

The Night Sky in September 2022



What's going on in the night sky this month?

Real County and the Frio Canyon experienced cloudy skies with glorious rain at the end of August that impeded viewing, but September should be a wonderful time to view our dark skies. We love the full moon, but the best gazing is possible with a new moon, when the moon isn't so bright it fades out the starry show. The full moon occurs on September 10th and the new moon is on the 25th. The week before the 25th would be the best time for stargazing in the evening. Deneb, one of the stars of the Summer Triangle and part of the constellation Cygnus, will be overhead around 10pm. Betelgeuse, the bright red star in Orion, will be rising about midnight, meaning the entire constellation will be visible later in the night and morning sky. On September 22nd the sun passes south of our equator and our summer turns to autumn, an event called the autumnal equinox. Mercury will be hiding behind the western hills or already set. Venus will be just above the eastern hills at sunrise. Mars will rise around 10pm. Jupiter will be rising at sunset and be overhead at midnight. Saturn will be visible all night, setting at sunrise. The moon will appear near Saturn on the 7th, near Jupiter on the 11th, and near Mars around the 16th.



You can see a lot with your naked eyes or a set of binoculars.

The Milky Way will cross the sky from the southeast to the northwest in September with the constellation Cygnus overhead. Cygnus is also known as the swan flying across the Milky Way, and it is also known as the Southern Cross due to the configuration of its prominent stars. See if you can find Polaris, our north star, 30 degrees or three fists width at arm's length, above the north horizon. Polaris is the end of the handle of the Little Dipper, or Ursa Minor. You know our skies are really dark when you can see all seven stars of the Little Dipper! Observe that the stars move around the north star counterclockwise, about 15 degrees per hour, and not quite 360 degrees each day. The Big Dipper, Ursa Major, will be low in the north sky in September. A good place to observe the heavens is away from the city lights...yes, we have them! With binoculars look for M31, the Andromeda Galaxy. With the help of a star map (<https://skymaps.com/skymaps/tesmn2210.pdf>) or star atlas, star hop starting from the Great Square of Pegasus, which should be east-southeast overhead, towards Cassiopeia, the "W" constellation. M31 is about halfway and appears as a misty patch to the naked eye but might show its spirals with binoculars or a telescope.

Happy Sky Gazing!