REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICALCYCLONES, NEWDELHI

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 0630 UTC OF 17.07.2022 BASED ON 0300 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 10 KMPH AND LAY CENTERED AT 0300 UTC OF TODAY, THE 17TH JULY, 2022 OVER THE SAME REGION NEAR LATITUDE 23.0°N AND LONGITUDE 68.2°E, ABOUT 220 KM NORTHWEST OF PORBANDAR (42830), 110 KM WEST-NORTHWEST OF OKHA (42730), 80 KM WEST-SOUTHWEST OF NALIYA (42631) AND 240 KM SOUTH-SOUTHEAST OF KARACHI (40898).

IT IS VERY LIKELY TO MAINTAIN THE INTENSITY OF DEPRESSION DURING NEXT 24 HOURS AND WEAKEN THEREAFTER INTO A WELL MARKED LOW PRESSURE AREA. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS 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 IS CLEARLY DEFINED IN VISIBLE IMAGERY. THE CLOUDS ARE ORGANISED IN SHEAR PATTERN WITH CONVECTIVE CLOUD SHEARED TO THE WEST OF SYSTEM CENTRE. 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 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^{0}C OVER NORTHEAST ARABIAN SEA WITH GRADUAL DECREASING TREND OVER NORTHWEST ARABIAN SEA. TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 60-80 KJ/CM^2 OVER NORTHEAST AND ADJOINING NORTHWEST ARABIAN SEA BECOMING LESS THAN 50 KJ/CM^2 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 THE SAME AROUND 150 X10^{-6} S^{-1} TO THE SOUTHWEST OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE HAS INCREASED AND IS 40X10^{-5} S^{-1} TO THE SOUTHWEST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND 20 X10^{-5} S^{-1} TO THE WEST 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 ALSO INDICATES WARM MOIST AIR INCURSION INTO THE SYSTEM CORE. UNDER THESE FAVOURABLE CONDITIONS, THE SYSTEM IS LIKELY TO MAINTAIN IT'S INTENSITY OF DEPRESSION. HOWEVER, AS THE SYSTEM WOULD MOVE WESTWARDS, IT WOULD ENCOUNTER HIGHER VERTICAL WIND SHEAR AND THUS, WEAKEN GRADUALLY.

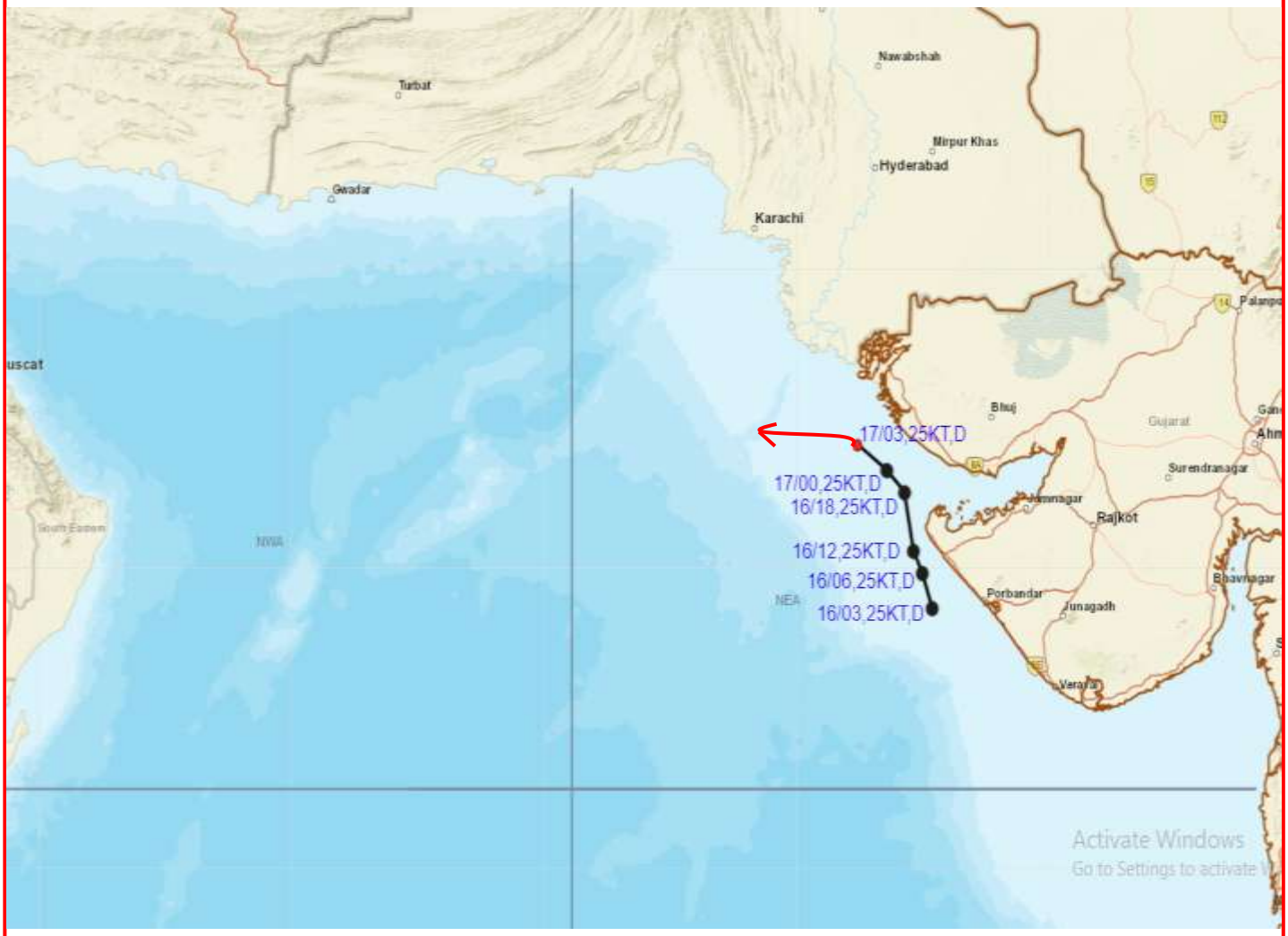
MOST OF THE NUMERICAL MODELS INDICATE THAT THE SYSTEM WOULD MAINTAIN THE INTENSITY OF DEPRESSION FOR NEXT 24 HOURS AND WEAKEN GRADUALLY THEREAFTER. MODELS ARE ALSO INDICATING NEARLY WESTWARDS MOVEMENT OF THE SYSTEM TOWARDS OMAN COAST.

IN VIEW OF ABOVE, THE SYSTEM IS VERY LIKELY TO MAINTAIN THE INTENSITY OF DEPRESSION DURING NEXT 24 HOURS AND WEAKEN THEREAFTER INTO A WELL MARKED LOW PRESSURE AREA. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS TOWARDS OMAN COAST ACROSS NORTHWEST ARABIAN SEA DURING NEXT 48 HOURS.

(M. SHARMA)
SCIENTIST-D
RSMC NEW DELHI

This is a guidance Bulletin for the WMO/ESCAP Panel Member countries,. Please visit respective National websites for Country specific Bulletins

OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHEAST ARABIAN SEA OFF SAURASHTRA AND KUTCH COAST BASED ON 0300 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

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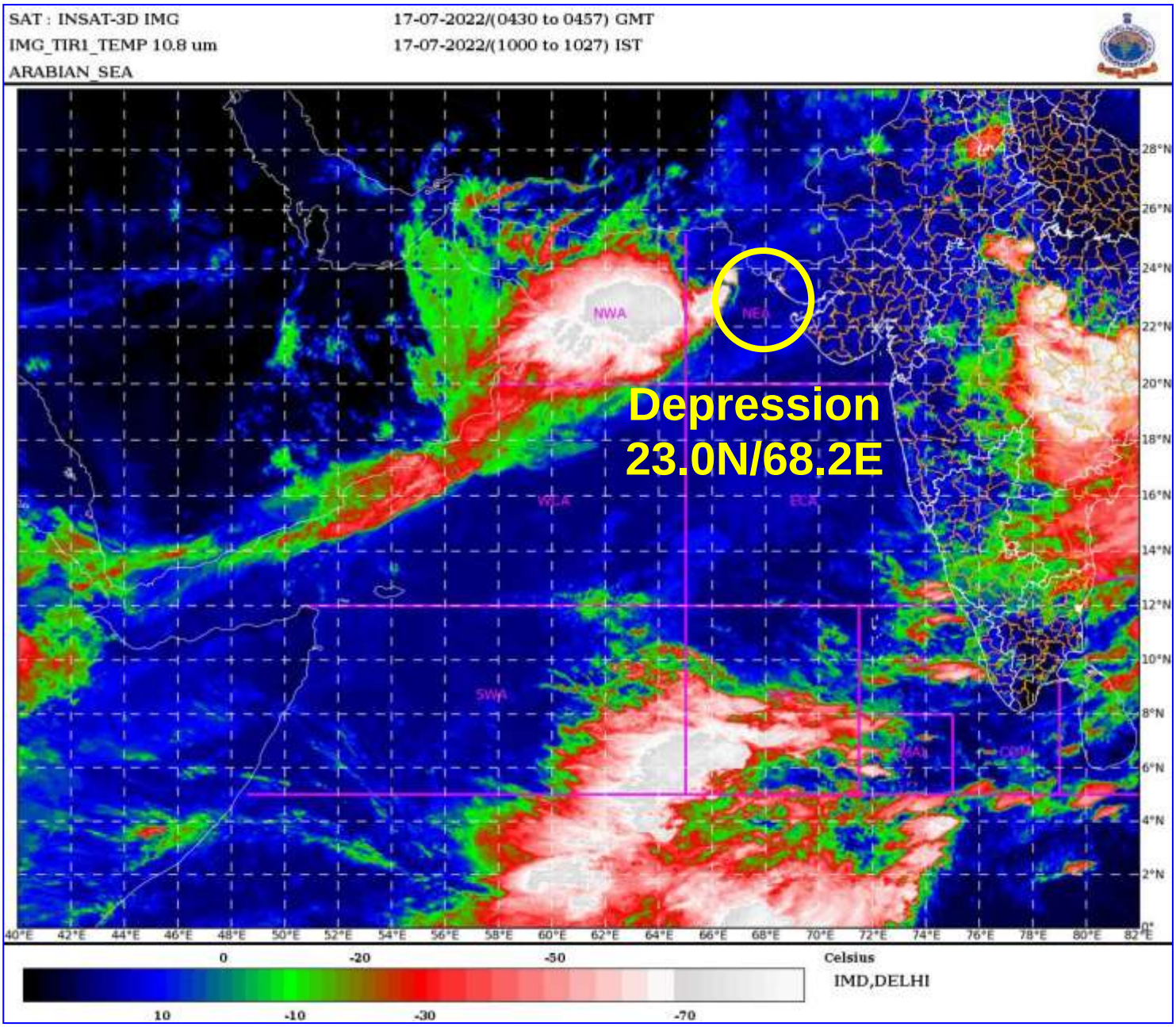
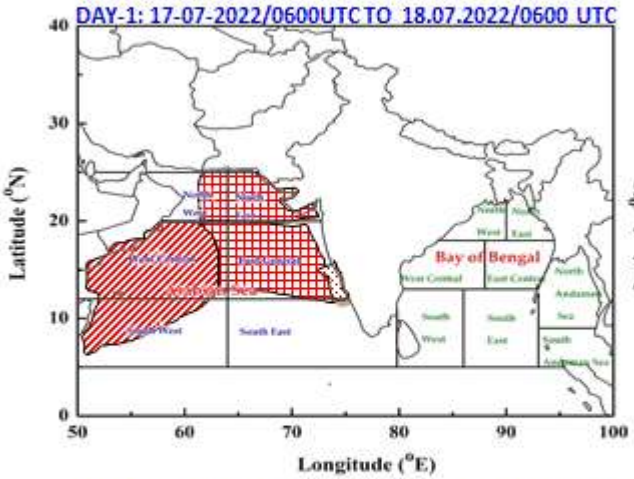
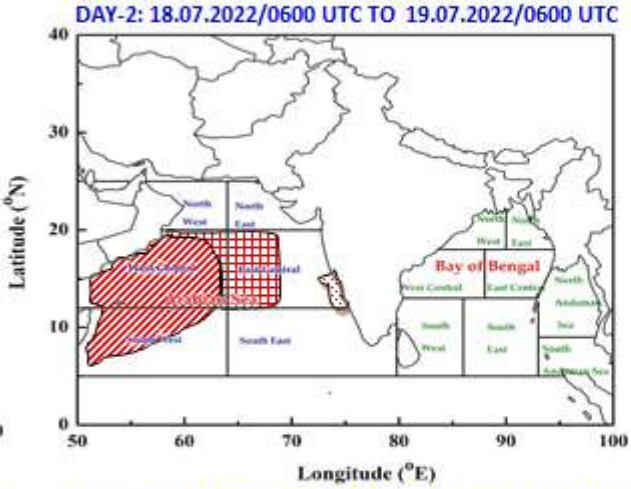

SAT : INSAT-3D IMG
IMG_TIR1_TEMP 10.8 um
ARABIAN_SEA
17-07-2022/(0430 to 0457) GMT
17-07-2022/(1000 to 1027) IST
NWA
NEA
WCA
ECA
SWA
Depression
23.0N/68.2E
Celsius
IMD,DELHI

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

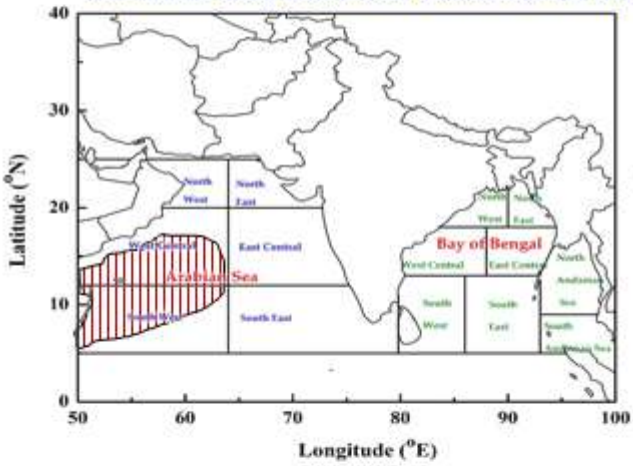
DAY-1: 17-07-2022/0600UTC TO 18.07.2022/0600 UTC



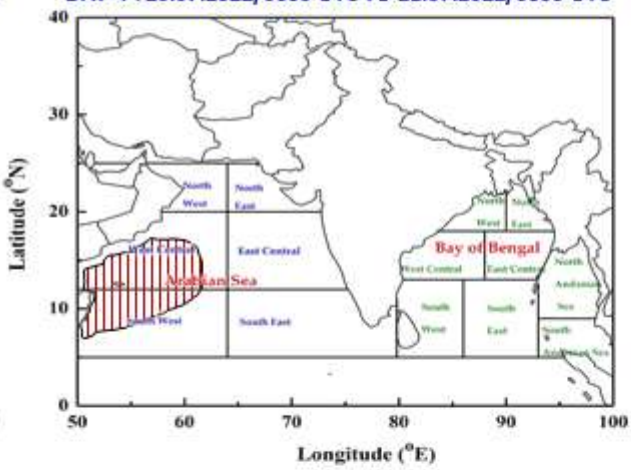
DAY-2: 18.07.2022/0600 UTC TO 19.07.2022/0600 UTC



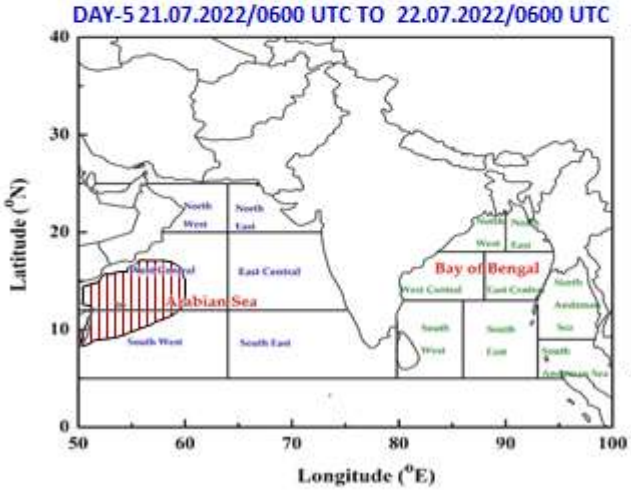
DAY-3-: 19.07.2022/0600 UTC TO 20.07.2022/0600 UTC



DAY-4-: 20.07.2022/0600 UTC TO 21.07.2022/0600 UTC



DAY-5 21.07.2022/0600 UTC TO 22.07.2022/0600 UTC



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)