



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

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Sub: (A) Cyclonic Storm "Tej" (pronounced as Tej) over southwest Arabian Sea

(B) Well Marked Low pressure Area over southeast and adjoining central Bay of Bengal

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

The Cyclonic Storm "Tej" (pronounced as Tej) over southwest Arabian Sea moved west-northwestwards with a speed of 23 kmph during past 6 hours and lay centered at 0830 hours IST of 21st October over the same region, near latitude 10.1°N and longitude 58.8°E about 600 km east-southeast of Socotra (Yemen), 920 km south-southeast of Salalah (Oman) and 980 km southeast of Al Ghaidah (Yemen).

It is very likely to intensify into a severe cyclonic storm during next 12 hours and further into a very severe cyclonic storm during subsequent 24 hours. It is very likely to move west-northwestwards till 22nd morning, northwestwards thereafter till 24th morning & then north-northwestwards. It is likely to cross Yemen-Oman coasts between Al Ghaidah (Yemen) & Salalah (Oman) around early morning 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
21.10.23/0830	10.1/58.8	75-85 gusting to 95	Cyclonic Storm
21.10.23/1130	10.3/58.2	80-90 gusting to 100	Cyclonic Storm
21.10.23/1730	10.6/57.5	90-100 gusting to 110	Severe Cyclonic Storm
21.10.23/2330	11.1/56.9	105-115 gusting to 125	Severe Cyclonic Storm
22.10.23/0530	11.7/56.3	110-120 gusting to 135	Very Severe Cyclonic Storm
22.10.23/1730	12.7/55.4	135-145 gusting to 160	Very Severe Cyclonic Storm
23.10.23/0530	13.6/54.5	150-160 gusting to 175	Very Severe Cyclonic Storm
23.10.23/1730	14.3/53.9	145-155 gusting to 170	Very Severe Cyclonic Storm
24.10.23/0530	15.0/53.4	135-145 gusting to 160	Very Severe Cyclonic Storm
24.10.23/1730	15.9/53.1	125-135 gusting to 150	Very Severe Cyclonic Storm
25.10.23/0530	16.6/52.9	100-110 gusting to 120	Severe Cyclonic Storm
25.10.23/1730	17.3/52.7	60-70 gusting to 80	Cyclonic Storm
26.10.23/0530	18.0/52.7	40-50 gusting to 60	Depression

Warnings:

(i) Wind warning (warning graphics enclosed):

• **Southwest Arabian Sea:**

Gale wind speed reaching **75-85 kmph gusting to 95 kmph** is prevailing and likely to increase gradually becoming **90-100 kmph gusting to 110 kmph** by evening of today, the 21st October and **110-120 kmph gusting to 135 kmph** by morning of 22nd October. It is likely to decrease gradually becoming **Gale wind** speed reaching **60-70 kmph gusting to 80 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:**

Squally wind speed reaching **50-60 kmph gusting to 70 kmph** is prevailing and likely to become **Gale wind speed reaching 80-90 kmph gusting to 100 kmph** by evening of 21st October. It is likely to increase gradually becoming **Gale wind speed reaching 110-120 kmph gusting to 135 kmph** in the morning of 22nd, **150-160 kmph gusting to 175 kmph** in the morning of 23rd October. Thereafter, it is likely to decrease gradually from evening of 23rd October becoming **Gale wind speed reaching 135-145 kmph gusting to 160 kmph** by 24th morning and **100-110 kmph gusting to 120 kmph** on 25th morning. It would decrease rapidly after the landfall becoming **Gale wind speed reaching 60-70 kmph gusting to 80 kmph** in the evening of 25th October and **Squally wind speed** reaching **35-45 kmph gusting to 55 kmph** by morning of 26th October.

(ii) Sea Condition

• **Southwest Arabian Sea:**

High sea condition is prevailing and likely to become **phenomenal** from morning of 22nd to morning of 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:**

Rough to very rough sea condition is prevailing and it is likely to become **high to very high** from evening of today, 21st October. It is likely to become **phenomenal** from 22nd morning and likely to continue till night of 24th October. It would improve gradually thereafter becoming **very high to high** from 25th morning. 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 26th October.
- ❖ Those out at sea are advised to return to coast.

(B) Well Marked Low pressure Area over southeast and adjoining central Bay of Bengal

The low pressure area over southeast & adjoining eastcentral Bay of Bengal moved northwestwards, became well marked low pressure area and lay centered over southeast and adjoining central Bay of Bengal at 0830 hours IST of 21st October, 2023. It is very likely to move northwestwards and intensify into a depression over westcentral Bay of Bengal by 22nd October. 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):

- **Southeast and adjoining eastcentral & southwest Bay of Bengal: Squally wind** speed reaching **45-55 kmph gusting to 65 kmph** is likely to prevail near the system on 21st & 22nd and **50-60 kmph gusting to 70 kmph** on 23rd October. It is likely to decrease gradually thereafter.
- **Westcentral Bay of Bengal: Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** is likely to prevail on 21st October. It is likely to gradually increase becoming **45-55 kmph gusting to 65 kmph** on 22nd and **50-60 kmph gusting to 70 kmph** on 23rd & 24th October.
- **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

- **Southeast and adjoining eastcentral & southwest Bay of Bengal: Moderate to rough sea condition** is likely to prevail near the system on 21st and it is likely to become **rough to very rough** on 23rd October. It is likely to improve gradually thereafter.
- **Westcentral Bay of Bengal: Rough sea condition** is likely to prevail on 21st October. It is likely to become **rough to very rough** from 23rd October.
- **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

- ❖ **Southeast and adjoining eastcentral & southwest Bay of Bengal** till 23rd October.
- ❖ **Westcentral Bay of Bengal** from 21st October onwards.
- ❖ **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 1430 hours IST of today, the 21st October, 2023.

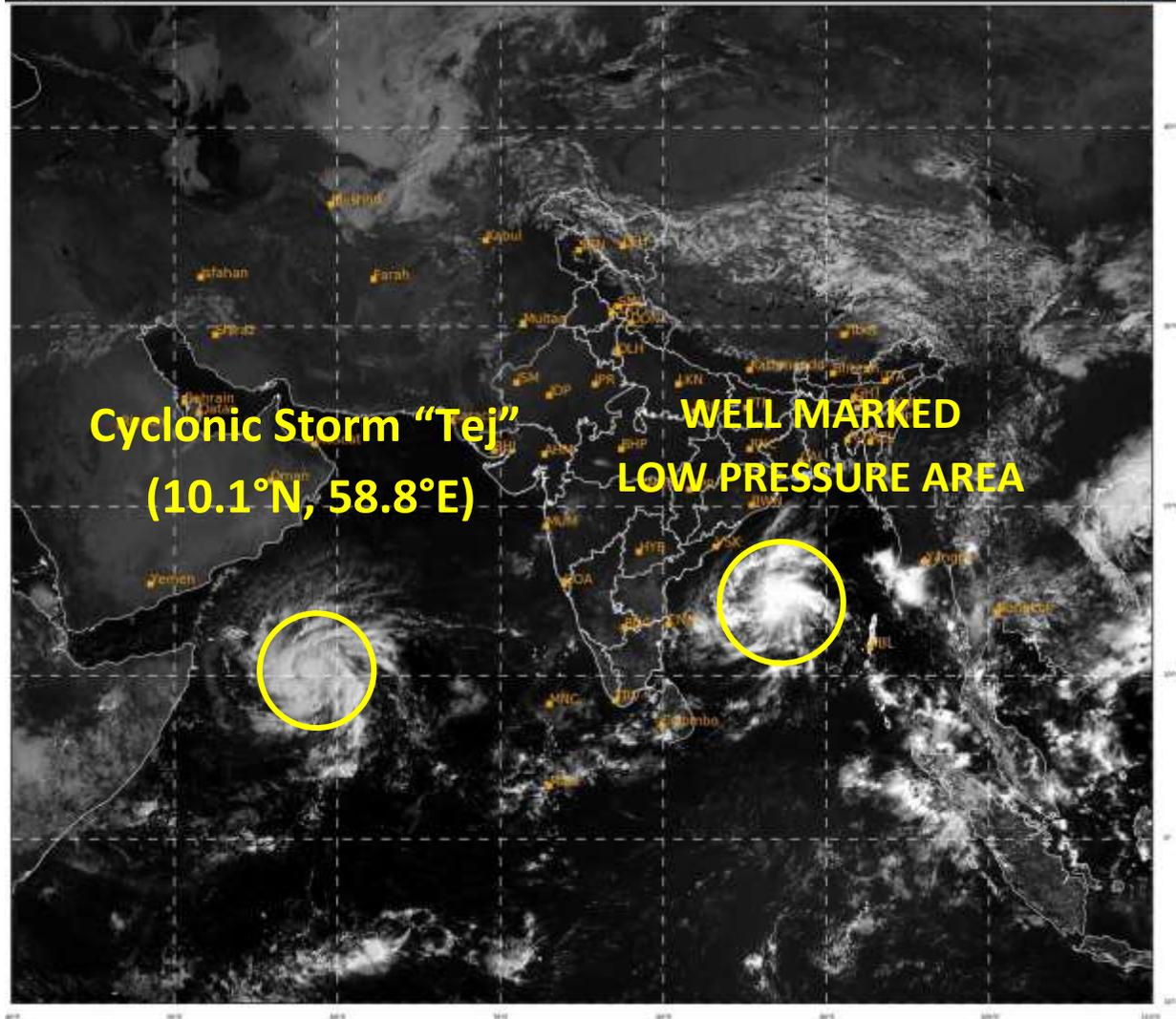
(Ananda Kumar Das)

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.



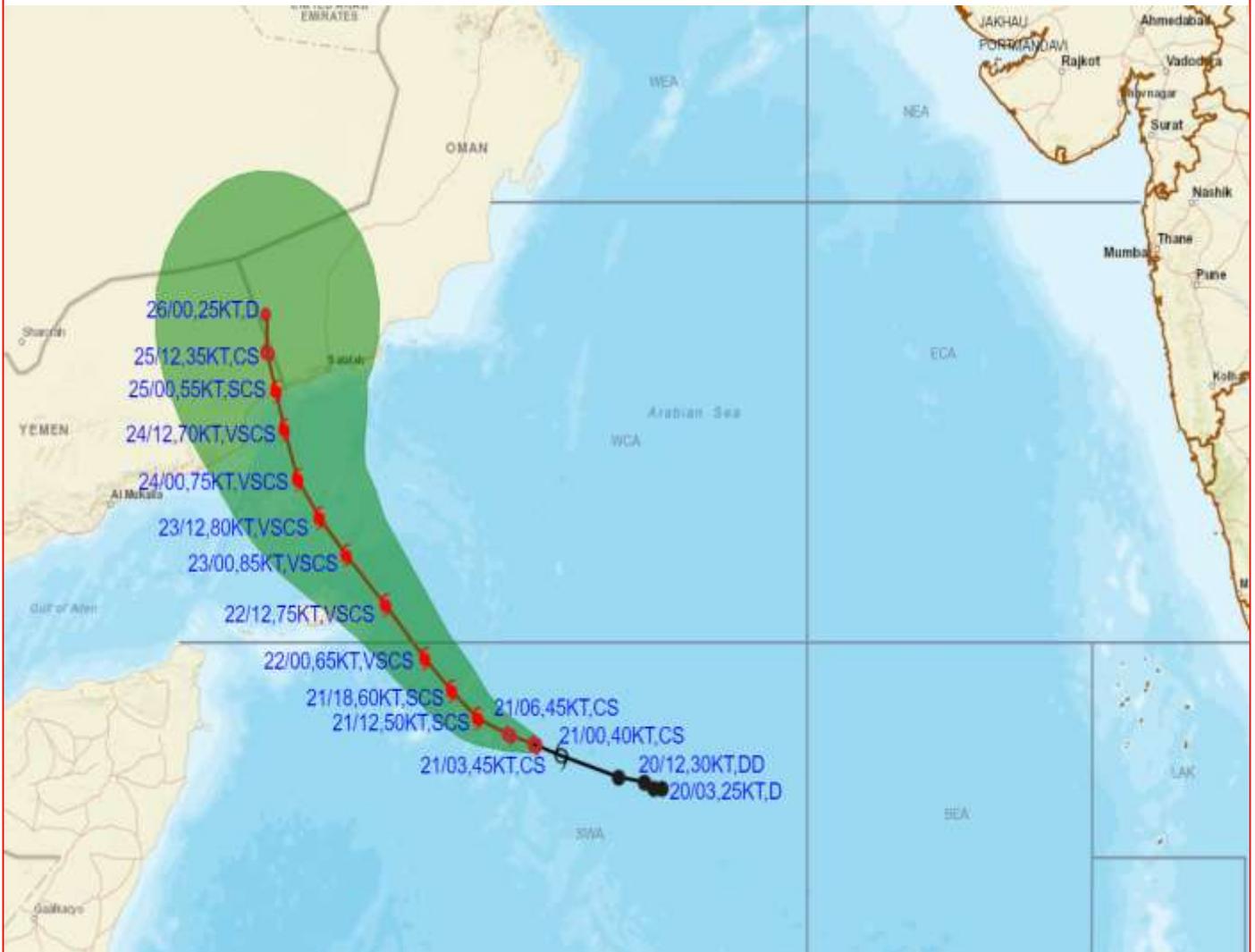
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486

IMD, DELHI



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM "TEJ" OVER SOUTHWEST ARABIAN SEA BASED ON 0300 UTC (0830 IST) OF 21st OCTOBER 2023.

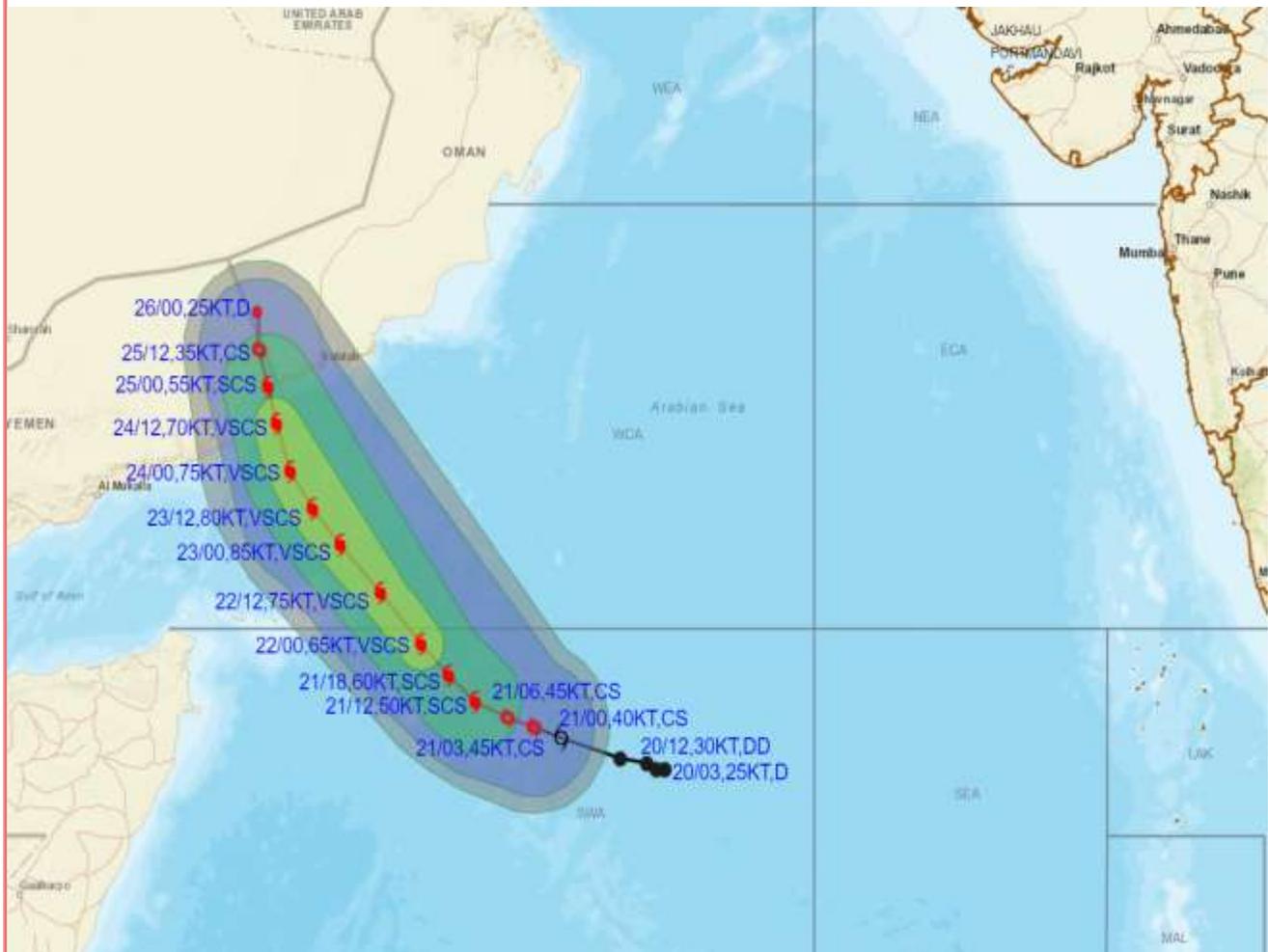


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (\leq 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 0300 UTC (0830 IST) OF 21st OCTOBER 2023.



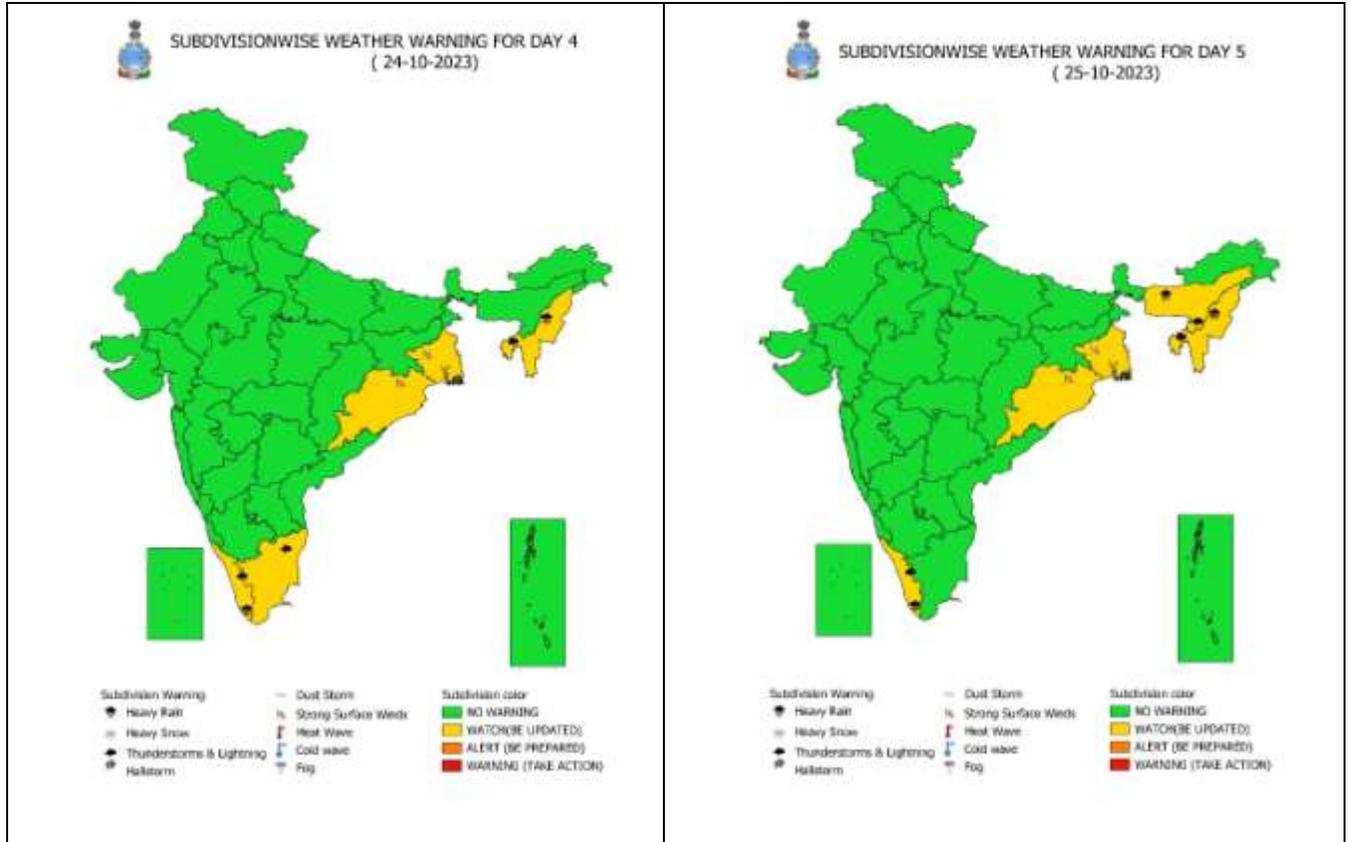
DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (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: 21.10.2023/11:30AM 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.