



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 06.06.2023

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0700 UTC OF 06.06.2023 BASED ON 0300 UTC OF 06.06.2023.

SUB: DEPRESSION OVER SOUTHEAST ARABIAN SEA

THE DEPRESSION OVER SOUTHEAST ARABIAN SEA MOVED NEARLY NORTHWARDS WITH A SPEED OF 11 KMPH DURING LAST 3 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 06TH JUNE, 2023 OVER THE SAME REGION NEAR LATITUDE 11.5°N AND LONGITUDE 66.0°E, ABOUT 950 KM WEST-SOUTHWEST OF GOA (43192), 1100 KM SOUTHWEST OF MUMBAI (43057), 1190 KM SOUTH-SOUTHWEST OF PORBANDAR (42830) AND 1490 KM SOUTH OF KARACHI (41780).

IT IS LIKELY TO MOVE NEARLY NORTHWARDS AND INTENSIFY INTO A CYCLONIC STORM OVER EASTCENTRAL ARABIAN SEA & ADJOINING SOUTHEAST by 1200 UTC OF TODAY, THE 6TH JUNE.

AS PER INSAT 3D IMAGERY, THE CLOUDS HAVE FURTHER ORGANIZED DURING PAST 6 HOURS AND VORTEX PATTERN IS SEEN. INTENSITY OF THE SYSTEM IS T 1.5. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH ADJOINING CENTRAL ARABIAN SEA BETWEEN LATITUDE 8.0N & 16.0N LONGITUDE 60.0E & 69.0E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 90 DEG C.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(IST)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
06.06.23/0300	11.5/66.0	45-55 GUSTING TO 65	DEPRESSION
06.06.23/1200	12.0/65.9	60-70 GUSTING TO 80	CYCLONIC STORM
07.06.23/0000	12.7/65.8	70-80 GUSTING TO 90	CYCLONIC STORM
07.06.23/1200	13.2/65.7	80-90 GUSTING TO 100	CYCLONIC STORM
08.06.23/0000	13.9/65.6	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
08.06.23/1200	14.4/65.5	95-105 GUSTING TO 115	SEVERE CYCLONIC STORM
09.06.23/0000	15.1/65.4	105-115 GUSTING TO 125	SEVERE CYCLONIC STORM
09.06.23/1200	15.7/65.3	115-125 GUSTING TO 140	VERY SEVERE CYCLONIC STORM
10.06.23/0000	16.4/65.2	125-135 GUSTING TO 150	VERY SEVERE CYCLONIC STORM
10.06.23/1200	17.3/65.1	135-145 GUSTING TO 160	VERY SEVERE CYCLONIC STORM
11.06.23/0000	18.2/65.0	145-155 GUSTING TO 170	VERY SEVERE CYCLONIC STORM

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. SEA CONDITION IS LIKELY TO BE ROUGH TO VERY ROUGH OVER SOUTHEAST AND ADJOINING EASTCENTRAL ARABIAN SEA.

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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AT 0300 UTC, A BUOY(23452) NEAR 12.0°N/68.6°E REPORTED MAXIMUM SUSTAINED WINDS OF 13.6 KNOTS.

REMARKS: SEA SURFACE TEMPERATURE IS AROUND 30-32°C OVER SOUTH & ADJOINING CENTRAL ARABIAN SEA. THE LOW PRESSURE AREA IS CURRENTLY IN A VERY FAVOURABLE ENVIROMENT WITH POSITIVE LOW LEVEL VORTICITY ($150 \times 10^{-6} \text{S}^{-1}$) TO THE SOUTH OF SYSTEM CENTRE, POSITIVE CONVERGENCE OF ABOUT $30 \times 10^{-5} \text{S}^{-1}$ TO THE SOUTH OF SYSTEM CENTRE, HIGH POSITIVE UPPER LEVEL DIVERGENCE OF ABOUT $30 \times 10^{-5} \text{S}^{-1}$ TO THE SOUTHWEST OF SYSTEM CENTRE. WIND SHEAR IS MODERATE OVER SYSTEM AREA (10-15 KNOTS). MJO IS IN PHASE 2 WITH AMPLITUDE CLOSE TO 1 AND EQUATORIAL ROSSBY WAVES, KELWIN WAVES ALONGWITH WESTERLY WINDS (5-7 MPS) ARE ALSO PREVAILING OVER SOUTH AND CENTRAL ARABIAN SEA.

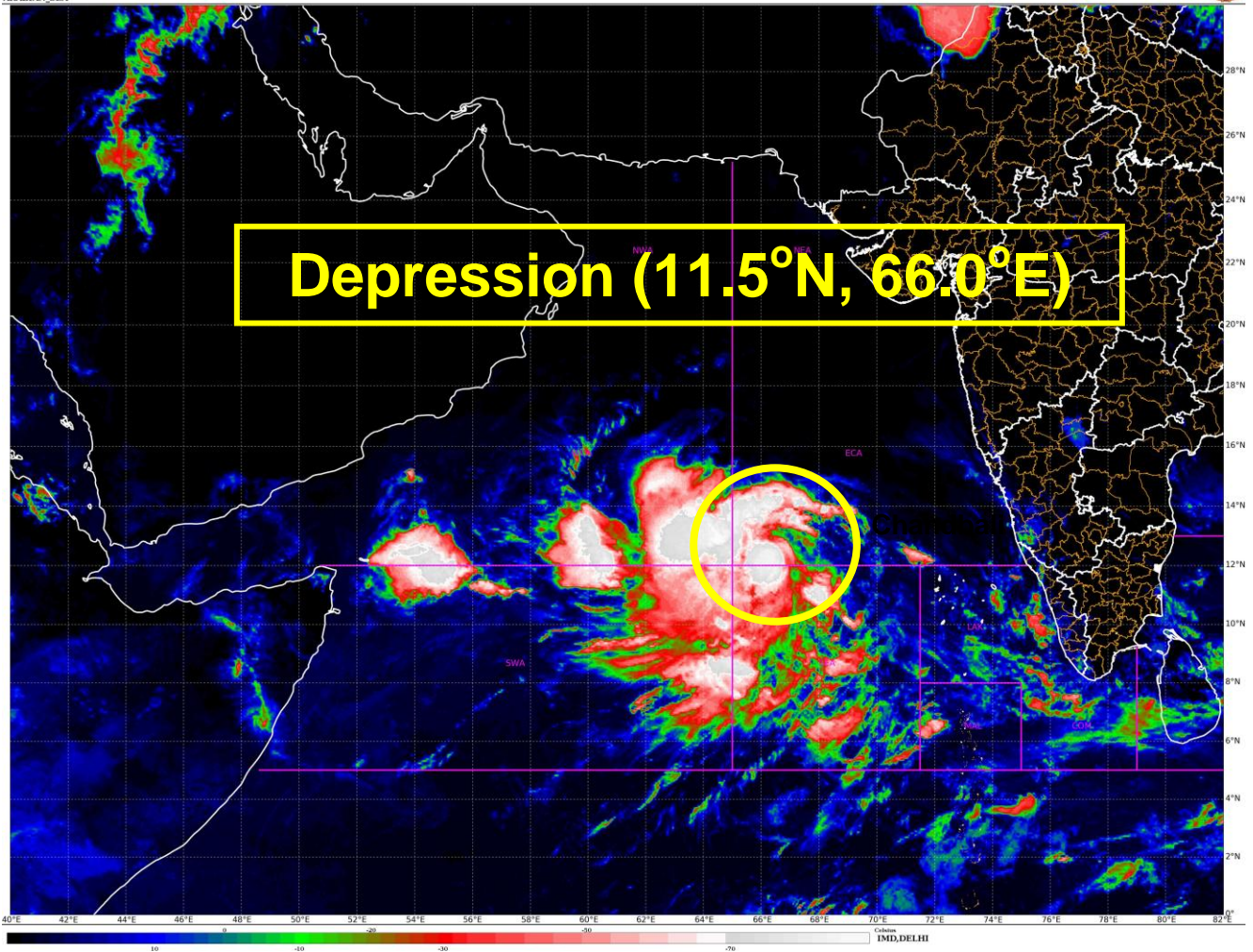
MOST OF THE MODELS SUCH AS ECMWF, IMDGFS, NCEP GFS, NCUM, IMD MME ARE INDICATING FURTHER INTESIFICATION OF THE SYSTEM INTO A CYCLONIC STORM DURING NEXT 24 HOURS AND NEARLY NORTHWARDS MOVEMENT DURING NEXT 5 DAYS.

CONSIDERING THE LATEST ENVIRONMENTAL FEATURES AND MODEL GUIDANCE, THE DEPRESSION OVER SOUTHEAST ARABIAN SEA IS LIKELY TO MOVE NEARLY NORTHWARDS AND INTENSIFY INTO A CYCLONIC STORM OVER EASTCENTRAL ARABIAN SEA & ADJOINING SOUTHEAST BY 1200 UTC OF TODAY, THE 6TH JUNE.

**M. SHARMA
SCIENTIST-D
RSMC NEW DELHI**

SAT : INSAT-3D IMG
IMG_TIR1_TEMP 10.8 um
ARABIAN SEA

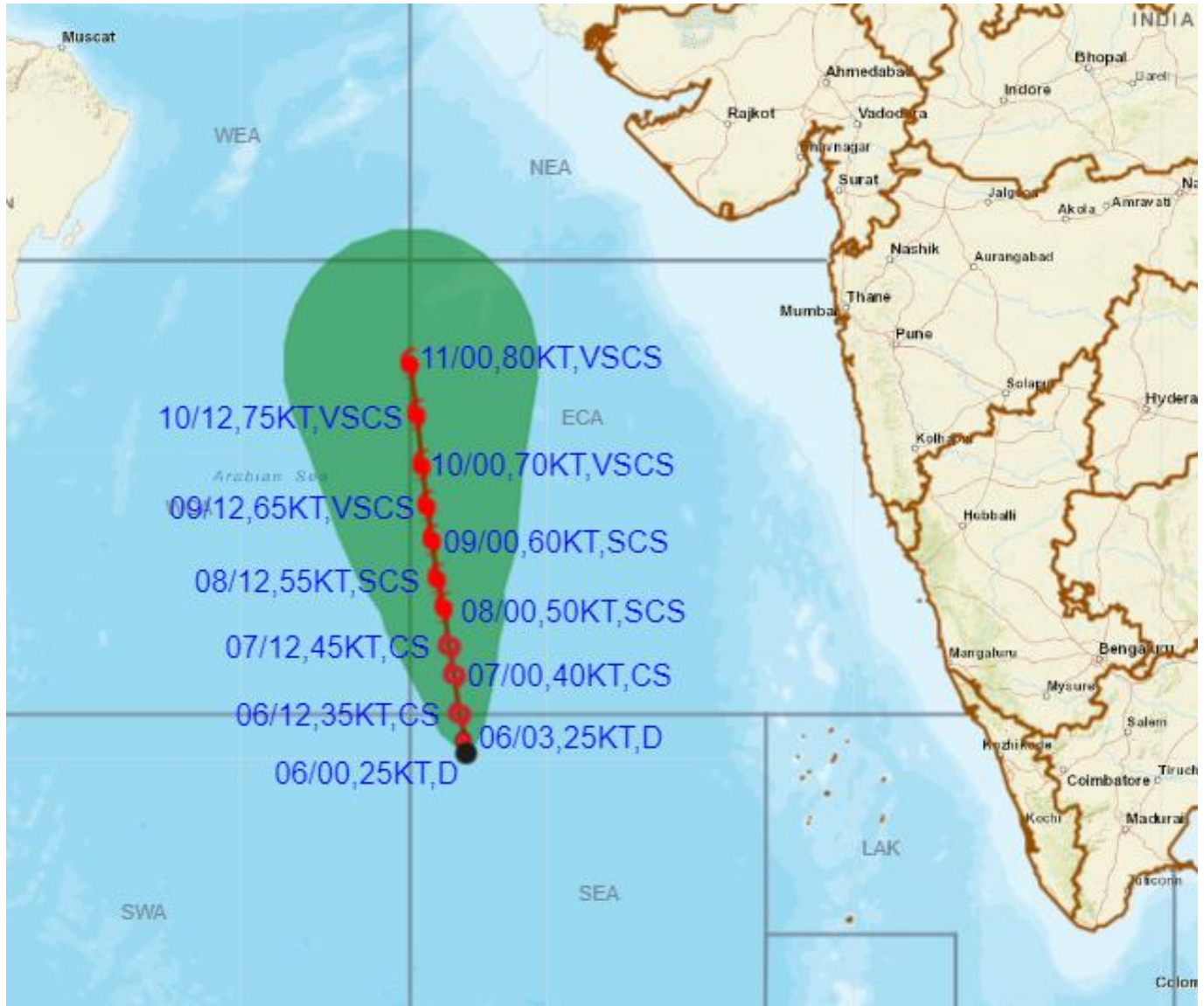
06-06-2023/(0530 to 0557) GMT
06-06-2023/(1100 to 1127) IST



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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER SOUTHEAST ARABIAN SEA BASED ON 0300 UTC (0830 IST) OF 06TH JUNE 2023.

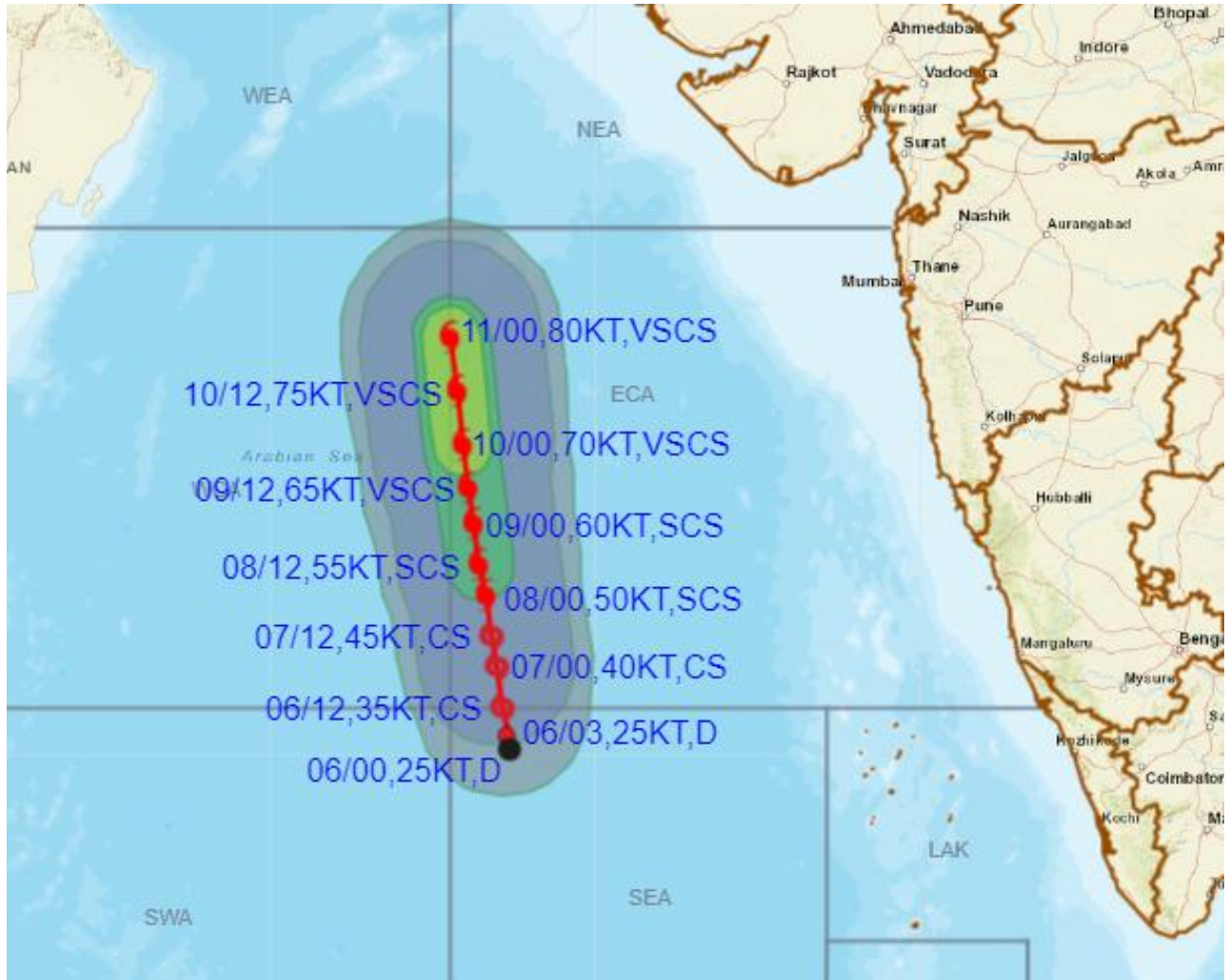


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM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

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



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHEAST ARABIAN SEA BASED ON 0300 UTC (0830 IST) OF 06TH 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)

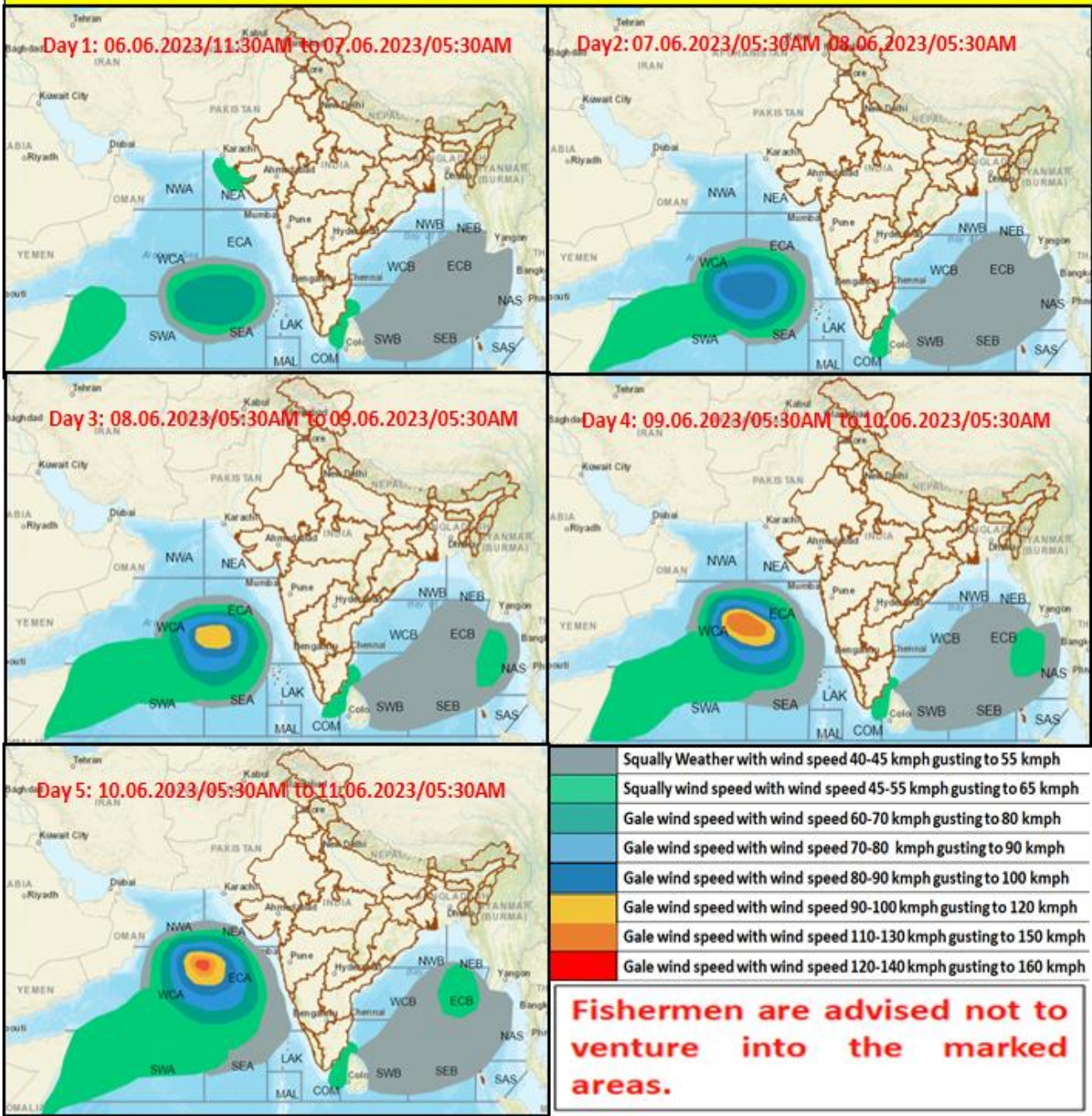
- LESS THAN 34 KT
- 34.47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY
- AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

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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