



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 10.10.2020

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 10.10.2020 BASED ON 0300 UTC OF 10.10.2020 .

BAY OF BENGAL:

1. YESTERDAY'S LOW PRESSURE AREA OVER NORTH ANDAMAN SEA AND ADJOINING EASTCENTRAL BAY OF BENGAL (BOB) LAY AS A WELL MARKED LOW PRESSURE AREA OVER EASTCENTRAL BOB & ADJOINING NORTH ANDAMAN SEA IN THE EARLY MORNING (0000 UTC) OF TODAY, THE 10TH OCTOBER, 2020. AT 0300 UTC. IT LAY OVER EASTCENTRAL & ADJOINING SOUTHEAST BOB.

IT IS VERY LIKELY TO CONCENTRATE INTO A DEPRESSION OVER CENTRAL BOB DURING NEXT 24 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS NORTH ANDHRA PRADESH COAST AS A DEPRESSION DURING 12TH OCTOBER MORNING.

AS PER SATELLITE IMAGERY BASED ON 0300 UTC OF 10TH OCTOBER, THE SYSTEM LAY WITHIN HALF A DEGREE OF 14.5N/89.0E WITH INTENSITY T 1.0. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL BOB IN ASSOCIATION WITH THE SYSTEM. MINIMUM CLOUD TOP TEMPERATURE IS -90°C.

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL BAY OF BENGAL & ANDAMAN SEA AND MODERATE TO INTENSE CONVECTION LAY OVER SOUTH & NORTHWEST BAY OF BENGAL.

2. A FRESH LOW PRESSURE AREA IS VERY LIKELY TO FORM OVER NORTH ANDAMAN SEA AND NEIGHBOURHOOD AROUND 14TH OCTOBER.

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	HIGH	NIL	NIL

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER EASTCENTRAL ARABIAN SEA OFF SOUTH MAHARASHTRA & KARNATAKA COASTS AND SOUTHEAST 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:

THE MADDEN JULIAN OSCILLATION (MJO) INDEX IS CURRENTLY IN PHASE 4 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE IN SAME PHASE FOR NEXT THREE DAYS AND WILL MOVE TO PHASE 5 THEREAFTER WITH AMPLITUDE REMAINING MORE THAN 1. THUS MJO WILL SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE THE BAY OF BENGAL (BOB) FOR NEXT 5 DAYS. CONSIDERING THE SEA CONDITIONS, THE SEA SURFACE TEMPERATURE (SST) IS 29- 30°C OVER ENTIRE BOB AND OVER ANDAMAN SEA. THE TROPICAL CYCLONE HEAT POTENTIAL IS 80-90 KJ/CM² OVER MAJOR PARTS OF SOUTH & CENTRAL BOB AND ANDAMAN SEA. IT IS DECREASING BECOMING ABOUT 40-50 KJ/CM² ALONG THE ANDHRA PRADESH-ODISHA COASTS.

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE VORTICITY HAS INCREASED DURING PAST 24 HOURS AND IS AROUND 100X10⁻⁶SEC⁻¹ NEAR THE SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. LOWER LEVEL CONVERGENCE HAS INCREASED AND IS ABOUT 30X10⁻⁵SEC⁻¹ NEAR THE SYSTEM CENTRE. THE UPPER LEVEL DIVERGENCE IS 20X10⁻⁵SEC⁻¹ TO THE WEST OF THE SYSTEM CENTRE. THE VERTICAL WIND SHEAR (VWS) IS HIGH (20-30 KTS) OVER WESTCENTRAL BOB AND ALONG & OFF ANDHRA PRADESH-ODISHA COASTS. THE UPPER TROPOSPHERIC RIDGE LIES NEAR 25⁰N OVER NORTHEAST INDIA. EASTERLY WINDS ARE PREVAILING IN THE UPPER TROPOSPHERE TO THE SOUTH OF THE RIDGE LINE.

SOME MODELS ARE INDICATING DEVELOPMENT OF DEPRESSION ON 10TH OCTOBER, 2020. MOST OF THE MODELS ARE INDICATING THAT THE SYSTEM WILL MOVE WEST-NORTHWESTWARDS DURING SUBSEQUENT TWO DAYS AND CROSS NORTH ANDHRA PRADESH COAST AS A DEPRESSION DURING THE MORNING OF 12TH OCTOBER 2020. THE GENESIS POTENTIAL PARAMETER (GPP) INDEX IS INDICATING POTENTIAL ZONE FOR CYCLOGENESIS ON 10TH OVER EASTCENTRAL BOB WITH WEST-NORTHWESTWARDS MOVEMENT TOWARDS ANDHRA PRADESH COAST TILL 12TH OCTOBER.

MODELS ARE ALSO INDICATING DEVELOPMENT OF A FRESH LOW PRESSURE AREA OVER NORTH ANDAMAN SEA AROUND 14TH OCTOBER WITH FURTHER INTENSIFICATION SUBSEQUENTLY.



