

# India Meteorological Department (Ministry of Earth Sciences)

#### NATIONAL BULLETIN NO.8 (BOB/01/2024)

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# Sub: Deep Depression over Eastcentral Bay of Bengal (Cyclone Alert for West Bengal Coast)

The deep depression over Eastcentral Bay of Bengal moved nearly northwards with a speed of 11 kmph during past 06 hours and lay centered at 1130 hrs IST of 25<sup>th</sup> May, 2024 over the same region near latitude 18.2°N and longitude 89.7°E, about 420 km south of Khepupara (Bangladesh), about 420 km south-southeast of Sagar Islands (West Bengal) and 460 km south-southeast of Canning (West Bengal).

It is very likely to continue to move nearly northwards and intensify into a **Cyclonic Storm** over eastcentral & adjoining north Bay of Bengal around 25<sup>th</sup> May evening. Continuing to move further northwards, it would intensify into a **Severe Cyclonic Storm** by 26<sup>th</sup> May morning 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	Position	Maximum sustained surface	Category of cyclonic
(IST)	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	wind speed (Kmph)	disturbance
25.05.24/1130	18.2/89.7	55-65 gusting to 75	Deep Depression
25.05.24/1730	18.8/89.6	60-70 gusting to 80	Cyclonic Storm
25.05.24/2330	19.4/89.6	75-85 gusting to 95	Cyclonic Storm
26.05.24/0530	20.0/89.5	95-105 gusting to 115	Severe Cyclonic Storm
26.05.24/1130	20.7/89.4	110-120 gusting to 135	Severe Cyclonic Storm
26.05.24/2330	21.9/89.4	110-120 gusting to 135	Severe Cyclonic Storm
27.05.24/1130	23.1/89.5	60-70 gusting to 80	Cyclonic Storm
27.05.24/2330	24.2/89.9	40-50 gusting to 60	Depression
28.05.24/1130	25.3/90.3	20-30 gusting to 40	Well Marked Low Pressure
			Area

## 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 over these districts on 26<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** 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:
- ❖ Squally wind speed reaching 50-60 kmph gusting to 70 kmph is prevailing over central Bay of Bengal. It is likely to become **Gale wind speed reaching 60-70 kmph** gusting to 80 kmph from evening to today, the 25<sup>th</sup> May.
- ❖ It would increase further and extend to adjoining areas of North Bay of Bengal becoming Gale wind speed reaching 70-80 kmph gusting to 90 kmph from evening of today, the 25<sup>th</sup> May and 100-110 kmph gusting to 120 kmph over North Bay of Bengal from morning and 110-120 kmph gusting to 135 kmph from evening of 26<sup>th</sup> May.
  - **Gale wind speed reaching 70-80 kmph gusting to 90 kmph** is likely over adjoining central Bay of Bengal from 26<sup>th</sup> morning for subsequent 24 hours and decrease thereafter.
- (b) Along & off Bangladesh and West Bengal coasts:
- ❖ Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely along & off Bangladesh and West Bengal & adjoining North Odisha coasts from 25<sup>th</sup> May evening 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 for subsequent 12 hours.
- ❖ 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 from 25<sup>th</sup> May evening to 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 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:

Rough to very rough sea condition is prevailing over central Bay of Bengal. It would become high 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 likely along & off Bangladesh and West Bengal coasts from 25<sup>th</sup> May evening. 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 over along & off North Odisha coast from 25<sup>th</sup> May evening to 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:

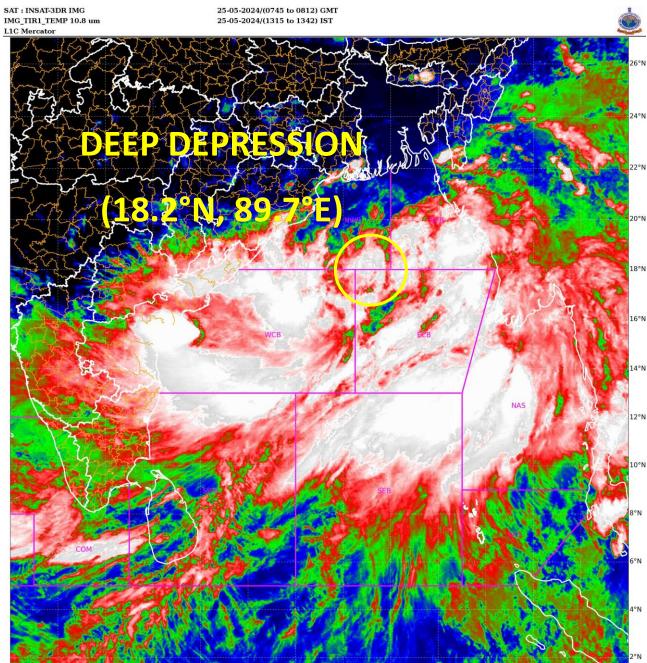
- > Total suspension of fishing operations.
- Surface transport and shipping operations need to be regulated
- ➤ Onshore & Offshore operation need to be regulated as per guidelines
- > Coastal hutment dwellers to be in safer places.
- ➤ People in affected areas to remain indoors.
- Avoid going to areas 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 1730 hours IST of today, the 25<sup>th</sup> May, 2024.

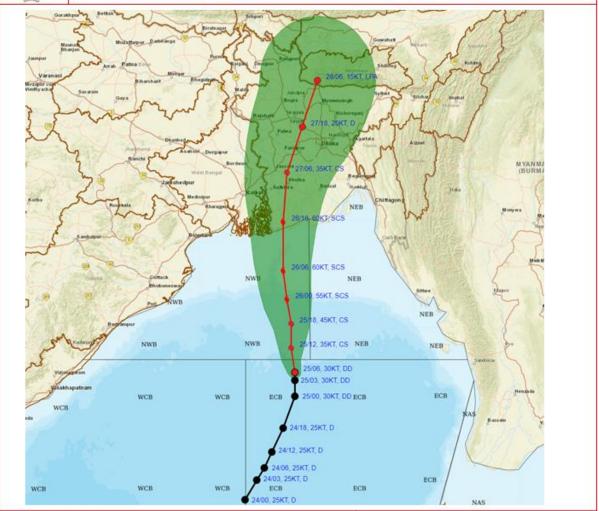
(D.R. Pattanaik)



Celsius IMD,DELHI



FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY IN ASSOCIATION WITH DEEP DEPRESSION OVER EASTCENTRAL BAY OF BENGAL BASED ON 0600 UTC (1130 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)

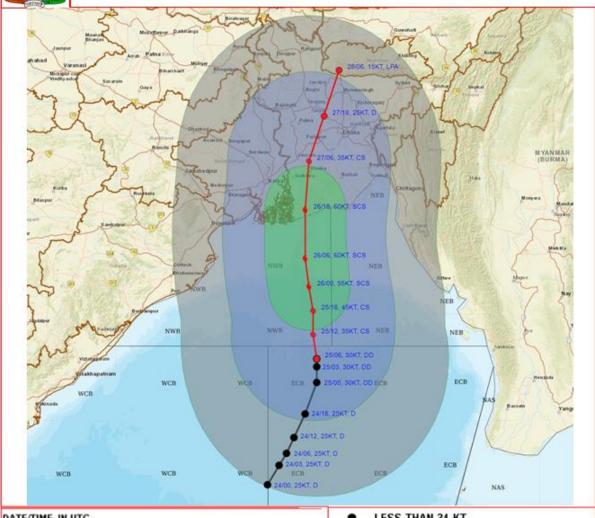
SuCS: SUPER CYCLONIC STORM № 120 KT)

•	LESS THAN 34 KT
9	34-47 KT
9	≥ 48 KT
	OBSERVED TRACK
	FORECAST TRACK
	CONE OF UNCERTAINTY

Forecast	DISTANCE (KM) AND DIRECTION FROM STATIONS			
Date and Time (UTC)	Canning	Khepupara	Sagar Island	
25.05.24/0600	460, SSE	420, S	420, SSE	
26.05.24/0600	180, SSE	160, SSW	180, SE	
27.05.24/0600	130, NE	150, NNW	220, NE	



FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH DEEP DEPRESSION OVER EASTCENTRAL BAY OF BENGAL BASED ON 0600 UTC (1130 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 (2 120 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)

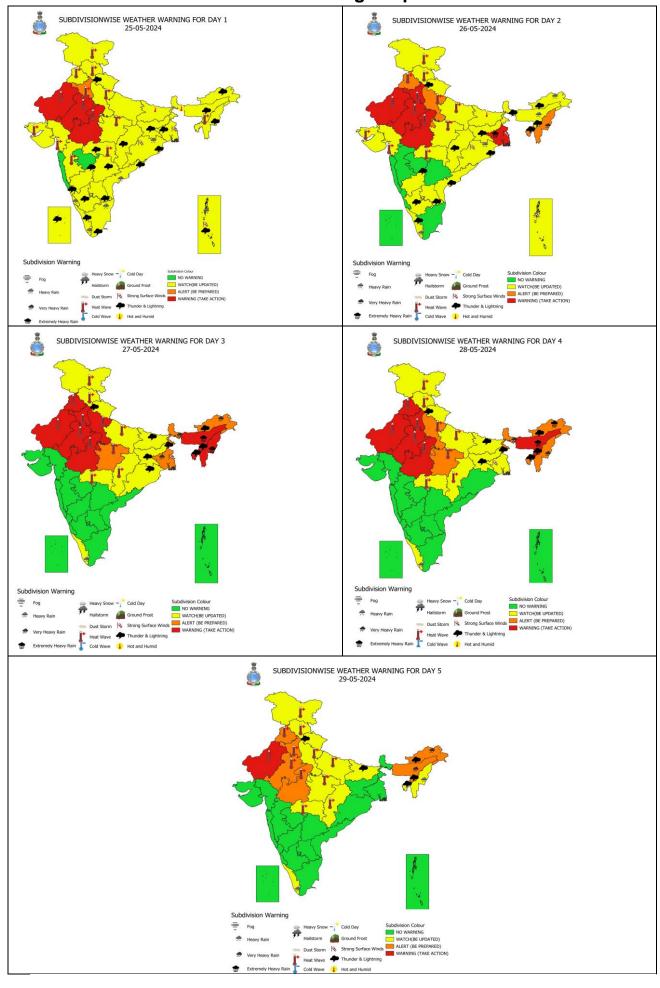
34-49 KT (62-91 KMPH)

50-63 KT (92-117 KMPH) ≥ 64 KT (≥118 KMPH)

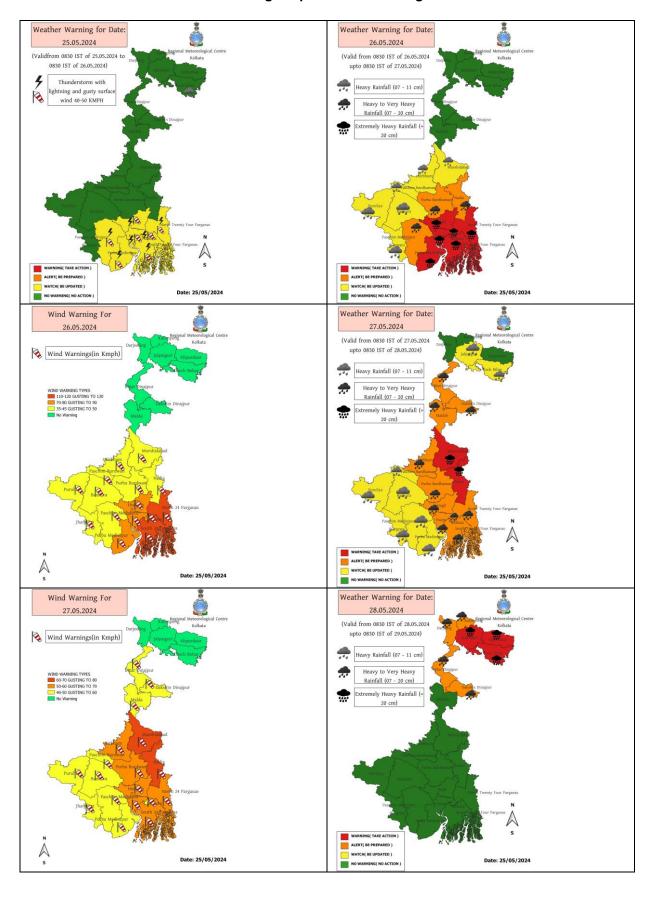
### IMPACT OVER THE SEA

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

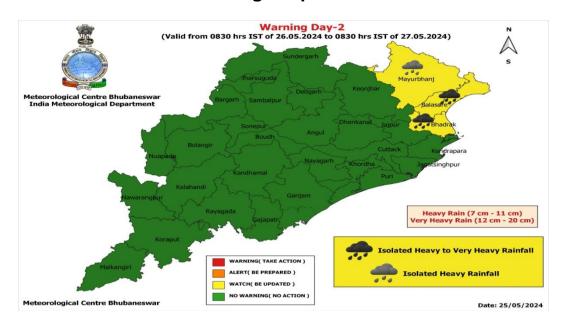
# **All India Warning Graphics**

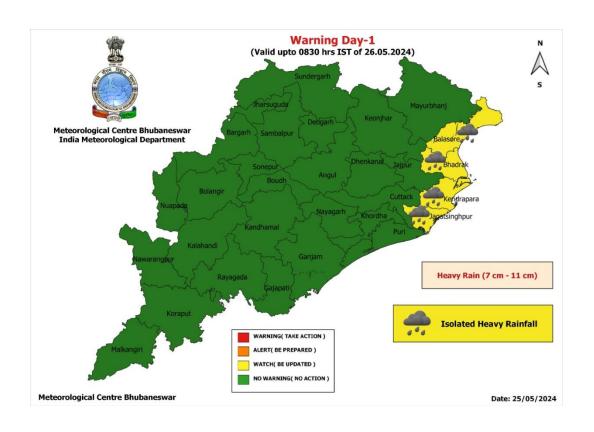


# **Warning Graphics of West Bengal**

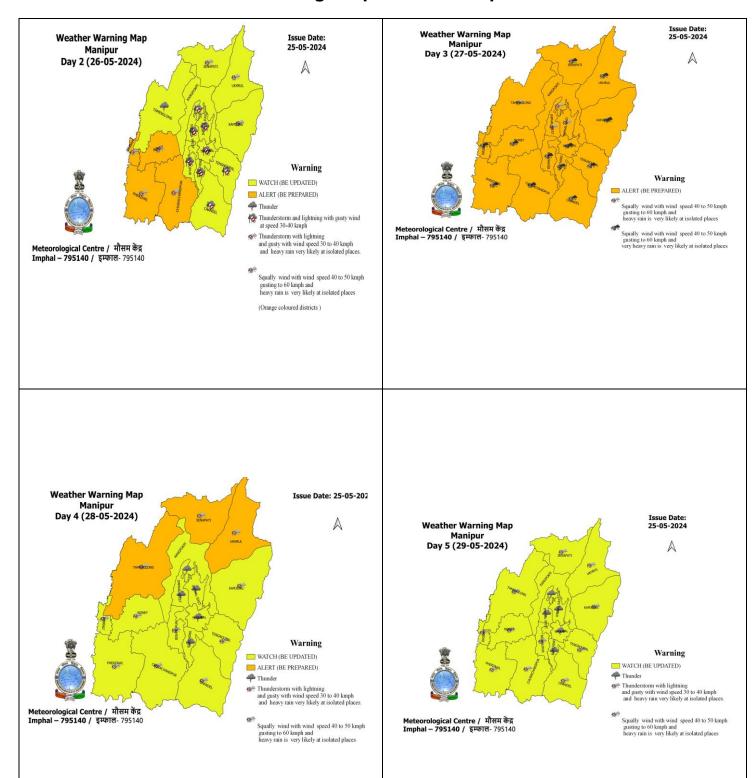


# Warning Graphics for Odisha



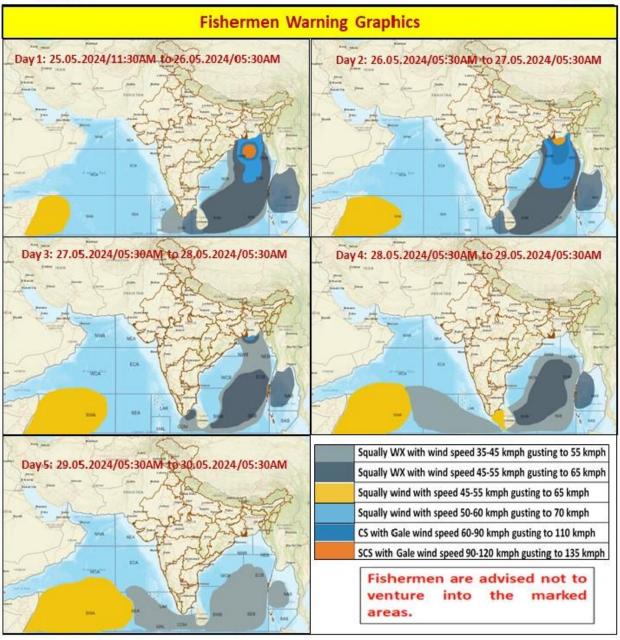


# **Warning Graphics for Manipur**

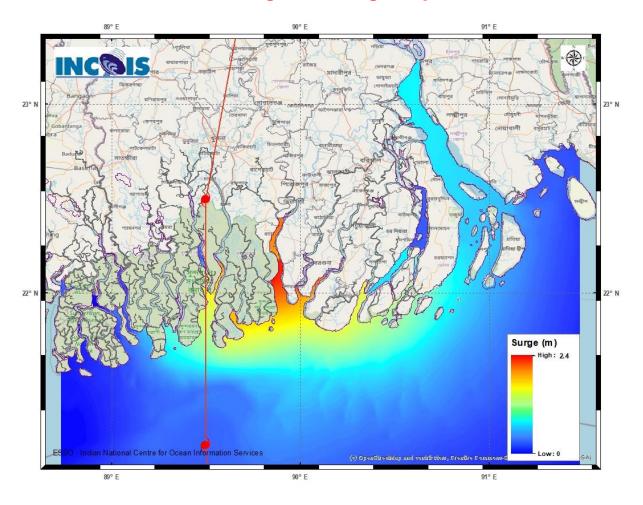








# **Storm Surge Warning Graphics**



# WIND AND FLOOD HAZARD MAPS FOR WEST BENGAL

