



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 29.09.2021

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THEBAY OF BENGAL OF BENGAL OF BENGAL OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 29.09.2021 BASED ON 0300 UTC OF 29.09.2021.

BAY OF BENGAL:

1. LOW PRESSURE AREA OVER NORTHWEST BAY OF BENGAL

YESTERDAY'S LOW PRESSURE AREA OVER NORTHWEST BAY OF BENGAL & ADJOINING COASTAL AREAS OF WEST BENGAL LAY AS A WELL MARKED LOW PRESSURE AREA OVER THE SAME REGION IN THE SAME EVENING (0900 UTC OF 28^{TH} SEPTEMBER). AT 0000 UTC OF TODAY, THE 29^{TH} SEPTEMBER, IT MOVED INLAND AND LAY OVER CENTRAL PARTS OF GANGETIC WEST BENGAL.

2. WELL MARKED LOW PRESSURE AREA OVER SOUTH GUJARAT AND ADJOINING GULF OF KHAMBAT

YESTERDAY'S DEPRESSION OVER SOUTHWEST VIDARBHA & NEIGHBORHOOD MOVED WEST-NORTHWESTWARDS AND WEAKENED INTO A WELL MARKED LOW PRESSURE AREA OVER WESTERN PARTS OF VIDARBHA IN THE SAME NOON (0600 UTC) OF 28^{TH} SEPTEMBER, 2021. AT 0300 UTC OF TODAY, THE 29^{TH} SEPTEMBER, IT LAY AS A WELL MARKED LOW PRESSURE AREA OVER SOUTH GUJARAT REGION & ADJOINING GULF OF KHAMBHAT. AS THE SYSTEM IS LIKELY TO EMERGE INTO ARABIAN SEA, FURTHER DETAILS HAVE BEEN DISCUSSED UNDER ARABIAN SEA REGION.

3. CONVECTION OVER BAY OF BENGAL:

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH BOB AND CENTRAL BOB. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER REST OF BOB AND SOUTH 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	NIL	NIL	NIL	NIL

ARABIAN SEA:

THE REMNANT OF THE CYCLONIC STORM 'GULAB' LAY AS A WELL MARKED LOW PRESSURE AREA OVER SOUTH GUJARAT REGION & ADJOINING GULF OF KHAMBHAT AT 0300 UTC OF TODAY, THE 29TH SEPTEMBER. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS, EMERGE INTO NORTHEAST ARABIAN SEA & INTENSIFY INTO A DEPRESSION BY TOMORROW, THE 30TH SEPT. 2021, MORNING. THEN IT IS VERY LIKELY TO MOVE FURTHER WEST-NORTHWESTWARDS AND INTENSIFY INTO A CYCLONIC STORM DURING THE SUBSEQUENT 24 HOURS. THEREAFTER IT IS LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS CLOSE TO PAKISTAN – MAKRAN COASTS, MOVING AWAY FROM THE INDIAN COAST.

AS PER SATELLITE IMAGERY AT 0300 UTC OF TODAY, THE 29TH SEPTEMBER, SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH MADHYA MAHARASHTRA & ADJOINING SOUTHWEST MADHYA PRADESH, NORTH KARNATAKA, SOUTH GUJARAT AND GULF OF CAMBAY & NEIGHBOURHOOD. MINIMUM CLOUD TOP TEMPERATURE IS -93°C.

CONVECTION OVER ARABIAN SEA:

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER GULF OF CAMBAY NORTHEAST AND ADJOINING EASTCENTRAL ARABIAN SEA WITH MINIMUM CLOUD TOP TEMPERATURE IS -93°C. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED WEAK TO MODERATE CONVECTION OVER NORTHWEST ARABIAN SEA, REST OF EASTCENTRAL ARABIAN SEA, SOUTHEAST ARABIAN SEA AND COMORIN 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
MODERATE	HIGH	HIGH	HIGH	NIL

REMARKS:

SEA AND ENVIRONMENTAL CONDITIONS OVER ARABIAN SEA

SEA SURFACE TEMPERATURE (SST) OF ABOUT 28-30°C OVER NORTHEAST ARABIAN SEA . TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 80-90 KJ/CM² OVER NORTHEAST ARABIAN SEA WITH DECREASING TREND TOWARDS THE NORTHWEST ARABIAN SEA. THE POSITIVE LOWER LEVEL CONVERGENCE HAS INCREASED IN PAST 24 HOURS AND IS ABOUT 20 X10-5S-1 OVER NORTHEAST ARABIAN SEA OFF SOUTH GUJARAT COAST. POSITIVE UPPER LEVEL DIVERGENCE HAS ALSO INCREASED IN PAST 24 HOURS AND IS ABOUT 20 X10-5S-1 OVER THE SAME REGION. LOW VERTICAL WIND SHEAR (VWS) ABOUT (10-15 KTS) IS PREVAILING OVER NORTH ARABIAN SEA UPTO GULF OF OMAN. UNDER THESE FAVOURABLE SEA AND ENVIRONMENTAL CONDITIONS, THE REMNANT OF CYCLONIC STORM "GULAB" EMERGING INTO NORTHEAST ARABIAN SEA IS LIKELY TO INTENSIFY INTO A DEPRESSION BY 30TH SEPTEMBER MORNING (AROUND 0000 UTC) AND INTO A CYCLONIC STORM DURING SUBSEQUENT 24 HOURS. MOST OF THE MODELS ARE INDICATING THAT THE SYSTEM WOULD MOVE WEST-NORTHWESTWARDS CLOSE TO PAKISTAN-MAKRAN COASTS. HOWEVER, SOME MODELS ARE ALSO INDICATING MOVEMENT TOWARDS GULF OF OMAN.

UNDER THESE FAVOURABLE CONDITIONS THERE IS MODERATE TO HIGH PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) OVER NORTHEAST ARABIAN SEA AND NEIGHBOURING AREAS WITH FURTHER INTENSIFICATION INTO A CYCLONIC STORM DURING 30^{TH} SEPTEMBER TO 2^{ND} OCTOBER. THE TRACK AND INTENSIFICATION OF THE SYSTEM IS BEING MONITORED CONTINUOUSLY AND ALL CONCERNED HYDROMETEOROLOGICAL CENTRES IN THE REGION ARE BEING INFORMED REGULARLY.



