



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 05.12.2022

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0700 UTC OF 05.12.2022 BASED ON 0300 UTC OF 05.12.2022.

BAY OF BENGAL:

A LOW PRESSURE AREA FORMED OVER SOUTH ANDAMAN SEA AND NEIGHBOURHOOD AT 0000 UTC OF TODAY THE 5TH DEC 2022 AND PERSISTED OVER THE SAME REGION AT 0300 UTC OF TODAY . IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND CONCENTRATE INTO A DEPRESSION OVER SOUTHEAST BAY OF BENGAL BY 06TH DECEMBER EVENING. THEREAFTER, IT IS LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS, INTENSIFY FURTHER GRADUALLY INTO A CYCLONIC STORM AND REACH SOUTHWEST BAY OF BENGAL NEAR NORTH TAMIL NADU-PUDUCHERRY & ADJOINING SOUTH ANDHRA PRADESH COASTS BY 08TH DECEMBER MORNING.

AS PER INSAT 3D IMAGARY CLOUDS ASSOCIATED WITH LOW PRESSURE AREA IS BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER ANDAMAN SEA ADJOINING SOUTHEAST BAY OF BENGAL. CONVECTION HAS INCREASED DURING LAST 6 HRS .MINIMUM CLOUD TOP TEMPERATURE (CTT) -93⁰ C.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL, ANDAMAN SEA AND MODERATE TO INTENSE CONVECTION LAY OVER SOUTHWEST BAY OF BENGAL.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
LOW	HIGH	HIGH	HIGH	LOW

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTH ARABIAN SEA LAKSHADWEEP ISLANDS AREA AND COMORIN AREA.

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:

THE MADDEN JULIAN OSCILLATION (MJO) INDEX CURRENTLY LIES IN PHASE 2 WITH AMPLITUDE LESS THAN 1. IT WILL CONTINUE IN SAME PHASE FOR NEXT 2 DAYS AND THEN MOVE TO PHASE 3 FROM 7TH AND REMAIN THERE TILL 9TH DECEMBER. MJO INDEX IS THUS CONDUCIVE FOR ENHANCEMENT OF CONVECTIVE ACTIVITY OVER BAY OF BENGAL. SEA SURFACE TEMPERATURE (SST) IS AROUND 28-29⁰C OVER ANDAMAN SEA AND INCREASE TO 29⁰C OVER SOUTHEAST AND ADJOINING PARTS CENTRAL BOB, SOUTHWEST BOB AND OFF TAMILNADU AND SRI LANKA COAST. THUS ,CONDUCIVE FOR FURTHER INTENSIFICATION OF THE SYSTEM. ALSO THE OCEAN HEAT CONTENT (OHC) IS 80-100 KJ/CM² OVER SOUTH ANDAMAN SEA AND ADJOINING SOUTHEAST BOB AND LESS THAN 50 KJ/CM² OVER WESTCENTRAL AND SOUTHWEST BOB ALONG EAST COAST OF INDIA.

LOW LEVEL VORTICITY IS AROUND 50-60 X10⁻⁶ S⁻¹ OVER SOUTH ANDAMAN SEA AND ADJOINING SOUTHEAST BOB. LOW LEVEL CONVERGENCE IS AROUND 10X10⁻⁵ S⁻¹ OVER SOUTH ANDAMAN SEA. UPPER LEVEL DIVERGENCE IS AROUND 20 X10⁻⁵ S⁻¹ OVER SOUTH ANDAMAN SEA.

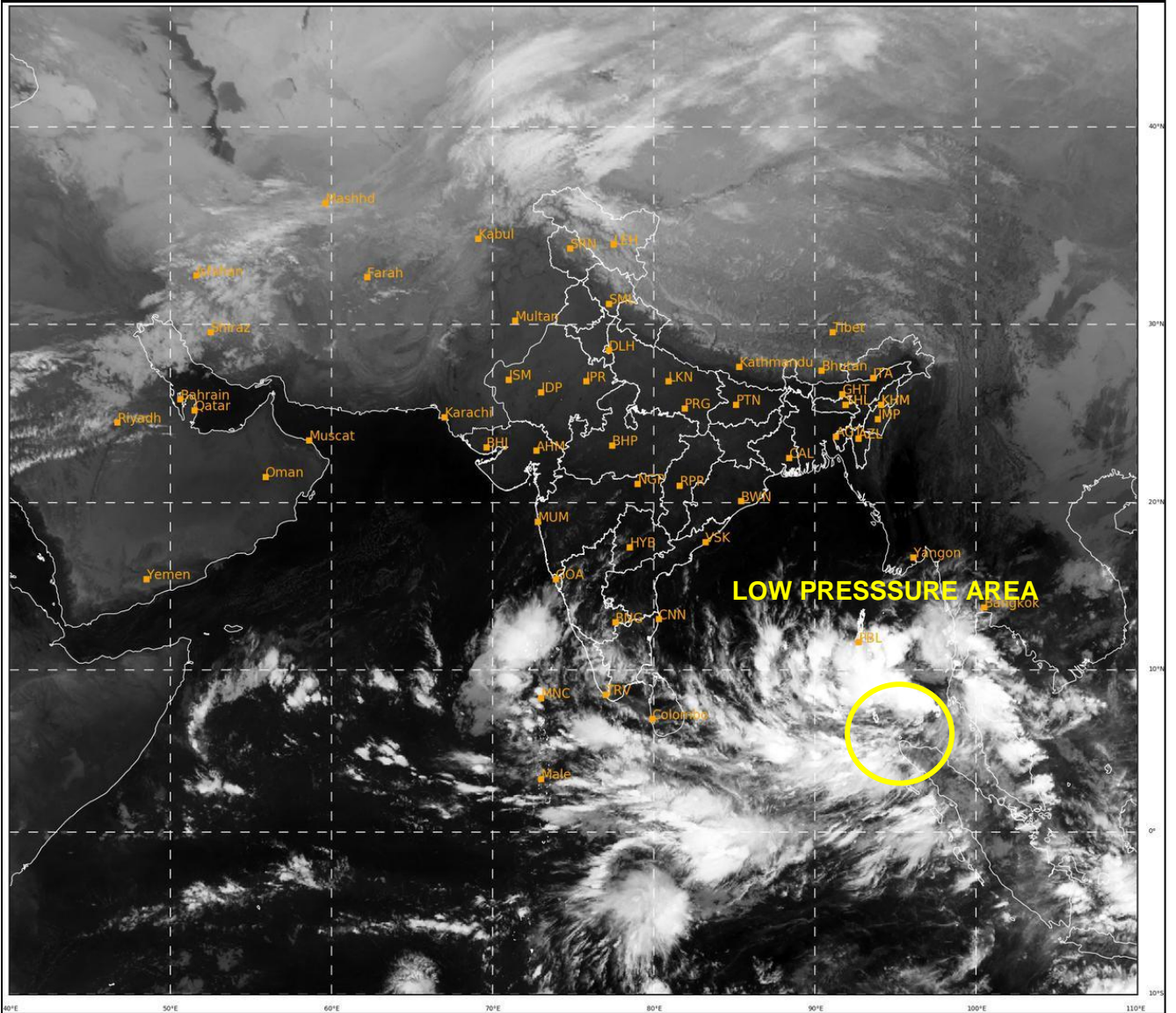
WIND SHEAR IS LOW (5-10 KNOTS) OVER SOUTH ANDAMAN SEA AND MODERATE (10-20 KNOTS) OVER SOUTHEAST BOB, ALONG THE EXPECTED TRACK. THERE EXISTS A UPPER TROPOSPHERIC RIDGE ALONG 14.0°N OVER THE BOB. UNDER THE INFLUENCE OF EAST SOUTHEASTERLY STEERING WINDS AT MIDDLE TROPOSPHERIC LEVEL, THE LPA IS PRESENTLY STEERED IN THE DIRECTION OF WEST-NORTHWESTWARDS .

MOST OF THE MODELS ARE INDICATING DEVELOPMENT OF DEPRESSION OVER SOUTHEAST BOB BY EVENING OF 6TH DECEMBER . MODELS ARE ALSO INDICATING THAT THE SYSTEM WOULD MOVE WEST-NORTHWESTWARDS AND CONCENTRATE INTO A DEPRESSION OVER SOUTHEAST BAY OF BENGAL BY 06TH DECEMBER EVENING. THEREAFTER, IT IS LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS, INTENSIFY FURTHER GRADUALLY INTO A CYCLONIC STORM AND REACH SOUTHWEST BAY OF BENGAL NEAR NORTH TAMIL NADU-PUDUCHERRY & ADJOINING SOUTH ANDHRA PRADESH COASTS BY 08TH DECEMBER MORNING.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE LOW PRESSURE AREA OVER SOUTH ANDAMAN SEA AND NEIGHBOURHOOD IS LIKELY TO MOVE MOVE WEST-NORTHWESTWARDS AND CONCENTRATE INTO A DEPRESSION OVER SOUTHEAST BAY OF BENGAL BY 06TH DECEMBER EVENING. THEREAFTER, IT IS LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS, INTENSIFY FURTHER GRADUALLY INTO A CYCLONIC STORM AND REACH SOUTHWEST BAY OF BENGAL NEAR NORTH TAMIL NADU-PUDUCHERRY & ADJOINING SOUTH ANDHRA PRADESH COASTS BY 08TH DECEMBER MORNING.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator

05-12-2022/(0300 to 0326) GMT
05-12-2022/(0830 to 0856) IST



510

941

IMD, DELHI

Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very Intense: : Less than -70°C
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION): NIL: 0%, LOW: 1-33%, , MODERATE: 34-66% AND HIGH: 67-100%
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