

REFLECTIONS / REFRACTIONS

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University Lowbrow Astronomers Monthly Newsletter

January, 2025, Vol 49, Issue 1

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WHIRLPOOL GALAXY (M51) BY AWNI HAFEDH

Awni's photo represents data captured over three years, from 2020-2022

84x180s of (Lum) data on 5/3/2020 using ASI1600MC camera
24x300s of (Ha) data on 3/13/2021 using ASI183MM camera
97x180s of (Lum) data on 3/9/2021 using ASI533MC camera
141x60s of (Lum) data on 3/17/2021 using ASI533MC camera
139x180s (Lum) data on 4/27/2022 using ASI2600MM camera
30x180s (Red) data on 4/28/2022 using ASI2600MM camera
30x180s (Green) data on 4/28/2022 using ASI2600MM camera
30x180s (Blue) data on 4/28/2022 using ASI2600MM camera
With a total exposure of 24.85 hours

Additional equipment used:

Celestron 9.25" with 0.7x reducer, Astronomik Ha, L, R, G, B filter
iOptron CEM60 mount ☐



QUICK RESULTS: OUR NEW SEESTAR S50

BY JEFF KOPMANIS

Jeff got a chance to test out our club's new Seestar on the drive back from a cloudy Upper Peninsula trip.

On the afternoon's drive back, it cleared up enough that I was able to do some test runs with the Seestar -- or enough to discharge the battery down to 18% after 4 hours or so of imaging. It skips the inclusion of bad frames, so while I was hoping for an hour for each, clouds prevented me from completing each run.

Here are the "quick results" from those runs using only the built-in touch-up tools. Pretty impressive for sitting in my La-Z-Boy watching them capture!



I got the Triangulum Galaxy, the California Nebula, and the Trifid Nebula. Total collection time is stamped on the photos." □

More test photos from Jeff, page 3.

The Seestar sits unobtrusively in Jeff's yard.



**A detailed review of the club's
Seestar and instructions for use
will be available soon. Stay tuned!**

UPCOMING MEETING SPEAKER SCHEDULE

January 17 David Gerdes, UM Astronomy

Topic: What's Beyond Neptune? Search and Discovery in the Outer Solar System

February 21: Jeff MacLeod, NASA/JPL Solar System Ambassador

Topic: TBA

March 21: Dr. Richard Goodrich

Topic: Fear and Loathing in the Heavens

April 18: TBA

May 16: TBA

June 20: TBA

OBSERVATORY UPDATE FROM JACK BRISBIN

The new ENVI Smart Heater was installed last Sunday. It is located on the south wall. The unit uses 8.33 amps (1000 watts) and runs on the number 8 circuit breaker, which is 20 amps. The electric chargers only use a couple of amps at various times. This new setup should work well.

The heater temp is set to 45 degrees; when it goes below 45 the heater turns on.

The manual is in the observatory manual folder on the blue corner table. ☐



OBSERVING REPORT

LESLIE PARK, DECEMBER 30, 2024

BY DON FOHEY

We had a very enjoyable evening Monday night, December 30th, at Leslie Park. How rare it was to have a clear warm night at new moon in late December. New member Ron Lev had emailed the ACNO list asking if anyone was going to observe in the forecasted cloud-free hours from 6 pm to 8 pm. I sent an email to the general membership to "come out, say hi, and share a view in my 10". Ron and I were joined by Jim and Ginia, her solar sister Colleen, Ron's friend Kathleen, Barry, and Dale. The 8 of us had a wonderful evening under the stars.

I first swung the 10" to Jupiter which is high in the sky and approaching opposition. I was delighted to see Europa in contact with the limb of Jupiter about to begin transition. Jim and I watched as it disappeared onto the face of Jupiter. The others arrived just a bit too late to see it. Jupiter was spectacular with very steady viewing. At a magnification of 240, details in the bands were visible. Just before packing up, I did get a brief view the Europa's shadow. It was a tiny spec and only visible in the brief instant the turbulent atmosphere permitted seeing it. In the spring and summer, the ecliptic is nearer the horizon and viewing isn't as good as it is in the winter.

We moved next to Venus which was exhibiting a 1/4 phase. (half the disk was illuminated). Kathleen was new to astronomy and was pleased to learn that Venus had phases like the moon. Next in line to view was Saturn and seeing the rings near edge-on is such an unusual experience. I am not sure I will still be observing in 15 years when they again appear edge-on. Binoculars were used by the group for the Pleiades, the double cluster, and other bright objects. I had a delightful view of the



Don's granddaughter gave him the best Christmas present ever.

Pleiades in, my 10" with a 40mm, 1.7 degree FOV 2" porthole of an eyepiece. The Orion Nebula, M42 was viewed low near the horizon in some haze, but still delighted. I never tire of seeing the trapezium embedded in the nebulosity. Lastly, we tried Mars low in the East. It was a roiling red disk, no detail to be seen. I am looking forward to seeing it later in January when it is at opposition and near the zenith.

Ron was getting accustomed to his 5" table top DOB. He has ordered an 8" DOB that he expects to be delivered by late January. I see aperture fever in his future. Ginia photographed the Pleiades using a new tracking mount but was disappointed with star trails.

The Leslie Park location although close to the city is a surprisingly good observing location. It has no direct lights illuminating the field and is a good location for a tour of the planets and other bright objects. The best part of the night was the comradery of fellow Lowbrows. □

A FEW PHOTOS BY CLUB MEMBERS

**CHEERS TO THOSE OF US WHO MANAGED TO CAPTURE PHOTOS
DURING A MONTH OF NEAR-CONSTANT CLOUD COVER!**



THE CALIFORNIA NEBULA, BY GLENN KAATZ

Telescope: William Optics Z61 refractor

Mount: Celestron CGX

Accessories: PoleMaster polar alignment camera, William Optics Z61 field flattener, ZWO off-axis guider, ASI120MM guide camera, ASI1600MM Pro imaging camera, ASIAir Plus, Baader CMOS-optimized 6.5 nm Ha, ZWO 7.0 nm OIII and SII filters

Processing: Pixinsight, Photoshop, RC Astro Noise, Star, and BlurXterminators

Total integration time: 9 hr 50 min, consisting of 40 X 300 sec Ha, 38X300 secOIII, and 40X300 sec SII subs.



M42 AND M82 BY DONOVAN DREW

Ah a clear night on the winter solstice. A good night for some astrophotography if you don't mind -15F. I was also able to take a crash course in electronic auto focusers at the same time with a newly installed ZWO EAF on my Edge HD 8. It has been a couple years since imaging M42 and since a 56% phase moon was coming up I turned the scope north to M82 after midnight. Only a couple hours of integration on each target since I was fiddling with the EAF alot but will be worth it in the end.



HORSEHEAD AND FLAME NEBULAS BY MATTHEW WEST

Taken with a
SeeStar



University Lowbrow Astronomers - Meeting Minutes December 20, 2024 7:30pm - revised

Our meeting at the Detroit Observatory was called to order by Charlie Neilsen at 7:34 PM.

Lowbrow member Gary Nichols gave an interesting talk on Electronic Assisted Astronomy (EAA) telescopes. These devices essentially integrate, stack, and stitch together multiple captures creating images difficult to obtain due to local conditions such as light pollution. These telescopes are controlled and their images viewed via applications on phones, tablets, or computers. The external viewing allows a group to watch the image develop, providing an enjoyable and engaging outreach activity.

Our business meeting began at 9:05 PM

Charlie mentioned that the Scio Township Parks Committee chairperson was looking to collaborate with the lowbrows on astronomy-related activities. Look for emails with more information.

Thank you to Doug Scobel and Jeff Kopmanis for handling the RASC handbook and calendar order and distribution. There are still some available please contact our treasurer Doug to pay and Jeff to arrange pickup.

On Tuesday December 17th Dean Regas presented a class on the Astronomical Year and made a link available to lowbrow members.

Newsletter editor Amy Cantu reported by email that she has removed the mailing label from the layout of the newsletter. The version with a mailing label location is preserved in our shared drive if we need to mail out paper copies again. Please send in articles and your photos for upcoming newsletters.

VP Don Fohey is pursuing two possible speakers and will report back.

Christine Cook is still working with the Ann Arbor Observer to ensure our activities are visible on their website and in their print edition

Jeff Kopmanis noted that our website hosting is coming up for renewal, which allows the club to change to a different hosting company. No changes yet, but he is looking at our options.

VP Brian Ottum has an article in Reflector magazine published by the Astronomical League. Brian will be speaking at their annual conference to be held in Bryce Canyon, Utah.

Observatory Director Jack Brisbin reported on graffiti drawn in chalk on the observatory door.

The vandalism there and at other Peach Mountain buildings was reported to police. In 2023 Jack installed a wall mounted ENVI electric heater to help improve winter conditions for equipment stored in the observatory. In reviewing the building temperature data collected last year, he recommended that a second unit be installed to stay above 32F in the observatory. He will buy and install a second unit.

VP Dimitri Tsahelnik would like to have one place for members to post links to social media posts as a way to improve club visibility and presence.

Norb Vance announced that Scherzer observatory will be open for the lunar eclipse on March 13 2025. Deepest eclipse will be at 3AM on March 14th, but If there is member interest, the club might consider hosting an event.

At 9:32 PM Doug Nelle made, and Dimitri supported a motion to adjourn.

Doug Scobel sent his Treasurer's report via email:

We have 213 memberships.

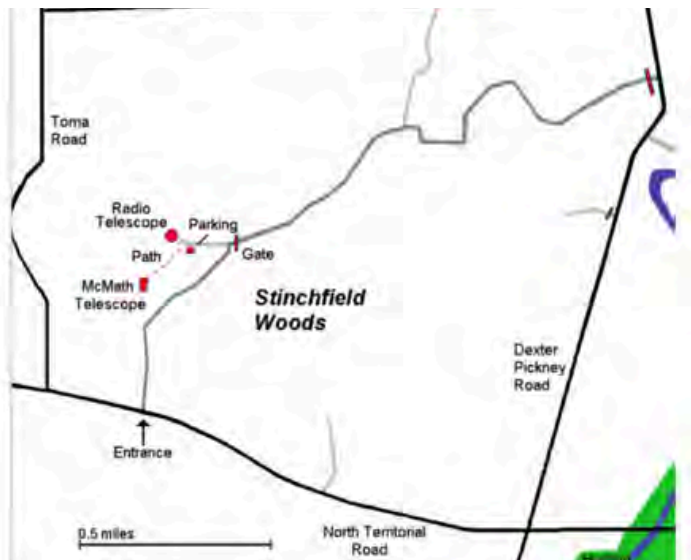
He made our usual monthly payment to AT&T for our Open House "hotline". He purchased a Seestar S50 and tripod leveler from High Point Scientific for \$518.29. Amy Cantu is the curator of that scope.

Minutes respectfully submitted,
Ken Cook, VP

PLACES & TIMES

Monthly meetings of the University Lowbrow Astronomers are held on the third Friday of each month at 7:30 p.m. The location is usually the Judy & Stanley Frankel Detroit Observatory. The Observatory is located at 1398 E. Ann St., Ann Arbor. The Ann Street Parking Structure (M86), the Catherine Street Structure (M5), the Glen Street Structure (M61), and the School of Public Health II Lot are usually open after 6:00 p.m. Mon-Fri. The M86 structure is closest to the Detroit Observatory.

Peach Mountain Observatory is the home of the University of Michigan's 25-meter radio telescope and McMath 24" telescope, which is maintained and operated by the Lowbrows. The entrance is addressed at 10280 North Territorial Road, Dexter MI, which is 1.1 miles west of Dexter-Pinckney Rd. A maize and blue sign marks the gate. Follow the gravel road to the top of the hill to a parking area south of the radiotelescope, then walk about 100 yards along the path west of the fence to reach the McMath Observatory.



PUBLIC OPEN HOUSE / STAR PARTIES

Public Open Houses / Star Parties are generally held on the Saturdays before and after the New Moon at the Peach Mt. Observatory but are usually canceled if the forecast is for clouds or temperatures below 10 degrees F. For the most up-to-date info on the Open House / Star Party status call: (734) 975-3248 after 4 pm. Many members bring their telescope to share with the public and visitors are welcome to do the same. Mosquitoes can be numerous, so be prepared with bug repellent. Evenings can be cold so dress accordingly.

Lowbrow's Home Page
<http://www.umich.edu/~lowbrows/>

MEMBERSHIP

Annual dues are \$30 for individuals and families, or \$20 for full time students and seniors age 55+. If you live outside of Michigan's Lower Peninsula then dues are just \$5.00. Membership lets you access our monthly newsletter online and use the 24" McMath telescope (after some training). Dues can be paid by PayPal or by mailing a check. For details about joining the Lowbrows, contact the club treasurer at: lowbrowdoug@gmail.com

Newsletter Contributions:

Members and non-members are encouraged to write about any astronomy-related topic. Contact the Newsletter Editor: Amy Cantu cantu.amy@gmail.com to discuss format. Announcements, article, and images are due by the 1st day of the month as publication is the 7th.

Telephone Numbers:

President:	Charlie Nielsen (734) 747-6585
Vice President:	Don Fohey Brian Ottum Ken Cooke Dmitri Tsahelnik
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Observatory Director:	Jack Brisbin
Newsletter Editor:	Amy Cantu
Key-holders:	Jim Forrester Jack Brisbin Charlie Nielsen
Webmaster:	Krishna Rao
Online Coordinator:	Jeff Kopmanis

A NOTE ON KEYS: The Club currently has three keys to the Observatory and the North Territorial Road gate to Peach Mountain. University policy limits possession of keys to those whom they are issued. If you desire access to the property at an unscheduled time, contact one of the key-holders. Lowbrow policy is to provide as much member access as possible.

Email to all members
Lowbrow-members@umich.edu