



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 14.11.2021

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0700 UTC OF 14.11.2021 BASED ON 0300 UTC OF 14.11.2021.

BAY OF BENGAL:

YESTERDAY'S LOW PRESSURE AREA OVER SOUTH ANDAMAN SEA & ADJOINING THAILAND COAST MOVED SLIGHTLY WEST-NORTHWESTWARDS AND LAY OVER CENTRAL PARTS OF ANDAMAN SEA AT 0000 UTC OF TODAY THE 14TH NOVEMBER 2021. IT PERSISTED OVER THE SAME REGION AT 0300 UTC. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND BECOME WELL MARKED OVER NORTH ANDAMAN SEA & ADJOINING SOUTHEAST BAY OF BENGAL BY 15TH NOVEMBER. THEREAFTER IT IS LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS ACROSS EAST-CENTRAL & ADJOINING SOUTHEAST BAY OF BENGAL, CONCENTRATE INTO A DEPRESSION OVER WEST-CENTRAL BAY OF BENGAL BY 17TH NOVEMBER AND REACH NEAR SOUTH ANDHRA PRADESH COAST AROUND 18TH NOVEMBER 2021.

AS PER SATELLITE IMAGERY AT 0300 UTC, SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER ANDAMAN SEA, TENASSERIM COAST, SOUTH THAILAND AND NEIGHBOURHOOD IN ASSOCIATION WITH THE LOW PRESSURE AREA OVER CENTRAL PARTS OF ANDAMAN SEA & NEIGHBOURHOOD. MINIMUM CLOUD TOP TEMPERATURE (CTT) MINUS 88°C .

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION ALSO LAY OVER SOUTHWEST BAY OF BENGAL. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER CENTRAL & SOUTHEAST 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
NIL	LOW	MODERATE	HIGH	HIGH

ARABIAN SEA:

A LOW PRESSURE AREA IS LIKELY TO FORM OVER EASTCENTRAL ARABIAN SEA OFF SOUTH MAHARASHTRA -GOA COAST AROUND 17TH.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST ADJOINING EASTCENTRAL ARABIAN SEA & LAKSHADWEEP 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	LOW

REMARKS:**(A): LOW PRESSURE AREA OVER ANDAMAN SEA:**

SEA SURFACE TEMPERATURE (SST) IS ABOUT 29-30°C OVER SOUTHEAST BOB AND ANDAMAN SEA. TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 100-120 KJ/CM² OVER PARTS OF EASTERN EQUATORIAL INDIAN OCEAN AND ADJOINING SOUTHEAST BOB & SOUTH ANDAMAN SEA. MADDEN JULIAN OSCILLATION INDEX IS IN PHASE 4 WITH AMPLITUDE CLOSE TO 1. IT WILL CONTINUE IN SAME PHASE WITH AMPLITUDE REMAINING CLOSE TO 1 DURING NEXT 5 DAYS. THE POSITIVE LOW LEVEL VORTICITY HAS DECREASED DURING PAST 24 HOURS AND IS ABOUT ($50 \times 10^{-6} \text{ S}^{-1}$) OVER THAILAND AND ADJOINING SOUTH ANDAMAN SEA TO THE SOUTHEAST OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. NORTH-SOUTH ORIENTED EXTENDED ZONE OF POSITIVE LOW LEVEL CONVERGENCE OF $05-10 \times 10^{-5} \text{ S}^{-1}$ LAY OVER SOUTH ANDAMAN SEA & ADJOINING THAILAND AND SOUTHEAST BOB. AN EXTENDED ZONE OF POSITIVE UPPER LEVEL DIVERGENCE IS AROUND $05-10 \times 10^{-5} \text{ S}^{-1}$ OVER SOUTH ANDAMAN SEA AND ADJOINING THAILAND AND PARTS OF SOUTHEAST BOB. WIND SHEAR IS LOW (05-15 KT) OVER ANDAMAN SEA AND ENTIRE CENTRAL BOB. HOWEVER, OVER SOUTH ANDAMAN SEA, NEAR THE SYSTEM CENTRE WIND SHEAR IS 15-25 KT WHICH IS NOT FAVOURING ORGANISATION OF CLOUDS. AS THE SYSTEM WILL MOVE WEST-NORTHWESTWARDS, IT WILL ENTER INTO LOW WIND SHEAR ZONE FROM TOMORROW. HENCE, WILL FAVOUR FURTHER ORGANIZATION OF THE SYSTEM. THE UPPER TROPOSPHERIC RIDGE LAY NEAR 18°N IN ASSOCIATION WITH ANTICYCLONIC CIRCULATION OFF MYANMAR COAST. UNDER THESE SEA AND ENVIRONMENTAL CONDITIONS, THERE WAS NO SIGNIFICANT CHANGE IN INTENSITY OF YESTERDAY'S LOW PRESSURE AREA OVER SOUTH ANDAMAN SEA AND ADJOINING THAILAND COAST MOVED SLIGHTLY WEST-NORTHWESTWARDS AND LAY OVER CENTRAL PARTS OF ANDAMAN SEA.

SOME OF THE MODELS (NCUM GROUP AND ECMWF) ARE INDICATING THAT THE LOW PRESSURE AREA OVER ANDAMAN SEA WOULD MOVE WEST-NORTHWESTWARDS, CONCENTRATE INTO A DEPRESSION OVER NORTH ANDAMAN SEA DURING 16TH-17TH NOVEMBER AND REACH ANDHRA PRADESH COAST AROUND 18TH. HOWEVER, IMD GFS IS NOT INDICATING ANY INTENSIFICATION OF THIS SYSTEM. NEPS IS INDICATING INTENSIFICATION UPTO CYCLONIC STORM STAGE AND ABOVE. THUS, THERE IS LARGE VARIATION AMONG MODELS W.R.T. INTENSIFICATION OF THE SYSTEM.

IN VIEW OF ALL THE ABOVE, THE EXISTING LOW PRESSURE AREA OVER CENTRAL PARTS OF ANDAMAN SEA IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND BECOME WELL MARKED OVER NORTH ANDAMAN SEA & ADJOINING SOUTHEAST BAY OF BENGAL BY 15TH NOVEMBER. THEREAFTER IT IS LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS ACROSS EAST-CENTRAL & ADJOINING SOUTHEAST BAY OF BENGAL, CONCENTRATE INTO A DEPRESSION OVER WEST-CENTRAL BAY OF BENGAL BY 17TH NOVEMBER AND REACH NEAR SOUTH ANDHRA PRADESH COAST AROUND 18TH NOVEMBER 2021.

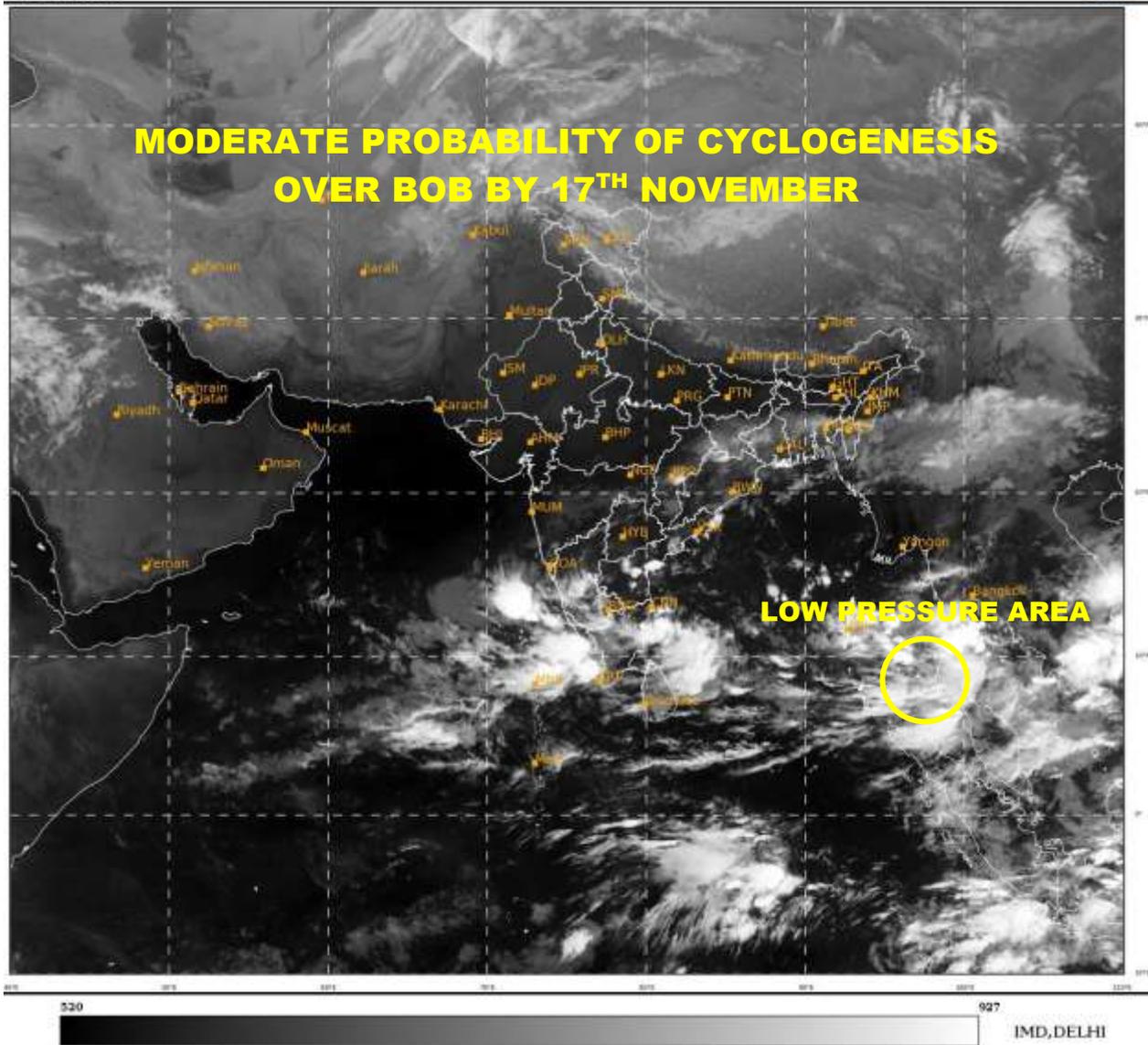
(B): CIRCULATION OVER SOUTHEAST ARABIAN SEA

SEA SURFACE TEMPERATURE (SST) IS ABOUT 28-29°C OVER SOUTHEAST & ADJOINING EASTCENTRAL ARABIAN SEA. TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 60-80 KJ/CM² OVER THE SAME REGION. THE POSITIVE LOW LEVEL VORTICITY HAS IS ABOUT ($30-400 \times 10^{-6} \text{ S}^{-1}$) OVER SOUTHEAST AND ADJOINING EASTCENTRAL AS WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. POSITIVE LOW LEVEL CONVERGENCE OF $05-10 \times 10^{-5} \text{ S}^{-1}$ LAY OVER SOUTHEAST AS. POSITIVE UPPER LEVEL DIVERGENCE IS AROUND $30 \times 10^{-5} \text{ S}^{-1}$ OVER SOUTHEAST AS. WIND SHEAR IS MODERATE (10-20 KT) OVER SOUTHEAST & ADJOINING EASTCENTRAL AS.

MODELS LIKE ECMWF, NCUM & NEPS ARE INDICATING FORMATION OF DEPRESSION OVER EASTCENTRAL ARABIAN SEA AROUND 18TH WITH GRADUAL INITIAL NORTHWARDS & THEN WESTWARDS MOVEMENT AND WEAKENING OVER THE SAME REGION BY 20TH NOVEMBER.

UNDER THESE CONDITIONS A LOW PRESSURE AREA IS LIKELY TO FORM OVER EASTCENTRAL ARABIAN SEA OFF SOUTH MAHARASHTRA - GOA COASTS AROUND 17TH. THERE IS ALSO LOW PROBABILITY OF IT'S INTENSIFICATION AROUND 18TH

NEXT MESSAGE WILL BE ISSUED AT 0600 UTC OF 15TH NOVEMBER, 2021.



LPA: LOW PRESSURE AREA