



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

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

(B) Depression over westcentral Bay of Bengal

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

The Extremely Severe Cyclonic Storm "Tej" (pronounced as Tej) over westcentral & adjoining southwest Arabian moved northwestwards with a speed of 19 kmph during past 6 hours, and lay centered at 1130 hours IST of today, the 22nd October over the same region, near latitude 12.6°N and longitude 55.1°E about 130 km east of Socotra (Yemen), 500 km south-southeast of Salalah (Oman) and 500 km southeast of Al Ghaidah (Yemen).

It is very likely to move northwestwards and cross Yemen coast close to Al Ghaidah (Yemen) around early hours of 24th October as a very severe cyclonic storm with wind speed of 125-135 kmph gusting to 150 kmph.

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
22.10.23/1130	12.6/55.1	170-180 gusting to 200	Extremely Severe Cyclonic Storm
22.10.23/1730	13.3/54.6	170-180 gusting to 200	Extremely Severe Cyclonic Storm
22.10.23/2330	14.0/54.0	170-180 gusting to 200	Extremely Severe Cyclonic Storm
23.10.23/0530	14.5/53.5	165-175 gusting to 195	Extremely Severe Cyclonic Storm
23.10.23/1130	15.0/53.0	150-160 gusting to 175	Very Severe Cyclonic Storm
23.10.23/2330	15.7/52.3	125-135 gusting to 150	Very Severe Cyclonic Storm
24.10.23/1130	16.1/51.7	90-100 gusting to 110	Severe Cyclonic Storm
24.10.23/2330	16.5/51.1	50-60 gusting to 70	Deep Depression
25.10.23/1130	17.0/50.4	25-35 gusting to 45	Well Marked Low

Warnings:

(i) Wind warning (warning graphics enclosed):

• **Southwest Arabian Sea:**

Gale wind speed reaching **170-180 kmph gusting to 200 kmph** is prevailing and is likely to continue till night of 22nd October. Thereafter, it is likely to decrease gradually becoming **Gale wind** speed reaching **80-90 kmph gusting to 100 kmph** by evening of 23rd and **Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** by early hours of 24th October. It would decrease gradually thereafter.

• **Westcentral Arabian Sea:**

Gale wind speed reaching **170-180 kmph gusting to 200 kmph** is prevailing and likely to continue till night of 22nd October. Thereafter, it is likely to decrease gradually becoming **Gale wind** speed reaching **150-160 kmph gusting to 175 kmph** by 23rd noon and **125-135 kmph gusting to 150 kmph** by early hours of 24th October. It would decrease rapidly after the landfall becoming **Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** in the morning of 25th October.

(ii) Sea Condition

• **Southwest Arabian Sea:**

Phenomenal sea condition is prevailing and will continue till morning of 23rd October. It is likely to improve gradually becoming **high to very rough** evening of 23rd, very rough to rough till evening of 24th October and would improve thereafter.

• **Westcentral Arabian Sea:**

Phenomenal sea condition is prevailing and will continue till night of 23rd October. It would improve gradually thereafter becoming **high to very rough** by early hours of 24th October. Thereafter, it would improve gradually.

(iii) Fishermen Warning (Graphics attached):

Fishermen are advised not to venture into

- ❖ **Southwest Arabian Sea** till 24th October.
- ❖ **Westcentral Arabian Sea** till night of 24th 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 nearly northwards with a speed of 07 kmph during past 6 hours and lay centered at 1130 hours IST of today, the 22nd October over the same region, near latitude 15.3°N and longitude 86.2°E about 550 km south of Paradip (Odisha), 710 km south of Digha (West Bengal), and 850 km south-southwest of Khepupara (Bangladesh).

It is likely to move nearly northwards and intensify into a deep depression during next 6 hours. Thereafter, it is likely to continue to move northwards till 23rd morning and then north-northeastwards during subsequent 2 days towards Bangladesh coast.

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
22.10.23/1130	15.3/86.2	40-50 gusting to 60	Depression
22.10.23/1730	15.7/86.2	50-60 gusting to 70	Deep Depression
22.10.23/2330	16.1/86.2	50-60 gusting to 70	Deep Depression
23.10.23/0530	16.6/86.3	50-60 gusting to 70	Deep Depression
23.10.23/1130	17.3/86.4	50-60 gusting to 70	Deep Depression
23.10.23/2330	18.3/86.9	60-70 gusting to 80	Cyclonic Storm
24.10.23/1130	19.3/87.7	60-70 gusting to 80	Cyclonic Storm
24.10.23/2330	20.1/88.7	60-70 gusting to 80	Cyclonic Storm
25.10.23/1130	21.0/89.7	50-60 gusting to 70	Deep Depression

Warnings:

(i) Rainfall Warning

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

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

Coastal Districts of West Bengal: Light to moderate rainfall at many places is likely on 24th and 25th 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 evening of 22nd till 25th 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 22nd till morning of 23rd 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 22nd and likely to increase gradually becoming **Gale wind** speed reaching **60-70 kmph gusting to 80 kmph** from 24th night to 26th October.

(iii) Sea Condition

- **Westcentral Bay of Bengal: Rough to very rough sea condition** is prevailing and will continue till 25th October. It is likely to improve gradually thereafter.
- **Adjoining eastcentral Bay of Bengal: Moderate to rough sea condition** is prevailing and likely till 24th October. It is likely to improve gradually thereafter.
- **Southwest Bay of Bengal: Moderate to rough sea condition** is prevailing and likely till 22nd 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 23rd and becoming **Very rough to High** sea condition from 24th to 26th October.

(iv) Fishermen Warning (Graphics attached):

Fishermen are advised not to venture into

- ❖ **Westcentral Bay of Bengal** till 25th October.
- ❖ **Adjoining eastcentral & southeast Bay of Bengal** till 23rd October.

❖ **North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts** during 23rd to 26th October.

Those out at sea are advised to return to coast.

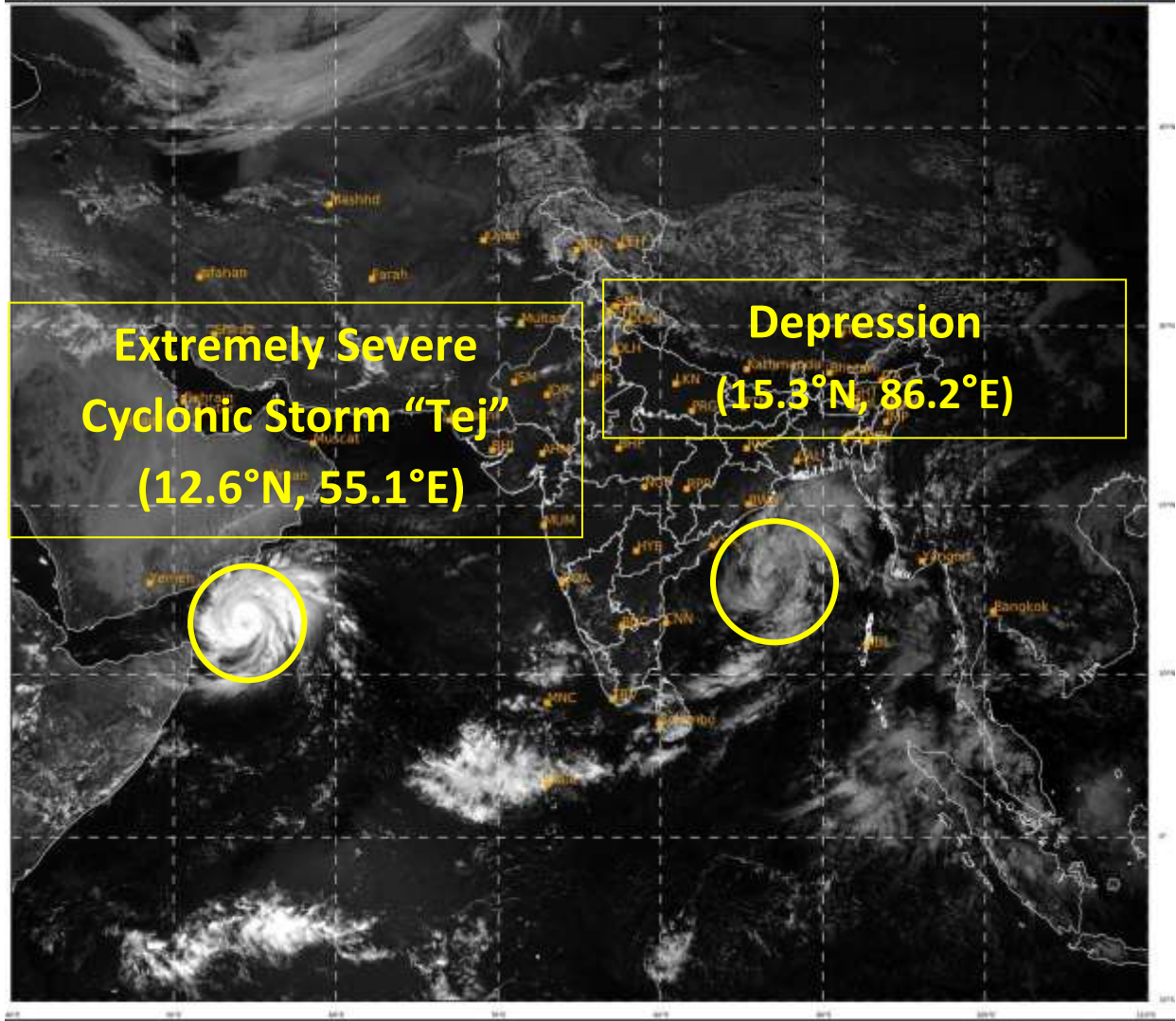
Both the systems are under continuous surveillance and the next bulletin will be issued at 1730 hours IST of 22nd October, 2023.

(Ananda Kumar Das)
Scientist F, Cyclone Warning, New Delhi

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

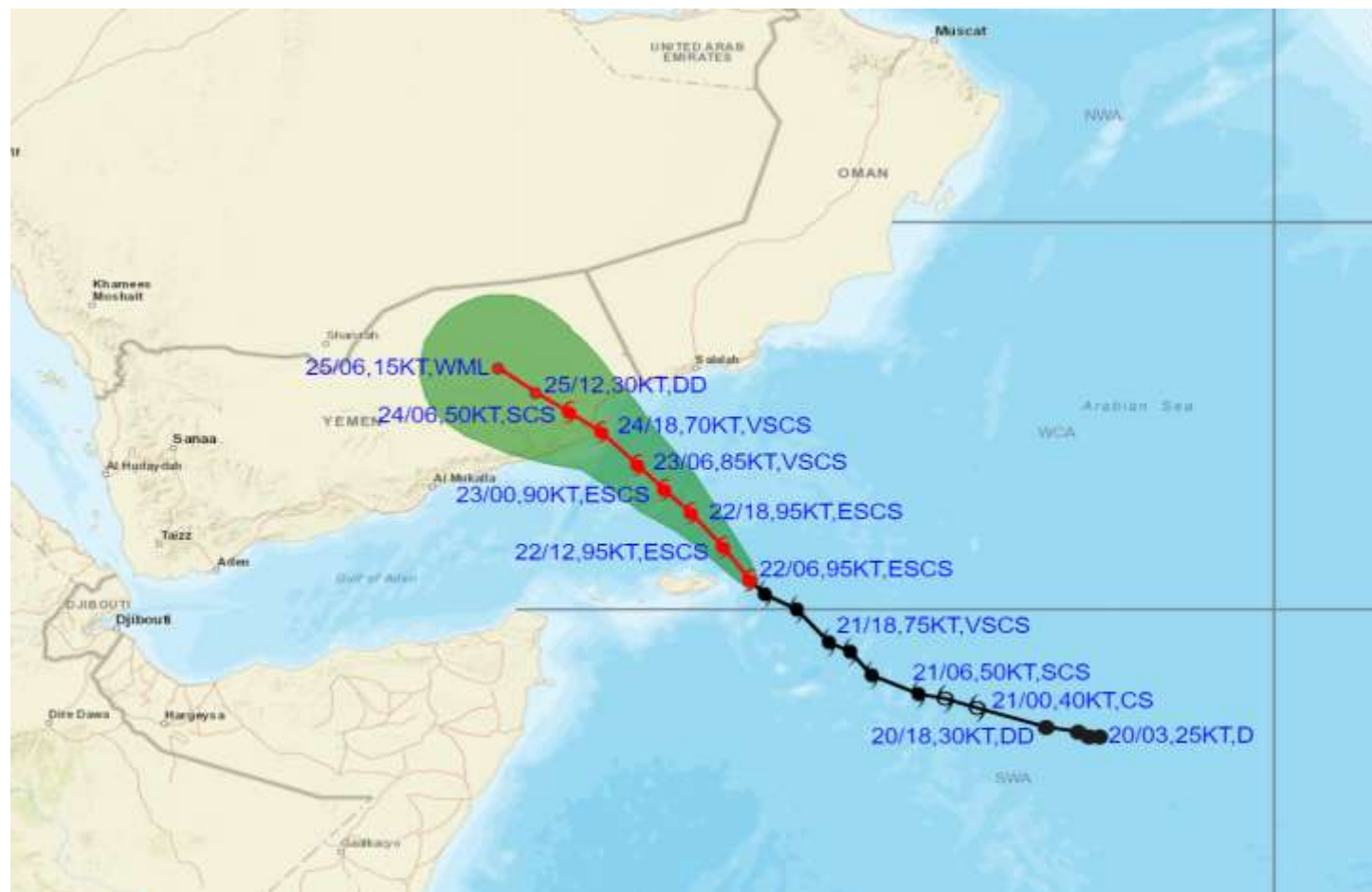
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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 EXTREMELY SEVERE CYCLONIC STORM "TEJ" OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA BASED ON 0600 UTC (1130 IST) OF 22ND 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 (\geq 120 KT)

LESS THAN 34 KT

34-47 KT

\geq 48 KT

OBSERVED TRACK

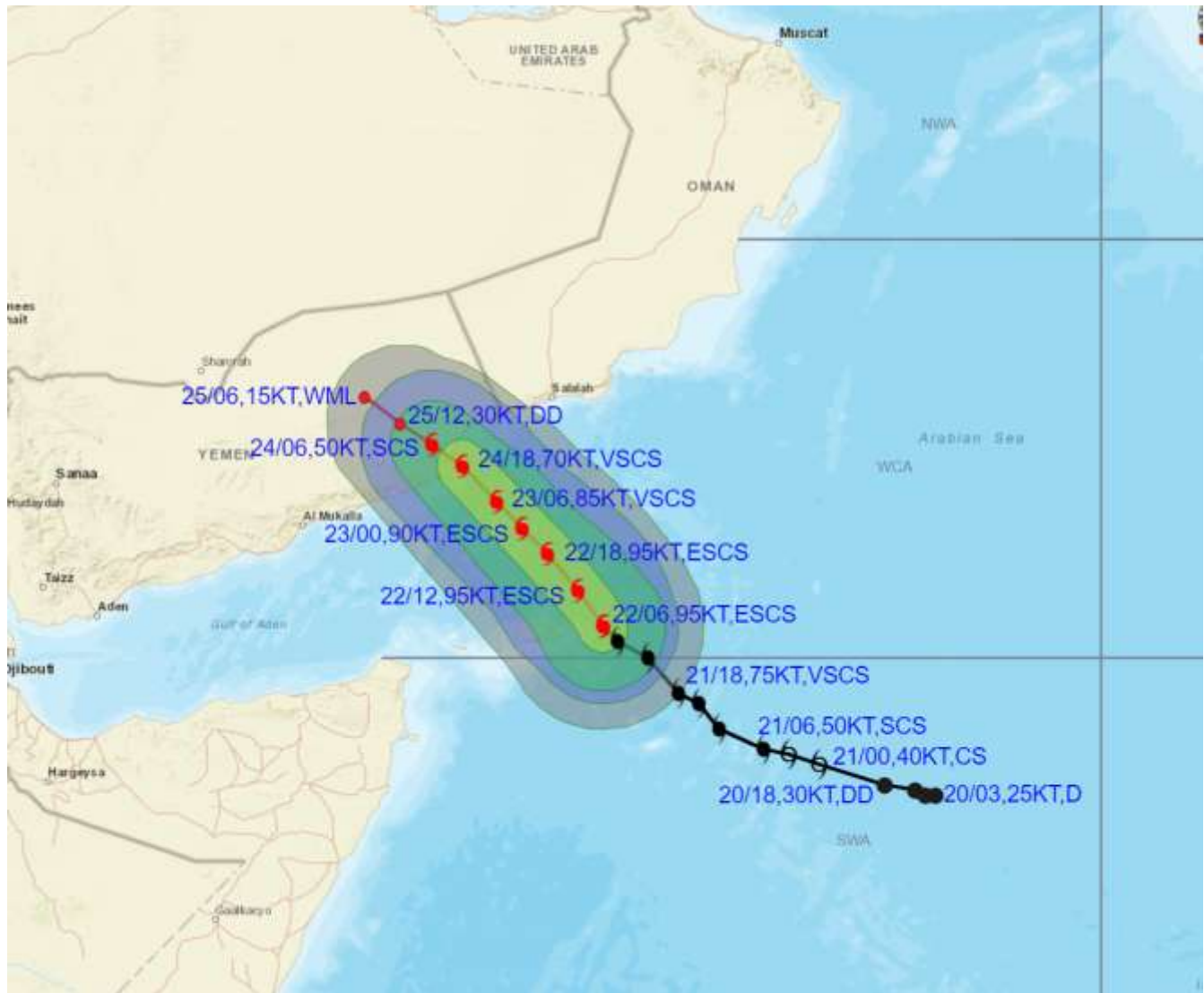
FORECAST TRACK

CONE OF UNCERTAINTY

STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	23.10.23/0600	24.10.23/0600	25.10.23/0600
SOCOTRA	210, NNW	410, NNW	610, NNW
SALALAH	290, SSW	210, SW	270, WNW
AL-GHAIDAH	240, SE	50, ESE	180, NNW



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF EXTREMELY SEVERE CYCLONIC STORM "TEJ" OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA BASED ON 0600 UTC (1130 IST) OF 22ND 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)

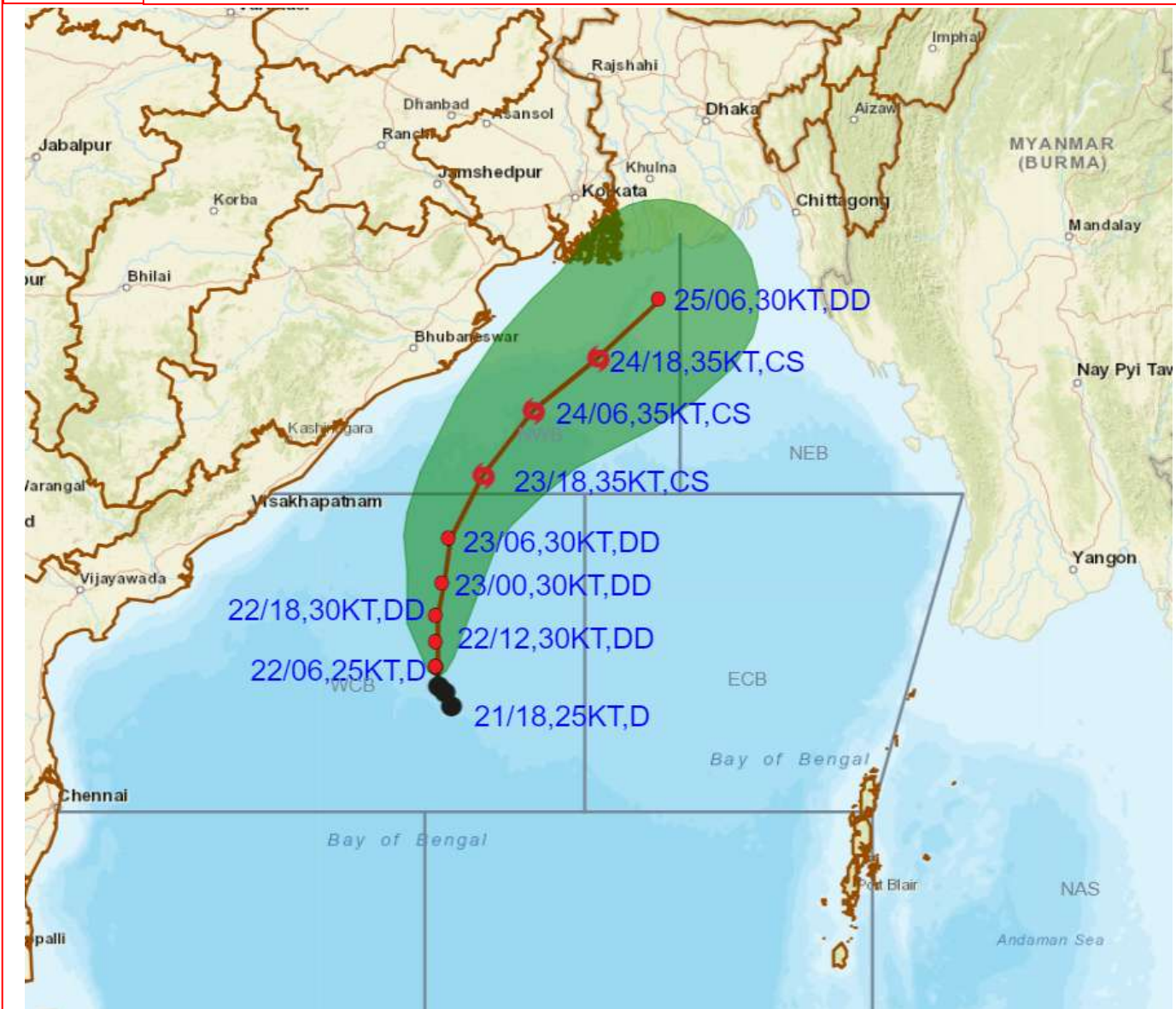
● LESS THAN 34 KT
 ⦿ 34-47 KT
 ⦿ ≥ 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 — CONE OF UNCERTAINTY
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 — 28-33 KT (52-61 KMPH)
 — 34-49 KT (62-91 KMPH)
 — 50-63 KT (92-117 KMPH)
 — ≥ 64 KT (≥118 KMPH)

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 0600 UTC (1130 IST) OF 22ND 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 (48-63 KT)

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

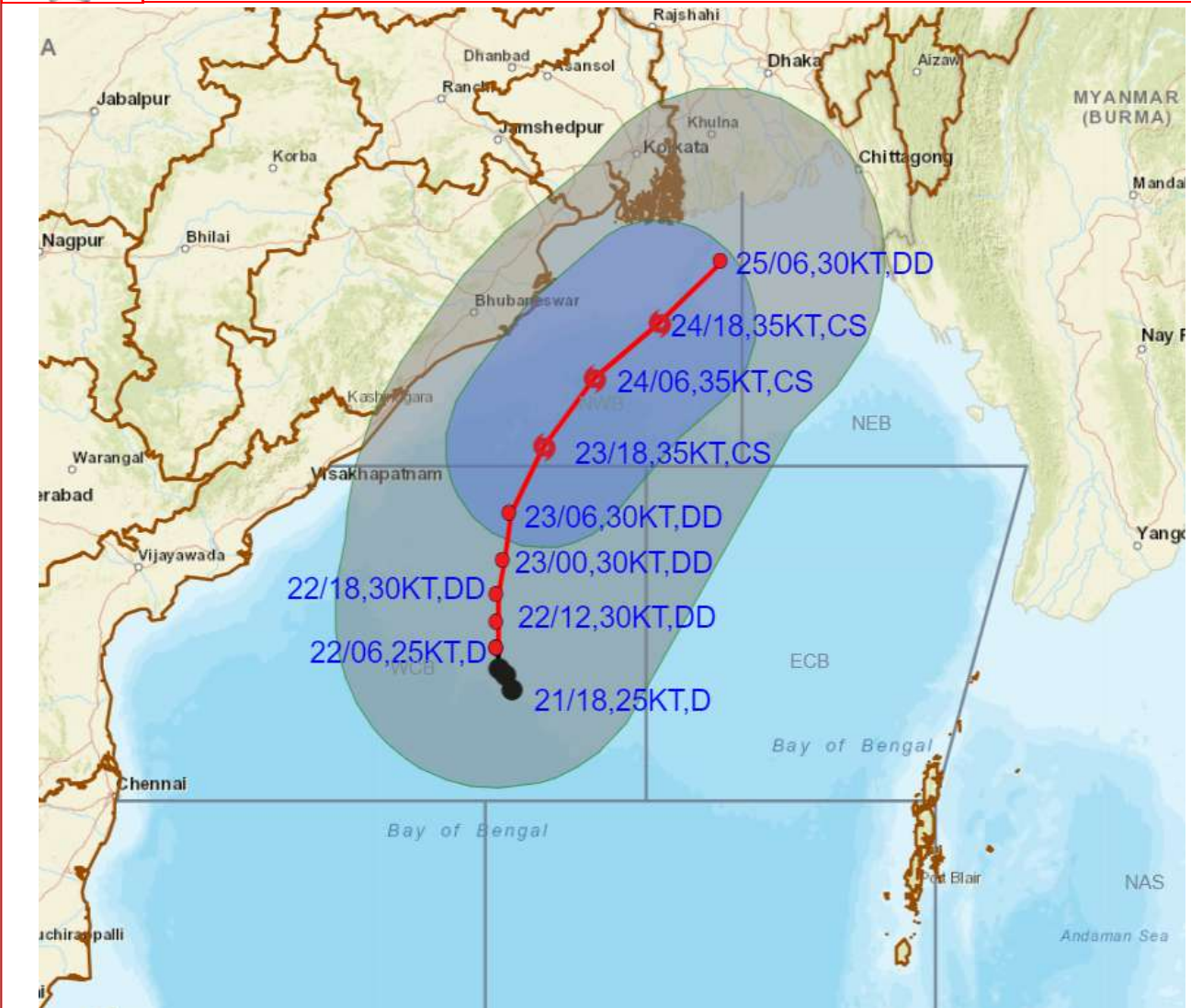
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER WESTCENTRAL BAY OF BENGAL BASED ON 0600 UTC (1130 IST) OF 22ND OCTOBER 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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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

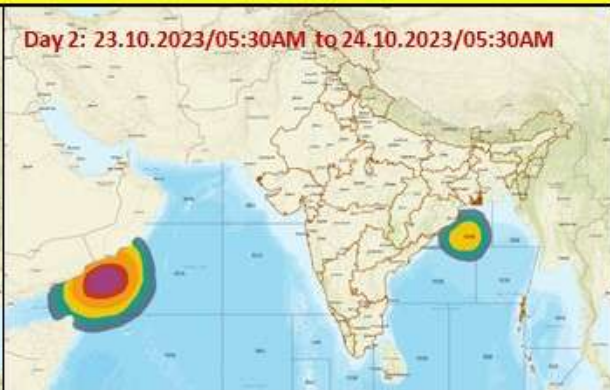
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

Fishermen warning graphics

Day 1: 22.10.2023/11:30AM 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



Day 5: 26.10.2023/05:30AM to 27.10.2023/05:30AM



	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.

WEATHER WARNING GRAPHICS

