

THE CONSTELLATION CRATER, THE CUP

Crater is a constellation in the southern sky. Its name is Latin for cup, and in Greek mythology it is identified with the cup of the god Apollo. It was one of the 48 constellations listed by the 2nd century astronomer Ptolemy, and remains one of the 88 modern constellations. It is faint, with no star brighter than third magnitude and few notable deep sky objects. Most galaxies found in the constellation are magnitude 12 or even fainter..

FACTS

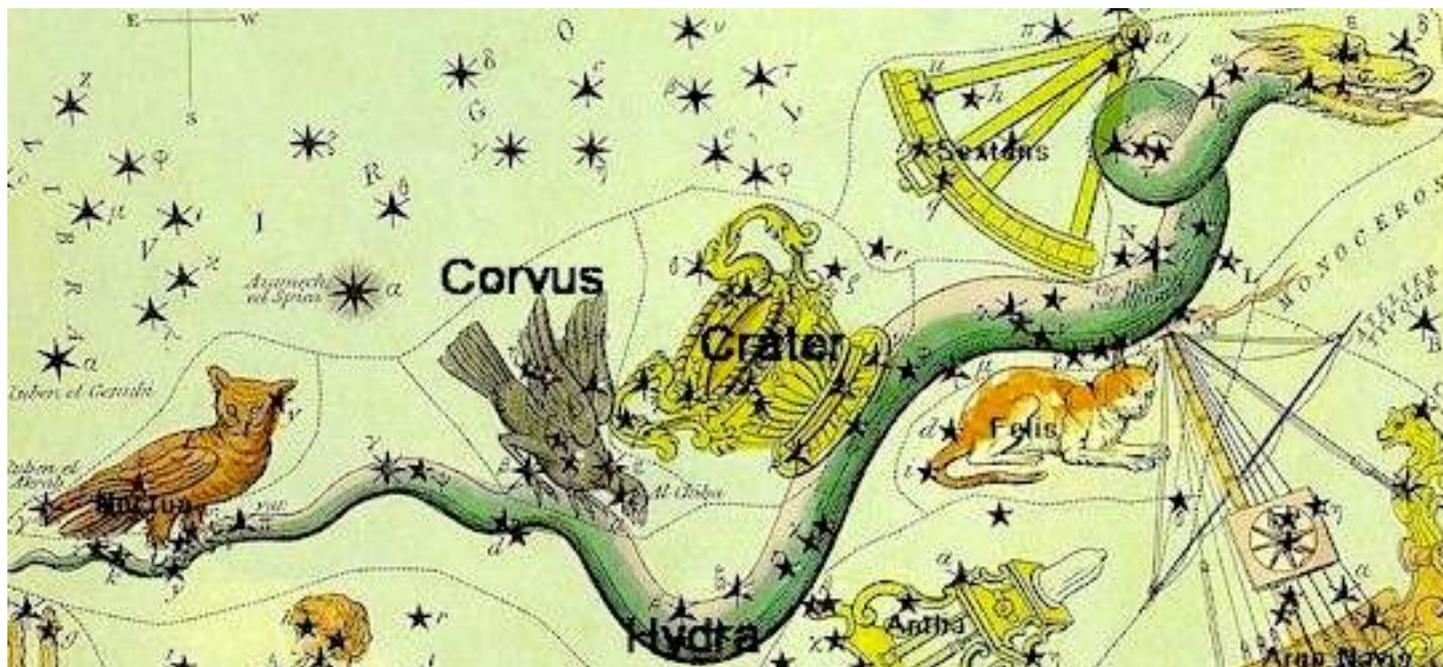
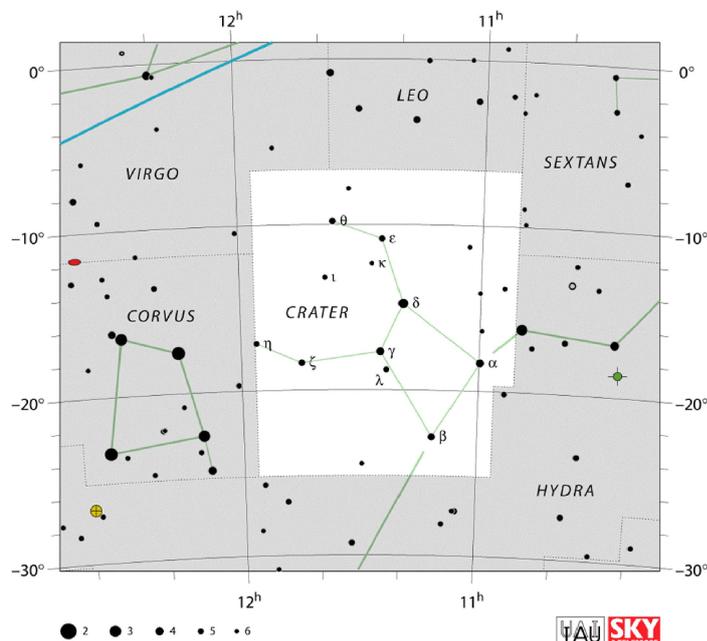
Crater is the 53rd constellation in size, occupying an area of 282 square degrees. It is located in the second quadrant of the southern hemisphere and can be seen at latitudes between +65° and -90°. The neighbouring constellations are Corvus, Hydra, Leo, Sextans, and Virgo.

Crater has three stars with known planets but contains no Messier objects. There is one meteor shower associated with the constellation; the Eta Craterids.

Crater belongs to the Hercules family of constellations, along with Aquila, Ara, Centaurus, Corona Australis, Corvus, Crux, Cygnus, Hercules, Hydra, Lupus, Lyra, Ophiuchus, Sagitta, Scutum, Sextans, Serpens, Triangulum Australe, and Vulpecula.

In Greek mythology the Crater Constellation represents the cup of the god Apollo. It is usually depicted as a two-handed chalice. The constellation is associated with the story of Apollo and his sacred bird, either the crow or the raven, which is represented by the neighbouring constellation Corvus.

In the story, the god Apollo is about to make a sacrifice on the altar and he needs some water to perform the ritual. The god sends the raven to fetch some water in his cup, but the bird gets distracted by a fig tree and spends a few days lazily resting and waiting for the figs to ripen. After feasting on the figs, the raven finally brings Apollo the cup filled with water and he also brings a water snake (Hydra) as an excuse for being so late.



Apollo sees through the raven's lies and angrily casts all three – the cup (Crater), the water snake (Hydra) and the raven (Corvus) into the sky.

Apollo also casts a curse on the raven, scorching its feathers and making the bird eternally thirsty and unable to do anything about it. This, according to the myth, is how crows and ravens came to have black feathers and why they have such raspy voices.

According to Christian legend, the Holy Grail was the dish, plate, or cup used by Jesus at the Last Supper, said to possess miraculous powers. The word grail is believed to be related to Crater, grail is from Old French graal, grael, from Medieval Latin gradalis, 'cup, platter', from Vulgar Latin cratalis, from cratus, 'a mixing bowl', from Latin crater, from Greek krater.

It was known in England two or three centuries ago as the Two-handed Pot; and Smyth tells us of a small ancient vase in the Warwick collection bearing an inscription thus translated:

Wise ancients knew when Crater rose to sight,
Nile's fertile deluge had attained its height;

although Egyptian remains thus far show no allusion to the constellation.

MAJOR STARS IN CRATER

Delta Crateris is an orange giant, approximately 196 light years distant. The star belongs to the spectral class K0III and has an apparent visual magnitude of 3.56. It is the brightest star in the constellation. It is sometimes known as Labrum, which means "the lip" in Latin. The name is associated with the story of the Holy Grail.

Alpha Crateris (Alkes) is a class K1 orange giant, approximately 174 light years from Earth. It has a visual magnitude of 4.07 but is actually 80 times more luminous than the Sun. It is located relatively close to the Galactic centre and is rich with heavy elements. Its traditional name is derived from the Arabic alkas, which means "the cup".

Beta Crateris (Al Sharasif) is a white sub-giant belonging to the spectral class A2III. The star has an apparent magnitude of 4.48 and is approximately 266 light years distant from the solar system. Its traditional name, Al Sharasif, means "the ribs" in Arabic.

Gamma Crateris is the second brightest star in Corvus. It is a close binary star approximately 84 light years distant. The brighter component in the system is a white dwarf, a class A9V star with an apparent magnitude of 4.06. The companion star has a visual magnitude of 9.6.

SZ Crateris is a variable star only 42.9 light years distant from Earth. It has a visual magnitude that varies from 8.61 to 11.0. It is really a binary star system composed of two main sequence stars, belonging to the spectral types K5V and M0V. The system belongs to the Ursa Major moving group (Collinder 285), a group of stars that share a similar motion through space, which includes most of the brightest stars in the constellation Ursa Major.

DEEP SKY OBJECTS IN CRATER

NGC 3887 is an 11th magnitude barred spiral galaxy in Crater. It has a diameter of 3.5'. The galaxy lies about a degree and half from the star *Zeta Crateris*. It has an apparent visual magnitude of 10.7 and is about 68 million light years distant. It was discovered in 1785 by Sir William Herschel.

NGC 3981 is a magnitude 12 SBbc type spiral galaxy. It has two very wide spiral arms and is 3' in diameter. Like NGC 3887, NGC 3981 was discovered by Sir William Herschel in 1785. It is approximately 80 million light years distant from Earth. **NGC 3511**

NGC 3511 is a spiral galaxy in Crater, seen almost edge-on. The galaxy has an apparent magnitude of 11.1. It belongs to the Abell 1060 galaxy cluster. It was discovered by William Herschel on December 21, 1786.

NGC 3513 is also a spiral galaxy, found in the same field of view as NGC 3511. It has an apparent magnitude of 12 and lies approximately 46 million light years from Earth.

