Does Topography Affect the Climate?

Climate is the word used to describe a region's long-term weather patterns. Looking at overall temperature and precipitation over time is the easiest way to explain the environment. The type and timing of precipitation, the amount of sunlight, average wind speeds and paths, the number of days above zero degrees, weather extremes, and local geography are all useful elements for defining climate (Lovejoy, 2013).

A variety of interconnected variables affect the environment of any given place. Latitude, elevation, surrounding sea, ocean waves, topography, vegetation, and prevailing winds are all factors to consider. The global climate environment and any changes within it affect the local atmosphere (Wang, 2019).

There have been a lot of significant changes in Earth's climate, according to geological reports. Many environmental causes have contributed to this, including fluctuations in the sun, volcanic emissions, shifts in Earth's orbit, and carbon dioxide levels. Historically, global climate rise has taken thousands or millions of years to develop. However, evidence indicates that the current atmosphere is evolving at a faster rate than previously thought based on geological data (Altieri & Koohafkan, 2008).

According to (Kalnay et al., 1996), the United States of America is a large and varied nation with a broad range of geographical characteristics and climatic conditions. And if they are almost at the same altitude, the climatic patterns on the East and West coasts of the United States vary (Levinson & Waple, 2004).

If we glance at a map of the United States, we can see that the eastern side of the country is bordered by the Atlantic Ocean, while the Pacific Ocean borders the western coast. Ocean currents still influence the temperature of the surrounding land. As a result, these oceans would undoubtedly affect the climatic conditions along this region.

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