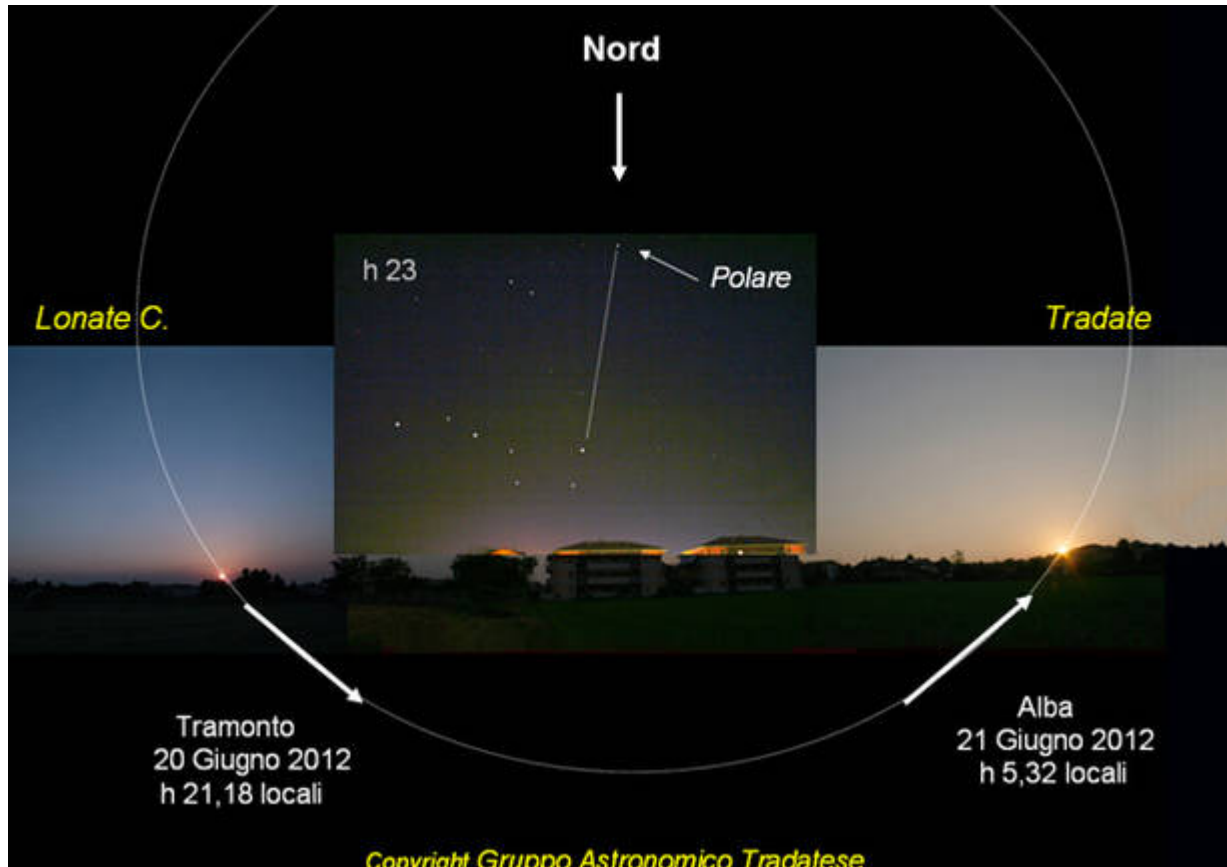


Leap year, spring has come earlier

Publicato: Giovedì 24 Marzo 2016



As 2016 is leap year, spring does not begin on 21 March but on the previous day, today, on the **morning of Sunday, 20 March, at 6.30 a.m. local time**. From the astronomic point of view, this means that, at exactly at 6.30 a.m., during its annual movement along the ecliptic, the Sun crossed the celestial equator (that is, the extension into space, of the earth's equator).

Two thousand one hundred years ago, the intersection of the ecliptic with the celestial equator was in the constellation of Aries; this is why **the beginning of spring coincided with the point of Aries**. But **today**, because of the precession of the equinoxes, **the Sun is in the constellation of Pisces**, at the beginning of spring, **and will then go into Aquarius, in around the year 2700, and so on**.

There is something that it never changes in relation to the beginning of spring, the fact that **the sun rises exactly in the east and sets exactly in the west, staying above the horizon for almost exactly 12 hours** (from which we get the term EQUI-nox, day and night are of equal length). It is wonderful (weather permitting, and if the horizon is clear!) to take photos of the sunset on the day of the equinox; it is possible to see the sun going below the horizon at a point (which corresponds with the west cardinal point) that is exactly equidistant from position of the sunset on the winter solstice (21 December) and the position of the sunset on the summer solstice (21 June). This is an exercise that the **Astronomic Group in Tradate** always suggest to students of every age, particularly today when everybody has ultra-modern cell phones and digital cameras. We must not forget (above all, during these days of lovely weather) **that spring nights provide us with a wonderful spectacle in the sky, that of all of the main planets simultaneously visible**. In the early evening, it is Jupiter that dominates (between Leo and

Virgo), then, after midnight, Mars (in Libra) and Saturn (in Scorpio) rise in the east. Finally, in the early light of dawn, we can see Venus shining. As the weeks pass, Mars and Saturn rise earlier and earlier, making them increasingly easy to see throughout the night. Mars deserves a special mention, because, on 22 May, it will be in opposition (Sun – Earth – Mars), so, “near” the Earth, and spectacularly visible, with its red-orange colour, even through a small telescope.

di Translated by Manuela Venuto (Reviewed by Prof. Rolf Cook)