



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 23.11.2023

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 0600 UTC OF 23.11.2023 BASED ON 0300 UTC OF 23.11.2023.

BAY OF BENGAL:

THERE IS LIKELIHOOD OF EMERGENCE OF A CYCLONIC CIRCULATION OVER SOUTH ANDAMAN SEA AND NEIGHBOURHOOD AROUND 25^{TH} . UNDER IT'S INFLUENCE, A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTH ANDAMAN SEA AROUND 26^{TH} NOVEMBER . IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEPRESSION OVER SOUTHEAST & ADJOINING ANDAMAN SEA AROUND 27^{TH} NOVEMBER, 2023.

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHWEST ADJOINING WESTCENTRAL BAY OF BENGAL, SOUTH ANDAMAN SEA AND ISOLATED WEAK TO MODERATE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL.

*PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:

24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
NIL	NIL	NIL	NIL	LOW	MOD	HIGH

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST AND MODERATE TO INTENSE CONVECTION LAY OVER REST OF SOUTH ARABIAN SEA AND COMORIN AREA.

*PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:

	24	24-48	48-72	72-96	96-120	120-144	144-168
	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
Ī	NIL	NIL	NIL	NIL	NIL	NIL	NIL

^{*}NOTE: EVERY 24HR FORECAST IS VALID UPTO 0300 UTC (0830 IST) OF NEXT DAY.

Remarks:

MADDEN JULIAN OSCILLATION (MJO) IS CURRENTLY IN PHASE 2 WITH AMPLITUDE GREATER THAN 1. IT WILL CONTINUE IN SAME PHASE WITH AMPLITUDE GREATER THAN 1 TILL 27TH NOV. THEREAFTER, IT WOULD ENTER INTO PHASE 3 WITH AMPLITUDE GREATER THAN 1 ON 25TH NOV. IT WOULD CONTINUE IN PHASE 3 TILL 28th NOV WITH AMPLITUDE GREATER THAN 1 AND MOVE TO PHASE 4 THERAFTER. THUS, MJO WOULD SUPPORT CYCLOGENESIS OVER THE BAY OF BENGAL (BOB) REGION TILL 6TH DECEMBER. SEA SURFACE TEMPERATURE IS 28-30°C OVER MAJOR PARTS OF BOB. TROPICAL CYCLONE HEAT POTENTIAL IS 80-100 KJ/CM² OVER SOUTH ANDAMAN SEA, 100-120 KJ/CM² OVER PARTS OF EASTCENTRAL AND ADJOINING SOUTHEAST BOB. THE NCICS BASED FORECAST FOR EQUATORIAL WAVES INDICATE STRENGTHENING OF WESTERLY WINDS OVER SOUTH BOB ALONGWITH PRESENCE OF EQUATORIAL ROSSBY WAVES AND MJO. EASTERLY WINDS (1-3 MPS) ARE LIKELY OVER CENTRAL BOB. ALL THESE FEATURES INDICATE A FAVOURABLE ENVIRONMENT FOR CYCLOGENESIS (FORMATION OF DEPRESSION) OVER SOUTHEAST BOB AND ADJOINING ANDAMAN SEA.

MOST OF THE MODELS INCLUDING IMD GFS, NCEP GFS, ECMWF AND ECMWF ENSEMBLE ARE INDICATING LIKELY EMERGENCE OF A CYCLONIC CIRCULATION INTO SOUTH ANDAMAN SEA AROUND 25^{TH} WITH FORMATION OF LOW PRESSURE AREA AROUND 26^{TH} OVER SOUTH ANDAMAN SEA. THESE MODELS ARE ALSO INDICATING FORMATION OF DEPRESSION OVER SOUTH BOB DURING $26^{\text{TH}} - 30^{\text{TH}}$ (IMD GFS AROUND 26^{TH} , NCEP GFS ON 27^{TH} AND ECMWF AROUND 30^{TH} BUT OVER SOUTHWEST BOB). GFS GROUP OF MODELS ARE ALSO INDICATING FURTHER INTENSIFICATION OF THIS SYSTEM INTO A SEVERE CYCLONIC STORM. WRT MOVEMENT, GFS GROUP OF MODELS ARE INDICATING INITIAL WESTNORTHWESRTWARDS MOVEMENT TILL 28^{TH} TOWARDS CENTRAL BOB FOLLOWED BY NORTH-NORTHEASTWARDS MOVEMENT TOWARDS BANGLADESH COAST. ECMWF IS HOWEVER INDICATING WEST-NORTHWESTWARDS MOVEMENT TOWARDS WESTCENTRAL BOB TILL 2^{ND} DECEMBER AND GRADUAL RECURVATURE THEREAFTER. NCUM GROUP OF MODELS ARE NOT INDICATING ANY SIGNIFICANT SYSTEM OVER THE BAY OF BENGAL.

IN VIEW OF ALL TRHE ABOVE, IT IS INFERRED THAT THERE IS LIKELIHOOD OF EMERGENCE OF A CYCLONIC CIRCULATION OVER SOUTH ANDAMAN SEA AND NEIGHBOURHOOD AROUND 25^{TH} . UNDER IT'S INFLUENCE, A LOW PRESSURE AREA IS LIKELY TO FORM OVER ANDAMAN SEA AROUND 26^{TH} NOVEMBER. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEPRESSION OVER SOUTHEAST & ADJOINING ANDAMAN SEA AROUND 27^{TH} NOVERBER, 2023.

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

23-11-2023/(0300 to 0327) GMT 23-11-2023/(0830 to 0857) IST



