Global Climate Changes

Climate Regions of the Globe

The word weather means “the atmospheric conditions at a specific place and time.” The weather can vary from day to day. In contrast to weather, climate is “the general or average atmospheric conditions of a region.” In different areas of the globe, the climate generally stays the same from year to year. For example, the climate in the desert is usually very dry. It may be cold in winter and hot in summer, but there is very little rain or humidity. In contrast, in tropical rain forests, there is very high humidity. In most other areas of the world, the weather is cool or cold and wet or dry in the winter season. It is warm or hot and dry or humid in the summer months.

According to some meteorologists (weather researchers), the earth’s climate is changing slowly. In most places on the earth, the weather varies from season to season or even from day to day. In contrast, the typical climate is similar every year. Even so, there may be global climate changes from one long time period to another. What are these changes? Some scientists believe the weather is becoming more extreme. There are longer periods of very cold and very hot temperatures. There are more and more powerful hurricanes and tornadoes (storms with strong, fast winds) and blizzards (heavy snowstorms). Floods (large amounts of water on dry land) and long droughts (times without enough rain) are causing greater and greater physical damage

to the human communities on Earth. These extreme forces of nature will get even worse in the future, say some people. And every change in climate in one part of the globe will bring more extreme changes in other areas.

Global warming and *El Niño* are having major effects on the earth’s atmosphere, weather, and climate. At least that’s the opinion of many researchers and scientists. What is global warming? It is a slow increase in the average yearly temperature of the planet. The cause is an increase of gases in the atmosphere. What is *El Nino*? The Spanish phrase means “The Little Boy” or “The Christ Child.” It names a weather condition most common in the month of December. This “seasonal weather disorder” is a change in the atmosphere of the tropical areas of the Pacific Ocean. It increases the amount of rain in the Americas and can bring strong winds and hurricanes. In contrast, *El Niño* may cause drought in the southern and western Pacific (Asia). Blizzards, snow, and long periods of low temperatures may follow in the northern regions of the globe.

Not all meteorologists believe there is much natural global warming. According to these scientists, the El Niño effect is not getting stronger. So why is the temperature of the earth going up? Why are tropical storms like hurricanes causing more and greater flood and wind damage?

Probably, human beings are the main cause of the extreme effects of weather and climate changes. Cars and factories are putting more and more gases like carbon dioxide (C02) into the earth’s atmosphere. Coal and oil add carbon dioxide to the air, too. Trees and plants take in carbon dioxide, but humans are cutting down the rain forests and putting up buildings where green plants used to grow. The world has a lot of people now, and it will have a lot more people in the future.