REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL WEATHER OUTLOOK

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 22.11.2023

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 22.11.2023 BASED ON 0300 UTC OF 22.11.2023.

BAY OF BENGAL:

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

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHWEST BAY OF BENGAL OFF NORTH TAMILNADU & EAST SRI LANKA COASTS. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER WESTCENTRAL BAY OF BENGAL & ANDAMAN SEA AND ISOLATED WEAK TO MODERATE CONVECTION LAY OVER RESTOF BAY OF BENGAL.

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

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

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

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH ARABIAN SEA COMORIN AREA AND MODERATE TO INTENSE CONVECTION LAY OVER LAKSHADWEEP ISLANDS AREA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED WEAK TO MODERATE CONVECTION LAY OVER NORTHWEST & WESTCENTRAL ARABIAN SEA.

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

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

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

Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very Intense: : Less than -70°C PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-33%, , MODERATE: 34-66% AND HIGH: 67-100% This is a guidance Bulletin for WMO/ESCAP Panel Member countries. Visit respective National websites for Country specific Bulletins

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 28TH NOV. IT WOULD CONTINUE IN PHASE 3 TILL 2ND DEC WITH AMPLITUDE GREATER THAN 1. THUS, MJO WOULD SUPPORT CYCLOGENESIS OVER THE BAY OF BENGAL (BOB) REGION. 28-300C 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.

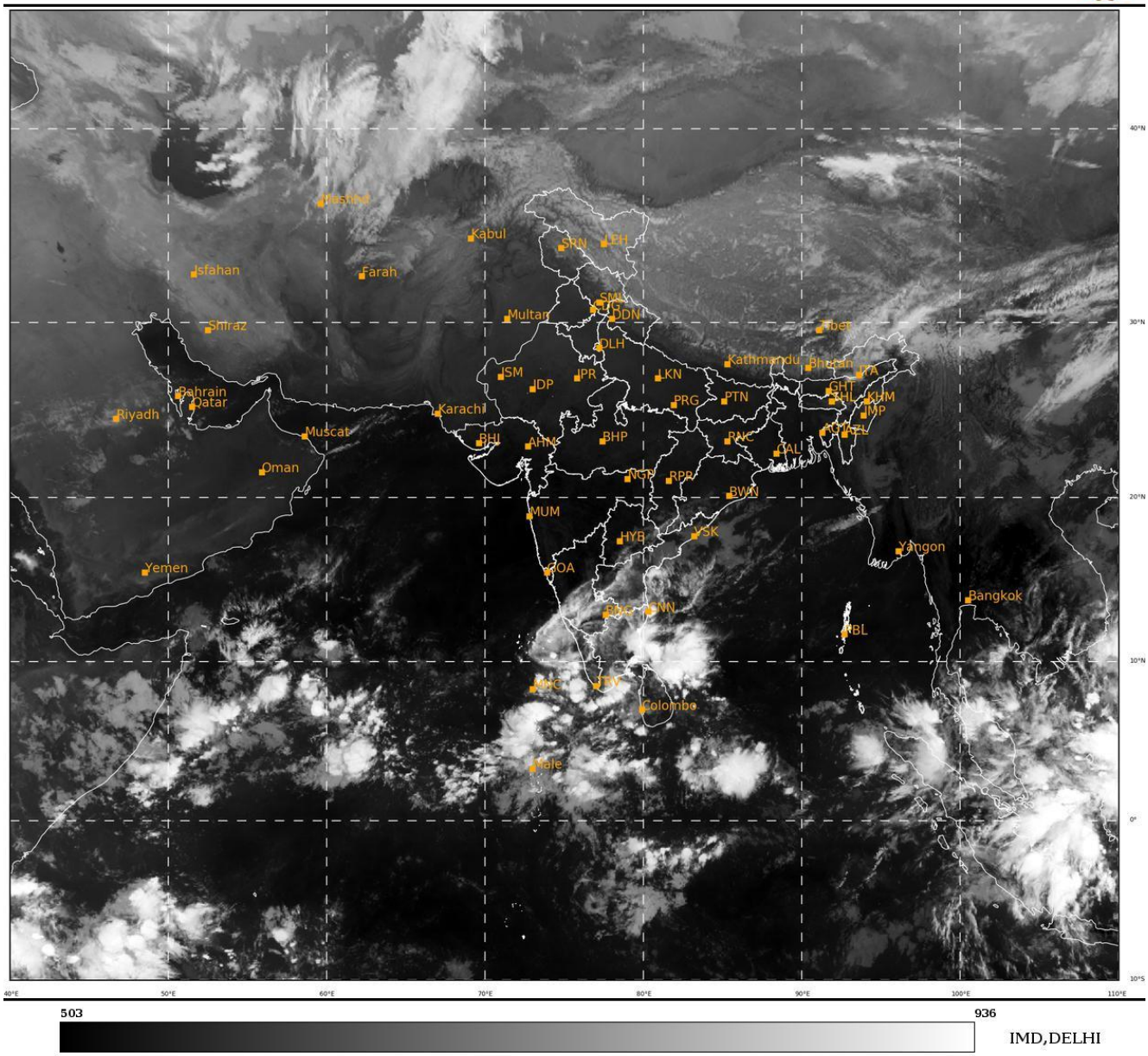
MOST OF THE MODELS INCLUDING IMD GFS, NCEP GFS, ECMWF AND ECMWF ENSEMBLE ARE INDICATING LIKELY EMERGENCE OF A CYCLONIC CIRCULATION INTO SOUTH ANDAMAN SEA AROUND 25TH WITH FORMATION OF LOW PRESSURE AREA AROUND 26TH OVER SOUTH ANDAMAN SEA. THESE MODELS ARE ALSO INDICATING FORMATION OF DEPRESSION OVER SOUTHEAST BOB AND NEIGHBOURHOOD DURING 26TH – 28TH (IMD GFS AROUND 26TH, ECMWF AROUND 28TH, NCEP ON 27TH). THESE MODELS ARE ALSO INDICATING FURTHER INTENSIFICATION OF THIS SYSTEM INTO A CYCLONIC STORM. WRT MOVEMENT, GFS GROUP OF MODELS ARE INDICATING INITIAL WEST-NORTHWESRTWARDS MOVEMENT TILL 28TH TOWARDS CENTRAL BOB FOLLOWED BY NORTH-NORTHEASTWARDS MOVEMENT TOWARDS BANGLADESH COAST. ECMWF IS HOWEVER INDICATING WEST-NORTHWESTWARDS MOVEMENT TOWARDS WESTCENTRAL BOB (TAMIL NADU-ANDHRA PRADESH COASTS).

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 25TH. UNDER IT'S INFLUENCE, A LOW PRESSURE AREA IS LIKELY TO FORM OVER ANDAMAN SEA AROUND 26TH NOVEMBER . IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEPRESSION OVER SOUTHEAST & ADJOINING ANDAMAN SEA AROUND 27TH NOVERBER, 2023.

(M. SHARMA)
SCIENTIST-D
RSMC NEW DELHI

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

22-11-2023/(0330 to 0356) GMT
22-11-2023/(0900 to 0926) IST



503 936

IMD,DELHI

Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very Intense: : Less than -70°C
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-33%, , MODERATE: 34-66% AND HIGH: 67-100%
This is a guidance Bulletin for WMO/ESCAP Panel Member countries. Visit respective National websites for Country specific Bulletins