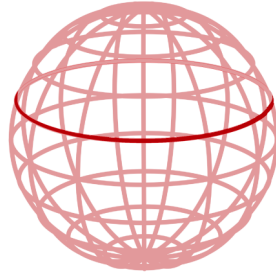


Longitude and Latitude

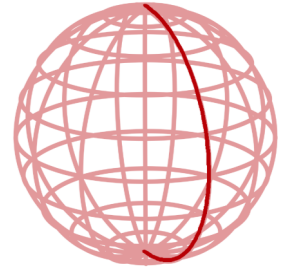
Definitions

A Latitude Line is an imaginary line running in a west-east plain on the Earth's surface. They are sometimes called Parallels. Latitude coordinates tell geographers how far north or south a place is located.

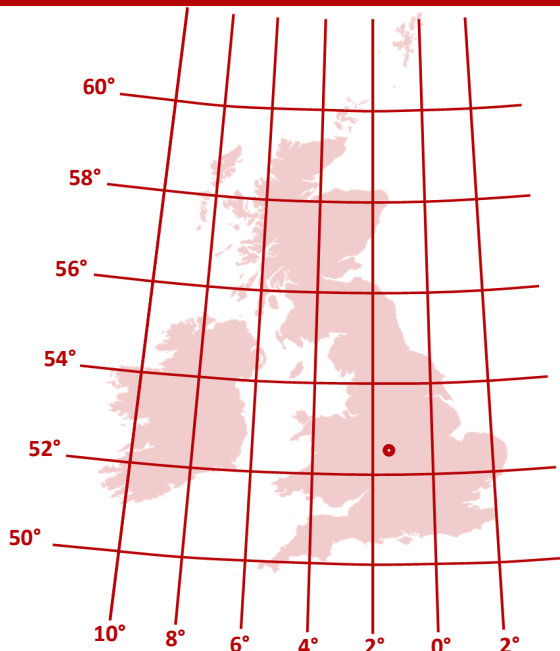


The 0° latitudinal line, from which all other latitude lines are measured, is the Equator.

A Longitude Line is an imaginary line running in a north-south plain on the Earth's surface. They are sometimes called Meridians. Longitude coordinates tell geographers how far west or east a place is located.



The 0° longitudinal line, from which all other longitude lines are measured, is the Greenwich or Prime Meridian in London.



Recording Longitude and Latitude

Latitude is measured in degrees north or south while longitude is measured in degrees west or east. They can be read off maps that include longitude/latitude grid lines or from GPS units. Latitude always precedes longitude when written down.

For example the latitude and longitude of Birmingham, UK is:

52.4° N 1.8° W

The Tropics and the International Date Line

Not all longitude lines are straight. The International Date Line curves around groups of islands in the south Pacific as they share the same time zone as each other.

The Tropics are two latitude lines which are often picked out by cartographers. They represent the points where the Sun is directly overhead at the start of summer (Cancer) and winter (Capricorn), the dates for when these occur are known as the Summer or Winter Equinox.

Problems with representing Longitude and Latitude on maps

Unlike the grid lines on an UK Ordnance Survey Map, the latitude and longitudinal lines on a world map do not form perfect squares.

This is because accurately representing the curvature of the Earth on a flat plain is impossible: instead grid 'squares' become more elongated as one moves towards the Poles. This is to enable the cartographer to 'fit' all the detail onto the map.

