

2024 Astronomical Events

Calendar Events

Please note calendar events are based on being located in Arizona, times may differ for your location, and in some instances the event may not occur due to your location. Selecting the link in the event column to get more details where you can update the event for your location. Additional Details for these events along with images and references so you can adjust for your location can be located on the [ArtCentrics This Years Astronomical Events](https://tinyurl.com/YoderAstroEvents) page: <https://tinyurl.com/YoderAstroEvents>.

More Astronomy and Hiking photos can be access on the [ArtCentrics Website](https://tinyurl.com/YoderAsroPhotos) either at the Astro-Photography page (<https://tinyurl.com/YoderAsroPhotos>) or on the Hiking page (<https://tinyurl.com/YoderHikes>).

Date	Event	Images	Details
Wed, Jan 3 rd	Quadrantid Meteor Shower (120)		Quadrantid meteor shower with expected peak shower rate of 120 meteors/hour in the late hours of January 03 to the morning of January 04. Where in the sky the appearance of falling stars from this shower cannot be predicted if you trace its trail back it should trace back to the constellation Bootes .
Sat, Jan 6 th	Jupiter Double Transit	1 , 2	Ganymede and Europa Double shadow transit from 19:19 to 19:57. Jupiter is well placed for this event.
Mon, Jan 8 th	Mercury AM sighting	1	Since Mercury is so close to the sun it is generally difficult to spot in the sky. However, on this morning, it will appear 15° above the eastern horizon just before sunrise.
Thu, Jan 11 th	New Moon		Dark Skies!
Thu, Jan 25 th	Full Moon		Wolf Moon: Naming full moons is silly, but it makes the news a lot of times.
Sat, Jan 27 th	Mercury-Mars Appulse	1 , 2	At 7:17 AM Mercury and Mars will be within 15' of each other in the eastern horizon about 10° above the horizon.
Fri, Feb 9 th	New Moon		Dark Skies!
Thu, Feb 22 nd	Venus-Mars Appulse	1 , 2	At 6:50 AM Venus and Mars will be within 38' of each other in the eastern horizon about 11° above the horizon.
Sat, Feb 24 th	Full Moon		Snow Moon: Naming full moons is silly, but it makes the news a lot of times.
Sun, Mar 10 th	New Moon		Dark Skies!
Wed, Mar 13 th	Moon-Jupiter Appulse	1 , 2	At 8:00 PM Jupiter and the moon with be within 3°38' of each other at an altitude of 31°
Wed, Mar 20 th	Equinox		

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Thu, Mar 21 st	Venus-Saturn Appulse	1 , 2	At 6:30 AM Venus and Saturn will be within 33' of each other in the eastern horizon about 10° above the horizon.
Mon, Mar 25 th	Full Moon		Worm Moon: Naming full moons is silly, but it makes the news a lot of times.
Mon, Mar 25 th	Mercury PM sighting	1	Since Mercury is so close to the sun it is generally difficult to spot in the sky. However, this evening, it will appear 13° above the western horizon just after sunset.
Mon, Apr 8 th	New Moon		Dark Skies!
Mon, Apr 8 th	Solar Eclipse	1 , 2 , 3	Check out the map to see if this will be a total or partial eclipse for your location
Wed, Apr 10 th	Mars-Saturn Appulse	1 , 2	At 5:25 AM Mars and Saturn will be within 30' of each other in the eastern horizon about 10° above the horizon.
Tue, April 23 rd	Full Moon		Pink Moon: Naming full moons is silly, but it makes the news a lot of times.
Sun, May 5 th	Eta Aquarids (40)		Eta Aquarids meteor shower with expected peak shower rate of 40 meteors/hour in the late hours of May 5th to the morning of May 6 th . Where in the sky the appearance of falling stars from this shower cannot be predicted if you trace its trail back it should trace back to the constellation Aquarius .
Wed, May 8 th	New Moon		Dark Skies!
Mon, May 13 th	Mercury AM sighting	1	Since Mercury is so close to the sun it is generally difficult to spot in the sky. However, on this morning, it will appear 10° above the eastern horizon just before sunrise.
Thu, May 23 rd	Full Moon		Flower Moon: Naming full moons is silly, but it makes the news a lot of times.
Thu, Jun 6 th	New Moon		Dark Skies!
Sat, June 22 nd	Full Moon		Strawberry Moon: Naming full moons is silly, but it makes the news a lot of times.
Thu, June 27 th	Moon-Saturn Occultation	1 , 2	The Moon will pass in front of Saturn at about 9:00 AM (25° above horizon) and will emerge from behind the moon at about 9:58 AM (15° above horizon).
Fri, July 5 th	New Moon		Dark Skies!
Sun, July 7 th	Mercury PM sighting	1	Since Mercury is so close to the sun it is generally difficult to spot in the sky. However, this evening, it will appear 13° above the western horizon directly below the moon after sunset.
Mon, July 15 th	Mars-Uranus Appulse	1 , 2	Mars and Uranus will be within 32' of each other at 5:00 AM at an altitude of 41°.
Sun, July 21 st	Full Moon		Buck Moon: Naming full moons is silly, but it makes the news a lot of times.

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Mon, July 29 th	Delta Aquarids (25)		Delta Aquarids meteor shower with expected peak shower rate of 25 meteors/hour in the late hours of July 28 th to the morning of July 29 th . Where in the sky the appearance of falling stars from this shower cannot be predicted if you trace its trail back it should trace back to the constellation Aquarius .
Sun, Aug 4 th	New Moon		Dark Skies!
Mon, Aug 5 th	Moon-Venus Appulse		The Moon and Venus within 1.5° of each other in the western horizon about 29° above the horizon at 6:00 PM.
Sun, Aug 11 th	Perseids (150)		Perseids meteor shower with expected peak shower rate of 150 meteors/hour in the late hours of August 11 th to the morning of August 12 th . Where in the sky the appearance of falling stars from this shower cannot be predicted if you trace its trail back it should trace back to the constellation Perseus .
Wed, Aug 14 th	Mars-Jupiter Appulse	1 , 2	At 5:00 AM Mars and Jupiter will be within 19' of each other in the eastern horizon about 50° above the horizon.
Mon, Aug 19 th	Full Moon		Sturgeon Moon: Naming full moons is silly, but it makes the news a lot of times.
Tue, Aug 20 th	Moon-Saturn Appulse	1 , 2	The Moon and Saturn within 2° of each other in the western horizon about 22° above the horizon at 10:00 PM.
Tue, Sep 3 rd	New Moon		Dark Skies!
Fri, Sep 6 th	Mercury AM sighting	1	Since Mercury is so close to the sun it is generally difficult to spot in the sky. However, on this morning, it will appear 14° above the eastern horizon just before sunrise.
Sun, Sep 8 th	Saturn at Opposition		Saturn lies opposite to the Sun in the sky and will be visible for most of the night.
			CRAZY Things Happening with the MOON this month!
Tue, Sep 17 th	Full Moon (Supermoon)		Harvest Moon: Naming full moons is silly, but it makes the news a lot of times. This month's full moon is also a Supermoon. The technical name for a Supermoon is Perigee-syzygy.
Tue, Sep 17 th	Moon/Saturn Occultation	1 , 2 , 3	The Moon will pass in front of Saturn at about 4:14 AM (14° above horizon) and Saturn will emerge from behind the moon at about 5:06 AM (4° above horizon).
Tue, Sep 17 th	Partial Lunar Eclipse	1 , 2	Earth's shadow will just graze the moon with a maximum coverage of 10%. Grazing will start at 7:14 PM with maximum at 7:47 PM and ending at 8:17 PM
Tue, Sep 17 th	Moon/Neptune Occultation	1 , 2 , 3	The Moon will pass in front of Neptune at about 11:52 PM (53° above horizon) and emerge from behind the moon at about 1:05 AM (54° above horizon).
Fri, Sep 20 th	Neptune at Opposition		Neptune lies opposite to the Sun in the sky and will be visible for most of the night.

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Sun, Sep 22 nd	Equinox		
Wed, Oct 2 nd	New Moon		Dark Skies!
Thu, Oct 17 th	Full Moon		Hunters Moon: Naming full moons is silly, but it makes the news a lot of times.
Fri, Nov 1 st	New Moon		Dark Skies!
Sun, Nov 10 th	Moon-Saturn Appulse	1 , 2	The Moon and Saturn within 38' of each other in the western horizon about 44° above the horizon at 7:00 PM.
Mon, Nov 11 th	Moon/Neptune Occultation	1 , 2 , 3	The Moon will pass in front of Neptune at about 6:20 PM (39° above horizon) and emerge from behind the moon at about 7:18 PM (48° above horizon).
Fri, Nov 15 th	Full Moon		Beaver Moon: Naming full moons is silly, but it makes the news a lot of times.
Sun, Nov 17 th	Uranus at Opposition		Uranus lies opposite to the Sun in the sky and will be visible for most of the night.
Wed, Nov 20 th	Mercury PM sighting	1	Since Mercury is so close to the sun it is generally difficult to spot in the sky. However, this evening, it will appear 9° above the western horizon just after sunset.
Sun, Dec 1 st	New Moon		Dark Skies!
Sat, Dec 7 th	Jupiter at Opposition		Jupiter lies opposite to the Sun in the sky and will be visible for most of the night.
Sun, Dec 15 th	Full Moon		Cold Moon: Naming full moons is silly, but it makes the news a lot of times.
Wed, Dec 18 th	Moon-Mars Appulse	1	The Moon and Mars within 47' of each other in the eastern horizon about 70° above the horizon at 2:00 AM.
Sat, Dec 21 st	Mercury AM sighting	1	Since Mercury is so close to the sun it is generally difficult to spot in the sky. However, on this morning, it will appear 16° above the eastern horizon just before sunrise.
Mon, Dec 23 rd	Jupiter Double Transit	1 , 2	Io and Ganymede Double shadow transit from 00:47 to 01:50. Jupiter is well placed for this event.
Mon, Dec 30 th	Jupiter Double Transit		Io and Ganymede Double shadow transit from 03:35 to 04:55. Jupiter will be low in the west for this event.
Mon, Dec 30 th	New Moon	1 , 2	Dark Skies!