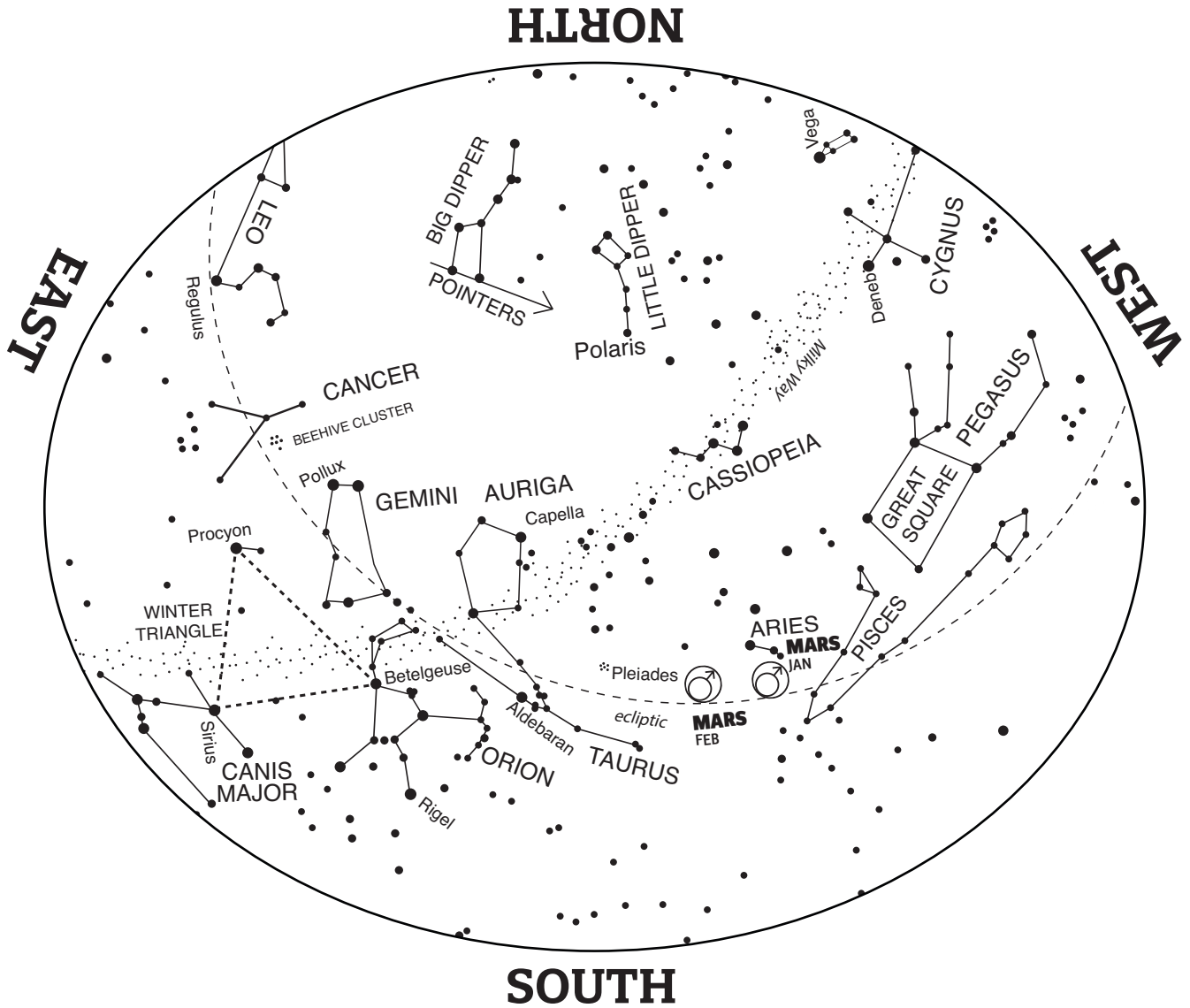


# Starmap

JANUARY/FEBRUARY 2021



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:

- 8:30pm Mid-Jan. EST
- 6:30pm Mid-Feb. EST

**MAGNITUDE** is a measure of a star's brightness. The lower the number, the brighter the star

- 1<sup>st</sup> or brighter magnitude star
- 2<sup>nd</sup> magnitude star
- 3<sup>rd</sup> magnitude star
- 4<sup>th</sup> 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

JANUARY/FEBRUARY 2021

## IN THE JANUARY/FEBRUARY SKY

- Jan 2**  
Earth at Perihelion
- Jan 3**  
Quadrantid meteors peak  
(See *Celestial Highlights*)
- ☾ **Jan 6**  
Last quarter Moon
- Jan 9**  
Mercury near Saturn  
and Jupiter  
(See *Celestial Highlights*)
- Jan 11**  
Moon near Venus
- **Jan 13**  
New Moon
- ☾ **Jan 20**  
First quarter Moon  
near Mars  
(See *Celestial Highlights*)
- Jan 23**  
Moon near Aldebaran  
Mercury at greatest elongation  
Saturn conjunction with Sun
- **Jan 28**  
Full Moon  
Jupiter conjunction with Sun
- Jan 29**  
Moon near Regulus
- ☾ **Feb 4**  
Last quarter Moon
- Feb 8**  
Inferior conjunction  
of Mercury
- **Feb 11**  
New Moon
- Feb 18**  
Moon near Mars
- ☾ **Feb 19**  
First quarter Moon
- Feb 23**  
Mercury near Saturn  
(Morning)  
(See *Celestial Highlights*)  
Moon near Pollux
- Feb 26**  
Moon near Regulus
- **Feb 27**  
Full Moon

## CELESTIAL HIGHLIGHTS

**Quadrantid meteors peak January 3** - Meteoroids are bits of debris from comets that when they burn up passing through Earth's atmosphere create a quick flash or streak of light called a "meteor" or "shooting star." A meteor shower is a high frequency of meteors that seem to come from one area of the sky. Meteor showers are usually named for the constellation that they radiate from, but in the case of the Quadrantids (named after, Quadrans Muralis) the constellation is no longer on modern star maps. Instead look for Quadrantid meteors from the night of January 2 to morning of January 3 near the Big Dipper.

**Moon near Mars, January 20 and February 18** - On January 20 the Moon and Mars do what astronomers call an *appulse*, when two astronomical objects appear close to one another in the sky. This happens again on February 18. Look for them in the southeast after sunset. They will be up until midnight when they set in the west.

**Planet groupings** - After sunset on January 9 three planets, Jupiter, Saturn, and Mercury, are seen grouped together forming a triangle low in the southwestern sky. Jupiter will be the brighter of the three and at the top of the triangle, with Mercury as the next brightest lower to the left, followed by Saturn up and to the right of Mercury. (See Figure 1.) Early morning on February 23, less than an hour before sunrise the planets can be seen low on the southeastern horizon. Mercury and Saturn are low in the southeast with Jupiter not far below them. Mercury then shifts down closer to Jupiter from one night to the next through the end of the month. Jupiter will be the brighter of the three, with Saturn as the next brightest. (See Figure 2.)

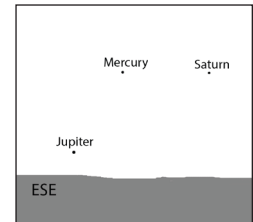
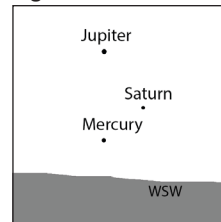


Fig. 1. West Southwest Jan. 9 at 5:40pm Fig. 2. East Southeast Feb. 23 at 6:09am

## IN THE WINTER SKY

**Winter Circle of Stars** - The winter sky holds bright stars and familiar constellations that create a circular pattern in the sky. The stars of the "Winter Circle", can be traced in a clockwise spiral starting in the center with Betelgeuse then moving down and around to Rigel, Sirius, Procyon, Pollux and Capella to Aldebaran. As you trace the circle in the sky compare the brightness and color of the stars. The Moon passes through the Winter Circle a few times during January and February.

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

For the health and safety of our guests, the Observatory is temporarily closed.



### MERCURY

**When:**  
After sunset, January  
Before sunrise,  
mid-February

**Where:**  
Southwest to West,  
January  
Low in East, February

**Constellation:**  
Capricornus



### VENUS

**When:**  
Before sunrise, until  
January 15  
Not visible, January 15  
through February

**Where:**  
Low in Southeast

**Constellation:**  
Ophiuchus, Sagittarius,  
Capricornus



### MARS

**When:**  
Evening sky

**Where:**  
South to Southwest

**Constellation:**  
Pisces, Aries, Taurus



### JUPITER

**When:**  
After sunset, early  
January  
Before sunrise, late  
February

**Where:**  
Low in Southwest,  
January  
Low in Southeast,  
February

**Constellation:**  
Capricornus



### SATURN

**When:**  
After sunset, early  
January  
Before sunrise, late  
February

**Where:**  
Low in Southwest,  
January  
Low in Southeast,  
February

**Constellation:**  
Capricornus