



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 17.11.2021

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 17.11.2021 BASED ON 0300 UTC OF 17.11.2021.

BAY OF BENGAL:

YESTERDAY'S LOW PRESSURE AREA (LPA) OVER SOUTHEAST BAY OF BENGAL (BOB) MOVED FURTHER WESTWARDS, LAY OVER SOUTHEAST & ADJOINING SOUTHWEST BOB AT 0000 UTC OF TODAY THE 17TH NOVEMBER 2021 AND PERSISTED OVER THE SAME REGION AT 0300 UTC. FURTHER MOVING WESTWARDS, IT LAY OVER SOUTHEAST BOB AT 0300 UTC. IT IS LIKELY TO MOVE NEARLY WESTWARDS AND REACH WESTCENTRAL & ADJOINING SOUTHWEST BAY OF BENGAL OFF SOUTH ANDHRA PRADESH AND ADJOINING NORTH TAMIL NADU COASTS BY TOMORROW, THE 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 WESTCENTRAL AND ADJOINING SOUTH BOB. MINIMUM CLOUD TOP TEMPERATURE (CTT) REDUCED DURING PAST 24 HOURS AND HAD BEEN MINUS 90°C AT 0300 UTC.

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

ARABIAN SEA:

YESTERDAY'S LOW PRESSURE AREA OVER EASTCENTRAL ARABIAN SEA (AS) OFF KARNATAKA COAST MOVED SLIGHTLY NORTHWESTWARDS AND LAY OVER EASTCENTRAL AS OFF GOA-KARNATAKA COASTS AT 0000 UTC OF TODAY, THE 17TH NOVEMBER 2021. FURTHER MOVING NORTHWESTWARDS, IT LAY OVER EASTCENTRAL AS OFF GOA- SOUTH MAHARASHTRA COASTS AT 0300 UTC. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS & BECOME MORE MARKED DURING NEXT 48 HOURS.

AS PER SATELLITE IMAGERY AT 0300 UTC, SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER EASTCENTRAL AS AND NEIGHBOURHOOD. MINIMUM CTT REDUCED DURING PAST 24 HOURS AND HAD BEEN MINUS 90°C AT 0300 UTC.

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	LOW	NIL

REMARKS:

(A): LOW PRESSURE AREA OVER SOUTHEAST & ADJOINING SOUTHWEST BOB:

SEA SURFACE TEMPERATURE (SST) IS ABOUT 30-32°C OVER SOUTHEAST. TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 80-100 KJ/CM² OVER CENTRAL PARTS OF SOUTH BOB. HOWEVER, IT IS DECREASING OVER WESTCENTRAL BOB AND OFF NORTH ANDHRA PRADESH AND ADJOINING SOUTH ODISHA & NORTH TAMILNADU COASTS. MADDEN JULIAN OSCILLATION INDEX IS IN PHASE 4 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE IN SAME PHASE WITH AMPLITUDE REMAINING MORE THAN 1 DURING NEXT 4 DAYS. THEREAFTER, THE AMPLITUDE WILL GRADUALLY DECREASE WITH PAHSE REMAINING THE SAME. THE POSITIVE LOW LEVEL VORTICITY IS THE SAME ABOUT (50-60 X10⁻⁶ S⁻¹) OVER CENTRAL PARTS OF SOUTH BOB WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. AN EXTENDED ZONE OF POSITIVE LOW LEVEL CONVERGENCE OF 05-20 X10⁻⁵ S⁻¹ LAY OVER CENTRAL PARTS OF SOUTH BOB AND ADJOINING EQUATORIAL INDIAN OCEAN. POSITIVE UPPER LEVEL DIVERGENCE IS AROUND 05-10X10⁻⁵ S⁻¹ OVER EASTCENTRAL & SOUTH BOB AND ADJOINING EQUATORIAL INDIAN OCEAN. ANOTHER ZONE OF POSITIVE DIVERGENCE AROUND 30 X10⁻⁵ S⁻¹ IS SEEN TO THE WEST OF SYSTEM CENTRE OVER SOUTHWEST BOB. VERTICAL WIND SHEAR IS LOW TO MODERATE (15-20 KTS) OVER CENTRAL PARTS OF SOUTH BOB. THE UPPER TROPOSPHERIC RIDGE LAY NEAR 17.5⁰N IN ASSOCIATION WITH ANTICYCLONIC CIRCULATION OFF MYANMAR COAST. UNDER THESE OCEANIC AND ENVIRONMENTAL CONDITIONS, THERE WAS NO SIGNIFICANT CHANGE IN INTENSITY OF THE LOW PRESSURE AREA OVER SOUTHEAST BOB.

MOST OF THE MODELS (IMD GFS, NCEP GFS, GEFS, NCUM, ECMWF DETERMINISTIC AND ENSEMBLE) ARE INDICATING THAT THE LOW PRESSURE AREA OVER SOUTHEAST BOB WOULD MOVE NEARLY WESTWARDS AND REACH WESTCENTRAL & ADJOINING SOUTHWEST BAY OF BENGAL OFF SOUTH ANDHRA PRADESH AND ADJOINING NORTH TAMIL NADU COASTS ON 18TH NOVEMBER 2021. NO NUMERICAL MODEL IS INDICATING INTENSIFICATION OF THE SYSTEM. THUS, THERE IS GOOD AGREEMENT AMONG VARIOUS MODELS W.R.T. INTENSITY AND TRACK OF THE SYSTEM.

IN VIEW OF ALL THE ABOVE, THE LOW PRESSURE AREA OVER SOUTHEAST & ADJOINING SOUTHWEST BOB IS LIKELY TO MOVE FURTHER WESTWARDS AND REACH WESTCENTRAL & ADJOINING SOUTHWEST BAY OF BENGAL OFF SOUTH ANDHRA PRADESH AND ADJOINING NORTH TAMIL NADU COASTS BY 18TH NOVEMBER, 2021.

(B): LOW PRESSURE AREA OVER EASTCENTRAL ARABIAN SEA OFF GOA-SOUTH MAHARASHTRA COASTS

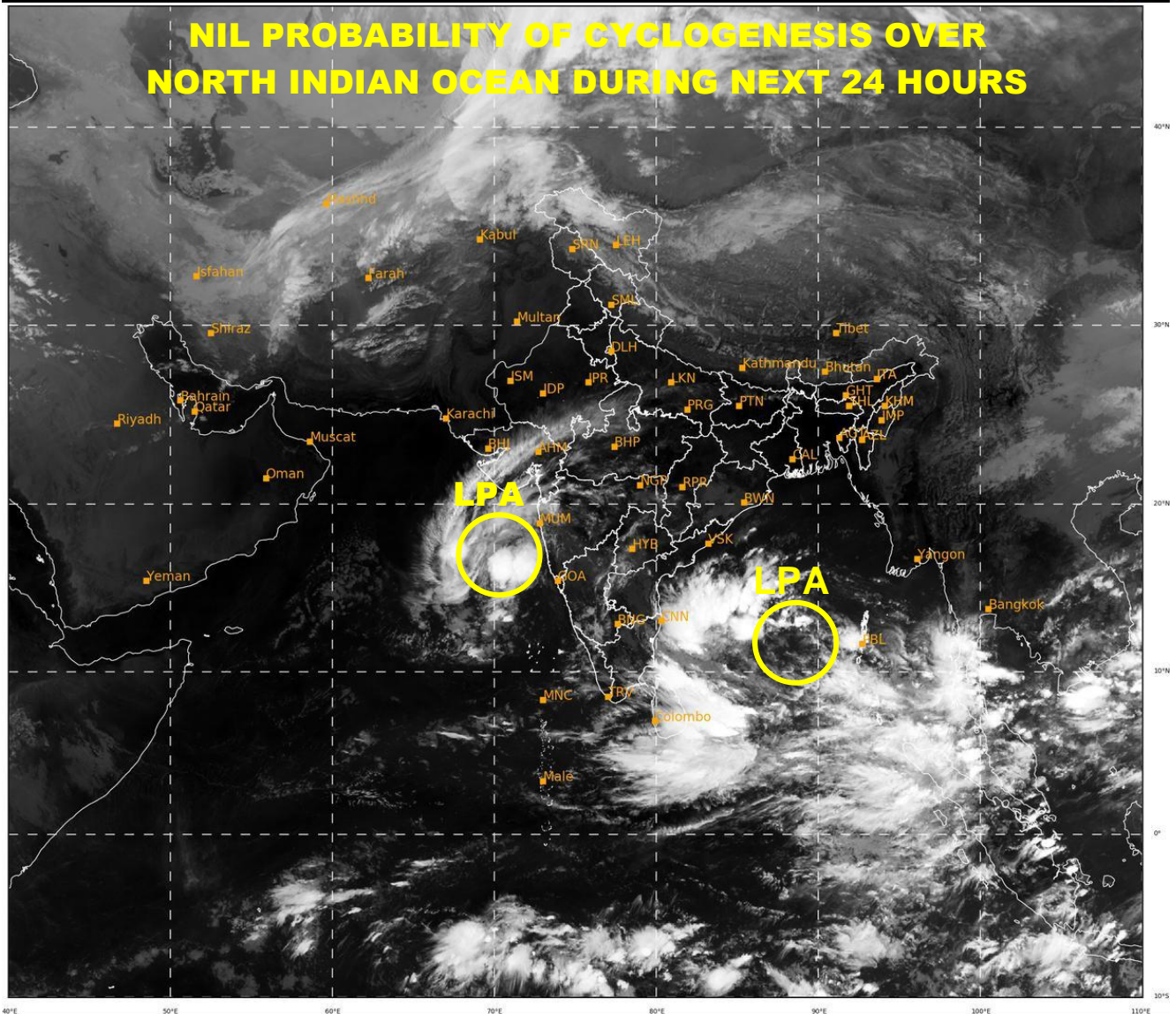
SEA SURFACE TEMPERATURE (SST) IS ABOUT 28-29°C OVER SOUTHEAST & ADJOINING EASTCENTRAL AS, BECOMING <28°C OVER WESTERN PARTS OF THE AS. TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 60-80 KJ/CM² OVER SOUTHEAST & ADJOINING EASTCENTRAL AS AND IS DECREASING TOWARDS WESTWERN PARTS OF AS. POSITIVE LOW LEVEL VORTICITY IS ABOUT (50-60 X10⁻⁶ S⁻¹) OVER SOUTHEAST AND ADJOINING EASTCENTRAL AS WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. POSITIVE LOW LEVEL CONVERGENCE OF ABOUT 20 X10⁻⁵ S⁻¹ LAY OVER SOUTHEAST AS TO THE EAST OF SYSTEM CENTRE. POSITIVE UPPER LEVEL DIVERGENCE IS THE SAME DURING PAST 24 HOURS AND IS AROUND 30X10⁻⁵ S⁻¹ OVER SOUTHEAST & ADJOINING EASTCENTRAL AS. STRONG POLEWARD OUTFLOW IS SEEN OVER THE SYSTEM AREA. WIND SHEAR IS LOW TO MODERATE (15-20 KT) OVER SOUTHEAST AS. IT IS GRADUALLY INCREASING OVER SOME AREA TO THE WEST OF SYSTEM CENTRE. UNDER THESE FAVOURABLE SEA AND ENVIRONMENTAL CONDITIONS, THE LOW PRESSURE AREA OVER SOUTHEAST AS IS LIKELY TO BECOME MORE MARKED WHILE MOVING WEST-NORTHWESTWARDS DURING NEXT 48 HOURS.

MOST OF THE MODELS LIKE IMD GFS, IMD GPP, NCUM, NEPS, NCUM (REGIONAL) AND ECMWF ARE INDICATING PERSISTENCE OF THE LOW PRESSURE AREA OVER EASTCENTRAL AS WITH VERY SLOW WEST-NORTHWESTWARD MOVEMNET DURING NEXT 4-5 DAYS. HOWEVER, NCUM GROUP OF MODELS ARE INDICATING FURTHER DEEPENING

AND HENCE MARGINAL INTENSIFICATION DURING 19TH TO 20TH NOVEMBER OVER EAST-CENTRAL AS AND MOVEMENT TOWARDS GULF OF ADEN TILL 23RD.

UNDER THESE CONDITIONS THE LOW PRESSURE AREA OVER SOUTHEAST AS OFF GOA-SOUTH MAHARASHTRA COASTS IS LIKELY TO MOVE WEST-NORTHWESTWARDS & BECOME MORE MARKED DURING NEXT 48 HOURS .

NEXT MESSAGE WILL BE ISSUED AT 0600 UTC OF 18TH NOVEMBER, 2021.



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IMD, DELHI

LPA: LOW PRESSURE AREA