

Guide to Viewing the Planets – Winter and Spring 2021

(Info taken from Space.com, skyatnightmagazine.com, earthsky.org, and Stellarium)

January

Mercury: (January 15th – January 31st) Evenings, visible to the West low to the Horizon, roughly an hour after sunset.

Venus: (January 1st – January 23rd) Mornings, visible in the Southeast in the morning

Mars: (January 1st – Aug 22st) Evenings, visible to the West-Southwest in the constellation Pisces and Aries. It will be closer to the moon at first, slowly moving away for the rest of the month

Jupiter: No longer visible.

Saturn: No longer visible.

February

Mercury: (February 28th) Mornings, visible in the East low to the horizon in the morning, roughly an hour before sunrise.

Venus: Not visible.

Mars: (January 1st – Aug 22st) Evenings, visible to the West in the constellation of Aries at about a 60-degree angle into the sky at the start of the night.

Jupiter: (February 17th – August 19th) Mornings, just before sunrise in the East-Southeast. Will be difficult to see due to the sun. Will be more easily seen later in the month.

Saturn: (February 15th – August 1st) Mornings, just before sunrise in the East-Southeast. Will be difficult to see due to the sun. Will be more easily seen later in the month.

March

Mercury: (March 1st - March 20th) Mornings, visible in the East low to the horizon in the morning, roughly an hour before sunrise.

Venus: Not Visible.

Mars: (January 1st – Aug 22st) Evenings, visible in the West-Southwest in the constellation of Taurus, at about a 60-degree angle in the sky at the start of the night.

Jupiter: (February 17th – August 19th) Mornings, rising in the Southeast roughly an hour before sunrise. Will be at about a 5-degree angle in the sky at sunrise.

Saturn: (February 10th – August 1st) Mornings, rising in the Southeast roughly an hour before sunrise. Will be at about a 10-degree angle in the sky at sunrise.

April

Mercury: Not visible.

Venus: Not visible.

Mars: (January 1st – Aug 22st) Evenings, visible in the West in Taurus, at about a 45-degree angle in the sky at the start of the night.

Jupiter: (February 17th – August 19th) Mornings, roughly 90 minutes before sunrise. It will be in the constellation of Capricornus. At sunrise, will be in the Southeast at a 15-degree angle.

Saturn: (February 10th – August 1st) Mornings, rising roughly 2 hours before sunrise in the Southeast. It will be in the constellation of Capricornus. At sunrise, will be in the Southeast at a 20-degree angle.

May

Mercury: (May 3rd to May 24th) Evenings, visible to the West low to the Horizon in the Evening, roughly an hour after sunset.

Venus: (May 24th - December 31st) Evenings, western sky at Dusk. Very close to the moon in the middle of the month.

Mars: (January 1st – Aug 22st) Evenings, visible in the West in Gemini, at about a 30-degree angle in the sky at the start of the night.

Jupiter: (February 17th – August 19th) Mornings, first rising around 2-3 in the morning in the East-Southeast, remaining visible throughout the night. Located inside the constellation of Capricornus. At sunrise, will be in the southeast at about a 25-degree angle.

Saturn: (February 10th – August 1st) Mornings, first rising around 1-2 in the morning in the East-Southeast, remaining visible throughout the night. Located inside the constellation of Capricornus. At sunrise, will be in the southeast at about a 25-degree angle.

June

Mercury: (June 27th – July 16th) Mornings, visible in the East low to the horizon in the morning, roughly an hour before sunrise.

Venus: (May 24th - December 31st) Evening, western sky at Dusk.

Mars: (January 1st – Aug 22st) Evenings, visible in the West-Northwest in Cancer, at about a 15-degree angle in the sky at the start of the night.

Jupiter: (February 17th – August 19th) Mornings, rising around 1 in the East-Southeast and remaining visible throughout the night. Located inside the constellation of Capricornus. At sunrise, will be located in the South at about a 30-degree angle.

Saturn: (February 10th – August 1st) Mornings, rising around midnight in the East-Southeast and remaining visible throughout the night. Located inside the constellation of Capricornus. At sunrise, will be located in the South at about a 30-degree angle.

July

Mercury: (June 27th – July 16th) Mornings, Visible in the East low to the horizon in the morning, roughly an hour before sunrise.

Venus: (May 24th - December 31st) Evenings, Western sky near the horizon.

Mars: (January 1st – Aug 22st) Evenings, visible in the West-Northwest near the horizon. Will get very close to Venus about halfway through July.

Jupiter: (February 17th – August 19th) Rises in the evening around 11 in the Southeast. At Sunrise, will be in the Southwest at about a 35-degree angle.

Saturn: (February 10th – August 1st) Rises in the evening around 10 in the Southeast. At Sunrise, will be in the Southwest at about a 20-degree angle.

Helpful Planet Observation Tips!

While stars twinkle, planets do **not** twinkle, helping you pick them out in the sky. They are usually bright, with Venus and Jupiter being the brightest.

Mercury – Notorious for being difficult to observe, Mercury is usually very low to the horizon and typically will only be visible for an hour or so before it sets. If you are dead set on seeing Mercury, try to get to a nice flat area, devoid of any horizon-blocking obstacles like trees or buildings.

Venus – Usually the brightest in the sky, it will therefore be easy to pick out as well. It usually has a silvery color to it. Venus was often called both the ‘morning’ and ‘evening’ star, depending on when it was visible. It does not last long in the sky, quickly either setting (if it appears in the evening) or being outshone by the sun (if it appears in the morning). It will have a few close encounters with other objects this year – on May 12th it will be extremely close to a waxing crescent moon, and on July 13th it will be right next to Mars!

Mars – Shining with a reddish-orange in the sky, Mars can change in brightness by a fair margin depending on the time of observation. It will get smaller and harder to see as the year goes on, so if you want to view Mars consider doing so earlier into this year for a more brilliant viewing.

Jupiter – Shining with a strong silver-white color, Jupiter is the largest of the planets and the second brightest, only being outshined by Venus. If you have a telescope, you may be able to pick out some of its moons! It will be close to Saturn in the constellation of Capricorn for all of the observing season. It will be to the left of Saturn.

Saturn – Usually seen with Jupiter, Saturn looks similar to Jupiter but is a bit dimmer and more yellow. It will be close to Jupiter and will be in the constellation of Capricorn for the entirety of this observing season. If you want to see the rings, you will need a telescope. It will be to the right of Jupiter.

Sources: (<https://www.space.com/39240-when-to-see-planets-in-the-sky.html>,
<https://www.skyatnightmagazine.com/advice/skills/astronomy-guide-viewing-planets-night-sky/>,
<https://earthsky.org/astronomy-essentials/visible-planets-tonight-mars-jupiter-venus-saturn-mercury>,
<http://stellarium.org/>)