REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL WEATHER OUTLOOK

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 09.11.2021

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 09.11.2021 BASED ON 0300 UTC OF 09.11.2021.

BAY OF BENGAL:

UNDER THE INFLUENCE OF CYCLONIC CIRCULATION OVER SOUTHEAST BAY OF BENGAL (BOB) & NEIGHBOURHOOD, A LOW PRESSURE AREA HAS FORMED OVER THE SAME REGION AT 0300 UTC OF TODAY, THE 9TH NOVEMBER, 2021. IT IS LIKELY TO CONCENTRATE INTO A DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL DURING NEXT 36 HOURS. IT IS LIKELY TO MOVE WEST–NORTHWESTWARDS AND REACH NEAR NORTH TAMILNADU COAST (SOUTHEAST COAST OF INDIA) BY THE EARLY MORNING (0000 UTC) OF 11TH NOVEMBER, 2021.

AS PER INSAT 3D IMAGERY AT 0300UTC, SCATTERED TO BROKEN LOW & MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL AND SOUTH BOB AND 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
LOW	MODERATE	HIGH	NIL	NIL

ARABIAN SEA:

THE WELL MARKED LOW PRESSURE AREA OVER CENTRAL PARTS OF ARABIAN SEA PERSISTED OVER THE SAME REGION AT 0300 UTC OF 9TH NOVEMBER, 2021. IT IS LIKELY TO MOVE WEST-SOUTHWESTWARDS DURING NEXT 03 DAYS.

AS PER INSAT 3D IMAGERY AT 0300 UTC, ASSOCIATED MINIMUM CLOUD TOP TEMPERATURE IS -90^{0}C. INTENSITY OF THE SYSTEM IS CATEGORISED AS T 1.0. CENTER IS NOT CLEARLY DEFINED IN THE IR IMAGERY. ASSOCIATED SCATTERED TO BROKEN LOW & MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER ARABIAN SEA BETWEEN LATITUDE 10.5^{0}N & 15.0^{0}N AND LONGITUDE 63.0^{0}E & 69.0^{0}E.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 15 KNOTS GUSTING TO 25 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM AREA. THE ESTIMATED CENTRAL PRESSURE IS 1004 HPA.

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:

(A) WELL MARKED LOW PRESSURE AREA OVER CENTRAL PARTS OF ARABIAN SEA

THE SEA SURFACE TEMPERATURE (SST) IS ABOUT 28-29°C OVER EASTCENTRAL ARABIAN SEA WITH DECREASING TREND TOWARDS WEST. SIMILARLY, TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 50-60 KJ/CM^2 OVER CENTRAL PARTS OF ARABIAN SEA BECOMING LESS THAN 50 KJ/CM^2 OVER WESTCENTRAL ARABIAN SEA. POSITIVE VORTICITY IS ABOUT 50 X10^{-6}S^{-1} AROUND SYSTEM CENTRE AT 850 HPA WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. POSITIVE LOWER LEVEL CONVERGENCE IS ABOUT 10 X10^{-5}S^{-1} TO THE SOUTHEAST OF SYSTEM CENTER. POSITIVE UPPER LEVEL DIVERGENCE IS ABOUT OF 10 X10^{-5}S^{-1} TO THE SOUTHEAST OF SYSTEM CENTER. MODERATE VERTICAL WIND SHEAR (VWS) ABOUT (15-20 KTS) IS PREVAILING AROUND THE SYSTEM CENTER BECOMING HIGH (25-30 KNOTS) TOWARDS WESTCENTRAL ARABIAN SEA. AS A RESULT, THE SYSTEM HAS WEAKEN AT 0000 UTC OF TODAY. THE SYSTEM IS LYING TO THE SOUTH OF RIDGE NEAR 17.0°N. HOWEVER, THE EAST-NORTHEASTERLY WINDS IN THE LOWER TROPOSPHERIC LEVELS ARE STEERING THE SYSTEM WEST-SOUTHWESTWARDS. DECREASING TRENDS IN ENVIRONMENTAL FEATURES, LOWER OCEAN THERMAL ENERGY AND HIGHER VERTICAL WIND SHEAR OVER WESTCENTRAL ARABIAN SEA ARE INDICATING NO FURTHER INTENSIFICATION OF SYSTEM DURING COMING NEXT 2-3 DAYS.

MODELS LIKE IMD GFS, NCEP GFS, ECMWF ARE INDICATING THAT THE SYSYEM WOULD MOVE WEST-SOUTHWESTWARDS AS A LOW PRESSURE AREA DURING NEXT 02-03 DAYS. HOWEVER, NCUM GROUP OF MODELS IS STILL INDICATING SLIGHT INTENSIFICATION OF SYSTEM WHILE MOVING WEST-SOUTHWESTWARDS TOWARDS SOUTHWEST ARABIAN SEA.

IN VIEW OF ABOVE, THE WELL MARKED LOW PRESSURE AREA IS LIKELY TO MOVE WEST-SOUTHWESTWARDS DURING NEXT 03 DAYS. THE INTENSIFICATION AND MOVEMENT OF THE SYSTEM IS BEING CONTINUOUSLY MONITORED.

(B) LIKELY FORMATION OF A LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL

SEA SURFACE TEMPERATURE (SST) IS ABOUT 29-30°C OVER ENTIRE BOB. TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 100-120 OVER OVER PARTS OF EASTERN EQUATORIAL INDIAN OCEAN ADJOINING SOUTHEAST BOB & SOUTH ANDAMAN SEA. IN ADDITION, A NEAR EQUATORIAL CONVERGENCE ZONE IS PRESENT ROUGHLY ALONG 5 DEG.N LATITUDE OVER THE REGION, PROVIDING THE NECESSARY CYCLONIC VORTICITY.

AN ELONGATED ZONE OF POSITIVE LOW LEVEL CONVERGENCE (10-40 X10^{-5}S^{-1}) LAY OVER EQUATORIAL INDIAN OCEAN AND ADJOINING SOUTHWEST BOB. A LARGE EXTENDED ZONE OF POSITIVE UPPER LEVEL DIVERGENCE ABOUT 05-20 X10^{-5}S^{-1} LAY OVER THE SAME REGION. POSITIVE LOW LEVEL VORTICITY IS ABOUT (50 X10^{-6} S^{-1}) TO THE SOUTHEAST AND ALSO TO THE SOUTHWEST OF SYSTEM AREA WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. UNDER THESE FAVOURABLE CONDITIONS A LOW PRESSURE AREA HAS FORMED OVER SOUTHEAST BAY OF BENGAL AND NEIGHBOURHOOD AT 0300 UTC OF TODAY.

MOST OF THE MODELS INCLUDING IMD GFS, ECMWF AND NCUM ARE INDICATING FURTHER INTENSIFICATION OF THE LOW PRESSURE AREA OVER SOUTHEAST BOB UPTO DEPRESSION STAGE OVER SOUTHWEST BOB DURING 10TH-11TH NOVEMBER. MODELS ARE ALSO UNANIMOUS ABOUT THE MOVEMENT OF SYSTEM TOWARDS TAMILNADU COAST DURING TILL 11TH.

IN VIEW OF ABOVE, THE LOW PRESSURE AREA OVER SOUTHEAST BOB AND NEIGHBOURHOOD IS LIKELY TO CONCENTRATE INTO A DEPRESSION DURING NEXT 36 HOURS, MOVE WEST–NORTHWESTWARDS AND REACH TAMILNADU COAST BY 11TH MORNING (0000 UTC).

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

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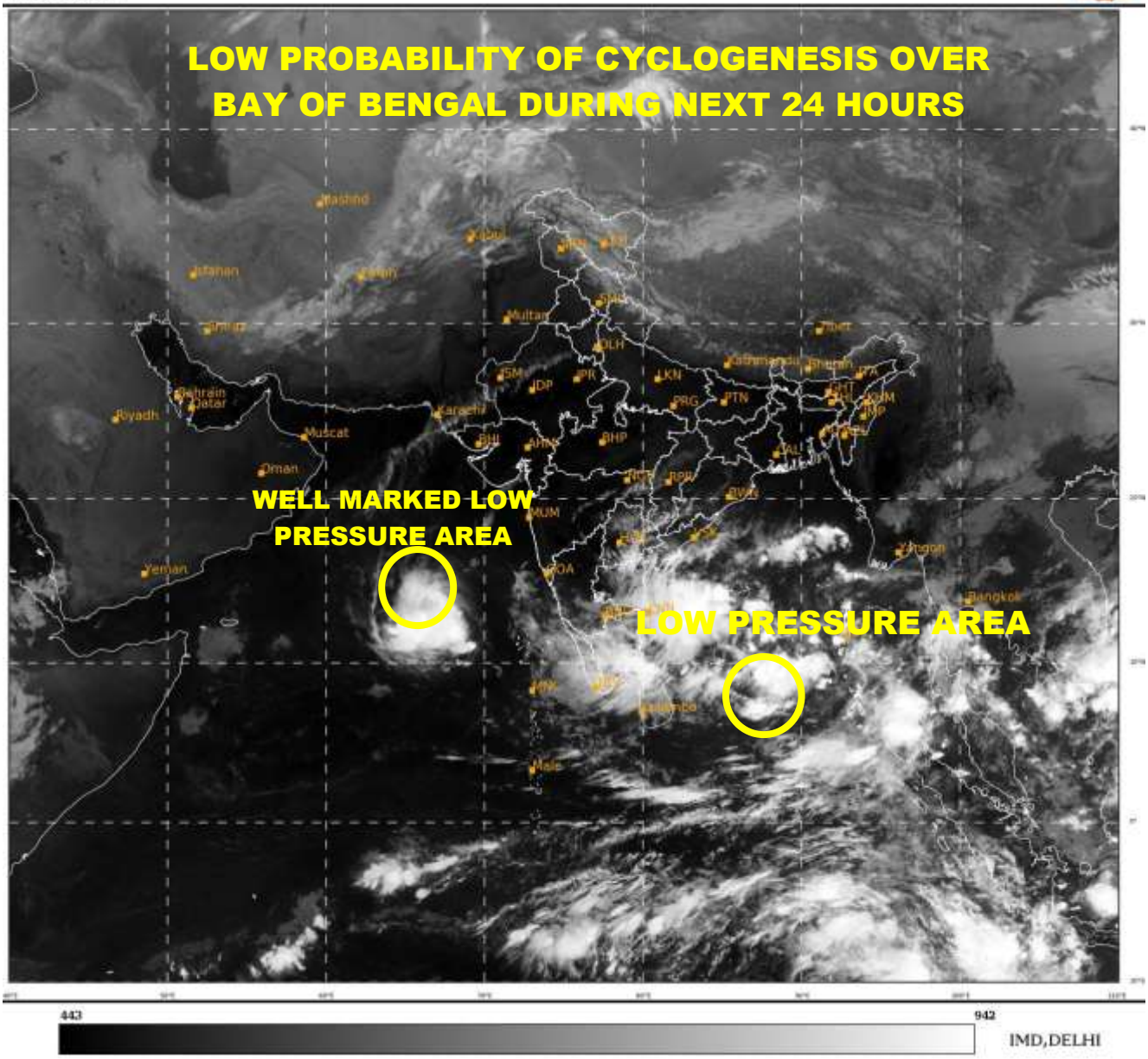
SAT : INSAT-3DR IMG
IMG_TIR1 10.8 um
L1C Mercator

09-11-2021/(0345 to 0412) GMT
09-11-2021/(0915 to 0942) IST



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