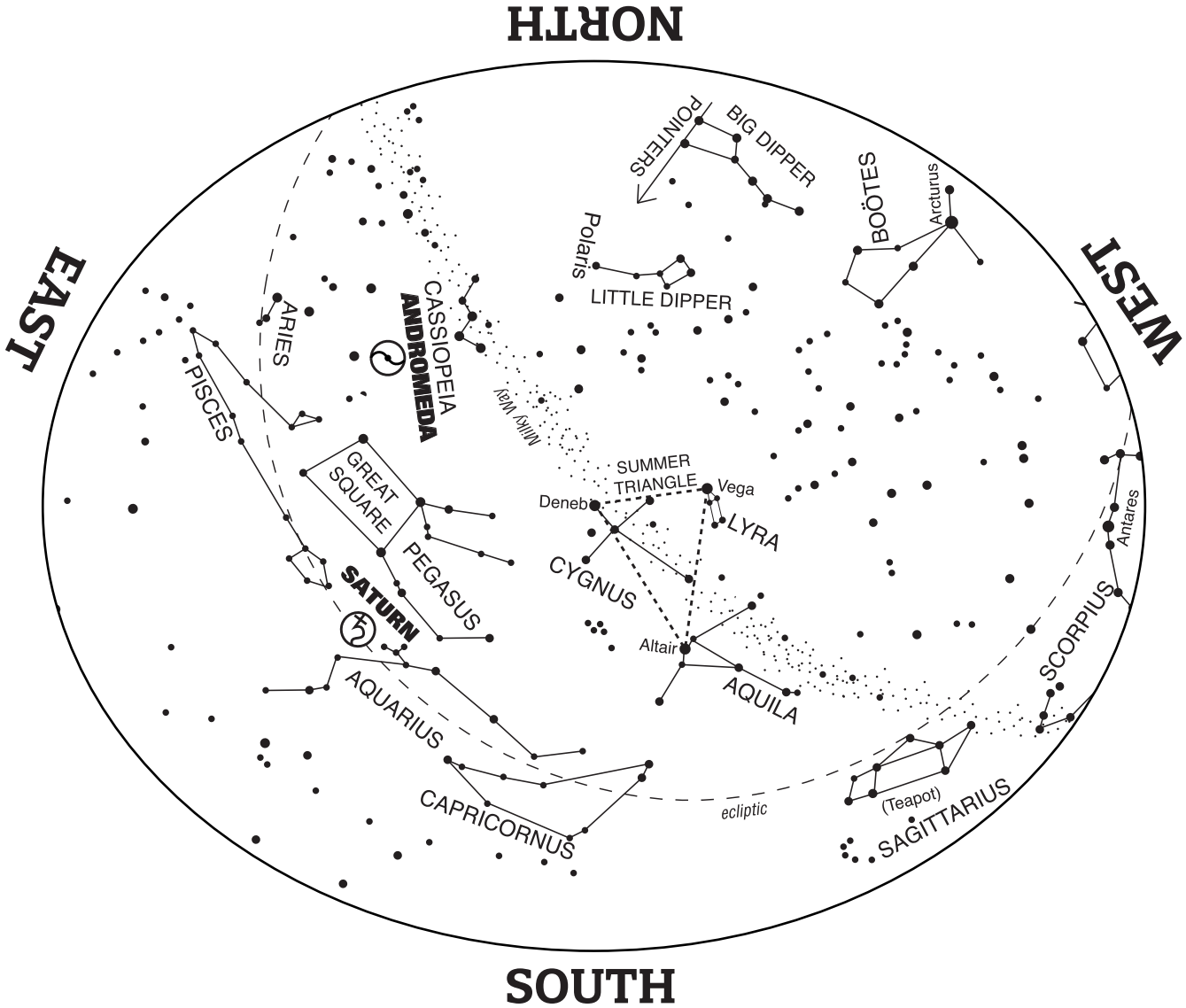


# Starmap

SEPTEMBER/OCTOBER 2024



601 Light Street • Baltimore's Inner Harbor  
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**TO USE MAP:**

Hold the map in front of you so that the direction you are facing is on the bottom. The stars on the lower half on the map will match up with the stars in the sky. The center of the map is directly overhead in the sky. Constellation and star pattern names are all capitalized. Names of stars have only the first letter capitalized. The map is valid within an hour of:  
9:30pm Mid-Sept. EDT  
7:30pm Mid-Oct. EDT

**MAGNITUDE** is a measure of a star's brightness.

The lower the number, the brighter the star

- 1<sup>st</sup> or brighter magnitude star
- 2<sup>nd</sup> magnitude star
- 3<sup>rd</sup> magnitude star
- 4<sup>th</sup> or fainter magnitude star

**ECLIPTIC:**

The imaginary path of the Sun through the year. Constellations of the Zodiac surround the Ecliptic and the Moon and planets appear along it.

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## IN THE SEPTEMBER/OCTOBER SKY

● Sept. 1 New Moon	● Oct. 1 Andromeda Galaxy at its highest point in the sky (See <i>Celestial Highlights</i> )
◐ Sept. 11 First Quarter Moon	● Oct. 2 New Moon
● Sept. 14 International Observe the Moon Night (See <i>Celestial Highlights</i> )	◐ Oct. 10 First Quarter Moon
○ Sept. 17 Full Moon near Saturn Partial Lunar Eclipse (See <i>Celestial Highlights</i> )	○ Oct. 14 Moon near Saturn (See <i>Celestial Highlights</i> )
● Sept. 22 Autumn Equinox	○ Oct. 17 Full Moon
● Sept. 23 Moon near Jupiter (See <i>Celestial Highlights</i> )	● Oct. 21 Orionid Meteor Shower Peaks Moon near Jupiter (See <i>Celestial Highlights</i> )
◐ Sept. 24 Last Quarter Moon	● Oct. 23 Moon near Mars (See <i>Celestial Highlights</i> )
● Sept. 25 Moon near Mars (See <i>Celestial Highlights</i> )	◐ Oct. 24 Last Quarter Moon

## CELESTIAL HIGHLIGHTS

**Planet and Moon groupings:** On September 17 Saturn is the brightest object near the Moon throughout the night. Jupiter and the Moon rise together just after 11pm in the northeastern sky on September 23 and Jupiter is the brightest object next to the moon the entire night. Mars is the red dot near the Moon on September 25; they rise in the northeastern sky just after midnight and stay together the whole night. Saturn and the Moon are paired up again on October 14 rising together in the eastern sky, the pair are visible all night. On October 23 Mars rises just before the Moon around midnight, the Moon appears to chase Mars throughout the night.

**Orionid Meteor Shower:** This meteor show is caused by the trail of Halley's Comet. As the Earth passes through, the leftover parts of the comet fragments hit the Earth's atmosphere and burn up. Find the constellation Orion after midnight and look above the bright orange star Betelgeuse to find the shower. The shower starts on October 2 and lasts until November 7 with the peak activity on October 21.

**The Andromeda Galaxy:** Grab a pair of binoculars or a telescope and look to the northern sky for an out of this galaxy view! The Milky Way's sister is at its highest point in the sky on October 1. Find the constellation Cassiopeia, which looks like a big W, find the lowest point of the W and follow it like an arrow until you find a fuzzy cloud in the sky, that's The Andromeda Galaxy!

**International Observe the Moon Night:** The night of September 14, 2024, is dedicated to observing our closest neighbor. The Moon rises at 5pm and sets at 3am. Take a pair of binoculars or a telescope and look along the terminator line, the line between the light and dark parts of the moon, to see craters up close and explore the Moon's surface with your own eyes!

**Partial Lunar Eclipse:** A partial lunar eclipse is when the Moon passes through a part of the Earth's shadow giving the Moon a reddish tint. This eclipse will be on September 17 starting at 10:12pm, lasting until 11:15pm with max coverage at 10:44pm.

The bi-monthly STARMAP is available on the web at <https://www.mdsci.org/learn/resources/starmaps/>

The Observatory at the Maryland Science Center info: Safe solar viewing is offered Saturdays from 1:00pm-4:00pm, weather permitting (admission included with Science Center admission).



### MERCURY

**When:** Morning sky, first 2 weeks of September  
Not visible, October  
**Where:** Low in East, September  
**Constellation:** Leo, Virgo, Libra

### VENUS

**When:** Not Visible, September  
Visible just after sunset, October  
**Where:** Southwest horizon  
**Constellation:** Libra, Virgo, Scorpius, Ophiuchus

### MARS

**When:** After 1 am  
**Where:** East to Northeast  
**Constellation:** Taurus, Gemini, Cancer

### JUPITER

**When:** Visible after midnight  
**Where:** East to Northeast  
**Constellation:** Taurus

### SATURN

**When:** Visible  
**Where:** Southern sky  
Moving East to West  
**Constellation:** Aquarius