

India Meteorological Department (Ministry of Earth Sciences)

NATIONAL BULLETIN NO.4 (BOB/01/2024)

TIME OF ISSUE: 2100 HOURS IST DATED: 24.05.2024 FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)

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 1730 hrs IST of today, the 24th May, 2024 over Eastcentral Bay of Bengal near latitude 16.2°N and longitude 89.1°E, about 650 km south of Khepupara (Bangladesh), about 620 km south-southeast of Sagar Islands (West Bengal) and 670 km south of Canning (West Bengal).

It is very likely to continue to move north-northeastwards and intensify into a **Cyclonic Storm** over eastcentral Bay of Bengal by 25th May morning. Subsequently, it would move nearly northwards, intensify into a **Severe Cyclonic Storm** by 25th night. Continuing to move nearly northwards, it is very likely to **cross Bangladesh and adjoining West Bengal coasts between Sagar Island and Khepupara by 26th 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. ⁰ N/ long. ⁰ E) | Maximum sustained surface wind speed (Kmph) | Category of cyclonic disturbance |
|--------------------|---|---|----------------------------------|
| 24.05.24/1730 | 16.2/89.1 | 45-55 gusting to 65 | Depression |
| 25.05.24/0530 | 17.1/89.4 | 60-70 gusting to 80 | Cyclonic Storm |
| 25.05.24/1730 | 18.1/89.6 | 80-90 gusting to 100 | Cyclonic Storm |
| 26.05.24/0530 | 19.6/89.6 | 100-110 gusting to 120 | Cyclonic Storm |
| 26.05.24/1730 | 21.1/89.5 | 110-120 gusting to 135 | Severe Cyclonic Storm |
| 27.05.24/0530 | 22.4/89.5 | 80-90 gusting to 100 | Cyclonic Storm |
| 27.05.24/1730 | 23.5/89.7 | 50-60 gusting to 70 | Deep Depression |
| 28.05.24/0530 | 24.6/90.1 | 40-50 gusting 60 | Depression |
| 28.05.24/1730 | 25.7/90.5 | 35-45 gusting to 55 | 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 on 26th & 27th with isolated extremely heavy rainfall over coastal districts of West Bengal on 26th 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 27th and 28th May.
- (b) **Odisha**: Light to moderate rainfall at most places with isolated heavy rainfall likely over North Coastal Odisha on 25th & 26th 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 26th and over Assam, Meghalaya, Arunachal Pradesh, Nagaland, Mizoram, Manipur & Tripura on 27th & 28th May. Isolated extremely heavy rainfall is also likely over Assam, Meghalaya on 27th & 28th May, Arunachal Pradesh on 28th May and Mizoram & Tripura on 27th 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 24th May and heavy rainfall at isolated places over north Andaman Islands on 25th May.

Wind Warning:

(a) Bay of Bengal:

- ❖ Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely to prevail over central and adjoining South Bay of Bengal on 24th May. It would become 50-60 kmph gusting to 70 kmph over central Bay of Bengal by 24th May midnight.
- ❖ It would extend to adjoining areas of North Bay of Bengal with gale wind speed reaching 60-70 kmph gusting to 80 kmph from 25th May morning. It would further increase becoming 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 26th May. Gale wind speed reaching 70-80 kmph gusting to 90 kmph is likely over adjoining central Bay of Bengal from 26th 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 25th May evening It is likely to increase becoming gale wind speed reaching 60-70 kmph gusting to 80 kmph from morning of 26th May and 100-120 kmph gusting to 135 kmph along & off Bangladesh and adjoining West Bengal coasts from evening of 26th evening for subsequent 12 hours.

(c) Along & off Odisha coasts:

Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely from 25th May evening to 27th 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 on 24th May.

(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 27th 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 on 24th May. It would become high over central Bay of Bengal on 25th May & 26th May and High to Very High over North Bay of Bengal from 25th evening till 27th 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 25th May evening. It would become high to very high along & off Bangladesh and West Bengal coasts from 26th morning onwards till 27th May morning.

(c) Along &off North Odisha coast:

Rough to very rough sea condition is likely over along & off North Odisha coast from 25th May evening to 27th May morning.

(d) Along & off Andaman Islands:

Rough to very rough sea condition is likely over Andaman Islands and North Andaman Sea on 24th May.

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 27th May, central Bay of Bengal till 26th May and North Bay of Bengal from 25th May till 27th May. Fishermen out at sea are advised to return to the coast.

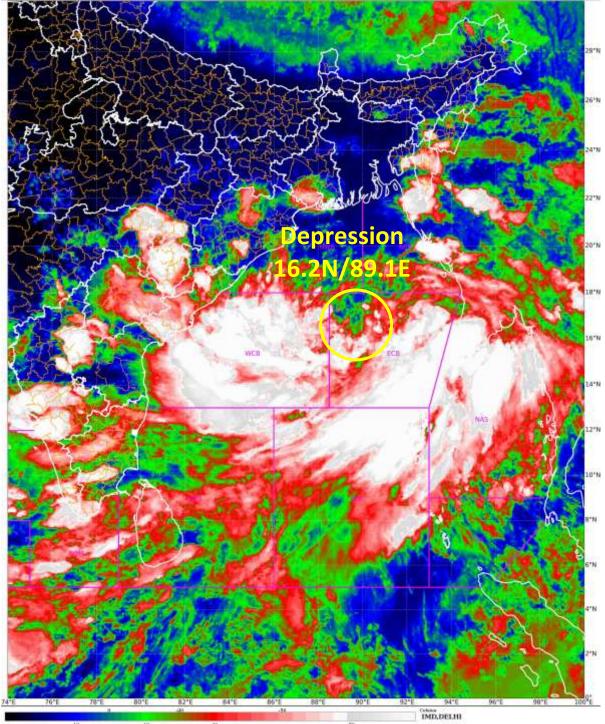
The system is under continuous surveillance and the next message will be issued at 0230 hours IST of tomorrow, the 25th May, 2024.

(M. Sharma)

Scientist D. Cyclone Warning Division, New Delhi

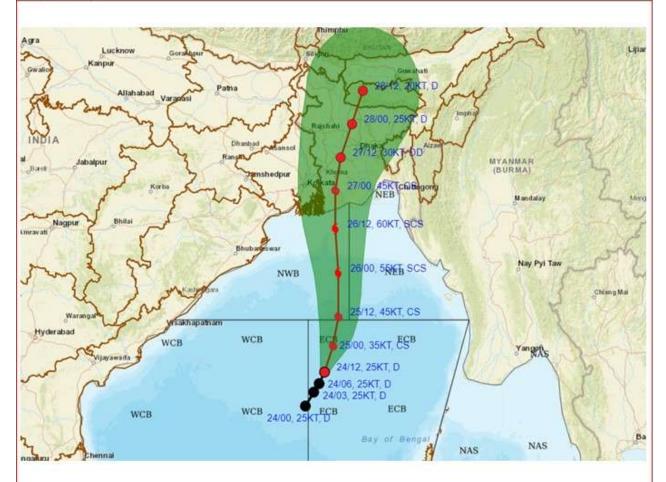
Copy to: ACWC Kolkata/ ACWC Chennai/ CWC Bhubaneswar/CWC Visakhapatnam/MO Port Blair/RMC Guwahati







FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY IN ASSOCIATION WITH DEPRESSION OVER EASTCENTRAL BAY OF BENGAL BASED ON 1200 UTC (1730 IST) OF 24TH MAY 2024.



DATE/TIME IN UTC IST=UTC + 0530

L: LOW PRESSURE AREA

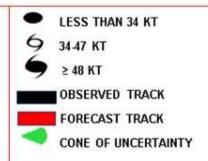
WML: WELL MARKED LOW PRESSURE AREA

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)

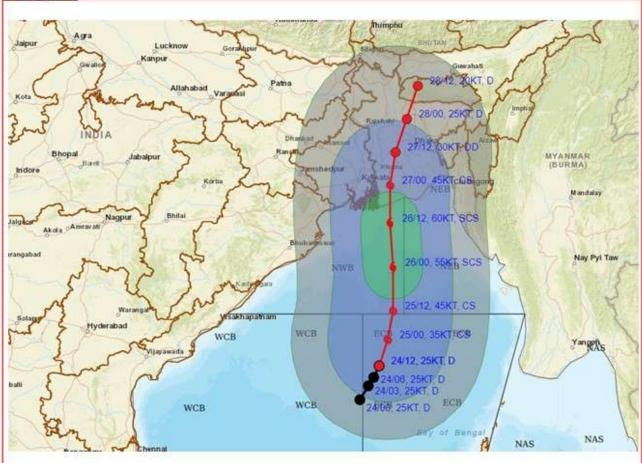
SuCS: SUPER CYCLONIC STORM № 120 KT)



| Forecast | DISTANCE (KM) AND DIRECTION FROM STATIONS | | | | |
|---------------------|---|-----------|--------------|--|--|
| Date and Time (UTC) | Canning | Khepupara | Sagar Island | | |
| 24.05.24/1200 | 670, S | 650, S | 620, S | | |
| 25.05.24/1200 | 470, SSE | 430, S | 430, SSE | | |
| 26.05.24/1200 | 160, SE | 130, SW | 160, ESE | | |



FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH DEPRESSION OVER EASTCENTRAL BAY OF BENGAL BASED ON 1200 UTC (1730 IST) OF 24TH 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)

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

9 34.47 KT 9 ≥ 48 KT

OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

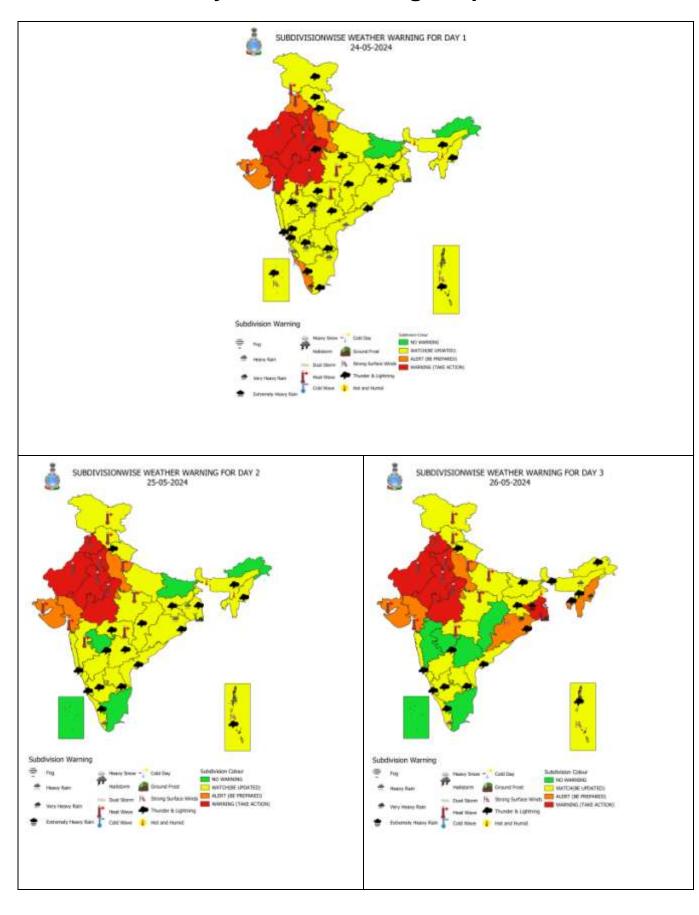
AREA OF MAXIMUM SUSTAINED WIND SPEED:

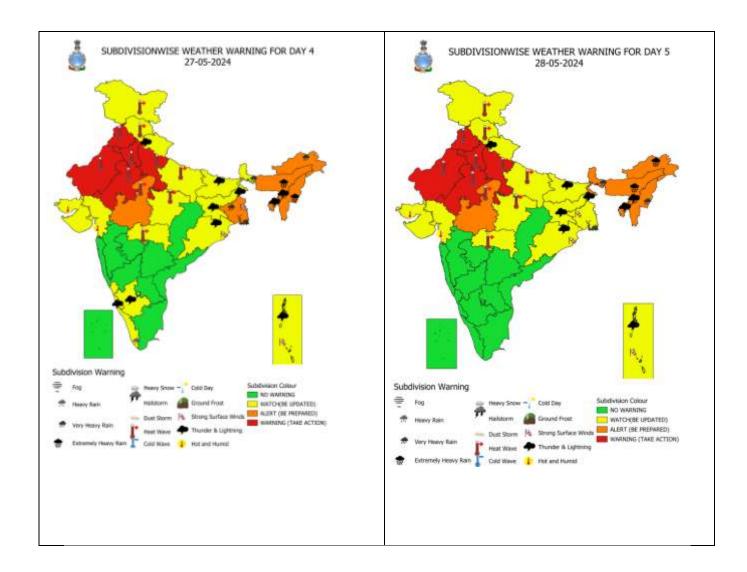
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

| MPACT OV | EK I | HE | SEA |
|----------|------|----|-----|
|----------|------|----|-----|

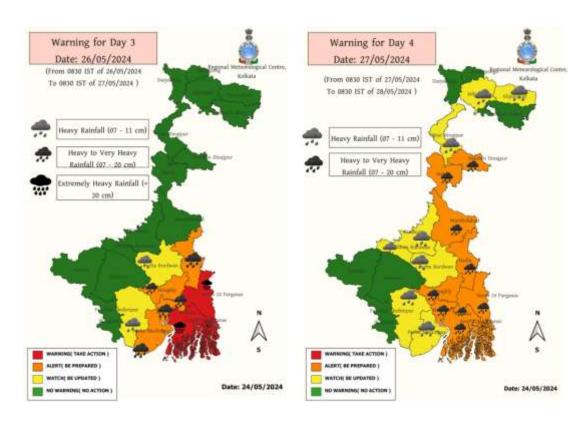
| MSW (knot/kmph) | Impact | Action |
|-----------------|------------------------|--|
| 28-33 (52-61) | Very rough seas | Total suspension of fishing operations |
| 34-49 (62-91) | High to very high seas | Total suspension of fishing operations |
| 50-63 (92-117) | Very high seas | Total suspension of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

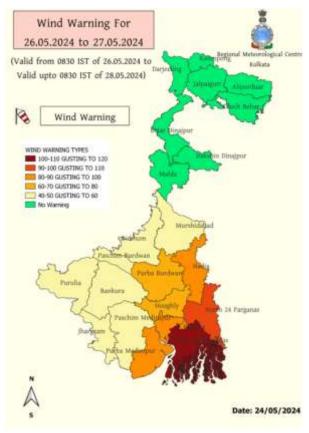
Heavy Rainfall Warning Graphics



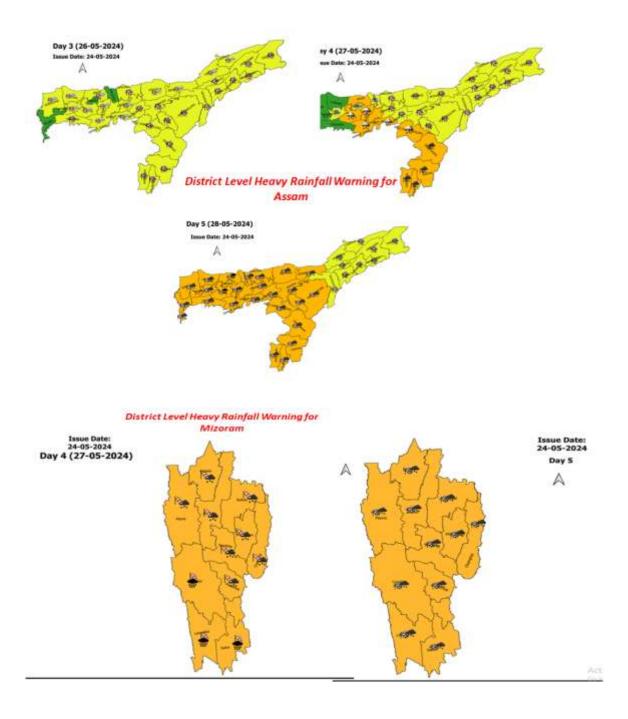


Districtwise Warning Maps of West Bengal



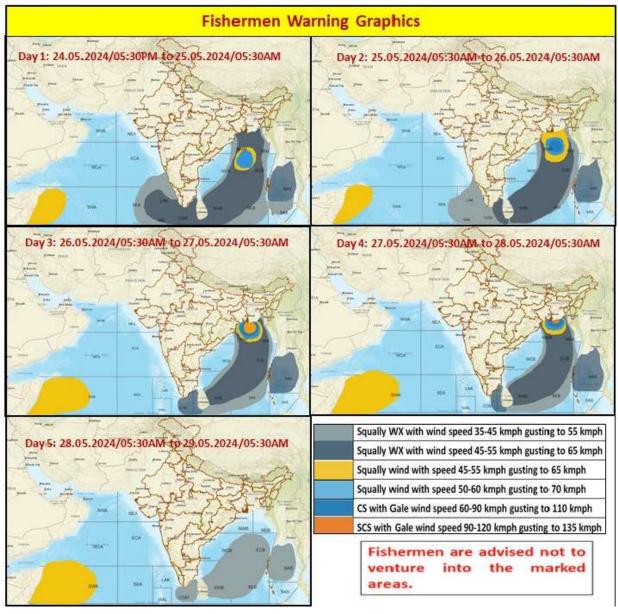


Districtwise Warning Maps of Northeastern States (Assam and Mizoram)









Storm Surge Warning Graphics

