

Cache Valley Clear Skies

The Journal of the Cache Valley Astronomical Society



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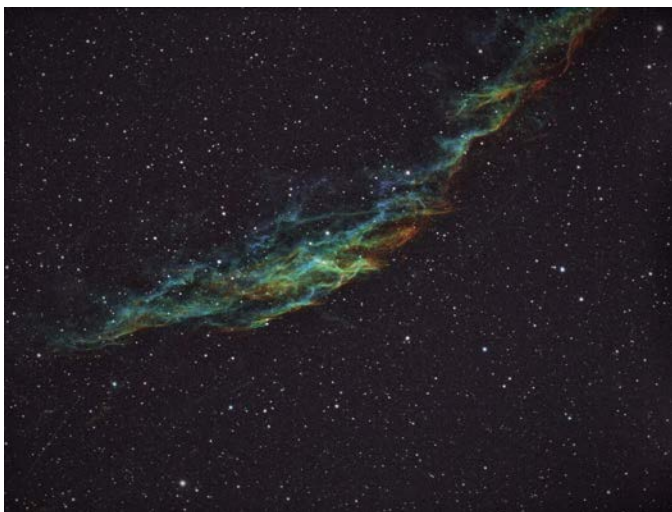
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www.cvas-utahskies.org

Meeting Announcement

We would like to thank everyone who presented at our virtual club meeting for April. It was very helpful for those of us with questions about astrophotography. That will be our last meeting until September. Hopefully by then we will be able to get together in person. We'll keep you posted. Until then, have a great summer.



The President's Corner By Bruce Horrocks – CVAS President

It looks like summer is just around the corner. I find myself working outside without a jacket and already noticing the days are longer and the observing window at night is much shorter. I am also very glad to see the reduction in Covid-19 related deaths and illness. To borrow a quote from a well-known novel, "It was the best of times and it was the worst of times". For some people this Covid thing has really be a difficult challenge in every way, and for others they have just gone on life as normal. I do hope that you have all been okay during this last year and we are hoping that we can resume our club meetings next fall.

I would first like to apologize for the problems with the Zoom meeting the other night. For some reason my Zoom account got deleted and even though I had scheduled a meeting it would not even let me join without a password. Thankfully Dell Vance was able to quickly set one up that we were able to connect in on and use for the evening. So if you were not able to connect to the meeting here are a few of my notes and hope they can help you if you

are thinking of trying some astrophotography in the future.

DSLR Cameras – Digital Single Lens Reflex Cameras – Dell Vance gave us his take on how he uses his DSLR remotely on his telescope while he sits nice and comfortable by the kitchen window. These are a great choice in getting into astrophotography since many of you might already have one for your other photography uses. They generally have a high quality image sensor and can be used on a variety of telescopes and lenses. Dell uses a USB cable that he connects to his computer and with some software is able to control his telescope and his camera from his house. If you have a camera setting around this might be a good option for you to try and if you have questions I am sure Dell will be glad to help you.

Sky-Watcher Tracker – Brady Mikesell who is one of our new club members presented his use of the small tracking device by Sky-Watcher. I believe he mentioned this sells for around \$400 or so and appears to be an easy to use and travel with tracking device. If you were at our summer social last year you would have seen Tom Westre present a bit about this as well. These are great little systems that are light to move around and appear to do a great job in tracking. So, if you are thinking of getting something to add to your collection this might be a great addition.

Mallincam Camera – Blaine Dickey present an overview of his Mallincam DS287 camera. This is a dedicated astrophotography color camera. It has large pixels which are great for getting a better image scale. There is some free software that comes with this as well that does some amazing work in auto calibrating your images and doing some live stacking. I believe the cost of this camera was around \$400 also and would be a great starting camera that works well for doing star shows on your computer. If you have been to one of our star parties in the past you may have seen Blaine with his set up. Overall a great little camera and I am sure if you are interested Blaine would be glad to provide you with additional information.

Monochrome Cameras – This was my topic and really the difference in using these as compared to a color camera is about the same, other than the images are all in grey scale. This does help give

you some shaper details and for looking at the sun is really the best way to go. The downside of these monochrome cameras is that if you want color it does take a lot more time to get a color image due to having to use color filters and you also have the added cost of the filters. The upside is that you can use some narrowband filters that will give you wildly colored images that have some sharp details. I personally have really grown to enjoy using this camera even with the added time it requires.

That is pretty much our meeting from the other night in a nutshell. We would like to have seen a few more faces there but we understand life gets busy. That does however wrap our club meetings until next fall. We hope you have enjoyed them and maybe learned a bit more about astronomy and the growing interest in astrophotography. I have found with my not so great eyesight it is a great way to once again enjoy viewing the stars and spend my kid's inheritance.

I know we will be having some star parties this summer and look forward to seeing you as some of these. If you have any organizations or groups that you think would enjoy a star presentation and you might need assistance with this, please let us know and we will be glad to give you a hand. Our best way to communicate with our club members is thru our Group ISO email and I hope that this works for you as well. If you have some great pictures or articles we can post these on the club website so you can look at them there as well. Thanks again for your help with our club and most of all for your friendship. There is a lot of great knowledge among the members of our club and so no matter where you are in this hobby if you ever need help we hope to provide you with that.

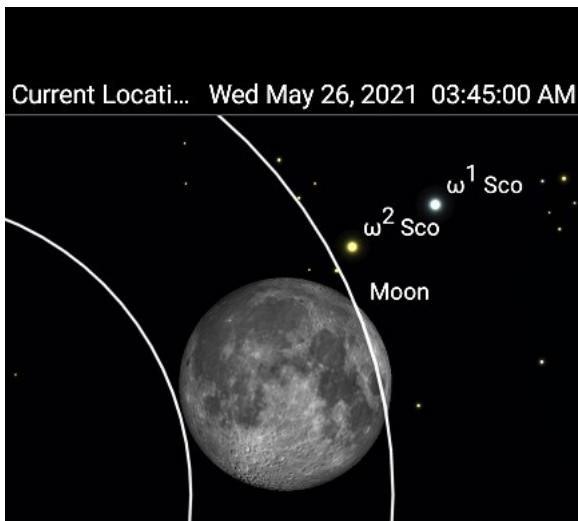
Clear Skies
Bruce Horrocks

Total Lunar Eclipse, May 26, 2021, by Blaine Dickey

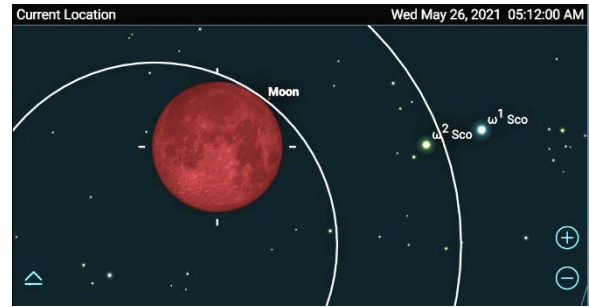
Next to a total eclipse of the Sun, a total Lunar Eclipse is one of the most beautiful naked eye events that you can observe. The last Total Lunar Eclipse was back in January 20, 2019 and it was somewhat disappointing because of the clouds that evening. It did peek through the clouds enough to that I was able to image its progress as shown in the image below.



The Total Lunar Eclipse on the early morning of Wednesday May 26 will be visible in the western sky. You will need to be up by 3:45AM to see the earth's shadow begin to move across the face of the moon. The moon at that time will be +18 degrees above the western horizon. As the earth's shadow continues across the full moon a very noticeable darkening of the sky will occur.



The earth's shadow will continue to progress across the face of the moon until it is totally eclipsed at 5:12 AM as seen in the image below. At the time of totality the moon will be only +07 above the western horizon.



At that point you will be able to see the reddish disk of the moon 7 degrees westward of Antares in the constellation Scorpius. The Milky Way may be visible 28 degrees east of the eclipsed moon, but dawn will have started to lighten the sky by then. The appearance of the reddish moon hung in a dark sky is similar to the spectacle of the planets being visible during a Total Eclipse of the Sun. It is a rare and beautiful sight.

Totality will end at 5:26 AM and the earth's shadow will slowly begin to leave the moon and the sunlight will strike to moon's surface once again. The moon will set over the Wellsville's during the partial phase of the eclipse.

If you live on the eastern side of Cache Valley you will be in a favored location to see this event. On the western side of the valley the mountains may interfere and the moon may set before the eclipse even begins.





This is an event that can be enjoyed entirely with the naked eye. A pair of binoculars or telescope will greatly enhance your experience. It is also a good opportunity to image an important celestial event with a camera equipped with or without a telephoto lens or through a telescope. Good luck and please share your experience or images with the rest of the club!

Upcoming Events and Anniversaries

- May 04 - [Star Wars Day](#)
- May 05 - [National Astronaut Day](#)
- May 05 - [Eta Aquarids Meteor Shower Peak](#)
- May 05 - 60th Anniversary (1961), [Freedom 7](#) Launch (Alan Shepard, 1st US Man in Space)
- May 07 - [Space Day](#)
- May 12 - [Moon Occults Venus](#)
- May 15 - 185th Anniversary (1836), [Francis Baily's](#) Observation of "[Baily's Beads](#)" During Annular Solar Eclipse
- May 17 - [Mercury](#) At Its Greatest Eastern [Elongation](#) (22 Degrees)
- May 19 - 1,160th Anniversary (861 AD) [Meteorite Hit Shrine in Nogata, Japan](#)
- May 24 - [Daniel Fahrenheit's](#) 335th Birthday (1686)
- May 25 - [Towel Day - Annual Tribute to Douglas Adams](#)
- May 25 - 60th Anniversary (1961), [John F. Kennedy's](#) Moon Goal Speech
- May 26 - [Total Lunar Eclipse](#)
- May 26 - [Supermoon](#)
- May 26 - [Sally Ride's](#) 70th Birthday (1951)
- May 29 - [Mercury](#) Passes 0.4 Degrees From [Venus](#)
- May 30 - 50th Anniversary (1971), [Mariner 9](#) Launch (USA Mars Orbiter)
- May 30 - 55th Anniversary (1966), [Surveyor 1](#) Launch (USA Moon Lander)

Library Loaner Telescope Program Status

10/31/2020

Library	Telescope Donated By	Telescope Placed	Available for Checkout	Library Status
Logan Library	CVAS	6/10/2018	10/15/2018	Loaning out with Holds pending
Logan Library #2	ICON Health & Fitness 	6/18/2019	7/15/2019	Loaning out
Hyrum Library	CVAS	12/11/2018	2/1/2019	Loaning out
Smithfield Library	Occipital, Inc	12/14/2018	4/10/2019	Loaning out
North Logan Library	Utah NASA Space Grant Consortium 	3/4/2019	4/5/2019	Loaning out
North Logan Library #2	Friends of the North Logan Library	10/26/2020	11/1/2020	Loaning out
Cache County Library (Providence)	INOVAR & CVAS Members	3/1/2019	5/22/2019	Loaning out
Lewiston Library	Schreiber Food's 	7/9/2019	9/1/2020	Loaning out
Richmond Library	Anonymous	10/25/2019	1/25/2019	Loaning out
Preston Library	Idaho NASA Space Grant Consortium	9/5/2019	9/26/2019	Loaning out
Mendon Library	Campbell Scientific 	4/8/2019	5/30/2019	Loaning out
Newton Library	A Club Member	9/24/2019	9/24/2019	Loaning out

CACHE VALLEY ASTRONOMICAL SOCIETY MEMBERSHIP APPLICATION FORM

Member # _____

NAME: _____
First Middle Initial Last

Address: _____
Street City State Zip Code

Home Phone: _____ Cell Phone: _____

Work Phone : _____ Occupation : _____

Email Address: _____

How did you learn about CVAS?

____ Website ____ Star Party ____ CVAS Member ____ Other _____

Membership: \$20 lifetime membership

Tell us about yourself: Do you have a special interest in astronomy? Do you have special skills? Are you willing to volunteer on CVAS projects or attend public outreach star parties? Astro equipment owned.

By signing this application, I acknowledge I have access to the CVAS website, cvas-utahskies.org, and the CVAS Constitution. I agree to abide by the constitution.

Signature: _____ Date: _____

Bring this form to the meeting or Mail Application to:

Janice Bradshaw, Treasurer
175 W 700 S
Wellsville, UT 84339

For any questions contact our Treasurer, Janice Bradshaw at lojbrads@yahoo.com
or our Secretary Wendell Waters at wendellw57@comcast.net