



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 02.04.2021

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0300 UTC OF 02.04.2021 BASED ON 0000 UTC OF 02.04.2021.

BAY OF BENGAL:

YESTERDAY'S WELL MARKED LOW PRESSURE AREA OVER CENTRAL PARTS OF ANDAMAN SEA CONCENTRATED INTO A DEPRESSION OVER NORTH ADMAN SEA AND LAY CENTERED AT 0000 UTC OF TODAY, THE 02ND APRIL, 2021 NEAR LATITUDE 11.0⁰N AND LONGITUDE 96.3⁰E ABOUT 400 KM EAST-NORTHEAST OF PORT BLAIR (43333), 420 KM NORTH-NORTHWEST OF PHUKET (48564) AND 640 KM SOUTH OF YANGON (48097). IT IS LIKELY TO MOVE NORTH-NORTHEASTWARDS TOWARDS MYANMAR COAST. IT IS LIKELY TO INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 12 HOURS.

AS PER SATELLITE IMAGERY BASED ON 0000 UTC OF 02ND APRIL, THE SYSTEM HAS INTENSITY T 1.5, SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH ADMAN SEA AND NEIGHBOURHOOD. IN ASSOCIATION WITH THE SYSTEM. MINIMUM CLOUD TOP TEMPERATURE IS -93°C.

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION LAY OVER 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 LIES CURRENTLY IN PHASE 5 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE IN SAME PHASE TILL $3^{\rm RD}$ APRIL. THEREAFTER, IT WILL MOVE TO PHASE 6 WITH AMPLITUDE REMAINING MORE THAN 1 AND WILL REMAIN IN SAME PHASE FOR SUBSEQUENT 3 DAYS. THUS, MJO PHASE AND AMPLITUDE WILL SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE ANDAMAN SEA AND ADJOINING AREAS TILL $3^{\rm RD}$ APRIL AND WILL BECOME UNFAVOURABLE FROM $3^{\rm RD}$ ONWARDS. THUS THE LARGE SCALE PROCESS LIKE MJO WILL SUPPORT INTENSIFICATION OF LOW PRESSURE SYSTEM TILL $3^{\rm RD}$ APRIL

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

AND WEAKENING THEREAFTER.

THE LOW LEVEL POSITIVE VORTICITY HAS NOT CHANGED DURING PAST 24 HOURS AND IS ABOUT 80-90 X10-6 SEC-1 OVER NORTH ANDAMAN SEA. THE AREAL EXTENSION OF POSITIVE LOW LEVEL CONVERGENCE ZONE HAS INCREASED DURING PAST 24 HOURS (10X10⁻⁵ SEC⁻¹) AND IS COVERING NORH ANDAMAN SEA TO THE EAST OF NICOBAR ISLANDS. THE AREAL EXTENSION AND MAGNITUDE OF THE ZONE OF POSITIVE UPPER LEVEL DIVERGENCE HAS ALSO INCREASED (30X10⁻⁵ SEC-1) OVER ANDAMAN SEA. IT IS NOW MORE CIRCULAR IN SHAPE AND IS COUPLED WITH THE LOW LEVEL CONVERGENCE ZONE . VERTICAL WIND SHEAR (VWS) IS MODERATE (15-20 KTS) OVER ANDAMAN SEA ALONG THE FORECAST TRACK. IT IS HIGHER TOWARDS THE NORTHWEST SECTOR. THUS, AS THE DEPRESSION MOVES NORTH-NORTHEASTWARDS, THE FAVOURABLE WINDSHEAR ZONE WOULD CONTINUE FOR SOME MORE TIME, AIDING THE INTENSIFICATION OF THE SYSTEM FURTHER INTO A DEEP DEPRESSION MARGINALLY. THEREAFTER, IT WILL GRADUALLY ENTER INTO AN AREA OF HIGH VWS, ESPECIALLY FROM 4^{TH} APRIL ONWARDS. THE UPPER TROPOSPHERIC RIDGE RAN ALONG 13°N OVER THE BOB. UNDER THE INFLUENCE OF THE ANTICYCLONIC CIRCULATION OVER SOUTHEAST ASIA AND MID TROSPHERIC WESTERLIES THE DEPRESSION WOULD MOVE NORTH-NORTHEASTWARDS TOWARDS MYANMAR COAST.

THE TROPICAL CYCLONE HEAT POTENTIAL OVER THE REGION IS AROUND 80 KJ PER SEC AAND THE SEA SURFACE TEMPERATURES ARE 29-30 DEG.C OVER THE REGION.

THE SYSTEM IS LYING IN A FAVOURABLE ENVIRONMENT. FEW MODELS ARE INDICATING FURTHER INTENSIFICATION OF THE SYSTEM DURING NEXT 12 HOURS WITH NORTH-NORTHEASTWARDS MOVEMENT TOWARDS MYANMAR COAST AND WEAKENING THEREAFTER. HOWEVER THE PROBABILITY OF BECOING A CYCLONIC STORM IS VERY LOW OWING TO THE INCREASING VWS TENDENCY.

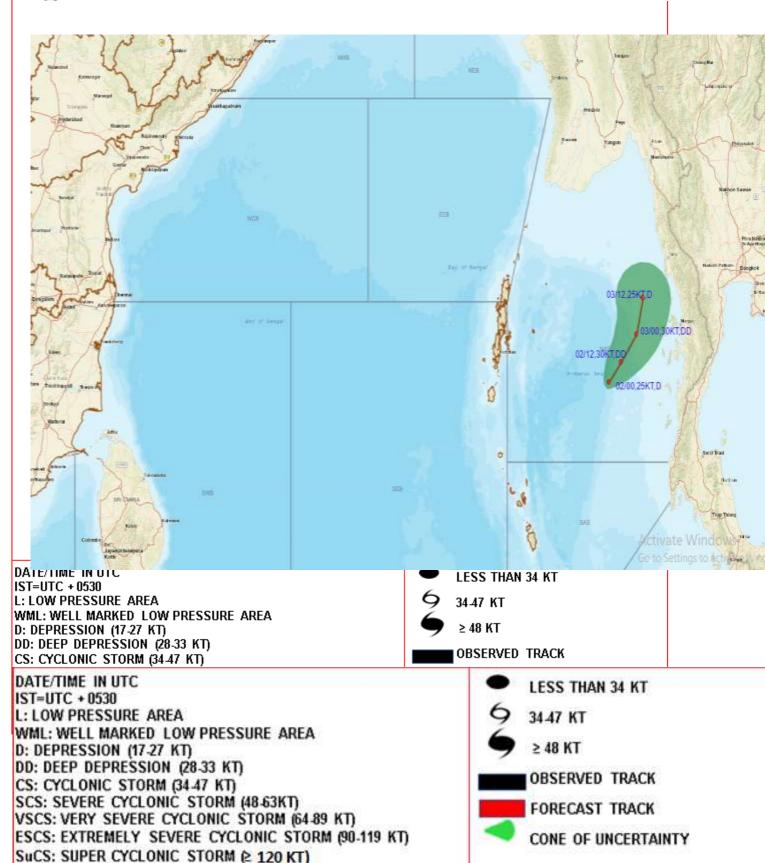
CONSIDERING ALL THESE, THE DEPRESSION IS LIKELY TO INTENSIFY INTO A DEEP DEPRESSION BY 1200 UTC OF 02ND APRIL AND GRADUALLY WEAKEN THEREAFTER. IT WOULD CONTINUE TO MOVE NORTH-NORTHEASTWARDS TOWARDS MYANMAR COAST.

NEXT BULLETIN WILL BE ISSUED AT 0600 UTC OF 02ND APRIL 2021.

(SUNITHA DEVI.S) SC.F RSMC NEW DELHI



OBSERVED TRACK ALONGWITH CONE OF UNCERTAINITY OF DEPRESSION OVER NORTH ANDAMAN SEA BASED ON 0000 UTC OF 2ND APRIL, 2021.



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