

## India Meteorological Department (Ministry of Earth Sciences)

#### NATIONAL BULLETIN NO.5 (BOB/01/2024)

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TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23012284, 23018638)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MOES (FAX NO. 24629777)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (23421105, 23421219)** 

**PIB MOES (FAX NO. 23389042)** 

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)

**DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192-232656)

CHIEF SECRETARY, GOVT. WEST BENGAL (FAX NO. 033-22144328)

CHIEF SECRETARY, GOVT. OF ODISHA (FAX NO. 0674 -2536660)

CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 0863-2441029, 08645-246600)

CHIEF SECRETARY, GOVT. OF TAMIL NADU (FAX NO. 044-25672304)

CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO. 0413-2337575, 2334145)

CHIEF SECRETARY, GOVT. OF TRIPURA (FAX NO. 0381-2414013, 2413200)

CHIEF SECRETARY, GOVT. OF MIZORAM (FAX NO. 0389-2322745, 2320588)

CHIEF SECRETARY, GOVT. OF MANIPUR (FAX NO. 0385-2452629)

CHIEF SECRETARY, GOVT. OF NAGALAND (FAX NO. 0370-2270057)

CHIEF SECRETARY, GOVT. OF ASSAM (FAX NO. 0361-2260900)

CHIEF SECRETARY, GOVT. OF MEGHALAYA (FAX NO. 0364-2225978)

## Sub: Depression over Eastcentral Bay of Bengal (Pre-Cyclone Watch for West Bengal Coast)

The Depression over Eastcentral Bay of Bengal moved north-northeastwards with a speed of 8 kmph during past 06 hours and lay centered at 2330 hrs IST of 24<sup>th</sup> May, 2024 over Eastcentral Bay of Bengal near latitude 16.6°N and longitude 89.3°E, about 610 km south of Khepupara (Bangladesh), about 580 km south-southeast of Sagar Islands (West Bengal) and 640 km south of Canning (West Bengal).

It is very likely to continue to move north-northeastwards and intensify into a **Deep Depression** by 25<sup>th</sup> May morning and into a **Cyclonic Storm** over eastcentral Bay of Bengal by 25<sup>th</sup> May evening. Subsequently, it would move nearly northwards, intensify into a **Severe Cyclonic Storm** by 26<sup>th</sup> May morning. Continuing to move nearly northwards, thereafter it is very likely to **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. <sup>0</sup> N/ long. <sup>0</sup> E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
24.05.24/2330	16.6/89.3	45-55 gusting to 65	Depression
25.05.24/1130	17.6/89.5	55-65 gusting to 75	Deep Depression
25.05.24/2330	18.8/89.6	75-85 gusting to 95	Cyclonic Storm
26.05.24/1130	20.0/89.6	100-110 gusting to 120	Severe Cyclonic Storm
26.05.24/2330	20.889.5	110-120 gusting to 130	Severe Cyclonic Storm
27.05.24/1130	22.9/89.6	70-80 gusting to 90	Cyclonic Storm
27.05.24/2330	24.0/89.9	50-60 gusting to 70	Depression
28.05.24/1130	25.2/90.3	30-40 gusting to 50	Well Marked 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 on 26<sup>th</sup> & 27<sup>th</sup> with isolated extremely heavy rainfall over coastal districts of West Bengal 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 to very heavy rainfall at isolated places are likely over Andaman Islands on 24<sup>th</sup> May and 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 45-55 gusting to 65 is likely to prevail over central and adjoining South Bay of Bengal during next 6 hours.
- ❖ It would extend to adjoining areas of North Bay of Bengal with gale wind speed reaching 50-60 kmph gusting to 70 kmph from 25<sup>th</sup> May morning. It would further increase becoming 90-100 kmph gusting to 110 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 & adjoining Odisha 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> evening for subsequent 12 hours.

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

Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely from  $25^{\rm th}$  May evening to  $27^{\rm th}$  May morning

#### (d) Andaman Islands and Andaman Islands:

❖ 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 and Tripura 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 likely over central and adjoining south Bay of Bengal during next 06 hours. 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 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 North & South 24 Parganas 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 0830 hours IST of today, the 25<sup>th</sup> May, 2024.

(S. P. Singh)

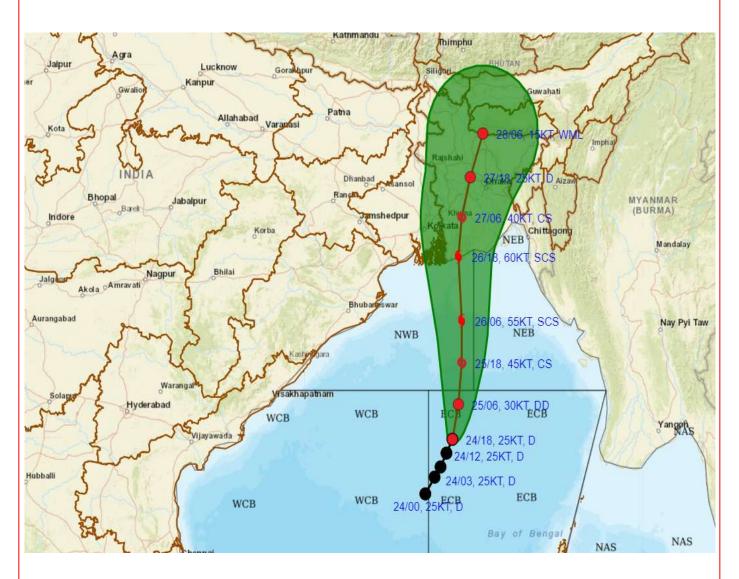
Scientist C, Cyclone Warning Division, New Delhi

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

IMD, DELHI



FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY IN ASSOCIATION WITH DEPRESSION OVER EASTCENTRAL BAY OF BENGAL BASED ON 1800 UTC (2330 IST) OF 24<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)

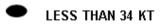
DD: DEEP DEPRESSION (28-33 KT) CS: CYCLONIC STORM (34-47 KT)

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 (2 120 KT)



9 3447 KT



OBSERVED TRACK

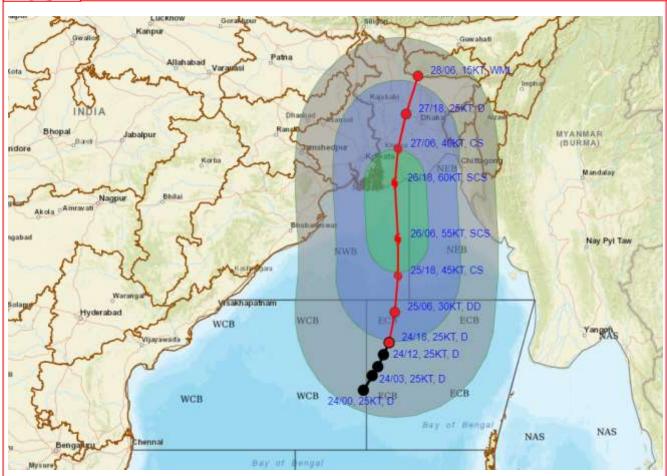
FORECAST TRACK

CONE OF UNCERTAINTY

Forecast	DISTANCE (KM) AND DIRECTION FROM STATION				
Date and Time (UTC)	Canning	Khepupara	SAGAR ISLAND	BAPATLA	
24.05.24/1800	630, S	600, S	570, SSE	950, E	
25.05.24/1800	390, SSE	360, S	350, SSE	1030, ENE	
26.05.24/1800	100, ESE	80, WSW	160, E	1160, NE	



FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH DEPRESSION OVER EASTCENTRAL BAY OF BENGAL BASED ON 1800 UTC (2330 IST) OF 24<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
 34.47 KT

CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:

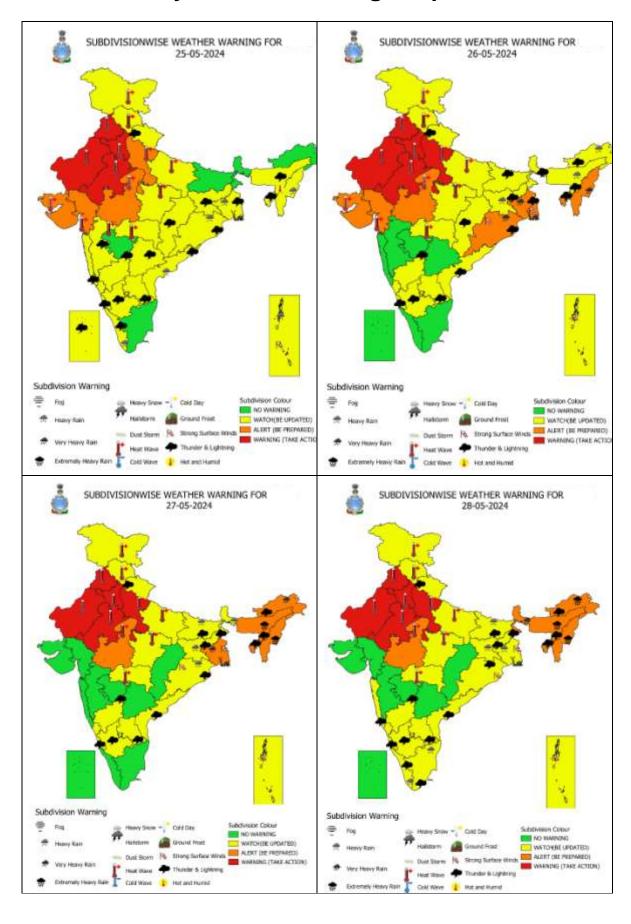
28-33 KT (52-61 KMPH) 34-49 KT (62-91 KMPH) 50-63 KT (92-117 KMPH)

≥ 64 KT (≥118 KMPH)

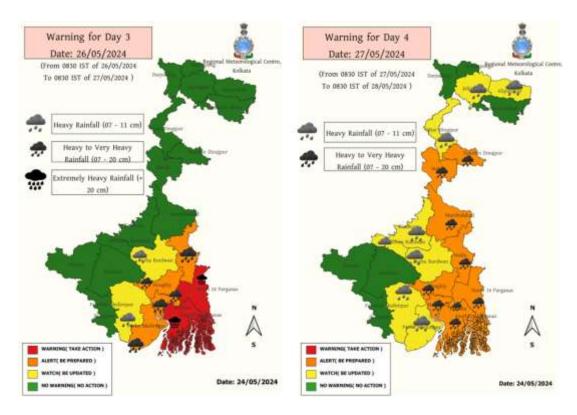
ADA	CT ON	CD TU	F SFA
IIVIPA		FR IH	F YEA

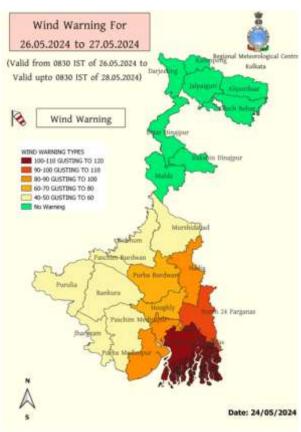
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

## **Heavy Rainfall Warning Graphics**

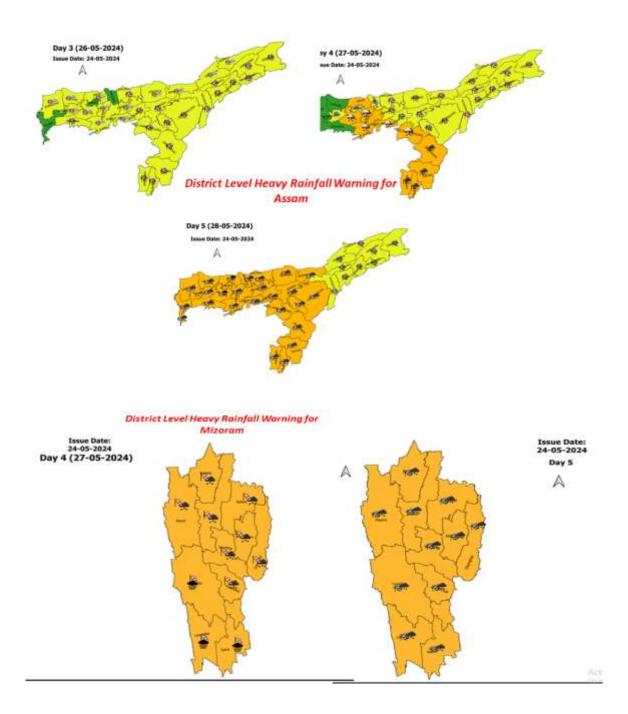


## **Districtwise Warning Maps of West Bengal**





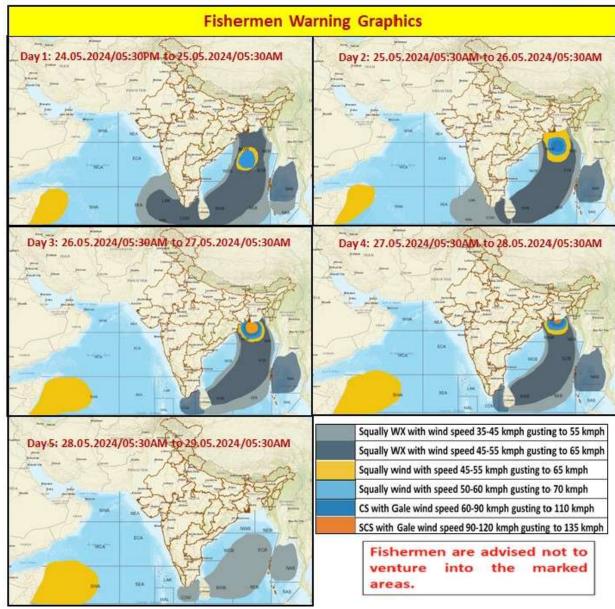
## **Districtwise Warning Maps of Northeastern States (Assam and Mizoram)**



## **Fishermen Warning Graphics**







# Storm Surge Warning Graphics

