



## Monthly and Seasonal Outlook of Rainfall for Chattogram and Cox's Bazar Region, Bangladesh

Issued on August 08, 2021

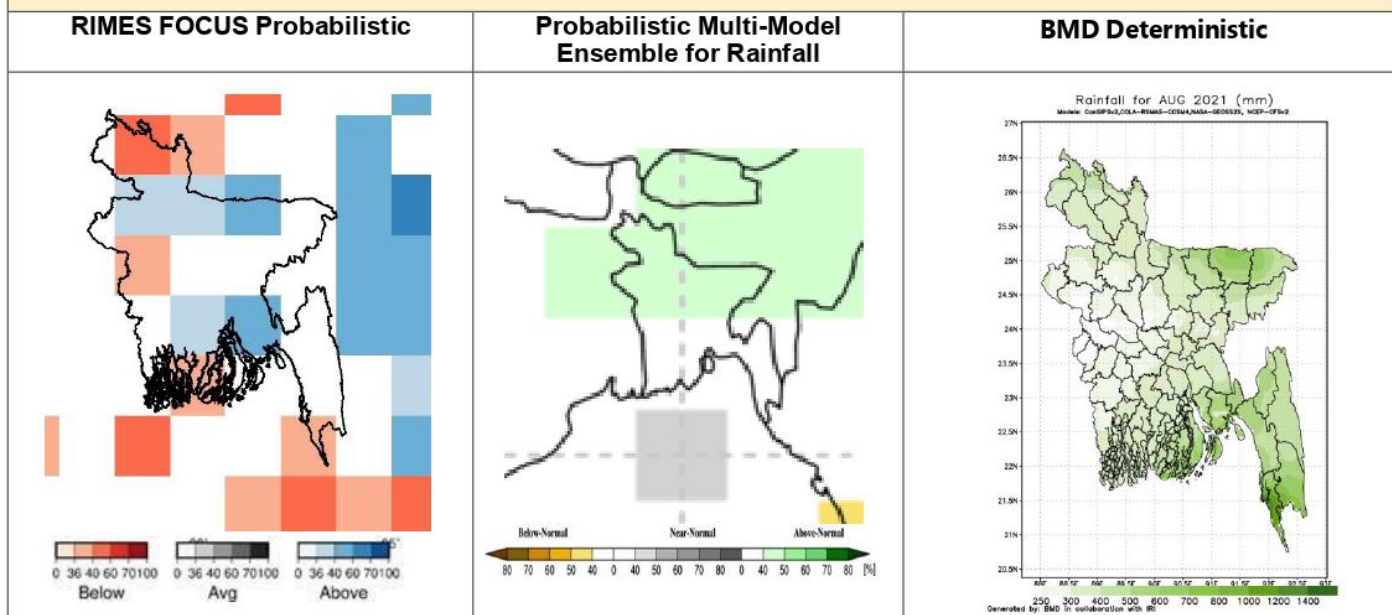
For the Month August and August-September-October

### Observed Climate in July 2021

The cumulative rainfall for the month of July in Cox's Bazar was 1095 mm and in Teknaf was 1003 mm which indicates normal rainfall in Cox's Bazar (13%) and in Teknaf (-12%) during July. For reference, based on the climatology (1980 - 2018) the normal cumulative rainfall for the month of July is 968 mm in Cox's Bazar and 1145 mm in Teknaf. The overall rainfall scenario was normal for the Cox's Bazar and Teknaf region. Due to active monsoon phase there were 4 low pressures in the Bay of Bengal.

### Outlook for August 2021

Considering World Meteorological Organization (WMO) designated global center model outputs, RIMES FOCUS probabilistic outlook and BMD's deterministic forecast, it is highly likely that the month of August would bring normal to below normal rainfall for the Chattogram-Cox's Bazar region. For reference, based on the climatology (1980 - 2018) the normal cumulative rainfall for the month of August in Cox's Bazar is 682 mm and Teknaf is 889 mm. Considering the available model output there is 35-40% chance of normal to below normal rainfall in Cox's Bazar region during the month of August. Overall, the whole country may receive normal rainfall during August, 2021, except the northern western part.

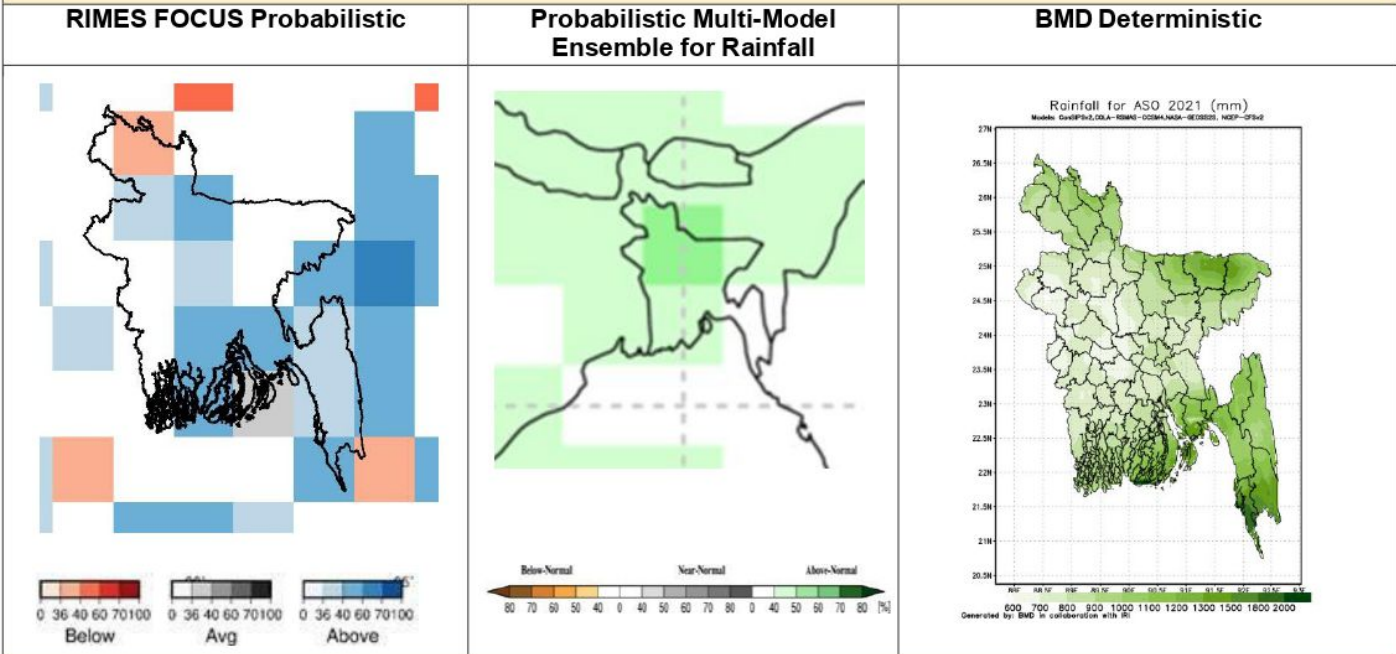


The bulletin is prepared by the Regional Integrated Multi-Hazard Early Warning System for Asia and Africa (RIMES) in collaboration with the Bangladesh Meteorological Department (BMD).

There may occur 1-2 low pressures due to active monsoon which may turn depression during August, 2021. However, no conclusion can be made on a monthly scale on possibilities of any extreme event.

**Outlook for August-September-October, 2021**

Considering WMO designated global center model outputs, RIMES FOCUS probabilistic outlook and BMD’s deterministic forecast, it is highly likely that the month of August-September-October would bring normal to above normal rainfall for the Chattogram-Cox’s Bazar region. Based on the climatology (1980 - 2018) the normal cumulative rainfall for August-September-October in Cox’s Bazar is 438 mm and in Teknaf is 534 mm. Overall, analyzing different models there is 40-50% chance of normal to above normal rainfall during August-September-October over the Chattogram-Cox’s Bazar region. The whole country also may receive above normal rainfall during these three months’ period except the northern part of Bangladesh.



**Overview**

The climate outlook provides a broader perspective of the possible climate for the coming month and season. This monthly and seasonal outlook (August & August-September-October) is generated by analyzing various global models and the monthly forecast of the Bangladesh Meteorological Department. In this outlook, forecast generated by the RIMES FOCUS tool is also included (which shall be tested experimentally for Bangladesh).



## Interpretation of climate outlooks

In general, the climate outlooks are presented in two different ways. But first we need to explain **Normal**. Normal in climate terms is the Long Period Average (LPA) of the rainfall over a location using 30 years or more of rainfall data (measured at a station). The average is considered as the “Normal” rainfall for the region. And seasonal climate outlook is to estimate if the season will have more than Normal, less than Normal rainfall or equivalent to normal rainfall.

### Forecast methods:

1. **Deterministic:** Deterministic forecast explains the percentage (%) departure from the Normal. If we expect 20% or less than Normal rainfall, we call it be **Below Normal**, if we expect 20% or more, we can it **Above Normal** and anything within the  $\pm 20\%$  is called the **Near Normal** rainfall for the season.

2. **Probabilistic:** The probabilistic approach explains the possibility (chance) of a certain amount of rainfall happening. For example, what is the chance of the season to be Below normal, or Normal or above Normal. If we say 45% Below normal, 30 % Normal and 25 % Above Normal. There is highly likely chance for the season to be Normal to Below Normal with a combined (75%) chance.

### Important Note

Below Normal rainfall does not indicate there will be no or less extreme rainfall events. There can be high intensity rainfall within short period of time followed by extended dry spells which may still sum up as Below Normal for the month. Users are advised to follow short and medium range forecast of BMD to keep track of extreme weather events. This outlook will be updated at the first week of September, 2021.