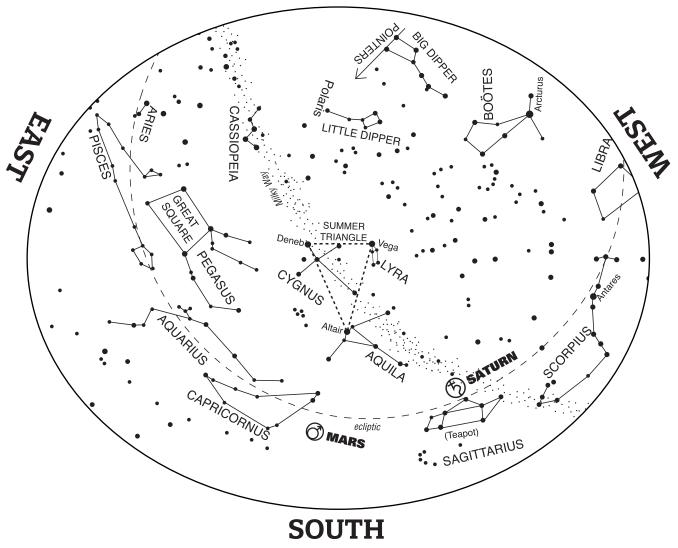
DAVIS PLANETARIUM





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HTAON



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-September EDT

7:30pm Mid-October EDT

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
- ${\scriptstyle \bullet}\, 4^{{\scriptscriptstyle th}}$ 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.



IN THE SEPTEMBER/OCTOBER SKY

Sept 2 Last Quarter Moon

Sept 7 Neptune Opposition (See Celestial Highlight)

Sept 9 New Moon

Sept 13 Moon near Jupiter

Sept 16 First Quarter Moon

Sept 17 Moon near Saturn

Sept 19/20 Moon near Mars

Sept 20 Mercury in conjunction with Sun (See *Celestial Highlight*)

Sept 22 Autumnal equinox (See Celestial Highlight)

Sept 24 Full Moon

Sept 27 First Quarter Moon Oct 2 Last Quarter Moon

Oct 8 New Moon

Oct 11 Moon near Jupiter

Oct 14 Moon near Saturn

Oct 16 First Quarter Moon

Oct 19 Observe the Moon Night (See *Celestial Highlight*)

Oct 23 Uranus Opposition (See Celestial Highlight)

Oct 24 Full Moon

Oct 26 Venus in conjunction with Sun (See *Celestial Highlight*)

Oct 28 Mercury near Jupiter

Oct 31 Last Quarter Moon

<u>CELESTIAL HIGHLIGHTS</u>

Planet Oppositions and Conjunctions with Sun – The astronomical term *opposition* describes when an object appears opposite the sun in the sky as seen from Earth. Planets at opposition are visible all night. Neptune is at opposition on September 7. Uranus is at opposition on October 23. In contrast, *conjunction* means that two objects appear in the same place in the sky as seen from Earth. Mercury is in conjunction with the Sun on September 20. Venus is in conjunction with the Sun on October 26. Planets in conjunction with the sun are not visible.

Autumnal Equinox, Saturday, September 22, 9:54 pm EDT – The Vernal Equinox marks the first day of spring. The Equinoxes are the only two days each year when the sun rises due east and sets due west every place on Earth! If you happen to be standing at the Earth's equator at noon during the Equinox you would see the sun pass directly overhead.

International Observe the Moon Night, October 19, 7pm-10:30pm - While the official "International Observe the Moon Night" is on October 20, we are celebrating a day early. Join MSC staff and guest scientists from the Johns Hopkins University Applied Physics Lab to enjoy a view of Earth's Moon and other related activities.

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 Fridays 7-10:30pm. Please call after 5pm on Friday for observing conditions.



MERCURY When:

Before sunrise, until September 8 After sunset, October

Where:

Low in east, September Low in west, October

Constellation:

Leo, Virgo, Libra, Scorpius



VENUS When: Evening sky, until October 21 Where:

Where: Low in west Constellation: Virgo, Libra, Virgo



MARS When: Evening sky Where: South Constellation: Capricornus



JUPITER When: Evening sky Where: Low in Southwest Constellation: Libra



SATURN When: Evening sky Where: South-southwest Constellation: Sagittarius

