



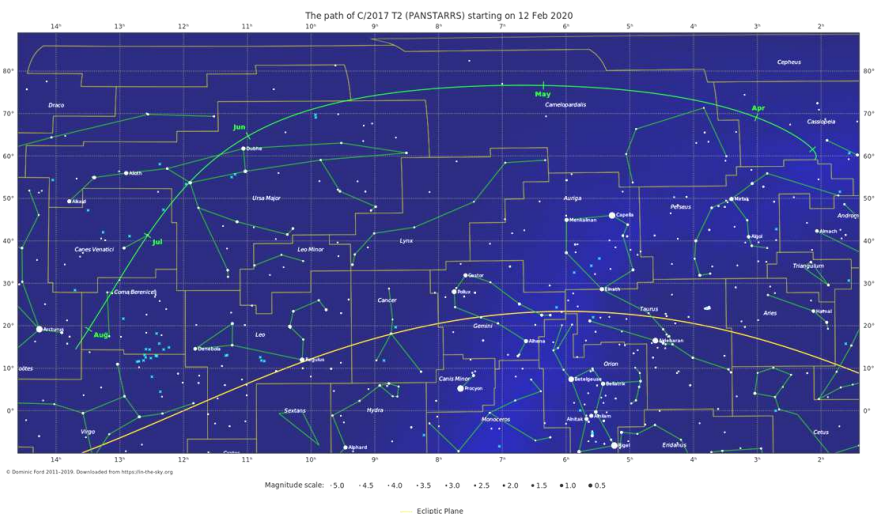
Comet C/2017 T2
From the Desk of the Northern Cross Observatory
By Doug Bock



Image Above: January 19, 2020, 10" f/8 RC, ZWO asi071MC PRO camera.

Comet C/2017 T2 has been in our neck of the woods for several months and is getting brighter as it heads for perihelion on May 4th, 2020. Currently it is passing by the Perseus double cluster, and makes for a nice view at ~8.5 magnitude with a small tail through a telescope. This comet will not get naked eye, but will be reachable for a couple of months via binoculars and telescopes, **so give it a try.**

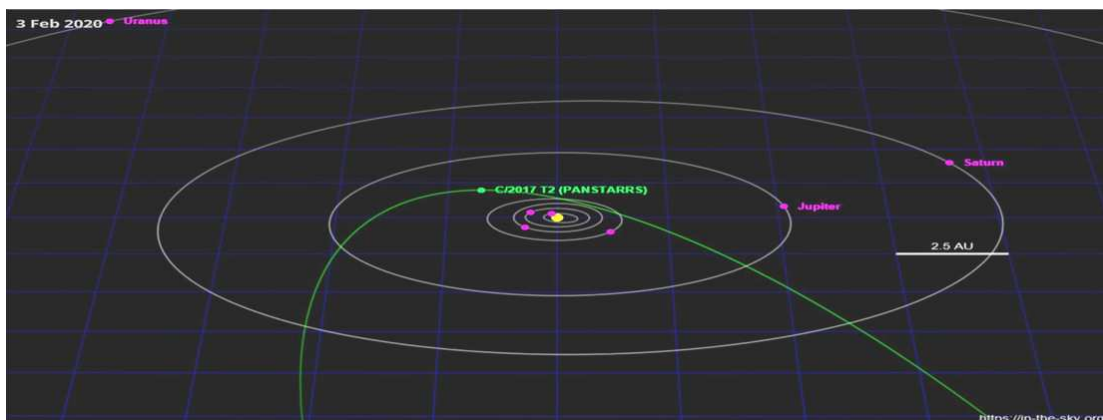
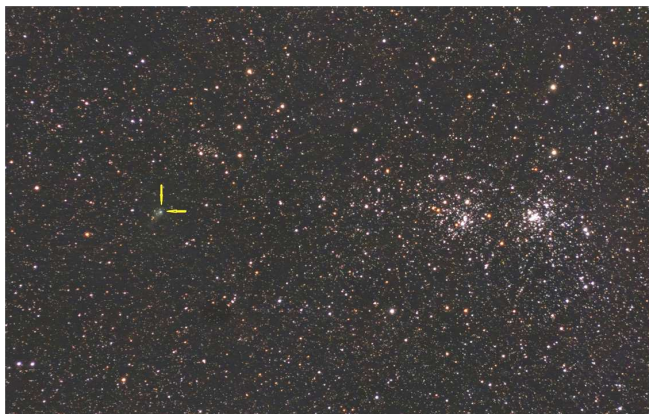
Right and next page are some graphics of it's orbit from "In-The-Sky.org", and "theskylive.com"



(Below) I have been imaging it since October of 2019, and here are a few of those along the way.



(Below) This was the position on January 19, 2020 relative to the Perseus double cluster (Canon T3i w/200mm lens – cropped)



Comet C/2017 T2 PANSTARRS

By Brian Ottum Ph.D.

Brian Ottum Ph.D. wrote to members in an email Jan 23rd.

“As you may know, we are in a real “drought” when it comes to bright comets. Nuthin’. This comet, feeble as it may be, could be the best we get for 2020. I took this last night, and was surprised by the composition. It looks like the green comet has entered a flying saucer asterism!

If it’s clear over the next few nights, be sure to get out and spot it. The comet is passing close to the Double Cluster in Perseus, at mag 9.5. There will be a bit of brightening, to mag 8.5, at it reaches a May perihelion. It is well placed for us in the north all the while.

<http://astro.vanbuitenen.nl/comet/2017T2>

I’m hoping for a unanticipated bright comet.”

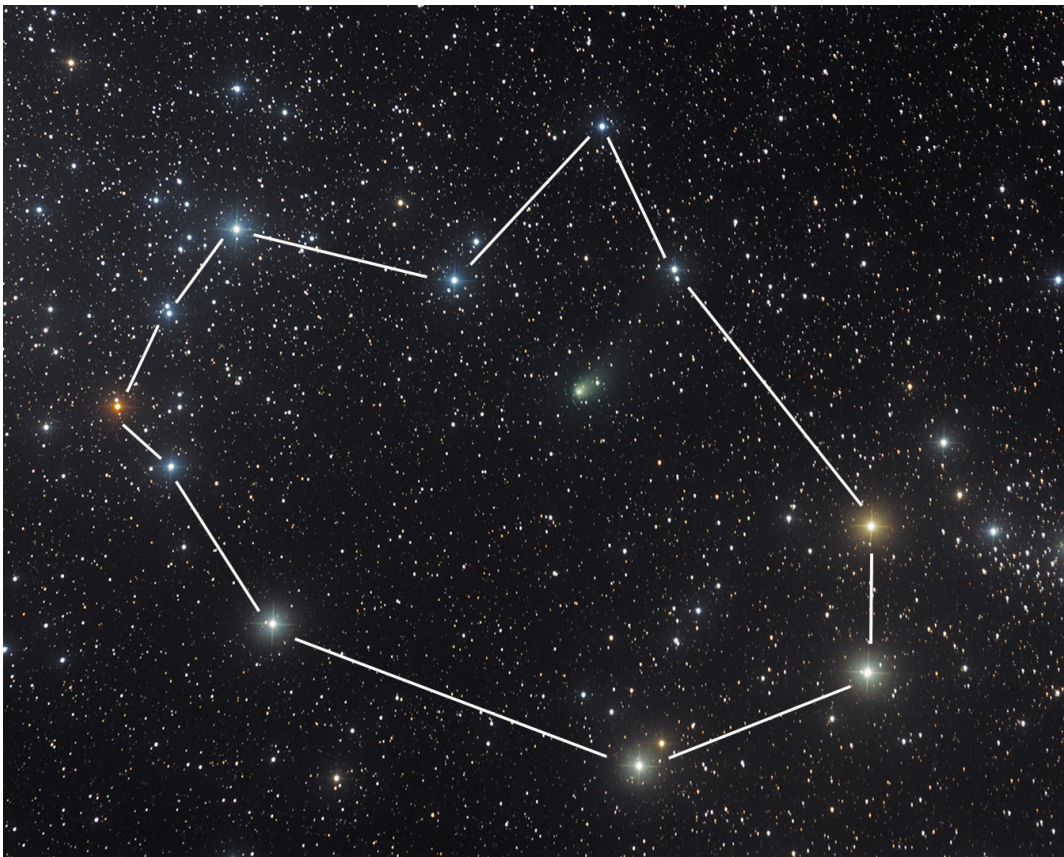


IMAGE DETAILS

- Remotely controlled telescope located in Animas, NM
- 10” f/5 reflector, with Baader flattener
- PlaneWave L-350 robotic gearless mount (made in SE Michigan!)
- Canon 5DmkIII surrounded by a homemade thermoelectric cooler box
- 10 stacked images, each 120 seconds long, ISO 6400
- 4UT, 24 Jan, 2020

MOON by Awni Hafedh



Awni Hafedh wrote in an email Dec.13th

“Dec 11th, 2019 - After almost two weeks of clouds we had a break this night with a beautifully clear night, the Moon was full but that didn't stop me from doing astrophotography, I was inspired by my friend (Jason Guenzel) and his color version of the moon, so I used the ZWO ASI1600MC with the Skywatcher 127Mak and it was collimated with the Tri-Bahtinov mask which made a huge difference with the image quality.”

The SW 127Mak could not fit the whole moon in the FoV so I had to capture the moon in two panel mosaic, each panel is a SER video of 1500 frames and stacked 25% in AutoStakkert3 and the final image was merged in Photoshop.

Now the stacked-merged image is not even close to being a color image, it is more like a gray image with bluish highlight, the trick of getting the final image is the following:

- 1) Match the Red, Green and Blue histogram together, which is an easy task in curves, by selecting each color and adjust the curves until the histogram graph is aligned.
- 2) Start by increasing the Saturation 10% , you might need to repeat this process between 10~20 times until you start to see some colors.
- 3) At this point you can enhance the sharpening, contrast, brightness, color separation ... etc until you reach the point of your personal satisfaction.

I hope this is helpful and you like my final image, I've learned that the different color is due to different materials like Iron, Titanium, Silicon, Magnesium and of course lots of impact craters.”

(Editor: in a following email Awni wrote of the bright feature in his image)

“Aristarchus. "[N]amed after the Greek astronomer Aristarchus of Samos, is a prominent lunar impact crater that lies in the northwest part of the Moon's near side. It is considered the brightest of the large formations on the lunar surface, with an albedo nearly double that of most lunar features.” -- wikipedia “

“So it seems that there is a blue and ultraviolet emission for this crater, check the link below”

https://www.thelivingmoon.com/43ancients/41Group_Lunar_FYEO/02files/FYEO_Lunar_02.html

First night of 2020 - The Moon



The Moon - Jan 1, 2020
© Awni Hafedh

Awni Hafedh wrote to member in an email on Jan3rd. "I Could not resist having a clear sky for an hour at the first day of the year. I wanted to capture the Moon in color." "My setup was a Skywatcher 180Mak telescope, ZWO ASI1600MC Camera, ZWO 1.25" Lum filter and iOptron ZEQ25 mount."

"The whole capture sequence was done using FireCapture, I took three panel mosaic each was 1250 frames video, the last video was captured just seconds before the clouds roled in. I then stacked 25% of each and stitched the three frames using Photoshop." "Then started the process of stretching, pumping the Saturation and sharpening slowly until I got to this final image, as always I was careful not to over it. I hope you like it and hope 2020 will be filled with plenty of clear nights."

Comet C2017 T2 imaged by Don Swetzig (KD8NNU)



Don emailed to members on Dec 8th. In a portion of that email he wrote."I really wanted to see a comet with a tail on my own."

"Comet C/2017 T2 as captured with my Celestron 8 in SCT with a 6.3 focal reducer flattener, ISA294MC non cooled camera using SharpCap Pro 3.2. Note I was trying 24 second exposures with a gain setting of 250. I am in a bortal 4/5 area not very far from Peach Mountain and I had just watched Robin Glover's presentation and my understanding from what he was saying this should be close to optimum exposure length."

Last Full Moon of the Decade

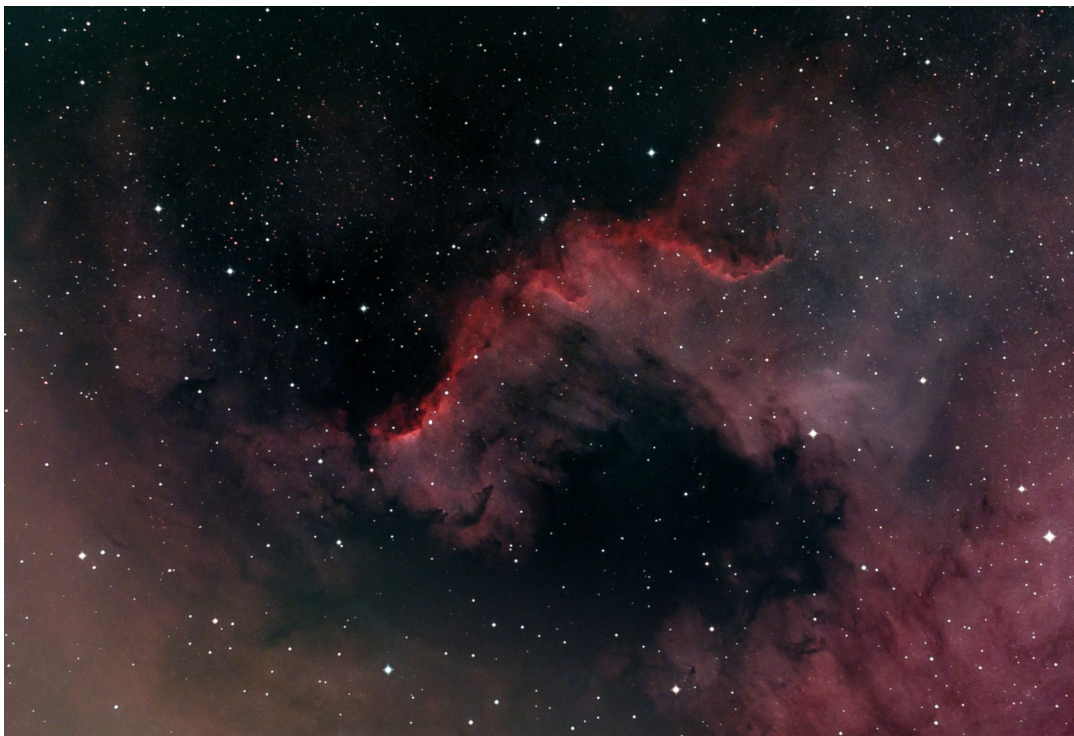


Adrian Bradley wrote an email to members on Dec 11, 2019.

“I know I could have done a little better in post but at least I got photons from the sun bouncing off the moon.

Doesn't look much different from any other moon this year or last ...

Cygnus Wall

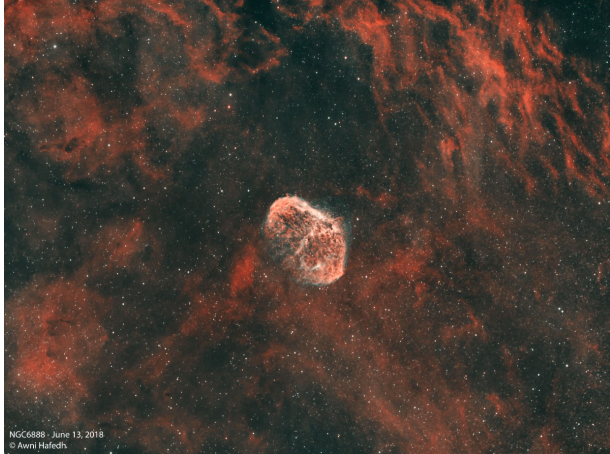


Federico Spotti wrote an email to members on Nov 24th 2019.

“Cygnus wall, taken few days ago from downtown Ann Arbor, Newtonian 153mm F4, ASI294, IDAS multi narrowband filter, 22x6min.

Some light pollution gradient remain on the lower left corner, but this is downtown astro-photo for you... (and I didn't want to crop the image too much.)”

Crescent Nebula (NGC6888) and Soap Bubble Nebula



Awni Hafedh wrote in an email to members on January 7th.

“June 13, 2018” “It was one of University Lowbrow Astronomers club star party at Peach mountain, were lots of members gather around. I don't really recall the details but I remember that it was a perfect night and setup to mainly capture the Crescent Nebula (NGC6888). I did 70 subs for each of the Astronomik H-Alpha and OIII filters, each sub was 120sec using my Hyperstar setup (Celestron EdgeHD 9.25" with Starizona hyperstar, ZWO Astronomy Cameras ASI16000MM-cool, IOptron CEM60 mount).

At home I did a quick stack to technically show people what I had got for the night and didn't really work on properly process the data, until recently when I realized that there is another object in that field of view. It is called (Soap Bubble Nebula), not sure of the NGC number for it and not even plate solving found it.

Later I found out that it was discovered back in 2008 which is relatively new and to be honest that is very exciting for me to capture such object by chance.

Upcoming Events

DATE	EVENT	LOCATION	
Friday Feb. 21st. 7:30 pm	Monthly Meeting	Room G115 Angell Hall 435 South State Street Ann Arbor, MI.	Professor Michael Liemohn, U/M, Climate and Space Sciences and Engineering, Topic: Mars atmospheric loss
Friday March 20th. 7:30 pm	Monthly Meeting	Room G115 Angell Hall 435 South State Street Ann Arbor, MI.	Dr. Sean Gavin, Professor and Associate Chair, WSU Physics/Astronomy Dept, Topic: Lord Kelvin and the sun
Saturday March 21st.	Messier Marathon	Lake Hudson Recreation Area	Join other Lowbrows to view all 110 Messier Catalog Objects
Saturday March 28th.	Open House	Peach Mountain	Peach Mountain Observatory, 10280 North Territorial Rd Dexter. Michigan.

Lowbrow meeting minutes

Friday, January 17, 2020

Meeting started at 7:30pm

Introduction of speaker, Dr. Edwin (Ted) Bergin, the head of the University of Michigan's Astronomy dept. who gave a talk on planet Formation - how a planet like Earth forms.

Followed by a story from Lowbrow member John Rosevear: He talked with an 11 year old on a bus who had never seen stars. It dawned on him that there are many people who have never really experienced the night sky at all, let alone seen the Milky Way.

Business meeting started: 8:42pm

President, Charlie Nielsen:

- MMSS Scheduled July 28, with a rain date of July 29th. About 6 people volunteered.
- Night Sky Network toolkit - hoping someone can take it. Doug Nelle took it.
- John's business may face closure in the future, and then we would have to find a new place to store our NSN toolkits.
- Hidden Lake Gardens - asked us to pick a date for their presentation
- Westland Library - wants us to come back for another presentation and star party. Will send out the date (sometime in spring) at a later date.
- Late Lowbrow club member John Causland's, estate sale information would be forthcoming in a separate email to the membership.

Treasurer - Doug Scobel

- 152 memberships, 2 on bubble
- \$7579 in treasury
- Had a question about what to do with the copy of John Causland's will that was sent to him. President Charlie Nielsen also has a copy. He will file it with the rest of the treasurer's records in case it is needed in the future.

Observatory Director - Jack Brisbin

- Observatory building is fine. Argo Navis controller and WiFi unit are in a heat box for temperature requirements.
- Roads have not been fixed. We are awaiting a repair date.
- Discussion continued surrounding issues with getting the road repaired before our first open house. We are hoping to get a little more communication from those in charge of Stinchfield woods.

Vice President Jim Forrester - Nothing to report.

Vice President Adrian Bradley

- Is the new GLAAC President
- AATB will be Sept 25,26 of this year.
- Outreach event from Independence Lake was a success.

Vice President Joy Poling - Nothing to report.

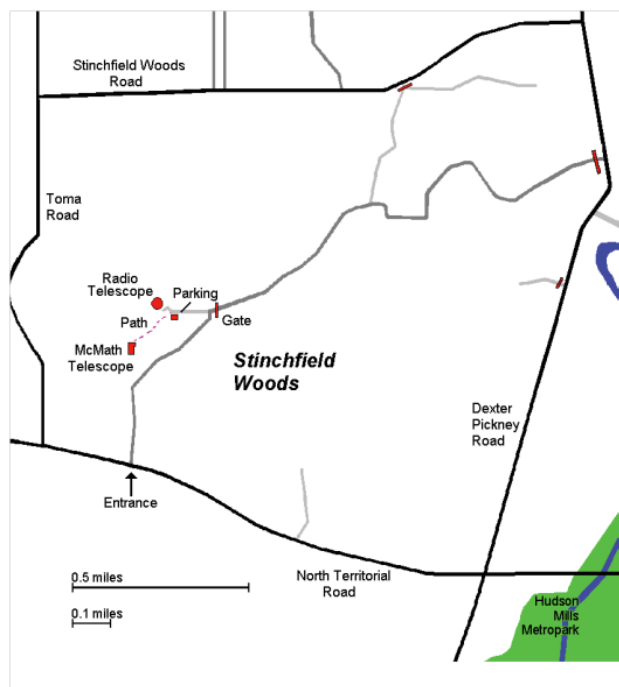
Meeting adjourned: 9:30pm

Minutes transcribed by Adrian Bradley

Places & Times

Monthly meetings of the University Lowbrow Astronomers are held the third Friday of each month at 7:30 PM. The location is usually Angel Hall, ground floor, Room G115. Angell Hall is located on State Street on the University of Michigan Central Campus between North University and South University Streets. The building entrance nearest Room G115 is the east facing door at the south end of Angell Hall.

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 radio telescope, 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 cancelled if the forecast is for clouds or temperature below 10° F. For the most up to date info on the Open House / Star Party status call: (734) 975-3248 after 4pm. 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. Evening can be cold so dress accordingly

Lowbrow's Home Page

<http://www.umich.edu/~lowbrows/>

Membership

Annual dues are \$30 for individuals and families, \$20 per year for students and seniors (age 55+) and \$5 if you live outside of the Lower Peninsula. Membership entitles you online access to our monthly Newsletters and use of the 24" McMath telescope (after some training). A mailed copy of the newsletter can be obtained with an additional \$18 annual fee to cover printing and postage. Dues can be paid by PayPal (contact the treasurer to find out how) or by check made out to "University Lowbrow Astronomers" and mailed to:

The University Lowbrow Astronomers

P.O. Box 131446

Ann Arbor, MI 48113-1446

Lowbrow members can obtain a discount on these magazine subscriptions:

Sky & Telescope - \$32.95/year or \$65.90/2 years

Astronomy - \$34.00/year, \$60.00/2 years or \$83.00/3 years

For more information about dues or magazines 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: Don Fohey donfohey@gmail.com to discuss format. Announcements, articles 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:	Adrian Bradley (313) 354 5346
	Jim Forrester (734) 663-1638
	Joy Poling
	Dave Jorgensen
Treasurer:	Doug Scobel (734) 277-7908
Observatory Director:	Jack Brisbin
Newsletter Editor:	Don Fohey (734) 812-3611
Key-holders:	Jim Forrester
	Jack Brisbin
	Charlie Nielsen
Webmaster	Krishna Rao

A NOTE ON KEYS: The club currently has three keys each to the Observatory and the North Territorial Road gate to Peach Mountain. University policy limits possession of keys to those who 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



University Lowbrow Astronomers



Member Club



Astronomical League Member Society
#201601, Great Lakes Region

University Lowbrow Astronomers
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