



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 21.05.2021

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 21.05.2021 BASED ON 0300 UTC OF 21.05.2021.

BAY OF BENGAL:

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL AND SOUTH BAY OF BENGAL (BOB) AND ANDAMAN SEA. SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED WEAK TO MODERATE CONVECTION LAY OVER NORTH BAY OF BENGAL.

A LOW PRESSURE AREA IS VERY LIKELY TO FORM OVER EASTCENTRAL BOB AND ADJOINING NORTH ANDAMAN SEA AROUND 22ND MAY, 2021. IT IS VERY LIKELY TO INTENSIFY INTO A CYCLONIC STORM BY 24TH. IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND REACH NEAR ODISHA - WEST BENGAL COASTS AROUND 26TH MAY MORNING.

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	LOW	MODERATE	HIGH	HIGH

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH PARTS OF EASTCENTRAL ARABIAN SEA AND SOUTH ARABIAN SEA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER COMORIN.


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 FOR THE EXPECTED SYSTEM OVER BOB:

SOUTHWEST MONSOON IS LIKEY TO ADVANCE OVER SOUTH ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL AROUND 21ST MAY. IN ASSOCIATION WITH THIS, THE SOUTHWESTERLY CROSS EQUATORIAL FLOW IS LIKELY TO STRENGTHEN AND DEEPEN DURING 21ST-24TH MAY AND HENCE THE CONVECTION IS LIKELY TO GET ENHANCED OVER THE ANDAMAN SEA AND ADJOINING EASTCENTRAL BOB FAVOURING CYCLOGENESIS.

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

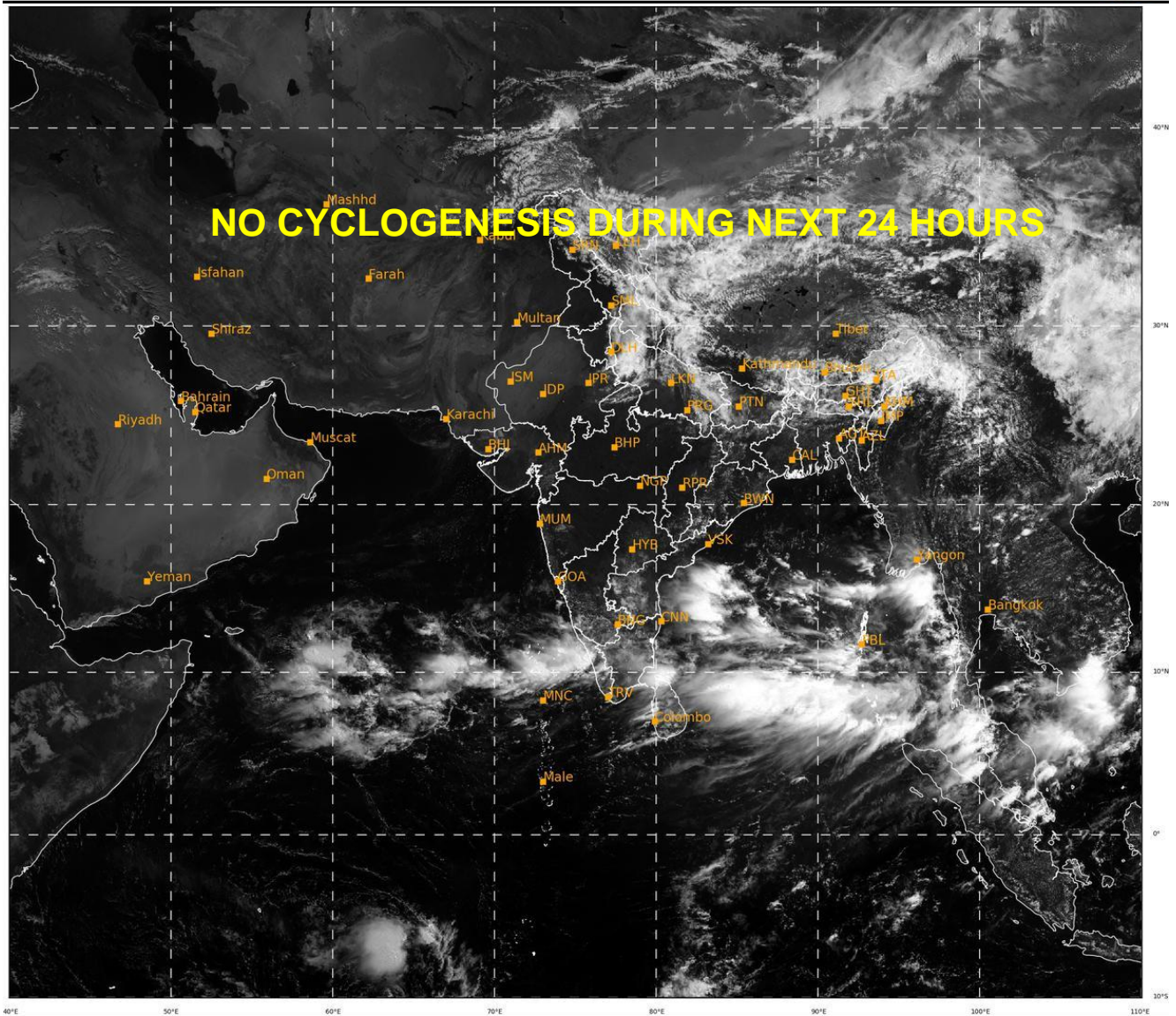
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THE MADDEN JULIAN INDEX (MJO) CURRENTLY LIES IN PHASE 5 WITH AMPLITUDE MORE THAN 1 AND WILL CONTINUE IN SAME PHASE DURING NEXT 2 DAYS. THEREAFTER, IT WILL MOVE TO PHASE 6 WITH AMPLITUDE BECOMING LESS THAN 1 DURING SUBSEQUENT 3 DAYS. THUS, MJO IS CONDUCIVE FOR ENHANCED CONVECTION OVER THE BAY OF BENGAL (BOB) DURING NEXT 3 DAYS. THE TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS MORE THAN 100 KJ/CM² OVER MAJOR PARTS OF BOB. IT IS SLIGHTLY DECREASING OVER EXTREME NORTH BOB AND ALONG & OFF ANDHRA, ODISHA, WEST BENGAL COASTS. SEA SURFACE TEMPERATURE (SST) IS AROUND 30-31°C OVER MAJOR PARTS OF BOB.

EASTERLY WINDS ARE PREVAILING IN THE UPPER LEVEL. UPPER TROPOSPHERIC RIDGE RUNS ALONG 22.0°N. A ZONE OF POSITIVE VORTICITY 30-40 X 10⁻⁶ S⁻¹ IS PREVAILING OVER SOUTH ANDAMAN SEA & ADJOINING SOUTHEAST BOB WITH VERTICAL EXTENSION UPTO 200 HPA LEVEL. TWO ZONES OF POSITIVE CONVERGENCE ZONE (10-15 X 10⁻⁵ S⁻¹) LAY OVER NORTH ANDAMAN SEA & CENTRAL PARTS OF BOB. AN EAST-WEST ORIENTED ZONE OF POSITIVE UPPER LEVEL DIVERGENCE (20-30 X 10⁻⁵ S⁻¹) LAY OVER SOUTHERN PARTS OF BOB. THE VERTICAL WIND SHEAR IS MODERATE (VWS) (15-20 KTS) OVER MAJOR PARTS OF ANDAMAN SEA, CENTRAL & NORTH BOB TO THE NORTH OF 12°N.

MOST OF THE NUMERICAL MODELS INCLUDING IMD GFS, NCEP GFS, ECMWF AND NCEP, ARE INDICATING FORMATION OF A LOW PRESSURE AREA OVER NORTH ANDAMAN SEA AND ADJOINING EASTCENTRAL BOB AROUND 22ND WITH NORTHWESTWARDS MOVEMENT AND INTENSIFICATION OF THE SYSTEM UPTO VERY SEVERE CYCLONIC STORM CATEGORY. HOWEVER, THERE IS LARGE DIVERGENCE AMONG VARIOUS MODELS W.R.T. LANDFALL LOCATION. THE MEAN MODEL GUIDANCE INDICATES THAT THE SYSTEM WOULD REACH ODISHA-WEST BENGAL COASTS AROUND 26TH MORNING.

IN VIEW OF FAVOURABLE ENVIRONMENTAL FEATURES AND AVAILABLE MODEL GUIDANCE, IT IS INFERRED THAT **A LOW PRESSURE AREA IS VERY LIKELY TO FORM OVER NORTH ANDAMAN SEA AND ADJOINING EASTCENTRAL BOB AROUND 22ND MAY, 2021 WITH MODERATE TO HIGH PROBABILITY OF FORMATION OF DEPRESSION AROUND 23RD. THE SYSTEM IS VERY LIKELY TO INTENSIFY INTO A CYCLONIC STORM BY 24TH. IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND REACH NEAR ODISHA - WEST BENGAL COASTS AROUND 26TH MAY MORNING.** CONTINUOUS WATCH IS BEING MAINTAINED OVER ANDAMAN SEA AND ADJOINING SOUTHEAST BOB REGION FOR PROBABLE CYCLOGENESIS (DEVELOPMENT OF DEPRESSION) AROUND 23RD MAY.



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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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