



**India Meteorological Department  
(Ministry of Earth Sciences)**

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**Sub: (A) Very Severe Cyclonic Storm "Tej" (pronounced as Tej) over westcentral & adjoining southwest Arabian Sea**

**(B) Depression over westcentral Bay of Bengal**

**(A) Very Severe Cyclonic Storm "Tej" (pronounced as Tej) over westcentral & adjoining southwest Arabian Sea**

The Very Severe Cyclonic Storm "Tej" (pronounced as Tej) over southwest Arabian Sea moved northwestwards with a speed of 16 kmph during past 6 hours, and lay centered at 0530 hours IST of today, the 22<sup>nd</sup> October over the westcentral & adjoining southwest Arabian Sea, near latitude 12.0°N and longitude 56.0°E about 240 km east-southeast of Socotra (Yemen), 600 km south-southeast of Salalah (Oman) and 620 km southeast of Al Ghaidah (Yemen).

It is very likely to intensify further into an Extremely Severe Cyclonic Storm in the forenoon of 22<sup>nd</sup> October. It is very likely to move northwestwards till 24<sup>th</sup> morning & then north-northwestwards. It is likely to cross Yemen-Oman coasts between Al Ghaidah (Yemen) & Salalah (Oman), close to east of Al Ghaidah (Yemen) around noon of 24<sup>th</sup> October.

**Forecast track and intensity are given below:**

<b>Date/Time(IST)</b>	<b>Position (Lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (Kmph)</b>	<b>Category of cyclonic disturbance</b>
22.10.23/0530	12.0/56.0	150-160 gusting to 175	Very Severe Cyclonic Storm
22.10.23/1130	12.6/55.5	165-175 gusting to 195	Extremely Severe Cyclonic Storm
22.10.23/1730	13.2/55.0	180-190 gusting to 210	Extremely Severe Cyclonic Storm
22.10.23/2330	13.8/54.5	180-190 gusting to 210	Extremely Severe Cyclonic Storm
23.10.23/0530	14.3/54.0	165-175 gusting to 195	Extremely Severe Cyclonic Storm
23.10.23/1730	15.1/53.1	145-155 gusting to 170	Very Severe Cyclonic Storm
24.10.23/0530	16.0/52.5	125-135 gusting to 150	Very Severe Cyclonic Storm
24.10.23/1730	16.8/52.0	90-100 gusting to 110	Severe Cyclonic Storm
25.10.23/0530	17.6/51.6	60-70 gusting to 80	Cyclonic Storm
25.10.23/1730	18.6/51.1	30-40 gusting to 50	Depression

**Warnings:**

**(i) Wind warning (warning graphics enclosed):**

• **Southwest Arabian Sea:**

**Gale wind** speed reaching **150-160 kmph gusting to 175 kmph** is prevailing and likely to increase gradually becoming **165-175 kmph gusting to 185 kmph** till night of 22<sup>nd</sup> October. Thereafter, it is likely to decrease gradually becoming **Gale wind** speed reaching **90-100 kmph gusting to 110 kmph** by evening of 23<sup>rd</sup> and **Squally wind** speed reaching **50-60 kmph gusting to 70 kmph** by morning of 24<sup>th</sup> October. It would decrease gradually thereafter.

• **Westcentral Arabian Sea:**

**Gale wind** speed reaching **150-160 kmph gusting to 175 kmph** is prevailing and likely to increase gradually becoming **180-190 kmph gusting to 210 kmph** in the evening of 22<sup>nd</sup> till morning of 23<sup>rd</sup> October. Thereafter, it is likely to decrease gradually from evening of 23<sup>rd</sup> October becoming **Gale wind speed reaching 125-135 kmph gusting to 150 kmph** by 24<sup>th</sup> morning and **90-100 kmph gusting to 110 kmph** on 25<sup>th</sup> morning. It would decrease rapidly after the landfall becoming **Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** in the evening of 25<sup>th</sup> October.

**(ii) Sea Condition**

• **Southwest Arabian Sea:**

**Phenomenal** sea condition is prevailing and will continue till 23<sup>rd</sup> October. It is likely to improve gradually becoming **high to very rough** from 24<sup>th</sup> morning and continue till evening. Thereafter, it would improve gradually.

• **Westcentral Arabian Sea:**

**Phenomenal** sea condition is prevailing and will continue till evening of 24<sup>th</sup> October. It would improve gradually thereafter becoming **very high to high** from 24<sup>th</sup> evening and **very rough to rough** by evening of 25<sup>th</sup> October. Thereafter, it would improve gradually.

**(iii) Fishermen Warning (Graphics attached):**

Fishermen are advised not to venture into

- ❖ **Southwest Arabian Sea** till 25<sup>th</sup> October.
- ❖ **Westcentral Arabian Sea** till night of 25<sup>th</sup> October.
- ❖ Those out at sea are advised to return to coast.

## (B) Depression over westcentral Bay of Bengal

The Depression over westcentral Bay of Bengal moved west-northwestwards with a speed of 06 kmph during past 6 hours and lay centered at 0530 hours IST of today, the 22<sup>nd</sup> October over the same region, near latitude 14.9°N and longitude 86.1°E about 600 km south of Paradip (Odisha), 760 km south of Digha (West Bengal), and 900 km south-southwest of Khepupara (Bangladesh).

It is likely to further intensify into a deep depression during next 24 hours. It is likely to move northwestwards during next 12 hours, then recurve and move north-northeastwards during subsequent 3 days towards Bangladesh and adjoining West Bengal coasts.

**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
22.10.23/0530	14.9/86.1	40-50 gusting to 60	Depression
22.10.23/1730	15.4/85.7	45-55 gusting to 65	Depression
23.10.23/0530	16.0/85.7	50-60 gusting to 70	Deep Depression
23.10.23/1730	17.1/86.3	55-65 gusting to 75	Deep Depression
24.10.23/0530	18.4/87.1	60-70 gusting to 80	Cyclonic Storm
24.10.23/1730	19.5/88.0	60-70 gusting to 80	Cyclonic Storm
25.10.23/0530	20.6/88.9	60-70 gusting to 80	Cyclonic Storm

### **Warnings:**

#### **(i) Rainfall Warning**

**Nagaland, Manipur, Mizoram & Tripura:** Light to moderate rainfall at most places with isolated heavy rainfall is likely on 24<sup>th</sup> and 25<sup>th</sup> October.

**Coastal Districts of Odisha:** Light to moderate rainfall at a few places is likely on 23<sup>rd</sup> and at many places on 24<sup>th</sup> & 25<sup>th</sup> October.

**Coastal Districts of West Bengal:** Light to moderate rainfall at many places is likely on 24<sup>th</sup> and 25<sup>th</sup> October.

#### **(ii) Wind warning (warning graphics enclosed):**

- **Westcentral Bay of Bengal: Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** is prevailing and likely to increase gradually becoming **50-60 kmph gusting to 70 kmph** from morning of 22<sup>nd</sup> till 25<sup>th</sup> October. It is likely to decrease gradually thereafter.
- **Adjoining eastcentral & southeast Bay of Bengal: Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** is prevailing near the system and likely to become **50-60 kmph gusting to 70 kmph** from morning of 22<sup>nd</sup> till 23<sup>rd</sup> October. It is likely to decrease gradually thereafter.
- **North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts:** **Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** is likely on 23<sup>rd</sup> and likely to increase gradually becoming **Gale wind** speed reaching **60-70 kmph gusting to 80 kmph** from 24<sup>th</sup> to 26<sup>th</sup> October.

#### **(iii) Sea Condition**

- **Westcentral Bay of Bengal: Rough to very rough sea condition** is prevailing and will continue till 25<sup>th</sup> October. It is likely to improve gradually thereafter.
- **Adjoining eastcentral Bay of Bengal: Moderate to rough sea condition** is prevailing and likely till 24<sup>th</sup> October. It is likely to improve gradually thereafter.
- **Southwest Bay of Bengal: Moderate to rough sea condition** is prevailing and likely till 22<sup>nd</sup> October. It is likely to improve gradually thereafter.

- **North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts:** **Rough sea condition** is likely on 23<sup>rd</sup> and becoming **Rough to very rough** sea condition from 24<sup>th</sup> to 26<sup>th</sup> October.

**(iv) Fishermen Warning (Graphics attached):**

Fishermen are advised not to venture into

- ❖ **Westcentral Bay of Bengal** till 25<sup>th</sup> October.
- ❖ **Adjoining eastcentral & southeast Bay of Bengal** till 23<sup>rd</sup> October.
- ❖ **North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts** from 23<sup>rd</sup> to 26<sup>th</sup> October.

Those out at sea are advised to return to coast.

**Both the systems are under continuous surveillance and the next bulletin will be issued at 1130 hours IST of 22<sup>nd</sup> October, 2023.**

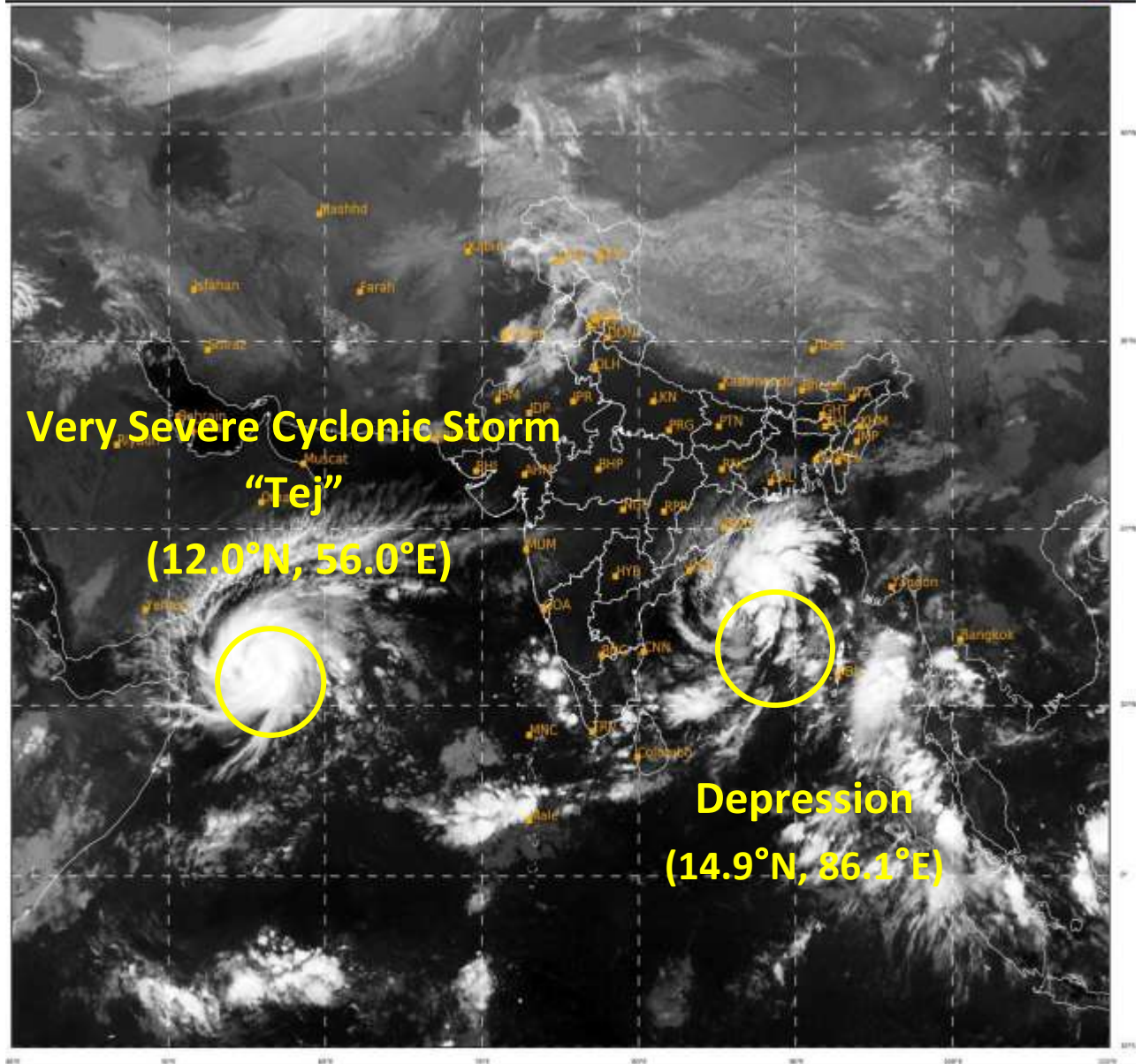
**(S. P. Singh)**

**Scientist C, Cyclone Warning, New Delhi**

*Copy to: ACWC Mumbai/ ACWC Chennai/ ACWC Kolkata/CWC Ahmedabad/CWC Bhubaneswar/CWC Vishakhapatnam/CWC Thiruvananthapuram/MC Goa*

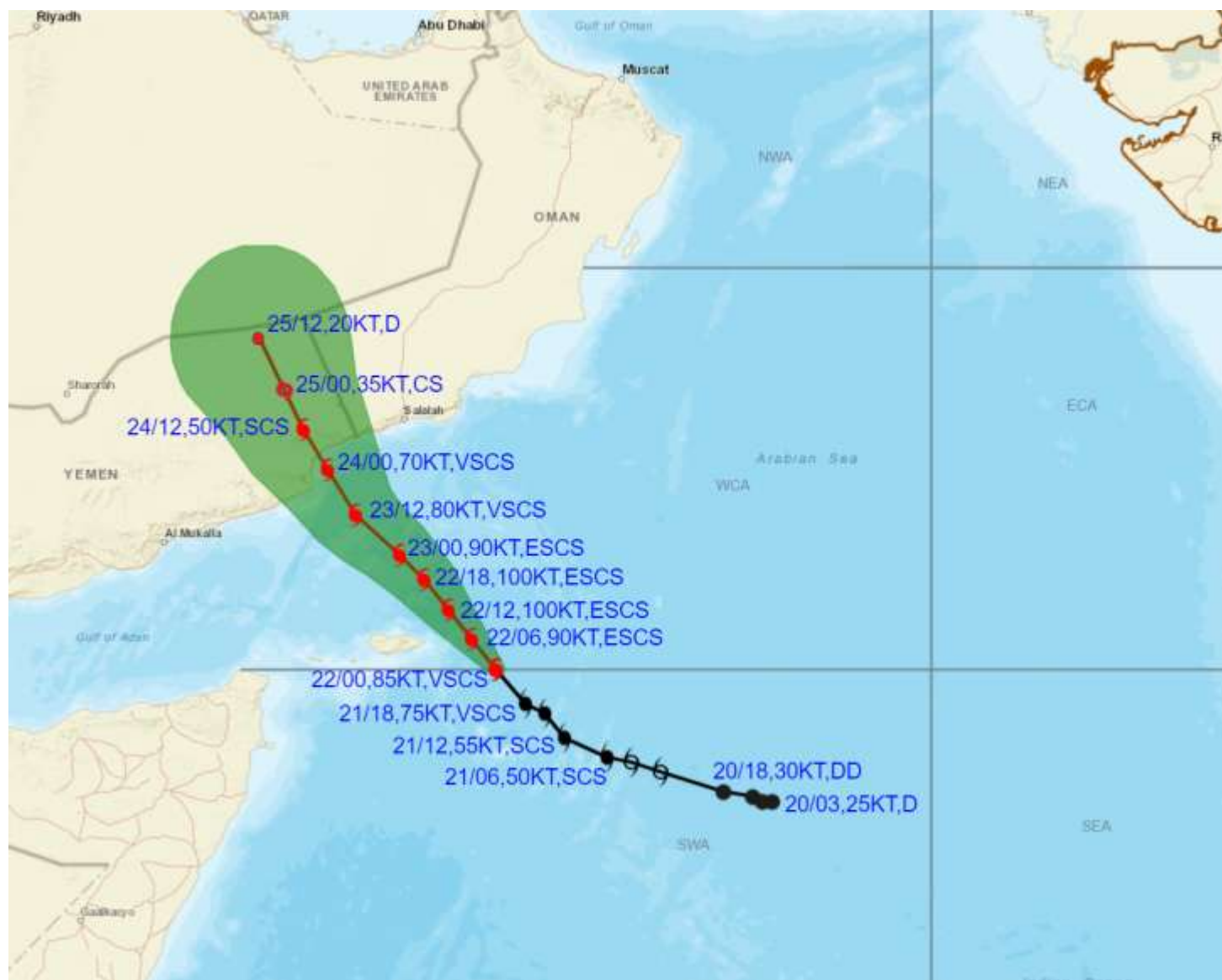
**Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%**

**Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.**





**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM "TEJ" OVER WESTCENTRAL & ADJOINING SOUTHWEST ARABIAN SEA BASED ON 0000 UTC (0530 IST) OF 22<sup>ND</sup> OCTOBER 2023.**



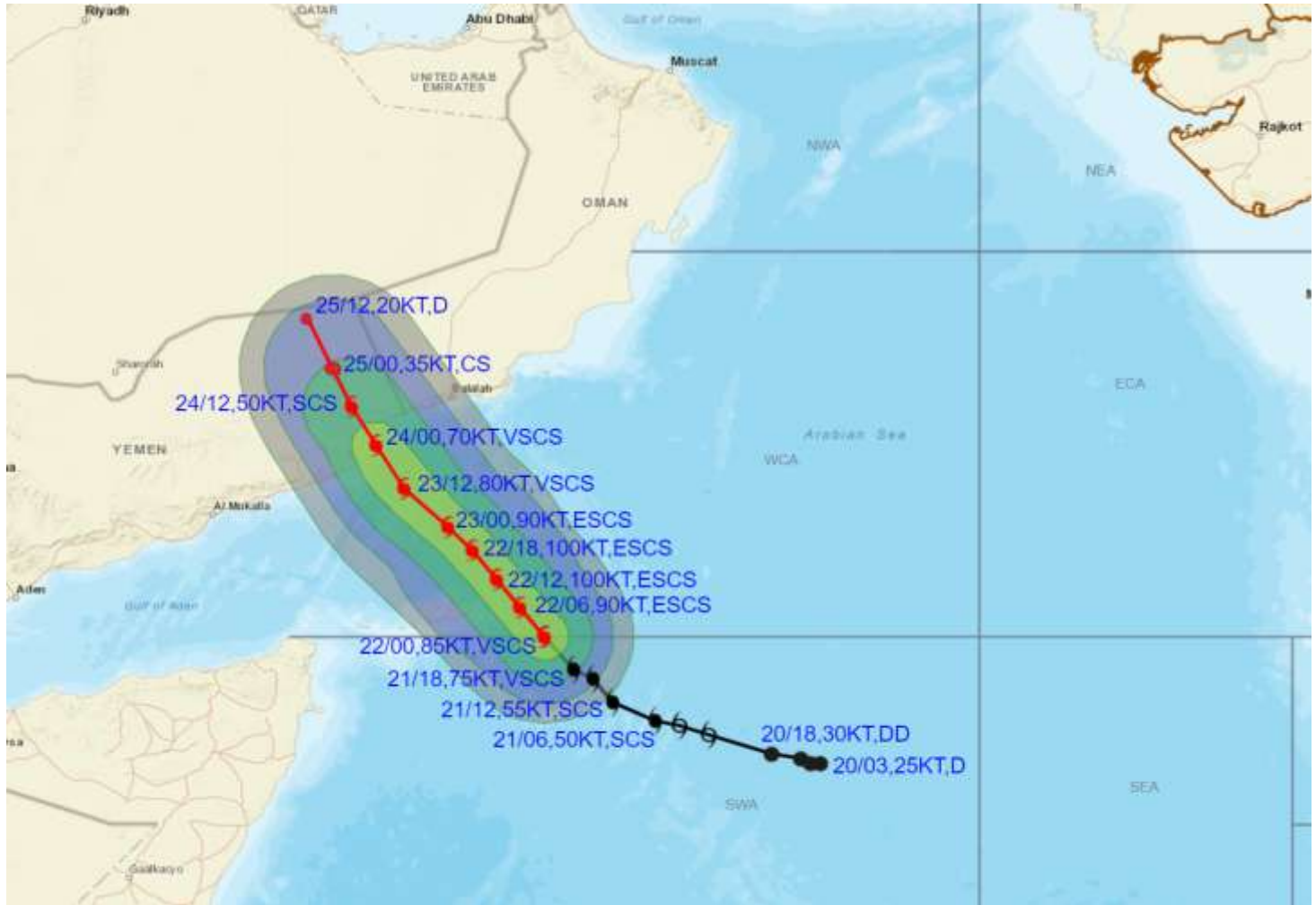
DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE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





**OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM "TEJ" OVER WESTCENTRAL & ADJOINING SOUTHWEST ARABIAN SEA BASED ON 0000 UTC (0530 IST) OF 22<sup>ND</sup> OCTOBER 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)

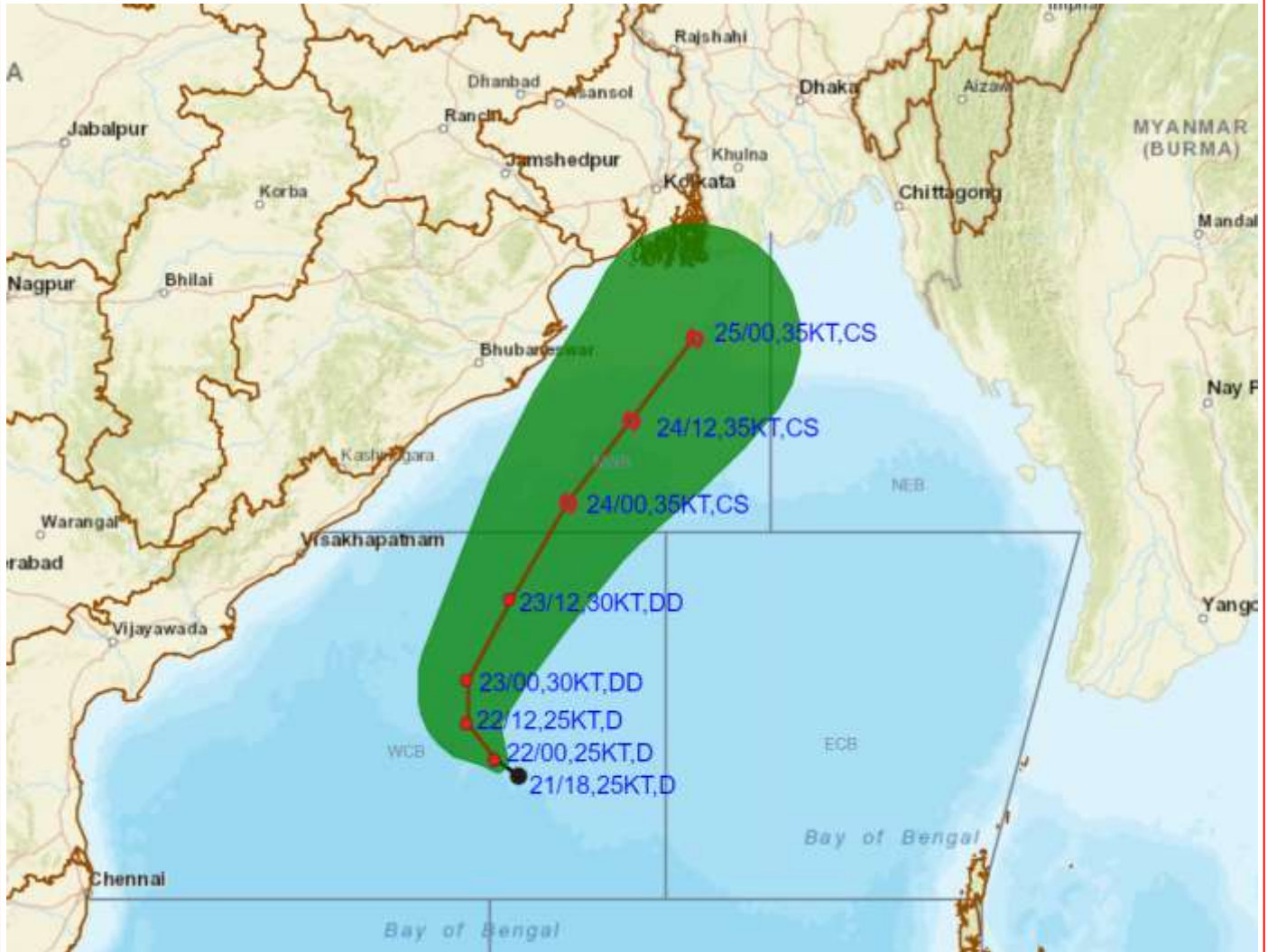
● LESS THAN 34 KT  
 ◌ 34-47 KT  
 ◐ ≥ 48 KT  
 — OBSERVED TRACK  
 — FORECAST TRACK  
 — CONE OF UNCERTAINTY  
 AREA OF MAXIMUM SUSTAINED WIND SPEED:  
 ■ 28-33 KT (52-61 KMPH)  
 ■ 34-49 KT (62-91 KMPH)  
 ■ 50-63 KT (92-117 KMPH)  
 ■ ≥ 64 KT (≥118 KMPH)

**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



**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER WESTCENTRAL BAY OF BENGAL BASED ON 0000 UTC (0530 IST) OF 22<sup>ND</sup> OCTOBER 2023.**



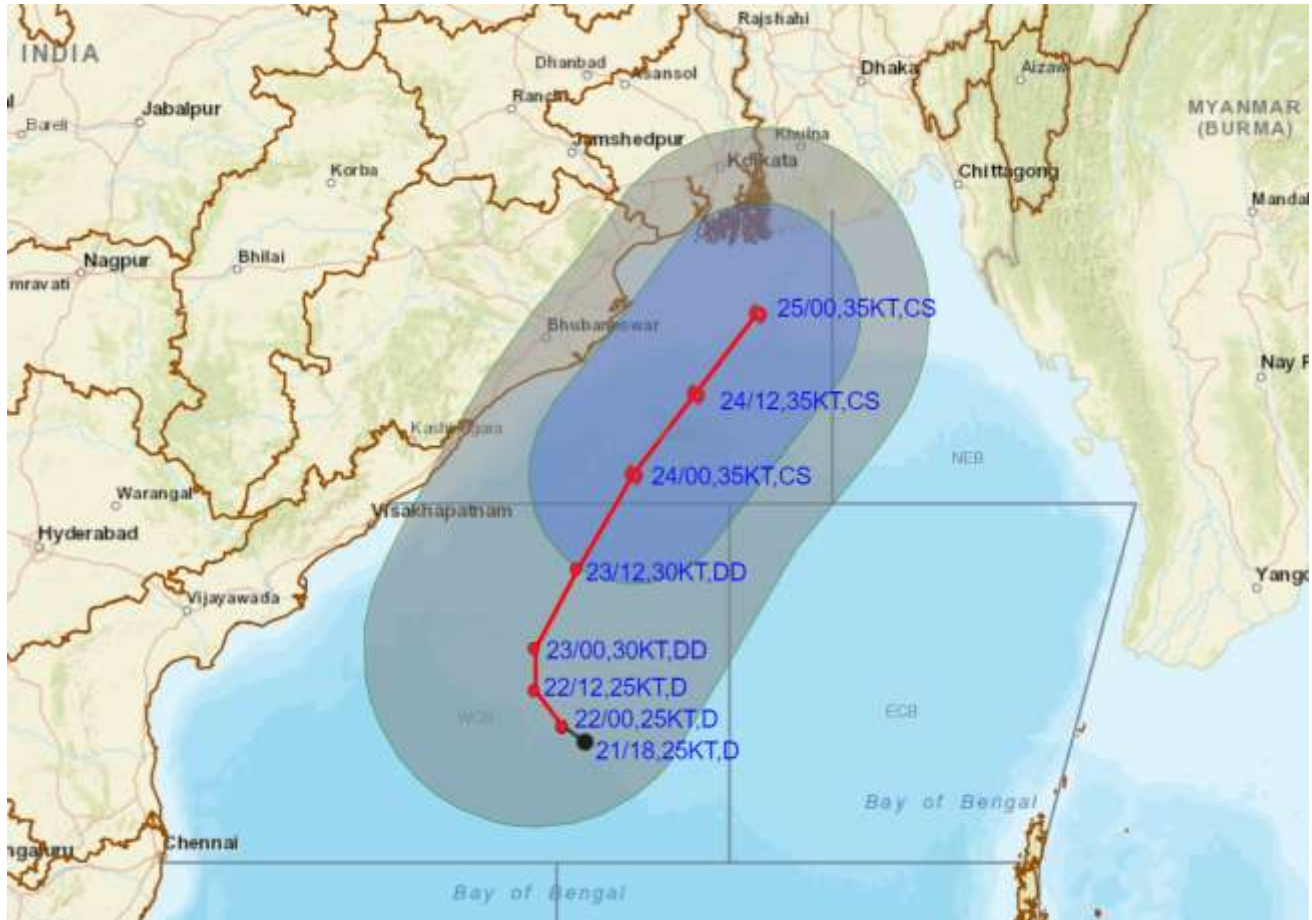
DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSXS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE 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 WESTCENTRAL BAY OF BENGAL BASED ON 0000 UTC (0530 IST) OF 22<sup>ND</sup> OCTOBER 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)

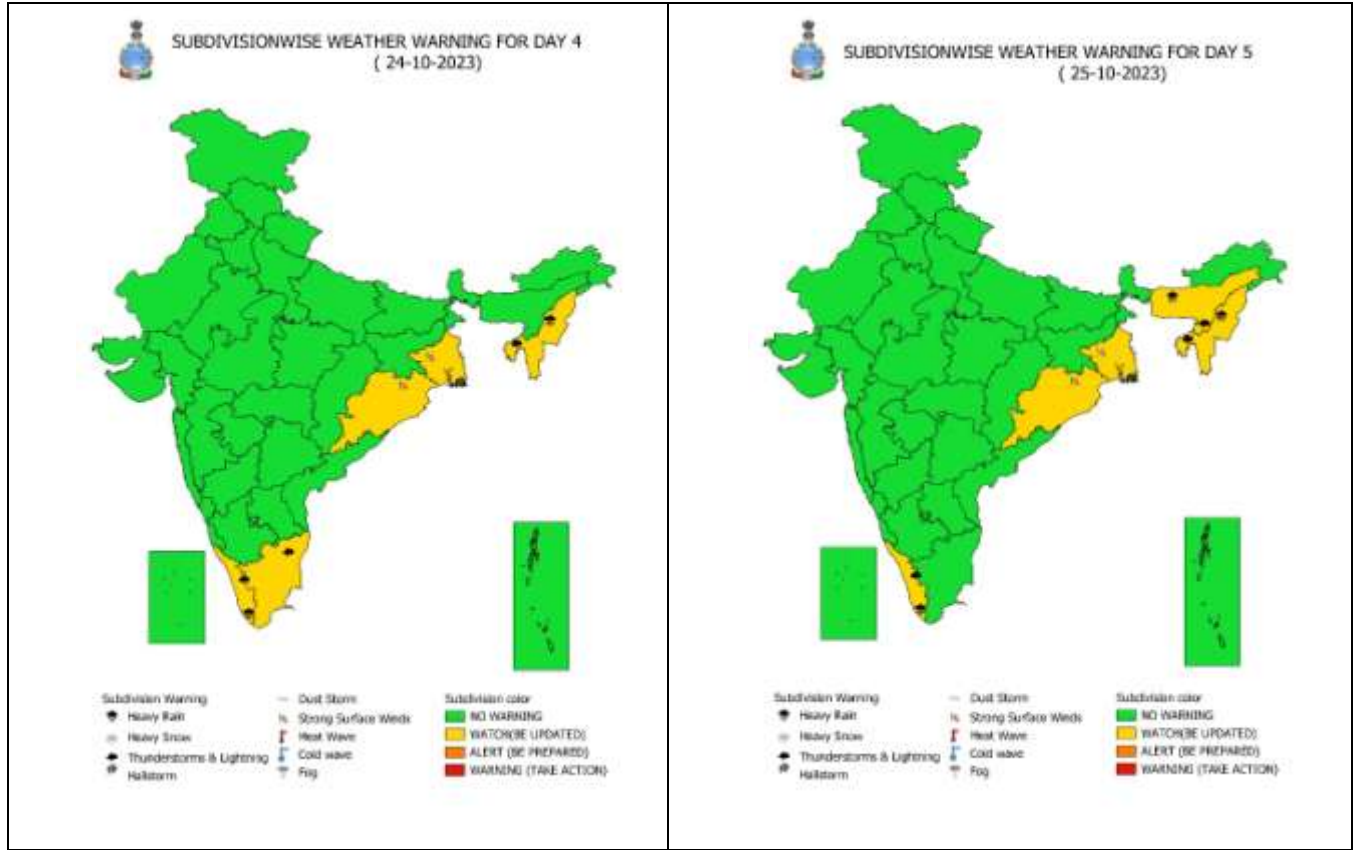
— 50-63 KT (92-117 KMPH)

— ≥ 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

# WEATHER WARNING GRAPHICS



## Fishermen warning graphics

Day 1: 22.10.2023/05:30AM to 23.10.2023/05:30AM



Day 2: 23.10.2023/05:30AM to 24.10.2023/05:30AM



Day 3: 24.10.2023/05:30AM to 25.10.2023/05:30AM



Day 4: 25.10.2023/05:30AM to 26.10.2023/05:30AM



Squally WX with wind speed 40-45 kmph gusting to 55 kmph

Squally WX with wind speed 45-55 kmph gusting to 65 kmph

Squally wind with speed 50-60 kmph gusting to 70 kmph

CS with Gale wind speed 60-90 kmph gusting to 110 kmph

SCS with Gale wind speed 90-110 kmph gusting to 120 kmph

VSCS with Gale wind speed 110-160 kmph gusting to 175 kmph

ESCS with Gale wind speed 160-220 kmph gusting to 240 kmph

**Fishermen are advised not to venture into the marked areas.**