## 2 Aldebaran in the constellation Taurus

Distance

67 light years

Luminosity
150 times that of the sun

Colour Orange

Surface temperature 3,900 K

Diameter 44 times the diameter of the sun (To Planet Trail scale: 62 m)

Evening visibility

November to March

Aldebaran is the brightest star in the constellation Taurus and the ninth brightest star we can see in the sky. Aldebaran falls into the red giant phase of the star life cycle. It is notable for its exceptional size and great luminosity. The star has a radius of around 30 million kilometres, meaning that if it replaced the sun in our solar system, its surface would extend halfway to Mercury's orbit. Aldebaran is in fact part of a binary star system. Its companion is a red dwarf. The question of whether the companion star is physically bound to Aldebaran has not yet been conclusively settled. Although Aldebaran lies along the same line of sight as the Hyades star cluster, it isn't actually part of it as it is located much closer to Earth.

The constellation Taurus gives its name to the corresponding sign of the zodiac. Our sun passes by the constellation between mid-May and mid-June.

Aldebaran forms the Winter Hexagon together with the stars Capella in Auriga, Pollux in Gemini, Procyon in Canis Minor, Sirius in Canis Major and Rigel in Orion.

Other bright stars in the constellation Taurus:

Elnath Distance: 134 light years Alcyone Distance: 410 light years Tianguan Distance: 400 light years

## **2 Constellation Taurus**

The constellation Taurus appears to the north of the impressive winter constellation Orion. Its distinctive stars form a V shape. This symbolises the head of a bull with its horns. Aldebaran forms the animal's fiery eye. Most of the stars forming the head belong to the Hyades open star cluster. The well-known Pleiades star cluster (also known as the Seven Sisters) lies slightly to the north-west. The apparent path of our sun and the planets passes between them. Together, the Hyades and Pleiades form the Golden Gate of the Ecliptic.

The well-known Crab Nebula (M1) also lies within this constellation. Back in 1054, Chinese astronomers observed a supernova explosion here, the remains of which now appear as a milky patch when viewed through binoculars. The constellation is depicted by the figure of a bull with its head facing forwards; its hindquarters are not shown.

According to Greek mythology, the constellation Taurus is associated with Zeus. The god transformed himself into a tame bull in order to get closer to the beautiful Europa. In the guise of a white bull, he let Europa and her friends pet him and adorn him with flowers on the beach. When Europa decided to ride on him, he slowly made his way from the beach into the sea and swam with her on his back to Crete. Once there, he turned back into himself and seduced Europa.