



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

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Sub: (A) Very Severe Cyclonic Storm "Tej" (pronounced as Tej) over Westcentral Arabian Sea very close to Yemen coast and (B) Cyclonic Storm "Hmoon" (pronounced as Hmoon) intensified into a Severe cyclonic storm over Northwest Bay of Bengal

(A) Very Severe Cyclonic Storm "Tej" (pronounced as Tej) over Westcentral Arabian Sea very close to Yemen coast

The Very Severe Cyclonic Storm "Tej" (pronounced as Tej) over Westcentral Arabian Sea very close to Yemen coast moved northwestwards with a speed of 8 kmph during past 6 hours and lay centered at 0230 hours IST of 24th October, over the same region near latitude 15.9°N and longitude 52.2°E, about 20 km south-southeast of Al Ghaidah (Yemen) and 230 km west-southwest of Salalah (Oman).

It is very likely to move northwestwards, and cross the Yemen coast close to south of Al-Ghaidah within a few hours as a **Very Severe Cyclonic Storm** with wind speed of 125-135 kmph gusting to 150 kmph. Landfall process is continuing and will be completed within a few hours.

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
24.10.23/0230	15.9/52.2	125-135 gusting to 150	Very Severe Cyclonic Storm
24.10.23/0530	16.1/51.9	90-100 gusting to 110	Severe Cyclonic Storm
24.10.23/1130	16.4/51.5	45-55 gusting to 65	Depression
24.10.23/1730	16.7/51.1	25-35 gusting to 45	Well Marked Low Pressure Area

Warnings:

(i) Wind warning (warning graphics enclosed):

• **Southwest Arabian Sea:**

Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is prevailing and likely to continue till 24th morning and decrease gradually thereafter.

• **Westcentral Arabian Sea:**

Gale wind speed reaching **125-135 kmph gusting to 150 kmph** is prevailing and likely to decrease rapidly becoming **Gale wind** speed reaching **90-100 kmph gusting to 110 kmph** in the early morning of 24th October, squally wind speed reaching **45-55 kmph gusting to 65 kmph** by noon of 24th October, and decrease gradually thereafter.

(ii) Sea Condition

• **Westcentral Arabian Sea:**

Phenomenal sea condition is prevailing and will continue till early hours of 24th October. It would improve gradually thereafter becoming **high to very rough** by 24th morning and rough to very rough by evening 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 morning.
- ❖ **Westcentral Arabian Sea** till night of 24th October.

(B) Cyclonic Storm “Hamoon” (pronounced as Hamoon) intensified into a severe cyclonic storm over Northwest Bay of Bengal

The Cyclonic Storm “Hamoon” (pronounced as Hamoon) over Northwest & adjoining Westcentral Bay of Bengal moved northeastwards with a speed of 18 kmph during past 6 hours, intensified into a severe cyclonic storm and lay centered at 0230 hours IST of 24th October over northwest Bay of Bengal, near latitude 19.3°N and longitude 88.4°E, about 210 km east-southeast of Paradip (Odisha), 270 km south-southeast of Digha (West Bengal) and 350 km south-southwest of Khepupara (Bangladesh).

It is very likely to move nearly north-northeastwards and cross Bangladesh coast between Khepupara and Chittagong around noon of 25th October as a **Deep Depression**.

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
24.10.23/0230	19.3/88.4	85-95 gusting to 105	Severe Cyclonic Storm
24.10.23/0530	19.5/88.5	90-100 gusting to 110	Severe Cyclonic Storm
24.10.23/1130	20.0/89.0	80-90 gusting to 100	Cyclonic Storm
24.10.23/1730	20.6/89.5	70-80 gusting to 90	Cyclonic Storm
24.10.23/2330	21.2/90.0	60-70 gusting to 80	Cyclonic Storm
25.10.23/1130	21.9/90.5	50-60 gusting to 70	Deep Depression
25.10.23/2330	22.6/91.0	25-35 gusting to 45	Well Marked Low Pressure Area

Warnings:

(i) Rainfall Warning

Manipur, Mizoram & Tripura and south Assam & Meghalaya: Light to moderate rainfall at most places with isolated heavy rainfall over Mizoram and heavy to very rainfall over Tripura is likely on 24th October. Isolated heavy rainfall is likely over the same region on 25th October. Rainfall intensity will decrease on 26th with light to moderate rainfall at a few places over the region.

Light to moderate rainfall is likely at many places over south Assam and eastern Meghalaya on 24th and 25th October with isolated heavy rainfall over south Assam.

Coastal Districts of Odisha: Light to moderate rainfall at most places are likely on 24th October.

Coastal Districts of West Bengal: Light to moderate rainfall at most places with isolated heavy rainfall over coastal areas of West Bengal likely on 24th October.

(ii) Wind warning (warning graphics enclosed):

• North Bay of Bengal:

Gale wind speed reaching **85-95 kmph gusting to 105 kmph** is prevailing and likely to become **90-100 kmph gusting 110 kmph** from 24th morning to noon. It would decrease gradually thereafter becoming **Gale wind** speed reaching **70-80 kmph gusting to 90 kmph** by 24th evening, and **Squally wind** speed reaching **50-60 kmph gusting to 70 kmph** by 25th noon and would decrease thereafter.

- Adjoining Westcentral Bay of Bengal: Squally wind** speed reaching **75-85 kmph gusting to 95 kmph** is prevailing and likely to continue till 24th October noon. It is likely to decrease gradually thereafter becoming **squally wind** speed reaching **50-60 kmph gusting 70 kmph** by 24th evening and **40-50 kmph gusting 60 kmph** till 25th morning.

- Adjoining eastcentral Bay of Bengal: Squally wind** speed reaching **45-55 kmph gusting to 65 kmph** is likely to increase gradually becoming **50-60 kmph gusting to 70 kmph** on 24th and decrease from 25th onwards.

• Along & off Odisha, West Bengal, Bangladesh and north Myanmar coasts:

Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is likely on 24th along & off Odisha coast. **Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** is likely to commence along & off West Bengal, Bangladesh and North Myanmar coasts from 24th morning. It would gradually increase becoming **55-65 kmph gusting to 75 kmph** along & off Bangladesh coast, **50-60 kmph gusting to 70 kmph** along & off north Myanmar coast and **45-55 kmph gusting to 65** along & off west Bengal coast on 25th October.

• Mizoram, Tripura, south Assam and Manipur:

Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is likely to prevail over Mizoram and Tripura and Strong wind speed reaching **30-40 kmph gusting to 50 kmph** over south Assam & Manipur on 25th October.

(iii) Sea Condition

• North Bay of Bengal:

High to very high sea conditions are prevailing and likely to continue till 24th and very rough on 25th October.

- Adjoining westcentral Bay of Bengal: Very Rough to high** sea condition is prevailing and likely to continue till 24th October and **rough to very rough** on 25th October. It is likely to improve gradually thereafter.

- Adjoining eastcentral Bay of Bengal: Moderate to rough sea condition** is prevailing and likely to continue till 24th October and **rough to very rough** on 25th October. It is likely to improve gradually thereafter.

- Along & off Odisha, West Bengal, Bangladesh and north Myanmar coasts: Rough sea condition** is likely on 23rd and **rough to very rough** on 24th and 25th October.

(iv) Fishermen Warning (Graphics attached):

Fishermen are advised not to venture into

- ❖ **Adjoining eastcentral Bay of Bengal** from 24th to 25th October.
- ❖ **Westcentral Bay of Bengal** till 24th October.
- ❖ **North Bay of Bengal and along & off Odisha, West Bengal, Bangladesh and north Myanmar coasts** during 24th to 25th October.

Both the systems are under continuous surveillance and the next bulletin will be issued at 0830 hours IST of 24th October, 2023.

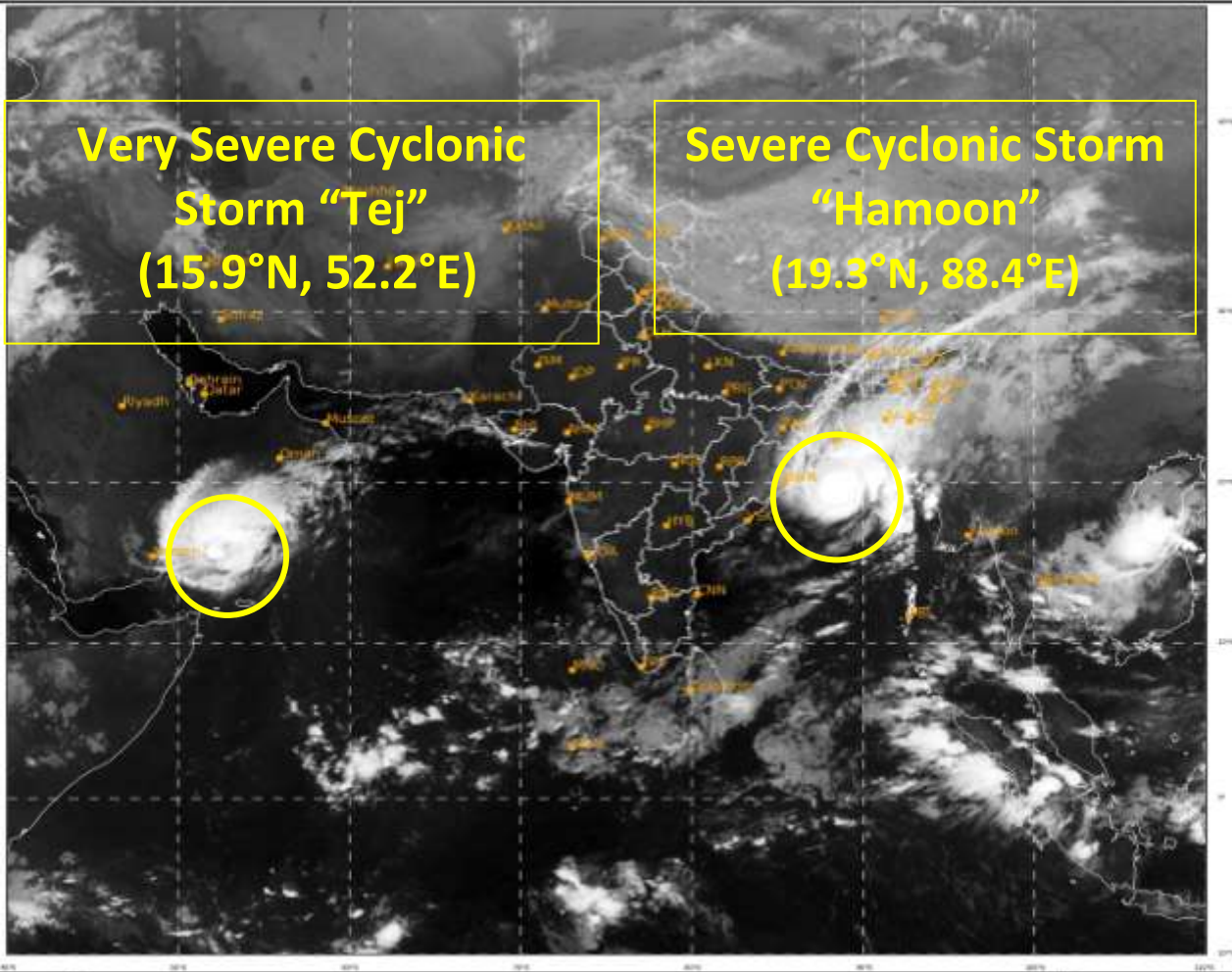
(Akhil Srivastava)

Scientist D, Cyclone Warning Division, 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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IMD, DELHI



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM “TEJ” OVER WESTCENTRAL ARABIAN SEA BASED ON 1800 UTC (2330 IST) OF 23RD 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

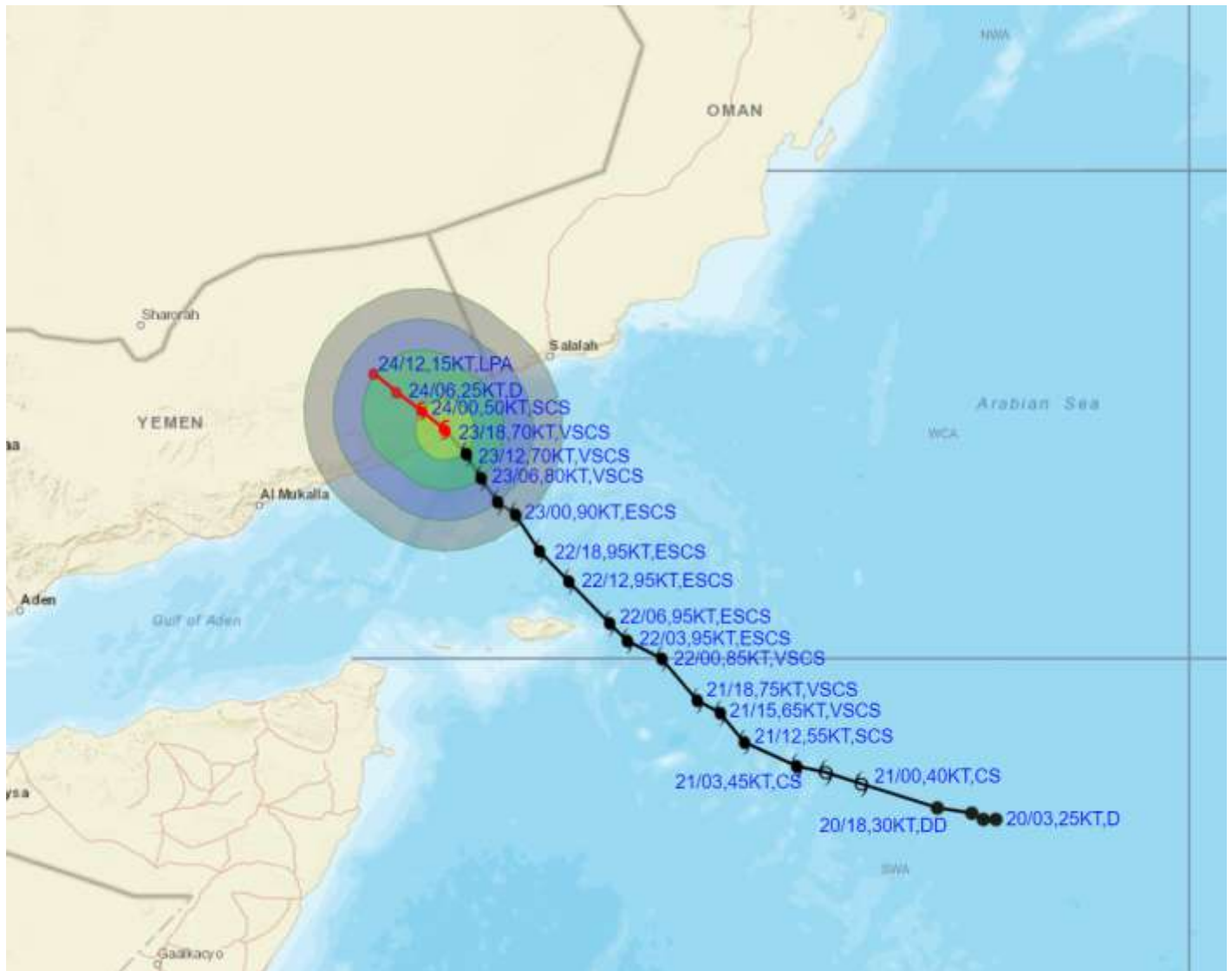
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM "TEJ" OVER WESTCENTRAL ARABIAN SEA BASED ON 1800 UTC (2330 IST) OF 23RD 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)

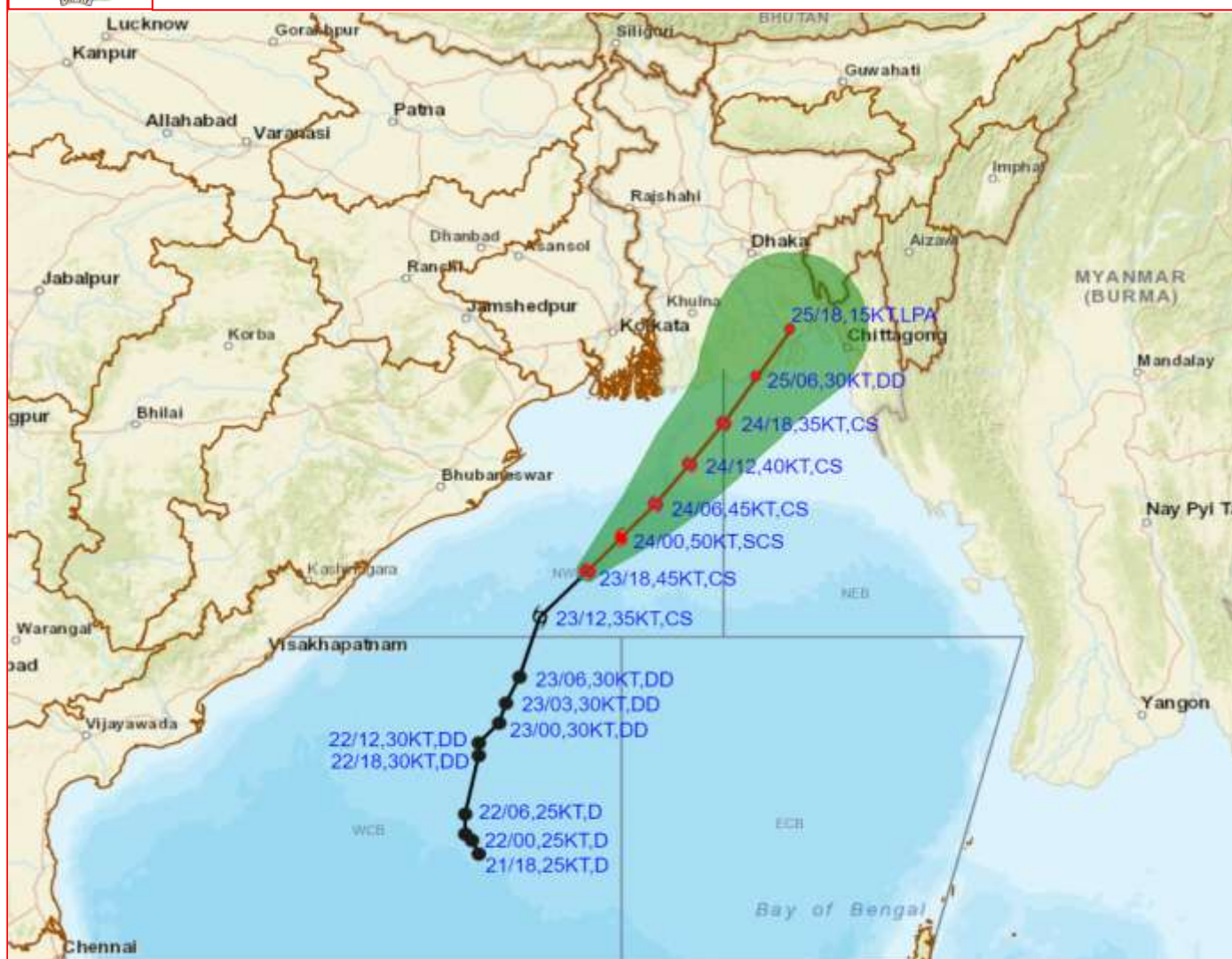
- LESS THAN 34 KT
- ⊖ 34-47 KT
- ⊕ ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- ▲ CONE OF UNCERTAINTY
- AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

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 CYCLONIC STORM "HAMOON" OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL BASED ON 1800 UTC (2330 IST) OF 23RD OCTOBER 2023.



DATE/TIME IN UTC
IST=UTC + 0530

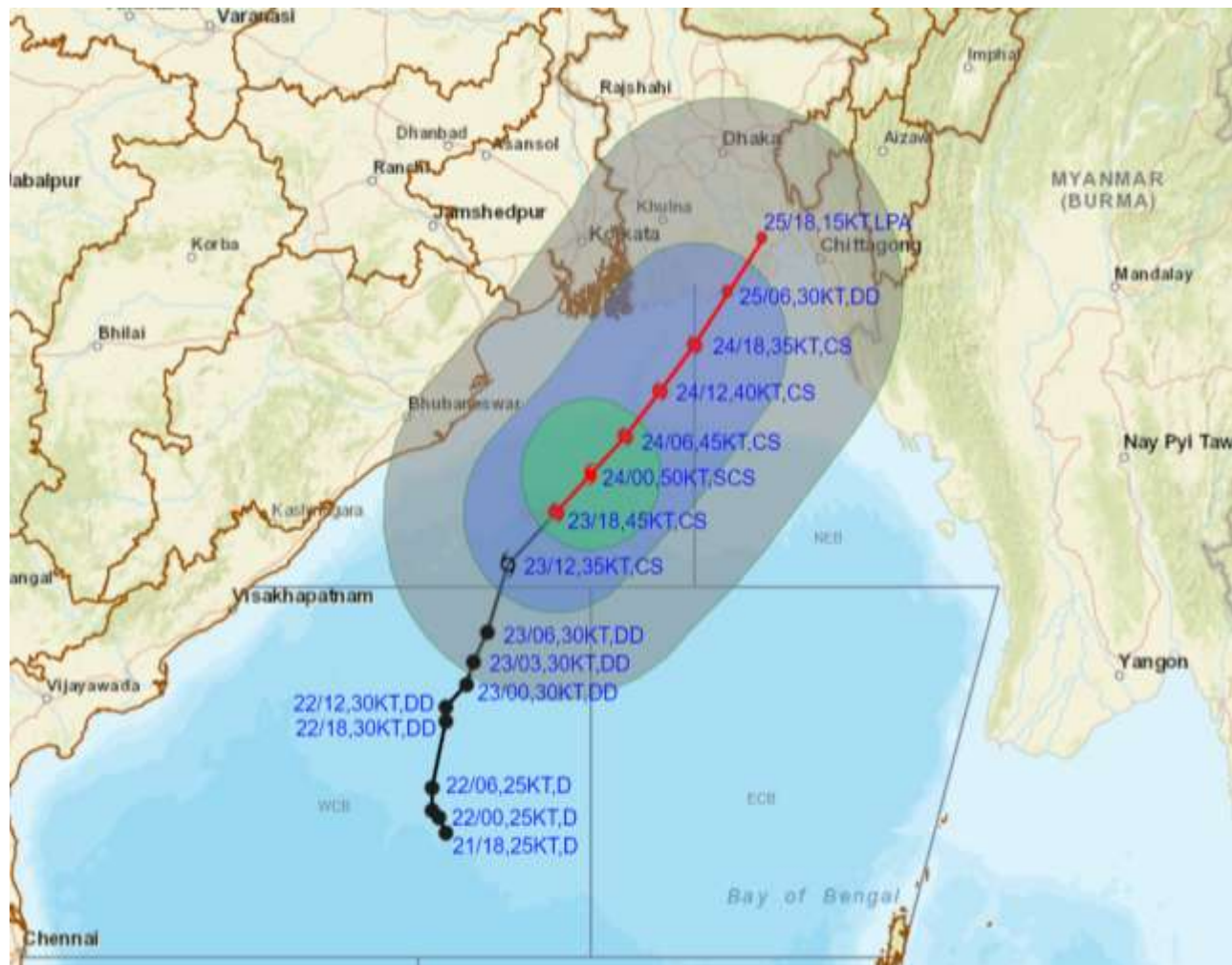
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (\geq 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- \geq 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

Forecast	DISTANCE(KM) AND DIRECTION FROM STATIONS		
Date and Time	PARADIP (CWR)	DIGHA	KHEPUPARA
24.10.23/1800	360, ENE	270, E	90, SSW
25.10.23/0600	440, ENE	320, E	30, ESE
25.10.23/1800	520, ENE	380, ENE	100, NE



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "HAMOON" OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL BASED ON 1800 UTC (2330 IST) OF 23RD 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 (≥20 KT)

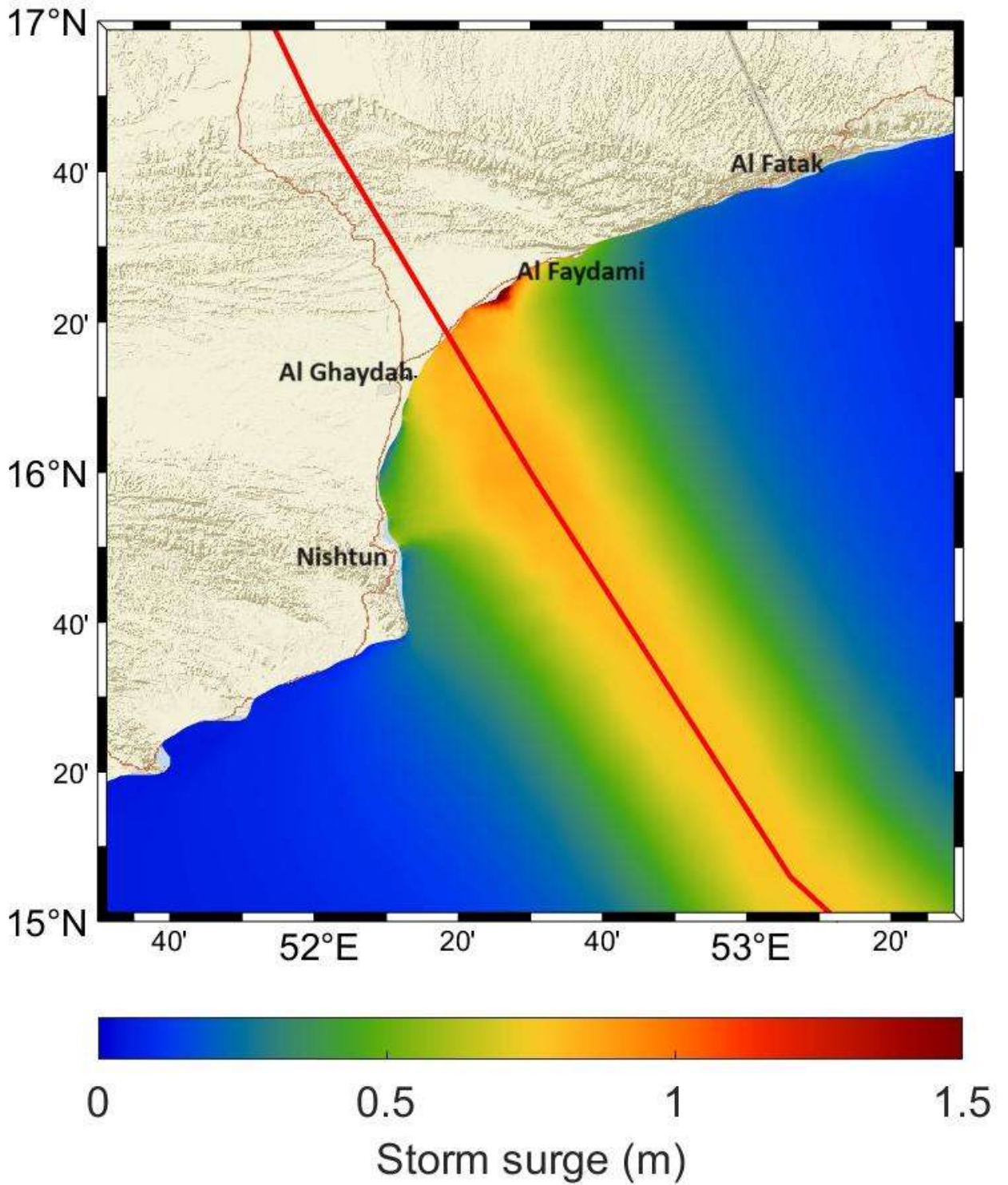
● LESS THAN 34 KT
 ⚡ 34-47 KT
 ⚡ ≥ 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 ● CONE OF UNCERTAINTY
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 28-33 KT (52-61 KMPH)
 34-49 KT (62-91 KMPH)
 50-63 KT (92-117 KMPH)
 ≥ 64 KT (≥118 KMPH)

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

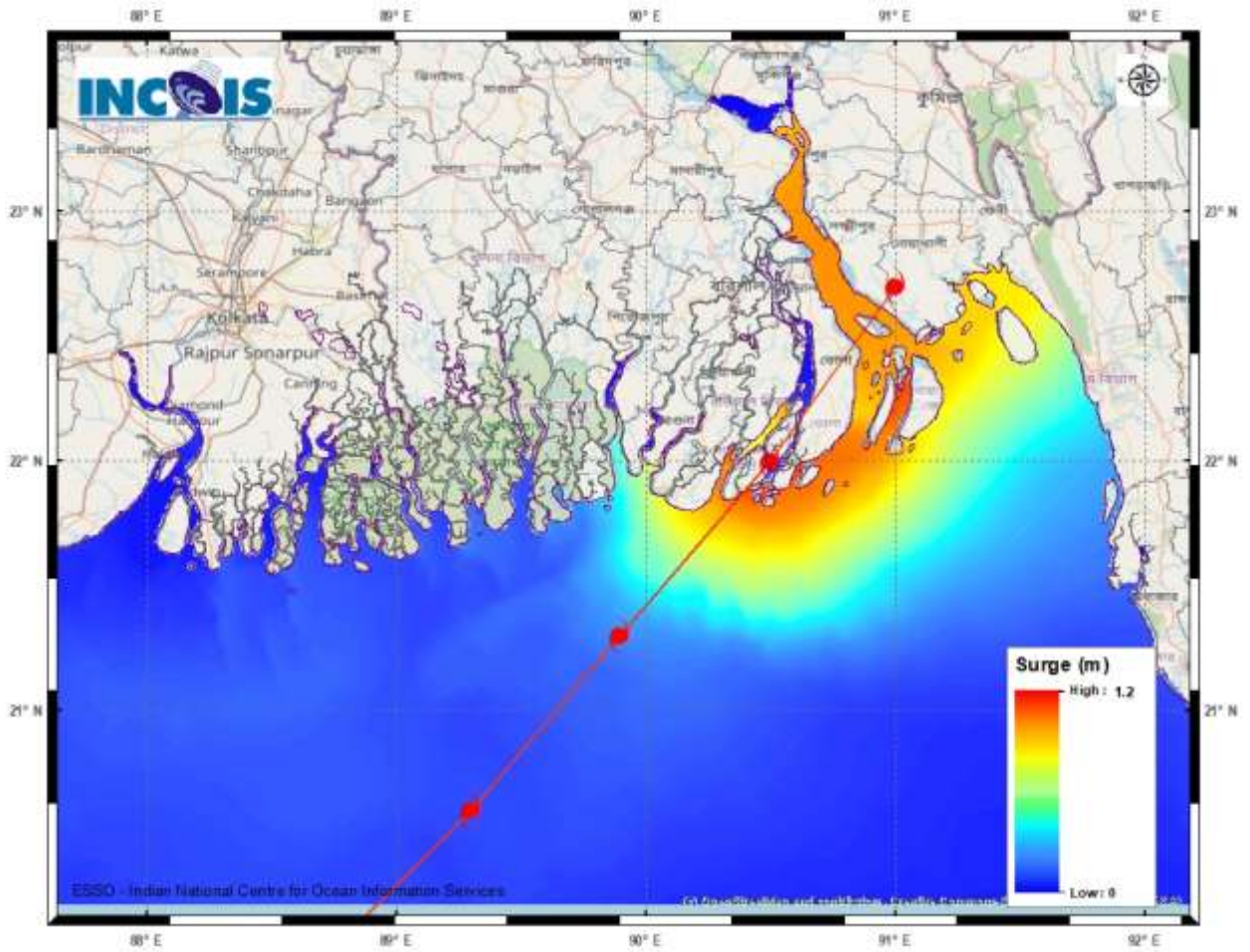
STORM SURGE GUIDANCE FOR YEMEN:

Storm surge of about 2 meter height above the astronomical tide is Likely to inundate low lying areas between al Ghaydah and al Faydami near the landfall point at the time of landfall.



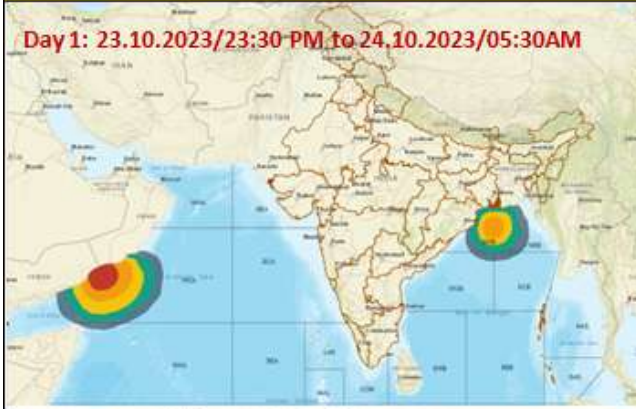
STORM SURGE GUIDANCE FOR BANGLADESH:

Storm surge of about 1.0-1.5 metre height above the astronomical tide is likely to inundate low lying areas between Khepupara and Chittagong (Bangladesh) around the time of landfall.



Fishermen warning graphics

Day 1: 23.10.2023/23:30 PM to 24.10.2023/05:30AM



Day 2: 24.10.2023/05:30AM to 25.10.2023/05:30AM



Day 3: 25.10.2023/05:30AM to 26.10.2023/05:30AM



Day 4: 26.10.2023/05:30AM to 27.10.2023/05:30AM



Day 5: 27.10.2023/05:30AM to 28.10.2023/05:30AM



	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



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(24-10-2023)



- | | | |
|--|---|---|
| Subdivision Warning
● Heavy Rain
☁ Heavy Snow
⚡ Thunderstorms & Lightning
🌨 Hailstorm | ☁ Dust Storm
🌪 Strong Surface Winds
🌡 Heat Wave
❄ Cold wave
🌫 Fog | Subdivision color
🟢 NO WARNING
🟡 WATCH(BE UPDATED)
🟠 ALERT (BE PREPARED)
🔴 WARNING (TAKE ACTION) |
|--|---|---|



SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(25-10-2023)



- | | | |
|--|---|---|
| Subdivision Warning
● Heavy Rain
☁ Heavy Snow
⚡ Thunderstorms & Lightning
🌨 Hailstorm | ☁ Dust Storm
🌪 Strong Surface Winds
🌡 Heat Wave
❄ Cold wave
🌫 Fog | Subdivision color
🟢 NO WARNING
🟡 WATCH(BE UPDATED)
🟠 ALERT (BE PREPARED)
🔴 WARNING (TAKE ACTION) |
|--|---|---|



SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(26-10-2023)



- | | | |
|--|---|---|
| Subdivision Warning
● Heavy Rain
☁ Heavy Snow
⚡ Thunderstorms & Lightning
🌨 Hailstorm | ☁ Dust Storm
🌪 Strong Surface Winds
🌡 Heat Wave
❄ Cold wave
🌫 Fog | Subdivision color
🟢 NO WARNING
🟡 WATCH(BE UPDATED)
🟠 ALERT (BE PREPARED)
🔴 WARNING (TAKE ACTION) |
|--|---|---|

- WATCH(BE UPDATED)
- ALERT (BE PREPARED)
- WARNING (TAKE ACTION)