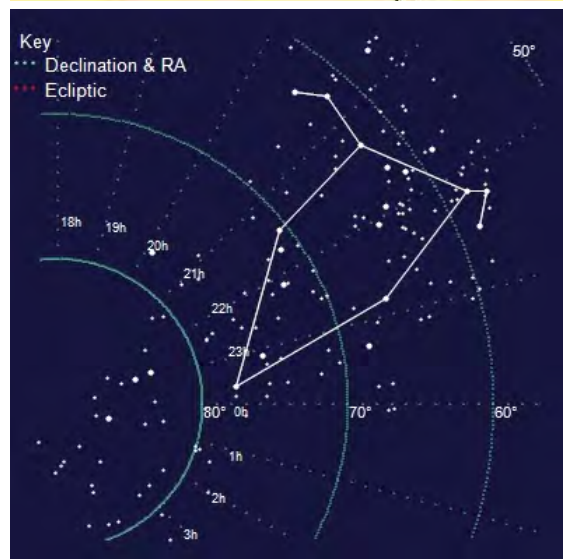
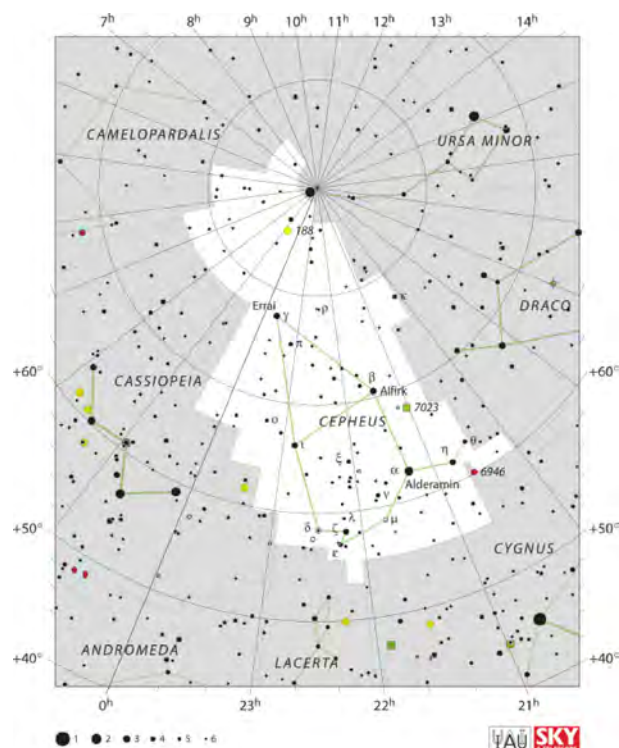


CONSTELLATION CEPHEUS, KING OF ETHIOPIA

Cepheus is a constellation in the northern sky. It is named after Cepheus, King of Aethiopia in Greek mythology. He was deemed worthy of a place in the sky because he was fourth in descent from the nymph Io, one of the loves of Zeus – and having Zeus as a relative was always an advantage when it came to being commemorated among the constellations. It was one of the 48 constellations listed by the 2nd century astronomer **Ptolemy**, and remains one of the 88 modern constellations. Its brightest star is *Alpha Cephei* with an apparent magnitude of 3.5. *Delta Cephei* is the prototype of an important class of star known as a Cepheid variable, a yellow-hued supergiant star 980 light-years from Earth. Discovered to be variable by **John Goodricke** in 1784, it varies between 3.5m and 4.4m over a period of 5 days and 9 hours from a minimum size of 40 solar diameters to a maximum of 46 solar diameters. *RW Cephei*, an orange hypergiant, together with the red supergiants Mu Cephei, (also known as Herschel's Garnet Star), *VV Cephei* and *V354 Cephei* are among the largest stars known. *VV Cephei* has a minimum magnitude of 5.4 and a maximum magnitude of 4.8, it has a diameter of 1,300 solar diameters. In addition, **Cepheus also has the hyperluminous quasar S5 0014+81, hosting an ultramassive black hole in its core at 40 billion solar masses, about 10,000 times more massive than the central black hole of the Milky Way, making it the most massive black hole known in the universe.**

Cepheus is a crowned king in royal robes, whose foot is firmly planted on the Pole star (Polaris, part of Ursa Minor). On the Farnese globe (2nd century A.D.) he is depicted in the garb of a tragic actor. He was the son of Belus, king of Egypt. Cepheus, as mentioned before, is husband of Cassiopeia, and their daughter is Andromeda. Cassiopeia was proud and boasted that she was more beautiful than the Sea Nymphs, the Nereids who were daughters of Poseidon (Neptune). The Nereids complained to Poseidon who sent a sea monster, Cetus, to ravage the coast of Ethiopia. **With his kingdom in grave danger Cepheus consulted the oracle of Ammon in Libya for advice. He learned that the only way to save his kingdom was to sacrifice his daughter to the sea monster.** Andromeda is chained to a rock and left to the mercy of the monster. The hero, Perseus, arrives just in time and falls in love with Andromeda. When the sea monster arrives Perseus kills it, breaks the chains that bind Andromeda to the rock and the wedding follows

Cepheus, the French Cephee and the Italian Cefeo, is shown in royal robes, with one foot on the pole star (Polaris), the other on the **solstitial colure** (the meridian or great circle of the celestial sphere which passes through the poles and the two solstices: the first point of Cancer and the first point of Capricorn.). His head marked by a triangle, the 4th-magnitudes delta, epsilon, and zeta; gamma (Alrai) and kappa, near the knees, forming an equilateral triangle with Polaris. Some see in his stars a large K open towards Cassiopeia. The constellation Cepheus as it can be seen by the naked eye. It is an inconspicuous constellation, but evidently was highly regarded in early times as the father of the Royal Family, and his story well known in early Greek literature.



DEEP-SKY OBJECTS

NGC 7354 is a planetary nebula in the constellation Cepheus.

NGC 188 is an open cluster first discovered by **John Herschel** in 1825. It is the oldest known open clusters and the closest to the north celestial pole.

NGC 6946 (The Fireworks Galaxy) is a spiral galaxy in which nine supernovae have been observed, more than in any other galaxy.

IC 469 is another spiral galaxy, characterized by a compact nucleus, of oval shape, with perceptible side arms.

NGC 7538 nebula is home to the largest yet discovered protostar.

NGC 7023 is a reflection nebula with an associated star cluster (Collinder 429); it has an overall magnitude of 7.7 and is 1400 light-years from Earth. The nebula and cluster are located near *Beta Cephei* and *T Cephei*.

Quasar 6C B0014+8120 is one of the most powerful objects in the universe, powered by a supermassive black hole equivalent to 40 billion Suns.

NGC 7129 is an open cluster star-forming region located in a reflection nebula that has the shape of a rosebud. The cluster contains more than 130 young stars, believed to be less than a million years old. It is approximately 3,300 light years distant and has an apparent magnitude of 11.5.

FACTS

Cepheus is the 27th largest constellation in the night sky, occupying an area of 588 square degrees. It is located in the fourth quadrant of the northern hemisphere (NQ4) and can be seen at latitudes between +90° and -10°.

The brightest star in the constellation is Alderamin, *Alpha Cephei*.

The neighbouring constellations are Camelopardalis, Cassiopeia, Cygnus, Draco, Lacerta, and Ursa Minor.

Cepheus has one star with known planets

It contains no Messier objects.

There are no meteor showers associated with Cepheus

Cepheus is part of the Perseus family of constellations, along with Cassiopeia, Andromeda, Perseus, Pegasus, Cetus, Auriga, Lacerta and Triangulum.

Constellations directly bordering Cepheus are Cygnus, Lacerta, Cassiopeia, Camelopardalis, Draco and Ursa Minor

The kingdom of Cepheus was not the Ethiopia we know today, but stretched from the south-eastern shore of the Mediterranean southwards to the Red Sea, an area that contains parts of the modern Israel, Jordan and Egypt.

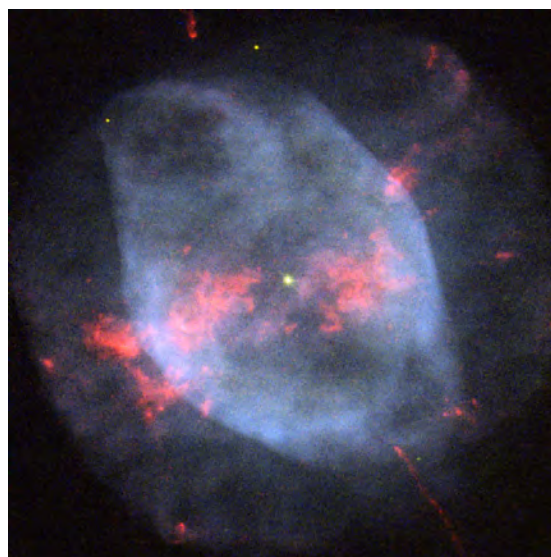
The constellation represents Cepheus, the king of Ethiopia and Cassiopeia's husband in Greek mythology. Zeus placed him in the sky after his tragic death because he was descended from one of Zeus' loves, the nymph Io. Cepheus and Cassiopeia died following the fight that broke out when Perseus and Andromeda were celebrating their wedding. Phineus, Cepheus' brother, turned up claiming that Andromeda had been promised to him and asked that she be turned over to him, but Cepheus refused and there was a fight. Perseus tried to fight off all his opponents, but he was sorely outnumbered and had to use the head of Medusa to turn his enemies into stone. Unfortunately, the king and queen did not look away in time and were turned to stone, too.

AK from Wikipedia Notes

The Fireworks Galaxy



NGC 7129



NGC 7538 is an emission nebula, approximately 9,100 light years distant. The nebula contains the biggest protostar discovered to date. The protostar is 300 times the size of the solar system.