



Lorain County, Ohio

November 2020

Website: blackriverastro.org

Newsletter submissions: [Editor](#)

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--Wednesday, November 4, 7 p.m.: Regular meeting via Zoom. Members' Favorite Astronomical Apps and Websites

--Thursday, November 12, 7 p.m.: Board meeting via Zoom.

--Thursday, November 19, 7 p.m.: Optional board meeting via Zoom for selecting public observing dates for 2021.

There are no public observing sessions scheduled in November due to the pandemic.

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Explore if you will the informative BRAS [website](#) and all its interesting, timely links, and join the interactive members-only BRAS [Forum](#) to better keep in touch.

If you have any astronomical wanted/for sale announcements, astronomical photos you've taken, astronomy article links, equipment reviews, observing reports, essays, or

anything that you think to which the local amateur astronomy community could relate, please send them to your humble *Guidescope* editor for inclusion in forthcoming issues.

BOARD SUMMARY Oct. 14, 2020 via Zoom

The October Board of Directors meeting was called to order at 7:13 p.m. with nine Directors present, plus visitor Mike Garrett. The Minutes of the September meeting were read and approved as was the Treasurers report which yielded a closing balance of \$5653.94.

Committee reports followed with there being no report on Instrumentation or the Website. *Guidescope* editor Bill Ruth reported that all was well with the newsletter, and the OTAA and Metro Parks Liaison Chairpersons had no reports.

Programing is a problem this year, as we had no speakers lined up for the rest of the year or for 2021. Schauer contacted the NASA Glenn Speakers Bureau to see if a speaker would be available for November, and at first we thought we had a speaker. However, the speaker developed a conflict with another meeting and had to reschedule for January. Thus in January we have Jeff Woychak speaking on the OSIRIS-Rex mission. For November, we are going to try something new. We are asking any member interested to choose an astronomy-related website or app that they use and enjoy, and we will take turns sharing with the rest of the participants. This is easy to do. Have the website or app open on your desktop in the background. When it is your turn to show off your website/app, click on “Share Your Screen” at the top of the Zoom page, and at that time, everyone else will see the website or app. You can then discuss it, and demonstrate how it works. This should be fun, especially if we can get enough people to participate. We will not need a program for December, as the December meeting will be a Zoom dessert and wine social gathering. This will be exactly what it sounds like: we will Zoom and chat as we eat desserts and enjoy a beverage of our choice, and will take the place of our holiday pot luck that we usually have at the Amherst Beaver Creek Reservation. We will, however, need programs starting in February and would like to encourage any member interested to prepare a program on an astronomy-related topic for February or any month after that.

Next came Old Business. The first topic of discussion was a continuation of last month’s discussion about culling the official membership roster and the TNS notification list. As a reminder: NO ONE is being removed from the *Guidescope* mailing list or from Dave Lengyel's Observers Calendar list. We are ONLY removing people from the official membership roster and the TNS list. Previously, we had 135 people on the membership roster including 90 people whose memberships had expired. Of those 90 expired people, 71 had been expired for anywhere from 4 to 10 years. The decision was made to remove any names whose memberships expired prior to 2013 plus four names of people who have died. Our current roster has 31 active members (those who have paid their 2021 dues), and

22 people who paid in 2020, but have not yet paid for 2021. Then we have 64 people whose membership expired in the years 2013-2019. All of those 117 people will get text notifications of Public Observing and Solar observing sessions...however, since only active members are allowed at impromptu observing sessions, only people whose dues are paid for 2021 will receive texts about those. Please note a membership form is included in this newsletter. If you have not done so, please write a check for \$20 and mail it and the membership form to Treasurer Dan Walker whose address is on the membership form.

Under new business, the Board first voted to cancel the November General Meeting at the Carlisle Visitors Center, and instead hold the meeting on Zoom. A second vote cancelled all Public Observing sessions in November. As a reminder, we had already cancelled the December holiday pot luck dinner at the Amherst Beaver Creek Reservation in favor of a Zoom dessert session. The next item was a further discussion about programing. Dave Lengyel will contact members of the Oberlin Physics Dept. to see who might be willing to do a program for us and Steve Schauer will contact astronomer Suzie Dills from Youngstown State to ask if she could do a program.

The next item of New Business was the happy chore of voting to accept new members into the club. The Board voted to accept the applications of Janet Garrett, Roseanne Johnson, Justin Sikorski, Susan Schauer, and Nancy Walker into the club. Welcome! We are delighted to have you join us!

The final item was a discussion about the 2024 total solar eclipse that will pass directly over northern Ohio in April of that year. While we have time to decide about hosting eclipse watch parties with the MetroParks and for members to decide whether they are staying home or traveling to a less cloudy location, it was suggested that the club investigate the purchase of eclipse glasses, as they may be easier to get and cheaper to buy now rather than later. Dan Walker offered to investigate the cost of the glasses. Update: Dan contacted two companies. Rainbow Symphony is the company we used in 2017. Their glasses are \$0.45 each for a thousand or more while American Paper Optics has a price of \$0.45 each for a thousand and \$0.40 each for two thousand or more. Both are CE certified and compliant with ISO 12312-2 certification. In 2017, the eclipse in Ohio was only a partial. We purchased 1,000 solar glasses and the Night Sky Network gave us an additional 500. We sold them all for \$1.00 each. Since the 2024 eclipse will be a total, it seems reasonable that we might sell an even greater quantity, so we may consider purchasing at least 2,000. If we bought 2,000 at 40 cents each and sold them for \$1.00 we would earn a \$1,200 profit.

Dates for November were set, and the meeting was adjourned.

~Steve Schauer

Deep-Sky Objects for November

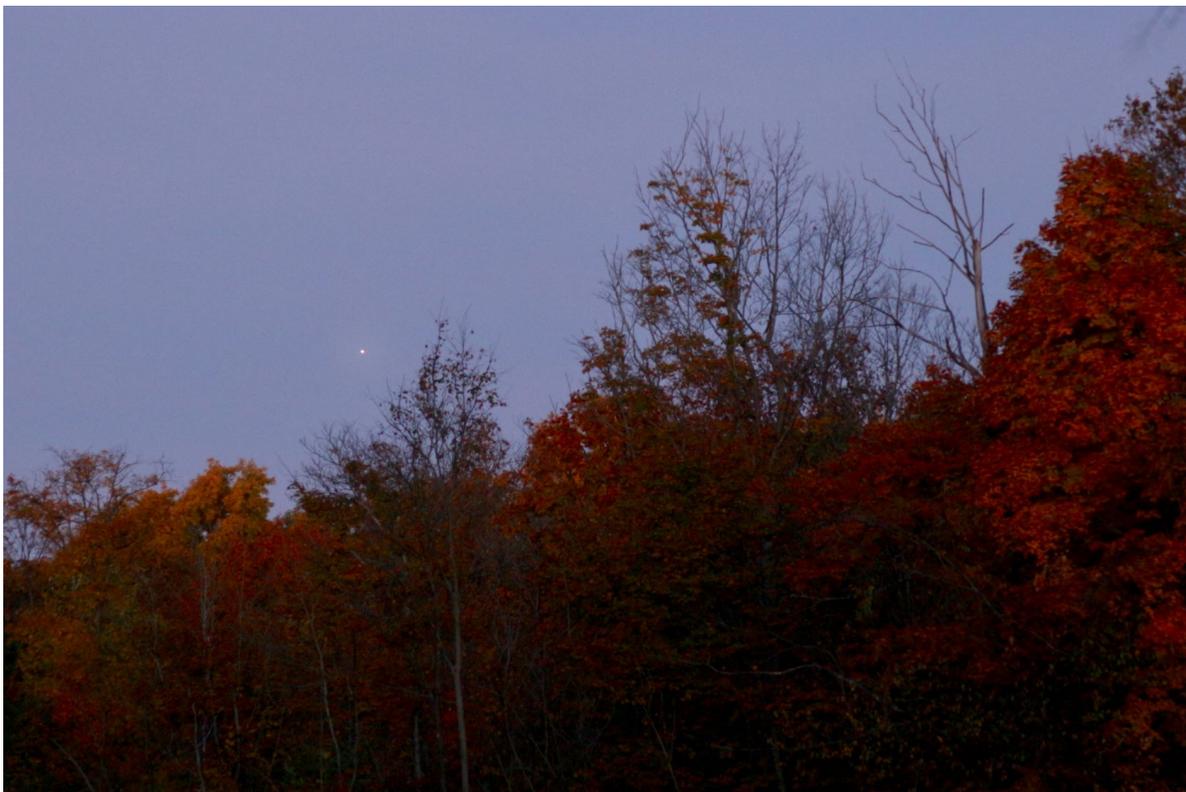
Objects for Binoculars							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
03 ^h 47.0 ^m	+24° 07'	M45	1.2v	110'		Tau	Open Cl 100+ "Pleiades"
04 ^h 27.0 ^m	+16° 0'	Mel 25	0.5v	330'		Tau	Open Cluster 40+ "Hyades"
04 ^h 46.0 ^m	+19° 04'	NGC 1647	6.4v	45'		Tau	Open Cluster 200+
05 ^h 28.7 ^m	+35° 50'	M38	6.4v	21'		Aur	Open Cluster 100+
05 ^h 36.1 ^m	+34° 08'	M36	6.0v	12'		Aur	Open Cluster 60+
05 ^h 52.4 ^m	+32° 33'	M37	5.6v	20'		Aur	Open Cluster 150+
Objects for Small Telescopes (2-6 inch)							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
04 ^h 09.2 ^m	+30° 47'	NGC 1514	10.9v	>114"		Tau	Planetary Nebula
04 ^h 51.1 ^m	+43° 42'	NGC 1664	7.6v	18'		Aur	Open Cluster 50+
05 ^h 03.6 ^m	+23° 49'	NGC 1746	6.1v	42'		Tau	Open Cluster 20+
05 ^h 10.7 ^m	+16° 32'	NGC 1807	7.0v	17'		Tau	Open Cluster 20+
05 ^h 12.1 ^m	+16° 42'	NGC 1817	7.7v	15'		Tau	Open Cluster 60+
06 ^h 11.6 ^m	+48° 43'	41 Aur	6.3, 7.0	7.7"	356°	Aur	Double Star
Objects for Medium Telescopes (8-14 inch)							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
03 ^h 19.7 ^m	-19° 25'	NGC 1300	10.4v	5.5'x2.9'		Eri	Galaxy
04 ^h 14.2 ^m	-12° 44'	NGC 1535	9.6p	>18"		Eri	Planetary Nebula
05 ^h 08.1 ^m	+37° 03'	NGC 1778	7.7v	6'		Aur	Open Cluster 25+
05 ^h 20.2 ^m	+39° 21'	NGC 1857	7.0v	5'		Aur	Open Cluster 40+
05 ^h 28.0 ^m	+35° 19'	NGC 1907	8.2v	6'		Aur	Open Cluster 30+
05 ^h 59.7 ^m	+37° 13'	37-Upsilon	2.6, 7.1	AB: 3.6"	313°	Aur	DS (AC: 10.6; 50"; 297")
Objects for Larger Telescopes (16-inch & larger) Challenge Objects							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
03 ^h 09.8 ^m	-20° 35'	NGC 1232	10.0v	6.8'x5.6'		Eri	Galaxy
03 ^h 38.5 ^m	-23° 02'	NGC 1395	9.7v	5.4'x4.6'		Eri	Galaxy
03 ^h 40.2 ^m	-18° 35'	NGC 1407	9.7v	6.0'x5.8'		Eri	Galaxy
04 ^h 21.8 ^m	+19° 32'	NGC 1554-55	-	1.7'		Tau	R+E Neb. "Hind's Var Neb"
05 ^h 16.3 ^m	+34° 16'	IC 405	-	30'x20'		Aur	R+E Neb "Flaming Star Neb"
05 ^h 34.5 ^m	+22° 01'	M1	-	6'x4'		Tau	SNR "Crab Nebula"

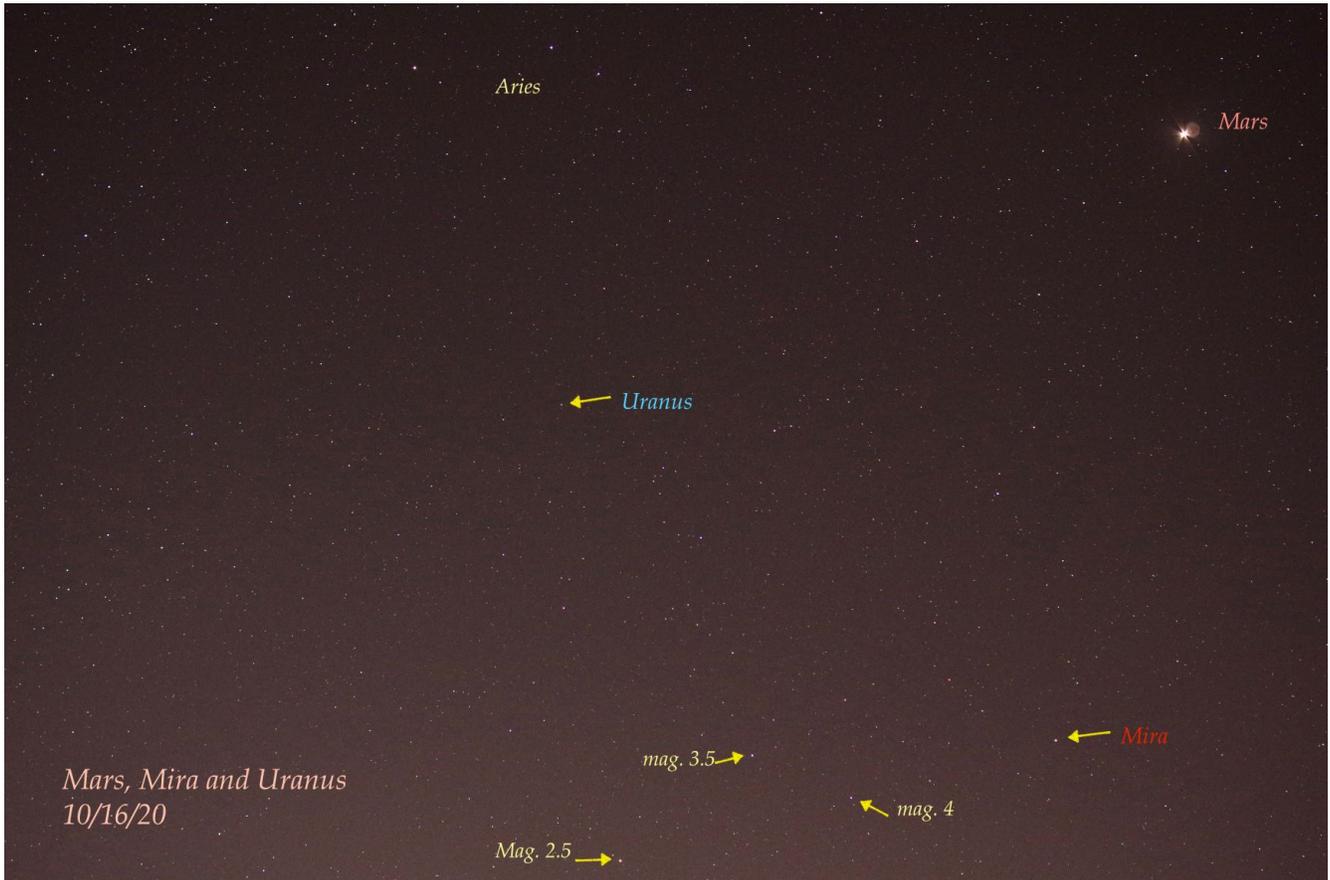
Print and use the [Deep-Sky Interest Group - Observation Form](#) to record your observations.

Thanks to Len Jezior for the deep sky objects charts.



The morning after the Mars opposition, Oct. 14, was filled with cool stuff in the sky. Mars set just north of due west, and in the east, the waning crescent Moon appeared near Venus. ~Dave Lengyel





Here is a nice triangle of Mars, Uranus and Mira, taken Oct. 16 from my back porch. You can use some of the other stars in Cetus to estimate Mira's brightness. The familiar shape of Aries is at the top.
~Dave Lengyel

Black Hole Spaghettifies Star

Noodly Handiwork of the Flying Spaghetti Monster

<https://youtu.be/AKCp-1OGGP4>

Thanks to Len Jezior for the link to the animation.

R'amen.