



AU AstroNews

The Newsletter of the Astronomical Unit

January 2022

Sponsored by the Santa Barbara Museum of Natural History



Bruce Murdock captured this phenomenal Green Flash sequence of the setting sun near his home in Isla Vista. Each image is separated by its neighbor by 200msec.

OUTREACH SUMMARY

Happy New Year! There was minimal outreach in December, but at least we got some rain. With the arrival of the omicron variant, please get vaccinated and boosted, then stay safe and healthy by wearing masks when necessary, washing your hands frequently, and practicing physical distancing.

For the whole of 2021, even with limited outreach, we still managed to inflict socially distanced Astronomy on 2130 members of the public at 32 events.

OUTREACH EVENTS

For January, there will be no indoor, in-person SBAU meetings. **The restart of second Saturday Public Star Parties at SBMNH has been postponed at least into February - stay tuned.**

We will resume our monthly second Saturday SBAU planning meetings as virtual events on Zoom, starting at 4:30 PM. Watch your email or sbau.org for the link.

On Friday, February 4, at 7:30 PM, we will start our first Friday monthly club meetings on Zoom,

beginning with a Members' Night. If you are willing to give a 15-minute presentation via Zoom, please contact our Veep Baron Ron Herron at [<vicepresident@sbau.org>](mailto:vicepresident@sbau.org) and give him a summary. Four presenters are needed.

The SBAU radio hour has been replaced by a weekly Zoom/YouTube Live event every Monday at 11 AM. If you watch, the Live video should be able to take comments and questions in its Chat area: [<https://tinyurl.com/2vss2yam>](https://tinyurl.com/2vss2yam)

Don't forget the weekly Telescope Workshop Zoom, every Tuesday from 7:30 PM to 9 PM. Check sbau.org for the link.

THE SKY FOR JANUARY

January is prime time for observing the bright stars of winter, mustered in a giant circle around Betelgeuse in the shoulder of Orion. The Pleiades are near zenith for binocular or eyeball viewing, and the Great Nebula in Orion for telescopes. The Andromeda Galaxy is still hanging in there in the northwest, visible with or without optical aid.

Our great evening appearances of the gas giants are coming to an end, but on January 3 at sunset you can catch a nice lineup consisting (from the horizon up) of bright Venus, Mercury with a very slim crescent Moon below, Saturn, and Jupiter. You may need binoculars to pick out Mercury and the Moon if the sky is bright or hazy. Also on January 3, at 11 PM PST, we are at perihelion, our closest to the Sun for the year at only 91,406,848 miles.

On Saturday, January 8, Venus will make the closest approach to Earth of any planet in the last century, at only 24.7 million miles away. Too bad it's hiding in the glare of the Sun.

The International Space Station will be making some nice visible evening passes from January 13 through January 21. Its orbit may change from time

to time, especially now that they have to dodge more space debris, so to get the latest and most complete predictions, visit Heavens Above <<https://tinyurl.com/y5yt22ch>>

FROM THE PRESIDENT

Jerry Wilson

Winter skies present a dramatic view of the outer rim of our galaxy. Our winter view is opposite summer's view of the galactic center. In summer our night sky is full of the dense star clouds and nebulae of the Milky Way core and central bulge. In winter we look at the outer arms of our galaxy, but ironically, our winter skies show the brightest stars and some very dramatic clusters and nebulae. Most dramatic of the galactic rim is the Great Nebula in Orion. There are also interesting fainter structures in the Orion region including the Horsehead Nebula, Barnard's Loop, and the California Nebula, to name a few.

Just as winter and summer present different views of our galaxy, spring and fall offer unobstructed views past our galaxy into deep intergalactic space. During these seasons we look out along our galaxy's north and south spin axis. Spring is the season of the great Virgo Galactic Cluster.

The Virgo Cluster contains about 1,500 members, possibly up to 2,000, and contains many Messier objects. Among these are M49, M58, M59, M60, M61, M84, M85, M86, M87, M88, M89, M90, M91, M98, M99, and M100.

The Virgo Cluster is about 59 Million light years from us and is part of the Virgo Supercluster which also contains the Local Group. That's us.

The approximately 85 gravitationally bound galaxies near the Milky Way are collectively known as the Local Group. This collection of galaxies, spread over roughly 10 million light-years, encompasses not only the Milky Way and several bright galaxies visible to the naked eye, but also many much smaller galaxies that dominate the Local Group by number. One of the most prominent members of the Local Group is M31, the Andromeda Galaxy. It has two small satellite galaxies, M32 and M110. Also prominent in the Local Group is the Triangulum Galaxy (M33), Leo I, and NGC 6822. M31, M33, and the Magellanic Clouds. Since we are a member of the local group we see its members scattered all about our sky, and all around the seasons.



"I'm pretty sure that you put the mirror in the wrong end of the tube." Photo credit: Tom Totton.

ARTS CORNER

Stephen Sondheim (1930-2021)

"Life is unpredictable. It is. There is no form. And making forms gives you solidity. I think that's why people paint paintings and take photographs and write music and tell stories that have beginnings, middles and ends – even when the middle is at the beginning and the beginning is at the end."

Send in the Clowns

Stephen Sondheim (1930-2021)

Isn't it rich?

Are we a pair?

Me here at last on the ground

You in mid-air

Send in the clowns

Isn't it bliss?

Don't you approve?

One who keeps tearing around

One who can't move

Where are the clowns?

Send in the clowns

Just when I stopped

Opening doors

Finally knowing the one that I wanted was yours

Making my entrance again with my usual flair

Sure of my lines

No one is there

Don't you love a farce?
My fault, I fear
I thought that you'd want what I want
Sorry my dear
But where are the clowns?
Send in the clowns
Don't bother
They're here

Isn't it rich?
Isn't it queer?
Losing my timing this late
In my career
Where are the clowns?
There ought to be clowns
Well, maybe next year



“Darn. No nametag. I wonder if our guest was able to make it back to his home planet.” Photo credit: Tom Totton.



“Wow. I don't believe it. A lifetime membership in the Jelly-of-the-Month Club....” Photo credit: Tom Totton.

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January 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2 NEW MOON	3 PERIHELION	4	5	6	7	8
9 FIRST QUARTER	10	11	12	13	14	15
16	17 FULL MOON	18	19	20	21	22
23	24	25 LAST QUARTER	26	27	28	29
30	31					