ZONNEWIJZER

UW ZONNEWIJZER OP MAAT THE SUN SHINES FOR EVERYONE

Solar time and sidereal time

Solar time is defined by the position of the sun. At 12:00 solar time the sun is south and 24 solar hours later the sun is south again. Sidereal time is defined by the position of the stars. At 0:00 sidereal time the vernal equinox is south and 24 sidereal hours later the vernal equinox is south again.

Vernal equinox

The vernal equinox is the point in the sky where the sun is when spring starts around March 20. On the astrolabe, the vernal equinox is 0^{O} Aries, so exactly between the zodiac signs Aries and Pisces.

Find the sidereal time

In a previous example, we set the astrolabe to July 11 at 14:00 local solar time. As shown in figure 1, we then found the Sun to be in Cancer at 19.9^{O} and we set the star chart to 14:00 local solar time.

To find the sidereal time for this moment, we keep the star chart in the same place and turn the ruler to the vernal equinox, so between the zodiac signs Aries and Pisces. In the edge of the astrolabe we find the sidereal time, namely 9:26, see figure 2.

So, on July 11 at 14:00 local solar time, it is 9:26 sidereal time.

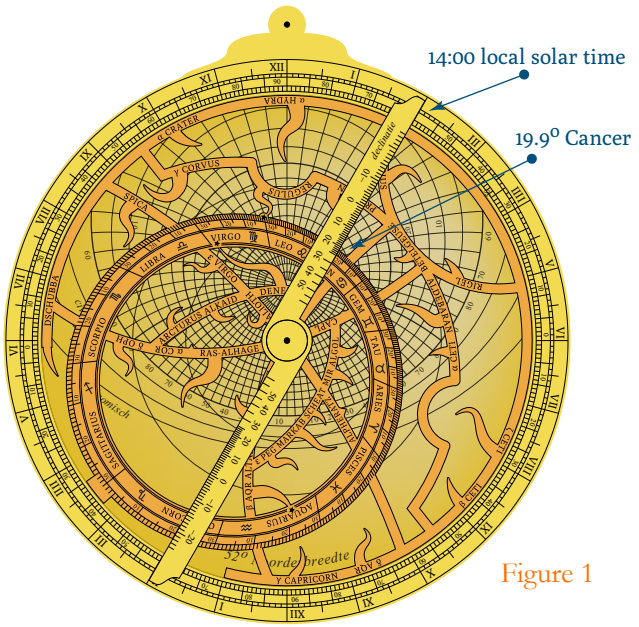

Figure 1

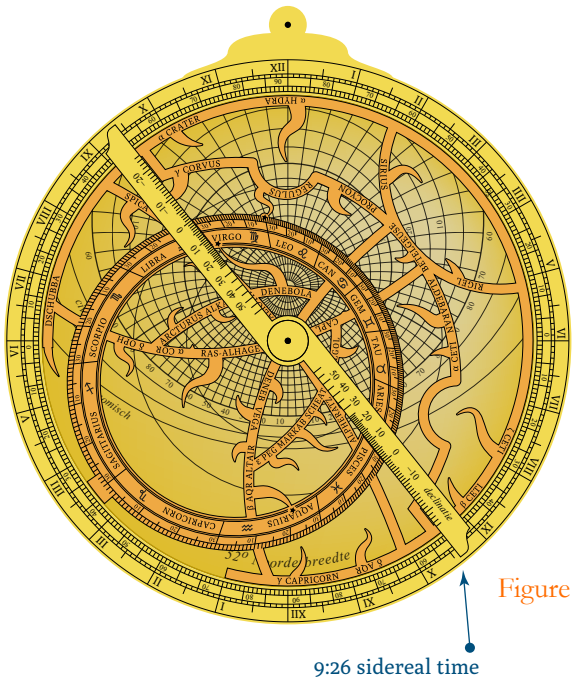

Figure 2

Uw Zonnewijzer op maat
T 06 16 462 879 | info@zonnewijzer.nl |
Amsterdam | www.zonnewijzer.nl |