## January Skies over the Pinnacles

January 2022

| January 2  | New Moon      | $\bigcirc$ |
|------------|---------------|------------|
| January 9  | First Quarter |            |
| January 17 | Full Moon     |            |
| January 25 | Last Quarter  |            |

### January's four principal phases of the moon

### Another Year of C\*\*\*d

Even though the pandemic will stubbornly refuse to go away just about as long as there are people who stubbornly refuse the vaccine, the skies over the Pinnacles will still offer opportunities for us all to wonder at the Cosmos. Later in this article and starting with a detailed look at what awaits us in January, let's take a look at what awaits us in 2022.

Before I offer my "predictions" for the coming year, thanks to information from such scientific sources as NASA and Sky and Telescope Magazine, let me address some of the questions I've been asked regarding the repurposing of the Gib Roberts Observatory. As you may know, it was removed last June from the now-demolished Hall Science Building.

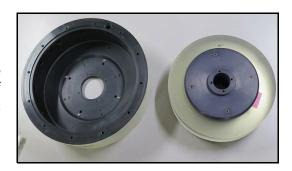


The Boller and Chivens telescope now resides on a mountain in British Columbia. The new owner has been reconditioning the instrument to get it ready new areas of research.



Here the telescope base is attached to a new platform and readied for installation into its domed enclosure.

The primary mirror, shown face-down here separated from it's housing, was found to be of superb quality and has been re-coated with a reflective surface of aluminum.



A site near the Ramah Indian Reservation in New Mexico was selected for the location of the observatory dome. It will house a larger Boller & Chivens telescope that will be used by students enrolled in the U.S Naval Academy via the internet.

### Attractions in January

# New Year's Day Binocular Alert! As soon as the sky begins to darken this evening, look to the southwestern sky for a rare parade of planets. Jupiter ·

| Jupiter • |         |               |               |
|-----------|---------|---------------|---------------|
|           |         |               | Vega (star) · |
|           |         | Altair (star) |               |
| Saturn ·  |         |               |               |
|           |         |               |               |
| Mercury · |         |               |               |
|           | Venus • |               |               |
|           |         |               |               |

## **January 3** Look for the thin crescent Moon joining the planetary lineup. January 6<sup>th</sup> will provide the best chance to see Mercury, farthest from the setting sun.



If you're feeling hardy, get to bed early and wake up by 3AM to catch the annual Quadrantid meteor shower. All meteor showers are named for the point in space where the appear to fly from. This point is called the radiant. This shower is named for Quadrans Muralis, a constellation that's no longer recognized.

January 12 As soon as gets dark first, look westward to see Mercury and Saturn slip by each other, about 2 fingers apart. Look higher to see the gibbous Moon close to my favorite star cluster, the Pleiades.



January 29 Just before dawn look to the southeast and see Venus, now a 'morning star' as it rises along with Mars and the crescent Moon.



### Highlights for 2022

February 18One of the best time of the year to spot sunlight reflecting off<br/>interplanetary dust in our solar system. Look for this Zodiacal Light<br/>invading the constellations Taurus and Gemini. Very clear skies are a<br/>must.

## March 20 Vernal Equinox. Spring begins and we have the same amount of daylight as night.

- April 22, 23 Lyrid Meteor Shower
- May 15-16 Total Lunar Eclipse
- June 14 Super Moon. When the Moon is full and happens to be at it's closest to Earth on it's orbit, we give it this name. The apparent size of the moon in the sky can vary by 14%

| July 21          | Summer Solstice. Summer begins and the daylight shortens until the Winter Solstice.  |  |
|------------------|--|--|
| August 12, 13    | The best known meteor shower, the Persieds, occurs.  |  |
| September 23     | Autumnal Equinox. Fall begins and we have the same amount of daylight as night.  |  |
| October 7 and 21 | Two meteor showers in one month! The Draconids on the 7 <sup>th</sup> and the Orionids on the 27 <sup>th</sup> . (The Orionids shower is the better of the two.) |  |
| November 8       | Partial lunar eclipse.   |  |
| December 21      | Winter Solstice. Winter begins but we start to see a little more daylight until the Summer Solstice.   |  |