REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL WEATHER OUTLOOK

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 20.07.2023

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 20.07.2023 BASED ON 0300 UTC OF 20.07.2023.

BAY OF BENGAL:

UNDER THE INFLUENCE OF YESTERDAY'S CYCLONIC CIRCULATION OVER NORTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL AND ADJOINING AREAS OF NORTH ANDHRA PRADESH SOUTH ODISHA COASTS, A LOW PRESSURE AREA FORMED OVER NORTHWEST BAY OF BENGAL OFF ODISHA COAST IN THE MORNING (0530 HRS IST/0000 UTC) OF TODAY, THE 20TH JULY 2023. THE SYSTEM PERSISTS AND ASSOCIATED CYCLONIC CIRCULATION EXTENDS UPTO 7.6 KM ABOVE MEAN SEA LEVEL TILTING SOUTHWARDS WITH HEIGHT. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS ODISHA DURING NEXT 2 DAYS.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTHWEST & CENTRAL BAY OF BENGAL. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHWEST BAY OF BENGAL, NORTH ANADAMAN SEA AND ISOLATED WEAK TO MODERATE CONVECTION LAY OVER REST BAY OF BENGAL AND SOUTH ANDAMAN 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	LOW	MODERATE	MODERATE

ARABIAN SEA:

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTHEAST & EASTCENTRAL ARABIAN SEA, GULF OF CAMBAY. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED WEAK TO MODERATE CONVECTION LAY OVER REST ARABIAN SEA, GULF OF KUTCH AND LAKSHADWEEP ISLAND AREA.

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

REMARKS:

MODEL GUIDANCE FOR BAY OF BENGAL (BOB):

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%
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VARIOUS DETERMINISTIC MODELS INCLUDING ECMWF, IMD GFS, NCUM, NEPS AND GEFS ARE INDICATING THE LOW PRESSURE AREA (LPA) OVER NORTHWEST BOB OFF ODISHA COAST. IMD GFS, NCUM, NEPS AND ECMWF MODEL ARE PREDICTING WEST-NORTHWESTWARD MOVEMENT OF THE LPA ACROSS ODISHA COAST TILL 23RD JULY. BUT NCEP GFS IS NOT SHOWING ANY MOVEMENT OF THE SYSTEM. THEREFORE, THE PRESENT LPA IS LIKELY TO MOVE WEST-NORTHWESTWARD ACROSS ODISHA COAST DURING NEXT TWO DAYS (21ST-22ND JULY).

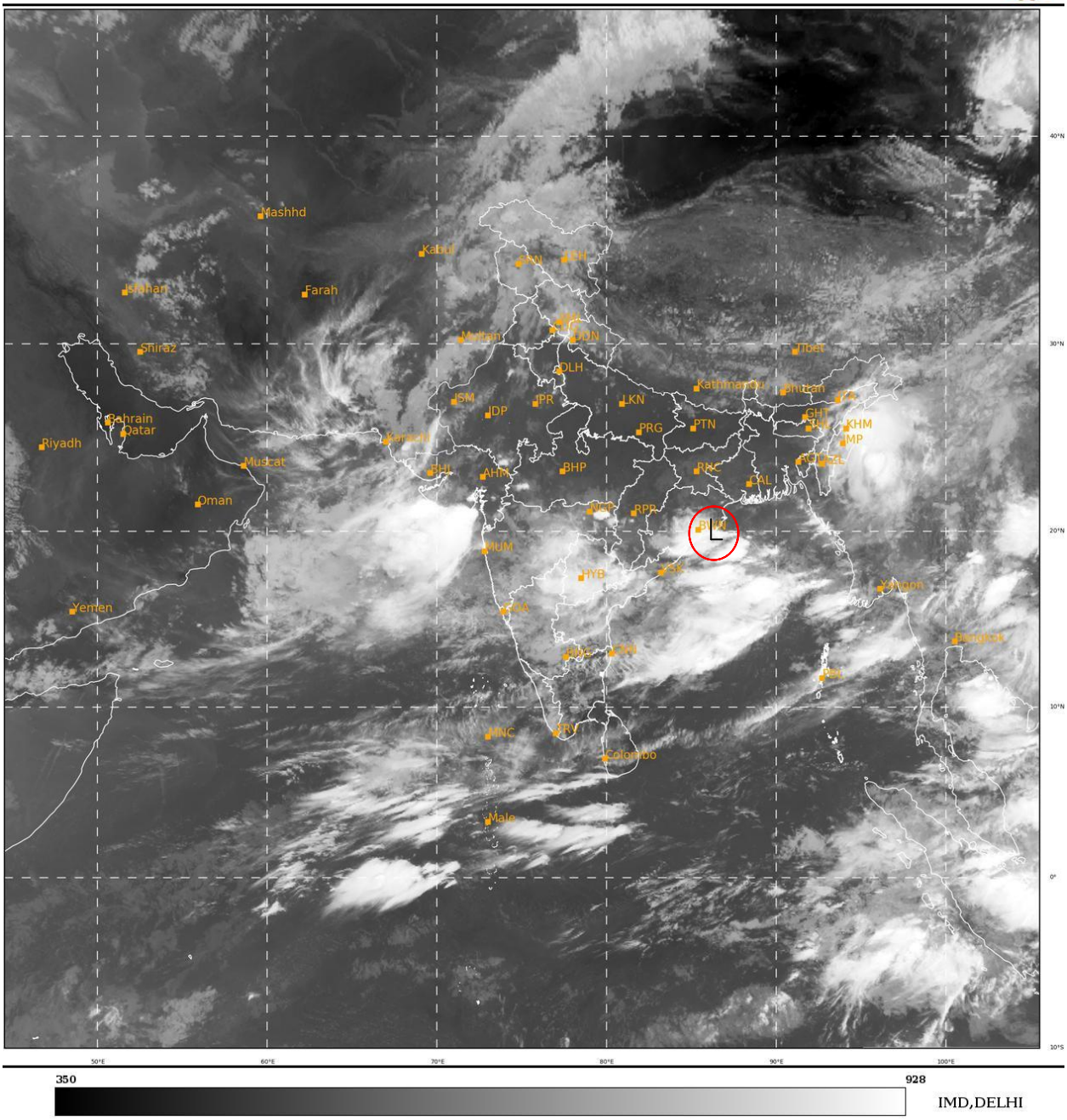
IMD GFS, NCEP GFS, NCUM, ECMWF, GEFS AND NEPS MODELS ARE INDICATING THE FORMATION OF A FRESH LOW PRESSURE SYSTEM OVER NORTHWEST AND ADJOINING WESTCENTRAL BOB OFF SOUTH ODISHA & NORTH ANDHRA PRADESH COASTS AROUND 24TH JULY MORNING (0530 HRS IST/0000 UTC). THERE IS A VARIATION AMONG MODELS WITH RESPECT TO FURTHER MOVEMENT AND INTENSIFICATION OF THE SYSTEM. BUT IMD GFS, NCUM, NEPS AND GEFS MODELS ARE SHOWING THAT THE LPA IS LIKELY TO INTENSIFY FURTHER INTO A DEPRESSION DURING SUBSEQUENT 48 HOURS.

IN VIEW OF THE AVAILABLE MODEL GUIDANCE AND ENVIRONMENTAL FEATURES, IT IS INFERRED THE EXISTING LPA OVER NORTHWEST BOB OFF ODISHA COAST IS LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS ODISHA COAST DURING NEXT TWO DAYS. ANOTHER FRESH LPA IS LIKELY TO FORM OVER NORTHWEST AND ADJOINING WESTCENTRAL BOB OFF SOUTH ODISHA AND NORTH ANDRA PRADESH COASTS AROUND 24TH JULY.

Legends: IMD GFS: India Meteorological Department Global Forecast System, NCUM: National Centre for Medium Range Weather Forecasting Centre (NCMRWF) Unified Model, European Centre for Medium Range Weather Forecasting, GPP: Genesis Potential Parameter, National Centre for Environment Prediction GFS, ECMM: ECMWF multi model, GEFS: GFS ensemble, NEPS: NCUM ensemble prediction system, CNCUM: Coupled NCUM, CPC: Climate Prediction Center, NWS: National Weather Service)

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

20-07-2023/(0300 to 0326) GMT
20-07-2023/(0830 to 0856) IST



IMD,DELHI

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