



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 12.05.2021

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 12.05.2021 BASED ON 0300 UTC OF 12.05.2021.

BAY OF BENGAL:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER WESTCENTRAL BAY OF BENGAL (BOB) OFF SOUTH ANDHRA PRADESH AND SOUTHWEST BOB.

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:


SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL AND SOUTH ARABIAN SEA (AS), ADJOINING EQUATORIAL INDIAN OCEAN & MALDIVES AREA. MINIMUM CLOUD TOP TEMPERATURE (CTT) IS MINUS 93°C. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION LAY OVER WESTCENTRAL AS.

A LOW PRESSURE AREA IS VERY LIKELY TO FORM OVER SOUTHEAST AS AROUND 14TH MAY MORNING. IT IS VERY LIKELY TO CONCENTRATE INTO A DEPRESSION OVER LAKSHADWEEP AREA AND ADJOINING SOUTHEAST & EASTCENTRAL AS BY 15TH MAY. IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND INTENSIFY FURTHER INTO A CYCLONIC STORM OVER EASTCENTRAL ARABIAN SEA AROUND 16TH MAY. IT IS LIKELY TO CONTINUE TO MOVE NORTH-NORTHWESTWARDS FOR SOME MORE TIME WITH FURTHER INTENSIFICATION.

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

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 1 WITH AMPLITUDE LESS THAN 1. IT WILL CONTINUE IN SAME PHASE DURING NEXT 4 DAYS WITH AMPLITUDE BECOMING MORE THAN 1 DURING 15TH-16TH MAY. THEREAFTER, IT WILL MOVE TO PHASE 3 ACROSS PHASE 2 WITH AMPLITUDE GRADUALLY DECREASING BECOMING LESS THAN 1 DURING SUBSEQUENT 5 DAYS TILL 20TH MAY. 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/CM² OVER SOUTHEAST AS AND IS DECREASING OVER CENTRAL PARTS OF CENTRAL AS & NORTH AS. SEA SURFACE TEMPERATURE (SST) IS AROUND 30°C OVER ENTIRE AS & 30-31°C OVER SOUTHEAST AS. THE AREA OF CONVECTION OVER CENTRAL AND SOUTH AS, ADJOINING EQUATORIAL INDIAN OCEAN AND MALDIVES AREA PERSISTS WITHOUT ANY FURTHER ORGANISATION. ASSOCIATED MINIMUM CLOUD TOP TEMPERATURE IS THE SAME DURING PAST 24 HOURS (-93°C). THE CROSS EQUATORIAL FLOW IN THE NEAR EQUATORIAL BELT IS LIKELY TO GET ENHANCED DURING NEXT 5 DAYS DUE TO WESTERLY WIND BURST.

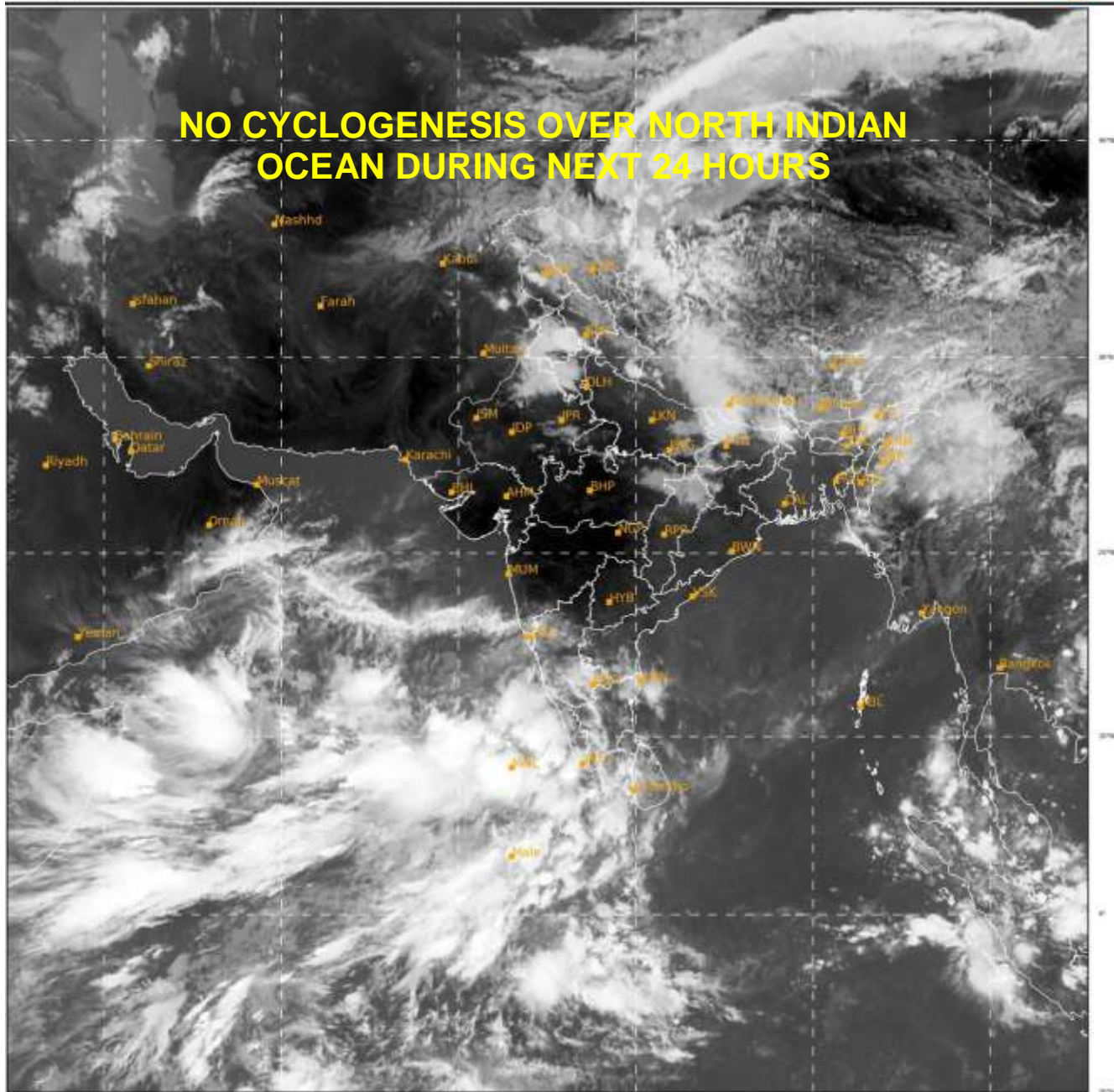
THE LOW LEVEL CYCLONIC VORTICITY IS $50 \times 10^{-6} \text{ S}^{-1}$ OVER SOUTHWEST ARABIAN SEA AND ANOTHER ZONE OF CYCLONIC VORTICITY $50 \times 10^{-6} \text{ S}^{-1}$ IS ALSO SEEN OVER SOUTHEAST AS AND ADJOINING MALDIVES AREA. LOW LEVEL CONVERGENCE IS THE SAME DURING PAST 24 HOURS AROUND $20-30 \times 10^{-5} \text{ S}^{-1}$ OVER SOUTHWEST ARABIAN SEA. ANOTHER ZONE OF POSITIVE CONVERGENCE IS ALSO SEEN OVER SOUTHEAST ARABIAN SEA AND MALDIVES AREA ($40 \times 10^{-5} \text{ S}^{-1}$). TWO ZONES OF POSITIVE UPPER LEVEL DIVERGENCE ARE SEEN OVER SOUTHEAST ($40 \times 10^{-5} \text{ S}^{-1}$) AND SOUTHWEST ($20 \times 10^{-5} \text{ S}^{-1}$) ARABIAN SEA. UPPER TROPOSPHERIC RIDGE RUNS ALONG 13°N. CURRENTLY, THE INVEST AREA IS IN A REGION OF MODERATE VERTICAL WIND SHEAR (VWS) (15-20 KTS). HOWEVER, VWS IS LOW TO MODERATE (10-15 KTS) OVER SOUTHEAST AS AND LAKSHADWEEP AREA.

MOST OF THE NUMERICAL MODELS ARE INDICATING FORMATION OF LOW PRESSURE AREA OVER SOUTHEAST AS AROUND 14TH MAY WHICH WILL INTENSIFY INTO A DEPRESSION OVER SOUTHEAST ARABIAN SEA AROUND 15TH MAY, MOVE NORTH-NORTHWESTWARDS AND INTENSIFY FURTHER INTO A CYCLONIC STORM AROUND 16TH MAY. MODELS ARE ALSO INDICATING FURTHER INTENSIFICATION OF THE SYSTEM AND NORTH-NORTHWESTWARD MOVEMENT TILL 18TH 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 14TH MAY MORNING. IT IS VERY LIKELY TO CONCENTRATE INTO A DEPRESSION AROUND 15TH MAY, MOVE NORTH-NORTHWESTWARDS AND INTENSIFY FURTHER INTO A CYCLONIC STORM OVER EASTCENTRAL ARABIAN SEA AROUND 16TH MAY. IT IS LIKELY TO MOVE NORTH-NORTHWESTWARDS FOR SOME MORE TIME WITH FURTHER INTENSIFICATION.



NO CYCLOGENESIS OVER NORTH INDIAN OCEAN DURING NEXT 24 HOURS



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IMD,DELHI

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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