



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

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**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 2000 UTC OF 17.07.2022 BASED ON 1800 UTC OF 17.07.2022.**

**SUB: DEPRESSION OVER NORTHEAST ARABIAN SEA**

THE DEPRESSION OVER NORTHEAST ARABIAN SEA OFF SAURASHTRA AND KUTCH COASTS MOVED WESTWARDS DURING LAST 06 HOURS WITH A SPEED OF 18 KMPH AND LAY CENTERED AT 1800 UTC OF 17<sup>TH</sup> JULY, 2022 OVER NORTHEAST ARABIAN SEA NEAR LATITUDE 23.4°N AND LONGITUDE 66.3°E, ABOUT 400 KM WEST-NORTHWEST OF PORBANDAR (42830), 305 KM WEST-NORTHWEST OF OKHA (42730), 265 KM WEST OF NALIYA (42631) AND 185 KM SOUTH-SOUTHWEST OF KARACHI (40898).

IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 06 HOURS. THEREAFTER IT WOULD CONTINUE TO MOVE NEARLY WESTWARDS TOWARDS OMAN COAST AS A LOW PRESSURE AREA ACROSS NORTHWEST ARABIAN SEA DURING SUBSEQUENT 24 HOURS.

AS PER INSAT 3D IMAGERY, THE INTENSITY OF THE SYSTEM IS CHARACTERISED AS T.1.0. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTHWEST ARABIAN SEA, MAKARAN COAST AND NEIGHBOURHOOD. MINIMUM CLOUD TOP TEMPERATURE IS -90 °C. ASSOCIATED INTENSE CONVECTIVE CLOUD MASS LIES WEST TO THE SYSTEM CENTER.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH OVER NORTHEAST AND ARABIAN SEA. THE ESTIMATED CENTRAL PRESSURE IS 995 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/CM<sup>2</sup> OVER NORTHEAST AND ADJOINING NORTHWEST ARABIAN SEA BECOMING LESS THAN 50 KJ/CM<sup>2</sup> 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 IS AROUND  $100 \times 10^{-6} \text{ S}^{-1}$  TO THE SOUTHWEST OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE AND UPPER LEVEL DIVERGENCE ARE AROUND  $10 \times 10^{-5} \text{ S}^{-1}$  TO THE SOUTHWEST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS MODERATE (10 KNOTS) AROUND THE SYSTEM CENTRE. TOTAL PRECIPITABLE WATER IMAGERY INDICATES WARM MOIST AIR INCURSION INTO THE SYSTEM CORE.

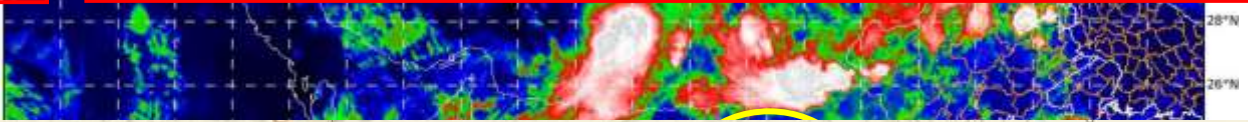
MOST OF THE NUMERICAL MODELS INDICATE THAT THE SYSTEM WOULD MAINTAIN THE INTENSITY OF DEPRESSION FOR NEXT 06 HOURS AND WEAKEN GRADUALLY THEREAFTER. MODELS ARE ALSO INDICATING NEARLY WESTWARDS MOVEMENT OF THE SYSTEM TOWARDS OMAN COAST AS A REMNANT LOW PRESSURE AREA.

IN VIEW OF THE ABOVE, IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 06 HOURS. THEREAFTER IT WOULD CONTINUE TO MOVE NEARLY WESTWARDS TOWARDS OMAN COAST AS A LOW PRESSURE AREA ACROSS NORTHWEST ARABIAN SEA DURING SUBSEQUENT 24 HOURS.

**THE SYSTEM IS UNDER CONTINUOUS SURVEILLANCE AND THE NEXT BULLETIN WILL BE ISSUED AT 0300 UTC OF 18<sup>TH</sup> JULY, 2022.**

( SHOBHIT KATIYAR)  
SCIENTIST-C  
RSMC NEW DELHI

**OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHEAST ARABIAN SEA BASED ON 1800 UTC OF 17<sup>th</sup> JULY 2022.**

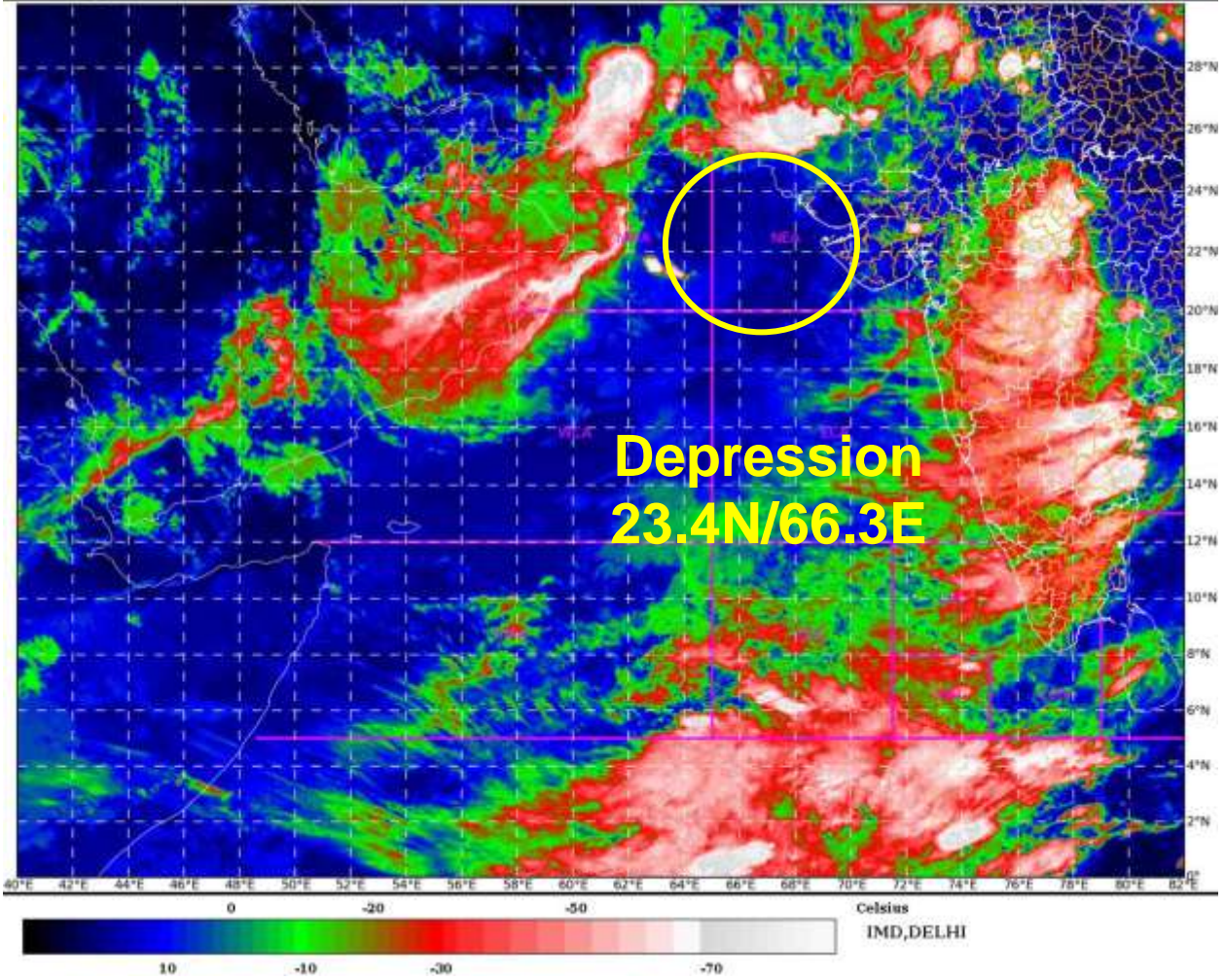


DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)  
 SuCS: SUPER CYCLONIC STORM ( $\geq$  120 KT)

- LESS THAN 34 KT
- 34-47 KT
- $\geq$  48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

SAT : INSAT-3D IMG  
IMG\_TIR1\_TEMP 10.8 um  
ARABIAN SEA

17-07-2022/(1830 to 1856) GMT  
18-07-2022/(0000 to 0026) IST



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

