



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 29.03.2021

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 29.03.2021 BASED ON 0300 UTC OF 29.03.2021.

BAY OF BENGAL:

A CYCLONIC CIRCULATION LAY OVER SOUTHEAST BAY OF BENGAL (BOB) & NEIGHBOURHOOD WITH VERTICAL EXTENSION UPTO 4.5 KM ABOVE MEAN SEA LEVEL. UNDER ITS INFLUENCE, A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTHEAST BOB & ADJOINING SOUTH ANDAMAN SEA DURING NEXT 48 HOURS. IT IS LIKELY TO BECOME MORE MARKED OVER NORTH ANDAMAN SEA & NEIGHBOURHOOD DURING SUBSEQUENT 24 HOURS.

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL AND ANDAMAN SEA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED WEAK TO MODERATE CONVECTION LAY OVER REST OF BAY OF BENGAL.

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	LOW	LOW

ARABIAN SEA:

A CYCLONIC CIRCULATION EXTENDING UPTO 5.8 KM ABOVE MEAN SEA LEVEL LAY OVER EIO & ADJOINING SOUTHEAST ARABIAN SEA (AS). UNDER ITS INFLUENCE, A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTHEAST AS & NEIGHBOURHOOD DURING NEXT 24 HOURS.

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST AND SOUTHWEST 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:

SEA CONDITIONS OVER THE NIO:

THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES CURRENTLY IN PHASE 4 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE IN SAME PHASE DURING NEXT 48 HOURS. THEREAFTER, IT WILL MOVE TO PHASE 5 AND WILL CONTINUE IN SAME PHASE FOR SUBSEQUENT 4 DAYS WITH AMPLITUDE REMAINING MORE THAN 1. THUS, MJO PHASE AND AMPLITUDE WILL SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE BAY OF BENGAL (BOB) DURING NEXT 5 DAYS. IT IS NOT CONDUCIVE FOR ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE ARABIAN SEA (AS).

THE SEA SURFACE TEMPERATURE (SST) IS 29-30°C OVER ENTIRE BOB AND OVER ADJOINING EQUATORIAL INDIAN OCEAN (EIO). THE TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS MORE THAN 100 KJ/CM² OVER SOUTHEAST BOB, SOUTH ANDAMAN SEA AND ADJOINING EIO. SST IS 29-31°C OVER SOUTHEAST ARABIAN SEA AND NEIGHBOURHOOD. TCHP IS MORE THAN 100 KJ/CM² OVER SOUTHEAST AS & ADJOINING EIO.

ENVIRONMENTAL CONDITIONS OVER BOB:

THE LOW LEVEL POSITIVE VORTICITY IS ABOUT 50 X10-6SEC-1 OVER CENTRAL PARTS OF SOUTH BOB AND ADJOINING EQUATORIAL INDIAN OCEAN (EIO). POSITIVE LOW LEVEL CONVERGENCE ZONE (5-10X10-5 SEC-1) LAY OVER SOUTHEAST BOB AND ADJOINING EIO. POSITIVE ZONE OF UPPER LEVEL DIVERGENCE (5-10X10-5 SEC-1) LAY OVER SOUTHEAST BOB & ADJOINING EIO AND IS EXTENDING UPTO EASTCENTRAL BOB. VERTICAL WIND SHEAR IS MODERATE (10-20 KTS) OVER SOUTH BOB & ADJOINING EIO WITH AN INCREASING TENDENCY TOWARDS NORTH BOB.

ENVIRONMENTAL CONDITIONS OVER AS:

LOW LEVEL POSITIVE VORTICITY OF ABOUT 100 X10-6SEC-1 LAY OVER EIO AND ADJOINING SOUTHEAST AS & MALDIVES AREA. POSITIVE LOW LEVEL CONVERGENCE ZONE (60X10-5 SEC-1) LAY OVER EIO & ADJOINING SOUTHEAST AS. POSITIVE ZONE (60X10-5 SEC-1) OF UPPER LEVEL DIVERGENCE LAY OVER EIO & ADJOINING SOUTHEAST AS. VERTICAL WIND SHEAR IS MODERATE (15-20 KTS) OVER EIO & ADJOINING MALDIVES AND OVER SOUTHEAST AS.

MODEL GUIDANCE:

FEW MODELS ARE INDICATING LIKELY FORMATION OF LOW PRESSURE AREA OVER SOUTHEAST BOB & ADJOINING SOUTH ANDAMAN SEA DURING NEXT 48 HOURS. IT IS LIKELY TO BECOME MORE MARKED OVER NORTH ANDAMAN SEA & NEIGHBOURHOOD DURING SUBSEQUENT 24 HOURS. MODELS ARE ALSO INDICATING DEVELOPMENT OF A LOW PRESSURE AREA OVER SOUTHEAST AS & NEIGHBOURHOOD DURING NEXT 24 HOURS WITH NO FURTHER INTENSIFICATION.



