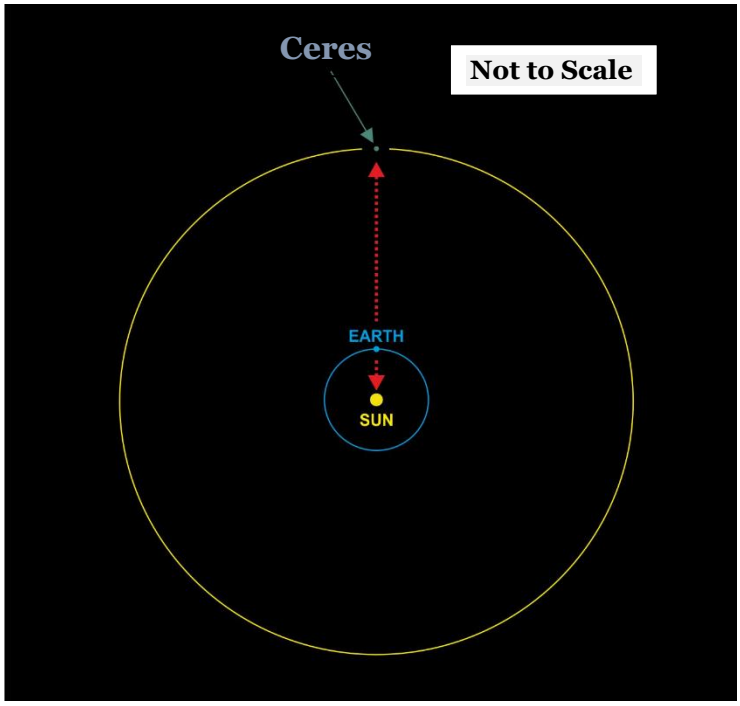
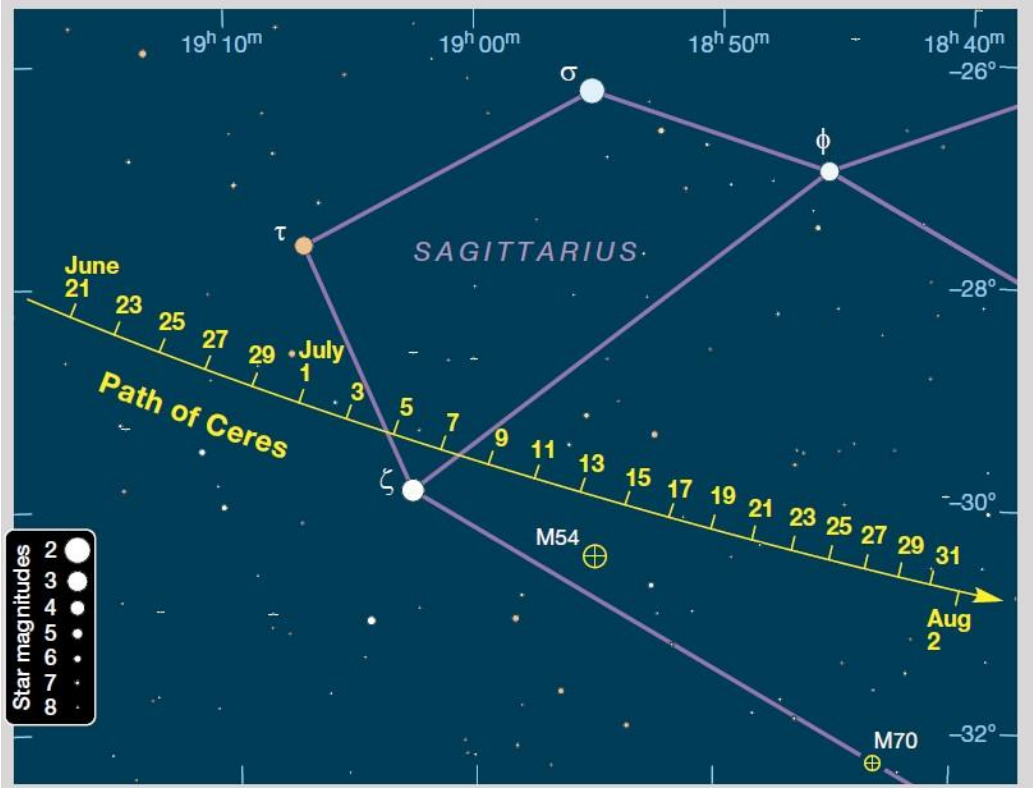
Observe the Largest Asteroid – Dwarf Planet Ceres

- a July 2024 Sky Event from the Astronomy Club of Asheville

Earth reaches "opposition" with "dwarf planet" Ceres on **July 5th**. At opposition, speedier Earth, moving counterclockwise on its inside lane, laps Ceres, positioning the Sun directly opposite the Earth from it.
This puts Ceres closest to Earth for the year and in great observing position for those using a telescope.

Rising at dusk and setting at dawn, Ceres is visible all night during the month of July. Located in the constellation Taurus, Ceres is positioned about 175 million miles (or 16 light-minutes) away from Earth at "opposition" this month.





At magnitude 7.3, Ceres will appear as a small, white dot in most amateur telescopes. In the summer of 2024, you will find Ceres along the ecliptic in the zodiac constellation Sagittarius, the Archer.

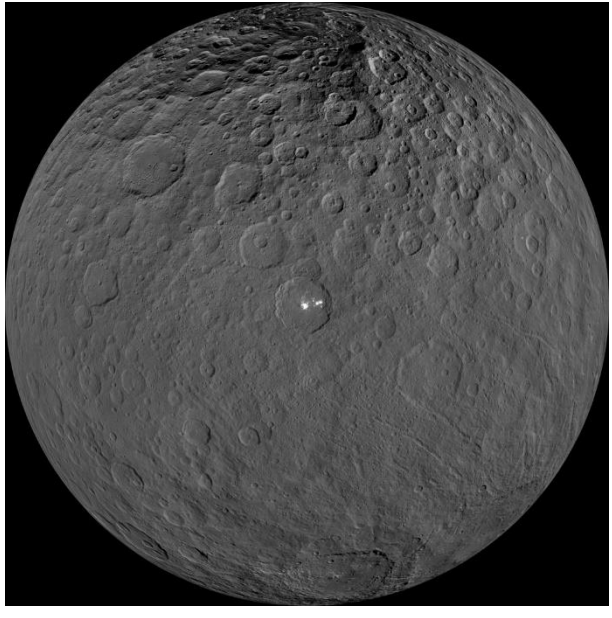
Chart courtesy of Sky & Telescope

Find out more about dwarf planet Ceres on page 2 below…

All About Ceres

Ceres was the first asteroid discovered -- by Italian astronomer Giuseppe Piazzi on January 1,1801 in Palermo, Sicily, using a telescope. It was initially classified as a "planet"! But in 1852, after the discovery of numerous other asteroids, Ceres was "demoted" to the status of asteroid. Sound familiar? Think Pluto and the Kuiper Belt, and its demotion to "dwarf planet" in 2006!

Ceres is the largest object in the asteroid belt that lies between the orbits of Mars and Jupiter, and it is the only object in the asteroid belt large enough to make itself "round". In 2006 Ceres was designated as a "dwarf planet" – the same solar system status as Pluto.



NASA Dawn Mission image of Ceres

Ceres is named after the Roman goddess of agriculture. The word "cereal" also derives from this deity. It has a diameter of 940 kilometers (583 miles), which is about a quarter the size of the Moon. When you think of how many millions of asteroids there are, it's remarkable that Ceres alone accounts for more than 25% of the asteroid belt's total mass. Its stupendous bulk is a big part of its "dwarf planet" status. To qualify as a dwarf planet, an object must orbit the Sun directly, be massive enough for self-gravity to shape it into a sphere, yet not so massive that it dominates its region of space, thus clearing it of other small bodies. Ceres checks all these boxes.***