

## Comet Encke nearest the Sun

Faithful Comet Encke – one of the shortest-period comets known – was closest to the sun on 10 March this year. Its frequent returns helped much to reveal the true nature of comets.

Comet Encke, known for its short orbital period of 3.3 years, was at its closest point to the Sun on March 10, 2017. **This point called its perihelion, with the word stemming from the Greek words peri, meaning near, and Helios in honour of the Greek god of the Sun.**

It was visible in February and early March, whipping around the Circlet asterism in the constellation Pisces, in the west shortly after sunset. Now, however, Comet Encke has plunged southward and become lost in the glare of evening twilight. Comet Encke visits us often and is now on its 63rd known visit to our part of space, with uncounted visits before those. And thus it's a well-studied comet and an interesting comet, for many reasons.

Encke is considered a short-period comet, and its orbit is much shorter than – for example – the brighter and more famous Comet Halley, known for its appearances to the unaided eye in Earth's sky. Halley's orbital period is about 75-76 years, and it last appeared in Earth's sky in 1986 and will next return in 2061. Is Encke the shortest-period comet known? Not exactly, although it's the shortest-period comet that becomes visible to observers using modest telescopes or binoculars. The exceedingly faint main-belt Comet 311P/PANSTARRS, for example, has a slightly shorter period of 3.2 years.

Comet Encke has a fascinating history. As its official designation implies, 2P/Encke was the second comet recognized as periodic, after 1P/Halley. **Prior to the time of those recognitions, comets were little understood objects – considered bad omens by the early skywatchers – thought to appear in our sky to influence someone's life.** It was **Pierre Méchain's** 1786 observation of Comet Encke that was the first one to be noticed by science. That is because **Johann Franz Encke** later used Méchain's observation as the first observation in a series, in which he was able – through labourious calculations – to link earlier observations of comets, showing that many of these differently designated objects were in fact one and the same comet.

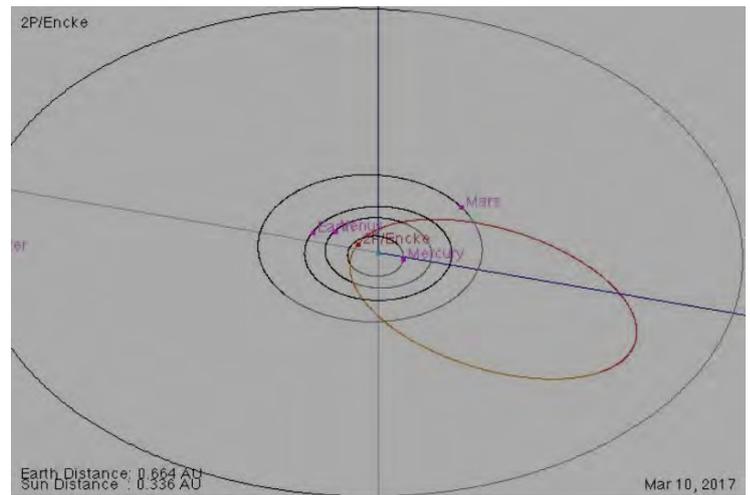
In 1819, Encke published his conclusions in the early journal *Correspondance Astronomique*, correctly predicting the comet's return in 1822. It was recovered by **Carl Ludwig Christian Rümker** on June 2, 1822.

By the way, Comet Encke spawns a meteor shower – a long-lasting one in which many very bright meteors, or “fireballs” can be seen – known as the Taurids. **The South and North Taurids appear in late October and November each year and occur as Earth passes through debris in space left behind by Comet Encke.**

AK, with EarthSky Notes



Comet Encke appears to have three tails in this image. One tail is the comet's dust tail. As the image was taken, the comet's gas or ion tail was split by the turbulent solar wind



Comet Encke's very short orbit. It doesn't even go past Jupiter



Johann Franz Encke, 23 Sep 1791 - 26 Aug 1865. A German astronomer who worked on the calculation of the periods of comets and asteroids, measured the distance from the earth to the sun, and made observations of the planet Saturn