



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 17.07.2022

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0900 UTC OF 17.07.2022 BASED ON 0600 UTC OF 17.07.2022.

SUB: DEPRESSION OVER NORTHEAST ARABIAN SEA OFF SAURASHTRA AND KUTCH COASTS

THE DEPRESSION OVER NORTHEAST ARABIAN SEA OFF SAURASHTRA AND KUTCH COASTS MOVED WEST-NORTHWESTWARDS DURING LAST 6 HOURS WITH A SPEED OF 15 KMPH AND LAY CENTERED AT 0600 UTC OF 17TH JULY, 2022 OVER THE SAME REGION NEAR LATITUDE 23.2°N AND LONGITUDE 67.8°E, ABOUT 250 KM NORTHWEST OF PORBANDAR (42830), 150 KM WEST-NORTHWEST OF OKHA (42730), 110 KM WEST OF NALIYA (42631) AND 200 KM SOUTH-SOUTHEAST OF KARACHI (40898).

IT IS VERY LIKELY TO MAINTAIN THE INTENSITY OF DEPRESSION DURING NEXT 12 HOURS AND WEAKEN GRADUALLY THEREAFTER. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS TOWARDS OMAN COAST AS A REMNANT LOW PRESSURE AREA ACROSS NORTHWEST ARABIAN SEA DURING NEXT 36 HOURS.

AS PER INSAT 3D IMAGERY, THE INTENSITY OF THE SYSTEM IS CHARACTERISED AS T.1.5. CENTRE IS CLEARLY DEFINED IN VISIBLE IMAGERY. THE CLOUDS ARE ORGANISED IN SHEAR PATTERN WITH CONVECTIVE CLOUD SHEARED TO THE WEST OF SYSTEM CENTRE. THE CLOUD MASS IS SHOWING SIGNS OF GRADUAL DISINTEGRATION DURING PAST 3 HOURS. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH ARABIAN SEA. MINIMUM CLOUD TOP TEMPERATURE IS -93°C.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH OVER NORTHEAST, ADJOINING NORTHWEST & CENTRAL ARABIAN SEA AND ALONG & OFF GUJARAT & PAKISTAN COASTS. THE ESTIMATED CENTRAL PRESSURE IS 994 HPA.

REMARKS:

SEA SURFACE TEMPERATURE IS AROUND 28-29°C OVER NORTHEAST ARABIAN SEA WITH GRADUAL DECREASING TREND OVER NORTHWEST ARABIAN SEA. TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 60-80 KJ/CM² OVER NORTHEAST AND ADJOINING NORTHWEST ARABIAN SEA BECOMING LESS THAN 50 KJ/CM² OVER GULF OF OMAN AND WESTWARDS. THE MADDEN JULIAN OSCILLATION (MJO) INDEX CURRENTLY LIES IN PHASE 5 WITH AMPLITUDE LESS THAN 1 AND WOULD CONTINUE IN SAME PHASE DURING NEXT 2 DAYS.

LOW LEVEL VORTICITY HAS DECREASED DURING PAST 3 HOURS AND IS AROUND 100 X10⁻⁶ S⁻¹ TO THE SOUTHWEST OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE HAS DECREASED AND IS 10X10⁻⁵ S⁻¹ TO THE

SOUTHWEST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE HAS DECREASED AND IS AROUND $10 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS LOW (05-10 KNOTS) AROUND THE SYSTEM CENTRE & OVER NORTHEAST ARABIAN SEA WITH INCREASING TREND OVER NORTHWEST ARABIAN SEA TO MODERATE VALUE OF 20-25 KNOTS . TOTAL PRECIPITABLE WATER IMAGERY INDICATES WARM MOIST AIR INCURSION INTO THE SYSTEM CORE.

MOST OF THE NUMERICAL MODELS INDICATE THAT THE SYSTEM WOULD MAINTAIN THE INTENSITY OF DEPRESSION FOR NEXT 12 HOURS AND WEAKEN GRADUALLY THEREAFTER. MODELS ARE ALSO INDICATING NEARLY WESTWARDS MOVEMENT OF THE SYSTEM TOWARDS OMAN COAST AS A REMNANT LOW PRESSURE AREA.

IN VIEW OF ABOVE, IT IS VERY LIKELY TO MAINTAIN THE INTENSITY OF DEPRESSION DURING NEXT 12 HOURS AND WEAKEN GRADUALLY THEREAFTER. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS TOWARDS OMAN COAST AS A REMNANT LOW PRESSURE AREA ACROSS NORTHWEST ARABIAN SEA DURING NEXT 36 HOURS.

(M. SHARMA)
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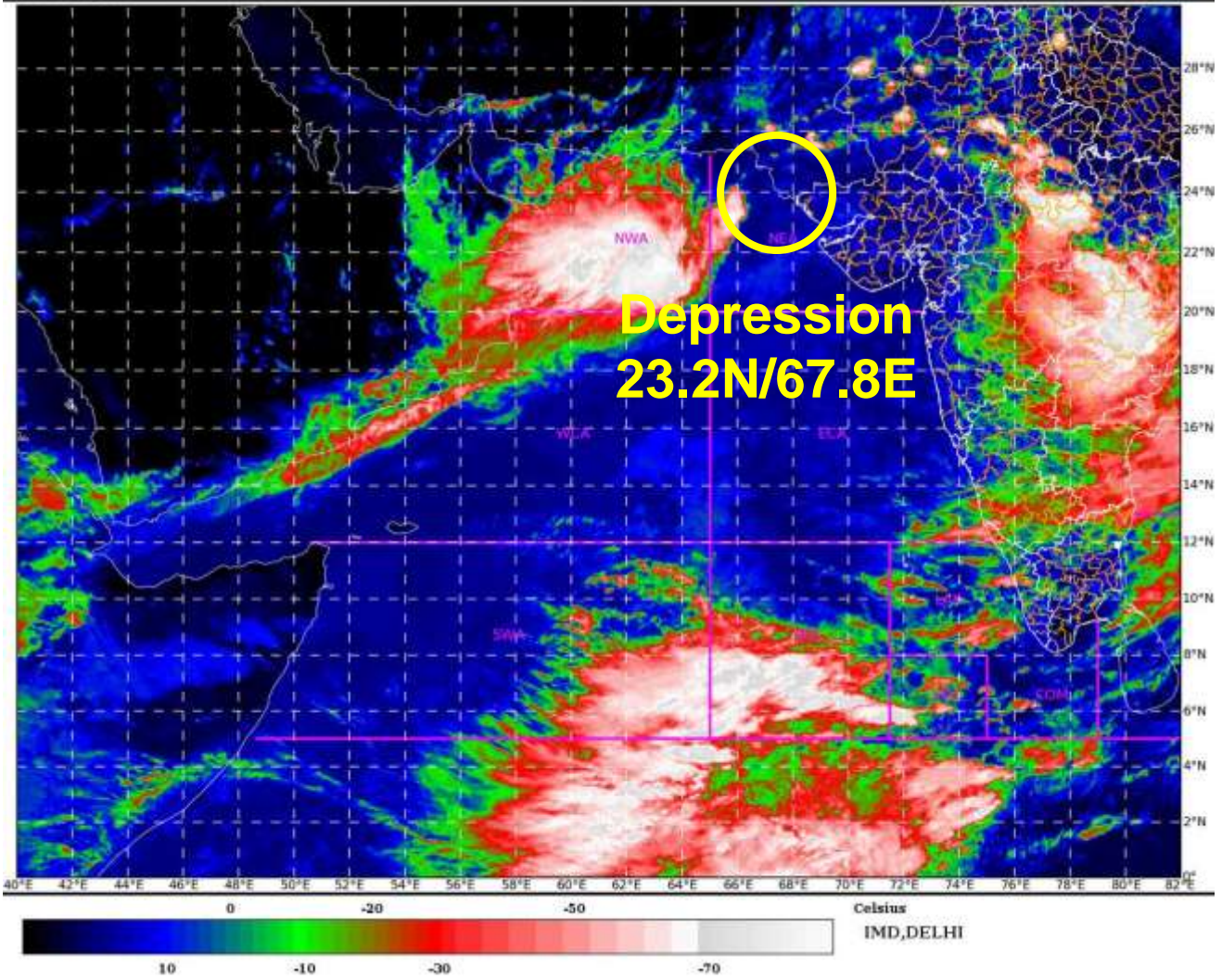


OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHEAST ARABIAN SEA OFF SAURASHTRA AND KUTCH COAST BASED ON 0600 UTC OF 17th JULY 2022



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 (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY



**INDIA METEOROLOGICAL DEPARTMENT
FISHERMAN WARNING FOR BAY OF BENGAL AND ARABIAN SEA**

