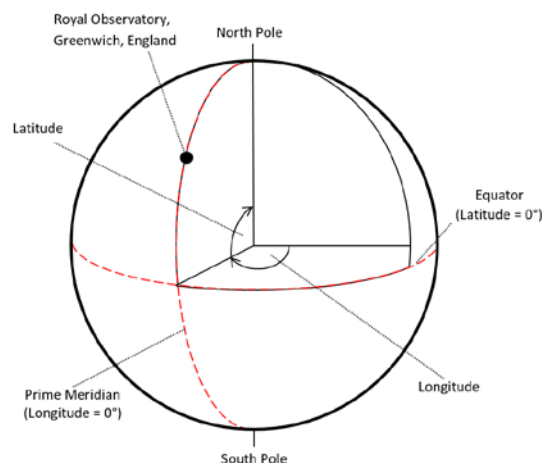


Latitude and Longitude

What are latitude and longitude?

Combined, latitude and longitude are part of the geographic coordinate system. They provide you with the position of an object anywhere on the earth.

Latitude is an angle measured from the center of the Earth (see diagram) that provides an object's north-south location on the Earth's surface. Latitude is measured in degrees and is often represented by the Greek letter *phi* (ϕ). Latitude ranges from 0 degrees at the Equator (a line that marks the center of the Earth) to 90 degrees at the poles. Lines of constant latitude run east-west around the Earth. Four other important lines of latitude are the Tropic of Cancer, Tropic of Capricorn, Arctic Circle, and Antarctic Circle.



Longitude is an angle also measured in degrees that provides an object's east-west location on the Earth's surface. Longitude is often represented by the Greek letter *lambda* (λ). Lines of constant longitude run north-south from the North Pole to the South Pole and are called meridians. The Prime Meridian, considered 0 degrees runs north-south and passes through the Royal Observatory in Greenwich, England. Longitude is measured up to +180 degrees east and -180 degrees west from the Prime Meridian.

Taken together, **latitude** and **longitude** can provide any location on the Earth's surface. Below is a map of the world with lines of latitude and longitude:

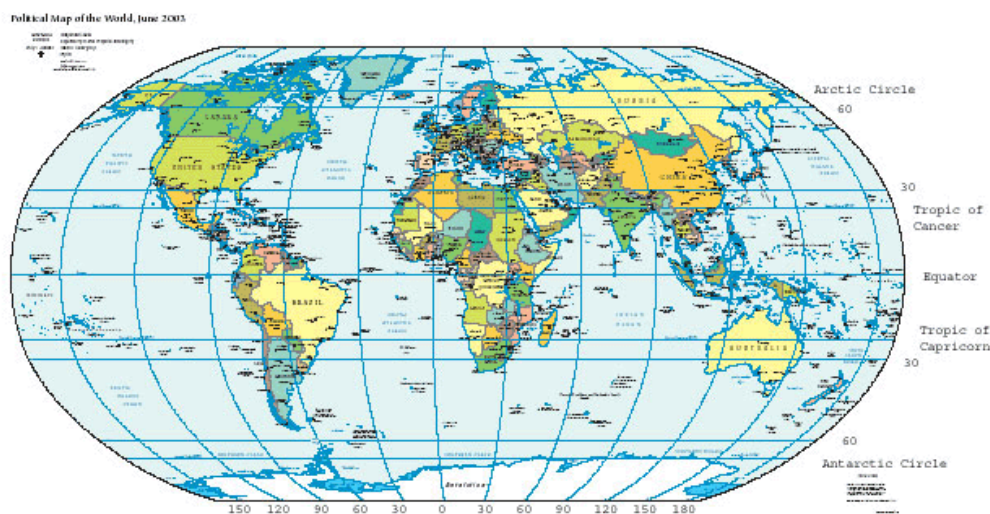


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