

## Climate of Assam

The **climate of Assam** is **Subtropical** according to the [Koeppen Climate Classification System](#). The region experiences a **distinct wet and dry season**, influenced by its proximity to the Bay of Bengal, the Brahmaputra River, and surrounding mountain ranges.

### Monsoon Season (June to September)

Assam's climate is characterized by the **monsoon season**, which occurs from June to September. During this period, the southwest monsoon brings sufficient amounts of rainfall for its agriculture and overall ecosystem.

### Flood in Brahmaputra River

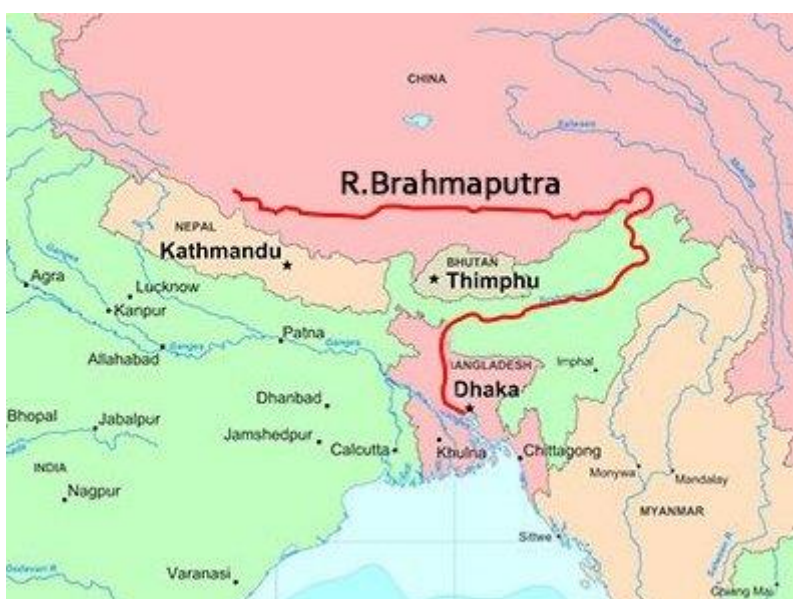
Assam receives one of the highest amounts of rainfall in India, with an average annual precipitation ranging from **2,500 to 3,000 millimeters**. Continuous rain during the monsoon leads to flooding in certain areas, especially along the banks of the Brahmaputra River.

### Dry Season (October to May)

The dry season prevails **from October to May**, with relatively lower rainfall and drier conditions compared to the monsoon months. **Winters (November to February) are generally cool and comfortable, with temperatures ranging from 10°C to 25°C**. Pre-monsoon months from March to May are relatively warmer, with temperatures rising to around 30° or higher during the day. The dry season is conducive to agricultural activities and outdoor tourism, given the pleasant weather.

### Factors Affecting the Climate of Assam

**Brahmaputra River:** The presence of the Brahmaputra River significantly **shapes the climate of Assam**. The river valley acts as a **channel for the monsoon winds, resulting in heavy rainfall in the region**.



## **Brahmaputra River**[/caption]

**Himalayas and Eastern Himalayas:** The Himalayas and the Eastern Himalayas to the north and northeast of Assam impact the climate. The mountains act as **barriers to cold northern winds during winter, keeping temperatures relatively mild.**

**Bay of Bengal:** The Bay of Bengal to the south of Assam also contributes to the region's climate by influencing the monsoon winds and the onset of the southwest monsoon.

### **How Climate of Assam affects the Biodiversity of the Region?**

Assam's subtropical climate fosters a **rich biodiversity and abundant vegetation.** The state's fertile plains and favorable weather support a variety of crops, with tea being a significant agricultural product. However, the region's susceptibility to monsoon floods can pose challenges for agriculture and infrastructure development.



### **Koppen Classification of Assam**

According to the Koppen climate classification, Assam's climate can be categorized as a combination of two main climate types: Tropical Monsoon Climate (Am) and Humid Subtropical Climate (Cwa).

**Tropical Monsoon Climate (Am):** This climate type is prevalent in most parts of Assam, like Guwahati and Jorhat. The Am climate is characterized by **high temperatures throughout the year and distinct wet and dry seasons.**

**Humid Subtropical Climate (Cwa):** The [Cwa climate](#) is found in certain areas of Assam, particularly in the **southern and southeastern parts of the state.** This climate type is characterized by hot and humid summers and milder winters with moderate rainfall.

The combination of these two climate types makes **Assam's weather quite diverse.**