

# The High Desert Observer

February 2025



## This Month's Meeting - Feb 28th

IN-PERSON & Zoom, Friday at 7 p.m.  
Mesilla Valley Radio Clubhouse  
6609 Jefferson Ave. Las Cruces, NM

At the corner of Wilt and Jefferson -- take the Porter exit from US 70, about 5 miles east from the I-25 interchange. Go south on Porter until you come to Jefferson. From there, turn left and go to the corner of Jefferson and Wilt. The meeting will also be available to members via Zoom.

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## Tombaugh Lecture Series Presentation for the Month

**ASLC's First 50 Years**  
Pioneers Who Persevered

Nils Allen  
ASLC Vice President



As we celebrate the 95th anniversary of Clyde Tombaugh's big discovery, let's look back at the early decades of our Society, via the dedicated pioneers & personalities who guided the ASLC to become the community we enjoy today.

Nils is a retired engineer & long-time ASLC member who loves to 1) share his passion for stargazing, 2) mess with telescopes, & 3) grow in camaraderie with his fellow astronomers.

## From the President

### Ranimo Bush



February is here so it's time to celebrate all things Tombaugh! Clyde was born February 4, 1906. He would have been 119 this year. He passed January 17, 1997, after a good, long, and accomplished life. He discovered Pluto February 18, 1930. Plutomania at the LC Museum of Nature and Science on February 15 was a blast as we shared our telescopes for views of the Sun and Venus with over 400 attendees during this event in his honor. We'll be celebrating the 95th anniversary of the important discovery and his seminal contributions to our society at our February monthly meeting. Our very own Nils will be presenting and for those of you attending in person, there will be a little

something special after the meeting. We might even have a special guest at the meeting – his great, grandson who lives in Las Cruces.

The other big event everyone is talking about is the "Planetary Parade." Of course, the media has blown it out of proportion, but it's great to be able to see all the planets on the same night. Some accomplished that during our Leasburg Outreach on February 22. Mercury was the biggest challenge. Technically it's called planetary alignment which is when planets gather closely on one side of the Sun at the same time. The planets do form a line, but it's not perfectly straight like some media stories report. All the planets orbit the Sun in almost the same plane called the ecliptic. So educate those around you and get out and see all the planets in one evening. A good resource is: <https://www.space.com/planetary-alignments-mean-for-science-astronomy>

We've had our first Board meeting in February. Exciting things are coming (and hopefully coming back) this year. We discussed the Member's Survey. We received 17 filled out surveys. It was good to see that members are taking advantage of our website, Groups.IO, and the HDO newsletter. There was a lot of support for each of these as well as lots of wonderful suggestions throughout the surveys. I'll give more details during our meeting. Even though the survey is over, please feel free to reach out to me with any suggestions or concerns. I'm here to listen to you.

Clear skies always!

## ASLC-West Update

### Mike Nuss

We got clouded out at Rockhound on Friday, the 20th. But we had 30+ last night at City of Rocks. George Chakhtoura, Bill Nigg, Barry Flansburg, Charles Turner and myself enjoyed great company and viewing. Once that pesky blowtorch Venus sets the Zodiacal Light outshines the winter Milky Way now that galaxy season is coming.

## Upcoming Events - Check [ASLC-NM.org](https://www.aslc-nm.org) Event Calendar for details

Thursday, February 27th - 5:30 to 7:00 p.m. — East Picacho Elementary School STEM Night (private)  
 Thursday, February 27th - 7:00 to 9:30 p.m. — White Sands NP Starry Night Event - sold out  
 Friday, February 28th - 7:00 to 9:00 p.m. — ASLC Monthly Meeting  
 Friday, March 7th - 8:00 p.m. — NMSU Open House at Tombaugh Observatory Complex (on campus)  
 Saturday, March 8th - at sunset — NMSU MoonGaze at the Plaza da Las Cruces  
 Friday, March 21st - at sunset — ASLC West - Rockhound State Park Public Observing  
 Saturday, March 22nd - at sunset — ASLC West - City of Rocks State Park Public Observing  
 Friday, March 28th - 7:00 to 9:00 p.m. — ASLC Monthly Meeting  
 Saturday, March 29th - 11:00 to 2:00 — Outdoor Expo @ Las Cruces Convention Center

### The Astronomical Society of Las Cruces

**(ASLC)** is a 503(c)(3) non-profit group dedicated to expanding public awareness and understanding of the wonders of the universe. ASLC holds frequent observing sessions and star parties, providing opportunities to work on Society and public educational projects. Members receive electronic delivery of The High Desert Observer, our monthly newsletter, plus membership in the Astronomical League including their quarterly publication, Reflector, available in either paper or digital format. ASLC members are also entitled to a discount on a subscription to Sky and Telescope magazine. Annual Individual Dues are \$36; Family \$42; Student (Full Time) \$24. Dues are payable in January and partial year prorated for new members. Please contact our Treasurer, Patricia Conley, [treasurer@aslc-nm.org](mailto:treasurer@aslc-nm.org) for further information.

### Regular Events

Monthly, on an evening close to the first-quarter moon, ASLC hosts a public “MoonGaze” observing session in Las Cruces. We also hold periodic special evening sessions at Tombaugh Observatory on the NMSU campus.

Also monthly, the ASLC welcomes public viewing at the Haas Observatory in Leasburg Dam State Park, located just 20 miles north of Las Cruces. Our 16-inch Meade LX200 telescope at this site is used to observe under rather dark skies.

Keep updated on the dates, times, and locations through this [link](#) with additional information available at our website [www.aslc-nm.org](https://www.aslc-nm.org) as well as our [Facebook](#) page.

## Congratulations to Dena Laterza

**our Pagosa Springs CO member, on earning her AL Messier Silver Certificate!** It's great to have recognition given to the efforts of visual observers. This is where the Astronomical League provides a valuable service to the amateur astronomical community with its various certificates and awards for visual objectives being met. Dena's not far from achieving the Gold Messier Certificate status. Great




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### ASLC Board of Directors

President:	Ranimo Bush	board@aslc-nm.org
Vice President:	Nils Allen	president@aslc-nm.org
Treasurer:	Patricia Conley	vp@aslc-nm.org
Secretary:	John McCullough	treasurer@aslc-nm.org
Director:	Bernie Jezercak	secretary@aslc-nm.org
Director:	Ed Montes	director1@aslc-nm.org
Past Pres:	Tim Kostelecky	director2@aslc-nm.org
		PastPres2@aslc-nm.org

### Committee Chairs

ALCOR:	Patricia Conley	treasurer@aslc-nm.com
Calendar:	Stephen Wood	outreach@aslc-nm.org
Education:	Rich Richins	education@aslc-nm.org
Loaner Program:	Tim Kostelecky	loanerScopes@aslc-nm.org
Observatories:		
Leasburg Dam:	Steve Barkes	LDSPObservatory@aslc-nm.org
Tombaugh:	Open	ASLCObservatory@aslc-nm.org
Outreach:	Stephen Wood	outreach@aslc-nm.org
Website:	Steve Barkes	webslave2@aslc-nm.org
HDO Editor:	Tim Kostelecky	HDO@aslc-nm.org

## Member Article

### Telescope Hosting Sites - What I've Learned

**Dave Doctor**

Years ago I purchased land across the street from the “renowned” New Mexico Skies astronomy enclave in Mayhill NM. Back then (2015) it was a dark Bortle 1-2 site with good seeing. I was able to realize a long-term dream of building my own observatory from the ground up as it were. Of course it was fantastic.....for about 5 years. And then disaster struck! Ranchers moved into the valley below and virtually destroyed everything! The above image was taken around 2021 or so and is a location about 50 yards from my rolloff!



So needless to say we had to sell the property and I moved two rigs to a telescope hosting site in a town in Western NM called Pie Town. And this brings us to the subject of this article: telescope hosting sites- what I've learned.



The amateur astronomy “skyscape” continues to evolve, especially when it comes to astrophotography. Technology advances, climate changes and other factors play into the dynamics.

The famous New Mexico Skies Astronomy Enclave is pictured above, located in Mayhill, NM. That is where it all started in the years 2000-2005! Several domes are seen at the top of the ridge on the right. Back in the early 2000s people were just beginning to explore the concept of “remote imaging” and the first remote observatories popped up, several in New Mexico. One of the first was the well-known “New Mexico Skies”. This enabled folks to do imaging from a dark site if they were living in light polluted areas. Many people would purchase land and build their observatories from the ground up. These observatories typically were in designated “astronomy enclaves” .

Unfortunately, as I have learned, nothing is guaranteed anymore with respect to light pollution and local seeing. Many of these so-called “enclaves” supposedly have lighting ordinances which cannot practically be enforced in many cases. New Mexico Skies was recently downgraded to a Bortle 3 sky and local light pollution as you can see is a major problem now.

Over the last 20 years, because of the above considerations, more amateur astronomers who

want to use their own equipment, especially for larger optical setups, have leaned more heavily toward telescope hosting where they can simply rent the piers in a desired location and have all of the infrastructure managed by the hosting facility. This has several obvious advantages:

- 1) No need to deal with operational problems like domes and roofs not working, power outages and network issues. These happen a LOT and if you have your own place it's a major headache. If you are at a hosting site all you need to do is make a phone call or text!
- 2) In most cases there are techs available that can deal with equipment-related issues.
- 3) If any equipment repairs are required, they can either do those on site or can ship your equipment to the manufacturer.
- 4) Onsite living accommodations are available free of charge for clients who need to manage equipment issues directly.
- 5) If conditions do deteriorate over time, you can always move without having to sell your observatory property, usually at a loss.

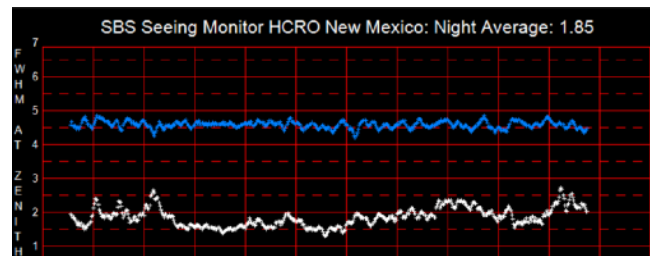


Here is an example of a typical roll-off at a hosting site. Usually several imaging rigs are present.

The number of telescope hosting sites has exploded over the last several years. These exist all over the world. If you have decided that pier rental is for you, here are some things to think about:

- 1) Local seeing conditions. This is absolutely the most important if you want to get the most out of this investment. If you have longer focus optics, say  $> 2000\text{mm}$ , you will probably be unhappy with average seeing regardless of how dark the site is! Sure, darkness is important but you're not going to find a hosting site located in a Bortle 7 sky! Most are 1-3. A couple are Bortle 4 but boast outstanding seeing!

Make sure you can look at objective seeing data from e.g. seeing monitors or similar, to make sure the seeing will support your optics, and check this data over at least a couple of years to be sure it is reasonably stable.



Here is an example of a seeing monitor from Howling Coyote Remote Observatory in Pie Town NM. This is actually a bad night for them as seeing there typically averages 1-1.5 arc sec

What is considered good or good enough? Well, different people probably have different opinions on this but it does depend on what you are installing and what your goals are. If your focal length is  $> 2000\text{mm}$  you should, in my opinion,

shoot for average seeing < 2 arc sec. Obviously the best seeing you can find is the goal. In North America you have some sites that average between 2 and 2.5, 1.5 and 2, and another few that average between 1 and 1.5 which is probably the best you're going to find.

2) Cost- this is obvious, but you will have to weigh cost vs sky conditions vs services provided. Generally, as of the date of this writing , costs can range from \$3/400 to \$1200US per month depending mainly on the size of your rig and also services requested or available. Probably the average price point is around \$8-900. Usually, they will still charge for any work done on your equipment after a total time of about one or two hours. This may be an additional \$50 an hour. Check with the facility for the details regarding equipment service charges. Unless you are paying at the top of the cost spectrum, you will be expected to do the initial install of your own equipment.

Other costs can include a UPS (uninterruptable power supply) for battery backup in case of power failure. These can in some cases be provided by the facility at no charge or you may have to supply your own. These can cost around \$2-400 depending on the capacity.



A web power switch such as the one pictured above is the other item you may be required to supply.

This is basically a power outlet strip that you can access via the web. Digital Loggers is the standard. The one pictured here sells for around \$220.

3) Location. There are maybe a hundred or more of these sites now scattered around the globe. You need to ask yourself how far away are you comfortable being? For example , if you must have the absolute best seeing possible on the globe, then perhaps you will be looking at places in Chile. Of course, there are major logistical challenges getting equipment shipped down there and installed. Whether or not the cost and hassle of doing that is worth it is of course up to you.

If you live in an area not too far from a site that has good seeing then perhaps it might give you peace of mind to know you can drive there to deal with equipment issues, if necessary.

Local weather can be a consideration. For example, in New Mexico, the seeing can be great and of course most of the year the weather is typically good, but you have two months of the summer where the “monsoon” occurs. While usually the inclement weather is spotty, you could have some years where you might not be able to do any imaging for nearly the full 2 months!

4) Of course, check images taken at the facility. Most of them have an online image gallery. Are there image publications, APODs, etc? You can go to Astrobin.com and probably find images obtained at just about every hosting site in the world. Sign-up is free for a basic membership. Definitely worth doing if you are not already a member.

Additionally, talk to clients who are already renting at the site and see what their experiences have been. Ask about the sky conditions and the services in particular.

5) Finally a couple of additional points to consider when contemplating renting at a hosting site:

a. While it may go without saying, you need to be certain your equipment runs smoothly before going out there to install it. Practice “automated” imaging before considering running it remotely. That means you can turn your equipment on, leave it alone, and run an imaging session through the night with no equipment failures. The more problems there are, the more costly and frustrating that will become.

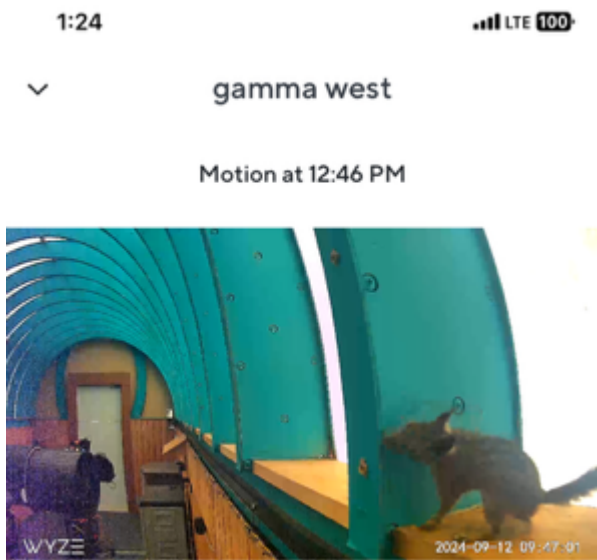
b. Be aware that, despite the fact that the infrastructure i.e. roof control, network etc is managed by the facility, problems will occur that will derail your planned imaging sessions. Power outages and network failures are the most common. Most of these facilities are remote enough that onsite help is not 24/7. I know a few of the owners of these and they are typically older individuals sometimes with various physical ailments, and as we get older it does become much more challenging to do the physical work required to manage these sites. It is very difficult to find help in some of these locations. In addition, the owner of the facility may not live full time there, so problems that come up will take a variable amount of time to resolve because of these factors. Some network glitches or power outages can take a few hours to a few days to resolve. Patience is very necessary! You need to inquire about how these are handled and what you can expect ahead of time. It can be frustrating to lose additional imaging nights not due to weather or the Moon, but this should average at the very most maybe a night or so a month.



c. Usually, the facility has installed observatory cameras to enable monitoring of your equipment if needed. This is extremely helpful. This is usually provided free of charge. If not, these cameras are relatively inexpensive, typically < \$100.

d. Frequently, multiple networks exist at the facility. So for example there may be an observatory network and a separate network for the main residence. There may be a need to access your observatory via the home network and this access should be provided.





Not too long ago I got a video alert from this observatory cam above which showed this uninvited rodent snooping around inside the roll-off! The observatory facility is responsible for “critter control” but sometimes, in spite of their best efforts, it turns out not to be a failsafe system!



I apologize for the Amazon content but there are several of these devices and I wanted to be sure to be clear which one I would recommend. Take

responsibility for your own equipment and be proactive with this potential issue, which has ruined more than a few mounts and other equipment!

The device pictured above has worked extremely well. I have it plugged in next to my pier. I put a piece of tape over the lights so they don't interfere at night.

e. Insuring equipment. These hosting sites will not insure your stuff. Unfortunately as I have found out, insurance companies can make it difficult to do this in a way that makes the cost worth it. If you really want this, some searching will be required.

Anyway that's all I have regarding telescope hosting sites. I have been using one for the last 3 years and have no regrets. I hope this information has been useful. Feel free to contact me with any questions.

Thanks for reading!

Dave Doctor

## Monthly Meeting Minutes January 2025

**John McCullough - Secretary**

### Call to Order:

Rani Bush, President, Astronomical Society of Las Cruces (ASLC, the Society), called the January 2025 meeting to order at 7:00 pm on 24 January 2025 at the Mesilla Valley Radio Clubhouse. There were twenty (20) members, spouses, and guests in attendance, as well as nine (9) attendees via Zoom at the start of the meeting.

Rani welcomed the group to tonight's meeting. She announced that the meeting minutes from November 2024 were published in the January 2025 issue of the Society newsletter, the High Desert Observer (HDO). She asked if there were corrections, clarifications, or modifications required. None being offered, Bernie Jezercak moved that the November minutes be accepted as published and Nils Allen seconded the motion. The minutes were accepted by acclamation.

### Presentation:

Tonight's Tombaugh Series presentation was by Richard Wolff-Jacobson, on "PiFinder: Improving the Observing Experience through Community and Innovation". Richard's presentation explored the journey of the PiFinder over the past two years, highlighting the incredible community engagement and the resulting improvements that have made the PiFinder a valuable tool for him and other amateur astronomers. He started with a bit of background about the PiFinder and what spawned it, delved into the collaborative efforts that have driven the project's growth, the role of user feedback, and explored how the PiFinder not only enhanced his observing sessions but also connected him to a vibrant, knowledgeable community passionate about astronomy.

Richard is a software engineer and hobbyist designer with a passion for astronomy, vintage electronics, and unusual form factor computers. He's been observing the night sky for over 30 years with various commercial and home-built telescopes, but still often feels like a beginner.

Rani welcomed Michael Beddo, a new member. Michael grew up on a horse farm near Anthony, NM. He built his own telescope when he was younger. A graduate of New Mexico State University, he has gotten into astronomy and decided to join the Society after recently moving to Las Cruces.

### Officer/Committee Reports:

#### Treasurer:

Trish Conley, Treasurer, presented a report on the status of the Society's finances. The Society has a positive balance of \$324.93 since the last meeting, primarily from annual membership dues payments. Trish noted that the Society's liability insurance premium has increased \$30 annually. Tracy Stuart offered a motion approving payment of the increase, Bruce Wiseman seconded. The motion passed. Trish also reported that the Society is in the black \$372 for the current fiscal year. Contact her for detailed expenditure/income reports.

## Outreach:

Stephen Wood, outreach coordinator, reported on recent and upcoming local events. Events and attendance were:

Event	Date	Members	Visitors
LDSP (3 <sup>rd</sup> Qtr. Moon)	13 Nov.	10	100
Vista Middle School	05 Dec.	4	100
December Moon Gaze	06 Dec.	2	200
Loma Heights Elem. STEAM Night	12 Dec.	4	25
Boys & Girls Teen Night	13 Dec.	5	30
Chihuahuan Desert Nature Park	13 Dec.	2	500
Kids Can/Whoville	14 Dec.	4	150
January Moon Gaze	04 Jan.	6	150
Railroad Museum Star Party	04 Jan.	4	60
LDSP (3 <sup>rd</sup> Qtr. Moon)	18 Jan.	10	50

Upcoming events are:

Event	Date
WSMR Sci-Fi/Space Party	25 Jan.
Tombaugh Elem. Star Party	31 Jan.
February Moon Gaze	08 Feb.
Plutomania @ MONAS	15 Feb.
LDSP (3 <sup>rd</sup> Qtr. Moon)	22 Feb.
East Picacho Elem. STEM Night	27 Feb.

Contact Stephen if you can support any or all events. He would like to see more members support the smaller events with telescopes.

## Apparel:

Rani Bush, committee chair, stated a replacement chair will be needed as she takes on the responsibilities of President this year.

## ASLC-West:

Mike Nuss, coordinator, was not available at tonight's meeting; Charles Turner gave a report on recent Deming-area outreach activities instead. On Friday 20 December, there were 11 guests at Rockhound State Park. On Saturday 21 December, there were around 40 at City of Rocks (CoR) State Park. On 17 January, the viewing was cloudy and 'winded out', but there were 17 guests at CoR the next evening, 18 January, for a good session. Barry Flansberg, Bill Nigg, Charles Turner, and Mike Nuss were the member/presenters on hand.

**Old Business:**

Loaner Telescopes/Donated Equipment – Tim Kostelecky continues his efforts to reduce the amount of equipment the Society maintains. Excess material may be offered to members or sold to support the Society's accounts. Charles Turner suggested advertising items on either Astro Mart or Cloudy Nights.

There was no additional old business for discussion.

**New Business/Announcements:**

Uranus Occultation –Mark Croom presented a project to the Society: participating in the Smithsonian Astronomical Observatory's (SAO) observation of the Uranus occultations in April 2025. He is attempting to get additional observers involved.

Member Survey – Rani Bush and Nils Allen presented a new member survey being conducted to determine how the Society can continue or better serve the membership. Hard copies of the survey are available tonight, an electronic version should be available online this weekend. Please complete and submit by 03 February so that results can be compiled by the next meeting. Some discussion followed.

PiFinder Build – Steve Barks asked how many members would be interested in building the PiFinder discussed in tonight's presentation. Looking at the website, components can be purchased for \$100-\$150, he can do some 3D-printing, and assembly could take place one weekend at the Mesilla Valley Radio Club house. Interested members should contact him.

Mesilla Valley Radio Club Donation – Trish Conley reported the Mesilla Valley Radio Club's insurance premium had increased dramatically recently. The Society has been meeting in their club house for several years at no charge. The Board had discussed donating \$360 a year to the club to help defray increased utility and insurance costs of the facility. Trish offered a motion to make said donation and to include the amount in future ASLC annual budgets. Jane Himes seconded. The motion was approved by the members present.

Storage Unit Increase – Tim Kostelecky reported that the donated astronomical equipment the Society maintains has exceeded his available space. A larger unit (10'x10' vs. 5'x10') is available in the compound where the Society currently stores miscellaneous items, mostly related to Renaissance Arts Faire. The Board had discussed acquiring the larger space at an increased monthly rental (\$35 to \$70). Tim offered a motion to accept the increased cost to double the storage capability and include the added cost to the budget. Tracy Stuart seconded. Following discussion, the motion was approved by the members present.

Honorary Members – Trish Conley reported the Board had been contacted by longtime members Roy and Sharon Willoughby and Vincent Dovydaitis about the possibility of becoming Honorary Members of the Society. Such members do not pay dues and cannot hold office nor vote on Society business. Steve Barks offered a motion to grant Honorary Member status to the Willoughby's and Vince Dovydaitis. Ed Montes seconded. The motion was approved by the members present.

There was no additional new business offered for discussion.

The January 2025 meeting was adjourned at 9:00 pm

-Respectfully submitted:  
John McCullough  
Secretary, ASLC

## Member Images

### NGC 7331 (Caldwell 30) in Pegasus Jeff Johnson



I recently re-visited data from my backyard (collected here in Las Cruces) of NGC 7331. Here (attached) is the result.

TPO 12" Truss-tube RC @ f/8,  
Astro-Physics AP1100GTO (on ATS pier),  
QSI 690wsg @ -10C,  
11x5min (bin1x1); 4x5min ea RGB (bin2x2); AstroArt5, PI, CS4 (uncropped, 10xdarks/flats/fdarks/bias)

Distance: 40 million light years (NGC 7331)

\*\*\* Small group of galaxies above NGC 7331 --- are ~300 million light years away

## Tombaugh Window at LC Unitarian Universalist Church Rich Richins



The LC museum coordinator asked me for a copy of the 'Tombaugh Window' for some Plutomania publicity, so I thought I'd send it out to the group in case any of you had never seen it before (we have some fairly newish members in the club). Clyde was a founding member of ASLC and the local UU church (where the window is located) as well as the discoverer of Pluto.

## NGC 6744: “Milky Way Doppelganger” in Pavo Alex Woronow



OTA: CDK24

Camera: 2 Cameras: one an older CCD and the current CMOS

Observatory: Telescope Live (CHI-1)

Date of Processing: 012024

Broadband: 24.8 h

Subframes Discarded: 28% (including all L)

NGC 6744, with its flocculent arms and elongated core, mimics our Milky Way Galaxy

The most interesting aspect of processing this image was that, once again, the separately captured lightness/luminosity (L filter) had less detail than the lightness already present in the RGB image. Here is the comparison:

**NGC 2264 Christmas Tree Cluster/Cone Nebula in Monoceros**  
**Tim Kostelecky**



My first attempt with an LRGB setup. ES127 refractor and ASI533MM camera.  
Processed with Siril and Mac Pixelmator Pro; 2.33 hours total integration.