

Stars over Sisters

By Alex Burroughs
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The night sky over Sisters in November affords the opportunity to view some splendid sights, including planets, stars and a number of other interesting objects.

Low in the southern sky, the constellation Sculptor can be seen just below Aquarius and Cetus. It is comprised of faint stars, the five brightest making a pentagon shape representing a sculptor in his studio. The reason there are no bright stars in this part of the sky is largely due to the fact that the south pole of our Milky Way Galaxy lies in Sculptor, where the stellar populations are very low.

Sculptor was one of 14 new constellations introduced by French astronomer Nicolas Louis de Lacaille in the 18th century. He originally named it Apparatus Sculptoris, which means “the sculptor’s studio,” but the name was later shortened to Sculptor.

Located approximately 1,500 light-years from Earth is R Sculptoris, an old red giant star in the final stage of its existence. This object is notable for the unusual spiral

structure in the material surrounding it. Astronomers theorize that the phenomenon may be caused by an unseen binary companion throwing off streams of gas.

Sculptor is home to three galaxies of note. Two of them, known as simply the Sculptor Galaxy, and the Sculptor Dwarf Galaxy, are relatively near our Milky Way Galaxy, at 11.4 and 13.4 million light-years, respectively. The third galaxy, called the Cartwheel Galaxy, lies much farther away, at approximately 500 million light-years. All three galaxies are too faint to be seen without optical aid.

The most prominent of these galaxies by far is the Sculptor Galaxy. Because of its color and round, flat shape, it is often referred to as the Silver Dollar or Silver Coin Galaxy. It is a starburst galaxy, meaning that new stars are being born there at a rapid rate. A large cloud of hydrogen gas surrounds the galaxy due to the intense radiation given off by the stars. The Sculptor Galaxy is located between the Alpha Sculptoris and the Beta Ceti.

The waning moon will be at last quarter on November 3 and will continue to thin until



PHOTO COURTESY NASA

The Silver Dollar Galaxy, one of nearest and brightest galaxies to our Milky Way Galaxy, lies in the constellation of Sculptor.

new moon on November 11. This will make for dark nights and excellent stargazing for a few days. The moon will then renew its cycle as it waxes, reaching first quarter on November 18 then becoming the full Beaver Moon on November 25.

In mid-November the annual Leonids meteor shower will put on a light display. At that time the earth will pass through the orbital path of comet Tempel-Tuttle, intercepting debris that produces streaks of light when it hits our atmosphere and is vaporized.

The best time to view this meteor shower is the

mornings of November 17 and 18, between midnight and dawn. Since the moon will be setting in the evening, it won’t interfere with your morning view. Expect to see 15 to 20 meteors per hour.

Approximately every 33 years, this meteor shower becomes a storm, producing up to a thousand meteors per hour. That probably won’t happen again until 2034. Dazzling displays occurred in 1833 and 1966 when up to 100,000 meteors per hour lit up the sky.

During the entire month of November, a group of three planets will put on a

fine display in the morning sky. On November 7 Jupiter, Venus, Mars and a waning crescent moon will be clustered together near the border of Leo and Virgo. As the month progresses the moon will depart and the planets will separate out a bit, but will still be an impressive sight, rising around 3 a.m. and disappearing at sunrise.

Neptune in Aquarius and Uranus in Pisces are located in the evening sky. Although these planets are very faint because they are so far away from both the sun and the earth, they can be spotted with either binoculars or a telescope.

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