



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 07.06.2023

FROM: RSMC –TROPICAL CYCLONES, NEW DELHI

**TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)
OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)**

**TROPICAL CYCLONE ADVISORY NO. 8 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1130 UTC OF 07.06.2023
BASED ON 0900 UTC OF 07.06.2023**

**SUB: VERY SEVERE CYCLONIC STORM “BIPARJOY” (PRONOUNCED AS
“BIPORJOY”) OVER EASTCENTRAL ARABIAN SEA**

THE VERY SEVERE CYCLONIC STORM “BIPARJOY” (PRONOUNCED AS “BIPORJOY”) OVER EASTCENTRAL AND ADJOINING SOUTHEAST ARABIAN SEA MOVED NEARLY NORTHWARDS WITH A SPEED OF 7 KMPH DURING LAST 6 HOURS AND LAY CENTERED AT 0900UTC OF TODAY, THE 07TH JUNE, 2023 OVER EASTCENTRAL ARABIAN SEA NEAR LATITUDE 13.1°N AND LONGITUDE 66.3 °E, ABOUT 850 KM WEST-SOUTHWEST OF GOA(43192), 950 KM SOUTHWEST OF MUMBAI(43057), 1010 KM SOUTH-SOUTHWEST OF PORBANDAR(42830) AND 1310 KM SOUTH OF KARACHI(41780).

IT WOULD MOVE NEARLY NORTHWARDS DURING NEXT 24 HOURS AND THEN NORTH-NORTHWESTWARDS DURING SUBSEQUENT 3 DAYS.

Forecast track and intensity are given below:

Date/Time(UTC)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
07.06.23/0900	13.1/66.3	115-125 gusting to 140	Very Severe Cyclonic Storm
07.06.23/1200	13.3/66.3	120-130 gusting to 145	Very Severe Cyclonic Storm
07.06.23/1800	13.7/66.2	125-135 gusting to 150	Very Severe Cyclonic Storm
08.06.23/0000	14.0/66.1	130-140 gusting to 155	Very Severe Cyclonic Storm
08.06.23/0600	14.3/66.0	135-145 gusting to 160	Very Severe Cyclonic Storm

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%
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08.06.23/1800	14.9/65.8	135-145 gusting to 160	Very Severe Cyclonic Storm
09.06.23/0600	15.5/65.5	145-155 gusting to 170	Very Severe Cyclonic Storm
09.06.23/1800	16.1/65.2	145-155 gusting to 170	Very Severe Cyclonic Storm
10.06.23/0600	16.7/64.9	145-155 gusting to 170	Very Severe Cyclonic Storm
10.06.23/1800	17.4/64.5	135-145 gusting to 160	Very Severe Cyclonic Storm
11.06.23/0600	18.2/64.0	130-140 gusting to 155	Very Severe Cyclonic Storm
11.06.23/1800	18.9/63.6	125-135 gusting to 150	Very Severe Cyclonic Storm
12.06.23/0600	19.5/63.1	120-130 gusting to 145	Very Severe Cyclonic Storm

AS PER INSAT 3D IMAGERY INTENSITY OF THE SYSTEM IS T 4.0. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL AND ADJOINING SOUTH ARABIAN SEA BETWEEN LATITUDE 10.5N & 15.0N LONGITUDE 61.5E & 66.5E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93DEG C. AS PER MULTISAT WINDS, STRONGER WINDS ARE SEEN IN THE SOUTHEAST SECTOR.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 65 KNOTS GUSTING TO 75 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 983 HPA. SEA CONDITION IS LIKELY TO BE PHENOMENAL OVER EASTCENTRAL AND ADJOINING EASTCENTRAL ARABIAN SEA.

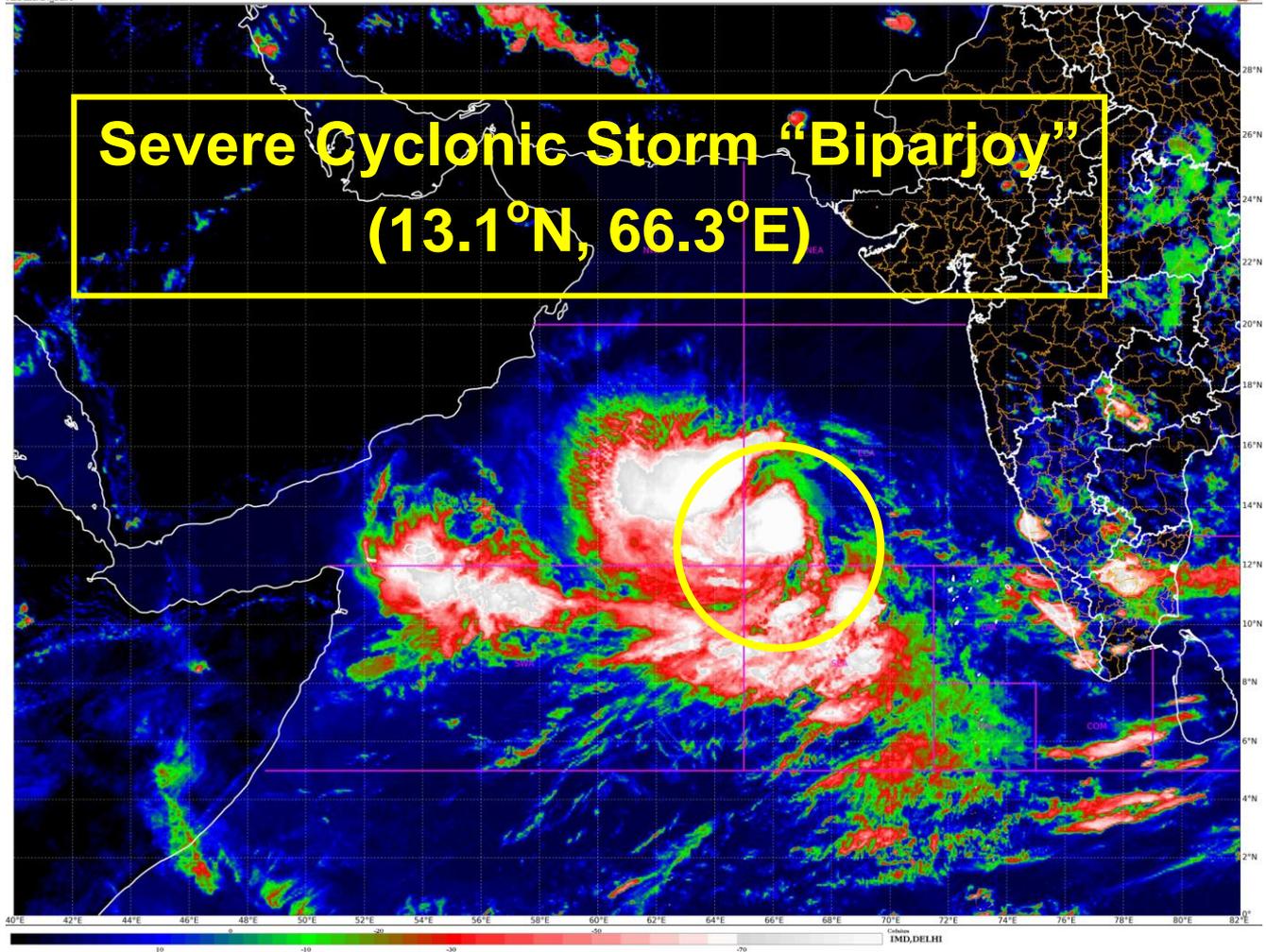
REMARKS:

SEA SURFACE TEMPERATURE IS AROUND 30-32°C OVER CENTRAL & ADJOINING SOUTH ARABIAN SEA. THE CYCLONIC STORM "BIPARJOY" IS CURRENTLY IN A VERY FAVOURABLE ENVIROMENT WITH POSITIVE LOW LEVEL VORTICITY ($200 \times 10^{-6} S^{-1}$) NEAR SYSTEM CENTRE, LOW LEVEL CONVERGENCE OF ABOUT $50 \times 10^{-5} S^{-1}$ OVER THE AREA AND UPPER LEVEL DIVERGENCE OF ABOUT $30 \times 10^{-5} S^{-1}$ TO THE SOUTH OF SYSTEM CENTRE. WIND SHEAR IS MODERATE OVER SYSTEM AREA (15-20 KNOTS) AND IS WEAK 05-10 KTS ALONG THE FORECASTE TRACK . MJO IS IN PHASE 2 WITH AMPLITUDE CLOSE TO 1 AND EQUATORIAL ROSSBY WAVES, KELVIN WAVES ALONGWITH WESTERLY WINDS (5-7 MPS) ARE ALSO PREVAILING OVER SOUTH AND CENTRAL ARABIAN SEA. TOTAL PRECEIPITABLE WATER IMAGERY INDICATE THE WARM MOIST AIR INCURSION INTO THE SYSTEM.

MOST OF THE MODELS SUCH AS ECMWF, IMDGFS, NCEP GFS, NCUM, IMD MME, IMD HWRF KEEPING THE SYSTEM INTENSITY AS VERY SEVERE CYCLONIC STORM FOR NEXT 4-5 DAYS. THE MODELS SUCH AS ECMWF, IMD GFS, NCUM, IMD MME, IMD HWRF ARE INDICATING INITIAL NEAR NORTHWARDS MOVEMENT TILL 8TH JUNE AND THEN NORTH-NORTHWESTWARDS MOVEMENT OF THE SYSTEM DURING SUBSEQUENT 3 DAYS. HOWEVER, NCEP GFS IS INDICATING LANDFALL OVER OMAN. THERE IS LARGE VARIATION AMONG VARIOUS MODELS WRT FURTHER MOVEMENT OF THE SYSTEM AFTER 11TH JUNE.

CONSIDERING ALL THE ABOVE, VERY SEVERE CYCLONIC STORM "BIPARJOY" IS LIKELY TO MOVE NEARLY NORTHWARDS DURING NEXT 24 HOURS AND THEN NORTH-NORTHWESTWARDS DURING SUBSEQUENT 3 DAYS.

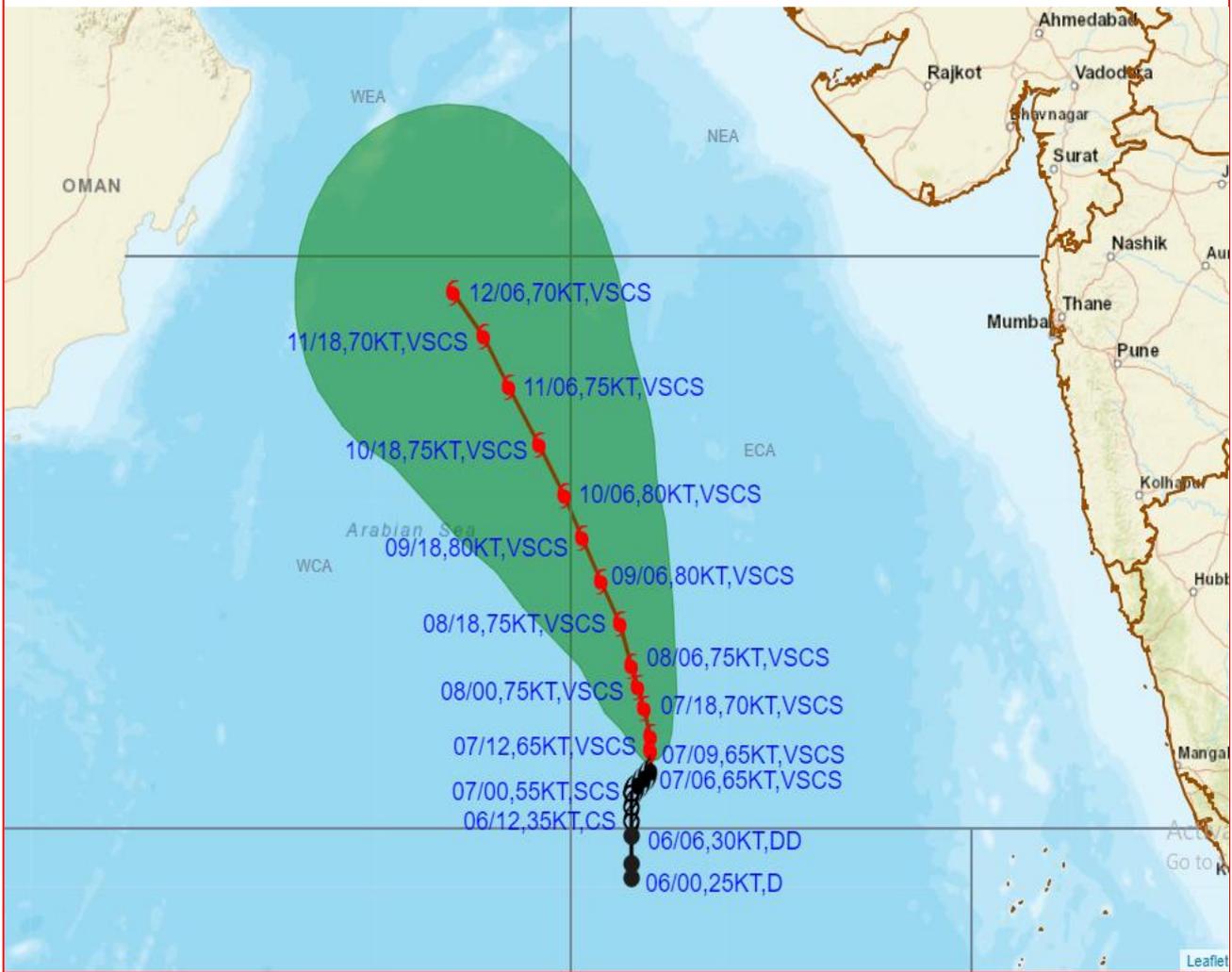
**DR RK JENAMANI
SC-G
RSMC NEW DELHI**



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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM “BIPARJOY” OVER EASTCENTRAL ARABIAN SEA BASED ON 0900 UTC (1430 IST) OF 07TH JUNE 2023.



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)

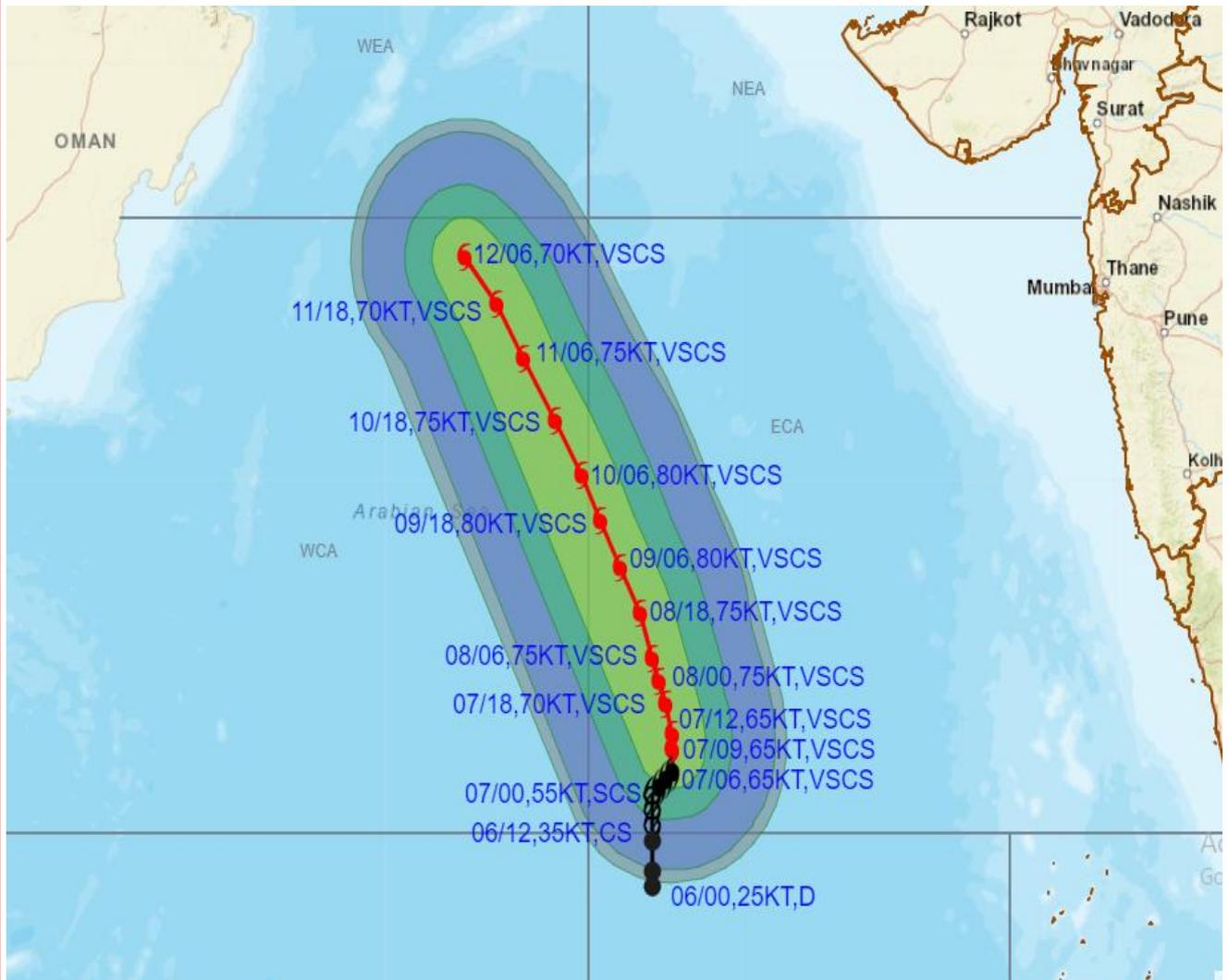
- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	08.06.23/0900	09.06.23/0600	10.06.23/0600
PORBANDAR	900, SSW	810, SSW	740, SW
BOMBAY / COLABA	880, SW	870, WSW	870, WSW
GOA/PANIIM	860, W	900, W	960, W
KARACHI AIRPORT	1180, S	1060, S	940, SSW
MASIRAH	1030, SE	900, SE	770, SE

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DATE/TIME IN UTC

IST=UTC + 0530

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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

AREA OF MAXIMUM SUSTAINED WIND SPEED:

— 28-33 KT (52-61 KMPH)

— 34-49 KT (62-91 KMPH)

— 50-63 KT (92-117 KMPH)

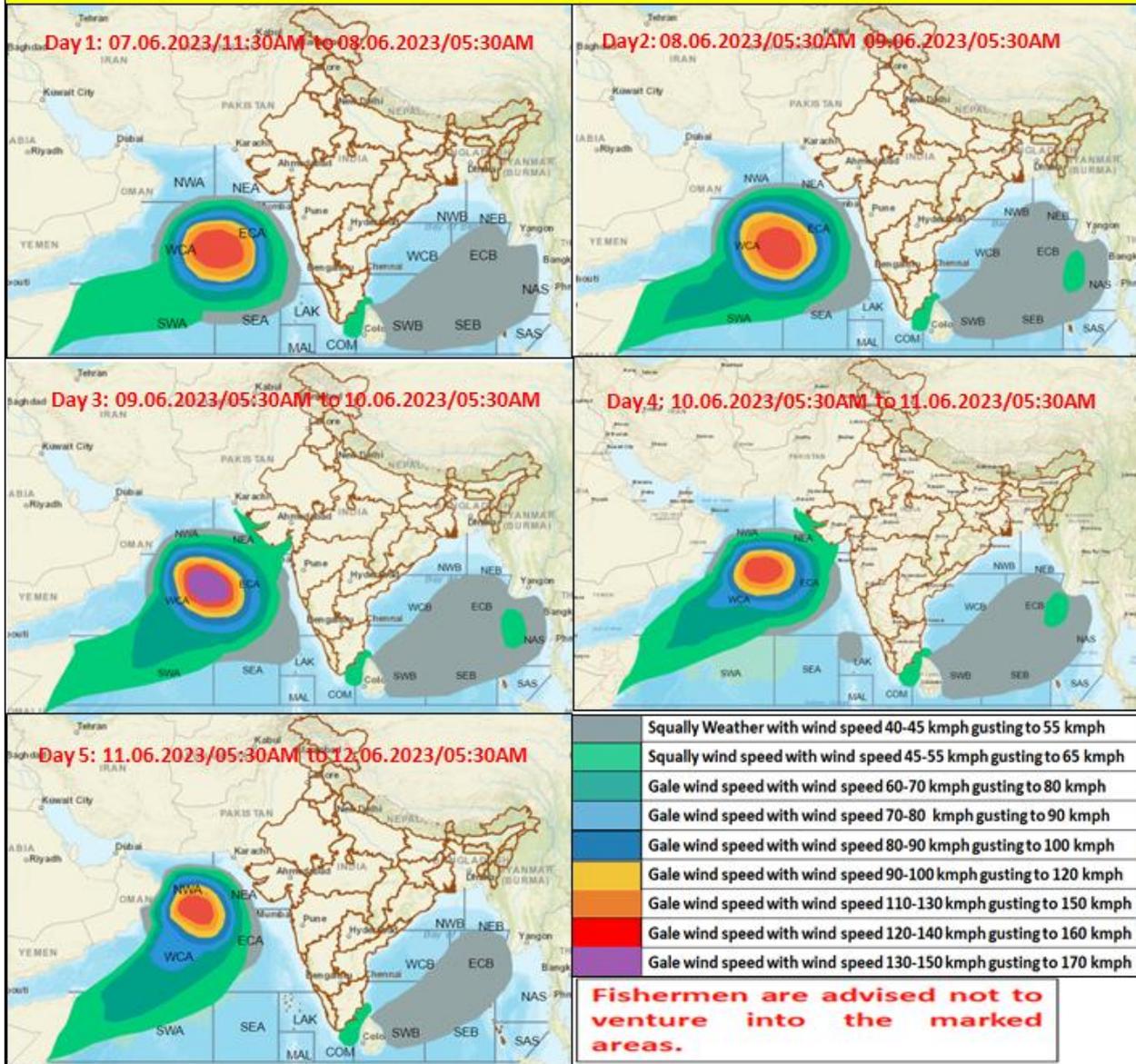
— ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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Fishermen warning graphics



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