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
9:30pm Mid-Aug.

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
JULY/AUGUST 2022

IN THE JULY/AUGUST SKY

July 3
Earth at aphelion
(See Celestial Highlights)

July 6
First quarter Moon

July 10
Moon near Antares

July 13
Full Moon

July 15
Moon near Saturn
(See Celestial Highlight)

July 16
Superior conjunction of Mercury

July 19
Moon near Jupiter
(morning)

July 20
Last quarter Moon

July 21
Moon near Mars
(morning)

July 23
Moon near Pleiades
(morning)

July 26
Moon near Venus
(morning)

July 28
New Moon
Delta Aquarid meteor shower

Aug. 5
First Quarter Moon

Aug. 6
Venus near Pollux
(morning)
Moon near Antares

Aug. 11
Full Moon
Moon near Saturn

Aug. 12
Annual Perseid meteor shower
(See Celestial Highlight)

Aug. 14
Saturn in opposition
(See Celestial Highlight)

Aug. 14/15
Moon near Jupiter

Aug. 17
Venus near Beehive Cluster
(morning)

Aug. 19
Last Quarter Moon
Moon near Mars
(morning)
Moon near Pleiades
(morning)

Aug. 20
Mars near Pleiades
(morning)

Aug. 23
Moon near Pollux
(morning)

Aug. 25
Moon near Venus
(morning)

Aug. 27
New Moon
Mercury at greatest elongation

CELESTIAL HIGHLIGHTS

Earth at Aphelion, July 3 - Aphelion is a planet’s farthest point from the Sun in its annual elliptical orbit. This year, Earth reaches aphelion on July 3, with a distance of 94,508,169 miles, making it about 3,000,000 miles farther from the Sun than perihelion, when we are at our closest distance, in January. Despite the variable distance between the Earth and the Sun, changing temperatures and seasons are caused by the tilt of the Earth.

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. Saturn goes into opposition August 14. In contrast, conjunction means that two objects appear in the same place in the sky as seen from Earth. Planets in conjunction with the Sun are not visible. Mercury is in conjunction with the Sun on July 16.

Perseids Meteor Shower peaks August 12 - 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.

Planet and Moon Pairings - Throughout the months of July and August, the Moon is sometimes seen next to a planet in the sky. On July 15 and August 11, the Moon will be close to Saturn. In the pre-dawn sky of July 19 and late night of August 14/15 the Moon will be close to Jupiter. On July 21 and August 19, the Moon and Mars are near each other in the pre-dawn sky. Venus gets its Moon visit on the morning of July 26 and August 25 before sunrise.

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