

The Equator is the datum from which latitude North or South is measured.

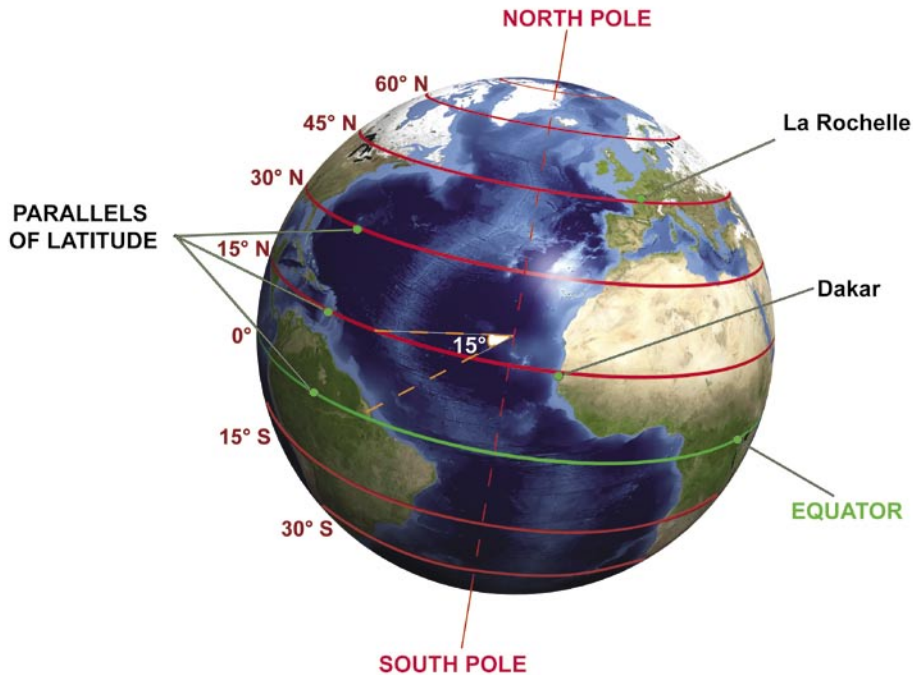


Figure 1.4 Parallels of Latitude.

Parallels of Latitude.

Imaginary east–west lines that are parallel with the **Equator** are known as **parallels of latitude**. The **Equator** is the datum from which **latitude North** or **South** is measured. **Parallels of latitude** extend from the **Equator**, which is designated **0° North/South**, to **90°** at the geographical poles.

Because the **parallels of latitude** are **spaced equally** between the **Equator** and the **Poles**, each **degree, minute** and **second** of **latitude** represents the same distance on the Earth’s surface all over the globe: **one degree of latitude is 60 nautical miles; one minute of latitude is one nautical mile, and one second represents 34 yards (31 metres)**. This latter relationship between **degrees, minutes** and **seconds** and **distances on the Earth’s surface** also holds true for all **distances** measured along a **great circle**.

Dakar, Senegal, lies at **14° 38’ North**, and **La Rochelle, France** is situated at **46° 10’ North**.

Defining the Location of Any Point on Earth.

Using **latitude and longitude** as the reference, any point on the Earth’s surface can be defined. For example, in Figure 1.3, **Tunis** lies at **36° 47’ North, 10° 10’ East**, and **Sao Paulo** lies at **23° 52’ South, 46° 37’ West**. **Madrid** is situated at **40° 23’ North, 3° 46’ West** and **St John’s, Newfoundland**, lies at **47° 37’ North, 52° 45’ West**.