

Latitude and Longitude

Any location on Earth is described by two numbers--its latitude and its longitude.

Latitude: On a globe of the Earth, lines of latitude are circles of different size. The longest is the equator, whose latitude is zero, while at the poles--at latitudes 90° north and 90° south (or -90°) the circles shrink to a point.

Longitude: On the globe, lines of constant longitude ("meridians") extend from pole to pole.

Every meridian must cross the equator. Since the equator is a circle, we can divide it--like any circle--into 360 degrees, and the longitude of a point is then the marked value of that division where its meridian meets the equator.

For historical reasons, the longitude (meridian) passing the old Royal Astronomical Observatory in Greenwich England, is the one chosen as zero longitude. Located at the eastern edge of London, the British capital, the observatory is now a public museum and a brass band stretching across its yard marks the "prime meridian."

A line of longitude is also called a meridian, derived from the Latin, from meri, a variation of "medius" which denotes "middle", and diem, meaning "day." The word once meant "noon", and times of the day before noon were known as "ante meridian", while times after it were "post meridian." Today's abbreviations a.m. and p.m. come from these terms, and the Sun at noon was said to be "passing meridian". All points on the same line of longitude experienced noon (and any other hour) at the same time and were therefore said to be on the same "meridian line".