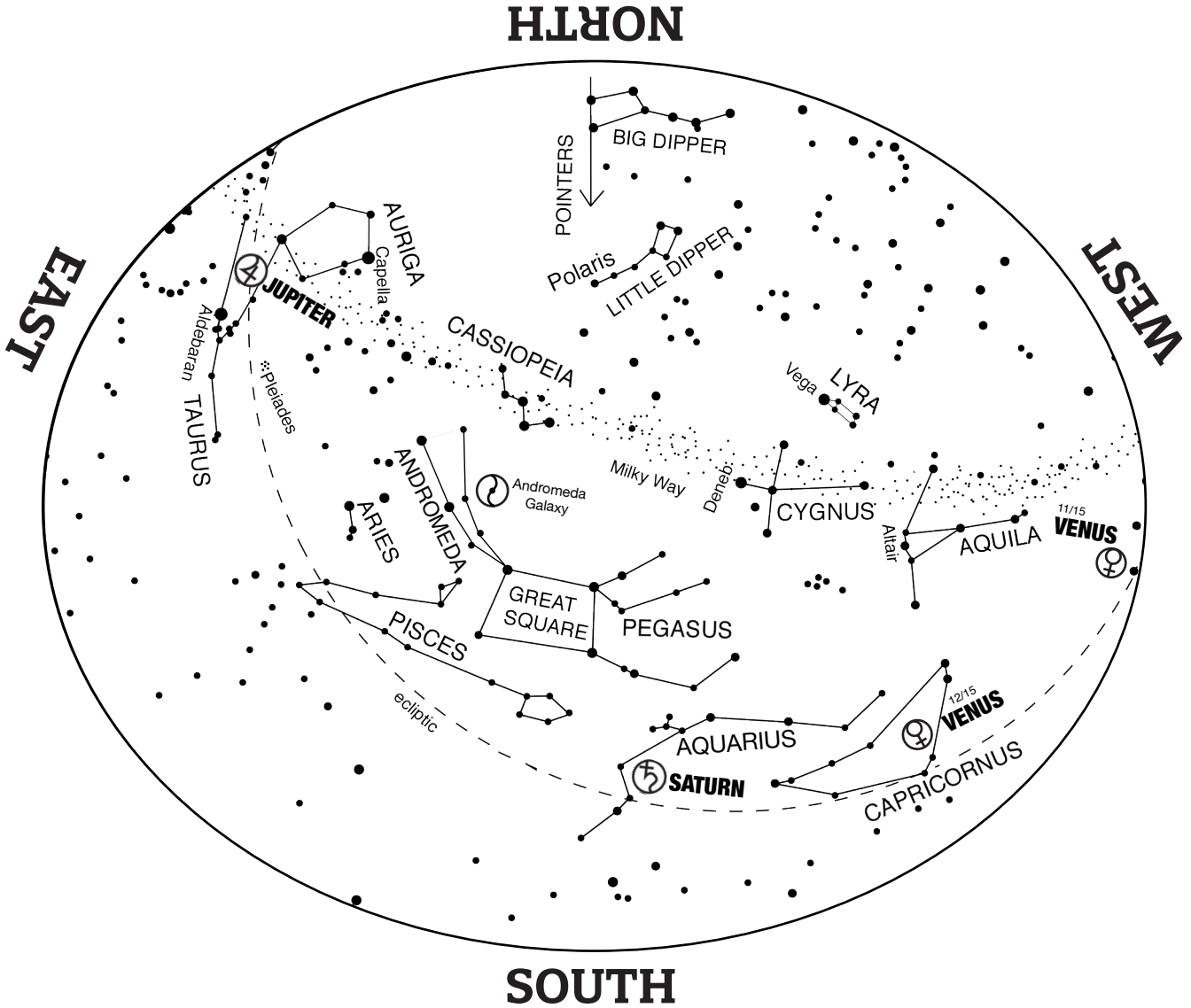


Starmap

NOVEMBER/DECEMBER 2024



601 Light Street • Baltimore's Inner Harbor
410.685.5225 • www.marylandsciencecenter.org



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:
7:30pm Mid-Nov EST
5:30pm Mid-Dec. EST

MAGNITUDE is a measure of a star's brightness.

The lower the number, the brighter the star

- 1st or brighter magnitude star
- 2nd magnitude star
- 3rd magnitude star
- 4th 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.

Starmap

NOVEMBER/DECEMBER 2024

IN THE NOVEMBER/DECEMBER SKY

- **Nov. 1**
New Moon
- **Nov. 3**
Daylight Savings Ends
(See *Celestial Highlights*)
- **Nov. 4**
Moon near Venus
(See *Celestial Highlights*)
- ◐ **Nov. 9**
First Quarter Moon
- **Nov. 10**
Moon near Saturn
(See *Celestial Highlights*)
- **Nov. 15**
Super Beaver Moon
(See *Celestial Highlights*)
- **Nov. 17**
Moon near Jupiter
(See *Celestial Highlights*)
- **Nov. 20**
Moon near Mars
(See *Celestial Highlights*)
- ◑ **Nov. 22**
Last Quarter Moon
- **Dec. 1**
New Moon
- **Dec. 4**
Moon near Venus
(See *Celestial Highlights*)
- ◐ **Dec. 8**
First Quarter Moon near Saturn
(See *Celestial Highlights*)
- **Dec. 13**
Geminid Meteor Shower Peaks
(See *Celestial Highlights*)
- **Dec. 14**
Moon near Jupiter
(See *Celestial Highlights*)
- **Dec. 15**
Full Moon
- **Dec. 18**
Moon near Mars
- **Dec. 21**
Winter Solstice
(See *Celestial Highlights*)
- ◑ **Dec. 22**
Last Quarter Moon

CELESTIAL HIGHLIGHTS

Planet and Moon Groupings – Around twilight on November 4, the Moon is close to setting in the South-western sky with Venus directly above it. On November 10, Saturn and the Moon are very close together until they set. The Moon and Jupiter rise together a little after sunset on November 17 and are visible all night, with the Moon appearing to chase Jupiter through the sky. Around 10pm on November 20, Mars and the Moon rise together in the Eastern horizon with the Moon following Mars through the sky. The Moon and Venus are together again on December 4 just after sunset near the Southwestern horizon. On December 8, the Moon follows Saturn in the Southern sky until midnight when they both set. Jupiter and the Moon move through the sky together on December 14, look for the brightest object near the Moon to find Jupiter. On the night of December 19, Mars rises around 10pm with the Moon following behind it throughout the night.

Daylight Savings Ends November 3, 2 A.M. – Set your clocks back an hour on the night of November 2.

Super Beaver Moon? – While you may be imaging a beaver wearing a mask and cape flying into the night to do...whatever super beavers do, this weirdly named Moon is the combination of two events. A Beaver Moon is the name of the Full Moon in November as it marks the time when beavers begin to move into their lodges to wait out the winter. So, what makes it super? The Moon's orbit around the Earth isn't a perfect circle so the Moon's distance from the Earth varies. When the Moon is at its closest point to the Earth it makes the Moon appear bigger than usual, which makes it a Supermoon! So, a Supermoon combined with a Beaver Moon makes it a Super Beaver Moon!

Geminids Meteor Shower – Locate the twin stars of Gemini in the eastern sky on December 13 to find the Gemini Meteor Shower at its peak activity with an estimated 120 meteors per hour. A meteor shower happens when the Earth passes through the leftover parts of a comet and when these parts hit the Earth's atmosphere they burn up and create a bright streak of light in the sky. The shower starts on December 7 and ends on December 17.

Winter Solstice, December 21 – This is the shortest day of the year for the Northern Hemisphere as the Sun takes its lowest path across the sky which results in the fewest hours of daylight of any day all year (only 9 hours). All through winter, celebrate the slow return of the Sun and notice how the days start to get longer again.

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:
Not visible

Where:
Not visible

Constellation:
Scorpius



VENUS

When:
Visible just after sunset

Where:
Southwest horizon

Constellation:
Ophiuchus, Sagittarius,
Capricornus, Aquarius



MARS

When:
Visible after midnight,
November

Visible, December

Where:
East to Northeast
Constellation:
Cancer



JUPITER

When:
Visible

Where:
Moving East to West

Constellation:
Taurus



SATURN

When:
Visible

Where:
Southern sky

Constellation:
Aquarius