



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

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Sub: (A) Severe Cyclonic Storm "Tej" (pronounced as Tej) intensified into a Very Severe Cyclonic Storm over southwest Arabian Sea

(B) Well Marked Low pressure Area over westcentral and adjoining south Bay of Bengal

(A) Very Severe Cyclonic Storm "Tej" (pronounced as Tej) over southwest Arabian Sea

The Severe Cyclonic Storm "Tej" (pronounced as Tej) over southwest Arabian Sea moved north-westwards with a speed of 23 kmph during past 6 hours, intensified into a Very Severe Cyclonic Storm and lay centered at 2030 hours IST of 21st October over the same region, near latitude 11.1°N and longitude 57.0°E about 380 km east-southeast of Socotra (Yemen), 730 km south-southeast of Salalah (Oman) and 770 km southeast of Al Ghaidah (Yemen).

It is very likely to intensify further into an Extremely Severe Cyclonic Storm in the forenoon of 22nd October. It is very likely to move northwestwards till 24th morning & then north-northwestwards thereafter. It is likely to cross Yemen-Oman coasts between Al Ghaidah (Yemen) & Salalah (Oman) around early hours of 25th October.

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
21.10.23/2030	11.1/57.0	110-120 gusting to 130	Very Severe Cyclonic Storm
21.10.23/2330	11.4/56.7	125-135 gusting to 150	Very Severe Cyclonic Storm
22.10.23/0530	11.8/56.2	145-155 gusting to 170	Very Severe Cyclonic Storm
22.10.23/1130	12.2/55.7	165-175 gusting to 195	Extremely Severe Cyclonic Storm
22.10.23/1730	12.7/55.2	180-190 gusting to 210	Extremely Severe Cyclonic Storm
23.10.23/0530	13.5/54.4	180-190 gusting to 210	Extremely Severe Cyclonic Storm
23.10.23/1730	14.4/53.7	150-160 gusting to 175	Very Severe Cyclonic Storm
24.10.23/0530	15.1/53.2	125-135 gusting to 150	Very Severe Cyclonic Storm
24.10.23/1730	15.9/52.8	105-115 gusting to 125	Severe Cyclonic Storm
25.10.23/0530	16.6/52.5	90-100 gusting to 110	Severe Cyclonic Storm
25.10.23/1730	17.2/52.3	40-50 gusting to 60	Depression

Warnings:

(i) Wind warning (warning graphics enclosed):

• **Southwest Arabian Sea:**

Gale wind speed reaching **110-120 kmph gusting to 130 kmph** is prevailing and likely to increase gradually becoming **145-155 kmph gusting to 170 kmph** by morning of 22nd October. Thereafter, it is likely to decrease gradually becoming **Gale wind** speed reaching **90-100 kmph gusting to 110 kmph** by morning of 23rd and **Squally wind** speed reaching **50-60 kmph gusting to 70 kmph** by morning of 24th October. It would decrease gradually thereafter.

• **Westcentral Arabian Sea:**

Gale wind speed reaching **80-90 kmph gusting to 100 kmph** is prevailing and likely to increase gradually becoming **Gale wind speed reaching 145-155 kmph gusting to 170 kmph** in the morning of 22nd, **180-190 kmph gusting to 210 kmph** in the evening of 22nd till morning of 23rd October. Thereafter, it is likely to decrease gradually from evening of 23rd October becoming **Gale wind speed reaching 125-135 kmph gusting to 150 kmph** by 24th morning and **90-100 kmph gusting to 110 kmph** on 25th morning. It would decrease rapidly after the landfall becoming **Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** in the evening of 25th October.

(ii) Sea Condition

• **Southwest Arabian Sea:**

Phenomenal sea condition is prevailing and will continue till 23rd October. It is likely to improve gradually becoming **very high** from 24th morning and continue till 25th morning. Thereafter, it would improve gradually.

• **Westcentral Arabian Sea:**

Phenomenal sea condition is prevailing and will continue till evening of 24th October. It would improve gradually thereafter becoming **very high to high** from 24th night. Thereafter, it would improve gradually.

(iii) Fishermen Warning (Graphics attached):

Fishermen are advised not to venture into

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

(B) Well Marked Low pressure Area over westcentral and adjoining south Bay of Bengal

The well marked low pressure area over westcentral and adjoining south Bay of Bengal moved slowly northwestwards and lay over the same region at 2030 hours IST of 21st October, 2023. It is very likely to move further northwestwards and intensify into a depression over westcentral Bay of Bengal during next 03 hours. Thereafter, it is likely to move north-northeastwards towards Bangladesh and adjoining West Bengal coasts and intensify further during subsequent 3 days.

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 morning of 22nd till 25th October. It is likely to decrease gradually thereafter.
- **Adjoining eastcentral & southeast Bay of Bengal: Squally wind** speed reaching **45-55 kmph gusting to 65 kmph** is prevailing near the system and likely to become **50-60 kmph gusting to 70 kmph** from morning of 22nd till 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 **45-55 kmph gusting to 65 kmph** is likely to prevail from 24th to 26th October.

(iii) Sea Condition

- **Westcentral Bay of Bengal: Rough sea condition** is prevailing and likely to become **rough to very rough** from the morning of 22nd till 25th October. It is likely to improve gradually thereafter.
- **Adjoining eastcentral & southeast Bay of Bengal: Moderate to rough sea condition** is prevailing and likely to become **rough to very rough** on 23rd October. It is likely to improve gradually thereafter.
- **North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts: Rough to very rough** sea condition is likely 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** from 24th 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 0230 hours IST of 22nd October, 2023.

(S. P. Singh)

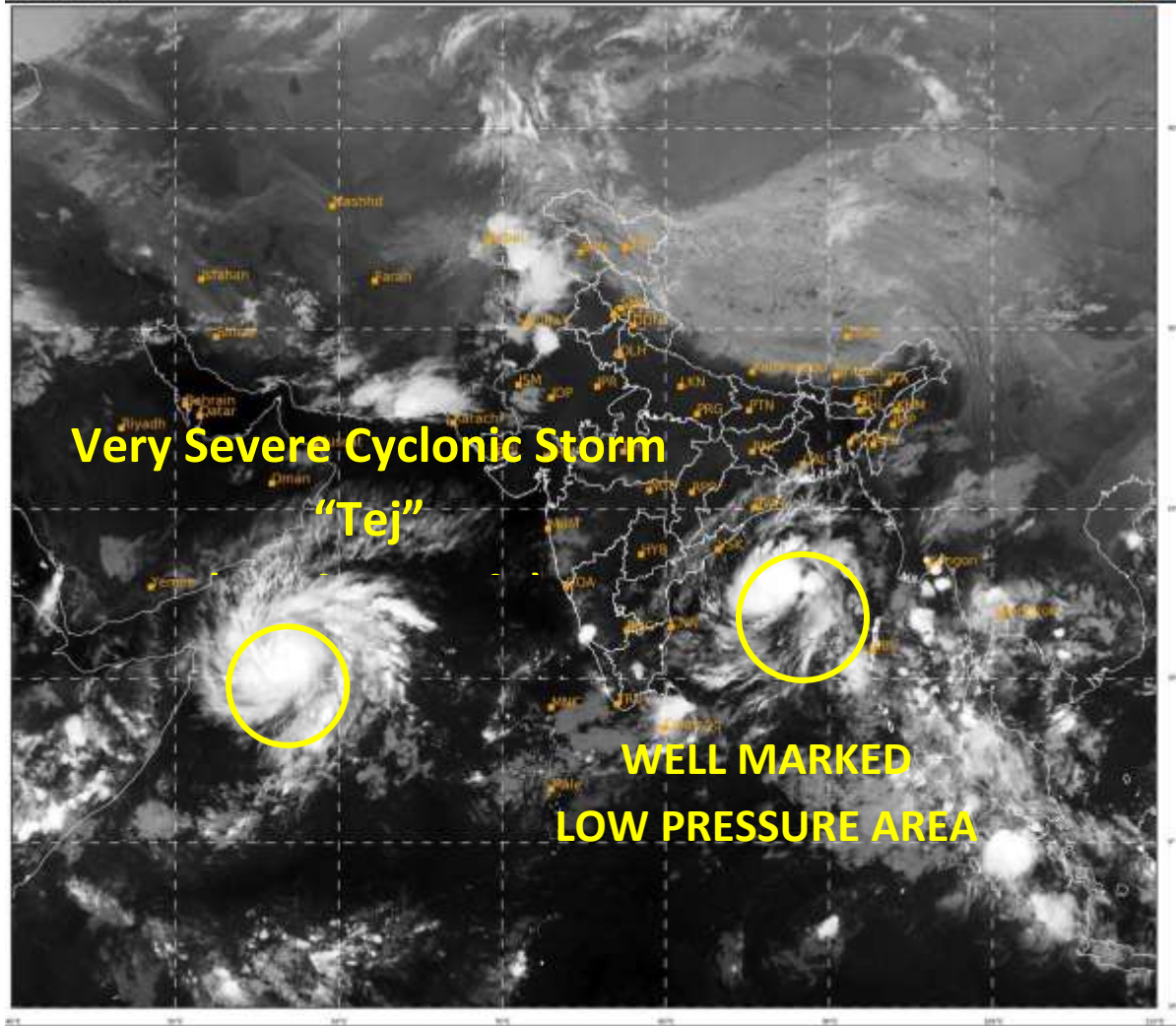
Scientist C, Cyclone Warning, New Delhi

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.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
LIC Mercator

21-10-2023/(1600 to 1626) GMT
21-10-2023/(2130 to 2156) IST



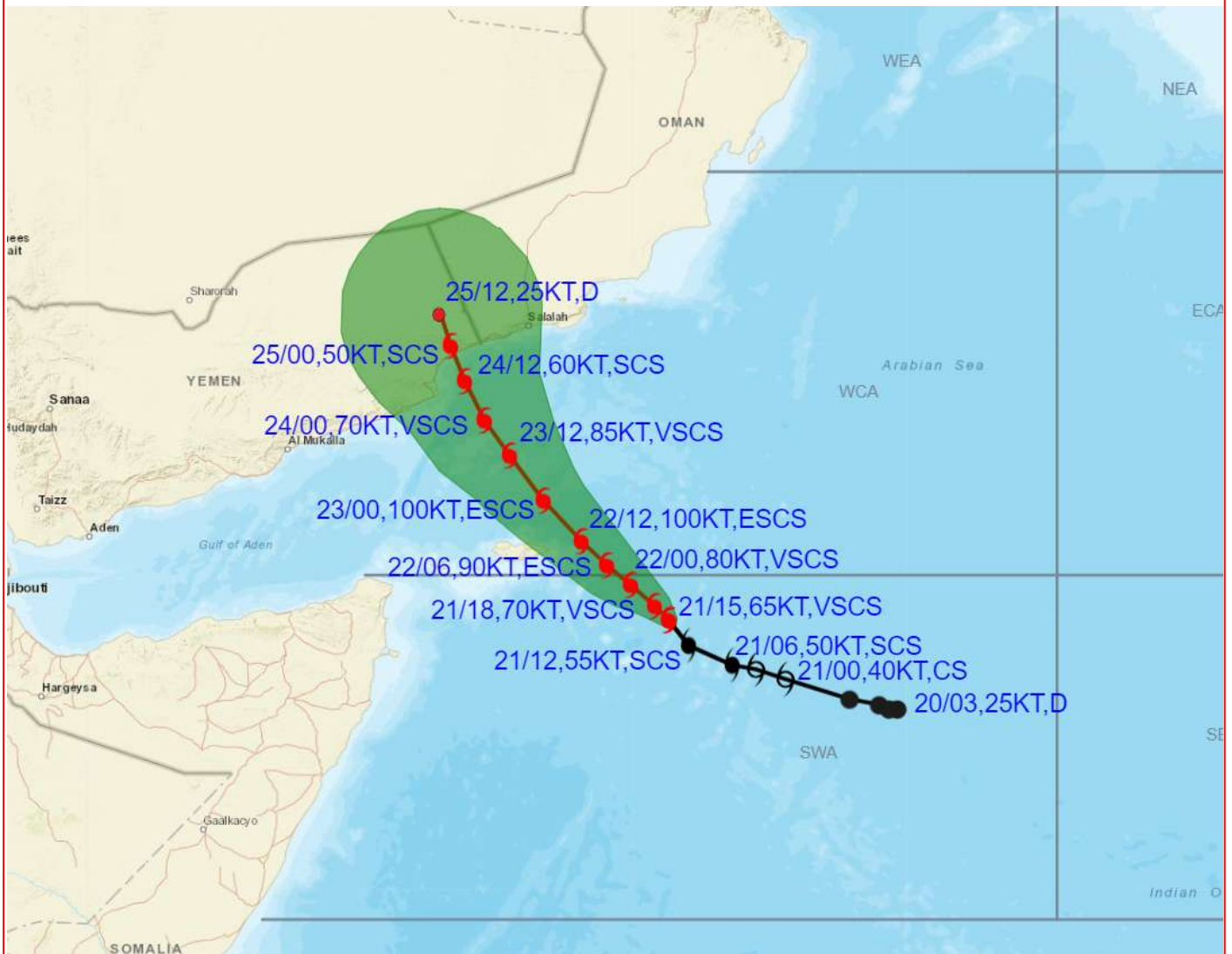
519

944

IMD, DELHI



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM “TEJ” OVER SOUTHWEST ARABIAN SEA BASED ON 1500 UTC (2030 IST) OF 21st OCTOBER 2023.

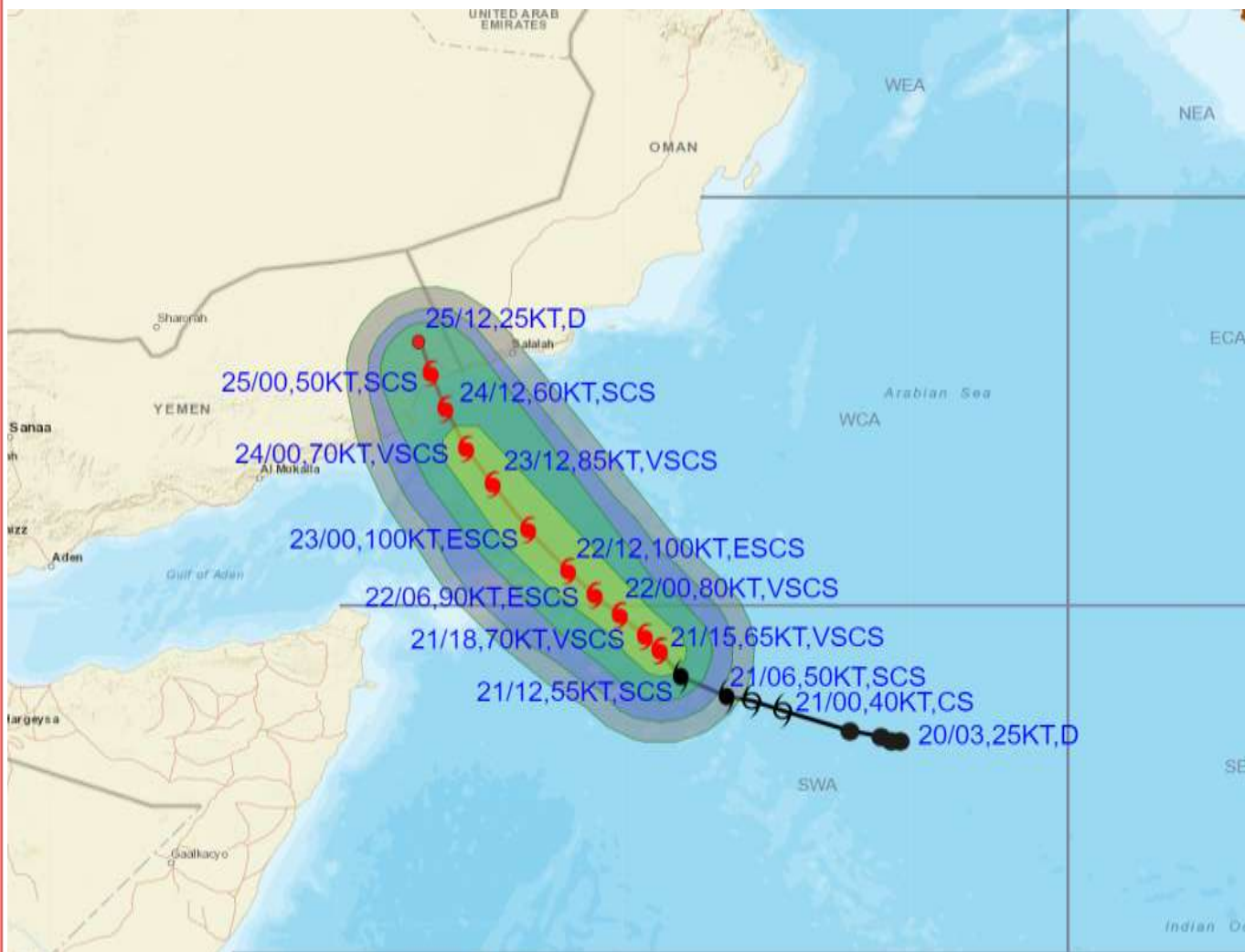


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM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



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM “TEJ” OVER SOUTHWEST ARABIAN SEA BASED ON 1500 UTC (2030 IST) OF 21st 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)

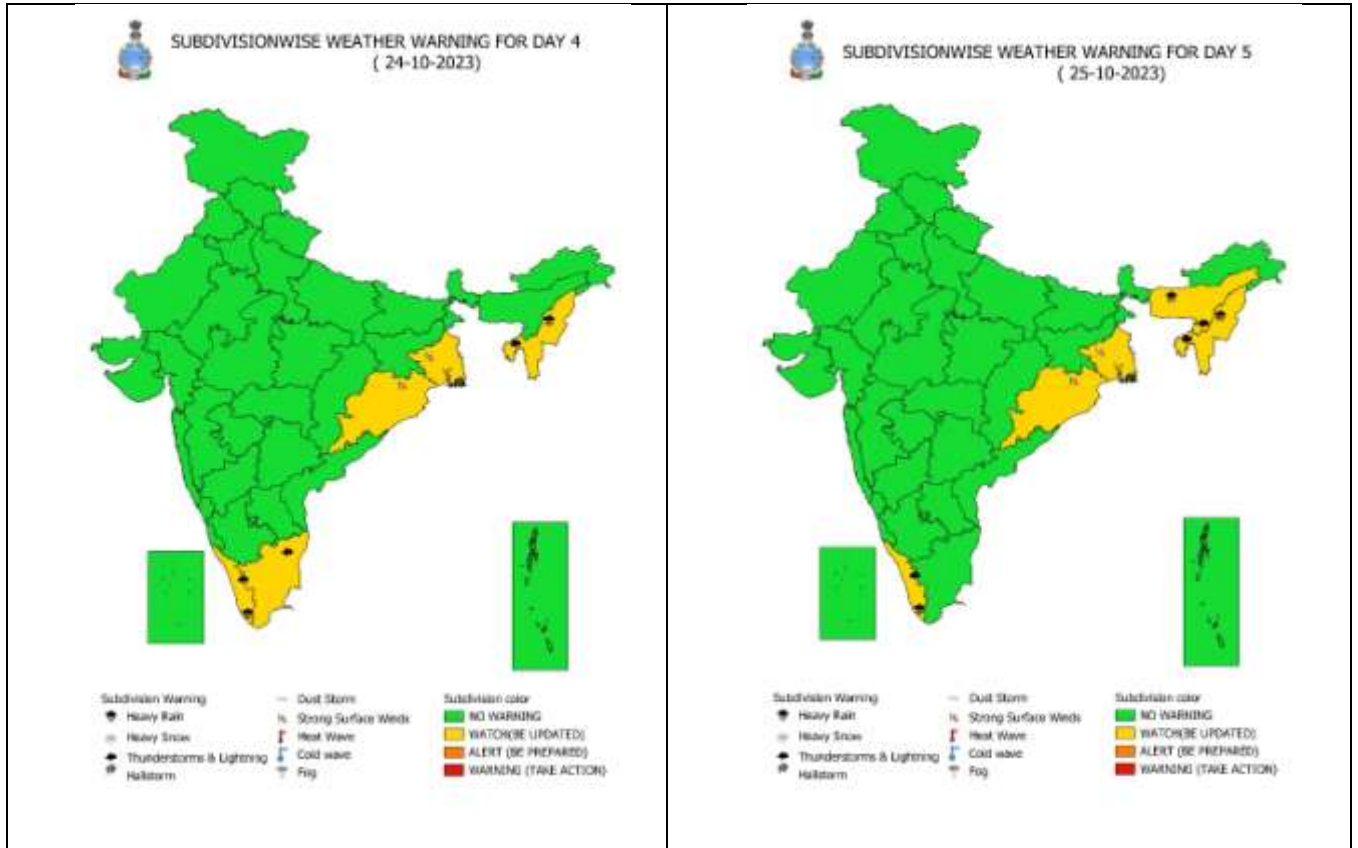
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- 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: 21.10.2023/17:30AM to 22.10.2023/05:30AM



Day 2: 22.10.2023/05:30AM to 23.10.2023/05:30AM



Day 3: 23.10.2023/05:30AM to 24.10.2023/05:30AM



Day 4: 24.10.2023/05:30AM to 25.10.2023/05:30AM



Day 5: 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

Fishermen are advised not to venture into the marked areas.