



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 11.09.2021

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL OF BENGAL OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 11.09.2021 BASED ON 0300 UTC OF 11.09.2021.

BAY OF BENGAL:

UNDER THE INFLUENCE OF THE CYCLONIC CIRCULATION OVER EASTCENTRAL BAY OF BENGAL (BOB) & NEIGHBOURHOOD, A LOW PRESSURE AREA HAS FORMED OVER EASTCENTRAL & ADJOINING NORTHEAST BOB AT 0000 UTC OF 11TH SEPTEMBER AND IT PERSISTED OVER THE SAME REGION. IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND CONCENTRATE INTO A DEPRESSION OVER NORTHWEST BOB OFF NORTH ODISHA-WEST BENGAL COASTS DURING NEXT 48 HOURS. THEN IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS NORTH ODISHA AND NORTH CHHATTISGARH DURING SUBSEQUENT 2-3 DAYS.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL BAY OF BENGAL. THE MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG CEL. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER REST OF SOUTHEAST BAY OF BENGAL & 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
NIL	LOW	MODERATE	MODERATE	NIL

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOL MODERATE TO INTENSE CONVECTION LAY OVER NORTH PARTS OF EASTCENTRAL ARABIAN SEA AND ISOLATED WEAK TO MODERATE CONVECTION LAY OVER REST ARABIAN 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
NIL	NIL	NIL	NIL	NIL

REMARKS:

CONSIDERING THE SEA CONDITIONS, SEA SURFACE TEMPERATURE (SST) IS AROUND 29-30°C OVER CENTRAL & NORTH BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 80-100 KJ/CM² OVER CENTRAL & NORTH BOB AND >100 KJ/CM² OVER NORTHWEST BOB. MADDEN JULIAN OSCILLATION (MJO) INDEX IS CURRENTLY IN PHASE 3 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE IN SAME PHASE WITH AMPLITUDE REMAINING MORE THAN 1 DURING NEXT 5 DAYS. MJO PHASE IS FAVOURABLE FOR CYCLOGENESIS OVER THE BOB. THE ENVIRONMENTAL CONDITIONS INDICATE, INCREASE IN POSITIVE VORTICITY AT LOWER LEVEL ($150 \times 10^{-6} \text{S}^{-1}$) TO THE SOUTHEAST OF SYSTEM CENTRE OVER CENTRAL BOB DURING PAST 24 HOURS. THE POSITIVE VORTICITY ZONE IS EXTENDING UPTO 500 HPA LEVEL. A ZONE OF POSITIVE UPPER LEVEL DIVERGENCE ($30 \times 10^{-5} \text{S}^{-1}$) IS SEEN OVER WESTCENTRAL BOB TO THE SOUTHWEST OF SYSTEM CENTRE. ANOTHER ZONE OF POSITIVE UPPER LEVEL DIVERGENCE ($20 \times 10^{-5} \text{S}^{-1}$) IS SEEN OVER NORTHEAST BOB OFF MYANMAR COAST. A ZONE OF POSITIVE LOWER LEVEL CONVERGENCE $30 \times 10^{-5} \text{S}^{-1}$ IS SEEN OVER WEST CENTRAL BOB AND ANOTHER ZONE ($30 \times 10^{-5} \text{S}^{-1}$) IS SEEN OVER EASTCENTRAL BOB OFF MYANMAR COAST. THE VERTICAL WIND SHEAR (VWS) IS LOW TO MODERATE (05-15 KTS) OVER THE NORTH AND ADJOINING CENTRAL BOB. THUS, FAVOURABLE SEA AND ENVIRONMENTAL CONDITIONS (SST 29-30°C, TCHP 80-100 KJ/CM², LOW TO MODERATE VWS, POSITIVE LOW LEVEL VORTICITY LOW LEVEL CONVERGENCE AND INCREASING EQUATORWARD OUTFLOW) WILL SUPPORT THE INTENSIFICATION OF SYSTEM INTO A DEPRESSION OVER BOB.

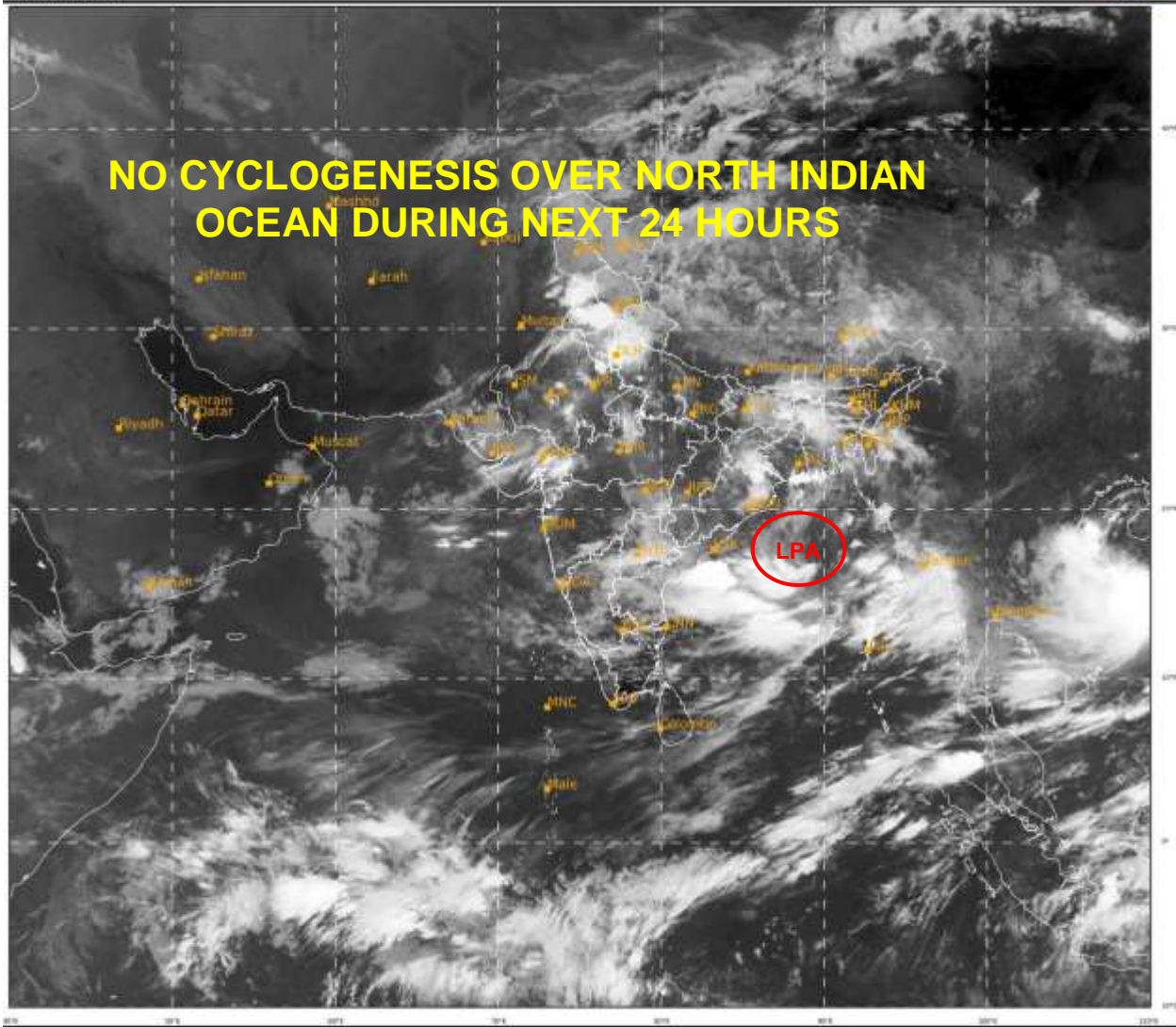
MOST OF THE MODELS LIKE IMD GFS, NCEP GFS, GEFS, ECMWF, NCUM AND NEPS ARE INDICATING FURTHER INTENSIFICATION OF THE SYSTEM DURING NEXT 48 HOURS. HOWEVER, GFS GROUP OF MODELS IS INDICATING SLIGHT INTENSIFICATION. ALL THE MODELS ARE UNANIMOUS THAT THE SYSTEM WOULD TRACK NORTHWESTWARDS TOWARDS NORTH ODISHA-WESTBENGAL COASTS. THUS, THE EXISTING ENVIRONMENTAL CONDITIONS AND MODEL GUIDANCE INDICATE MODERATE PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) OVER THE BOB DURING NEXT 48 HOURS.

SAT : INSAT-3D IMG
IMG_TIRI 10.8 um
LIC Mercator

11-09-2021/(0300 to 0326) GMT
11-09-2021/(0830 to 0856) IST



NO CYCLOGENESIS OVER NORTH INDIAN OCEAN DURING NEXT 24 HOURS



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IMD, DELHI