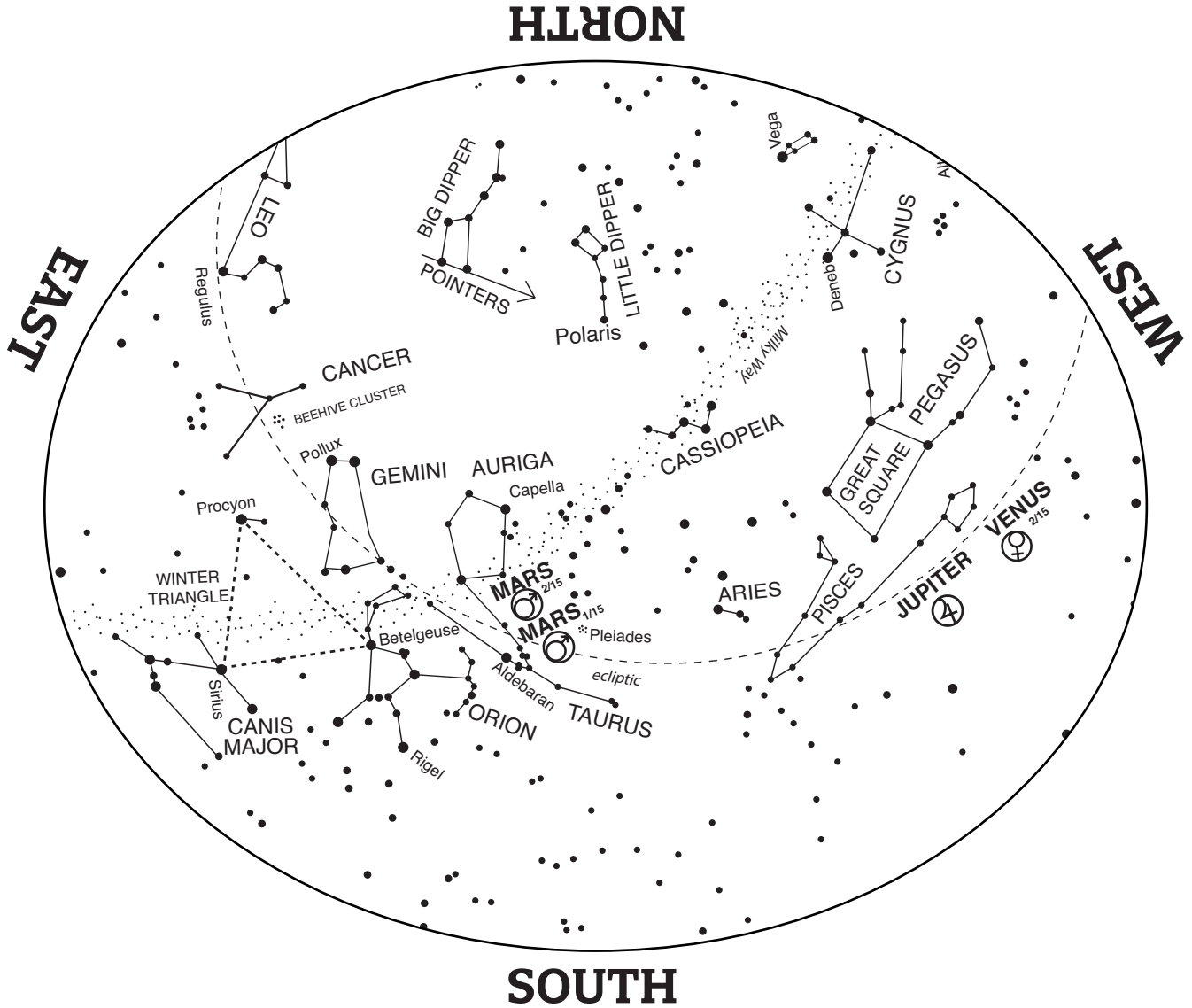


# Starmap

JANUARY/FEBRUARY 2023



601 Light Street • Baltimore's Inner Harbor  
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**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.

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## IN THE JANUARY/FEBRUARY SKY

- |   |   |
|---|---|
| <p><b>Jan. 3</b><br/>Moon near Mars</p> <p><b>Jan. 4</b><br/>Quadrantid meteors peak<br/>(See Celestial Highlights)<br/>Earth at Perihelion</p> <p> <b>Jan. 6</b><br/>Full Moon near Caster and Pollux</p> <p><b>Jan. 7</b><br/>Inferior conjunction of Mercury with Sun<br/>Moon near Pollux</p> <p> <b>Jan. 14</b><br/>Last quarter Moon</p> <p><b>Jan. 20</b><br/>Moon near Mercury (morning)</p> <p> <b>Jan. 21</b><br/>New Moon</p> <p><b>Jan. 22</b><br/>Venus near Saturn<br/>(See Celestial Highlights)</p> <p><b>Jan. 23</b><br/>Moon near Venus and Saturn</p> <p><b>Jan. 25</b><br/>Moon near Jupiter</p> <p> <b>Jan. 28</b><br/>First quarter Moon</p> <p><b>Jan. 29/30</b><br/>Moon near the Pleiades</p> <p><b>Jan. 30</b><br/>Mercury at greatest elongation (morning)</p> <p><b>Jan 30</b><br/>Moon near Mars</p> | <p><b>Feb. 3</b><br/>Moon near Pollux</p> <p> <b>Feb. 5</b><br/>Full Moon</p> <p><b>Feb. 6</b><br/>Moon near Regulus</p> <p> <b>Feb. 13</b><br/>Last quarter Moon</p> <p><b>Feb. 16</b><br/>Saturn conjunction with Sun</p> <p> <b>Feb. 20</b><br/>New Moon</p> <p><b>Feb. 21</b><br/>Moon near Venus<br/>(See Celestial Highlights)</p> <p><b>Feb. 22</b><br/>Moon near Jupiter<br/>(See Celestial Highlights)</p> <p><b>Feb. 26</b><br/>Moon near the Pleiades</p> <p> <b>Feb. 27</b><br/>First quarter Moon near Mars</p> |
|---|---|

## CELESTIAL HIGHLIGHTS

### Quadrantid meteors peak January 4 before sunrise -

Meteoroids are bits of debris from comets that burn up passing through Earth's atmosphere creating 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 3 to morning of January 4 near the Big Dipper.

**Venus near Saturn, January 22** - In the beginning of January, Venus starts low near the horizon with Saturn above. Venus moves closer to Saturn each day until it reaches its closest on January 22. After sunset on January 22, look to the southwest horizon to see the two bright planets at their closest. Venus is the brighter of the two. The next brightest dot higher off the horizon is Jupiter, and a very thin crescent Moon will be visible very low on the horizon.

**Planet and Moon groupings** - After sunset during the month of January, four planets, Mars, Jupiter, Saturn, and Venus are seen forming a line in the southern sky from southeast to southwest. Mars has a pinkish color to it and is seen bright in the southeast. Jupiter seen highest in the southwest, with Venus as the brightest planet starting lowest in the sky closest to the horizon, with Saturn in between. The Moon moves through this group of planets visiting each one in the sky, beginning with Mars on January 3, January 30 and again on February 27. The Moon is near Venus and Saturn on January 22, and Jupiter on January 25. In February, the Moon is near Venus on February 21 and Jupiter on February 22. Venus moves from being near Saturn in January to approaching Jupiter in February from our perspective on Earth.

## 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/>



### MERCURY

**When:**  
Before sunrise, last week  
January  
Not visible, February

**Where:**  
Low in Southeast,  
January  
Not visible,  
February

**Constellation:**  
Sagittarius, Capricornus



### VENUS

**When:**  
After sunset, January  
Early evening, February

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

**Constellation:**  
Sagittarius, Capricornus,  
Aquarius, Pisces, Cetus,  
Pisces



### MARS

**When:**  
Evening sky to pre-dawn

**Where:**  
East to Northwest,  
January  
Southeast to Northwest,  
February

**Constellation:**  
Taurus



### JUPITER

**When:**  
Evening sky

**Where:**  
Southwest to West

**Constellation:**  
Pisces, Cetus, Pisces



### SATURN

**When:**  
After sunset, January  
Not visible, February

**Where:**  
Low in Southwest,  
January  
Not visible, February

**Constellation:**  
Capricornus, Aquarius