



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 12.09.2021

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 12.09.2021 BASED ON 0300 UTC OF 12.09.2021.

BAY OF BENGAL:

YESTERDAYS LOW PRESSURE AREA OVER EASTCENTRAL & ADJOINING NORTHEAST BAY OF BENGAL LAY AS WELL MARKED LOW PRESSURE (WML) AREA OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL AT 0000 UTC OF TODAY, THE 12TH SEPTEMBER 2021. IT PERSISTED OVER THE SAME REGION AT 0300 UTC OF TODAY. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CONCENTRATE INTO A DEPRESSION OVER NORTHWEST BOB AND ADJOINING AREAS OF NORTH ODISHA-WEST BENGAL COASTS DURING NEXT 12 HOURS. THEREAFTER IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS NORTH ODISHA AND NORTH CHHATTISGARH DURING SUBSEQUENT 2-3 DAYS.

AS PER INSAT 3D IMAGERY AT 0300 UTC, THE WML OVER NORTHWEST BAY OF BENGAL & NEIGHBOURHOOD IS CENTERED WITHIN HALF A DEGREE OF 19.5°N / 88.0°E. INTENSITY OF THE SYSTEM IS T1.0. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH & ADJOINING CENTRAL BAY OF BENGAL AND EAST ODISHA. MINIMUM CLOUD TOP TEMPERATURE IS -93°C.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH AND WEST CENTRAL BAY OF BENGAL. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER REST BAY OF BENGAL AND NORTH 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
HIGH	HIGH	NIL	NIL	NIL

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER GULF OF KUTCH, ADJOINING NORTHEAST & EASTCENTRAL ARABIAN SEA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED WEAK TO MODERATE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA & COMRIN REGION.

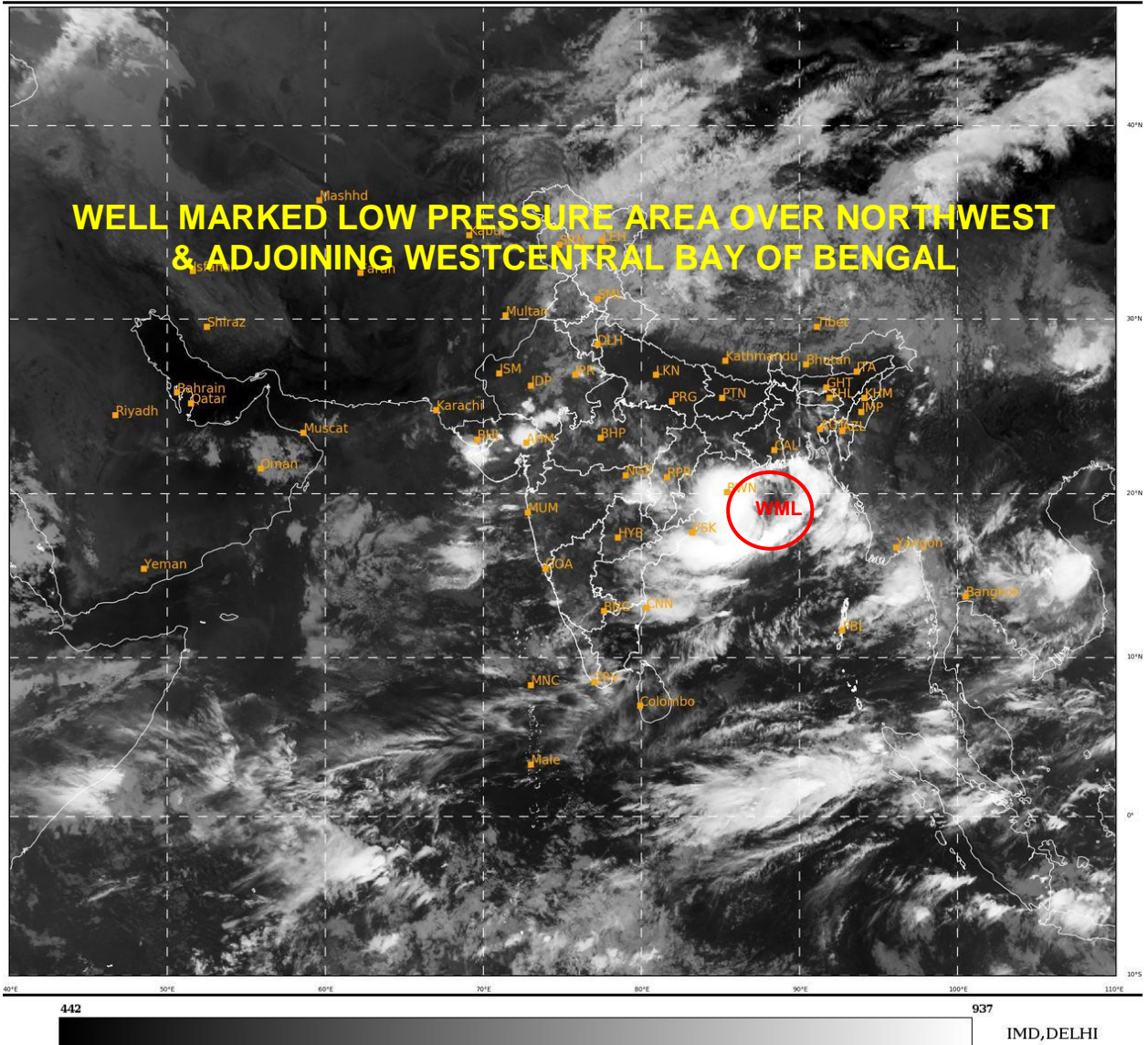
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	NIL	NIL	NIL

REMARKS:

THE 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 OFF NORTH ODISHA TO BANGLADESH COASTS. 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. A ZONE OF POSITIVE VORTICITY ($100 \times 10^{-6} \text{S}^{-1}$) AT LOWER LEVEL IS LYING TO THE SOUTHEAST OF SYSTEM CENTRE OVER NORTHWEST BOB. THE POSITIVE VORTICITY ZONE IS EXTENDING UPTO 500 HPA LEVEL. A ZONE OF POSITIVE LOWER LEVEL CONVERGENCE $10 \times 10^{-5} \text{S}^{-1}$ IS SEEN OVER WEST CENTRAL BOB AND ANOTHER ZONE ($10 \times 10^{-5} \text{S}^{-1}$) IS SEEN OVER EASTCENTRAL BOB OFF MYANMAR COAST. 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 AND ANOTHER ZONE ($30 \times 10^{-5} \text{S}^{-1}$) IS SEEN OVER EASTCENTRAL BOB OFF MYANMAR COAST. STRONG EQUATORWARD OUTFLOW IS PERSISTING OVER THE REGION. THE VERTICAL WIND SHEAR (VWS) IS MODERATE (15-20 KTS) OVER THE NORTHWEST BOB.

THUS, THE EXISTING ENVIRONMENTAL CONDITIONS AND MODEL GUIDANCE ARE INDICATING HIGH PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) OVER THE BOB DURING NEXT 24 HOURS AND THE WEST-NORTHWESTWARDS MOVEMENT OF THE SYSTEM ACROSS NORTH ODISHA AND NORTH CHATTISGARH DURING NEXT 48 HOURS.



WML: WELL MARKED LOW PRESSURE AREA