



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

**DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 20.05.2021**

**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 20.05.2021 BASED ON 0300 UTC OF 20.05.2021.**

**A. STATUS OVER NORTH INDIAN OCEAN  
BAY OF BENGAL:**

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

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

**ARABIAN SEA:**

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHWEST & ADJOINING EASTCENTRAL ARABIAN SEA OFF KARNATAKA COAST.

**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

**B. LOW PRESSURE AREA OVER SOUTHWEST UTTAR PRADESH (REMNANT OF ESCS  
TAUKTAE)**

YESTERDAY'S DEPRESSION OVER SOUTH RAJASTHAN AND ADJOINING GUJARAT REGION WEAKENED INTO A WELL MARKED LOW PRESSURE AREA IN THE SAME EVENING AT 1200 UTC (19<sup>TH</sup>MAY) OVER EAST RAJASTHAN & ADJOINING WEST MADHYA PRADESH. MOVING FURTHER NORTHEASTWARDS, IT WEAKENED INTO A LOW PRESSURE AREA (LPA) OVER NORTHWEST MADHYA PRADESH & NEIGHBOURHOOD IN THE MORNING (0000 UTC) OF TODAY, THE 20<sup>TH</sup> MAY, 2021. AT 0300 UTC OF TODAY, IT LAY AS AN LPA OVER SOUTHWEST UTTAR PRADESH.

AS PER SATELLITE IMAGERY BASED ON 0300 UTC OF 20<sup>TH</sup> MAY, SCATTERED LOW &

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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MEDIUM CLOUDS WITH EMBEDDED ISOLATED WEAK TO MODERATE CONVECTION LAY OVER EXTREME NORTHEAST RAJASTHAN ADJOINING NORTHWEST MADHYA PRADESH, EAST HARYANA, DELHI, NORTHWEST UTTAR PRADESH.

OBSERVED TRACK OF EXTERMELY SEVERE CYCLONIC STORM TAUKTAE IS ATTACHED HEREWITH. AS THE SYSTEM IS OVER LAND, THIS IS LAST UPDATE IN ASSOCIATION WITH REMNANT OF TAUKTAE IN THIS BULLETIN.

### REMARKS FOR THE EXPECTED SYSTEM OVER BOB:

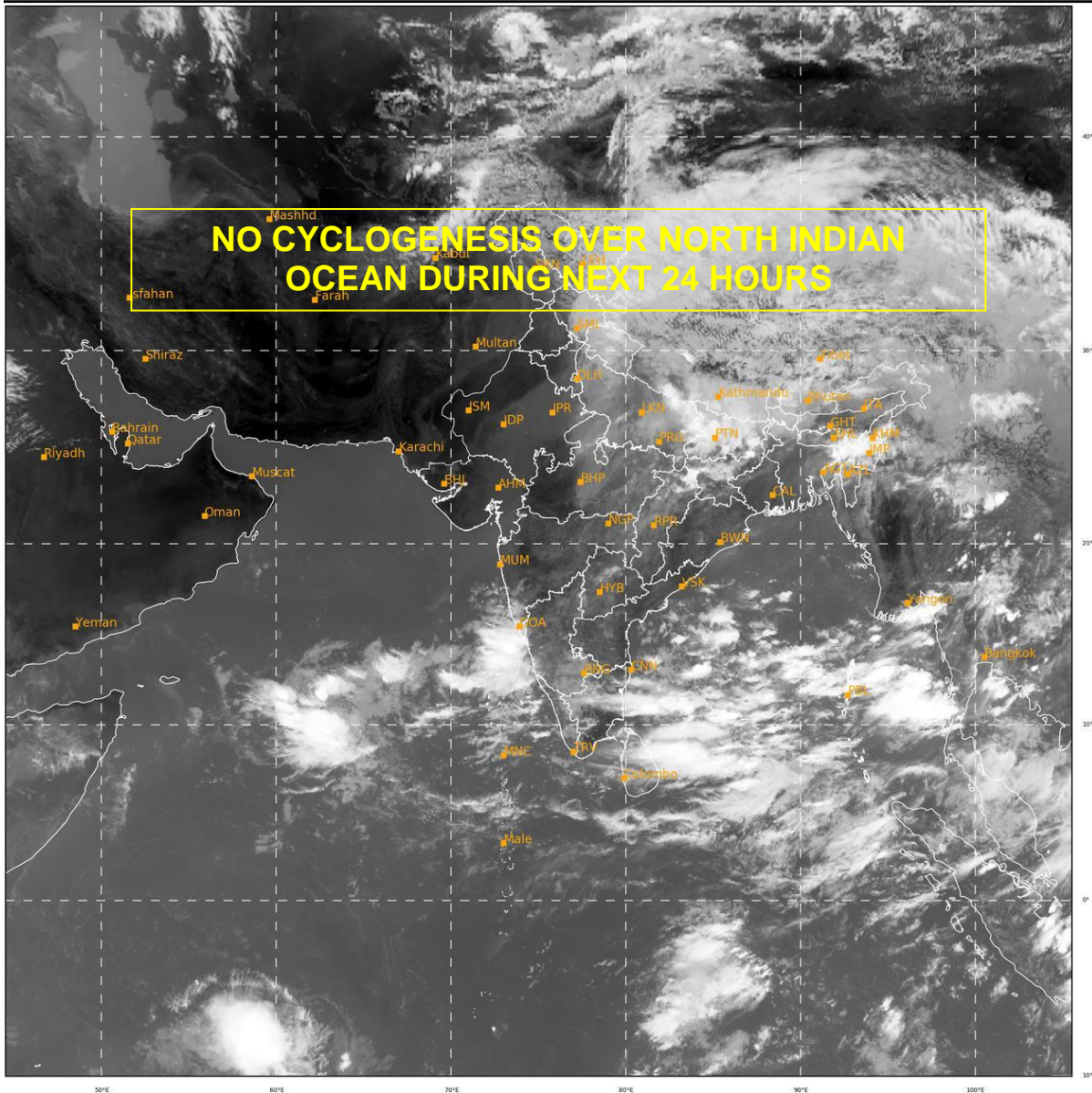
SOUTHWEST MONSOON IS LIKEY TO ADVANCE OVER SOUTH ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL AROUND 21<sup>ST</sup> MAY. IN ASSOCIATION WITH THIS, THE SOUTHWESTERLY CROSS EQUATORIAL FLOW IS LIKELY TO STRENGTHEN AND DEEPEN DURING 21<sup>ST</sup>-24<sup>TH</sup> MAY AND HENCE THE CONVECTION IS LIKELY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

THE MADDEN JULIAN INDEX (MJO) CURRENTLY LIES IN PHASE 4 WITH AMPLITUDE MORE THAN 1. THEREAFTER, IT WILL MOVE TO PHASE 5 AND CONTINUE IN SAME PHASE WITH AMPLITUDE REMAINING MORE THAN 1 DURING SUBSEQUENT 4 DAYS. THUS, MJO IS CONDUCIVE FOR ENHANCED CONVECTION OVER THE BAY OF BENGAL (BOB) DURING NEXT 5 DAYS. THE TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS MORE THAN 100 KJ/CM<sup>2</sup> 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<sup>0</sup>C OVER MAJOR PARTS OF BOB.

EASTERLY WINDS ARE PREVAILING IN THE UPPER LEVEL. UPPER TROPOSPHERIC RIDGE RUNS ALONG 22.0<sup>0</sup>N. A ZONE OF POSITIVE VORTICITY 30-40 X10<sup>-6</sup> S<sup>-1</sup> IS PREVAILING OVER SOUTH ANDAMAN SEA & ADJOINING SOUTHEAST BOB WITH VERTICAL EXTENSION UPTO 200 HPA LEVEL. A NORTH-SOUTH ORIENTED POSITIVE CONVERGENCE ZONE (10 X 10<sup>-5</sup> S<sup>-1</sup>) PERSISTS OVER CENTRAL PARTS OF BOB. AN EAST-WEST ORIENTED ZONE OF POSITIVE UPPER LEVEL DIVERGENCE (10-20 X 10<sup>-5</sup> S<sup>-1</sup>) 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<sup>0</sup>N.

MOST OF THE NUMERICAL MODELS INCLUDING IMD GFS, NCEP GFS, ECMWF AND NCUM, ARE INDICATING FORMATION OF A LOW PRESSURE AREA OVER NORTH ANDAMAN SEA AND ADJOINING EASTCENTRAL BOB AROUND 22<sup>ND</sup> WITH NORTHWESTWARDS MOVEMENT AND INTENSIFICATION OF THE SYSTEM UPTO SEVERE CYCLONIC STORM CATEGORY. THE MEAN MODEL GUIDANCE INDICATES THAT THE SYSTEM WOULD REACH ODISHA-WEST BENGAL COASTS AROUND 26<sup>TH</sup> 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 22<sup>ND</sup> MAY, 2021 WITH MODERATE TO HIGH PROBABILITY OF FORMATION OF DEPRESSION AROUND 23<sup>RD</sup>. THE SYSTEM IS VERY LIKELY TO INTENSIFY INTO A CYCLONIC STORM BY 24<sup>TH</sup>. IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND REACH NEAR ODISHA - WEST BENGAL COASTS AROUND 26<sup>TH</sup> MAY MORNING.** CONTINUOUS WATCH IS BEING MAINTAINED OVER ANDAMAN SEA AND ADJOINING SOUTHEAST BOB REGION FOR PROBABLE CYCLOGENESIS (DEVELOPMENT OF DEPRESSION) AROUND 23<sup>RD</sup> MAY.



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IMD, DELHI

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## OBSERVED TRACK OF ESCS TAUKTAE (14-19 MAY, 2021)



DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)

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