



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

**DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 22.05.2021**

**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 22.05.2021 BASED ON 0300 UTC OF 22.05.2021.**

**BAY OF BENGAL:**

A LOW PRESSURE AREA HAS FORMED OVER **EASTCENTRAL BOB TODAY THE 22<sup>ND</sup> MAY 2021 MORNING (0300 UTC)**. IT IS VERY LIKELY TO CONCENTRATE INTO A DEPRESSION OVER EASTCENTRAL BAY OF BENGAL BY TOMORROW, THE 23<sup>RD</sup> MAY MORNING. IT IS VERY LIKELY MOVE NORTH-NORTHWESTWARDS, INTENSIFY INTO A **CYCLONIC STORM** BY 24<sup>TH</sup> MAY AND FURTHER INTO A VERY SEVERE CYCLONIC STORM DURING SUBSEQUENT 24 HOURS. IT WOULD CONTINUE TO MOVE NORTH-NORTHWESTWARDS, INTENSIFY FURTHER AND REACH NORTH BAY OF BENGAL NEAR WEST BENGAL AND ADJOINING NORTH ODISHA & BANGLADESH COASTS AROUND 26<sup>TH</sup> MAY MORNING. IT IS VERY LIKELY TO CROSS WEST BENGAL AND ADJOINING NORTH ODISHA & BANGLADESH COASTS AROUND EVENING OF 26<sup>TH</sup> MAY.

THE MAXIMUM SUSTAINED WIND SPEED IS 10-15 KMPH GUSTING TO 25 KMPH AROUND SYSTEM CENTRE. SEA CONDITION IS ROUGH TO VERY ROUGH. THE ESTIMATED CENTRAL PRESSURE IS 1003 HPA.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER BAY OF BENGAL (BOB) AND 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
<b>MODERATE</b>	<b>HIGH</b>	<b>HIGH</b>	<b>HIGH</b>	<b>HIGH</b>

**ARABIAN SEA:**

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH ARABIAN SEA AND 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
<b>NIL</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>

**REMARKS:**

IN VIEW OF THE ADVANCE OF SOUTHWEST MONSOON OVER ANDAMAN SEA AND SOUTHEAST BOB, THERE IS SIGNIFICANT INCREASE IN WESTERLIES OVER THE REGION. THIS WILL FAVOUR THE INTENSIFICATION OF THE SYSTEM.

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 TILL 24<sup>TH</sup> MAY. 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/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. AN EAST-WEST ORIENTED POSITIVE VORTICITY ZONE 70-80 X10<sup>-6</sup> S<sup>-1</sup> IS PREVAILING TO THE SOUTH OF SYSTEM CENTRE OVER CENTRAL BOB WITH VERTICAL EXTENSION UPTO 200 HPA LEVEL. AN EAST-WEST ORIENTED POSITIVE CONVERGENCE ZONE (5-10 X 10<sup>-5</sup> S<sup>-1</sup>) LAY TO THE SOUTH OF SYSTEM CENTRE OVER CENTRAL BOB. AN EAST-WEST ORIENTED ZONE OF POSITIVE UPPER LEVEL DIVERGENCE (10-20 X 10<sup>-5</sup> S<sup>-1</sup>) LAY OVER CENTRAL BOB. LOW TO MODERATE VERTICAL WIND SHEAR (VWS) (10-15 KTS) IS PREVAILING OVER CENTRAL & NORTH BOB TO THE NORTH OF 12°N WHICH IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF SYSTEM.

MOST OF THE NUMERICAL MODELS INCLUDING IMD GFS, NCEP GFS, ECMWF AND NCEP, ARE INDICATING FORMATION OF DEPRESSION OVER EASTCENTRAL BOB BY 23<sup>RD</sup> WITH NORTH-NORTHWESTWARD MOVEMENT TOWARDS WEST BENGAL AND ADJOINING NORTH ODISHA & BANGLADESH COASTS. MODELS ARE HIGHLY CONVERGENT ABOUT RAPID INTENSIFICATION OF SYSTEM UPTO VERY SEVERE CYCLONIC STORM CATEGORY. HOWEVER, THERE IS DIVERGENCE AMONG VARIOUS MODELS W.R.T. LANDFALL LOCATION AND TIME. CONSIDERING THE MEAN MODEL GUIDANCE, THE SYSTEM IS EXPECTED TO REACH NORTH BAY OF BENGAL NEAR WEST BENGAL AND ADJOINING NORTH ODISHA & BANGLADESH COASTS AROUND 26<sup>TH</sup> MAY MORNING. IT IS VERY LIKELY TO CROSS WEST BENGAL AND ADJOINING NORTH ODISHA & BANGLADESH COASTS AROUND EVENING OF 26<sup>TH</sup> MAY.

IN VIEW OF HIGHLY FAVOURABLE ENVIRONMENTAL FEATURES AND AVAILABLE MODEL GUIDANCE, IT IS INFERRED WITH HIGH CONFIDENCE THAT THE LOW PRESSURE AREA OVER BOB IS VERY LIKELY TO CONCENTRATE INTO A DEPRESSION OVER EASTCENTRAL BAY OF BENGAL BY 23<sup>RD</sup> MAY MORNING. IT IS VERY LIKELY MOVE NORTH-NORTHWESTWARDS, INTENSIFY INTO A **CYCLONIC STORM** BY 24<sup>TH</sup> MAY AND FURTHER INTO A VERY SEVERE CYCLONIC STORM DURING SUBSEQUENT 24 HOURS. IT WOULD CONTINUE TO MOVE NORTH-NORTHWESTWARDS, INTENSIFY FURTHER AND REACH NORTH BAY OF BENGAL NEAR WEST BENGAL – NORTH ODISHA COASTS AROUND 26<sup>TH</sup> MAY MORNING. IT IS VERY LIKELY TO CROSS WEST BENGAL AND ADJOINING NORTH ODISHA & BANGLADESH COASTS AROUND EVENING OF 26<sup>TH</sup> MAY.

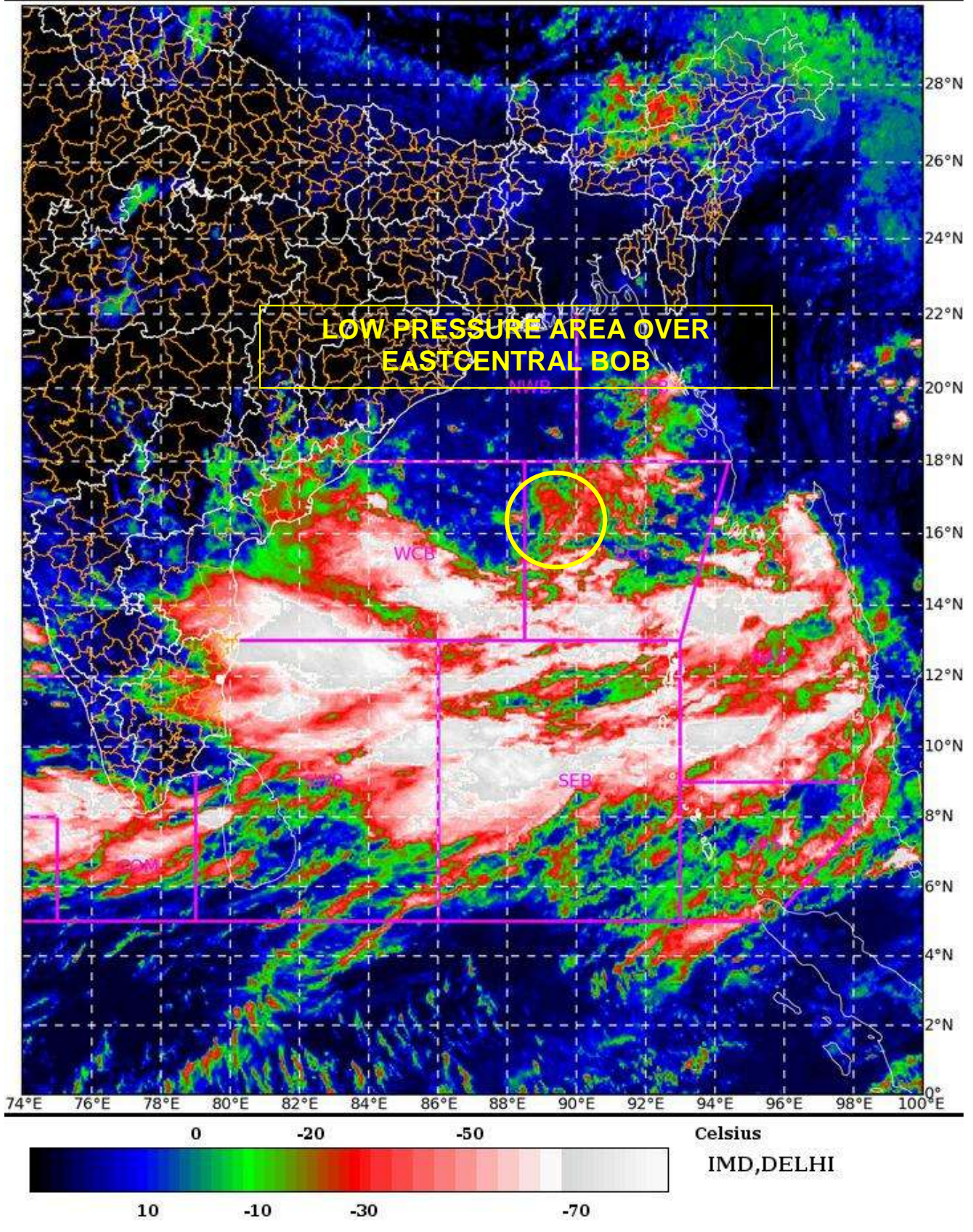
SAT : INSAT-3D IMG

22-05-2021/(0430 to 0457) GMT

IMG\_TIR1\_TEMP 10.8 um

22-05-2021/(1000 to 1027) IST

L1C Mercator



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