



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 02.08.2023

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 0900 UTC OF 02.08.2023 BASED ON 0600 UTC OF 02.08.2023.

(1) DEEP DEPRESSION OVER GANGETIC WEST BENGAL AND ADJOINING JHARKHAND

THE DEEP DEPRESSION OVER GANGETIC WEST BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 19 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT 0600 UTC OF 02ND AUGUST, 2023 OVER GANGETIC WEST BENGAL AND ADJOINING JHARKHAND NEAR LATITUDE 23.3°N AND LONGITUDE 86.3°E, CLOSE TO PURULIA (42705, WEST BENGAL), ABOUT 50 KM NORTH-NORTHEAST OF JAMSHEDPUR (JHARKHAND, 42798) AND 100 KM EAST OF RANCHI (JHARKHAND, 42701).

IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS JHARKHAND AND WEAKEN GRADUALLY INTO A DEPRESSION DURING NEXT 12 HOURS AND INTO A WELL MARKED LOW PRESSURE AREA DURING SUBSEQUENT 24 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME (UTC)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
02.08.23/0600	23.3/86.3	50-60 GUSTING TO 70	DEEP DEPRESSION
02.08.23/1200	23.4/85.4	45-55 GUSTING TO 65	DEPRESSION
02.08.23/1800	23.6/84.4	40-50 GUSTING TO 60	DEPRESSION
03.08.23/0000	23.8/83.4	35-45 GUSTING TO 55	DEPRESSION
03.08.23/0600	24.0/82.4	30-40 GUSTING TO 50	WELL MARKED LOW PRESSURE AREA

ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH JHARKHAND, ODISHA AND NORTH BAY OF BENGAL (BOB) & NEIGHBOURHOOD. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEGREE CELSIUS.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. ESTIMATED CENTRAL PRESSURE IS 990 HPA. SEA CONDITION IS LIKELY TO BE ROUGH OVER NORTHWEST & ADJOINING WESTCENTRAL BOB AND ALONG & OFF WEST BENGAL-ODISHA-NORTH ANDHRA PRADESH COASTS TILL 0600 UTC OF 3RD AUGUST.

(2) BAY OF BENGAL:

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH & CENTRAL BOB, ARAKAN COAST, NORTH

ANDAMAN SEA AND GULF OF MARTABAN. SCATTERED LOW & MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER REST BOB AND SOUTH ANDAMAN SEA.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

(3) ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED WEAK TO MODERATE CONVECTION LAY OVER LAKSHADWEEP ISLANDS AND COMORIN AREA.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

REMARKS:

THE LOW LEVEL VORTICITY IS AROUND $150 \times 10^{-6} \text{S}^{-1}$ TO THE SOUTHEAST OF SYSTEM CENTER AND VERTICALLY IT IS EXTENDING UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS ABOUT $20 \times 10^{-5} \text{S}^{-1}$ AROUND THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND $20 \times 10^{-5} \text{S}^{-1}$ AROUND SYSTEM CENTRE. VERTICAL WIND SHEAR IS LOW TO MODERATE (10-15 KNOTS) AROUND SYSTEM AREA AND ALONG EXPECTED TRACK. THE SYSTEM IS IN FAVOURABLE ENVIRONMENT AND IS LIKELY TO MAINTAIN IT'S INTENSITY OF DEEP DEPRESSION DURING NEXT 06 HOURS AND WEAKEN INTO A DEPRESSION THEREAFTER.

VARIOUS DETERMINISTIC MODELS ARE IN AGREEMENT THAT THE SYSTEM WOULD MAINTAIN THE INTENSITY OF DEEP DEPRESSION TILL 2ND AUGUST/1200 UTC AND WEAKEN INTO A DEPRESSION THEREAFTER. MODELS ARE ALSO INDICATING WEST-NORTHWESTWARDS MOVEMENT OF THE SYSTEM TILL 3RD/0000 UTC.

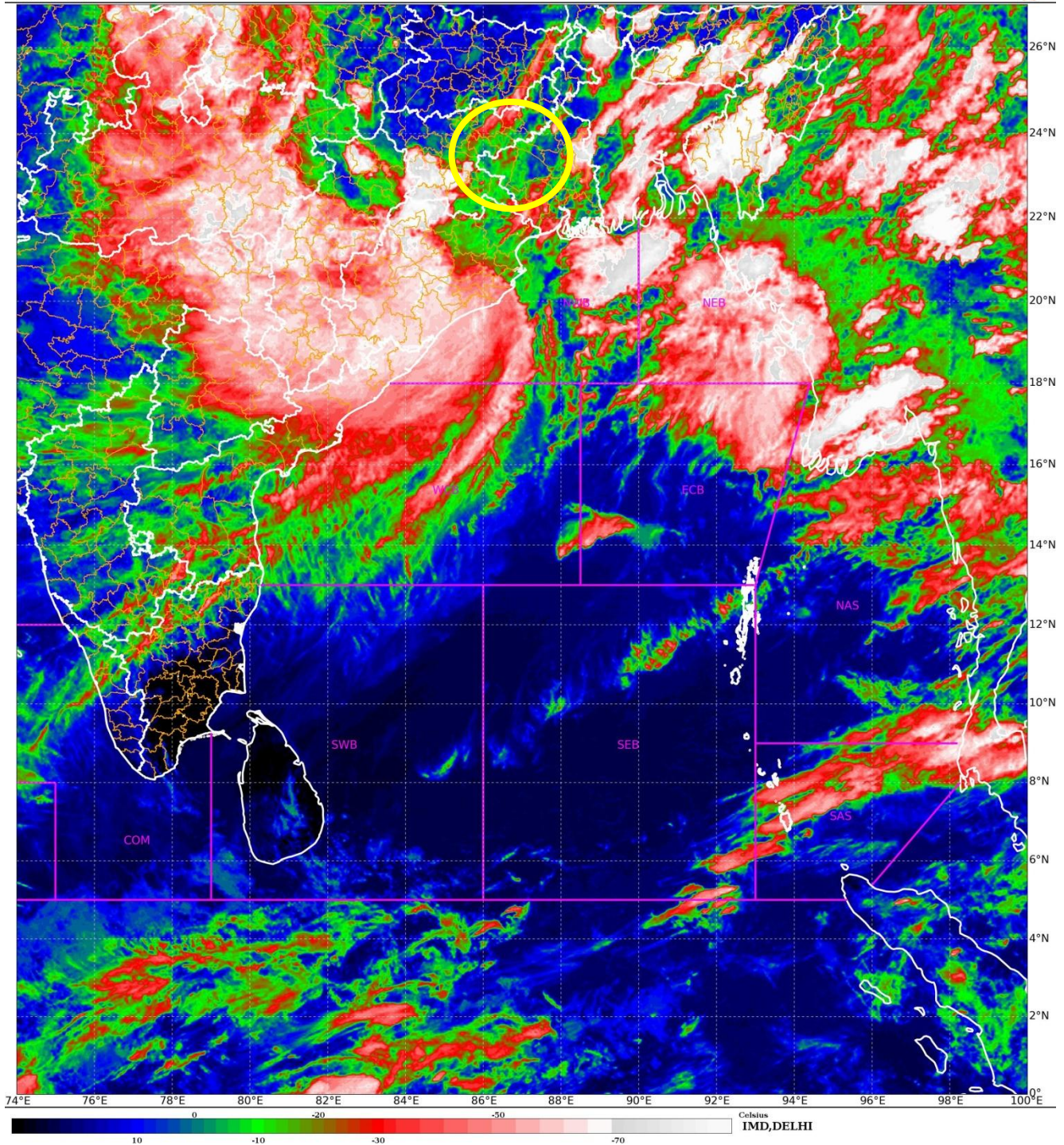
HENCE, IT IS INFERRED THAT THE DEEP DEPRESSION OVER GANGETIC WEST BENGAL IS LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS JHARKHAND AND WEAKEN GRADUALLY INTO A DEPRESSION DURING NEXT 12 HOURS AND INTO A WELL MARKED LOW PRESSURE AREA DURING SUBSEQUENT 24 HOURS.

**(M. SHARMA)
SCIENTIST-D
RSMC, NEW DELHI**

Deep Depression (23.3°N, 86.3°E)

SAT : INSAT-3DR IMG
IMG_TIR1_TEMP 10.8 um
L1C Mercator

02-08-2023/(0815 to 0842) GMT
02-08-2023/(1345 to 1412) IST



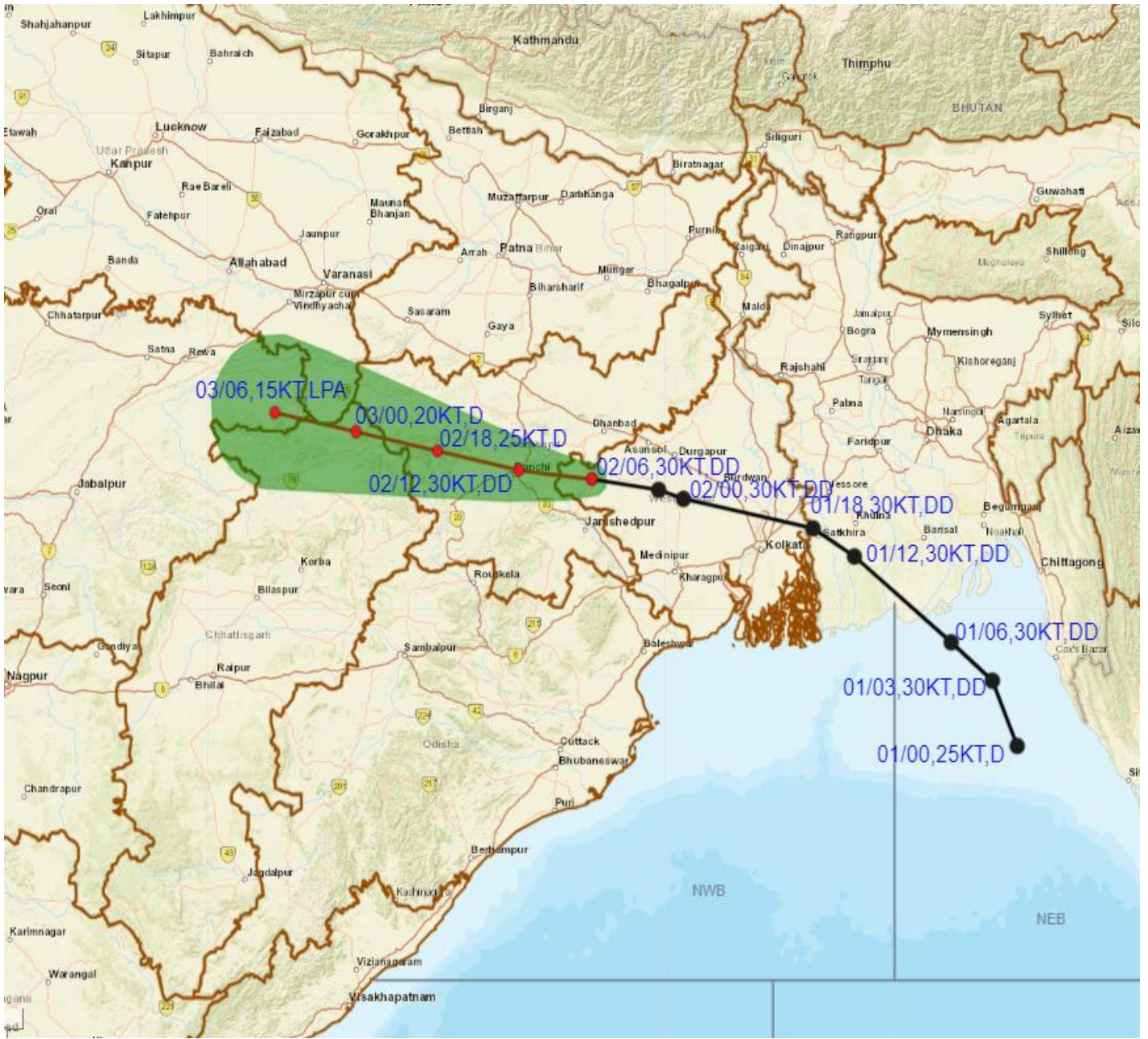
Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very Intense: : Less than -70°C

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-33%, , MODERATE: 34-66% AND HIGH: 67-100%

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OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER GANGETIC WEST BENGAL AND ADJOINING JHARKHAND BASED ON 0600 UTC (1130 IST) OF 02ND AUGUST 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

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
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OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER GANGETIC WEST BENGAL AND ADJOINING JHARKHAND BASED ON 0600 UTC (1130 IST) OF 02ND AUGUST 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)
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SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

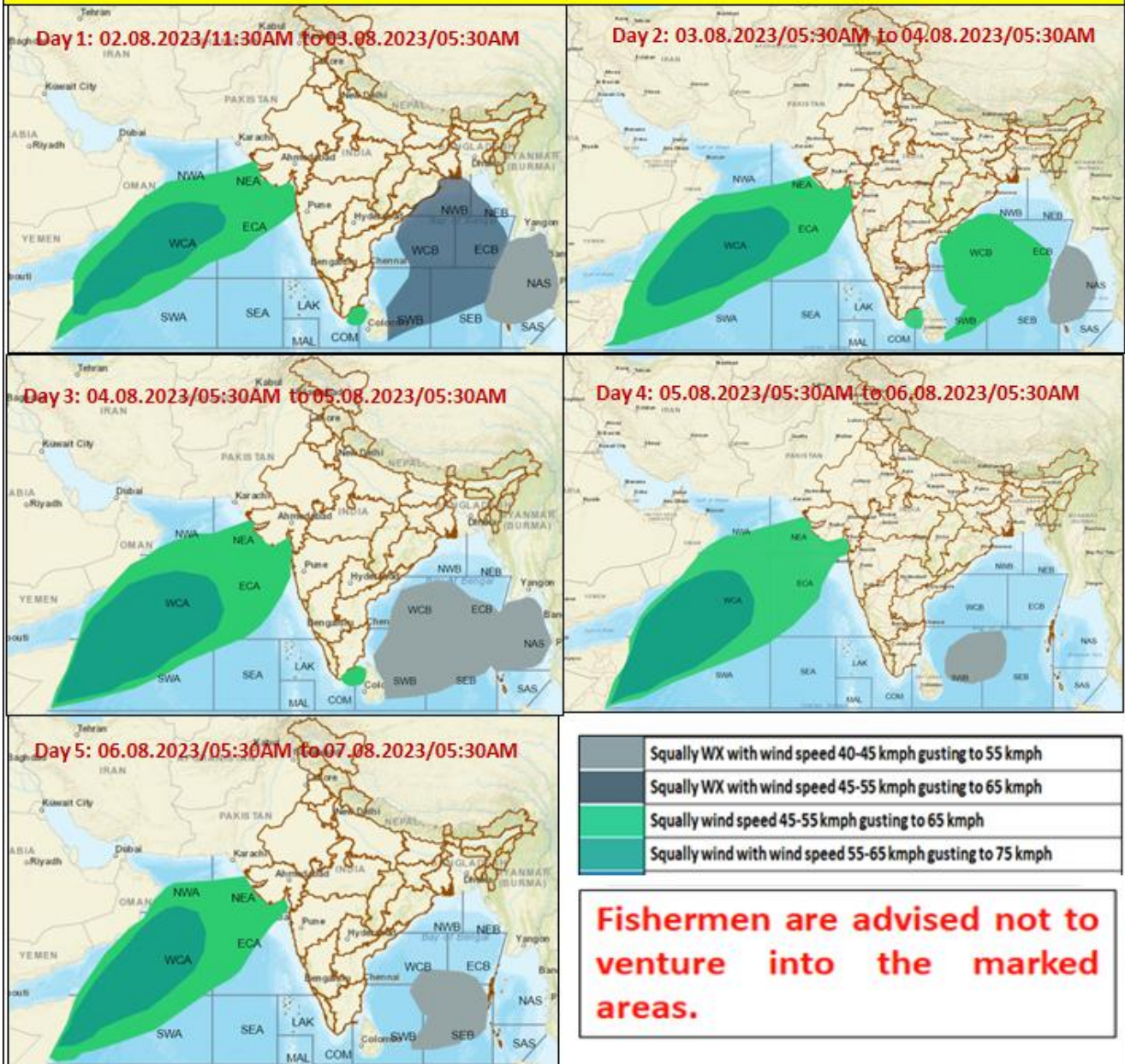
● LESS THAN 34 KT
 ○ 34-47 KT
 ○ ≥ 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 ▲ CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 28-33 KT (52-61 KMPH)
 ■ 34-49 KT (62-91 KMPH)
 ■ 50-63 KT (92-117 KMPH)
 ■ ≥ 64 KT (≥118 KMPH)

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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