

July 2024 Highlight

The First-Quarter Moon Hides the Star Spica

On **July 13th** and into the **first hour of July 14th**, the first-quarter Moon will occult the blue-white star Spica in the zodiacal constellation Virgo, the Virgin.

Here in the Asheville area, this occultation will occur low on the western horizon. The Moon will be only 16° above the horizon at first contact (11:28 p.m. EDT), and a mere 3° degrees above the horizon at second contact -- some 69 minutes later. You will need an unobstructed view low to the western horizon to watch this occultation. Using binoculars or a small telescope will increase your chances of observing Spica disappear behind the dark limb of the Moon and then reappear on the opposite and illuminated limb.



Spica's disappearance at 11:28 p.m.



Spica's reappearance at 12:37 a.m.

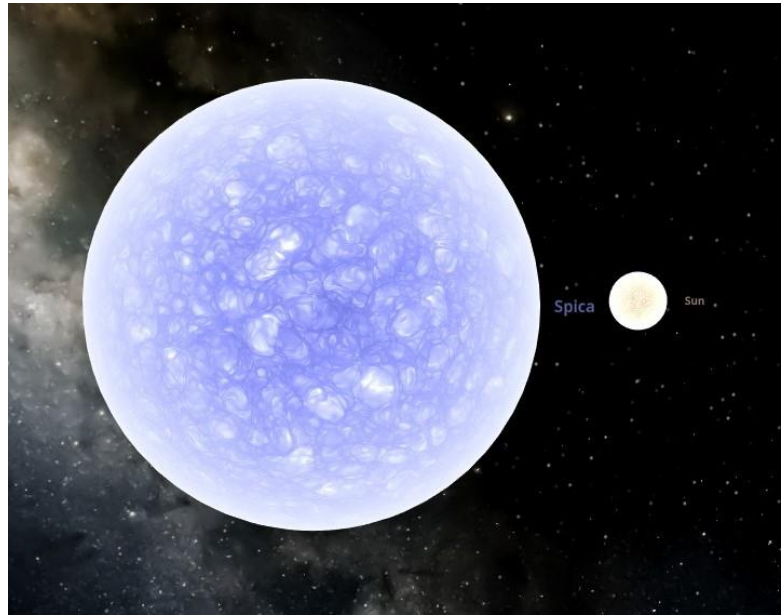
Approximate timings for this 69-minute Spica occultation in the Asheville, NC region:

11:28 p.m. EDT (May 13)	1 st contact and beginning of Spica's disappearance
12:37 a.m. EDT (May 14)	2 nd contact and the beginning of Spica's reappearance

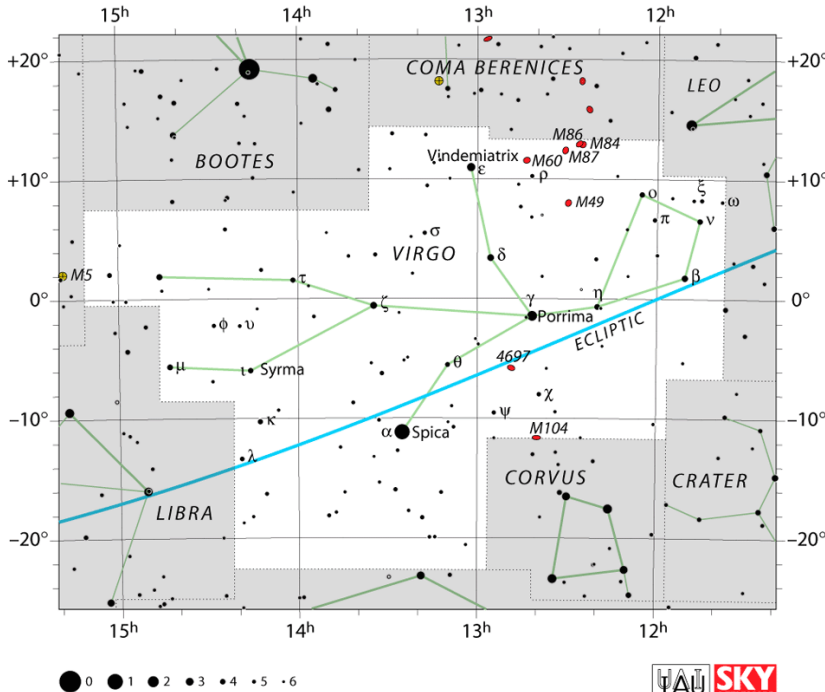
Find out more about the star Spica on page 2.

Spica is the brightest star in the constellation Virgo and one of the brightest stars visible in Earth's night skies. It is located along the ecliptic, some 250 light years away from our Sun. The star Spica is very young, very large, and much hotter than our Sun. Its age is estimated at only 13 million years, compared to the Sun which is about 4.5 billion years old.

Spectral analysis reveals that Spica is part of a very tight binary star system. Its companion, although smaller than Spica, is also a rather large star. The stars orbit each other once every four days, and they are so close to one another that they cannot be resolved as two stars through a telescope.



Blue-white Spica compared to our smaller, yellow Sun



The word Spica comes from Latin, and it means “head of grain”.

Of the 88 officially designated constellations, Spica's host constellation, Virgo, is the 2nd largest in area – only surpassed by Hydra, the Sea Serpent.