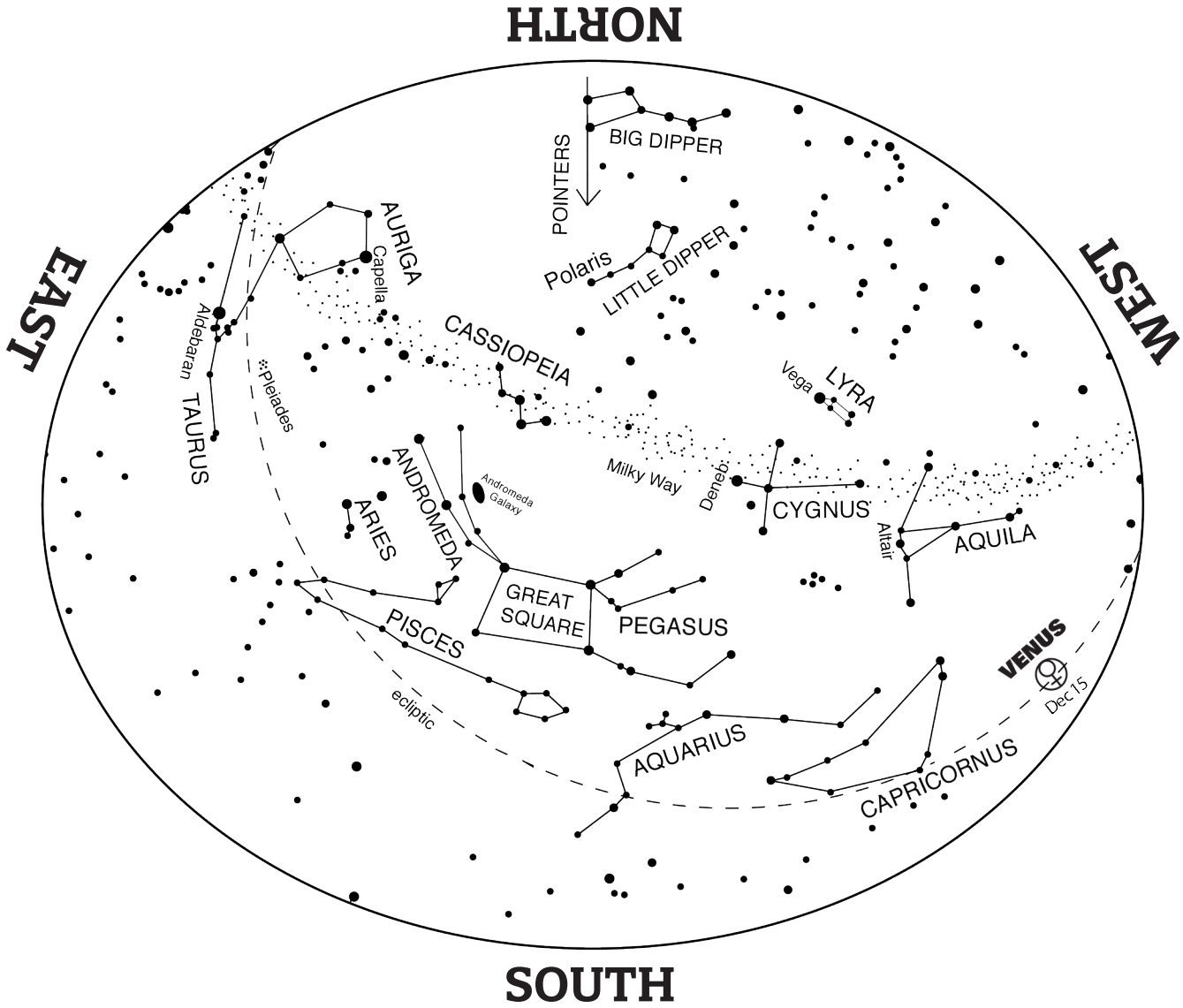
DAVIS PLANETARIUM

Starmap

NOVEMBER/DECEMBER 2019

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:
7:30p.m. Mid-Nov. EST
5:30p.m. 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.

DAVIS PLANETARIUM

Starmap

NOVEMBER/DECEMBER 2019

IN THE NOVEMBER/DECEMBER SKY

Nov 1
Moon near Saturn
(See ***Celestial Highlights***)

Nov 3
Eastern Standard Time returns
(See ***Celestial Highlights***)

Nov 4
First Quarter Moon

Nov 9
Mars near Spica (morning)

Nov 11
Transit of Mercury
(See ***Celestial Highlights***)

Nov 12
Full Moon

Nov 19
Last Quarter Moon

Nov 24
Moon near Mars (morning)
Venus near Jupiter

Nov 26
New Moon

Nov 28
Mercury greatest morning elongation
(See ***Celestial Highlights***)

Nov 29
Moon near Saturn

Dec 4
First Quarter Moon

Dec 10
Venus near Saturn
(See ***Celestial Highlights***)

Dec 12
Full Moon

Dec 14
Geminid Meteor Shower
(See ***Celestial Highlights***)

Dec 18
Last Quarter Moon

Dec 21
Winter Solstice
(See ***Celestial Highlights***)

Dec 23
Moon near Mars (morning)

Dec 26
New Moon

Dec 27
Jupiter in conjunction with Sun

Dec 28
Moon near Venus

= Observatory events

CELESTIAL HIGHLIGHTS

Eastern Standard Time returns, November 3 – Clocks are set back one hour on Saturday night, November 2.

Planet and Moon Pairings – The Moon pairs up with Saturn on November 1 and again on November 29. Venus is near Jupiter on November 24, and near Saturn on December 10. On November 28, after sunset, look for a thin crescent Moon with the bright dot Venus next to it; Jupiter will be not too far off to the west. Both Venus and Jupiter are very bright, but Venus is always the brightest of the two. Each of these planet and moon pairings are visible just after sunset. For Saturn and Jupiter, you will need a clear view of the horizon.

Mercury viewing – Mercury is the closest planet to the Sun, and sometimes is hard to see due to the Sun's brightness. There are two different types of opportunities to see Mercury in November. On November 11, Mercury will move between the Earth and Sun during a transit event, where it will be seen (with protection) as a dot moving across the face of the Sun. (See Mercury Transit event note below). The other way to see Mercury is when it is at its farthest from the Sun from Earth's perspective - its Greatest Elongation, which takes place November 28.

Transit of Mercury Event – November 11, 10:00a-1:00p – As Mercury transits (passes in front of) the Sun, MSC staff offer safe viewing of its tiny silhouette crossing the face of the Sun. Transit viewing is included with Science Center admission. Transit viewing is also weather permitting. Please call 410-545-2999 after 9 am on November 11 to see if the Observatory is open.

Geminid Meteor Shower – The Geminids peak on Dec 14; look toward the stars of Gemini, the Twins. Usually one of the best meteor showers of the year, this year most of the meteors will be washed-out by the almost Full Moon.

Winter Solstice, Saturday, December 21 – The shortest day of the year for the Northern Hemisphere. 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/

CROSBY RAMSEY MEMORIAL OBSERVATORY INFO 410-545-2999

Free public observing nights are held Friday evenings, weather permitting. Observatory hours on Observatory hours on Nov. 1 are 7-10:30pm EDT. Starting Nov. 8, Observatory hours are 5:30-9pm EST. Please call Friday after 5:00pm for observing conditions.

MERCURY

When:
Only visible before sunrise, late November to mid-December

Where:
Low in southwest

Constellation:
Libra, Scorpius, Ophiuchus, Sagittarius

VENUS

When:
After sunset

Where:
Low in southwest

Constellation:
Scorpius, Ophiuchus, Sagittarius, Capricornus

MARS

When:
Morning sky

Where:
Southeast

Constellation:
Virgo, Libra

JUPITER

When:
After sunset, November - early December

Where:
Low in southeast

Constellation:
Ophiuchus, Sagittarius

SATURN

When:
Early evening, November
Not visible, December

Where:
Low in southwest

Constellation:
Sagittarius