



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

**DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 01.08.2023**

**SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0900 UTC OF 01.08.2023 BASED ON 0600 UTC OF 01.08.2023.**

**SUB: DEEP DEPRESSION OVER NORTHEAST BAY OF BENGAL OFF BANGLADESH COAST**

THE DEEP DEPRESSION OVER NORTHEAST BAY OF BENGAL OFF BANGLADESH COAST MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 25 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT 0600 UTC OF TODAY, THE 1ST AUGUST, 2023 OVER THE SAME REGION NEAR LATITUDE 21.6 °N AND LONGITUDE 90.7 °E, ABOUT 60 KM SOUTHEAST OF KHEPUPARA (BANGLADESH, 41984) AND 330 KM EAST OF DIGHA (WEST BENGAL, 42901).

IT IS LIKELY TO MOVE NORTHWESTWARDS AND CROSS BANGLADESH COAST CLOSE TO EAST OF KHEPUPARA AROUND 1200 UTC OF TODAY, THE 1ST AUGUST. THEREAFTER, IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS GANGETIC WEST BENGAL 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
01.08.23/0600	21.6/90.7	55-65 gusting to 75	Deep Depression
01.08.23/1200	22.0/90.1	55-65 gusting to 75	Deep Depression
01.08.23/1800	22.5/89.2	55-65 gusting to 75	Deep Depression
02.08.23/0000	22.9/88.2	50-60 gusting to 70	Deep Depression
02.08.23/0600	23.1/87.2	45-55 gusting to 65	Depression
02.08.23/1800	23.5/85.2	40-50 gusting to 60	Depression

AS PER INSAT-3D IMAGERY, INTENSITY OF THE SYSTEM IS T 2.0. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH AND ADJOINING CENTRAL BAY OF BENGAL. 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 TO VERY ROUGH OVER NORTH BOB AND ADJOINING CENTRAL BOB AND ALONG & OFF ALONG & OFF MYANMAR-BANGLADESH-WEST BENGAL-NORTH ODISHA COASTS TILL 0600 UTC OF 2<sup>ND</sup> AUGUST.

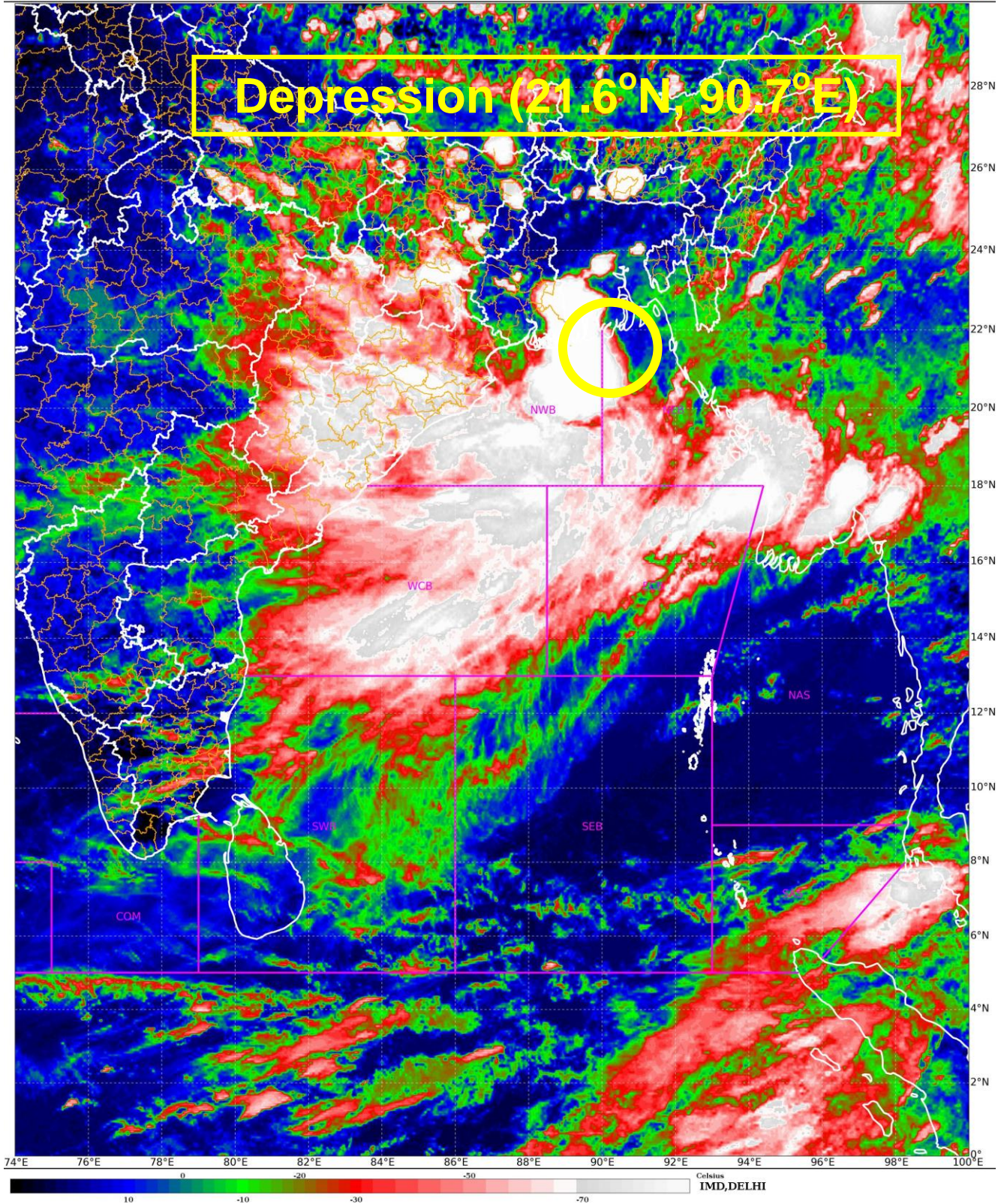
## REMARKS:

MADDEN JULIAN OSCILLATION IS IN PHASE 1 WITH AMPLITUDE LESS THAN 1. IT WOULD CONTINUE IN SAME PHASE DURING NEXT 4-5 DAYS. HENCE MJO IS NOT LIKELY TO SUPPORT CONVECTIVE ACTIVITY OVER THE BAY OF BENGAL (BOB) REGION. HOWEVER, EQUATORIAL WAVES INDICATE WESTERLY WINDS (1-3 MPS) OVER CENTRAL & SOUTH BOB AND EASTERLY WINDS (1-3 MPS) OVER NORTH BOB, ALONG WITH PRESENCE OF ROSSBY WAVES OVER CENTRAL BOB. THUS EQUATORIAL WAVES ARE LIKELY TO SUPPORT CYCLOGENESIS OVER THE BOB REGION. TOTAL PRECIPITABLE WATER IMAGERY INDICATES WARM MOIST AIR INCURSION INTO THE CORE AND AROUND THE SYSTEM AREA. SEA SURFACE TEMPERATURE IS AROUND 29°C OVER NORTH BOB, BECOMING 30°C OFF NORTH ODISHA & ADJOINING GANGETIC WEST BENGAL COASTS. THE LOW LEVEL VORTICITY IS AROUND  $150 \times 10^{-6} \text{S}^{-1}$  OVER EASTCENTRAL BOB TO THE SOUTHEAST OF SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS ABOUT  $30 \times 10^{-5} \text{S}^{-1}$  TO THE EAST AND  $20 \times 10^{-5} \text{S}^{-1}$  TO THE WEST OF SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND  $30 \times 10^{-5} \text{S}^{-1}$  TO THE SOUTHWEST AND  $20 \times 10^{-5} \text{S}^{-1}$  TO THE SOUTHEAST OF SYSTEM CENTRE. VERTICAL WIND SHEAR IS HIGH ABOUT 20-30 KNOTS AROUND SYSTEM AREA AND OVER NORTH BAY OF BENGAL. ALL THESE FAVOURABLE CONDITIONS LED TO INTENSIFICATION OF SYSTEM INTO A DEEP DEPRESSION.

VARIOUS DETERMINISTIC MODELS INDICATE THAT THE SYSTEM WOULD MAINTAIN THE INTENSITY OF DEEP DEPRESSION TILL 2<sup>ND</sup> AUGUST/0200 UTC, MOVE NORTHWESTWARDS & CROSS BANGLADESH COAST NEAR KHEPUPARA AROUND 1200 UTC OF TODAY, THE 1ST AUGUST.

HENCE, IT IS INFERRED THAT THE DEEP DEPRESSION OVER NORTHEAST BAY OF BENGAL OFF BANGLADESH COAST IS LIKELY TO MOVE NORTHWESTWARDS AND CROSS BANGLADESH COAST CLOSE TO EAST OF KHEPUPARA AROUND 1200 UTC OF TODAY, THE 1ST AUGUST. THEREAFTER, IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS GANGETIC WEST BENGAL DURING SUBSEQUENT 24 HOURS.

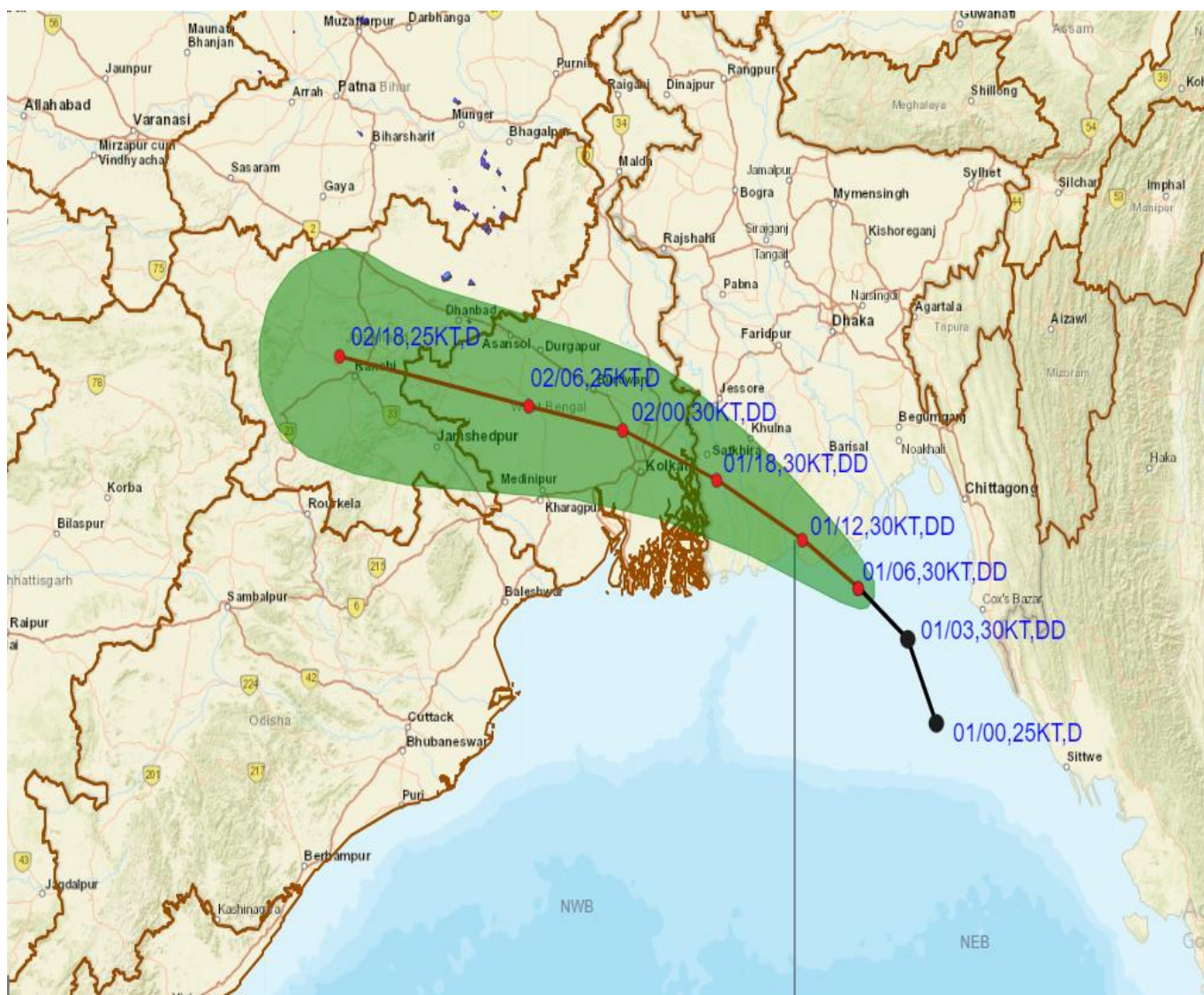
**(M. SHARMA)**  
**SCIENTIST-D**  
**RSMC NEW DELHI**



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%  
This is a guidance Bulletin for WMO/ESCAP Panel Member countries. Visit respective National websites for Country specific Bulletins



# OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER NORTHEAST BAY OF BENGAL BASED ON 0600 UTC (1130 IST) OF 01<sup>ST</sup> 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

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**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 ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER NORTHEAST BAY OF BENGAL BASED ON 0600 UTC (1130 IST) OF 01<sup>ST</sup> AUGUST 2023.



**DATE/TIME IN UTC**  
**IST=UTC + 0530**  
**L: LOW PRESSURE AREA**  
**WML: WELL MARKED LOW PRESSURE AREA**  
**D: DEPRESSION (17-27 KT)**  
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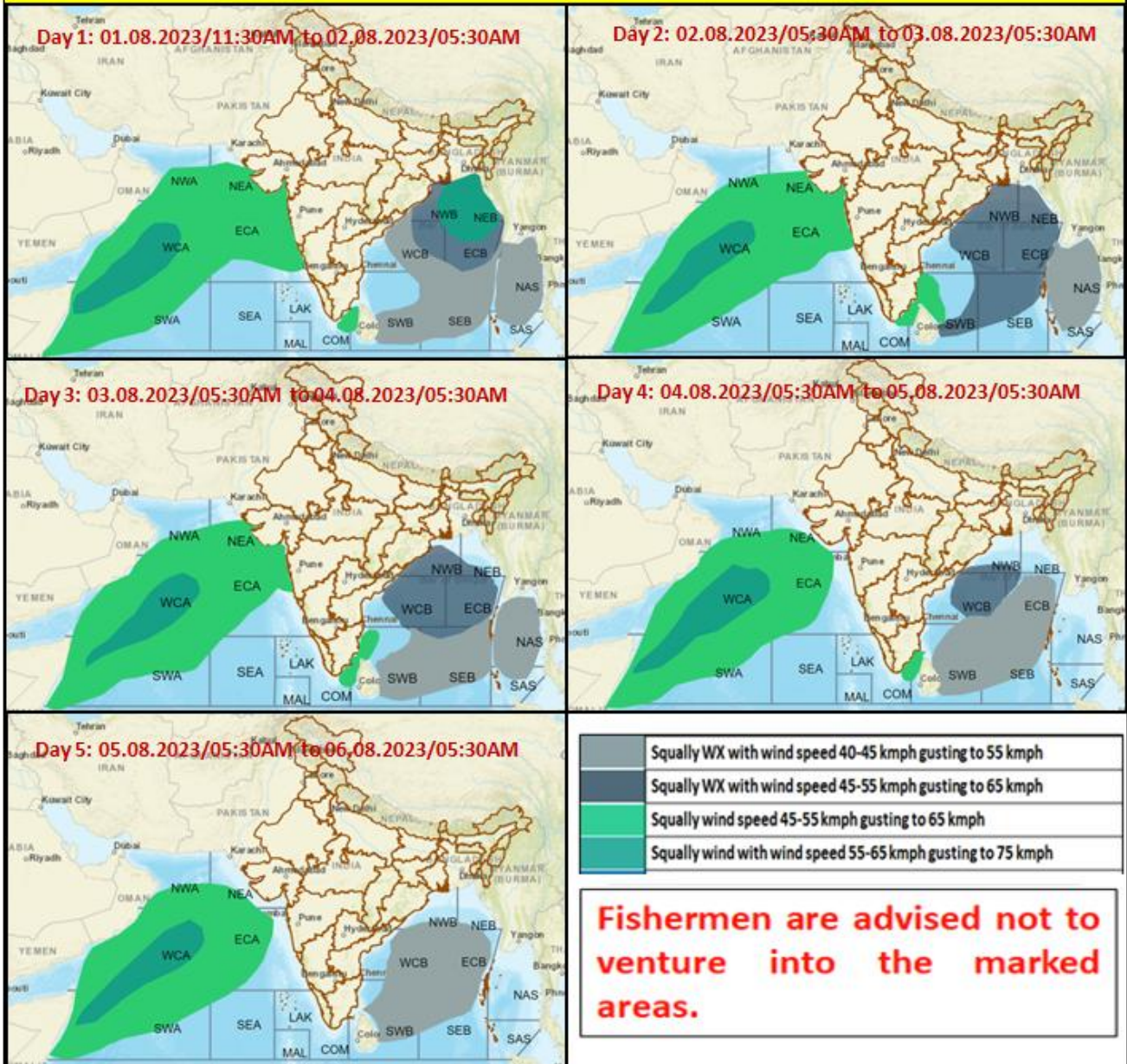
● LESS THAN 34 KT  
 ○ 34-47 KT  
 ● ≥ 48 KT  
 — OBSERVED TRACK  
 — FORECAST TRACK  
 ▲ CONE OF UNCERTAINTY  
**AREA OF MAXIMUM SUSTAINED WIND SPEED:**  
 ■ 28-33 KT (52-61 KMPH)  
 ■ 34-49 KT (62-91 KMPH)  
 ■ 50-63 KT (92-117 KMPH)  
 ■ ≥ 64 KT (≥118 KMPH)

### 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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