



# What's in the Sky for September 2023

## **September 4: Jupiter and Moon Rising**

Jupiter and the moon will rise together at approximately 10:50 pm with Jupiter leading the way by a few minutes. You might be able to see this with the naked eye. The Moon will be in the Gibbous phase (a little more than half lit but less than full). A telescope with a moon filter might be just what you need to see this pairing. Look for Jupiter a bit above and to the right of the Moon

## **September 14: New Moon**

The New Moon is the first lunar phase. During the New Moon, the Sun, Earth, and the Moon are aligned. The Moon is situated between the Sun and the Earth. The position of Earth blocks the sunlight, making the Moon invisible to us on Earth.

## **September 16: UNT Public Star Party**

The Star Parties at the Rafes Urban Astronomy Center are one of my favorite activities. If you have never been to one of these, I would highly recommend it. <https://astronomy.unt.edu/observatories/star-parties>

## **September 23: Autumnal Equinox**

The Autumnal Equinox is the point where Earth experiences roughly equal lengths of day and night. In the northern hemisphere it is called the Autumnal Equinox and marks the beginning of Autumn or Fall. In the southern hemisphere it is called the Vernal Equinox and marks the beginning of Spring. There are usually many outdoor festivals around the world celebrating this change in seasons. Little Elm will celebrate Autumn Fest September 14-17 at Little Elm Park. This is a fun event for the entire family with carnival rides, games, live music, food trucks, vendors and a Tacos and Tequila fun walk. <https://lakefrontlittleelm.com/events/autumn-fest-2/>

## **September 29: Full Moon**

The Full Moon closest to the September Equinox is called the Harvest Moon. The Harvest Moon is the most famous of all the Full Moon names. The early moonrise for a few days around the equinox meant that farmers could work and harvest their crops for a longer time each of those days. This year the Harvest Moon will rise around 7:40 pm.

## **Planets—All Month:**

Saturn rises early evening and is viewable all night. Jupiter rises at the beginning of the month around 11:00 pm but by the end of September will rise at 9:00 pm. Mars rises during daylight but may be seen setting about an hour after sunset at the beginning of the month. By the end of the month Mars will be setting with the sun. Venus will rise around 5:00 am at the beginning of the month and will be very bright. You might catch it on your morning commute before sunrise. By the end of the month Venus will be rising around 4:00 am. Uranus begins the month rising at 11:18 pm and ends the month rising around 9:25 pm. Neptune is in the night sky all month but slightly difficult to see. Mercury is a daytime planet during September.