



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

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**DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 11.05.2021**

**TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 11.05.2021 BASED ON 0300 UTC OF 11.05.2021.**

**BAY OF BENGAL:**

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ANDAMAN SEA AND ISOLATED WEAK TO MODERATE CONVECTION LAY OVER SOUTHWEST BAY OF BENGAL OFF SOUTH ANDHRA PRADESH & TAMIL NADU COASTS.

**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

**ARABIAN SEA:**

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER COMORIN AREA, SOUTH ARABIAN SEA AND ADJOINING EQUATORIAL INDIA OCEAN (MINIMUM CTT MINUS 93°C). SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION LAY OVER WESTCENTRAL ARABIAN SEA.


A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTHEAST ARABIAN SEA AROUND 14<sup>TH</sup> MAY MORNING. IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS ACROSS SOUTHEAST ARABIAN SEA & ADJOINING LAKSHADWEEP AREA AND INTENSIFY INTO A DEPRESSION AROUND 15<sup>TH</sup> MAY. IT MAY INTENSIFY INTO A CYCLONIC STORM OVER EASTCENTRAL ARABIAN SEA AROUND 16<sup>TH</sup> MAY AND CONTINUE TO MOVE NORTH-NORTHWESTWARDS.

**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	MODERATE	HIGH

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PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

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## REMARKS:

THE MADDEN JULIAN INDEX (MJO) CURRENTLY LIES IN PHASE 3 WITH AMPLITUDE LESS THAN 1. THEREAFTER, IT WILL MOVE AROUND PHASE 2 WITH AMPLITUDE INITIALLY BECOMING MORE THAN 1 DURING 16<sup>TH</sup>-17<sup>TH</sup> MAY AND REMAINING LESS THAN 1 ON ALL OTHER DAYS DURING NEXT 6 DAYS. THUS, MJO IS CONDUCIVE FOR ENHANCED CONVECTION OVER THE ARABIAN SEA (AS) DURING NEXT 7 DAYS. THE TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS MORE THAN 140 KJ/CM<sup>2</sup> OVER SOUTHEAST AS AND IS DECREASING OVER CENTRAL PARTS OF CENTRAL AS & NORTH AS. SEA SURFACE TEMPERATURE (SST) IS AROUND 30<sup>0</sup>C OVER ENTIRE AS & 30-31<sup>0</sup>C OVER SOUTHEAST AS. THE AREA OF CONVECTION OVER CENTRAL PARTS OF SOUTH AS & ADJOINING EQUATORIAL INDIAN OCEAN IS STILL PERSISTING. HOWEVER, IT HAS FURTHER EXPANDED AND IS MOVING EASTWARDS. ASSOCIATED MINIMUM CLOUD TOP TEMPERATURE IS -93<sup>0</sup>C. THE CROSS EQUATORIAL FLOW IN THE NEAR EQUATORIAL BELT IS LIKELY TO GET ENHANCED DURING NEXT 5 DAYS DUE TO WESTERLY WIND BURST.

THE LOW LEVEL VORTICITY IS  $50 \times 10^{-6} \text{ S}^{-1}$  TO THE SOUTHWEST OF SYSTEM CENTRE. LOW LEVEL CONVERGENCE IS THE SAME DURING PAST 24 HOURS AROUND  $20-30 \times 10^{-5} \text{ S}^{-1}$  TO THE SOUTHWEST OF SYSTEM CENTRE. THE UPPER LEVEL DIVERGENCE HAS INCREASED DURING PAST 24 HOURS  $40 \times 10^{-5} \text{ S}^{-1}$  TO THE SOUTHWEST OF SYSTEM CENTRE. CURRENTLY, THE INVEST AREA IS IN A REGION OF MODERATE VERTICAL WIND SHEAR (VWS) (15-20 KTS). HOWEVER, VWS IS LOW TO MODERATE OVER SOUTHEAST AS. MOST OF THE NUMERICAL MODELS ARE INDICATING FORMATION OF LOW PRESSURE AREA OVER SOUTHEAST AS AROUND 14<sup>TH</sup> MAY WHICH WILL INTENSIFY INTO A DEPRESSION OVER SOUTHEAST ARABIAN SEA AROUND 15<sup>TH</sup> MAY, MOVE NORTH-NORTHWESTWARDS AND INTENSIFY FURTHER INTO A CYCLONIC STORM AROUND 16<sup>TH</sup> MAY.

WITH THE EASTWARD MOVEMENT OF THE CLOUD CLUSTERS OVER CENTRAL PARTS OF SOUTH ARABIAN SEA & ADJOINING EQUATORIAL INDIAN OCEAN AND PERSISTENCE OF FAVOURABLE ENVIRONMENT LIKE MJO , HIGH SST, HIGH TCHP, GOOD POLEWARD OUTFLOW, MODERATE VWS AND WESTERLY WIND BURST, A LOW PRESSURE AREA IS VERY LIKELY TO FORM OVER SOUTHEAST ARABIAN SEA AROUND 14<sup>TH</sup> MAY MORNING. IT IS VERY LIKELY TO INTENSIFY INTO A DEPRESSION AROUND 15<sup>TH</sup> MAY, MOVE NORTH-NORTHWESTWARDS ACROSS SOUTHEAST ARABIAN SEA & ADJOINING LAKSHADWEEP AREA AND INTENSIFY GRADUALLY INTO A CYCLONIC STORM OVER EASTCENTRAL ARABIAN SEA AROUND 16<sup>TH</sup> MAY.

