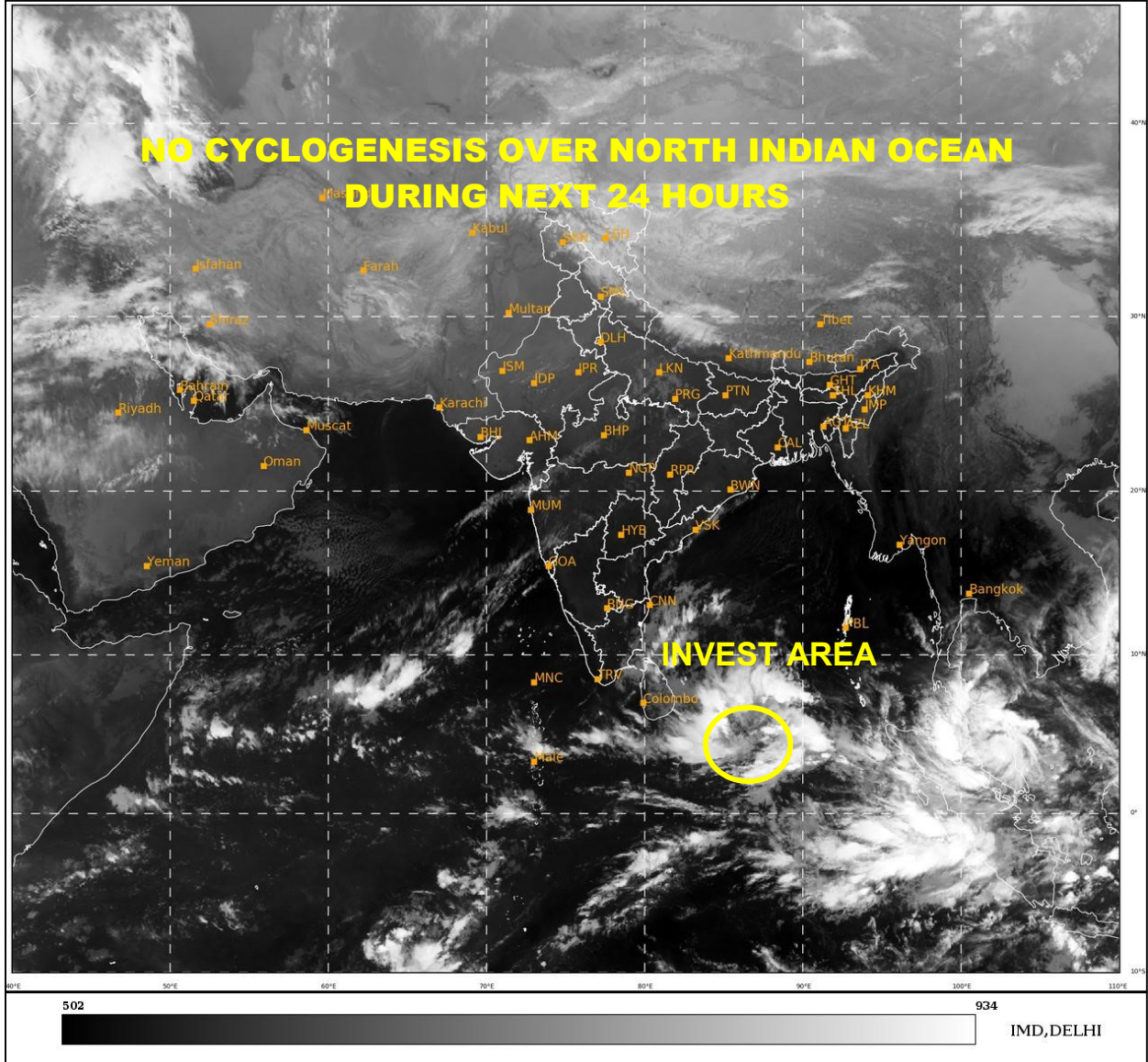
DECEMBER. SIMILARLY IMD GPP IS ALSO INDICATING A POTENTIAL ZONE FOR CYCLOGENESIS OVER THE EIO & ADJOINING SOUTH BOB DURING NEXT 4-5 DAYS WITH EAST-NORTHEASTWARDS MOVEMENT TOWARDS NORTH ANDAMAN SEA.

CURRENT SEA AND ENVIRONMENTAL CONDITIONS INCLUDING SEA SURFACE TEMPERATURE ( $>28^{\circ}\text{C}$ ), TROPICAL CYCLONE HEAT POTENTIAL ( $>100 \text{ KJ}/\text{CM}^2$ ), DEPTH OF  $26^{\circ}\text{C}$  ISOTHERM (100-120 M), POITIVE LOW LEVEL VORTICITY ( $40-60 \times 10^{-6} \text{S}^{-1}$ ), POSITIVE LOW LEVEL CONVERGENCE ( $15 \times 10^{-5} \text{S}^{-1}$ ), POSITIVE UPPER LEVEL DIVERGENCE ( $40 \times 10^{-5} \text{S}^{-1}$ ), MODERATE WIND SHEAR (15-25 KTS), PRESENCE OF EQUATORIAL ROSSBY WAVES, STRONG CROSS EQUATORIAL WESTERLY FLOW AND ACTIVE ITCZ ARE INDICATING FAVOURABLE ENVIRONMENT FOR CYCLOGENESIS OVER EIO AND ADJOINING SOUTH BOB.

IN VIEW OF ABOVE, LOW PROBABILITY IS ASSIGNED TO FORMATION OF DEPRESSION OVER EIO AND ADJOINING SOUTH BOB ON DAY 4 & 5 (DURING 20<sup>TH</sup> - 22<sup>ND</sup> DECEMBER).

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

17-12-2021/(0300 to 0326) GMT  
17-12-2021/(0830 to 0856) IST



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%  
This is a guidance Bulletin for the WMO/ESCAP Panel Member countries., Please visit respective National websites for Country specific Bulletins