

## India Meteorological Department (Ministry of Earth Sciences)

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FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)

TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23012284, 23018638)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MOES (FAX NO. 24629777)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (23421105, 23421219)** 

**PIB MOES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)

DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)

ADMINISTRATOR, LAKSHADWEEP ISLANDS (FAX NO. 0413-262184)

CHIEF SECRETARY, KERALA (FAX NO. 0471-2327176)

CHIEF SECRETARY, KARNATAKA (FAX NO. 080-22258913)

CHIEF SECRETARY, GOA (FAX NO. 0832-2415201)

CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022- 22028594)

CHIEF SECRETARY, GUJARAT (FAX NO. 079-23250305)

CHIEF SECRETARY, DAMAN & DIU (FAX NO. 0260-2230775)

CHIEF SECRETARY, DADRA & NAGAR HAVELI (FAX NO. 0260-2645466)

CHIEF SECRETARY, ODISHA (FAX NO. 0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX NO. 033-22144328)

CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0863-2441029, 08645-246600)

CHIEF SECRETARY, TAMIL NADU (FAX NO 044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX NO 0413-2334145)

CHIEF SECRETARY, GOVT. OF TRIPURA (FAX NO. 0381-2414013, 2413200)

CHIEF SECRETARY, GOVT. OF MIZORAM (FAX NO. 0389-2322745, 2320588)

CHIEF SECRETARY, GOVT. OF MANIPUR (FAX NO. 0385-2452629)

CHIEF SECRETARY, GOVT. OF NAGALAND (FAX NO. 0370-2270057)

ADMINISTRATOR, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192-232656)

# 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 16 kmph during past 6 hours, and lay centered at 1430 hours IST of today, the 22<sup>nd</sup> October over the same region, near latitude 12.9°N and longitude 54.7°E about 90 km east-northeast of Socotra (Yemen), 460 km south-southeast of Salalah (Oman) and 450 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 24<sup>th</sup> 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	Maximum sustained surface	Category of cyclonic
	(Lat. ⁰N/ long. ºE)	wind speed (Kmph)	disturbance
22.10.23/1430	12.9/54.7	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 22<sup>nd</sup> October. Thereafter, it is likely to decrease gradually becoming Gale wind speed reaching 80-90 kmph gusting to 100 kmph by evening of 23<sup>rd</sup> and Squally wind speed reaching 40-50 kmph gusting to 60 kmph by early hours of 24<sup>th</sup> 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 22<sup>nd</sup>October. Thereafter, it is likely to decrease gradually becoming Gale wind speed reaching 150-160 kmph gusting to 175 kmph by 23<sup>rd</sup> noon and 125-135 kmph gusting to 150 kmph by early hours of 24<sup>th</sup> October. It would decrease rapidly after the landfall becoming Squally wind speed reaching 40-50 kmph gusting to 60 kmph in the morning of 25<sup>th</sup> October.

#### (ii) Sea Condition

#### Southwest Arabian Sea:

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

#### Westcentral Arabian Sea:

**Phenomenal** sea condition is prevailing and will continue till night of 23<sup>rd</sup> October. It would improve gradually thereafter becoming **high to very rough** by early hours of 24<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 24th October.
- ❖ Westcentral Arabian Sea till night of 24<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 nearly northwards with a speed of 11 kmph during past 6 hours and lay centered at 1430 hours IST of today, the 22<sup>nd</sup> October over the same region, near latitude 15.6°N and longitude 86.2°E about 520 km south-southeast of Paradip (Odisha), 680 km south-southwest of Digha (West Bengal), and 820 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 23<sup>rd</sup> morning and then northnortheastwards during subsequent 2 days towards Bangladesh coast.

## Forecast track and intensity are given below:

Date/Time(IST)	Position (Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
22.10.23/1430	15.6/86.2	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 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 evening 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 likely to prevail till morning of 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 22<sup>nd</sup> and likely to increase gradually becoming Gale wind speed reaching 60-70 kmph gusting to 80 kmph from 24<sup>th</sup> night 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.
- Adjoining Southwest Bay of Bengal: Moderate to rough sea condition is prevailing and likely till night of 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 23<sup>rd</sup> and becoming Very rough to High 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 during 23<sup>rd</sup> to 26<sup>th</sup> October.

Those out at sea are advised to return to coast.

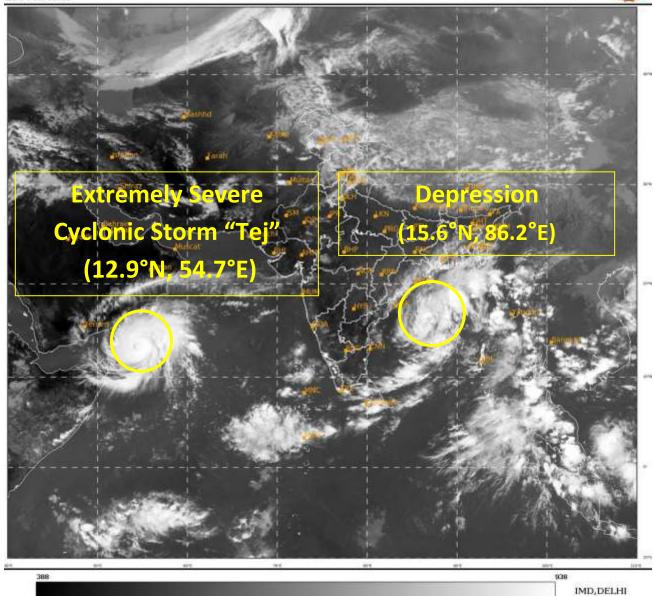
Both the systems are under continuous surveillance and the next bulletin will be issued at 2030 hours IST of 22<sup>nd</sup> October, 2023.

(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

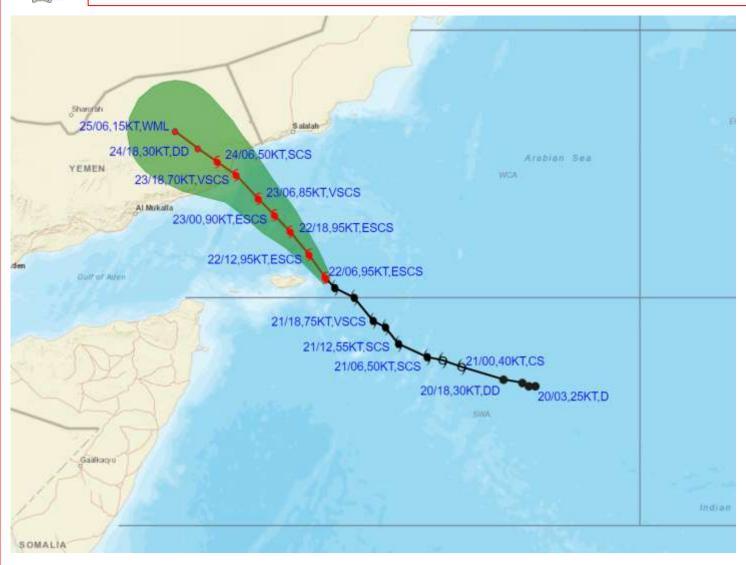
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100% Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.







OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF EXTREMELY SEVERE CYCLONIC STORM "TEJ" OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA BASED ON 0600 UTC (1130 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)

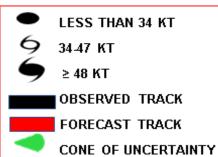
DD: DEEP DEPRESSION (28-33 KT) CS: CYCLONIC STORM (34-47 KT)

SCS: SEVERE CYCLONIC STORM (48-63KT)

VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)

ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)

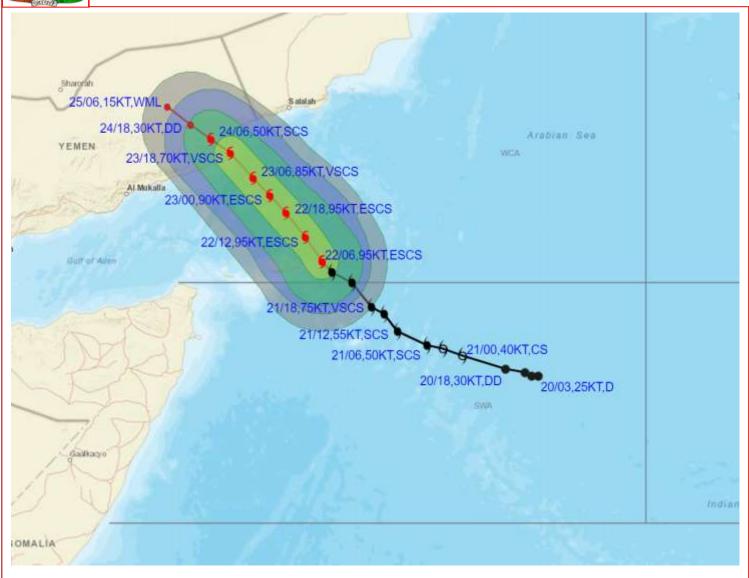
SuCS: SUPER CYCLONIC STORM € 120 KT)



STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS			
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 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

6 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)

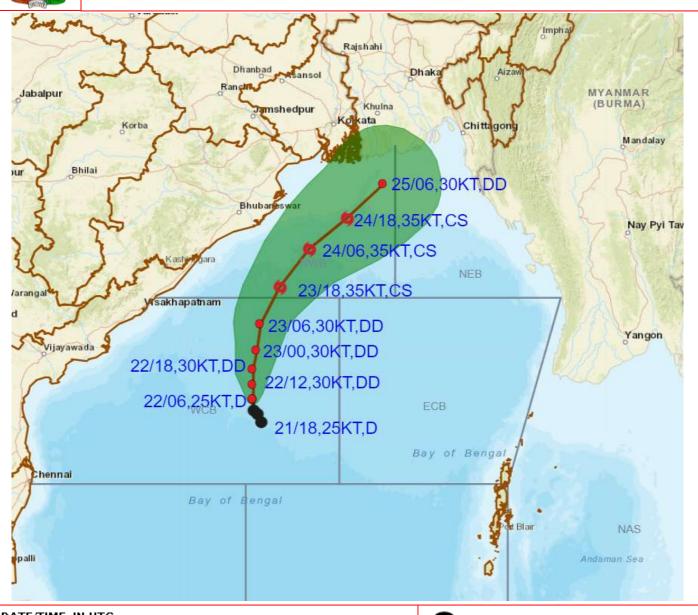
≥ 64 KT (≥118 KMPH)

#### 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 UNCERTAINITY OF DEPRESSION OVER WESTCENTRAL BAY OF BENGAL BASED ON 0600 UTC (1130 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)

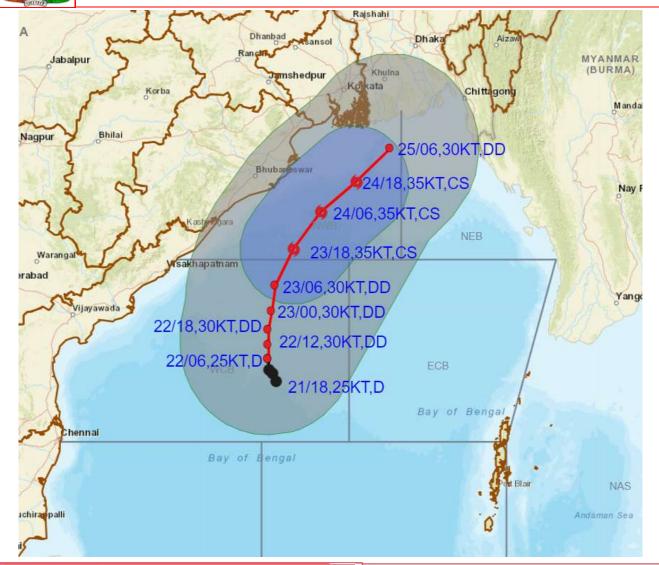
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)

Sucs: SUPER CYCLONIC STORM ₱ 120 KT)





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

9 34.47 KT

≥ 48 KT

OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

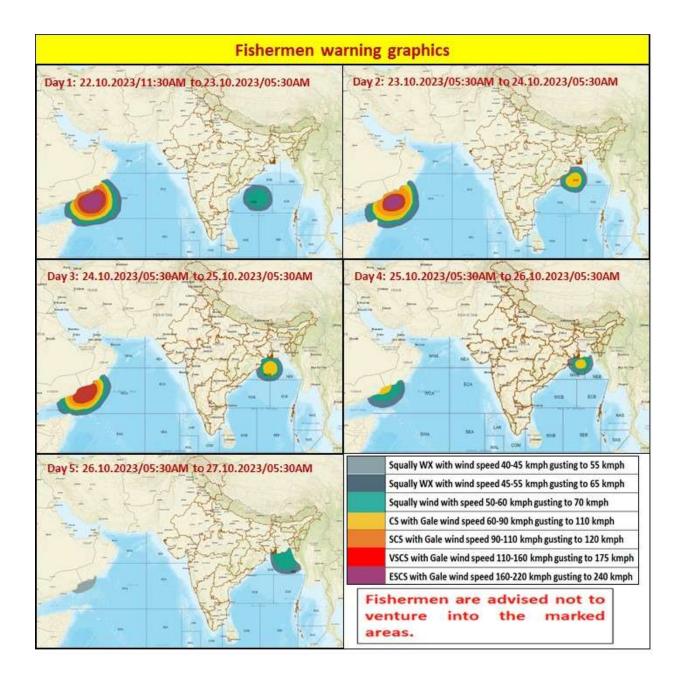
AREA OF MAXIMUM SUSTAINED WIND SPEED:

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 SE	A
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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**

