TIME OF ISSUE: 1430 HOURS IST          DATED: 27.05.2024
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. 246701729)
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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. 0385-2452629)
CHIEF SECRETARY, GOVT. OF MANIPUR (FAX NO. 0370-2270057)
CHIEF SECRETARY, GOVT. OF ASSAM (FAX NO. 0361-2260900)
CHIEF SECRETARY, GOVT. OF MEGHALAYA (FAX NO. 0364-2225978)

Sub: Cyclonic Storm “Remal” (pronounced as “Re-Mal”) over Bangladesh and adjoining West Bengal

The Cyclonic Storm “Remal” (pronounced as “Re-Mal”) over Coastal Bangladesh and adjoining Coastal West Bengal moved nearly northwards, with a speed of 08 kmph during past 06 hours and lay centered at 1130 hrs IST of today, the 27th May, 2024 over Bangladesh and adjoining West Bengal, near latitude 23.0°N and longitude 89.2°E about 65 km northwest of Mongla (Bangladesh), 100 km north-northeast of Canning (West Bengal), 110 km northeast of Kolkata (West Bengal), 150 km northwest of Khepupara (Bangladesh) and 150 km southwest of Dhaka (Bangladesh)

The system is likely to move north-northeastswards, and gradually weaken further into Deep Depression by evening of today, the 27th May 2024.

Forecast track and intensity are given in the following table:

<table>
<thead>
<tr>
<th>Date/Time (IST)</th>
<th>Position (Lat. °N/ long. °E)</th>
<th>Maximum sustained surface wind speed (Kmph)</th>
<th>Category of cyclonic disturbance</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.05.24/1130</td>
<td>23.0/89.2</td>
<td>60-70 gusting to 80</td>
<td>Cyclonic Storm</td>
</tr>
<tr>
<td>27.05.24/1730</td>
<td>23.6/89.4</td>
<td>50-60 gusting to 70</td>
<td>Deep Depression</td>
</tr>
<tr>
<td>27.05.24/2330</td>
<td>24.2/90.0</td>
<td>40-50 gusting to 60</td>
<td>Depression</td>
</tr>
<tr>
<td>28.05.24/0530</td>
<td>24.8/90.7</td>
<td>35-45 gusting to 55</td>
<td>Depression</td>
</tr>
<tr>
<td>28.05.24/1130</td>
<td>25.4/91.5</td>
<td>25-35 gusting to 45</td>
<td>Well Marked Low Pressure Area</td>
</tr>
</tbody>
</table>
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 and eastern districts of Gangetic West Bengal adjacent to Bangladesh on 27th May. Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places likely over eastern districts of Sub-Himalayan West Bengal on 27th and 28th May.

(b) Northeastern States: Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places is likely over Assam, Meghalaya, Arunachal Pradesh, Nagaland, Mizoram, Manipur & Tripura on 27th & 28th May. Isolated extremely heavy rainfall (\(\geq 20\) cm) is also likely over Assam, Meghalaya, Mizoram & Tripura on 27th, and Arunachal Pradesh on 28th May.

Wind Warning:

(a) Bay of Bengal

- Gale wind speed reaching 65-75 kmph gusting to 85 kmph is prevailing over North Bay of Bengal. It is likely to decrease becoming squally wind speed reaching 50-60 kmph gusting to 70 kmph by evening of 27th May.

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph will continue to prevail over adjoining central Bay of Bengal till afternoon of 27th May.

(b) Along & off Bangladesh and West Bengal coasts

- Gale wind speed reaching 65-75 kmph gusting to 85 kmph will continue to prevail along & off Bangladesh and adjoining West Bengal coasts during next 3 hours. It is likely to decrease becoming squally wind speed reaching 45-55 kmph gusting to 65 kmph by evening of 27th May and decrease gradually thereafter.

- Gale wind speed reaching 60-70 kmph gusting to 80 kmph will continue to prevail over Howrah, Hoogly, Kolkata & Nadia and squally wind speed reaching 45-55 gusting to 65 kmph over East Medinipur during next 3 hours. The wind speed would decrease over these regions gradually thereafter.

(c) Along & off North Odisha coasts

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail during next 6 hours and decrease thereafter.

(d) Northeastern States

- Squally wind speed reaching 50-60 kmph gusting to 70 kmph is likely over South Assam and Meghalaya, Tripura and 40-50 kmph gusting to 60 kmph is likely over & Mizoram, Manipur and remaining parts of Assam on 27th May. It would reduce to 40-50 gusting to 60 kmph over Assam & Meghalaya till noon of 28th May.

Sea condition warning:

(a) North Bay of Bengal

High Sea condition is likely over North Bay of Bengal till afternoon and gradually improve becoming very rough to rough thereafter till night of 27th May. It would improve thereafter.

(b) Along & off Bangladesh and West Bengal coasts

High sea condition is likely along & off Bangladesh and West Bengal coasts till afternoon and gradually improve becoming very rough to rough thereafter till 27th May night. It would improve thereafter.

(c) Along &off North Odisha coast

Rough sea condition is likely along & off North Odisha coast during next 6 hours and improve thereafter.

(d) Central Bay of Bengal

Rough sea condition is likely to prevail over central Bay of Bengal during next 6 hours and improve thereafter.
Damage Expected over West Bengal (South & North 24 Parganas, Howrah, Hoogly, Kolkata, Nadia, Murshidabad districts) and Northeastern States (Assam, Meghalaya, Manipur, Tripura, Mizoram)

- Damage to vulnerable structures and thatched houses/huts.
- Unattached metal sheets may fly.
- Breaking of tree branches, uprooting of small trees. Damage to banana and papaya trees.
- Partial damage to power and communication lines due to breaking of branches and uprooting of small 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 Damage Expected over West Bengal (South & North 24 Parganas, Howrah, Hoogly, Kolkata, Nadia, Murshidabad districts) and Northeastern States (Assam, Meghalaya, Manipur, Tripura, Mizoram) on 27th May:

- People in vulnerable areas to move to safer places.
- People in affected areas to remain indoors.
- Total suspension of fishing operations on 27th May.
- Surface transport and shipping Onshore & Offshore operations over North Bay of Bengal need to be regulated till afternoon of 27th May
- Avoid going to areas that face the water logging problems often.

Fishermen Warning (graphics attached):
Fishermen are advised not to venture into North Bay of Bengal along and off West Bengal and Bangladesh coasts till 27th May evening.

The system is under continuous surveillance and the next message will be issued at 1730 hours IST of today, the 27th 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
Cyclonic Storm ‘Remal’
23.0°N/89.2°E
Kolkata Radar Image 1410 hrs IST of today, the 27th May
FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY IN ASSOCIATION WITH CYCLONIC STORM ‘REMAL’ OVER BANGLADESH AND ADJOINING WEST BENGAL BASED ON 0600 UTC (1130 IST) OF 27TH 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 (20.33 KT)
CS: CYCLONIC STORM (34.47 KT)
SCS: SEVERE CYCLONIC STORM (48.63 KT)
VSCS: VERY SEVERE CYCLONIC STORM (64.89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90.119 KT)
SUPER CYCLONIC STORM (> 120 KT)

<table>
<thead>
<tr>
<th>Forecast Date and Time (UTC)</th>
<th>Distance (KM) and Direction from Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Canning</td>
</tr>
<tr>
<td>27.05.24/0000</td>
<td>100, NNE</td>
</tr>
<tr>
<td>27.05.24/0600</td>
<td>170, NNE</td>
</tr>
<tr>
<td>27.05.24/1200</td>
<td>260, NNE</td>
</tr>
<tr>
<td>28.05.24/0000</td>
<td>360, NE</td>
</tr>
<tr>
<td>28.05.24/0600</td>
<td>460, NE</td>
</tr>
</tbody>
</table>
FORECAST TRACK ALONG WITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH CYCLONIC STORM ‘REMAL’ OVER BANGLADESH AND ADJOINING WEST BENGAL BASED ON 0600 UTC (1130 IST) OF 27TH MAY 2024.

DATE/TIME IN UTC
IST=UTC + 0530

- L: LOW PRESSURE AREA
- WML: WELL MARKED LOW PRESSURE AREA
- D: DEPRESSION (17.33 KT)
- DD: DEEP DEPRESSION (28.33 KT)
- CS: CYCLONIC STORM (34.47 KT)
- SCS: SEVERE CYCLONIC STORM (49.63 KT)
- VSCS: VERY SEVERE CYCLONIC STORM (64.89 KT)
- ESSCS: EXTREMELY SEVERE CYCLONIC STORM (80.119 KT)
- SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

IMPACT OVER THE SEA

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

LESS THAN 34 KT
34.47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONES OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34.47 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥ 118 KMPH)
All India Warning Graphics

SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
27-05-2024

SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
28-05-2024

SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
29-05-2024

SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
30-05-2024
Warning Graphics of West Bengal

Weather Warnings
Date: 27/05/2024
(Till 0300 IST of 28/05/2024)

Wind Warning For
27.05.2024

Weather Warnings
Date: 28/05/2024
(Till 0900 IST of 29/05/2024)

Wind Warning For
28.05.2024
Warning Graphics of North-eastern States of India

**MANIPUR**

Weather Warning Map
Manipur
Day 3 (27-05-2024)

- Warning
  - Alert (Be Prepared)
  - Gale force wind with speed 60 to 90 km/hour reaching in isolated places
  - Heavy rain is very likely in isolated places

Weather Warning Map
Manipur
Day 4 (28-05-2024)

- Warning
  - Wind gusting to 60 km/hour
  - Heavy rain is very likely in isolated places

Metereological Centre / ณ อม อม ง ญ
Imphal – 795140 / ณ ใต ง ญ – 795140

**MIZORAM**

Day 1

Day 2
Fishermen Warning Graphics

Day 1: 26.05.2024/11:30 AM to 27.05.2024/05:30AM

Day 2: 27.05.2024/05:30AM to 28.05.2024/05:30AM

Day 3: 28.05.2024/05:30AM to 29.05.2024/05:30AM

Day 4: 29.05.2024/05:30AM to 30.05.2024/05:30AM

Day 5: 30.05.2024/05:30AM to 31.05.2024/05:30AM

Squally WX with wind speed 35-45 kmph gusting to 55 kmph
Squally WX with wind speed 45-55 kmph gusting to 65 kmph
Squally wind with speed 45-55 kmph gusting to 65 kmph
Squally wind with speed 50-60 kmph gusting to 70 kmph
CS with Gale wind speed 60-90 kmph gusting to 110 kmph
SCS with Gale wind speed 90-120 kmph gusting to 135 kmph

Fishermen are advised not to venture into the marked areas.
### Wind Reported over West Bengal

**MAXIMUM WIND REPORTED IN AWS STATIONS ON 26th & 27th MAY 2024**

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>AWS NAME</th>
<th>DATE</th>
<th>TIME</th>
<th>WIND DIR</th>
<th>WIND SPEED(KT)</th>
<th>MAX GUST(KT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUTH TWENTY FOUR PARGANAS</td>
<td>CANNING</td>
<td>26-05-2024</td>
<td>16:15:00</td>
<td>47</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>SOUTH TWENTY FOUR PARGANAS</td>
<td>RAMKRISHNA MISSION COLLEGE</td>
<td>26-05-2024</td>
<td>20:15:00</td>
<td>20</td>
<td>14</td>
<td>42</td>
</tr>
<tr>
<td>HOOGHLY</td>
<td>DEGREE COLLEGE TARAKESWAR</td>
<td>27-05-2024</td>
<td>00:15:00</td>
<td>337</td>
<td>17</td>
<td>41</td>
</tr>
<tr>
<td>HOWRAH</td>
<td>ULUBERIA</td>
<td>27-05-2024</td>
<td>00:00:00</td>
<td>281</td>
<td>17</td>
<td>39</td>
</tr>
<tr>
<td>SOUTH TWENTY FOUR PARGANAS</td>
<td>DIAMOND HARBOUR</td>
<td>26-05-2024</td>
<td>13:45:00</td>
<td>7</td>
<td>22</td>
<td>37</td>
</tr>
<tr>
<td>SOUTH TWENTY FOUR PARGANAS</td>
<td>BARUJPUR AMF</td>
<td>26-05-2024</td>
<td>20:00:00</td>
<td>333</td>
<td>14</td>
<td>37</td>
</tr>
<tr>
<td>HOWRAH</td>
<td>RAMSADAY COLLEGE AMTA</td>
<td>27-05-2024</td>
<td>00:15:00</td>
<td>297</td>
<td>17</td>
<td>36</td>
</tr>
<tr>
<td>DURGAPUR</td>
<td>KZI AIRPORT</td>
<td>26-05-2024</td>
<td>13:10:00</td>
<td>89</td>
<td>17</td>
<td>35</td>
</tr>
<tr>
<td>NADIA</td>
<td>KALYANI AMRI</td>
<td>26-05-2024</td>
<td>22:30:00</td>
<td>346</td>
<td>14</td>
<td>35</td>
</tr>
<tr>
<td>HOWRAH</td>
<td>KVK HOWRAH JAGATBALLAVAPUR</td>
<td>26-05-2024</td>
<td>19:30:00</td>
<td>325</td>
<td>12</td>
<td>35</td>
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<tr>
<td>SOUTH TWENTY FOUR PARGANAS</td>
<td>GANGASAGAR</td>
<td>26-05-2024</td>
<td>13:00:00</td>
<td>125</td>
<td>13</td>
<td>34</td>
</tr>
<tr>
<td>SOUTH TWENTY FOUR PARGANAS</td>
<td>NIMPITH</td>
<td>26-05-2024</td>
<td>13:00:00</td>
<td>42</td>
<td>12</td>
<td>34</td>
</tr>
<tr>
<td>SOUTH TWENTY FOUR PARGANAS</td>
<td>RAIDIGHI</td>
<td>26-05-2024</td>
<td>13:45:00</td>
<td>107</td>
<td>10</td>
<td>34</td>
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<tr>
<td>EAST MIDNAPORE</td>
<td>TAMLUK</td>
<td>27-05-2024</td>
<td>18:45:00</td>
<td>301</td>
<td>11</td>
<td>-</td>
</tr>
</tbody>
</table>

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**Flash Flood Guidance for Northeastern States**

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 28-05-2024:

Moderate flash flood risk likely over few watersheds & neighbourhoods of Arunachal Pradesh, Assam & Meghalaya and NMMT Met Sub-divisions during next 24 hours.

Surface runoff/Inundation may occur on low lying areas due to persistent rainfall under the influence of impending Cyclonic Storm "Rema" in next 24 hours.

<table>
<thead>
<tr>
<th>Flash Flood Threat</th>
<th>Flash Flood Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="high.png" alt="High Threat" /></td>
<td><img src="high.png" alt="High Risk" /></td>
</tr>
<tr>
<td><img src="moderate.png" alt="Moderate Threat" /></td>
<td><img src="moderate.png" alt="Moderate Risk" /></td>
</tr>
<tr>
<td><img src="low.png" alt="Low Threat" /></td>
<td><img src="low.png" alt="Low Risk" /></td>
</tr>
</tbody>
</table>