



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 13.08.2022

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0800 UTC OF 13.08.2022 BASED ON 0300 UTC OF 13.08.2022.

(A) DEPRESSION OVER NORTHWEST AND ADJOINING NORTHEAST ARABIAN SEA

THE DEPRESSION OVER NORTHWEST AND ADJOINING NORTHEAST ARABIAN SEA MOVED NEARLY WESTWARDS WITH A SPEED OF 10 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 13TH AUGUST, 2022, OVER THE SAME REGION NEAR LATITUDE 22.1°N AND LONGITUDE 63.6°E, ABOUT 560 KM WEST-SOUTHWEST OF NALIYA (GUJARAT), 630 KM WEST OF PORBANDAR (GUJARAT), 470 KM SOUTHWEST OF KARACHI (PAKISTAN) AND 460 KM SOUTHEAST OF CHAHBAHAR (IRAN).

IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 06 HOURS. THEREAFTER, THE REMNANT WELL MARKED LOW PRESSURE AREA IS LIKELY TO RECURVE NORTH-NORTHEASTWARDS AND WEAKEN FURTHER GRADUALLY.

AS PER INSAT 3D IMAGERY AT 0300 UTC, INTENSITY OF THE SYSTEM IS CHARACTERISED AS T 1.5. THE CLOUD MASS HAS FURTHER SHEARED TO THE WEST OF SYSTEM CENTRE. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTHWEST AND ADJOINING WESTCENTRAL ARABIAN SEA AND OMAN. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93°C.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH OVER NORTHWEST & ADJOINING NORTHEAST ARABIAN SEA, CENTRAL ARABIAN SEA AND ALONG & OFF GUJARAT, PAKISTAN & OMAN COASTS. THE ESTIMATED CENTRAL PRESSURE IS 992 HPA.

(B) LIKELY FORMATION OF DEPRESSION OVER NORTHWEST BAY OF BENGAL AROUND 14TH AUGUST

A LOW PRESSURE AREA HAS FORMED OVER NORTH BAY OF BENGAL AT 0300 UTC OF TODAY, THE 13TH AUGUST. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS, BECOME WELL MARKED DURING NEXT 12 HOURS AND CONCENTRATE INTO A DEPRESSION DURING SUBSEQUENT 24 HOURS.

SEA CONDITION IS LIKELY TO BE ROUGH TO VERY ROUGH OVER NORTH AND ADJOINING CENTRAL BAY OF BENGAL AND ALONG & OFF BANGLADESH, WEST BENGAL, ODISHA AND ADJOINING NORTH ANDHRA PRADESH COASTS ON 13TH AND 14TH AUGUST.

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH BAY OF BENGAL AND NEIGHBOURHOOD. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY

OVER NORTH AND ADJOINING CENTRAL BAY OF BENGAL AND COASTAL ODISHA. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93⁰C.

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	MOD	NIL	NIL	NIL

REMARKS:

ARABIAN SEA:

SEA SURFACE TEMPERATURE IS AROUND 28-29°C OVER NORTH ARABIAN SEA. LOW LEVEL VORTICITY IS THE SAME DURING PAST 6 HOURS IS AROUND $150 \times 10^{-6} \text{ S}^{-1}$ TO THE SOUTH OF SYSTEM CENTRE. LOW LEVEL CONVERGENCE HAS REDUCED AND IS AROUND $10 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND $20 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHWEST OF SYSTEM CENTRE AND ANOTHER ZONE OF $10 \times 10^{-5} \text{ S}^{-1}$ TO THE NORTHEAST OF SYSTEM CENTRE. WIND SHEAR IS HIGH (20-30 KNOTS) OVER THE SYSTEM AREA AND IS LIKELY TO REMAIN HIGH OVER NORTH ARABIAN SEA.

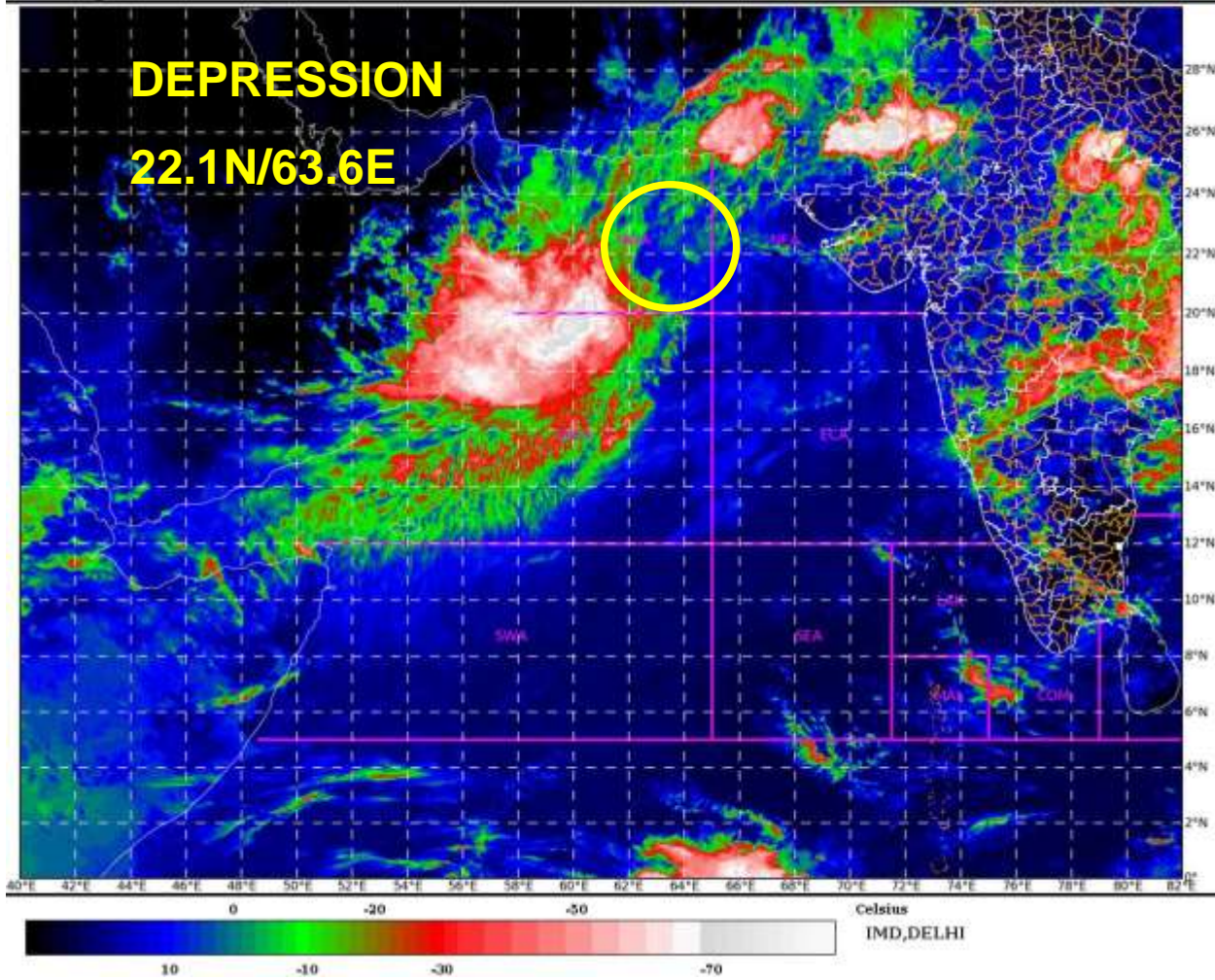
IN VIEW OF CURRENT ENVIRONMENTAL CONDITIONS, IT IS INFERRED THAT THE **DEPRESSION OVER NORTHWEST AND ADJOINING NORTHEAST ARABIAN SEA** IS VERY LIKELY TO MOVE NEARLY WESTWARDS FOR SOMETIME AND THEN NORTHWESTWARDS AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 06 HOURS. THEREAFTER, THE REMNANT WELL MARKED LOW PRESSURE AREA IS LIKELY TO RECURVE NORTH-NORTHEASTWARDS AND WEAKEN GRADUALLY FURTHER.

BAY OF BENGAL:

SEA SURFACE TEMPERATURE IS AROUND 28-29°C OVER NORTH BAY OF BENGAL. LOW LEVEL VORTICITY IS AROUND $120 \times 10^{-6} \text{ S}^{-1}$ OVER NORTHWEST BOB. LOW LEVEL CONVERGENCE IS AROUND $20 \times 10^{-5} \text{ S}^{-1}$ OVER NORTHWEST BOB AND ANOTHER ZONE OF $20 \times 10^{-5} \text{ S}^{-1}$ OVER EASTCENTRAL BOB. POSITIVE UPPER LEVEL DIVERGENCE AROUND $20 \times 10^{-5} \text{ S}^{-1}$ OVER CENTRAL BOB. WIND SHEAR IS LOW (10-20 KNOTS) OVER HEAD BOB AND HIGH (20-30 KNOTS) OVER ADJOINING CENTRAL BOB.

MOST OF THE MODELS ARE INDICATING LIKELY FORMATION OF A DEPRESSION OVER NORTHWEST BAY OF BENGAL AROUND 14TH AUGUST AND WEST-NORTHWESTWARDS MOVEMENT OF THE SYSTEM.

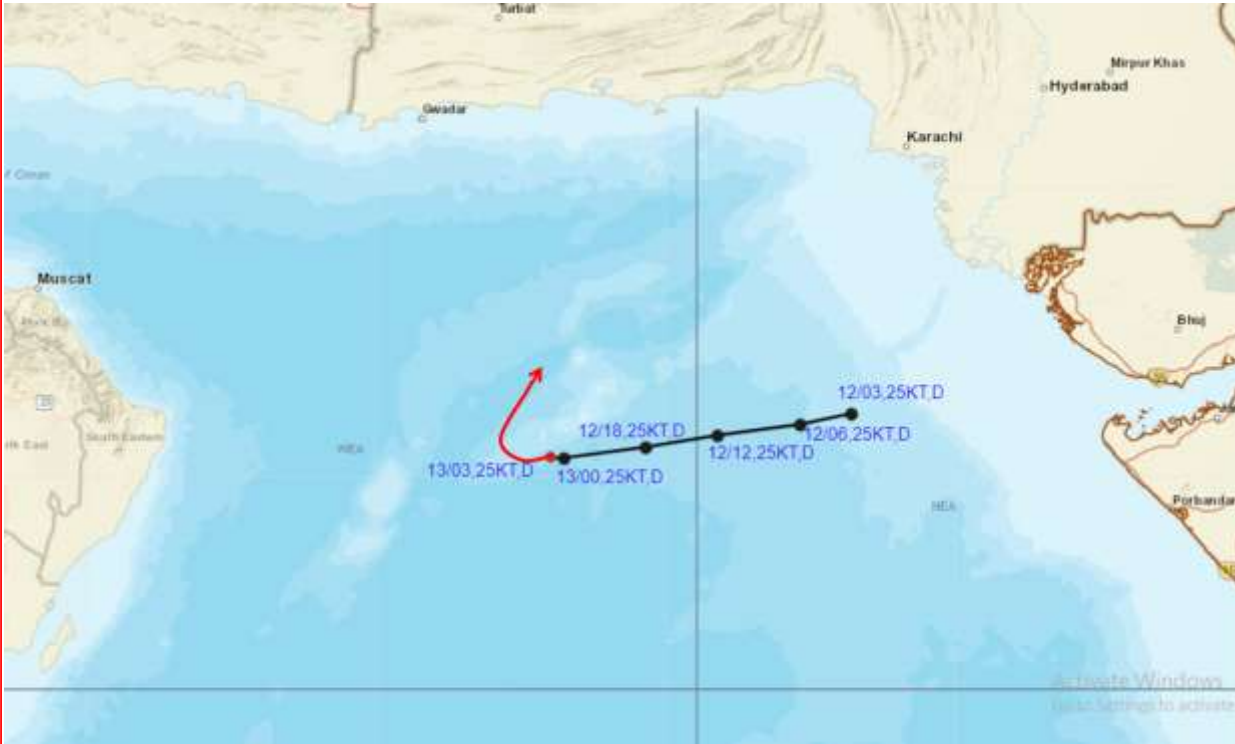
(M. SHARMA)
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Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very 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



OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHWEST AND ADJOINING NORTHEAST ARABIAN SEA BASED ON 0300 UTC OF 13th AUGUST, 2022



DATE/TIME IN UTC

IST=UTC + 0530

L: LOW PRESSURE AREA

WML: WELL MARKED LOW PRESSURE AREA

D: DEPRESSION (17-27 KT)

DD: DEEP DEPRESSION (28-33 KT)

CS: CYCLONIC STORM (34-47 KT)

SCS: SEVERE CYCLONIC STORM (48-63KT)

VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)

ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)

SuCS: SUPER CYCLONIC STORM (\geq 120 KT)

● LESS THAN 34 KT

○ 34-47 KT

○ \geq 48 KT

— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY