



India Meteorological Department  
(Ministry of Earth Sciences)

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**Sub: Deep Depression intensified into a Cyclonic Storm “Remal” (pronounced as “Re-Mal”) over North & adjoining Eastcentral Bay of Bengal (Cyclone Warning for West Bengal Coast: Orange Message)**

The Deep Depression over Eastcentral Bay of Bengal moved nearly northward with a speed of 12 kmph during past 06 hours, intensified into a **Cyclonic Storm “Remal” (pronounced as “Re-Mal”)** and lay centered at 1730 hrs IST of today, the 25<sup>th</sup> May, 2024 over the North & adjoining Eastcentral Bay of Bengal near latitude 18.8°N and longitude 89.5°E, about 360 km south-southeast of Khepupara (Bangladesh), 350 km south-southeast of Sagar Islands (West Bengal) and 390 km south-southeast of Canning (West Bengal).

It is very likely to continue to move nearly northwards and intensify into a **Severe Cyclonic Storm** by 26<sup>th</sup> May morning over North Bay of Bengal and **cross Bangladesh and adjoining West Bengal coasts between Sagar Island and Khepupara by 26<sup>th</sup> May midnight as a Severe Cyclonic Storm with wind speed of 110-120 gusting to 135 kmph.**

Forecast track and intensity are given in the following table:

Date/Time (IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
25.05.24/1730	18.8/89.5	60-70 gusting to 80	Cyclonic Storm
25.05.24/2330	19.4/89.4	75-85 gusting to 95	Cyclonic Storm
26.05.24/0530	20.0/89.4	95-105 gusting to 115	Severe Cyclonic Storm
26.05.24/1130	20.7/89.4	110-120 gusting to 135	Severe Cyclonic Storm
26.05.24/1730	21.4/89.4	110-120 gusting to 135	Severe Cyclonic Storm
27.05.24/0530	22.6/89.6	70-80 gusting to 90	Cyclonic Storm
27.05.24/1730	23.8/90.0	50-60 gusting to 70	Deep Depression
28.05.24/0530	24.9/90.5	30-40 gusting to 50	Depression

## **Warnings (Graphics Attached):**

### **Heavy Rainfall Warning:**

- (a) **West Bengal:** Light to moderate rainfall at most places with **heavy to very heavy rainfall** at a few places is likely over coastal districts of West Bengal and eastern districts of Gangetic West Bengal adjacent to Bangladesh on 26<sup>th</sup> & 27<sup>th</sup> with isolated **extremely heavy rainfall** ( $\geq 20$  cm) over these districts on 26<sup>th</sup> May. The peak rainfall activity is likely during noon of 26<sup>th</sup> to noon of 27<sup>th</sup> May.  
Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places likely over eastern districts of Sub-Himalayan West Bengal on 27<sup>th</sup> and 28<sup>th</sup> May.
- (b) **Odisha:** Light to moderate rainfall at most places with isolated **heavy rainfall** likely over North Coastal Odisha on 25<sup>th</sup> & 26<sup>th</sup> May.
- (c) **Northeastern States:** Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places is likely over Mizoram, Tripura and South Manipur on 26<sup>th</sup> and over Assam, Meghalaya, Arunachal Pradesh, Nagaland, Mizoram, Manipur & Tripura on 27<sup>th</sup> & 28<sup>th</sup> May. Isolated **extremely heavy rainfall** ( $\geq 20$  cm) is also likely over Assam, Meghalaya on 27<sup>th</sup> & 28<sup>th</sup> May, Arunachal Pradesh on 28<sup>th</sup> May and Mizoram & Tripura on 27<sup>th</sup> May.
- (d) **Andaman Islands:** Light to moderate rainfall at most places with **heavy rainfall** at isolated places over north Andaman Islands on 25<sup>th</sup> May.

### **Wind Warning:**

#### **(a) Bay of Bengal:**

- ❖ **Gale wind speed reaching 60-70 kmph gusting to 80 kmph** is likely to prevail over central Bay of Bengal till morning of 26<sup>th</sup> May and decrease thereafter becoming Squally wind speed reaching 50-60 kmph gusting to 70 kmph till morning of 27<sup>th</sup> May.
- ❖ **Gale wind speed reaching 60-70 kmph gusting to 80 kmph** prevailing over North Bay of Bengal is likely to increase becoming **95-105 kmph gusting to 115 kmph** from early morning and **110-120 kmph gusting to 135 kmph** from noon till midnight of 26<sup>th</sup> May. It is likely decrease thereafter becoming 70-80 kmph gusting to 90 kmph by morning on 27<sup>th</sup> May and squally wind speed reaching 45-55 kmph gusting to 65 kmph by evening of 27<sup>th</sup> May.

#### **(b) Along & off Bangladesh and West Bengal coasts:**

- ❖ **Squally wind speed reaching 40-50 kmph gusting to 60 kmph** is likely to prevail along & off Bangladesh and West Bengal & adjoining North Odisha coasts from tonight. It is likely to increase becoming **gale wind speed reaching 60-70 kmph gusting to 80 kmph** from morning of 26<sup>th</sup> May and **100-120 kmph gusting to 135 kmph** along & off Bangladesh and adjoining West Bengal coasts from evening of 26<sup>th</sup> May till early morning of 27<sup>th</sup> May. It is likely decrease thereafter to become 60-70 kmph gusting to 80 kmph by afternoon and squally wind 50-60 kmph gusting to 70 kmph by night of 27<sup>th</sup> May.
- ❖ **Squally wind speed reaching 40-50 kmph gusting to 60 kmph** is likely to commence over Howrah, Hoogly, Kolkata and East Medinipur districts from evening of 26<sup>th</sup> May. It will increase gradually becoming **Gale wind speed reaching 70-80 kmph gusting to 90 kmph** over these districts during night of 26<sup>th</sup> May except East Medinipur where the wind speed may reach up to **60-70 kmph gusting to 80 kmph** during the same period.

#### **(c) Along & off Odisha coasts:**

**Squally wind speed reaching 40-50 kmph gusting to 60 kmph** is likely to prevail till 27<sup>th</sup> May morning

#### **(d) South Bay of Bengal, Andaman Islands and Andaman Sea:**

**Squally wind speed reaching 40-50 kmph gusting to 60 kmph** is likely over Andaman Islands and North Andaman Sea during next 12 hours.

#### **(e) Northeastern States:**

**Squally wind speed reaching 50-60 kmph gusting to 70 kmph** is likely over Mizoram Tripura & south Manipur on 26<sup>th</sup> & 27<sup>th</sup> May and **40-50 kmph gusting to 60 kmph** is likely over South Assam and Meghalaya on 27<sup>th</sup> May.

**Storm surge warning:**

Storm surge of about 1 meter height above astronomical tide is likely to inundate low lying areas of coastal West Bengal and 3-4 m above astronomical tide likely to inundate low lying areas of coastal Bangladesh around the time of landfall.

**Sea condition warning:****(a) Central and North Bay of Bengal:**

Very rough to high sea condition is likely to prevail over central Bay of Bengal on 25<sup>th</sup> May & 26<sup>th</sup> May and High to Very High over North Bay of Bengal from 25<sup>th</sup> evening till 27<sup>th</sup> May morning.

**(b) Along & off Bangladesh and West Bengal coasts**

Rough to very rough sea condition is prevailing along & off Bangladesh and West Bengal coasts. It would become high to very high along & off Bangladesh and West Bengal coasts from 26<sup>th</sup> morning onwards till 27<sup>th</sup> May morning.

**(c) Along & off North Odisha coast:**

Rough to very rough sea condition is likely along & off North Odisha coast till 27<sup>th</sup> May morning.

**(d) Along & off Andaman Islands:**

Rough to very rough sea condition is likely over Andaman Islands and North Andaman Sea during next 12 hours.

**Damage Expected over South & North 24 Parganas, Howrah, Hoogly, Kolkata & adjoining East Medinipur districts of west Bengal:**

- Major damage to thatched houses/ huts. Possibilities of damage to vulnerable structure.
- Unattached metal sheets may fly.
- Breaking of tree branches, uprooting of trees. Major damage to banana and papaya trees. Dead limbs may blow off from trees.
- Damage to power and communication lines due to breaking of branches and uprooting of trees.
- Damage to Kutcha and minor damage to Pucca roads due to heavy rain.
- Damage to paddy crops, horticultural crops and orchards.
- Inundation of low-lying areas and localized flooding
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic due to water logging and squally winds

**Action Suggested for South & North 24 Parganas, Howrah, Hoogly, Kolkata & adjoining East Medinipur districts of West Bengal:**

- Total suspension of fishing operations.
- Surface transport and shipping operations need to be regulated
- Onshore & Offshore operation need to be regulated as per guidelines
- Coastal hutment dwellers to move to safer places.
- People in affected areas to remain indoors.
- Avoid going to areas that face the water logging problems often.
- Avoid staying in vulnerable structure.

**Fishermen Warning (graphics attached):**

Fishermen are advised not to venture into south Bay of Bengal and Andaman Sea till 27<sup>th</sup> May, central Bay of Bengal till 26<sup>th</sup> May and North Bay of Bengal from 25<sup>th</sup> May till 27<sup>th</sup> May. Fishermen out at sea are advised to return to the coast.

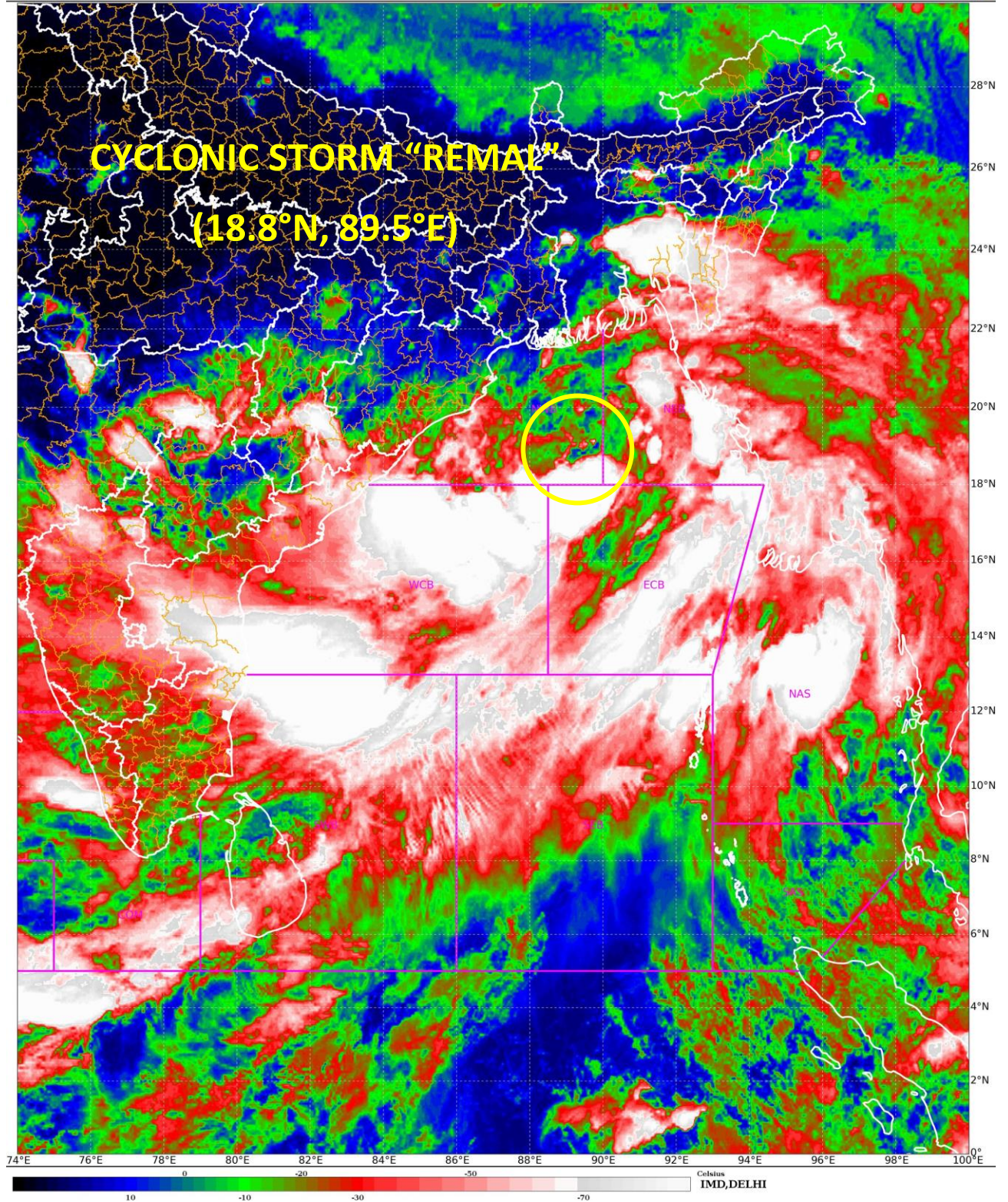
**The system is under continuous surveillance and the next message will be issued at 2330 hours IST of today, the 25<sup>th</sup> May, 2024.**

**(Ananda Kumar Das)**

**Scientist F, Cyclone Warning Division, New Delhi**

*Copy to: ACWC Kolkata/ ACWC Chennai/ CWC Bhubaneswar/CWC Visakhapatnam/MO  
Port Blair/RMC Guwahati*

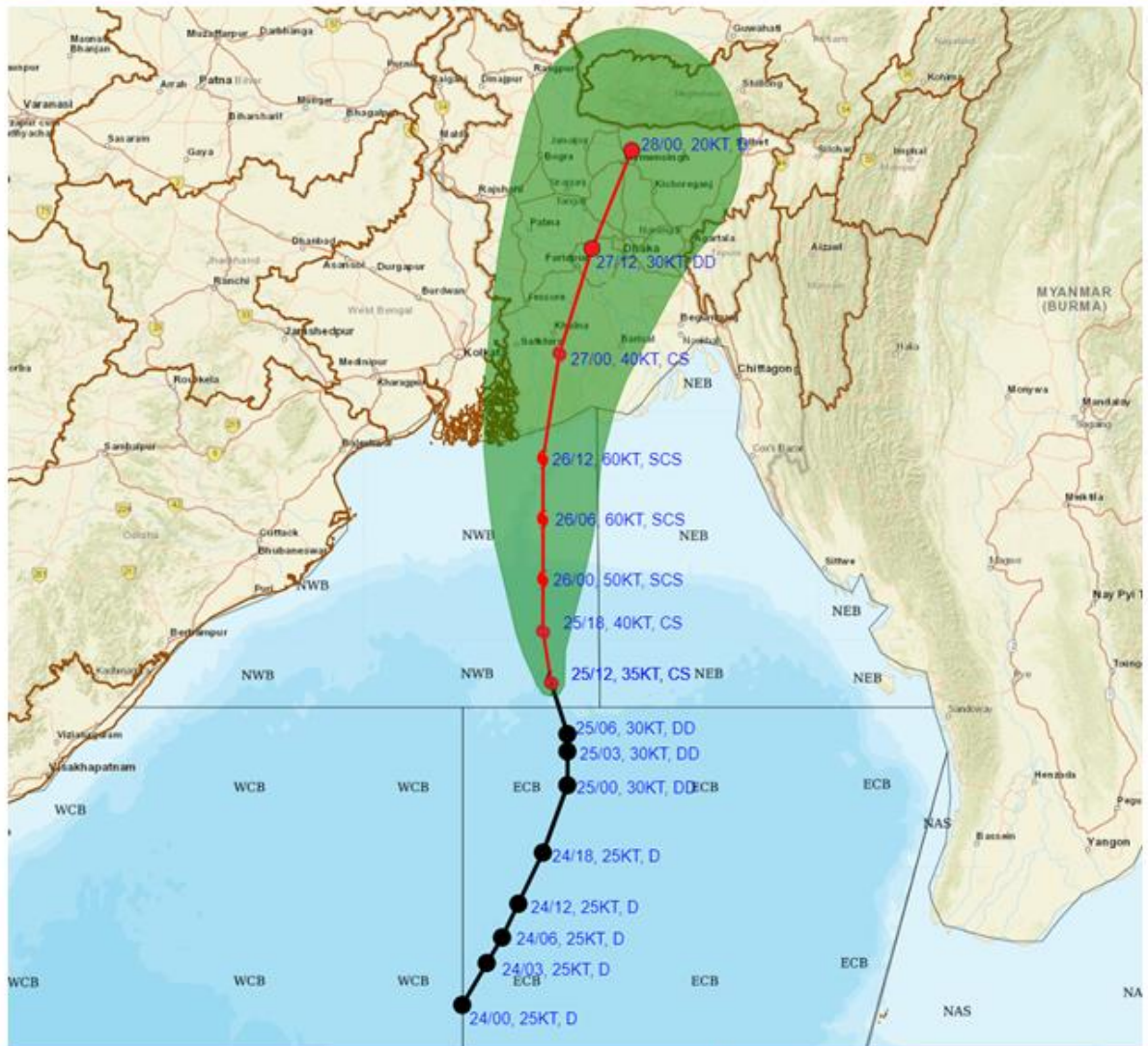








**FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY IN ASSOCIATION WITH CYCLONIC STORM 'REMAL' OVER NORTH AND ADJOINING EASTCENTRAL BAY OF BENGAL BASED ON 1200 UTC (1730 IST) OF 25<sup>TH</sup> MAY 2024.**



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)

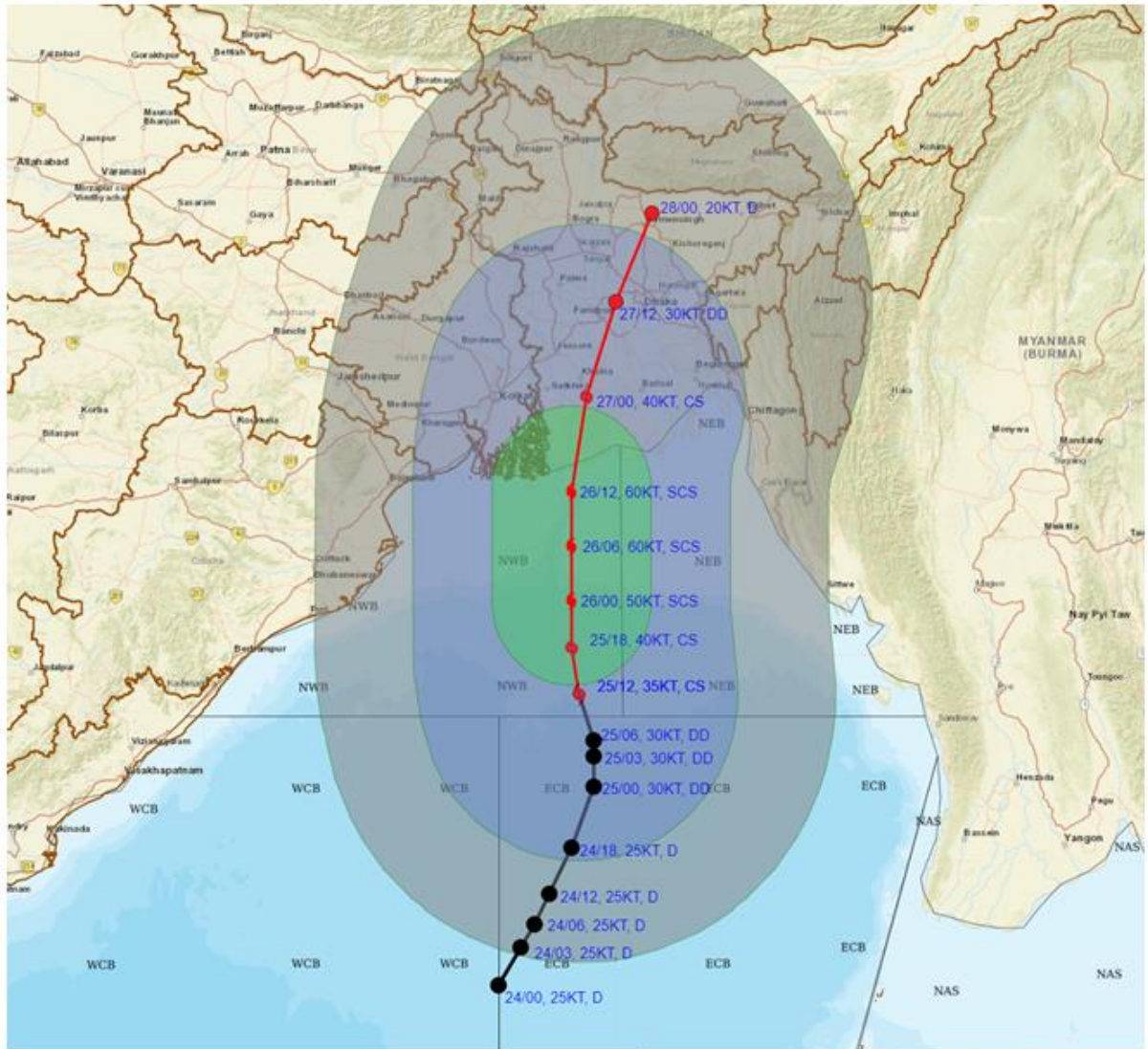
- LESS THAN 34 KT
- 34-47 KT
- $\geq$  48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

Forecast	DISTANCE (KM) AND DIRECTION FROM STATIONS		
Date and Time (UTC)	Canning	Khepupara	SAGAR ISLAND
25.05.24/1200	390, SSE	360, SSW	350, SSE
26.05.24/1200	130, SE	110, SW	150, E
27.05.24/1200	230, NE	210, N	320, NE





**FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH CYCLONIC STORM 'REMAL' OVER NORTH AND ADJOINING EASTCENTRAL BAY OF BENGAL BASED ON 1200 UTC (1730 IST) OF 25TH MAY 2024.**



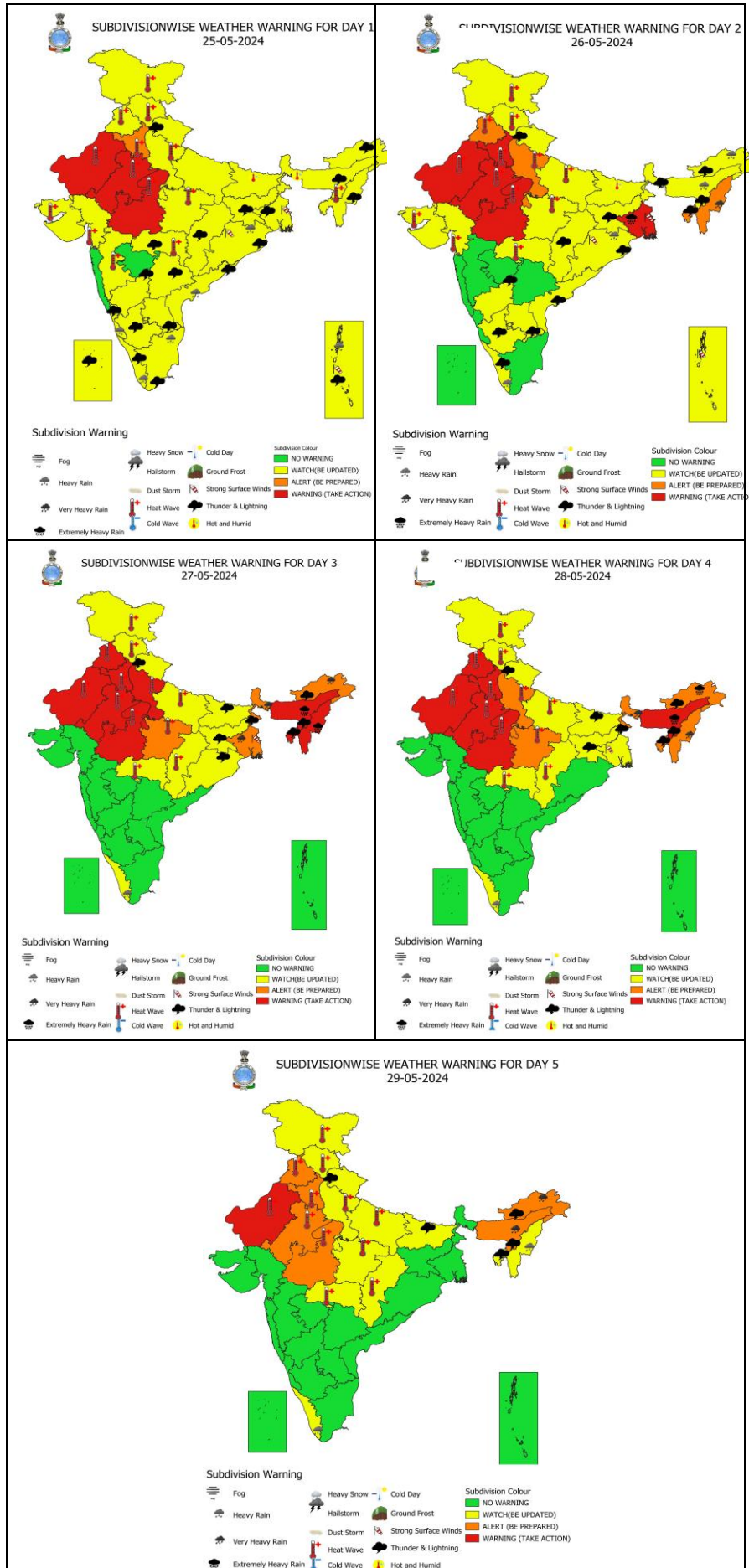
DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE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

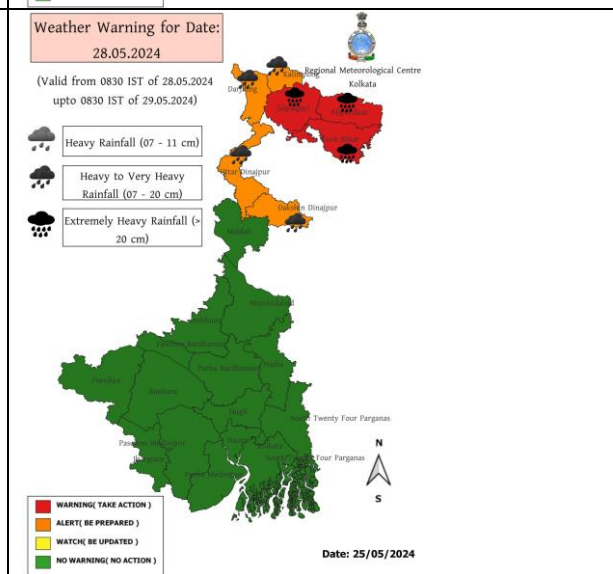
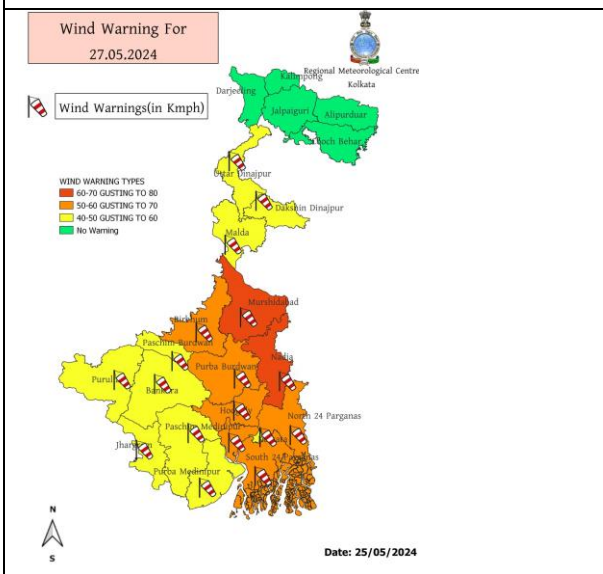
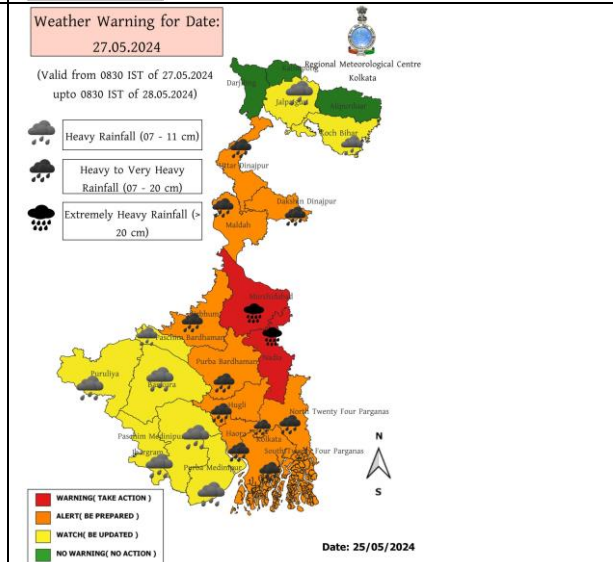
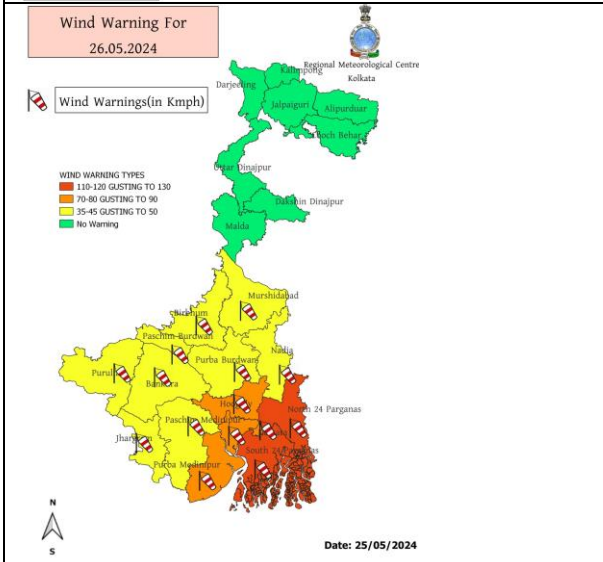
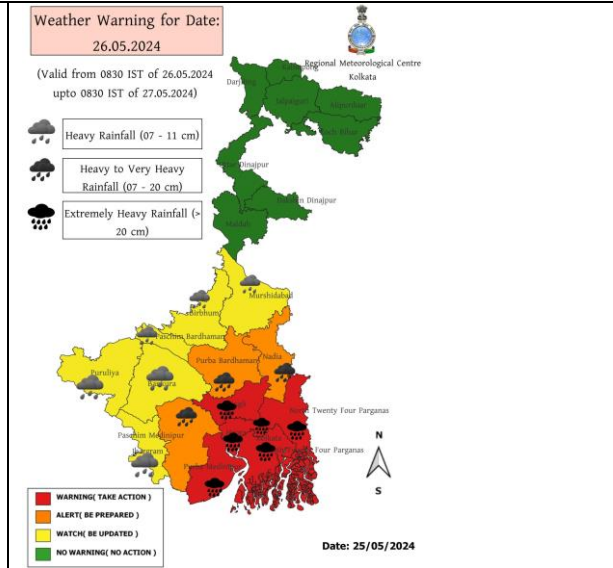
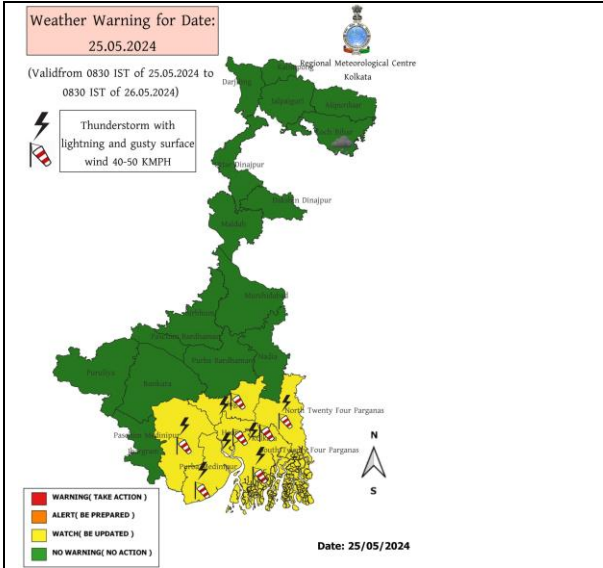
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

# All India Warning Graphics



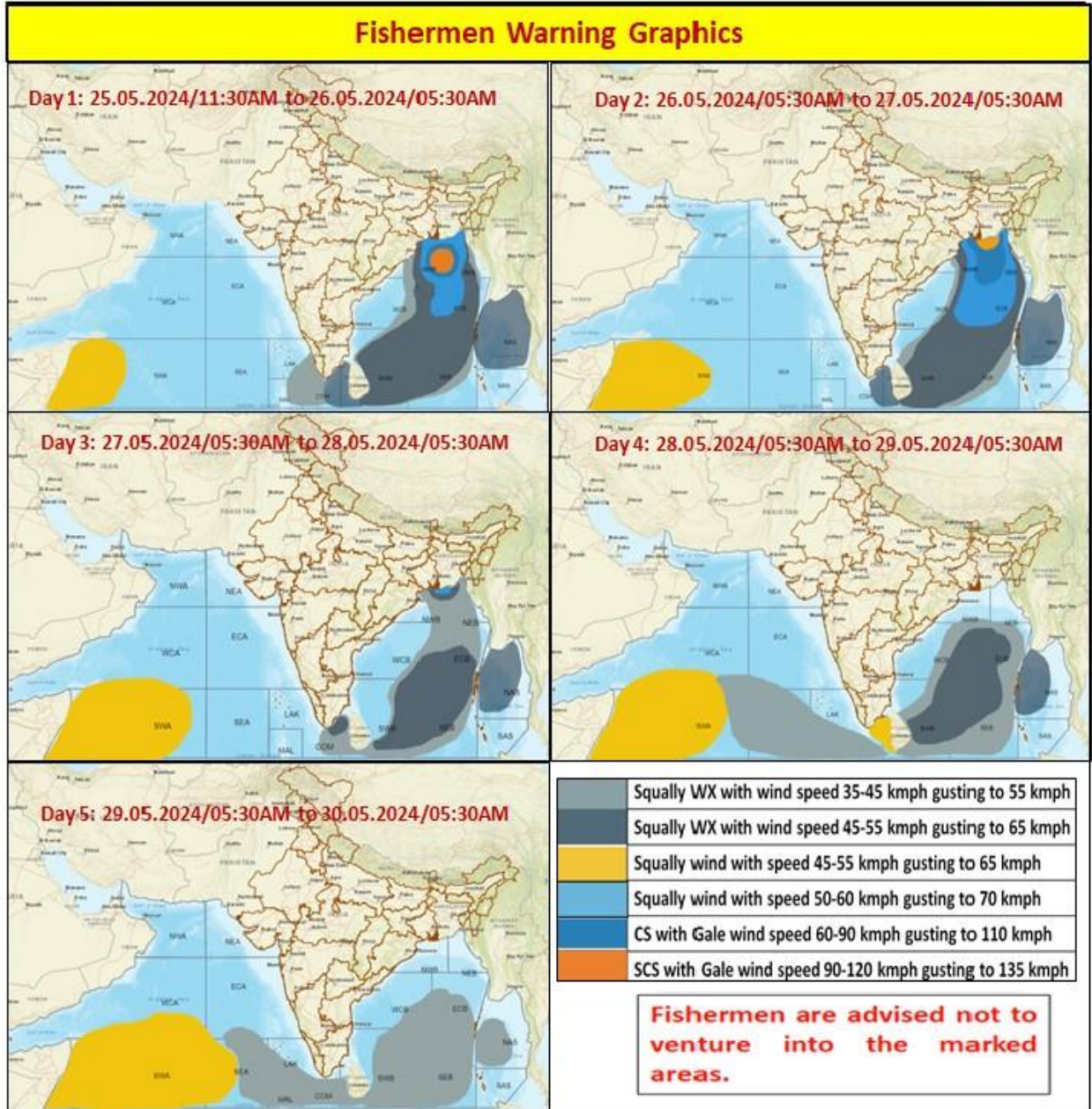


# Warning Graphics of West Bengal

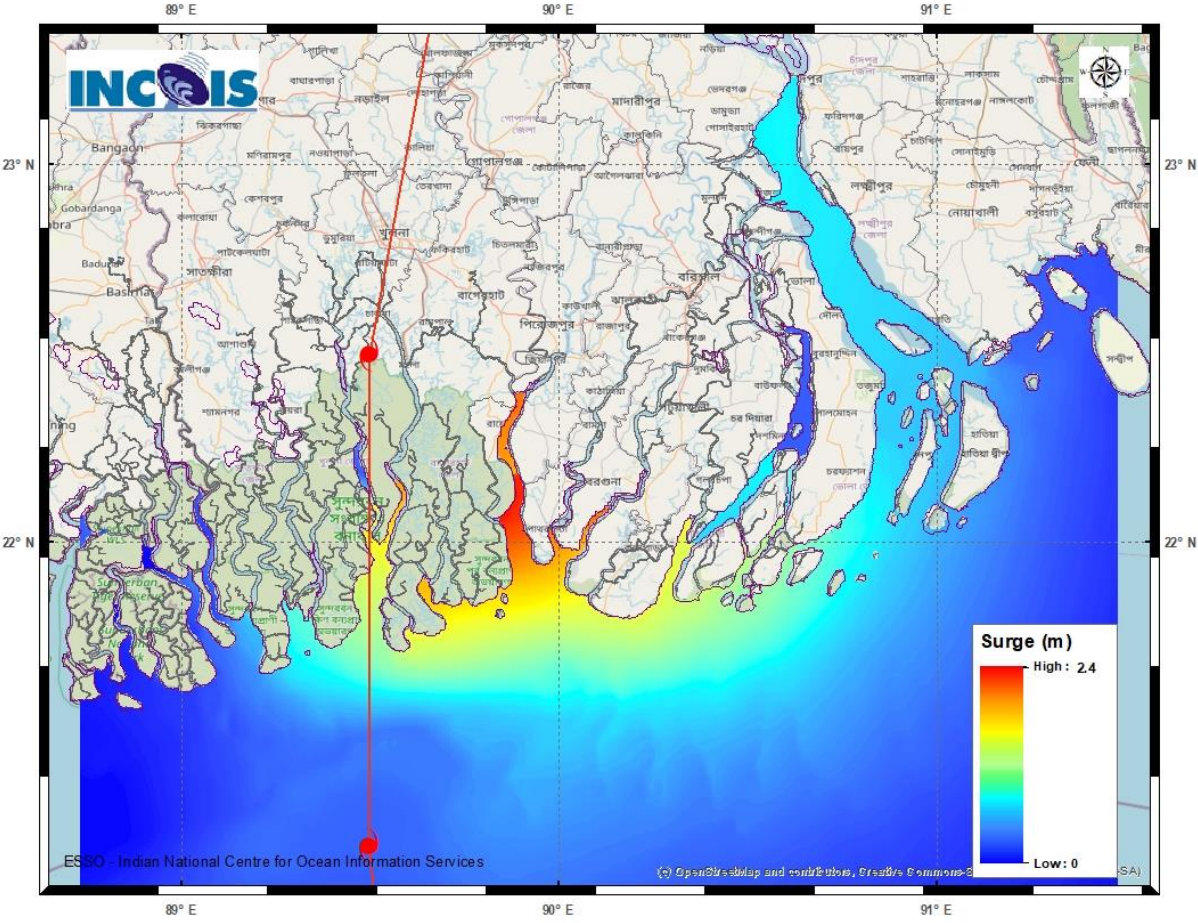




# Fishermen Warning Graphics



# Storm Surge Warning Graphics





# WIND AND FLOOD HAZARD MAPS FOR WEST BENGAL

