



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

**NATIONAL BULLETIN NO. 34 (ARB/03/2023)**

**TIME OF ISSUE: 2230 HOURS IST**

**DATED: 24.10.2023**

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**Sub: (A) Depression [Remnant of the Cyclonic Storm "Tej" (pronounced as Tej)] weakened into a Well Marked Low Pressure Area over Yemen**

**(B) Severe Cyclonic Storm "Hamoon" (pronounced as Hamoon) over Northeast Bay of Bengal.**

**(A) Depression [Remnant of the Cyclonic Storm "Tej" (pronounced as Tej)] weakened into a Well Marked Low Pressure Area over Yemen**

The Depression [Remnant of the Cyclonic Storm "Tej" (pronounced as Tej)] over Yemen moved west-northwestward during past 6 hours and weakened into a Well Marked Low Pressure Area over the same region at 2030 hours IST of today, the 24<sup>th</sup> October.

It is very likely to move further west-northwestwards and weaken into a Low Pressure Area during next 6 hours.

## **Warnings:**

### **(i) Wind warning (warning graphics enclosed):**

#### **• Westcentral Arabian Sea:**

**Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** is likely to prevail during next 03 hours and improve gradually thereafter.

### **(ii) Sea Condition**

#### **• Westcentral Arabian Sea:**

**Rough** condition is likely to prevail during next 03 hours and improve gradually thereafter.

### **(iii) Fishermen Warning (Graphics attached):**

Fishermen are advised not to venture into **Westcentral Arabian Sea** during next 06 hours.

**This is the last bulletin for this system.**

## **NATIONAL BULLETIN NO. 34 (BOB/04/2023)**

### **(B) Severe Cyclonic Storm “Hamoon” (pronounced as Hamoon) over Northeast Bay of Bengal**

The Severe Cyclonic Storm “Hamoon” (pronounced as Hamoon) over Northeast Bay of Bengal moved east-northeastwards with a speed of 23 kmph during past 6 hours and lay centered at 2030 hours IST of today, the 24<sup>th</sup> October over the same region, near latitude 21.3°N and longitude 91.3°E, about 390 km east-southeast of Digha (West Bengal), 130 km east-southeast of Khepupara (Bangladesh) and 130 km south-southwest of Chittagong (Bangladesh).

It is likely to further weaken gradually into a Cyclonic Storm during next 09 hours. It is likely to move northeastwards and cross Bangladesh coast to the south of Chittagong by early hours of 25<sup>th</sup> October as a **Cyclonic Storm with wind speed of 80 to 90 kmph gusting to 100 kmph**. **Landfall process is likely to commence from mid-night of today, the 24<sup>th</sup> October 2023.**

### ***Forecast track and intensity are given below:***

<b>Date/Time (IST)</b>	<b>Position (Lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (Kmph)</b>	<b>Category of cyclonic disturbance</b>
24.10.23/2030	21.3/91.3	100-110 gusting to 120	Severe Cyclonic Storm
24.10.23/2330	21.6/91.6	95-105 gusting to 115	Severe Cyclonic Storm
25.10.23/0530	22.2/92.2	80-90 gusting to 100	Cyclonic Storm
25.10.23/1130	22.8/92.7	60-70 gusting to 80	Cyclonic Storm
25.10.23/1730	23.4/93.2	40-50 gusting to 60	Depression
25.10.23/2330	24.0/93.7	25-35 gusting to 45	Low Pressure Area

## **Warnings:**

### **(i) Rainfall Warning:**

**Manipur, Mizoram & Tripura and south Assam & Meghalaya:** Light to moderate rainfall is very likely at most places with isolated heavy rainfall over Mizoram and Tripura on 24<sup>th</sup> and 25<sup>th</sup> and over south Assam & Meghalaya on 24<sup>th</sup> October. Light to moderate rainfall is likely at many places over Mizoram and Tripura on 26<sup>th</sup> October.

Light to moderate rainfall is very likely at many places over Nagaland and Manipur during 24-26<sup>th</sup> October and east Arunachal Pradesh on 25<sup>th</sup> & 26<sup>th</sup> October.

**(ii) Wind warning (warning graphics enclosed):**

• **Northeast Bay of Bengal:**

**Gale wind** speed reaching **105-115 kmph gusting to 125 kmph** is prevailing and likely to continue during next 03 hours. It would decrease gradually thereafter becoming **Gale wind** speed reaching **95-105 kmph gusting to 115 kmph** by 24<sup>th</sup> midnight and **80-90 kmph gusting to 100 kmph** by 25<sup>th</sup> early morning and would decrease thereafter.

• **Northwest Bay of Bengal:**

**Gale wind** speed reaching **105-115 kmph gusting 125 kmph** is prevailing and likely to continue during next 03 hours. It would decrease gradually thereafter becoming **Gale wind** speed reaching **80-90 kmph gusting to 100 kmph** by 24<sup>th</sup> midnight, **Squally wind** speed reaching **50-60 kmph gusting to 70 kmph** by 25<sup>th</sup> evening and would decrease thereafter.

• **Adjoining eastcentral Bay of Bengal: Squally wind** speed reaching **50-60 kmph gusting to 70 kmph** is prevailing and would gradually decrease from 25<sup>th</sup> forenoon.

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

**Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** is likely to prevail along & off West Bengal coast till 25<sup>th</sup> morning.

**Gale wind** speed reaching 70-80 gusting to 90 kmph is prevailing along & off Bangladesh coast. It would gradually increase becoming **80-90 kmph gusting to 100 kmph** along & off Bangladesh and adjoining north Myanmar coast from midnight of today till early morning of 25<sup>th</sup>.

**Squally wind** speed reaching **55-65 kmph gusting to 75 kmph likely** along & off remaining parts of north Myanmar coast during the same period and decrease thereafter.

**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 25<sup>th</sup> October.

**(iii) Sea Condition**

• **Northeast Bay of Bengal and along & off Bangladesh & adjoining north Myanmar coasts:**

**Very high sea conditions** are prevailing and likely to continue till early morning of 25<sup>th</sup> and would become high thereafter till 25<sup>th</sup> morning and very rough to rough till 25<sup>th</sup> October evening.

• **Northwest Bay of Bengal:**

**High to Very high sea conditions** are prevailing and likely to continue till today midnight and would become very rough to rough thereafter till 25<sup>th</sup> morning and gradually improve thereafter.

• **Adjoining eastcentral Bay of Bengal: Very rough to rough** till 25<sup>th</sup> October forenoon. It is likely to improve gradually thereafter.

• **Along & off West Bengal coasts: Rough to very rough sea conditions** likely to prevail till 25<sup>th</sup> October morning.

**(iv) Fishermen Warning (Graphics attached):**

Fishermen are advised not to venture into

❖ **North Bay of Bengal and along & off West Bengal, Bangladesh and north Myanmar coasts** till 25<sup>th</sup> October.

❖ **Adjoining areas of Eastcentral Bay of Bengal** till 25<sup>th</sup> October morning.

**System is under continuous surveillance and the next bulletin will be issued at 0230 hours IST of 25<sup>th</sup> October, 2023.**

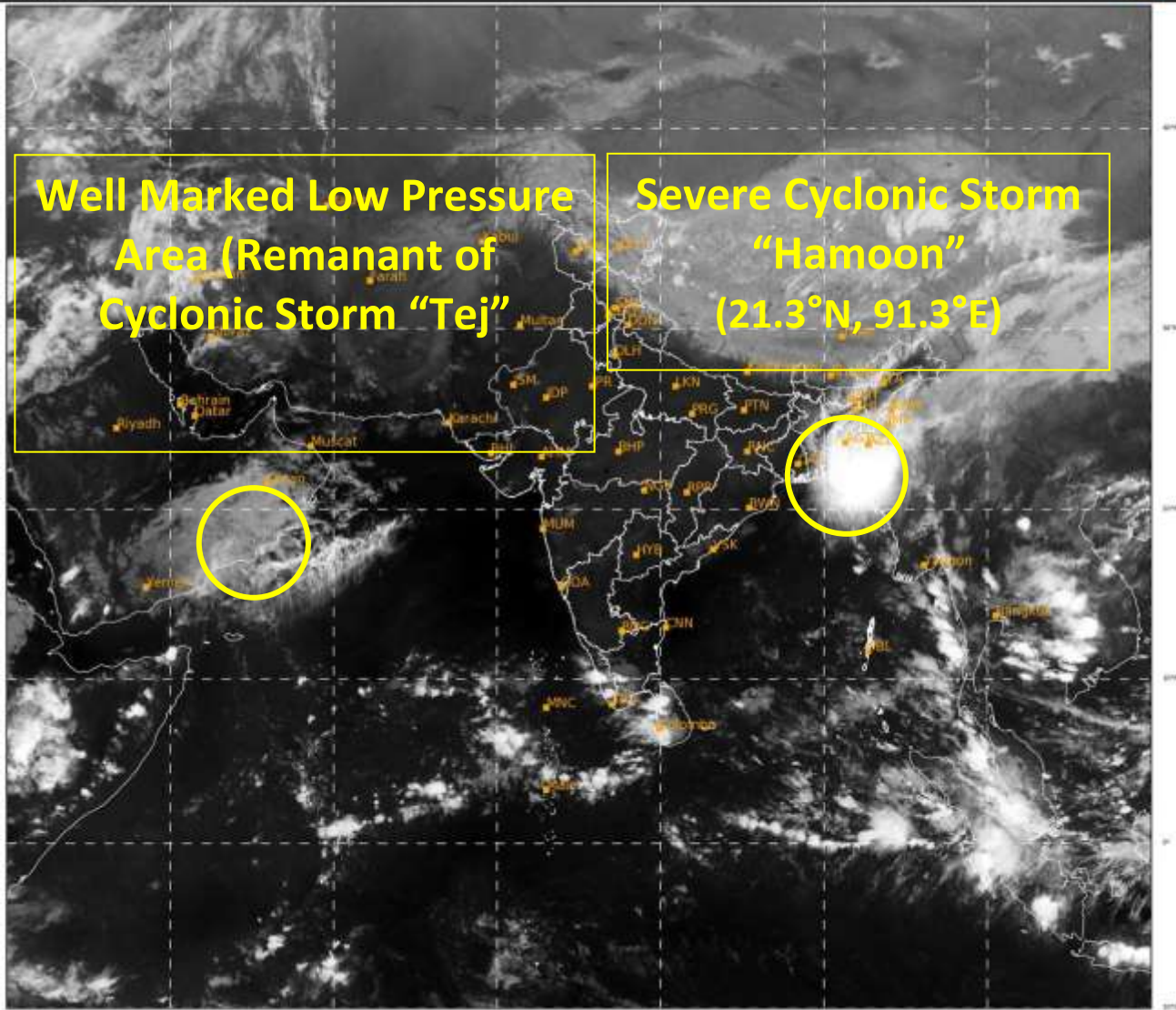
**(Shobhit Katiyar)**

**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*

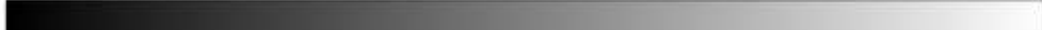
**Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%**

**Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.**



520

936



IMD, DELHI



**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF SEVERE CYCLONIC STORM "HAMOON" OVER NORTHEAST BAY OF BENGAL BASED ON 1500 UTC (2030 IST) OF 24<sup>TH</sup> OCTOBER 2023.**



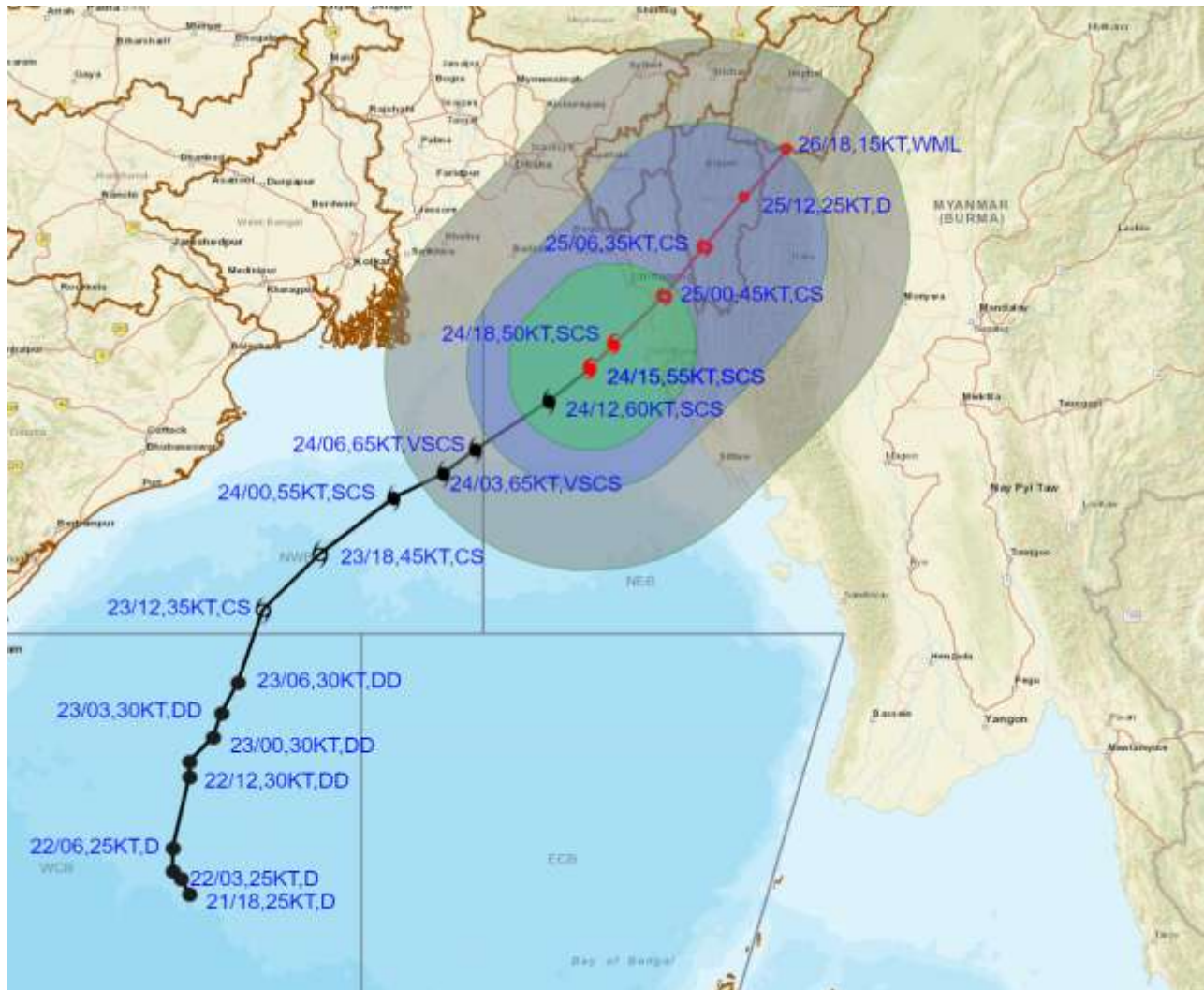
DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)  
 SuCS: SUPER CYCLONIC STORM ( $\geq$  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			
	PARADIP (CWR)	DIGHA	KHEPUPARA	CHITTAGONG (AMBAGAN)
25.10.23/1200	760, ENE	620, ENE	350, ENE	190, NE



**OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF SEVERE CYCLONIC STORM "HAMOON" OVER NORTHEAST BAY OF BENGAL BASED ON 1500 UTC (2030 IST) OF 24<sup>TH</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 (≥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



**OBSERVED AND FORECAST TRACK OF WELL MARKED LOW PRESSURE AREA (REMNANT OF VERY SEVERE CYCLONIC STORM "TEJ") OVER YEMEN BASED ON 1500 UTC (2030 IST) OF 24<sup>TH</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 ( $\geq$  120 KT)

● LESS THAN 34 KT

○ 34-47 KT

⊗  $\geq$  48 KT

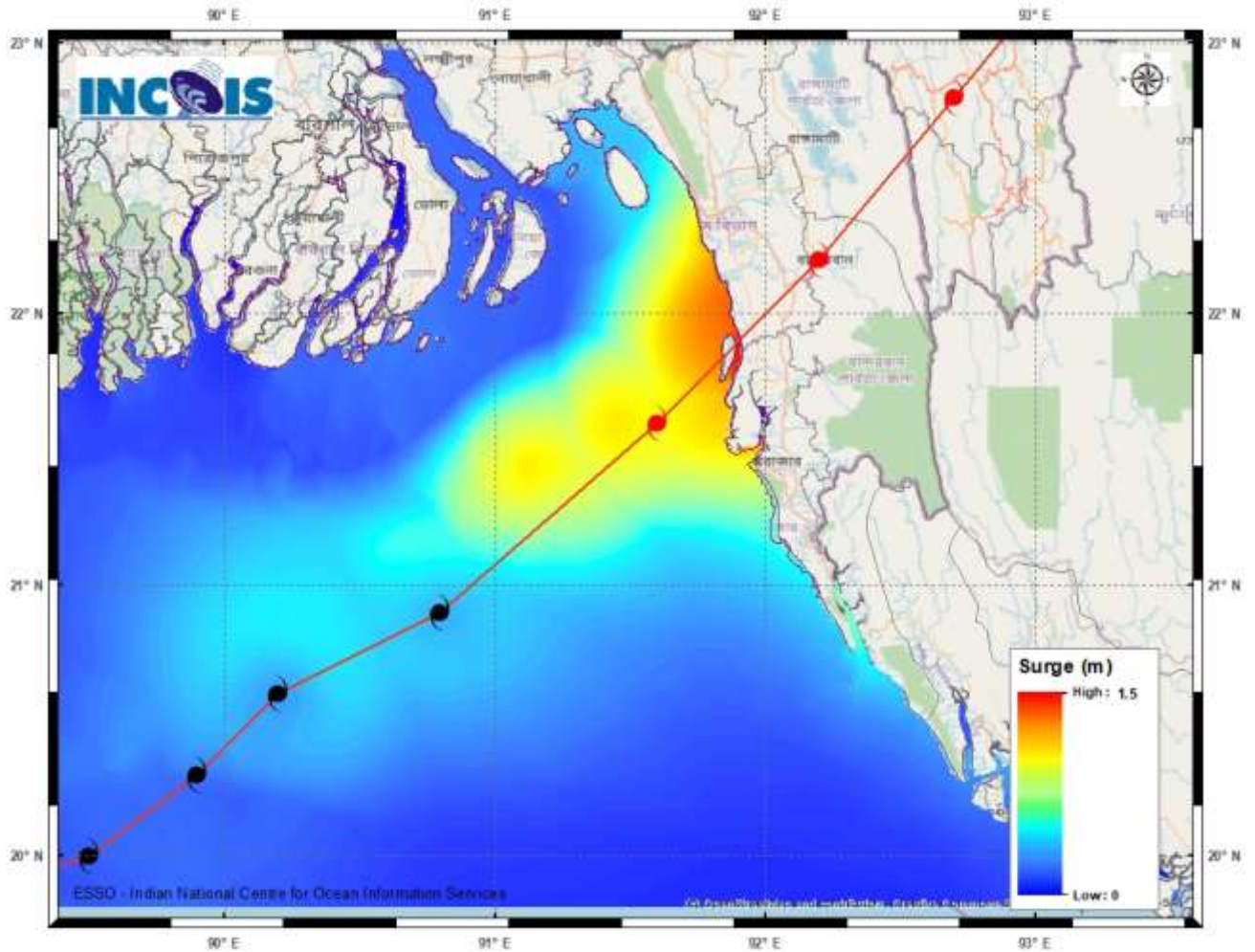
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY

## 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: 24.10.2023/20:30PM to 25.10.2023/05:30AM



Day 2: 25.10.2023/05:30AM to 26.10.2023/05:30AM



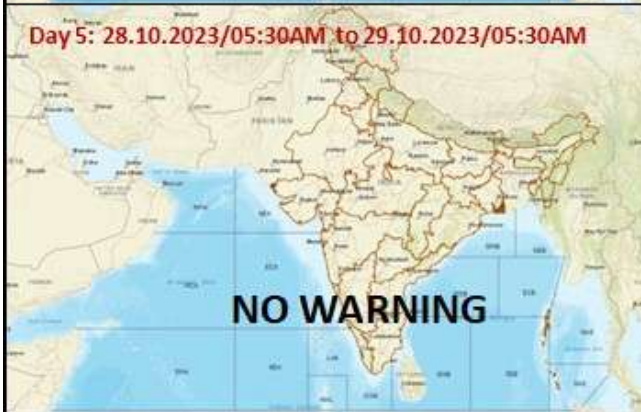
Day 3: 26.10.2023/05:30AM to 27.10.2023/05:30AM



Day 4: 27.10.2023/05:30AM to 28.10.2023/05:30AM



Day 5: 28.10.2023/05:30AM to 29.10.2023/05:30AM



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

**Fishermen are advised not to venture into the marked areas.**

# WEATHER WARNING GRAPHICS

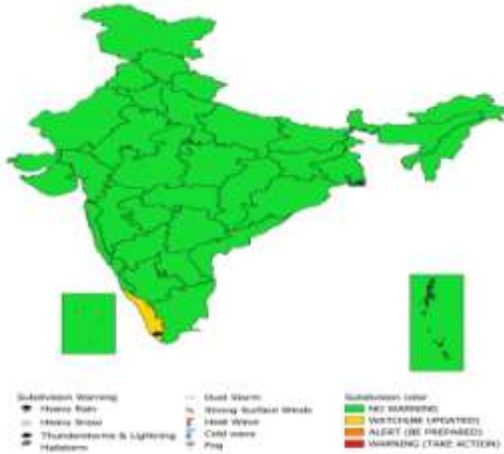
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 1**  
( 24-10-2023 )



**SUBDIVISIONWISE WEATHER WARNING FOR DAY 2**  
( 25-10-2023 )



**SUBDIVISIONWISE WEATHER WARNING FOR DAY 3**  
( 26-10-2023 )



**SUBDIVISIONWISE WEATHER WARNING FOR DAY 4**  
( 27-10-2023 )



**SUBDIVISIONWISE WEATHER WARNING FOR DAY 5**  
( 28-10-2023 )



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