



WESTMINSTER ASTRONOMICAL SOCIETY, INC. (WASI)



Membership News



Volume 2 – Number 2

(formerly the Mason Dixon)

Spring 2024

Message from our Society's President, Wayne (Skip) Bird

Howdy and Welcome to Wayne's World.

Thanks to all that voted me as your new club president (I would be worried). If I remember my last stint as president (sometime last century) I was impeached for instituting the draft (if you were an club member you had to do at 5 outreach programs), arrested for shooting out a neighbors light (it was in the direction I needed to look) with a sling shot, I think he got mad because the light was in the kitchen, and taking \$1000 from the treasury and betting on a Terps football game. In my defense they won, and I put \$23,457.68 in the observatory account (as a donation from an unknown benefactor, however, I'm still under investigation for tax evasion and money laundering for the \$76,542.32 in cash they found in my house during the drug raid) which was why at one time we had \$50,000 in the observatory account.

So again, thank you all for your vote of confidence and I promise I will out do myself this time.

WASI News

Curt Roelle will be talking about WASI's history at the May 8 membership meeting. If you have any info or pictures about this please send them to Curt at roelle1@yahoo.com.

Are you ready for the eclipse April 8? Many of our members will be traveling to areas of totality. Please bring your photos back and share them at our meetings.

The libraries here in Carroll County would like for us to have some telescopes set up for the public to experience this event. If you will be in town, and have a scope with a solar filter, please contact jack@ganssle.com as he is coordinating with the libraries.

Want to know more about our outreach events? Here's the calendar: https://nightsky.jpl.nasa.gov/club-view.cfm?Club_ID=152

This newsletter goes out quarterly. Please send your astrophotos and astronomy news to jack@ganssle.com—especially your pictures of the eclipse!

WASI's 40th Anniversary



Saturday April 13 will be Carroll County Astronomy Day, A Celebration of 40 years of the Westminster Astronomical Society, Inc. Held at Bear Branch Nature Center, it's a chance for us to come out with our telescopes and enjoy the skies together. **The public is invited**, so let your friends know.

We plan to do some solar observing in the afternoon, with a star party after dark. Telescopes will be raffled off and there will be plenty of WASI and NASA swag. If you haven't looked through our 14" Celestron in the observatory, well, you're in for a treat.

Please bring your telescopes and solar filters!

A planetarium show is planned, and there will be a talks about astronomy in the nature center.

We're looking for volunteers for:

- Giving tours of the observatory (basically, to be there to answer questions and insure the security of our equipment).
- Run telescopes and explain what you're observing to the general public.
- Help with the planetarium.
- Give a talk about astronomy! We'll be using the meeting room in the Nature Center. What excites you that you can talk about for 15 or 20 minutes?
- Raffle off several telescopes and distribute swag.
- Publish this event on your social media outlets. Here's a sample post:

The Westminster Astronomical Society turns 40 this year, and we're hosting the Carroll County Astronomy Day Saturday April 13 starting at 4:00. Open to the public—come out and see the stars through our telescopes, tour our observatory, enjoy a planetarium show, listen to some talks, snag some free swag, and win one of the telescopes we're raffling off! This will be at the Bear Branch Nature Center, 300 John Owings Rd, Westminster, MD 21158 .

If you can help out, please email jack@ganssle.com or call 410-960-0707.

You may have seen coverage of the Society and the upcoming anniversary in Carroll Magazine last month. Our fearless president did a great job of promoting WASI.

Book Review: Totality

Just in time for the April 8 eclipse, Mark Littman and Fred Espenak's book "Totality" arrives. It is subtitled "The Great North American Eclipse of 2024", which makes it topical and irresistible.

The book is a little hard to characterize. It's a compendium of science, feelings experienced, personal anecdotes from a wide range of eclipse viewers, and history. Oh, there is a bit about the upcoming eclipse.

The first chapter describes how viewers feel when observing a total eclipse. Those feelings are scattered throughout the volume. This reviewer found that content uninteresting, but given that most news stories today focus on such reactions, perhaps this would appeal to many.

Chapter 2 is the best: it's a detailed explanation of the science behind eclipses. And it is detailed; the authors suggest skipping it if one finds it too murky, but science buffs will enjoy this.

Several chapters examine the historical record and how ancients interpreted the mystery of a disappearing sun. In some cases this skips so quickly through Egyptian, Armenian, Hindu and a hundred other cultures that a single paragraph traverses societies on many continents. In other cases there are fun stories, like the battle between the Lydians and Medes in 585 BCE that stopped at the moment of totality, and whose portents so frightened both sides that they immediately laid their arms down and made peace. Let's hope for more of this. Or the many peoples who had so little understanding that, even in modern times, they kept pregnant women indoors out of concern for the little ones' health. Or those who fit blankets to door and window cracks to ward off, well, something, while they watched the eclipse on TV. (Not mentioned is the scene from Mark Twain's *A Connecticut Yankee in King Arthur's Court* where Hank Morgan uses his knowledge of an upcoming eclipse to avoid the gallows and replace Merlin.)

The book does a good (and interesting) job of detailing the evolution of the understanding of the mechanisms of these events, and covers the various scientists who contributed to such knowledge. There's even a chapter about how several eclipses helped prove Einstein's General Theory of Relativity (don't worry—this is all described in an easy-to-understand way).

A pretty decent chapter on photographing an eclipse is worthwhile. For those thinking ahead, all eclipses till the middle of this century are cataloged.

But what about April 8, 2024? Yes, one chapter covers it, with detailed maps covering totality. If you have downloaded a map of the sun's path this chapter will add nothing useful. For those who will be stuck in Maryland or any place outside of totality, well, the book is silent.

Eclipse junkies will enjoy much of the book. But "The Great North American Eclipse of 2024" is rather a misnomer as there is so little about this event.

It's available on Amazon for \$18.95.

Notes on Outreach

At our January meeting a number of members received pins and certificates for outreach.



*Back row: Skip Bird, Jack Ganssle, Jim Reynolds, Marissa Galitz, Al Ansonge, Chris Bennett, Cindy Ward
front row: Narayan Nair, Foster Stolte, Curt Roelle, Laurie Ansonge*

In January some of our members helped decommission the Smiling Irish Eyes observatory in Frederick. Skip Bird, Al Ansonge, Gary Hand, Jeff Burns and Jack Ganssle contributed to the mayhem. The final disassembly is March 3. Let Skip know if you can help. We need a couple of trucks and implements of destruction like saws, crowbars, etc. We'll be tearing the wooden structure shown in the last picture apart.



In The News

We're all looking forward to April's eclipse, but these may become a thing of the past.

The moon is moving away from the Earth at about 3.8 cm per year—more or less the rate that fingernails grow. In 620 million years the moon will be so far away that we won't see total solar eclipses anymore.

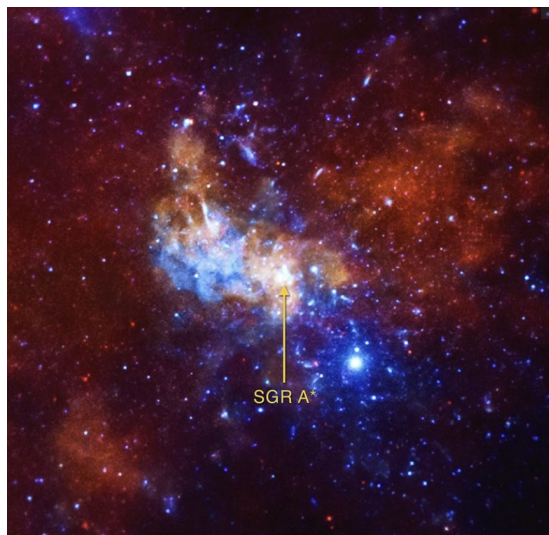
The moon is tidally locked to the Earth. As it pulls on our oceans they bulge out a bit (causing the tides), but also slows the Earth's rotation. You've certainly heard of the conservation of energy; well, angular momentum is also conserved (that's basically distance times rotational speed). When a skater spins more rapidly as he or she brings her arms in closer to the body, that's the effect of angular momentum being conserved. As the moon slows the Earth's rotation, to conserve that momentum, it must move further away from us. Eventually it won't be able to block the sun anymore.

Flattened Space Time

The Superbowl may be over, but new data from NASA's Chandra X-Ray Observatory and the Jansky Very Large Array (<https://www.space.com/milky-way-black-hole-shaping-spacetime-football-super-bowl>) suggests that spacetime in the vicinity of the supermassive black hole at the center of the Milky Way may be flattened like a cosmic football.

A spinning massive object quite literally "drags" spacetime around it. Sagittarius A*, the black hole in the center of our galaxy, is as massive as 4 million of our suns. The Chandra data shows that the hefty beast is spinning at something like 60% of the speed of light, which flattens spacetime near it to an oval shape.

Though it is spinning, apparently Sgr A* isn't all that busy gobbling up gas and goodies at this time, though in the past it was much more active.



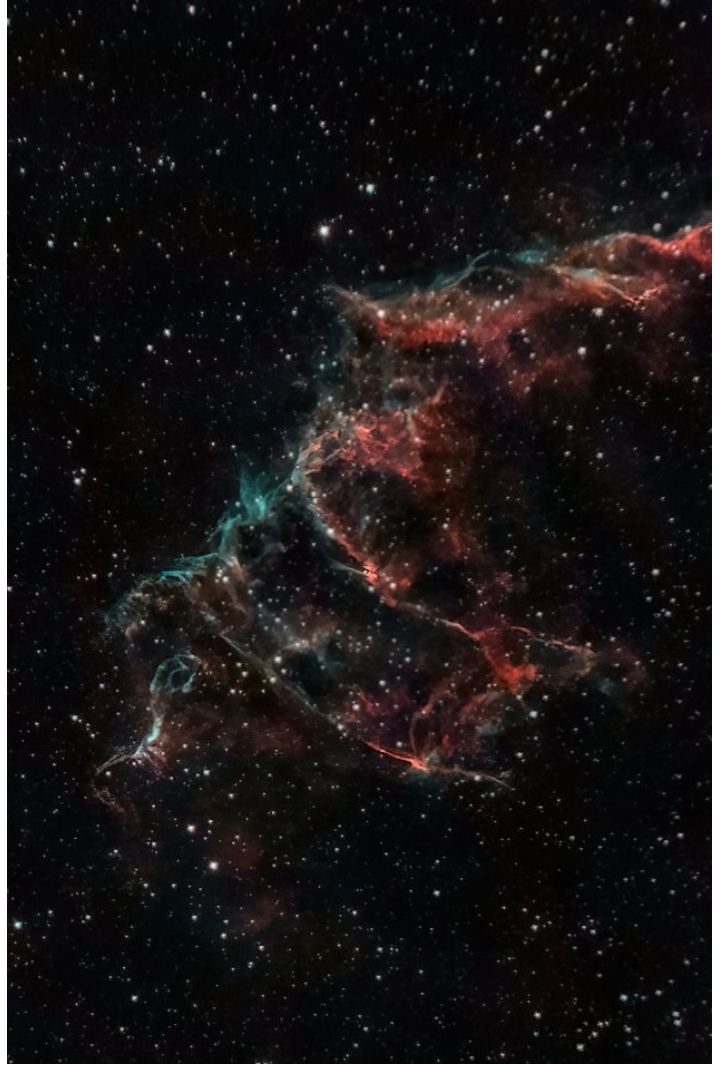
A Chandra photo of the center of the Milky Way with Sagittarius A noted.*

Astrophotos From Our Members

Matt Orsie is getting some great photos from his new ZWO Seestar S50. This is a robotic telescope that sells for about \$500 and includes a dew heater, UV/IR cut filters, a mini tripod, and more.



M42—just a 5 minute exposure!



Portion of the Veil Nebula NGC 1695 with IC 1340.
1 hour exposure

Astrophotos From Our Members

Laurie Ansorge captured some very nice images using her new Unistellar Odyssey Pro scope, another of these amazing robotic scopes:



NGC2419, AKA Caldwell 25



The Candy Wrapper Nebula, NGC2371. This is an object from the WASI 130 list.

Astrophotos From Our Members

Jackie Donaldson got an incredible image of the Horsehead Nebula using a Star Adventurer GTI, an Apertura 60 (360 mm focal length), a Player One Uranus C-Pro camera, and IDAS narrow band filter. These were guided 3 minute subs over two nights, running NINA, and edited with Siril and Photoshop:



Micheal Newman's RASA 8 at F2 with a Player One Saturn camera on an AM5 mount is garnering some awesome images. These are 15 minute exposures; the only postprocessing is cropping the edges in Sharpcap.



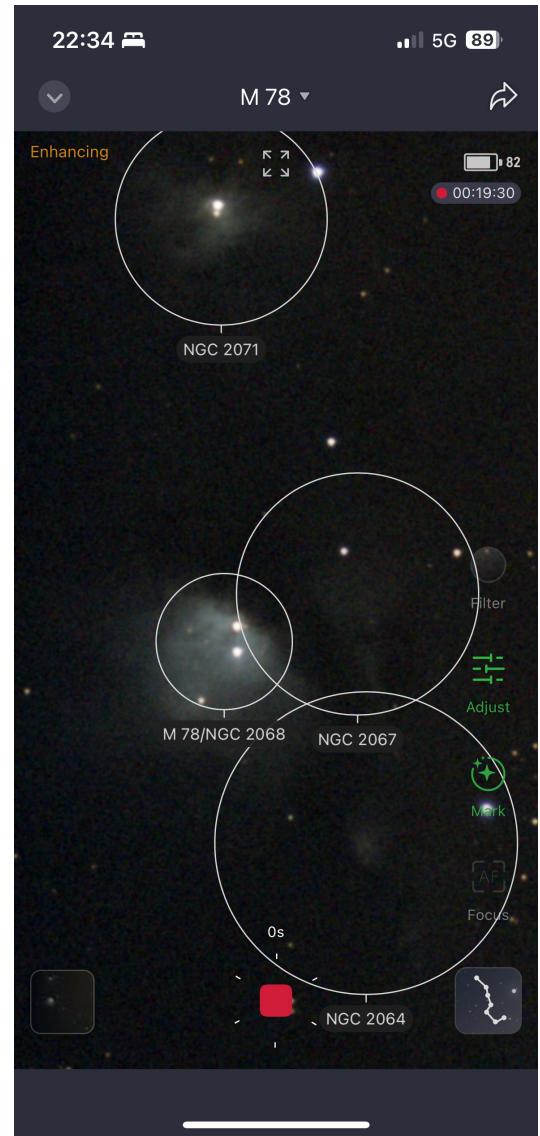
C31—The Flaming Star Nebula—17.5 minutes of data.



C50—NGC2244, The Rosette Nebula—18.5 minutes of data.

Astrophotos From Our Members

Doc Desai is also using the new ZWO Seestar. He got these pictures of M33 and the region around M78:



Alf Shupe captured M81 and M82 with his Vaonis smart telescope. This is a 25 minute exposure he got just before our February meeting at Bear Branch.



Astrophotos From Our Members

Ian Slepian sent a couple of pictures from his 11 inch SCT at 2716 mm focal length, using a ZWO 294MC PRO color camera, processed in PIXLR and Windows Photo. Here's 6 x120" of M51:



And here's M88, from ten frames of 30 seconds each. This is with a reducer so the focal length is 1938 mm He also caught galaxy PGC41515:



WASI FAQs

Did you know we have over 700 books about astronomy in our WASI library? There are available to WASI members. Here's the complete card catalog: <https://westminsterastro.groups.io/g/main/files>.

Newsletter - Please send pictures, articles, and ideas for the newsletter to jack@ganssle.com.

Facebook - We're active and sharing images on our Facebook page, found here:



Join/Renew membership link: <https://www.westminsterastro.org/join-wasi/>

If you've already entered your contact information (renewing), skip the "database" link: <https://paypal.me/WAstroSInc>

Dues are payable via PayPal on the link above, by check or cash (and through your bank's on-line bill payment). Membership Dues are \$25/year for individuals or family, and youth under 18 is \$5/year.

- On time payment means eligibility for the annual incentive .
- Keep access to the members-only groups.io pages/information
- Receive members-only access/notifications on Night Sky Network
- Keep/get discount rates for popular astronomy magazines
- Borrow from the WASI scope/literature library

Files and club member correspondence & wiki links are found here: <https://westminsterastro.groups.io/g/main>. Remember to set your communication preferences.

Outreach/event calendar is found on: <https://nightsky.jpl.nasa.gov/index.cfm>. Set your communication preferences here as well.

Changed address, email or phone? Please update your information and send a message to the webmaster and/or treasurer@westminsterastro.org.

We meet monthly on the 2nd Wednesday of the month:
Back to Basics from 7:15 PM – 7:30PM; General Meeting 7:30PM – 9:30PM
Bear Branch Nature Center Carroll County; 300 John Owings Rd.; Westminster, MD 21158
Website: <https://www.westminsterastro.org/> (Zoom info for hybrid meetings)