



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 28.11.2021

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 28.11.2021 BASED ON 0300 UTC OF 28.11.2021.

BAY OF BENGAL:

A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTH ANDAMAN SEA AROUND 30^{TH} NOVEMBER, 2021. IT IS LIKELY TO BECOME MORE MARKED AND MOVE WESTNORTHWESTWARDS DURING SUBSEQUENT 48 HOURS.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER WESTCENTRAL & SOUTH BAY OF BENGAL AND SOUTH ANDAMAN SEA. MINIMUM CLOUD TOP TEMPERATURE MINUS 93°C.

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	MODERATE

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER SOUTHEAST ARABIAN SEA & COMORIN AREA. MINIMUM CLOUD TOP TEMPERATURE MINUS 80° C.

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 IS 29-31°C OVER ENTIRE BOB. TROPICAL CYCLONE HEAT POTENTIAL IS 100-120 KJ/CM² OVER EASTERN EQUATORIAL INDIAN OCEAN AND ADJOINING SOUTH ANDAMAN SEA & SOUTHEAST BAY OF BENGAL (BOB). IT IS 80-100 OVER MAJOR PARTS OF CENTRAL & NORTH BOB. DEPTH OF 26°C ISOTHERM IS 100-120 M OVER THE ANDAMAN SEA AND NEIGHBOURHOOD. THE MADDEN JULIAN OSCILLATION INDEX IS CURRENTLY IN PHASE 4 WITH AMPLITUDE CLOSE TO 1. IT WILL REMAIN IN SAME PHASE FOR ONE MORE DAY. THEREAFTER, IT WILL MOVE TO PHASE 5 WITH AMPLITUDE REMAINING CLOSE TO 1 FOR SUBSEQUENT 3 DAYS AND FURTHER PROPAGATE EASTWARDS INTO PHASE 6 FROM 3RD DECEMBER ONWARDS. VARIOUS ENVIRONMENTAL CONDITIONS LIKE VERTICAL WIND SHEAR (05-15), LOW LEVEL VORTICITY & CONVERGENCE AND UPPER LEVEL DIVERGENCE ARE ALSO FAVOURABLE FOR CYCLOGENESIS OVER

ANDAMAN SEA REGION. THUS, CURRENT SEA & ENVIRONMENTAL CONDITIONS ARE CONDUCIVE FOR CYCLOGENESIS OVER THE ANDAMAN SEA REGION.

MAJORITY OF THE MODELS INDICATE EMERGENCE OF CYCLONIC DISTURBANCE FROM GULF OF THAILAND OVER SOUTH ANDAMAN SEA AROUND 30TH NOVEMBER WITH INITIAL WEST-NORTHWESTWARD MOVEMENT AND INTENSIFICATION INTO DEPRESSION AND CYCLONIC STORM SUBSEQUENTLY. HOWEVER, THERE IS LARGE DIVERGENCE AMONG VARIOUS MODELS W.R.T. DATE OF GENESIS (FORMATION OF DEPRESSION), INTENSIFICATION AND DIRECTION OF MOVEMENT. GFS GROUP OF MODELS IS INDICATING EMERGENCE OF A CYCLONIC STORM FROM GULF OF THAILAND BY THE EVENING / NIGHT (1200 -1500 UTC) OF 30TH NOVEMBER AND NCUM GROUP & ECMWF ARE INDICATING EMERGENCE OF LOW PRESSURE AREA INTO ANDAMAN SEA AND FORMATION OF DEPRESSION AROUND 2ND. HENCE, LOW PROBABILITY IS ASSIGNED TO FORMATION OF DEPRESSION OVER BOB ON DAY-4 AND MODERATE ON DAY-5.

