



**India Meteorological Department** 

## **PRESS RELEASE - 9**

Time of issue: 1900 hours IST Dated: 20-05-2020

Sub: Super Cyclonic Storm 'AMPHAN' (pronounced as UM-PUN) crossed West Bengal – Bangladesh coasts: Cyclone warning for West Bengal coast: Red Message.

The Super Cyclonic Storm 'AMPHAN' (pronounced as UM-PUN) over Northwest Bay of Bengal moved north-northeastwards with a speed of 25 kmph during past 06 hours, crossed West Bengal – Bangladesh coasts as a Very Severe Cyclonic Storm with a speed of 155-165 kmph gusting to 185 kmph across Sundarbans, near Lat. 21.65°N and longitude 88.3°E and lay centred at 1730 hrs IST of today, the 20<sup>th</sup> May, 2020, over West Bengal coast near latitude 21.9°N and longitude 88.4°E, about 70 km nearly to the south of Kolkata (West Bengal), 95 km east-northeast of Digha (West Bengal), 35 km northeast of Sagar Islands and 185 km south-southwest of Khepupara (Bangladesh).

Kolkata (Alipur) reported 112 kmph winds at 1752 hrs IST of today, the 20<sup>th</sup> May 2020.

The system is now being continuously tracked by the Doppler Weather Radar (DWR) at Kolkata (West Bengal).

Forecast track and intensity are given in the following table:

| Date/Time(IST) |                             | Maximum sustained      | Category of cyclonic       |  |
|----------------|-----------------------------|------------------------|----------------------------|--|
|                | (Lat. <sup>0</sup> N/ long. | surface                | disturbance                |  |
|                | °Е)                         | wind speed (Kmph)      |                            |  |
| 20.05.20/1730  | 21.9/88.4                   | 140-150 gusting to 165 | Very Severe Cyclonic Storm |  |
| 20.05.20/2330  | 23.2/88.8                   | 100-110 gusting to 125 | Severe Cyclonic Storm      |  |
| 21.05.20/0530  | 24.6/89.3                   | 60-70 gusting to 80    | Cyclonic Storm             |  |
| 21.05.20/1130  | 26.0/90.3                   | 30-40 gusting to 50    | Depression                 |  |

## (1) Heavy rainfall Warning:

#### Odisha

Heavy to very heavy rainfall is very likely at isolated places over north coastal Odisha (Balasore, Bhadrak and isolated heavy falls over Jagatsinghpur district during next 12 hours.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology,

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Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in

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

## West Bengal

Rainfall at most places with heavy to very heavy falls at a few places & extremely heavy falls at isolated places likely over Gangetic West Bengal (east & west Medinipur, south & north 24 Parganas, Howrah, Hoogli, Kolkata and adjoining districts) during next 12 hours and isolated heavy rain over interior districts on 21<sup>st</sup> May, 2020.

# **Sub-Himalayan West Bengal and Sikkim**

Light to moderate rainfall at most places with heavy to very heavy falls at a few places over Malda & Dinajpur districts during next 12 hours and over most of the districts of Sub-Himalayan West Bengal & Sikkim on 21<sup>st</sup> May, 2020.

# Assam & Meghalaya

Light to moderate rainfall at most places with heavy falls at isolated places over Meghalaya during next 12 hours and heavy to very heavy falls at a few places over the western districts of Assam & Meghalaya on 21<sup>st</sup> May.

# (2) Wind warning

## West Bengal & Odisha

- Gale wind, speed reaching 60 to 70 kmph gusting to 80 kmph is prevailing along and off Balasore district of Odisha during next 3 hours. It will gradually decrease subsequently.
- Gale wind speed reaching 140 to 150 kmph gusting to 165 kmph very likely along & off east Medinipur and north & south 24 Parganas districts, 110-120 kmph gusting to 130 kmph over Kolkata, Hoogli, Howrah and West Medinipur Districts and 80-90kmph gusting to 100 kmph over Bardhman, Murshidabad, & Nadia Districts of West Bengal . It is very likely to decrease during next 06 hours.

#### Deep Sea area

• Gale wind speed reaching 130-140 gusting to 150 kmph is prevailing over northern parts of northwest Bay of Bengal. It will gradually decrease during next 06 hours.

#### (3) Sea condition:

- Sea condition is very High over Northwest Bay of Bengal and is likely to continue for next 06 hours.
- Sea condition will be high to very high over Northeast Bay of Bengal for next 06 hours.

## (4) Fishermen Warning

 The fishermen are advised not to venture into North Bay of Bengal during next 12 hours. Also, fishermen are advised not to venture into North Bay of Bengal along and off North Odisha, West Bengal and adjoining Bangladesh coasts during next 12 hours.

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## (5) Storm Surge expected

 Storm Surge of about 4-5 meters above Astronomical Tide is likely to inundate low lying areas of south & north 24 Parganas and about 3-4 meters over the low lying areas of East Medinipur District of West Bengal during next 06 hours. (Figure enclosed)

# (6) Damage Expected and Action suggested

# (a) West Bengal (east Medinipur, south & north 24 Parganas, Howrah, Hoogli, Kolkata districts)

# **Damage Expected:**

- Extensive damage to all types of kutcha houses, some damage to old badly managed Pucca structures. Potential threat from flying objects.
- Extensive uprooting of communication and power poles.
- Disruption of rail/road link at several places.
- Extensive damage to standing crops, plantations, orchards.
- Blowing down of Palm and coconut trees.
- Uprooting of large bushy trees.
- Large boats and ships may get torn from their moorings.

# Fishermen Warning & Action Suggested:

- Total suspension of fishing operations till 20th May 2020.
- Diversion or suspension of rail and road traffic.
- People in affected areas to remain indoors. Mobilise evacuation from Low lying areas.
- Movement in motor boats and small ships not advisable.

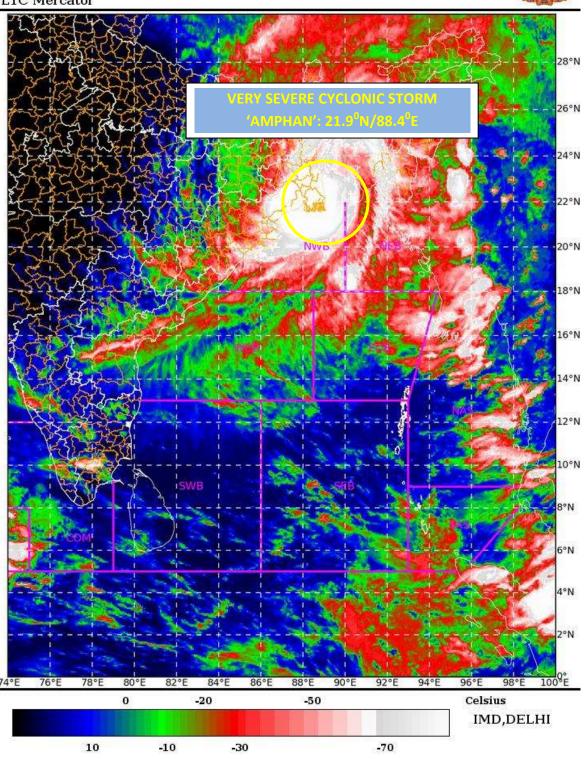
Kindly visit <u>www.rsmcnewdelhi.imd.gov.in</u> and <u>www.mausam.imd.gov.in</u> for updates on the system.

The system is under continuous surveillance and the concerned state governments are being informed regularly.

SAT : INSAT-3D IMG IMG\_TIR1\_TEMP 10.8 um 20-05-2020/(1200 to 1226) GMT 20-05-2020/(1730 to 1756) IST



L1C Mercator

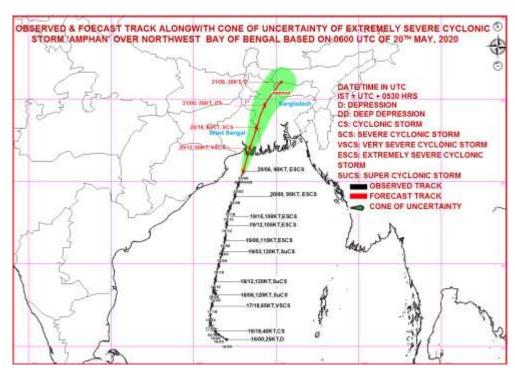


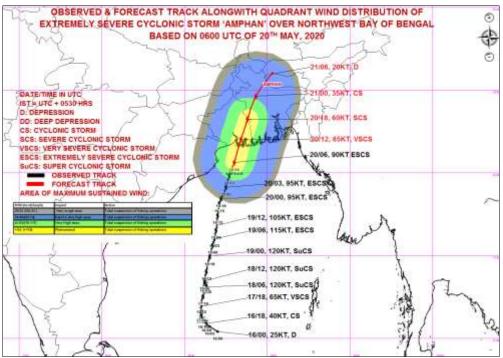
Legend: WCB – Westcentral Bay of Bengal NWB – Northwest Bay of Bengal

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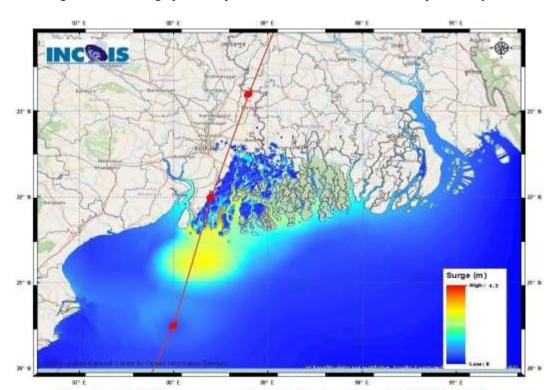


Figure: Storm Surge forecast from INCOIS issued at 1500 IST of 20<sup>th</sup> May 2020

Fig: Computed storm surge & Inundation based on the IMD track forecast

Storm Surge of about 4-5 meters above Astronomical Tide is likely to inundate low lying areas of south & north 24 Parganas and about 3-4 meters over the low lying areas of East Medinipur District of West Bengal during the time of Landfall. Given below is the direct model output from INCIOS Strom Surge model.

#### STORM SURGE HEIGHT INFORMATION:

\* The below listed surge heights are over and above astronomical tide.

| MANDAL/TALUK    | DISTRICT          | STATE / UNION<br>TERRITORY | NEAREST PLACE<br>OF HABITATION | * STORM SURGE<br>(m) | * EXPECTED<br>INUNDATION<br>EXTENT (km) |
|-----------------|-------------------|----------------------------|--------------------------------|----------------------|---|
| Bhangar-I       | South 24 Parganas | West Bengal                | Bhangar-I                      | 0.5-4.3              | Around 17                               |
| Basirhat        | North 24 Parganas | West Bengal                | Basirhat                       | 0.5-3.9              | Around 10                               |
| Diamond Harbour | South 24 Parganas | West Bengal                | Daimond Harbor                 | 0.5-3.5              | Around 17                               |
| Bagnan-II       | Haora             | West Bengal                | Bagnan-II                      | 0,5-1.0              | Around 0.4                              |
| Mahisadal       | Medhinipur        | West Bengal                | Tentul Berya                   | 0.5-1.0              | Around 0.4                              |
| Nandigram-I     | Medhinipur        | West Bengal                | Nakchira Chara                 | 0.5-0.8              | Around 0.4                              |
| off Haldia      | Purba Medhinipur  | West Bengal                | Nayachar Island                | 0.5-1.5              | Around 0.5                              |
| Sutahata-I      | Medinipur         | West Bengal                | Maniruddin Chara               | 0.5-1.6              | Around 0.4                              |
| Sutahata-II     | Medinipur         | West Bengal                | Haldia                         | 0.5-1.5              | Around 0.3                              |
| Digha           | Purba Medhinipur  | West Bengal                | Digha                          | 0.5-0.7              | Around 0.3                              |
| Tamluk          | East Midnapore    | West Bengal                | Tamluk                         | 0.5-1.5              | Around 0.3                              |
| Bhadrak         | Bhadrak           | Odisha                     | Mohanpur                       | 0.5-1.1              | Around 0.8                              |
| Kendrapara      | Kendraparha       | Odisha                     | Baligarh                       | 0.5-0.8              | Around 2.6                              |
| Baleshwar       | Baleshwar         | Odisha                     | Sahapur                        | 0.5-0.7              | Around 0.7                              |

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Figure: Reflectivity of Kolkata Doppler Weather Radar at 1152 UTC of 20<sup>th</sup> May 2020

