

January 27, 2024

Three Rocky Planets Align at Dawn

A January 2024 Sky Event from the [Astronomy Club of Asheville](#)

On **Saturday, January 27, 2024**, with a clear view low to the southeast horizon at dawn, there is an opportunity to catch all three of our inner solar system neighboring planets simultaneously.

The rocky planets Mercury, Mars, and Venus will all be aligned in the constellation Sagittarius, the Archer. Because sunrise is about 7:34 a.m. ET in our region, observing fainter Mercury and Mars will be a challenge. They both pop up off the horizon just before sunrise, and they will be a mere 6° off that horizon at the prime time for locating them.

Using binoculars or a telescope at low power will increase your chances of spotting these two “small rocks”! Mercury and fainter Mars are separated by just 16 arc minutes – about half the diameter of the Moon in the sky.

Brilliant Venus will be a very easy target; on this morning, besides being much higher in the sky, it outshines the two smaller planets by a factor of 100!

Below is a table of each planet’s distance from us here on Earth and their visible brightness (“apparent magnitude”) – the lower the number the brighter the appearance to our eyes.



Distance and Brightness Values on January 27, 2024

Planet	Distance in miles	Apparent Magnitude
Venus	124.6 million	-3.98
Mercury	118.1 million	-0.24
Mars	217.6 million	1.33