February Skies over the Pinnacles

February 2025

by Jeff Hutton

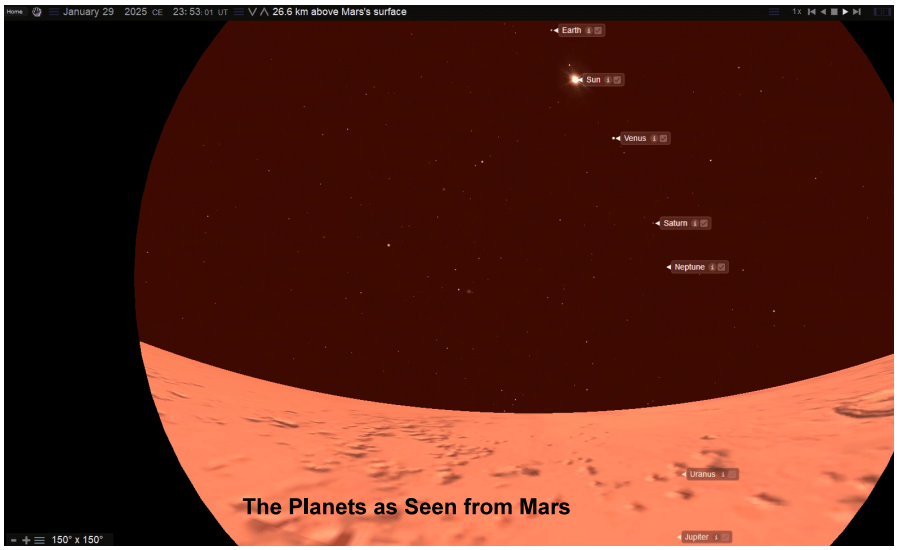
February's Four Principal Phases of the Moon

February 5	First Quarter
February 12	Full Moon
February 20	Last Quarter
February 28	New Moon

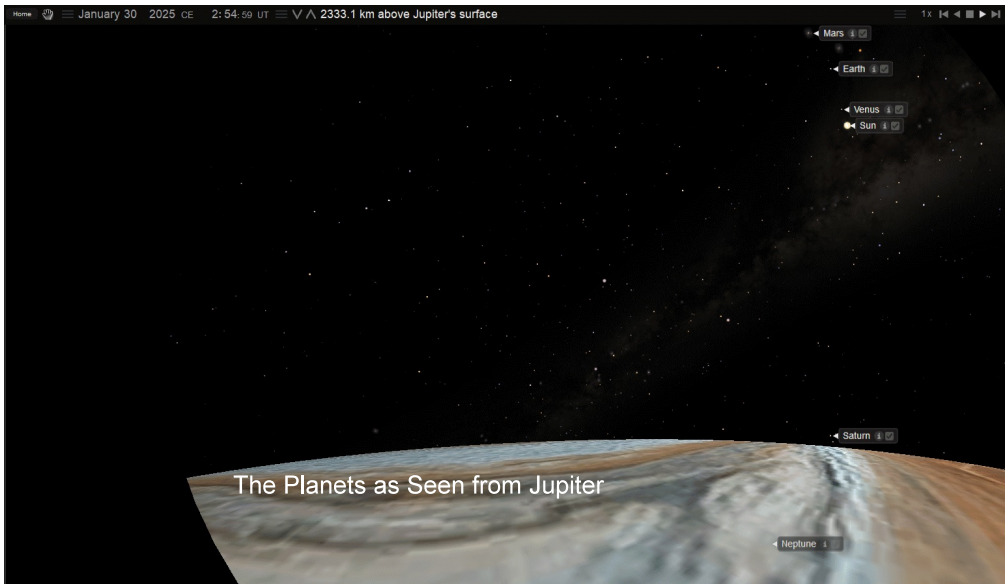
A Matter of Perspective

I remember the lyrics from an old John Denver song that included the sentence, "Running away just changes the view". The way you see a situation or arrangement of the planets depends on where you are.

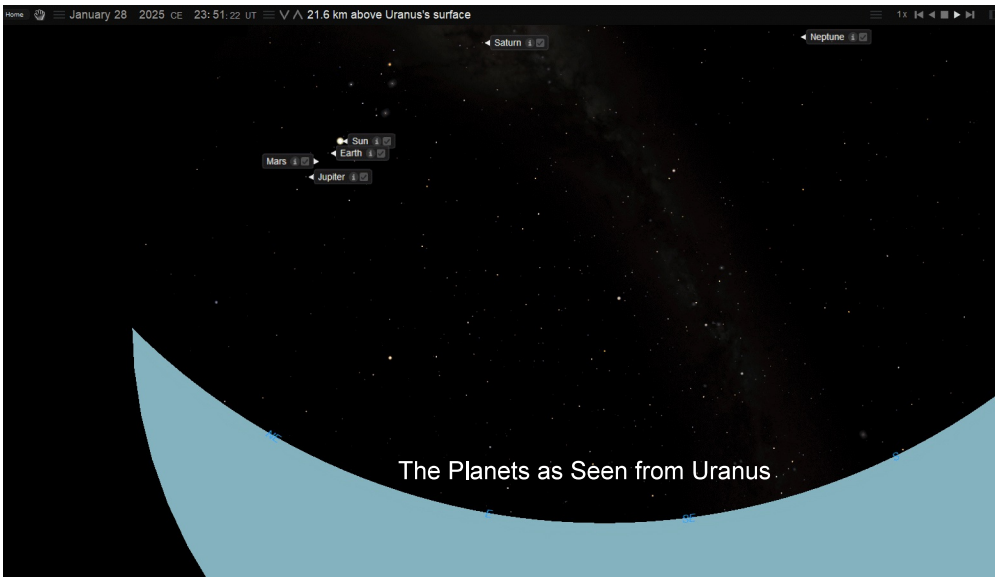
This is a representation of how the planets, Mars, Jupiter, Uranus, Neptune, Venus and Saturn would be arrayed across the sky at the end of January. I used the planetarium program called "The Sky", for personal computer.



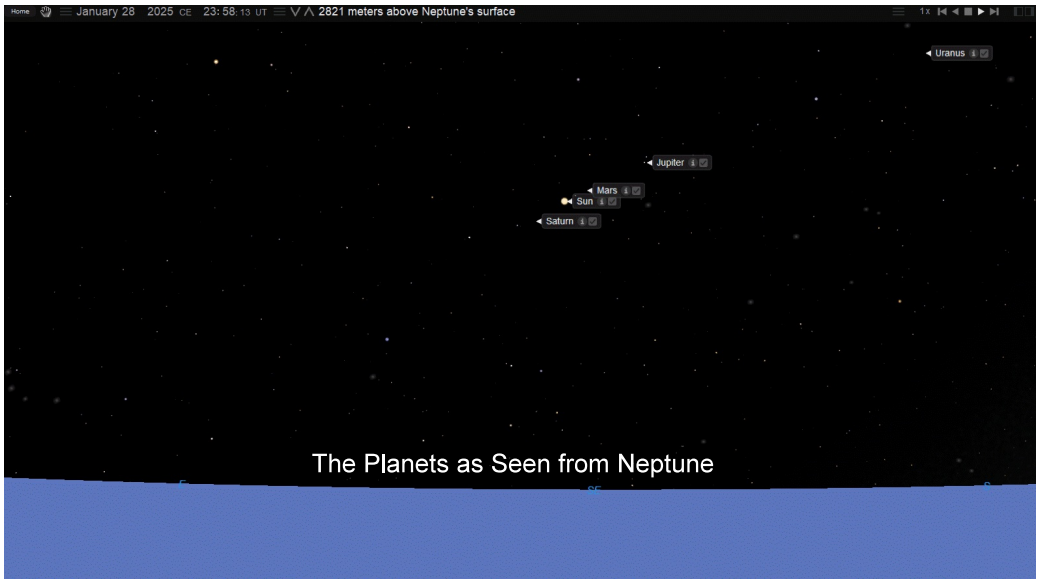
If we ran away to Mars, we would see how the planets, including Earth, would look on the same dste in the skies of Mars. Uranus and Neptune are below the local horizon.



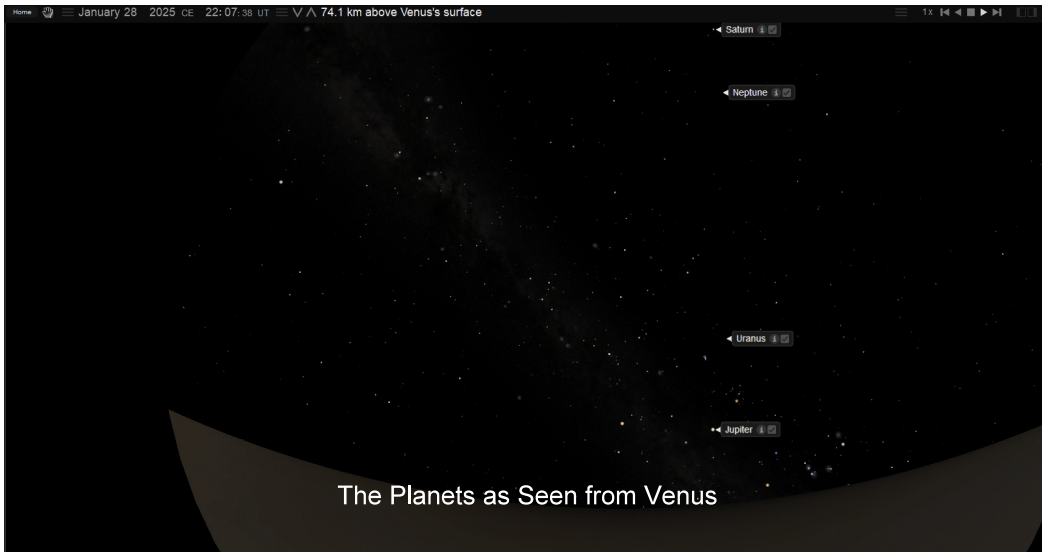
If you were to hover just above the opaque clouds of Jupiter this would be your view. Neptune and Uranus are below our horizon.



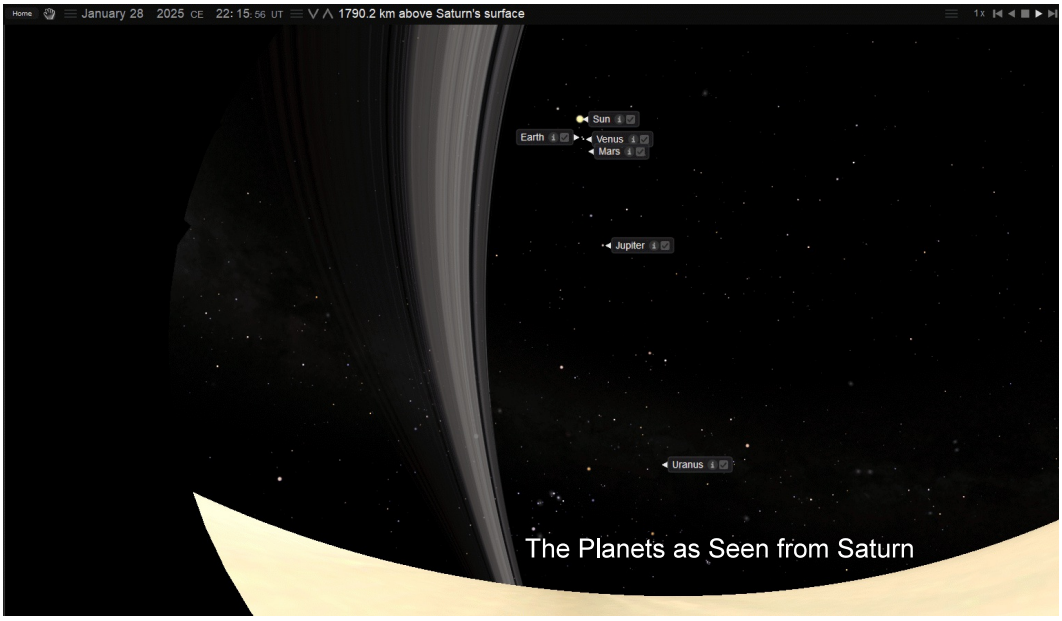
Now, as we hover above the cloudy atmosphere of Uranus we see another kind of grouping of the planets.



Here's the planetary view from Neptune. Can't find Venus, the Earth and Mars? From out here, almost 3 billion miles, the inner planets can't be made out from glare of the distant Sun. (Don't even think about Mercury!)



Closer to home, this is the view of the planets from the night side of Venus. Earth and Mars are below our horizon for now.



Saturn is the last planet in our parade (as seen from Earth). Imagine now seeing the planets near the great ring system! Neptune is below our horizon right now.

The views shown above were rendered for a flat computer screen, so things like horizons get distorted If you want to see more natural vistas from our neighboring planets, I suggest that you visit a planetarium. The marvelous one at Berea College uses computer graphics to project these wonderful views above your head. It's breathtaking.

Over my life in astronomy, there have been many "planetary alignments". These are exciting and beautiful. But that is all they are. Some folks will tell you that having two or more planets that appear close will somehow effect you by altering gravitation. Well they do, but in tiny amounts, too weak to measure. Others will say that these arrangements are somehow predictors of the future. They want you to ask, "What important thing happened to you the last time that, say, Mars was this *apparently* close to Jupiter?" If you think of some event, I guarantee that you will be on the lookout for something similar happening to you this time. We all do that. But the apparent location of the planets in the sky has nothing to do with what happens here, unless you're planning a trip to that planet.

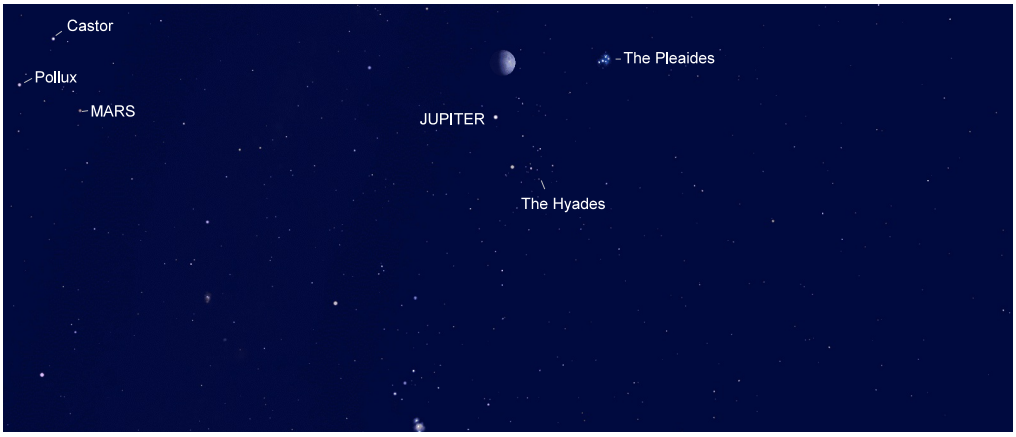
All of the illustrations above show the apparent locations of the planets viewed *from each planet*. I used the order of the planets, from east to west, that they appear from Earth at this time. The reality we perceive is influenced by the perspective we happen to hold. It also is important to try to see any issue from the perspective of someone else, especially if you don't happen to agree with them. That might make a good lesson for our times.

Attractions in February

When you hold your hand all the way out and hold three fingers out, like the scout's salute in panel 2, your fingers create an **angular distance** of 5 degrees**,** about the width of the bowl of the Big Dipper. When I talk about the angular distance between, say, the Moon or a star or planet, I'll say that they are separated by a certain number of angular degrees. Sky and Telescope magazine is my source for most of the following information.

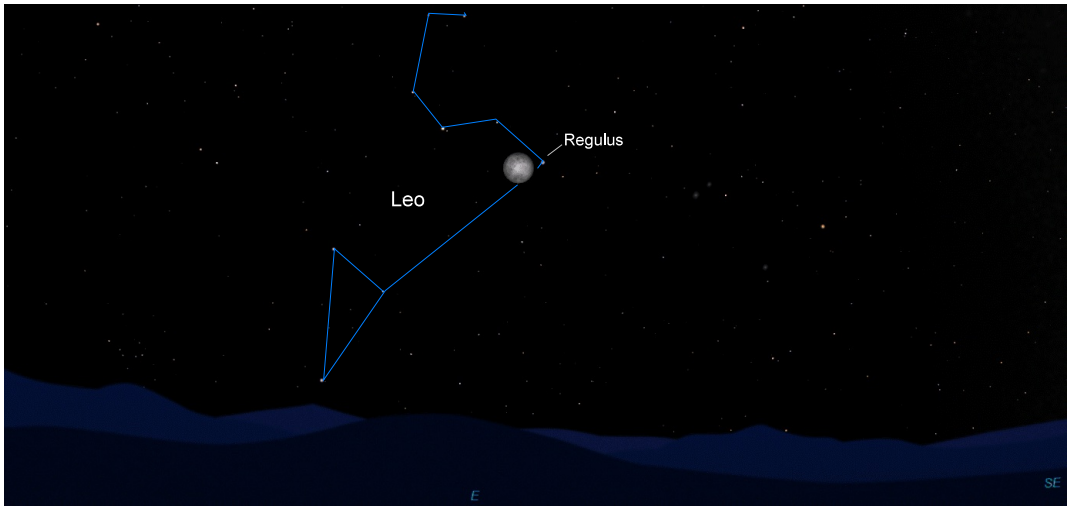
February 1 Here's a wonderful way to start the month! Go outside as it is getting dark and look to the western sky. Marvel at bright Venus almost kissing the moon. The bright 'star' below is the planet Saturn.

February 6 Another pretty lunar/planetary grouping! First, check out the fattening, gibbous Moon with Jupiter below. Below Jupiter is the V-shaped star cluster called the Hyades. This shape represents the face of Taurus the Bull. To the right is the pretty Pleaides star cluster. Now, look east and find orange planet Mars making a neat right triangle with Pollux and Castor, brightest stars in Gemini.



February 9 Tonight, look how the Moon has abandoned Taurus and is landed in the company of Mars, Pollux and Castor.

February 12 Look east at 9PM tonight and watch the rising full moon with the star Regulus jst 1-1/2 degrees to the right of the moon. Regulus is the brightest star in the constellation, Leo, which I've outlined below.



February 24 Start watching the west-southwestern sky at about 6:15 for two planets which are about the set. The brighter of the two is Mercury, with Saturn above and to the left. To avoid damaging your eyes, wait for the Sun to completely set and then scan the horizon with binoculars to try to catch the pair. Venus blazes above.

February 28 My mother always saie how much she loved seeing a "fingernail" Moon. The thin sliver, or "fingernail" can ne seen just above west-southwestern horizon. It can be seen just 3 degrees below the planet Mercury this evening. Take care to avoid looking at the Sun, especially if you are using binoculars or a telescope.