The High Desert Observer March 2025



Tombaugh Lecture Series Presentation for the Month

This Month's Meeting March 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.

In This Issue

Astrometry.net - Plate-solving Database Dr. Dustin Lang

Computational Scientist Perimeter Institute for Theoretical Physics, Adjunct Assistant Professor, Department of Physics & Astronomy, University of Waterloo.



My research is at the intersection of computer science and astronomy. I mostly work on principled data analysis methods for astronomical images, drawing on old and new results from computer vision, machine learning, signal processing, information theory, and statistics. On the astronomy side, the goal of my work is to make the best possible use of the data we have to answer scientific questions and to discover new questions to be asked.

I continue making small improvements to the Astrometry.net code and the Nova.astrometry.net web service. Astrometry.net is a system for automatically recognizing (or astrometically calibrating) astronomical images using pattern recognition and fast search techniques. We have thousands of users who have uploaded tens of thousands of astronomical images.

Upcoming Events - Check <u>ASLC-NM.org</u> Event Calendar for details

Friday, March 28th - 7:00 to 9:00 p.m. — ASLC Monthly Meeting Saturday, March 29th - 11:00 a.m. to 2:00 p.m. — Outdoor Expo at Las Cruces Convention Center Friday, April 4th - 9:00 p.m. — NMSU Open House at Tombaugh Observatories, on campus Friday, April 4th - at sunset — Stars at the Station - Public Outreach at Las Cruces Train Museum Saturday, April 5th - at sunset — ASLC MoonGaze at the Plaza da Las Cruces Thursday, April 17th - 5:00 p.m. to 7:00 p.m. — Sonoma Elementary STEM Night (private event) Friday, April 18th - at sunset — ASLC West - Rockhound State Park Public Observing Saturday, April 19th - at sunset — ASLC West - City of Rocks State Park Public Observing Saturday, April 19th - at sunset — ASLC Leasburg Dam State Park Public Observing Friday, April 25th - 7:00 to 9:00 p.m. — ASLC Monthly Meeting

ASLC-West Update Mike Nuss

The winds died down thankfully around sunset this past weekend and we were able to enjoy viewing the spring skies replacing the winter constellations. We had 20 participants at Rockhound on Friday, March 21st. Bill Nigg, Charles Turner and myself presenting. Unfortunately, the seeing was poor that evening.

We had more than 50 folks for a great turnout at City of Rocks on Saturday, the 22nd. Much better seeing than the previous night, and the clouds were teasing us early on but disappeared shortly after sunset, setting the tone for an enjoyable evening. George Chakhtoura, Chris Brownewell, Bill Nigg, Charles Turner and myself hosted the event.

Of note, with a lot of the participants, artificial satellite viewing both nights seemed to garner as much or more interest than what the rest of the universe had to offer.

The Astronomical Society of Las Cruces	Regular Events
(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 for further information.	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, along with additional information on our website www.aslc-nm.org as well as our Facebook page.

ASLC Board of Directors

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Committee Chairs

ALCOR:	Patricia Conley	treasu
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Observatories:		
Leasburg Dam:	Steve Barkes	LDSPC
Tombaugh:	Open	ASLCO
Outreach:	Stephen Wood	outre
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Member Article

My Other Telescopes by Lydia Tamez

Not sure readers are aware that I have used other scopes prior to my oft-used Unistellar, and I thought you would enjoy these pictures.

Besides a 4-inch Celestron refractor back in the 1990's these are the others:



Figure 1

My husband and I have a couple of Moonraker beautiful 4-inch refractors which are great for planets, but are now sitting around as show pieces (one of which is in my living room -Figures 1 and 2), while I use my eVscope2. We have other mounts when we used them outside as the DeltaPod stand in the picture is just for display because I think the craftsmanship is so beautiful.

Figure 2



Outside pics (Figures 3 and 4):

We have two 6-inch telescopes from Moonraker as well - one refractor and one reflector. The Moonraker guy in England makes some beautiful telescopes. Even Lowell Observatory commissioned him to make them one. A sci-fi series "Altered Carbon" also featured one. His website shows more of them. My husband saw them a few years back and suddenly they were at our house. But not something you can take to a public event or just leave outside. These pics show them on our Pier Tech mounts which we had put on wheels - those piers allowed us to raise and lower the telescopes as my husband is 6'2" and I am 5'6". But it took time

Figure 3



to set up everything each night and I needed his help because everything was heavy and it took the two of us to mount everything, etc. Then I had to take time to sight on two or three stars to get it oriented and that took me forever because I was so limited in my skills. I just had a strong will, but it never got easy for me. And he had to leave so early in the mornings to go to work, that we had very little time for viewing before breaking it all back down, so I could not stay up very late. But it didn't really matter because once I gave up trying to use my Mallincam SkyRaider DS10cTEC camera for Deep Sky objects as the software was not intuitive for me, all that was left for me were the same planets, moon and sun. Nothing like what I am seeing now and can share with the public - not to mention the ease of use of Unistellar, the Slack network, and Citizen Science — which is one of the most extensive networks in the world.

I am aware an observatory would have helped, but since I was left only viewing planets and the moon it wasn't worth it for me. Again, I have no interest in astrophotography as I am missing the 'artistic' gene that is required. I just want to see as many things as I can each night and be filled with the awesomeness of the cosmos!

Figure 4



Monthly Meeting Minutes February 2025

John McCullough - Secretary

Call to Order:

Rani Bush, President, Astronomical Society of Las Cruces (ASLC, the Society), called the February 2025 meeting to order at 7:00 pm on 28 February 2025 at the Mesilla Valley Radio Clubhouse. There were twentyfour (24) members, spouses, and guests in attendance, as well as six (6) attendees via Zoom at the start of the meeting.

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

Presentation:

Tonight's Tombaugh Series presentation was by ASLC member and current VicePresident Nils Allen, on "ASLC's First 50 – Pioneers Who Persevered". As we celebrate the 95th anniversary of Clyde'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 that is enjoyed today.

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

Rani welcomed Victor (?), retired White Sands Missile Range (WSMR) employee and former colleague of Nils Allen. He discovered ASLC "by accident" and knew Clyde Tombaugh and Reta Beebe when he was a student at New Mexico State University (NMSU).

Officer/Committee Reports:

Treasurer:

Trish Conley, Treasurer, presented a report on the status of the Society's finances. The Society had a net income of \$402 since the last meeting. 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
WSMR Sci-Fi/Space Party	25 Jan.	4	10
Tombaugh Elementary	31 Jan.	6	300
February Moon Gaze	08 Feb.	10	200
Plutomania	15 Feb.	8	300
LDSP (3 rd Qtr. Moon)	22 Feb.	7	100
WSNP Starry Nights	27 Feb.	7	110
East Picacho Elementary	27 Feb.	4	100

He noted the WSMR event was mostly clouds.

Upcoming Events:

Event	Date
March Moon Gaze	08 Mar.
LDSP (3 rd Qtr. Moon)	22 Mar.

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 announced that Don Dapkus has volunteered to take over responsibilities for Societyrelated apparel. There are some items in inventory, primarily caps, and an order for additional items will be placed in the future.

ASLC-West:

Neither Mike Nuss, coordinator, nor Charles Turner was available at tonight's meeting; there was no report on recent Deming-area outreach activities. There was no news from Pagosa Springs, CO (Dena Laterza).

Old Business:

Member Survey – Preliminary results indicate most members would enjoy more member-only activities and social gatherings such as cookouts, post-meeting gatherings, etc. Several asked if ASLC's social media presence can be increased.

Tim Kostelecky noted the groups.io had become very active the last two months. More discussion can occur after the meeting.

PiFinder Build – Steve Barkes displayed the unit he built utilizing the online resources. He asked again if other members were interested in building similar PiFinder units. Interested members should contact him.

There was no additional old business for discussion.

New Business/Announcements:

ASLC Board of Directors – Tracy Stuart has had to step away from serving on the 2025 Board for personal reasons. Ed Montes was asked to fill the open position and has agreed.

Mesilla Valley Radio Club – Steve Barkes reported the Mesilla Valley Radio Club is looking for full cutoff lighting for its parking area. This may enable Society members to do some observing post-meeting.

Astronomical League (AL) Reflector – Trish Conley reported that the March issue of the Reflector will be an electronic-only issue as a cost saving initiative (approximately \$25,000) by the AL. Subsequent issues will be print and electronic as previously distributed.

There was no additional new business offered for discussion.

The February 2025 meeting was adjourned at 8:37 pm.

-Respectfully submitted: John McCullough Secretary, ASLC

Member Images

Colorful Lunar Eclipse Rich Richins



It was a very ugly night with a dust storm howling thru the entire eclipse. Image enhanced by cranking up the color saturation and then blurring the colors slightly. The yellow might be the result of the dust??

Horsehead Nebula (Barnard 33) in Orion Mark Gorman



Taken with C14 at F7.2. Nearly 90% full moon with two 7nm bandwidths Ha and Hb. ASI 2600mm. 15 X 120" subs. The nebula is part of the much larger Orion molecular cloud complex, and is located just south of Alnitak, the easternmost star of the belt of Orion.



IC 2872 and Other Clouds - Nebulae in Centaurus Alex Woronow

Equipment: OTA: ASA500 (f/3.8); Camera: FLI PL 16803 CCD Pixel Resolution: 2" Observatory: Telescope Live

These clouds are not highly studied, perhaps because they are not highly interesting. They are HII clouds, ionized by nearby/embedded stars.

Processing was easy because the data quality was high but sparse with only 6 or 7 subs for each narrowband capture. However, the ASA500 has a relatively short focal length and, the 600s images of this target are the equivalent of 1500s exposures at f/6 in terms of photons recorded.