

Winter 2021-22

Buhl Planetarium & Observatory

ASTRONOMICAL CALENDAR & STAR CHART



Night sky from Pittsburgh, PA 7:30 pm EST Feb. 1, 2022 facing South

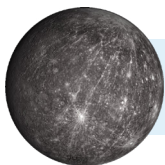
Look for future **Virtual Bite-Size Buhl** dates (Thursdays) or **SKYWATCH** (in-person) at CarnegieScienceCenter.org. Presented by



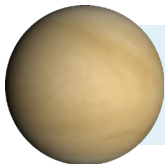
WINTER SKYGAZING: TOP PICS

Tues	Dec. 14	Geminid meteor shower peak
Fri	Dec. 17	Venus appears closest to Jupiter and Saturn; Southwest at dusk
Sun	Dec. 19	Full Oak Moon
Sun	Dec. 26	Mars appears to pass by red giant Antares Southeast in Scorpius, pre-dawn around 6:30 am
Mon	Jan. 3	Moon above Venus in claws of Scorpius South from dusk until 8:30 pm
Wed	Jan. 5	Close approach of Moon and Jupiter Southwest in Aquarius on horizon at dusk, from 5:30 pm to 8:57 pm
Sat	Jan. 29	Close approach of Moon and Mars Southeast in Sagittarius on horizon at dawn, from 5:25 am to 7 am
Sat	Feb. 12	Conjunction of Venus and Mars Southeast in Sagittarius on horizon at dawn, from 5:15 am to 6:58 am
Sat	Feb. 19	M81 Bode's Galaxy well placed for telescope observation North in Ursa Major (Big Dipper); visible all night
Sun	Feb. 27	Close approach of the Moon, Venus, and Mars Southeast in Sagittarius on horizon at dawn, from 5 am to 6:30 am

WINTER PLANET VISIBILITIES



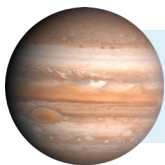
Mercury: SE before Sunrise (February mornings)



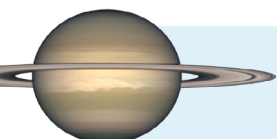
Venus: SW after Sunset (December evenings); SE before Sunrise (mid-January, February mornings)



Mars: SE before Sunrise (late December, January, February mornings)



Jupiter: SW after Sunset (December, January evenings)



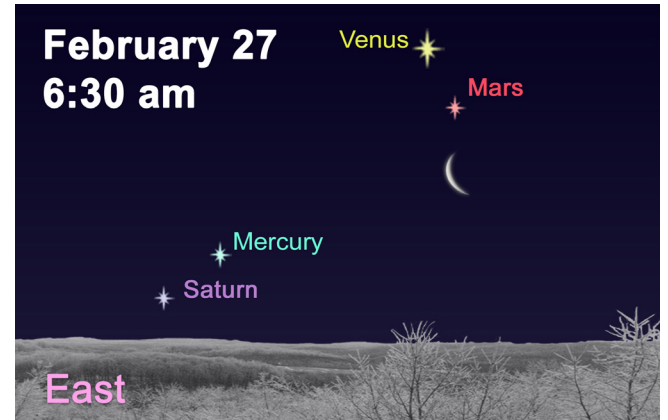
Saturn: SW after Sunset (December, first week of January evenings)

MOON PHASES KEY

New Moon ● First Quarter ◐ Full Moon ○ Third Quarter ◑

MOON PHASES

Dec	4: ●	10: ◐	18: ○	26: ◑
Jan	2: ●	9: ◐	17: ○	25: ◑
Feb	1: ●	8: ◐	16: ○	23: ◑



WHAT'S UP?

A Panoply of Planets

On Sunday, Feb. 27, early risers and sharp-eyed observers will see Mars, Venus, and the Moon in close proximity gleaming low to the horizon at 6:30 am, an hour before sunrise. The lunar and planetary trio will be in the constellation Sagittarius. Saturn and Mercury are in Capricornus nearby, but so close to the Sun that their visibility may be lost in the glare of dawn.



SPACE NEWS:

Artemis 1: Go for Launch!

Five decades since the last Apollo astronauts left the lunar surface, Artemis I is poised to take the next human steps back to the Moon. The tentative launch date is Saturday, Feb. 12 at 5:56 pm, but the window for launch will remain open until Sunday, Feb. 27. On board will be a mannequin, or Moonikin, named Campos. Arturo Campos was instrumental in bringing the Apollo 13 crew safely home. Instruments on his namesake will collect data on radiation levels in space, and record vibrations affecting the human body during mission phases.

STAR CHART FAQ



How do I use the star chart?

Hold it out in front of you with the direction you're facing at the bottom of the chart. It works even better if you hold it above your head and look up at it.

Why are east and west switched?

They are only switched because you're used to looking at maps of the ground. Hold it above your head, and you'll see the directions line up just right.