

Patterns in the Natural World

Comparing Weather and Climate



weather

The daily conditions of the atmosphere in a given area.

The state of the atmosphere at a given time and place due to variables such as temperature, precipitation, humidity, wind, clouds, and pressure.

Affects the environment and how we dress.



climate

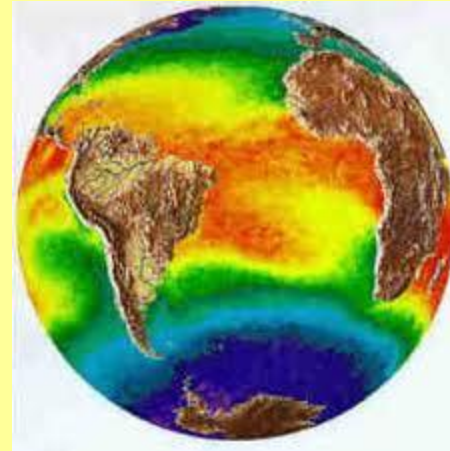
The average (overall) conditions of the atmosphere over many years.

Weather information that describes the weather during a specified time (usually 30 years) and will include information about weather extremes for a specific area .

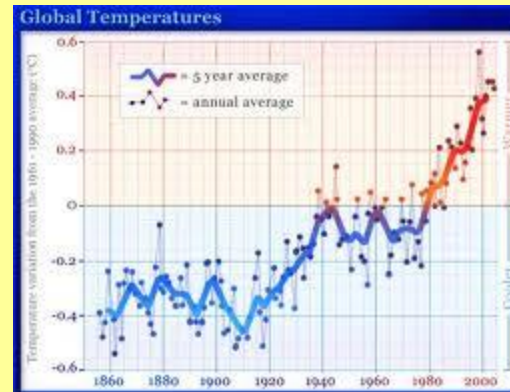


global climate*

Worldwide weather averages collected over a long period of time.



Global climate can change, but it is not easy or quickly done.



humidity

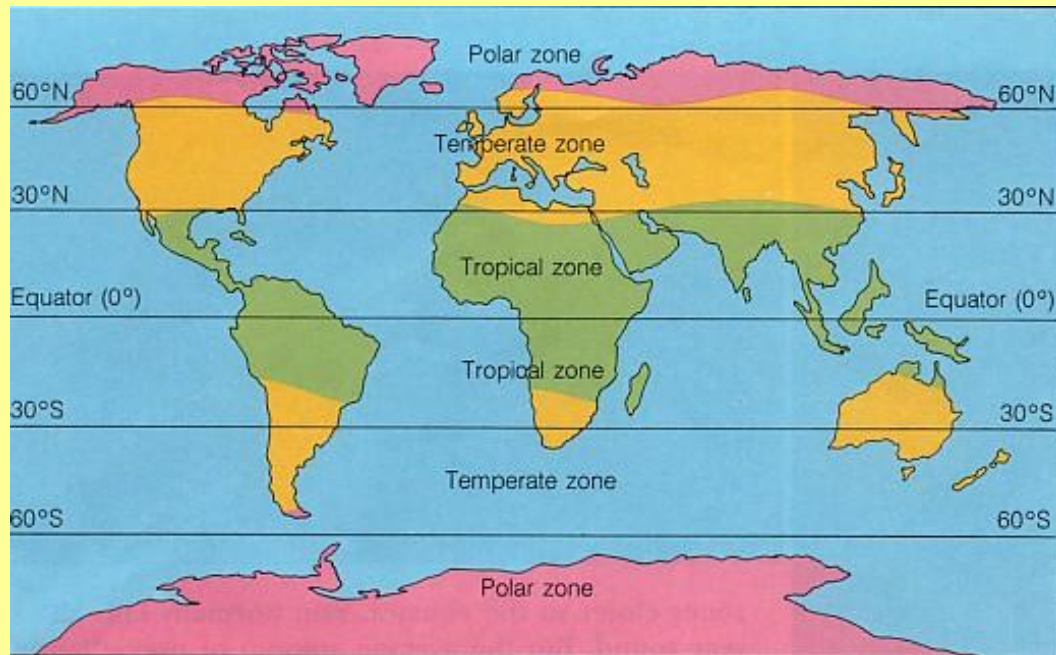
The amount of water vapor or moisture in the air. The more water, the higher the humidity.

Changes with temperature



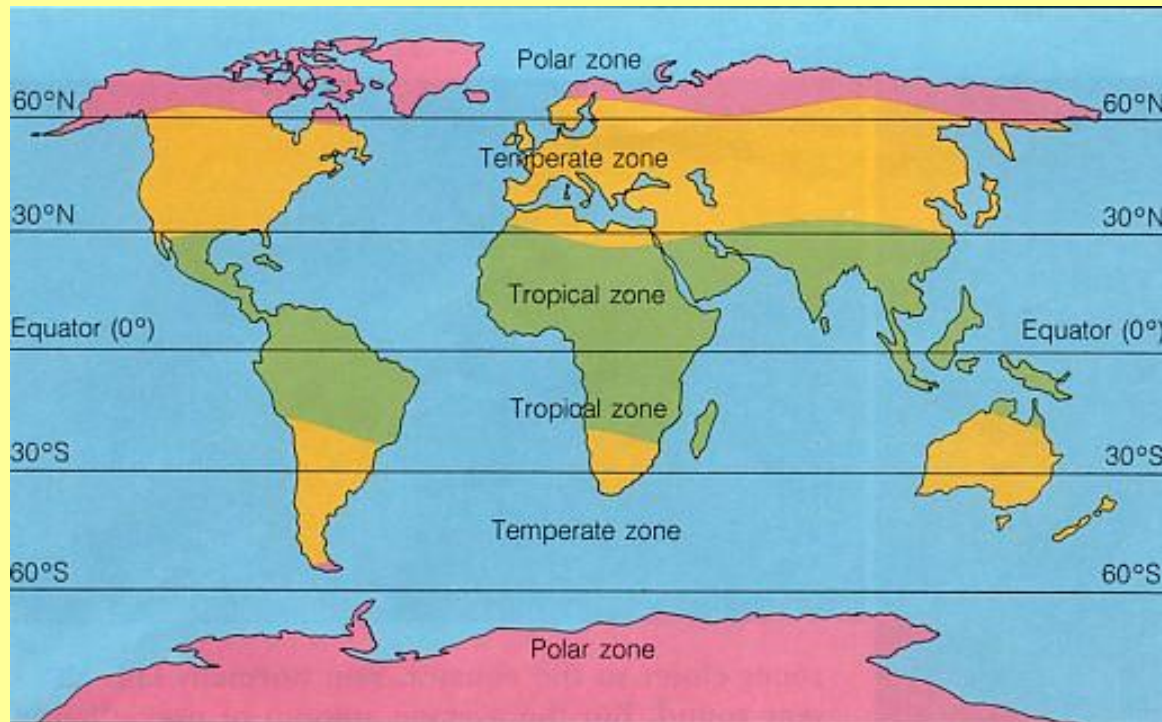
latitude

How close an area is to the equator.



climate zone*

Any of the 3 divided areas of Earth's climate based on latitude



Polar (artic) climate zone

- Extreme coldness
- Covered in ice and snow year round
- Found near the poles
- Temperature mostly below 10 degrees
- Little precipitation
- Few plants and animals live here



Tropical climate zone

- Climate of heat and rain
- Near the equator
- Plentiful forests and hot deserts
- Sun directly overhead year round
- Temperatures greater than 18 degrees C
- Rain varies



Temperate climate zone

- Moderate temperatures
- Varying amounts of precipitation
- In between extremes of cold and hot
- 4 distinct seasons
- United States has a temperate climate



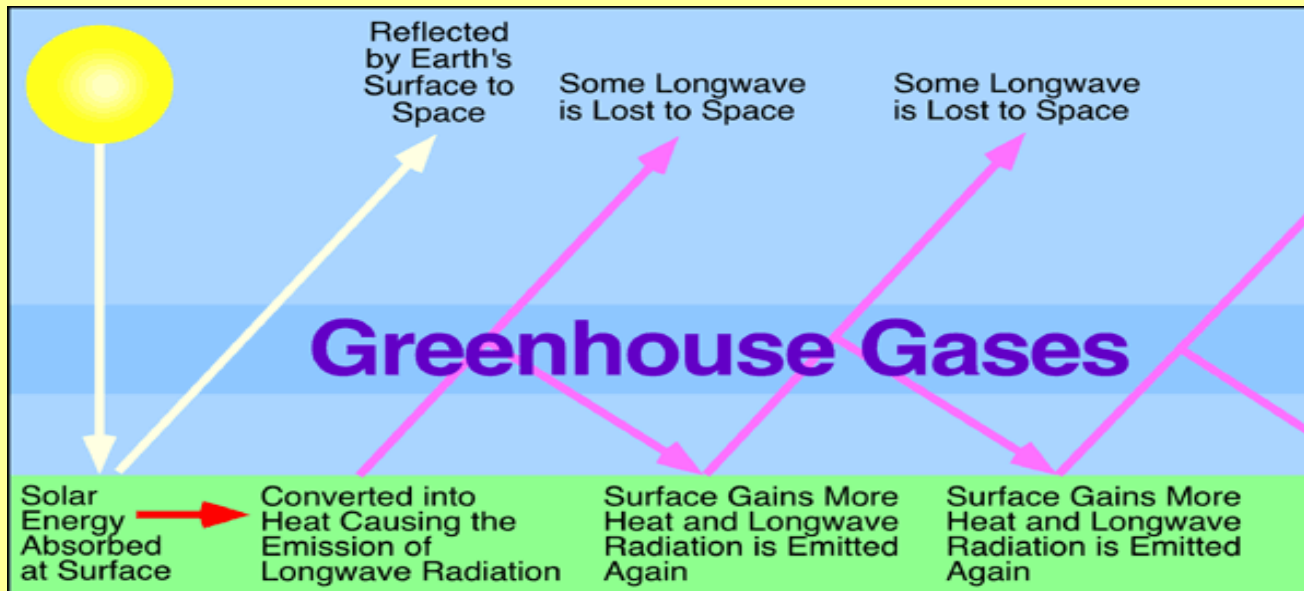
Desert climate*

- Tropical climate zone
- Extremely hot and dry areas
- Too little precipitation to sustain vegetation
- Also called arid
- Complete opposite of polar/arctic



greenhouse gases*

Atmosphere gases, carbon dioxide and water vapor, that traps and absorbs infrared radiation in order to allow sunlight to pass through the atmosphere and reach the Earth instead of escaping back into space



greenhouse effect

natural process of atmospheric gases
keeping the Earth warm by absorbing
energy

