DAVIS PLANETARIUM

Starmap JULY/AUGUST 2018



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

NORTH PEGASUS D JUPIT SCORPIUS • **SOUTH**

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:

11:30pm Mid-July EDT 9:30pm Mid-August 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
- 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.



IN THE JULY/AUGUST SKY

July 6

Last Quarter Moon Earth at aphelion

July 9

Venus near Regulus

July 12

New Moon Mercury at greatest elongation

July 14

Moon near Mercury

July 15

Moon near Venus and Regulus

July 19

First Quarter Moon

July 20

Moon near Jupiter

July 24

Moon near Saturn

July 27

Mars Opposition (See Celestial Highlight)

Full Moon



= Observatory events

August 4 Last Quarter Moon

August 8

Mercury in conjunction with Sun

August 11 New Moon

August 12

Annual Perseid meteor shower (See Celestial Highlight)

August 14

Moon near Venus



August 17

First Quarter Moon near Jupiter

Venus greatest elongation (See Celestial Highlights)

August 20

Moon near Saturn

August 23

Moon near Mars

August 26 Full 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. Mars is in opposition on July 27. 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 August 8. Planets in conjunction with the Sun are not visible.

Planet Elongations, Mercury on July 12, Venus on August 17 -The interior planets Mercury and Venus don't have oppositions from the Sun but rather they have what is called an elongation. This means they are at their farthest distance from the Sun in the sky from our perspective on Earth making it the best time to look for these two planets. Both planets are found in the early evening sky after sunset, if you look toward the west the bright non-twinkling dots in the sky are Venus and Mercury, with Venus being the brightest.

Planet Parties, July 27 and August 17 - This summer all five visible planets, Mercury, Venus, Jupiter, Saturn and Mars will be in the sky. For July 27 the observations start with focusing on planets Venus and Mercury followed by Jupiter, Saturn and then Mars near the Moon. For the August 17 observatory night the Moon will be next to Jupiter. That evening Venus, Saturn and Mars will also be in the sky. Join MSC staff as we party with the planets, weather permitting.

Perseids Meteor Shower peaks August 12 - One of the best meteor showers of the year, the Perseids peak with about 90 meteors per hour. While the peak occurs on August 12, some meteors may be visible July 17 - August 24. Look to the north eastern sky after dark to watch for Perseid meteors.

MISSION HIGHLIGHT

The Parker Solar Probe launches August 4 - Parker Solar Probe will fly through the Sun's outer atmosphere numerous times over several years. The data gathered will help forecast major solar events that impact life on Earth. For more information visit: http://parkersolarprobe.jhuapl.edu/index.php

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 7:00-10:30pm. Please call after 5:00pm on Friday for observing conditions.

SPECIAL FOCUS EVENTS - weather permitting

Fri, July 27, 2018 - Planet Party - Mercury, Venus, Jupiter, Saturn and Mars

Fri, August 17, 2018 - Planet Party - Venus, Jupiter, Saturn and Mars



MERCURY

When:

After Sunset, early July Before Sunrise, after August 15

Where:

Low in west, July Low in east, August

Constellation:

Cancer, Leo, Cancer



VENUS

When: Evening sky

Where: Low in west

Constellation:

Leo, Virgo



MARS

When: All night

Where: Southeast to South

Constellation: Capricornus, Sagittarius



JUPITER

When: Evening sky

Where:

Southwest

Constellation:

Libra



SATURN

When: **Evening sky**

Where:

Southeast to southwest

Constellation: Sagittarius