



**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 0320 UTC OF 17.07.2022 BASED ON 0000 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 NORTHWESTWARDS SLOWLY DURING LAST 6 HOURS WITH A SPEED OF 5 KMPH AND LAY CENTERED AT 0000 UTC OF 17TH JULY, 2022 OVER THE SAME REGION NEAR LATITUDE 22.8°N AND LONGITUDE 68.5°E, ABOUT 170 KM WEST-NORTHWEST OF PORBANDAR ((428300, 70 KM WEST-NORTHWEST OF OKHA (42730), 70 KM SOUTH-SOUTHWEST OF NALIYA (42631) AND 270 KM SOUTH-SOUTHEAST OF KARACHI (40898).

IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS TOWARDS OMAN COAST ACROSS NORTHWEST ARABIAN SEA DURING NEXT 48 HOURS.

AS PER INSAT 3D IMAGERY, THE INTENSITY OF THE SYSTEM IS CHARACTERISED AS T.1.5. CENTRE POORLY DEFINED IN THE IR IMAGERY. THE CLOUD MASS INDICATES SHEAR PATTERN WITH CONVECTIVE CLOUD SHEARED TO THE WEST OF SYSTEM CENTRE. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH ARABIAN SEA AND GULF OF KUTCH. 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 AND ADJOINING CENTRAL ARABIAN SEA ALONG & OFF GUJARAT AND PAKISTAN COASTS. THE ESTIMATED CENTRAL PRESSURE IS 992 HPA.

REMARKS:

SEA SURFACE TEMPERATURE IS AROUND 28-29°C OVER NORTH 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 4 WITH AMPLITUDE LESS THAN 1 AND WOULD CONTINUE IN SAME PHASE DURING NEXT 2 DAYS.

LOW LEVEL VORTICITY CONTINUED TO REMAIN AROUND $150 \times 10^{-6} \text{ S}^{-1}$ TO THE SOUTHWEST OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE HAS INCREASED TO AROUND $30 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND $30 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS LOW (05-10 KNOTS)

AROUND THE SYSTEM CENTRE WITH GRADUAL INCREASING TREND OVER NORTHWEST ARABIAN SEA TO MODERATE VALUE OF 20-25 KNOTS . UNDER THESE FAVOURABLE CONDITIONS, THE SYSTEM IS LIKELY TO MAINTAINED IT'S INTENSITY OF DEPRESSION. HOWEVER, AS THE SYSTEM WOULD MOVE WESTWARDS, IT WOULD ENCOUNTER HIGHER VERTICAL WIND SHEAR AND THUS, WOULD NOT INTENSIFY FURTHER.

MOST OF THE NUMERICAL MODELS INDICATE THAT THE SYSTEM WOULD MAINTAIN THE INTENSITY OF DEPRESSION FOR NEXT 36 HOURS AND WEAKEN GRADUALLY THEREAFTER. IT WOULD MOVE WESTWARDS TOWARDS OMAN COAST.

IN VIEW OF ABOVE, IT IS VERY LIKELY TO NEARLY WESTWARDS TOWARDS OMAN COAST ACROSS NORTHWEST ARABIAN SEA DURING SUBSEQUENT 48 HOURS.

(RK JENAMANI)
SCIENTIST-F
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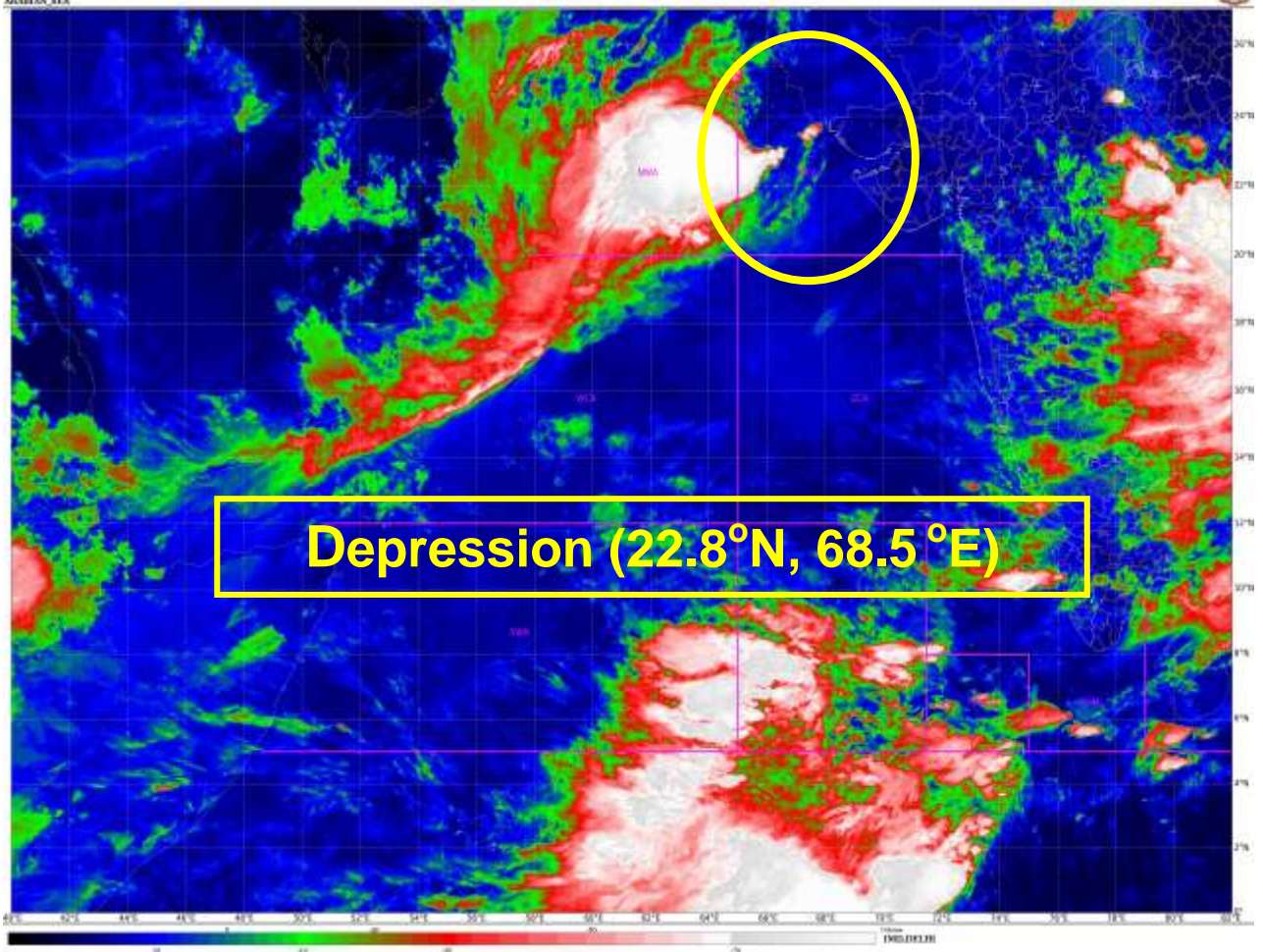


OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHEAST ARABIAN SEA OFF SAURASHTRA AND KUTCH COAST BASED ON 0000 UTC OF 17th JULY 2022

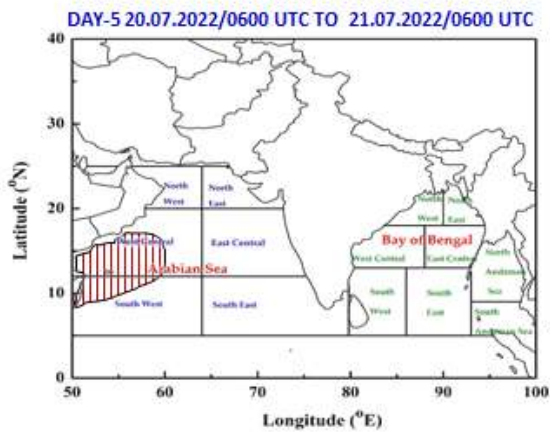
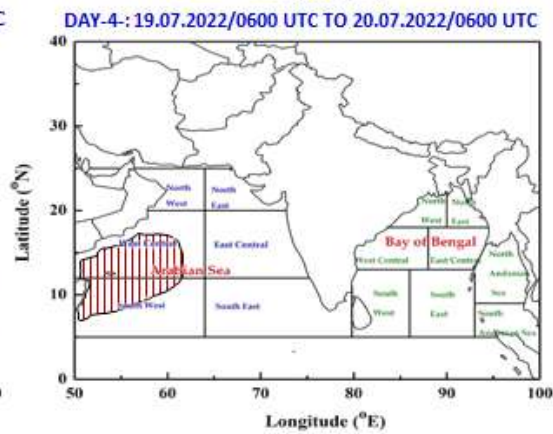
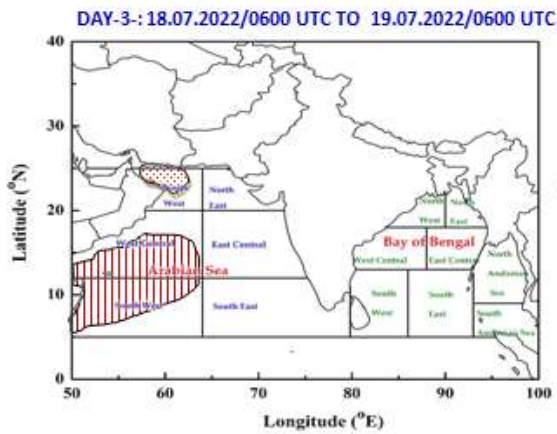
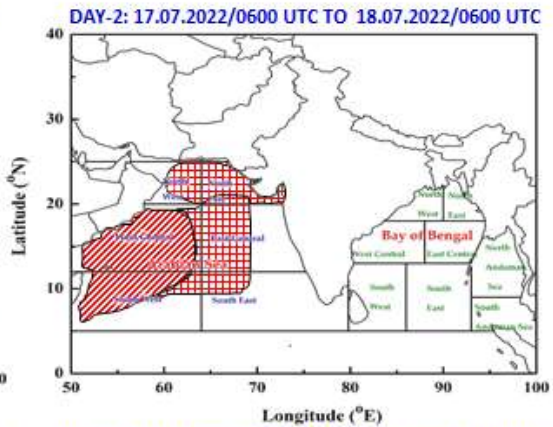
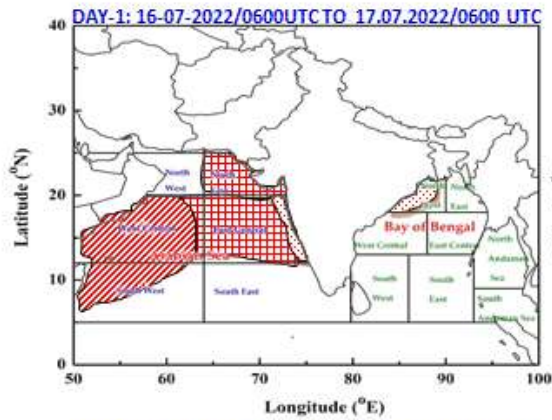


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119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

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



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



AREA UNDER FISHERMEN WARNING	
	40-50 KMPH GUSTING TO 60 KMPH (SQUALLY WEATHER)
	45-55 KMPH GUSTING TO 65 KMPH (STRONG WIND)
	45-55 KMPH GUSTING TO 65 KMPH (SQUALLY WEATHER)
	50-60 KMPH GUSTING TO 70 KMPH (STRONG WIND)